

**PRESCRIPTION SETTING PROCEDURES FOR 4-2 WIRE
(J99343RB, RC, RG, AND RJ)
AND 2-4 WIRE REPEATERS (J99343RD, RE, RH, AND RK)
METALLIC FACILITY TERMINAL**

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1. GENERAL	
1.01 This section gives prescription setting procedures for the balancing networks and equalizers used in 4-2 intermediate/terminal or 2-4 intermediate metallic facility terminal (MFT) repeaters. The information given in this section	

is for 4-wire circuits with 2-wire extensions. For 4-wire circuits without 2-wire extensions, see Section 332-912-232.

1.02 This section is being reissued to include prescription information on the new J99343RJ and J99343RK 4-2 and 2-4 repeaters.

1.03 This section includes procedures for prescription settings of the following repeaters:

4-2 Terminal/Intermediate

J99343RB (MD) — Loaded

J99343RC (MD) — Nonloaded

J99343RG — Loaded

J99343RJ — Loaded or Nonloaded

2-4 Intermediate

J99343RD (MD) — Loaded

J99343RE (MD) — Nonloaded

J99343RH — Loaded

J99343RK — Loaded or Nonloaded.

1.04 The new J99343RJ and RK repeaters provide the combined features of both the loaded and nonloaded repeaters in the 4-2 and 2-4 categories, respectively. These units do this by providing the necessary circuitry to equalize and balance all types of loaded and nonloaded facilities in the 2-wire extensions. Although these repeaters provide combined features, they have the same prescription settings as those given for the unit they replace. This includes all precision balance network (PBN) settings (both loaded and nonloaded) and all equalizer settings. The major difference in these new repeaters is that they include the LOADED/NONLOADED switch which must be selected to match the type facility in the 2-wire extension. Previously, this selection was determined by the type of repeater used.

1.05 The J99343RJ is a direct replacement for the J99343RB, RC, and RG 4-2 repeaters, while the J99343RK replaces the J99343RD, RE, and RH 2-4 repeaters.

1.06 The procedures in this section allow the calculation of PBN settings, equalizer settings, the 1-kHz gain of the equalizer, and the 1-kHz cable loss.

1.07 To obtain the correct PBN and equalizer settings, the proper design rules for the circuit must be used. Also, the equalization strategy discussed in Part 5 must be applied, as described, for proper allocation of equalization.

1.08 Transmission levels for 4-wire circuits with 2-wire extensions are limited by two constraints: crosstalk and stability. The same level requirements used on 2-wire circuits apply. The 4-wire sections of a circuit may contain one or more 4-wire repeaters or a carrier link.

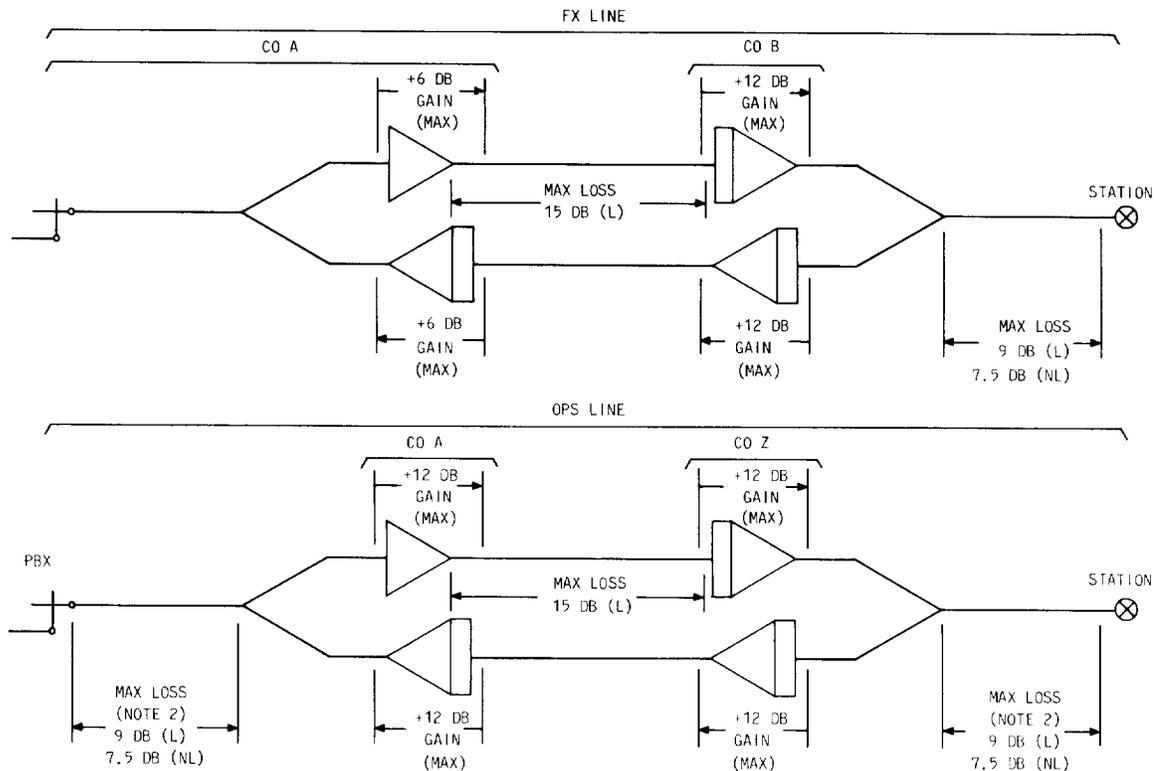
1.09 The maximum gain allowed across the repeater is dictated by crosstalk considerations. The maximum gains are:

- Terminal repeaters—6 dB (assumes 0 dB on terminal side)
- Intermediate repeaters—12 dB.

Figure 1 illustrates maximum gains and losses of these repeaters in typical applications.

1.10 Crosstalk limitations determine the minimum input and maximum output levels as shown in Table A. The maximum 1-kHz cable loss between 4-wire repeaters is shown in Table B, while the maximum 2-wire cable loss is limited by the objectives for the individual types of special services and message trunks.

1.11 Table C gives the rules for selecting the 4-wire impedance of the repeater. The rule for mixed loaded and nonloaded cable can be stated as follows: A cable is considered to be mixed nonloaded and loaded if there is **more** than 9 kft of cable plus bridged tap from a repeater to the first load coil. This end of the cable is considered to be nonloaded and 600-ohm impedance should be selected. If there is less than 9 kft of cable plus bridged tap from the repeater to the first load coil, the cable is considered to be loaded and 1200-ohm impedance is selected.



- NOTES:
1. SEE SECTION 851-300-100 FOR ADDITIONAL APPLICATIONS.
 2. SUM OF LOSS IN BOTH 2-WIRE EXTENSIONS CANNOT EXCEED 14 DB.

Fig. 1—Maximum Gains and Losses for 4-2 and 2-4 Repeaters

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1.12 Since the MFT repeaters use active equalizers, the total gain of the repeater at 1 kHz is the sum of the flat-gain setting and the gain of the equalizer section. The equalizer section gain consists of two components: the gain of the slope section (SL) and the gain of the bump section (HT and BW). The gain produced by each slope setting is shown in Table D. The bump section gain for any combination of height (HT) and bandwidth (BW) settings is given in Table E.

2. PRESCRIPTION SETTINGS FOR LOADED CABLE PRECISION BALANCING NETWORKS

2.01 Two methods of obtaining prescription settings for loaded cable PBNs are described in this part. The first method uses a flowchart (Chart 1) to supply average PBN settings based on cable gauge. The second method involves the use of tables with PBN settings based on facility gauge, length, and distant termination. The original loaded cable PBN was the 4240A type used in J99343RB and RD, which are now MD. The 4240C is used in the J99343RG and RH and is compatible with metropolitan area trunk (MAT) cable. The newest repeaters, J99343RJ and RK, use a new integrated circuit (IC) type PBN which can be used in both loaded and nonloaded applications.

2.02 The settings obtained from Chart 1 should meet balance requirements for most circuits. If improved balance is desired after completion of the procedure in Chart 1, the return loss of the circuit may be optimized using the manual procedures described in Section 332-912-221. Use of the chart is self-explanatory.

2.03 The prescription setting tables for loaded cable PBNs are based on single-gauge and 2-gauge facilities. For circuits using 2-wire facilities composed of more than two gauges, with bridged taps or a mixture of loaded and nonloaded cable, the manual procedures described in Section 332-912-221 must be used. However, the table entry which most closely resembles the actual facility may be used as an initial setting to minimize the time required for optimizing the network.

2.04 The tables list the PBN settings by the type of termination at the far end. Three types of terminations are given:

- 900 ohms in series with 2.15 μ F

- 600 ohms in series with 2.15 μ F
- Off-hook telephone set with 35 mA of loop current.

The tables also include the 1-kHz loss and the dc resistance of the facility.

2.05 For circuits requiring terminal balance (837- or J99380-type impedance compensators at the location with the balance requirement), the procedures in Part 4 should be used.

2.06 To use the tables, determine the line build-out capacitance (LBOC) setting based on the near-end section length from Table F. Table F lists the value of capacitance required by end section length for both Hi-Cap and MAT cable. Select the value of capacitance specified by the appropriate LBOC switches. The LBOC Setting column denotes the screws which are turned down on the older type repeaters.

2.07 For single-gauge facilities, Tables G, H, I, J, and K for 26-, 25-, 24-, 22-, and 19-gauge cable, respectively, locate the facility length. Then, using the appropriate termination column, read the correct PBN setting.

2.08 Tables which give settings for combinations of two gauges (Table L for 26- and 24-gauge; Table M for 24- and 26-gauge; Table N for 26- and 22-gauge; Table O for 22- and 26-gauge; Table P for 24- and 22-gauge; and Table Q for 22- and 24-gauge) must be selected according to the gauge of cable adjacent to the repeater. The adjacent gauge is listed first in the table title. The working length (WL) parameter, which is the total length of the facility between the repeater and the termination, is used to allow a better grouping of PBN settings. The WL is divided into the lengths of the individual gauges for determination of settings.

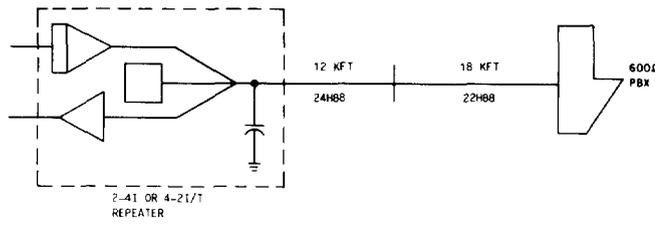
2.09 Tables for combinations of MAT and Hi-Cap cable are not supplied. For facilities of this type, Chart 1 or the manual procedures in Section 332-912-221 must be used.

2.10 To use the 2-gauge loaded tables (L, M, N, O, P, and Q):

- (1) Determine the proper table by the gauges of the facility. Be sure the gauge adjacent to the repeater is listed first in the table title.

- (2) Locate the WL of the facility and then the lengths of the individual gauges.
- (3) Locate the PBN settings under the appropriate termination heading.
- (4) Locate the 1-kHz cable loss and dc resistance.

2.11 The following is an example of how to obtain the PBN setting from the tables for 2-gauge loaded cable.



Example:

Given: the above circuit with the near-end section equal to 3200 feet.

- (1) Calculate the LBOC setting or use Table F. From Table F the LBOC = 0.052 μ F or screws BDE down.
- (2) Using the 2-gauge tables, determine the PBN settings from Table P (24H88 adjacent to the repeater combined with 22H88)

$$WL = 12 + 18 = 30$$

Under WL = 30, locate 12 and 18.

- (3) Since the circuit terminates in a 600-ohm PBX, the 600 + 2.15 termination column is used. The PBN settings are:

$$R = 5$$

$$Z = 3$$

3. PRESCRIPTION SETTINGS FOR NONLOADED CABLE PRECISION BALANCING NETWORKS

3.01 The tables for PBNs used on nonloaded cable are similar to the tables for loaded cable. The major difference in the two networks is that the nonloaded PBN does not require the LBOC. The nonloaded PBN tables cover PBN settings for the older 4240B PBN used in the J99343RC and

RE repeaters as well as the new selectable type used in the J99343RJ and RK repeaters (see paragraph 1.03).

3.02 The same procedures given for loaded cable for using the tables apply. If the cable facility does not match the table entry point very closely, the manual procedures described in Section 332-912-221 should be used.

3.03 Tables R, S, T, U, and V are for single-gauge facilities. Settings for 2-gauge facilities may be found in Tables W, X, Y, Z, AA, and BB.

4. PRESCRIPTION SETTINGS FOR CIRCUITS REQUIRING 837- OR J99380-TYPE IMPEDANCE COMPENSATORS

4.01 MFT repeaters may be used in conjunction with impedance compensators on circuits requiring terminal balance. The 837- or J99380-type network is used to improve the circuit performance by permitting a better impedance match at the location with the balance requirement.

4.02 Different procedures must be used to determine the PBN settings when impedance compensators are used with MFT 4-2 or 2-4 repeaters. Two tables are given for nonloaded cable PBNs: Table CC is for an impedance of 600 ohms on the drop side of the impedance compensator and Table DD is for 900 ohms impedance. The tables list the PBN and impedance compensator settings and the 1-kHz loss of the facility. When impedance compensators are used, the equalizers must be adjusted manually as described in Section 332-912-221.

Note: Nonloaded 25-gauge MAT cable is not recommended for use on circuits requiring terminal balance.

4.03 Table EE lists the settings for loaded cable PBNs and various 837- or J99380-type impedance compensators used on H88 loaded cable. The table assumes 3-kft end sections and gives settings for building out the end section to 6 kft. The 1-kHz loss is also given. When the facility does not match the table entry points very closely, the manual procedures described in Section 332-912-221 should be used.

5. EQUALIZATION STRATEGY

5.01 Since the 4-wire repeaters (4-4, 4-2, or 2-4) can be used in a variety of circuit configurations, a consistent set of rules for the allocation of equalization among repeaters is necessary.

5.02 The strategy applies to the entire metallic portion of the circuit. When the circuit includes 4-4 or 2-4 terminal repeaters with 4-2 or 2-4 intermediate repeaters, the equalization allocation must follow the guidelines in this section.

Note: In some cases the 4-4 repeaters may use the same strategy as described in Section 332-912-232 (post-equalization).

5.03 The procedures in this section may require the equalizers to post-equalize, pre-equalize, both post- and pre-equalize, or be set to zero. The typical equalization strategy for circuits without 4-4 intermediate repeaters is shown in Fig. 2. For additional information, see Section 851-300-130.

5.04 All the circuits in Fig. 2 have H88 loaded 4-wire facilities. For nonloaded or combinations of loaded and nonloaded facilities, the manual adjustment procedures described in Section 332-912-221 must be used to determine the equalizer settings.

5.05 Four basic rules for equalization of circuits with 2-wire extensions have been developed.

- Circuits with a single repeater and single-loaded 2-wire extension are not equalized (Fig. 2A).
- Repeater with two equalizers other than 4-4 intermediate are set alike (Fig. 2B).
- A maximum of two cable sections may be equalized by a single repeater.
- Repeater with only one adjustable equalizer must have a corresponding equalizer for the other voice path (Fig. 2C).

5.06 The circuits shown in Fig. 2 indicate the type of equalization, which cable sections are equalized by each equalizer, and which equalizers have identical settings. The repeater type is also shown, but the type used will depend on the office wiring arrangement (see Section 332-910-101 for a discussion of MFT wiring arrangements).

5.07 The circuit configurations shown in Fig. 3 include the use of 4-4 intermediate repeaters. When additional 4-4 intermediate repeaters are used, the additional 4-wire link should be equalized as shown in Fig. 3(F).

6. CABLE LOSS COMPUTATIONS

6.01 The 1-kHz loss of nonloaded cable may be computed using the total length of the facility, the dc resistance, and the terminating impedances. Use the following procedure to determine the 1-kHz cable loss.

- (a) Calculate the total length of the cable in kilofeet.

Note: The 25-gauge MAT cable should be converted to an equivalent length of 26-gauge cable before determining total length (see paragraph 7.05).

- (b) Calculate the total resistance of the cable from Table FF.

- (c) Using the values determined in (a) and (b), find the estimated insertion loss using Chart 2 for 900-ohm terminations on both ends, Chart 3 for a 600- and 900-ohm combination termination, or Chart 4 for 600-ohm terminations on both ends.

- (d) If a bridged tap (BT) is present, include the length of BT(s) in the total facility length, but do not include the resistance of the BT in the total resistance.

6.02 To determine the 1-kHz loss of loaded cable, multiply the lengths of the gauges by the loss/kft values shown in Table GG. Add the losses of individual sections to determine the total 1-kHz loss.

7. PRESCRIPTION EQUALIZER SETTINGS

A. Prescription Equalizer Setting Tables

7.01 The tables in this section are divided into four categories:

- Terminal repeaters with 2-wire extensions
- Loaded 4-wire facilities with loaded 2-wire extensions

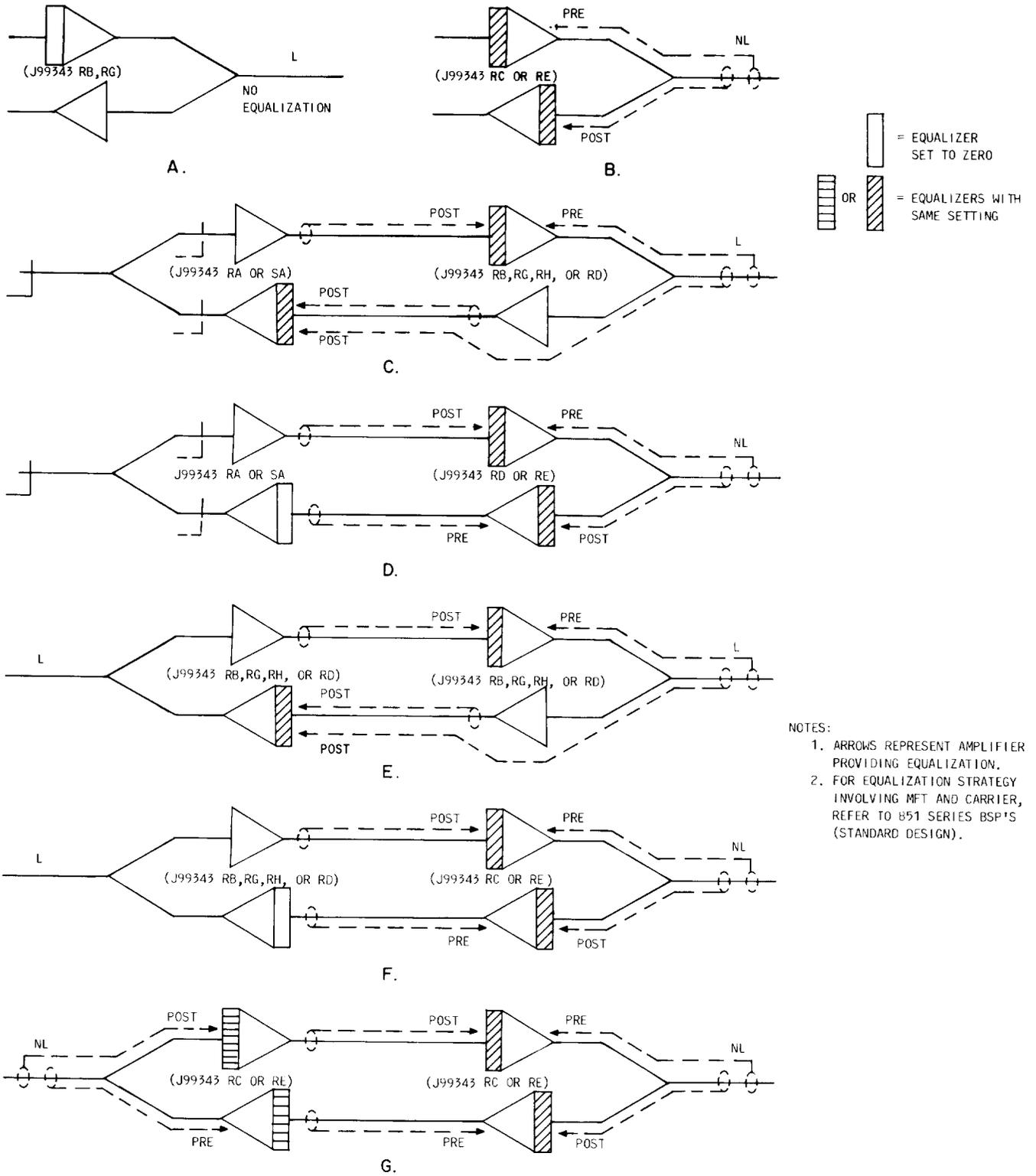


Fig. 2—Equalization Strategy

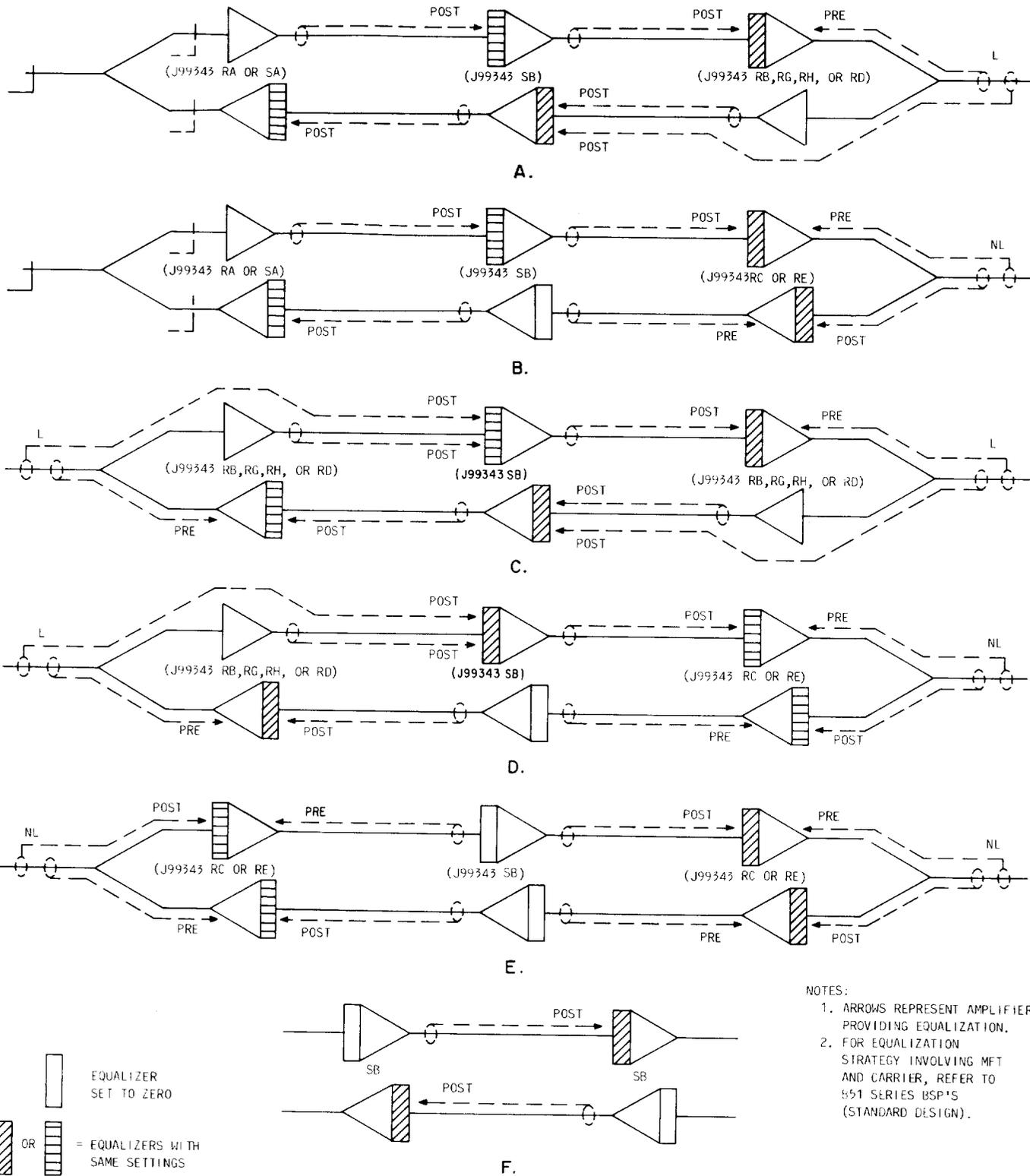


Fig. 3—Equalization Strategy

- Loaded 4-wire facilities with nonloaded 2-wire extensions
- Loaded 4-wire facilities between 4-wire repeaters (4-4 type).

7.02 *The tables assume that all 4-wire facilities are loaded. Most of the tables are for single-gauge facilities.* To use the tables for multigauge facilities, equivalence procedures must be used to determine the single- or double-gauge equivalent length (see paragraph 7.03). The equivalence procedures given in this section are for computing equalizer settings only.

7.03 To convert a cable facility with two gauges to the equivalent single-gauge length, use the total length of the facility and the gauge of the longest segment. To convert a cable facility containing more than two gauges (mixed gauges) to a 2-gauge equivalent, use the two gauges which have the longest lengths as the major gauges and add the lengths of the remaining segments to the major gauges with the closest gauge.

7.04 Conversion of nonloaded facilities to a single-gauge must include the termination at the far end. Two conversion factor tables are given: one for 900-ohm terminations and one for 600-ohm terminations (Table HH for 900 ohms and Table II for 600 ohms). The equivalent length of a major gauge is found by the formula:

$$\text{Equivalent length} = K \text{ times the length of the minor gauge.}$$

The constant K is obtained from Table HH for 900-ohm terminations or Table II for 600-ohm terminations. This equivalent length is added to the length of the major gauge for entry in the tables. For conversion of bridged taps to an equivalent length of nonloaded cable, see Part 8.

7.05 Nonloaded MAT cable may be converted to an equivalent length of 26-gauge cable for entry into the tables for facilities composed of more than one gauge. **The 25-gauge length is multiplied by 0.77 to equate to a 26-gauge nonloaded cable.**

7.06 The equalizer settings for 4-2 terminal repeaters are given in four sets of tables. Table JJ is for single-gauge, 2-wire extensions with a 900-ohm termination at the far end. Table KK

is for single-gauge with a 600-ohm termination. Tables LL and MM are for 2-gauge extensions with 900- and 600-ohm terminations, respectively.

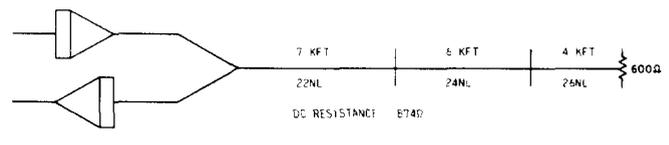
7.07 The tables for intermediate repeaters are given by the gauge of the 4-wire cable section and the far end termination. Tables NN, OO, PP, and QQ are for 19-, 22-, 24-, and 26-gauge loaded 4-wire facilities with **loaded 2-wire** extensions terminated in 900 ohms. Tables RR, SS, TT, and UU are for the same facilities terminated in 600 ohms. Loaded 24H88 cable values can be used for loaded 25H88 MAT cable values in these tables (NN through UU).

7.08 Settings for 19-, 22-, 24-, and 26-gauge loaded 4-wire facilities with **nonloaded 2-wire** extensions terminated in 900 ohms are given in Tables VV, WW, XX, and YY, respectively. Tables ZZ, AAA, BBB, and CCC are for the same facilities terminated in 600 ohms. Values shown in Tables XX and BBB for 24-gauge H88 loaded 4-wire cable can be used for 25-gauge H88 loaded 4-wire MAT cable. However, the nonloaded 25-gauge MAT 2-wire extension length is converted to an equivalent nonloaded 26-gauge length by multiplying by 0.77.

7.09 For convenience, Tables DDD, EEE, and FFF are given for 4-wire cable sections. These tables are used only for circuit segments as shown in Fig. 3(F).

7.10 The following examples demonstrate the use of the equalizer tables.

Example 1: Terminal 4-2 Repeater



Determine the equalizer settings and 1-kHz loss of the circuit above.

- (1) Since this circuit uses a terminal repeater, it is equalized as shown in Fig. 2(B).
- (2) The 2-wire extension must be converted to a 2-gauge equivalent to use Table MM (600-ohm termination).

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- (3) Convert 4 kft 26-gauge to a 24-gauge equivalent (paragraph 7.04).

$$EL = 4(K)$$

$$EL = 4(1.15) \text{ from Table II}$$

$$EL = 4.6 \text{ kft of 24-gauge}$$

- (4) Using Table MM, the entry points are:

$$WL = 18 \text{ kft} \quad (7 \text{ kft} + 6 \text{ kft} + 4.6 \text{ kft})$$

$$GA1 = 10.6 \text{ or } 11 \text{ kft 24-gauge rounded off}$$

$$GA2 = 7 \text{ kft 22-gauge}$$

Therefore

$$BW = 15$$

$$HT = 0$$

$$SLOPE = 8, NL$$

$$EQLR \text{ GAIN} = 3.7 \text{ dB}$$

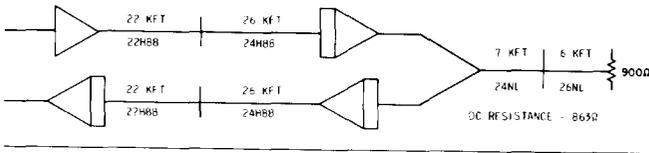
- (5) The 1-kHz loss is computed using Chart 3.

$$\text{Total length} = 17 \text{ kft}$$

$$\text{dc resistance} = 874 \text{ ohms}$$

$$1\text{-kHz loss} = 6.1 \text{ dB}$$

Example 2: 4-2 Intermediate



Determine the equalizer settings and 1-kHz loss for the above circuit.

- (1) The circuit should be equalized as shown in Fig. 2(D).
- (2) Convert the 4-wire facility to a single-gauge equivalent (paragraph 7.03).

$$\text{Major gauge} = 24H88$$

$$\text{Minor gauge} = 22H88$$

$$\text{Equivalent length} = 22 \text{ kft} + 26 \text{ kft} = 48 \text{ kft 24H88}$$

- (3) Convert the 2-wire extension to a single-gauge equivalent (paragraph 7.04).

$$\text{Major gauge} = 24$$

$$\text{Minor gauge} = 26$$

From Table HH, $K = 1.11$

$$\text{Therefore } EL = 6(1.11)$$

$$\text{Therefore } EL = 6.6 \text{ kft 24-gauge}$$

$$\text{Total length of 24-gauge} = 6.6 + 7 = 13.6 \text{ kft or } 14 \text{ kft rounded off}$$

- (4) Using Table XX:

$$4\text{-wire facility} = 48 \text{ kft 24H88}$$

$$2\text{-wire facility} = 14 \text{ kft 24 NL}$$

The equalizer settings are:

$$BW = 15$$

$$HT = 0$$

$$SLOPE = 13, NL$$

$$EQLR \text{ GAIN} = 5.8 \text{ dB}$$

- (5) The 1-kHz loss of the circuit equals the 4-wire loss plus the 2-wire loss.

4-wire loss

$$22 \text{ kft } 22H88 \quad 22 \times .15 \text{ dB/kft (Table GG)}$$

$$26 \text{ kft } 24H88 \quad 26 \times .23 \text{ dB/kft (Table GG)}$$

$$4\text{-wire loss} = 3.3 \text{ dB} + 6.0 \text{ dB} = 9.3 \text{ dB}$$

2-wire loss

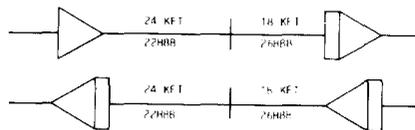
$$\text{Total length} = 14 \text{ kft}$$

$$\text{dc resistance} = 863 \text{ ohms}$$

$$\text{From Fig. 4 } 1\text{-kHz loss} = 5.3 \text{ dB}$$

$$\text{Total facility loss} = 9.3 \text{ dB} + 5.3 \text{ dB} = 14.6 \text{ dB}$$

Example 3: 4-4 Intermediate



Determine the equalizer settings and 1-kHz loss of the 4-wire segment of the circuit above.

(1) Since this is a segment of a circuit between 4-wire repeaters, the 4-wire tables must be used (Table FFF).

(2) The table entry points are:

GA1 = 18 kft 26H88

GA2 = 24 kft 22H88

(3) From Table FFF 26/22 column, the settings for 18 kft 26-gauge and 24 kft 22-gauge are:

BW = 5

HT = 5

SLOPE = 3, L

EQLR GAIN = 3.7 dB

(4) The 1-kHz loss can be estimated using the factors from Table GG:

24 kft 22H88 = $24 \times .15$ dB/kft = 3.6 dB

18 kft 26H88 = $18 \times .34$ dB/kft = 6.1 dB

Total facility loss = 9.7 dB

B. Prescription Equalizer Setting Charts

7.11 The prescription setting charts (Charts 5 and 6) are graphic representations of the active equalizer settings for the J99343RC and J99343RJ 4-2 terminal repeaters with nonloaded 2-wire extensions. The charts will supply "optimum" or "near optimum" equalizer settings which meet trunk roll-off objectives for most facilities. These charts should only be used in lieu of the tables when the gauge(s) of the 2-wire facility to be equalized is not known. If the length and dc resistance of the 2-wire facility is not known, the normal method must be used to determine the equalizer settings.

7.12 The procedures for using Charts 5 and 6 are simpler than those required for the prescription setting tables. An equivalence procedure is also required for 25-gauge MAT cable. (See Note, paragraph 7.13.)

7.13 The following procedures for using the charts give equalizer settings for cable or cable combinations as a function of total length and dc resistance of the nonloaded facility.

(1) Determine the total length (L) of the nonloaded facility in kilofeet, including the length of all bridged taps.

Note: The 25-gauge nonloaded MAT cable must be converted to an equivalent length of 26-gauge cable by multiplying the length of 25-gauge cable by 0.77 before determining the total length.

(2) Determine (by measurement) the dc resistance (R) in ohms of the nonloaded facility found in (1) above. Do not use bridged tap resistance.

(3) Select the applicable chart based on the nonloaded cable termination, ie, 600 or 900 ohms.

(4) Using the length (L) determined in (1) and the resistance (R) determined in (2), locate the point of intersection on the chart selected in (3).

(5) The region in which the point of intersection is located specifies the active equalizer setting. If the point is located on a boundary line, choose the larger of the two settings.

8. EQUIVALENCE PROCEDURES FOR BRIDGED TAPS ON NONLOADED CABLE

8.01 Bridged taps on nonloaded cable can be related to an equivalent length of cable by using Table GGG. The bridged tap can be converted to an equivalent length using one of the following:

(1) The gauge of cable to which the bridged tap is connected

(2) The gauge of the greater length if the bridged tap is connected between two different gauges

(3) The gauge which comprises the greatest length of cable when the location of the bridged tap is unknown.

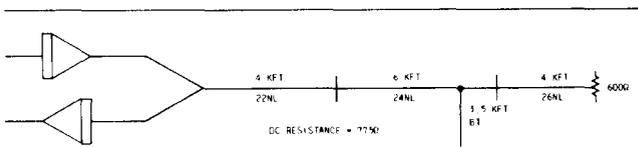
SECTION 332-912-222

8.02 To find the equivalent cable length in Table GGG:

- (1) Find the bridged tap length in Table GGG that is the nearest to the actual length of the bridged tap.
- (2) Locate the equivalent length under the gauge selected using the procedure in paragraph 8.01.
- (3) Insert this equivalent length into the cable facility at the location of the bridged tap and use the single- or 2-gauge prescription setting tables as required.

8.03 The following is an example of how to obtain an equalizer setting for a repeater with bridged taps on the 2-wire nonloaded extension.

Example:



Determine the equalizer settings and 1-kHz loss of the circuit above.

- (1) Since this circuit uses a terminal repeater, it is equalized as shown in Fig. 2(B).
- (2) The 2-wire extension must be converted to a 2-gauge equivalent to use Table MM (600-ohm termination).
- (3) Convert 4 kft 26-gauge to a 24-gauge equivalent (paragraph 7.04).

EL = 4(K)
 EL = 4(1.15) from Table GG
 EL = 4.6 kft of 24-gauge

(4) Convert the BT to an equivalent 24-gauge length (paragraph 8.01). From Table GGG, 3.5 kft of BT equates to 2.7 kft of 24-gauge cable.

(5) Using Table MM, the entry points are:

WL = 17 kft (4 kft + 6 kft + 2.7 kft + 4.6 kft)
 GA1 = 13.3 kft or 13 kft 24-gauge rounded off
 GA2 = 4 kft 22 gauge

Therefore

BW = 15
 HT = 0
 SLOPE = 7, NL
 EQLR GAIN = 3.4 dB

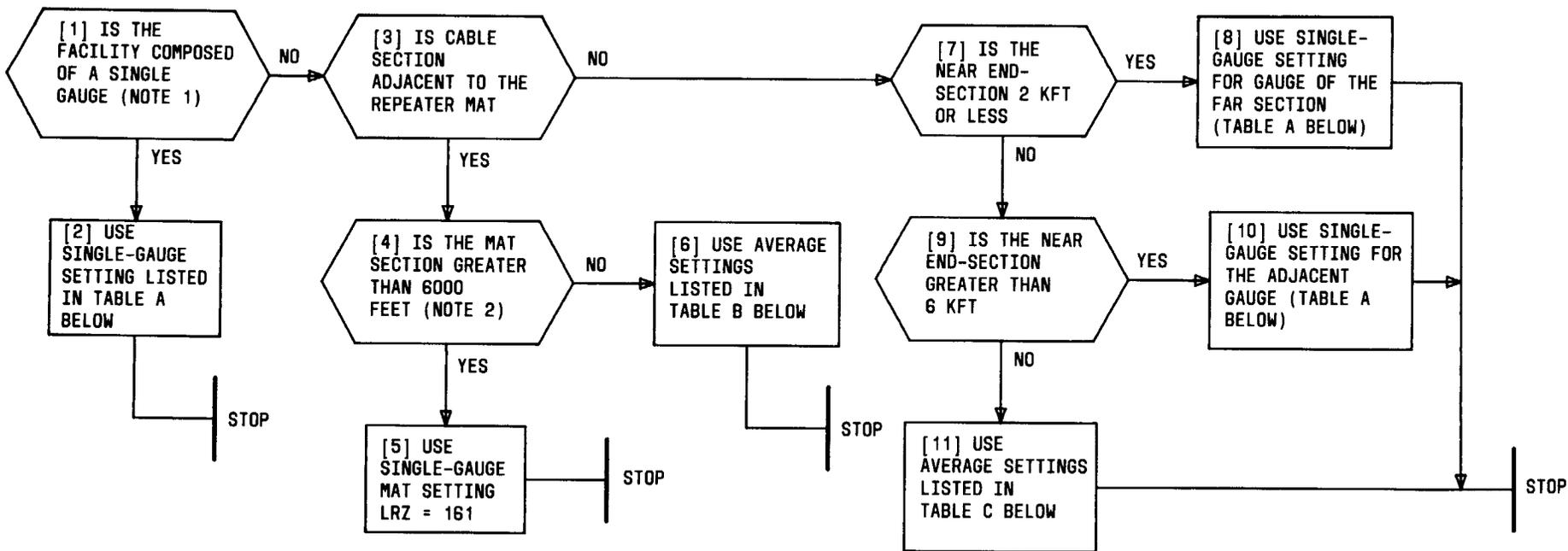
(6) The 1-kHz loss is computed using Chart 3.

Total length = 17.5 kft
 DC resistance = 76 ohms
 1-kHz loss = 5.8 dB

9. REFERENCES

9.01 The following documents contain additional information on the 4-2 and 2-4 repeaters.

SECTION	TITLE
332-910-100	General Description of MFT
332-910-180	General Application Information for MFT
332-912-121	Description of 4-2 and 2-4 Repeater
332-912-221	Installation and Testing 4-2 and 2-4 Repeater
SD-1C359-01	Metallic Facility Terminal Circuit
CD-1C359-01	Common Systems—MF Circuit



NOTES:

1. FOR FACILITIES COMPOSED OF TWO OR MORE GAUGES, THE NEAR GAUGE IS ADJACENT TO THE REPEATER AND FAR SECTION IS THE NEXT GAUGE. ALL OTHER GAUGES ARE IGNORED.
2. IT IS ASSUMED THAT MAT WILL BE BUILT OUT TO MULTIPLES OF 6 KFT.

TABLE A			
GAUGE	L	R	Z
19	0	0	2
22	0	2	2
24	0	4	3
25	1	6	1
26	0	7	4

TABLE B			
GAUGES	L	R	Z
25 AND 19	1	3	0
25 AND 22	1	3	0
25 AND 24	1	6	1
25 AND 26	1	6	1

TABLE C			
GAUGES	L	R	Z
19 AND 22	0	1	2
19 AND 24	0	2	2
19 AND 25	0	2	3
19 AND 26	0	3	3
22 AND 24	0	3	2
22 AND 25	0	4	5
22 AND 26	0	4	3
24 AND 25	0	4	4
24 AND 26	0	5	3
26 AND 25	0	5	5

Chart 1—Prescription Setting for Loaded Cable Precision Balancing Networks

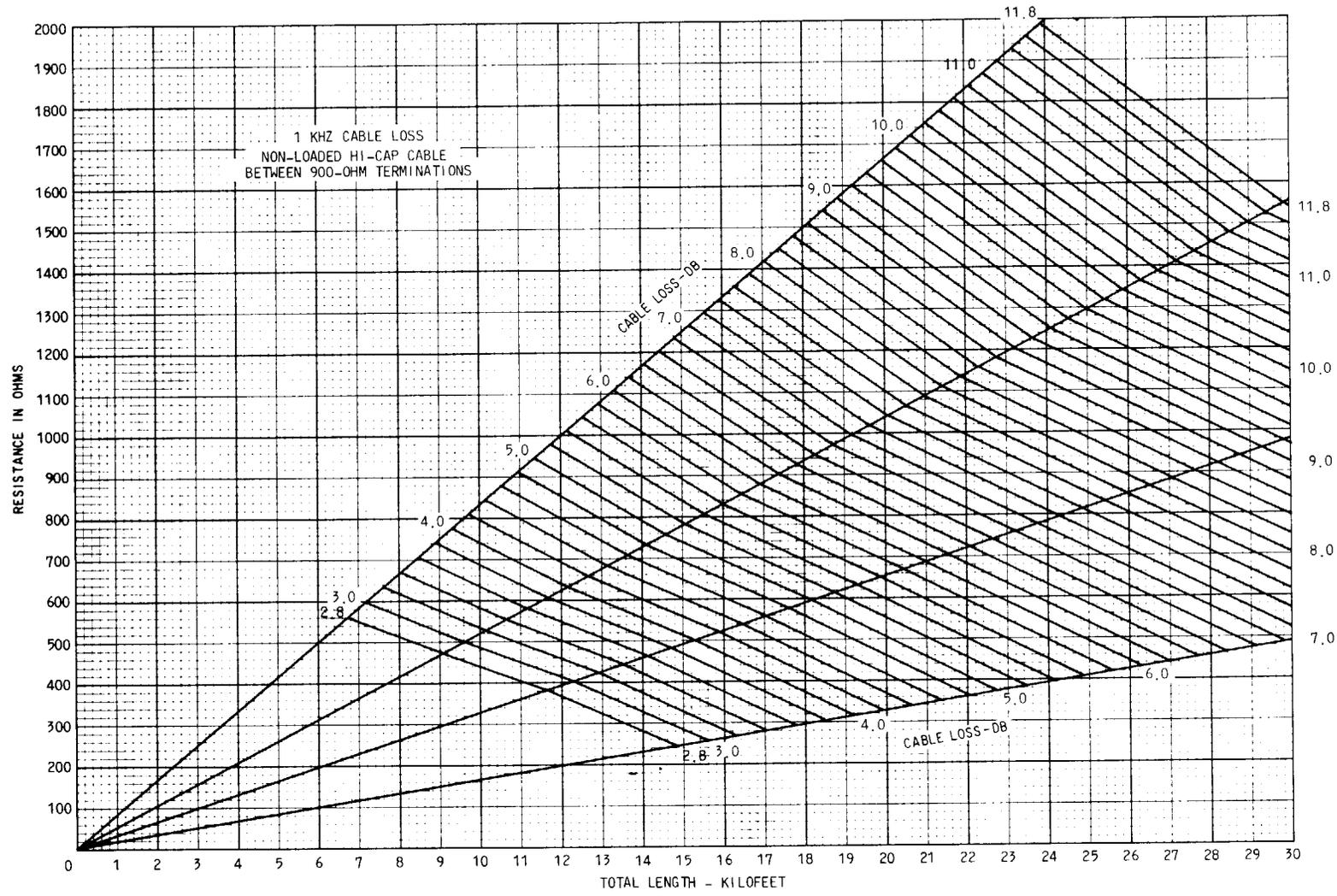


Chart 2—1-KHz Cable Loss (900 to 900)

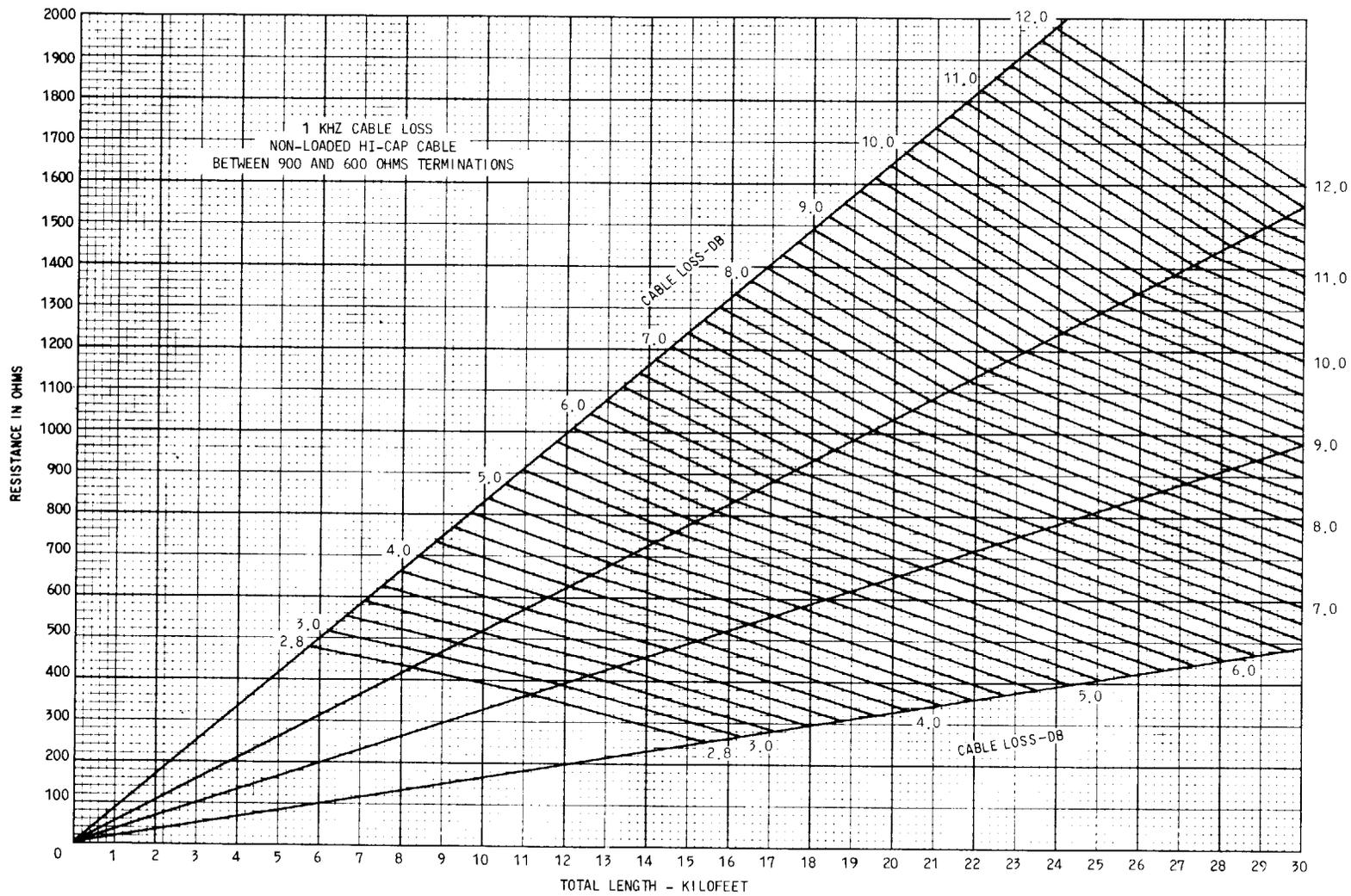


Chart 3—1-KHz Cable Loss (900 to 600)

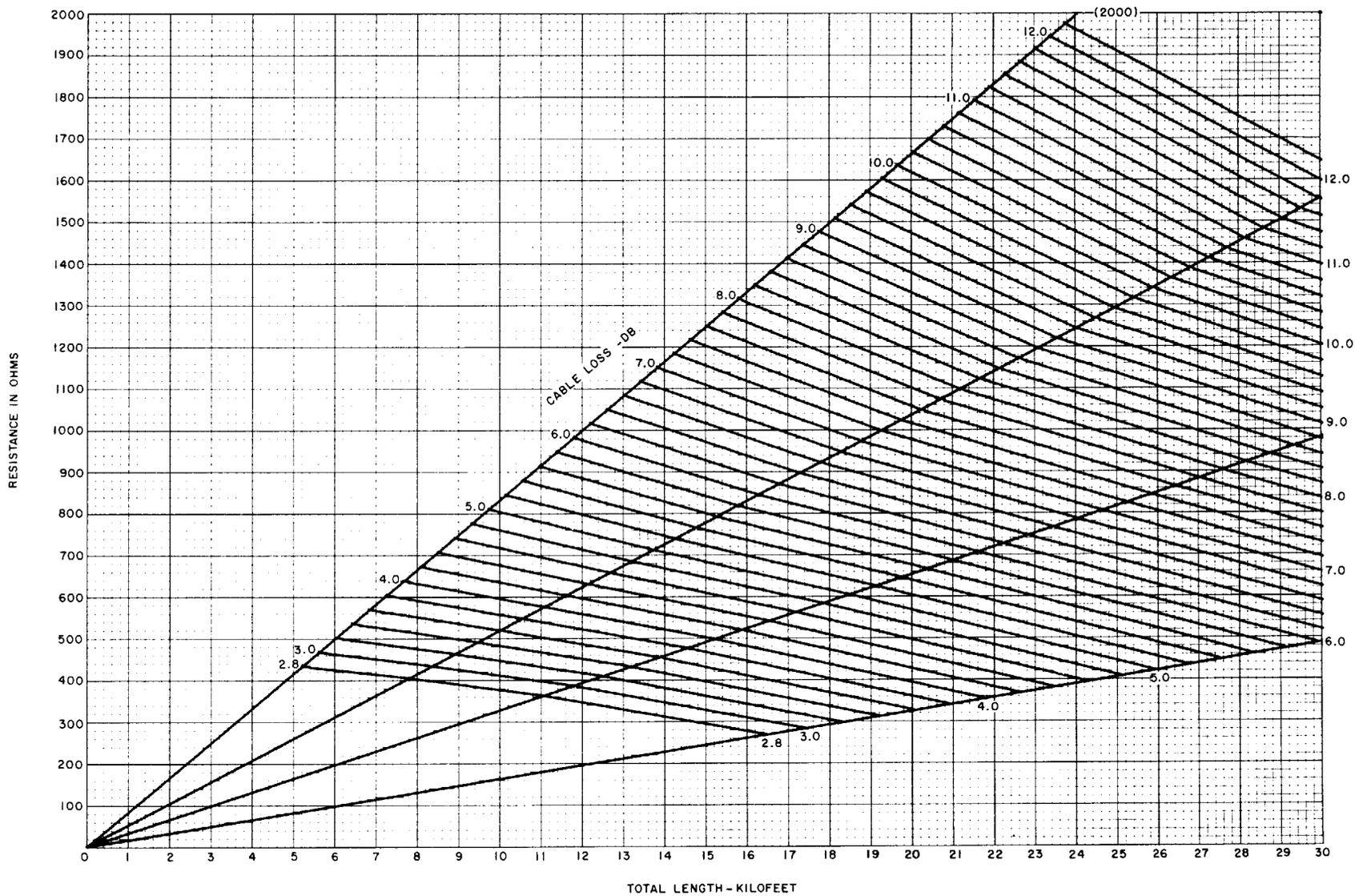


Chart 4—1-KHz Cable Loss (600 to 600)

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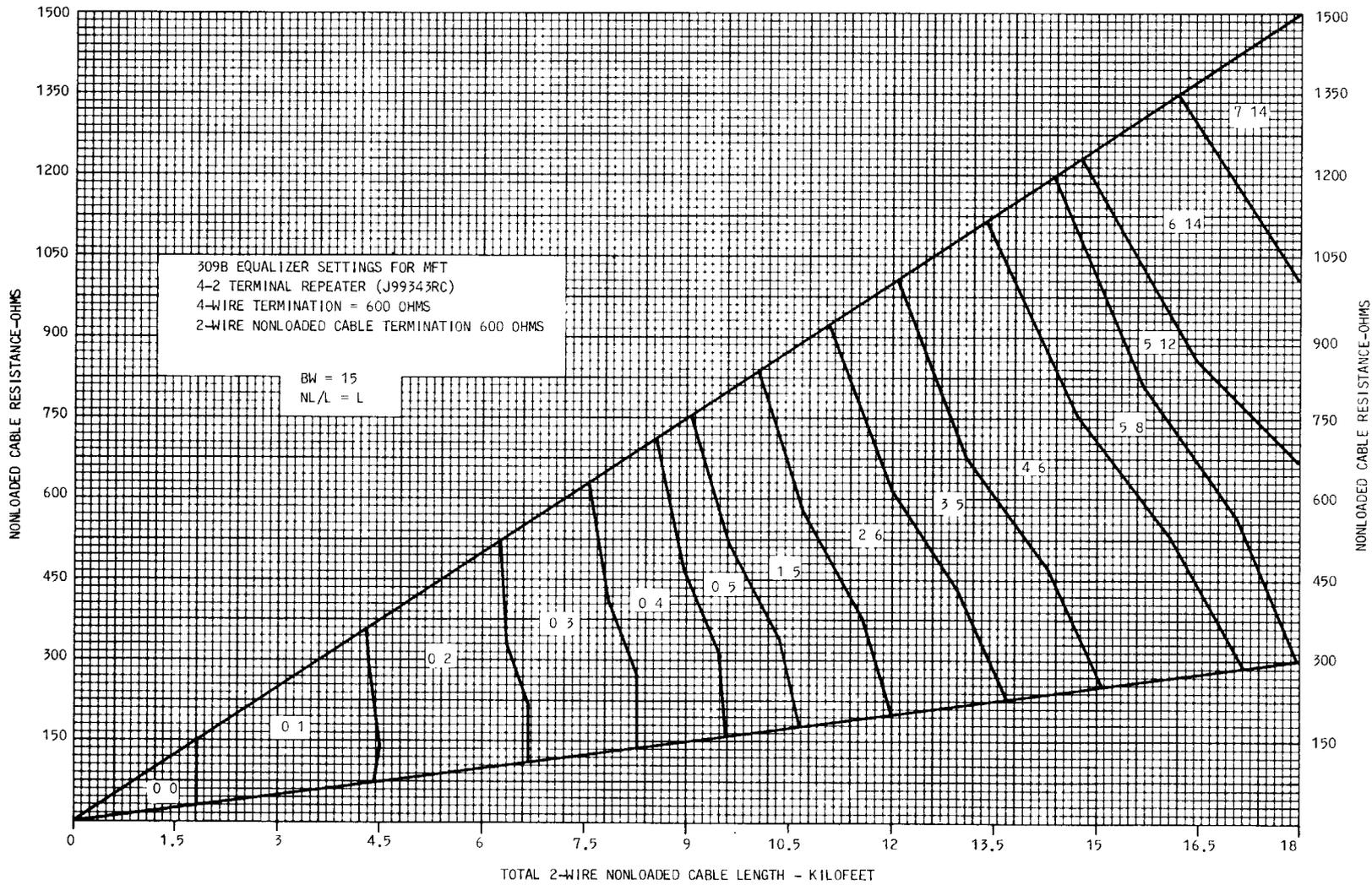


Chart 5—Equalizer Settings for J99343RC and RJ 4-2 Wire Terminal Repeaters (NL)—Cable Termination = 600 Ohms

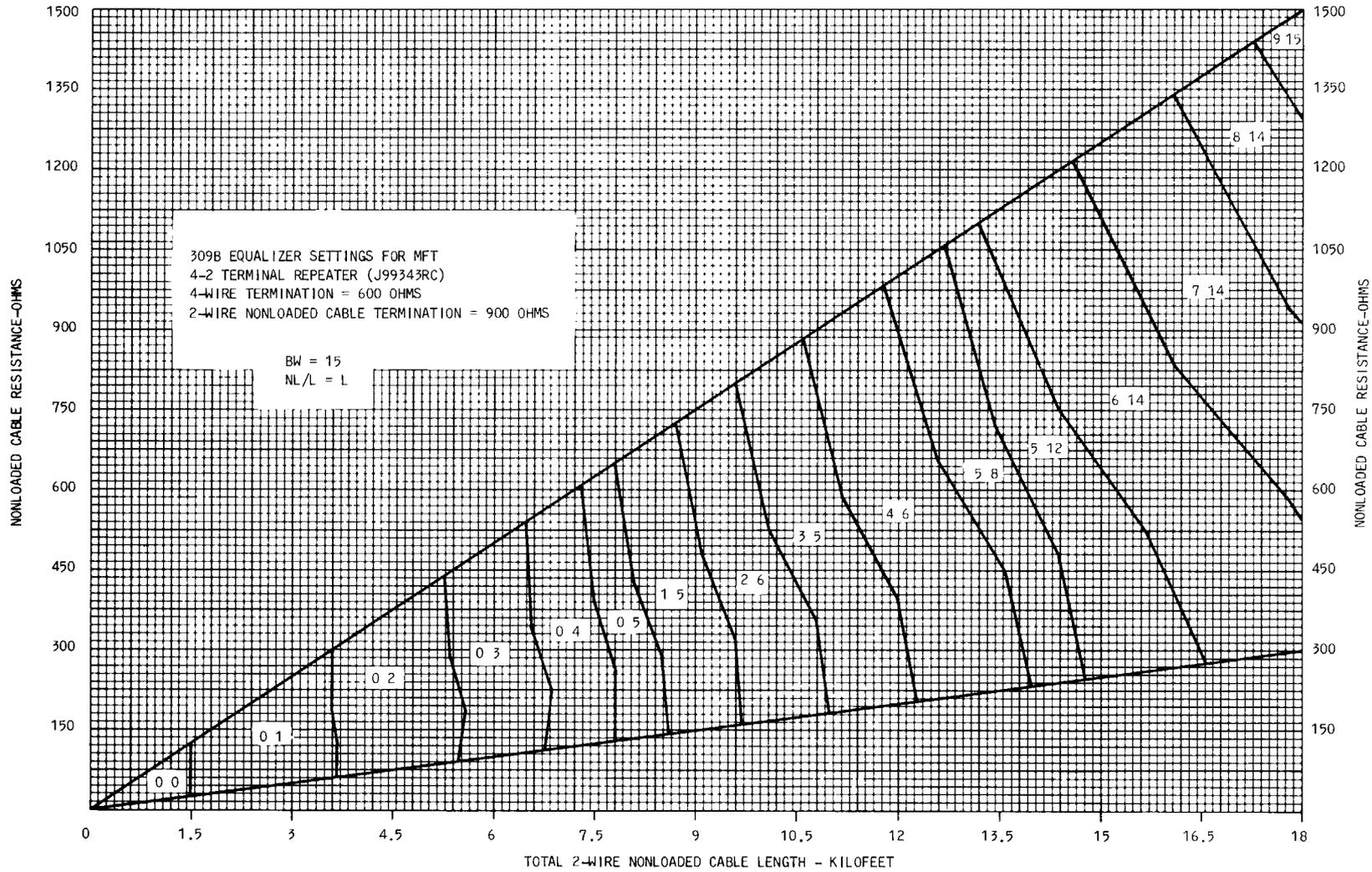


Chart 6—Equalizer Settings for J99343RC and RJ 4-2 Wire Terminal Repeaters (NL)—Cable Termination = 900 Ohms

TABLE A

**PERMISSIBLE TRANSMITTING AND RECEIVING LEVELS AT 1 KHZ
WITH RESPECT TO TRANSMISSION LEVEL POINT (TLP)**

REPEATER LOCATION	CABLE TYPE	MINIMUM INPUT LEVEL (dB)	MAXIMUM OUTPUT LEVEL (dB)
Central Office	Nonloaded	-9	+6
	H88 loaded	-9	+6
PBX or other customer location	Nonloaded	-9	+6
	H88 loaded	-6	+3

TABLE B

MAXIMUM 1-KHZ LOSS PER LENGTH OF CABLE WITHIN A REPEATER SECTION

REPEATER SECTION	MAXIMUM LOSS	
	NONLOADED	H88 LOADED
PBX or cust to CO	15 dB	12 dB
CO to CO	15 dB	15 dB

TABLE C

4-WIRE IMPEDANCE SELECTION

4-Wire Cable	Impedance Selection
Nonloaded	600 Ohms on Both Ends
H88 Loaded	1200 Ohms on Both Ends
Mixed Nonloaded and Loaded	600 Ohms on the Nonloaded End and 1200 Ohms on the Loaded End

TABLE D

ADDITIONAL 1-KHZ GAIN IN DB
AS A RESULT OF SLOPE SETTINGS

SLOPE SETTING	NL/L SWITCH	
	NL	L
0*	0	0
1	0.4	1.4
2	0.9	2.6
3	1.4	3.7
4	1.8	4.7
5	2.3	5.5
6	2.8	6.3
7	3.4	7.2
8	3.7	7.8
9	4.2	8.4
10	4.6	9.0
11	5.0	9.5
12	5.4	10.0
13	5.8	10.5
14	6.2	11.0
15	6.6	11.4

* SLOPE setting 0 disables the slope unit.

TABLE E

ADDITIONAL 1-HKZ GAIN IN DB AS A
RESULT OF HT AND BW SETTINGS

		HT SETTING															
		0 (NOTE)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
B W S E T T I N G	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1
	5	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	0.1
	6	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.2
	7	0	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
	8	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.4
	9	0	0	0	0	0	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.4	0.5
	10	0	0	0	0	0	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.4	0.5	0.7
	11	0	0	0	0	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.4	0.4	0.6	0.7	0.9
	12	0	0	0	0.1	0.1	0.1	0.2	0.2	0.3	0.4	0.4	0.5	0.6	0.8	0.9	1.2
	13	0	0	0.1	0.1	0.1	0.2	0.2	0.3	0.4	0.5	0.6	0.7	0.9	1.1	1.3	1.7
	14	0	0	0.1	0.1	0.2	0.3	0.4	0.5	0.7	0.8	1.0	1.2	1.4	1.7	2.0	2.5
15	0	0.1	0.2	0.3	0.4	0.5	0.7	0.9	1.2	1.5	1.7	2.0	2.4	2.8	3.3	3.9	

Note: HT setting 0 disables the bump unit for all BW settings.

TABLE F

LBOC SETTINGS

END-SECTION LENGTH (KFT)	HI-CAP		MAT		END-SECTION LENGTH (KFT)	HI-CAP		MAT	
	C (μ F)	LBLOC SETTING	C (μ F)	LBLOC SETTING		C (μ F)	LBLOC SETTING	C (μ F)	LBLOC SETTING
0.0	0.104	CEF	0.082	ADF	3.0	0.056	CDE	0.044	BCE
0.1	0.102	ABEF	0.080	DF	3.1	0.054	ABDE	0.044	BCE
0.2	0.100	BEF	0.078	ABCF	3.2	0.052	BDE	0.042	ACE
0.3	0.100	BEF	0.078	ABCF	3.3	0.052	BDE	0.040	CE
0.4	0.098	AEF	0.076	BCF	3.4	0.050	ADE	0.040	CE
0.5	0.096	EF	0.076	BCF	3.5	0.048	DE	0.038	ABE
0.6	0.094	ABCDF	0.074	ACF	3.6	0.046	ABCE	0.038	ABE
0.7	0.092	BCDF	0.072	CF	3.7	0.044	BCE	0.036	BE
0.8	0.092	BCDF	0.072	CF	3.8	0.044	BCE	0.034	AE
0.9	0.090	ACDF	0.070	ABF	3.9	0.042	ACE	0.034	AE
1.0	0.088	CDF	0.068	BF	4.0	0.040	CE	0.032	E
1.1	0.086	ABDF	0.068	BF	4.1	0.038	ABE	0.032	E
1.2	0.084	BDF	0.066	AF	4.2	0.036	BE	0.030	ABCE
1.3	0.084	BDF	0.066	AF	4.3	0.036	BE	0.028	BCD
1.4	0.082	ADF	0.064	F	4.4	0.034	AE	0.028	BCD
1.5	0.080	DF	0.062	ABCDE	4.5	0.032	E	0.026	ACD
1.6	0.078	ABCF	0.062	ABCDE	4.6	0.030	ABCD	0.026	ACD
1.7	0.076	BCF	0.060	BCDE	4.7	0.028	BCD	0.024	CD
1.8	0.076	BCF	0.060	BCDE	4.8	0.028	BCD	0.022	ABD
1.9	0.074	ACF	0.058	ACDE	4.9	0.026	ACD	0.022	ABD
2.0	0.072	CF	0.056	CDE	5.0	0.024	CD	0.020	BD
2.1	0.070	ABF	0.056	CDE	5.1	0.022	ABD	0.018	AD
2.2	0.068	BF	0.054	ABDE	5.2	0.020	BD	0.018	AD
2.3	0.068	BF	0.054	ABDE	5.3	0.020	BD	0.016	D
2.4	0.066	AF	0.052	BDE	5.4	0.018	AD	0.016	D
2.5	0.064	F	0.050	ADE	5.5	0.016	D	0.014	ABC
2.6	0.062	ABCDE	0.050	ADE	5.6	0.014	ABC	0.012	BC
2.7	0.060	BCDF	0.048	DE	5.7	0.012	BC	0.012	BC
2.8	0.060	BCDE	0.048	DE	5.8	0.012	BC	0.010	AC
2.9	0.058	ACDF	0.046	ABCE	5.9	0.010	AC	0.010	AC

TABLE G

PRECISION BALANCE NETWORK SETTINGS FOR
26-GAUGE H88 LOADED CABLE WITHOUT BRIDGED TAP AT 68° F (NOTE)

END SECTION = 3.0 KFT

LENGTH (KFT)	BALANCE NETWORK SETTINGS BY TERMINATION						1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RESISTANCE (OHMS)
	900 + 2.16		600 + 2.16		TELSET (35MA)			
	R	Z	R	Z	R	Z		
6.0	5	2	1	0	1	0	2.2	508.4
12.0	7	3	7	3	7	2	4.1	1016.8
18.0	7	4	7	3	7	3	6.0	1525.2
24.0	7	4	7	4	7	4	8.2	2033.6
30.0	7	4	7	4	7	4	10.3	2542.0
36.0	7	4	7	4	7	4	12.4	3050.4
42.0	7	4	7	4	7	4	14.5	3558.8
48.0	7	4	7	4	7	4	16.5	4067.2

Note: All L switch settings = O (Off).

TABLE H

PRECISION BALANCE NETWORK SETTINGS FOR
25-GAUGE H88 LOADED MAT CABLE WITHOUT BRIDGED TAP AT 68° F

END SECTION = 3.0 kft

LENGTH (kft)	BALANCE NETWORK SETTINGS BY TERMINATION									1 KHZ CABLE LOSS (dB) (900 OHMS)	DC CABLE RES (OHMS)
	900 + 2.16			600 + 2.16			TEL SET (35 mA)				
	L	R	Z	L	R	Z	L	R	Z		
12.0	1	6	0	1	4	0	1	7	0	3.2	802.5
18.0	1	7	1	1	7	1	1	7	0	4.3	1203.7
24.0	1	7	1	1	7	1	1	7	0	5.9	1605.0
30.0	1	6	1	1	7	1	1	7	1	7.4	2006.2
36.0	1	6	1	1	6	1	1	7	1	9.0	2407.4
42.0	1	6	1	1	6	1	1	6	1	10.5	2808.7
48.0	1	6	1	1	6	1	1	6	1	12.0	3209.9
54.0	1	6	1	1	6	1	1	6	1	13.4	3611.2
60.0	1	6	1	1	6	1	1	6	1	14.9	4012.4

TABLE I
 PRECISION BALANCE NETWORK SETTINGS FOR
 24-GAUGE H88 LOADED CABLE WITHOUT BRIDGED TAP AT 68° F (NOTE)

END SECTION = 3.0 KFT

LENGTH (KFT)	BALANCE NETWORK SETTINGS BY TERMINATION						1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RESISTANCE (OHMS)
	900 + 2.16		600 + 2.16		TELSET (35MA)			
	R	Z	R	Z	R	Z		
6.0	2	1	0	0	0	0	1.5	319.8
12.0	4	2	3	2	5	1	2.7	639.5
18.0	5	3	5	3	6	3	4.0	959.3
24.0	4	3	5	3	6	3	5.4	1279.1
30.0	4	3	4	3	5	3	6.8	1598.8
36.0	4	3	4	3	4	3	8.2	1918.6
42.0	4	3	4	3	4	3	9.6	2238.3
48.0	4	3	4	3	4	3	11.0	2558.1
54.0	4	3	4	3	4	3	12.3	2877.9
60.0	4	3	4	3	4	3	13.7	3197.6
66.0	4	3	4	3	4	3	15.1	3517.4

Note: All L switch settings = O (Off).

TABLE J
 PRECISION BALANCE NETWORK SETTINGS FOR
 22-GAUGE H88 LOADED CABLE WITHOUT BRIDGED TAP AT 68° F (NOTE)

END SECTION = 3.0 KFT

LENGTH (KFT)	BALANCE NETWORK SETTINGS BY TERMINATION						1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RESISTANCE (OHMS)
	900 + 2.16		600 + 2.16		TELSET (35MA)			
	R	Z	R	Z	R	Z		
12.0	2	2	0	1	2	0	1.8	410.0
18.0	2	2	2	2	4	2	2.6	615.0
24.0	2	2	3	2	5	3	3.5	820.0
30.0	2	2	3	3	4	3	4.5	1025.0
36.0	2	2	3	3	3	3	5.4	1229.9
42.0	2	2	2	2	3	3	6.3	1434.9
48.0	2	2	2	2	2	3	7.2	1639.9
54.0	2	2	2	2	2	3	8.0	1844.9
60.0	2	2	2	2	2	3	8.9	2049.9
66.0	2	2	2	2	2	3	9.9	2254.9
72.0	2	2	2	2	2	3	10.8	2459.9
78.0	2	2	2	2	2	3	11.6	2664.9
84.0	2	2	2	2	2	2	12.5	2869.9
90.0	2	2	2	2	2	2	13.4	3074.9
96.0	2	2	2	2	2	2	14.3	3279.9
102.0	2	2	2	2	2	2	15.2	3484.9

Note: All L switch settings = O (Off).

TABLE K

PRECISION BALANCE NETWORK SETTINGS FOR
19-GAUGE H88 LOADED CABLE WITHOUT BRIDGED TAP AT 68° F (NOTE)

END SECTION = 3.0 KFT

LENGTH (KFT)	BALANCE NETWORK SETTINGS BY TERMINATION						1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RESISTANCE (OHMS)
	900 + 2.16		600 + 2.16		TELSET (35MA)			
	R	Z	R	Z	R	Z		
24.0	0	2	0	1	3	2	1.9	424.5
30.0	0	2	1	2	2	2	2.4	530.6
36.0	0	2	1	2	2	2	2.9	636.8
42.0	0	2	1	2	1	2	3.4	742.9
48.0	0	2	1	2	1	2	3.9	849.0
54.0	0	2	0	2	0	2	4.3	955.1
60.0	0	2	0	2	0	2	4.8	1061.3
66.0	0	2	0	2	0	2	5.3	1167.4
72.0	0	2	0	2	0	2	5.8	1273.5
78.0	0	2	0	2	0	2	6.3	1379.7
84.0	0	2	0	2	0	2	6.7	1485.8
90.0	0	2	0	2	0	2	7.2	1591.9
96.0	0	2	0	2	0	2	7.7	1698.0
102.0	0	2	0	2	0	2	8.2	1804.2
108.0	0	2	0	2	0	2	8.7	1910.3
114.0	0	2	0	2	0	2	9.1	2016.4
120.0	0	2	0	2	0	2	9.6	2122.5
126.0	0	2	0	2	0	2	10.1	2228.7
132.0	0	2	0	2	0	2	10.6	2334.8
138.0	0	2	0	2	0	2	11.1	2440.9
144.0	0	2	0	2	0	2	11.6	2547.1
150.0	0	2	0	2	0	2	12.0	2653.2
156.0	0	2	0	2	0	2	12.5	2759.3
162.0	0	2	0	2	0	2	13.0	2865.4
168.0	0	2	0	2	0	2	13.5	2971.6
174.0	0	2	0	2	0	2	14.0	3077.7
180.0	0	2	0	2	0	2	14.4	3183.8
186.0	0	2	0	2	0	2	14.9	3289.9
192.0	0	2	0	2	0	2	15.4	3396.1

Note: All L switch settings = O (Off).

TABLE L

PRECISION BALANCE NETWORK SETTINGS FOR MIXED 26- AND 24-GAUGE H88 LOADED CABLE WITHOUT BRIDGED TAP AT 68° F (NOTE)

26- GAUGE ADJACENT TO REPEATER
END SECTION = 3.0 KFT

LENGTH(KFT) 26-GA 24-GA	BALANCE NETWORK SETTINGS BY TERMINATION						1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RESISTANCE (OHMS)
	900 + 2.16		600 + 2.16		TELSET (35MA)			
	R	Z	R	Z	R	Z		
WL = 12.0 6.0 6.0	7	3	6	2	7	2	3.4	828.2
WL = 18.0 6.0 12.0 12.0 6.0	7	3	7	3	7	3	4.7	1147.9
	7	3	7	3	7	3	5.3	1336.6
WL = 24.0 6.0 18.0 12.0 12.0 18.0 6.0	7	3	7	3	7	3	6.2	1467.7
	7	4	7	3	7	3	6.8	1656.3
	7	4	7	4	7	3	7.4	1845.0
WL = 30.0 6.0 24.0 12.0 18.0 18.0 12.0 24.0 6.0	6	3	7	3	7	3	7.6	1787.5
	7	4	7	4	7	4	8.3	1976.1
	7	4	7	4	7	4	8.9	2164.7
	7	4	7	4	7	4	9.5	2353.4
WL = 36.0 6.0 30.0 12.0 24.0 18.0 18.0 24.0 12.0 30.0 6.0	6	3	6	3	7	4	9.0	2107.2
	7	4	7	4	7	4	9.7	2295.9
	7	4	7	4	7	4	10.3	2484.5
	7	4	7	4	7	4	11.0	2673.1
	7	4	7	4	7	4	11.7	2861.8
WL = 42.0 6.0 36.0 12.0 30.0 18.0 24.0 24.0 18.0 30.0 12.0 36.0 6.0	6	3	6	3	6	3	10.3	2427.0
	7	4	7	4	7	4	11.0	2615.6
	7	4	7	4	7	4	11.7	2804.3
	7	4	7	4	7	4	12.4	2992.9
	7	4	7	4	7	4	13.1	3181.5
	7	4	7	4	7	4	13.7	3370.2
WL = 48.0 6.0 42.0 12.0 36.0 18.0 30.0 24.0 24.0 30.0 18.0 36.0 12.0 42.0 6.0	6	3	6	3	6	3	11.7	2746.7
	7	4	7	4	7	4	12.3	2935.4
	7	4	7	4	7	4	13.0	3124.0
	7	4	7	4	7	4	13.8	3312.7
	7	4	7	4	7	4	14.5	3501.3
	7	4	7	4	7	4	15.1	3689.9
	7	4	7	4	7	4	15.8	3878.6
WL = 54.0 6.0 48.0 12.0 42.0 18.0 36.0 24.0 30.0 30.0 24.0	6	3	6	3	6	3	13.1	3066.5
	7	4	7	4	7	4	13.7	3255.1
	7	4	7	4	7	4	14.4	3443.8
	7	4	7	4	7	4	15.1	3632.4
	7	4	7	4	7	4	15.9	3821.1
WL = 60.0 6.0 54.0	6	3	6	3	6	3	14.5	3386.3

Note: All L switch settings = O (Off).

TABLE L (Contd)

PRECISION BALANCE NETWORK SETTINGS FOR MIXED 26-
AND 24-GAUGE H88 LOADED CABLE WITHOUT BRIDGED TAP AT 68° F (NOTE)

26- GAUGE ADJACENT TO REPEATER
END SECTION = 3.0 KFT

LENGTH(KFT) 26-GA 24-GA	BALANCE NETWORK SETTINGS BY TERMINATION						1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RESISTANCE (OHMS)
	900 + 2.16		600 + 2.16		TELSET (35MA)			
	R	Z	R	Z	R	Z		
WL = 60.0								
12.0 48.0	7	4	7	4	7	4	15.1	3574.9
18.0 42.0	7	4	7	4	7	4	15.8	3763.5
WL = 66.0								
6.0 60.0	6	3	6	3	6	3	15.9	3706.0

Note: All L switch settings = O (Off).

TABLE M

PRECISION BALANCE NETWORK SETTINGS FOR MIXED 24-
AND 26-GAUGE H88 LOADED CABLE WITHOUT BRIDGED TAP AT 68° F (NOTE)

24- GAUGE ADJACENT TO REPEATER
END SECTION = 3.0 KFT

LENGTH(KFT) 24-GA 26-GA	BALANCE NETWORK SETTINGS BY TERMINATION						1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RESISTANCE (OHMS)
	900 + 2.16		600 + 2.16		TELSET (35MA)			
	R	Z	R	Z	R	Z		
WL = 12.0 6.0 6.0	5	3	4	2	6	2	3.4	828.2
WL = 18.0 6.0 12.0 12.0 6.0	6 5	4 3	6 5	4 3	7 6	4 3	5.3 4.7	1336.6 1147.9
WL = 24.0 6.0 18.0 12.0 12.0 18.0 6.0	6 4 4	4 3 3	6 5 5	4 3 3	6 5 5	4 3 3	7.4 6.8 6.2	1845.0 1656.3 1467.7
WL = 30.0 6.0 24.0 12.0 18.0 18.0 12.0 24.0 6.0	5 4 4 4	4 3 3 3	5 4 4 4	4 3 3 3	6 5 5 5	4 4 3 3	9.5 8.9 8.3 7.6	2353.4 2164.7 1976.1 1787.5
WL = 36.0 6.0 30.0 12.0 24.0 18.0 18.0 24.0 12.0 30.0 6.0	5 4 4 4 4	4 3 3 3 3	5 4 4 4 4	4 3 3 3 3	5 4 4 4 4	4 3 3 3 3	11.7 11.0 10.3 9.7 9.0	2861.8 2673.1 2484.5 2295.9 2107.2
WL = 42.0 6.0 36.0 12.0 30.0 18.0 24.0 24.0 18.0 30.0 12.0 36.0 6.0	5 4 4 4 4 4	4 3 3 3 3 3	5 4 4 4 4 4	4 3 3 3 3 3	5 4 4 4 4 4	4 3 3 3 3 3	13.7 13.1 12.4 11.7 11.0 10.3	3370.2 3181.5 2992.9 2804.3 2615.6 2427.0
WL = 48.0 6.0 42.0 12.0 36.0 18.0 30.0 24.0 24.0 30.0 18.0 36.0 12.0 42.0 6.0	5 4 4 4 4 4 4	4 3 3 3 3 3 3	5 4 4 4 4 4 4	4 3 3 3 3 3 3	5 4 4 4 4 4 4	4 3 3 3 3 3 3	15.8 15.1 14.5 13.8 13.0 12.3 11.7	3878.6 3689.9 3501.3 3312.7 3124.0 2935.4 2746.7
WL = 54.0 24.0 30.0 30.0 24.0 36.0 18.0 42.0 12.0 48.0 6.0	4 4 4 4 4	3 3 3 3 3	4 4 4 4 4	3 3 3 3 3	3 4 4 4 4	3 3 3 3 3	15.9 15.1 14.4 13.7 13.1	3821.1 3632.4 3443.8 3255.1 3066.5
WL = 60.0 42.0 18.0	4	3	4	3	4	3	15.8	3763.5

Note: All L switch settings = O (Off).

TABLE M (Contd)

PRECISION BALANCE NETWORK SETTINGS FOR MIXED 24-
AND 26-GAUGE H88 LOADED CABLE WITHOUT BRIDGED TAP AT 68° F (NOTE)

24- GAUGE ADJACENT TO REPEATER
END SECTION = 3.0 KFT

LENGTH(KFT) 24-GA 26-GA	BALANCE NETWORK SETTINGS BY TERMINATION						1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RESISTANCE (OHMS)
	900 + 2.16		600 + 2.16		TELSET (35MA)			
	R	Z	R	Z	R	Z		
WL = 60.0								
48.0 12.0	4	3	4	3	4	3	15.1	3574.9
54.0 6.0	4	3	4	3	4	3	14.5	3386.3
WL = 66.0								
60.0 6.0	4	3	4	3	4	3	15.9	3706.0

Note: All L switch settings = O (Off).

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TABLE N

PRECISION BALANCE NETWORK SETTINGS FOR MIXED 26- AND 22-GAUGE H88 LOADED CABLE WITHOUT BRIDGED TAP AT 68° F (NOTE)

26- GAUGE ADJACENT TO REPEATER
END SECTION = 3.0 KFT

LENGTH(KFT) 26-GA 22-GA	BALANCE NETWORK SETTINGS BY TERMINATION						1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RESISTANCE (OHMS)
	900 + 2.16		600 + 2.16		TELSET (35MA)			
	R	Z	R	Z	R	Z		
WL = 12.0 6.0 6.0	6	2	5	2	7	2	3.0	713.4
WL = 18.0 6.0 12.0 12.0 6.0	7	3	7	3	7	2	3.8	918.4
	7	3	7	3	7	3	4.8	1221.8
WL = 24.0 6.0 18.0 12.0 12.0 18.0 6.0	6	3	7	3	7	3	4.8	1123.4
	7	3	7	3	7	3	5.8	1426.8
	7	4	7	4	7	3	6.9	1730.2
WL = 30.0 6.0 24.0 12.0 18.0 18.0 12.0 24.0 6.0	6	3	7	3	7	3	5.7	1328.4
	7	3	7	3	7	3	6.8	1631.8
	7	4	7	4	7	4	7.9	1935.2
	7	4	7	4	7	4	9.0	2238.6
WL = 36.0 6.0 30.0 12.0 24.0 18.0 18.0 24.0 12.0 30.0 6.0	6	3	6	3	7	3	6.6	1533.4
	7	4	7	3	7	3	7.8	1836.8
	7	4	7	4	7	4	8.9	2140.2
	7	4	7	4	7	4	10.0	2443.6
	7	4	7	4	7	4	11.2	2747.0
WL = 42.0 6.0 36.0 12.0 30.0 18.0 24.0 24.0 18.0 30.0 12.0 36.0 6.0	6	3	6	3	6	3	7.5	1738.3
	7	4	7	4	7	4	8.6	2041.8
	7	4	7	4	7	4	9.8	2345.2
	7	4	7	4	7	4	11.0	2648.6
	7	4	7	4	7	4	12.1	2952.0
	7	4	7	4	7	4	13.2	3255.4
WL = 48.0 6.0 42.0 12.0 36.0 18.0 30.0 24.0 24.0 30.0 18.0 36.0 12.0 42.0 6.0	6	3	6	3	6	3	8.4	1943.3
	7	4	7	4	7	4	9.4	2246.7
	7	4	7	4	7	4	10.6	2550.2
	7	4	7	4	7	4	11.8	2853.6
	7	4	7	4	7	4	13.1	3157.0
	7	4	7	4	7	4	14.2	3460.4
	7	4	7	4	7	4	15.3	3763.8
WL = 54.0 6.0 48.0 12.0 42.0 18.0 36.0 24.0 30.0 30.0 24.0 36.0 18.0	6	3	6	3	6	3	9.3	2148.3
	7	4	7	4	7	4	10.3	2451.7
	7	4	7	4	7	4	11.4	2755.1
	7	4	7	4	7	4	12.7	3058.6
	7	4	7	4	7	4	14.0	3362.0
	7	4	7	4	7	4	15.1	3665.4
WL = 60.0								

Note: All L switch settings = O (Off).

TABLE N (Contd)

**PRECISION BALANCE NETWORK SETTINGS FOR MIXED 26-
AND 22-GAUGE H88 LOADED CABLE WITHOUT BRIDGED TAP AT 68° F (NOTE)**

**26- GAUGE ADJACENT TO REPEATER
END SECTION = 3.0 KFT**

LENGTH(KFT) 26-GA 22-GA	BALANCE NETWORK SETTINGS BY TERMINATION						1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RESISTANCE (OHMS)
	900 + 2.16		600 + 2.16		TELSET (35MA)			
	R	Z	R	Z	R	Z		
WL = 60.0								
6.0 54.0	6	3	6	3	6	3	10.2	2353.3
12.0 48.0	7	4	7	4	7	4	11.3	2656.7
18.0 42.0	7	4	7	4	7	4	12.4	2960.1
24.0 36.0	7	4	7	4	7	4	13.6	3263.5
30.0 30.0	7	4	7	4	7	4	14.8	3567.0
WL = 66.0								
6.0 60.0	6	3	6	3	6	3	11.1	2558.3
12.0 54.0	7	4	7	4	7	4	12.2	2861.7
18.0 48.0	7	4	7	4	7	4	13.3	3165.1
24.0 42.0	7	4	7	4	7	4	14.5	3468.5
30.0 36.0	7	4	7	4	7	4	15.7	3771.9
WL = 72.0								
6.0 66.0	6	3	6	3	6	3	12.0	2763.3
12.0 60.0	7	4	7	4	7	4	13.1	3066.7
18.0 54.0	7	4	7	4	7	4	14.2	3370.1
24.0 48.0	7	4	7	4	7	4	15.4	3673.5
WL = 78.0								
6.0 72.0	6	3	6	3	6	3	12.9	2968.3
12.0 66.0	7	4	7	4	7	4	13.9	3271.7
18.0 60.0	7	4	7	4	7	4	15.1	3575.1
WL = 84.0								
6.0 78.0	6	3	6	3	6	3	13.8	3173.3
12.0 72.0	7	4	7	4	7	4	14.8	3476.7
WL = 90.0								
6.0 84.0	6	3	6	3	6	3	14.7	3378.3
12.0 78.0	7	4	7	4	7	4	15.7	3681.7
WL = 96.0								
6.0 90.0	6	3	6	3	6	3	15.6	3583.3

Note: All L switch settings = O (Off).

TABLE O

PRECISION BALANCE NETWORK SETTINGS FOR MIXED 22- AND 26-GAUGE H88 LOADED CABLE WITHOUT BRIDGED TAP AT 68° F (NOTE)

22- GAUGE ADJACENT TO REPEATER
END SECTION = 3.0 KFT

LENGTH(KFT) 22-GA 26-GA	BALANCE NETWORK SETTINGS BY TERMINATION						1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RESISTANCE (OHMS)
	900 + 2.16		600 + 2.16		TELSET (35MA)			
	R	Z	R	Z	R	Z		
WL = 12.0 6.0 6.0	4	3	3	2	5	2	3.0	713.4
WL = 18.0 6.0 12.0 12.0 6.0	4 3	3 3	4 3	3 3	5 4	3 2	4.8 3.8	1221.8 918.4
WL = 24.0 6.0 18.0 12.0 12.0 18.0 6.0	4 3 3	4 3 3	5 3 3	4 3 3	5 4 4	4 3 3	6.9 5.8 4.8	1730.2 1426.8 1123.4
WL = 30.0 6.0 24.0 12.0 18.0 18.0 12.0 24.0 6.0	4 2 2 2	4 3 3 3	4 3 2 3	4 3 3 3	5 3 3 3	4 3 3 3	9.0 7.9 6.8 5.7	2238.6 1935.2 1631.8 1328.4
WL = 36.0 6.0 30.0 12.0 24.0 18.0 18.0 24.0 12.0 30.0 6.0	4 2 2 2 2	4 3 3 3 2	4 2 2 2 2	4 3 3 3 2	4 3 2 2 3	4 3 3 3 3	11.2 10.0 8.9 7.8 6.6	2747.0 2443.6 2140.2 1836.8 1533.4
WL = 42.0 6.0 36.0 12.0 30.0 18.0 24.0 24.0 18.0 30.0 12.0 36.0 6.0	4 2 2 2 2 2	4 3 3 3 3 2	4 2 2 2 2 2	4 3 3 3 3 2	4 2 2 2 2 2	4 3 3 3 3 3	13.2 12.1 11.0 9.8 8.6 7.5	3255.4 2952.0 2648.6 2345.2 2041.8 1738.3
WL = 48.0 6.0 42.0 12.0 36.0 18.0 30.0 24.0 24.0 30.0 18.0 36.0 12.0 42.0 6.0	4 2 2 2 2 2 2	4 3 3 3 3 3 2	4 2 2 2 2 2 2	4 3 3 3 3 3 2	4 2 2 2 2 2 2	4 3 3 3 3 3 3	15.3 14.2 13.1 11.8 10.6 9.4 8.4	3763.8 3460.4 3157.0 2853.6 2550.2 2246.7 1943.3
WL = 54.0 18.0 36.0 24.0 30.0 30.0 24.0 36.0 18.0 42.0 12.0 48.0 6.0	2 1 1 2 2 2	3 2 2 3 3 2	2 1 1 2 2 2	3 2 2 3 3 2	2 1 1 2 2 2	3 2 2 3 3 3	15.1 14.0 12.7 11.4 10.3 9.3	3665.4 3362.0 3058.6 2755.1 2451.7 2148.3
WL = 60.0								

Note: All L switch settings = O (Off).

TABLE O (Contd)

**PRECISION BALANCE NETWORK SETTINGS FOR MIXED 22-
AND 26-GAUGE H88 LOADED CABLE WITHOUT BRIDGED TAP AT 68° F (NOTE)**

**22- GAUGE ADJACENT TO REPEATER
END SECTION = 3.0 KFT**

LENGTH(KFT) 22-GA 26-GA	BALANCE NETWORK SETTINGS BY TERMINATION						1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RESISTANCE (OHMS)
	900 + 2.16		600 + 2.16		TELSET (35MA)			
	R	Z	R	Z	R	Z		
WL = 60.0								
30.0 30.0	1	2	1	2	1	2	14.8	3567.0
36.0 24.0	1	2	2	3	1	2	13.6	3263.5
42.0 18.0	2	3	2	3	2	3	12.4	2960.1
48.0 12.0	2	2	2	2	2	3	11.3	2656.7
54.0 6.0	2	2	2	2	2	3	10.2	2353.3
WL = 66.0								
36.0 30.0	1	2	1	2	1	2	15.7	3771.9
42.0 24.0	2	2	2	3	2	3	14.5	3468.5
48.0 18.0	2	2	2	2	2	3	13.3	3165.1
54.0 12.0	2	2	2	2	2	3	12.2	2861.7
60.0 6.0	2	2	2	2	2	3	11.1	2558.3
WL = 72.0								
48.0 24.0	2	2	2	2	2	2	15.4	3673.5
54.0 18.0	2	2	2	2	2	2	14.2	3370.1
60.0 12.0	2	2	2	2	2	2	13.1	3066.7
66.0 6.0	2	2	2	2	2	3	12.0	2763.3
WL = 78.0								
60.0 18.0	2	2	2	2	2	2	15.1	3575.1
66.0 12.0	2	2	2	2	2	2	13.9	3271.7
72.0 6.0	2	2	2	2	2	2	12.9	2968.3
WL = 84.0								
66.0 18.0	2	2	2	2	2	2	16.0	3780.1
72.0 12.0	2	2	2	2	2	2	14.8	3476.7
78.0 6.0	2	2	2	2	2	2	13.8	3173.3
WL = 90.0								
78.0 12.0	2	2	2	2	2	2	15.7	3681.7
84.0 6.0	2	2	2	2	2	2	14.7	3378.3
WL = 96.0								
90.0 6.0	2	2	2	2	2	2	15.6	3583.3

Note: All L switch settings = O (Off).

TABLE P

PRECISION BALANCE NETWORK SETTINGS FOR MIXED 24-
AND 22-GAUGE H88 LOADED CABLE WITHOUT BRIDGED TAP AT 68° F (NOTE)

24- GAUGE ADJACENT TO REPEATER
END SECTION = 3.0 KFT

LENGTH(KFT) 24-GA 22-GA	BALANCE NETWORK SETTINGS BY TERMINATION						1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RESISTANCE (OHMS)
	900 + 2.16		600 + 2.16		TELSET (35MA)			
	R	Z	R	Z	R	Z		
WL = 12.0 6.0 6.0	3	2	2	1	4	1	2.3	524.8
WL = 18.0 6.0 12.0 12.0 6.0	4	3	4	2	6	2	3.1	729.7
	5	3	5	3	7	3	3.5	844.5
WL = 24.0 6.0 18.0 12.0 12.0 18.0 6.0	4	3	5	3	6	3	4.0	934.7
	5	3	5	3	6	3	4.4	1049.5
	5	3	5	3	6	3	4.9	1164.3
WL = 30.0 6.0 24.0 12.0 18.0 18.0 12.0 24.0 6.0	4	3	4	3	5	3	5.0	1139.7
	4	3	5	3	5	3	5.4	1254.5
	4	3	5	3	5	3	5.9	1369.3
	4	3	5	3	5	3	6.3	1484.0
WL = 36.0 6.0 30.0 12.0 24.0 18.0 18.0 24.0 12.0 30.0 6.0	4	3	4	3	5	3	5.9	1344.7
	4	3	5	3	5	3	6.4	1459.5
	4	3	5	3	5	3	6.8	1574.3
	4	3	4	3	5	3	7.3	1689.0
	4	3	4	3	5	3	7.7	1803.8
WL = 42.0 6.0 36.0 12.0 30.0 18.0 24.0 24.0 18.0 30.0 12.0 36.0 6.0	4	3	4	3	4	3	6.8	1549.7
	4	3	4	3	4	3	7.2	1664.5
	4	3	4	3	4	3	7.7	1779.3
	4	3	4	3	4	3	8.2	1894.0
	4	3	4	3	4	3	8.7	2008.8
	4	3	4	3	4	3	9.1	2123.6
WL = 48.0 6.0 42.0 12.0 36.0 18.0 30.0 24.0 24.0 30.0 18.0 36.0 12.0 42.0 6.0	4	3	4	3	4	3	7.6	1754.7
	4	3	4	3	4	3	8.1	1869.5
	4	3	4	3	4	3	8.5	1984.2
	4	3	4	3	4	3	9.1	2099.0
	4	3	4	3	4	3	9.6	2213.8
	4	3	4	3	4	3	10.0	2328.6
	4	3	4	3	4	3	10.5	2443.3
WL = 54.0 6.0 48.0 12.0 42.0 18.0 36.0 24.0 30.0 30.0 24.0 36.0 18.0 42.0 12.0 48.0 6.0	4	3	4	3	4	3	8.5	1959.7
	4	3	4	3	4	3	9.0	2074.5
	4	3	4	3	4	3	9.4	2189.2
	4	3	4	3	4	3	9.9	2304.0
	4	3	4	3	4	3	10.5	2418.8
	4	3	4	3	4	3	10.9	2533.6
	4	3	4	3	4	3	11.4	2648.3
	4	3	4	3	4	3	11.8	2763.1

Note: All L switch settings = O (Off).

TABLE P (Contd)

PRECISION BALANCE NETWORK SETTINGS FOR MIXED 24-
AND 22-GAUGE H88 LOADED CABLE WITHOUT BRIDGED TAP AT 68° F (NOTE)

24- GAUGE ADJACENT TO REPEATER
END SECTION = 3.0 KFT

LENGTH(KFT) 24-GA 22-GA	BALANCE NETWORK SETTINGS BY TERMINATION						1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RESISTANCE (OHMS)
	900 + 2.16		600 + 2.16		TELSET (35MA)			
	R	Z	R	Z	R	Z		
WL = 60.0								
6.0 54.0	4	3	4	3	3	3	9.4	2164.7
12.0 48.0	4	3	4	3	4	3	9.9	2279.5
18.0 42.0	4	3	4	3	4	3	10.3	2394.2
24.0 36.0	4	3	4	3	4	3	10.8	2509.0
30.0 30.0	4	3	4	3	4	3	11.3	2623.8
36.0 24.0	4	3	4	3	4	3	11.8	2738.5
42.0 18.0	4	3	4	3	4	3	12.3	2853.3
48.0 12.0	4	3	4	3	4	3	12.8	2968.1
54.0 6.0	4	3	4	3	4	3	13.2	3082.9
WL = 66.0								
6.0 60.0	4	3	4	3	3	3	10.4	2369.7
12.0 54.0	4	3	4	3	4	3	10.8	2484.4
18.0 48.0	4	3	4	3	4	3	11.3	2599.2
24.0 42.0	4	3	4	3	4	3	11.7	2714.0
30.0 36.0	4	3	4	3	4	3	12.2	2828.8
36.0 30.0	4	3	4	3	4	3	12.7	2943.5
42.0 24.0	4	3	4	3	4	3	13.2	3058.3
48.0 18.0	4	3	4	3	4	3	13.7	3173.1
54.0 12.0	4	3	4	3	4	3	14.2	3287.9
60.0 6.0	4	3	4	3	4	3	14.6	3402.6
WL = 72.0								
6.0 66.0	4	3	4	3	3	3	11.2	2574.7
12.0 60.0	4	3	4	3	4	3	11.7	2689.4
18.0 54.0	4	3	4	3	4	3	12.2	2804.2
24.0 48.0	4	3	4	3	4	3	12.6	2919.0
30.0 42.0	4	3	4	3	4	3	13.1	3033.8
36.0 36.0	4	3	4	3	4	3	13.6	3148.5
42.0 30.0	4	3	4	3	4	3	14.1	3263.3
48.0 24.0	4	3	4	3	4	3	14.6	3378.1
54.0 18.0	4	3	4	3	4	3	15.1	3492.8
60.0 12.0	4	3	4	3	4	3	15.5	3607.6
WL = 78.0								
6.0 72.0	4	3	4	3	3	3	12.1	2779.7
12.0 66.0	4	3	4	3	4	3	12.6	2894.4
18.0 60.0	4	3	4	3	4	3	13.0	3009.2
24.0 54.0	4	3	4	3	4	3	13.5	3124.0
30.0 48.0	4	3	4	3	4	3	14.0	3238.7
36.0 42.0	4	3	4	3	4	3	14.5	3353.5
42.0 36.0	4	3	4	3	4	3	15.0	3468.3
48.0 30.0	4	3	4	3	4	3	15.5	3583.1
WL = 84.0								
6.0 78.0	4	3	4	3	4	3	13.0	2984.6
12.0 72.0	4	3	4	3	4	3	13.5	3099.4
18.0 66.0	4	3	4	3	4	3	13.9	3214.2
24.0 60.0	4	3	4	3	4	3	14.4	3329.0
30.0 54.0	4	3	4	3	4	3	14.9	3443.7

Note: All L switch settings = O (Off).

TABLE P (Contd)

PRECISION BALANCE NETWORK SETTINGS FOR MIXED 24-
AND 22-GAUGE H88 LOADED CABLE WITHOUT BRIDGED TAP AT 68° F (NOTE)

24- GAUGE ADJACENT TO REPEATER
END SECTION = 3.0 KFT

LENGTH(KFT) 24-GA 22-GA	BALANCE NETWORK SETTINGS BY TERMINATION						1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RESISTANCE (OHMS)
	900 + 2.16		600 + 2.16		TELSET (35MA)			
	R	Z	R	Z	R	Z		
WL = 84.0								
36.0 48.0	4	3	4	3	4	3	15.4	3558.5
42.0 42.0	4	3	4	3	4	3	15.9	3673.3
WL = 90.0								
6.0 84.0	4	3	4	3	4	3	13.9	3189.6
12.0 78.0	4	3	4	3	4	3	14.4	3304.4
18.0 72.0	4	3	4	3	4	3	14.8	3419.2
24.0 66.0	4	3	4	3	4	3	15.3	3534.0
30.0 60.0	4	3	4	3	4	3	15.8	3648.7
WL = 96.0								
6.0 90.0	4	3	4	3	4	3	14.8	3394.6
12.0 84.0	4	3	4	3	4	3	15.3	3509.4
18.0 78.0	4	3	4	3	4	3	15.7	3624.2
WL = 102.0								
6.0 96.0	4	3	4	3	4	3	15.7	3599.6

Note: All L switch settings = O (Off).

TABLE Q

PRECISION BALANCE NETWORK SETTINGS FOR MIXED 22- AND 24-GAUGE H88 LOADED CABLE WITHOUT BRIDGED TAP AT 68° F (NOTE)

22- GAUGE ADJACENT TO REPEATER
END SECTION = 3.0 KFT

LENGTH(KFT) 22-GA 24-GA	BALANCE NETWORK SETTINGS BY TERMINATION						1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RESISTANCE (OHMS)
	900 + 2.16		600 + 2.16		TELSET (35MA)			
	R	Z	R	Z	R	Z		
WL = 12.0 6.0 6.0	2	2	1	1	3	1	2.3	524.8
WL = 18.0 6.0 12.0 12.0 6.0	3	3	3	2	5	3	3.5	844.5
	2	2	2	2	4	2	3.1	729.7
WL = 24.0 6.0 18.0 12.0 12.0 18.0 6.0	3	3	3	3	5	3	4.9	1164.3
	3	3	3	3	4	3	4.4	1049.5
	3	3	3	3	4	3	4.0	934.7
WL = 30.0 6.0 24.0 12.0 18.0 18.0 12.0 24.0 6.0	3	3	3	3	4	3	6.3	1484.0
	3	3	3	3	3	3	5.9	1369.3
	2	3	3	3	4	3	5.4	1254.5
	2	2	3	3	4	3	5.0	1139.7
WL = 36.0 6.0 30.0 12.0 24.0 18.0 18.0 24.0 12.0 30.0 6.0	3	3	3	3	3	3	7.7	1803.8
	2	3	3	3	3	3	7.3	1689.0
	2	3	2	2	3	3	6.8	1574.3
	2	2	2	2	3	3	6.4	1459.5
	2	2	2	2	3	3	5.9	1344.7
WL = 42.0 6.0 36.0 12.0 30.0 18.0 24.0 24.0 18.0 30.0 12.0 36.0 6.0	3	3	3	3	3	3	9.1	2123.6
	2	3	2	3	2	3	8.7	2008.8
	2	3	2	3	2	3	8.2	1894.0
	2	3	2	2	2	3	7.7	1779.3
	2	2	2	2	3	3	7.2	1664.5
	2	2	2	2	3	3	6.8	1549.7
WL = 48.0 6.0 42.0 12.0 36.0 18.0 30.0 24.0 24.0 30.0 18.0 36.0 12.0 42.0 6.0	3	3	3	3	3	3	10.5	2443.3
	2	3	2	3	2	3	10.0	2328.6
	2	3	2	3	2	3	9.6	2213.8
	2	3	2	3	2	3	9.1	2099.0
	2	3	2	3	2	3	8.5	1984.2
	2	2	2	2	2	3	8.1	1869.5
	2	2	2	2	2	3	7.6	1754.7
WL = 54.0 6.0 48.0 12.0 42.0 18.0 36.0 24.0 30.0 30.0 24.0 36.0 18.0 42.0 12.0 48.0 6.0	3	3	3	3	2	3	11.8	2763.1
	2	3	2	3	2	3	11.4	2648.3
	2	3	2	3	2	3	10.9	2533.6
	2	3	2	3	2	3	10.5	2418.8
	2	3	2	3	2	3	9.9	2304.0
	2	3	2	3	2	3	9.4	2189.2
	2	2	2	2	2	3	9.0	2074.5
	2	2	2	2	2	3	8.5	1959.7

Note: All L switch settings = O (Off).

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TABLE Q (Contd)

PRECISION BALANCE NETWORK SETTINGS FOR MIXED 22- AND 24-GAUGE H88 LOADED CABLE WITHOUT BRIDGED TAP AT 68° F (NOTE)

22- GAUGE ADJACENT TO REPEATER
END SECTION = 3.0 KFT

LENGTH(KFT) 22-GA 24-GA	BALANCE NETWORK SETTINGS BY TERMINATION						1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RESISTANCE (OHMS)
	900 + 2.16		600 + 2.16		TELSET (35MA)			
	R	Z	R	Z	R	Z		
WL = 60.0								
6.0 54.0	3	3	3	3	2	3	13.2	3082.9
12.0 48.0	2	3	2	3	2	3	12.8	2968.1
18.0 42.0	2	3	2	3	2	3	12.3	2853.3
24.0 36.0	2	3	2	3	2	3	11.8	2738.5
30.0 30.0	2	3	2	3	2	3	11.3	2623.8
36.0 24.0	2	3	2	3	2	3	10.8	2509.0
42.0 18.0	2	2	2	3	2	3	10.3	2394.2
48.0 12.0	2	2	2	2	2	3	9.9	2279.5
54.0 6.0	2	2	2	2	2	3	9.4	2164.7
WL = 66.0								
6.0 60.0	3	3	3	3	2	3	14.6	3402.6
12.0 54.0	2	3	2	3	2	3	14.2	3287.9
18.0 48.0	2	3	2	3	2	3	13.7	3173.1
24.0 42.0	2	3	2	3	2	3	13.2	3058.3
30.0 36.0	2	3	2	3	2	3	12.7	2943.5
36.0 30.0	2	2	2	3	2	3	12.2	2828.8
42.0 24.0	2	2	2	2	2	3	11.7	2714.0
48.0 18.0	2	2	2	2	2	3	11.3	2599.2
54.0 12.0	2	2	2	2	2	3	10.8	2484.4
60.0 6.0	2	2	2	2	2	3	10.4	2369.7
WL = 72.0								
12.0 60.0	2	3	2	3	2	3	15.5	3607.6
18.0 54.0	2	3	2	3	2	3	15.1	3492.8
24.0 48.0	2	3	2	3	2	3	14.6	3378.1
30.0 42.0	2	3	2	3	2	3	14.1	3263.3
36.0 36.0	2	2	2	3	2	3	13.6	3148.5
42.0 30.0	2	2	2	2	2	3	13.1	3033.8
48.0 24.0	2	2	2	2	2	3	12.6	2919.0
54.0 18.0	2	2	2	2	2	3	12.2	2804.2
60.0 12.0	2	2	2	2	2	3	11.7	2689.4
66.0 6.0	2	2	2	2	2	3	11.2	2574.7
WL = 78.0								
24.0 54.0	2	3	2	3	2	3	16.0	3697.8
30.0 48.0	2	3	2	3	2	3	15.5	3583.1
36.0 42.0	2	2	2	2	2	3	15.0	3468.3
42.0 36.0	2	2	2	2	2	2	14.5	3353.5
48.0 30.0	2	2	2	2	2	2	14.0	3238.7
54.0 24.0	2	2	2	2	2	2	13.5	3124.0
60.0 18.0	2	2	2	2	2	2	13.0	3009.2
66.0 12.0	2	2	2	2	2	2	12.6	2894.4
72.0 6.0	2	2	2	2	2	2	12.1	2779.7
WL = 84.0								
42.0 42.0	2	2	2	2	2	2	15.9	3673.3
48.0 36.0	2	2	2	2	2	2	15.4	3558.5
54.0 30.0	2	2	2	2	2	2	14.9	3443.7
60.0 24.0	2	2	2	2	2	2	14.4	3329.0

Note: All L switch settings = O (Off).

TABLE Q (Contd)

PRECISION BALANCE NETWORK SETTINGS FOR MIXED 22-
AND 24-GAUGE H88 LOADED CABLE WITHOUT BRIDGED TAP AT 68° F (NOTE)

22- GAUGE ADJACENT TO REPEATER
END SECTION = 3.0 KFT

LENGTH(KFT) 22-GA 24-GA	BALANCE NETWORK SETTINGS BY TERMINATION						1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RESISTANCE (OHMS)
	900 + 2.16		600 + 2.16		TELSET (35MA)			
	R	Z	R	Z	R	Z		
WL = 84.0								
66.0 18.0	2	2	2	2	2	2	13.9	3214.2
72.0 12.0	2	2	2	2	2	2	13.5	3099.4
78.0 6.0	2	2	2	2	2	2	13.0	2984.6
WL = 90.0								
60.0 30.0	2	2	2	2	2	2	15.8	3648.7
66.0 24.0	2	2	2	2	2	2	15.3	3534.0
72.0 18.0	2	2	2	2	2	2	14.8	3419.2
78.0 12.0	2	2	2	2	2	2	14.4	3304.4
84.0 6.0	2	2	2	2	2	2	13.9	3189.6
WL = 96.0								
78.0 18.0	2	2	2	2	2	2	15.7	3624.2
84.0 12.0	2	2	2	2	2	2	15.3	3509.4
90.0 6.0	2	2	2	2	2	2	14.8	3394.6
WL = 102.0								
96.0 6.0	2	2	2	2	2	2	15.7	3599.6

Note: All L switch settings = O (Off).

TABLE R
 PRECISION BALANCE NETWORK SETTINGS FOR
 26-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68° F

LENGTH (KFT)	BALANCE NETWORK SETTINGS BY TERMINATION									1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
	900 + 2.16			600 + 2.16			TELSET (35MA)				
	R1	R2	Z	R1	R2	Z	R1	R2	Z		
4.0	7	12	0	7	8	0	7	11	0	1.6	333.3
4.5	7	13	2	7	9	0	7	12	0	1.8	375.0
5.0	7	14	5	7	9	0	7	12	0	2.1	416.7
5.5	7	15	10	7	10	1	7	12	0	2.3	458.3
6.0	7	15	10	7	12	5	7	12	0	2.5	500.0
6.5	7	15	10	7	13	7	7	13	2	2.7	541.7
7.0	6	8	0	7	14	10	7	14	5	2.9	583.3
7.5	6	9	2	7	15	13	7	15	10	3.2	625.0
8.0	6	9	2	7	15	13	7	15	10	3.4	666.7
8.5	6	10	5	6	6	0	7	15	10	3.6	708.3
9.0	6	10	5	6	6	0	7	15	11	3.9	750.0
9.5	6	10	5	6	6	0	7	15	11	4.1	791.7
10.0	6	10	6	6	7	1	6	9	2	4.3	833.3
10.5	6	10	6	6	8	3	6	9	2	4.6	875.0
11.0	5	6	1	6	8	3	6	10	5	4.8	916.7
11.5	5	6	1	6	8	4	6	10	5	5.1	958.3
12.0	5	6	2	6	9	5	6	10	5	5.3	1000.0
12.5	5	6	2	6	9	5	6	10	6	5.6	1041.7
13.0	5	6	2	5	4	0	6	10	6	5.8	1083.3
13.5	5	6	2	5	4	0	6	10	6	6.1	1125.0
14.0	5	6	3	5	4	0	6	10	6	6.4	1166.7
14.5	4	3	0	5	4	0	5	6	1	6.6	1208.3
15.0	4	3	0	5	4	0	5	6	1	6.9	1250.0
15.5	4	3	0	5	4	0	5	6	2	7.2	1291.7
16.0	4	3	0	5	4	0	5	6	2	7.4	1333.3
16.5	4	3	0	5	5	2	5	6	2	7.7	1375.0
17.0	4	3	0	5	5	2	5	6	2	8.0	1416.7
17.5	4	3	0	5	5	2	5	6	2	8.3	1458.3
18.0	4	3	0	4	3	0	4	4	0	8.5	1500.0
18.5	4	3	0	4	3	0	4	4	0	8.8	1541.7
19.0	4	3	0	4	3	0	4	3	0	9.1	1583.3
19.5	4	2	0	4	3	0	4	3	0	9.4	1625.0
20.0	4	2	0	4	2	0	4	3	0	9.6	1666.7
20.5	3	2	0	4	2	0	4	3	0	9.9	1708.3
21.0	3	2	0	4	2	0	4	3	0	10.2	1750.0
21.5	3	1	0	4	2	0	4	3	0	10.5	1791.7
22.0	3	1	0	4	2	0	4	3	0	10.8	1833.3
22.5	3	1	0	4	2	0	4	3	0	11.0	1875.0
23.0	3	1	0	4	2	0	4	3	0	11.3	1916.7
23.5	3	1	0	4	2	0	3	2	0	11.6	1958.3
24.0	3	1	0	4	2	0	3	2	0	11.9	2000.0

TABLE S

PRECISION BALANCE NETWORK SETTINGS FOR
25-GAUGE NONLOADED MAT CABLE WITHOUT BRIDGED TAP AT 68° F

LENGTH (kft)	BALANCE NETWORK SETTINGS BY TERMINATION									1 KHZ CABLE LOSS (dB) (900 OHMS)	DC CABLE RES (OHMS)
	900 + 2.16			600 + 2.16			TEL SET (35 mA)				
	R1	R2	Z	R1	R2	Z	R1	R2	Z		
1.0	7	8	0	7	0	0	7	0	0	.3	65.5
1.5	7	10	0	7	0	0	7	0	0	.5	98.2
2.0	7	10	0	7	0	0	7	0	0	.6	130.9
2.5	7	11	0	7	1	0	7	2	0	.8	163.7
3.0	7	12	0	7	3	0	7	5	0	.9	196.4
3.5	7	12	0	7	3	0	7	5	0	1.1	229.4
4.0	7	12	0	7	6	0	7	9	0	1.3	261.9
4.5	7	12	0	7	7	0	7	10	0	1.4	294.6
5.0	7	12	0	7	8	0	7	11	0	1.6	327.4
5.5	7	13	1	7	9	0	7	11	0	1.8	360.1
6.0	7	13	2	7	9	0	7	12	0	1.9	392.8
6.5	7	14	5	7	10	1	7	12	0	2.1	425.6
7.0	7	15	9	7	10	0	7	12	0	2.3	458.3
7.5	7	15	10	7	11	2	7	12	0	2.4	491.1
8.0	7	15	10	7	12	4	7	13	1	2.6	523.8
8.5	7	15	10	7	13	7	7	13	2	2.8	556.5
9.0	6	8	0	7	14	10	7	14	5	2.9	589.3
9.5	6	9	1	7	14	10	7	15	9	3.1	622.0
10.0	6	9	2	7	15	13	7	15	10	3.3	654.7
10.5	6	9	2	7	15	13	7	15	10	3.5	687.5
11.0	6	10	4	6	6	0	7	15	10	3.7	720.2
11.5	6	10	5	6	6	0	7	15	10	3.8	752.9
12.0	6	10	5	6	6	0	7	15	11	4.0	785.7
12.5	6	10	5	6	7	1	6	9	1	4.2	818.4
13.0	6	10	6	6	7	1	6	9	2	4.4	851.2
13.5	6	10	6	6	8	3	6	9	2	4.6	883.9
14.0	5	6	1	6	8	3	6	10	4	4.8	916.6
14.5	5	6	1	6	8	3	6	10	5	5.0	949.4
15.0	5	6	1	6	8	3	6	10	5	5.2	982.1
15.5	5	6	2	6	9	5	6	10	5	5.4	1014.8
16.0	5	6	2	6	9	5	6	10	5	5.6	1047.6
16.5	5	6	2	6	9	5	6	10	6	5.8	1080.3
17.0	5	6	2	5	4	0	6	10	6	6.0	1113.0
17.5	5	6	2	5	4	0	6	10	6	6.2	1145.8
18.0	5	6	2	5	4	0	6	10	6	6.4	1178.5
18.5	4	3	0	5	4	0	5	6	1	6.6	1211.3
19.0	4	3	0	5	4	0	5	6	1	6.8	1244.0
19.5	4	3	0	5	4	0	5	6	1	7.0	1276.7
20.0	4	3	0	5	4	0	5	6	1	7.2	1309.5
20.5	4	3	0	5	4	0	5	6	2	7.4	1342.2
21.0	4	3	0	5	4	0	5	6	2	7.6	1374.9
21.5	4	3	0	5	4	0	5	6	2	7.8	1407.7
22.0	4	3	0	5	4	0	5	6	2	8.0	1440.4
22.5	4	3	0	5	4	0	5	6	2	8.3	1473.2
23.0	4	3	0	4	3	0	4	4	0	8.5	1505.9
23.5	4	3	0	4	3	0	4	4	0	8.7	1538.6
24.0	4	3	0	4	3	0	4	4	0	8.9	1571.4

TABLE T

PRECISION BALANCE NETWORK SETTINGS FOR
24-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68° F

LENGTH (KFT)	BALANCE NETWORK SETTINGS BY TERMINATION									1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
	900 + 2.16			600 + 2.16			TELSET (35MA)				
	R1	R2	Z	R1	R2	Z	R1	R2	Z		
4.0	7	11	0	7	4	0	7	8	0	1.1	207.6
4.5	7	13	6	7	6	1	7	9	0	1.2	233.5
5.0	7	15	13	7	9	5	7	10	0	1.4	259.5
5.5	7	15	13	7	11	8	7	10	0	1.6	285.4
6.0	7	15	14	7	12	10	7	10	0	1.7	311.4
6.5	7	15	14	7	13	12	7	12	4	1.9	337.3
7.0	6	9	6	7	14	15	7	13	7	2.1	363.3
7.5	6	10	9	7	15	18	7	15	14	2.2	389.2
8.0	6	10	9	7	15	18	7	15	14	2.4	415.2
8.5	6	11	12	7	15	18	7	15	15	2.6	441.1
9.0	6	11	12	6	6	7	7	15	15	2.8	467.0
9.5	6	11	13	6	7	8	7	15	15	3.0	493.0
10.0	6	12	15	6	8	10	7	15	16	3.1	518.9
10.5	6	12	15	6	8	10	7	15	16	3.3	544.9
11.0	6	12	16	6	8	10	6	10	10	3.5	570.8
11.5	5	8	11	6	9	12	6	10	11	3.7	596.8
12.0	5	8	11	6	9	12	6	11	13	3.9	622.7
12.5	5	8	12	6	9	12	6	11	13	4.1	648.7
13.0	5	8	12	6	10	14	6	11	14	4.3	674.6
13.5	5	8	12	6	10	14	6	11	14	4.5	700.6
14.0	5	8	12	6	10	14	6	11	14	4.8	726.5
14.5	5	7	11	5	5	9	6	11	14	5.0	752.5
15.0	5	8	13	5	5	9	6	11	15	5.2	778.4
15.5	4	5	10	5	5	9	6	11	15	5.4	804.4
16.0	4	5	10	5	5	10	6	11	15	5.6	830.3
16.5	4	4	9	5	5	10	5	7	11	5.8	856.2
17.0	4	4	9	5	5	10	5	7	11	6.0	882.2
17.5	4	4	9	5	5	10	5	7	11	6.3	908.1
18.0	4	4	10	5	5	10	5	7	11	6.5	934.1
18.5	4	4	10	5	5	10	5	7	11	6.7	960.0
19.0	4	4	10	5	5	10	5	7	11	6.9	986.0
19.5	3	2	8	4	2	8	5	7	11	7.1	1011.9
20.0	3	2	8	4	2	8	5	6	10	7.4	1037.9
20.5	3	1	7	4	2	8	4	4	9	7.6	1063.8
21.0	3	1	8	4	2	8	4	4	9	7.8	1089.8
21.5	3	1	8	4	2	8	4	4	9	8.0	1115.7
22.0	3	1	8	4	2	8	4	4	9	8.3	1141.7
22.5	3	1	8	4	2	8	4	3	8	8.5	1167.6
23.0	3	0	7	4	2	8	4	3	8	8.7	1193.6
23.5	3	0	7	4	2	8	4	3	8	8.9	1219.5
24.0	3	0	7	4	2	8	4	3	8	9.2	1245.5

TABLE U

PRECISION BALANCE NETWORK SETTINGS FOR
22-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68° F

LENGTH (KFT)	BALANCE NETWORK SETTINGS BY TERMINATION									1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
	900 + 2.16			600 + 2.16			TELSET (35MA)				
	R1	R2	Z	R1	R2	Z	R1	R2	Z		
4.0	7	11	2	7	2	1	7	6	0	.7	131.1
4.5	7	13	8	7	6	5	7	7	0	.9	147.4
5.0	7	15	14	7	8	7	7	8	0	1.0	163.8
5.5	7	15	15	7	10	10	7	8	0	1.1	180.2
6.0	7	15	16	7	12	13	7	8	0	1.2	196.6
6.5	7	15	16	7	13	16	7	10	3	1.3	213.0
7.0	6	9	9	7	14	18	7	12	8	1.5	229.4
7.5	6	10	11	7	15	20	7	14	13	1.6	245.7
8.0	6	11	14	7	15	21	7	15	17	1.7	262.1
8.5	6	12	16	7	15	21	7	15	17	1.9	278.5
9.0	6	12	17	7	15	21	7	15	17	2.0	294.9
9.5	6	12	17	6	7	13	7	15	18	2.2	311.3
10.0	6	12	18	6	8	14	7	15	18	2.3	327.7
10.5	6	13	20	6	8	14	7	15	19	2.5	344.0
11.0	6	13	20	6	9	16	7	15	19	2.6	360.4
11.5	6	13	21	6	9	16	7	15	19	2.8	376.8
12.0	6	13	21	6	9	16	6	11	16	2.9	393.2
12.5	5	9	16	6	10	18	6	11	16	3.1	409.6
13.0	5	10	18	6	10	18	6	12	18	3.2	425.9
13.5	5	9	17	6	10	18	6	12	19	3.4	442.3
14.0	5	9	17	6	10	18	6	12	19	3.6	458.7
14.5	5	10	19	6	11	20	6	12	19	3.7	475.1
15.0	5	9	18	6	11	20	6	12	19	3.9	491.5
15.5	5	9	18	6	11	20	6	12	20	4.1	507.9
16.0	5	9	18	5	6	16	6	12	20	4.2	524.2
16.5	4	7	17	5	6	16	6	12	20	4.4	540.6
17.0	4	7	17	5	6	16	6	12	20	4.6	557.0
17.5	4	6	16	5	6	16	6	12	21	4.8	573.4
18.0	4	6	16	5	6	16	6	12	21	4.9	589.8
18.5	4	6	17	5	6	16	6	12	21	5.1	606.2
19.0	4	6	17	5	6	16	5	8	17	5.3	622.5
19.5	4	6	17	5	6	16	5	8	17	5.5	638.9
20.0	4	6	17	5	6	17	5	8	17	5.7	655.3
20.5	4	5	16	5	6	17	5	8	17	5.8	671.7
21.0	3	3	15	5	6	17	5	8	17	6.0	688.1
21.5	3	3	15	5	6	17	5	8	18	6.2	704.5
22.0	3	3	15	4	3	15	5	8	18	6.4	720.8
22.5	3	3	15	4	3	15	5	8	18	6.6	737.2
23.0	3	3	15	4	3	15	5	7	17	6.7	753.6
23.5	3	3	15	4	3	15	5	7	17	6.9	770.0
24.0	3	2	15	4	3	15	4	5	16	7.1	786.4

TABLE V

PRECISION BALANCE NETWORK SETTINGS FOR
19-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68° F

LENGTH (KFT)	BALANCE NETWORK SETTINGS BY TERMINATION									1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
	900 + 2.16			600 + 2.16			TELSET (35MA)				
	R1	R2	Z	R1	R2	Z	R1	R2	Z		
4.0	7	12	7	7	4	6	7	3	0	.5	65.2
4.5	7	14	13	7	7	9	7	4	0	.5	73.3
5.0	7	15	16	7	10	13	7	5	0	.6	81.4
5.5	7	15	17	7	12	16	7	5	0	.7	89.6
6.0	7	15	18	7	13	18	7	5	0	.8	97.7
6.5	6	10	13	7	14	20	7	9	5	.9	105.9
7.0	6	11	15	7	15	23	7	12	11	1.0	114.0
7.5	6	11	16	7	15	23	7	14	16	1.1	122.2
8.0	6	12	18	7	15	23	7	15	19	1.2	130.3
8.5	6	13	21	7	15	24	7	15	20	1.3	138.4
9.0	6	13	21	7	15	24	7	15	20	1.4	146.6
9.5	6	14	23	6	9	19	7	15	21	1.5	154.7
10.0	6	14	24	6	9	19	7	15	21	1.6	162.9
10.5	6	14	24	6	10	21	7	15	21	1.7	171.0
11.0	6	14	25	6	10	21	7	15	22	1.8	179.2
11.5	6	15	27	6	11	22	7	15	22	1.9	187.3
12.0	6	15	27	6	11	23	6	12	21	2.1	195.5
12.5	6	15	27	6	11	23	6	12	21	2.2	203.6
13.0	5	12	24	6	12	24	6	13	23	2.3	211.7
13.5	5	12	24	6	12	25	6	13	23	2.4	219.9
14.0	5	12	25	6	12	25	6	13	24	2.6	228.0
14.5	5	12	25	6	12	25	6	13	24	2.7	236.2
15.0	5	12	25	6	12	25	6	14	26	2.8	244.3
15.5	5	12	25	6	12	25	6	14	26	3.0	252.5
16.0	5	12	26	6	13	27	6	14	26	3.1	260.6
16.5	5	12	26	6	13	27	6	14	26	3.2	268.7
17.0	5	12	26	6	13	27	6	14	27	3.4	276.9
17.5	5	12	26	5	9	24	6	14	27	3.5	285.0
18.0	4	10	25	5	9	24	6	14	27	3.7	293.2
18.5	4	10	25	5	9	24	6	14	27	3.8	301.3
19.0	4	10	25	5	9	24	6	14	27	3.9	309.5
19.5	4	10	25	5	9	24	6	14	28	4.1	317.6
20.0	4	9	25	5	8	24	6	14	28	4.2	325.8
20.5	4	9	25	5	8	24	6	14	28	4.4	333.9
21.0	4	9	25	5	8	24	5	11	25	4.5	342.0
21.5	4	9	25	5	8	24	5	11	25	4.6	350.2
22.0	3	7	24	5	8	24	5	10	25	4.8	358.3
22.5	3	7	24	5	8	24	5	10	25	4.9	366.5
23.0	3	7	24	4	6	23	5	10	25	5.1	374.6
23.5	3	7	24	4	5	23	5	10	25	5.2	382.8
24.0	3	7	24	4	5	23	5	10	25	5.4	390.9

TABLE W

PRECISION BALANCE NETWORK SETTINGS FOR MIXED 26-
AND 24-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68° F

26-GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 26-GA 24-GA	BALANCE NETWORK SETTINGS BY TERMINATION									1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
	900 + 2.16			600 + 2.16			TELSET (35MA)				
	R1	R2	Z	R1	R2	Z	R1	R2	Z		
WL = 7.0											
4.0 3.0	6	7	0	7	13	9	7	12	1	2.6	489.0
5.0 2.0	6	8	0	7	13	8	7	13	3	2.7	520.5
6.0 1.0	6	8	0	7	13	8	7	13	3	2.8	551.9
WL = 8.0											
1.0 7.0	6	9	7	7	15	17	7	15	13	2.5	446.6
2.0 6.0	6	8	4	7	14	13	7	14	9	2.7	478.0
3.0 5.0	6	8	3	7	14	13	7	14	9	2.8	509.5
4.0 4.0	6	8	2	7	14	12	7	14	8	2.9	540.9
5.0 3.0	6	8	1	7	14	11	7	15	11	3.0	572.3
6.0 2.0	6	8	1	7	14	11	7	15	10	3.1	603.8
7.0 1.0	6	9	2	7	15	13	7	15	10	3.3	635.2
WL = 9.0											
1.0 8.0	6	10	10	6	5	5	7	15	14	2.9	498.5
2.0 7.0	6	9	7	6	3	1	7	15	13	3.0	529.9
3.0 6.0	6	9	6	6	3	0	7	15	13	3.2	561.4
4.0 5.0	6	9	5	6	4	0	7	15	12	3.3	592.8
5.0 4.0	6	9	4	6	4	0	7	15	12	3.4	624.2
6.0 3.0	6	9	4	6	5	0	7	15	11	3.5	655.7
7.0 2.0	6	9	4	6	5	0	7	15	11	3.6	687.1
8.0 1.0	6	10	5	6	6	0	7	15	11	3.7	718.6
WL = 10.0											
1.0 9.0	6	11	12	6	6	6	7	15	15	3.3	550.4
2.0 8.0	6	10	10	6	5	4	7	15	14	3.4	581.8
3.0 7.0	6	9	7	6	5	3	7	15	14	3.5	613.3
4.0 6.0	6	9	6	6	4	1	7	15	13	3.6	644.7
5.0 5.0	6	9	6	6	5	1	7	15	12	3.8	676.1
6.0 4.0	6	9	5	6	5	0	7	15	12	3.9	707.6
7.0 3.0	6	10	6	6	6	1	7	15	12	4.0	739.0
8.0 2.0	6	10	6	6	6	0	7	15	12	4.1	770.5
9.0 1.0	6	10	6	6	6	0	6	8	0	4.2	801.9
WL = 11.0											
1.0 10.0	6	11	13	6	7	8	6	9	8	3.7	602.3
2.0 9.0	6	10	10	6	6	6	6	8	5	3.8	633.7
3.0 8.0	6	9	8	6	5	3	6	8	4	3.9	665.2
4.0 7.0	6	9	7	6	5	2	6	8	3	4.0	696.6
5.0 6.0	6	9	6	6	5	1	6	8	2	4.1	728.0
6.0 5.0	6	9	6	6	6	2	6	8	2	4.3	759.5
7.0 4.0	6	10	7	6	6	1	6	8	1	4.4	790.9
8.0 3.0	6	10	7	6	7	2	6	9	3	4.5	822.3
9.0 2.0	5	5	0	6	7	2	6	9	3	4.6	853.8
10.0 1.0	5	6	1	6	7	2	6	9	3	4.7	885.2
WL = 12.0											
1.0 11.0	5	6	8	6	8	10	6	10	10	4.1	654.2
2.0 10.0	5	5	5	6	7	7	6	9	7	4.2	685.6
3.0 9.0	5	5	4	6	6	5	6	8	5	4.3	717.0
4.0 8.0	5	4	2	6	6	4	6	8	4	4.4	748.5

TABLE W (Contd)

PRECISION BALANCE NETWORK SETTINGS FOR MIXED 26-
AND 24-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68° F

26-GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 26-GA 24-GA		BALANCE NETWORK SETTINGS BY TERMINATION									1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
		900 + 2.16			600 + 2.16			TELSET (35MA)				
		R1	R2	Z	R1	R2	Z	R1	R2	Z		
WL = 12.0												
5.0	7.0	5	4	1	6	6	3	6	8	3	4.5	779.9
6.0	6.0	5	4	1	6	6	2	6	8	3	4.7	811.4
7.0	5.0	5	5	1	6	7	3	6	9	4	4.8	842.8
8.0	4.0	5	5	1	6	7	3	6	9	4	4.9	874.2
9.0	3.0	5	5	1	6	8	4	6	9	3	5.0	905.7
10.0	2.0	5	6	2	6	8	4	6	10	5	5.1	937.1
11.0	1.0	5	6	2	6	8	4	6	10	5	5.2	968.6
WL = 13.0												
1.0	12.0	5	6	8	6	8	10	6	10	11	4.5	706.1
2.0	11.0	5	5	6	6	7	8	6	9	8	4.6	737.5
3.0	10.0	5	5	5	6	6	5	6	9	7	4.7	768.9
4.0	9.0	5	4	3	6	6	4	6	8	5	4.8	800.4
5.0	8.0	5	4	2	6	6	4	6	8	4	5.0	831.8
6.0	7.0	5	4	1	6	6	3	6	9	5	5.1	863.3
7.0	6.0	5	4	1	6	7	4	6	9	5	5.2	894.7
8.0	5.0	5	5	2	6	7	3	6	9	4	5.3	926.1
9.0	4.0	5	5	1	6	8	4	6	9	4	5.4	957.6
10.0	3.0	5	5	1	6	8	4	6	10	6	5.5	989.0
11.0	2.0	5	6	2	6	8	4	6	10	6	5.6	1020.5
12.0	1.0	5	6	2	6	9	6	6	10	6	5.7	1051.9
WL = 14.0												
1.0	13.0	5	6	9	6	8	10	6	10	11	4.9	758.0
2.0	12.0	5	5	7	6	7	8	6	9	9	5.0	789.4
3.0	11.0	5	4	4	6	7	7	6	9	8	5.2	820.8
4.0	10.0	5	4	3	6	7	6	6	9	7	5.3	852.3
5.0	9.0	5	4	3	6	6	4	6	8	5	5.4	883.7
6.0	8.0	5	4	2	6	6	3	6	9	6	5.5	915.2
7.0	7.0	5	4	1	6	7	4	6	9	5	5.6	946.6
8.0	6.0	5	4	1	6	7	3	6	9	5	5.7	978.0
9.0	5.0	5	5	2	6	8	5	6	9	5	5.8	1009.5
10.0	4.0	5	5	2	6	8	4	6	10	6	5.9	1040.9
11.0	3.0	5	5	1	5	4	0	6	10	6	6.0	1072.3
12.0	2.0	5	6	3	5	4	0	6	10	6	6.1	1103.8
13.0	1.0	5	6	3	5	4	0	6	10	6	6.2	1135.2
WL = 15.0												
1.0	14.0	5	6	9	5	3	6	6	10	12	5.3	809.8
2.0	13.0	4	2	4	5	2	4	6	9	9	5.5	841.3
3.0	12.0	4	1	2	5	1	2	6	9	8	5.6	872.7
4.0	11.0	4	1	1	5	1	1	6	8	6	5.7	904.2
5.0	10.0	5	4	3	5	1	0	6	8	5	5.8	935.6
6.0	9.0	5	4	2	5	2	0	6	9	6	5.9	967.0
7.0	8.0	5	4	2	5	2	0	6	9	6	6.0	998.5
8.0	7.0	5	4	1	5	3	0	6	9	5	6.1	1029.9
9.0	6.0	5	4	1	5	3	0	6	9	5	6.2	1061.4
10.0	5.0	5	5	2	5	3	0	6	10	7	6.3	1092.8
11.0	4.0	5	5	2	5	4	0	6	10	7	6.4	1124.2
12.0	3.0	4	3	0	5	4	0	5	6	1	6.5	1155.7
13.0	2.0	4	3	0	5	4	0	5	6	1	6.6	1187.1

TABLE W (Contd)

PRECISION BALANCE NETWORK SETTINGS FOR MIXED 26- AND 24-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68° F

26-GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 26-GA 24-GA	BALANCE NETWORK SETTINGS BY TERMINATION									1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
	900 + 2.16			600 + 2.16			TELSET (35MA)				
	R1	R2	Z	R1	R2	Z	R1	R2	Z		
WL = 15.0											
14.0 1.0	4	3	0	5	4	0	5	6	1	6.8	1218.6
WL = 16.0											
1.0 15.0	4	3	7	5	4	7	5	6	8	5.8	861.7
2.0 14.0	4	2	5	5	2	4	5	5	6	5.9	893.2
3.0 13.0	4	1	3	5	1	2	5	4	3	6.0	924.6
4.0 12.0	4	0	1	5	1	1	5	3	1	6.1	956.1
5.0 11.0	4	0	0	5	1	0	5	3	0	6.2	987.5
6.0 10.0	4	1	0	5	2	0	5	4	1	6.3	1018.9
7.0 9.0	4	1	0	5	2	0	5	4	0	6.4	1050.4
8.0 8.0	4	2	0	5	3	0	5	4	0	6.5	1081.8
9.0 7.0	4	2	0	5	3	0	5	5	1	6.6	1113.3
10.0 6.0	4	2	0	5	3	0	5	5	0	6.7	1144.7
11.0 5.0	4	3	0	5	3	0	5	5	0	6.8	1176.1
12.0 4.0	4	3	0	5	4	0	5	5	0	7.0	1207.6
13.0 3.0	4	3	0	5	4	0	5	6	2	7.1	1239.0
14.0 2.0	4	3	0	5	4	0	5	6	2	7.2	1270.5
15.0 1.0	4	3	0	5	4	0	5	6	2	7.3	1301.9
WL = 17.0											
1.0 16.0	4	3	7	5	3	7	5	6	8	6.2	913.6
2.0 15.0	4	1	4	5	2	5	5	5	6	6.3	945.1
3.0 14.0	4	0	2	5	2	3	5	4	4	6.5	976.5
4.0 13.0	4	0	1	5	1	1	5	3	2	6.6	1008.0
5.0 12.0	4	0	0	5	1	0	5	3	1	6.7	1039.4
6.0 11.0	4	0	0	5	1	0	5	3	0	6.8	1070.8
7.0 10.0	4	1	0	5	2	0	5	4	1	6.9	1102.3
8.0 9.0	4	1	0	5	2	0	5	4	0	7.0	1133.7
9.0 8.0	4	2	0	5	3	0	5	4	0	7.1	1165.2
10.0 7.0	4	2	0	5	3	0	5	5	1	7.2	1196.6
11.0 6.0	4	2	0	5	3	0	5	5	1	7.3	1228.0
12.0 5.0	4	2	0	5	4	1	5	5	1	7.4	1259.5
13.0 4.0	4	3	0	5	4	0	5	6	2	7.5	1290.9
14.0 3.0	4	3	0	5	4	0	5	6	2	7.6	1322.3
15.0 2.0	4	3	0	5	4	0	5	6	2	7.7	1353.8
16.0 1.0	4	3	0	5	5	2	5	6	2	7.8	1385.2
WL = 18.0											
1.0 17.0	4	2	7	5	3	7	5	6	9	6.6	965.5
2.0 16.0	4	1	4	5	2	5	5	4	5	6.8	997.0
3.0 15.0	4	0	2	5	1	3	5	4	4	6.9	1028.4
4.0 14.0	4	0	1	5	1	2	5	3	2	7.0	1059.8
5.0 13.0	4	0	0	5	1	1	5	3	1	7.1	1091.3
6.0 12.0	4	0	0	5	1	0	5	3	0	7.2	1122.7
7.0 11.0	4	1	0	5	2	0	5	3	0	7.3	1154.2
8.0 10.0	4	1	0	5	2	0	5	4	0	7.4	1185.6
9.0 9.0	4	1	0	5	3	0	5	4	0	7.5	1217.0
10.0 8.0	4	2	0	5	3	0	5	4	0	7.6	1248.5
11.0 7.0	4	2	0	5	3	0	5	5	1	7.7	1279.9
12.0 6.0	4	2	0	5	4	1	5	5	1	7.8	1311.4
13.0 5.0	4	2	0	5	4	1	5	5	1	7.9	1342.8

TABLE W (Contd)

PRECISION BALANCE NETWORK SETTINGS FOR MIXED 26- AND 24-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68° F

26-GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 26-GA 24-GA	BALANCE NETWORK SETTINGS BY TERMINATION									1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
	900 + 2.16			600 + 2.16			TELSET (35MA)				
	R1	R2	Z	R1	R2	Z	R1	R2	Z		
WL = 18.0											
14.0 4.0	4	3	0	5	4	1	5	5	1	8.0	1374.2
15.0 3.0	4	3	0	5	4	1	5	6	2	8.1	1405.7
16.0 2.0	4	3	0	5	4	1	5	6	2	8.3	1437.1
17.0 1.0	4	3	0	5	5	2	5	6	2	8.4	1468.6
WL = 19.0											
1.0 18.0	3	0	5	4	0	5	5	5	8	7.1	1017.4
2.0 17.0	4	0	4	5	2	5	5	4	6	7.2	1048.9
3.0 16.0	4	0	3	5	1	3	5	3	3	7.3	1080.3
4.0 15.0	4	0	1	5	1	2	5	3	2	7.5	1111.7
5.0 14.0	4	0	0	5	1	1	5	3	1	7.6	1143.2
6.0 13.0	4	0	0	5	1	0	5	3	1	7.7	1174.6
7.0 12.0	4	0	0	5	2	0	5	3	0	7.8	1206.1
8.0 11.0	4	1	0	5	2	0	5	4	1	7.9	1237.5
9.0 10.0	4	1	0	5	3	0	5	4	0	8.0	1268.9
10.0 9.0	4	2	0	5	3	0	5	4	0	8.1	1300.4
11.0 8.0	4	2	0	5	3	0	5	4	0	8.2	1331.8
12.0 7.0	4	2	0	5	3	0	5	5	1	8.3	1363.3
13.0 6.0	4	2	0	5	4	1	5	5	1	8.4	1394.7
14.0 5.0	4	2	0	5	4	1	5	5	1	8.5	1426.1
15.0 4.0	4	2	0	5	4	1	5	5	1	8.6	1457.6
16.0 3.0	4	2	0	4	2	0	4	4	0	8.7	1489.0
17.0 2.0	4	3	0	4	3	0	4	4	0	8.8	1520.5
18.0 1.0	4	3	0	4	3	0	4	4	0	8.9	1551.9
WL = 20.0											
1.0 19.0	3	0	5	4	0	5	5	5	8	7.5	1069.3
2.0 18.0	4	0	4	4	0	4	5	4	6	7.7	1100.8
3.0 17.0	4	0	3	4	0	2	5	3	4	7.8	1132.2
4.0 16.0	4	0	1	5	1	2	5	3	3	7.9	1163.6
5.0 15.0	4	0	0	5	1	1	5	3	2	8.0	1195.1
6.0 14.0	4	0	0	5	1	0	5	3	1	8.1	1226.5
7.0 13.0	4	0	0	5	2	0	5	3	0	8.2	1258.0
8.0 12.0	4	1	0	5	2	0	5	3	0	8.3	1289.4
9.0 11.0	4	1	0	5	2	0	5	4	0	8.4	1320.8
10.0 10.0	4	1	0	5	3	0	5	4	0	8.5	1352.3
11.0 9.0	4	2	0	5	3	0	5	4	0	8.6	1383.7
12.0 8.0	4	2	0	5	3	0	5	5	1	8.7	1415.2
13.0 7.0	4	2	0	5	4	1	5	5	1	8.8	1446.6
14.0 6.0	4	2	0	5	4	1	4	3	0	8.9	1478.0
15.0 5.0	4	2	0	4	2	0	4	3	0	9.0	1509.5
16.0 4.0	4	2	0	4	2	0	4	3	0	9.1	1540.9
17.0 3.0	4	2	0	4	2	0	4	3	0	9.2	1572.3
18.0 2.0	4	2	0	4	2	0	4	3	0	9.4	1603.8
19.0 1.0	4	2	0	4	2	0	4	3	0	9.5	1635.2
WL = 21.0											
1.0 20.0	3	0	5	4	0	5	4	2	6	8.0	1121.2
2.0 19.0	4	0	4	4	0	4	4	1	3	8.1	1152.7
3.0 18.0	4	0	3	4	0	2	4	0	1	8.2	1184.1
4.0 17.0	4	0	2	4	0	1	4	0	0	8.4	1215.5

TABLE W (Contd)

PRECISION BALANCE NETWORK SETTINGS FOR MIXED 26-
AND 24-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68° F

26-GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 26-GA 24-GA	BALANCE NETWORK SETTINGS BY TERMINATION									1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
	900 + 2.16			600 + 2.16			TELSET (35MA)				
	R1	R2	Z	R1	R2	Z	R1	R2	Z		
WL = 21.0											
5.0 16.0	4	0	1	5	1	1	4	0	0	8.5	1247.0
6.0 15.0	4	0	0	5	1	0	5	2	0	8.6	1278.4
7.0 14.0	4	0	0	5	1	0	5	3	0	8.7	1309.8
8.0 13.0	4	0	0	5	2	0	5	3	0	8.8	1341.3
9.0 12.0	4	1	0	5	2	0	5	3	0	8.9	1372.7
10.0 11.0	4	1	0	5	3	0	5	4	0	9.0	1404.2
11.0 10.0	4	2	0	5	3	0	5	4	0	9.1	1435.6
12.0 9.0	4	2	0	5	3	0	4	3	0	9.2	1467.0
13.0 8.0	4	2	0	5	3	0	4	3	0	9.3	1498.5
14.0 7.0	4	2	0	4	2	0	4	3	0	9.4	1529.9
15.0 6.0	4	2	0	4	2	0	4	3	0	9.5	1561.4
16.0 5.0	4	2	0	4	2	0	4	3	0	9.6	1592.8
17.0 4.0	4	2	0	4	2	0	4	3	0	9.7	1624.2
18.0 3.0	4	2	0	4	2	0	4	3	0	9.8	1655.7
19.0 2.0	4	2	0	4	2	0	4	3	0	9.9	1687.1
20.0 1.0	4	2	0	4	2	0	4	3	0	10.1	1718.6
WL = 22.0											
1.0 21.0	3	0	5	4	0	5	4	2	6	8.4	1173.1
2.0 20.0	3	0	4	4	0	4	4	0	3	8.6	1204.5
3.0 19.0	4	0	3	4	0	3	4	0	2	8.7	1236.0
4.0 18.0	4	0	2	4	0	1	4	0	0	8.8	1267.4
5.0 17.0	4	0	1	4	0	0	4	0	0	8.9	1298.9
6.0 16.0	4	0	0	4	0	0	4	1	0	9.1	1330.3
7.0 15.0	4	0	0	5	1	0	4	1	0	9.2	1361.7
8.0 14.0	4	0	0	5	2	0	5	3	0	9.3	1393.2
9.0 13.0	4	1	0	5	2	0	4	2	0	9.4	1424.6
10.0 12.0	4	1	0	5	3	0	4	2	0	9.4	1456.1
11.0 11.0	4	1	0	5	3	0	4	3	0	9.5	1487.5
12.0 10.0	4	2	0	5	3	0	4	3	0	9.6	1518.9
13.0 9.0	4	2	0	4	2	0	4	3	0	9.7	1550.4
14.0 8.0	4	2	0	4	2	0	4	3	0	9.8	1581.8
15.0 7.0	4	2	0	4	2	0	4	3	0	9.9	1613.3
16.0 6.0	4	2	0	4	2	0	4	3	0	10.0	1644.7
17.0 5.0	4	2	0	4	2	0	4	3	0	10.1	1676.1
18.0 4.0	4	2	0	4	2	0	4	3	0	10.2	1707.6
19.0 3.0	4	2	0	4	2	0	4	3	0	10.4	1739.0
20.0 2.0	4	2	0	4	2	0	4	3	0	10.5	1770.5
21.0 1.0	3	1	0	4	2	0	4	3	0	10.6	1801.9
WL = 23.0											
1.0 22.0	3	0	6	4	0	5	4	2	6	8.9	1225.0
2.0 21.0	3	0	4	4	0	4	4	0	3	9.0	1256.4
3.0 20.0	4	0	3	4	0	3	4	0	2	9.2	1287.9
4.0 19.0	4	0	2	4	0	1	4	0	1	9.3	1319.3
5.0 18.0	4	0	1	4	0	0	4	0	0	9.4	1350.8
6.0 17.0	4	0	0	4	0	0	4	0	0	9.5	1382.2
7.0 16.0	4	0	0	4	0	0	4	1	0	9.6	1413.6
8.0 15.0	4	0	0	5	2	0	4	1	0	9.7	1445.1
9.0 14.0	4	1	0	5	2	0	4	2	0	9.8	1476.5
10.0 13.0	4	1	0	5	3	0	4	2	0	9.9	1508.0

TABLE W (Contd)

PRECISION BALANCE NETWORK SETTINGS FOR MIXED 26- AND 24-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68° F

26-GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 26-GA 24-GA		BALANCE NETWORK SETTINGS BY TERMINATION									1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
		900. + 2.16			600 + 2.16			TELSET (35MA)				
		R1	R2	Z	R1	R2	Z	R1	R2	Z		
WL = 23.0												
11.0	12.0	4	1	0	5	3	0	4	2	0	10.0	1539.4
12.0	11.0	4	2	0	4	2	0	4	3	0	10.1	1570.8
13.0	10.0	4	2	0	4	2	0	4	3	0	10.2	1602.3
14.0	9.0	4	2	0	4	2	0	4	3	0	10.3	1633.7
15.0	8.0	4	2	0	4	2	0	4	3	0	10.4	1665.2
16.0	7.0	4	2	0	4	2	0	4	3	0	10.5	1696.6
17.0	6.0	4	2	0	4	2	0	4	3	0	10.6	1728.0
18.0	5.0	4	2	0	4	2	0	4	3	0	10.7	1759.5
19.0	4.0	4	2	0	4	2	0	4	3	0	10.8	1790.9
20.0	3.0	3	1	0	4	2	0	4	3	0	10.9	1822.3
21.0	2.0	3	1	0	4	2	0	4	3	0	11.0	1853.8
22.0	1.0	3	1	0	4	2	0	4	3	0	11.2	1885.2
WL = 24.0												
1.0	23.0	3	0	6	4	0	5	4	1	5	9.3	1276.9
2.0	22.0	3	0	4	4	0	4	4	0	3	9.5	1308.3
3.0	21.0	4	0	3	4	0	3	4	0	2	9.6	1339.8
4.0	20.0	4	0	2	4	0	1	4	0	1	9.7	1371.2
5.0	19.0	4	0	1	4	0	0	4	0	0	9.9	1402.7
6.0	18.0	4	0	0	4	0	0	4	0	0	10.0	1434.1
7.0	17.0	4	0	0	4	0	0	4	1	0	10.1	1465.5
8.0	16.0	4	0	0	4	0	0	4	1	0	10.2	1497.0
9.0	15.0	4	1	0	5	2	0	4	2	0	10.3	1528.4
10.0	14.0	4	1	0	4	1	0	4	2	0	10.4	1559.8
11.0	13.0	4	1	0	4	1	0	4	2	0	10.5	1591.3
12.0	12.0	4	1	0	4	2	0	4	2	0	10.6	1622.7
13.0	11.0	4	2	0	4	2	0	4	3	0	10.6	1654.2
14.0	10.0	4	2	0	4	2	0	4	3	0	10.7	1685.6
15.0	9.0	4	2	0	4	2	0	4	3	0	10.8	1717.0
16.0	8.0	4	2	0	4	2	0	4	3	0	10.9	1748.5
17.0	7.0	4	2	0	4	2	0	4	3	0	11.0	1779.9
18.0	6.0	4	2	0	4	2	0	4	3	0	11.1	1811.4
19.0	5.0	4	2	0	4	2	0	4	3	0	11.2	1842.8
20.0	4.0	3	1	0	4	2	0	4	3	0	11.4	1874.2

TABLE X

**PRECISION BALANCE NETWORK SETTINGS FOR MIXED 24-
AND 26-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68° F**

24-GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 24-GA 26-GA	BALANCE NETWORK SETTINGS BY TERMINATION									1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
	900 + 2.16			600 + 2.16			TELSET (35MA)				
	R1	R2	Z	R1	R2	Z	R1	R2	Z		
WL = 7.0											
1.0 6.0	6	9	2	7	15	14	7	15	10	2.8	551.9
2.0 5.0	6	10	5	7	15	15	7	15	11	2.7	520.5
3.0 4.0	6	10	6	7	15	15	7	15	12	2.6	489.0
WL = 8.0											
1.0 7.0	6	10	5	7	15	14	7	15	11	3.3	635.2
2.0 6.0	6	11	8	7	15	15	7	15	11	3.1	603.8
3.0 5.0	6	11	9	7	15	16	7	15	12	3.0	572.3
4.0 4.0	6	11	10	7	15	16	7	15	13	2.9	540.9
5.0 3.0	6	11	10	7	15	17	7	15	13	2.8	509.5
6.0 2.0	6	11	11	7	15	17	7	15	14	2.7	478.0
7.0 1.0	6	11	11	7	15	18	7	15	14	2.5	446.6
WL = 9.0											
1.0 8.0	6	11	8	6	7	2	7	15	11	3.7	718.6
2.0 7.0	6	12	11	6	8	5	7	15	12	3.6	687.1
3.0 6.0	6	12	12	6	8	6	7	15	13	3.5	655.7
4.0 5.0	6	12	12	6	8	7	7	15	13	3.4	624.2
5.0 4.0	6	12	13	6	8	8	7	15	14	3.3	592.8
6.0 3.0	6	12	13	6	8	8	7	15	14	3.2	561.4
7.0 2.0	6	12	14	6	7	7	7	15	15	3.0	529.9
8.0 1.0	6	11	12	6	7	8	7	15	15	2.9	498.5
WL = 10.0											
1.0 9.0	6	11	9	6	8	4	6	10	5	4.2	801.9
2.0 8.0	6	12	12	6	9	7	6	11	8	4.1	770.5
3.0 7.0	6	12	13	6	9	8	6	11	9	4.0	739.0
4.0 6.0	6	12	13	6	10	10	6	11	9	3.9	707.6
5.0 5.0	6	13	16	6	10	11	6	11	10	3.8	676.1
6.0 4.0	6	12	14	6	9	10	6	11	10	3.6	644.7
7.0 3.0	6	12	14	6	9	10	6	10	9	3.5	613.3
8.0 2.0	6	12	15	6	9	11	6	10	9	3.4	581.8
9.0 1.0	6	12	15	6	8	10	7	15	16	3.3	550.4
WL = 11.0											
1.0 10.0	5	7	4	6	9	6	6	11	8	4.7	885.2
2.0 9.0	5	8	6	6	10	9	6	11	9	4.6	853.8
3.0 8.0	5	9	9	6	10	10	6	12	11	4.5	822.3
4.0 7.0	5	9	10	6	11	12	6	12	12	4.4	790.9
5.0 6.0	5	9	10	6	10	11	6	12	13	4.3	759.5
6.0 5.0	5	9	11	6	10	12	6	12	13	4.1	728.0
7.0 4.0	5	9	11	6	10	12	6	11	11	4.0	696.6
8.0 3.0	5	9	11	6	10	13	6	11	12	3.9	665.2
9.0 2.0	5	8	10	6	9	11	6	11	12	3.8	633.7
10.0 1.0	6	12	16	6	9	12	6	10	10	3.7	602.3
WL = 12.0											
1.0 11.0	5	7	4	6	10	8	6	11	8	5.2	968.6
2.0 10.0	5	8	7	6	10	9	6	12	11	5.1	937.1
3.0 9.0	5	9	9	6	11	12	6	12	12	5.0	905.7
4.0 8.0	5	9	10	6	11	13	6	12	13	4.9	874.2

TABLE X (Contd)

PRECISION BALANCE NETWORK SETTINGS FOR MIXED 24-
AND 26-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68° F

24-GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 24-GA 26-GA	BALANCE NETWORK SETTINGS BY TERMINATION									1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
	900 + 2.16			600 + 2.16			TELSET (35MA)				
	R1	R2	Z	R1	R2	Z	R1	R2	Z		
WL = 12.0											
5.0 7.0	5	9	11	6	11	13	6	12	13	4.8	842.8
6.0 6.0	5	9	11	6	11	14	6	12	14	4.7	811.4
7.0 5.0	5	9	12	6	11	14	6	12	14	4.5	779.9
8.0 4.0	5	9	12	6	10	13	6	12	14	4.4	748.5
9.0 3.0	5	9	12	6	10	13	6	12	15	4.3	717.0
10.0 2.0	5	8	11	6	10	13	6	11	13	4.2	685.6
11.0 1.0	5	8	11	6	9	12	6	11	13	4.1	654.2
WL = 13.0											
1.0 12.0	5	7	5	6	10	8	6	11	9	5.7	1051.9
2.0 11.0	5	8	7	6	11	11	6	12	12	5.6	1020.5
3.0 10.0	5	9	10	6	11	12	6	12	13	5.5	989.0
4.0 9.0	5	9	11	6	11	13	6	13	15	5.4	957.6
5.0 8.0	5	9	11	6	11	13	6	13	16	5.3	926.1
6.0 7.0	5	9	12	6	11	14	6	13	16	5.2	894.7
7.0 6.0	5	9	12	6	11	14	6	13	17	5.1	863.3
8.0 5.0	5	9	12	6	11	15	6	12	15	5.0	831.8
9.0 4.0	5	9	13	6	11	15	6	12	15	4.8	800.4
10.0 3.0	5	9	13	6	11	15	6	12	15	4.7	768.9
11.0 2.0	5	8	12	6	10	14	6	12	15	4.6	737.5
12.0 1.0	5	8	12	6	10	14	6	11	14	4.5	706.1
WL = 14.0											
1.0 13.0	5	7	5	5	6	4	6	11	9	6.2	1135.2
2.0 12.0	5	8	8	5	7	6	6	12	12	6.1	1103.8
3.0 11.0	5	9	10	5	7	7	6	12	13	6.0	1072.3
4.0 10.0	5	9	11	5	7	8	6	13	16	5.9	1040.9
5.0 9.0	5	9	12	5	8	10	6	13	16	5.8	1009.5
6.0 8.0	5	9	12	5	7	9	6	13	17	5.7	978.0
7.0 7.0	5	9	12	5	7	10	6	13	17	5.6	946.6
8.0 6.0	5	9	13	5	7	10	6	13	17	5.5	915.2
9.0 5.0	5	9	13	5	7	11	6	12	16	5.4	883.7
10.0 4.0	5	8	12	5	7	11	6	12	16	5.3	852.3
11.0 3.0	5	8	12	5	6	10	6	12	16	5.2	820.8
12.0 2.0	5	8	12	5	6	10	6	12	16	5.0	789.4
13.0 1.0	5	8	12	6	10	14	6	11	14	4.9	758.0
WL = 15.0											
1.0 14.0	4	4	2	5	6	4	5	7	4	6.8	1218.6
2.0 13.0	4	5	4	5	7	6	5	8	7	6.6	1187.1
3.0 12.0	4	6	7	5	7	7	5	9	9	6.5	1155.7
4.0 11.0	4	6	7	5	7	8	5	9	10	6.4	1124.2
5.0 10.0	4	7	9	5	8	10	5	9	10	6.3	1092.8
6.0 9.0	4	7	10	5	8	11	5	9	11	6.2	1061.4
7.0 8.0	4	7	10	5	8	11	5	9	11	6.1	1029.9
8.0 7.0	4	7	11	5	7	10	5	9	12	6.0	998.5
9.0 6.0	4	6	10	5	7	11	5	9	12	5.9	967.0
10.0 5.0	4	6	10	5	7	11	5	8	11	5.8	935.6
11.0 4.0	4	6	10	5	6	10	5	8	11	5.7	904.2
12.0 3.0	4	6	11	5	6	10	6	12	16	5.6	872.7
13.0 2.0	4	5	10	5	6	10	6	12	16	5.5	841.3

TABLE X (Contd)

PRECISION BALANCE NETWORK SETTINGS FOR MIXED 24- AND 26-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68° F

24-GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 24-GA 26-GA	BALANCE NETWORK SETTINGS BY TERMINATION									1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
	900 + 2.16			600 + 2.16			TELSET (35MA)				
	R1	R2	Z	R1	R2	Z	R1	R2	Z		
WL = 15.0 14.0 1.0	4	5	10	5	5	9	6	12	16	5.3	809.8
WL = 16.0											
1.0 15.0	4	4	2	5	6	4	5	7	4	7.3	1301.9
2.0 14.0	4	5	5	5	7	6	5	8	7	7.2	1270.5
3.0 13.0	4	6	7	5	8	9	5	9	9	7.1	1239.0
4.0 12.0	4	6	8	5	8	10	5	9	10	7.0	1207.6
5.0 11.0	4	6	8	5	8	10	5	9	11	6.8	1176.1
6.0 10.0	4	7	10	5	8	11	5	9	11	6.7	1144.7
7.0 9.0	4	7	11	5	8	11	5	9	12	6.6	1113.3
8.0 8.0	4	6	10	5	8	12	5	9	12	6.5	1081.8
9.0 7.0	4	6	10	5	7	11	5	9	12	6.4	1050.4
10.0 6.0	4	6	11	5	7	11	5	9	13	6.3	1018.9
11.0 5.0	4	6	11	5	7	11	5	8	11	6.2	987.5
12.0 4.0	4	6	11	5	6	10	5	8	12	6.1	956.1
13.0 3.0	4	5	10	5	6	11	5	8	12	6.0	924.6
14.0 2.0	4	5	10	5	6	11	5	8	12	5.9	893.2
15.0 1.0	4	5	10	5	6	11	5	7	10	5.8	861.7
WL = 17.0											
1.0 16.0	4	4	2	5	6	4	5	7	5	7.8	1385.2
2.0 15.0	4	5	5	5	7	7	5	8	7	7.7	1353.8
3.0 14.0	4	6	7	5	8	9	5	8	8	7.6	1322.3
4.0 13.0	4	6	8	5	8	10	5	9	10	7.5	1290.9
5.0 12.0	4	6	9	5	8	11	5	9	11	7.4	1259.5
6.0 11.0	4	6	9	5	8	11	5	9	12	7.3	1228.0
7.0 10.0	4	6	10	5	8	12	5	9	12	7.2	1196.6
8.0 9.0	4	6	10	5	8	12	5	9	12	7.1	1165.2
9.0 8.0	4	6	10	5	7	11	5	9	13	7.0	1133.7
10.0 7.0	4	6	11	5	7	11	5	9	13	6.9	1102.3
11.0 6.0	4	6	11	5	7	12	5	8	12	6.8	1070.8
12.0 5.0	4	5	10	5	7	12	5	8	12	6.7	1039.4
13.0 4.0	4	5	10	5	6	11	5	8	12	6.6	1008.0
14.0 3.0	4	5	10	5	6	11	5	8	12	6.5	976.5
15.0 2.0	4	5	10	5	6	11	5	8	12	6.3	945.1
16.0 1.0	4	4	9	5	6	11	5	7	11	6.2	913.6
WL = 18.0											
1.0 17.0	4	4	2	4	3	1	4	4	1	8.4	1468.6
2.0 16.0	4	5	5	4	4	3	4	6	5	8.3	1437.1
3.0 15.0	4	5	6	4	5	6	4	6	6	8.1	1405.7
4.0 14.0	4	6	8	4	5	6	4	6	7	8.0	1374.2
5.0 13.0	4	6	9	4	5	7	4	7	9	7.9	1342.8
6.0 12.0	3	5	8	4	6	9	4	7	9	7.8	1311.4
7.0 11.0	3	5	9	4	5	8	4	7	10	7.7	1279.9
8.0 10.0	3	4	8	4	5	9	4	6	9	7.6	1248.5
9.0 9.0	3	4	9	4	5	9	5	9	13	7.5	1217.0
10.0 8.0	3	4	9	4	5	10	5	8	12	7.4	1185.6
11.0 7.0	3	4	9	4	4	9	5	8	12	7.3	1154.2
12.0 6.0	3	4	9	4	4	9	5	8	12	7.2	1122.7
13.0 5.0	3	3	9	4	4	9	5	8	12	7.1	1091.3

TABLE X (Contd)

PRECISION BALANCE NETWORK SETTINGS FOR MIXED 24-
AND 26-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68° F

24-GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 24-GA 26-GA	BALANCE NETWORK SETTINGS BY TERMINATION									1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
	900 + 2.16			600 + 2.16			TELSET (35MA)				
	R1	R2	Z	R1	R2	Z	R1	R2	Z		
WL = 18.0											
14.0 4.0	3	3	9	4	4	9	5	8	12	7.0	1059.8
15.0 3.0	3	3	9	5	6	11	5	7	11	6.9	1028.4
16.0 2.0	4	4	10	5	6	11	5	7	11	6.8	997.0
17.0 1.0	4	4	10	5	5	10	5	7	11	6.6	965.5
WL = 19.0											
1.0 18.0	3	2	0	4	3	1	4	4	1	8.9	1551.9
2.0 17.0	3	3	3	4	4	3	4	5	4	8.8	1520.5
3.0 16.0	3	4	5	4	5	6	4	6	6	8.7	1489.0
4.0 15.0	3	4	6	4	5	7	4	6	7	8.6	1457.6
5.0 14.0	3	4	7	4	5	7	4	7	9	8.5	1426.1
6.0 13.0	3	4	7	4	5	8	4	7	10	8.4	1394.7
7.0 12.0	3	4	8	4	5	9	4	7	10	8.3	1363.3
8.0 11.0	3	4	8	4	5	9	4	6	9	8.2	1331.8
9.0 10.0	3	4	9	4	5	9	4	6	10	8.1	1300.4
10.0 9.0	3	4	9	4	5	10	4	6	10	8.0	1268.9
11.0 8.0	3	4	9	4	4	9	4	6	10	7.9	1237.5
12.0 7.0	3	3	9	4	4	9	4	6	10	7.8	1206.1
13.0 6.0	3	3	9	4	4	9	4	5	9	7.7	1174.6
14.0 5.0	3	3	9	4	4	9	4	5	9	7.6	1143.2
15.0 4.0	3	3	9	4	3	9	4	5	9	7.5	1111.7
16.0 3.0	3	2	8	4	3	9	5	7	11	7.3	1080.3
17.0 2.0	3	2	8	4	3	9	5	7	11	7.2	1048.9
18.0 1.0	3	2	8	4	2	8	5	7	11	7.1	1017.4
WL = 20.0											
1.0 19.0	3	2	1	4	3	1	4	4	2	9.5	1635.2
2.0 18.0	3	3	3	4	4	4	4	5	4	9.4	1603.8
3.0 17.0	3	3	4	4	5	6	4	6	6	9.2	1572.3
4.0 16.0	3	4	6	4	5	7	4	6	7	9.1	1540.9
5.0 15.0	3	4	7	4	5	7	4	6	8	9.0	1509.5
6.0 14.0	3	4	7	4	5	8	4	7	10	8.9	1478.0
7.0 13.0	3	4	8	4	5	9	4	6	9	8.8	1446.6
8.0 12.0	3	4	8	4	5	9	4	6	10	8.7	1415.2
9.0 11.0	3	4	9	4	5	10	4	6	10	8.6	1383.7
10.0 10.0	3	4	9	4	5	10	4	6	10	8.5	1352.3
11.0 9.0	3	3	9	4	4	9	4	6	10	8.4	1320.8
12.0 8.0	3	3	9	4	4	9	4	5	10	8.3	1289.4
13.0 7.0	3	3	9	4	4	9	4	5	10	8.2	1258.0
14.0 6.0	3	3	9	4	3	9	4	5	10	8.1	1226.5
15.0 5.0	3	2	8	4	3	9	4	5	10	8.0	1195.1
16.0 4.0	3	2	8	4	3	9	4	5	10	7.9	1163.6
17.0 3.0	3	2	8	4	3	9	4	4	9	7.8	1132.2
18.0 2.0	3	2	8	4	3	9	4	4	9	7.7	1100.8
19.0 1.0	3	2	8	4	2	8	4	4	9	7.5	1069.3
WL = 21.0											
1.0 20.0	3	1	0	4	3	1	4	4	2	10.1	1718.6
2.0 19.0	3	2	2	4	4	4	4	5	4	9.9	1687.1
3.0 18.0	3	3	4	4	5	6	4	6	6	9.8	1655.7
4.0 17.0	3	4	6	4	5	7	4	6	7	9.7	1624.2

TABLE X (Contd)

PRECISION BALANCE NETWORK SETTINGS FOR MIXED 24- AND 26-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68° F

24-GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 24-GA 26-GA	BALANCE NETWORK SETTINGS BY TERMINATION									1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
	900 + 2.16			600 + 2.16			TELSET (35MA)				
	R1	R2	Z	R1	R2	Z	R1	R2	Z		
WL = 21.0											
5.0 16.0	3	4	7	4	5	8	4	6	8	9.6	1592.8
6.0 15.0	3	4	7	4	5	8	4	6	9	9.5	1561.4
7.0 14.0	3	4	8	4	5	9	4	6	9	9.4	1529.9
8.0 13.0	3	4	9	4	5	9	4	6	10	9.3	1498.5
9.0 12.0	3	4	9	3	3	8	4	6	10	9.2	1467.0
10.0 11.0	3	3	8	3	3	8	4	6	10	9.1	1435.6
11.0 10.0	2	2	8	3	3	8	4	6	11	9.0	1404.2
12.0 9.0	2	2	8	3	2	8	4	5	10	8.9	1372.7
13.0 8.0	3	3	9	3	2	8	4	5	10	8.8	1341.3
14.0 7.0	3	2	8	4	4	10	4	5	10	8.7	1309.8
15.0 6.0	3	2	8	4	3	9	4	5	10	8.6	1278.4
16.0 5.0	3	2	8	4	3	9	4	4	9	8.5	1247.0
17.0 4.0	3	2	8	4	3	9	4	4	9	8.4	1215.5
18.0 3.0	3	2	8	4	3	9	4	4	9	8.2	1184.1
19.0 2.0	3	1	8	4	2	8	4	4	9	8.1	1152.7
20.0 1.0	3	1	8	4	2	8	4	4	9	8.0	1121.2
WL = 22.0											
1.0 21.0	3	1	0	4	3	1	3	2	0	10.6	1801.9
2.0 20.0	3	2	2	4	4	4	3	3	2	10.5	1770.5
3.0 19.0	3	3	4	4	5	6	3	4	4	10.4	1739.0
4.0 18.0	3	4	6	4	5	7	3	4	5	10.2	1707.6
5.0 17.0	3	4	7	3	4	7	3	5	7	10.1	1676.1
6.0 16.0	3	4	8	3	4	7	3	5	8	10.0	1644.7
7.0 15.0	2	3	7	3	4	8	3	5	8	9.9	1613.3
8.0 14.0	2	2	7	3	4	8	3	4	8	9.8	1581.8
9.0 13.0	2	2	7	3	3	8	3	4	8	9.7	1550.4
10.0 12.0	2	2	7	3	3	8	3	4	8	9.6	1518.9
11.0 11.0	2	2	8	3	3	8	3	4	9	9.5	1487.5
12.0 10.0	2	2	8	3	2	8	3	4	9	9.4	1456.1
13.0 9.0	2	1	7	3	2	8	3	3	8	9.4	1424.6
14.0 8.0	2	1	7	3	2	8	3	3	8	9.3	1393.2
15.0 7.0	2	0	7	3	2	8	3	3	8	9.2	1361.7
16.0 6.0	2	0	7	3	1	7	4	4	9	9.1	1330.3
17.0 5.0	2	0	7	4	3	9	4	4	9	8.9	1298.9
18.0 4.0	2	0	7	4	3	9	4	4	9	8.8	1267.4
19.0 3.0	3	1	8	4	2	8	4	4	9	8.7	1236.0
20.0 2.0	3	1	8	4	2	8	4	4	9	8.6	1204.5
21.0 1.0	3	1	8	4	2	8	4	4	9	8.4	1173.1
WL = 23.0											
1.0 22.0	3	1	0	3	1	0	3	2	0	11.2	1885.2
2.0 21.0	3	2	2	3	2	2	3	3	2	11.0	1853.8
3.0 20.0	3	3	4	3	3	4	3	4	4	10.9	1822.3
4.0 19.0	3	3	5	3	3	5	3	4	5	10.8	1790.9
5.0 18.0	3	4	7	3	4	7	3	4	6	10.7	1759.5
6.0 17.0	2	3	7	3	4	7	3	4	7	10.6	1728.0
7.0 16.0	2	3	7	3	4	8	3	4	7	10.5	1696.6
8.0 15.0	2	2	7	3	3	7	3	4	8	10.4	1665.2
9.0 14.0	2	2	7	3	3	8	3	4	8	10.3	1633.7
10.0 13.0	2	2	8	3	3	8	3	4	9	10.2	1602.3

TABLE X (Contd)

PRECISION BALANCE NETWORK SETTINGS FOR MIXED 24-
AND 26-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68° F

24-GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 24-GA 26-GA	BALANCE NETWORK SETTINGS BY TERMINATION						1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)			
	900 + 2.16			600 + 2.16					TELSET (35MA)		
	R1	R2	Z	R1	R2	Z	R1	R2	Z		
WL = 23.0											
11.0 12.0	2	2	8	3	3	8	3	4	9	10.1	1570.8
12.0 11.0	2	1	7	3	2	8	3	3	8	10.0	1539.4
13.0 10.0	2	1	7	3	2	8	3	3	8	9.9	1508.0
14.0 9.0	2	1	7	3	2	8	3	3	8	9.8	1476.5
15.0 8.0	2	0	7	3	2	8	3	3	8	9.7	1445.1
16.0 7.0	2	0	7	3	1	7	3	2	8	9.6	1413.6
17.0 6.0	2	0	7	3	1	7	3	2	8	9.5	1382.2
18.0 5.0	2	0	7	3	1	7	3	2	8	9.4	1350.8
19.0 4.0	2	0	7	3	0	7	4	4	9	9.3	1319.3
20.0 3.0	2	0	7	4	2	8	4	4	9	9.2	1287.9
21.0 2.0	3	1	8	4	2	8	4	3	8	9.0	1256.4
22.0 1.0	3	0	7	4	2	8	4	3	8	8.9	1225.0
WL = 24.0											
3.0 21.0	3	3	4	3	3	4	3	4	4	11.5	1905.7
4.0 20.0	2	2	4	3	3	5	3	4	5	11.4	1874.2
5.0 19.0	2	2	5	3	4	7	3	4	6	11.2	1842.8
6.0 18.0	2	2	6	3	4	7	3	4	7	11.1	1811.4
7.0 17.0	2	2	6	3	4	8	3	4	7	11.0	1779.9
8.0 16.0	2	2	7	3	3	8	3	4	8	10.9	1748.5
9.0 15.0	2	2	7	3	3	8	3	4	8	10.8	1717.0
10.0 14.0	2	2	8	3	3	8	3	4	9	10.7	1685.6
11.0 13.0	2	1	7	3	2	8	3	3	8	10.6	1654.2
12.0 12.0	2	1	7	3	2	8	3	3	8	10.6	1622.7
13.0 11.0	2	1	7	3	2	8	3	3	8	10.5	1591.3
14.0 10.0	2	0	7	3	2	8	3	3	8	10.4	1559.8
15.0 9.0	2	0	7	3	2	8	3	2	8	10.3	1528.4
16.0 8.0	2	0	7	3	1	7	3	2	8	10.2	1497.0
17.0 7.0	2	0	7	3	1	8	3	2	8	10.1	1465.5
18.0 6.0	2	0	7	3	0	7	3	2	8	10.0	1434.1
19.0 5.0	2	0	7	3	0	7	3	2	8	9.9	1402.7
20.0 4.0	2	0	7	3	0	7	3	2	8	9.7	1371.2
21.0 3.0	2	0	7	3	0	7	3	1	7	9.6	1339.8
22.0 2.0	3	0	7	3	0	7	3	1	7	9.5	1308.3
23.0 1.0	3	0	7	4	2	8	4	3	8	9.3	1276.9

TABLE Y

PRECISION BALANCE NETWORK SETTINGS FOR MIXED 24-
AND 22-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68° F

24-GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 24-GA 22-GA	BALANCE NETWORK SETTINGS BY TERMINATION									1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
	900 + 2.16			600 + 2.16			TELSET (35MA)				
	R1	R2	Z	R1	R2	Z	R1	R2	Z		
WL = 9.0											
6.0 3.0	6	11	13	7	15	19	7	15	15	2.5	409.7
7.0 2.0	6	11	13	7	15	19	7	15	15	2.6	428.8
8.0 1.0	6	11	12	7	15	18	7	15	15	2.7	447.9
WL = 10.0											
3.0 7.0	6	11	15	6	6	10	7	15	17	2.6	385.0
4.0 6.0	6	11	14	6	6	9	7	15	17	2.6	404.2
5.0 5.0	6	11	14	6	6	9	7	15	16	2.7	423.3
6.0 4.0	6	11	14	6	6	8	7	15	16	2.8	442.4
7.0 3.0	6	11	14	6	6	8	7	15	16	2.9	461.6
8.0 2.0	6	11	13	6	7	9	7	15	16	3.0	480.7
9.0 1.0	6	11	13	6	7	9	7	15	16	3.1	499.8
WL = 11.0											
1.0 10.0	6	12	18	6	8	14	7	15	19	2.7	379.5
2.0 9.0	6	12	18	6	7	12	7	15	18	2.8	398.7
3.0 8.0	6	11	16	6	7	12	7	15	18	2.9	417.8
4.0 7.0	6	11	15	6	7	11	7	15	18	3.0	436.9
5.0 6.0	6	11	15	6	7	11	7	15	17	3.0	456.1
6.0 5.0	6	11	15	6	7	10	7	15	17	3.1	475.2
7.0 4.0	6	11	14	6	7	10	7	15	17	3.2	494.3
8.0 3.0	6	11	14	6	8	11	7	15	17	3.3	513.4
9.0 2.0	6	12	16	6	8	11	6	9	9	3.4	532.6
10.0 1.0	6	12	16	6	8	10	6	10	10	3.4	551.7
WL = 12.0											
1.0 11.0	6	12	19	6	9	16	6	10	14	3.0	412.3
2.0 10.0	6	12	18	6	8	14	6	10	13	3.1	431.4
3.0 9.0	6	12	18	6	7	12	6	10	13	3.2	450.6
4.0 8.0	6	11	16	6	7	12	6	9	11	3.3	469.7
5.0 7.0	5	7	11	6	7	11	6	9	11	3.4	488.8
6.0 6.0	5	7	11	6	7	11	6	9	10	3.4	508.0
7.0 5.0	5	7	11	6	8	12	6	9	10	3.5	527.1
8.0 4.0	5	7	10	6	8	11	6	10	11	3.6	546.2
9.0 3.0	5	7	10	6	8	11	6	10	11	3.7	565.3
10.0 2.0	5	7	10	6	8	11	6	10	11	3.8	584.5
11.0 1.0	5	8	11	6	9	12	6	10	11	3.8	603.6
WL = 13.0											
1.0 12.0	5	9	16	6	9	16	6	11	16	3.3	445.1
2.0 11.0	5	8	14	6	8	14	6	10	14	3.4	464.2
3.0 10.0	5	7	13	6	8	14	6	10	14	3.5	483.3
4.0 9.0	5	7	12	6	8	13	6	10	13	3.6	502.5
5.0 8.0	5	7	12	6	8	13	6	10	13	3.7	521.6
6.0 7.0	5	7	12	6	8	12	6	10	13	3.8	540.7
7.0 6.0	5	7	11	6	8	12	6	10	12	3.8	559.8
8.0 5.0	5	7	11	6	8	12	6	10	12	3.9	579.0
9.0 4.0	5	7	11	6	9	13	6	10	12	4.0	598.1
10.0 3.0	5	7	11	6	9	13	6	10	12	4.1	617.2
11.0 2.0	5	8	12	6	9	13	6	11	14	4.2	636.4
12.0 1.0	5	8	12	6	9	13	6	11	13	4.2	655.5

TABLE Y (Contd)

PRECISION BALANCE NETWORK SETTINGS FOR MIXED 24-
AND 22-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68° F

24-GAUGE ADJACENT TO REPEATER

LENGTH(KFT)		BALANCE NETWORK SETTINGS BY TERMINATION									1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
24-GA	22-GA	900 + 2.16			600 + 2.16			TELSET (35MA)				
		R1	R2	Z	R1	R2	Z	R1	R2	Z		
WL = 14.0												
1.0	13.0	5	9	17	6	10	18	6	11	17	3.7	477.8
2.0	12.0	5	8	15	6	9	16	6	11	16	3.8	497.0
3.0	11.0	5	7	13	6	8	14	6	10	14	3.8	516.1
4.0	10.0	5	7	13	6	8	14	6	10	14	3.9	535.2
5.0	9.0	5	7	13	6	8	13	6	10	14	4.0	554.4
6.0	8.0	5	7	12	6	8	13	6	10	13	4.1	573.5
7.0	7.0	5	7	12	6	8	12	6	10	13	4.2	592.6
8.0	6.0	5	7	12	6	8	12	6	10	13	4.2	611.7
9.0	5.0	5	7	11	6	8	12	6	11	14	4.3	630.9
10.0	4.0	5	7	11	6	9	13	6	11	14	4.4	650.0
11.0	3.0	5	7	11	6	9	13	6	11	14	4.5	669.1
12.0	2.0	5	7	11	6	9	13	6	11	14	4.6	688.3
13.0	1.0	5	7	11	6	9	13	6	11	14	4.7	707.4
WL = 15.0												
1.0	14.0	5	8	16	6	10	18	6	12	19	4.0	510.6
2.0	13.0	5	8	16	6	9	16	6	11	17	4.1	529.7
3.0	12.0	5	7	14	6	9	16	6	10	15	4.2	548.9
4.0	11.0	5	7	14	6	8	14	6	10	15	4.3	568.0
5.0	10.0	5	6	12	6	8	14	6	10	14	4.4	587.1
6.0	9.0	5	6	12	6	8	13	6	10	14	4.4	606.2
7.0	8.0	5	6	11	6	8	13	6	10	14	4.5	625.4
8.0	7.0	5	6	11	6	9	14	6	10	13	4.6	644.5
9.0	6.0	5	7	12	6	8	12	6	10	13	4.7	663.6
10.0	5.0	5	7	12	6	9	13	6	11	15	4.7	682.8
11.0	4.0	5	7	12	6	9	13	6	11	15	4.8	701.9
12.0	3.0	5	7	12	6	9	13	6	11	15	4.9	721.0
13.0	2.0	5	7	12	5	5	9	6	11	15	5.0	740.2
14.0	1.0	5	7	12	5	5	9	6	11	15	5.1	759.3
WL = 16.0												
1.0	15.0	5	8	17	5	5	14	6	11	18	4.3	543.4
2.0	14.0	5	7	15	5	4	13	6	11	17	4.4	562.5
3.0	13.0	5	7	15	5	4	12	6	11	17	4.5	581.6
4.0	12.0	5	6	13	5	3	10	6	10	15	4.6	600.8
5.0	11.0	5	6	13	5	3	10	6	10	15	4.7	619.9
6.0	10.0	5	6	12	5	3	9	6	10	14	4.8	639.0
7.0	9.0	5	6	12	5	3	9	6	10	14	4.9	658.1
8.0	8.0	5	6	11	5	3	9	6	10	14	4.9	677.3
9.0	7.0	5	6	11	5	4	9	6	10	14	5.0	696.4
10.0	6.0	5	6	11	5	4	9	6	11	15	5.1	715.5
11.0	5.0	5	7	12	5	4	9	6	11	15	5.2	734.7
12.0	4.0	4	4	9	5	4	9	6	11	15	5.2	753.8
13.0	3.0	4	4	9	5	5	10	6	11	15	5.3	772.9
14.0	2.0	4	4	9	5	5	10	6	11	15	5.4	792.0
15.0	1.0	4	5	10	5	5	10	6	11	15	5.5	811.2
WL = 17.0												
1.0	16.0	4	6	15	5	5	14	6	12	20	4.7	576.1
2.0	15.0	4	5	14	5	4	13	6	11	18	4.8	595.3
3.0	14.0	4	4	12	5	4	12	6	10	16	4.9	614.4

TABLE Y (Contd)

**PRECISION BALANCE NETWORK SETTINGS FOR MIXED 24-
AND 22-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68° F**

24-GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 24-GA 22-GA	BALANCE NETWORK SETTINGS BY TERMINATION									1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
	900 + 2.16			600 + 2.16			TELSET (35MA)				
	R1	R2	Z	R1	R2	Z	R1	R2	Z		
WL = 17.0											
4.0 13.0	4	3	11	5	3	11	6	10	16	5.0	633.5
5.0 12.0	4	3	10	5	3	10	6	10	15	5.1	652.7
6.0 11.0	4	3	10	5	3	10	6	10	15	5.1	671.8
7.0 10.0	4	3	10	5	3	9	6	10	14	5.2	690.9
8.0 9.0	4	3	9	5	3	9	6	10	14	5.3	710.0
9.0 8.0	4	3	9	5	3	9	6	10	14	5.4	729.2
10.0 7.0	4	3	9	5	4	9	6	10	14	5.4	748.3
11.0 6.0	4	3	9	5	4	9	6	10	14	5.5	767.4
12.0 5.0	4	4	9	5	4	9	6	11	15	5.6	786.6
13.0 4.0	4	4	9	5	4	9	6	11	15	5.7	805.7
14.0 3.0	4	4	9	5	5	10	5	7	11	5.8	824.8
15.0 2.0	4	4	9	5	5	10	5	7	11	5.8	843.9
16.0 1.0	4	4	9	5	5	10	5	7	11	5.9	863.1
WL = 18.0											
1.0 17.0	4	5	15	5	5	15	6	11	19	5.1	608.9
2.0 16.0	4	4	13	5	4	13	6	11	18	5.1	628.0
3.0 15.0	4	3	12	5	3	12	6	10	16	5.2	647.2
4.0 14.0	4	3	11	5	3	11	6	10	16	5.3	666.3
5.0 13.0	4	3	11	5	3	11	6	10	16	5.4	685.4
6.0 12.0	4	3	10	5	3	10	6	10	15	5.5	704.5
7.0 11.0	4	3	10	5	3	10	6	10	15	5.6	723.7
8.0 10.0	4	2	9	5	3	9	5	6	11	5.6	742.8
9.0 9.0	4	3	9	5	3	9	5	6	10	5.7	761.9
10.0 8.0	4	3	9	5	3	9	5	6	10	5.8	781.1
11.0 7.0	4	3	9	5	4	9	5	6	10	5.9	800.2
12.0 6.0	4	3	9	5	4	9	5	6	10	6.0	819.3
13.0 5.0	4	3	9	5	4	9	5	6	10	6.0	838.4
14.0 4.0	4	3	9	5	5	10	5	7	11	6.1	857.6
15.0 3.0	4	4	10	5	5	10	5	7	11	6.2	876.7
16.0 2.0	4	4	10	5	5	10	5	7	11	6.3	895.8
17.0 1.0	4	4	10	5	5	10	5	7	11	6.4	915.0
WL = 19.0											
1.0 18.0	4	5	15	5	5	15	5	7	15	5.4	641.7
2.0 17.0	4	4	14	5	4	13	5	7	15	5.5	660.8
3.0 16.0	4	3	12	5	3	12	5	6	13	5.6	679.9
4.0 15.0	4	2	11	5	3	11	5	6	13	5.7	699.1
5.0 14.0	4	2	10	5	3	11	5	5	11	5.8	718.2
6.0 13.0	4	2	10	5	3	10	5	5	11	5.9	737.3
7.0 12.0	4	2	9	5	3	10	5	5	10	5.9	756.4
8.0 11.0	4	2	9	5	3	9	5	5	10	6.0	775.6
9.0 10.0	4	2	9	5	3	9	5	5	10	6.1	794.7
10.0 9.0	4	2	9	5	3	9	5	6	10	6.2	813.8
11.0 8.0	4	3	9	5	4	10	5	6	10	6.2	833.0
12.0 7.0	4	3	9	5	4	9	5	6	10	6.3	852.1
13.0 6.0	4	3	9	5	4	9	5	6	10	6.4	871.2
14.0 5.0	4	3	9	5	4	9	5	6	10	6.5	890.3
15.0 4.0	4	3	9	5	5	10	5	6	10	6.6	909.5
16.0 3.0	4	3	9	5	5	10	5	7	11	6.6	928.6
17.0 2.0	4	3	9	5	5	10	5	7	11	6.7	947.7

TABLE Y (Contd)

PRECISION BALANCE NETWORK SETTINGS FOR MIXED 24-
AND 22-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68° F

24-GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 24-GA 22-GA	BALANCE NETWORK SETTINGS BY TERMINATION									1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
	900 + 2.16			600 + 2.16			TELSET (35MA)				
	R1	R2	Z	R1	R2	Z	R1	R2	Z		
WL = 19.0 18.0 1.0	4	4	10	5	5	10	5	7	11	6.8	966.9
WL = 20.0											
1.0 19.0	4	4	15	5	5	15	5	7	16	5.8	674.4
2.0 18.0	4	3	13	5	4	14	5	6	14	5.9	693.6
3.0 17.0	4	2	12	5	3	12	5	6	13	6.0	712.7
4.0 16.0	4	2	11	5	3	12	5	5	12	6.1	731.8
5.0 15.0	4	2	11	5	3	11	5	5	11	6.1	750.9
6.0 14.0	4	2	10	5	2	10	5	5	11	6.2	770.1
7.0 13.0	4	1	9	5	3	10	5	5	10	6.3	789.2
8.0 12.0	4	2	9	5	3	10	5	5	10	6.4	808.3
9.0 11.0	4	2	9	5	3	9	5	5	10	6.4	827.5
10.0 10.0	4	2	9	5	3	9	5	5	10	6.5	846.6
11.0 9.0	4	2	9	5	3	9	5	6	11	6.6	865.7
12.0 8.0	4	2	8	5	4	10	5	6	10	6.7	884.8
13.0 7.0	4	3	9	5	4	9	5	6	10	6.8	904.0
14.0 6.0	4	3	9	5	4	9	5	6	10	6.8	923.1
15.0 5.0	4	3	9	5	4	9	5	6	10	6.9	942.2
16.0 4.0	4	3	9	5	5	10	5	6	10	7.0	961.4
17.0 3.0	4	3	9	5	5	10	5	6	10	7.1	980.5
18.0 2.0	4	3	9	4	2	8	5	6	10	7.2	999.6
19.0 1.0	3	2	8	4	2	8	5	6	10	7.3	1018.7
WL = 21.0											
1.0 20.0	3	2	13	5	5	15	5	7	16	6.1	707.2
2.0 19.0	3	1	12	4	1	12	5	6	14	6.2	726.3
3.0 18.0	3	0	11	5	3	12	5	5	13	6.3	745.5
4.0 17.0	3	0	10	4	0	10	5	5	12	6.4	764.6
5.0 16.0	3	0	9	5	3	11	5	5	12	6.5	783.7
6.0 15.0	3	0	9	5	2	10	5	5	11	6.6	802.8
7.0 14.0	4	1	9	5	3	10	5	5	11	6.7	822.0
8.0 13.0	4	1	9	5	3	10	5	5	10	6.7	841.1
9.0 12.0	4	1	8	5	3	9	5	5	10	6.8	860.2
10.0 11.0	4	1	8	5	3	9	5	5	10	6.9	879.4
11.0 10.0	4	2	9	5	3	9	5	5	10	7.0	898.5
12.0 9.0	3	0	7	5	4	10	5	5	10	7.0	917.6
13.0 8.0	3	0	7	5	4	10	5	6	11	7.1	936.7
14.0 7.0	3	0	7	5	4	10	5	6	10	7.2	955.9
15.0 6.0	3	0	7	4	1	7	5	6	10	7.3	975.0
16.0 5.0	3	0	7	4	2	8	5	6	10	7.4	994.1
17.0 4.0	3	1	7	4	2	8	5	6	10	7.4	1013.3
18.0 3.0	3	1	7	4	2	8	5	6	10	7.5	1032.4
19.0 2.0	3	1	7	4	2	8	4	4	9	7.6	1051.5
20.0 1.0	3	1	7	4	2	8	4	4	9	7.7	1070.6
WL = 22.0											
1.0 21.0	3	2	14	4	2	13	5	7	16	6.5	740.0
2.0 20.0	3	1	12	4	1	12	5	6	15	6.6	759.1
3.0 19.0	3	0	11	4	0	11	5	5	13	6.7	778.2
4.0 18.0	3	0	10	4	0	10	5	5	12	6.8	797.3
5.0 17.0	3	0	10	4	0	9	5	4	11	6.9	816.5

TABLE Y (Contd)

PRECISION BALANCE NETWORK SETTINGS FOR MIXED 24-
AND 22-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68° F

24-GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 24-GA 22-GA	BALANCE NETWORK SETTINGS BY TERMINATION									1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
	900 + 2.16			600 + 2.16			TELSET (35MA)				
	R1	R2	Z	R1	R2	Z	R1	R2	Z		
WL = 22.0											
6.0 16.0	3	0	9	4	0	9	5	4	10	7.0	835.6
7.0 15.0	3	0	9	4	0	8	5	4	10	7.0	854.7
8.0 14.0	3	0	8	4	0	8	5	4	10	7.1	873.9
9.0 13.0	3	0	8	4	0	8	5	5	10	7.2	893.0
10.0 12.0	3	0	8	4	0	7	5	5	10	7.3	912.1
11.0 11.0	3	0	7	4	0	7	5	5	10	7.3	931.2
12.0 10.0	3	0	7	4	0	7	5	5	10	7.4	950.4
13.0 9.0	3	0	7	4	0	7	5	5	10	7.5	969.5
14.0 8.0	3	0	7	4	1	7	5	6	11	7.6	988.6
15.0 7.0	3	0	7	4	1	7	5	6	11	7.6	1007.8
16.0 6.0	3	0	7	4	1	7	4	3	8	7.7	1026.9
17.0 5.0	3	0	7	4	2	8	4	3	8	7.8	1046.0
18.0 4.0	3	0	7	4	2	8	4	3	8	7.9	1065.2
19.0 3.0	3	0	7	4	2	8	4	3	8	8.0	1084.3
20.0 2.0	3	1	8	4	2	8	4	4	9	8.1	1103.4
21.0 1.0	3	1	8	4	2	8	4	4	9	8.2	1122.5
WL = 23.0											
1.0 22.0	3	1	13	4	1	13	5	6	15	6.9	772.7
2.0 21.0	3	0	12	4	1	12	5	5	14	7.0	791.9
3.0 20.0	3	0	11	4	0	11	5	5	13	7.1	811.0
4.0 19.0	3	0	10	4	0	10	5	4	12	7.1	830.1
5.0 18.0	3	0	10	4	0	9	5	4	11	7.2	849.2
6.0 17.0	3	0	9	4	0	9	5	4	11	7.3	868.4
7.0 16.0	3	0	9	4	0	8	5	4	10	7.4	887.5
8.0 15.0	3	0	8	4	0	8	5	4	10	7.5	906.6
9.0 14.0	3	0	8	4	0	8	5	4	10	7.6	925.8
10.0 13.0	3	0	8	4	0	7	5	5	10	7.6	944.9
11.0 12.0	3	0	7	4	0	7	5	5	10	7.7	964.0
12.0 11.0	3	0	7	4	0	7	5	5	10	7.8	983.1
13.0 10.0	3	0	7	4	0	7	4	2	7	7.9	1002.3
14.0 9.0	3	0	7	4	1	7	4	3	8	7.9	1021.4
15.0 8.0	3	0	7	4	1	7	4	3	8	8.0	1040.5
16.0 7.0	3	0	7	4	1	7	4	3	8	8.1	1059.7
17.0 6.0	3	0	7	4	1	7	4	3	8	8.2	1078.8
18.0 5.0	3	0	7	4	2	8	4	3	8	8.2	1097.9
19.0 4.0	3	0	7	4	2	8	4	3	8	8.3	1117.0
20.0 3.0	3	0	7	4	2	8	4	3	8	8.4	1136.2
21.0 2.0	3	0	7	4	2	8	4	3	8	8.5	1155.3
22.0 1.0	3	0	7	4	2	8	4	3	8	8.6	1174.4
WL = 24.0											
1.0 23.0	3	1	13	4	1	13	4	4	14	7.2	805.5
2.0 22.0	3	0	12	4	1	12	4	2	12	7.3	824.6
3.0 21.0	3	0	11	4	0	11	4	2	11	7.4	843.7
4.0 20.0	3	0	10	4	0	10	4	1	10	7.5	862.9
5.0 19.0	3	0	10	4	0	10	4	1	9	7.6	882.0
6.0 18.0	3	0	9	4	0	9	4	1	9	7.7	901.1
7.0 17.0	3	0	9	4	0	8	4	1	8	7.8	920.3
8.0 16.0	3	0	8	4	0	8	4	1	8	7.8	939.4
9.0 15.0	3	0	8	4	0	8	4	1	7	7.9	958.5

TABLE Y (Contd)

PRECISION BALANCE NETWORK SETTINGS FOR MIXED 24-
AND 22-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68° F

24-GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 24-GA 22-GA	BALANCE NETWORK SETTINGS BY TERMINATION									1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
	900 + 2.16			600 + 2.16			TELSET (35MA)				
	R1	R2	Z	R1	R2	Z	R1	R2	Z		
WL = 24.0											
10.0 14.0	3	0	8	4	0	7	4	1	7	8.0	977.7
11.0 13.0	3	0	7	4	0	7	4	2	8	8.1	996.8
12.0 12.0	3	0	7	4	0	7	4	2	8	8.2	1015.9
13.0 11.0	3	0	7	4	0	7	4	2	7	8.2	1035.0
14.0 10.0	3	0	7	4	0	7	4	2	7	8.3	1054.2
15.0 9.0	3	0	7	4	1	7	4	3	8	8.4	1073.3
16.0 8.0	3	0	7	4	1	7	4	3	8	8.5	1092.4
17.0 7.0	3	0	7	4	1	7	4	3	8	8.5	1111.6
18.0 6.0	3	0	7	4	1	7	4	3	8	8.6	1130.7
19.0 5.0	3	0	7	4	2	8	4	3	8	8.7	1149.8
20.0 4.0	3	0	7	4	2	8	4	3	8	8.8	1168.9
21.0 3.0	3	0	7	4	2	8	4	3	8	8.9	1188.1
22.0 2.0	3	0	7	4	2	8	4	3	8	9.0	1207.2
23.0 1.0	3	0	7	4	2	8	4	3	8	9.1	1226.3

TABLE Z

PRECISION BALANCE NETWORK SETTINGS FOR MIXED 22- AND 24-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68° F

22-GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 22-GA 24-GA	BALANCE NETWORK SETTINGS BY TERMINATION									1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
	900 + 2.16			600 + 2.16			TELSET (35MA)				
	R1	R2	Z	R1	R2	Z	R1	R2	Z		
WL = 9.0											
1.0 8.0	6	12	15	6	7	9	7	15	15	2.7	447.9
2.0 7.0	6	12	15	6	7	9	7	15	16	2.6	428.8
3.0 6.0	6	12	15	6	8	11	7	15	16	2.5	409.7
WL = 10.0											
1.0 9.0	6	12	15	6	8	11	7	15	16	3.1	499.8
2.0 8.0	6	13	18	6	9	12	7	15	17	3.0	480.7
3.0 7.0	6	13	18	6	9	13	7	15	17	2.9	461.6
4.0 6.0	6	13	19	6	9	13	7	15	17	2.8	442.4
5.0 5.0	6	13	19	6	9	14	7	15	17	2.7	423.3
6.0 4.0	6	13	19	6	9	14	7	15	18	2.6	404.2
7.0 3.0	6	13	19	6	9	14	7	15	18	2.6	385.0
WL = 11.0											
1.0 10.0	6	12	16	6	9	12	6	11	13	3.4	551.7
2.0 9.0	6	13	19	6	10	14	6	11	13	3.4	532.6
3.0 8.0	6	13	19	6	10	15	6	11	13	3.3	513.4
4.0 7.0	6	13	19	6	10	15	6	11	14	3.2	494.3
5.0 6.0	6	13	19	6	10	16	6	11	14	3.1	475.2
6.0 5.0	6	14	22	6	10	16	6	11	14	3.0	456.1
7.0 4.0	6	13	20	6	10	16	6	11	15	3.0	436.9
8.0 3.0	6	13	20	6	10	16	6	11	15	2.9	417.8
9.0 2.0	6	13	20	6	10	17	7	15	19	2.8	398.7
10.0 1.0	6	13	20	6	9	16	7	15	19	2.7	379.5
WL = 12.0											
1.0 11.0	5	9	13	6	10	14	6	11	13	3.8	603.6
2.0 10.0	5	9	14	6	10	15	6	12	16	3.8	584.5
3.0 9.0	5	9	14	6	10	15	6	12	16	3.7	565.3
4.0 8.0	5	10	16	6	11	17	6	12	16	3.6	546.2
5.0 7.0	5	10	16	6	11	17	6	12	17	3.5	527.1
6.0 6.0	5	10	16	6	11	18	6	12	17	3.4	508.0
7.0 5.0	5	10	17	6	11	18	6	12	17	3.4	488.8
8.0 4.0	5	10	17	6	11	18	6	12	17	3.3	469.7
9.0 3.0	5	10	17	6	10	17	6	12	17	3.2	450.6
10.0 2.0	6	13	21	6	10	17	6	11	16	3.1	431.4
11.0 1.0	6	13	21	6	10	17	6	11	16	3.0	412.3
WL = 13.0											
1.0 12.0	5	9	14	6	10	14	6	12	16	4.2	655.5
2.0 11.0	5	9	14	6	10	15	6	12	16	4.2	636.4
3.0 10.0	5	10	16	6	11	17	6	12	17	4.1	617.2
4.0 9.0	5	10	16	6	11	17	6	13	19	4.0	598.1
5.0 8.0	5	10	17	6	11	18	6	13	19	3.9	579.0
6.0 7.0	5	10	17	6	11	18	6	13	19	3.8	559.8
7.0 6.0	5	10	17	6	11	18	6	13	20	3.8	540.7
8.0 5.0	5	10	17	6	11	19	6	13	20	3.7	521.6
9.0 4.0	5	10	18	6	11	19	6	12	18	3.6	502.5
10.0 3.0	5	10	18	6	11	19	6	12	18	3.5	483.3
11.0 2.0	5	10	18	6	11	19	6	12	18	3.4	464.2
12.0 1.0	5	10	18	6	10	18	6	12	18	3.3	445.1

TABLE Z (Contd)

PRECISION BALANCE NETWORK SETTINGS FOR MIXED 22- AND 24-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68° F

22-GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 22-GA 24-GA	BALANCE NETWORK SETTINGS BY TERMINATION									1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
	900 + 2.16			600 + 2.16			TELSET (35MA)				
	R1	R2	Z	R1	R2	Z	R1	R2	Z		
WL = 14.0											
1.0 13.0	5	8	13	6	10	15	6	12	16	4.7	707.4
2.0 12.0	5	9	15	6	11	17	6	12	17	4.6	688.3
3.0 11.0	5	9	15	6	11	17	6	13	19	4.5	669.1
4.0 10.0	5	10	17	6	12	19	6	13	19	4.4	650.0
5.0 9.0	5	10	17	6	11	18	6	13	20	4.3	630.9
6.0 8.0	5	10	18	6	12	20	6	13	20	4.2	611.7
7.0 7.0	5	10	18	6	12	20	6	13	20	4.2	592.6
8.0 6.0	5	10	18	6	12	20	6	13	20	4.1	573.5
9.0 5.0	5	10	18	6	11	19	6	13	20	4.0	554.4
10.0 4.0	5	10	18	6	11	19	6	13	20	3.9	535.2
11.0 3.0	5	10	18	6	11	19	6	12	19	3.8	516.1
12.0 2.0	5	10	19	6	11	19	6	12	19	3.8	497.0
13.0 1.0	5	10	19	6	10	18	6	12	19	3.7	477.8
WL = 15.0											
1.0 14.0	5	8	13	5	6	11	6	12	17	5.1	759.3
2.0 13.0	5	9	15	5	7	13	6	13	19	5.0	740.2
3.0 12.0	5	10	17	5	7	13	6	13	19	4.9	721.0
4.0 11.0	5	10	17	5	8	15	6	13	20	4.8	701.9
5.0 10.0	5	10	18	5	8	15	6	13	20	4.7	682.8
6.0 9.0	5	10	18	5	8	16	6	13	20	4.7	663.6
7.0 8.0	5	10	18	5	8	16	6	13	21	4.6	644.5
8.0 7.0	5	10	18	5	8	16	6	13	21	4.5	625.4
9.0 6.0	5	10	19	5	8	16	6	13	21	4.4	606.2
10.0 5.0	5	10	19	5	7	16	6	13	21	4.4	587.1
11.0 4.0	5	10	19	5	7	16	6	13	21	4.3	568.0
12.0 3.0	5	10	19	6	11	20	6	13	21	4.2	548.9
13.0 2.0	5	10	19	6	11	20	6	13	21	4.1	529.7
14.0 1.0	5	10	19	6	11	20	6	13	21	4.0	510.6
WL = 16.0											
1.0 15.0	4	6	12	5	6	11	6	12	17	5.5	811.2
2.0 14.0	4	6	12	5	7	13	6	12	18	5.4	792.0
3.0 13.0	4	7	14	5	7	13	6	13	20	5.3	772.9
4.0 12.0	4	7	14	5	8	15	6	13	20	5.2	753.8
5.0 11.0	4	8	16	5	8	16	6	13	20	5.2	734.7
6.0 10.0	4	8	16	5	8	16	6	13	21	5.1	715.5
7.0 9.0	4	8	16	5	8	16	6	13	21	5.0	696.4
8.0 8.0	4	8	17	5	8	16	6	13	21	4.9	677.3
9.0 7.0	4	8	17	5	8	17	6	13	21	4.9	658.1
10.0 6.0	4	8	17	5	8	17	6	13	21	4.8	639.0
11.0 5.0	4	8	17	5	7	16	6	13	21	4.7	619.9
12.0 4.0	4	7	16	5	7	16	6	13	22	4.6	600.8
13.0 3.0	5	9	18	5	7	16	6	13	22	4.5	581.6
14.0 2.0	5	9	18	5	7	16	6	12	20	4.4	562.5
15.0 1.0	5	9	18	5	7	16	6	12	20	4.3	543.4
WL = 17.0											
1.0 16.0	4	5	11	5	6	12	5	8	13	5.9	863.1
2.0 15.0	4	6	13	5	7	13	5	8	13	5.8	843.9
3.0 14.0	4	7	14	5	7	14	5	9	15	5.8	824.8

TABLE Z (Contd)

PRECISION BALANCE NETWORK SETTINGS FOR MIXED 22-
AND 24-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68° F

22-GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 22-GA 24-GA	BALANCE NETWORK SETTINGS BY TERMINATION									1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
	900 + 2.16			600 + 2.16			TELSET (35MA)				
	R1	R2	Z	R1	R2	Z	R1	R2	Z		
WL = 17.0											
4.0 13.0	4	7	15	5	8	15	5	9	15	5.7	805.7
5.0 12.0	4	7	15	5	8	16	5	10	17	5.6	786.6
6.0 11.0	4	7	15	5	8	16	5	10	17	5.5	767.4
7.0 10.0	4	8	17	5	8	16	5	10	18	5.4	748.3
8.0 9.0	4	8	17	5	8	17	5	10	18	5.4	729.2
9.0 8.0	4	8	17	5	8	17	5	10	18	5.3	710.0
10.0 7.0	4	7	16	5	8	17	5	10	18	5.2	690.9
11.0 6.0	4	7	17	5	8	17	6	13	22	5.1	671.8
12.0 5.0	4	7	17	5	7	16	6	13	22	5.1	652.7
13.0 4.0	4	7	17	5	7	17	6	13	22	5.0	633.5
14.0 3.0	4	7	17	5	7	17	6	13	22	4.9	614.4
15.0 2.0	4	7	17	5	7	17	6	13	22	4.8	595.3
16.0 1.0	4	7	17	5	7	17	6	13	22	4.7	576.1
WL = 18.0											
1.0 17.0	4	5	11	5	6	12	5	8	13	6.4	915.0
2.0 16.0	4	6	13	5	7	13	5	9	15	6.3	895.8
3.0 15.0	4	6	13	5	7	14	5	9	15	6.2	876.7
4.0 14.0	4	7	15	5	8	15	5	9	16	6.1	857.6
5.0 13.0	4	7	15	5	8	16	5	9	16	6.0	838.4
6.0 12.0	4	7	16	5	8	16	5	10	18	6.0	819.3
7.0 11.0	4	7	16	5	8	17	5	10	18	5.9	800.2
8.0 10.0	4	7	16	5	8	17	5	10	18	5.8	781.1
9.0 9.0	4	7	17	5	8	17	5	10	18	5.7	761.9
10.0 8.0	4	7	17	5	8	17	5	9	17	5.6	742.8
11.0 7.0	4	7	17	5	8	18	5	10	19	5.6	723.7
12.0 6.0	4	7	17	5	8	18	5	9	18	5.5	704.5
13.0 5.0	4	7	17	5	7	17	5	9	18	5.4	685.4
14.0 4.0	4	7	17	5	7	17	5	9	18	5.3	666.3
15.0 3.0	4	7	17	5	7	17	5	9	18	5.2	647.2
16.0 2.0	4	7	17	5	7	17	5	9	18	5.1	628.0
17.0 1.0	4	6	16	5	7	17	6	12	21	5.1	608.9
WL = 19.0											
1.0 18.0	4	5	11	5	6	12	5	8	13	6.8	966.9
2.0 17.0	4	5	12	5	7	13	5	8	14	6.7	947.7
3.0 16.0	4	6	13	5	7	14	5	9	15	6.6	928.6
4.0 15.0	4	6	14	5	8	16	5	9	16	6.6	909.5
5.0 14.0	4	7	15	5	8	16	5	9	16	6.5	890.3
6.0 13.0	4	7	16	5	8	16	5	10	18	6.4	871.2
7.0 12.0	4	7	16	5	8	17	5	10	18	6.3	852.1
8.0 11.0	4	7	16	5	8	17	5	9	17	6.2	833.0
9.0 10.0	4	7	17	5	8	17	5	10	19	6.2	813.8
10.0 9.0	4	7	17	5	8	18	5	10	19	6.1	794.7
11.0 8.0	4	7	17	5	8	18	5	9	18	6.0	775.6
12.0 7.0	4	7	17	5	8	18	5	9	18	5.9	756.4
13.0 6.0	4	7	17	5	7	17	5	9	18	5.9	737.3
14.0 5.0	4	7	17	5	7	17	5	9	18	5.8	718.2
15.0 4.0	4	6	17	5	7	17	5	9	18	5.7	699.1
16.0 3.0	4	6	17	5	7	17	5	9	18	5.6	679.9
17.0 2.0	4	6	17	5	7	17	5	9	18	5.5	660.8

TABLE Z (Contd)

PRECISION BALANCE NETWORK SETTINGS FOR MIXED 22-
AND 24-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68° F

22-GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 22-GA 24-GA	BALANCE NETWORK SETTINGS BY TERMINATION									1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
	900 + 2.16			600 + 2.16			TELSET (35MA)				
	R1	R2	Z	R1	R2	Z	R1	R2	Z		
WL = 19.0											
18.0 1.0	4	6	17	5	7	17	5	8	17	5.4	641.7
WL = 20.0											
1.0 19.0	3	3	10	4	3	9	5	7	12	7.3	1018.7
2.0 18.0	3	3	10	4	4	11	5	8	14	7.2	999.6
3.0 17.0	3	4	12	4	5	12	5	9	16	7.1	980.5
4.0 16.0	3	5	13	4	5	13	5	9	16	7.0	961.4
5.0 15.0	3	5	14	4	5	13	5	9	16	6.9	942.2
6.0 14.0	3	5	14	4	6	15	5	9	17	6.8	923.1
7.0 13.0	3	5	15	4	6	15	5	9	17	6.8	904.0
8.0 12.0	3	5	15	4	6	15	5	9	17	6.7	884.8
9.0 11.0	3	5	15	4	5	15	5	9	18	6.6	865.7
10.0 10.0	3	5	15	4	5	15	5	9	18	6.5	846.6
11.0 9.0	3	5	16	4	5	15	5	9	18	6.4	827.5
12.0 8.0	3	5	16	4	5	15	5	9	18	6.4	808.3
13.0 7.0	3	5	16	4	5	16	5	9	18	6.3	789.2
14.0 6.0	3	5	16	4	5	16	5	9	18	6.2	770.1
15.0 5.0	3	5	16	4	4	15	5	9	18	6.1	750.9
16.0 4.0	4	6	17	5	7	17	5	9	18	6.1	731.8
17.0 3.0	4	6	17	5	7	17	5	8	17	6.0	712.7
18.0 2.0	4	6	17	5	7	17	5	8	17	5.9	693.6
19.0 1.0	4	6	17	5	6	17	5	8	17	5.8	674.4
WL = 21.0											
1.0 20.0	3	2	9	4	3	9	4	5	10	7.7	1070.6
2.0 19.0	3	3	10	4	4	11	4	6	12	7.6	1051.5
3.0 18.0	3	4	12	4	4	12	4	6	13	7.5	1032.4
4.0 17.0	3	4	12	4	5	13	4	6	13	7.4	1013.3
5.0 16.0	3	5	14	4	5	14	4	7	15	7.4	994.1
6.0 15.0	3	5	14	4	5	14	4	7	15	7.3	975.0
7.0 14.0	3	5	15	4	6	15	4	7	15	7.2	955.9
8.0 13.0	3	5	15	4	5	15	4	7	16	7.1	936.7
9.0 12.0	3	5	15	4	5	15	4	7	16	7.0	917.6
10.0 11.0	3	5	16	4	5	15	4	7	16	7.0	898.5
11.0 10.0	3	5	16	4	5	15	5	9	18	6.9	879.4
12.0 9.0	3	5	16	4	5	16	5	9	18	6.8	860.2
13.0 8.0	3	5	16	4	5	16	5	9	18	6.7	841.1
14.0 7.0	3	5	16	4	5	16	5	9	19	6.7	822.0
15.0 6.0	3	4	15	4	5	16	5	9	19	6.6	802.8
16.0 5.0	3	4	15	4	4	15	5	9	19	6.5	783.7
17.0 4.0	3	4	16	4	4	15	5	8	18	6.4	764.6
18.0 3.0	3	4	16	4	4	15	5	8	18	6.3	745.5
19.0 2.0	3	3	15	4	4	15	5	8	18	6.2	726.3
20.0 1.0	3	3	15	5	6	17	5	8	18	6.1	707.2
WL = 22.0											
1.0 21.0	3	2	9	4	3	10	4	5	11	8.2	1122.5
2.0 20.0	3	3	11	4	4	11	4	5	11	8.1	1103.4
3.0 19.0	3	3	11	4	4	12	4	6	13	8.0	1084.3
4.0 18.0	3	4	13	4	5	13	4	6	13	7.9	1065.2
5.0 17.0	3	4	13	4	5	14	4	7	15	7.8	1046.0

TABLE Z (Contd)

PRECISION BALANCE NETWORK SETTINGS FOR MIXED 22-
AND 24-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68° F

22-GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 22-GA 24-GA	BALANCE NETWORK SETTINGS BY TERMINATION									1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
	900 + 2.16			600 + 2.16			TELSET (35MA)				
	R1	R2	Z	R1	R2	Z	R1	R2	Z		
WL = 22.0											
6.0 16.0	3	5	14	4	5	14	4	7	15	7.7	1026.9
7.0 15.0	3	5	15	4	6	15	4	7	16	7.6	1007.8
8.0 14.0	3	5	15	4	5	15	4	7	16	7.6	988.6
9.0 13.0	3	5	15	4	5	15	4	7	16	7.5	969.5
10.0 12.0	3	4	15	4	5	15	4	7	16	7.4	950.4
11.0 11.0	3	4	15	4	5	16	4	7	17	7.3	931.2
12.0 10.0	3	4	15	4	5	16	4	7	17	7.3	912.1
13.0 9.0	3	4	15	4	5	16	4	6	16	7.2	893.0
14.0 8.0	3	4	15	4	5	16	4	6	16	7.1	873.9
15.0 7.0	3	4	16	4	5	16	4	6	16	7.0	854.7
16.0 6.0	3	4	16	4	4	15	4	6	16	7.0	835.6
17.0 5.0	3	3	15	4	4	15	4	6	16	6.9	816.5
18.0 4.0	3	3	15	4	4	15	5	8	18	6.8	797.3
19.0 3.0	3	3	15	4	3	15	5	8	18	6.7	778.2
20.0 2.0	3	3	15	4	3	15	5	8	18	6.6	759.1
21.0 1.0	3	3	15	4	3	15	5	8	18	6.5	740.0
WL = 23.0											
1.0 22.0	3	2	9	4	3	10	4	4	10	8.6	1174.4
2.0 21.0	3	2	10	4	4	11	4	5	11	8.5	1155.3
3.0 20.0	3	3	11	4	4	12	4	6	13	8.4	1136.2
4.0 19.0	3	4	13	4	5	13	4	6	13	8.3	1117.0
5.0 18.0	3	4	13	4	5	14	4	6	14	8.2	1097.9
6.0 17.0	3	4	14	4	5	14	4	7	15	8.2	1078.8
7.0 16.0	3	4	14	4	5	15	4	7	16	8.1	1059.7
8.0 15.0	3	4	14	4	5	15	4	7	16	8.0	1040.5
9.0 14.0	3	4	15	4	5	15	4	7	16	7.9	1021.4
10.0 13.0	3	4	15	4	5	15	4	6	16	7.9	1002.3
11.0 12.0	3	4	15	4	5	16	4	6	16	7.8	983.1
12.0 11.0	3	4	15	4	5	16	4	6	16	7.7	964.0
13.0 10.0	2	3	15	4	5	16	4	6	16	7.6	944.9
14.0 9.0	2	3	15	4	5	16	4	6	16	7.6	925.8
15.0 8.0	3	3	15	4	5	16	4	6	16	7.5	906.6
16.0 7.0	3	3	15	4	4	15	4	6	16	7.4	887.5
17.0 6.0	3	3	15	4	4	16	4	6	16	7.3	868.4
18.0 5.0	3	3	15	4	3	15	4	6	16	7.2	849.2
19.0 4.0	3	3	15	4	3	15	4	6	16	7.1	830.1
20.0 3.0	3	3	15	4	3	15	4	5	15	7.1	811.0
21.0 2.0	3	3	15	4	3	15	4	5	15	7.0	791.9
22.0 1.0	3	3	15	4	3	15	5	8	18	6.9	772.7
WL = 24.0											
1.0 23.0	3	2	9	4	3	10	4	4	10	9.1	1226.3
2.0 22.0	3	2	10	4	4	11	4	5	11	9.0	1207.2
3.0 21.0	3	3	11	4	4	12	4	5	12	8.9	1188.1
4.0 20.0	3	3	12	4	5	13	4	6	14	8.8	1168.9
5.0 19.0	3	4	13	4	5	14	4	6	14	8.7	1149.8
6.0 18.0	3	4	14	4	5	14	4	6	14	8.6	1130.7
7.0 17.0	3	4	14	4	5	15	4	6	15	8.5	1111.6
8.0 16.0	2	3	14	4	5	15	4	6	15	8.5	1092.4
9.0 15.0	2	3	14	4	5	15	4	6	15	8.4	1073.3

TABLE Z (Contd)

PRECISION BALANCE NETWORK SETTINGS FOR MIXED 22-
AND 24-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68° F

22-GAUGE ADJACENT TO REPEATER

LENGTH (KFT) 22-GA 24-GA		BALANCE NETWORK SETTINGS BY TERMINATION									1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
		900 + 2.16			600 + 2.16			TELSET (35MA)				
		R1	R2	Z	R1	R2	Z	R1	R2	Z		
WL = 24.0												
10.0	14.0	2	3	14	3	3	14	4	6	16	8.3	1054.2
11.0	13.0	2	3	14	4	5	16	4	6	16	8.2	1035.0
12.0	12.0	2	2	14	4	5	16	4	6	16	8.2	1015.9
13.0	11.0	2	2	14	4	5	16	4	6	16	8.1	996.8
14.0	10.0	2	2	14	4	5	16	4	6	16	8.0	977.7
15.0	9.0	2	2	14	4	4	15	4	6	16	7.9	958.5
16.0	8.0	2	2	14	4	4	16	4	6	16	7.8	939.4
17.0	7.0	3	3	15	4	4	16	4	5	16	7.8	920.3
18.0	6.0	2	1	14	4	3	15	4	5	16	7.7	901.1
19.0	5.0	2	1	14	4	3	15	4	5	16	7.6	882.0
20.0	4.0	2	1	14	4	3	15	4	5	16	7.5	862.9
21.0	3.0	2	1	14	4	3	15	4	5	16	7.4	843.7
22.0	2.0	3	2	15	4	3	15	4	5	16	7.3	824.6
23.0	1.0	3	2	15	4	3	15	4	5	16	7.2	805.5

TABLE AA

PRECISION BALANCE NETWORK SETTINGS FOR MIXED 26-
AND 22-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68° F

26-GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 26-GA 22-GA	BALANCE NETWORK SETTINGS BY TERMINATION									1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
	900 + 2.16			600 + 2.16			TELSET (35MA)				
	R1	R2	Z	R1	R2	Z	R1	R2	Z		
WL = 7.0											
5.0 2.0	7	15	12	7	12	6	7	12	1	2.5	482.2
6.0 1.0	6	8	0	7	13	8	7	13	3	2.7	532.8
WL = 8.0											
4.0 4.0	6	7	2	7	13	10	7	13	6	2.6	464.4
5.0 3.0	6	8	2	7	13	9	7	14	8	2.8	515.0
6.0 2.0	6	8	1	7	14	11	7	14	7	3.0	565.5
7.0 1.0	6	8	1	7	15	14	7	15	10	3.2	616.1
WL = 9.0											
3.0 6.0	6	8	6	7	14	15	7	14	11	2.7	446.6
4.0 5.0	6	8	5	7	14	14	7	15	13	2.9	497.2
5.0 4.0	6	8	4	7	14	13	7	15	12	3.1	547.7
6.0 3.0	6	8	3	7	14	12	7	15	12	3.3	598.3
7.0 2.0	6	9	4	7	15	14	7	15	11	3.5	648.9
8.0 1.0	6	9	3	6	6	0	7	15	11	3.6	699.4
WL = 10.0											
1.0 9.0	6	11	15	6	5	9	7	15	17	2.5	378.2
2.0 8.0	6	9	10	6	3	5	7	15	16	2.8	428.8
3.0 7.0	6	8	7	6	2	2	7	15	15	3.0	479.4
4.0 6.0	6	8	6	6	2	1	7	15	14	3.2	529.9
5.0 5.0	6	8	5	6	3	0	7	15	13	3.4	580.5
6.0 4.0	6	8	4	6	4	0	7	15	12	3.5	631.1
7.0 3.0	6	9	5	6	5	0	7	15	12	3.7	681.6
8.0 2.0	6	9	4	6	6	1	7	15	12	3.9	732.2
9.0 1.0	6	10	6	6	6	0	7	15	11	4.1	782.8
WL = 11.0											
1.0 10.0	6	11	16	6	6	11	7	15	18	2.8	411.0
2.0 9.0	6	10	13	6	4	7	7	15	17	3.1	461.6
3.0 8.0	6	9	10	6	3	4	7	15	16	3.3	512.1
4.0 7.0	6	8	7	6	3	2	7	15	15	3.5	562.7
5.0 6.0	6	8	6	6	3	1	7	15	14	3.7	613.3
6.0 5.0	6	8	5	6	4	0	7	15	13	3.9	663.8
7.0 4.0	6	9	6	6	5	1	7	15	13	4.0	714.4
8.0 3.0	6	9	5	6	6	1	6	8	1	4.2	765.0
9.0 2.0	6	10	7	6	7	2	6	9	3	4.4	815.5
10.0 1.0	5	6	1	6	7	2	6	9	3	4.6	866.1
WL = 12.0											
1.0 11.0	5	7	12	6	7	12	6	9	11	3.2	443.7
2.0 10.0	5	5	8	6	5	8	7	15	17	3.4	494.3
3.0 9.0	5	4	5	6	4	6	7	15	16	3.6	544.9
4.0 8.0	5	3	3	6	4	4	7	15	15	3.8	595.5
5.0 7.0	5	3	1	6	4	2	6	6	1	4.0	646.0
6.0 6.0	5	3	0	6	4	1	6	7	2	4.2	696.6
7.0 5.0	5	4	1	6	5	1	6	7	1	4.4	747.2
8.0 4.0	5	4	0	6	6	2	6	8	2	4.5	797.7
9.0 3.0	5	5	1	6	7	3	6	9	3	4.7	848.3
10.0 2.0	5	5	1	6	7	2	6	9	3	4.9	898.9

TABLE AA (Contd)

PRECISION BALANCE NETWORK SETTINGS FOR MIXED 26-
AND 22-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68° F

26-GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 26-GA 22-GA	BALANCE NETWORK SETTINGS BY TERMINATION									1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
	900 + 2.16			600 + 2.16			TELSET (35MA)				
	R1	R2	Z	R1	R2	Z	R1	R2	Z		
WL = 12.0 11.0 1.0	5	6	2	6	8	4	6	10	5	5.1	949.4
WL = 13.0 1.0 12.0	5	7	13	6	8	14	6	10	14	3.5	476.5
2.0 11.0	5	5	9	6	6	10	6	8	9	3.7	527.1
3.0 10.0	5	4	6	6	5	7	6	7	6	3.9	577.7
4.0 9.0	5	3	4	6	4	4	6	7	5	4.1	628.2
5.0 8.0	5	3	2	6	4	3	6	7	4	4.3	678.8
6.0 7.0	5	3	1	6	5	3	6	7	3	4.5	729.4
7.0 6.0	5	3	0	6	5	2	6	8	3	4.7	779.9
8.0 5.0	5	4	1	6	6	2	6	8	3	4.9	830.5
9.0 4.0	5	4	0	6	7	3	6	9	4	5.0	881.1
10.0 3.0	5	5	1	6	7	3	6	9	4	5.2	931.6
11.0 2.0	5	5	1	6	8	4	6	10	6	5.4	982.2
12.0 1.0	5	6	2	6	8	4	6	10	6	5.6	1032.8
WL = 14.0 1.0 13.0	5	7	14	6	8	14	6	10	14	3.8	509.3
2.0 12.0	5	5	10	6	6	10	6	8	10	4.1	559.8
3.0 11.0	5	4	7	6	5	8	6	7	7	4.3	610.4
4.0 10.0	5	3	4	6	4	5	6	7	6	4.5	661.0
5.0 9.0	5	2	2	6	4	3	6	7	4	4.7	711.6
6.0 8.0	5	3	2	6	5	3	6	7	3	4.8	762.1
7.0 7.0	5	3	1	6	5	2	6	8	4	5.0	812.7
8.0 6.0	5	3	0	6	6	3	6	8	3	5.2	863.3
9.0 5.0	5	4	1	6	6	2	6	9	5	5.4	913.8
10.0 4.0	5	5	2	6	7	3	6	9	4	5.6	964.4
11.0 3.0	5	5	1	6	8	4	6	10	6	5.8	1015.0
12.0 2.0	5	5	1	5	4	0	6	10	6	5.9	1065.5
13.0 1.0	5	6	3	5	4	0	6	10	6	6.2	1116.1
WL = 15.0 1.0 14.0	5	7	14	6	8	15	6	10	15	4.2	542.0
2.0 13.0	5	5	10	6	6	11	6	9	12	4.4	592.6
3.0 12.0	5	3	7	6	5	8	6	7	8	4.6	643.2
4.0 11.0	5	2	4	6	4	5	6	7	6	4.8	693.7
5.0 10.0	5	2	3	6	4	4	6	7	5	5.0	744.3
6.0 9.0	5	2	1	6	5	4	6	7	4	5.2	794.9
7.0 8.0	5	2	0	6	5	3	6	7	3	5.4	845.5
8.0 7.0	5	3	1	6	6	3	6	8	4	5.6	896.0
9.0 6.0	5	3	0	6	7	4	6	9	5	5.7	946.6
10.0 5.0	5	4	1	6	7	3	6	9	5	5.9	997.2
11.0 4.0	5	5	2	5	3	0	6	9	5	6.1	1047.7
12.0 3.0	5	5	2	5	4	0	6	10	7	6.3	1098.3
13.0 2.0	5	5	2	5	4	0	5	6	1	6.5	1148.9
14.0 1.0	4	3	0	5	4	0	5	6	1	6.7	1199.4
WL = 16.0 1.0 15.0	4	4	12	5	3	11	6	10	16	4.5	574.8
2.0 14.0	4	1	8	5	0	7	6	9	13	4.7	625.4
3.0 13.0	4	0	5	5	0	5	6	8	10	5.0	675.9

TABLE AA (Contd)

PRECISION BALANCE NETWORK SETTINGS FOR MIXED 26-
AND 22-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

26-GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 26-GA 22-GA	BALANCE NETWORK SETTINGS BY TERMINATION									1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
	900 + 2.16			600 + 2.16			TELSET (35MA)				
	R1	R2	Z	R1	R2	Z	R1	R2	Z		
WL = 16.0											
4.0 12.0	5	2	5	5	0	3	6	7	7	5.2	726.5
5.0 11.0	5	2	3	5	0	1	6	7	6	5.4	777.1
6.0 10.0	5	2	2	5	0	0	6	7	4	5.6	827.7
7.0 9.0	5	2	1	6	5	3	6	7	4	5.7	878.2
8.0 8.0	5	2	0	6	6	3	6	8	4	5.9	928.8
9.0 7.0	5	3	0	5	2	0	6	8	4	6.1	979.4
10.0 6.0	5	4	1	5	3	0	6	9	5	6.3	1029.9
11.0 5.0	5	4	1	5	3	0	6	9	5	6.4	1080.5
12.0 4.0	5	5	2	5	3	0	5	5	0	6.6	1131.1
13.0 3.0	4	3	0	5	4	0	5	5	0	6.8	1181.6
14.0 2.0	4	3	0	5	4	0	5	6	2	7.0	1232.2
15.0 1.0	4	3	0	5	4	0	5	6	2	7.2	1282.8
WL = 17.0											
1.0 16.0	4	3	12	5	3	12	6	10	16	4.9	607.6
2.0 15.0	4	1	8	5	1	8	6	8	12	5.1	658.1
3.0 14.0	4	0	5	5	0	5	6	7	9	5.3	708.7
4.0 13.0	4	0	4	5	0	3	6	7	7	5.5	759.3
5.0 12.0	4	0	2	5	0	2	6	7	6	5.7	809.8
6.0 11.0	5	1	1	5	0	0	6	7	5	5.9	860.4
7.0 10.0	5	1	0	5	0	0	6	7	4	6.1	911.0
8.0 9.0	5	2	0	5	1	0	6	8	5	6.3	961.6
9.0 8.0	5	3	1	5	2	0	6	8	4	6.4	1012.1
10.0 7.0	5	3	0	5	2	0	5	4	0	6.6	1062.7
11.0 6.0	5	4	1	5	3	0	5	4	0	6.8	1113.3
12.0 5.0	4	2	0	5	3	0	5	5	0	7.0	1163.8
13.0 4.0	4	2	0	5	4	0	5	5	0	7.2	1214.4
14.0 3.0	4	3	0	5	4	0	5	6	2	7.3	1265.0
15.0 2.0	4	3	0	5	4	0	5	6	2	7.5	1315.5
16.0 1.0	4	3	0	5	4	0	5	6	2	7.8	1366.1
WL = 18.0											
1.0 17.0	4	3	12	5	3	12	6	10	16	5.2	640.3
2.0 16.0	4	0	8	5	1	8	6	8	12	5.5	690.9
3.0 15.0	4	0	6	5	0	6	5	2	5	5.7	741.5
4.0 14.0	4	0	4	5	0	4	5	1	3	5.9	792.0
5.0 13.0	4	0	2	5	0	2	5	1	1	6.1	842.6
6.0 12.0	4	0	1	5	0	1	5	1	0	6.3	893.2
7.0 11.0	4	0	0	5	0	0	5	2	0	6.5	943.7
8.0 10.0	4	0	0	5	1	0	5	3	0	6.6	994.3
9.0 9.0	5	2	0	5	2	0	5	3	0	6.8	1044.9
10.0 8.0	5	3	0	5	2	0	5	4	0	7.0	1095.5
11.0 7.0	4	2	0	5	3	0	5	4	0	7.2	1146.0
12.0 6.0	4	2	0	5	3	0	5	5	1	7.3	1196.6
13.0 5.0	4	2	0	5	3	0	5	5	1	7.5	1247.2
14.0 4.0	4	2	0	5	4	0	5	5	1	7.7	1297.7
15.0 3.0	4	3	0	5	4	0	5	5	1	7.9	1348.3
16.0 2.0	4	3	0	5	4	1	5	6	2	8.1	1398.9
17.0 1.0	4	3	0	5	5	2	5	6	2	8.3	1449.4
WL = 19.0											

TABLE AA (Contd)

PRECISION BALANCE NETWORK SETTINGS FOR MIXED 26-
AND 22-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

26-GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 26-GA 22-GA	BALANCE NETWORK SETTINGS BY TERMINATION									1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
	900 + 2.16			600 + 2.16			TELSET (35MA)				
	R1	R2	Z	R1	R2	Z	R1	R2	Z		
WL = 19.0											
1.0 18.0	4	3	12	5	3	12	5	6	13	5.6	673.1
2.0 17.0	4	0	8	5	0	8	5	3	8	5.8	723.7
3.0 16.0	4	0	6	5	0	6	5	2	6	6.0	774.2
4.0 15.0	4	0	4	5	0	4	5	1	3	6.3	824.8
5.0 14.0	4	0	3	5	0	2	5	1	1	6.5	875.4
6.0 13.0	4	0	1	5	0	1	5	1	0	6.7	925.9
7.0 12.0	4	0	0	5	0	0	5	2	0	6.8	976.5
8.0 11.0	4	0	0	5	1	0	5	3	0	7.0	1027.1
9.0 10.0	4	0	0	5	2	0	5	3	0	7.2	1077.7
10.0 9.0	4	1	0	5	2	0	5	4	0	7.4	1128.2
11.0 8.0	4	1	0	5	3	0	5	4	0	7.5	1178.8
12.0 7.0	4	2	0	5	3	0	5	4	0	7.7	1229.4
13.0 6.0	4	2	0	5	3	0	5	5	1	7.9	1279.9
14.0 5.0	4	2	0	5	4	1	5	5	1	8.0	1330.5
15.0 4.0	4	2	0	5	4	1	5	5	1	8.2	1381.1
16.0 3.0	4	2	0	5	4	1	5	5	1	8.4	1431.6
17.0 2.0	4	3	0	5	4	1	4	4	0	8.6	1482.2
18.0 1.0	4	3	0	4	3	0	4	4	0	8.9	1532.8
WL = 20.0											
1.0 19.0	4	2	12	5	3	12	5	5	13	5.9	705.9
2.0 18.0	4	0	8	5	0	8	5	3	9	6.2	756.4
3.0 17.0	4	0	6	5	0	6	5	2	6	6.4	807.0
4.0 16.0	4	0	5	5	0	4	5	1	3	6.6	857.6
5.0 15.0	4	0	3	5	0	2	5	0	1	6.8	908.1
6.0 14.0	5	0	1	5	0	1	5	1	0	7.0	958.7
7.0 13.0	4	0	0	5	0	0	5	2	0	7.2	1009.3
8.0 12.0	4	0	0	5	1	0	5	2	0	7.4	1059.8
9.0 11.0	4	0	0	5	1	0	5	3	0	7.6	1110.4
10.0 10.0	4	1	0	5	2	0	5	3	0	7.7	1161.0
11.0 9.0	4	1	0	5	3	0	5	4	0	7.9	1211.6
12.0 8.0	4	2	0	5	3	0	5	4	0	8.1	1262.1
13.0 7.0	4	2	0	5	3	0	5	4	0	8.2	1312.7
14.0 6.0	4	2	0	5	3	0	5	5	1	8.4	1363.3
15.0 5.0	4	2	0	5	4	1	5	5	1	8.6	1413.8
16.0 4.0	4	2	0	5	4	1	5	5	1	8.8	1464.4
17.0 3.0	4	2	0	4	2	0	4	3	0	9.0	1515.0
18.0 2.0	4	2	0	4	2	0	4	3	0	9.2	1565.5
19.0 1.0	4	2	0	4	2	0	4	3	0	9.4	1616.1
WL = 21.0											
1.0 20.0	3	0	11	4	0	11	5	5	13	6.3	738.6
2.0 19.0	4	0	9	5	0	8	5	3	9	6.6	789.2
3.0 18.0	4	0	7	5	0	6	5	1	6	6.8	839.8
4.0 17.0	4	0	5	5	0	4	5	0	3	7.0	890.3
5.0 16.0	4	0	3	5	0	3	5	0	1	7.2	940.9
6.0 15.0	5	0	1	5	0	1	5	0	0	7.4	991.5
7.0 14.0	5	0	0	5	0	0	5	1	0	7.6	1042.0
8.0 13.0	4	0	0	5	0	0	5	2	0	7.8	1092.6
9.0 12.0	4	0	0	5	1	0	5	3	0	7.9	1143.2
10.0 11.0	4	0	0	5	2	0	5	3	0	8.1	1193.7

TABLE AA (Contd)

**PRECISION BALANCE NETWORK SETTINGS FOR MIXED 26-
AND 22-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68° F**

26-GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 26-GA 22-GA	BALANCE NETWORK SETTINGS BY TERMINATION									1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
	900 + 2.16			600 + 2.16			TELSET (35MA)				
	R1	R2	Z	R1	R2	Z	R1	R2	Z		
WL = 21.0											
11.0 10.0	4	1	0	5	2	0	5	4	0	8.3	1244.3
12.0 9.0	4	1	0	5	3	0	5	4	0	8.4	1294.9
13.0 8.0	4	2	0	5	3	0	5	4	0	8.6	1345.5
14.0 7.0	4	2	0	5	3	0	5	4	0	8.8	1396.0
15.0 6.0	4	2	0	5	4	1	5	5	1	9.0	1446.6
16.0 5.0	4	2	0	5	4	1	4	3	0	9.1	1497.2
17.0 4.0	4	2	0	4	2	0	4	3	0	9.3	1547.7
18.0 3.0	4	2	0	4	2	0	4	3	0	9.5	1598.3
19.0 2.0	4	2	0	4	2	0	4	3	0	9.7	1648.9
20.0 1.0	4	2	0	4	2	0	4	3	0	10.0	1699.4
WL = 22.0											
1.0 21.0	3	0	11	4	0	11	5	5	13	6.7	771.4
2.0 20.0	4	0	9	5	0	8	5	3	9	6.9	822.0
3.0 19.0	4	0	7	5	0	6	5	1	6	7.2	872.5
4.0 18.0	4	0	5	5	0	4	5	0	3	7.4	923.1
5.0 17.0	4	0	3	5	0	3	5	0	1	7.6	973.7
6.0 16.0	5	0	2	5	0	1	5	0	0	7.8	1024.2
7.0 15.0	5	0	0	5	0	0	5	1	0	8.0	1074.8
8.0 14.0	4	0	0	5	0	0	5	2	0	8.1	1125.4
9.0 13.0	4	0	0	5	1	0	5	3	0	8.3	1175.9
10.0 12.0	4	0	0	5	2	0	5	3	0	8.5	1226.5
11.0 11.0	4	1	0	5	2	0	5	3	0	8.6	1277.1
12.0 10.0	4	1	0	5	3	0	5	4	0	8.8	1327.7
13.0 9.0	4	2	0	5	3	0	5	4	0	9.0	1378.2
14.0 8.0	4	2	0	5	3	0	5	4	0	9.2	1428.8
15.0 7.0	4	2	0	5	3	0	4	3	0	9.3	1479.4
16.0 6.0	4	2	0	4	2	0	4	3	0	9.5	1529.9
17.0 5.0	4	2	0	4	2	0	4	3	0	9.7	1580.5
18.0 4.0	4	2	0	4	2	0	4	3	0	9.9	1631.1
19.0 3.0	4	2	0	4	2	0	4	3	0	10.1	1681.6
20.0 2.0	4	2	0	4	2	0	4	3	0	10.3	1732.2
21.0 1.0	3	1	0	4	2	0	4	3	0	10.5	1782.8
WL = 23.0											
1.0 22.0	3	0	11	4	0	11	5	5	13	7.0	804.2
2.0 21.0	4	0	9	5	0	9	5	2	9	7.3	854.7
3.0 20.0	4	0	7	5	0	6	5	1	6	7.5	905.3
4.0 19.0	4	0	5	5	0	4	5	0	3	7.7	955.9
5.0 18.0	5	0	3	5	0	3	5	0	2	8.0	1006.4
6.0 17.0	5	0	2	5	0	1	5	0	0	8.1	1057.0
7.0 16.0	5	0	0	5	0	0	5	1	0	8.3	1107.6
8.0 15.0	4	0	0	5	0	0	5	2	0	8.5	1158.1
9.0 14.0	4	0	0	5	1	0	5	2	0	8.7	1208.7
10.0 13.0	4	0	0	5	2	0	5	3	0	8.9	1259.3
11.0 12.0	4	1	0	5	2	0	5	3	0	9.0	1309.8
12.0 11.0	4	1	0	5	3	0	5	4	0	9.2	1360.4
13.0 10.0	4	1	0	5	3	0	5	4	0	9.4	1411.0
14.0 9.0	4	2	0	5	3	0	5	4	0	9.5	1461.6
15.0 8.0	4	2	0	5	3	0	4	3	0	9.7	1512.1
16.0 7.0	4	2	0	4	2	0	4	3	0	9.9	1562.7

TABLE AA (Contd)

PRECISION BALANCE NETWORK SETTINGS FOR MIXED 26-
AND 22-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68° F

26-GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 26-GA 22-GA	BALANCE NETWORK SETTINGS BY TERMINATION									1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
	900 + 2.16			600 + 2.16			TELSET (35MA)				
	R1	R2	Z	R1	R2	Z	R1	R2	Z		
WL = 23.0											
17.0 6.0	4	2	0	4	2	0	4	3	0	10.1	1613.3
18.0 5.0	4	2	0	4	2	0	4	3	0	10.3	1663.8
19.0 4.0	4	2	0	4	2	0	4	3	0	10.4	1714.4
20.0 3.0	4	2	0	4	2	0	4	3	0	10.6	1765.0
21.0 2.0	3	1	0	4	2	0	4	3	0	10.9	1815.5
22.0 1.0	3	1	0	4	2	0	4	3	0	11.1	1866.1
WL = 24.0											
1.0 23.0	3	0	11	4	0	11	4	2	11	7.4	836.9
2.0 22.0	4	0	9	5	0	9	4	0	8	7.7	887.5
3.0 21.0	4	0	7	5	0	7	5	0	5	7.9	938.1
4.0 20.0	4	0	5	5	0	5	5	0	3	8.1	988.6
5.0 19.0	5	0	3	5	0	3	5	0	2	8.3	1039.2
6.0 18.0	5	0	2	5	0	1	5	0	0	8.5	1089.8
7.0 17.0	5	0	0	5	0	0	5	1	0	8.7	1140.3
8.0 16.0	5	0	0	5	0	0	5	1	0	8.9	1190.9
9.0 15.0	4	0	0	5	1	0	5	2	0	9.1	1241.5
10.0 14.0	4	0	0	5	2	0	5	3	0	9.2	1292.0
11.0 13.0	4	1	0	5	2	0	5	3	0	9.4	1342.6
12.0 12.0	4	1	0	5	3	0	5	4	0	9.6	1393.2
13.0 11.0	4	1	0	5	3	0	5	4	0	9.7	1443.7
14.0 10.0	4	2	0	5	3	0	4	3	0	9.9	1494.3
15.0 9.0	4	2	0	5	3	0	4	3	0	10.1	1544.9
16.0 8.0	4	2	0	4	2	0	4	3	0	10.3	1595.5
17.0 7.0	4	2	0	4	2	0	4	3	0	10.4	1646.0
18.0 6.0	4	2	0	4	2	0	4	3	0	10.6	1696.6
19.0 5.0	4	2	0	4	2	0	4	3	0	10.8	1747.2
20.0 4.0	4	2	0	4	2	0	4	3	0	11.0	1797.7
21.0 3.0	4	2	0	4	2	0	4	3	0	11.2	1848.3

TABLE BB

PRECISION BALANCE NETWORK SETTINGS FOR MIXED 22-
AND 26-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

22-GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 22-GA 26-GA	BALANCE NETWORK SETTINGS BY TERMINATION									1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
	900 + 2.16			600 + 2.16			TELSET (35MA)				
	R1	R2	Z	R1	R2	Z	R1	R2	Z		
WL = 7.0											
1.0 6.0	6	9	3	7	15	14	7	15	10	2.7	532.8
2.0 5.0	6	10	6	7	15	16	7	15	12	2.5	482.2
WL = 8.0											
1.0 7.0	6	11	8	7	15	14	7	15	11	3.2	616.1
2.0 6.0	6	12	11	7	15	16	7	15	12	3.0	565.5
3.0 5.0	6	12	12	7	15	17	7	15	13	2.8	515.0
4.0 4.0	6	12	13	7	15	18	7	15	14	2.6	464.4
WL = 9.0											
1.0 8.0	6	12	11	6	8	4	7	15	12	3.6	699.4
2.0 7.0	6	12	12	6	9	8	7	15	13	3.5	648.9
3.0 6.0	6	13	15	6	9	9	7	15	14	3.3	598.3
4.0 5.0	6	13	16	6	10	12	7	15	15	3.1	547.7
5.0 4.0	6	13	17	6	10	13	7	15	16	2.9	497.2
6.0 3.0	6	13	17	6	9	12	7	15	16	2.7	446.6
WL = 10.0											
1.0 9.0	6	12	11	6	9	6	6	10	5	4.1	782.8
2.0 8.0	6	13	15	6	10	10	6	11	9	3.9	732.2
3.0 7.0	6	13	16	6	11	13	6	12	12	3.7	681.6
4.0 6.0	6	14	19	6	11	14	6	12	13	3.5	631.1
5.0 5.0	6	14	20	6	11	15	6	12	14	3.4	580.5
6.0 4.0	6	14	20	6	11	16	6	12	14	3.2	529.9
7.0 3.0	6	14	21	6	10	15	6	11	13	3.0	479.4
8.0 2.0	6	13	19	6	10	15	7	15	18	2.8	428.8
9.0 1.0	6	13	19	6	9	15	7	15	18	2.5	378.2
WL = 11.0											
1.0 10.0	5	8	6	6	10	8	6	11	8	4.6	866.1
2.0 9.0	5	9	9	6	11	12	6	12	12	4.4	815.5
3.0 8.0	6	14	19	6	11	13	6	13	15	4.2	765.0
4.0 7.0	6	14	19	6	12	16	6	13	16	4.0	714.4
5.0 6.0	6	14	20	6	12	17	6	13	16	3.9	663.8
6.0 5.0	6	14	21	6	12	17	6	13	17	3.7	613.3
7.0 4.0	6	14	21	6	12	18	6	13	18	3.5	562.7
8.0 3.0	6	14	21	6	11	17	6	12	16	3.3	512.1
9.0 2.0	6	14	22	6	10	16	6	12	16	3.1	461.6
10.0 1.0	6	13	20	6	10	17	6	11	15	2.8	411.0
WL = 12.0											
1.0 11.0	5	8	6	6	10	9	6	12	11	5.1	949.4
2.0 10.0	5	9	9	6	11	12	6	12	12	4.9	898.9
3.0 9.0	5	10	12	6	12	15	6	13	15	4.7	848.3
4.0 8.0	5	11	15	6	12	16	6	14	19	4.5	797.7
5.0 7.0	5	11	16	6	13	19	6	14	19	4.4	747.2
6.0 6.0	5	11	17	6	13	19	6	14	20	4.2	696.6
7.0 5.0	5	11	17	6	12	18	6	13	18	4.0	646.0
8.0 4.0	5	11	18	6	12	19	6	13	19	3.8	595.5
9.0 3.0	5	11	18	6	12	19	6	13	19	3.6	544.9
10.0 2.0	5	10	17	6	11	18	6	12	17	3.4	494.3

TABLE BB (Contd)

PRECISION BALANCE NETWORK SETTINGS FOR MIXED 22-
AND 26-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

22-GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 22-GA 26-GA	BALANCE NETWORK SETTINGS BY TERMINATION									1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
	900 + 2.16			600 + 2.16			TELSET (35MA)				
	R1	R2	Z	R1	R2	Z	R1	R2	Z		
WL = 12.0 11.0 1.0	5	10	17	6	10	17	6	11	16	3.2	443.7
WL = 13.0 1.0 12.0	5	8	7	6	11	11	6	12	11	5.6	1032.8
2.0 11.0	5	9	10	6	12	14	6	13	15	5.4	982.2
3.0 10.0	5	10	13	6	12	15	6	13	16	5.2	931.6
4.0 9.0	5	11	15	6	13	18	6	14	19	5.0	881.1
5.0 8.0	5	11	16	6	13	19	6	14	20	4.9	830.5
6.0 7.0	5	11	17	6	13	20	6	14	20	4.7	779.9
7.0 6.0	5	11	18	6	13	20	6	14	21	4.5	729.4
8.0 5.0	5	11	18	6	13	21	6	14	21	4.3	678.8
9.0 4.0	5	11	18	6	13	21	6	14	21	4.1	628.2
10.0 3.0	5	11	19	6	12	20	6	13	20	3.9	577.7
11.0 2.0	5	11	19	6	11	19	6	13	20	3.7	527.1
12.0 1.0	5	10	18	6	11	19	6	12	18	3.5	476.5
WL = 14.0 1.0 13.0	5	8	7	5	6	4	6	12	12	6.2	1116.1
2.0 12.0	5	9	10	5	8	9	6	13	15	5.9	1065.5
3.0 11.0	5	10	13	5	9	11	6	14	19	5.8	1015.0
4.0 10.0	5	11	16	5	9	13	6	14	19	5.6	964.4
5.0 9.0	5	11	17	5	10	15	6	14	20	5.4	913.8
6.0 8.0	5	11	17	5	10	16	6	14	21	5.2	863.3
7.0 7.0	5	11	18	5	9	15	6	14	21	5.0	812.7
8.0 6.0	5	12	20	5	9	16	6	14	22	4.8	762.1
9.0 5.0	5	11	19	5	9	16	6	14	22	4.7	711.6
10.0 4.0	5	11	19	5	9	17	6	14	22	4.5	661.0
11.0 3.0	5	10	18	6	12	20	6	13	20	4.3	610.4
12.0 2.0	5	10	18	6	11	19	6	13	21	4.1	559.8
13.0 1.0	5	10	18	6	11	19	6	12	19	3.8	509.3
WL = 15.0 1.0 14.0	4	5	4	5	7	6	5	8	6	6.7	1199.4
2.0 13.0	4	7	8	5	8	9	5	9	9	6.5	1148.9
3.0 12.0	4	8	11	5	9	12	5	10	12	6.3	1098.3
4.0 11.0	4	8	12	5	9	13	5	11	15	6.1	1047.7
5.0 10.0	4	9	14	5	10	15	5	11	16	5.9	997.2
6.0 9.0	4	9	15	5	10	16	5	11	16	5.7	946.6
7.0 8.0	4	9	16	5	10	17	5	11	17	5.6	896.0
8.0 7.0	4	9	16	5	10	17	6	14	22	5.4	845.5
9.0 6.0	4	9	17	5	10	18	6	14	22	5.2	794.9
10.0 5.0	4	9	17	5	9	17	6	14	23	5.0	744.3
11.0 4.0	5	11	20	5	9	17	6	14	23	4.8	693.7
12.0 3.0	5	10	19	5	8	17	6	13	21	4.6	643.2
13.0 2.0	5	10	19	5	8	17	6	13	21	4.4	592.6
14.0 1.0	5	10	19	6	11	20	6	13	21	4.2	542.0
WL = 16.0 1.0 15.0	4	5	4	5	7	6	5	8	6	7.2	1282.8
2.0 14.0	4	7	8	5	8	9	5	9	10	7.0	1232.2
3.0 13.0	4	8	11	5	9	12	5	10	12	6.8	1181.6

TABLE BB (Contd)

PRECISION BALANCE NETWORK SETTINGS FOR MIXED 22-
AND 26-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

22-GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 22-GA 26-GA	BALANCE NETWORK SETTINGS BY TERMINATION									1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
	900 + 2.16			600 + 2.16			TELSET (35MA)				
	R1	R2	Z	R1	R2	Z	R1	R2	Z		
WL = 16.0											
4.0 12.0	4	8	12	5	9	13	5	11	15	6.6	1131.1
5.0 11.0	4	9	14	5	10	15	5	11	16	6.4	1080.5
6.0 10.0	4	9	15	5	10	16	5	11	17	6.3	1029.9
7.0 9.0	4	9	16	5	10	17	5	11	17	6.1	979.4
8.0 8.0	4	9	17	5	10	18	5	11	18	5.9	928.8
9.0 7.0	4	9	17	5	10	18	5	11	18	5.7	878.2
10.0 6.0	4	9	18	5	9	17	5	11	19	5.6	827.7
11.0 5.0	4	9	18	5	9	18	5	11	19	5.4	777.1
12.0 4.0	4	8	17	5	9	18	5	10	18	5.2	726.5
13.0 3.0	4	8	17	5	8	17	6	13	22	5.0	675.9
14.0 2.0	4	8	17	5	8	17	6	13	22	4.7	625.4
15.0 1.0	5	9	18	5	7	16	6	12	20	4.5	574.8
WL = 17.0											
1.0 16.0	4	5	4	5	7	6	5	8	7	7.8	1366.1
2.0 15.0	4	6	7	5	8	9	5	9	10	7.5	1315.5
3.0 14.0	4	7	10	5	9	12	5	10	13	7.3	1265.0
4.0 13.0	4	8	12	5	10	15	5	11	15	7.2	1214.4
5.0 12.0	4	9	15	5	10	16	5	11	16	7.0	1163.8
6.0 11.0	4	9	16	5	10	16	5	11	17	6.8	1113.3
7.0 10.0	4	9	16	5	10	17	5	11	18	6.6	1062.7
8.0 9.0	4	9	17	5	10	18	5	11	18	6.4	1012.1
9.0 8.0	4	9	17	5	10	18	5	11	19	6.3	961.6
10.0 7.0	4	9	18	5	10	19	5	11	19	6.1	911.0
11.0 6.0	4	9	18	5	9	18	5	11	19	5.9	860.4
12.0 5.0	4	8	17	5	9	18	5	10	18	5.7	809.8
13.0 4.0	4	8	18	5	8	17	5	10	18	5.5	759.3
14.0 3.0	4	8	18	5	8	17	5	10	18	5.3	708.7
15.0 2.0	4	7	17	5	7	17	6	13	22	5.1	658.1
16.0 1.0	4	7	17	5	7	17	6	13	22	4.9	607.6
WL = 18.0											
1.0 17.0	4	4	3	4	4	3	4	5	3	8.3	1449.4
2.0 16.0	4	6	7	4	6	7	5	9	10	8.1	1398.9
3.0 15.0	4	7	10	4	7	10	5	10	13	7.9	1348.3
4.0 14.0	4	8	12	4	7	11	5	10	14	7.7	1297.7
5.0 13.0	4	9	15	4	8	13	5	11	17	7.5	1247.2
6.0 12.0	4	9	16	4	8	14	5	11	17	7.3	1196.6
7.0 11.0	3	7	14	4	8	15	5	11	18	7.2	1146.0
8.0 10.0	3	8	16	4	8	16	5	11	18	7.0	1095.5
9.0 9.0	3	7	15	4	8	16	5	11	19	6.8	1044.9
10.0 8.0	3	7	16	4	8	17	5	11	19	6.6	994.3
11.0 7.0	3	7	16	4	7	16	5	11	20	6.5	943.7
12.0 6.0	3	7	17	4	7	16	5	11	20	6.3	893.2
13.0 5.0	4	8	18	4	6	16	5	10	19	6.1	842.6
14.0 4.0	4	8	18	5	8	18	5	10	19	5.9	792.0
15.0 3.0	4	7	17	5	8	18	5	10	19	5.7	741.5
16.0 2.0	4	7	17	5	7	17	5	9	18	5.5	690.9
17.0 1.0	4	7	17	5	7	17	5	9	18	5.2	640.3
WL = 19.0											

TABLE BB (Contd)

PRECISION BALANCE NETWORK SETTINGS FOR MIXED 22- AND 26-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

22-GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 22-GA 26-GA	BALANCE NETWORK SETTINGS BY TERMINATION									1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)	
	900 + 2.16			600 + 2.16			TELSET (35MA)					
	R1	R2	Z	R1	R2	Z	R1	R2	Z			
WL = 19.0												
1.0	18.0	3	3	2	4	4	3	4	5	3	8.9	1532.8
2.0	17.0	3	4	5	4	6	7	4	7	8	8.6	1482.2
3.0	16.0	3	6	9	4	7	10	4	8	10	8.4	1431.6
4.0	15.0	3	6	10	4	7	11	4	8	12	8.2	1381.1
5.0	14.0	3	7	12	4	8	13	4	9	14	8.0	1330.5
6.0	13.0	3	7	13	4	8	14	4	9	15	7.9	1279.9
7.0	12.0	3	7	14	4	8	15	4	9	16	7.7	1229.4
8.0	11.0	3	7	15	4	8	16	4	9	16	7.5	1178.8
9.0	10.0	3	7	16	4	8	16	4	9	17	7.4	1128.2
10.0	9.0	3	7	16	4	8	17	4	9	17	7.2	1077.7
11.0	8.0	3	7	16	4	7	16	4	9	18	7.0	1027.1
12.0	7.0	3	7	17	4	7	17	5	10	19	6.8	976.5
13.0	6.0	3	6	16	4	7	17	5	10	19	6.7	925.9
14.0	5.0	3	6	16	4	6	16	5	10	19	6.5	875.4
15.0	4.0	3	6	17	4	6	16	5	9	18	6.3	824.8
16.0	3.0	3	5	16	5	8	18	5	9	18	6.0	774.2
17.0	2.0	4	6	17	5	7	17	5	9	18	5.8	723.7
18.0	1.0	4	6	17	5	7	17	5	9	18	5.6	673.1
WL = 20.0												
1.0	19.0	3	2	1	4	4	3	4	5	3	9.4	1616.1
2.0	18.0	3	4	5	4	6	7	4	6	6	9.2	1565.5
3.0	17.0	3	5	8	4	7	10	4	7	9	9.0	1515.0
4.0	16.0	3	6	10	4	7	11	4	8	12	8.8	1464.4
5.0	15.0	3	7	13	4	8	13	4	9	14	8.6	1413.8
6.0	14.0	3	7	14	4	8	14	4	9	15	8.4	1363.3
7.0	13.0	3	7	14	4	8	15	4	9	16	8.2	1312.7
8.0	12.0	3	7	15	4	8	16	4	9	16	8.1	1262.1
9.0	11.0	3	7	16	4	8	16	4	9	17	7.9	1211.6
10.0	10.0	3	7	16	4	8	17	4	9	17	7.7	1161.0
11.0	9.0	3	7	17	4	7	16	4	9	18	7.6	1110.4
12.0	8.0	3	6	16	4	7	17	4	8	17	7.4	1059.8
13.0	7.0	3	6	16	4	7	17	4	8	17	7.2	1009.3
14.0	6.0	3	6	17	4	6	16	4	8	17	7.0	958.7
15.0	5.0	3	5	16	4	6	16	4	7	16	6.8	908.1
16.0	4.0	3	5	16	4	5	16	5	9	18	6.6	857.6
17.0	3.0	3	5	16	4	5	16	5	9	18	6.4	807.0
18.0	2.0	3	5	16	4	4	15	5	9	18	6.2	756.4
19.0	1.0	4	6	17	5	7	17	5	8	17	5.9	705.9
WL = 21.0												
1.0	20.0	3	2	1	4	4	3	4	5	4	10.0	1699.4
2.0	19.0	3	4	5	4	5	6	4	6	7	9.7	1648.9
3.0	18.0	3	5	8	4	7	10	4	7	9	9.5	1598.3
4.0	17.0	3	6	10	4	7	11	4	8	12	9.3	1547.7
5.0	16.0	3	7	13	4	8	14	4	8	13	9.1	1497.2
6.0	15.0	3	7	14	4	8	14	4	9	15	9.0	1446.6
7.0	14.0	3	7	14	4	8	15	4	9	16	8.8	1396.0
8.0	13.0	3	7	15	4	8	16	4	9	17	8.6	1345.5
9.0	12.0	3	7	16	4	8	17	4	9	17	8.4	1294.9
10.0	11.0	3	7	16	4	8	17	4	9	18	8.3	1244.3

TABLE BB (Contd)

PRECISION BALANCE NETWORK SETTINGS FOR MIXED 22-
AND 26-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

22-GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 22-GA 26-GA	BALANCE NETWORK SETTINGS BY TERMINATION									1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
	900 + 2.16			600 + 2.16			TELSET (35MA)				
	R1	R2	Z	R1	R2	Z	R1	R2	Z		
WL = 21.0											
11.0 10.0	2	6	16	3	6	16	4	8	17	8.1	1193.7
12.0 9.0	3	6	16	4	7	17	4	8	17	7.9	1143.2
13.0 8.0	2	5	16	4	7	17	4	8	17	7.8	1092.6
14.0 7.0	2	5	16	4	6	16	4	8	18	7.6	1042.0
15.0 6.0	3	5	16	4	6	17	4	7	17	7.4	991.5
16.0 5.0	3	5	16	4	5	16	4	7	17	7.2	940.9
17.0 4.0	3	5	16	4	5	16	4	7	17	7.0	890.3
18.0 3.0	3	4	16	4	5	16	5	9	19	6.8	839.8
19.0 2.0	3	4	16	4	4	15	5	8	18	6.6	789.2
20.0 1.0	3	4	16	4	4	15	5	8	18	6.3	738.6
WL = 22.0											
1.0 21.0	3	2	1	4	4	3	3	3	1	10.5	1782.8
2.0 20.0	3	4	5	4	5	6	4	6	7	10.3	1732.2
3.0 19.0	3	5	8	4	7	10	3	6	8	10.1	1681.6
4.0 18.0	3	6	10	4	7	11	4	8	12	9.9	1631.1
5.0 17.0	3	6	12	4	8	14	3	7	12	9.7	1580.5
6.0 16.0	3	7	14	3	6	12	3	7	13	9.5	1529.9
7.0 15.0	2	6	13	3	7	14	3	8	15	9.3	1479.4
8.0 14.0	2	6	14	3	7	15	3	8	16	9.2	1428.8
9.0 13.0	2	6	15	3	7	16	3	7	15	9.0	1378.2
10.0 12.0	2	6	15	3	6	15	3	7	16	8.8	1327.7
11.0 11.0	2	5	15	3	6	16	3	7	16	8.6	1277.1
12.0 10.0	2	5	15	3	6	16	3	7	16	8.5	1226.5
13.0 9.0	2	5	16	3	5	15	4	8	18	8.3	1175.9
14.0 8.0	2	4	15	3	5	16	4	8	18	8.1	1125.4
15.0 7.0	2	4	15	3	4	15	4	7	17	8.0	1074.8
16.0 6.0	2	3	15	3	4	15	4	7	17	7.8	1024.2
17.0 5.0	2	3	15	4	5	16	4	7	17	7.6	973.7
18.0 4.0	2	3	15	4	5	16	4	6	16	7.4	923.1
19.0 3.0	3	4	16	4	5	16	4	6	16	7.2	872.5
20.0 2.0	3	3	15	4	4	16	4	6	16	6.9	822.0
21.0 1.0	3	3	15	4	3	15	5	8	18	6.7	771.4
WL = 23.0											
1.0 22.0	3	2	1	3	2	1	3	3	2	11.1	1866.1
2.0 21.0	3	4	5	3	4	5	3	4	4	10.9	1815.5
3.0 20.0	3	5	8	3	5	8	3	6	8	10.6	1765.0
4.0 19.0	3	6	10	3	6	10	3	6	10	10.4	1714.4
5.0 18.0	3	6	12	3	6	11	3	7	12	10.3	1663.8
6.0 17.0	2	6	13	3	6	12	3	7	13	10.1	1613.3
7.0 16.0	2	6	13	3	7	14	3	7	14	9.9	1562.7
8.0 15.0	2	6	14	3	7	15	3	7	15	9.7	1512.1
9.0 14.0	2	6	15	3	6	15	3	7	15	9.5	1461.6
10.0 13.0	2	5	15	3	6	15	3	7	16	9.4	1411.0
11.0 12.0	2	5	15	3	6	16	3	7	16	9.2	1360.4
12.0 11.0	2	5	15	3	6	16	3	7	17	9.0	1309.8
13.0 10.0	2	5	16	3	5	16	3	6	16	8.9	1259.3
14.0 9.0	2	4	15	3	5	16	3	6	16	8.7	1208.7
15.0 8.0	2	4	15	3	4	15	3	6	16	8.5	1158.1
16.0 7.0	2	3	15	3	4	15	4	7	17	8.3	1107.6

TABLE BB (Contd)

PRECISION BALANCE NETWORK SETTINGS FOR MIXED 22-
AND 26-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

22-GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 22-GA 26-GA	BALANCE NETWORK SETTINGS BY TERMINATION									1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
	900 + 2.16			600 + 2.16			TELSET (35MA)				
	R1	R2	Z	R1	R2	Z	R1	R2	Z		
WL = 23.0											
17.0 6.0	2	3	15	3	3	15	4	7	17	8.1	1057.0
18.0 5.0	2	3	15	3	3	15	4	6	16	8.0	1006.4
19.0 4.0	2	3	15	3	3	15	4	6	16	7.7	955.9
20.0 3.0	3	3	15	4	4	16	4	6	16	7.5	905.3
21.0 2.0	3	3	15	4	3	15	4	6	16	7.3	854.7
22.0 1.0	3	3	15	4	3	15	4	5	15	7.0	804.2
WL = 24.0											
2.0 22.0	3	4	5	3	4	5	3	4	5	11.4	1898.9
3.0 21.0	3	5	8	3	5	8	3	5	7	11.2	1848.3
4.0 20.0	3	6	10	3	6	10	3	6	10	11.0	1797.7
5.0 19.0	2	5	11	3	6	11	3	7	12	10.8	1747.2
6.0 18.0	2	5	12	3	6	12	3	7	13	10.6	1696.6
7.0 17.0	2	6	14	3	7	14	3	7	14	10.4	1646.0
8.0 16.0	2	6	14	3	7	15	3	7	15	10.3	1595.5
9.0 15.0	2	6	15	3	6	15	3	7	15	10.1	1544.9
10.0 14.0	2	5	15	3	6	15	3	7	16	9.9	1494.3
11.0 13.0	2	5	15	3	6	16	3	7	16	9.7	1443.7
12.0 12.0	2	5	15	3	6	16	3	6	16	9.6	1393.2
13.0 11.0	2	4	15	3	5	16	3	6	16	9.4	1342.6
14.0 10.0	2	4	15	3	5	16	3	6	16	9.2	1292.0
15.0 9.0	1	3	15	3	5	16	3	6	16	9.1	1241.5
16.0 8.0	2	3	15	3	4	15	3	5	16	8.9	1190.9
17.0 7.0	2	3	15	3	3	15	3	5	16	8.7	1140.3
18.0 6.0	2	3	15	3	3	15	3	5	16	8.5	1089.8
19.0 5.0	2	2	15	3	3	15	3	4	15	8.3	1039.2
20.0 4.0	2	2	15	3	3	15	4	5	16	8.1	988.6
21.0 3.0	2	1	14	4	4	16	4	5	16	7.9	938.1
22.0 2.0	2	1	14	4	3	15	4	5	16	7.7	887.5
23.0 1.0	2	1	14	4	3	15	4	5	16	7.4	836.9

TABLE CC

PRESCRIPTION SETTINGS FOR NONLOADED CABLE PBN AND
837- OR J99380-TYPE IMPEDANCE COMPENSATORS

837D/J99380AA DROP SIDE IMPEDANCE = 600 OHMS

LENGTH (KFT)	PBN			IMPEDANCE COMPENSATOR		1 KHZ CKT LOSS (dB)
	R1	R2	Z	837D/J99380AA (600 OHM SCREWS DOWN) BOR	R POTENTIOMETER	
26 GA NL						
8.0	6	7	0	114	32	8.1
9.0	6	7	0	114	30	8.6
10.0	6	8	2	114	28	9.2
24 GA NL						
9.0	6	7	6	114	22	7.5
10.0	6	9	10	114	20	7.9
11.0	6	10	12	114	18	8.3
12.0	6	10	13	114	18	8.7
13.0	5	6	9	114	16	9.1
14.0	5	6	10	114	16	9.5
22 GA NL						
9.0	6	10	13	228	28	7.2
10.0	6	11	16	228	26	7.5
11.0	6	12	18	228	24	7.8
12.0	6	10	16	114	10	7.6
13.0	6	11	18	114	10	7.9
14.0	6	11	19	114	8	8.2
15.0	5	7	15	114	8	8.5
16.0	5	7	16	114	6	8.9
17.0	5	7	16	114	6	9.2
18.0	5	7	17	114	6	9.5

TABLE DD

PRESCRIPTION SETTINGS FOR NONLOADED CABLE PBN AND
837- OR J99380-TYPE IMPEDANCE COMPENSATORS

837D/J99380AA DROP SIDE IMPEDANCE = 900 OHMS

LENGTH (KFT)	PBN			IMPEDANCE COMPENSATOR		1 KHZ CKT LOSS (dB)
	R1	R1	Z	837D/J99380AA (900 OHM SCREWS DOWN) BOR	R POTENTIOMETER	
26 GA NL						
8.0	7	15	12	114	36	8.2
9.0	6	7	0	114	34	8.7
10.0	6	8	2	114	34	9.2
11.0	6	9	4	114	32	9.7
24 GA NL						
9.0	6	6	5	114	30	7.5
10.0	6	8	9	114	28	7.9
11.0	6	9	11	114	26	8.3
12.0	6	10	13	114	24	8.7
13.0	6	10	13	114	24	9.1
14.0	5	6	10	114	24	9.5
22 GA NL						
9.0	6	9	12	228	36	7.1
10.0	6	11	16	228	34	7.4
11.0	6	11	17	228	34	7.7
12.0	6	10	16	114	18	7.6
13.0	6	11	18	114	18	7.9
14.0	6	11	19	114	16	8.3
15.0	6	11	19	114	16	8.6
16.0	5	7	16	114	16	8.9
17.0	5	7	16	114	14	9.2
18.0	5	7	17	114	14	9.5

TABLE EE

PRESCRIPTION SETTINGS FOR LOADED CABLE PBN AND
837- OR J99380-TYPE IMPEDANCE COMPENSATORS

END SECTION = 3.0 kft
IMPEDANCE COMPENSATOR ADJUSTED FOR 3.0 kft END SECTION

LENGTH (kft)	22H88 (NOTE)								24H88 (NOTE)								25H88				26H88 (NOTE)			
	837A, B				837E, F/J99380AB				837A, B				837E, F/J99380AB				837J				837G			
	L	R	Z	LOSS	L	R	Z	LOSS	L	R	Z	LOSS	L	R	Z	LOSS	L	R	Z	LOSS	L	R	Z	LOSS
12.0	0	2	2	2.1	0	3	2	2.3	0	4	2	2.9	0	5	3	3.1	1	5	0	5.7	0	7	3	6.4
18.0	0	2	2	2.9	0	3	2	3.1	0	5	3	4.2	0	5	3	4.5	1	7	1	7.0	0	7	4	8.4
24.0	0	3	3	3.8	0	3	3	4.0	0	5	3	5.6	0	5	3	5.9	1	7	1	8.4				
30.0	0	3	3	4.8	0	3	3	5.0	0	4	3	7.1	0	4	3	7.3	1	6	1	9.9				
36.0	0	2	2	5.7	0	2	2	5.9	0	4	3	8.5	0	4	3	8.7								
42.0	0	2	2	6.6	0	2	3	6.8																
48.0	0	2	2	7.5	0	2	3	7.6																
54.0	0	2	2	8.3	0	2	3	8.5																

Note: All L switch settings = O (Off).

TABLE FF

DC RESISTANCE CONSTANTS
FOR NL CABLE

GAUGE	OHMS/KFT
19	16.3
22	32.8
24	51.9
26	88.3

TABLE GG

H88 LOADED CABLE LOSS

GAUGE	LOSS/KFT (dB)
26	.34
24	.23
22	.15
19	.08

TABLE HH

CONSTANT (K) FOR CONVERSION TO
EQUIVALENT GAUGE (900 TO 900 OHMS)

Minor Gauge

	19	22	24	26
19	1.00	1.06	1.17	1.30
22	.95	1.00	1.10	1.22
24	.86	.91	1.00	1.11
26	.79	.83	.91	1.00

MAJOR
GAUGE

TABLE II

CONSTANT (K) FOR CONVERSION TO
EQUIVALENT GAUGE (900 TO 600 OHMS)

Minor Gauge

	19	22	24	26
19	1.00	1.11	1.27	1.48
22	.91	1.00	1.14	1.32
24	.80	.88	1.00	1.15
26	.70	.77	.88	1.00

MAJOR
GAUGE

TABLE JJ

EQUALIZER SETTINGS FOR 4-2 TERMINAL REPEATERS FOR SINGLE
GAUGE NONLOADED 2-WIRE FACILITIES WITHOUT BRIDGED TAPS AT 68° F

4-WIRE IMPEDANCE = 600 OHMS
2-WIRE TERMINATION = 900 OHMS

LENGTH (KFT)	2-WIRE = 19GA				2-WIRE = 22GA				2-WIRE = 24GA				2-WIRE = 26GA			
	BW = 15		EQLR		BW = 15		EQLR		BW = 15		EQLR		BW = 15		EQLR	
	HT	SLOPE	GAIN		HT	SLOPE	GAIN		HT	SLOPE	GAIN		HT	SLOPE	GAIN	
1.0	0	0	L	0.0	0	0	L	0.0	0	0	L	0.0	0	0	L	0.0
2.0	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4
3.0	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4
4.0	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6
5.0	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6
6.0	0	3	L	3.7	0	3	L	3.7	0	3	L	3.7	0	3	L	3.7
7.0	0	4	L	4.7	0	4	L	4.7	0	4	L	4.7	0	4	L	4.7
8.0	0	5	L	5.5	0	5	L	5.5	0	5	L	5.5	1	5	L	5.6
9.0	1	5	L	5.6	1	5	L	5.6	1	6	L	6.4	2	5	L	5.7
10.0	2	5	L	5.7	2	5	L	5.7	2	6	L	6.5	3	6	L	6.6
11.0	2	7	L	7.4	3	6	L	6.6	3	7	L	7.5	4	6	L	6.7
12.0	3	7	L	7.5	3	8	L	8.0	4	7	L	7.6	5	7	L	7.7
13.0	4	8	L	8.1	4	8	L	8.1	5	8	L	8.3	0	7	NL	3.4
14.0	4	11	L	9.9	5	8	L	8.3	0	7	NL	3.4	1	7	NL	3.4
15.0	5	11	L	10.0	5	13	L	11.0	0	8	NL	3.7	1	9	NL	4.2
16.0	5	15	L	11.9	0	8	NL	3.7	1	8	NL	3.8	2	9	NL	4.3
17.0	0	8	NL	3.7	0	9	NL	4.2	1	9	NL	4.2	2	10	NL	4.8
18.0	0	9	NL	4.2	1	9	NL	4.2	2	10	NL	4.8	3	11	NL	5.3

TABLE KK

EQUALIZER SETTINGS FOR 4-2 TERMINAL REPEATERS FOR SINGLE
GAUGE NONLOADED 2-WIRE FACILITIES WITHOUT BRIDGED TAPS AT 68° F

4-WIRE IMPEDANCE = 600 OHMS
2-WIRE TERMINATION = 600 OHMS

LENGTH (KFT)	2-WIRE = 19GA			2-WIRE = 22GA			2-WIRE = 24GA			2-WIRE = 26GA		
	BW = 15 HT	EQLR SLOPE	GAIN	BW = 15 HT	EQLR SLOPE	GAIN	BW = 15 HT	EQLR SLOPE	GAIN	BW = 15 HT	EQLR SLOPE	GAIN
1.0	0	0	L 0.0	0	0	L 0.0	0	0	L 0.0	0	0	L 0.0
2.0	0	1	L 1.4	0	1	L 1.4	0	1	L 1.4	0	1	L 1.4
3.0	0	1	L 1.4	0	1	L 1.4	0	1	L 1.4	0	1	L 1.4
4.0	0	1	L 1.4	0	1	L 1.4	0	1	L 1.4	0	1	L 1.4
5.0	0	2	L 2.6	0	2	L 2.6	0	2	L 2.6	0	2	L 2.6
6.0	0	2	L 2.6	0	2	L 2.6	0	2	L 2.6	0	2	L 2.6
7.0	0	3	L 3.7	0	3	L 3.7	0	3	L 3.7	0	3	L 3.7
8.0	0	3	L 3.7	0	3	L 3.7	0	4	L 4.7	0	4	L 4.7
9.0	0	4	L 4.7	0	4	L 4.7	0	5	L 5.5	0	5	L 5.5
10.0	0	5	L 5.5	0	5	L 5.5	1	5	L 5.6	1	6	L 6.4
11.0	1	5	L 5.6	1	5	L 5.6	2	5	L 5.7	2	6	L 6.5
12.0	1	6	L 6.4	2	5	L 5.7	3	5	L 5.8	3	7	L 7.5
13.0	2	6	L 6.5	2	7	L 7.4	3	7	L 7.5	4	7	L 7.6
14.0	3	6	L 6.6	3	7	L 7.5	4	7	L 7.6	5	8	L 8.3
15.0	3	8	L 8.0	4	7	L 7.6	5	7	L 7.7	6	8	L 8.5
16.0	4	8	L 8.1	4	10	L 9.3	5	12	L 10.6	6	15	L 12.1
17.0	4	11	L 9.9	5	9	L 8.9	6	11	L 10.2	7	14	L 11.9
18.0	5	10	L 9.5	5	15	L 11.9	6	15	L 12.1	8	11	L 10.8

TABLE LL

EQUALIZER SETTINGS FOR 4-2 TERMINAL REPEATERS FOR
MIXED GAUGE NONLOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

4-WIRE IMPEDANCE = 600 OHMS
2-WIRE TERMINATION = 900 OHMS

LENGTH (KFT) GA1 GA2		EQUALIZER SETTINGS BY GAUGE											
		24/22 GAUGE			26/24 GAUGE			26/22 GAUGE					
		BW = 15	EQLR			BW = 15	EQLR			BW = 15	EQLR		
		HT	SLOPE	GAIN			HT	SLOPE	GAIN	HT	SLOPE	GAIN	
WL= 2.0													
1.0	1.0	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4
WL= 3.0													
1.0	2.0	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4
2.0	1.0	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4
WL= 4.0													
1.0	3.0	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6
2.0	2.0	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6
3.0	1.0	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6
WL= 5.0													
1.0	4.0	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6
2.0	3.0	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6
3.0	2.0	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6
4.0	1.0	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6
WL= 6.0													
1.0	5.0	0	3	L	3.7	0	3	L	3.7	0	3	L	3.7
2.0	4.0	0	3	L	3.7	0	3	L	3.7	0	3	L	3.7
3.0	3.0	0	3	L	3.7	0	3	L	3.7	0	3	L	3.7
4.0	2.0	0	3	L	3.7	0	3	L	3.7	0	3	L	3.7
5.0	1.0	0	3	L	3.7	0	3	L	3.7	0	3	L	3.7
WL= 7.0													
1.0	6.0	0	4	L	4.7	0	4	L	4.7	0	4	L	4.7
2.0	5.0	0	4	L	4.7	0	4	L	4.7	0	4	L	4.7
3.0	4.0	0	4	L	4.7	0	4	L	4.7	0	4	L	4.7
4.0	3.0	0	4	L	4.7	0	4	L	4.7	0	4	L	4.7
5.0	2.0	0	4	L	4.7	0	4	L	4.7	0	4	L	4.7
6.0	1.0	0	4	L	4.7	0	4	L	4.7	0	4	L	4.7
WL= 8.0													
1.0	7.0	0	5	L	5.5	1	4	L	4.7	0	5	L	5.5
2.0	6.0	0	5	L	5.5	1	4	L	4.7	0	5	L	5.5
3.0	5.0	0	5	L	5.5	1	4	L	4.7	0	5	L	5.5
4.0	4.0	0	5	L	5.5	1	4	L	4.7	0	5	L	5.5
5.0	3.0	0	5	L	5.5	1	4	L	4.7	0	5	L	5.5
6.0	2.0	0	5	L	5.5	1	4	L	4.7	1	4	L	4.7

TABLE LL (Contd)

EQUALIZER SETTINGS FOR 4-2 TERMINAL REPEATERS FOR
MIXED GAUGE NONLOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

4-WIRE IMPEDANCE = 600 OHMS
2-WIRE TERMINATION = 900 OHMS

LENGTH (KFT) GA1 GA2		EQUALIZER SETTINGS BY GAUGE											
		24/22 GAUGE				26/24 GAUGE			26/22 GAUGE				
		BW = 15	EQLR			BW = 15	EQLR		BW = 15	EQLR			
		HT	SLOPE	GAIN		HT	SLOPE	GAIN	HT	SLOPE	GAIN		
WL= 8.0													
7.0	1.0	0	5	L	5.5	1	5	L	5.6	1	4	L	4.7
WL= 9.0													
1.0	8.0	1	5	L	5.6	2	5	L	5.7	1	5	L	5.6
2.0	7.0	1	5	L	5.6	2	5	L	5.7	1	6	L	6.4
3.0	6.0	1	5	L	5.6	2	5	L	5.7	1	6	L	6.4
4.0	5.0	1	5	L	5.6	2	5	L	5.7	1	6	L	6.4
5.0	4.0	1	5	L	5.6	2	5	L	5.7	1	6	L	6.4
6.0	3.0	1	6	L	6.4	2	5	L	5.7	2	5	L	5.7
7.0	2.0	1	6	L	6.4	2	5	L	5.7	2	5	L	5.7
8.0	1.0	1	6	L	6.4	2	5	L	5.7	2	5	L	5.7
WL= 10.0													
1.0	9.0	2	6	L	6.5	3	5	L	5.8	2	6	L	6.5
2.0	8.0	2	6	L	6.5	3	5	L	5.8	2	6	L	6.5
3.0	7.0	2	6	L	6.5	3	5	L	5.8	2	6	L	6.5
4.0	6.0	2	6	L	6.5	3	5	L	5.8	2	6	L	6.5
5.0	5.0	2	6	L	6.5	3	5	L	5.8	2	6	L	6.5
6.0	4.0	2	6	L	6.5	3	5	L	5.8	2	6	L	6.5
7.0	3.0	2	6	L	6.5	3	5	L	5.8	3	5	L	5.8
8.0	2.0	2	6	L	6.5	3	5	L	5.8	3	5	L	5.8
9.0	1.0	2	6	L	6.5	3	6	L	6.6	3	5	L	5.8
WL= 11.0													
1.0	10.0	3	6	L	6.6	3	7	L	7.5	3	6	L	6.6
2.0	9.0	3	6	L	6.6	3	7	L	7.5	3	6	L	6.6
3.0	8.0	3	6	L	6.6	3	8	L	8.0	3	7	L	7.5
4.0	7.0	3	6	L	6.6	3	8	L	8.0	3	7	L	7.5
5.0	6.0	3	6	L	6.6	3	8	L	8.0	3	7	L	7.5
6.0	5.0	3	6	L	6.6	4	6	L	6.7	3	7	L	7.5
7.0	4.0	3	6	L	6.6	4	6	L	6.7	3	7	L	7.5
8.0	3.0	3	6	L	6.6	4	6	L	6.7	3	7	L	7.5
9.0	2.0	3	7	L	7.5	4	6	L	6.7	4	6	L	6.7
10.0	1.0	3	7	L	7.5	4	6	L	6.7	4	6	L	6.7
WL= 12.0													
1.0	11.0	3	8	L	8.0	4	8	L	8.1	4	6	L	6.7
2.0	10.0	3	9	L	8.6	4	8	L	8.1	4	7	L	7.6
3.0	9.0	4	6	L	6.7	4	8	L	8.1	4	7	L	7.6

TABLE LL (Contd)

EQUALIZER SETTINGS FOR 4-2 TERMINAL REPEATERS FOR
MIXED GAUGE NONLOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

4-WIRE IMPEDANCE = 600 OHMS
2-WIRE TERMINATION = 900 OHMS

LENGTH (KFT) GA1 GA2		EQUALIZER SETTINGS BY GAUGE								
		24/22 GAUGE			26/24 GAUGE			26/22 GAUGE		
		BW = 15 HT	EQLR SLOPE	EQLR GAIN	BW = 15 HT	EQLR SLOPE	EQLR GAIN	BW = 15 HT	EQLR SLOPE	EQLR GAIN
WL= 12.0										
4.0	8.0	4	6 L	6.7	4	9 L	8.7	4	7 L	7.6
5.0	7.0	4	6 L	6.7	4	9 L	8.7	4	7 L	7.6
6.0	6.0	4	7 L	7.6	4	9 L	8.7	4	7 L	7.6
7.0	5.0	4	7 L	7.6	4	9 L	8.7	4	7 L	7.6
8.0	4.0	4	7 L	7.6	4	9 L	8.7	4	8 L	8.1
9.0	3.0	4	7 L	7.6	4	9 L	8.7	4	8 L	8.1
10.0	2.0	4	7 L	7.6	4	9 L	8.7	4	8 L	8.1
11.0	1.0	4	7 L	7.6	5	6 L	6.9	4	9 L	8.7
WL= 13.0										
1.0	12.0	4	9 L	8.7	5	8 L	8.3	4	9 L	8.7
2.0	11.0	4	9 L	8.7	5	9 L	8.9	4	10 L	9.3
3.0	10.0	4	9 L	8.7	5	9 L	8.9	4	10 L	9.3
4.0	9.0	4	9 L	8.7	5	9 L	8.9	4	11 L	9.9
5.0	8.0	4	10 L	9.3	5	9 L	8.9	5	7 L	7.7
6.0	7.0	4	10 L	9.3	5	9 L	8.9	5	7 L	7.7
7.0	6.0	4	10 L	9.3	5	9 L	8.9	5	8 L	8.3
8.0	5.0	4	10 L	9.3	5	10 L	9.5	5	8 L	8.3
9.0	4.0	4	10 L	9.3	5	10 L	9.5	5	8 L	8.3
10.0	3.0	4	11 L	9.9	5	10 L	9.5	5	9 L	8.9
11.0	2.0	5	7 L	7.7	5	10 L	9.5	5	9 L	8.9
12.0	1.0	5	7 L	7.7	0	7 NL	3.4	5	10 L	9.5
WL= 14.0										
1.0	13.0	5	9 L	8.9	0	7 NL	3.4	5	9 L	8.9
2.0	12.0	5	9 L	8.9	0	7 NL	3.4	5	10 L	9.5
3.0	11.0	5	9 L	8.9	0	7 NL	3.4	5	11 L	10.0
4.0	10.0	5	9 L	8.9	0	7 NL	3.4	5	11 L	10.0
5.0	9.0	5	10 L	9.5	0	7 NL	3.4	5	12 L	10.6
6.0	8.0	5	10 L	9.5	0	8 NL	3.7	5	12 L	10.6
7.0	7.0	5	10 L	9.5	0	8 NL	3.7	0	7 NL	3.4
8.0	6.0	5	10 L	9.5	0	8 NL	3.7	0	7 NL	3.4
9.0	5.0	5	11 L	10.0	6	10 L	9.7	0	7 NL	3.4
10.0	4.0	5	11 L	10.0	6	10 L	9.7	0	7 NL	3.4
11.0	3.0	5	11 L	10.0	6	10 L	9.7	6	9 L	9.1
12.0	2.0	5	12 L	10.6	6	11 L	10.2	6	10 L	9.7
13.0	1.0	5	12 L	10.6	6	12 L	10.7	6	11 L	10.2
WL= 15.0										

TABLE LL (Contd)

EQUALIZER SETTINGS FOR 4-2 TERMINAL REPEATERS FOR
MIXED GAUGE NONLOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

4-WIRE IMPEDANCE = 600 OHMS
2-WIRE TERMINATION = 900 OHMS

LENGTH (KFT) GA1 GA2	EQUALIZER SETTINGS BY GAUGE								
	24/22 GAUGE			26/24 GAUGE			26/22 GAUGE		
	BW = 15 HT	EQLR SLOPE	GAIN	BW = 15 HT	EQLR SLOPE	GAIN	BW = 15 HT	EQLR SLOPE	GAIN
WL= 15.0									
1.0 14.0	5	14	L 11.5	6	15	L 12.1	5	15	L 11.9
2.0 13.0	5	15	L 11.9	6	15	L 12.1	0	7	NL 3.4
3.0 12.0	5	15	L 11.9	6	15	L 12.1	0	8	NL 3.7
4.0 11.0	0	7	NL 3.4	6	15	L 12.1	0	8	NL 3.7
5.0 10.0	0	7	NL 3.4	6	15	L 12.1	0	8	NL 3.7
6.0 9.0	0	7	NL 3.4	1	8	NL 3.8	0	8	NL 3.7
7.0 8.0	0	7	NL 3.4	1	8	NL 3.8	6	12	L 10.7
8.0 7.0	0	7	NL 3.4	1	8	NL 3.8	6	13	L 11.2
9.0 6.0	0	8	NL 3.7	1	8	NL 3.8	6	14	L 11.7
10.0 5.0	0	8	NL 3.7	1	8	NL 3.8	6	15	L 12.1
11.0 4.0	0	8	NL 3.7	1	8	NL 3.8	1	8	NL 3.8
12.0 3.0	0	8	NL 3.7	1	8	NL 3.8	1	8	NL 3.8
13.0 2.0	0	8	NL 3.7	1	8	NL 3.8	1	8	NL 3.8
14.0 1.0	0	8	NL 3.7	1	8	NL 3.8	1	8	NL 3.8
WL= 16.0									
1.0 15.0	0	8	NL 3.7	1	8	NL 3.8	0	8	NL 3.7
2.0 14.0	0	8	NL 3.7	1	9	NL 4.2	0	8	NL 3.7
3.0 13.0	0	8	NL 3.7	1	9	NL 4.2	6	15	L 12.1
4.0 12.0	0	8	NL 3.7	1	9	NL 4.2	6	15	L 12.1
5.0 11.0	0	8	NL 3.7	1	9	NL 4.2	0	9	NL 4.2
6.0 10.0	6	15	L 12.1	1	9	NL 4.2	1	8	NL 3.8
7.0 9.0	6	15	L 12.1	1	9	NL 4.2	1	8	NL 3.8
8.0 8.0	6	15	L 12.1	1	9	NL 4.2	1	8	NL 3.8
9.0 7.0	6	15	L 12.1	7	15	L 12.4	1	9	NL 4.2
10.0 6.0	6	15	L 12.1	7	15	L 12.4	1	9	NL 4.2
11.0 5.0	6	15	L 12.1	7	15	L 12.4	7	14	L 11.9
12.0 4.0	1	8	NL 3.8	7	15	L 12.4	7	15	L 12.4
13.0 3.0	1	8	NL 3.8	2	9	NL 4.3	7	15	L 12.4
14.0 2.0	1	8	NL 3.8	2	9	NL 4.3	7	15	L 12.4
15.0 1.0	1	8	NL 3.8	2	9	NL 4.3	2	9	NL 4.3
WL= 17.0									
1.0 16.0	0	9	NL 4.2	1	10	NL 4.7	0	9	NL 4.2
2.0 15.0	0	9	NL 4.2	1	10	NL 4.7	0	9	NL 4.2
3.0 14.0	0	9	NL 4.2	1	10	NL 4.7	1	9	NL 4.2
4.0 13.0	0	9	NL 4.2	1	10	NL 4.7	1	9	NL 4.2
5.0 12.0	0	9	NL 4.2	2	9	NL 4.3	1	9	NL 4.2
6.0 11.0	1	8	NL 3.8	2	9	NL 4.3	1	9	NL 4.2

TABLE LL (Contd)

EQUALIZER SETTINGS FOR 4-2 TERMINAL REPEATERS FOR
MIXED GAUGE NONLOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

4-WIRE IMPEDANCE = 600 OHMS
2-WIRE TERMINATION = 900 OHMS

LENGTH (KFT) GA1 GA2		EQUALIZER SETTINGS BY GAUGE											
		24/22 GAUGE			26/24 GAUGE			26/22 GAUGE					
		BW = 15	EQLR		BW = 15	EQLR		BW = 15	EQLR				
		HT	SLOPE	GAIN	HT	SLOPE	GAIN	HT	SLOPE	GAIN			
WL= 17.0													
7.0	10.0	1	9	NL	4.2	2	9	NL	4.3	1	9	NL	4.2
8.0	9.0	1	9	NL	4.2	2	9	NL	4.3	1	9	NL	4.2
9.0	8.0	1	9	NL	4.2	2	9	NL	4.3	7	15	L	12.4
10.0	7.0	1	9	NL	4.2	2	9	NL	4.3	2	9	NL	4.3
11.0	6.0	1	9	NL	4.2	2	10	NL	4.8	2	9	NL	4.3
12.0	5.0	1	9	NL	4.2	2	10	NL	4.8	2	9	NL	4.3
13.0	4.0	1	9	NL	4.2	2	10	NL	4.8	2	9	NL	4.3
14.0	3.0	1	9	NL	4.2	2	10	NL	4.8	2	9	NL	4.3
15.0	2.0	1	9	NL	4.2	2	10	NL	4.8	2	10	NL	4.8
16.0	1.0	1	9	NL	4.2	2	10	NL	4.8	2	10	NL	4.8
WL= 18.0													
1.0	17.0	1	9	NL	4.2	2	10	NL	4.8	1	9	NL	4.2
2.0	16.0	1	9	NL	4.2	2	10	NL	4.8	1	9	NL	4.2
3.0	15.0	1	9	NL	4.2	2	10	NL	4.8	1	10	NL	4.7
4.0	14.0	1	9	NL	4.2	2	10	NL	4.8	1	10	NL	4.7
5.0	13.0	1	9	NL	4.2	2	10	NL	4.8	1	10	NL	4.7
6.0	12.0	1	9	NL	4.2	2	10	NL	4.8	1	10	NL	4.7
7.0	11.0	1	9	NL	4.2	2	10	NL	4.8	2	9	NL	4.3
8.0	10.0	1	10	NL	4.7	2	10	NL	4.8	2	9	NL	4.3
9.0	9.0	1	10	NL	4.7	2	11	NL	5.2	2	10	NL	4.8
10.0	8.0	1	10	NL	4.7	2	11	NL	5.2	2	10	NL	4.8
11.0	7.0	1	10	NL	4.7	3	10	NL	4.9	2	10	NL	4.8
12.0	6.0	1	10	NL	4.7	3	10	NL	4.9	2	10	NL	4.8
13.0	5.0	1	10	NL	4.7	3	10	NL	4.9	3	9	NL	4.4
14.0	4.0	1	10	NL	4.7	3	10	NL	4.9	3	10	NL	4.9
15.0	3.0	2	9	NL	4.3	3	10	NL	4.9	3	10	NL	4.9
16.0	2.0	2	9	NL	4.3	3	10	NL	4.9	3	10	NL	4.9
17.0	1.0	2	9	NL	4.3	3	10	NL	4.9	3	10	NL	4.9

TABLE MM

EQUALIZER SETTINGS FOR 4-2 TERMINAL REPEATERS FOR
MIXED GAUGE NONLOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

4-WIRE IMPEDANCE = 600 OHMS
2-WIRE TERMINATION = 600 OHMS

LENGTH (KFT) GA1 GA2		EQUALIZER SETTINGS BY GAUGE												
		24/22 GAUGE			26/24 GAUGE			26/22 GAUGE						
		BW = 15	EQLR			BW = 15	EQLR			BW = 15	EQLR			
		HT	SLOPE	GAIN			HT	SLOPE	GAIN			HT	SLOPE	GAIN
WL= 2.0														
1.0	1.0	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4	
WL= 3.0														
1.0	2.0	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4	
2.0	1.0	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4	
WL= 4.0														
1.0	3.0	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4	
2.0	2.0	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4	
3.0	1.0	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4	
WL= 5.0														
1.0	4.0	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6	
2.0	3.0	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6	
3.0	2.0	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6	
4.0	1.0	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6	
WL= 6.0														
1.0	5.0	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6	
2.0	4.0	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6	
3.0	3.0	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6	
4.0	2.0	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6	
5.0	1.0	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6	
WL= 7.0														
1.0	6.0	0	3	L	3.7	0	3	L	3.7	0	3	L	3.7	
2.0	5.0	0	3	L	3.7	0	3	L	3.7	0	3	L	3.7	
3.0	4.0	0	3	L	3.7	0	3	L	3.7	0	3	L	3.7	
4.0	3.0	0	3	L	3.7	0	3	L	3.7	0	3	L	3.7	
5.0	2.0	0	3	L	3.7	0	3	L	3.7	0	3	L	3.7	
6.0	1.0	0	3	L	3.7	0	3	L	3.7	0	3	L	3.7	
WL= 8.0														
1.0	7.0	0	3	L	3.7	0	4	L	4.7	0	3	L	3.7	
2.0	6.0	0	3	L	3.7	0	4	L	4.7	0	3	L	3.7	
3.0	5.0	0	3	L	3.7	0	4	L	4.7	0	3	L	3.7	
4.0	4.0	0	3	L	3.7	0	4	L	4.7	0	3	L	3.7	
5.0	3.0	0	3	L	3.7	0	4	L	4.7	0	3	L	3.7	
6.0	2.0	0	3	L	3.7	0	4	L	4.7	0	4	L	4.7	

TABLE MM (Contd)

EQUALIZER SETTINGS FOR 4-2 TERMINAL REPEATERS FOR
MIXED GAUGE NONLOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

4-WIRE IMPEDANCE = 600 OHMS
2-WIRE TERMINATION = 600 OHMS

LENGTH (KFT) GA1 GA2		EQUALIZER SETTINGS BY GAUGE											
		24/22 GAUGE BW = 15 EQLR HT SLOPE GAIN			26/24 GAUGE BW = 15 EQLR HT SLOPE GAIN			26/22 GAUGE BW = 15 EQLR HT SLOPE GAIN					
WL= 8.0													
7.0	1.0	0	4	L	4.7	0	4	L	4.7	0	4	L	4.7
WL= 9.0													
1.0	8.0	0	4	L	4.7	0	5	L	5.5	0	4	L	4.7
2.0	7.0	0	4	L	4.7	0	5	L	5.5	0	4	L	4.7
3.0	6.0	0	4	L	4.7	0	5	L	5.5	0	4	L	4.7
4.0	5.0	0	4	L	4.7	0	5	L	5.5	0	4	L	4.7
5.0	4.0	0	4	L	4.7	0	5	L	5.5	0	4	L	4.7
6.0	3.0	0	4	L	4.7	0	5	L	5.5	0	4	L	4.7
7.0	2.0	0	4	L	4.7	0	5	L	5.5	0	5	L	5.5
8.0	1.0	0	4	L	4.7	0	5	L	5.5	0	5	L	5.5
WL= 10.0													
1.0	9.0	0	5	L	5.5	1	5	L	5.6	0	5	L	5.5
2.0	8.0	0	5	L	5.5	1	5	L	5.6	0	5	L	5.5
3.0	7.0	0	5	L	5.5	1	5	L	5.6	1	4	L	4.7
4.0	6.0	0	5	L	5.5	1	5	L	5.6	1	4	L	4.7
5.0	5.0	0	5	L	5.5	1	5	L	5.6	1	5	L	5.6
6.0	4.0	1	4	L	4.7	1	5	L	5.6	1	5	L	5.6
7.0	3.0	1	5	L	5.6	1	5	L	5.6	1	5	L	5.6
8.0	2.0	1	5	L	5.6	1	5	L	5.6	1	5	L	5.6
9.0	1.0	1	5	L	5.6	1	5	L	5.6	1	5	L	5.6
WL= 11.0													
1.0	10.0	1	5	L	5.6	2	5	L	5.7	1	6	L	6.4
2.0	9.0	1	6	L	6.4	2	5	L	5.7	1	6	L	6.4
3.0	8.0	1	6	L	6.4	2	5	L	5.7	1	6	L	6.4
4.0	7.0	1	6	L	6.4	2	5	L	5.7	1	6	L	6.4
5.0	6.0	1	6	L	6.4	2	5	L	5.7	1	6	L	6.4
6.0	5.0	1	6	L	6.4	2	5	L	5.7	2	5	L	5.7
7.0	4.0	1	6	L	6.4	2	5	L	5.7	2	5	L	5.7
8.0	3.0	1	6	L	6.4	2	6	L	6.5	2	5	L	5.7
9.0	2.0	2	5	L	5.7	2	6	L	6.5	2	5	L	5.7
10.0	1.0	2	5	L	5.7	2	6	L	6.5	2	6	L	6.5
WL= 12.0													
1.0	11.0	2	6	L	6.5	3	5	L	5.8	2	6	L	6.5
2.0	10.0	2	6	L	6.5	3	6	L	6.6	2	6	L	6.5
3.0	9.0	2	6	L	6.5	3	6	L	6.6	2	6	L	6.5

TABLE MM (Contd)

EQUALIZER SETTINGS FOR 4-2 TERMINAL REPEATERS FOR
MIXED GAUGE NONLOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

4-WIRE IMPEDANCE = 600 OHMS
2-WIRE TERMINATION = 600 OHMS

LENGTH (KFT) GA1 GA2		EQUALIZER SETTINGS BY GAUGE											
		24/22 GAUGE			26/24 GAUGE			26/22 GAUGE					
		BW = 15	EQLR			BW = 15	EQLR			BW = 15	EQLR		
		HT	SLOPE	GAIN			HT	SLOPE	GAIN	HT	SLOPE	GAIN	
WL= 12.0													
4.0	8.0	2	6	L	6.5	3	6	L	6.6	2	6	L	6.5
5.0	7.0	2	6	L	6.5	3	6	L	6.6	2	6	L	6.5
6.0	6.0	2	6	L	6.5	3	6	L	6.6	2	6	L	6.5
7.0	5.0	2	6	L	6.5	3	6	L	6.6	2	6	L	6.5
8.0	4.0	2	6	L	6.5	3	6	L	6.6	3	5	L	5.8
9.0	3.0	2	6	L	6.5	3	6	L	6.6	3	5	L	5.8
10.0	2.0	2	6	L	6.5	3	6	L	6.6	3	6	L	6.6
11.0	1.0	2	7	L	7.4	3	6	L	6.6	3	6	L	6.6
WL= 13.0													
1.0	12.0	3	6	L	6.6	3	7	L	7.5	3	6	L	6.6
2.0	11.0	3	6	L	6.6	3	8	L	8.0	3	6	L	6.6
3.0	10.0	3	6	L	6.6	3	8	L	8.0	3	6	L	6.6
4.0	9.0	3	6	L	6.6	4	6	L	6.7	3	6	L	6.6
5.0	8.0	3	6	L	6.6	4	6	L	6.7	3	6	L	6.6
6.0	7.0	3	6	L	6.6	4	6	L	6.7	3	6	L	6.6
7.0	6.0	3	6	L	6.6	4	6	L	6.7	3	6	L	6.6
8.0	5.0	3	6	L	6.6	4	6	L	6.7	3	7	L	7.5
9.0	4.0	3	6	L	6.6	4	6	L	6.7	3	7	L	7.5
10.0	3.0	3	6	L	6.6	4	6	L	6.7	4	6	L	6.7
11.0	2.0	3	7	L	7.5	4	7	L	7.6	4	6	L	6.7
12.0	1.0	3	7	L	7.5	4	7	L	7.6	4	7	L	7.6
WL= 14.0													
1.0	13.0	3	7	L	7.5	4	8	L	8.1	3	8	L	8.0
2.0	12.0	3	8	L	8.0	4	8	L	8.1	3	8	L	8.0
3.0	11.0	3	8	L	8.0	4	8	L	8.1	3	8	L	8.0
4.0	10.0	3	8	L	8.0	4	8	L	8.1	4	6	L	6.7
5.0	9.0	3	8	L	8.0	4	8	L	8.1	4	6	L	6.7
6.0	8.0	3	8	L	8.0	4	8	L	8.1	4	6	L	6.7
7.0	7.0	3	8	L	8.0	4	9	L	8.7	4	7	L	7.6
8.0	6.0	4	6	L	6.7	4	9	L	8.7	4	7	L	7.6
9.0	5.0	4	6	L	6.7	4	9	L	8.7	4	7	L	7.6
10.0	4.0	4	6	L	6.7	5	6	L	6.9	4	7	L	7.6
11.0	3.0	4	6	L	6.7	5	6	L	6.9	4	8	L	8.1
12.0	2.0	4	7	L	7.6	5	7	L	7.7	5	6	L	6.9
13.0	1.0	4	7	L	7.6	5	7	L	7.7	5	7	L	7.7
WL= 15.0													

TABLE MM (Contd)

EQUALIZER SETTINGS FOR 4-2 TERMINAL REPEATERS FOR
MIXED GAUGE NONLOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

4-WIRE IMPEDANCE = 600 OHMS
2-WIRE TERMINATION = 600 OHMS

LENGTH (KFT) GA1 GA2		EQUALIZER SETTINGS BY GAUGE								
		24/22 GAUGE			26/24 GAUGE			26/22 GAUGE		
		BW = 15 HT	EQLR SLOPE	EQLR GAIN	BW = 15 HT	EQLR SLOPE	EQLR GAIN	BW = 15 HT	EQLR SLOPE	EQLR GAIN
WL= 15.0										
1.0	14.0	4	7 L	7.6	5	8 L	8.3	4	8 L	8.1
2.0	13.0	4	7 L	7.6	5	8 L	8.3	4	8 L	8.1
3.0	12.0	4	8 L	8.1	5	8 L	8.3	4	8 L	8.1
4.0	11.0	4	8 L	8.1	5	8 L	8.3	4	9 L	8.7
5.0	10.0	4	8 L	8.1	5	9 L	8.9	4	9 L	8.7
6.0	9.0	4	8 L	8.1	5	9 L	8.9	4	9 L	8.7
7.0	8.0	4	8 L	8.1	5	9 L	8.9	4	9 L	8.7
8.0	7.0	4	8 L	8.1	5	9 L	8.9	5	7 L	7.7
9.0	6.0	4	9 L	8.7	5	9 L	8.9	5	7 L	7.7
10.0	5.0	4	9 L	8.7	5	9 L	8.9	5	7 L	7.7
11.0	4.0	4	9 L	8.7	5	10 L	9.5	5	8 L	8.3
12.0	3.0	4	9 L	8.7	0	7 NL	3.4	5	9 L	8.9
13.0	2.0	4	10 L	9.3	0	7 NL	3.4	5	10 L	9.5
14.0	1.0	5	7 L	7.7	0	7 NL	3.4	0	7 NL	3.4
WL= 16.0										
1.0	15.0	4	11 L	9.9	0	7 NL	3.4	4	11 L	9.9
2.0	14.0	4	11 L	9.9	0	7 NL	3.4	5	8 L	8.3
3.0	13.0	4	11 L	9.9	0	7 NL	3.4	5	8 L	8.3
4.0	12.0	4	11 L	9.9	0	7 NL	3.4	5	8 L	8.3
5.0	11.0	5	7 L	7.7	0	7 NL	3.4	5	9 L	8.9
6.0	10.0	5	8 L	8.3	0	7 NL	3.4	5	9 L	8.9
7.0	9.0	5	8 L	8.3	0	7 NL	3.4	5	9 L	8.9
8.0	8.0	5	8 L	8.3	0	7 NL	3.4	5	10 L	9.5
9.0	7.0	5	8 L	8.3	6	9 L	9.1	5	10 L	9.5
10.0	6.0	5	8 L	8.3	6	9 L	9.1	0	7 NL	3.4
11.0	5.0	5	9 L	8.9	6	9 L	9.1	0	7 NL	3.4
12.0	4.0	5	9 L	8.9	6	10 L	9.7	0	7 NL	3.4
13.0	3.0	5	9 L	8.9	6	11 L	10.2	6	9 L	9.1
14.0	2.0	5	10 L	9.5	6	11 L	10.2	6	10 L	9.7
15.0	1.0	5	11 L	10.0	6	13 L	11.2	6	12 L	10.7
WL= 17.0										
1.0	16.0	5	10 L	9.5	6	12 L	10.7	5	11 L	10.0
2.0	15.0	5	10 L	9.5	6	13 L	11.2	5	12 L	10.6
3.0	14.0	5	11 L	10.0	6	13 L	11.2	5	12 L	10.6
4.0	13.0	5	11 L	10.0	6	14 L	11.7	5	13 L	11.0
5.0	12.0	5	11 L	10.0	6	14 L	11.7	0	7 NL	3.4
6.0	11.0	5	11 L	10.0	6	14 L	11.7	0	7 NL	3.4

TABLE MM (Contd)

EQUALIZER SETTINGS FOR 4-2 TERMINAL REPEATERS FOR
MIXED GAUGE NONLOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

4-WIRE IMPEDANCE = 600 OHMS
2-WIRE TERMINATION = 600 OHMS

LENGTH (KFT) GA1 GA2		EQUALIZER SETTINGS BY GAUGE										
		24/22 GAUGE			26/24 GAUGE			26/22 GAUGE				
		BW = 15 HT	EQLR SLOPE	GAIN	BW = 15 HT	EQLR SLOPE	GAIN	BW = 15 HT	EQLR SLOPE	GAIN		
WL= 17.0												
7.0	10.0	5	12 L	10.6	6	15 L	12.1	0	7 NL	3.4		
8.0	9.0	5	12 L	10.6	1	8 NL	3.8	0	7 NL	3.4		
9.0	8.0	5	12 L	10.6	1	8 NL	3.8	6	9 L	9.1		
10.0	7.0	0	7 NL	3.4	1	8 NL	3.8	6	10 L	9.7		
11.0	6.0	0	7 NL	3.4	1	8 NL	3.8	6	11 L	10.2		
12.0	5.0	0	7 NL	3.4	1	8 NL	3.8	6	12 L	10.7		
13.0	4.0	0	7 NL	3.4	1	8 NL	3.8	1	8 NL	3.8		
14.0	3.0	0	7 NL	3.4	7	10 L	9.9	1	8 NL	3.8		
15.0	2.0	0	7 NL	3.4	7	11 L	10.4	1	8 NL	3.8		
16.0	1.0	0	8 NL	3.7	7	12 L	11.0	7	11 L	10.4		
WL= 18.0												
1.0	17.0	0	7 NL	3.4	1	8 NL	3.8	0	7 NL	3.4		
2.0	16.0	0	7 NL	3.4	1	8 NL	3.8	0	8 NL	3.7		
3.0	15.0	0	7 NL	3.4	1	8 NL	3.8	0	8 NL	3.7		
4.0	14.0	0	7 NL	3.4	1	8 NL	3.8	0	8 NL	3.7		
5.0	13.0	0	7 NL	3.4	1	9 NL	4.2	0	8 NL	3.7		
6.0	12.0	0	8 NL	3.7	1	9 NL	4.2	6	13 L	11.2		
7.0	11.0	0	8 NL	3.7	1	9 NL	4.2	6	14 L	11.7		
8.0	10.0	0	8 NL	3.7	7	13 L	11.5	6	14 L	11.7		
9.0	9.0	0	8 NL	3.7	7	14 L	11.9	1	8 NL	3.8		
10.0	8.0	0	8 NL	3.7	7	14 L	11.9	1	8 NL	3.8		
11.0	7.0	0	8 NL	3.7	7	15 L	12.4	1	8 NL	3.8		
12.0	6.0	6	12 L	10.7	7	15 L	12.4	7	10 L	9.9		
13.0	5.0	6	13 L	11.2	2	8 NL	3.9	7	11 L	10.4		
14.0	4.0	6	14 L	11.7	2	8 NL	3.9	7	12 L	11.0		
15.0	3.0	6	15 L	12.1	2	9 NL	4.3	7	15 L	12.4		
16.0	2.0	6	15 L	12.1	2	9 NL	4.3	2	8 NL	3.9		
17.0	1.0	1	8 NL	3.8	2	9 NL	4.3	2	9 NL	4.3		

TABLE NN

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE REPEATERS ON 19-GAUGE H88 LOADED 4-WIRE FACILITIES WITH H88 LOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
 4-WIRE TERMINATION = 1200 OHMS
 2-WIRE TERMINATION = 900 OHMS

LENGTH (KFT)		2-WIRE = 19H88		2-WIRE = 22H88		2-WIRE = 24H88		2-WIRE = 26H88	
4-WIRE 19H88	2-WIRE	BW = 15 HT	EQLR SLOPE						
			GAIN		GAIN		GAIN		GAIN
12.0	12.0	0 3	L 3.7	0 3	L 3.7	0 3	L 3.7	0 5	L 5.5
12.0	18.0	0 3	L 3.7	0 3	L 3.7	0 4	L 4.7	0 8	L 7.8
12.0	24.0	0 3	L 3.7	0 4	L 4.7	0 7	L 7.2	1 15	L 11.5
12.0	30.0	0 3	L 3.7	0 4	L 4.7	0 9	L 8.4	1 15	L 11.5
12.0	36.0	1 4	L 4.7	0 6	L 6.3	0 15	L 11.4		
12.0	42.0	0 3	L 3.7	0 6	L 6.3	0 15	L 11.4		
12.0	48.0	0 4	L 4.7	0 7	L 7.2				
12.0	54.0	1 3	L 3.8	0 8	L 7.8				
12.0	60.0	0 4	L 4.7	0 9	L 8.4				
12.0	66.0	1 4	L 4.7	0 10	L 9.0				
12.0	72.0	0 4	L 4.7						
12.0	78.0	1 4	L 4.7						
18.0	12.0	0 3	L 3.7	0 3	L 3.7	0 4	L 4.7	0 6	L 6.3
18.0	18.0	0 2	L 2.6	0 3	L 3.7	0 4	L 4.7	0 12	L 10.0
18.0	24.0	0 3	L 3.7	0 4	L 4.7	0 8	L 7.8	0 15	L 11.4
18.0	30.0	0 3	L 3.7	0 5	L 5.5	0 13	L 10.5	1 15	L 11.5
18.0	36.0	1 3	L 3.8	0 6	L 6.3	0 15	L 11.4		
18.0	42.0	0 4	L 4.7	0 6	L 6.3	0 15	L 11.4		
18.0	48.0	0 4	L 4.7	0 7	L 7.2				
18.0	54.0	0 5	L 5.5	0 8	L 7.8				
18.0	60.0	0 4	L 4.7	0 9	L 8.4				
18.0	66.0	1 4	L 4.7	0 11	L 9.5				
18.0	72.0	0 5	L 5.5						
18.0	78.0	0 8	L 7.8						
24.0	12.0	0 3	L 3.7	0 4	L 4.7	0 4	L 4.7	0 6	L 6.3
24.0	18.0	0 2	L 2.6	0 3	L 3.7	0 4	L 4.7	0 13	L 10.5
24.0	24.0	0 6	L 6.3	0 4	L 4.7	0 9	L 8.4	1 15	L 11.5
24.0	30.0	0 4	L 4.7	0 5	L 5.5	0 14	L 11.0	1 15	L 11.5
24.0	36.0	2 1	L 1.5	0 9	L 8.4	0 15	L 11.4		
24.0	42.0	0 4	L 4.7	0 6	L 6.3	0 15	L 11.4		
24.0	48.0	0 5	L 5.5	0 8	L 7.8				
24.0	54.0	1 3	L 3.8	0 9	L 8.4				
24.0	60.0	0 5	L 5.5	0 10	L 9.0				
24.0	66.0	1 7	L 7.3	0 12	L 10.0				
24.0	72.0	0 5	L 5.5						
24.0	78.0	1 4	L 4.7						

TABLE NN (Contd)

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE
REPEATERS ON 19-GAUGE H88 LOADED 4-WIRE FACILITIES WITH
H88 LOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68°

END SECTIONS = 3.0 KFT
4-WIRE TERMINATION = 1200 OHMS
2-WIRE TERMINATION = 900 OHMS

LENGTH (KFT)		2-WIRE = 19H88		2-WIRE = 22H88		2-WIRE = 24H88		2-WIRE = 26H88	
4-WIRE 19H88	2-WIRE	BW = 15 HT	EQLR SLOPE	BW = 15 HT	EQLR GAIN	BW = 15 HT	EQLR SLOPE	BW = 15 HT	EQLR GAIN
30.0	12.0	0 3	L 3.7	0 4	L 4.7	0 4	L 4.7	0 6	L 6.3
30.0	18.0	0 3	L 3.7	0 3	L 3.7	0 5	L 5.5	0 12	L 10.0
30.0	24.0	0 4	L 4.7	0 5	L 5.5	0 9	L 8.4	1 15	L 11.5
30.0	30.0	0 3	L 3.7	0 5	L 5.5	0 14	L 11.0	1 15	L 11.5
30.0	36.0	1 5	L 5.6	0 7	L 7.2	0 15	L 11.4		
30.0	42.0	0 4	L 4.7	0 7	L 7.2	0 15	L 11.4		
30.0	48.0	0 5	L 5.5	0 9	L 8.4				
30.0	54.0	1 4	L 4.7	0 10	L 9.0				
30.0	60.0	0 5	L 5.5	0 11	L 9.5				
30.0	66.0	1 5	L 5.6	0 14	L 11.0				
30.0	72.0	0 5	L 5.5						
30.0	78.0	1 4	L 4.7						
36.0	12.0	0 3	L 3.7	0 3	L 3.7	0 4	L 4.7	0 6	L 6.3
36.0	18.0	0 5	L 5.5	0 4	L 4.7	0 5	L 5.5	1 9	L 8.4
36.0	24.0	1 3	L 3.8	0 5	L 5.5	1 6	L 6.4	1 15	L 11.5
36.0	30.0	0 3	L 3.7	0 5	L 5.5	0 13	L 10.5	1 15	L 11.5
36.0	36.0	2 2	L 2.8	1 5	L 5.6	1 15	L 11.5		
36.0	42.0	0 4	L 4.7	0 7	L 7.2	0 15	L 11.4		
36.0	48.0	1 4	L 4.7	1 6	L 6.4				
36.0	54.0	1 4	L 4.7	0 11	L 9.5				
36.0	60.0	1 4	L 4.7	0 12	L 10.0				
36.0	66.0	2 3	L 3.8	1 8	L 7.8				
36.0	72.0	1 4	L 4.7						
36.0	78.0	2 3	L 3.8						
42.0	12.0	0 3	L 3.7	0 3	L 3.7	0 4	L 4.7	0 5	L 5.5
42.0	18.0	0 4	L 4.7	0 3	L 3.7	0 5	L 5.5	1 8	L 7.8
42.0	24.0	1 3	L 3.8	0 4	L 4.7	1 6	L 6.4	1 15	L 11.5
42.0	30.0	0 3	L 3.7	0 5	L 5.5	0 12	L 10.0	1 15	L 11.5
42.0	36.0	2 2	L 2.8	1 5	L 5.6	1 14	L 11.1		
42.0	42.0	0 4	L 4.7	0 6	L 6.3	0 15	L 11.4		
42.0	48.0	1 3	L 3.8	1 5	L 5.6				
42.0	54.0	1 4	L 4.7	0 10	L 9.0				
42.0	60.0	1 3	L 3.8	0 10	L 9.0				
42.0	66.0	2 3	L 3.8	1 7	L 7.3				
42.0	72.0	1 4	L 4.7						
42.0	78.0	2 2	L 2.8						

TABLE NN (Contd)

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE REPEATERS ON 19-GAUGE H88 LOADED 4-WIRE FACILITIES WITH H88 LOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
 4-WIRE TERMINATION = 1200 OHMS
 2-WIRE TERMINATION = 900 OHMS

LENGTH (KFT)		2-WIRE = 19H88		2-WIRE = 22H88		2-WIRE = 24H88		2-WIRE = 26H88									
4-WIRE	2-WIRE	BW = 15	EQLR														
19H88		HT	SLOPE	HT	SLOPE	HT	SLOPE	HT	SLOPE								
			GAIN		GAIN		GAIN		GAIN								
48.0	12.0	0	3	L	3.7	0	3	L	3.7	0	5	L	5.5				
48.0	18.0	0	5	L	5.5	0	3	L	3.7	0	11	L	9.5				
48.0	24.0	1	3	L	3.8	0	4	L	4.7	1	6	L	6.4				
48.0	30.0	0	3	L	3.7	0	5	L	5.5	0	11	L	9.5				
48.0	36.0	2	2	L	2.8	1	4	L	4.7	1	11	L	9.6				
48.0	42.0	0	4	L	4.7	0	6	L	6.3	0	15	L	11.4				
48.0	48.0	1	3	L	3.8	0	12	L	10.0								
48.0	54.0	1	3	L	3.8	0	9	L	8.4								
48.0	60.0	1	3	L	3.8	0	9	L	8.4								
48.0	66.0	2	2	L	2.8	1	7	L	7.3								
48.0	72.0	1	4	L	4.7												
48.0	78.0	1	6	L	6.4												
54.0	12.0	0	3	L	3.7	0	3	L	3.7	0	4	L	4.7	0	5	L	5.5
54.0	18.0	1	1	L	1.5	0	5	L	5.5	0	5	L	5.5	1	8	L	7.8
54.0	24.0	1	3	L	3.8	1	3	L	3.8	1	6	L	6.4	2	15	L	11.6
54.0	30.0	0	3	L	3.7	0	5	L	5.5	0	12	L	10.0	2	15	L	11.6
54.0	36.0	2	3	L	3.8	1	4	L	4.7	1	11	L	9.6				
54.0	42.0	0	4	L	4.7	0	6	L	6.3	1	15	L	11.5				
54.0	48.0	1	3	L	3.8	1	5	L	5.6								
54.0	54.0	1	5	L	5.6	1	5	L	5.6								
54.0	60.0	1	3	L	3.8	1	6	L	6.4								
54.0	66.0	2	3	L	3.8	1	6	L	6.4								
54.0	72.0	1	3	L	3.8												
54.0	78.0	2	2	L	2.8												
60.0	12.0	0	3	L	3.7	0	3	L	3.7	0	4	L	4.7	0	5	L	5.5
60.0	18.0	1	1	L	1.5	0	5	L	5.5	0	5	L	5.5	1	7	L	7.3
60.0	24.0	1	3	L	3.8	1	3	L	3.8	1	6	L	6.4	2	15	L	11.6
60.0	30.0	0	3	L	3.7	0	4	L	4.7	0	11	L	9.5	2	15	L	11.6
60.0	36.0	2	3	L	3.8	1	4	L	4.7	1	11	L	9.6				
60.0	42.0	0	4	L	4.7	0	6	L	6.3	1	15	L	11.5				
60.0	48.0	1	3	L	3.8	1	5	L	5.6								
60.0	54.0	1	5	L	5.6	1	5	L	5.6								
60.0	60.0	1	3	L	3.8	1	6	L	6.4								
60.0	66.0	2	3	L	3.8	1	7	L	7.3								
60.0	72.0	1	4	L	4.7												
60.0	78.0	2	2	L	2.8												

TABLE NN (Contd)

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE
 REPEATERS ON 19-GAUGE H88 LOADED 4-WIRE FACILITIES WITH
 H88 LOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
 4-WIRE TERMINATION = 1200 OHMS
 2-WIRE TERMINATION = 900 OHMS

LENGTH (KFT)		2-WIRE = 19H88		2-WIRE = 22H88		2-WIRE = 24H88		2-WIRE = 26H88		
4-WIRE	2-WIRE	BW = 15	EQLR							
19H88		HT	SLOPE	HT	SLOPE	HT	SLOPE	HT	SLOPE	
			GAIN		GAIN		GAIN		GAIN	
66.0	12.0	0	3 L	3.7	0	3 L	3.7	0	5 L	5.5
66.0	18.0	1	2 L	2.7	1	2 L	2.7	1	8 L	7.8
66.0	24.0	2	2 L	2.8	1	3 L	3.8	2	15 L	11.6
66.0	30.0	0	3 L	3.7	0	5 L	5.5	2	15 L	11.6
66.0	36.0	3	1 L	1.6	2	3 L	3.8	1	14 L	11.1
66.0	42.0	0	4 L	4.7	0	6 L	6.3	1	15 L	11.5
66.0	48.0	2	2 L	2.8	1	6 L	6.4			
66.0	54.0	2	2 L	2.8	1	6 L	6.4			
66.0	60.0	1	3 L	3.8	1	7 L	7.3			
66.0	66.0	3	1 L	1.6	2	4 L	4.8			
66.0	72.0	1	4 L	4.7						
66.0	78.0	2	3 L	3.8						
72.0	12.0	0	3 L	3.7	0	3 L	3.7	0	5 L	5.5
72.0	18.0	1	2 L	2.7	1	2 L	2.7	1	8 L	7.8
72.0	24.0	2	2 L	2.8	1	3 L	3.8	2	15 L	11.6
72.0	30.0	0	4 L	4.7	0	5 L	5.5	2	15 L	11.6
72.0	36.0	3	1 L	1.6	2	3 L	3.8			
72.0	42.0	0	4 L	4.7	0	7 L	7.2	1	15 L	11.5
72.0	48.0	2	2 L	2.8	1	6 L	6.4			
72.0	54.0	2	2 L	2.8	1	6 L	6.4			
72.0	60.0	1	4 L	4.7	1	7 L	7.3			
72.0	66.0	3	1 L	1.6	2	4 L	4.8			
72.0	72.0	2	3 L	3.8						
72.0	78.0	2	3 L	3.8						
78.0	12.0	0	3 L	3.7	0	4 L	4.7	0	6 L	6.3
78.0	18.0	1	2 L	2.7	1	2 L	2.7	1	9 L	8.4
78.0	24.0	2	2 L	2.8	1	4 L	4.7	2	15 L	11.6
78.0	30.0	0	4 L	4.7	0	5 L	5.5	1	10 L	9.0
78.0	36.0	3	1 L	1.6	2	3 L	3.8	2	7 L	7.4
78.0	42.0	0	4 L	4.7	0	7 L	7.2	1	15 L	11.5
78.0	48.0	2	2 L	2.8	1	6 L	6.4			
78.0	54.0	2	2 L	2.8	1	6 L	6.4			
78.0	60.0	1	4 L	4.7	1	7 L	7.3			
78.0	66.0	3	1 L	1.6	2	4 L	4.8			
78.0	72.0	1	6 L	6.4						
78.0	78.0	2	3 L	3.8						

TABLE NN (Contd)

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE
 REPEATERS ON 19-GAUGE H88 LOADED 4-WIRE FACILITIES WITH
 H88 LOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
 4-WIRE TERMINATION = 1200 OHMS
 2-WIRE TERMINATION = 900 OHMS

LENGTH (KFT)		2-WIRE = 19H88			2-WIRE = 22H88			2-WIRE = 24H88			2-WIRE = 26H88		
4-WIRE 19H88	2-WIRE	BW = 15 HT	EQLR SLOPE	EQLR GAIN									
84.0	12.0	0	4	L 4.7	0	4	L 4.7	0	5	L 5.5	1	5	L 5.6
84.0	18.0	1	3	L 3.8	1	3	L 3.8	1	4	L 4.7	1	10	L 9.0
84.0	24.0	2	2	L 2.8	1	4	L 4.7	2	5	L 5.7	2	15	L 11.6
84.0	30.0	0	5	L 5.5	0	6	L 6.3	1	11	L 9.6	2	15	L 11.6
84.0	36.0	3	1	L 1.6	2	3	L 3.8	2	7	L 7.4			
84.0	42.0	0	6	L 6.3	0	9	L 8.4	1	15	L 11.5			
84.0	48.0	2	2	L 2.8	1	13	L 10.6						
84.0	54.0	2	3	L 3.8	1	7	L 7.3						
84.0	60.0	1	4	L 4.7	1	8	L 7.8						
84.0	66.0	3	1	L 1.6	2	4	L 4.8						
84.0	72.0	2	3	L 3.8									
84.0	78.0	2	5	L 5.7									
90.0	12.0	0	4	L 4.7	0	4	L 4.7	0	5	L 5.5	1	6	L 6.4
90.0	18.0	1	4	L 4.7	1	3	L 3.8	1	4	L 4.7	1	11	L 9.6
90.0	24.0	2	2	L 2.8	1	4	L 4.7	2	5	L 5.7	2	15	L 11.6
90.0	30.0	1	3	L 3.8	0	6	L 6.3	1	12	L 10.1	2	15	L 11.6
90.0	36.0	3	1	L 1.6	2	3	L 3.8	2	8	L 7.9			
90.0	42.0	0	6	L 6.3	0	10	L 9.0	1	15	L 11.5			
90.0	48.0	2	2	L 2.8	2	3	L 3.8						
90.0	54.0	2	3	L 3.8	1	7	L 7.3						
90.0	60.0	2	3	L 3.8	1	9	L 8.4						
90.0	66.0	3	1	L 1.6	2	5	L 5.7						
90.0	72.0	2	3	L 3.8									
90.0	78.0	2	6	L 6.5									
96.0	12.0	0	4	L 4.7	0	5	L 5.5	0	6	L 6.3	1	6	L 6.4
96.0	18.0	2	1	L 1.5	1	6	L 6.4	1	4	L 4.7	2	7	L 7.4
96.0	24.0	2	3	L 3.8	2	3	L 3.8	2	6	L 6.5	2	15	L 11.6
96.0	30.0	1	3	L 3.8	1	5	L 5.6	1	14	L 11.1	2	15	L 11.6
96.0	36.0	3	2	L 2.9	2	4	L 4.8	2	9	L 8.5			
96.0	42.0	1	4	L 4.7	1	6	L 6.4	2	12	L 10.2			
96.0	48.0	2	3	L 3.8	2	4	L 4.8						
96.0	54.0	2	5	L 5.7	2	5	L 5.7						
96.0	60.0	2	3	L 3.8	2	5	L 5.7						
96.0	66.0	3	3	L 3.9	2	5	L 5.7						
96.0	72.0	2	3	L 3.8									
96.0	78.0	3	1	L 1.6									

TABLE OO

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE REPEATERS ON 22-GAUGE H88 LOADED 4-WIRE FACILITIES WITH H88 LOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
 4-WIRE TERMINATION = 1200 OHMS
 2-WIRE TERMINATION = 900 OHMS

LENGTH (KFT)		2-WIRE = 19H88		2-WIRE = 22H88		2-WIRE = 24H88		2-WIRE = 26H88					
4-WIRE	2-WIRE	BW = 15	EQLR										
22H88		HT	SLOPE	HT	SLOPE	HT	SLOPE	HT	SLOPE				
			GAIN		GAIN		GAIN		GAIN				
12.0	12.0	0	3 L	3.7	0	3 L	3.7	0	4 L	4.7	0	5 L	5.5
12.0	18.0	0	4 L	4.7	0	4 L	4.7	0	5 L	5.5	0	10 L	9.0
12.0	24.0	1	3 L	3.8	0	4 L	4.7	0	8 L	7.8	1	15 L	11.5
12.0	30.0	0	3 L	3.7	0	4 L	4.7	0	11 L	9.5	1	15 L	11.5
12.0	36.0	2	2 L	2.8	1	5 L	5.6	1	15 L	11.5			
12.0	42.0	0	4 L	4.7	0	7 L	7.2	0	15 L	11.4			
12.0	48.0	1	4 L	4.7	0	9 L	8.4						
12.0	54.0	1	4 L	4.7	0	10 L	9.0						
12.0	60.0	0	4 L	4.7	0	10 L	9.0						
12.0	66.0	2	3 L	3.8	1	9 L	8.4						
12.0	72.0	0	5 L	5.5									
12.0	78.0	1	5 L	5.6									
18.0	12.0	0	4 L	4.7	0	5 L	5.5	0	6 L	6.3	0	8 L	7.8
18.0	18.0	0	4 L	4.7	0	4 L	4.7	0	7 L	7.2	0	15 L	11.4
18.0	24.0	0	5 L	5.5	0	6 L	6.3	0	14 L	11.0	1	15 L	11.5
18.0	30.0	0	4 L	4.7	0	7 L	7.2	0	15 L	11.4	1	15 L	11.5
18.0	36.0	1	4 L	4.7	0	10 L	9.0	0	15 L	11.4			
18.0	42.0	0	5 L	5.5	0	10 L	9.0	0	15 L	11.4			
18.0	48.0	0	7 L	7.2	0	15 L	11.4						
18.0	54.0	0	7 L	7.2	0	15 L	11.4						
18.0	60.0	0	7 L	7.2	0	15 L	11.4						
18.0	66.0	1	6 L	6.4	0	15 L	11.4						
18.0	72.0	0	7 L	7.2									
18.0	78.0	1	6 L	6.4									
24.0	12.0	0	6 L	6.3	0	6 L	6.3	0	7 L	7.2	0	12 L	10.0
24.0	18.0	0	4 L	4.7	0	4 L	4.7	0	7 L	7.2	0	15 L	11.4
24.0	24.0	0	6 L	6.3	0	7 L	7.2	0	15 L	11.4	1	15 L	11.5
24.0	30.0	0	6 L	6.3	0	10 L	9.0	0	15 L	11.4	2	15 L	11.6
24.0	36.0	1	7 L	7.3	0	12 L	10.0	0	15 L	11.4			
24.0	42.0	0	6 L	6.3	0	13 L	10.5	0	15 L	11.4			
24.0	48.0	0	8 L	7.8	0	15 L	11.4						
24.0	54.0	1	5 L	5.6	0	15 L	11.4						
24.0	60.0	0	8 L	7.8	0	15 L	11.4						
24.0	66.0	1	7 L	7.3	0	15 L	11.4						
24.0	72.0	0	9 L	8.4									
24.0	78.0	1	6 L	6.4									

TABLE OO (Contd)

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE REPEATERS ON 22-GAUGE H88 LOADED 4-WIRE FACILITIES WITH H88 LOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
 4-WIRE TERMINATION = 1200 OHMS
 2-WIRE TERMINATION = 900 OHMS

LENGTH (KFT)		2-WIRE = 19H88			2-WIRE = 22H88			2-WIRE = 24H88			2-WIRE = 26H88						
4-WIRE	2-WIRE	BW = 15	EQLR	GAIN													
22H88		HT	SLOPE		HT	SLOPE		HT	SLOPE		HT	SLOPE					
30.0	12.0	0	6	L	6.3	0	7	L	7.2	0	9	L	8.4	0	15	L	11.4
30.0	18.0	0	4	L	4.7	0	5	L	5.5	0	9	L	8.4	0	15	L	11.4
30.0	24.0	0	7	L	7.2	0	9	L	8.4	0	15	L	11.4	1	15	L	11.5
30.0	30.0	0	6	L	6.3	0	11	L	9.5	0	15	L	11.4	2	15	L	11.6
30.0	36.0	1	6	L	6.4	0	15	L	11.4	0	15	L	11.4				
30.0	42.0	0	7	L	7.2	0	15	L	11.4	0	15	L	11.4				
30.0	48.0	0	10	L	9.0	0	15	L	11.4								
30.0	54.0	0	13	L	10.5	0	15	L	11.4								
30.0	60.0	0	10	L	9.0	0	15	L	11.4								
30.0	66.0	1	8	L	7.8	0	15	L	11.4								
30.0	72.0	0	11	L	9.5												
30.0	78.0	1	7	L	7.3												
36.0	12.0	0	7	L	7.2	0	7	L	7.2	0	10	L	9.0	0	15	L	11.4
36.0	18.0	0	5	L	5.5	0	7	L	7.2	0	12	L	10.0	1	15	L	11.5
36.0	24.0	1	6	L	6.4	0	10	L	9.0	1	15	L	11.5	1	15	L	11.5
36.0	30.0	0	7	L	7.2	0	12	L	10.0	0	15	L	11.4	2	15	L	11.6
36.0	36.0	2	4	L	4.8	1	10	L	9.0	1	15	L	11.5				
36.0	42.0	0	8	L	7.8	0	15	L	11.4	1	15	L	11.5				
36.0	48.0	1	6	L	6.4	0	15	L	11.4								
36.0	54.0	1	7	L	7.3	0	15	L	11.4								
36.0	60.0	0	12	L	10.0	0	15	L	11.4								
36.0	66.0	2	5	L	5.7	1	15	L	11.5								
36.0	72.0	0	14	L	11.0												
36.0	78.0	1	9	L	8.4												
42.0	12.0	0	7	L	7.2	0	7	L	7.2	0	10	L	9.0	0	15	L	11.4
42.0	18.0	0	6	L	6.3	0	7	L	7.2	0	13	L	10.5	1	15	L	11.5
42.0	24.0	1	6	L	6.4	0	11	L	9.5	1	15	L	11.5	2	15	L	11.6
42.0	30.0	0	7	L	7.2	0	12	L	10.0	0	15	L	11.4	2	15	L	11.6
42.0	36.0	2	4	L	4.8	1	10	L	9.0	1	15	L	11.5				
42.0	42.0	0	9	L	8.4	0	15	L	11.4	1	15	L	11.5				
42.0	48.0	1	7	L	7.3	1	14	L	11.1								
42.0	54.0	1	8	L	7.8	0	15	L	11.4								
42.0	60.0	0	12	L	10.0	0	15	L	11.4								
42.0	66.0	2	5	L	5.7	1	15	L	11.5								
42.0	72.0	1	8	L	7.8												
42.0	78.0	1	10	L	9.0												

TABLE OO (Contd)

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE
 REPEATERS ON 22-GAUGE H88 LOADED 4-WIRE FACILITIES WITH
 H88 LOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
 4-WIRE TERMINATION = 1200 OHMS
 2-WIRE TERMINATION = 900 OHMS

LENGTH (KFT)		2-WIRE = 19H88		2-WIRE = 22H88		2-WIRE = 24H88		2-WIRE = 26H88	
4-WIRE 22H88	2-WIRE	BW = 15 HT	EQLR SLOPE						
		GAIN		GAIN		GAIN		GAIN	
48.0	12.0	0 7	L 7.2	0 8	L 7.8	0 10	L 9.0	0 15	L 11.4
48.0	18.0	0 6	L 6.3	0 7	L 7.2	0 13	L 10.5	1 15	L 11.5
48.0	24.0	1 6	L 6.4	0 11	L 9.5	1 15	L 11.5	2 15	L 11.6
48.0	30.0	0 7	L 7.2	0 13	L 10.5	0 15	L 11.4	2 15	L 11.6
48.0	36.0	2 4	L 4.8	1 10	L 9.0	1 15	L 11.5		
48.0	42.0	0 9	L 8.4	0 15	L 11.4	1 15	L 11.5		
48.0	48.0	1 6	L 6.4	1 13	L 10.6				
48.0	54.0	1 7	L 7.3	0 15	L 11.4				
48.0	60.0	0 15	L 11.4	0 15	L 11.4				
48.0	66.0	2 5	L 5.7	1 15	L 11.5				
48.0	72.0	1 8	L 7.8						
48.0	78.0	1 10	L 9.0						
54.0	12.0	0 7	L 7.2	0 8	L 7.8	0 11	L 9.5	0 15	L 11.4
54.0	18.0	0 6	L 6.3	0 7	L 7.2	0 13	L 10.5	1 15	L 11.5
54.0	24.0	1 6	L 6.4	0 11	L 9.5	1 15	L 11.5	2 15	L 11.6
54.0	30.0	0 7	L 7.2	0 14	L 11.0	0 15	L 11.4	2 15	L 11.6
54.0	36.0	2 4	L 4.8	1 10	L 9.0	1 15	L 11.5		
54.0	42.0	0 9	L 8.4	0 15	L 11.4	1 15	L 11.5		
54.0	48.0	1 6	L 6.4	1 13	L 10.6				
54.0	54.0	1 7	L 7.3	1 15	L 11.5				
54.0	60.0	0 13	L 10.5	1 15	L 11.5				
54.0	66.0	2 5	L 5.7	1 15	L 11.5				
54.0	72.0	1 9	L 8.4						
54.0	78.0	2 4	L 4.8						
60.0	12.0	0 8	L 7.8	0 9	L 8.4	0 12	L 10.0	0 15	L 11.4
60.0	18.0	0 7	L 7.2	0 7	L 7.2	0 13	L 10.5	1 15	L 11.5
60.0	24.0	1 6	L 6.4	0 12	L 10.0	1 15	L 11.5	2 15	L 11.6
60.0	30.0	0 8	L 7.8	0 15	L 11.4	0 15	L 11.4	2 15	L 11.6
60.0	36.0	2 4	L 4.8	1 11	L 9.6	1 15	L 11.5		
60.0	42.0	0 9	L 8.4	0 15	L 11.4	1 15	L 11.5		
60.0	48.0	1 7	L 7.3	1 14	L 11.1				
60.0	54.0	1 8	L 7.8	1 15	L 11.5				
60.0	60.0	1 8	L 7.8	1 15	L 11.5				
60.0	66.0	2 5	L 5.7	1 15	L 11.5				
60.0	72.0	1 9	L 8.4						
60.0	78.0	2 5	L 5.7						

TABLE OO (Contd)

**EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE
REPEATERS ON 22-GAUGE H88 LOADED 4-WIRE FACILITIES WITH
H88 LOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F**

END SECTIONS = 3.0 KFT
4-WIRE TERMINATION = 1200 OHMS
2-WIRE TERMINATION = 900 OHMS

LENGTH (KFT)		2-WIRE = 19H88			2-WIRE = 22H88			2-WIRE = 24H88			2-WIRE = 26H88		
4-WIRE	2-WIRE	BW = 15	EQLR	GAIN									
22H88		HT	SLOPE		HT	SLOPE		HT	SLOPE		HT	SLOPE	
84.0	12.0	0	14	L	11.0			0	15	L	11.4		
84.0	18.0	1	4	L	4.7			1	10	L	9.0		
84.0	24.0	2	4	L	4.8			2	15	L	11.6		
84.0	30.0	0	14	L	11.0			0	15	L	11.4		
84.0	36.0	3	2	L	2.9			2	7	L	7.4		
84.0	42.0	0	15	L	11.4			0	15	L	11.4		
84.0	48.0	1	14	L	11.1			1	15	L	11.5		
84.0	54.0	2	5	L	5.7			1	15	L	11.5		
84.0	60.0	1	15	L	11.5			1	15	L	11.5		
84.0	66.0	3	2	L	2.9			2	12	L	10.2		
84.0	72.0	1	15	L	11.5								
84.0	78.0	2	7	L	7.4								
90.0	12.0	0	15	L	11.4			0	15	L	11.4		
90.0	18.0	1	4	L	4.7			1	6	L	6.4		
90.0	24.0	2	5	L	5.7			1	15	L	11.5		
90.0	30.0	0	15	L	11.4			0	15	L	11.4		
90.0	36.0	3	2	L	2.9			2	8	L	7.9		
90.0	42.0	0	15	L	11.4			0	15	L	11.4		
90.0	48.0	2	5	L	5.7			1	15	L	11.5		
90.0	54.0	2	6	L	6.5			1	15	L	11.5		
90.0	60.0	1	15	L	11.5			1	15	L	11.5		
90.0	66.0	3	3	L	3.9			2	15	L	11.6		
90.0	72.0	1	15	L	11.5								
90.0	78.0	2	7	L	7.4								
96.0	12.0	0	15	L	11.4			0	15	L	11.4		
96.0	18.0	1	5	L	5.6			1	15	L	11.5		
96.0	24.0	2	6	L	6.5			2	15	L	11.6		
96.0	30.0	0	15	L	11.4			0	15	L	11.4		
96.0	36.0	3	2	L	2.9			2	9	L	8.5		
96.0	42.0	0	15	L	11.4			1	15	L	11.5		
96.0	48.0	2	5	L	5.7			2	10	L	9.1		
96.0	54.0	2	7	L	7.4			1	15	L	11.5		
96.0	60.0	1	15	L	11.5			1	15	L	11.5		
96.0	66.0	3	3	L	3.9			2	15	L	11.6		
96.0	72.0	2	8	L	7.9								
96.0	78.0	2	9	L	8.5								

TABLE PP

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE REPEATERS ON 24-GAUGE H88 LOADED 4-WIRE FACILITIES WITH H88 LOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
 4-WIRE TERMINATION = 1200 OHMS
 2-WIRE TERMINATION = 900 OHMS

LENGTH (KFT)		2-WIRE = 19H88			2-WIRE = 22H88			2-WIRE = 24H88			2-WIRE = 26H88						
4-WIRE	2-WIRE	BW = 15	EQLR	GAIN													
24H88		HT	SLOPE		HT	SLOPE		HT	SLOPE		HT	SLOPE					
12.0	12.0	0	4	L	4.7	0	4	L	4.7	0	5	L	5.5	0	6	L	6.3
12.0	18.0	0	6	L	6.3	0	5	L	5.5	0	7	L	7.2	1	11	L	9.6
12.0	24.0	1	4	L	4.7	1	5	L	5.6	1	8	L	7.8	1	15	L	11.5
12.0	30.0	0	4	L	4.7	0	6	L	6.3	0	15	L	11.4	2	15	L	11.6
12.0	36.0	2	3	L	3.8	1	7	L	7.3	1	15	L	11.5				
12.0	42.0	0	5	L	5.5	0	9	L	8.4	1	15	L	11.5				
12.0	48.0	1	5	L	5.6	1	10	L	9.0								
12.0	54.0	1	5	L	5.6	1	10	L	9.0								
12.0	60.0	1	5	L	5.6	1	11	L	9.6								
12.0	66.0	2	4	L	4.8	1	13	L	10.6								
12.0	72.0	1	5	L	5.6												
12.0	78.0	2	4	L	4.8												
18.0	12.0	0	7	L	7.2	0	8	L	7.8	0	10	L	9.0	0	15	L	11.4
18.0	18.0	0	7	L	7.2	0	9	L	8.4	0	15	L	11.4	0	15	L	11.4
18.0	24.0	0	12	L	10.0	0	13	L	10.5	1	15	L	11.5	2	15	L	11.6
18.0	30.0	0	7	L	7.2	0	13	L	10.5	0	15	L	11.4	2	15	L	11.6
18.0	36.0	2	5	L	5.7	1	15	L	11.5	1	15	L	11.5				
18.0	42.0	0	10	L	9.0	0	15	L	11.4	1	15	L	11.5				
18.0	48.0	0	15	L	11.4	0	15	L	11.4								
18.0	54.0	1	10	L	9.0	0	15	L	11.4								
18.0	60.0	0	13	L	10.5	0	15	L	11.4								
18.0	66.0	2	7	L	7.4	1	15	L	11.5								
18.0	72.0	0	15	L	11.4												
18.0	78.0	1	12	L	10.1												
24.0	12.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4
24.0	18.0	0	10	L	9.0	0	13	L	10.5	0	15	L	11.4	1	15	L	11.5
24.0	24.0	1	10	L	9.0	0	15	L	11.4	1	15	L	11.5	2	15	L	11.6
24.0	30.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4	3	15	L	11.7
24.0	36.0	2	6	L	6.5	1	15	L	11.5	1	15	L	11.5				
24.0	42.0	0	15	L	11.4	0	15	L	11.4	1	15	L	11.5				
24.0	48.0	1	12	L	10.1	0	15	L	11.4								
24.0	54.0	1	15	L	11.5	0	15	L	11.4								
24.0	60.0	0	15	L	11.4	0	15	L	11.4								
24.0	66.0	2	8	L	7.9	1	15	L	11.5								
24.0	72.0	1	15	L	11.5												
24.0	78.0	1	15	L	11.5												

TABLE PP (Contd)

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE
 REPEATERS ON 24-GAUGE H88 LOADED 4-WIRE FACILITIES WITH
 H88 LOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
 4-WIRE TERMINATION = 1200 OHMS
 2-WIRE TERMINATION = 900 OHMS

LENGTH (KFT)		2-WIRE = 19H88			2-WIRE = 22H88			2-WIRE = 24H88			2-WIRE = 26H88		
4-WIRE	2-WIRE	BW = 15	EQLR	GAIN									
24H88		HT	SLOPE		HT	SLOPE		HT	SLOPE		HT	SLOPE	
30.0	12.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4
30.0	18.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4
30.0	24.0	1	15	L	11.5	0	15	L	11.4	1	15	L	11.5
30.0	30.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4
30.0	36.0	2	9	L	8.5	1	15	L	11.5	1	15	L	11.5
30.0	42.0	0	15	L	11.4	0	15	L	11.4	1	15	L	11.5
30.0	48.0	1	15	L	11.5	1	15	L	11.5				
30.0	54.0	1	15	L	11.5	0	15	L	11.4				
30.0	60.0	0	15	L	11.4	1	15	L	11.5				
30.0	66.0	2	14	L	11.1	1	15	L	11.5				
30.0	72.0	1	15	L	11.5								
30.0	78.0	1	15	L	11.5								
36.0	12.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4
36.0	18.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4
36.0	24.0	1	15	L	11.5	1	15	L	11.5	1	15	L	11.5
36.0	30.0	0	15	L	11.4	0	15	L	11.4	1	15	L	11.5
36.0	36.0	2	14	L	11.1	1	15	L	11.5	1	15	L	11.5
36.0	42.0	0	15	L	11.4	0	15	L	11.4	2	15	L	11.6
36.0	48.0	1	15	L	11.5	1	15	L	11.5				
36.0	54.0	1	15	L	11.5	1	15	L	11.5				
36.0	60.0	1	15	L	11.5	1	15	L	11.5				
36.0	66.0	2	15	L	11.6	1	15	L	11.5				
36.0	72.0	1	15	L	11.5								
36.0	78.0	2	15	L	11.6								
42.0	12.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4
42.0	18.0	1	14	L	11.1	1	15	L	11.5	1	15	L	11.5
42.0	24.0	1	15	L	11.5	1	15	L	11.5	2	15	L	11.6
42.0	30.0	0	15	L	11.4	0	15	L	11.4	1	15	L	11.5
42.0	36.0	2	15	L	11.6	1	15	L	11.5	2	15	L	11.6
42.0	42.0	0	15	L	11.4	0	15	L	11.4	2	15	L	11.6
42.0	48.0	1	15	L	11.5	1	15	L	11.5				
42.0	54.0	2	15	L	11.6	1	15	L	11.5				
42.0	60.0	1	15	L	11.5	1	15	L	11.5				
42.0	66.0	2	15	L	11.6	2	15	L	11.6				
42.0	72.0	1	15	L	11.5								
42.0	78.0	2	15	L	11.6								

TABLE PP (Contd)

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE REPEATERS ON 24-GAUGE H88 LOADED 4-WIRE FACILITIES WITH H88 LOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
 4-WIRE TERMINATION = 1200 OHMS
 2-WIRE TERMINATION = 900 OHMS

LENGTH (KFT)		2-WIRE = 19H88			2-WIRE = 22H88			2-WIRE = 24H88			2-WIRE = 26H88		
4-WIRE	2-WIRE	BW = 15	EQLR	GAIN									
24H88		HT	SLOPE		HT	SLOPE		HT	SLOPE		HT	SLOPE	
48.0	12.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4
48.0	18.0	1	15	L	11.5	1	15	L	11.5	1	15	L	11.5
48.0	24.0	1	15	L	11.5	1	15	L	11.5	2	15	L	11.6
48.0	30.0	0	15	L	11.4	0	15	L	11.4	1	15	L	11.5
48.0	36.0	2	15	L	11.6	2	15	L	11.6	2	15	L	11.6
48.0	42.0	0	15	L	11.4	1	15	L	11.5	2	15	L	11.6
48.0	48.0	1	15	L	11.5	1	15	L	11.5				
48.0	54.0	2	15	L	11.6	1	15	L	11.5				
48.0	60.0	1	15	L	11.5	1	15	L	11.5				
48.0	66.0	2	15	L	11.6	2	15	L	11.6				
48.0	72.0	1	15	L	11.5								
48.0	78.0	2	15	L	11.6								
54.0	12.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4
54.0	18.0	1	15	L	11.5	1	15	L	11.5	1	15	L	11.5
54.0	24.0	2	15	L	11.6	1	15	L	11.5	2	15	L	11.6
54.0	30.0	0	15	L	11.4	0	15	L	11.4	1	15	L	11.5
54.0	36.0	3	5	L	5.8	2	15	L	11.6	2	15	L	11.6
54.0	42.0	0	15	L	11.4	1	15	L	11.5	2	15	L	11.6
54.0	48.0	2	15	L	11.6	1	15	L	11.5				
54.0	54.0	2	15	L	11.6	1	15	L	11.5				
54.0	60.0	1	15	L	11.5	1	15	L	11.5				
54.0	66.0	3	8	L	8.0	2	15	L	11.6				
54.0	72.0	1	15	L	11.5								
54.0	78.0	2	15	L	11.6								
60.0	12.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4
60.0	18.0	1	15	L	11.5	1	15	L	11.5	1	15	L	11.5
60.0	24.0	2	15	L	11.6	1	15	L	11.5	2	15	L	11.6
60.0	30.0	0	15	L	11.4	1	15	L	11.5	2	15	L	11.6
60.0	36.0	3	7	L	7.5	2	15	L	11.6	2	15	L	11.6
60.0	42.0	1	15	L	11.5	1	15	L	11.5	2	15	L	11.6
60.0	48.0	2	15	L	11.6	2	15	L	11.6				
60.0	54.0	2	15	L	11.6	1	15	L	11.5				
60.0	60.0	1	15	L	11.5	2	15	L	11.6				
60.0	66.0	3	10	L	9.2	2	15	L	11.6				
60.0	72.0	2	15	L	11.6								
60.0	78.0	2	15	L	11.6								

TABLE PP (Contd)

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE
 REPEATERS ON 24-GAUGE H88 LOADED 4-WIRE FACILITIES WITH
 H88 LOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
 4-WIRE TERMINATION = 1200 OHMS
 2-WIRE TERMINATION = 900 OHMS

LENGTH (KFT)		2-WIRE = 19H88			2-WIRE = 22H88			2-WIRE = 24H88			2-WIRE = 26H88		
4-WIRE	2-WIRE	BW = 15	EQLR	GAIN									
24H88		HT	SLOPE		HT	SLOPE		HT	SLOPE		HT	SLOPE	
66.0	12.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4
66.0	18.0	1	15	L	11.5	1	15	L	11.5	1	15	L	11.5
66.0	24.0	2	15	L	11.6	1	15	L	11.5	2	15	L	11.6
66.0	30.0	0	15	L	11.4	1	15	L	11.5	2	15	L	11.6
66.0	36.0	3	9	L	8.6	2	15	L	11.6	2	15	L	11.6
66.0	42.0	1	15	L	11.5	1	15	L	11.5	2	15	L	11.6
66.0	48.0	2	15	L	11.6	2	15	L	11.6				
66.0	54.0	2	15	L	11.6	2	15	L	11.6				
66.0	60.0	1	15	L	11.5	2	15	L	11.6				
66.0	66.0	3	15	L	11.7	2	15	L	11.6				
66.0	72.0	2	15	L	11.6								
66.0	78.0	3	15	L	11.7								

TABLE QQ

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE
 REPEATERS ON 26-GAUGE H88 LOADED 4-WIRE FACILITIES WITH
 H88 LOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
 4-WIRE TERMINATION = 1200 OHMS
 2-WIRE TERMINATION = 900 OHMS

LENGTH (KFT)		2-WIRE = 19H88				2-WIRE = 22H88				2-WIRE = 24H88				2-WIRE = 26H88				
4-WIRE	2-WIRE	BW = 15	EQLR	HT	SLOPE	BW = 15	EQLR	HT	SLOPE	BW = 15	EQLR	HT	SLOPE	BW = 15	EQLR	HT	SLOPE	GAIN
26H88																		
12.0	12.0	0	5	L	5.5	0	5	L	5.5	0	7	L	7.2	0	10	L	9.0	
12.0	18.0	1	6	L	6.4	1	6	L	6.4	1	8	L	7.8	1	15	L	11.5	
12.0	24.0	2	4	L	4.8	1	6	L	6.4	2	9	L	8.5	2	15	L	11.6	
12.0	30.0	1	4	L	4.7	0	8	L	7.8	1	15	L	11.5					
12.0	36.0	3	4	L	4.9	2	7	L	7.4	2	15	L	11.6					
12.0	42.0	0	7	L	7.2	0	15	L	11.4	2	15	L	11.6					
12.0	48.0	2	6	L	6.5	1	15	L	11.5									
12.0	54.0	2	6	L	6.5	1	15	L	11.5									
12.0	60.0	1	8	L	7.8	1	15	L	11.5									
12.0	66.0	3	5	L	5.8	2	15	L	11.6									
12.0	72.0	2	6	L	6.5													
12.0	78.0	2	6	L	6.5													
18.0	12.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4	1	15	L	11.5	
18.0	18.0	1	15	L	11.5	1	15	L	11.5	1	15	L	11.5	2	15	L	11.6	
18.0	24.0	2	15	L	11.6	1	15	L	11.5	2	15	L	11.6	3	15	L	11.7	
18.0	30.0	1	15	L	11.5	0	15	L	11.4	1	15	L	11.5					
18.0	36.0	2	15	L	11.6	2	15	L	11.6	3	15	L	11.7					
18.0	42.0	0	15	L	11.4	1	15	L	11.5	2	15	L	11.6					
18.0	48.0	2	15	L	11.6	2	15	L	11.6									
18.0	54.0	2	15	L	11.6	1	15	L	11.5									
18.0	60.0	1	15	L	11.5	2	15	L	11.6									
18.0	66.0	2	15	L	11.6	2	15	L	11.6									
18.0	72.0	1	15	L	11.5													
18.0	78.0	2	15	L	11.6													
24.0	12.0	0	15	L	11.4	0	15	L	11.4	1	15	L	11.5	2	15	L	11.6	
24.0	18.0	1	15	L	11.5	1	15	L	11.5	2	15	L	11.6	3	15	L	11.7	
24.0	24.0	2	15	L	11.6	2	15	L	11.6	3	15	L	11.7	4	15	L	11.8	
24.0	30.0	1	15	L	11.5	1	15	L	11.5	2	15	L	11.6					
24.0	36.0	3	15	L	11.7	2	15	L	11.6	3	15	L	11.7					
24.0	42.0	1	15	L	11.5	2	15	L	11.6	3	15	L	11.7					
24.0	48.0	2	15	L	11.6	2	15	L	11.6									
24.0	54.0	2	15	L	11.6	2	15	L	11.6									
24.0	60.0	2	15	L	11.6	2	15	L	11.6									
24.0	66.0	3	15	L	11.7	3	15	L	11.7									
24.0	72.0	2	15	L	11.6													
24.0	78.0	2	15	L	11.6													

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TABLE QQ (Contd)

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE
 REPEATERS ON 26-GAUGE H88 LOADED 4-WIRE FACILITIES WITH
 H88 LOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
 4-WIRE TERMINATION = 1200 OHMS
 2-WIRE TERMINATION = 900 OHMS

LENGTH (KFT)		2-WIRE = 19H88			2-WIRE = 22H88			2-WIRE = 24H88			2-WIRE = 26H88						
4-WIRE	2-WIRE	BW = 15	EQLR	GAIN													
26H88		HT	SLOPE		HT	SLOPE		HT	SLOPE		HT	SLOPE					
30.0	12.0	0	15	L	11.4	0	15	L	11.4	1	15	L	11.5	2	15	L	11.6
30.0	18.0	2	15	L	11.6	2	15	L	11.6	2	15	L	11.6	4	15	L	11.8
30.0	24.0	2	15	L	11.6	2	15	L	11.6	3	15	L	11.7	4	15	L	11.8
30.0	30.0	1	15	L	11.5	2	15	L	11.6	3	15	L	11.7				
30.0	36.0	3	15	L	11.7	3	15	L	11.7	3	15	L	11.7				
30.0	42.0	2	15	L	11.6	3	15	L	11.7	3	15	L	11.7				
30.0	48.0	2	15	L	11.6	3	15	L	11.7								
30.0	54.0	3	15	L	11.7	3	15	L	11.7								
30.0	60.0	2	15	L	11.6	3	15	L	11.7								
30.0	66.0	3	15	L	11.7	3	15	L	11.7								
30.0	72.0	3	15	L	11.7												
30.0	78.0	3	15	L	11.7												
36.0	12.0	1	15	L	11.5	2	15	L	11.6	2	15	L	11.6	3	15	L	11.7
36.0	18.0	2	15	L	11.6	2	15	L	11.6	3	15	L	11.7	4	15	L	11.8
36.0	24.0	3	15	L	11.7	3	15	L	11.7	4	15	L	11.8	5	15	L	11.9
36.0	30.0	2	15	L	11.6	3	15	L	11.7	4	15	L	11.8				
36.0	36.0	3	15	L	11.7	3	15	L	11.7	4	15	L	11.8				
36.0	42.0	3	15	L	11.7	3	15	L	11.7	4	15	L	11.8				
36.0	48.0	3	15	L	11.7	3	15	L	11.7								
36.0	54.0	3	15	L	11.7	3	15	L	11.7								
36.0	60.0	3	15	L	11.7	4	15	L	11.8								
36.0	66.0	3	15	L	11.7	4	15	L	11.8								
36.0	72.0	3	15	L	11.7												
36.0	78.0	3	15	L	11.7												

TABLE RR

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE
 REPEATERS ON 19-GAUGE H88 LOADED 4-WIRE FACILITIES WITH
 H88 LOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
 4-WIRE TERMINATION = 1200 OHMS
 2-WIRE TERMINATION = 600 OHMS

LENGTH (KFT)		2-WIRE = 19H88		2-WIRE = 22H88		2-WIRE = 24H88		2-WIRE = 26H88	
4-WIRE 19H88	2-WIRE	BW = 15 HT	EQLR SLOPE						
			GAIN		GAIN		GAIN		GAIN
12.0	12.0	0 2	L 2.6	0 2	L 2.6	0 3	L 3.7	0 4	L 4.7
12.0	18.0	1 3	L 3.8	1 1	L 1.5	0 3	L 3.7	1 4	L 4.7
12.0	24.0	1 4	L 4.7	1 2	L 2.7	1 4	L 4.7	1 10	L 9.0
12.0	30.0	1 2	L 2.7	0 3	L 3.7	0 6	L 6.3	1 15	L 11.5
12.0	36.0	4 0	L .4	2 2	L 2.8	1 9	L 8.4		
12.0	42.0	1 2	L 2.7	0 5	L 5.5	0 15	L 11.4		
12.0	48.0	1 4	L 4.7	1 5	L 5.6				
12.0	54.0	1 5	L 5.6	0 8	L 7.8				
12.0	60.0	1 4	L 4.7	0 9	L 8.4				
12.0	66.0	3 1	L 1.6						
12.0	72.0	1 4	L 4.7						
12.0	78.0	2 3	L 3.8						
18.0	12.0	0 3	L 3.7	0 3	L 3.7	0 4	L 4.7	0 4	L 4.7
18.0	18.0	1 2	L 2.7	0 7	L 7.2	0 3	L 3.7	0 6	L 6.3
18.0	24.0	1 2	L 2.7	0 3	L 3.7	1 4	L 4.7	1 15	L 11.5
18.0	30.0	1 2	L 2.7	0 4	L 4.7	0 8	L 7.8	1 15	L 11.5
18.0	36.0	3 2	L 2.9	2 2	L 2.8	1 9	L 8.4		
18.0	42.0	0 5	L 5.5	0 5	L 5.5	0 15	L 11.4		
18.0	48.0	1 4	L 4.7	1 4	L 4.7				
18.0	54.0	1 3	L 3.8	0 8	L 7.8				
18.0	60.0	1 3	L 3.8	0 10	L 9.0				
18.0	66.0	3 1	L 1.6						
18.0	72.0	0 7	L 7.2						
18.0	78.0	1 8	L 7.8						
24.0	12.0	0 3	L 3.7	0 4	L 4.7	0 4	L 4.7	0 5	L 5.5
24.0	18.0	1 3	L 3.8	1 1	L 1.5	0 4	L 4.7	1 4	L 4.7
24.0	24.0	1 6	L 6.4	1 2	L 2.7	1 4	L 4.7	1 15	L 11.5
24.0	30.0	1 2	L 2.7	0 4	L 4.7	0 9	L 8.4	1 15	L 11.5
24.0	36.0	4 0	L .4	2 2	L 2.8	1 12	L 10.1		
24.0	42.0	0 5	L 5.5	0 6	L 6.3	1 15	L 11.5		
24.0	48.0	1 5	L 5.6	1 4	L 4.7				
24.0	54.0	2 1	L 1.5	1 5	L 5.6				
24.0	60.0	1 4	L 4.7	1 7	L 7.3				
24.0	66.0	3 1	L 1.6						
24.0	72.0	1 4	L 4.7						
24.0	78.0	2 2	L 2.8						

TABLE RR (Contd)

**EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE
REPEATERS ON 19-GAUGE H88 LOADED 4-WIRE FACILITIES WITH
H88 LOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F**

END SECTIONS = 3.0 KFT
4-WIRE TERMINATION = 1200 OHMS
2-WIRE TERMINATION = 600 OHMS

LENGTH (KFT)		2-WIRE = 19H88		2-WIRE = 22H88		2-WIRE = 24H88		2-WIRE = 26H88	
4-WIRE	2-WIRE	BW = 15	EQLR						
19H88		HT	SLOPE	HT	SLOPE	HT	SLOPE	HT	SLOPE
			GAIN		GAIN		GAIN		GAIN
30.0	12.0	0	3	L	3.7	0	3	L	3.7
30.0	18.0	1	4	L	4.7	1	1	L	1.5
30.0	24.0	1	5	L	5.6	1	2	L	2.7
30.0	30.0	1	3	L	3.8	0	5	L	5.5
30.0	36.0	4	0	L	4	2	3	L	3.8
30.0	42.0	1	2	L	2.7	0	6	L	6.3
30.0	48.0	1	7	L	7.3	1	5	L	5.6
30.0	54.0	1	7	L	7.3	0	10	L	9.0
30.0	60.0	1	5	L	5.6	1	7	L	7.3
30.0	66.0	3	1	L	1.6				
30.0	72.0	1	4	L	4.7				
30.0	78.0	2	3	L	3.8				
36.0	12.0	0	3	L	3.7	0	3	L	3.7
36.0	18.0	2	1	L	1.5	1	4	L	4.7
36.0	24.0	2	2	L	2.8	1	3	L	3.8
36.0	30.0	2	1	L	1.5	1	3	L	3.8
36.0	36.0	4	1	L	1.8	3	1	L	1.6
36.0	42.0	1	3	L	3.8	0	6	L	6.3
36.0	48.0	2	2	L	2.8	2	3	L	3.8
36.0	54.0	2	2	L	2.8	1	7	L	7.3
36.0	60.0	2	2	L	2.8	1	8	L	7.8
36.0	66.0	3	4	L	4.9				
36.0	72.0	1	5	L	5.6				
36.0	78.0	2	6	L	6.5				
42.0	12.0	0	3	L	3.7	0	3	L	3.7
42.0	18.0	2	1	L	1.5	1	3	L	3.8
42.0	24.0	2	2	L	2.8	1	3	L	3.8
42.0	30.0	2	1	L	1.5	1	3	L	3.8
42.0	36.0	4	1	L	1.8	3	1	L	1.6
42.0	42.0	1	3	L	3.8	0	6	L	6.3
42.0	48.0	2	2	L	2.8	2	3	L	3.8
42.0	54.0	2	2	L	2.8	1	6	L	6.4
42.0	60.0	2	2	L	2.8	1	7	L	7.3
42.0	66.0	3	4	L	4.9				
42.0	72.0	1	5	L	5.6				
42.0	78.0	2	6	L	6.5				
42.0	12.0	0	3	L	3.7	0	3	L	3.7
42.0	18.0	2	1	L	1.5	1	2	L	2.7
42.0	24.0	2	2	L	2.8	2	3	L	3.8
42.0	30.0	2	1	L	1.5	1	6	L	6.4
42.0	36.0	4	1	L	1.8	2	6	L	6.5
42.0	42.0	1	3	L	3.8	1	15	L	11.5
42.0	48.0	2	2	L	2.8				
42.0	54.0	2	2	L	2.8				
42.0	60.0	2	2	L	2.8				
42.0	66.0	3	4	L	4.9				
42.0	72.0	1	5	L	5.6				
42.0	78.0	2	6	L	6.5				
42.0	12.0	0	3	L	3.7	0	3	L	3.7
42.0	18.0	2	1	L	1.5	1	2	L	2.7
42.0	24.0	2	2	L	2.8	2	3	L	3.8
42.0	30.0	2	1	L	1.5	1	6	L	6.4
42.0	36.0	4	1	L	1.8	2	6	L	6.5
42.0	42.0	1	3	L	3.8	1	15	L	11.5
42.0	48.0	2	2	L	2.8				
42.0	54.0	2	2	L	2.8				
42.0	60.0	2	2	L	2.8				
42.0	66.0	3	4	L	4.9				
42.0	72.0	1	5	L	5.6				
42.0	78.0	2	6	L	6.5				

TABLE RR (Contd)

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE REPEATERS ON 19-GAUGE H88 LOADED 4-WIRE FACILITIES WITH H88 LOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
 4-WIRE TERMINATION = 1200 OHMS
 2-WIRE TERMINATION = 600 OHMS

LENGTH (KFT)		2-WIRE = 19H88		2-WIRE = 22H88		2-WIRE = 24H88		2-WIRE = 26H88	
4-WIRE 19H88	2-WIRE	BW = 15 HT	EQLR SLOPE GAIN	BW = 15 HT	EQLR SLOPE GAIN	BW = 15 HT	EQLR SLOPE GAIN	BW = 15 HT	EQLR SLOPE GAIN
48.0	12.0	0 3	L 3.7	0 3	L 3.7	0 3	L 3.7	0 4	L 4.7
48.0	18.0	2 1	L 1.5	1 4	L 4.7	1 2	L 2.7	1 5	L 5.6
48.0	24.0	2 2	L 2.8	1 2	L 2.7	2 3	L 3.8	2 9	L 8.5
48.0	30.0	2 1	L 1.5	1 3	L 3.8	1 6	L 6.4	2 15	L 11.6
48.0	36.0	4 1	L 1.8	2 5	L 5.7	2 5	L 5.7		
48.0	42.0	1 2	L 2.7	0 5	L 5.5	1 15	L 11.5		
48.0	48.0	2 2	L 2.8	1 10	L 9.0				
48.0	54.0	2 2	L 2.8	1 6	L 6.4				
48.0	60.0	2 2	L 2.8	1 7	L 7.3				
48.0	66.0	3 4	L 4.9						
48.0	72.0	1 4	L 4.7						
48.0	78.0	2 5	L 5.7						
54.0	12.0	0 3	L 3.7	0 3	L 3.7	0 4	L 4.7	0 4	L 4.7
54.0	18.0	2 1	L 1.5	2 0	L .1	1 2	L 2.7	1 5	L 5.6
54.0	24.0	2 3	L 3.8	1 4	L 4.7	2 3	L 3.8	2 9	L 8.5
54.0	30.0	2 0	L .1	1 3	L 3.8	1 6	L 6.4	2 15	L 11.6
54.0	36.0	4 2	L 3.0	3 1	L 1.6	2 5	L 5.7		
54.0	42.0	1 2	L 2.7	0 5	L 5.5	1 15	L 11.5		
54.0	48.0	2 2	L 2.8	2 2	L 2.8				
54.0	54.0	2 4	L 4.8	1 5	L 5.6				
54.0	60.0	2 2	L 2.8	1 7	L 7.3				
54.0	66.0	4 0	L .4						
54.0	72.0	2 3	L 3.8						
54.0	78.0	3 1	L 1.6						
60.0	12.0	0 3	L 3.7	0 3	L 3.7	0 3	L 3.7	0 4	L 4.7
60.0	18.0	2 2	L 2.8	2 0	L .1	1 2	L 2.7	1 5	L 5.6
60.0	24.0	2 3	L 3.8	1 4	L 4.7	2 3	L 3.8	2 8	L 7.9
60.0	30.0	2 1	L 1.5	1 3	L 3.8	1 6	L 6.4	2 15	L 11.6
60.0	36.0	4 2	L 3.0	3 1	L 1.6	2 5	L 5.7		
60.0	42.0	1 3	L 3.8	0 5	L 5.5	1 14	L 11.1		
60.0	48.0	2 3	L 3.8	2 3	L 3.8				
60.0	54.0	2 3	L 3.8	1 6	L 6.4				
60.0	60.0	2 2	L 2.8	1 7	L 7.3				
60.0	66.0	4 0	L .4						
60.0	72.0	2 3	L 3.8						
60.0	78.0	3 1	L 1.6						

TABLE RR (Contd)

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE
REPEATERS ON 19-GAUGE H88 LOADED 4-WIRE FACILITIES WITH
H88 LOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
4-WIRE TERMINATION = 1200 OHMS
2-WIRE TERMINATION = 600 OHMS

LENGTH (KFT)		2-WIRE = 19H88			2-WIRE = 22H88			2-WIRE = 24H88			2-WIRE = 26H88						
4-WIRE	2-WIRE	BW = 15	EQLR	GAIN													
19H88		HT	SLOPE		HT	SLOPE		HT	SLOPE		HT	SLOPE					
66.0	12.0	0	3	L	3.7	0	3	L	3.7	0	3	L	3.7	0	4	L	4.7
66.0	18.0	2	3	L	3.8	2	1	L	1.5	2	1	L	1.5	2	3	L	3.8
66.0	24.0	3	0	L	.2	2	2	L	2.8	2	5	L	5.7	3	6	L	6.6
66.0	30.0	2	1	L	1.5	1	3	L	3.8	1	6	L	6.4	2	15	L	11.6
66.0	36.0	5	0	L	.5	3	2	L	2.9	3	3	L	3.9				
66.0	42.0	2	1	L	1.5	1	4	L	4.7	2	8	L	7.9				
66.0	48.0	3	0	L	.2	2	3	L	3.8								
66.0	54.0	3	1	L	1.6	2	4	L	4.8								
66.0	60.0	2	4	L	4.8	2	4	L	4.8								
66.0	66.0	4	1	L	1.8												
66.0	72.0	2	3	L	3.8												
66.0	78.0	3	2	L	2.9												
72.0	12.0	0	3	L	3.7	0	3	L	3.7	0	4	L	4.7	0	4	L	4.7
72.0	18.0	2	4	L	4.8	2	2	L	2.8	2	1	L	1.5	2	3	L	3.8
72.0	24.0	3	1	L	1.6	2	2	L	2.8	3	2	L	2.9	3	6	L	6.6
72.0	30.0	2	2	L	2.8	1	3	L	3.8	1	6	L	6.4	2	15	L	11.6
72.0	36.0	5	0	L	.5	3	2	L	2.9	3	3	L	3.9				
72.0	42.0	2	2	L	2.8	1	4	L	4.7	2	9	L	8.5				
72.0	48.0	3	0	L	.2	2	4	L	4.8								
72.0	54.0	3	1	L	1.6	2	4	L	4.8								
72.0	60.0	2	5	L	5.7	2	5	L	5.7								
72.0	66.0	4	2	L	3.0												
72.0	72.0	2	3	L	3.8												
72.0	78.0	3	2	L	2.9												
78.0	12.0	0	3	L	3.7	0	3	L	3.7	0	4	L	4.7	0	5	L	5.5
78.0	18.0	3	0	L	.2	2	2	L	2.8	2	1	L	1.5	2	3	L	3.8
78.0	24.0	3	1	L	1.6	2	2	L	2.8	3	2	L	2.9	3	6	L	6.6
78.0	30.0	2	2	L	2.8	1	3	L	3.8	1	6	L	6.4	2	15	L	11.6
78.0	36.0	5	0	L	.5	3	2	L	2.9	3	3	L	3.9				
78.0	42.0	2	2	L	2.8	1	4	L	4.7	2	9	L	8.5				
78.0	48.0	3	1	L	1.6	2	5	L	5.7								
78.0	54.0	3	1	L	1.6	2	4	L	4.8								
78.0	60.0	3	1	L	1.6	2	5	L	5.7								
78.0	66.0	4	2	L	3.0												
78.0	72.0	2	3	L	3.8												
78.0	78.0	3	3	L	3.9												

TABLE RR (Contd)

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE REPEATERS ON 19-GAUGE H88 LOADED 4-WIRE FACILITIES WITH H88 LOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
 4-WIRE TERMINATION = 1200 OHMS
 2-WIRE TERMINATION = 600 OHMS

LENGTH (KFT)		2-WIRE = 19H88		2-WIRE = 22H88		2-WIRE = 24H88		2-WIRE = 26H88	
4-WIRE 19H88	2-WIRE	BW = 15 HT	EQLR SLOPE						
			GAIN		GAIN		GAIN		GAIN
84.0	12.0	0 4	L 4.7	0 4	L 4.7	0 4	L 4.7	1 4	L 4.7
84.0	18.0	3 0	L .2	2 3	L 3.8	2 1	L 1.5	2 3	L 3.8
84.0	24.0	3 1	L 1.6	2 2	L 2.8	3 2	L 2.9	3 7	L 7.5
84.0	30.0	2 2	L 2.8	1 4	L 4.7	1 7	L 7.3	2 15	L 11.6
84.0	36.0	5 0	L .5	3 4	L 4.9	3 3	L 3.9		
84.0	42.0	2 2	L 2.8	1 5	L 5.6	2 9	L 8.5		
84.0	48.0	3 1	L 1.6	2 8	L 7.9				
84.0	54.0	3 1	L 1.6	2 4	L 4.8				
84.0	60.0	2 6	L 6.5	2 5	L 5.7				
84.0	66.0	4 3	L 4.1						
84.0	72.0	2 4	L 4.8						
84.0	78.0	3 4	L 4.9						
90.0	12.0	0 4	L 4.7	0 4	L 4.7	0 5	L 5.5	1 5	L 5.6
90.0	18.0	3 0	L .2	2 3	L 3.8	2 1	L 1.5	2 4	L 4.8
90.0	24.0	3 1	L 1.6	2 2	L 2.8	3 2	L 2.9	3 7	L 7.5
90.0	30.0	2 3	L 3.8	1 5	L 5.6	1 8	L 7.8	2 15	L 11.6
90.0	36.0	5 0	L .5	3 4	L 4.9	3 3	L 3.9		
90.0	42.0	2 2	L 2.8	1 5	L 5.6	2 10	L 9.1		
90.0	48.0	3 1	L 1.6	2 10	L 9.1				
90.0	54.0	3 2	L 2.9	2 4	L 4.8				
90.0	60.0	3 1	L 1.6	2 5	L 5.7				
90.0	66.0	4 3	L 4.1						
90.0	72.0	2 4	L 4.8						
90.0	78.0	3 4	L 4.9						
96.0	12.0	0 4	L 4.7	0 4	L 4.7	0 5	L 5.5	1 5	L 5.6
96.0	18.0	3 1	L 1.6	3 0	L .2	2 2	L 2.8	2 5	L 5.7
96.0	24.0	3 2	L 2.9	2 4	L 4.8	3 3	L 3.9	3 8	L 8.0
96.0	30.0	2 4	L 4.8	2 3	L 3.8	2 6	L 6.5	3 15	L 11.7
96.0	36.0	5 1	L 1.9	4 0	L .4	3 4	L 4.9		
96.0	42.0	2 2	L 2.8	1 6	L 6.4	2 13	L 10.7		
96.0	48.0	3 2	L 2.9	3 2	L 2.9				
96.0	54.0	3 3	L 3.9	2 5	L 5.7				
96.0	60.0	3 1	L 1.6	2 7	L 7.4				
96.0	66.0	5 0	L .5						
96.0	72.0	3 2	L 2.9						
96.0	78.0	4 0	L .4						

TABLE SS

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE
 REPEATERS ON 22-GAUGE H88 LOADED 4-WIRE FACILITIES WITH
 H88 LOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
 4-WIRE TERMINATION = 1200 OHMS
 2-WIRE TERMINATION = 600 OHMS

LENGTH (KFT)		2-WIRE = 19H88		2-WIRE = 22H88		2-WIRE = 24H88		2-WIRE = 26H88					
4-WIRE	2-WIRE	BW = 15	EQLR										
22H88		HT	SLOPE	HT	SLOPE	HT	SLOPE	HT	SLOPE				
			GAIN		GAIN		GAIN		GAIN				
12.0	12.0	0	3	L	3.7	0	3	L	3.7	0	4	L	4.7
12.0	18.0	1	6	L	6.4	1	2	L	2.7	0	5	L	5.5
12.0	24.0	2	1	L	1.5	1	3	L	3.8	1	5	L	5.6
12.0	30.0	2	1	L	1.5	1	3	L	3.8	0	7	L	7.2
12.0	36.0	4	0	L	.4	2	3	L	3.8	2	7	L	7.4
12.0	42.0	1	3	L	3.8	0	6	L	6.3	1	15	L	11.5
12.0	48.0	2	2	L	2.8	1	6	L	6.4				
12.0	54.0	2	2	L	2.8	1	7	L	7.3				
12.0	60.0	2	2	L	2.8	1	8	L	7.8				
12.0	66.0	3	2	L	2.9								
12.0	72.0	1	4	L	4.7								
12.0	78.0	2	3	L	3.8								
18.0	12.0	0	4	L	4.7	0	4	L	4.7	0	5	L	5.5
18.0	18.0	1	4	L	4.7	1	1	L	1.5	0	4	L	4.7
18.0	24.0	1	4	L	4.7	0	5	L	5.5	1	6	L	6.4
18.0	30.0	1	3	L	3.8	0	5	L	5.5	0	12	L	10.0
18.0	36.0	3	3	L	3.9	2	3	L	3.8	1	15	L	11.5
18.0	42.0	1	3	L	3.8	0	8	L	7.8	0	15	L	11.4
18.0	48.0	1	6	L	6.4	1	7	L	7.3				
18.0	54.0	1	5	L	5.6	0	15	L	11.4				
18.0	60.0	1	5	L	5.6	0	15	L	11.4				
18.0	66.0	3	2	L	2.9								
18.0	72.0	1	6	L	6.4								
18.0	78.0	2	4	L	4.8								
24.0	12.0	0	5	L	5.5	0	6	L	6.3	0	7	L	7.2
24.0	18.0	1	4	L	4.7	1	1	L	1.5	0	5	L	5.5
24.0	24.0	1	7	L	7.3	0	11	L	9.5	1	7	L	7.3
24.0	30.0	1	2	L	2.7	0	7	L	7.2	0	15	L	11.4
24.0	36.0	3	5	L	5.8	2	4	L	4.8	1	15	L	11.5
24.0	42.0	0	6	L	6.3	0	10	L	9.0	1	15	L	11.5
24.0	48.0	1	7	L	7.3	1	8	L	7.8				
24.0	54.0	1	11	L	9.6	1	10	L	9.0				
24.0	60.0	1	5	L	5.6	1	14	L	11.1				
24.0	66.0	3	2	L	2.9								
24.0	72.0	1	7	L	7.3								
24.0	78.0	2	4	L	4.8								

TABLE SS (Contd)

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE REPEATERS ON 22-GAUGE H88 LOADED 4-WIRE FACILITIES WITH H88 LOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
 4-WIRE TERMINATION = 1200 OHMS
 2-WIRE TERMINATION = 600 OHMS

LENGTH (KFT)		2-WIRE = 19H88				2-WIRE = 22H88				2-WIRE = 24H88				2-WIRE = 26H88								
4-WIRE	2-WIRE	BW = 15	EQLR	HT	SLOPE	GAIN	BW = 15	EQLR	HT	SLOPE	GAIN	BW = 15	EQLR	HT	SLOPE	GAIN	BW = 15	EQLR	HT	SLOPE	GAIN	
22H88																						
30.0	12.0	0	6	L		6.3	0	6	L		6.3	0	8	L		7.8	0	10	L		9.0	
30.0	18.0	1	4	L		4.7	1	1	L		1.5	0	5	L		5.5	0	15	L		11.4	
30.0	24.0	1	6	L		6.4	0	8	L		7.8	1	9	L		8.4	1	15	L		11.5	
30.0	30.0	1	3	L		3.8	0	8	L		7.8	0	15	L		11.4	1	15	L		11.5	
30.0	36.0	3	4	L		4.9	2	4	L		4.8	1	15	L		11.5						
30.0	42.0	0	10	L		9.0	0	13	L		10.5	1	15	L		11.5						
30.0	48.0	1	7	L		7.3	1	10	L		9.0											
30.0	54.0	1	8	L		7.8	0	15	L		11.4											
30.0	60.0	1	6	L		6.4	1	15	L		11.5											
30.0	66.0	3	2	L		2.9																
30.0	72.0	1	8	L		7.8																
30.0	78.0	2	5	L		5.7																
36.0	12.0	0	7	L		7.2	0	7	L		7.2	0	8	L		7.8	0	10	L		9.0	
36.0	18.0	2	1	L		1.5	1	3	L		3.8	1	3	L		3.8	1	12	L		10.1	
36.0	24.0	2	1	L		1.5	1	5	L		5.6	2	6	L		6.5	2	15	L		11.6	
36.0	30.0	1	5	L		5.6	0	9	L		8.4	0	15	L		11.4	2	15	L		11.6	
36.0	36.0	4	1	L		1.8	2	5	L		5.7	2	15	L		11.6						
36.0	42.0	1	5	L		5.6	0	15	L		11.4	1	15	L		11.5						
36.0	48.0	2	3	L		3.8	1	15	L		11.5											
36.0	54.0	2	3	L		3.8	1	15	L		11.5											
36.0	60.0	2	4	L		4.8	1	15	L		11.5											
36.0	66.0	3	3	L		3.9																
36.0	72.0	1	10	L		9.0																
36.0	78.0	2	6	L		6.5																
42.0	12.0	0	7	L		7.2	0	7	L		7.2	0	8	L		7.8	0	10	L		9.0	
42.0	18.0	2	1	L		1.5	1	3	L		3.8	1	4	L		4.7	1	13	L		10.6	
42.0	24.0	2	2	L		2.8	1	5	L		5.6	2	7	L		7.4	2	15	L		11.6	
42.0	30.0	1	6	L		6.4	0	12	L		10.0	0	15	L		11.4	2	15	L		11.6	
42.0	36.0	4	1	L		1.8	2	6	L		6.5	2	15	L		11.6						
42.0	42.0	1	5	L		5.6	0	15	L		11.4	1	15	L		11.5						
42.0	48.0	2	3	L		3.8	1	15	L		11.5											
42.0	54.0	2	3	L		3.8	1	15	L		11.5											
42.0	60.0	2	4	L		4.8	1	15	L		11.5											
42.0	66.0	3	4	L		4.9																
42.0	72.0	1	10	L		9.0																
42.0	78.0	2	6	L		6.5																

TABLE SS (Contd)

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE
 REPEATERS ON 22-GAUGE H88 LOADED 4-WIRE FACILITIES WITH
 H88 LOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
 4-WIRE TERMINATION = 1200 OHMS
 2-WIRE TERMINATION = 600 OHMS

LENGTH (KFT)		2-WIRE = 19H88			2-WIRE = 22H88			2-WIRE = 24H88			2-WIRE = 26H88						
4-WIRE	2-WIRE	BW = 15	EQLR	GAIN													
22H88		HT	SLOPE		HT	SLOPE		HT	SLOPE		HT	SLOPE					
48.0	12.0	0	7	L	7.2	0	7	L	7.2	0	8	L	7.8	0	11	L	9.5
48.0	18.0	2	1	L	1.5	1	4	L	4.7	1	4	L	4.7	1	13	L	10.6
48.0	24.0	2	2	L	2.8	1	5	L	5.6	2	7	L	7.4	2	15	L	11.6
48.0	30.0	1	7	L	7.3	1	6	L	6.4	1	15	L	11.5	2	15	L	11.6
48.0	36.0	4	1	L	1.8	2	7	L	7.4	2	15	L	11.6				
48.0	42.0	1	5	L	5.6	0	15	L	11.4	1	15	L	11.5				
48.0	48.0	2	3	L	3.8	2	5	L	5.7								
48.0	54.0	2	3	L	3.8	1	15	L	11.5								
48.0	60.0	2	4	L	4.8	1	15	L	11.5								
48.0	66.0	3	5	L	5.8												
48.0	72.0	1	10	L	9.0												
48.0	78.0	2	7	L	7.4												
54.0	12.0	0	8	L	7.8	0	7	L	7.2	0	9	L	8.4	0	12	L	10.0
54.0	18.0	2	1	L	1.5	1	5	L	5.6	1	3	L	3.8	1	12	L	10.1
54.0	24.0	2	3	L	3.8	1	5	L	5.6	2	7	L	7.4	2	15	L	11.6
54.0	30.0	1	6	L	6.4	0	12	L	10.0	1	15	L	11.5	2	15	L	11.6
54.0	36.0	4	1	L	1.8	2	10	L	9.1	2	15	L	11.6				
54.0	42.0	1	5	L	5.6	0	15	L	11.4	1	15	L	11.5				
54.0	48.0	2	3	L	3.8	2	5	L	5.7								
54.0	54.0	2	3	L	3.8	1	15	L	11.5								
54.0	60.0	2	4	L	4.8	1	15	L	11.5								
54.0	66.0	3	7	L	7.5												
54.0	72.0	1	10	L	9.0												
54.0	78.0	2	12	L	10.2												
60.0	12.0	0	8	L	7.8	0	8	L	7.8	0	9	L	8.4	0	13	L	10.5
60.0	18.0	2	2	L	2.8	1	6	L	6.4	1	4	L	4.7	1	13	L	10.6
60.0	24.0	2	3	L	3.8	1	5	L	5.6	2	7	L	7.4	2	15	L	11.6
60.0	30.0	1	9	L	8.4	1	7	L	7.3	1	15	L	11.5	2	15	L	11.6
60.0	36.0	4	2	L	3.0	2	13	L	10.7	2	15	L	11.6				
60.0	42.0	1	5	L	5.6	0	15	L	11.4	1	15	L	11.5				
60.0	48.0	2	3	L	3.8	2	5	L	5.7								
60.0	54.0	2	4	L	4.8	1	15	L	11.5								
60.0	60.0	2	4	L	4.8	1	15	L	11.5								
60.0	66.0	3	8	L	8.0												
60.0	72.0	1	11	L	9.6												
60.0	78.0	2	15	L	11.6												

TABLE SS (Contd)

**EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE
REPEATERS ON 22-GAUGE H88 LOADED 4-WIRE FACILITIES WITH
H88 LOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F**

END SECTIONS = 3.0 KFT
4-WIRE TERMINATION = 1200 OHMS
2-WIRE TERMINATION = 600 OHMS

LENGTH (KFT)		2-WIRE = 19H88			2-WIRE = 22H88			2-WIRE = 24H88			2-WIRE = 26H88						
4-WIRE	2-WIRE	BW = 15	EQLR	GAIN													
22H88		HT	SLOPE		HT	SLOPE		HT	SLOPE		HT	SLOPE					
66.0	12.0	0	9	L	8.4	0	8	L	7.8	0	10	L	9.0	0	14	L	11.0
66.0	18.0	2	2	L	2.8	1	15	L	11.5	1	4	L	4.7	1	15	L	11.5
66.0	24.0	2	5	L	5.7	1	9	L	8.4	2	8	L	7.9	2	15	L	11.6
66.0	30.0	2	2	L	2.8	1	7	L	7.3	1	15	L	11.5	2	15	L	11.6
66.0	36.0	4	3	L	4.1	3	3	L	3.9	2	15	L	11.6				
66.0	42.0	1	6	L	6.4	0	15	L	11.4	2	15	L	11.6				
66.0	48.0	2	4	L	4.8	2	6	L	6.5								
66.0	54.0	2	7	L	7.4	1	15	L	11.5								
66.0	60.0	2	5	L	5.7	2	10	L	9.1								
66.0	66.0	4	1	L	1.8												
66.0	72.0	2	7	L	7.4												
66.0	78.0	3	3	L	3.9												
72.0	12.0	0	9	L	8.4	0	9	L	8.4	0	11	L	9.5	0	15	L	11.4
72.0	18.0	2	3	L	3.8	2	1	L	1.5	1	5	L	5.6	2	7	L	7.4
72.0	24.0	2	7	L	7.4	1	15	L	11.5	2	9	L	8.5	2	15	L	11.6
72.0	30.0	2	2	L	2.8	1	8	L	7.8	1	15	L	11.5	2	15	L	11.6
72.0	36.0	4	3	L	4.1	3	3	L	3.9	2	15	L	11.6				
72.0	42.0	1	6	L	6.4	0	15	L	11.4	2	15	L	11.6				
72.0	48.0	2	5	L	5.7	2	7	L	7.4								
72.0	54.0	2	10	L	9.1	2	9	L	8.5								
72.0	60.0	2	5	L	5.7	2	12	L	10.2								
72.0	66.0	4	1	L	1.8												
72.0	72.0	2	8	L	7.9												
72.0	78.0	3	3	L	3.9												
78.0	12.0	0	11	L	9.5	0	11	L	9.5	0	14	L	11.0	0	15	L	11.4
78.0	18.0	2	3	L	3.8	2	2	L	2.8	1	7	L	7.3	2	8	L	7.9
78.0	24.0	2	10	L	9.1	2	4	L	4.8	2	10	L	9.1	3	15	L	11.7
78.0	30.0	2	2	L	2.8	1	9	L	8.4	1	15	L	11.5	2	15	L	11.6
78.0	36.0	4	5	L	5.9	3	3	L	3.9	3	7	L	7.5				
78.0	42.0	1	7	L	7.3	1	15	L	11.5	2	15	L	11.6				
78.0	48.0	2	7	L	7.4	2	7	L	7.4								
78.0	54.0	3	2	L	2.9	2	11	L	9.7								
78.0	60.0	2	6	L	6.5	2	14	L	11.1								
78.0	66.0	4	1	L	1.8												
78.0	72.0	2	9	L	8.5												
78.0	78.0	3	3	L	3.9												

SECTION 332-912-222

TABLE SS (Contd)

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE REPEATERS ON 22-GAUGE H88 LOADED 4-WIRE FACILITIES WITH H88 LOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
 4-WIRE TERMINATION = 1200 OHMS
 2-WIRE TERMINATION = 600 OHMS

LENGTH (KFT)		2-WIRE = 19H88				2-WIRE = 22H88				2-WIRE = 24H88				2-WIRE = 26H88								
4-WIRE	2-WIRE	BW = 15	EQLR	HT	SLOPE	GAIN	BW = 15	EQLR	HT	SLOPE	GAIN	BW = 15	EQLR	HT	SLOPE	GAIN	BW = 15	EQLR	HT	SLOPE	GAIN	
22H88																						
84.0	12.0	0	14	L		11.0	0	14	L		11.0	0	15	L		11.4	0	15	L		11.4	
84.0	18.0	2	4	L		4.8	2	2	L		2.8	1	12	L		10.1	2	9	L		8.5	
84.0	24.0	3	1	L		1.6	2	5	L		5.7	2	12	L		10.2	3	15	L		11.7	
84.0	30.0	2	2	L		2.8	1	11	L		9.6	1	15	L		11.5	3	15	L		11.7	
84.0	36.0	4	6	L		6.7	3	4	L		4.9	3	7	L		7.5						
84.0	42.0	1	8	L		7.8	1	15	L		11.5	2	15	L		11.6						
84.0	48.0	2	10	L		9.1	2	8	L		7.9											
84.0	54.0	3	2	L		2.9	2	12	L		10.2											
84.0	60.0	2	6	L		6.5	2	15	L		11.6											
84.0	66.0	4	2	L		3.0																
84.0	72.0	2	10	L		9.1																
84.0	78.0	3	3	L		3.9																
90.0	12.0	0	15	L		11.4	0	15	L		11.4	0	15	L		11.4	0	15	L		11.4	
90.0	18.0	2	5	L		5.7	2	2	L		2.8	2	2	L		2.8	2	10	L		9.1	
90.0	24.0	3	1	L		1.6	2	5	L		5.7	2	14	L		11.1	3	15	L		11.7	
90.0	30.0	2	2	L		2.8	1	13	L		10.6	1	15	L		11.5	3	15	L		11.7	
90.0	36.0	4	8	L		8.1	3	4	L		4.9	3	8	L		8.0						
90.0	42.0	1	9	L		8.4	1	15	L		11.5	2	15	L		11.6						
90.0	48.0	3	2	L		2.9	2	9	L		8.5											
90.0	54.0	3	2	L		2.9	2	14	L		11.1											
90.0	60.0	2	7	L		7.4	2	15	L		11.6											
90.0	66.0	4	2	L		3.0																
90.0	72.0	2	11	L		9.7																
90.0	78.0	3	4	L		4.9																
96.0	12.0	0	15	L		11.4	0	15	L		11.4	0	15	L		11.4	0	15	L		11.4	
96.0	18.0	2	6	L		6.5	2	3	L		3.8	2	3	L		3.8	2	12	L		10.2	
96.0	24.0	3	2	L		2.9	2	6	L		6.5	3	5	L		5.8	3	15	L		11.7	
96.0	30.0	2	3	L		3.8	1	15	L		11.5	1	15	L		11.5	3	15	L		11.7	
96.0	36.0	3	6	L		6.6	3	5	L		5.8	3	9	L		8.6						
96.0	42.0	1	11	L		9.6	1	15	L		11.5	2	15	L		11.6						
96.0	48.0	3	2	L		2.9	2	15	L		11.6											
96.0	54.0	3	2	L		2.9	2	15	L		11.6											
96.0	60.0	2	9	L		8.5	2	15	L		11.6											
96.0	66.0	4	3	L		4.1																
96.0	72.0	2	14	L		11.1																
96.0	78.0	3	5	L		5.8																

TABLE TT

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE REPEATERS ON 24-GAUGE H88 LOADED 4-WIRE FACILITIES WITH H88 LOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
 4-WIRE TERMINATION = 1200 OHMS
 2-WIRE TERMINATION = 600 OHMS

LENGTH (KFT)		2-WIRE = 19H88				2-WIRE = 22H88				2-WIRE = 24H88				2-WIRE = 26H88			
4-WIRE	2-WIRE	BW = 15	EQLR	HT	GAIN	BW = 15	EQLR	HT	GAIN	BW = 15	EQLR	HT	GAIN	BW = 15	EQLR	HT	GAIN
12.0	12.0	0	4	L	4.7	0	4	L	4.7	0	4	L	4.7	0	5	L	5.5
12.0	18.0	2	2	L	2.8	1	5	L	5.6	1	4	L	4.7	1	7	L	7.3
12.0	24.0	2	2	L	2.8	1	4	L	4.7	2	5	L	5.7	2	12	L	10.2
12.0	30.0	2	1	L	1.5	1	4	L	4.7	1	7	L	7.3	2	15	L	11.6
12.0	36.0	4	1	L	1.8	3	2	L	2.9	2	11	L	9.7				
12.0	42.0	1	4	L	4.7	0	7	L	7.2	1	15	L	11.5				
12.0	48.0	2	3	L	3.8	2	6	L	6.5								
12.0	54.0	2	4	L	4.8	1	10	L	9.0								
12.0	60.0	2	4	L	4.8	1	11	L	9.6								
12.0	66.0	3	5	L	5.8												
12.0	72.0	2	4	L	4.8												
12.0	78.0	2	7	L	7.4												
18.0	12.0	0	7	L	7.2	0	7	L	7.2	0	8	L	7.8	0	11	L	9.5
18.0	18.0	1	11	L	9.6	1	3	L	3.8	0	9	L	8.4	1	15	L	11.5
18.0	24.0	1	15	L	11.5	1	6	L	6.4	1	13	L	10.6	2	15	L	11.6
18.0	30.0	1	6	L	6.4	0	12	L	10.0	0	15	L	11.4	2	15	L	11.6
18.0	36.0	4	0	L	4	2	6	L	6.5	2	15	L	11.6				
18.0	42.0	1	6	L	6.4	0	15	L	11.4	1	15	L	11.5				
18.0	48.0	2	5	L	5.7	1	15	L	11.5								
18.0	54.0	2	5	L	5.7	1	15	L	11.5								
18.0	60.0	2	5	L	5.7	1	15	L	11.5								
18.0	66.0	3	4	L	4.9												
18.0	72.0	1	12	L	10.1												
18.0	78.0	2	8	L	7.9												
24.0	12.0	0	15	L	11.4												
24.0	18.0	2	2	L	2.8	1	4	L	4.7	1	6	L	6.4	1	15	L	11.5
24.0	24.0	2	3	L	3.8	1	9	L	8.4	2	13	L	10.7	2	15	L	11.6
24.0	30.0	1	6	L	6.4	0	15	L	11.4	1	15	L	11.5	3	15	L	11.7
24.0	36.0	4	1	L	1.8	2	9	L	8.5	2	15	L	11.6				
24.0	42.0	1	9	L	8.4	0	15	L	11.4	1	15	L	11.5				
24.0	48.0	2	6	L	6.5	1	15	L	11.5								
24.0	54.0	2	6	L	6.5	1	15	L	11.5								
24.0	60.0	2	6	L	6.5	1	15	L	11.5								
24.0	66.0	3	4	L	4.9												
24.0	72.0	1	15	L	11.5												
24.0	78.0	2	11	L	9.7												

SECTION 332-912-222

TABLE TT (Contd)

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE REPEATERS ON 24-GAUGE H88 LOADED 4-WIRE FACILITIES WITH H88 LOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
 4-WIRE TERMINATION = 1200 OHMS
 2-WIRE TERMINATION = 600 OHMS

LENGTH (KFT)		2-WIRE = 19H88			2-WIRE = 22H88			2-WIRE = 24H88			2-WIRE = 26H88						
4-WIRE	2-WIRE	BW = 15	EQLR	GAIN													
24H88		HT	SLOPE		HT	SLOPE		HT	SLOPE		HT	SLOPE					
30.0	12.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4
30.0	18.0	2	3	L	3.8	1	4	L	4.7	1	8	L	7.8	1	15	L	11.5
30.0	24.0	2	3	L	3.8	1	15	L	11.5	2	15	L	11.6	2	15	L	11.6
30.0	30.0	1	8	L	7.8	0	15	L	11.4	1	15	L	11.5	3	15	L	11.7
30.0	36.0	4	1	L	1.8	2	15	L	11.6	2	15	L	11.6				
30.0	42.0	1	14	L	11.1	0	15	L	11.4	1	15	L	11.5				
30.0	48.0	2	7	L	7.4	2	15	L	11.6								
30.0	54.0	2	7	L	7.4	1	15	L	11.5								
30.0	60.0	2	10	L	9.1	1	15	L	11.5								
30.0	66.0	3	6	L	6.6												
30.0	72.0	1	15	L	11.5												
30.0	78.0	2	15	L	11.6												
36.0	12.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4
36.0	18.0	2	3	L	3.8	1	9	L	8.4	1	14	L	11.1	1	15	L	11.5
36.0	24.0	2	4	L	4.8	1	15	L	11.5	2	15	L	11.6	3	15	L	11.7
36.0	30.0	2	4	L	4.8	1	15	L	11.5	1	15	L	11.5	3	15	L	11.7
36.0	36.0	4	2	L	3.0	3	7	L	7.5	2	15	L	11.6				
36.0	42.0	1	15	L	11.5	0	15	L	11.4	2	15	L	11.6				
36.0	48.0	2	11	L	9.7	2	15	L	11.6								
36.0	54.0	2	11	L	9.7	1	15	L	11.5								
36.0	60.0	2	15	L	11.6	1	15	L	11.5								
36.0	66.0	4	3	L	4.1												
36.0	72.0	2	15	L	11.6												
36.0	78.0	3	7	L	7.5												
42.0	12.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4
42.0	18.0	2	3	L	3.8	2	3	L	3.8	1	15	L	11.5	2	15	L	11.6
42.0	24.0	2	7	L	7.4	2	14	L	11.1	2	15	L	11.6	3	15	L	11.7
42.0	30.0	2	6	L	6.5	1	15	L	11.5	1	15	L	11.5	3	15	L	11.7
42.0	36.0	4	4	L	5.0	3	9	L	8.6	3	15	L	11.7				
42.0	42.0	1	15	L	11.5	1	15	L	11.5	2	15	L	11.6				
42.0	48.0	2	15	L	11.6	2	15	L	11.6								
42.0	54.0	2	15	L	11.6	2	15	L	11.6								
42.0	60.0	2	15	L	11.6	2	15	L	11.6								
42.0	66.0	4	3	L	4.1												
42.0	72.0	2	15	L	11.6												
42.0	78.0	3	10	L	9.2												

TABLE TT (Contd)

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE REPEATERS ON 24-GAUGE H88 LOADED 4-WIRE FACILITIES WITH H88 LOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
 4-WIRE TERMINATION = 1200 OHMS
 2-WIRE TERMINATION = 600 OHMS

LENGTH (KFT)		2-WIRE = 19H88			2-WIRE = 22H88			2-WIRE = 24H88			2-WIRE = 26H88		
4-WIRE	2-WIRE	BW = 15	EQLR	GAIN									
24H88		HT	SLOPE		HT	SLOPE		HT	SLOPE		HT	SLOPE	
48.0	12.0	0	15	L	11.4								
48.0	18.0	2	4	L	4.8	2	4	L	4.8	1	15	L	11.5
48.0	24.0	2	10	L	9.1	2	15	L	11.6	2	15	L	11.6
48.0	30.0	2	6	L	6.5	1	15	L	11.5	1	15	L	11.5
48.0	36.0	4	5	L	5.9	3	12	L	10.3	3	15	L	11.7
48.0	42.0	1	15	L	11.5	1	15	L	11.5	2	15	L	11.6
48.0	48.0	2	15	L	11.6	2	15	L	11.6				
48.0	54.0	3	5	L	5.8	2	15	L	11.6				
48.0	60.0	2	15	L	11.6	2	15	L	11.6				
48.0	66.0	4	4	L	5.0								
48.0	72.0	2	15	L	11.6								
48.0	78.0	3	12	L	10.3								
54.0	12.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4
54.0	18.0	2	5	L	5.7	2	5	L	5.7	2	8	L	7.9
54.0	24.0	3	3	L	3.9	2	15	L	11.6	2	15	L	11.6
54.0	30.0	2	7	L	7.4	1	15	L	11.5	2	15	L	11.6
54.0	36.0	4	8	L	8.1	3	15	L	11.7	3	15	L	11.7
54.0	42.0	1	15	L	11.5	1	15	L	11.5	2	15	L	11.6
54.0	48.0	3	6	L	6.6	2	15	L	11.6				
54.0	54.0	3	6	L	6.6	2	15	L	11.6				
54.0	60.0	2	15	L	11.6	2	15	L	11.6				
54.0	66.0	4	4	L	5.0								
54.0	72.0	2	15	L	11.6								
54.0	78.0	3	15	L	11.7								
60.0	12.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4
60.0	18.0	2	7	L	7.4	2	6	L	6.5	2	12	L	10.2
60.0	24.0	3	4	L	4.9	2	15	L	11.6	3	15	L	11.7
60.0	30.0	2	10	L	9.1	1	15	L	11.5	2	15	L	11.6
60.0	36.0	3	15	L	11.7	3	15	L	11.7	3	15	L	11.7
60.0	42.0	1	15	L	11.5	1	15	L	11.5	2	15	L	11.6
60.0	48.0	3	7	L	7.5	2	15	L	11.6				
60.0	54.0	3	9	L	8.6	2	15	L	11.6				
60.0	60.0	2	15	L	11.6	2	15	L	11.6				
60.0	66.0	4	5	L	5.9								
60.0	72.0	2	15	L	11.6								
60.0	78.0	3	15	L	11.7								

TABLE TT (Contd)

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE
REPEATERS ON 24-GAUGE H88 LOADED 4-WIRE FACILITIES WITH
H88 LOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
4-WIRE TERMINATION = 1200 OHMS
2-WIRE TERMINATION = 600 OHMS

LENGTH (KFT)		2-WIRE = 19H88			2-WIRE = 22H88			2-WIRE = 24H88			2-WIRE = 26H88		
4-WIRE	2-WIRE	BW = 15	EQLR										
24H88		HT	SLOPE	GAIN									
66.0	12.0	0	15	L 11.4	0	15	L 11.4	0	15	L 11.4	1	15	L 11.5
66.0	18.0	2	14	L 11.1	2	8	L 7.9	2	15	L 11.6	2	15	L 11.6
66.0	24.0	3	5	L 5.8	2	15	L 11.6	3	15	L 11.7	3	15	L 11.7
66.0	30.0	2	15	L 11.6	1	15	L 11.5	2	15	L 11.6	4	15	L 11.8
66.0	36.0	3	15	L 11.7	3	15	L 11.7	3	15	L 11.7			
66.0	42.0	1	15	L 11.5	1	15	L 11.5	3	15	L 11.7			
66.0	48.0	3	10	L 9.2	3	15	L 11.7						
66.0	54.0	3	13	L 10.8	2	15	L 11.6						
66.0	60.0	3	15	L 11.7	2	15	L 11.6						
66.0	66.0	4	6	L 6.7									
66.0	72.0	2	15	L 11.6									
66.0	78.0	3	15	L 11.7									

TABLE UU

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE REPEATERS ON 26-GAUGE H88 LOADED 4-WIRE FACILITIES WITH H88 LOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
 4-WIRE TERMINATION = 1200 OHMS
 2-WIRE TERMINATION = 600 OHMS

LENGTH (KFT)		2-WIRE = 19H88		2-WIRE = 22H88		2-WIRE = 24H88		2-WIRE = 26H88		
4-WIRE	2-WIRE	BW = 15	EQLR							
26H88		HT	SLOPE	HT	SLOPE	HT	SLOPE	HT	SLOPE	
			GAIN		GAIN		GAIN		GAIN	
12.0	12.0	1	7 L	7.3	0	5 L	5.5	0	6 L	6.3
12.0	18.0	3	1 L	1.6	2	3 L	3.8	2	4 L	4.8
12.0	24.0	3	1 L	1.6	2	4 L	4.8	3	5 L	5.8
12.0	30.0	3	1 L	1.6	2	4 L	4.8	1	10 L	9.0
12.0	36.0	5	0 L	.5	3	5 L	5.8	3	13 L	10.8
12.0	42.0	2	4 L	4.8	1	9 L	8.4	2	15 L	11.6
12.0	48.0	3	3 L	3.9	2	11 L	9.7			
12.0	54.0	3	4 L	4.9	2	12 L	10.2			
12.0	60.0	3	4 L	4.9	2	13 L	10.7			
12.0	66.0	4	3 L	4.1						
12.0	72.0	2	6 L	6.5						
12.0	78.0	3	5 L	5.8						
18.0	12.0	1	15 L	11.5	0	15 L	11.4	0	15 L	11.4
18.0	18.0	2	8 L	7.9	2	6 L	6.5	1	15 L	11.5
18.0	24.0	2	10 L	9.1	2	15 L	11.6	2	15 L	11.6
18.0	30.0	2	7 L	7.4	1	15 L	11.5	1	15 L	11.5
18.0	36.0	4	5 L	5.9	3	14 L	11.2	3	15 L	11.7
18.0	42.0	2	13 L	10.7	1	15 L	11.5	3	15 L	11.7
18.0	48.0	3	8 L	8.0	2	15 L	11.6			
18.0	54.0	3	9 L	8.6	2	15 L	11.6			
18.0	60.0	2	15 L	11.6	2	15 L	11.6			
18.0	66.0	4	6 L	6.7						
18.0	72.0	2	15 L	11.6						
18.0	78.0	3	15 L	11.7						
24.0	12.0	1	15 L	11.5	0	15 L	11.4	0	15 L	11.4
24.0	18.0	2	15 L	11.6	2	15 L	11.6	2	15 L	11.6
24.0	24.0	3	7 L	7.5	2	15 L	11.6	3	15 L	11.7
24.0	30.0	2	15 L	11.6	2	15 L	11.6	2	15 L	11.6
24.0	36.0	4	15 L	11.8	3	15 L	11.7	3	15 L	11.7
24.0	42.0	2	15 L	11.6	2	15 L	11.6	3	15 L	11.7
24.0	48.0	3	15 L	11.7	3	15 L	11.7			
24.0	54.0	3	15 L	11.7	3	15 L	11.7			
24.0	60.0	3	15 L	11.7	3	15 L	11.7			
24.0	66.0	4	14 L	11.4						
24.0	72.0	2	15 L	11.6						
24.0	78.0	3	15 L	11.7						
								1	15 L	11.5
								3	15 L	11.7
								4	15 L	11.8

TABLE UU (Contd)

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE
 REPEATERS ON 26-GAUGE H88 LOADED 4-WIRE FACILITIES WITH
 H88 LOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
 4-WIRE TERMINATION = 1200 OHMS
 2-WIRE TERMINATION = 600 OHMS

LENGTH (KFT)		2-WIRE = 19H88			2-WIRE = 22H88			2-WIRE = 24H88			2-WIRE = 26H88						
4-WIRE	2-WIRE	BW = 15	EQLR	GAIN													
26H88		HT	SLOPE		HT	SLOPE		HT	SLOPE		HT	SLOPE					
30.0	12.0	1	15	L	11.5	0	15	L	11.4	1	15	L	11.5	2	15	L	11.6
30.0	18.0	3	15	L	11.7	2	15	L	11.6	2	15	L	11.6	3	15	L	11.7
30.0	24.0	3	15	L	11.7	2	15	L	11.6	3	15	L	11.7	4	15	L	11.8
30.0	30.0	3	15	L	11.7	2	15	L	11.6	3	15	L	11.7				
30.0	36.0	5	3	L	4.2	3	15	L	11.7	4	15	L	11.8				
30.0	42.0	2	15	L	11.6	3	15	L	11.7	4	15	L	11.8				
30.0	48.0	3	15	L	11.7	3	15	L	11.7								
30.0	54.0	3	15	L	11.7	3	15	L	11.7								
30.0	60.0	3	15	L	11.7	3	15	L	11.7								
30.0	66.0	4	15	L	11.8												
30.0	72.0	3	15	L	11.7												
30.0	78.0	3	15	L	11.7												
36.0	12.0	2	15	L	11.6	1	15	L	11.5	2	15	L	11.6	3	15	L	11.7
36.0	18.0	3	15	L	11.7	3	15	L	11.7	2	15	L	11.6	4	15	L	11.8
36.0	24.0	3	15	L	11.7	3	15	L	11.7	4	15	L	11.8	5	15	L	11.9
36.0	30.0	3	15	L	11.7	2	15	L	11.6	4	15	L	11.8				
36.0	36.0	5	6	L	6.9	4	15	L	11.8	4	15	L	11.8				
36.0	42.0	3	15	L	11.7	3	15	L	11.7	4	15	L	11.8				
36.0	48.0	3	15	L	11.7	4	15	L	11.8								
36.0	54.0	3	15	L	11.7	4	15	L	11.8								
36.0	60.0	3	15	L	11.7	4	15	L	11.8								
36.0	66.0	5	15	L	11.9												
36.0	72.0	4	15	L	11.8												
36.0	78.0	4	15	L	11.8												

TABLE VV

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE
 REPEATERS ON 19-GAUGE H88 LOADED 4-WIRE FACILITIES WITH
 NONLOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
 4-WIRE TERMINATION = 1200 OHMS
 2-WIRE TERMINATION = 900 OHMS

LENGTH (KFT)		2-WIRE = 19 NL			2-WIRE = 22 NL			2-WIRE = 24 NL			2-WIRE = 26 NL		
4-WIRE	2-WIRE	BW = 15	EQLR	GAIN									
19H88		HT	SLOPE		HT	SLOPE		HT	SLOPE		HT	SLOPE	
12.0	1.0	0	0	L	0.0	0	0	L	0.0	0	0	L	0.0
12.0	2.0	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4
12.0	3.0	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4
12.0	4.0	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6
12.0	5.0	0	3	L	3.7	0	3	L	3.7	0	3	L	3.7
12.0	6.0	0	3	L	3.7	0	3	L	3.7	0	3	L	3.7
12.0	7.0	0	4	L	4.7	0	4	L	4.7	0	4	L	4.7
12.0	8.0	0	5	L	5.5	0	5	L	5.5	1	5	L	5.6
12.0	9.0	1	6	L	6.4	1	6	L	6.4	2	5	L	5.7
12.0	10.0	2	6	L	6.5	2	6	L	6.5	3	6	L	6.6
12.0	11.0	3	6	L	6.6	3	7	L	7.5	4	6	L	6.7
12.0	12.0	3	9	L	8.6	4	7	L	7.6	4	9	L	8.7
12.0	13.0	4	9	L	8.7	4	10	L	9.3	5	9	L	8.9
12.0	14.0	5	9	L	8.9	5	10	L	9.5	0	7	NL	3.4
12.0	15.0	5	14	L	11.5	0	7	NL	3.4	1	8	NL	3.8
12.0	16.0	0	8	NL	3.7	0	8	NL	3.7	1	9	NL	4.2
12.0	17.0	0	9	NL	4.2	1	8	NL	3.8	2	9	NL	4.3
12.0	18.0	0	9	NL	4.2	1	9	NL	4.2	2	10	NL	4.8
18.0	1.0	0	0	L	0.0	0	0	L	0.0	0	0	L	0.0
18.0	2.0	0	0	L	0.0	0	0	L	0.0	0	0	L	0.0
18.0	3.0	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4
18.0	4.0	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6
18.0	5.0	0	3	L	3.7	0	3	L	3.7	0	3	L	3.7
18.0	6.0	0	4	L	4.7	0	4	L	4.7	0	4	L	4.7
18.0	7.0	0	5	L	5.5	0	5	L	5.5	0	6	L	6.3
18.0	8.0	0	7	L	7.2	0	7	L	7.2	1	6	L	6.4
18.0	9.0	1	8	L	7.8	1	8	L	7.8	2	7	L	7.4
18.0	10.0	2	8	L	7.9	2	8	L	7.9	2	10	L	9.1
18.0	11.0	3	9	L	8.6	3	9	L	8.6	3	12	L	10.3
18.0	12.0	3	13	L	10.8	3	14	L	11.2	4	13	L	10.9
18.0	13.0	4	13	L	10.9	4	15	L	11.8	5	14	L	11.5
18.0	14.0	4	15	L	11.8	5	15	L	11.9	5	15	L	11.9
18.0	15.0	5	15	L	11.9	5	15	L	11.9	0	9	NL	4.2
18.0	16.0	0	8	NL	3.7	0	8	NL	3.7	1	9	NL	4.2
18.0	17.0	0	9	NL	4.2	0	9	NL	4.2	1	10	NL	4.7
18.0	18.0	0	10	NL	4.6	0	10	NL	4.6	2	10	NL	4.8

TABLE VV (Contd)

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE REPEATERS ON 19-GAUGE H88 LOADED 4-WIRE FACILITIES WITH NONLOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
 4-WIRE TERMINATION = 1200 OHMS
 2-WIRE TERMINATION = 900 OHMS

LENGTH (KFT)		2-WIRE = 19 NL		2-WIRE = 22 NL		2-WIRE = 24 NL		2-WIRE = 26 NL	
4-WIRE	2-WIRE	BW = 15	EQLR						
19H88		HT	SLOPE	HT	SLOPE	HT	SLOPE	HT	SLOPE
24.0	1.0	0	0 L	0	0 L	0	0 L	0	0 L
24.0	2.0	0	0 L	0	0 L	0	0 L	0	0 L
24.0	3.0	0	1 L	0	1 L	0	1 L	0	1 L
24.0	4.0	0	2 L	0	2 L	0	2 L	0	2 L
24.0	5.0	0	3 L	0	3 L	0	3 L	0	3 L
24.0	6.0	0	5 L	0	4 L	0	5 L	0	5 L
24.0	7.0	0	6 L	0	6 L	0	6 L	0	7 L
24.0	8.0	0	8 L	1	6 L	1	7 L	1	8 L
24.0	9.0	1	9 L	1	9 L	2	8 L	2	9 L
24.0	10.0	2	10 L	2	10 L	3	9 L	3	11 L
24.0	11.0	3	10 L	3	11 L	4	10 L	4	13 L
24.0	12.0	4	10 L	4	11 L	4	15 L	5	15 L
24.0	13.0	4	15 L	4	15 L	5	15 L	6	15 L
24.0	14.0	5	15 L	5	15 L	6	15 L	7	15 L
24.0	15.0	5	15 L	6	15 L	6	15 L	7	15 L
24.0	16.0	6	15 L	6	15 L	7	15 L	8	15 L
24.0	17.0	6	15 L	7	15 L	1	11 NL	9	15 L
24.0	18.0	0	10 NL	1	10 NL	2	11 NL	3	12 NL
30.0	1.0	0	0 L	0	0 L	0	0 L	0	0 L
30.0	2.0	0	1 L	0	1 L	0	1 L	0	1 L
30.0	3.0	0	2 L	0	2 L	0	2 L	0	2 L
30.0	4.0	0	2 L	0	2 L	0	3 L	0	3 L
30.0	5.0	0	3 L	0	3 L	0	3 L	0	3 L
30.0	6.0	0	4 L	0	4 L	0	4 L	0	5 L
30.0	7.0	0	6 L	0	5 L	0	6 L	0	6 L
30.0	8.0	0	7 L	0	7 L	1	6 L	1	7 L
30.0	9.0	1	8 L	1	8 L	2	7 L	2	8 L
30.0	10.0	2	9 L	2	9 L	3	8 L	3	9 L
30.0	11.0	3	9 L	3	9 L	4	8 L	4	11 L
30.0	12.0	4	9 L	4	10 L	4	14 L	5	12 L
30.0	13.0	4	14 L	4	15 L	5	15 L	6	13 L
30.0	14.0	5	13 L	5	15 L	6	14 L	1	8 NL
30.0	15.0	5	15 L	6	14 L	6	15 L	1	9 NL
30.0	16.0	6	15 L	6	15 L	1	9 NL	2	10 NL
30.0	17.0	0	9 NL	1	9 NL	1	10 NL	3	10 NL
30.0	18.0	0	10 NL	1	10 NL	2	11 NL	3	12 NL

TABLE VV (Contd)

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE REPEATERS ON 19-GAUGE H88 LOADED 4-WIRE FACILITIES WITH NONLOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
 4-WIRE TERMINATION = 1200 OHMS
 2-WIRE TERMINATION = 900 OHMS

LENGTH (KFT)		2-WIRE = 19 NL				2-WIRE = 22 NL				2-WIRE = 24 NL				2-WIRE = 26 NL			
4-WIRE	2-WIRE	BW = 15	EQLR			BW = 15	EQLR			BW = 15	EQLR			BW = 15	EQLR		
19H88		HT	SLOPE	GAIN		HT	SLOPE	GAIN		HT	SLOPE	GAIN		HT	SLOPE	GAIN	
36.0	1.0	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4
36.0	2.0	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4
36.0	3.0	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6
36.0	4.0	0	3	L	3.7	0	3	L	3.7	0	3	L	3.7	0	3	L	3.7
36.0	5.0	0	3	L	3.7	0	3	L	3.7	0	3	L	3.7	0	3	L	3.7
36.0	6.0	0	4	L	4.7	0	4	L	4.7	0	4	L	4.7	0	4	L	4.7
36.0	7.0	0	5	L	5.5	0	5	L	5.5	0	6	L	6.3	1	5	L	5.6
36.0	8.0	1	6	L	6.4	1	6	L	6.4	2	5	L	5.7	2	5	L	5.7
36.0	9.0	2	6	L	6.5	2	6	L	6.5	2	7	L	7.4	3	6	L	6.6
36.0	10.0	3	6	L	6.6	3	6	L	6.6	3	7	L	7.5	4	6	L	6.7
36.0	11.0	3	8	L	8.0	4	6	L	6.7	4	8	L	8.1	5	7	L	7.7
36.0	12.0	4	8	L	8.1	4	9	L	8.7	5	8	L	8.3	0	7	NL	3.4
36.0	13.0	5	8	L	8.3	5	9	L	8.9	0	7	NL	3.4	1	7	NL	3.4
36.0	14.0	5	12	L	10.6	0	7	NL	3.4	1	7	NL	3.4	2	7	NL	3.5
36.0	15.0	0	7	NL	3.4	1	7	NL	3.4	1	8	NL	3.8	2	8	NL	3.9
36.0	16.0	0	8	NL	3.7	1	8	NL	3.8	2	8	NL	3.9	3	9	NL	4.4
36.0	17.0	1	8	NL	3.8	1	9	NL	4.2	2	9	NL	4.3	3	10	NL	4.9
36.0	18.0	1	9	NL	4.2	2	9	NL	4.3	3	10	NL	4.9	4	10	NL	5.0
42.0	1.0	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4
42.0	2.0	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4
42.0	3.0	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6
42.0	4.0	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6
42.0	5.0	0	3	L	3.7	0	3	L	3.7	0	3	L	3.7	0	3	L	3.7
42.0	6.0	0	4	L	4.7	0	4	L	4.7	0	4	L	4.7	0	4	L	4.7
42.0	7.0	0	5	L	5.5	0	5	L	5.5	1	4	L	4.7	1	5	L	5.6
42.0	8.0	1	5	L	5.6	1	5	L	5.6	2	5	L	5.7	2	5	L	5.7
42.0	9.0	2	6	L	6.5	2	6	L	6.5	3	5	L	5.8	3	5	L	5.8
42.0	10.0	3	6	L	6.6	3	6	L	6.6	3	7	L	7.5	4	6	L	6.7
42.0	11.0	3	8	L	8.0	4	6	L	6.7	4	7	L	7.6	5	6	L	6.9
42.0	12.0	4	8	L	8.1	4	8	L	8.1	5	7	L	7.7	6	6	L	7.0
42.0	13.0	5	7	L	7.7	5	8	L	8.3	0	7	NL	3.4	6	11	L	10.2
42.0	14.0	5	11	L	10.0	0	7	NL	3.4	1	7	NL	3.4	7	10	L	9.9
42.0	15.0	0	7	NL	3.4	1	7	NL	3.4	1	8	NL	3.8	8	9	L	9.6
42.0	16.0	0	8	NL	3.7	1	8	NL	3.8	2	8	NL	3.9	3	9	NL	4.4
42.0	17.0	1	8	NL	3.8	2	8	NL	3.9	2	9	NL	4.3	3	10	NL	4.9
42.0	18.0	1	9	NL	4.2	2	9	NL	4.3	3	9	NL	4.4	4	10	NL	5.0

TABLE VV (Contd)

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE
REPEATERS ON 19-GAUGE H88 LOADED 4-WIRE FACILITIES WITH
NONLOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT

4-WIRE TERMINATION = 1200 OHMS

2-WIRE TERMINATION = 900 OHMS

LENGTH (KFT)		2-WIRE = 19 NL				2-WIRE = 22 NL				2-WIRE = 24 NL				2-WIRE = 26 NL				
4-WIRE	2-WIRE	BW = 15	EQLR	HT	SLOPE	BW = 15	EQLR	HT	SLOPE	BW = 15	EQLR	HT	SLOPE	BW = 15	EQLR	HT	SLOPE	GAIN
19H88																		
48.0	1.0	0	0	L	0.0													
48.0	2.0	0	1	L	1.4													
48.0	3.0	0	2	L	2.6	0	1	L	1.4	0	2	L	2.6	0	2	L	2.6	
48.0	4.0	0	2	L	2.6													
48.0	5.0	0	3	L	3.7													
48.0	6.0	0	4	L	4.7													
48.0	7.0	0	5	L	5.5	0	5	L	5.5	0	5	L	5.5	1	5	L	5.6	
48.0	8.0	1	5	L	5.6	1	5	L	5.6	1	6	L	6.4	2	5	L	5.7	
48.0	9.0	2	6	L	6.5	2	6	L	6.5	2	6	L	6.5	3	6	L	6.6	
48.0	10.0	3	6	L	6.6	3	6	L	6.6	3	7	L	7.5	4	6	L	6.7	
48.0	11.0	3	8	L	8.0	4	6	L	6.7	4	7	L	7.6	5	6	L	6.9	
48.0	12.0	4	8	L	8.1	4	8	L	8.1	5	7	L	7.7	5	10	L	9.5	
48.0	13.0	5	8	L	8.3	5	8	L	8.3	5	12	L	10.6	6	11	L	10.2	
48.0	14.0	5	11	L	10.0	5	13	L	11.0	6	12	L	10.7	7	11	L	10.4	
48.0	15.0	6	10	L	9.7	6	12	L	10.7	7	11	L	10.4	2	8	NL	3.9	
48.0	16.0	6	15	L	12.1	1	8	NL	3.8	7	15	L	12.4	3	9	NL	4.4	
48.0	17.0	1	8	NL	3.8	1	9	NL	4.2	2	9	NL	4.3	3	10	NL	4.9	
48.0	18.0	1	9	NL	4.2	2	9	NL	4.3	3	9	NL	4.4	4	10	NL	5.0	
54.0	1.0	0	0	L	0.0													
54.0	2.0	0	1	L	1.4													
54.0	3.0	0	1	L	1.4													
54.0	4.0	0	2	L	2.6													
54.0	5.0	0	3	L	3.7													
54.0	6.0	0	4	L	4.7													
54.0	7.0	0	5	L	5.5	0	5	L	5.5	1	4	L	4.7	1	5	L	5.6	
54.0	8.0	1	5	L	5.6	1	5	L	5.6	2	5	L	5.7	2	5	L	5.7	
54.0	9.0	2	6	L	6.5	2	6	L	6.5	3	5	L	5.8	3	6	L	6.6	
54.0	10.0	3	6	L	6.6	3	6	L	6.6	4	5	L	5.9	4	6	L	6.7	
54.0	11.0	4	6	L	6.7	4	6	L	6.7	4	7	L	7.6	5	6	L	6.9	
54.0	12.0	4	8	L	8.1	4	9	L	8.7	5	8	L	8.3	6	7	L	7.9	
54.0	13.0	5	8	L	8.3	5	9	L	8.9	6	8	L	8.5	6	11	L	10.2	
54.0	14.0	5	12	L	10.6	6	8	L	8.5	6	13	L	11.2	7	11	L	10.4	
54.0	15.0	6	10	L	9.7	6	12	L	10.7	7	11	L	10.4	8	9	L	9.6	
54.0	16.0	6	15	L	12.1	7	10	L	9.9	7	15	L	12.4	9	10	L	10.4	
54.0	17.0	7	13	L	11.5	7	15	L	12.4	8	15	L	12.7	10	11	L	11.2	
54.0	18.0	7	15	L	12.4	2	9	NL	4.3	9	15	L	12.9	11	11	L	11.5	

TABLE VV (Contd)

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE
REPEATERS ON 19-GAUGE H88 LOADED 4-WIRE FACILITIES WITH
NONLOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
4-WIRE TERMINATION = 1200 OHMS
2-WIRE TERMINATION = 900 OHMS

LENGTH (KFT)		2-WIRE = 19 NL				2-WIRE = 22 NL				2-WIRE = 24 NL				2-WIRE = 26 NL			
4-WIRE	2-WIRE	BW = 15		EQLR	BW = 15		EQLR	BW = 15		EQLR	BW = 15		EQLR	BW = 15		EQLR	
19H88		HT	SLOPE	GAIN	HT	SLOPE	GAIN	HT	SLOPE	GAIN	HT	SLOPE	GAIN	HT	SLOPE	GAIN	
60.0	1.0	0	0	L	0.0	0	0	L	0.0	0	0	L	0.0	0	0	L	0.0
60.0	2.0	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4
60.0	3.0	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6
60.0	4.0	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6
60.0	5.0	0	3	L	3.7	0	3	L	3.7	0	3	L	3.7	0	3	L	3.7
60.0	6.0	0	4	L	4.7	0	4	L	4.7	0	4	L	4.7	0	4	L	4.7
60.0	7.0	0	5	L	5.5	0	5	L	5.5	1	4	L	4.7	1	4	L	4.7
60.0	8.0	1	5	L	5.6	1	5	L	5.6	2	5	L	5.7	2	5	L	5.7
60.0	9.0	2	5	L	5.7	2	5	L	5.7	3	5	L	5.8	3	5	L	5.8
60.0	10.0	3	6	L	6.6	3	6	L	6.6	4	5	L	5.9	4	6	L	6.7
60.0	11.0	4	6	L	6.7	4	6	L	6.7	4	7	L	7.6	5	6	L	6.9
60.0	12.0	4	7	L	7.6	4	8	L	8.1	5	7	L	7.7	6	6	L	7.0
60.0	13.0	5	7	L	7.7	5	8	L	8.3	6	7	L	7.9	6	10	L	9.7
60.0	14.0	5	10	L	9.5	6	7	L	7.9	6	11	L	10.2	7	10	L	9.9
60.0	15.0	6	9	L	9.1	6	11	L	10.2	7	10	L	9.9	8	8	L	9.0
60.0	16.0	6	15	L	12.1	1	8	NL	3.8	7	15	L	12.4	8	15	L	12.7
60.0	17.0	1	8	NL	3.8	2	8	NL	3.9	8	14	L	12.2	9	15	L	12.9
60.0	18.0	1	9	NL	4.2	2	9	NL	4.3	3	10	NL	4.9	10	15	L	13.1
66.0	1.0	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4
66.0	2.0	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4
66.0	3.0	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6
66.0	4.0	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6
66.0	5.0	0	3	L	3.7	0	3	L	3.7	0	3	L	3.7	0	3	L	3.7
66.0	6.0	0	4	L	4.7	0	4	L	4.7	0	4	L	4.7	0	4	L	4.7
66.0	7.0	1	4	L	4.7	1	4	L	4.7	1	4	L	4.7	1	4	L	4.7
66.0	8.0	2	4	L	4.8	2	4	L	4.8	2	5	L	5.7	2	5	L	5.7
66.0	9.0	3	4	L	4.9	3	4	L	4.9	3	5	L	5.8	3	5	L	5.8
66.0	10.0	3	6	L	6.6	3	6	L	6.6	4	5	L	5.9	4	6	L	6.7
66.0	11.0	4	6	L	6.7	4	6	L	6.7	5	5	L	6.1	5	6	L	6.9
66.0	12.0	5	5	L	6.1	5	6	L	6.9	5	7	L	7.7	6	6	L	7.0
66.0	13.0	5	7	L	7.7	5	8	L	8.3	6	7	L	7.9	7	6	L	7.3
66.0	14.0	6	7	L	7.9	6	7	L	7.9	7	6	L	7.3	7	10	L	9.9
66.0	15.0	6	9	L	9.1	1	7	NL	3.4	7	10	L	9.9	8	8	L	9.0
66.0	16.0	1	8	NL	3.8	2	7	NL	3.5	8	8	L	9.0	9	9	L	9.8
66.0	17.0	1	8	NL	3.8	2	8	NL	3.9	8	13	L	11.8	10	10	L	10.7
66.0	18.0	2	8	NL	3.9	2	9	NL	4.3	9	14	L	12.5	11	10	L	11.0

TABLE VV (Contd)

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE REPEATERS ON 19-GAUGE H88 LOADED 4-WIRE FACILITIES WITH NONLOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
 4-WIRE TERMINATION = 1200 OHMS
 2-WIRE TERMINATION = 900 OHMS

LENGTH (KFT)		2-WIRE = 19 NL			2-WIRE = 22 NL			2-WIRE = 24 NL			2-WIRE = 26 NL		
4-WIRE	2-WIRE	BW = 15	EQLR	GAIN									
19H88		HT	SLOPE		HT	SLOPE		HT	SLOPE		HT	SLOPE	
72.0	1.0	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4
72.0	2.0	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4
72.0	3.0	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6
72.0	4.0	0	3	L	3.7	0	2	L	2.6	0	3	L	3.7
72.0	5.0	0	3	L	3.7	0	3	L	3.7	0	3	L	3.7
72.0	6.0	0	4	L	4.7	0	4	L	4.7	0	4	L	4.7
72.0	7.0	1	4	L	4.7	1	4	L	4.7	1	4	L	4.8
72.0	8.0	2	4	L	4.8	2	4	L	4.8	2	5	L	5.7
72.0	9.0	3	4	L	4.9	3	4	L	4.9	3	5	L	5.8
72.0	10.0	3	6	L	6.6	4	4	L	5.0	4	5	L	5.9
72.0	11.0	4	6	L	6.7	4	6	L	6.7	5	5	L	6.1
72.0	12.0	5	6	L	6.9	5	6	L	6.9	5	7	L	7.7
72.0	13.0	5	7	L	7.7	5	9	L	8.9	6	7	L	7.9
72.0	14.0	6	7	L	7.9	6	7	L	7.9	7	7	L	8.1
72.0	15.0	6	10	L	9.7	1	7	NL	3.4	7	10	L	9.9
72.0	16.0	1	8	NL	3.8	2	7	NL	3.5	8	8	L	9.0
72.0	17.0	2	8	NL	3.9	2	8	NL	3.9	8	14	L	12.2
72.0	18.0	2	8	NL	3.9	2	9	NL	4.3	9	15	L	12.9
78.0	1.0	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4
78.0	2.0	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4
78.0	3.0	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6
78.0	4.0	0	3	L	3.7	0	3	L	3.7	0	3	L	3.7
78.0	5.0	0	3	L	3.7	0	3	L	3.7	0	4	L	4.7
78.0	6.0	0	4	L	4.7	0	4	L	4.7	0	5	L	5.5
78.0	7.0	1	5	L	5.6	1	5	L	5.6	1	5	L	5.6
78.0	8.0	2	5	L	5.7	2	5	L	5.7	2	5	L	5.7
78.0	9.0	3	5	L	5.8	3	5	L	5.8	3	6	L	6.6
78.0	10.0	3	6	L	6.6	4	5	L	5.9	4	6	L	6.7
78.0	11.0	4	6	L	6.7	4	6	L	6.7	5	6	L	6.9
78.0	12.0	5	6	L	6.9	5	6	L	6.9	5	9	L	8.9
78.0	13.0	5	9	L	8.9	6	6	L	7.0	6	8	L	8.5
78.0	14.0	6	8	L	8.5	6	9	L	9.1	7	7	L	8.1
78.0	15.0	6	11	L	10.2	7	7	L	8.1	7	12	L	11.0
78.0	16.0	7	9	L	9.3	7	11	L	10.4	8	9	L	9.6
78.0	17.0	7	14	L	11.9	7	15	L	12.4	8	15	L	12.7
78.0	18.0	7	15	L	12.4	8	13	L	11.8	9	15	L	12.9

TABLE VV (Contd)

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE REPEATERS ON 19-GAUGE H88 LOADED 4-WIRE FACILITIES WITH NONLOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
 4-WIRE TERMINATION = 1200 OHMS
 2-WIRE TERMINATION = 900 OHMS

LENGTH (KFT)		2-WIRE = 19 NL			2-WIRE = 22 NL			2-WIRE = 24 NL			2-WIRE = 26 NL		
4-WIRE	2-WIRE	BW = 15	EQLR										
19H88		HT	SLOPE	GAIN									
84.0	1.0	0	1	L 1.4									
84.0	2.0	0	1	L 1.4									
84.0	3.0	0	2	L 2.6									
84.0	4.0	0	3	L 3.7									
84.0	5.0	0	4	L 4.7									
84.0	6.0	0	5	L 5.5	0	5	L 5.5	0	5	L 5.5	1	4	L 4.7
84.0	7.0	1	5	L 5.6	1	5	L 5.6	1	5	L 5.6	2	5	L 5.7
84.0	8.0	2	5	L 5.7	2	5	L 5.7	2	6	L 6.5	3	5	L 5.8
84.0	9.0	3	5	L 5.8	3	5	L 5.8	3	6	L 6.6	4	5	L 5.9
84.0	10.0	4	5	L 5.9	4	5	L 5.9	4	6	L 6.7	5	5	L 6.1
84.0	11.0	4	7	L 7.6	4	7	L 7.6	5	6	L 6.9	5	8	L 8.3
84.0	12.0	5	7	L 7.7	5	7	L 7.7	6	6	L 7.0	6	8	L 8.5
84.0	13.0	5	10	L 9.5	6	7	L 7.9	6	10	L 9.7	7	8	L 8.7
84.0	14.0	6	9	L 9.1	6	10	L 9.7	7	9	L 9.3	8	7	L 8.5
84.0	15.0	6	14	L 11.7	7	9	L 9.3	7	15	L 12.4	8	12	L 11.3
84.0	16.0	7	11	L 10.4	7	14	L 11.9	8	11	L 10.8	9	14	L 12.5
84.0	17.0	7	15	L 12.4	8	10	L 10.2	9	12	L 11.5	10	15	L 13.1
84.0	18.0	2	9	NL 4.3	8	15	L 12.7	9	15	L 12.9	11	15	L 13.4
90.0	1.0	0	1	L 1.4									
90.0	2.0	0	1	L 1.4									
90.0	3.0	0	2	L 2.6									
90.0	4.0	0	3	L 3.7									
90.0	5.0	0	4	L 4.7									
90.0	6.0	0	5	L 5.5	0	5	L 5.5	0	5	L 5.5	1	4	L 4.7
90.0	7.0	1	5	L 5.6	1	5	L 5.6	1	6	L 6.4	2	5	L 5.7
90.0	8.0	2	6	L 6.5	2	6	L 6.5	2	6	L 6.5	3	5	L 5.8
90.0	9.0	3	6	L 6.6	3	6	L 6.6	3	7	L 7.5	4	5	L 5.9
90.0	10.0	4	6	L 6.7	4	6	L 6.7	4	7	L 7.6	5	6	L 6.9
90.0	11.0	4	8	L 8.1	4	8	L 8.1	5	7	L 7.7	5	9	L 8.9
90.0	12.0	5	7	L 7.7	5	8	L 8.3	6	7	L 7.9	6	9	L 9.1
90.0	13.0	5	11	L 10.0	6	7	L 7.9	6	10	L 9.7	7	9	L 9.3
90.0	14.0	6	10	L 9.7	6	11	L 10.2	7	9	L 9.3	8	7	L 8.5
90.0	15.0	6	15	L 12.1	7	9	L 9.3	7	15	L 12.4	8	13	L 11.8
90.0	16.0	7	12	L 11.0	7	15	L 12.4	8	12	L 11.3	9	15	L 12.9
90.0	17.0	7	15	L 12.4	8	11	L 10.8	9	13	L 12.0	10	15	L 13.1
90.0	18.0	2	9	NL 4.3	8	15	L 12.7	9	15	L 12.9	11	15	L 13.4

TABLE VV (Contd)

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE
REPEATERS ON 19-GAUGE H88 LOADED 4-WIRE FACILITIES WITH
NONLOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
4-WIRE TERMINATION = 1200 OHMS
2-WIRE TERMINATION = 900 OHMS

LENGTH (KFT)		2-WIRE = 19 NL				2-WIRE = 22 NL				2-WIRE = 24 NL				2-WIRE = 26 NL			
4-WIRE	2-WIRE	BW = 15	EQLR	HT	GAIN	BW = 15	EQLR	HT	GAIN	BW = 15	EQLR	HT	GAIN	BW = 15	EQLR	HT	GAIN
19H88																	
96.0	1.0	0	1	L	1.4												
96.0	2.0	0	2	L	2.6												
96.0	3.0	0	2	L	2.6	0	2	L	2.6	0	3	L	3.7	0	3	L	3.7
96.0	4.0	0	3	L	3.7												
96.0	5.0	0	4	L	4.7												
96.0	6.0	0	5	L	5.5	0	5	L	5.5	1	5	L	5.6	1	5	L	5.6
96.0	7.0	1	6	L	6.4	1	6	L	6.4	2	5	L	5.7	2	5	L	5.7
96.0	8.0	2	6	L	6.5	2	6	L	6.5	3	5	L	5.8	3	5	L	5.8
96.0	9.0	3	6	L	6.6	3	6	L	6.6	4	5	L	5.9	4	6	L	6.7
96.0	10.0	4	6	L	6.7	4	6	L	6.7	4	7	L	7.6	5	6	L	6.9
96.0	11.0	4	8	L	8.1	5	6	L	6.9	5	7	L	7.7	6	6	L	7.0
96.0	12.0	5	8	L	8.3	5	8	L	8.3	6	7	L	7.9	6	9	L	9.1
96.0	13.0	6	7	L	7.9	6	8	L	8.5	6	12	L	10.7	7	9	L	9.3
96.0	14.0	6	10	L	9.7	6	12	L	10.7	7	10	L	9.9	8	8	L	9.0
96.0	15.0	7	8	L	8.7	7	10	L	9.9	8	8	L	9.0	9	9	L	9.8
96.0	16.0	7	13	L	11.5	7	15	L	12.4	8	13	L	11.8	10	9	L	10.1
96.0	17.0	7	15	L	12.4	8	11	L	10.8	9	14	L	12.5	11	9	L	10.4
96.0	18.0	8	14	L	12.2	8	15	L	12.7	10	13	L	12.2	12	8	L	10.1

TABLE WW

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE REPEATERS ON 22-GAUGE H88 LOADED 4-WIRE FACILITIES WITH NONLOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
 4-WIRE TERMINATION = 1200 OHMS
 2-WIRE TERMINATION = 900 OHMS

LENGTH (KFT)		2-WIRE = 19 NL			2-WIRE = 22 NL			2-WIRE = 24 NL			2-WIRE = 26 NL		
4-WIRE	2-WIRE	BW = 15	EQLR	GAIN									
22H88		HT	SLOPE		HT	SLOPE		HT	SLOPE		HT	SLOPE	
12.0	1.0	0	1	L	1.4								
12.0	2.0	0	1	L	1.4								
12.0	3.0	0	2	L	2.6								
12.0	4.0	0	2	L	2.6								
12.0	5.0	0	3	L	3.7								
12.0	6.0	0	4	L	4.7								
12.0	7.0	0	5	L	5.5								
12.0	8.0	1	5	L	5.6								
12.0	9.0	2	5	L	5.7								
12.0	10.0	2	7	L	7.4								
12.0	11.0	3	7	L	7.5								
12.0	12.0	4	7	L	7.6								
12.0	13.0	4	11	L	9.9								
12.0	14.0	5	10	L	9.5								
12.0	15.0	0	7	NL	3.4								
12.0	16.0	0	8	NL	3.7								
12.0	17.0	0	9	NL	4.2								
12.0	18.0	1	9	NL	4.2								
18.0	1.0	0	1	L	1.4								
18.0	2.0	0	1	L	1.4								
18.0	3.0	0	2	L	2.6								
18.0	4.0	0	3	L	3.7								
18.0	5.0	0	4	L	4.7								
18.0	6.0	0	6	L	6.3								
18.0	7.0	0	7	L	7.2								
18.0	8.0	0	10	L	9.0								
18.0	9.0	1	11	L	9.6								
18.0	10.0	2	12	L	10.2								
18.0	11.0	3	13	L	10.8								
18.0	12.0	3	15	L	11.7								
18.0	13.0	4	15	L	11.8								
18.0	14.0	5	15	L	11.9								
18.0	15.0	5	15	L	11.9								
18.0	16.0	0	9	NL	4.2								
18.0	17.0	0	10	NL	4.6								
18.0	18.0	0	11	NL	5.0								

TABLE WW (Contd)

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE REPEATERS ON 22-GAUGE H88 LOADED 4-WIRE FACILITIES WITH NONLOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
 4-WIRE TERMINATION = 1200 OHMS
 2-WIRE TERMINATION = 900 OHMS

LENGTH (KFT)		2-WIRE = 19 NL				2-WIRE = 22 NL				2-WIRE = 24 NL				2-WIRE = 26 NL			
4-WIRE	2-WIRE	BW = 15	EQLR	GAIN	BW = 15	EQLR	GAIN	BW = 15	EQLR	GAIN	BW = 15	EQLR	GAIN	BW = 15	EQLR	GAIN	
22H88		HT	SLOPE		HT	SLOPE		HT	SLOPE		HT	SLOPE		HT	SLOPE		
24.0	1.0	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4
24.0	2.0	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4
24.0	3.0	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6
24.0	4.0	0	4	L	4.7	0	4	L	4.7	0	4	L	4.7	0	4	L	4.7
24.0	5.0	0	5	L	5.5	0	5	L	5.5	0	6	L	6.3	0	6	L	6.3
24.0	6.0	0	8	L	7.8	0	8	L	7.8	0	8	L	7.8	0	9	L	8.4
24.0	7.0	0	11	L	9.5	0	11	L	9.5	0	13	L	10.5	0	14	L	11.0
24.0	8.0	0	15	L	11.4	0	15	L	11.4	1	15	L	11.5	1	15	L	11.5
24.0	9.0	1	15	L	11.5	1	15	L	11.5	2	15	L	11.6	2	15	L	11.6
24.0	10.0	2	15	L	11.6	2	15	L	11.6	3	15	L	11.7	3	15	L	11.7
24.0	11.0	3	15	L	11.7	3	15	L	11.7	4	15	L	11.8	4	15	L	11.8
24.0	12.0	4	15	L	11.8	4	15	L	11.8	5	15	L	11.9	5	15	L	11.9
24.0	13.0	4	15	L	11.8	5	15	L	11.9	5	15	L	11.9	6	15	L	12.1
24.0	14.0	5	15	L	11.9	5	15	L	11.9	6	15	L	12.1	0	10	NL	4.6
24.0	15.0	6	15	L	12.1	6	15	L	12.1	0	10	NL	4.6	1	11	NL	5.1
24.0	16.0	0	9	NL	4.2	0	10	NL	4.6	1	10	NL	4.7	2	11	NL	5.2
24.0	17.0	0	10	NL	4.6	0	11	NL	5.0	1	12	NL	5.5	2	13	NL	6.0
24.0	18.0	0	11	NL	5.0	0	12	NL	5.4	2	12	NL	5.6	3	13	NL	6.1
30.0	1.0	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4
30.0	2.0	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4
30.0	3.0	0	3	L	3.7	0	3	L	3.7	0	3	L	3.7	0	3	L	3.7
30.0	4.0	0	4	L	4.7	0	4	L	4.7	0	4	L	4.7	0	5	L	5.5
30.0	5.0	0	6	L	6.3	0	6	L	6.3	0	6	L	6.3	0	6	L	6.3
30.0	6.0	0	9	L	8.4	0	9	L	8.4	0	9	L	8.4	0	10	L	9.0
30.0	7.0	0	13	L	10.5	0	13	L	10.5	0	15	L	11.4	0	15	L	11.4
30.0	8.0	0	15	L	11.4	0	15	L	11.4	1	15	L	11.5	1	15	L	11.5
30.0	9.0	1	15	L	11.5	1	15	L	11.5	2	15	L	11.6	2	15	L	11.6
30.0	10.0	2	15	L	11.6	2	15	L	11.6	3	15	L	11.7	3	15	L	11.7
30.0	11.0	3	15	L	11.7	3	15	L	11.7	4	15	L	11.8	4	15	L	11.8
30.0	12.0	4	15	L	11.8	4	15	L	11.8	4	15	L	11.8	5	15	L	11.9
30.0	13.0	4	15	L	11.8	5	15	L	11.9	5	15	L	11.9	6	15	L	12.1
30.0	14.0	5	15	L	11.9	5	15	L	11.9	6	15	L	12.1	0	10	NL	4.6
30.0	15.0	5	15	L	11.9	6	15	L	12.1	0	10	NL	4.6	1	11	NL	5.1
30.0	16.0	0	9	NL	4.2	0	10	NL	4.6	0	12	NL	5.4	2	11	NL	5.2
30.0	17.0	0	10	NL	4.6	0	11	NL	5.0	1	12	NL	5.5	2	13	NL	6.0
30.0	18.0	0	11	NL	5.0	0	12	NL	5.4	1	13	NL	5.9	3	14	NL	6.5

TABLE WW (Contd)

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE
 REPEATERS ON 22-GAUGE H88 LOADED 4-WIRE FACILITIES WITH
 NONLOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
 4-WIRE TERMINATION = 1200 OHMS
 2-WIRE TERMINATION = 900 OHMS

LENGTH (KFT)		2-WIRE = 19 NL				2-WIRE = 22 NL				2-WIRE = 24 NL				2-WIRE = 26 NL					
4-WIRE	2-WIRE	BW = 15	EQLR	HT	SLOPE	BW = 15	EQLR	HT	SLOPE	BW = 15	EQLR	HT	SLOPE	BW = 15	EQLR	HT	SLOPE	GAIN	
22H88			GAIN				GAIN				GAIN				GAIN				
36.0	1.0	0	1	L	1.4														
36.0	2.0	0	2	L	2.6														
36.0	3.0	0	3	L	3.7														
36.0	4.0	0	5	L	5.5														
36.0	5.0	0	7	L	7.2														
36.0	6.0	0	9	L	8.4	0	9	L	8.4	0	10	L	9.0	0	10	L	9.0		
36.0	7.0	0	14	L	11.0	0	14	L	11.0	0	15	L	11.4	0	15	L	11.4		
36.0	8.0	1	15	L	11.5	1	15	L	11.5	1	15	L	11.5	2	14	L	11.1		
36.0	9.0	2	15	L	11.6	2	15	L	11.6	2	15	L	11.6	3	15	L	11.7		
36.0	10.0	3	15	L	11.7	3	15	L	11.7	3	15	L	11.7	4	15	L	11.8		
36.0	11.0	3	15	L	11.7	3	15	L	11.7	4	15	L	11.8	5	15	L	11.9		
36.0	12.0	4	15	L	11.8	4	15	L	11.8	5	15	L	11.9	5	15	L	11.9		
36.0	13.0	5	15	L	11.9	5	15	L	11.9	6	15	L	12.1	0	9	NL	4.2		
36.0	14.0	5	15	L	11.9	6	15	L	12.1	0	9	NL	4.2	1	10	NL	4.7		
36.0	15.0	0	9	NL	4.2	0	9	NL	4.2	0	10	NL	4.6	1	11	NL	5.1		
36.0	16.0	0	10	NL	4.6	0	10	NL	4.6	1	11	NL	5.1	2	12	NL	5.6		
36.0	17.0	0	11	NL	5.0	0	11	NL	5.0	1	12	NL	5.5	3	12	NL	5.7		
36.0	18.0	0	11	NL	5.0	1	11	NL	5.1	2	12	NL	5.6	3	14	NL	6.5		
42.0	1.0	0	1	L	1.4														
42.0	2.0	0	2	L	2.6														
42.0	3.0	0	4	L	4.7	0	3	L	3.7	0	4	L	4.7	0	4	L	4.7		
42.0	4.0	0	5	L	5.5														
42.0	5.0	0	7	L	7.2														
42.0	6.0	0	9	L	8.4	0	9	L	8.4	0	10	L	9.0	0	10	L	9.0		
42.0	7.0	0	14	L	11.0	0	13	L	10.5	0	15	L	11.4	0	15	L	11.4		
42.0	8.0	1	15	L	11.5	1	15	L	11.5	1	15	L	11.5	2	14	L	11.1		
42.0	9.0	2	15	L	11.6	2	15	L	11.6	2	15	L	11.6	3	15	L	11.7		
42.0	10.0	3	15	L	11.7	3	15	L	11.7	3	15	L	11.7	4	15	L	11.8		
42.0	11.0	3	15	L	11.7	4	15	L	11.8	4	15	L	11.8	5	15	L	11.9		
42.0	12.0	4	15	L	11.8	4	15	L	11.8	5	15	L	11.9	6	15	L	12.1		
42.0	13.0	5	15	L	11.9	5	15	L	11.9	6	15	L	12.1	0	9	NL	4.2		
42.0	14.0	5	15	L	11.9	6	15	L	12.1	0	9	NL	4.2	1	10	NL	4.7		
42.0	15.0	0	9	NL	4.2	0	9	NL	4.2	1	10	NL	4.7	1	11	NL	5.1		
42.0	16.0	0	10	NL	4.6	0	10	NL	4.6	1	11	NL	5.1	2	11	NL	5.2		
42.0	17.0	0	10	NL	4.6	1	10	NL	4.7	2	11	NL	5.2	3	12	NL	5.7		
42.0	18.0	0	11	NL	5.0	1	11	NL	5.1	2	12	NL	5.6	4	13	NL	6.2		

TABLE WW (Contd)

EQUALIZER SETTINGS FOR 4-2 OR 24 INTERMEDIATE REPEATERS ON 22-GAUGE H88 LOADED 4-WIRE FACILITIES WITH NONLOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
 4-WIRE TERMINATION = 1200 OHMS
 2-WIRE TERMINATION = 900 OHMS

LENGTH (KFT)		2-WIRE = 19 NL			2-WIRE = 22 NL			2-WIRE = 24 NL			2-WIRE = 26 NL		
4-WIRE	2-WIRE	BW = 15	EQLR	GAIN									
22H88		HT	SLOPE		HT	SLOPE		HT	SLOPE		HT	SLOPE	
48.0	1.0	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4
48.0	2.0	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6
48.0	3.0	0	3	L	3.7	0	3	L	3.7	0	3	L	3.7
48.0	4.0	0	5	L	5.5	0	5	L	5.5	0	5	L	5.5
48.0	5.0	0	7	L	7.2	0	7	L	7.2	0	7	L	7.2
48.0	6.0	0	10	L	9.0	0	10	L	9.0	0	10	L	9.5
48.0	7.0	0	15	L	11.4	0	15	L	11.4	0	15	L	10.6
48.0	8.0	1	15	L	11.5	1	15	L	11.5	1	15	L	11.6
48.0	9.0	2	15	L	11.6	2	15	L	11.6	2	15	L	11.7
48.0	10.0	3	15	L	11.7	3	15	L	11.7	3	15	L	11.8
48.0	11.0	3	15	L	11.7	4	15	L	11.8	4	15	L	11.9
48.0	12.0	4	15	L	11.8	4	15	L	11.8	5	15	L	12.1
48.0	13.0	5	15	L	11.9	5	15	L	11.9	6	15	L	12.1
48.0	14.0	5	15	L	11.9	6	15	L	12.1	0	9	NL	4.2
48.0	15.0	0	9	NL	4.2	0	9	NL	4.2	1	10	NL	4.7
48.0	16.0	0	10	NL	4.6	0	10	NL	4.6	1	10	NL	4.7
48.0	17.0	0	10	NL	4.6	1	10	NL	4.7	1	11	NL	5.1
48.0	18.0	0	11	NL	5.0	1	10	NL	4.7	2	11	NL	5.2
						1	11	NL	5.1	2	12	NL	5.7
										2	12	NL	5.6
													6.2
54.0	1.0	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4
54.0	2.0	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6
54.0	3.0	0	3	L	3.7	0	3	L	3.7	0	3	L	3.7
54.0	4.0	0	5	L	5.5	0	5	L	5.5	0	5	L	5.5
54.0	5.0	0	7	L	7.2	0	7	L	7.2	0	8	L	7.8
54.0	6.0	0	11	L	9.5	0	10	L	9.0	0	11	L	9.5
54.0	7.0	0	15	L	11.4	0	15	L	11.4	0	12	L	10.0
54.0	8.0	1	15	L	11.5	1	15	L	11.5	0	15	L	11.4
54.0	9.0	2	15	L	11.6	2	15	L	11.6	1	14	L	11.1
54.0	10.0	3	15	L	11.7	2	15	L	11.6	2	15	L	11.6
54.0	11.0	4	15	L	11.8	3	15	L	11.7	3	15	L	11.7
54.0	12.0	4	15	L	11.8	3	15	L	11.7	4	15	L	11.8
54.0	13.0	4	15	L	11.8	4	15	L	11.8	4	15	L	11.8
54.0	14.0	5	15	L	11.9	4	15	L	11.8	5	15	L	11.9
54.0	15.0	5	15	L	11.9	5	15	L	11.9	6	15	L	12.1
54.0	16.0	6	15	L	12.1	6	15	L	12.1	0	9	NL	4.2
54.0	17.0	0	10	NL	4.6	0	9	NL	4.2	1	10	NL	4.7
54.0	18.0	0	11	NL	5.0	0	10	NL	4.6	1	10	NL	4.7
						0	9	NL	4.2	1	11	NL	5.1
						1	10	NL	4.7	1	11	NL	5.1
						1	11	NL	5.1	2	11	NL	5.2
										2	12	NL	5.6
										2	12	NL	5.7
										3	12	NL	5.7
										4	13	NL	6.2
										2	12	NL	5.6
													6.2

TABLE WW (Contd)

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE REPEATERS ON 22-GAUGE H88 LOADED 4-WIRE FACILITIES WITH NONLOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
 4-WIRE TERMINATION = 1200 OHMS
 2-WIRE TERMINATION = 900 OHMS

LENGTH (KFT)		2-WIRE = 19 NL			2-WIRE = 22 NL			2-WIRE = 24 NL			2-WIRE = 26 NL		
4-WIRE	2-WIRE	BW = 15	EQLR	GAIN									
22H88		HT	SLOPE		HT	SLOPE		HT	SLOPE		HT	SLOPE	
60.0	1.0	0	1	L	1.4			0	1	L	1.4		
60.0	2.0	0	2	L	2.6			0	2	L	2.6		
60.0	3.0	0	3	L	3.7			0	3	L	3.7		
60.0	4.0	0	5	L	5.5			0	6	L	6.3		
60.0	5.0	0	8	L	7.8			0	8	L	7.8		
60.0	6.0	0	11	L	9.5			0	12	L	10.0		
60.0	7.0	0	15	L	11.4			0	15	L	11.4		
60.0	8.0	1	15	L	11.5			2	15	L	11.6		
60.0	9.0	2	15	L	11.6			3	15	L	11.7		
60.0	10.0	3	15	L	11.7			3	15	L	11.7		
60.0	11.0	4	15	L	11.8			4	15	L	11.8		
60.0	12.0	4	15	L	11.8			5	15	L	11.9		
60.0	13.0	5	15	L	11.9			6	15	L	12.1		
60.0	14.0	5	15	L	11.9			0	9	NL	4.2		
60.0	15.0	6	15	L	12.1			1	10	NL	4.7		
60.0	16.0	0	10	NL	4.6			1	11	NL	5.1		
60.0	17.0	0	11	NL	5.0			2	12	NL	5.6		
60.0	18.0	0	12	NL	5.4			2	13	NL	6.0		
66.0	1.0	0	1	L	1.4			0	1	L	1.4		
66.0	2.0	0	2	L	2.6			0	2	L	2.6		
66.0	3.0	0	4	L	4.7			0	4	L	4.7		
66.0	4.0	0	6	L	6.3			0	6	L	6.3		
66.0	5.0	0	9	L	8.4			0	9	L	8.4		
66.0	6.0	0	12	L	10.0			0	13	L	10.5		
66.0	7.0	0	15	L	11.4			1	15	L	11.5		
66.0	8.0	1	15	L	11.5			2	15	L	11.6		
66.0	9.0	2	15	L	11.6			3	15	L	11.7		
66.0	10.0	3	15	L	11.7			4	15	L	11.8		
66.0	11.0	4	15	L	11.8			5	15	L	11.9		
66.0	12.0	4	15	L	11.8			5	15	L	11.9		
66.0	13.0	5	15	L	11.9			6	15	L	12.1		
66.0	14.0	6	15	L	12.1			0	10	NL	4.6		
66.0	15.0	0	9	NL	4.2			1	10	NL	4.7		
66.0	16.0	0	10	NL	4.6			1	11	NL	5.1		
66.0	17.0	0	11	NL	5.0			2	12	NL	5.6		
66.0	18.0	1	11	NL	5.1			2	13	NL	6.0		

TABLE WW (Contd)

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE
 REPEATERS ON 22-GAUGE H88 LOADED 4-WIRE FACILITIES WITH
 NONLOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
 4-WIRE TERMINATION = 1200 OHMS
 2-WIRE TERMINATION = 900 OHMS

LENGTH (KFT)		2-WIRE = 19 NL				2-WIRE = 22 NL				2-WIRE = 24 NL				2-WIRE = 26 NL			
4-WIRE	2-WIRE	BW = 15	EQLR	HT	GAIN	BW = 15	EQLR	HT	GAIN	BW = 15	EQLR	HT	GAIN	BW = 15	EQLR	HT	GAIN
22H88																	
72.0	1.0	0	2	L	2.6												
72.0	2.0	0	3	L	3.7												
72.0	3.0	0	4	L	4.7												
72.0	4.0	0	7	L	7.2	0	6	L	6.3	0	7	L	7.2	0	7	L	7.2
72.0	5.0	0	10	L	9.0	0	9	L	8.4	0	10	L	9.0	0	10	L	9.0
72.0	6.0	0	14	L	11.0	0	14	L	11.0	0	15	L	11.4	0	15	L	11.4
72.0	7.0	0	15	L	11.4	0	15	L	11.4	1	15	L	11.5	1	15	L	11.5
72.0	8.0	1	15	L	11.5	1	15	L	11.5	2	15	L	11.6	2	15	L	11.6
72.0	9.0	2	15	L	11.6	2	15	L	11.6	3	15	L	11.7	3	15	L	11.7
72.0	10.0	3	15	L	11.7	3	15	L	11.7	4	15	L	11.8	4	15	L	11.8
72.0	11.0	4	15	L	11.8	4	15	L	11.8	5	15	L	11.9	5	15	L	11.9
72.0	12.0	5	15	L	11.9	5	15	L	11.9	5	15	L	11.9	6	15	L	12.1
72.0	13.0	5	15	L	11.9	5	15	L	11.9	6	15	L	12.1	7	15	L	12.4
72.0	14.0	6	15	L	12.1	6	15	L	12.1	0	10	NL	4.6	1	10	NL	4.7
72.0	15.0	0	9	NL	4.2	0	10	NL	4.6	1	10	NL	4.7	2	11	NL	5.2
72.0	16.0	0	10	NL	4.6	0	11	NL	5.0	1	12	NL	5.5	3	11	NL	5.3
72.0	17.0	0	11	NL	5.0	1	11	NL	5.1	2	12	NL	5.6	3	13	NL	6.1
72.0	18.0	1	12	NL	5.5	1	12	NL	5.5	2	13	NL	6.0	4	14	NL	6.6
78.0	1.0	0	2	L	2.6												
78.0	2.0	0	3	L	3.7												
78.0	3.0	0	5	L	5.5	0	4	L	4.7	0	5	L	5.5	0	5	L	5.5
78.0	4.0	0	7	L	7.2	0	7	L	7.2	0	8	L	7.8	0	8	L	7.8
78.0	5.0	0	11	L	9.5	0	11	L	9.5	0	12	L	10.0	0	12	L	10.0
78.0	6.0	0	15	L	11.4												
78.0	7.0	1	15	L	11.5												
78.0	8.0	2	15	L	11.6												
78.0	9.0	2	15	L	11.6	3	15	L	11.7	3	15	L	11.7	3	15	L	11.7
78.0	10.0	3	15	L	11.7	3	15	L	11.7	4	15	L	11.8	4	15	L	11.8
78.0	11.0	4	15	L	11.8	4	15	L	11.8	5	15	L	11.9	5	15	L	11.9
78.0	12.0	5	15	L	11.9	5	15	L	11.9	6	15	L	12.1	6	15	L	12.1
78.0	13.0	5	15	L	11.9	6	15	L	12.1	6	15	L	12.1	7	15	L	12.4
78.0	14.0	6	15	L	12.1	6	15	L	12.1	0	10	NL	4.6	1	11	NL	5.1
78.0	15.0	0	9	NL	4.2	0	10	NL	4.6	1	11	NL	5.1	2	11	NL	5.2
78.0	16.0	0	11	NL	5.0	1	10	NL	4.7	1	12	NL	5.5	3	12	NL	5.7
78.0	17.0	0	12	NL	5.4	1	12	NL	5.5	2	12	NL	5.6	3	14	NL	6.5
78.0	18.0	1	12	NL	5.5	1	13	NL	5.9	2	14	NL	6.4	4	14	NL	6.6

TABLE WW (Contd)

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE REPEATERS ON 22-GAUGE H88 LOADED 4-WIRE FACILITIES WITH NONLOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
 4-WIRE TERMINATION = 1200 OHMS
 2-WIRE TERMINATION = 900 OHMS

LENGTH (KFT)		2-WIRE = 19 NL			2-WIRE = 22 NL			2-WIRE = 24 NL			2-WIRE = 26 NL		
4-WIRE	2-WIRE	BW = 15	EQLR	GAIN									
22H88		HT	SLOPE		HT	SLOPE		HT	SLOPE		HT	SLOPE	
84.0	1.0	0	2	L	2.6			0	2	L	2.6		
84.0	2.0	0	3	L	3.7			0	3	L	3.7		
84.0	3.0	0	5	L	5.5			0	5	L	5.5		
84.0	4.0	0	8	L	7.8			0	8	L	7.8		
84.0	5.0	0	14	L	11.0			0	15	L	11.4		
84.0	6.0	0	15	L	11.4			0	15	L	11.4		
84.0	7.0	1	15	L	11.5			1	15	L	11.5		
84.0	8.0	2	15	L	11.6			2	15	L	11.6		
84.0	9.0	3	15	L	11.7			3	15	L	11.7		
84.0	10.0	3	15	L	11.7			4	15	L	11.8		
84.0	11.0	4	15	L	11.8			4	15	L	11.8		
84.0	12.0	5	15	L	11.9			5	15	L	11.9		
84.0	13.0	5	15	L	11.9			6	15	L	12.1		
84.0	14.0	6	15	L	12.1			6	15	L	12.1		
84.0	15.0	0	10	NL	4.6			0	11	NL	5.0		
84.0	16.0	0	11	NL	5.0			1	11	NL	5.1		
84.0	17.0	0	12	NL	5.4			2	11	NL	5.2		
84.0	18.0	1	12	NL	5.5			2	13	NL	6.0		
								3	13	NL	6.1		
90.0	1.0	0	2	L	2.6			0	2	L	2.6		
90.0	2.0	0	3	L	3.7			0	3	L	3.7		
90.0	3.0	0	5	L	5.5			0	5	L	5.5		
90.0	4.0	0	9	L	8.4			0	9	L	8.4		
90.0	5.0	0	15	L	11.4			0	10	L	9.0		
90.0	6.0	0	15	L	11.4			0	15	L	11.4		
90.0	7.0	1	15	L	11.5			0	15	L	11.4		
90.0	8.0	2	15	L	11.6			1	15	L	11.5		
90.0	9.0	3	15	L	11.7			2	15	L	11.6		
90.0	10.0	4	15	L	11.8			3	15	L	11.7		
90.0	11.0	4	15	L	11.8			4	15	L	11.8		
90.0	12.0	5	15	L	11.9			5	15	L	11.9		
90.0	13.0	6	15	L	12.1			6	15	L	12.1		
90.0	14.0	6	15	L	12.1			6	15	L	12.1		
90.0	15.0	0	10	NL	4.6			0	11	NL	5.0		
90.0	16.0	0	11	NL	5.0			1	11	NL	5.1		
90.0	17.0	1	11	NL	5.1			2	11	NL	5.2		
90.0	18.0	1	12	NL	5.5			2	13	NL	6.0		
								3	13	NL	6.1		
								4	15	NL	6.9		

TABLE WW (Contd)

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE
 REPEATERS ON 22-GAUGE H88 LOADED 4-WIRE FACILITIES WITH
 NONLOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
 4-WIRE TERMINATION = 1200 OHMS
 2-WIRE TERMINATION = 900 OHMS

LENGTH (KFT)		2-WIRE = 19 NL				2-WIRE = 22 NL				2-WIRE = 24 NL				2-WIRE = 26 NL						
4-WIRE	2-WIRE	BW = 15		EQLR		BW = 15		EQLR		BW = 15		EQLR		BW = 15		EQLR				
22H88		HT	SLOPE	GAIN			HT	SLOPE	GAIN			HT	SLOPE	GAIN			HT	SLOPE	GAIN	
96.0	1.0	0	2	L	2.6		0	2	L	2.6		0	2	L	2.6		0	2	L	2.6
96.0	2.0	0	4	L	4.7		0	3	L	3.7		0	4	L	4.7		0	4	L	4.7
96.0	3.0	0	6	L	6.3		0	6	L	6.3		0	6	L	6.3		0	6	L	6.3
96.0	4.0	0	11	L	9.5		0	11	L	9.5		0	12	L	10.0		0	12	L	10.0
96.0	5.0	0	15	L	11.4		0	15	L	11.4		0	15	L	11.4		0	15	L	11.4
96.0	6.0	0	15	L	11.4		0	15	L	11.4		0	15	L	11.4		0	15	L	11.4
96.0	7.0	1	15	L	11.5		1	15	L	11.5		1	15	L	11.5		2	15	L	11.6
96.0	8.0	2	15	L	11.6		2	15	L	11.6		2	15	L	11.6		3	15	L	11.7
96.0	9.0	3	15	L	11.7		3	15	L	11.7		3	15	L	11.7		4	15	L	11.8
96.0	10.0	4	15	L	11.8		4	15	L	11.8		4	15	L	11.8		5	15	L	11.9
96.0	11.0	4	15	L	11.8		5	15	L	11.9		5	15	L	11.9		6	15	L	12.1
96.0	12.0	5	15	L	11.9		5	15	L	11.9		6	15	L	12.1		6	15	L	12.1
96.0	13.0	6	15	L	12.1		6	15	L	12.1		7	15	L	12.4		7	15	L	12.4
96.0	14.0	6	15	L	12.1		7	15	L	12.4		7	15	L	12.4		8	15	L	12.7
96.0	15.0	0	10	NL	4.6		0	11	NL	5.0		1	11	NL	5.1		2	12	NL	5.6
96.0	16.0	0	11	NL	5.0		1	11	NL	5.1		2	11	NL	5.2		3	12	NL	5.7
96.0	17.0	1	11	NL	5.1		1	12	NL	5.5		2	13	NL	6.0		4	12	NL	5.8
96.0	18.0	1	13	NL	5.9		2	12	NL	5.6		3	13	NL	6.1		4	15	NL	6.9

TABLE XX

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE
 REPEATERS ON 24-GAUGE H88 LOADED 4-WIRE FACILITIES WITH
 NONLOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
 4-WIRE TERMINATION = 1200 OHMS
 2-WIRE TERMINATION = 900 OHMS

LENGTH (KFT)		2-WIRE = 19 NL			2-WIRE = 22 NL			2-WIRE = 24 NL			2-WIRE = 26 NL						
4-WIRE	2-WIRE	BW = 15	EQLR	GAIN													
24H88		HT	SLOPE		HT	SLOPE		HT	SLOPE		HT	SLOPE					
12.0	1.0	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6
12.0	2.0	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6
12.0	3.0	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6
12.0	4.0	0	3	L	3.7	0	3	L	3.7	0	3	L	3.7	0	3	L	3.7
12.0	5.0	0	4	L	4.7	0	4	L	4.7	0	4	L	4.7	0	4	L	4.7
12.0	6.0	0	5	L	5.5	0	5	L	5.5	0	5	L	5.5	0	5	L	5.5
12.0	7.0	0	6	L	6.3	0	6	L	6.3	1	5	L	5.6	1	5	L	5.6
12.0	8.0	1	6	L	6.4	1	6	L	6.4	2	6	L	6.5	2	6	L	6.5
12.0	9.0	2	7	L	7.4	2	7	L	7.4	2	8	L	7.9	3	7	L	7.5
12.0	10.0	3	7	L	7.5	3	7	L	7.5	3	9	L	8.6	4	7	L	7.6
12.0	11.0	3	10	L	9.2	4	7	L	7.6	4	9	L	8.7	5	8	L	8.3
12.0	12.0	4	10	L	9.3	4	11	L	9.9	5	10	L	9.5	0	7	NL	3.4
12.0	13.0	5	10	L	9.5	5	11	L	10.0	0	7	NL	3.4	1	8	NL	3.8
12.0	14.0	5	15	L	11.9	0	7	NL	3.4	1	8	NL	3.8	1	9	NL	4.2
12.0	15.0	0	8	NL	3.7	0	8	NL	3.7	1	9	NL	4.2	2	9	NL	4.3
12.0	16.0	0	9	NL	4.2	1	9	NL	4.2	2	9	NL	4.3	3	10	NL	4.9
12.0	17.0	1	9	NL	4.2	1	9	NL	4.2	2	10	NL	4.8	3	11	NL	5.3
12.0	18.0	1	10	NL	4.7	2	9	NL	4.3	3	10	NL	4.9	4	11	NL	5.4
18.0	1.0	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6
18.0	2.0	0	3	L	3.7	0	3	L	3.7	0	3	L	3.7	0	3	L	3.7
18.0	3.0	0	5	L	5.5	0	4	L	4.7	0	5	L	5.5	0	5	L	5.5
18.0	4.0	0	6	L	6.3	0	6	L	6.3	0	6	L	6.3	0	6	L	6.3
18.0	5.0	0	7	L	7.2	0	7	L	7.2	0	7	L	7.2	0	7	L	7.2
18.0	6.0	0	10	L	9.0	0	9	L	8.4	0	10	L	9.0	0	11	L	9.5
18.0	7.0	0	15	L	11.4	0	14	L	11.0	0	15	L	11.4	0	15	L	11.4
18.0	8.0	1	15	L	11.5	1	15	L	11.5	1	15	L	11.5	1	15	L	11.5
18.0	9.0	2	15	L	11.6	2	15	L	11.6	2	15	L	11.6	3	15	L	11.7
18.0	10.0	2	15	L	11.6	3	15	L	11.7	3	15	L	11.7	4	15	L	11.8
18.0	11.0	3	15	L	11.7	3	15	L	11.7	4	15	L	11.8	5	15	L	11.9
18.0	12.0	4	15	L	11.8	4	15	L	11.8	5	15	L	11.9	0	8	NL	3.7
18.0	13.0	5	15	L	11.9	5	15	L	11.9	0	8	NL	3.7	0	10	NL	4.6
18.0	14.0	0	8	NL	3.7	0	8	NL	3.7	0	10	NL	4.6	0	11	NL	5.0
18.0	15.0	0	9	NL	4.2	0	10	NL	4.6	0	11	NL	5.0	1	12	NL	5.5
18.0	16.0	0	10	NL	4.6	0	11	NL	5.0	1	11	NL	5.1	2	12	NL	5.6
18.0	17.0	0	11	NL	5.0	0	12	NL	5.4	1	13	NL	5.9	2	14	NL	6.4
18.0	18.0	0	12	NL	5.4	1	12	NL	5.5	2	13	NL	6.0	3	14	NL	6.5

TABLE XX (Contd)

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE
REPEATERS ON 24-GAUGE H88 LOADED 4-WIRE FACILITIES WITH
NONLOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
4-WIRE TERMINATION = 1200 OHMS
2-WIRE TERMINATION = 900 OHMS

LENGTH (KFT)		2-WIRE = 19 NL			2-WIRE = 22 NL			2-WIRE = 24 NL			2-WIRE = 26 NL		
4-WIRE	2-WIRE	BW = 15	EQLR	GAIN									
24H88		HT	SLOPE		HT	SLOPE		HT	SLOPE		HT	SLOPE	
24.0	1.0	0	2	L	2.6			0	2	L	2.6		
24.0	2.0	0	3	L	3.7			0	3	L	3.7		
24.0	3.0	0	5	L	5.5			0	5	L	5.5		
24.0	4.0	0	9	L	8.4			0	9	L	8.4		
24.0	5.0	0	15	L	11.4			0	15	L	11.4		
24.0	6.0	0	15	L	11.4			0	15	L	11.4		
24.0	7.0	0	15	L	11.4			0	15	L	11.4		
24.0	8.0	1	15	L	11.5			1	15	L	11.5		
24.0	9.0	2	15	L	11.6			3	15	L	11.7		
24.0	10.0	3	15	L	11.7			3	15	L	11.7		
24.0	11.0	4	15	L	11.8			4	15	L	11.8		
24.0	12.0	4	15	L	11.8			5	15	L	11.9		
24.0	13.0	5	15	L	11.9			0	9	NL	4.2		
24.0	14.0	0	8	NL	3.7			0	10	NL	4.6		
24.0	15.0	0	9	NL	4.2			0	12	NL	5.4		
24.0	16.0	0	11	NL	5.0			0	14	NL	6.2		
24.0	17.0	0	12	NL	5.4			1	14	NL	6.3		
24.0	18.0	0	13	NL	5.8			2	14	NL	6.4		
30.0	1.0	0	3	L	3.7			0	3	L	3.7		
30.0	2.0	0	4	L	4.7			0	4	L	4.7		
30.0	3.0	0	8	L	7.8			0	8	L	7.8		
30.0	4.0	0	15	L	11.4			0	15	L	11.4		
30.0	5.0	0	15	L	11.4			0	15	L	11.4		
30.0	6.0	0	15	L	11.4			0	15	L	11.4		
30.0	7.0	0	15	L	11.4			0	15	L	11.4		
30.0	8.0	1	15	L	11.5			2	15	L	11.6		
30.0	9.0	2	15	L	11.6			3	15	L	11.7		
30.0	10.0	3	15	L	11.7			4	15	L	11.8		
30.0	11.0	4	15	L	11.8			4	15	L	11.8		
30.0	12.0	4	15	L	11.8			5	15	L	11.9		
30.0	13.0	5	15	L	11.9			0	9	NL	4.2		
30.0	14.0	0	9	NL	4.2			0	11	NL	5.0		
30.0	15.0	0	10	NL	4.6			0	13	NL	5.8		
30.0	16.0	0	11	NL	5.0			0	15	NL	6.2		
30.0	17.0	0	13	NL	5.8			1	15	NL	6.6		
30.0	18.0	0	14	NL	6.2			2	15	NL	6.7		

TABLE XX (Contd)

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE REPEATERS ON 24-GAUGE H88 LOADED 4-WIRE FACILITIES WITH NONLOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
 4-WIRE TERMINATION = 1200 OHMS
 2-WIRE TERMINATION = 900 OHMS

LENGTH (KFT)		2-WIRE = 19 NL		2-WIRE = 22 NL		2-WIRE = 24 NL		2-WIRE = 26 NL		
4-WIRE	2-WIRE	BW = 15	EQLR							
24H88		HT	SLOPE	HT	SLOPE	HT	SLOPE	HT	SLOPE	
			GAIN		GAIN		GAIN		GAIN	
36.0	1.0	0	4 L	4.7	0	4 L	4.7	0	4 L	4.7
36.0	2.0	0	6 L	6.3	0	6 L	6.3	0	6 L	6.3
36.0	3.0	0	12 L	10.0	0	12 L	10.0	0	13 L	10.5
36.0	4.0	0	15 L	11.4	0	15 L	11.4	0	15 L	11.4
36.0	5.0	0	15 L	11.4	0	15 L	11.4	0	15 L	11.4
36.0	6.0	0	15 L	11.4	0	15 L	11.4	0	15 L	11.4
36.0	7.0	0	15 L	11.4	0	15 L	11.4	1	15 L	11.5
36.0	8.0	1	15 L	11.5	1	15 L	11.5	2	15 L	11.6
36.0	9.0	2	15 L	11.6	2	15 L	11.6	3	15 L	11.7
36.0	10.0	3	15 L	11.7	3	15 L	11.7	4	15 L	11.8
36.0	11.0	4	15 L	11.8	4	15 L	11.8	5	15 L	11.9
36.0	12.0	5	15 L	11.9	5	15 L	11.9	6	15 L	12.1
36.0	13.0	5	15 L	11.9	6	15 L	12.1	0	10 NL	4.6
36.0	14.0	0	10 NL	4.6	0	10 NL	4.6	0	12 NL	5.4
36.0	15.0	0	11 NL	5.0	0	12 NL	5.4	0	13 NL	5.8
36.0	16.0	0	12 NL	5.4	0	13 NL	5.8	1	14 NL	6.3
36.0	17.0	0	14 NL	6.2	0	14 NL	6.2	1	15 NL	6.6
36.0	18.0	0	15 NL	6.6	1	15 NL	6.6	2	15 NL	6.7
42.0	1.0	0	5 L	5.5	0	5 L	5.5	0	5 L	5.5
42.0	2.0	0	8 L	7.8	0	7 L	7.2	0	8 L	7.8
42.0	3.0	0	15 L	11.4	0	15 L	11.4	0	15 L	11.4
42.0	4.0	0	15 L	11.4	0	15 L	11.4	0	15 L	11.4
42.0	5.0	0	15 L	11.4	0	15 L	11.4	0	15 L	11.4
42.0	6.0	0	15 L	11.4	0	15 L	11.4	0	15 L	11.4
42.0	7.0	1	15 L	11.5	1	15 L	11.5	1	15 L	11.5
42.0	8.0	2	15 L	11.6	2	15 L	11.6	2	15 L	11.6
42.0	9.0	3	15 L	11.7	3	15 L	11.7	3	15 L	11.7
42.0	10.0	3	15 L	11.7	4	15 L	11.8	4	15 L	11.8
42.0	11.0	4	15 L	11.8	4	15 L	11.8	5	15 L	11.9
42.0	12.0	5	15 L	11.9	5	15 L	11.9	6	15 L	12.1
42.0	13.0	6	15 L	12.1	0	9 NL	4.2	0	10 NL	4.6
42.0	14.0	0	10 NL	4.6	0	10 NL	4.6	0	12 NL	5.4
42.0	15.0	0	11 NL	5.0	0	12 NL	5.4	0	13 NL	5.8
42.0	16.0	0	13 NL	5.8	0	13 NL	5.8	1	14 NL	6.3
42.0	17.0	0	14 NL	6.2	1	14 NL	6.3	2	15 NL	6.7
42.0	18.0	0	15 NL	6.6	1	15 NL	6.6	2	15 NL	6.7

TABLE XX (Contd)

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE
 REPEATERS ON 24-GAUGE H88 LOADED 4-WIRE FACILITIES WITH
 NONLOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
 4-WIRE TERMINATION = 1200 OHMS
 2-WIRE TERMINATION = 900 OHMS

LENGTH (KFT)		2-WIRE = 19 NL			2-WIRE = 22 NL			2-WIRE = 24 NL			2-WIRE = 26 NL		
4-WIRE	2-WIRE	BW = 15	EQLR										
24H88		HT	SLOPE	GAIN									
48.0	1.0	0	5	L	5.5			0	5	L	5.5		
48.0	2.0	0	9	L	8.4			0	9	L	8.4		
48.0	3.0	0	15	L	11.4			0	15	L	11.4		
48.0	4.0	0	15	L	11.4			0	15	L	11.4		
48.0	5.0	0	15	L	11.4			0	15	L	11.4		
48.0	6.0	0	15	L	11.4			0	15	L	11.4		
48.0	7.0	1	15	L	11.5			1	15	L	11.5		
48.0	8.0	2	15	L	11.6			2	15	L	11.6		
48.0	9.0	3	15	L	11.7			3	15	L	11.7		
48.0	10.0	4	15	L	11.8			4	15	L	11.8		
48.0	11.0	4	15	L	11.8			5	15	L	11.9		
48.0	12.0	5	15	L	11.9			0	9	NL	4.2		
48.0	13.0	6	15	L	12.1			0	11	NL	5.0		
48.0	14.0	0	10	NL	4.6			0	13	NL	5.8		
48.0	15.0	0	12	NL	5.4			0	14	NL	6.2		
48.0	16.0	0	13	NL	5.8			1	15	NL	6.6		
48.0	17.0	0	14	NL	6.2			2	15	NL	6.7		
48.0	18.0	0	15	NL	6.6			2	15	NL	6.7		
54.0	1.0	0	6	L	6.3			0	6	L	6.3		
54.0	2.0	0	10	L	9.0			0	11	L	9.5		
54.0	3.0	0	15	L	11.4			0	15	L	11.4		
54.0	4.0	0	15	L	11.4			0	15	L	11.4		
54.0	5.0	0	15	L	11.4			0	15	L	11.4		
54.0	6.0	0	15	L	11.4			0	15	L	11.4		
54.0	7.0	1	15	L	11.5			1	15	L	11.5		
54.0	8.0	2	15	L	11.6			3	15	L	11.7		
54.0	9.0	3	15	L	11.7			4	15	L	11.8		
54.0	10.0	4	15	L	11.8			5	15	L	11.9		
54.0	11.0	5	15	L	11.9			5	15	L	11.9		
54.0	12.0	5	15	L	11.9			0	9	NL	4.2		
54.0	13.0	0	9	NL	4.2			0	11	NL	5.0		
54.0	14.0	0	10	NL	4.6			0	13	NL	5.8		
54.0	15.0	0	12	NL	5.4			0	15	NL	6.6		
54.0	16.0	0	14	NL	6.2			1	15	NL	6.6		
54.0	17.0	0	15	NL	6.6			2	15	NL	6.7		
54.0	18.0	0	15	NL	6.6			3	15	NL	6.8		

TABLE XX (Contd)

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE
 REPEATERS ON 24-GAUGE H88 LOADED 4-WIRE FACILITIES WITH
 NONLOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68°F

END SECTIONS = 3.0 KFT
 4-WIRE TERMINATION = 1200 OHMS
 2-WIRE TERMINATION = 900 OHMS

LENGTH (KFT)		2-WIRE = 19 NL				2-WIRE = 22 NL				2-WIRE = 24 NL				2-WIRE = 26 NL				
4-WIRE	2-WIRE	BW = 15	EQLR	HT	SLOPE	BW = 15	EQLR	HT	SLOPE	BW = 15	EQLR	HT	SLOPE	BW = 15	EQLR	HT	SLOPE	GAIN
24H88																		
60.0	1.0	0	7	L	7.2													
60.0	2.0	0	15	L	11.4	0	14	L	11.0	0	15	L	11.4	0	15	L	11.4	
60.0	3.0	0	15	L	11.4													
60.0	4.0	0	15	L	11.4													
60.0	5.0	0	15	L	11.4													
60.0	6.0	0	15	L	11.4	0	15	L	11.4	1	15	L	11.5	1	15	L	11.5	
60.0	7.0	1	15	L	11.5	1	15	L	11.5	2	15	L	11.6	2	15	L	11.6	
60.0	8.0	2	15	L	11.6	2	15	L	11.6	3	15	L	11.7	3	15	L	11.7	
60.0	9.0	3	15	L	11.7	3	15	L	11.7	4	15	L	11.8	4	15	L	11.8	
60.0	10.0	4	15	L	11.8	4	15	L	11.8	5	15	L	11.9	5	15	L	11.9	
60.0	11.0	5	15	L	11.9	5	15	L	11.9	6	15	L	12.1	6	15	L	12.1	
60.0	12.0	6	15	L	12.1	6	15	L	12.1	0	9	NL	4.2	0	11	NL	5.0	
60.0	13.0	0	9	NL	4.2	0	10	NL	4.6	0	11	NL	5.0	0	13	NL	5.8	
60.0	14.0	0	11	NL	5.0	0	11	NL	5.0	0	14	NL	6.2	1	14	NL	6.3	
60.0	15.0	0	13	NL	5.8	0	13	NL	5.8	1	14	NL	6.3	2	15	NL	6.7	
60.0	16.0	0	14	NL	6.2	0	15	NL	6.6	1	15	NL	6.6	3	15	NL	6.8	
60.0	17.0	0	15	NL	6.6	1	15	NL	6.6	2	15	NL	6.7	3	15	NL	6.8	
60.0	18.0	1	15	NL	6.6	1	15	NL	6.6	3	15	NL	6.8	4	15	NL	6.9	
66.0	1.0	0	10	L	9.0													
66.0	2.0	0	15	L	11.4													
66.0	3.0	0	15	L	11.4													
66.0	4.0	0	15	L	11.4													
66.0	5.0	0	15	L	11.4													
66.0	6.0	1	15	L	11.5													
66.0	7.0	2	15	L	11.6													
66.0	8.0	3	15	L	11.7													
66.0	9.0	4	15	L	11.8													
66.0	10.0	4	15	L	11.8	5	15	L	11.9	5	15	L	11.9	6	15	L	12.1	
66.0	11.0	5	15	L	11.9	5	15	L	11.9	6	15	L	12.1	0	9	NL	4.2	
66.0	12.0	6	15	L	12.1	6	15	L	12.1	0	10	NL	4.6	0	11	NL	5.0	
66.0	13.0	0	10	NL	4.6	0	10	NL	4.6	0	12	NL	5.4	0	14	NL	6.2	
66.0	14.0	0	11	NL	5.0	0	12	NL	5.4	0	14	NL	6.2	1	15	NL	6.6	
66.0	15.0	0	13	NL	5.8	0	14	NL	6.2	1	15	NL	6.6	2	15	NL	6.7	
66.0	16.0	0	15	NL	6.6	0	15	NL	6.6	1	15	NL	6.6	3	15	NL	6.8	
66.0	17.0	0	15	NL	6.6	1	15	NL	6.6	2	15	NL	6.7	4	15	NL	6.9	
66.0	18.0	1	15	NL	6.6	2	15	NL	6.7	3	15	NL	6.8	4	15	NL	6.9	

TABLE YY

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE
REPEATERS ON 26-GAUGE H88 LOADED 4-WIRE FACILITIES WITH
NONLOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
4-WIRE TERMINATION = 1200 OHMS
2-WIRE TERMINATION = 900 OHMS

LENGTH (KFT)		2-WIRE = 19 NL		2-WIRE = 22 NL		2-WIRE = 24 NL		2-WIRE = 26 NL	
4-WIRE	2-WIRE	BW = 15	EQLR						
26H88		HT	SLOPE	HT	SLOPE	HT	SLOPE	HT	SLOPE
			GAIN		GAIN		GAIN		GAIN
12.0	1.0	0 3	L 3.7						
12.0	2.0	0 3	L 3.7						
12.0	3.0	0 3	L 3.7						
12.0	4.0	0 4	L 4.7						
12.0	5.0	0 5	L 5.5						
12.0	6.0	0 6	L 6.3	0 6	L 6.3	0 7	L 7.2	0 7	L 7.2
12.0	7.0	1 7	L 7.3	1 7	L 7.3	1 7	L 7.3	1 8	L 7.8
12.0	8.0	2 7	L 7.4	2 7	L 7.4	2 8	L 7.9	3 6	L 6.6
12.0	9.0	3 7	L 7.5	3 7	L 7.5	3 9	L 8.6	4 7	L 7.6
12.0	10.0	3 10	L 9.2	3 11	L 9.8	4 9	L 8.7	4 11	L 9.9
12.0	11.0	4 11	L 9.9	4 11	L 9.9	5 9	L 8.9	0 7	NL 3.4
12.0	12.0	5 10	L 9.5	5 11	L 10.0	0 7	NL 3.4	1 7	NL 3.4
12.0	13.0	0 7	NL 3.4	0 7	NL 3.4	1 8	NL 3.8	1 9	NL 4.2
12.0	14.0	0 8	NL 3.7	0 8	NL 3.7	1 9	NL 4.2	2 9	NL 4.3
12.0	15.0	0 9	NL 4.2	1 9	NL 4.2	2 9	NL 4.3	3 9	NL 4.4
12.0	16.0	1 9	NL 4.2	1 10	NL 4.7	2 10	NL 4.8	3 11	NL 5.3
12.0	17.0	1 10	NL 4.7	2 10	NL 4.8	3 10	NL 4.9	4 11	NL 5.4
12.0	18.0	1 11	NL 5.1	2 10	NL 4.8	3 11	NL 5.3	4 12	NL 5.8
18.0	1.0	0 8	L 7.8						
18.0	2.0	0 9	L 8.4						
18.0	3.0	0 12	L 10.0	0 11	L 9.5	0 12	L 10.0	0 12	L 10.0
18.0	4.0	0 15	L 11.4						
18.0	5.0	0 15	L 11.4						
18.0	6.0	0 15	L 11.4						
18.0	7.0	1 15	L 11.5						
18.0	8.0	2 15	L 11.6	2 15	L 11.6	2 15	L 11.6	3 15	L 11.7
18.0	9.0	3 15	L 11.7	3 15	L 11.7	3 15	L 11.7	4 15	L 11.8
18.0	10.0	4 15	L 11.8	4 15	L 11.8	4 15	L 11.8	5 15	L 11.9
18.0	11.0	4 15	L 11.8	5 15	L 11.9	0 8	NL 3.7	0 9	NL 4.2
18.0	12.0	0 8	NL 3.7	0 8	NL 3.7	0 9	NL 4.2	0 10	NL 4.6
18.0	13.0	0 9	NL 4.2	0 10	NL 4.6	0 11	NL 5.0	0 12	NL 5.4
18.0	14.0	0 10	NL 4.6	0 11	NL 5.0	0 12	NL 5.4	1 12	NL 5.5
18.0	15.0	0 11	NL 5.0	0 12	NL 5.4	1 12	NL 5.5	2 13	NL 6.0
18.0	16.0	0 12	NL 5.4	0 13	NL 5.8	1 14	NL 6.3	2 15	NL 6.7
18.0	17.0	0 13	NL 5.8	1 13	NL 5.9	2 14	NL 6.4	3 15	NL 6.8
18.0	18.0	1 13	NL 5.9	1 14	NL 6.3	2 15	NL 6.7	4 15	NL 6.9

TABLE YY (Contd)

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE
REPEATERS ON 26-GAUGE H88 LOADED 4-WIRE FACILITIES WITH
NONLOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
4-WIRE TERMINATION = 1200 OHMS
2-WIRE TERMINATION = 900 OHMS

LENGTH (KFT)		2-WIRE = 19 NL			2-WIRE = 22 NL			2-WIRE = 24 NL			2-WIRE = 26 NL						
4-WIRE	2-WIRE	BW = 15	EQLR	GAIN													
26H88		HT	SLOPE		HT	SLOPE		HT	SLOPE		HT	SLOPE					
24.0	1.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4
24.0	2.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4
24.0	3.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4
24.0	4.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4
24.0	5.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4
24.0	6.0	1	15	L	11.5	1	15	L	11.5	1	15	L	11.5	1	15	L	11.5
24.0	7.0	2	15	L	11.6	2	15	L	11.6	2	15	L	11.6	2	15	L	11.6
24.0	8.0	3	15	L	11.7	3	15	L	11.7	3	15	L	11.7	4	15	L	11.8
24.0	9.0	4	15	L	11.8	4	15	L	11.8	4	15	L	11.8	5	15	L	11.9
24.0	10.0	5	15	L	11.9	5	15	L	11.9	5	15	L	11.9	0	8	NL	3.7
24.0	11.0	0	7	NL	3.4	0	8	NL	3.7	0	9	NL	4.2	0	10	NL	4.6
24.0	12.0	0	9	NL	4.2	0	9	NL	4.2	0	11	NL	5.0	0	12	NL	5.4
24.0	13.0	0	10	NL	4.6	0	11	NL	5.0	0	13	NL	5.8	0	14	NL	6.2
24.0	14.0	0	12	NL	5.4	0	13	NL	5.8	0	15	NL	6.6	1	15	NL	6.6
24.0	15.0	0	14	NL	6.2	0	14	NL	6.2	1	15	NL	6.6	2	15	NL	6.7
24.0	16.0	0	15	NL	6.6	0	15	NL	6.6	1	15	NL	6.6	3	15	NL	6.8
24.0	17.0	0	15	NL	6.6	1	15	NL	6.6	2	15	NL	6.7	4	15	NL	6.9
24.0	18.0	1	15	NL	6.6	2	15	NL	6.7	3	15	NL	6.8	4	15	NL	6.9
30.0	1.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4
30.0	2.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4
30.0	3.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4
30.0	4.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4
30.0	5.0	0	15	L	11.4	0	15	L	11.4	1	15	L	11.5	1	15	L	11.5
30.0	6.0	1	15	L	11.5	1	15	L	11.5	2	15	L	11.6	2	15	L	11.6
30.0	7.0	3	15	L	11.7	3	15	L	11.7	3	15	L	11.7	3	15	L	11.7
30.0	8.0	4	15	L	11.8	4	15	L	11.8	4	15	L	11.8	4	15	L	11.8
30.0	9.0	5	15	L	11.9	5	15	L	11.9	5	15	L	11.9	6	15	L	12.1
30.0	10.0	6	15	L	12.1	6	15	L	12.1	0	8	NL	3.7	0	9	NL	4.2
30.0	11.0	0	9	NL	4.2	0	9	NL	4.2	0	10	NL	4.6	0	11	NL	5.0
30.0	12.0	0	10	NL	4.6	0	11	NL	5.0	0	12	NL	5.4	0	14	NL	6.2
30.0	13.0	0	12	NL	5.4	0	13	NL	5.8	0	15	NL	6.6	0	15	NL	6.6
30.0	14.0	0	14	NL	6.2	0	15	NL	6.6	0	15	NL	6.6	1	15	NL	6.6
30.0	15.0	0	15	NL	6.6	0	15	NL	6.6	1	15	NL	6.6	2	15	NL	6.7
30.0	16.0	0	15	NL	6.6	1	15	NL	6.6	2	15	NL	6.7	3	15	NL	6.8
30.0	17.0	1	15	NL	6.6	1	15	NL	6.6	3	15	NL	6.8	4	15	NL	6.9
30.0	18.0	1	15	NL	6.6	2	15	NL	6.7	3	15	NL	6.8	5	15	NL	7.1

TABLE YY (Contd)

**EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE
REPEATERS ON 26-GAUGE H88 LOADED 4-WIRE FACILITIES WITH
NONLOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F**

END SECTIONS = 3.0 KFT
4-WIRE TERMINATION = 1200 OHMS
2-WIRE TERMINATION = 900 OHMS

LENGTH (KFT)		2-WIRE = 19 NL			2-WIRE = 22 NL			2-WIRE = 24 NL			2-WIRE = 26 NL						
4-WIRE	2-WIRE	BW = 15	EQLR	GAIN													
26H88		HT	SLOPE		HT	SLOPE		HT	SLOPE		HT	SLOPE					
36.0	1.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4
36.0	2.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4
36.0	3.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4
36.0	4.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4
36.0	5.0	1	15	L	11.5	1	15	L	11.5	2	15	L	11.6	2	15	L	11.6
36.0	6.0	2	15	L	11.6	2	15	L	11.6	3	15	L	11.7	3	15	L	11.7
36.0	7.0	4	15	L	11.8	4	15	L	11.8	4	15	L	11.8	4	15	L	11.8
36.0	8.0	5	15	L	11.9	5	15	L	11.9	5	15	L	11.9	5	15	L	11.9
36.0	9.0	5	15	L	11.9	6	15	L	12.1	0	8	NL	3.7	0	8	NL	3.7
36.0	10.0	0	8	NL	3.7	0	9	NL	4.2	0	9	NL	4.2	0	10	NL	4.6
36.0	11.0	0	10	NL	4.6	0	10	NL	4.6	0	12	NL	5.4	0	13	NL	5.8
36.0	12.0	0	12	NL	5.4	0	12	NL	5.4	0	14	NL	6.2	0	15	NL	6.6
36.0	13.0	0	14	NL	6.2	0	15	NL	6.6	0	15	NL	6.6	1	15	NL	6.6
36.0	14.0	0	15	NL	6.6	0	15	NL	6.6	1	15	NL	6.6	2	15	NL	6.7
36.0	15.0	0	15	NL	6.6	0	15	NL	6.6	2	15	NL	6.7	3	15	NL	6.8
36.0	16.0	1	15	NL	6.6	1	15	NL	6.6	2	15	NL	6.7	4	15	NL	6.9
36.0	17.0	1	15	NL	6.6	2	15	NL	6.7	3	15	NL	6.8	4	15	NL	6.9
36.0	18.0	2	15	NL	6.7	2	15	NL	6.7	4	15	NL	6.9	5	15	NL	7.1
42.0	1.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4
42.0	2.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4
42.0	3.0	1	15	L	11.5	1	15	L	11.5	1	15	L	11.5	1	15	L	11.5
42.0	4.0	2	15	L	11.6	2	15	L	11.6	2	15	L	11.6	2	15	L	11.6
42.0	5.0	3	15	L	11.7	3	15	L	11.7	3	15	L	11.7	3	15	L	11.7
42.0	6.0	4	15	L	11.8	4	15	L	11.8	4	15	L	11.8	4	15	L	11.8
42.0	7.0	5	15	L	11.9	5	15	L	11.9	5	15	L	11.9	5	15	L	11.9
42.0	8.0	5	15	L	11.9	5	15	L	11.9	6	15	L	12.1	6	15	L	12.1
42.0	9.0	0	8	NL	3.7	0	8	NL	3.7	0	9	NL	4.2	0	9	NL	4.2
42.0	10.0	0	9	NL	4.2	0	10	NL	4.6	0	10	NL	4.6	0	12	NL	5.4
42.0	11.0	0	11	NL	5.0	0	11	NL	5.0	0	13	NL	5.8	0	15	NL	6.6
42.0	12.0	0	13	NL	5.8	0	14	NL	6.2	0	15	NL	6.6	0	15	NL	6.6
42.0	13.0	0	15	NL	6.6	0	15	NL	6.6	0	15	NL	6.6	1	15	NL	6.6
42.0	14.0	0	15	NL	6.6	0	15	NL	6.6	1	15	NL	6.6	2	15	NL	6.7
42.0	15.0	1	15	NL	6.6	1	15	NL	6.6	2	15	NL	6.7	3	15	NL	6.8
42.0	16.0	1	15	NL	6.6	2	15	NL	6.7	3	15	NL	6.8	4	15	NL	6.9
42.0	17.0	2	15	NL	6.7	2	15	NL	6.7	4	15	NL	6.9	5	15	NL	7.1
42.0	18.0	2	15	NL	6.7	3	15	NL	6.8	4	15	NL	6.9	6	15	NL	7.3

TABLE YY (Contd)

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE
 REPEATERS ON 26-GAUGE H88 LOADED 4-WIRE FACILITIES WITH
 NONLOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
 4-WIRE TERMINATION = 1200 OHMS
 2-WIRE TERMINATION = 900 OHMS

LENGTH (KFT)		2-WIRE = 19 NL				2-WIRE = 22 NL				2-WIRE = 24 NL				2-WIRE = 26 NL			
4-WIRE 2-WIRE		BW = 15		EQLR		BW = 15		EQLR		BW = 15		EQLR		BW = 15		EQLR	
26H88		HT	SLOPE	GAIN	HT	SLOPE	GAIN	HT	SLOPE	GAIN	HT	SLOPE	GAIN	HT	SLOPE	GAIN	
48.0	1.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4
48.0	2.0	1	15	L	11.5	1	15	L	11.5	1	15	L	11.5	1	15	L	11.5
48.0	3.0	2	15	L	11.6	2	15	L	11.6	2	15	L	11.6	2	15	L	11.6
48.0	4.0	2	15	L	11.6	2	15	L	11.6	3	15	L	11.7	3	15	L	11.7
48.0	5.0	3	15	L	11.7	3	15	L	11.7	3	15	L	11.7	4	15	L	11.8
48.0	6.0	4	15	L	11.8	4	15	L	11.8	4	15	L	11.8	5	15	L	11.9
48.0	7.0	5	15	L	11.9	5	15	L	11.9	5	15	L	11.9	5	15	L	11.9
48.0	8.0	6	15	L	12.1	6	15	L	12.1	0	9	NL	4.2	0	9	NL	4.2
48.0	9.0	0	9	NL	4.2	0	9	NL	4.2	0	10	NL	4.6	0	11	NL	5.0
48.0	10.0	0	11	NL	5.0	0	11	NL	5.0	0	12	NL	5.4	0	13	NL	5.8
48.0	11.0	0	12	NL	5.4	0	13	NL	5.8	0	15	NL	6.6	0	15	NL	6.6
48.0	12.0	0	15	NL	6.6	0	15	NL	6.6	0	15	NL	6.6	1	15	NL	6.6
48.0	13.0	0	15	NL	6.6	0	15	NL	6.6	1	15	NL	6.6	2	15	NL	6.7
48.0	14.0	0	15	NL	6.6	1	15	NL	6.6	2	15	NL	6.7	3	15	NL	6.8
48.0	15.0	1	15	NL	6.6	1	15	NL	6.6	2	15	NL	6.7	4	15	NL	6.9
48.0	16.0	2	15	NL	6.7	2	15	NL	6.7	3	15	NL	6.8	5	15	NL	7.1
48.0	17.0	2	15	NL	6.7	3	15	NL	6.8	4	15	NL	6.9	6	15	NL	7.3
48.0	18.0	3	15	NL	6.8	4	15	NL	6.9	5	15	NL	7.1	7	15	NL	7.5

TABLE ZZ

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE
REPEATERS ON 19-GAUGE H88 LOADED 4-WIRE FACILITIES WITH
NONLOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
4-WIRE TERMINATION = 1200 OHMS
2-WIRE TERMINATION = 600 OHMS

LENGTH (KFT)		2-WIRE = 19 NL				2-WIRE = 22 NL				2-WIRE = 24 NL				2-WIRE = 26 NL								
4-WIRE	2-WIRE	BW = 15	EQLR	HT	SLOPE	GAIN	BW = 15	EQLR	HT	SLOPE	GAIN	BW = 15	EQLR	HT	SLOPE	GAIN	BW = 15	EQLR	HT	SLOPE	GAIN	
19H88																						
12.0	1.0	0	0	L	0.0	0.0	0	0	L	0.0	0.0	0	0	L	0.0	0.0	0	0	L	0.0	0.0	
12.0	2.0	0	1	L	1.4	1.4	0	1	L	1.4	1.4	0	1	L	1.4	1.4	0	1	L	1.4	1.4	
12.0	3.0	0	1	L	1.4	1.4	0	1	L	1.4	1.4	0	1	L	1.4	1.4	0	1	L	1.4	1.4	
12.0	4.0	0	2	L	2.6	2.6	0	2	L	2.6	2.6	0	2	L	2.6	2.6	0	2	L	2.6	2.6	
12.0	5.0	0	2	L	2.6	2.6	0	2	L	2.6	2.6	0	2	L	2.6	2.6	0	2	L	2.6	2.6	
12.0	6.0	0	3	L	3.7	3.7	0	3	L	3.7	3.7	0	3	L	3.7	3.7	0	3	L	3.7	3.7	
12.0	7.0	0	3	L	3.7	3.7	0	3	L	3.7	3.7	0	3	L	3.7	3.7	0	3	L	3.7	3.7	
12.0	8.0	0	4	L	4.7	4.7	0	4	L	4.7	4.7	0	4	L	4.7	4.7	0	4	L	4.7	4.7	
12.0	9.0	0	5	L	5.5	5.5	0	5	L	5.5	5.5	0	5	L	5.5	5.5	1	5	L	5.6	5.6	
12.0	10.0	0	6	L	6.3	6.3	1	5	L	5.6	5.6	1	6	L	6.4	6.4	2	5	L	5.7	5.7	
12.0	11.0	1	6	L	6.4	6.4	1	6	L	6.4	6.4	2	6	L	6.5	6.5	3	6	L	6.6	6.6	
12.0	12.0	2	6	L	6.5	6.5	2	6	L	6.5	6.5	3	6	L	6.6	6.6	4	6	L	6.7	6.7	
12.0	13.0	2	7	L	7.4	7.4	3	6	L	6.6	6.6	4	6	L	6.7	6.7	5	6	L	6.9	6.9	
12.0	14.0	3	7	L	7.5	7.5	3	9	L	8.6	8.6	4	9	L	8.7	8.7	5	10	L	9.5	9.5	
12.0	15.0	4	7	L	7.6	7.6	4	8	L	8.1	8.1	5	9	L	8.9	8.9	6	10	L	9.7	9.7	
12.0	16.0	4	10	L	9.3	9.3	5	8	L	8.3	8.3	0	7	NL	3.4	3.4	1	8	NL	3.8	3.8	
12.0	17.0	4	14	L	11.4	11.4	5	12	L	10.6	10.6	1	7	NL	3.4	3.4	2	8	NL	3.9	3.9	
12.0	18.0	5	12	L	10.6	10.6	0	8	NL	3.7	3.7	1	8	NL	3.8	3.8	3	9	NL	4.4	4.4	
18.0	1.0	0	0	L	0.0	0.0	0	0	L	0.0	0.0	0	0	L	0.0	0.0	0	0	L	0.0	0.0	
18.0	2.0	0	0	L	0.0	0.0	0	0	L	0.0	0.0	0	0	L	0.0	0.0	0	0	L	0.0	0.0	
18.0	3.0	0	1	L	1.4	1.4	0	1	L	1.4	1.4	0	1	L	1.4	1.4	0	1	L	1.4	1.4	
18.0	4.0	0	1	L	1.4	1.4	0	1	L	1.4	1.4	0	1	L	1.4	1.4	0	1	L	1.4	1.4	
18.0	5.0	0	2	L	2.6	2.6	0	2	L	2.6	2.6	0	2	L	2.6	2.6	0	2	L	2.6	2.6	
18.0	6.0	0	3	L	3.7	3.7	0	3	L	3.7	3.7	0	3	L	3.7	3.7	0	3	L	3.7	3.7	
18.0	7.0	0	4	L	4.7	4.7	0	4	L	4.7	4.7	0	4	L	4.7	4.7	0	4	L	4.7	4.7	
18.0	8.0	0	5	L	5.5	5.5	0	5	L	5.5	5.5	0	5	L	5.5	5.5	0	6	L	6.3	6.3	
18.0	9.0	0	6	L	6.3	6.3	0	6	L	6.3	6.3	0	7	L	7.2	7.2	1	6	L	6.4	6.4	
18.0	10.0	0	7	L	7.2	7.2	0	7	L	7.2	7.2	1	7	L	7.3	7.3	2	7	L	7.4	7.4	
18.0	11.0	1	7	L	7.3	7.3	1	8	L	7.8	7.8	2	8	L	7.9	7.9	2	10	L	9.1	9.1	
18.0	12.0	2	8	L	7.9	7.9	2	8	L	7.9	7.9	3	8	L	8.0	8.0	3	11	L	9.8	9.8	
18.0	13.0	2	10	L	9.1	9.1	3	8	L	8.0	8.0	3	12	L	10.3	10.3	4	13	L	10.9	10.9	
18.0	14.0	3	10	L	9.2	9.2	3	12	L	10.3	10.3	4	13	L	10.9	10.9	5	14	L	11.5	11.5	
18.0	15.0	3	15	L	11.7	11.7	4	12	L	10.4	10.4	5	13	L	11.0	11.0	6	15	L	12.1	12.1	
18.0	16.0	4	14	L	11.4	11.4	4	15	L	11.8	11.8	5	15	L	11.9	11.9	1	8	NL	3.8	3.8	
18.0	17.0	4	15	L	11.8	11.8	5	15	L	11.9	11.9	6	15	L	12.1	12.1	1	10	NL	4.7	4.7	
18.0	18.0	5	15	L	11.9	11.9	0	8	NL	3.7	3.7	1	9	NL	4.2	4.2	2	10	NL	4.8	4.8	

TABLE ZZ (Contd)

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE REPEATERS ON 19-GAUGE H88 LOADED 4-WIRE FACILITIES WITH NONLOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
 4-WIRE TERMINATION = 1200 OHMS
 2-WIRE TERMINATION = 600 OHMS

LENGTH (KFT)		2-WIRE = 19 NL			2-WIRE = 22 NL			2-WIRE = 24 NL			2-WIRE = 26 NL			
4-WIRE	2-WIRE	BW = 15	EQLR	GAIN										
19H88		HT	SLOPE		HT	SLOPE		HT	SLOPE		HT	SLOPE		
24.0	1.0	0	0	L	0.0	0	0	L	0.0	0	0	L	0.0	
24.0	2.0	0	0	L	0.0	0	0	L	0.0	0	0	L	0.0	
24.0	3.0	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4	
24.0	4.0	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4	
24.0	5.0	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6	
24.0	6.0	0	3	L	3.7	0	3	L	3.7	0	3	L	3.7	
24.0	7.0	0	4	L	4.7	0	4	L	4.7	0	5	L	5.5	
24.0	8.0	0	5	L	5.5	0	5	L	5.5	0	6	L	6.3	
24.0	9.0	0	7	L	7.2	0	7	L	7.2	0	8	L	7.8	
24.0	10.0	1	7	L	7.3	1	7	L	7.3	1	9	L	8.4	
24.0	11.0	1	9	L	8.4	2	7	L	7.4	2	9	L	8.5	
24.0	12.0	2	9	L	8.5	2	10	L	9.1	3	10	L	9.2	
24.0	13.0	3	9	L	8.6	3	10	L	9.2	4	10	L	9.3	
24.0	14.0	3	13	L	10.8	4	10	L	9.3	4	15	L	11.8	
24.0	15.0	4	12	L	10.4	4	15	L	11.8	5	15	L	11.9	
24.0	16.0	4	15	L	11.8	5	14	L	11.5	6	15	L	12.1	
24.0	17.0	5	15	L	11.9	5	15	L	11.9	6	15	L	12.1	
24.0	18.0	5	15	L	11.9	6	15	L	12.1	7	15	L	12.4	
30.0	1.0	0	0	L	0.0	0	0	L	0.0	0	0	L	0.0	
30.0	2.0	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4	
30.0	3.0	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4	
30.0	4.0	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6	
30.0	5.0	0	3	L	3.7	0	2	L	2.6	0	3	L	3.7	
30.0	6.0	0	3	L	3.7	0	3	L	3.7	0	3	L	3.7	
30.0	7.0	0	4	L	4.7	0	4	L	4.7	0	4	L	4.7	
30.0	8.0	0	5	L	5.5	0	5	L	5.5	0	5	L	5.5	
30.0	9.0	0	6	L	6.3	0	6	L	6.3	0	7	L	7.2	
30.0	10.0	0	8	L	7.8	1	6	L	6.4	1	7	L	7.3	
30.0	11.0	1	8	L	7.8	1	8	L	7.8	2	8	L	7.9	
30.0	12.0	2	8	L	7.9	2	9	L	8.5	3	8	L	8.0	
30.0	13.0	2	11	L	9.7	3	9	L	8.6	4	9	L	8.7	
30.0	14.0	3	11	L	9.8	3	13	L	10.8	4	14	L	11.4	
30.0	15.0	4	10	L	9.3	4	13	L	10.9	5	14	L	11.5	
30.0	16.0	4	15	L	11.8	5	12	L	10.6	6	13	L	11.2	
30.0	17.0	5	13	L	11.0	5	15	L	11.9	6	15	L	12.1	
30.0	18.0	5	15	L	11.9	6	15	L	12.1	7	15	L	12.4	
											2	9	NL	4.3
											2	10	NL	4.8

TABLE ZZ (Contd)

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE REPEATERS ON 19-GAUGE H88 LOADED 4-WIRE FACILITIES WITH NONLOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
 4-WIRE TERMINATION = 1200 OHMS
 2-WIRE TERMINATION = 600 OHMS

LENGTH (KFT)		2-WIRE = 19 NL			2-WIRE = 22 NL			2-WIRE = 24 NL			2-WIRE = 26 NL		
4-WIRE	2-WIRE	BW = 15	EQLR	GAIN									
19H88		HT	SLOPE		HT	SLOPE		HT	SLOPE		HT	SLOPE	
36.0	1.0	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4
36.0	2.0	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4
36.0	3.0	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4
36.0	4.0	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6
36.0	5.0	0	3	L	3.7	0	3	L	3.7	0	3	L	3.7
36.0	6.0	0	3	L	3.7	0	3	L	3.7	0	3	L	3.7
36.0	7.0	0	4	L	4.7	0	4	L	4.7	0	4	L	4.7
36.0	8.0	0	5	L	5.5	0	5	L	5.5	0	5	L	5.5
36.0	9.0	0	6	L	6.3	0	6	L	6.3	1	5	L	5.6
36.0	10.0	1	6	L	6.4	1	6	L	6.4	2	6	L	6.5
36.0	11.0	2	6	L	6.5	2	6	L	6.5	3	6	L	6.6
36.0	12.0	2	7	L	7.4	3	6	L	6.6	3	8	L	8.0
36.0	13.0	3	7	L	7.5	3	8	L	8.0	4	8	L	8.1
36.0	14.0	4	7	L	7.6	4	8	L	8.1	5	8	L	8.3
36.0	15.0	4	9	L	8.7	5	7	L	7.7	0	7	NL	3.4
36.0	16.0	5	8	L	8.3	5	11	L	10.0	1	7	NL	3.4
36.0	17.0	5	12	L	10.6	0	7	NL	3.4	1	8	NL	3.8
36.0	18.0	0	7	NL	3.4	1	7	NL	3.4	2	8	NL	3.9
42.0	1.0	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4
42.0	2.0	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4
42.0	3.0	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4
42.0	4.0	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6
42.0	5.0	0	3	L	3.7	0	2	L	2.6	0	3	L	3.7
42.0	6.0	0	3	L	3.7	0	3	L	3.7	0	3	L	3.7
42.0	7.0	0	4	L	4.7	0	4	L	4.7	0	4	L	4.7
42.0	8.0	0	4	L	4.7	0	4	L	4.7	0	5	L	5.5
42.0	9.0	0	5	L	5.5	0	6	L	6.3	1	5	L	5.6
42.0	10.0	1	6	L	6.4	1	6	L	6.4	2	5	L	5.7
42.0	11.0	2	6	L	6.5	2	6	L	6.5	3	5	L	5.8
42.0	12.0	2	7	L	7.4	3	6	L	6.6	3	7	L	7.5
42.0	13.0	3	7	L	7.5	3	8	L	8.0	4	7	L	7.6
42.0	14.0	4	6	L	6.7	4	7	L	7.6	5	7	L	7.7
42.0	15.0	4	9	L	8.7	5	7	L	7.7	0	7	NL	3.4
42.0	16.0	5	8	L	8.3	5	10	L	9.5	1	7	NL	3.4
42.0	17.0	5	11	L	10.0	0	7	NL	3.4	2	7	NL	3.5
42.0	18.0	0	7	NL	3.4	1	7	NL	3.4	2	8	NL	3.9

TABLE ZZ (Contd)

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE
 REPEATERS ON 19-GAUGE H88 LOADED 4-WIRE FACILITIES WITH
 NONLOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
 4-WIRE TERMINATION = 1200 OHMS
 2-WIRE TERMINATION = 600 OHMS

LENGTH (KFT)		2-WIRE = 19 NL				2-WIRE = 22 NL				2-WIRE = 24 NL				2-WIRE = 26 NL			
4-WIRE	2-WIRE	BW = 15	EQLR														
19H88		HT	SLOPE	GAIN		HT	SLOPE	GAIN		HT	SLOPE	GAIN		HT	SLOPE	GAIN	
48.0	1.0	0	0	L	0.0												
48.0	2.0	0	1	L	1.4												
48.0	3.0	0	1	L	1.4												
48.0	4.0	0	2	L	2.6												
48.0	5.0	0	2	L	2.6												
48.0	6.0	0	3	L	3.7												
48.0	7.0	0	4	L	4.7												
48.0	8.0	0	4	L	4.7	0	4	L	4.7	0	5	L	5.5	0	5	L	5.5
48.0	9.0	0	5	L	5.5	0	6	L	6.3	1	5	L	5.6	1	6	L	6.4
48.0	10.0	1	6	L	6.4	1	6	L	6.4	2	5	L	5.7	2	6	L	6.5
48.0	11.0	2	6	L	6.5	2	6	L	6.5	3	5	L	5.8	3	7	L	7.5
48.0	12.0	2	7	L	7.4	3	6	L	6.6	3	7	L	7.5	4	7	L	7.6
48.0	13.0	3	7	L	7.5	3	8	L	8.0	4	8	L	8.1	5	7	L	7.7
48.0	14.0	4	7	L	7.6	4	7	L	7.6	5	7	L	7.7	6	7	L	7.9
48.0	15.0	4	9	L	8.7	5	7	L	7.7	5	12	L	10.6	6	13	L	11.2
48.0	16.0	5	8	L	8.3	5	10	L	9.5	6	11	L	10.2	7	12	L	11.0
48.0	17.0	5	11	L	10.0	6	9	L	9.1	7	9	L	9.3	8	10	L	10.2
48.0	18.0	5	15	L	11.9	6	14	L	11.7	7	15	L	12.4	9	11	L	11.0
54.0	1.0	0	0	L	0.0												
54.0	2.0	0	1	L	1.4												
54.0	3.0	0	1	L	1.4												
54.0	4.0	0	2	L	2.6												
54.0	5.0	0	2	L	2.6												
54.0	6.0	0	3	L	3.7												
54.0	7.0	0	4	L	4.7												
54.0	8.0	0	5	L	5.5	0	5	L	5.5	0	5	L	5.5	1	4	L	4.7
54.0	9.0	1	5	L	5.6	1	5	L	5.6	1	5	L	5.6	2	5	L	5.7
54.0	10.0	1	6	L	6.4	2	5	L	5.7	2	5	L	5.7	3	5	L	5.8
54.0	11.0	2	6	L	6.5	2	6	L	6.5	3	6	L	6.6	4	5	L	5.9
54.0	12.0	3	6	L	6.6	3	6	L	6.6	4	6	L	6.7	4	7	L	7.6
54.0	13.0	3	7	L	7.5	4	6	L	6.7	4	8	L	8.1	5	8	L	8.3
54.0	14.0	4	7	L	7.6	4	8	L	8.1	5	8	L	8.3	6	8	L	8.5
54.0	15.0	4	9	L	8.7	5	7	L	7.7	6	7	L	7.9	7	7	L	8.1
54.0	16.0	5	8	L	8.3	5	10	L	9.5	6	11	L	10.2	7	13	L	11.5
54.0	17.0	5	12	L	10.6	6	9	L	9.1	7	10	L	9.9	8	10	L	10.2
54.0	18.0	6	10	L	9.7	6	14	L	11.7	7	15	L	12.4	9	11	L	11.0

TABLE ZZ (Contd)

**EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE
REPEATERS ON 19-GAUGE H88 LOADED 4-WIRE FACILITIES WITH
NONLOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F**

END SECTIONS = 3.0 KFT
4-WIRE TERMINATION = 1200 OHMS
2-WIRE TERMINATION = 600 OHMS

LENGTH (KFT)		2-WIRE = 19 NL				2-WIRE = 22 NL				2-WIRE = 24 NL				2-WIRE = 26 NL												
4-WIRE	2-WIRE	BW = 15	EQLR	HT	SLOPE	GAIN	BW = 15	EQLR	HT	SLOPE	GAIN	BW = 15	EQLR	HT	SLOPE	GAIN	BW = 15	EQLR	HT	SLOPE	GAIN					
19H88																										
60.0	1.0	0	0	L		0.0	0	0	L		0.0	0	0	L		0.0	0	0	L		0.0	0	0	L		0.0
60.0	2.0	0	1	L		1.4	0	1	L		1.4	0	1	L		1.4	0	1	L		1.4	0	1	L		1.4
60.0	3.0	0	1	L		1.4	0	1	L		1.4	0	1	L		1.4	0	1	L		1.4	0	1	L		1.4
60.0	4.0	0	2	L		2.6	0	2	L		2.6	0	2	L		2.6	0	2	L		2.6	0	2	L		2.6
60.0	5.0	0	2	L		2.6	0	2	L		2.6	0	2	L		2.6	0	2	L		2.6	0	2	L		2.6
60.0	6.0	0	3	L		3.7	0	3	L		3.7	0	3	L		3.7	0	3	L		3.7	0	3	L		3.7
60.0	7.0	0	4	L		4.7	0	4	L		4.7	0	4	L		4.7	0	4	L		4.7	0	4	L		4.7
60.0	8.0	0	4	L		4.7	0	4	L		4.7	0	5	L		5.5	1	4	L		4.7	1	4	L		4.7
60.0	9.0	1	4	L		4.7	1	4	L		4.7	1	5	L		5.6	2	4	L		4.8	2	4	L		4.8
60.0	10.0	1	5	L		5.6	2	4	L		4.8	2	5	L		5.7	3	5	L		5.8	3	5	L		5.8
60.0	11.0	2	5	L		5.7	2	6	L		6.5	3	5	L		5.8	4	5	L		5.9	4	5	L		5.9
60.0	12.0	3	5	L		5.8	3	6	L		6.6	4	5	L		5.9	4	7	L		7.6	4	7	L		7.6
60.0	13.0	3	7	L		7.5	4	5	L		5.9	4	7	L		7.6	5	7	L		7.7	5	7	L		7.7
60.0	14.0	4	6	L		6.7	4	7	L		7.6	5	7	L		7.7	6	7	L		7.9	6	7	L		7.9
60.0	15.0	4	8	L		8.1	5	7	L		7.7	6	7	L		7.9	7	7	L		8.1	7	7	L		8.1
60.0	16.0	5	7	L		7.7	5	9	L		8.9	6	10	L		9.7	7	11	L		10.4	7	11	L		10.4
60.0	17.0	5	10	L		9.5	6	8	L		8.5	7	9	L		9.3	8	9	L		9.6	8	9	L		9.6
60.0	18.0	6	9	L		9.1	6	12	L		10.7	7	15	L		12.4	9	10	L		10.4	9	10	L		10.4
66.0	1.0	0	1	L		1.4	0	1	L		1.4	0	1	L		1.4	0	1	L		1.4	0	1	L		1.4
66.0	2.0	0	1	L		1.4	0	1	L		1.4	0	1	L		1.4	0	1	L		1.4	0	1	L		1.4
66.0	3.0	0	1	L		1.4	0	1	L		1.4	0	1	L		1.4	0	1	L		1.4	0	1	L		1.4
66.0	4.0	0	2	L		2.6	0	2	L		2.6	0	2	L		2.6	0	2	L		2.6	0	2	L		2.6
66.0	5.0	0	2	L		2.6	0	2	L		2.6	0	3	L		3.7	0	3	L		3.7	0	3	L		3.7
66.0	6.0	0	3	L		3.7	0	3	L		3.7	0	3	L		3.7	0	3	L		3.7	0	3	L		3.7
66.0	7.0	0	4	L		4.7	0	4	L		4.7	0	4	L		4.7	0	4	L		4.7	0	4	L		4.7
66.0	8.0	0	4	L		4.7	0	4	L		4.7	1	4	L		4.7	1	4	L		4.7	1	4	L		4.7
66.0	9.0	1	4	L		4.7	1	4	L		4.7	2	4	L		4.8	2	4	L		4.8	2	4	L		4.8
66.0	10.0	2	4	L		4.8	2	4	L		4.8	3	4	L		4.9	3	5	L		5.8	3	5	L		5.8
66.0	11.0	2	5	L		5.7	3	4	L		4.9	3	5	L		5.8	4	5	L		5.9	4	5	L		5.9
66.0	12.0	3	5	L		5.8	3	6	L		6.6	4	5	L		5.9	5	5	L		6.1	5	5	L		6.1
66.0	13.0	4	5	L		5.9	4	5	L		5.9	5	5	L		6.1	6	5	L		6.2	6	5	L		6.2
66.0	14.0	4	6	L		6.7	5	5	L		6.1	5	7	L		7.7	6	7	L		7.9	6	7	L		7.9
66.0	15.0	5	6	L		6.9	5	7	L		7.7	6	7	L		7.9	7	7	L		8.1	7	7	L		8.1
66.0	16.0	5	7	L		7.7	6	6	L		7.0	7	6	L		7.3	8	6	L		7.6	8	6	L		7.6
66.0	17.0	6	6	L		7.0	6	8	L		8.5	7	9	L		9.3	8	9	L		9.6	8	9	L		9.6
66.0	18.0	6	9	L		9.1	7	7	L		8.1	2	8	NL		3.9	9	10	L		10.4	9	10	L		10.4

TABLE ZZ (Contd)

**EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE
REPEATERS ON 19-GAUGE H88 LOADED 4-WIRE FACILITIES WITH
NONLOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F**

END SECTIONS = 3.0 KFT
4-WIRE TERMINATION = 1200 OHMS
2-WIRE TERMINATION = 600 OHMS

LENGTH (KFT)		2-WIRE = 19 NL			2-WIRE = 22 NL			2-WIRE = 24 NL			2-WIRE = 26 NL						
4-WIRE	2-WIRE	BW = 15	EQLR	GAIN													
19H88		HT	SLOPE		HT	SLOPE		HT	SLOPE		HT	SLOPE					
72.0	1.0	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4
72.0	2.0	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4
72.0	3.0	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6
72.0	4.0	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6
72.0	5.0	0	3	L	3.7	0	3	L	3.7	0	3	L	3.7	0	3	L	3.7
72.0	6.0	0	3	L	3.7	0	3	L	3.7	0	3	L	3.7	0	3	L	3.7
72.0	7.0	0	4	L	4.7	0	4	L	4.7	0	4	L	4.7	0	4	L	4.7
72.0	8.0	0	5	L	5.5	0	5	L	5.5	1	4	L	4.7	1	4	L	4.7
72.0	9.0	1	5	L	5.6	1	5	L	5.6	2	4	L	4.8	2	5	L	5.7
72.0	10.0	2	4	L	4.8	2	5	L	5.7	3	4	L	4.9	3	5	L	5.8
72.0	11.0	3	4	L	4.9	3	5	L	5.8	3	5	L	5.8	4	5	L	5.9
72.0	12.0	3	5	L	5.8	3	6	L	6.6	4	6	L	6.7	5	5	L	6.1
72.0	13.0	4	5	L	5.9	4	6	L	6.7	5	5	L	6.1	6	5	L	6.2
72.0	14.0	4	7	L	7.6	5	5	L	6.1	5	7	L	7.7	6	7	L	7.9
72.0	15.0	5	6	L	6.9	5	7	L	7.7	6	7	L	7.9	7	7	L	8.1
72.0	16.0	5	8	L	8.3	6	6	L	7.0	7	6	L	7.3	8	6	L	7.6
72.0	17.0	6	7	L	7.9	6	9	L	9.1	7	9	L	9.3	8	10	L	10.2
72.0	18.0	6	9	L	9.1	7	7	L	8.1	8	7	L	8.5	9	11	L	11.0
78.0	1.0	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4
78.0	2.0	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4
78.0	3.0	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6
78.0	4.0	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6
78.0	5.0	0	3	L	3.7	0	3	L	3.7	0	3	L	3.7	0	3	L	3.7
78.0	6.0	0	3	L	3.7	0	3	L	3.7	0	4	L	4.7	0	4	L	4.7
78.0	7.0	0	4	L	4.7	0	4	L	4.7	0	4	L	4.7	0	5	L	5.5
78.0	8.0	0	5	L	5.5	0	5	L	5.5	1	4	L	4.7	1	5	L	5.6
78.0	9.0	1	5	L	5.6	1	5	L	5.6	2	5	L	5.7	2	5	L	5.7
78.0	10.0	2	5	L	5.7	2	5	L	5.7	3	5	L	5.8	3	5	L	5.8
78.0	11.0	3	5	L	5.8	3	5	L	5.8	3	6	L	6.6	4	6	L	6.7
78.0	12.0	3	6	L	6.6	3	6	L	6.6	4	6	L	6.7	5	6	L	6.9
78.0	13.0	4	6	L	6.7	4	6	L	6.7	5	6	L	6.9	6	6	L	7.0
78.0	14.0	4	7	L	7.6	5	6	L	6.9	5	9	L	8.9	6	8	L	8.5
78.0	15.0	5	7	L	7.7	5	8	L	8.3	6	8	L	8.5	7	8	L	8.7
78.0	16.0	5	9	L	8.9	6	7	L	7.9	7	7	L	8.1	8	7	L	8.5
78.0	17.0	6	7	L	7.9	6	10	L	9.7	7	11	L	10.4	9	7	L	8.7
78.0	18.0	6	10	L	9.7	7	8	L	8.7	8	8	L	9.0	10	7	L	8.9

TABLE ZZ (Contd)

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE
 REPEATERS ON 19-GAUGE H88 LOADED 4-WIRE FACILITIES WITH
 NONLOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
 4-WIRE TERMINATION = 1200 OHMS
 2-WIRE TERMINATION = 600 OHMS

LENGTH (KFT)		2-WIRE = 19 NL			2-WIRE = 22 NL			2-WIRE = 24 NL			2-WIRE = 26 NL		
4-WIRE	2-WIRE	BW = 15	EQLR	GAIN									
19H88		HT	SLOPE		HT	SLOPE		HT	SLOPE		HT	SLOPE	
84.0	1.0	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4
84.0	2.0	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4
84.0	3.0	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6
84.0	4.0	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6
84.0	5.0	0	3	L	3.7	0	3	L	3.7	0	3	L	3.7
84.0	6.0	0	4	L	4.7	0	4	L	4.7	0	4	L	4.7
84.0	7.0	0	5	L	5.5	0	5	L	5.5	0	5	L	5.5
84.0	8.0	0	6	L	6.3	1	5	L	5.6	1	5	L	5.6
84.0	9.0	1	6	L	6.4	1	6	L	6.4	2	5	L	5.7
84.0	10.0	2	6	L	6.5	2	6	L	6.5	3	5	L	5.8
84.0	11.0	3	5	L	5.8	3	6	L	6.6	4	5	L	5.9
84.0	12.0	3	7	L	7.5	4	5	L	5.9	4	7	L	7.6
84.0	13.0	4	6	L	6.7	4	7	L	7.6	5	7	L	7.7
84.0	14.0	4	8	L	8.1	5	7	L	7.7	6	6	L	7.0
84.0	15.0	5	8	L	8.3	5	9	L	8.9	6	9	L	9.1
84.0	16.0	5	10	L	9.5	6	8	L	8.5	7	8	L	8.7
84.0	17.0	6	9	L	9.1	6	12	L	10.7	7	13	L	11.5
84.0	18.0	6	13	L	11.2	7	10	L	9.9	8	9	L	9.6
90.0	1.0	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4
90.0	2.0	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4
90.0	3.0	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6
90.0	4.0	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6
90.0	5.0	0	3	L	3.7	0	3	L	3.7	0	3	L	3.7
90.0	6.0	0	4	L	4.7	0	4	L	4.7	0	4	L	4.7
90.0	7.0	0	5	L	5.5	0	5	L	5.5	0	5	L	5.5
90.0	8.0	0	6	L	6.3	1	5	L	5.6	1	5	L	5.6
90.0	9.0	1	6	L	6.4	1	6	L	6.4	2	5	L	5.7
90.0	10.0	2	6	L	6.5	2	6	L	6.5	3	5	L	5.8
90.0	11.0	3	6	L	6.6	3	6	L	6.6	4	5	L	5.9
90.0	12.0	3	7	L	7.5	4	6	L	6.7	4	7	L	7.6
90.0	13.0	4	7	L	7.6	4	7	L	7.6	5	7	L	7.7
90.0	14.0	4	9	L	8.7	5	7	L	7.7	6	7	L	7.9
90.0	15.0	5	8	L	8.3	5	10	L	9.5	6	10	L	9.7
90.0	16.0	5	11	L	10.0	6	9	L	9.1	7	9	L	9.3
90.0	17.0	6	9	L	9.1	6	13	L	11.2	7	14	L	11.9
90.0	18.0	6	14	L	11.7	7	10	L	9.9	8	10	L	10.2

TABLE ZZ (Contd)

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE
 REPEATERS ON 19-GAUGE H88 LOADED 4-WIRE FACILITIES WITH
 NONLOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
 4-WIRE TERMINATION = 1200 OHMS
 2-WIRE TERMINATION = 600 OHMS

LENGTH (KFT)		2-WIRE = 19 NL			2-WIRE = 22 NL			2-WIRE = 24 NL			2-WIRE = 26 NL						
4-WIRE	2-WIRE	BW = 15	EQLR	GAIN													
19H88		HT	SLOPE		HT	SLOPE		HT	SLOPE		HT	SLOPE					
96.0	1.0	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4
96.0	2.0	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6
96.0	3.0	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6
96.0	4.0	0	3	L	3.7	0	3	L	3.7	0	3	L	3.7	0	3	L	3.7
96.0	5.0	0	3	L	3.7	0	3	L	3.7	0	4	L	4.7	0	4	L	4.7
96.0	6.0	0	4	L	4.7	0	4	L	4.7	0	4	L	4.7	0	4	L	4.7
96.0	7.0	0	5	L	5.5	0	5	L	5.5	0	5	L	5.5	1	5	L	5.6
96.0	8.0	1	5	L	5.6	1	5	L	5.6	1	6	L	6.4	2	5	L	5.7
96.0	9.0	2	5	L	5.7	2	5	L	5.7	2	6	L	6.5	3	5	L	5.8
96.0	10.0	2	6	L	6.5	2	6	L	6.5	3	6	L	6.6	4	5	L	5.9
96.0	11.0	3	6	L	6.6	3	6	L	6.6	4	6	L	6.7	4	7	L	7.6
96.0	12.0	4	6	L	6.7	4	6	L	6.7	5	6	L	6.9	5	7	L	7.7
96.0	13.0	4	7	L	7.6	4	8	L	8.1	5	8	L	8.3	6	7	L	7.9
96.0	14.0	5	7	L	7.7	5	7	L	7.7	6	7	L	7.9	7	7	L	8.1
96.0	15.0	5	9	L	8.9	6	7	L	7.9	6	11	L	10.2	7	11	L	10.4
96.0	16.0	6	7	L	7.9	6	9	L	9.1	7	9	L	9.3	8	9	L	9.6
96.0	17.0	6	10	L	9.7	7	8	L	8.7	8	7	L	8.5	9	9	L	9.8
96.0	18.0	6	15	L	12.1	7	11	L	10.4	8	11	L	10.8	10	10	L	10.7

TABLE AAA

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE
REPEATERS ON 22-GAUGE H88 LOADED 4-WIRE FACILITIES WITH
NONLOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
4-WIRE TERMINATION = 1200 OHMS
2-WIRE TERMINATION = 600 OHMS

LENGTH (KFT)		2-WIRE = 19 NL				2-WIRE = 22 NL				2-WIRE = 24 NL				2-WIRE = 26 NL					
4-WIRE	2-WIRE	BW = 15	EQLR	HT	SLOPE	BW = 15	EQLR	HT	SLOPE	BW = 15	EQLR	HT	SLOPE	BW = 15	EQLR	HT	SLOPE	GAIN	
22H88			GAIN				GAIN				GAIN				GAIN				
12.0	1.0	0	1	L	1.4														
12.0	2.0	0	1	L	1.4														
12.0	3.0	0	2	L	2.6														
12.0	4.0	0	2	L	2.6														
12.0	5.0	0	2	L	2.6														
12.0	6.0	0	3	L	3.7														
12.0	7.0	0	3	L	3.7	0	3	L	3.7	0	4	L	4.7	0	4	L	4.7		
12.0	8.0	0	4	L	4.7	0	4	L	4.7	0	5	L	5.5	0	5	L	5.5		
12.0	9.0	0	5	L	5.5	0	5	L	5.5	1	5	L	5.6	1	5	L	5.6		
12.0	10.0	1	5	L	5.6	1	5	L	5.6	1	6	L	6.4	2	6	L	6.5		
12.0	11.0	1	6	L	6.4	2	5	L	5.7	2	7	L	7.4	3	6	L	6.6		
12.0	12.0	2	7	L	7.4	2	7	L	7.4	3	7	L	7.5	4	7	L	7.6		
12.0	13.0	3	6	L	6.6	3	7	L	7.5	4	7	L	7.6	5	7	L	7.7		
12.0	14.0	3	9	L	8.6	4	7	L	7.6	5	7	L	7.7	0	7	NL	3.4		
12.0	15.0	4	8	L	8.1	4	10	L	9.3	5	11	L	10.0	1	7	NL	3.4		
12.0	16.0	4	11	L	9.9	5	9	L	8.9	0	8	NL	3.7	1	9	NL	4.2		
12.0	17.0	5	10	L	9.5	0	7	NL	3.4	1	8	NL	3.8	2	9	NL	4.3		
12.0	18.0	5	15	L	11.9	0	8	NL	3.7	1	9	NL	4.2	3	9	NL	4.4		
18.0	1.0	0	1	L	1.4														
18.0	2.0	0	1	L	1.4														
18.0	3.0	0	2	L	2.6														
18.0	4.0	0	2	L	2.6	0	2	L	2.6	0	3	L	3.7	0	3	L	3.7		
18.0	5.0	0	3	L	3.7	0	3	L	3.7	0	4	L	4.7	0	4	L	4.7		
18.0	6.0	0	4	L	4.7	0	4	L	4.7	0	4	L	4.7	0	5	L	5.5		
18.0	7.0	0	5	L	5.5	0	5	L	5.5	0	6	L	6.3	0	6	L	6.3		
18.0	8.0	0	6	L	6.3	0	6	L	6.3	0	7	L	7.2	0	8	L	7.8		
18.0	9.0	0	8	L	7.8	0	8	L	7.8	0	10	L	9.0	1	8	L	7.8		
18.0	10.0	0	11	L	9.5	0	11	L	9.5	1	10	L	9.0	2	9	L	8.5		
18.0	11.0	1	11	L	9.6	1	12	L	10.1	2	11	L	9.7	3	11	L	9.8		
18.0	12.0	2	11	L	9.7	2	13	L	10.7	3	12	L	10.3	4	12	L	10.4		
18.0	13.0	2	15	L	11.6	3	13	L	10.8	4	13	L	10.9	4	15	L	11.8		
18.0	14.0	3	15	L	11.7	3	15	L	11.7	4	15	L	11.8	5	15	L	11.9		
18.0	15.0	4	15	L	11.8	4	15	L	11.8	5	15	L	11.9	0	9	NL	4.2		
18.0	16.0	4	15	L	11.8	5	15	L	11.9	0	8	NL	3.7	1	9	NL	4.2		
18.0	17.0	5	15	L	11.9	5	15	L	11.9	0	9	NL	4.2	1	11	NL	5.1		
18.0	18.0	5	15	L	11.9	0	9	NL	4.2	0	10	NL	4.6	2	11	NL	5.2		

TABLE AAA (Contd)

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE REPEATERS ON 22-GAUGE H88 LOADED 4-WIRE FACILITIES WITH NONLOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
 4-WIRE TERMINATION = 1200 OHMS
 2-WIRE TERMINATION = 600 OHMS

LENGTH (KFT)		2-WIRE = 19 NL			2-WIRE = 22 NL			2-WIRE = 24 NL			2-WIRE = 26 NL						
4-WIRE	2-WIRE	BW = 15	EQLR	GAIN													
22H88		HT	SLOPE		HT	SLOPE		HT	SLOPE		HT	SLOPE					
24.0	1.0	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4
24.0	2.0	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4
24.0	3.0	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4
24.0	4.0	0	2	L	2.6	0	2	L	2.6	0	3	L	3.7	0	3	L	3.7
24.0	5.0	0	4	L	4.7	0	4	L	4.7	0	4	L	4.7	0	4	L	4.7
24.0	6.0	0	5	L	5.5	0	5	L	5.5	0	6	L	6.3	0	6	L	6.3
24.0	7.0	0	7	L	7.2	0	7	L	7.2	0	8	L	7.8	0	8	L	7.8
24.0	8.0	0	9	L	8.4	0	10	L	9.0	0	11	L	9.5	0	12	L	10.0
24.0	9.0	0	13	L	10.5	0	14	L	11.0	0	15	L	11.4	1	15	L	11.5
24.0	10.0	0	15	L	11.4	1	15	L	11.5	1	15	L	11.5	2	15	L	11.6
24.0	11.0	1	15	L	11.5	1	15	L	11.5	2	15	L	11.6	3	15	L	11.7
24.0	12.0	2	15	L	11.6	2	15	L	11.6	3	15	L	11.7	4	15	L	11.8
24.0	13.0	3	15	L	11.7	3	15	L	11.7	4	15	L	11.8	5	15	L	11.9
24.0	14.0	3	15	L	11.7	4	15	L	11.8	5	15	L	11.9	6	15	L	12.1
24.0	15.0	4	15	L	11.8	4	15	L	11.8	5	15	L	11.9	6	15	L	12.1
24.0	16.0	4	15	L	11.8	5	15	L	11.9	6	15	L	12.1	7	15	L	12.4
24.0	17.0	5	15	L	11.9	5	15	L	11.9	0	10	NL	4.6	1	11	NL	5.1
24.0	18.0	5	15	L	11.9	6	15	L	12.1	0	11	NL	5.0	2	11	NL	5.2
30.0	1.0	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4
30.0	2.0	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4
30.0	3.0	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6
30.0	4.0	0	3	L	3.7	0	3	L	3.7	0	3	L	3.7	0	3	L	3.7
30.0	5.0	0	4	L	4.7	0	4	L	4.7	0	5	L	5.5	0	5	L	5.5
30.0	6.0	0	6	L	6.3	0	6	L	6.3	0	6	L	6.3	0	7	L	7.2
30.0	7.0	0	8	L	7.8	0	8	L	7.8	0	9	L	8.4	0	9	L	8.4
30.0	8.0	0	11	L	9.5	0	11	L	9.5	0	13	L	10.5	0	14	L	11.0
30.0	9.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4	1	15	L	11.5
30.0	10.0	0	15	L	11.4	1	15	L	11.5	1	15	L	11.5	2	15	L	11.6
30.0	11.0	1	15	L	11.5	1	15	L	11.5	2	15	L	11.6	3	15	L	11.7
30.0	12.0	2	15	L	11.6	2	15	L	11.6	3	15	L	11.7	4	15	L	11.8
30.0	13.0	3	15	L	11.7	3	15	L	11.7	4	15	L	11.8	5	15	L	11.9
30.0	14.0	3	15	L	11.7	4	15	L	11.8	4	15	L	11.8	5	15	L	11.9
30.0	15.0	4	15	L	11.8	4	15	L	11.8	5	15	L	11.9	6	15	L	12.1
30.0	16.0	4	15	L	11.8	5	15	L	11.9	6	15	L	12.1	0	11	NL	5.0
30.0	17.0	5	15	L	11.9	5	15	L	11.9	0	10	NL	4.6	1	11	NL	5.1
30.0	18.0	5	15	L	11.9	0	9	NL	4.2	0	11	NL	5.0	2	12	NL	5.6

TABLE AAA (Contd)

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE
REPEATERS ON 22-GAUGE H88 LOADED 4-WIRE FACILITIES WITH
NONLOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
4-WIRE TERMINATION = 1200 OHMS
2-WIRE TERMINATION = 600 OHMS

LENGTH (KFT)		2-WIRE = 19 NL			2-WIRE = 22 NL			2-WIRE = 24 NL			2-WIRE = 26 NL						
4-WIRE	2-WIRE	BW = 15	EQLR	GAIN													
22H88		HT	SLOPE		HT	SLOPE		HT	SLOPE		HT	SLOPE					
36.0	1.0	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4
36.0	2.0	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6
36.0	3.0	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6	0	3	L	3.7
36.0	4.0	0	4	L	4.7	0	4	L	4.7	0	4	L	4.7	0	4	L	4.7
36.0	5.0	0	5	L	5.5	0	5	L	5.5	0	6	L	6.3	0	6	L	6.3
36.0	6.0	0	7	L	7.2	0	7	L	7.2	0	7	L	7.2	0	7	L	7.2
36.0	7.0	0	9	L	8.4	0	9	L	8.4	0	9	L	8.4	0	10	L	9.0
36.0	8.0	0	11	L	9.5	0	11	L	9.5	0	13	L	10.5	0	15	L	11.4
36.0	9.0	0	15	L	11.4	0	15	L	11.4	1	15	L	11.5	1	15	L	11.5
36.0	10.0	1	15	L	11.5	1	15	L	11.5	2	15	L	11.6	2	15	L	11.6
36.0	11.0	2	15	L	11.6	2	15	L	11.6	3	15	L	11.7	3	15	L	11.7
36.0	12.0	2	15	L	11.6	3	15	L	11.7	3	15	L	11.7	4	15	L	11.8
36.0	13.0	3	15	L	11.7	3	15	L	11.7	4	15	L	11.8	5	15	L	11.9
36.0	14.0	4	15	L	11.8	4	15	L	11.8	5	15	L	11.9	6	15	L	12.1
36.0	15.0	4	15	L	11.8	5	15	L	11.9	6	15	L	12.1	0	9	NL	4.2
36.0	16.0	5	15	L	11.9	5	15	L	11.9	0	9	NL	4.2	1	10	NL	4.7
36.0	17.0	5	15	L	11.9	6	15	L	12.1	0	10	NL	4.6	2	11	NL	5.2
36.0	18.0	6	15	L	12.1	0	9	NL	4.2	1	10	NL	4.7	2	12	NL	5.6
42.0	1.0	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4
42.0	2.0	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6
42.0	3.0	0	3	L	3.7	0	3	L	3.7	0	3	L	3.7	0	3	L	3.7
42.0	4.0	0	4	L	4.7	0	4	L	4.7	0	4	L	4.7	0	4	L	4.7
42.0	5.0	0	5	L	5.5	0	5	L	5.5	0	6	L	6.3	0	6	L	6.3
42.0	6.0	0	7	L	7.2	0	7	L	7.2	0	7	L	7.2	0	7	L	7.2
42.0	7.0	0	9	L	8.4	0	9	L	8.4	0	9	L	8.4	0	10	L	9.0
42.0	8.0	0	11	L	9.5	0	11	L	9.5	0	13	L	10.5	0	15	L	11.4
42.0	9.0	0	15	L	11.4	0	15	L	11.4	1	15	L	11.5	1	15	L	11.5
42.0	10.0	1	15	L	11.5	1	15	L	11.5	2	15	L	11.6	2	15	L	11.6
42.0	11.0	2	15	L	11.6	2	15	L	11.6	3	15	L	11.7	3	15	L	11.7
42.0	12.0	2	15	L	11.6	3	15	L	11.7	3	15	L	11.7	4	15	L	11.8
42.0	13.0	3	15	L	11.7	3	15	L	11.7	4	15	L	11.8	5	15	L	11.9
42.0	14.0	4	15	L	11.8	4	15	L	11.8	5	15	L	11.9	6	15	L	12.1
42.0	15.0	4	15	L	11.8	5	15	L	11.9	6	15	L	12.1	1	9	NL	4.2
42.0	16.0	5	15	L	11.9	5	15	L	11.9	0	9	NL	4.2	1	10	NL	4.7
42.0	17.0	5	15	L	11.9	6	15	L	12.1	0	10	NL	4.6	2	10	NL	4.8
42.0	18.0	0	8	NL	3.7	0	9	NL	4.2	1	10	NL	4.7	3	11	NL	5.3

TABLE AAA (Contd)

**EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE
REPEATERS ON 22-GAUGE H88 LOADED 4-WIRE FACILITIES WITH
NONLOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F**

END SECTIONS = 3.0 KFT
4-WIRE TERMINATION = 1200 OHMS
2-WIRE TERMINATION = 600 OHMS

LENGTH (KFT)		2-WIRE = 19 NL			2-WIRE = 22 NL			2-WIRE = 24 NL			2-WIRE = 26 NL						
4-WIRE	2-WIRE	BW = 15	EQLR	GAIN													
22H88		HT	SLOPE		HT	SLOPE		HT	SLOPE		HT	SLOPE					
48.0	1.0	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4
48.0	2.0	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6
48.0	3.0	0	3	L	3.7	0	2	L	2.6	0	3	L	3.7	0	3	L	3.7
48.0	4.0	0	4	L	4.7	0	4	L	4.7	0	4	L	4.7	0	4	L	4.7
48.0	5.0	0	5	L	5.5	0	5	L	5.5	0	6	L	6.3	0	6	L	6.3
48.0	6.0	0	7	L	7.2	0	7	L	7.2	0	7	L	7.2	0	8	L	7.8
48.0	7.0	0	9	L	8.4	0	9	L	8.4	0	10	L	9.0	0	11	L	9.5
48.0	8.0	0	12	L	10.0	0	12	L	10.0	0	14	L	11.0	0	15	L	11.4
48.0	9.0	0	15	L	11.4	0	15	L	11.4	1	15	L	11.5	1	15	L	11.5
48.0	10.0	1	15	L	11.5	1	15	L	11.5	2	15	L	11.6	2	15	L	11.6
48.0	11.0	2	15	L	11.6	2	15	L	11.6	3	15	L	11.7	3	15	L	11.7
48.0	12.0	2	15	L	11.6	3	15	L	11.7	3	15	L	11.7	4	15	L	11.8
48.0	13.0	3	15	L	11.7	3	15	L	11.7	4	15	L	11.8	5	15	L	11.9
48.0	14.0	4	15	L	11.8	4	15	L	11.8	5	15	L	11.9	6	15	L	12.1
48.0	15.0	4	15	L	11.8	5	15	L	11.9	6	15	L	12.1	7	15	L	12.4
48.0	16.0	5	15	L	11.9	5	15	L	11.9	0	9	NL	4.2	1	10	NL	4.7
48.0	17.0	5	15	L	11.9	6	15	L	12.1	0	10	NL	4.6	2	10	NL	4.8
48.0	18.0	6	15	L	12.1	0	9	NL	4.2	1	10	NL	4.7	3	11	NL	5.3
54.0	1.0	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4	0	1	L	1.4
54.0	2.0	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6
54.0	3.0	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6	0	2	L	2.6
54.0	4.0	0	4	L	4.7	0	4	L	4.7	0	4	L	4.7	0	4	L	4.7
54.0	5.0	0	5	L	5.5	0	5	L	5.5	0	6	L	6.3	0	6	L	6.3
54.0	6.0	0	7	L	7.2	0	7	L	7.2	0	8	L	7.8	0	8	L	7.8
54.0	7.0	0	10	L	9.0	0	10	L	9.0	0	11	L	9.5	0	11	L	9.5
54.0	8.0	0	13	L	10.5	0	13	L	10.5	0	15	L	11.4	0	15	L	11.4
54.0	9.0	0	15	L	11.4	0	15	L	11.4	1	15	L	11.5	1	15	L	11.5
54.0	10.0	1	15	L	11.5	1	15	L	11.5	2	15	L	11.6	2	15	L	11.6
54.0	11.0	2	15	L	11.6	2	15	L	11.6	3	15	L	11.7	3	15	L	11.7
54.0	12.0	3	15	L	11.7	3	15	L	11.7	4	15	L	11.8	4	15	L	11.8
54.0	13.0	3	15	L	11.7	4	15	L	11.8	4	15	L	11.8	5	15	L	11.9
54.0	14.0	4	15	L	11.8	4	15	L	11.8	5	15	L	11.9	6	15	L	12.1
54.0	15.0	4	15	L	11.8	5	15	L	11.9	6	15	L	12.1	7	15	L	12.4
54.0	16.0	5	15	L	11.9	5	15	L	11.9	0	9	NL	4.2	1	10	NL	4.7
54.0	17.0	5	15	L	11.9	6	15	L	12.1	1	9	NL	4.2	2	11	NL	5.2
54.0	18.0	6	15	L	12.1	0	10	NL	4.6	1	10	NL	4.7	3	11	NL	5.3

TABLE AAA (Contd)

**EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE
REPEATERS ON 22-GAUGE H88 LOADED 4-WIRE FACILITIES WITH
NONLOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F**

END SECTIONS = 3.0 KFT
4-WIRE TERMINATION = 1200 OHMS
2-WIRE TERMINATION = 600 OHMS

LENGTH (KFT)		2-WIRE = 19 NL				2-WIRE = 22 NL				2-WIRE = 24 NL				2-WIRE = 26 NL			
4-WIRE	2-WIRE	BW = 15	EQLR	HT	GAIN	BW = 15	EQLR	HT	GAIN	BW = 15	EQLR	HT	GAIN	BW = 15	EQLR	HT	GAIN
22H88																	
60.0	1.0	0	1	L	1.4												
60.0	2.0	0	2	L	2.6												
60.0	3.0	0	2	L	2.6	0	2	L	2.6	0	3	L	3.7	0	3	L	3.7
60.0	4.0	0	4	L	4.7												
60.0	5.0	0	6	L	6.3	0	5	L	5.5	0	6	L	6.3	0	6	L	6.3
60.0	6.0	0	8	L	7.8	0	7	L	7.2	0	8	L	7.8	0	8	L	7.8
60.0	7.0	0	10	L	9.0	0	10	L	9.0	0	11	L	9.5	0	12	L	10.0
60.0	8.0	0	14	L	11.0	0	14	L	11.0	0	15	L	11.4	0	15	L	11.4
60.0	9.0	0	15	L	11.4	0	15	L	11.4	1	15	L	11.5	2	15	L	11.6
60.0	10.0	1	15	L	11.5	1	15	L	11.5	2	15	L	11.6	3	15	L	11.7
60.0	11.0	2	15	L	11.6	2	15	L	11.6	3	15	L	11.7	3	15	L	11.7
60.0	12.0	3	15	L	11.7	3	15	L	11.7	4	15	L	11.8	4	15	L	11.8
60.0	13.0	3	15	L	11.7	4	15	L	11.8	4	15	L	11.8	5	15	L	11.9
60.0	14.0	4	15	L	11.8	4	15	L	11.8	5	15	L	11.9	6	15	L	12.1
60.0	15.0	4	15	L	11.8	5	15	L	11.9	6	15	L	12.1	7	15	L	12.4
60.0	16.0	5	15	L	11.9	5	15	L	11.9	0	9	NL	4.2	1	10	NL	4.7
60.0	17.0	5	15	L	11.9	6	15	L	12.1	1	9	NL	4.2	2	11	NL	5.2
60.0	18.0	6	15	L	12.1	0	10	NL	4.6	1	11	NL	5.1	3	11	NL	5.3
66.0	1.0	0	1	L	1.4												
66.0	2.0	0	2	L	2.6												
66.0	3.0	0	3	L	3.7												
66.0	4.0	0	4	L	4.7	0	4	L	4.7	0	4	L	4.7	0	5	L	5.5
66.0	5.0	0	6	L	6.3	0	6	L	6.3	0	6	L	6.3	0	7	L	7.2
66.0	6.0	0	8	L	7.8	0	8	L	7.8	0	9	L	8.4	0	9	L	8.4
66.0	7.0	0	11	L	9.5	0	11	L	9.5	0	12	L	10.0	0	13	L	10.5
66.0	8.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4	1	15	L	11.5
66.0	9.0	1	15	L	11.5	1	15	L	11.5	1	15	L	11.5	2	15	L	11.6
66.0	10.0	1	15	L	11.5	2	15	L	11.6	2	15	L	11.6	3	15	L	11.7
66.0	11.0	2	15	L	11.6	2	15	L	11.6	3	15	L	11.7	4	15	L	11.8
66.0	12.0	3	15	L	11.7	3	15	L	11.7	4	15	L	11.8	5	15	L	11.9
66.0	13.0	3	15	L	11.7	4	15	L	11.8	5	15	L	11.9	5	15	L	11.9
66.0	14.0	4	15	L	11.8	4	15	L	11.8	5	15	L	11.9	6	15	L	12.1
66.0	15.0	5	15	L	11.9	5	15	L	11.9	6	15	L	12.1	7	15	L	12.4
66.0	16.0	5	15	L	11.9	6	15	L	12.1	0	9	NL	4.2	8	15	L	12.7
66.0	17.0	6	15	L	12.1	6	15	L	12.1	1	10	NL	4.7	2	11	NL	5.2
66.0	18.0	6	15	L	12.1	0	10	NL	4.6	1	11	NL	5.1	3	11	NL	5.3

TABLE AAA (Contd)

**EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE
REPEATERS ON 22-GAUGE H88 LOADED 4-WIRE FACILITIES WITH
NONLOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F**

END SECTIONS = 3.0 KFT
4-WIRE TERMINATION = 1200 OHMS
2-WIRE TERMINATION = 600 OHMS

LENGTH (KFT)		2-WIRE = 19 NL				2-WIRE = 22 NL				2-WIRE = 24 NL				2-WIRE = 26 NL												
4-WIRE	2-WIRE	BW = 15	EQLR	HT	SLOPE	GAIN	BW = 15	EQLR	HT	SLOPE	GAIN	BW = 15	EQLR	HT	SLOPE	GAIN	BW = 15	EQLR	HT	SLOPE	GAIN					
22H88																										
72.0	1.0	0	2	L		2.6	0	2	L		2.6	0	2	L		2.6	0	2	L		2.6	0	2	L		2.6
72.0	2.0	0	2	L		2.6	0	2	L		2.6	0	2	L		2.6	0	2	L		2.6	0	2	L		2.6
72.0	3.0	0	3	L		3.7	0	3	L		3.7	0	3	L		3.7	0	3	L		3.7	0	3	L		3.7
72.0	4.0	0	5	L		5.5	0	5	L		5.5	0	5	L		5.5	0	5	L		5.5	0	5	L		5.5
72.0	5.0	0	7	L		7.2	0	7	L		7.2	0	7	L		7.2	0	7	L		7.2	0	7	L		7.2
72.0	6.0	0	9	L		8.4	0	9	L		8.4	0	10	L		9.0	0	10	L		9.0	0	10	L		9.0
72.0	7.0	0	13	L		10.5	0	13	L		10.5	0	14	L		11.0	0	15	L		11.4	1	15	L		11.5
72.0	8.0	0	15	L		11.4	0	15	L		11.4	0	15	L		11.4	1	15	L		11.5	2	15	L		11.6
72.0	9.0	1	15	L		11.5	1	15	L		11.5	1	15	L		11.5	2	15	L		11.6	3	15	L		11.7
72.0	10.0	1	15	L		11.5	2	15	L		11.6	2	15	L		11.6	3	15	L		11.7	4	15	L		11.8
72.0	11.0	2	15	L		11.6	2	15	L		11.6	3	15	L		11.7	4	15	L		11.8	5	15	L		11.9
72.0	12.0	3	15	L		11.7	3	15	L		11.7	4	15	L		11.8	5	15	L		11.9	6	15	L		12.1
72.0	13.0	4	15	L		11.8	4	15	L		11.8	5	15	L		11.9	5	15	L		11.9	6	15	L		12.1
72.0	14.0	4	15	L		11.8	5	15	L		11.9	5	15	L		11.9	6	15	L		12.1	7	15	L		12.4
72.0	15.0	5	15	L		11.9	5	15	L		11.9	6	15	L		12.1	7	15	L		12.4	1	11	NL		5.1
72.0	16.0	5	15	L		11.9	6	15	L		12.1	0	10	NL		4.6	1	11	NL		5.1	2	11	NL		5.2
72.0	17.0	6	15	L		12.1	6	15	L		12.1	1	10	NL		4.7	2	11	NL		5.2	3	12	NL		5.7
72.0	18.0	0	9	NL		4.2	0	10	NL		4.6	1	11	NL		5.1	3	12	NL		5.7					
78.0	1.0	0	2	L		2.6	0	2	L		2.6	0	2	L		2.6	0	2	L		2.6	0	2	L		2.6
78.0	2.0	0	2	L		2.6	0	2	L		2.6	0	2	L		2.6	0	2	L		2.6	0	2	L		2.6
78.0	3.0	0	3	L		3.7	0	3	L		3.7	0	3	L		3.7	0	3	L		3.7	0	3	L		3.7
78.0	4.0	0	5	L		5.5	0	5	L		5.5	0	5	L		5.5	0	5	L		5.5	0	5	L		5.5
78.0	5.0	0	7	L		7.2	0	7	L		7.2	0	8	L		7.8	0	8	L		7.8	0	8	L		7.8
78.0	6.0	0	11	L		9.5	0	11	L		9.5	0	12	L		10.0	0	12	L		10.0	0	12	L		10.0
78.0	7.0	0	15	L		11.4	0	15	L		11.4	0	15	L		11.4	0	15	L		11.4	0	15	L		11.4
78.0	8.0	0	15	L		11.4	0	15	L		11.4	1	15	L		11.5	1	15	L		11.5	1	15	L		11.5
78.0	9.0	1	15	L		11.5	1	15	L		11.5	2	15	L		11.6	2	15	L		11.6	2	15	L		11.6
78.0	10.0	2	15	L		11.6	2	15	L		11.6	2	15	L		11.6	3	15	L		11.7	3	15	L		11.7
78.0	11.0	2	15	L		11.6	3	15	L		11.7	3	15	L		11.7	4	15	L		11.8	4	15	L		11.8
78.0	12.0	3	15	L		11.7	3	15	L		11.7	4	15	L		11.8	5	15	L		11.9	5	15	L		11.9
78.0	13.0	4	15	L		11.8	4	15	L		11.8	5	15	L		11.9	6	15	L		12.1	6	15	L		12.1
78.0	14.0	4	15	L		11.8	5	15	L		11.9	6	15	L		12.1	6	15	L		12.1	6	15	L		12.1
78.0	15.0	5	15	L		11.9	5	15	L		11.9	6	15	L		12.1	7	15	L		12.4	7	15	L		12.4
78.0	16.0	5	15	L		11.9	6	15	L		12.1	0	10	NL		4.6	8	15	L		12.7	8	15	L		12.7
78.0	17.0	6	15	L		12.1	0	9	NL		4.2	1	10	NL		4.7	2	12	NL		5.6	2	12	NL		5.6
78.0	18.0	0	9	NL		4.2	0	10	NL		4.6	1	12	NL		5.5	3	12	NL		5.7	3	12	NL		5.7

TABLE AAA (Contd)

**EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE
REPEATERS ON 22-GAUGE H88 LOADED 4-WIRE FACILITIES WITH
NONLOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F**

END SECTIONS = 3.0 KFT
4-WIRE TERMINATION = 1200 OHMS
2-WIRE TERMINATION = 600 OHMS

LENGTH (KFT)		2-WIRE = 19 NL				2-WIRE = 22 NL				2-WIRE = 24 NL				2-WIRE = 26 NL												
4-WIRE	2-WIRE	BW = 15	EQLR	HT	SLOPE	GAIN	BW = 15	EQLR	HT	SLOPE	GAIN	BW = 15	EQLR	HT	SLOPE	GAIN	BW = 15	EQLR	HT	SLOPE	GAIN					
22H88																										
84.0	1.0	0	2	L		2.6	0	2	L		2.6	0	2	L		2.6	0	2	L		2.6	0	2	L		2.6
84.0	2.0	0	2	L		2.6	0	2	L		2.6	0	2	L		2.6	0	2	L		2.6	0	2	L		2.6
84.0	3.0	0	4	L		4.7	0	4	L		4.7	0	4	L		4.7	0	4	L		4.7	0	4	L		4.7
84.0	4.0	0	5	L		5.5	0	5	L		5.5	0	6	L		6.3	0	6	L		6.3	0	6	L		6.3
84.0	5.0	0	9	L		8.4	0	8	L		7.8	0	9	L		8.4	0	10	L		9.0	0	10	L		9.0
84.0	6.0	0	13	L		10.5	0	13	L		10.5	0	15	L		11.4	0	15	L		11.4	0	15	L		11.4
84.0	7.0	0	15	L		11.4	0	15	L		11.4	0	15	L		11.4	0	15	L		11.4	0	15	L		11.4
84.0	8.0	0	15	L		11.4	0	15	L		11.4	1	15	L		11.5	1	15	L		11.5	1	15	L		11.5
84.0	9.0	1	15	L		11.5	1	15	L		11.5	2	15	L		11.6	2	15	L		11.6	2	15	L		11.6
84.0	10.0	2	15	L		11.6	2	15	L		11.6	3	15	L		11.7	3	15	L		11.7	3	15	L		11.7
84.0	11.0	2	15	L		11.6	3	15	L		11.7	3	15	L		11.7	4	15	L		11.8	4	15	L		11.8
84.0	12.0	3	15	L		11.7	3	15	L		11.7	4	15	L		11.8	5	15	L		11.9	5	15	L		11.9
84.0	13.0	4	15	L		11.8	4	15	L		11.8	5	15	L		11.9	6	15	L		12.1	6	15	L		12.1
84.0	14.0	4	15	L		11.8	5	15	L		11.9	6	15	L		12.1	7	15	L		12.4	7	15	L		12.4
84.0	15.0	5	15	L		11.9	5	15	L		11.9	6	15	L		12.1	7	15	L		12.4	7	15	L		12.4
84.0	16.0	5	15	L		11.9	6	15	L		12.1	7	15	L		12.4	8	15	L		12.7	8	15	L		12.7
84.0	17.0	6	15	L		12.1	0	9	NL		4.2	1	10	NL		4.7	2	12	NL		5.6	2	12	NL		5.6
84.0	18.0	0	9	NL		4.2	0	11	NL		5.0	1	12	NL		5.5	3	12	NL		5.7	3	12	NL		5.7
90.0	1.0	0	2	L		2.6	0	2	L		2.6	0	2	L		2.6	0	2	L		2.6	0	2	L		2.6
90.0	2.0	0	3	L		3.7	0	3	L		3.7	0	3	L		3.7	0	3	L		3.7	0	3	L		3.7
90.0	3.0	0	4	L		4.7	0	4	L		4.7	0	4	L		4.7	0	4	L		4.7	0	4	L		4.7
90.0	4.0	0	6	L		6.3	0	6	L		6.3	0	6	L		6.3	0	6	L		6.3	0	6	L		6.3
90.0	5.0	0	10	L		9.0	0	10	L		9.0	0	11	L		9.5	0	11	L		9.5	0	11	L		9.5
90.0	6.0	0	15	L		11.4	0	15	L		11.4	0	15	L		11.4	0	15	L		11.4	0	15	L		11.4
90.0	7.0	0	15	L		11.4	0	15	L		11.4	0	15	L		11.4	0	15	L		11.4	0	15	L		11.4
90.0	8.0	0	15	L		11.4	0	15	L		11.4	1	15	L		11.5	1	15	L		11.5	1	15	L		11.5
90.0	9.0	1	15	L		11.5	1	15	L		11.5	2	15	L		11.6	2	15	L		11.6	2	15	L		11.6
90.0	10.0	2	15	L		11.6	2	15	L		11.6	3	15	L		11.7	3	15	L		11.7	3	15	L		11.7
90.0	11.0	3	15	L		11.7	3	15	L		11.7	3	15	L		11.7	4	15	L		11.8	4	15	L		11.8
90.0	12.0	3	15	L		11.7	4	15	L		11.8	4	15	L		11.8	5	15	L		11.9	5	15	L		11.9
90.0	13.0	4	15	L		11.8	4	15	L		11.8	5	15	L		11.9	6	15	L		12.1	6	15	L		12.1
90.0	14.0	4	15	L		11.8	5	15	L		11.9	6	15	L		12.1	7	15	L		12.4	7	15	L		12.4
90.0	15.0	5	15	L		11.9	6	15	L		12.1	6	15	L		12.1	7	15	L		12.4	7	15	L		12.4
90.0	16.0	6	15	L		12.1	6	15	L		12.1	7	15	L		12.4	8	15	L		12.7	8	15	L		12.7
90.0	17.0	6	15	L		12.1	7	15	L		12.4	1	11	NL		5.1	2	12	NL		5.6	2	12	NL		5.6
90.0	18.0	0	9	NL		4.2	0	11	NL		5.0	2	11	NL		5.2	3	12	NL		5.7	3	12	NL		5.7

TABLE BBB

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE
 REPEATERS ON 24-GAUGE H88 LOADED 4-WIRE FACILITIES WITH
 NONLOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
 4-WIRE TERMINATION = 1200 OHMS
 2-WIRE TERMINATION = 600 OHMS

LENGTH (KFT)		2-WIRE = 19 NL		2-WIRE = 22 NL		2-WIRE = 24 NL		2-WIRE = 26 NL		
4-WIRE	2-WIRE	BW = 15	EQLR							
24H88		HT	SLOPE	HT	SLOPE	HT	SLOPE	HT	SLOPE	
			GAIN		GAIN		GAIN		GAIN	
12.0	1.0	0	2 L	2.6	0	2 L	2.6	0	2 L	2.6
12.0	2.0	0	2 L	2.6	0	2 L	2.6	0	2 L	2.6
12.0	3.0	0	2 L	2.6	0	2 L	2.6	0	2 L	2.6
12.0	4.0	0	3 L	3.7	0	3 L	3.7	0	3 L	3.7
12.0	5.0	0	3 L	3.7	0	3 L	3.7	0	3 L	3.7
12.0	6.0	0	4 L	4.7	0	4 L	4.7	0	4 L	4.7
12.0	7.0	0	4 L	4.7	0	4 L	4.7	0	5 L	5.5
12.0	8.0	0	5 L	5.5	0	5 L	5.5	0	6 L	6.3
12.0	9.0	0	6 L	6.3	0	7 L	7.2	1	6 L	6.4
12.0	10.0	1	7 L	7.3	1	7 L	7.3	2	6 L	6.5
12.0	11.0	2	7 L	7.4	2	7 L	7.4	3	7 L	7.5
12.0	12.0	2	9 L	8.5	3	7 L	7.5	3	9 L	8.6
12.0	13.0	3	9 L	8.6	3	10 L	9.2	4	10 L	9.3
12.0	14.0	4	8 L	8.1	4	10 L	9.3	5	10 L	9.5
12.0	15.0	4	11 L	9.9	5	9 L	8.9	0	7 NL	3.4
12.0	16.0	5	10 L	9.5	5	14 L	11.5	0	8 NL	3.7
12.0	17.0	5	15 L	11.9	0	8 NL	3.7	1	9 NL	4.2
12.0	18.0	0	8 NL	3.7	0	9 NL	4.2	2	9 NL	4.3
18.0	1.0	0	2 L	2.6	0	2 L	2.6	0	2 L	2.6
18.0	2.0	0	2 L	2.6	0	2 L	2.6	0	3 L	3.7
18.0	3.0	0	4 L	4.7	0	4 L	4.7	0	4 L	4.7
18.0	4.0	0	5 L	5.5	0	5 L	5.5	0	5 L	5.5
18.0	5.0	0	6 L	6.3	0	6 L	6.3	0	6 L	6.3
18.0	6.0	0	7 L	7.2	0	7 L	7.2	0	7 L	7.2
18.0	7.0	0	9 L	8.4	0	9 L	8.4	0	10 L	9.0
18.0	8.0	0	12 L	10.0	0	12 L	10.0	0	14 L	11.0
18.0	9.0	0	15 L	11.4	0	15 L	11.4	1	15 L	11.5
18.0	10.0	1	15 L	11.5	1	15 L	11.5	1	15 L	11.5
18.0	11.0	1	15 L	11.5	2	15 L	11.6	2	15 L	11.6
18.0	12.0	2	15 L	11.6	2	15 L	11.6	3	15 L	11.7
18.0	13.0	3	15 L	11.7	3	15 L	11.7	4	15 L	11.8
18.0	14.0	3	15 L	11.7	4	15 L	11.8	5	15 L	11.9
18.0	15.0	4	15 L	11.8	5	15 L	11.9	0	9 NL	4.2
18.0	16.0	5	15 L	11.9	5	15 L	11.9	0	8 NL	3.7
18.0	17.0	5	15 L	11.9	0	9 NL	4.2	0	9 NL	4.2
18.0	18.0	0	9 NL	4.2	0	11 NL	5.0	1	10 NL	4.7
					0	10 NL	4.6	0	12 NL	5.5
								1	11 NL	5.1
								2	12 NL	5.6

TABLE BBB (Contd)

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE
REPEATERS ON 24-GAUGE H88 LOADED 4-WIRE FACILITIES WITH
NONLOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
4-WIRE TERMINATION = 1200 OHMS
2-WIRE TERMINATION = 600 OHMS

LENGTH (KFT)		2-WIRE = 19 NL				2-WIRE = 22 NL				2-WIRE = 24 NL				2-WIRE = 26 NL			
4-WIRE	2-WIRE	BW = 15	EQLR	HT	GAIN	BW = 15	EQLR	HT	GAIN	BW = 15	EQLR	HT	GAIN	BW = 15	EQLR	HT	GAIN
24H88																	
24.0	1.0	0	2	L	2.6												
24.0	2.0	0	3	L	3.7	0	2	L	2.6	0	3	L	3.7	0	3	L	3.7
24.0	3.0	0	4	L	4.7												
24.0	4.0	0	6	L	6.3												
24.0	5.0	0	9	L	8.4	0	9	L	8.4	0	10	L	9.0	0	11	L	9.5
24.0	6.0	0	15	L	11.4												
24.0	7.0	0	15	L	11.4												
24.0	8.0	0	15	L	11.4												
24.0	9.0	0	15	L	11.4	0	15	L	11.4	1	15	L	11.5	1	15	L	11.5
24.0	10.0	1	15	L	11.5	1	15	L	11.5	2	15	L	11.6	2	15	L	11.6
24.0	11.0	2	15	L	11.6	2	15	L	11.6	3	15	L	11.7	3	15	L	11.7
24.0	12.0	3	15	L	11.7	3	15	L	11.7	4	15	L	11.8	4	15	L	11.8
24.0	13.0	3	15	L	11.7	4	15	L	11.8	4	15	L	11.8	5	15	L	11.9
24.0	14.0	4	15	L	11.8	4	15	L	11.8	5	15	L	11.9	0	9	NL	4.2
24.0	15.0	5	15	L	11.9	5	15	L	11.9	6	15	L	12.1	0	11	NL	5.0
24.0	16.0	5	15	L	11.9	6	15	L	12.1	0	10	NL	4.6	0	13	NL	5.8
24.0	17.0	6	15	L	12.1	0	9	NL	4.2	0	11	NL	5.0	1	13	NL	5.9
24.0	18.0	0	9	NL	4.2	0	10	NL	4.6	0	13	NL	5.8	2	14	NL	6.4
30.0	1.0	0	2	L	2.6												
30.0	2.0	0	3	L	3.7												
30.0	3.0	0	5	L	5.5												
30.0	4.0	0	9	L	8.4	0	9	L	8.4	0	10	L	9.0	0	10	L	9.0
30.0	5.0	0	15	L	11.4												
30.0	6.0	0	15	L	11.4												
30.0	7.0	0	15	L	11.4												
30.0	8.0	0	15	L	11.4												
30.0	9.0	0	15	L	11.4	0	15	L	11.4	1	15	L	11.5	2	15	L	11.6
30.0	10.0	1	15	L	11.5	1	15	L	11.5	2	15	L	11.6	3	15	L	11.7
30.0	11.0	2	15	L	11.6	2	15	L	11.6	3	15	L	11.7	4	15	L	11.8
30.0	12.0	3	15	L	11.7	3	15	L	11.7	4	15	L	11.8	4	15	L	11.8
30.0	13.0	3	15	L	11.7	4	15	L	11.8	4	15	L	11.8	5	15	L	11.9
30.0	14.0	4	15	L	11.8	4	15	L	11.8	5	15	L	11.9	0	9	NL	4.2
30.0	15.0	5	15	L	11.9	5	15	L	11.9	0	9	NL	4.2	0	11	NL	5.0
30.0	16.0	5	15	L	11.9	6	15	L	12.1	0	11	NL	5.0	0	13	NL	5.8
30.0	17.0	6	15	L	12.1	0	10	NL	4.6	0	12	NL	5.4	1	14	NL	6.3
30.0	18.0	0	10	NL	4.6	0	11	NL	5.0	0	14	NL	6.2	2	15	NL	6.7

TABLE BBB (Contd)

**EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE
REPEATERS ON 24-GAUGE H88 LOADED 4-WIRE FACILITIES WITH
NONLOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F**

END SECTIONS = 3.0 KFT
4-WIRE TERMINATION = 1200 OHMS
2-WIRE TERMINATION = 600 OHMS

LENGTH (KFT)		2-WIRE = 19 NL			2-WIRE = 22 NL			2-WIRE = 24 NL			2-WIRE = 26 NL						
4-WIRE	2-WIRE	BW = 15	EQLR	GAIN													
24H88		HT	SLOPE		HT	SLOPE		HT	SLOPE		HT	SLOPE					
36.0	1.0	0	3	L	3.7	0	3	L	3.7	0	3	L	3.7	0	3	L	3.7
36.0	2.0	0	5	L	5.5	0	5	L	5.5	0	5	L	5.5	0	5	L	5.5
36.0	3.0	0	7	L	7.2	0	7	L	7.2	0	8	L	7.8	0	8	L	7.8
36.0	4.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4
36.0	5.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4
36.0	6.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4
36.0	7.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4
36.0	8.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4	1	15	L	11.5
36.0	9.0	1	15	L	11.5	1	15	L	11.5	1	15	L	11.5	2	15	L	11.6
36.0	10.0	1	15	L	11.5	2	15	L	11.6	2	15	L	11.6	3	15	L	11.7
36.0	11.0	2	15	L	11.6	2	15	L	11.6	3	15	L	11.7	4	15	L	11.8
36.0	12.0	3	15	L	11.7	3	15	L	11.7	4	15	L	11.8	5	15	L	11.9
36.0	13.0	4	15	L	11.8	4	15	L	11.8	5	15	L	11.9	6	15	L	12.1
36.0	14.0	4	15	L	11.8	5	15	L	11.9	6	15	L	12.1	0	10	NL	4.6
36.0	15.0	5	15	L	11.9	5	15	L	11.9	0	10	NL	4.6	0	12	NL	5.4
36.0	16.0	5	15	L	11.9	0	9	NL	4.2	0	11	NL	5.0	1	13	NL	5.9
36.0	17.0	0	9	NL	4.2	0	11	NL	5.0	0	13	NL	5.8	2	14	NL	6.4
36.0	18.0	0	11	NL	5.0	0	12	NL	5.4	1	14	NL	6.3	2	15	NL	6.7
42.0	1.0	0	4	L	4.7	0	4	L	4.7	0	4	L	4.7	0	4	L	4.7
42.0	2.0	0	6	L	6.3	0	6	L	6.3	0	6	L	6.3	0	6	L	6.3
42.0	3.0	0	10	L	9.0	0	10	L	9.0	0	11	L	9.5	0	11	L	9.5
42.0	4.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4
42.0	5.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4
42.0	6.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4
42.0	7.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4
42.0	8.0	0	15	L	11.4	0	15	L	11.4	1	15	L	11.5	1	15	L	11.5
42.0	9.0	1	15	L	11.5	1	15	L	11.5	2	15	L	11.6	2	15	L	11.6
42.0	10.0	2	15	L	11.6	2	15	L	11.6	3	15	L	11.7	3	15	L	11.7
42.0	11.0	2	15	L	11.6	3	15	L	11.7	3	15	L	11.7	4	15	L	11.8
42.0	12.0	3	15	L	11.7	3	15	L	11.7	4	15	L	11.8	5	15	L	11.9
42.0	13.0	4	15	L	11.8	4	15	L	11.8	5	15	L	11.9	6	15	L	12.1
42.0	14.0	4	15	L	11.8	5	15	L	11.9	6	15	L	12.1	0	11	NL	5.0
42.0	15.0	5	15	L	11.9	6	15	L	12.1	0	10	NL	4.6	0	12	NL	5.4
42.0	16.0	6	15	L	12.1	0	10	NL	4.6	0	12	NL	5.4	1	13	NL	5.9
42.0	17.0	0	10	NL	4.6	0	11	NL	5.0	0	13	NL	5.8	2	14	NL	6.4
42.0	18.0	0	11	NL	5.0	0	13	NL	5.8	1	14	NL	6.3	3	15	NL	6.8

TABLE BBB (Contd)

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE REPEATERS ON 24-GAUGE H88 LOADED 4-WIRE FACILITIES WITH NONLOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
 4-WIRE TERMINATION = 1200 OHMS
 2-WIRE TERMINATION = 600 OHMS

LENGTH (KFT)		2-WIRE = 19 NL			2-WIRE = 22 NL			2-WIRE = 24 NL			2-WIRE = 26 NL		
4-WIRE	2-WIRE	BW = 15	EQLR	GAIN									
24H88		HT	SLOPE		HT	SLOPE		HT	SLOPE		HT	SLOPE	
48.0	1.0	0	5	L	5.5	0	5	L	5.5	0	5	L	5.5
48.0	2.0	0	7	L	7.2	0	6	L	6.3	0	7	L	7.2
48.0	3.0	0	12	L	10.0	0	12	L	10.0	0	13	L	10.5
48.0	4.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4
48.0	5.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4
48.0	6.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4
48.0	7.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4
48.0	8.0	0	15	L	11.4	0	15	L	11.4	1	15	L	11.5
48.0	9.0	1	15	L	11.5	1	15	L	11.5	2	15	L	11.6
48.0	10.0	2	15	L	11.6	2	15	L	11.6	3	15	L	11.7
48.0	11.0	3	15	L	11.7	3	15	L	11.7	4	15	L	11.8
48.0	12.0	3	15	L	11.7	4	15	L	11.8	4	15	L	11.8
48.0	13.0	4	15	L	11.8	4	15	L	11.8	5	15	L	11.9
48.0	14.0	5	15	L	11.9	5	15	L	11.9	0	9	NL	4.2
48.0	15.0	5	15	L	11.9	6	15	L	12.1	0	10	NL	4.6
48.0	16.0	0	9	NL	4.2	0	10	NL	4.6	0	12	NL	5.4
48.0	17.0	0	10	NL	4.6	0	11	NL	5.0	0	14	NL	6.2
48.0	18.0	0	11	NL	5.0	0	13	NL	5.8	1	14	NL	6.3
54.0	1.0	0	5	L	5.5	0	5	L	5.5	0	5	L	5.5
54.0	2.0	0	8	L	7.8	0	7	L	7.2	0	8	L	7.8
54.0	3.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4
54.0	4.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4
54.0	5.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4
54.0	6.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4
54.0	7.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4
54.0	8.0	0	15	L	11.4	1	15	L	11.5	1	15	L	11.5
54.0	9.0	1	15	L	11.5	1	15	L	11.5	2	15	L	11.6
54.0	10.0	2	15	L	11.6	2	15	L	11.6	3	15	L	11.7
54.0	11.0	3	15	L	11.7	3	15	L	11.7	4	15	L	11.8
54.0	12.0	4	15	L	11.8	4	15	L	11.8	5	15	L	11.9
54.0	13.0	4	15	L	11.8	5	15	L	11.9	5	15	L	11.9
54.0	14.0	5	15	L	11.9	5	15	L	11.9	0	9	NL	4.2
54.0	15.0	6	15	L	12.1	6	15	L	12.1	0	11	NL	5.0
54.0	16.0	0	9	NL	4.2	0	10	NL	4.6	0	13	NL	5.8
54.0	17.0	0	10	NL	4.6	0	12	NL	5.4	0	14	NL	6.2
54.0	18.0	0	12	NL	5.4	0	13	NL	5.8	1	15	NL	6.6

TABLE BBB (Contd)

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE
REPEATERS ON 24-GAUGE H88 LOADED 4-WIRE FACILITIES WITH
NONLOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
4-WIRE TERMINATION = 1200 OHMS
2-WIRE TERMINATION = 600 OHMS

LENGTH (KFT)		2-WIRE = 19 NL			2-WIRE = 22 NL			2-WIRE = 24 NL			2-WIRE = 26 NL		
4-WIRE	2-WIRE	BW = 15	EQLR	GAIN									
24H88		HT	SLOPE		HT	SLOPE		HT	SLOPE		HT	SLOPE	
60.0	1.0	0	6	L	6.3	0	6	L	6.3	0	6	L	6.3
60.0	2.0	0	10	L	9.0	0	10	L	9.0	0	10	L	9.0
60.0	3.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4
60.0	4.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4
60.0	5.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4
60.0	6.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4
60.0	7.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4
60.0	8.0	1	15	L	11.5	1	15	L	11.5	1	15	L	11.5
60.0	9.0	2	15	L	11.6	2	15	L	11.6	2	15	L	11.6
60.0	10.0	2	15	L	11.6	3	15	L	11.7	3	15	L	11.7
60.0	11.0	3	15	L	11.7	3	15	L	11.7	4	15	L	11.8
60.0	12.0	4	15	L	11.8	4	15	L	11.8	5	15	L	11.9
60.0	13.0	5	15	L	11.9	5	15	L	11.9	6	15	L	12.1
60.0	14.0	5	15	L	11.9	6	15	L	12.1	0	9	NL	4.2
60.0	15.0	6	15	L	12.1	0	9	NL	4.2	0	11	NL	5.0
60.0	16.0	0	9	NL	4.2	0	10	NL	4.6	0	13	NL	5.8
60.0	17.0	0	11	NL	5.0	0	12	NL	5.4	0	15	NL	6.6
60.0	18.0	0	12	NL	5.4	0	14	NL	6.2	1	15	NL	6.6
66.0	1.0	0	9	L	8.4	0	9	L	8.4	0	9	L	8.4
66.0	2.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4
66.0	3.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4
66.0	4.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4
66.0	5.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4
66.0	6.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4
66.0	7.0	0	15	L	11.4	0	15	L	11.4	1	15	L	11.5
66.0	8.0	1	15	L	11.5	1	15	L	11.5	2	15	L	11.6
66.0	9.0	2	15	L	11.6	2	15	L	11.6	3	15	L	11.7
66.0	10.0	3	15	L	11.7	3	15	L	11.7	3	15	L	11.7
66.0	11.0	3	15	L	11.7	4	15	L	11.8	4	15	L	11.8
66.0	12.0	4	15	L	11.8	4	15	L	11.8	5	15	L	11.9
66.0	13.0	5	15	L	11.9	5	15	L	11.9	6	15	L	12.1
66.0	14.0	6	15	L	12.1	6	15	L	12.1	0	10	NL	4.6
66.0	15.0	6	15	L	12.1	0	9	NL	4.2	0	12	NL	5.4
66.0	16.0	0	10	NL	4.6	0	11	NL	5.0	0	14	NL	6.2
66.0	17.0	0	11	NL	5.0	0	13	NL	5.8	1	14	NL	6.3
66.0	18.0	0	13	NL	5.8	0	15	NL	6.6	1	15	NL	6.6

TABLE CCC

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE REPEATERS ON 26-GAUGE H88 LOADED 4-WIRE FACILITIES WITH NONLOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
 4-WIRE TERMINATION = 1200 OHMS
 2-WIRE TERMINATION = 600 OHMS

LENGTH (KFT)		2-WIRE = 19 NL		2-WIRE = 22 NL		2-WIRE = 24 NL		2-WIRE = 26 NL		
4-WIRE	2-WIRE	BW = 15	EQLR							
26H88		HT	SLOPE	HT	SLOPE	HT	SLOPE	HT	SLOPE	
			GAIN		GAIN		GAIN		GAIN	
12.0	1.0	0	3 L	3.7	0	3 L	3.7	0	3 L	3.7
12.0	2.0	0	3 L	3.7	0	3 L	3.7	0	3 L	3.7
12.0	3.0	0	3 L	3.7	0	3 L	3.7	0	3 L	3.7
12.0	4.0	0	4 L	4.7	0	4 L	4.7	0	4 L	4.7
12.0	5.0	0	4 L	4.7	0	4 L	4.7	0	4 L	4.7
12.0	6.0	0	5 L	5.5	0	5 L	5.5	0	5 L	5.5
12.0	7.0	0	6 L	6.3	0	6 L	6.3	0	6 L	6.3
12.0	8.0	0	7 L	7.2	0	7 L	7.2	1	7 L	7.3
12.0	9.0	1	7 L	7.3	1	8 L	7.8	2	7 L	7.4
12.0	10.0	2	7 L	7.4	2	8 L	7.9	3	7 L	7.5
12.0	11.0	2	10 L	9.1	3	8 L	8.0	3	10 L	9.2
12.0	12.0	3	10 L	9.2	3	11 L	9.8	4	10 L	9.3
12.0	13.0	4	9 L	8.7	4	10 L	9.3	5	10 L	9.5
12.0	14.0	4	13 L	10.9	5	10 L	9.5	0	7 NL	3.4
12.0	15.0	5	11 L	10.0	5	15 L	11.9	0	8 NL	3.7
12.0	16.0	5	15 L	11.9	0	8 NL	3.7	1	9 NL	4.2
12.0	17.0	0	8 NL	3.7	1	8 NL	3.8	2	9 NL	4.3
12.0	18.0	0	9 NL	4.2	1	9 NL	4.2	2	10 NL	4.8
18.0	1.0	0	9 L	8.4	0	9 L	8.4	0	9 L	8.4
18.0	2.0	0	9 L	8.4	0	9 L	8.4	0	9 L	8.4
18.0	3.0	0	11 L	9.5	0	11 L	9.5	0	10 L	9.0
18.0	4.0	0	13 L	10.5	0	13 L	10.5	0	13 L	10.5
18.0	5.0	0	15 L	11.4	0	15 L	11.4	0	15 L	11.4
18.0	6.0	0	15 L	11.4	0	15 L	11.4	0	15 L	11.4
18.0	7.0	0	15 L	11.4	0	15 L	11.4	0	15 L	11.4
18.0	8.0	0	15 L	11.4	0	15 L	11.4	1	15 L	11.5
18.0	9.0	1	15 L	11.5	1	15 L	11.5	2	15 L	11.6
18.0	10.0	2	15 L	11.6	2	15 L	11.6	3	15 L	11.7
18.0	11.0	3	15 L	11.7	3	15 L	11.7	4	15 L	11.8
18.0	12.0	3	15 L	11.7	4	15 L	11.8	4	15 L	11.8
18.0	13.0	4	15 L	11.8	4	15 L	11.8	0	8 NL	3.7
18.0	14.0	5	15 L	11.9	0	8 NL	3.7	0	9 NL	4.2
18.0	15.0	0	8 NL	3.7	0	9 NL	4.2	0	11 NL	5.0
18.0	16.0	0	9 NL	4.2	0	10 NL	4.6	0	11 NL	5.0
18.0	17.0	0	10 NL	4.6	0	11 NL	5.0	1	12 NL	5.5
18.0	18.0	0	11 NL	5.0	0	12 NL	5.4	1	13 NL	5.9

TABLE CCC (Contd)

**EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE
REPEATERS ON 26-GAUGE H88 LOADED 4-WIRE FACILITIES WITH
NONLOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F**

END SECTIONS = 3.0 KFT
4-WIRE TERMINATION = 1200 OHMS
2-WIRE TERMINATION = 600 OHMS

LENGTH (KFT)		2-WIRE = 19 NL			2-WIRE = 22 NL			2-WIRE = 24 NL			2-WIRE = 26 NL		
4-WIRE	2-WIRE	BW = 15	EQLR	GAIN									
26H88		HT	SLOPE		HT	SLOPE		HT	SLOPE		HT	SLOPE	
24.0	1.0	0 15	L	11.4									
24.0	2.0	0 15	L	11.4									
24.0	3.0	0 15	L	11.4									
24.0	4.0	0 15	L	11.4									
24.0	5.0	0 15	L	11.4									
24.0	6.0	0 15	L	11.4									
24.0	7.0	0 15	L	11.4	0 15	L	11.4	1 15	L	11.5	1 15	L	11.5
24.0	8.0	1 15	L	11.5	1 15	L	11.5	2 15	L	11.6	2 15	L	11.6
24.0	9.0	2 15	L	11.6	2 15	L	11.6	3 15	L	11.7	3 15	L	11.7
24.0	10.0	3 15	L	11.7	3 15	L	11.7	4 15	L	11.8	4 15	L	11.8
24.0	11.0	4 15	L	11.8	4 15	L	11.8	5 15	L	11.9	5 15	L	11.9
24.0	12.0	4 15	L	11.8	5 15	L	11.9	0 7	NL	3.4	0 9	NL	4.2
24.0	13.0	5 15	L	11.9	0 7	NL	3.4	0 9	NL	4.2	0 11	NL	5.0
24.0	14.0	0 8	NL	3.7	0 9	NL	4.2	0 11	NL	5.0	0 13	NL	5.8
24.0	15.0	0 9	NL	4.2	0 10	NL	4.6	0 12	NL	5.4	0 15	NL	6.6
24.0	16.0	0 11	NL	5.0	0 12	NL	5.4	0 14	NL	6.2	1 15	NL	6.6
24.0	17.0	0 12	NL	5.4	0 13	NL	5.8	0 15	NL	6.6	2 15	NL	6.7
24.0	18.0	0 13	NL	5.8	0 15	NL	6.6	1 15	NL	6.6	3 15	NL	6.8
30.0	1.0	0 15	L	11.4									
30.0	2.0	0 15	L	11.4									
30.0	3.0	0 15	L	11.4									
30.0	4.0	0 15	L	11.4									
30.0	5.0	0 15	L	11.4									
30.0	6.0	0 15	L	11.4	0 15	L	11.4	0 15	L	11.4	1 15	L	11.5
30.0	7.0	1 15	L	11.5	1 15	L	11.5	1 15	L	11.5	2 15	L	11.6
30.0	8.0	2 15	L	11.6	2 15	L	11.6	2 15	L	11.6	3 15	L	11.7
30.0	9.0	3 15	L	11.7	3 15	L	11.7	4 15	L	11.8	4 15	L	11.8
30.0	10.0	4 15	L	11.8	4 15	L	11.8	4 15	L	11.8	5 15	L	11.9
30.0	11.0	4 15	L	11.8	5 15	L	11.9	5 15	L	11.9	0 8	NL	3.7
30.0	12.0	5 15	L	11.9	6 15	L	12.1	0 8	NL	3.7	0 10	NL	4.6
30.0	13.0	0 8	NL	3.7	0 8	NL	3.7	0 10	NL	4.6	0 12	NL	5.4
30.0	14.0	0 9	NL	4.2	0 10	NL	4.6	0 12	NL	5.4	0 15	NL	6.6
30.0	15.0	0 11	NL	5.0	0 12	NL	5.4	0 14	NL	6.2	0 15	NL	6.6
30.0	16.0	0 12	NL	5.4	0 14	NL	6.2	0 15	NL	6.6	2 15	NL	6.7
30.0	17.0	0 14	NL	6.2	0 15	NL	6.6	1 15	NL	6.6	3 15	NL	6.8
30.0	18.0	0 15	NL	6.6	0 15	NL	6.6	2 15	NL	6.7	3 15	NL	6.8

TABLE CCC (Contd)

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE REPEATERS ON 26-GAUGE H88 LOADED 4-WIRE FACILITIES WITH NONLOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
 4-WIRE TERMINATION = 1200 OHMS
 2-WIRE TERMINATION = 600 OHMS

LENGTH (KFT)		2-WIRE = 19 NL			2-WIRE = 22 NL			2-WIRE = 24 NL			2-WIRE = 26 NL		
4-WIRE	2-WIRE	BW = 15	EQLR	GAIN									
26H88		HT	SLOPE		HT	SLOPE		HT	SLOPE		HT	SLOPE	
36.0	1.0	0 15	L	11.4									
36.0	2.0	0 15	L	11.4									
36.0	3.0	0 15	L	11.4									
36.0	4.0	0 15	L	11.4									
36.0	5.0	0 15	L	11.4	0 15	L	11.4	0 15	L	11.4	1 15	L	11.5
36.0	6.0	1 15	L	11.5	1 15	L	11.5	1 15	L	11.5	2 15	L	11.6
36.0	7.0	2 15	L	11.6	2 15	L	11.6	2 15	L	11.6	3 15	L	11.7
36.0	8.0	3 15	L	11.7	3 15	L	11.7	3 15	L	11.7	4 15	L	11.8
36.0	9.0	4 15	L	11.8	4 15	L	11.8	4 15	L	11.8	5 15	L	11.9
36.0	10.0	5 15	L	11.9	5 15	L	11.9	5 15	L	11.9	6 15	L	12.1
36.0	11.0	5 15	L	11.9	6 15	L	12.1	0 8	NL	3.7	0 9	NL	4.2
36.0	12.0	0 8	NL	3.7	0 8	NL	3.7	0 10	NL	4.6	0 12	NL	5.4
36.0	13.0	0 9	NL	4.2	0 10	NL	4.6	0 12	NL	5.4	0 14	NL	6.2
36.0	14.0	0 11	NL	5.0	0 12	NL	5.4	0 14	NL	6.2	0 15	NL	6.6
36.0	15.0	0 12	NL	5.4	0 14	NL	6.2	0 15	NL	6.6	1 15	NL	6.6
36.0	16.0	0 14	NL	6.2	0 15	NL	6.6	1 15	NL	6.6	2 15	NL	6.7
36.0	17.0	0 15	NL	6.6	0 15	NL	6.6	1 15	NL	6.6	3 15	NL	6.8
36.0	18.0	0 15	NL	6.6	1 15	NL	6.6	2 15	NL	6.7	4 15	NL	6.9
42.0	1.0	0 15	L	11.4									
42.0	2.0	0 15	L	11.4									
42.0	3.0	0 15	L	11.4									
42.0	4.0	1 15	L	11.5									
42.0	5.0	2 15	L	11.6									
42.0	6.0	3 15	L	11.7									
42.0	7.0	3 15	L	11.7	3 15	L	11.7	4 15	L	11.8	4 15	L	11.8
42.0	8.0	4 15	L	11.8	4 15	L	11.8	4 15	L	11.8	5 15	L	11.9
42.0	9.0	5 15	L	11.9	5 15	L	11.9	5 15	L	11.9	6 15	L	12.1
42.0	10.0	5 15	L	11.9	5 15	L	11.9	6 15	L	12.1	0 9	NL	4.2
42.0	11.0	0 8	NL	3.7	0 8	NL	3.7	0 9	NL	4.2	0 10	NL	4.6
42.0	12.0	0 9	NL	4.2	0 10	NL	4.6	0 11	NL	5.0	0 13	NL	5.8
42.0	13.0	0 10	NL	4.6	0 11	NL	5.0	0 13	NL	5.8	0 15	NL	6.6
42.0	14.0	0 12	NL	5.4	0 13	NL	5.8	0 15	NL	6.6	1 15	NL	6.6
42.0	15.0	0 14	NL	6.2	0 15	NL	6.6	0 15	NL	6.6	2 15	NL	6.7
42.0	16.0	0 15	NL	6.6	0 15	NL	6.6	1 15	NL	6.6	3 15	NL	6.8
42.0	17.0	0 15	NL	6.6	0 15	NL	6.6	2 15	NL	6.7	4 15	NL	6.9
42.0	18.0	0 15	NL	6.6	1 15	NL	6.6	3 15	NL	6.8	4 15	NL	6.9

TABLE CCC (Contd)

EQUALIZER SETTINGS FOR 4-2 OR 2-4 INTERMEDIATE REPEATERS ON 26-GAUGE H88 LOADED 4-WIRE FACILITIES WITH NONLOADED 2-WIRE EXTENSIONS WITHOUT BRIDGED TAPS AT 68° F

END SECTIONS = 3.0 KFT
 4-WIRE TERMINATION = 1200 OHMS
 2-WIRE TERMINATION = 600 OHMS

LENGTH (KFT)		2-WIRE = 19 NL			2-WIRE = 22 NL			2-WIRE = 24 NL			2-WIRE = 26 NL						
4-WIRE	2-WIRE	BW = 15	EQLR	GAIN													
26H88		HT	SLOPE		HT	SLOPE		HT	SLOPE		HT	SLOPE					
48.0	1.0	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4	0	15	L	11.4
48.0	2.0	1	15	L	11.5	1	15	L	11.5	1	15	L	11.5	1	15	L	11.5
48.0	3.0	1	15	L	11.5	1	15	L	11.5	1	15	L	11.5	1	15	L	11.5
48.0	4.0	2	15	L	11.6	2	15	L	11.6	2	15	L	11.6	2	15	L	11.6
48.0	5.0	2	15	L	11.6	2	15	L	11.6	3	15	L	11.7	3	15	L	11.7
48.0	6.0	3	15	L	11.7	3	15	L	11.7	3	15	L	11.7	4	15	L	11.8
48.0	7.0	4	15	L	11.8	4	15	L	11.8	4	15	L	11.8	4	15	L	11.8
48.0	8.0	5	15	L	11.9	5	15	L	11.9	5	15	L	11.9	5	15	L	11.9
48.0	9.0	5	15	L	11.9	5	15	L	11.9	6	15	L	12.1	0	9	NL	4.2
48.0	10.0	6	15	L	12.1	0	8	NL	3.7	0	9	NL	4.2	0	10	NL	4.6
48.0	11.0	0	9	NL	4.2	0	10	NL	4.6	0	10	NL	4.6	0	12	NL	5.4
48.0	12.0	0	10	NL	4.6	0	11	NL	5.0	0	12	NL	5.4	0	15	NL	6.6
48.0	13.0	0	11	NL	5.0	0	12	NL	5.4	0	15	NL	6.6	0	15	NL	6.6
48.0	14.0	0	13	NL	5.8	0	15	NL	6.6	0	15	NL	6.6	1	15	NL	6.6
48.0	15.0	0	15	NL	6.6	0	15	NL	6.6	1	15	NL	6.6	2	15	NL	6.7
48.0	16.0	0	15	NL	6.6	0	15	NL	6.6	2	15	NL	6.7	3	15	NL	6.8
48.0	17.0	0	15	NL	6.6	1	15	NL	6.6	2	15	NL	6.7	4	15	NL	6.9
48.0	18.0	1	15	NL	6.6	2	15	NL	6.7	3	15	NL	6.8	5	15	NL	7.1

TABLE DDD

EQUALIZER SETTINGS FOR 4-4 TERMINAL AND INTERMEDIATE OR 2-4 TERMINAL REPEATERS FOR SINGLE GAUGE H88 LOADED CABLE WITHOUT BRIDGED TAPS AT 68° F

END SECTION = 3.0 KFT
 INPUT IMPEDANCE = 1200 OHMS
 CABLE TERMINATION = 1200 OHMS

LENGTH (KFT)	19H88					22H88					24H88					26H88					
	SETTINGS	EQLR				SETTINGS	EQLR				SETTINGS	EQLR				SETTINGS	EQLR				
	BW	HT	SLOPE	GAIN		BW	HT	SLOPE	GAIN		BW	HT	SLOPE	GAIN		BW	HT	SLOPE	GAIN		
12.0	3	4	0	L	0.0	6	3	0	L	0.0	7	3	0	L	0.0	8	3	1	L	1.4	
18.0	1	3	0	L	0.0	3	3	0	L	0.0	3	4	1	L	1.4	5	4	3	L	3.7	
24.0	5	2	0	L	0.0	6	2	0	L	0.0	3	4	1	L	1.4	5	4	7	L	7.2	
30.0	5	3	0	L	0.0	4	4	0	L	0.0	3	4	2	L	2.6	6	4	15	L	11.4	
36.0	5	4	0	L	0.0	3	4	1	L	1.4	3	5	2	L	2.6	5	5	15	L	11.4	
42.0	5	4	0	L	0.0	4	4	1	L	1.4	4	5	2	L	2.6	6	5	15	L	11.4	
48.0	5	4	0	L	0.0	4	4	1	L	1.4	3	6	3	L	3.7	6	6	15	L	11.4	
54.0	4	5	0	L	0.0	3	5	1	L	1.4	3	6	3	L	3.7						
60.0	6	4	0	L	0.0	4	5	1	L	1.4	2	7	4	L	4.7						
66.0	5	5	0	L	0.0	4	5	1	L	1.4	3	7	5	L	5.6						
72.0	6	5	0	L	0.0	3	6	1	L	1.4											
78.0	6	5	0	L	0.0	4	6	1	L	1.4											
84.0	6	5	0	L	0.0	4	6	1	L	1.4											
90.0	5	6	0	L	0.0	3	7	1	L	1.4											
96.0	6	6	0	L	0.0	3	7	1	L	1.4											
102.0	6	6	0	L	0.0	4	7	1	L	1.4											
108.0	6	6	0	L	0.0																
114.0	5	7	0	L	0.0																
120.0	5	7	0	L	0.0																
126.0	5	7	0	L	0.0																
132.0	6	7	0	L	0.0																
138.0	6	7	0	L	0.0																
144.0	6	7	0	L	0.0																
150.0	5	8	0	L	0.0																
156.0	5	8	0	L	0.0																
162.0	5	9	0	L	0.0																
168.0	5	9	0	L	0.0																
174.0	5	9	0	L	0.0																
180.0	5	9	0	L	0.0																
186.0	5	10	0	L	0.0																
192.0	5	10	0	L	0.0																

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TABLE EEE

EQUALIZER SETTING FOR 4-4 TERMINAL AND INTERMEDIATE OR 2-4 TERMINAL
REPEATERS FOR SINGLE 25-GAUGE H88 LOADED MAT CABLE WITHOUT BRIDGED TAPS AT 68°F

END SECTION = 3.0 KFT

INPUT IMPEDANCE = 1200 OHMS

CABLE TERMINATION = 1200 OHMS

LENGTH (KFT)	EQUALIZER SETTINGS			EQUALIZER GAIN (dB)	1 KHz CABLE LOSS (dB)	DC CABLE RES (OHMS)
	BW	HT	SL			
12.0	15	1	0	0.1	3.0	803.2
18.0	15	1	0	0.1	4.5	1204.8
24.0	15	0	2	2.6	6.0	1606.4
30.0	15	0	3	3.7	7.5	2008.0
36.0	15	0	3	3.7	9.0	2409.6
42.0	15	0	4	4.7	10.5	2811.2
48.0	15	0	5	5.5	12.0	3212.8
54.0	15	0	7	7.2	13.5	3614.4
60.0	15	0	10	9.0	15.0	4016.0

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TABLE FFF

EQUALIZER SETTINGS FOR 4-4 TERMINAL AND INTERMEDIATE OR 2-4 TERMINAL REPEATERS FOR MIXED GAUGE H88 LOADED CABLE WITHOUT BRIDGED TAPS AT 68°F

END SECTION = 3.0 KFT
 INPUT IMPEDANCE = 1200 OHMS
 CABLE TERMINATION = 1200 OHMS

LENGTH (KFT)		24/22 GAUGE SETTINGS				26/22 GAUGE SETTINGS				26/24 GAUGE SETTINGS			
GA1	GA2	BW	HT	SLOPE	EQLR GAIN	BW	HT	SLOPE	EQLR GAIN	BW	HT	SLOPE	EQLR GAIN
6.0	12.0	4	3	0	L 0.0	2	3	1	L 1.4	4	3	2	L 2.6
6.0	18.0	5	3	0	L 0.0	4	2	1	L 1.4	4	3	2	L 2.6
6.0	24.0	2	4	1	L 1.4	4	3	1	L 1.4	4	4	2	L 2.6
6.0	30.0	4	4	1	L 1.4	4	4	1	L 1.4	4	5	2	L 2.6
6.0	36.0	5	4	1	L 1.4	5	4	1	L 1.4	4	5	3	L 3.7
6.0	42.0	5	4	1	L 1.4	5	4	1	L 1.4	3	6	3	L 3.7
6.0	48.0	4	5	1	L 1.4	4	5	1	L 1.4	3	6	4	L 4.7
6.0	54.0	4	5	1	L 1.4	4	5	1	L 1.4	3	7	4	L 4.7
6.0	60.0	5	5	1	L 1.4	5	5	1	L 1.4	3	7	5	L 5.6
6.0	66.0	4	6	1	L 1.4	4	6	1	L 1.4				
6.0	72.0	4	6	1	L 1.4	4	6	1	L 1.4				
6.0	78.0	4	6	1	L 1.4	5	6	1	L 1.4				
6.0	84.0	3	7	1	L 1.4	5	6	1	L 1.4				
6.0	90.0	4	7	1	L 1.4	3	7	2	L 2.6				
6.0	96.0	3	7	2	L 2.6								
12.0	6.0	4	3	1	L 1.4	6	3	2	L 2.6	6	3	3	L 3.7
12.0	12.0	4	3	1	L 1.4	5	3	2	L 2.6	4	4	3	L 3.7
12.0	18.0	3	4	1	L 1.4	5	4	2	L 2.6	5	4	3	L 3.7
12.0	24.0	5	4	1	L 1.4	6	4	1	L 1.4	5	5	3	L 3.7
12.0	30.0	5	4	1	L 1.4	7	4	1	L 1.4	5	5	4	L 4.7
12.0	36.0	4	5	1	L 1.4	7	4	1	L 1.4	4	6	5	L 5.6
12.0	42.0	4	5	1	L 1.4	5	5	2	L 2.6	4	6	6	L 6.3
12.0	48.0	5	5	1	L 1.4	5	5	2	L 2.6	3	7	7	L 7.2
12.0	54.0	4	6	1	L 1.4	6	5	2	L 2.6				
12.0	60.0	4	6	1	L 1.4	5	6	2	L 2.6				
12.0	66.0	5	6	1	L 1.4	5	6	2	L 2.6				
12.0	72.0	5	6	1	L 1.4	5	6	3	L 3.7				
12.0	78.0	3	7	2	L 2.6	4	7	3	L 3.7				
12.0	84.0	4	7	2	L 2.6								
18.0	6.0	5	3	1	L 1.4	5	4	5	L 5.5	5	4	6	L 6.3
18.0	12.0	3	4	1	L 1.4	4	4	4	L 4.7	3	5	6	L 6.3
18.0	18.0	3	5	1	L 1.4	4	5	3	L 3.7	4	5	6	L 6.3
18.0	24.0	4	5	1	L 1.4	5	5	3	L 3.7	5	5	6	L 6.3
18.0	30.0	4	5	1	L 1.4	6	5	2	L 2.6	4	6	8	L 7.8
18.0	36.0	5	5	1	L 1.4	6	5	3	L 3.7	5	6	7	L 7.2
18.0	42.0	3	6	1	L 1.4	4	6	4	L 4.7	3	7	15	L 11.4
18.0	48.0	4	6	1	L 1.4	5	6	3	L 3.7				
18.0	54.0	4	6	2	L 2.6	5	6	4	L 4.7				
18.0	60.0	4	6	2	L 2.6	5	6	5	L 5.6				
18.0	66.0	3	7	2	L 2.6	4	7	5	L 5.6				

TABLE FFF (Contd)

EQUALIZER SETTINGS FOR 4-4 TERMINAL AND INTERMEDIATE OR 2-4 TERMINAL REPEATERS FOR MIXED GAUGE H88 LOADED CABLE WITHOUT BRIDGE TAPS AT 68° F

END SECTION = 3.0 KFT
 INPUT IMPEDANCE = 1200 OHMS
 CABLE TERMINATION = 1200 OHMS

LENGTH (KFT)		24/22 GAUGE SETTINGS				26/22 GAUGE SETTINGS				26/24 GAUGE SETTINGS			
GA1	GA2	BW	HT	SLOPE	EQLR GAIN	BW	HT	SLOPE	EQLR GAIN	BW	HT	SLOPE	EQLR GAIN
18.0	72.0	3	7	2	L 2.6								
18.0	78.0	4	7	2	L 2.6								
24.0	6.0	3	4	2	L 2.6	4	5	9	L 8.4	4	5	13	L 10.5
24.0	12.0	1	5	2	L 2.6	3	5	7	L 7.2	4	5	13	L 10.5
24.0	18.0	3	5	2	L 2.6	4	5	6	L 6.3	5	5	11	L 9.5
24.0	24.0	4	5	2	L 2.6	5	5	5	L 5.6	4	6	15	L 11.4
24.0	30.0	4	5	2	L 2.6	4	6	6	L 6.3	5	6	15	L 11.4
24.0	36.0	3	6	2	L 2.6	4	6	7	L 7.2				
24.0	42.0	3	6	2	L 2.6	5	6	6	L 6.4				
24.0	48.0	4	6	2	L 2.6	5	6	7	L 7.2				
24.0	54.0	3	7	2	L 2.6								
24.0	60.0	3	7	2	L 2.6								
24.0	66.0	3	7	2	L 2.6								
30.0	6.0	3	5	2	L 2.6	5	5	15	L 11.4	5	5	15	L 11.4
30.0	12.0	3	5	2	L 2.6	4	5	15	L 11.4	4	6	15	L 11.4
30.0	18.0	3	5	2	L 2.6	5	5	11	L 9.5	4	6	15	L 11.4
30.0	24.0	2	6	2	L 2.6	4	6	11	L 9.5	5	6	15	L 11.4
30.0	30.0	3	6	2	L 2.6	5	6	9	L 8.4				
30.0	36.0	4	6	2	L 2.6	5	6	12	L 10.0				
30.0	42.0	4	6	2	L 2.6								
30.0	48.0	3	7	2	L 2.6								
30.0	54.0	3	7	2	L 2.6								
30.0	60.0	3	7	3	L 3.7								
36.0	6.0	4	5	2	L 2.6	6	5	15	L 11.4	6	5	15	L 11.4
36.0	12.0	3	5	2	L 2.6	4	6	15	L 11.4	5	6	15	L 11.4
36.0	18.0	3	6	2	L 2.6	4	6	15	L 11.4				
36.0	24.0	3	6	2	L 2.6								
36.0	30.0	4	6	2	L 2.6								
36.0	36.0	3	7	2	L 2.6								
36.0	42.0	3	7	3	L 3.7								
36.0	48.0	3	7	3	L 3.7								
42.0	6.0	2	6	3	L 3.7								
42.0	12.0	2	6	3	L 3.7								
42.0	18.0	3	6	3	L 3.7								
42.0	24.0	2	7	3	L 3.7								
42.0	30.0	3	7	3	L 3.7								
42.0	36.0	3	7	3	L 3.7								
42.0	42.0	3	7	3	L 3.7								
48.0	6.0	3	6	3	L 3.7								
48.0	12.0	3	6	3	L 3.7								

TABLE FFF (Contd)

EQUALIZER SETTINGS FOR 4-4 TERMINAL AND INTERMEDIATE OR 2-4 TERMINAL REPEATERS FOR MIXED GAUGE H88 LOADED CABLE WITHOUT BRIDGE TAPS AT 68° F

END SECTION = 3.0 KFT
 INPUT IMPEDANCE = 1200 OHMS
 CABLE TERMINATION = 1200 OHMS

LENGTH (KFT)		24/22 GAUGE				26/22 GAUGE				26/24 GAUGE			
GA1	GA2	SETTINGS			EQLR	SETTINGS			EQLR	SETTINGS			EQLR
		BW	HT	SLOPE	GAIN	BW	HT	SLOPE	GAIN	BW	HT	SLOPE	GAIN
48.0	18.0	2	7	3	L 3.7								
48.0	24.0	3	7	3	L 3.7								
48.0	30.0	3	7	3	L 3.7								
54.0	6.0	2	7	4	L 4.7								
54.0	12.0	2	7	4	L 4.7								
54.0	18.0	2	7	4	L 4.7								
60.0	6.0	3	7	4	L 4.7								
60.0	12.0	2	7	5	L 5.5								

TABLE GGG
CABLE EQUIVALENCES FOR
BRIDGED TAPS

BRIDGED TAP LENGTH	GAUGE			
	26	24	22	19
.5	0.3	0.4	0.4	0.4
1.0	0.6	0.7	0.8	0.9
1.5	0.9	1.1	1.3	1.4
2.0	1.3	1.5	1.7	1.9
2.5	1.6	1.9	2.1	2.3
3.0	2.0	2.3	2.6	2.8
3.5	2.3	2.7	3.1	3.4
4.0	2.7	3.2	3.6	3.9
4.5	3.1	3.6	4.1	4.4
5.0	3.5	4.1	4.6	5.0
5.5	3.9	4.5	5.1	5.5
6.0	4.4	5.0	5.6	6.1