

752, 753, and 754
TYPES OF VOLUME INDICATORS

1. GENERAL

- 1.01 This addendum is issued to provide "A" series holders with a practice covering the 752, 753 and 754 types of Volume Indicators.
- 1.02 This addendum consists of the attached Addendum E47.153.

Attachment:
Addendum E47.153

752, 753 AND 754 TYPES OF VOLUME INDICATORS

1. GENERAL

1.01 This Addendum describes certain changes in the 752, 753 and 754 types of volume indicators which have been suggested as a result of further field experience with these units. These changes are of a relatively simple nature and can readily be made on existing instruments in service in the plant as described below.

2. METER LAMP CIRCUIT

2.01 The R3 resistor in the power circuit for the dial lamps used with the illuminated dial meters (KS-8208 and KS-8218 meters) is being changed from 80 ohms to 100 ohms. This will reduce the voltage across the lamp terminals and is expected to result in materially longer service life for the lamps. The illumination obtained with this lower operating voltage will still be adequate. Revised Pages 100, 101 and 102 of Section E47.153 showing this change are attached to this Addendum.

2.02 The change of the R3 resistor can be made on existing instruments without removing the panel from the relay rack. The 80-ohm R3 resistor which is readily accessible on a terminal strip at the back of the volume indicator panel is unsoldered from the strip and removed. The 100-ohm resistor is then soldered to the strip in place of the 80-ohm resistor. In doing this work precaution should be

taken so that none of the panel wiring to the R3 resistor lugs has been loosened during the substitution.

3. METER CONTACT SPRINGS

3.01 The lamp contact springs originally furnished with the KS-8208 and KS-8218 meters were made of phosphor bronze and some contact trouble has developed in these springs where the lamps are left burning continuously due to a blackening of the spring surface and to the loss of spring tension. In order to correct this difficulty these meters will be provided with new nickel silver springs which will afford an improved surface contact and increased spring tension which is practically unaffected by the heat resulting from the prolonged burning of the lamps.

3.02 In existing installations the new type of contact springs may be substituted for the existing springs by a simple operation involving the use of a screwdriver and soldering iron. The new springs are made available in two sets, one for the left-hand lamp and the other for the right-hand lamp, each set consisting of a side spring and an end spring. In making the substitution it is suggested that in order to avoid confusion between the springs associated with the right and left-hand lamps that the old springs be replaced one at a time.

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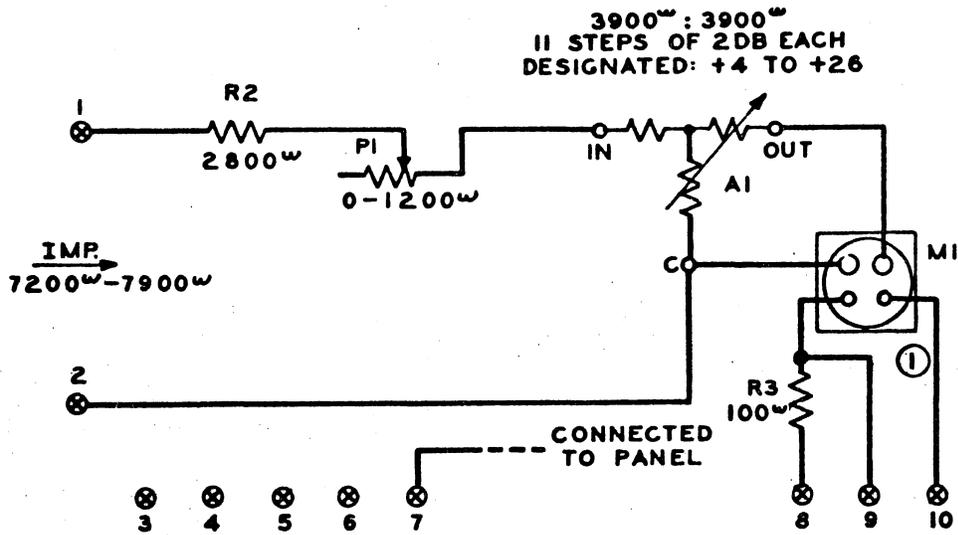
ES-853656

S.B. 4-4-39

S.B. 4-25-39

S.B. 10-31-39

752A, 753A, AND 754A VOLUME INDICATORS SCHEMATIC CIRCUIT DIAGRAM



LEGEND: ⊗ -TERMS. ON P250833 TERM. STRIP.

R2-I.R.C. TYPE NAB RESISTANCE.

R3-I.R.C. TYPE AB RESISTANCE.

PI-I.R.C. TYPE VW VOLUME CONTROL.

AI-DAVEN W.E. 80-1 ATTENUATOR

MI-KS-8207, KS-8208, KS-8217, OR KS-8218 METER.(NOT INCLUDED AS PART OF CODED PANEL; MUST BE ORDERED SEPARATELY)

NOTES:

①

THESE TERMS ARE PROVIDED ONLY ON KS-8208 AND KS-8218 METERS. R3 AND WIRING TO TERMS. 8, 9, AND 10 ARE PROVIDED ON ALL PANELS. FOR ILLUMINATED METERS, CONNECT AS FOLLOWS:

POWER SUPPLY AVAILABLE	USE TERMS.	LAMPS IN	CURRENT
24 VOLT	8 AND 10	SERIES	0.13 AMP.
12 VOLT	9 AND 10	SERIES	0.15 AMP.
6 VOLT	9 AND 10	PARALLEL	0.30 AMP.

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752B, 753B, AND 754 B VOLUME INDICATORS SCHEMATIC CIRCUIT DIAGRAMS

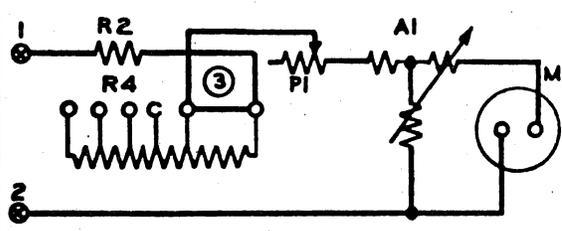
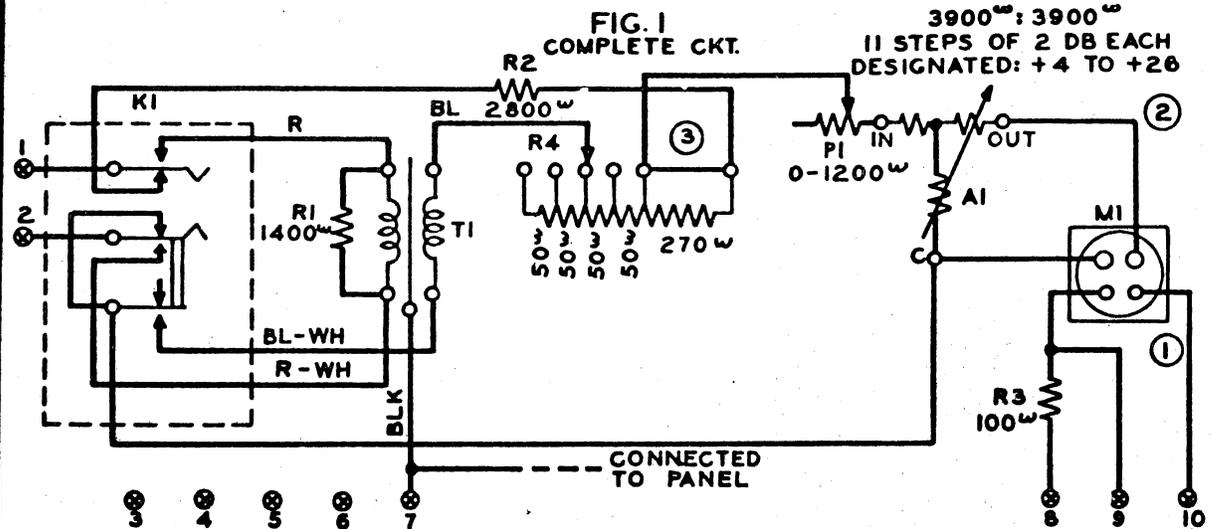


FIG. 2
 SIMPLIFIED SCHEMATIC
 WITH KI IN "HIGH IMP" POSITION

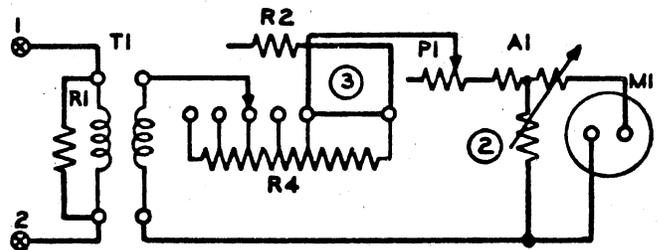


FIG. 3
 SIMPLIFIED SCHEMATIC
 WITH KI IN "600 OHMS" POSITION

LEGEND: ⊕-TERMS. ON P250833 TERM. STRIP.

- R1-I.R.C. TYPE NAB RESISTANCE.
- R2-I.R.C. TYPE NAB RESISTANCE.
- R3-I.R.C. TYPE AB RESISTANCE
- R4-I.R.C. TYPE MW3 RESISTANCE
- PI-I.R.C. TYPE VW VOLUME CONTROL.
- AI-DAVEN W.E. 80-1 ATTENUATOR
- TI-W.E. 170A REP. COIL (IMP. RATIO - 420Ω: 2160Ω)
- KI-W.E. 2 CL KEY UNIT. (2 POSITION, LEVER TYPE)
- MI-KS-8207, KS-8208, KS-8217, OR KS-8218 METER (NOT INCLUDED AS PART OF CODED PANEL; MUST BE ORDERED SEPARATELY.)

NOTES:

- ① THESE TERMS ARE PROVIDED ONLY ON KS-8208 AND KS-8218 METERS. R3 AND WIRING TO TERMS. 8, 9, AND 10 ARE PROVIDED ON ALL PANELS. FOR ILLUMINATED METERS CONNECT AS FOLLOWS:

POWER SUPPLY AVAILABLE	USE TERMS.	LAMPS IN	CURRENT
24 VOLT	8 AND 10	SERIES	0.13AMP
12 VOLT	9 AND 10	SERIES	0.15AMP
6 VOLT	9 AND 10	PARALLEL	0.30AMP.

- ② SUBTRACT 10 FROM ATTENUATOR SETTING WHEN KEY IS IN "600 OHMS" POSITION.
- ③ REMOVE THIS STRAP IF METHOD 3 IS USED FOR CALIBRATION.

752C, 753C, AND 754C VOLUME INDICATORS SCHEMATIC CIRCUIT DIAGRAMS

FIG. 1
COMPLETE CKT.

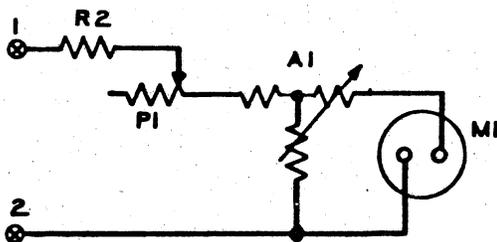
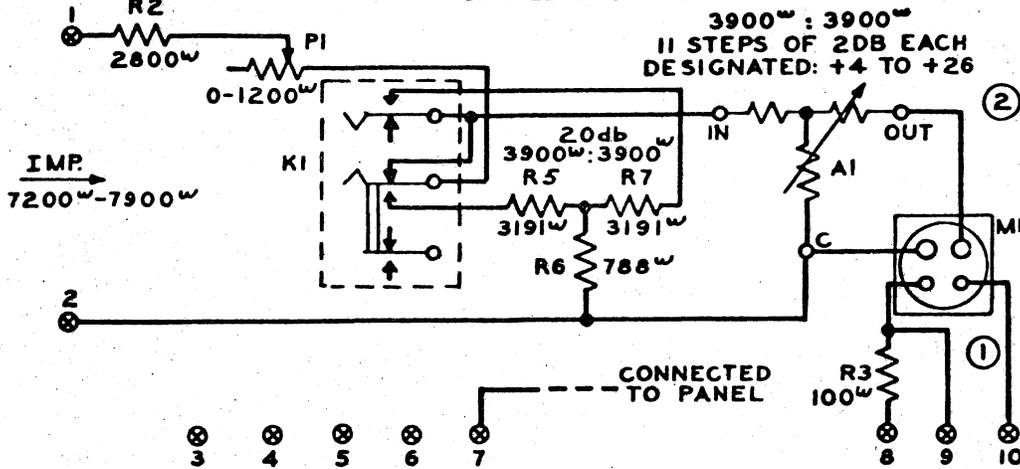


FIG. 2
SIMPLIFIED SCHEMATIC
WITH KI IN
NORMAL OR "0" POSITION

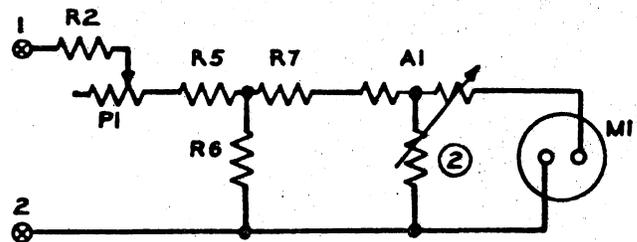


FIG. 3
SIMPLIFIED SCHEMATIC
WITH KI IN
OPERATE OR "+20" POSITION

LEGEND: ⊗ -TERMS. ON P-250833 TERM. STRIP

R2-I.R.C. TYPE NAB RESISTANCE.

R3-I.R.C. TYPE AB RESISTANCE.

R5, R6, R7-I. R.C. TYPE NAB RESISTANCES.

PI-I.R.C. TYPE VW VOLUME CONTROL.

A1-DAVEN W.E. 80-1 ATTENUATOR.

K1-W.E. 2CL KEY UNIT (2 POSITION, LEVER TYPE)

MI-KS-8207, KS-8208, KS-8217, OR KS-8218 METER (NOT INCLUDED AS PART OF CODED PANEL; MUST BE ORDERED SEPARATELY)

NOTES:

① THESE TERMS ARE PROVIDED ONLY ON KS-8208 AND KS-8218 METERS R3 AND WIRING TO TERMS. 8, 9, AND 10 ARE PROVIDED ON ALL PANELS. FOR ILLUMINATED METERS, CONNECT AS FOLLOWS:

POWER SUPPLY AVAILABLE	USE TERMS.	LAMPS IN	CURRENT
24 VOLT	8 AND 10	SERIES	0.13 AMP.
12 VOLT	9 AND 10	SERIES	0.15 AMP.
6 VOLT	9 AND 10	PARALLEL	0.30 AMP.

② ADD 20 TO ATTENUATOR SETTING WHEN KEY IS IN "+20" POSITION.