

W702-E4B

2600 HERTZ INBAND SIGNALING SYSTEM

FIELD INSTALLATION INSTRUCTION

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Test jacks at the front panel provide for monitoring of operating signals and voltage levels. See Fig. 1.

1. GENERAL

1.01 This instruction is intended to provide the minimum level of installation line-up and maintenance instruction for the W702-E4B. If additional information is required refer to:

Circuit Description, Section 702-E4B-101

Plant Series, Section 702-E4B-102

1.02 The W702-E4B is a complete self contained 2600 Hertz oscillator and signaling unit. It requires only -48V DC and is designed to be used on a four wire circuit. An external terminating set may be used to convert to a two wire circuit at each end.

1.03 The W702-E4B signaling system is a compact K.T.U. type module consisting of a VF Oscillator drawer and Control Unit drawer assembled in a housing 3 3/8" wide, 7 5/32" deep, 6 7/16" high.

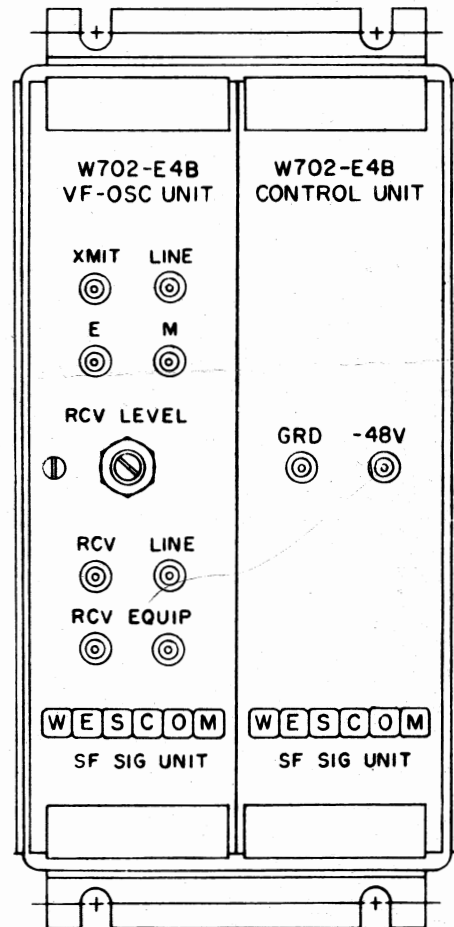


Fig. 1. W702-E4B Front View

2. MOUNTING

2.01 The W702-E4B signal system fits into key unit apparatus mountings

such as the 16C or 31A or on relay racks. Vertical hole mounting centers measure 6.44" and horizontal hole mounting centers 2.19". Five units mount in a 19" rack and six in a 23" rack. Mounting screws are included with each unit.

3. INSTALLER CONNECTIONS

3.01 Twenty terminals are brought out at the rear of the mounting and secured to a terminal board as shown in Fig. 2.

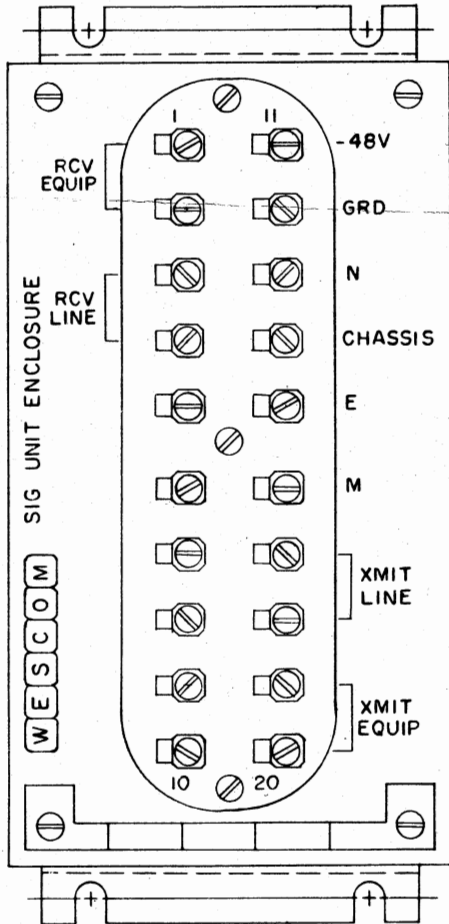


Fig. 2. W702-E4B Rear View

3.02 Strapping information is shown in Table A, Page 3.

NOTE: No internal strapping is required.

4. POWER REQUIREMENTS

4.01 Each unit nominally requires 50 MA at 48V DC in the idle condition and 60 MA at 48V DC in the busy condition. The equipment is designed to meet the specification over a voltage range of 44 to 52V DC.

4.02 The 840-48V DC power supply is recommended for use where existing power supply is not available. This power supply is in a K.T.U. mounting approximately the size of the W702-E4B signal system. It has a voltage range of 47 to 49 volts (regulated supply) with a load range of 0 to 1 ampere. It will power 1 to 15 W702-E4B units.

5. LINE UP

5.01 A single screwdriver adjustment is all that is required to place the unit in operation. This adjustment, RCV LEVEL is located on the front of the VF-OSC DRAWER. See Figure 1.

5.02 RECEIVE LEVEL. Overall facility levels must be checked prior to initial line-up procedure.

5.03 Test equipment required at the local terminal for this procedure is as follows:

- Transmission Measuring Set
- Northeast Electronic
- TTS25A or equivalent

TABLE A

CIRCUIT	CONNECT TO TERMINAL NUMBER
E Lead	15
M Lead	16
Transmit Eqpt.	19 and 20
Receive Eqpt.	1 and 2
Transmit Line	17 and 18
Receive Line	3 and 4
Battery ground (+)	12
48 vdc battery (-)	11
Station or rack ground	14

Test cord, 2 W 6A cords or equivalent, 10 feet long e/w one 310 plus and two 59 type cord tips.

5.04 At both terminals (near end and far end) condition the signaling equipment to the off-hook condition by operating the M lead. This will remove the 2600 Hz signaling tone from the line.

5.05 Request the distant terminal to insert a 1000 Hz test tone at the required office level into the channel under test.

5.06 At the local terminal, arrange the TTS 26A test set for bridging measurement and connect the test set to the RCV-LINE pin jacks on the face of the W702 VF Oscillator drawer.

Requirement: $+7.0 \pm 0.25$ DBM

5.07 At the local terminal, arrange the TTS 26A test set for bridging measurement and connect the test set to the

RCV EQUIP pin jacks on the face of the W702 VF Oscillator drawer.

Requirement: $+7.0 \pm 0.25$ DBM

5.08 Adjust the RCV LEVEL control on the face of the W702 VF Oscillator drawer to meet the requirement.

6. BASIC TROUBLE SHOOTING

6.01 Equipment faults are usually incomplete failure or incorrect operation. First, make sure the fault actually is with the W702-E4B unit and not associated equipment. To do this, we suggest the following:

6.02 Check supply voltage to be sure it is within the specified limits (44-54-VDC).

6.03 Check, by means of the test jack, that the required signals and voltage levels are present. Substitute similar

SECTION 702-E4B-103

plug-in drawer and insert into existing mounted housing.

6.04 Inspect receptacle pin connections, external leads and contacts between mating connectors.

6.05 IMPORTANT — Be sure each drawer is firmly in place within the housing.

6.06 If it is determined the unit is defective, return to Wescom, Inc. for repair. Normally it is not recommended that repairs be attempted in the field.

6.07 For complete test procedures and maintenance instructions, see prac-

tices referred to in Paragraph 1.01 of this instruction.

7. REFERENCES

7.01 The following drawings are made part of this section:

SD 70701 Issue 2 Schematic Diagram

7.02 The following practices are related to this section:

702-E4B-101 Issue 1

702-E4B-102 Issue 1

