



# 9610 Type 10 to MFT Card Adapter

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# description and application

1.01 The Tellabs 9610 Type 10 to MFT Card Adapter (figure 1) is a single-module plug-in mounting device that allows Tellabs Type 10 modules to be used in Western Electric Metallic Facility Terminal (MFT) mounting shelves. Each Adapter (with a Type 10 module installed) is pin-for-pin compatible with the Western Electric MFT wiring scheme.

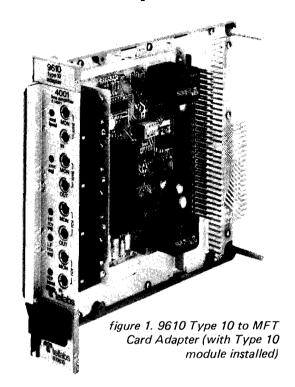
- 1.02 In the event that this Practice section is reissued, the reason for reissue will be stated in this paragraph.
- 1.03 The 9610 contains card guides that permit the Type 10 module to slide into the Adapter and plug into an internal 56-pin card-edge connector. The card guides are mounted on a ferrous-metal backing plate that provides electromagnetic interference (EMI) shielding. Also, a tapped hole in this plate lines up with a hole in the Type 10 module; a screw secured through these holes (factory installed on the Adapter when it is ordered with a Type 10 module) provides permanent, secure mounting for the module. The 9610 mounts in a Western Electric mounting shelf via a bifurcated 40-pin card-edge connector.
- 1.04 An ejector lever on the 9610 locks the Adapter into the MFT mounting shelf. The lever also unlocks and ejects the Adapter whenever removal of the module is necessary.

#### unwired 9610 adapter

1.05 The 9610 Adapter is normally provided unwired. Wire-wrapping is therefore required to interconnect the Type 10 module's 56-pin connector and the MFT Adapter's 40-pin connector. Refer to paragraph 2.03 for wiring procedures.

#### 9610 custom wiring

1.06 Tellabs can custom-wire the 9610 Adapter to accommodate all Type 10 modules that require installer connections to fewer than 40 pins. The Adapter can be ordered with the desired Type 10 module factory installed; the Adapter can also be ordered in a custom-wired configuration without a module. Modules normally requiring more than 40 pin connections may be used in certain applications where not all of the pins are used. Table 1 lists Type 10 modules with more than 40 pin connections. Please call Tellabs Customer Service at your



Tellabs Regional Office or at our U.S. or Canadian Headquarters (see paragraph 5.02) for specific application information.

4449	Dual 9Way Active Data Bridge
6071A	
	(requires 9971 Subassembly)
9001	Relay Module
9002	Relay Module
9114	DDD Backup Module

table 1. Type 10 modules normally requiring more than 40 installer connections that can be used in 9610 in certain applications

# 2. installation

### inspection

2.01 The 9610 Type 10 to MFT Card Adapter should be visually inspected upon arrival in order to find possible damage incurred during shipment. Check for loose components (if the 9610 was shipped with a module installed) and loose wiring connections. If damage is noted, a claim should immediately be filed with the carrier. If stored, the Adapter should be visually inspected again prior to installation.

2.02 The 9610 Adapter mounts in one position of a Western Electric MTM-1, MTM-2, MTM-2/S, or Customer-Premises Facility Terminal (CPFT) Shelf. The MTM-1, MTM-2, and MTM-2/S Shelves are designed for 23-inch relay rack installation, while the

CPFT Shelf is designed for customer-premises applications. Each 9610 Adapter plugs physically and electrically into a 40-pin card-edge connector at the rear of the shelf.

# installer connections within 9610 Adapter

2.03 The unwired 9610 requires customer wiring appropriate to the given application. Please refer to section 3 of this Practice for the relative positions of the pins on the 56-pin and 40-pin connectors. Make the required interconnections by wire-wrapping between the 56-pin and 40-pin connectors according to the installation section of the Type 10 module Practice (and the appropriate Western Electric document).

2.04 The custom-wired 9610 Adapters require no further internal connections. When a 9610 is ordered with a specific module, the module is secured to the 9610 via a screw. In this manner, the module and Adapter effectively become one unit. When ordering a custom-wired version of the 9610, please specify the following:

- (1) Part number of module.
- (2) Type of shelf (MTM-1, MTM-2, MTM-2/S, or CPFT).
- (3) Western Electric "J" number equivalent.

Note: Before installation, the Type 10 module must be optioned as directed in the options section of its Practice.

#### installer connections to MFT mounting shelf

2.05 The Western Electric MTM-1 (single-module), MTM-2 (double-module), MTM-2/S (double-module), and CPFT Shelves are factory prewired and therefore require no additional installer connections.

#### Adapter grounding

2.06 If required, the ferrous-metal backing plate can be grounded in either of the following ways:

- (1) Connect a wire from a screw head on the backing plate to the speed nut below the 40-pin connector (refer to the wiring diagram in section 3).
- (2) Connect a wire from a screw head on the backing plate to pin 1 on the 40-pin connector.

#### securing module to Adapter

2.07 For securing a Type 10 module to the Adapter backing plate, use the 4-40x5/16-inch screw provided. This screw can be inserted from either side so that securing the module is possible when components are located near the hole.

#### 4. specifications

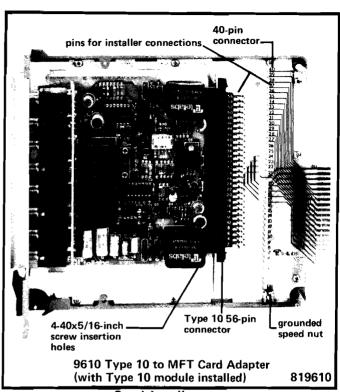
connector

40-pin, bifurcated, gold-plated contacts

fire resistance

plastic frame has a limiting oxygen index (LOI) of at least 28, per ASTM D2863-70

operating environment  $20^{\circ}$  to  $130^{\circ}$  F ( $-7^{\circ}$  to  $+54^{\circ}$ C), humidity to 95% (no condensation)



3. wiring diagram

dimensions

1.70 inches (4.32cm) wide

7.90 inches (20.07cm) high

9.32 inches (23.67cm) deep

weight

14.25 ounces (403 grams)

mounting

relay rack via one position of a Western Electric MTM-1 (single-module), MTM-2 (double-module), MTM-2/S (double-module), or CPFT Shelf

electrical specifications

refer to applicable Tellabs Type 10 module Practice

# 5. testing and troubleshooting

5.01 The Testing Guide Checklist in this section may be used to assist in the installation, testing, or troubleshooting of the 9610 Type 10 to MFT Card Adapter. The Checklist is intended as an aid in the localization of trouble to a specific Adapter. If a 9610 is suspected of being defective, a new one should be substituted and the test conducted again. If the substitute 9610 operates correctly, the original unit should be considered defective and returned to Tellabs for repair or replacement. We strongly recommend that no internal (component-level) testing or repairs be attempted on the 9610 Adapter. Unauthorized testing or repairs may void the unit's warranty.

Note: Warranty service does not include removal of permanent customer markings on the front panels of Tellabs modules or Adapters, although an attempt will be made to do so. If a module or Adapter must be marked defective, we recommend that

it be done on a piece of tape or on a removable stick-on label.

5.02 If a situation arises that is not covered in the Checklist, contact Tellabs Customer Service at your Tellabs Regional Office or at our Lisle, Illinois, or Mississauga, Ontario, Headquarters. Telephone numbers are as follows:

US central region: (312) 969-8800 US northeast region: (412) 787-7860 US southeast region: (305) 645-5888 US western region: (213) 595-7071 Lisle Headquarters: (312) 969-8800 Mississauga Headquarters: (416) 624-0052

5.03 If a 9610 is diagnosed as defective, the situation may be remedied by either *replacement* or *repair and return*. Because it is more expedient, the *replacement* procedure should be followed whenever time is a critical factor (e.g., service outages, etc.).

#### replacement

5.04 To obtain a replacement 9610 Adapter, notify Tellabs via letter (see addresses below), telephone (see numbers above), or twx (910-695-3530 in the USA, 610-492-4387 in Canada). Be sure to provide all relevant information, including the

8X9610 part number that indicates the issue of the unit in question. Upon notification, we shall ship a replacement unit to you. If the 9610 in question is in warranty, the replacement will be shipped at no charge. Pack the defective 9610 in the replacement unit's carton, sign the packing slip included with the replacement, and enclose it with the defective unit (this is your return authorization). Affix the preaddressed label provided with the replacement unit to the carton being returned, and ship the unit prepaid to Tellabs.

#### repair and return

5.05 Return the defective 9610 Adapter, shipment prepaid, to Tellabs (attn: repair and return).

in the USA: Tellabs Incorporated

4951 Indiana Avenue Lisle, Illinois 60532

in Canada: Tellabs Communications Canada, Ltd.

1200 Aerowood Drive, Unit 11 Mississauga, Ontario, Canada L4W 2S7

Enclose an explanation of the unit's malfunction. Follow your company's standard procedure with regard to administrative paperwork. Tellabs will repair the unit and ship it back to you. If the unit is in warranty, no invoice will be issued.

# testing guide checklist

trouble condition	possible cause (in order of likelihood)
unit inoperative	<ol> <li>Wrong module installed □. Check section 2, installation.</li> <li>Improperly wired □. Check section 2, installation, and section 3, wiring diagram.</li> <li>Defective module □. Follow the test procedures in the associated Type 10 module Practice.</li> </ol>