TYPE E CONNECTING ARRANGEMENT FOR CERTIFIED CUSTOMER-PROVIDED DATA TERMINAL EQUIPMENT PTS-92, GROUP 1

1. GENERAL

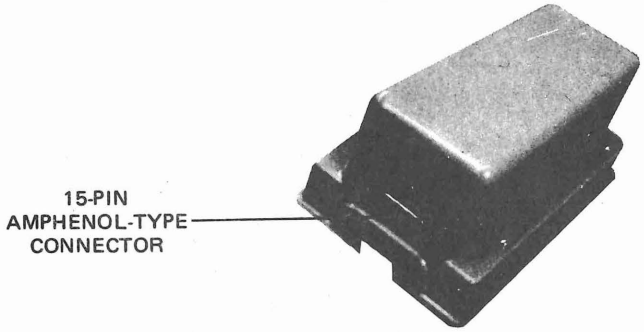
1.01 This section provides a description of, as well as explains how to, install, connect, and order Type E connecting devices, used with certified customer-provided (CP) data equipment.

Note: This information was formerly contained in Section 463-300-901PT, Issue A.

1.02 The Type E Connecting Device USOCs are ZZB51 and ZZC51. The same equipment is used with both USOCs. Optional identification is determined by the payment plan the customer chooses.

2. DESCRIPTION

2.01 The Type E Connecting Device (Fig. 1) is used with certified units of CP data terminal equipment (eg, data sets).



Type E Connecting Device
Fig. 1

2.02 This connecting device contains a 15-pin receptacle which is the connection and demarcation point for the customer equipment. The customer will provide the plug and cord connected to the data terminal equipment.

2.03 The Type E connecting device is arranged to permit momentary isolation of the customer equipment from the central office (CO) line via local test position. Thus, the telephone company (TELCo) portion of the circuit can be observed to localize any trouble conditions which may exist.

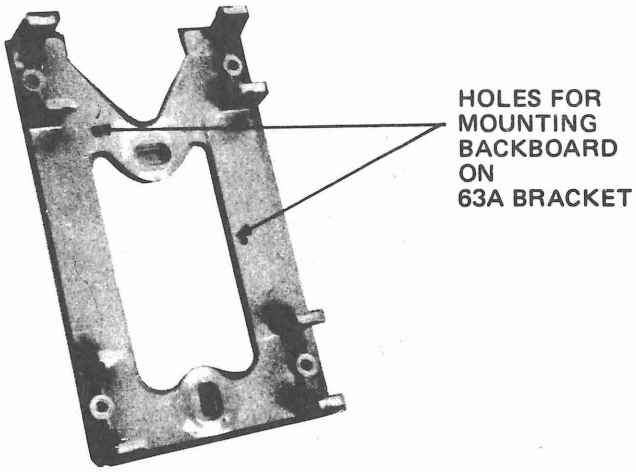
Note: The isolation portion of this device operates only over a full metallic circuit.

2.04 To ensure signal output of the customer equipment does not exceed -12 dBm at the CO subscriber line termination, the Type E connecting device is equipped with a 0 to -15 dB adjustable pad.

3. INSTALLATION AND CONNECTIONS

3.01 This connecting device comes equipped with a backboard (Fig. 2) which is arranged to fasten directly to the wall or to an electrical or telephone outlet. The connecting device is attached by snapping it into place on the backboard.

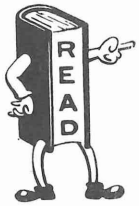
Do not snap the backboard into the device before it is mounted on the wall. Damage may result to the printed circuit board (PCB) while attempting to remove it.



Backboard for Connecting Devices
Type A, B, and E
Fig. 2

3.02 Locate connecting device near customer equipment so that the CP mounting cord and plug will be in easy reach of the device.

3.03 It is preferred that this unit be mounted horizontally with the receptacle pointing to the left or right.



To avoid trouble caused by dirt or other foreign material falling into the receptacle, do not mount device with receptacle facing up.

3.04 When mounting unit, a minimum 6-inch clearance from the floor is necessary to provide space to insert plug into jack.

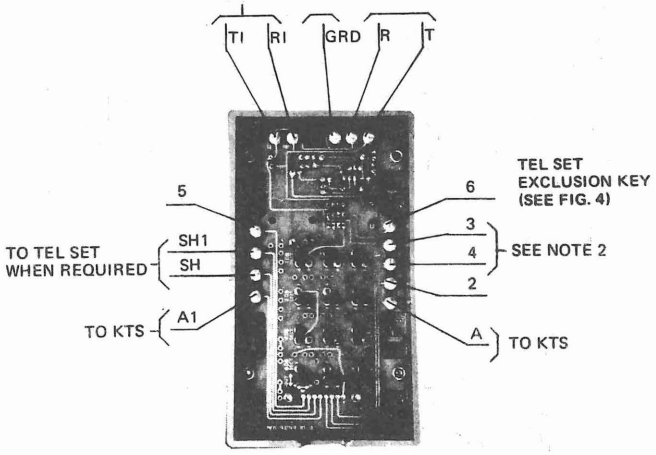
3.05 Length of inside wire (IW) should be kept to a minimum to avoid interfering with the PCB or existing PCB wiring.

3.06 If IW enters from an electrical or telephone outlet, remove the outer covering where the wires come through the backboard. If the wire enters from the bottom, remove covering approximately 1-inch inside the connecting device case.

3.07 Leads should be long enough to allow for easy removal of device.

3.08 Fasten leads from CO line to T and R terminals and connect local ground to GRD terminal of the unit (See Fig. 3).

Note: This device must be grounded to work properly.



Notes:
1. All straps in a particular pad section must be placed in the same direction.
2. Strap terminals 3 and 4 together when exclusion key is not used.

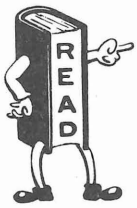
Type E
Connecting Device Terminations
Fig. 3

3.09 The A, A1, SH, SH1, 3, 4, and 6 leads shall be connected when required. The options are shown in Fig. 4 and listed as follows:

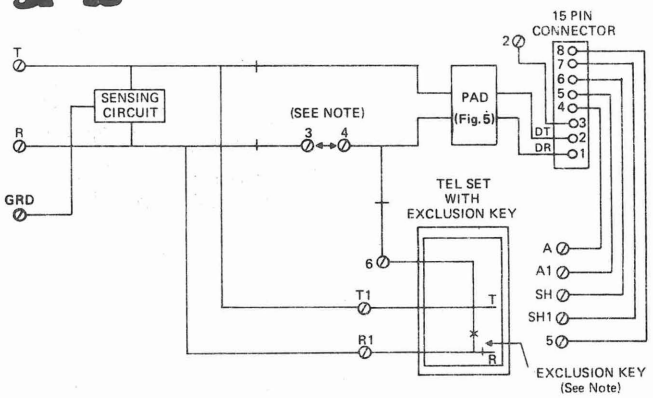
- A and A1 leads (optional control leads) are used to indicate the status of customer equipment (ON-OFF) to the associated TELCo equipment. These leads should be multipled with the A and A1 leads from the associated KTS.

- SH and SH1 leads (optional control leads) used to indicate status of associated telephone set (ON-OFF hook) to customer's equipment. A typical arrangement would be to correct these leads to a spare "make" contact in the associated telephone set switchhook.

- The lead from connecting device terminal 6 (an optional arrangement) is used when the ring side of the CO line is routed through the exclusion key of the associated telephone set. (Refer to Section 590-103-103 for a typical arrangement of this option.)



If this optional arrangement is not used, terminal 3 must be strapped to terminal 4 in the connecting device.



Note: Strap terminals 3 and 4 together when exclusion key is not used.

Type E Connecting Device
Fig. 4

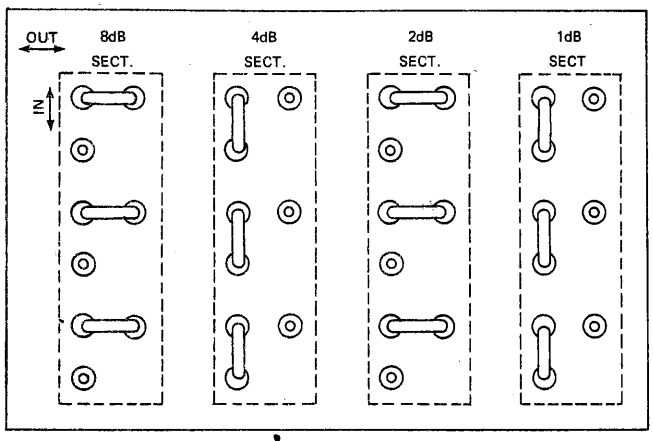
Pad Adjustments

3.10 Measure the 1 kHz tone from the CO at the T and R terminals of the connecting device. If the signal is higher than -3 dBm (eg, -2 dBm), the pad in the connecting device must be adjusted to decrease the signal level to -3 dBm.

3.11 The pad is adjustable in 1 dB increments from 0 dB to -15 dB as shown in Fig. 5. There are four basic sections in the pads consisting of 1-, 2-, 4-, and 8-dB. Each section contains three movable straps which are used to switch the pad sections in or out of the circuit.

Note: All three straps associated with a particular pad section must be turned the same direction at all times. (See Fig. 5)

3.12 The CPE will have a send level no higher than -9 dBm and the level received at the CO should be no higher than -12 dBm.



Notes:
1. All straps in a particular pad section **must** be placed in the same direction.
2. In this figure the pad circuit is strapped for a 5dB loss.

Adjustable Pad Circuit
(Part of Type E Connecting Device)
Fig. 5

3.13 The Type E Connecting Device is equipped with a relay which, when operated from the local test position, will isolate the customer equipment from the CO line and TELCo equipment. (See Fig. 4.)

3.14 When the local test position applies 130 volts (coin collect battery) on either the tip or ring of the CO line, the relay will operate for approximately 6 to 8 seconds to allow time for testing CO line and TELCo equipment.

3.15 When the relay is operated, the pad circuit and the DT and DR leads to the 15 pin connector are temporarily disconnected from the line.

3.16 The local test position shall check to ensure that these features are working properly before turning the device up for service.

3.17 If the telephone set exclusion key circuit is used, the installer shall check to see that the transmission path to the customer equipment is completed and the telephone set disconnected when the exclusion key is operated.

3.18 This unit should be replaced if it is found to be defective. No repairs should be attempted, and the unit should be returned to the Regional Supply Center.

4. ORDERING INFORMATION

4.01 The connecting device listed in this practice is available at the Regional Supply Service Center.

4.02 Order Wording —

(Qty) Arrangement, Connecting, Data PTS-92, Group 1