

Digital Data System
Operating Instructions for the
INTERFACE ADAPTER V35 to MIL-STD 188-100

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A. Introduction.....	1	2.03 The adapter is 10 1/2 inches wide and 12 inches in depth by 3 1/2 inches in height.
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1. General		3. Maintenance of the INTERFACE ADAPTER V35 to MIL-STD 188-100
1.01 This Unit permits interfacing a Data- phone Digital 56KB Mode M with a MIL-STD-188 Terminal. The Cabinet enclosure CD/R-8MV4 is a free-standing unit, designed to accept up to eight cable driver or cable receiver circuit packs. Rack adapter brackets may be ordered to permit rack mounting. Also slide-on mounting plates may be ordered to permit mounting the unit on the side of a desk. All interface connections to the DSU and the terminal are made through rear panel connectors.		A. Maintenance Procedure
1.02 The CD/R-8 enclosure contains an inte- gral 120 volt ac power supply designed to operate on a continual basis. Therefore the enclosure does not contain a power on/off switch.		3.01 The Standard Dataphone Digital Main- tenance Plan should be followed in testing through the DSU. If the trouble appears to exist between the DSU and the terminal, the customer should be requested to remove the cable connectors and place the
1.03 The Dataphone Digital Service has been equipped with special maintenance features to provide rapid trouble isolation. The addition of the interface adapter between the Dataphone Digital Mode M and the customer's terminal requires a loop around maintenance beyond the regular maintenance feature. Therefore this arrangement requires customer cooperation in the connection of a dummy connector to temporarily provide loop around at the demarcation point.		
2. Installation of The Interface Adapter V35 to MIL-STD 188-100		

dummy connector on the end of the demarcation connector to provide loop around for testing. Defective cards should be returned for repair. Instructions for shop card testing is given below.

Test Equipment:

- (1.) Oscilloscope - Tektronix Model 4104/D10 with 5A15N amplifier and 5B13N Time Base Plug-ins or equivalent.
- (2.) D.C. Voltage Probe - Tektronix Model P-6006.
- (3.) Signal Generator - Hewlett Packard Model 209A.
- (4.) Canal Connector - APM Type 67968-1.
- (5.) Terminating Resistors - 40 OHMS, +5%, 1/2W (2 required); 3K OHMS, +5%, 1/2W (2 required).

B. Testing Procedure, Balanced Voltage Grid Interface Driver

- 3.02 Connect the equipment as shown in Figure 2. If the card is tested outside of the enclosure, the test equipment should be connected to the card edge connector. If the card is tested in an enclosure, the test equipment should be connected to the rear panel connector/terminal strip.
- 3.03 Set the signal generator to produce a 10 KHZ signal with an amplitude of 10 volts peak to peak.

3.04 Connect the voltage probe to the oscilloscope.

3.05 Verify that the signal present on card connector pin 2 conforms to the waveform shown in Figure 1.

C. Testing Procedure, Cable Receiver Cards

3.06 Connect the test equipment as shown in Figure 3. If the card is tested outside of the enclosure, the test equipment should be connected to the card edge connector. If the card is tested in an enclosure, the test equipment should be connected to the rear panel connector/terminal strip.

3.07 Set the signal generator to produce a 10KHZ signal with an amplitude of 1 volt peak to peak.

3.08 Connect the voltage probe to the oscilloscope.

3.09 Verify that the signal present on card connector pin 2 conforms to the waveform shown on Figure 1.

3.10 When testing a card with a balanced terminal interface, add a resistor between pins 4 and 6 and verify that the signal on pin 2 conforms to the waveform shown on Figure 1.

3.11 Reverse the connections on the Signal Generator. Apply the input to pin 30 and the signal generator ground to pin 28. Verify that the same waveform is present on pin 2 (or pin 4).

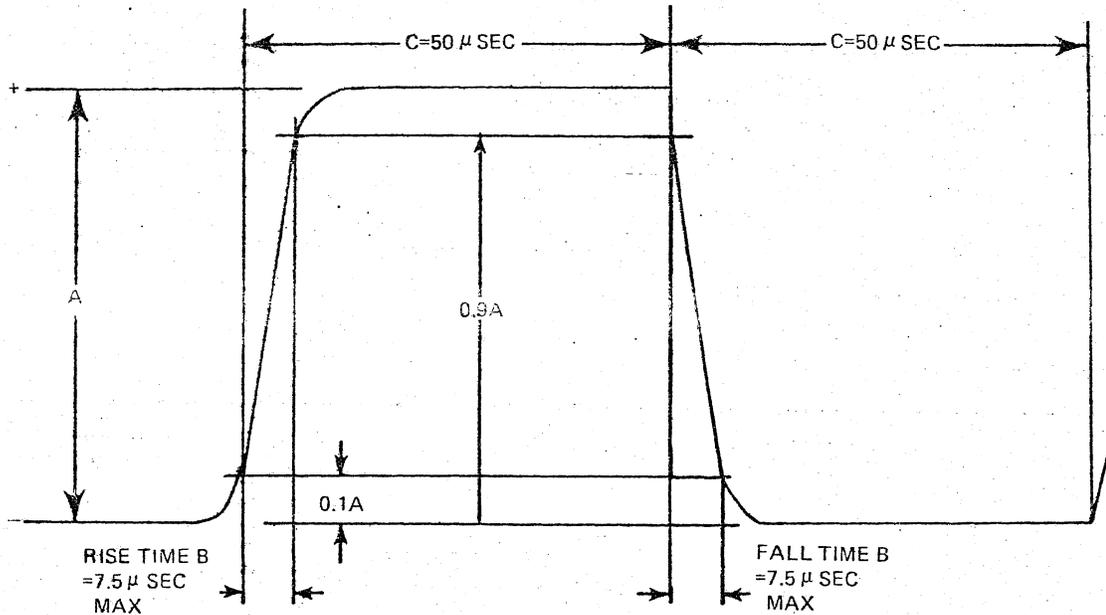


FIG. 1
OUTPUT WAVEFORM

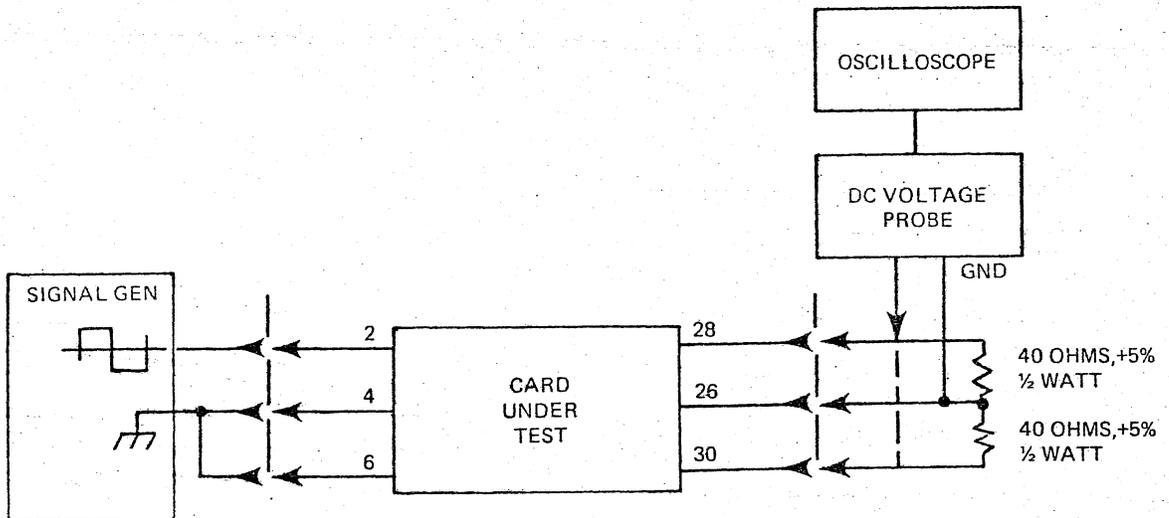


FIG. 2
TEST CONFIGURATION BALANCED VOLTAGE GRID
INTERFACE DRIVER

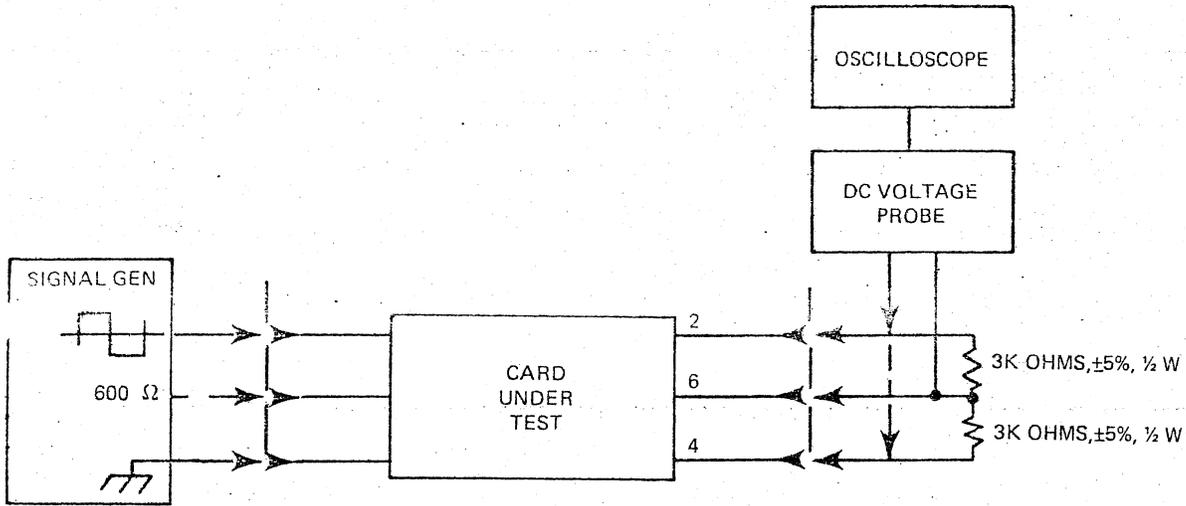


FIG. 3
TEST CONFIGURATION, BALANCED VOLTAGE GRID
INTERFACE RECEIVER