

Type 200 Dual slot housing Installation and Maintenance

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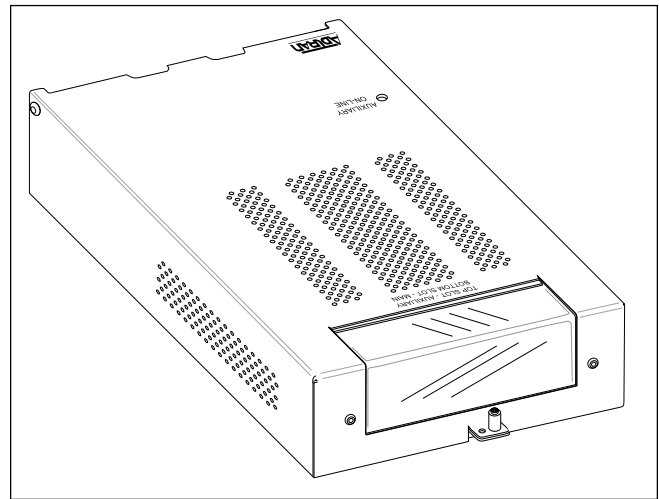


Figure 1. ADTRAN T200 Dual Slot Housing

1. GENERAL

The ADTRAN Type 200 Dual Slot Housing (P/N 1245034L1) is used to house one or two standard T200 circuit packs, and is capable of performing loop termination. **Figure 1** is an illustration of the unit.

Revision History

This is the second issue of this practice. It has been revised to incorporate the telecommunications codes, Table 1 and the pinout edge card connection in relationship to the barrier strip, Table 2.

Basic Features

The basic features of the unit are listed below.

- Standalone Type 200 housing
- -48VDC power connections
- Network connection through a terminal barrier strip
- Removable 8 pin modular jacks for connection to RJ-48C or RJ-48X jacks shipped with unit for each connections to CPE
- Durable, hinged metal enclosure
- Wraparound transparent front panel for easy LED viewing

The T200 Dual Slot Housing is designed to accept any standard Type 200 plug-in card. For non-loop powered units, the T200 Dual Slot Housing can provide power to the circuit card through an external power supply. The ADTRAN 1353DSK48V04 power supply can be used to provide -48 VDC from standard 100-120 VAC to power these cards.

This power supply must be purchased separately. The T200 Housing also provides network and customer interface connections to the circuit card.

2. CONFIGURATION

The T200 Dual Slot Housing may be used with any T200 mechanics HTU-R when used in non-protection configuration. This will allow either one or two independent circuits to be connected using the terminal blocks labeled MAIN and AUX. HDSL Loop and DS1 connections are required for each circuit. The AUXILIARY ONLINE LED has no functionality in the non-protection configuration.

The T200 Dual Slot Housing may also be deployed with ADTRAN HTU-Rs (Part Numbers 1245026Lx or 1246026Lx) which, when used in conjunction with Part Number 1245005L1, will provide a 1:1 protection system. In this configuration, the primary circuit is connected to the terminal blocks labeled MAIN. HDSL Loop and DS1 connections are required. The backup circuit is connected to the terminal blocks labeled AUX. For the backup circuit, only HDSL Loop connections are required. No DS1 connections are required because the protection system will automatically switch the DS1 connection from the primary circuit to the backup circuit. However, while data is being transmitted on the primary circuit, the backup circuit may be tested using the AUX DS1 connections. When a switch is necessary, the system will disconnect from the AUX DS1 connections and supply the backup circuit with primary DS1 connection and illuminate the AUXILIARY ONLINE LED.

3. PHYSICAL DESCRIPTION

Figure 1 illustrates the ADTRAN T200 Dual Slot Housing with the cover on. Connections are made available by unscrewing the lock screw and lifting the hinged cover.

Inside the housing are Euro-style connectors, illustrated in **Figure 2**, for connecting to the network, to the CPE, and to an external power source, if one is used. A grounding lug is provided for frame ground connections.

The rear panel of the T200 Dual Slot Housing contains two slots for either an 8 pin modular jacks for connection to RJ-48C jack (factory installed) or an RJ-48X jack (shipped loose) for CPE connections, and a portal for network and power connections, illustrated in **Figure 3**.

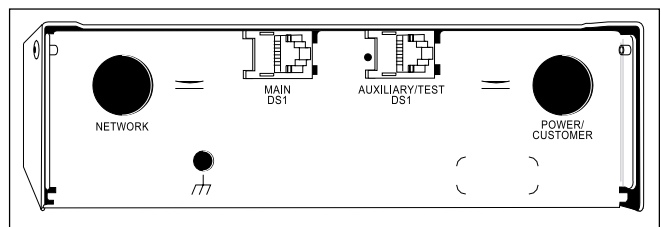


Figure 3. T200 Housing Rear Panel

The T200 Dual Slot Housing is 2 inches high by 6 inches wide by 9 3/4 inches deep, and weighs less than 1 pound. It can be mounted on a desk, table, or wall. The unit operating temperature range is -40°C to +70°C.

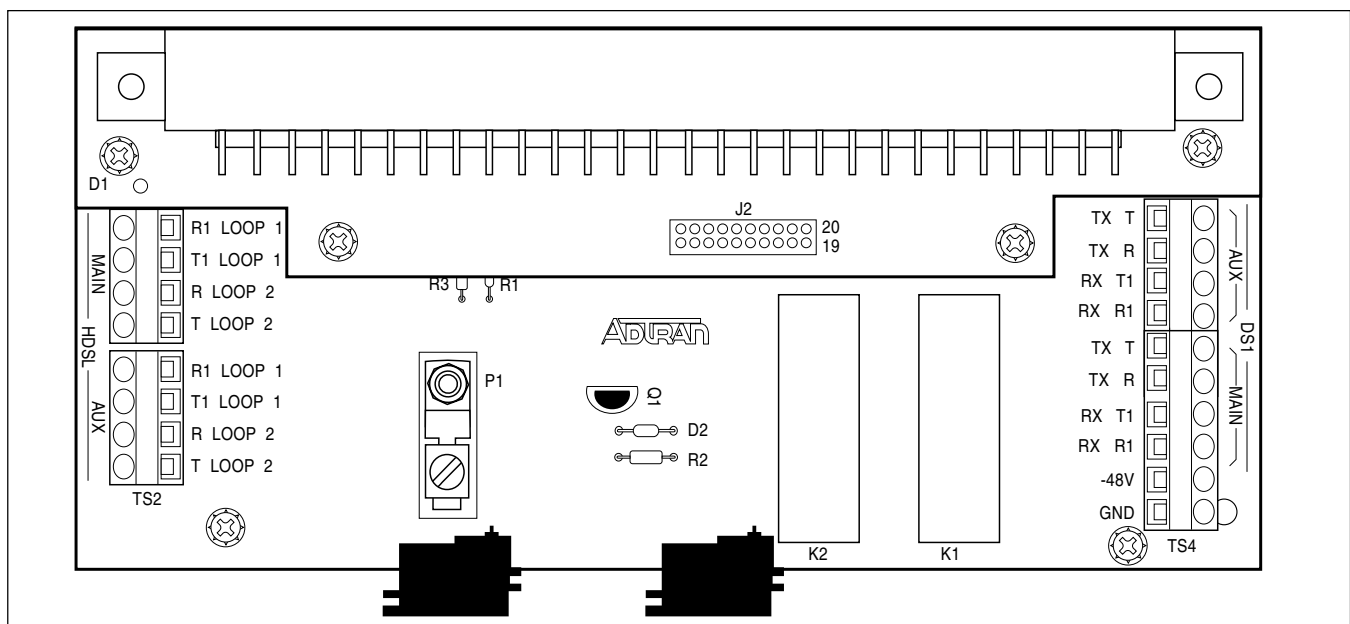


Figure 2. T200 Housing Terminal Barrier Back

4. INSTALLATION

After unpacking the unit, inspect it for damage. If damage is discovered, file a claim with the carrier, then contact ADTRAN. See *Warranty and Customer Service*.

Components shipped with the unit include the following:

- T200 chassis (including RJ-48C jack)
- 8 pin modular jacks for connection to RJ-48X jack (shipped loose)
- Four #8 screws
- Wall mounting template

CAUTION

If circuit packs are installed that do not provide fuse protection on the DS1 interface, the DS1 interface wiring must only be connected to intra-building wiring.

The T200 chassis is designed to be wall- or desk-mounted. For wall mounting, four #8 screws have been included. Select a suitable position on a wall or desk for installation.

Figure 4 illustrates the mounting pattern in the base of the chassis. The four mounting screws should be located as shown. Drive the screws into the mounting surface, leaving a clearance of at least $\frac{1}{4}$ inch, and no greater than $\frac{1}{2}$ inch.

A mounting template is provided with each unit to assist in locating the drill holes. The template attaches to the wall by a tape strip located across the top of the template. Remove the template from the wall after using.

Electrical Code Compliance

Table 1 shows the Telecommunications Codes for the T200 Single-Mount Housing. The T200 Dual Slot Housing complies with the requirements covered under UL 1459 third edition and is intended to be installed in an enclosure with an Installation Code (IC) of “E.”

CAUTION

Voltages on the HDSL wiring may be up to -200VDC.

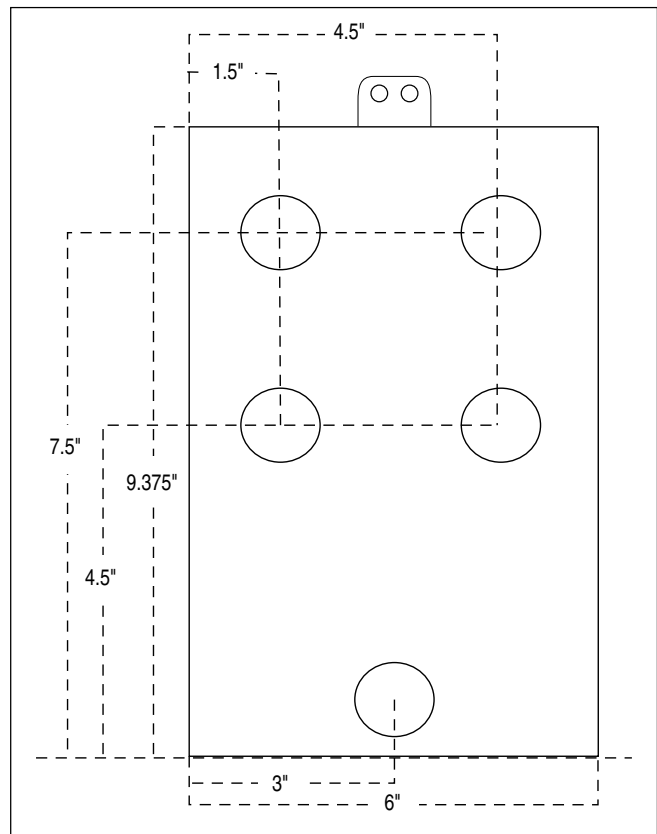


Figure 4. Chassis Mounting Template

Table 1. Telecommunications Codes

Code	Input	Output
IC	E	-
TC	X	X
PC	F	C



5. CONNECTIONS

The terminal barrier strip is used to make connections to the housing. The terminal strip is connected to the card edge connector to interface the connections to the circuit card. **Table 2** describes the pinout of the card edge connector in relation to the barrier strip. The RJ-48 jack, along with the terminal strip, provides for CPE connection.

Table 2. Card Edge Connector Pinout

Pin	Designation	Description
1	CH GND	Chassis Ground
5	DS1-T1	DS1 Receive OUT Tip (to Customer Interface)
7	H1-T	HDSL Loop 1 Tip (Facility)
11	CH GND	Chassis Ground
13	H1-R	HDSL Loop 1 Ring (Facility)
15	DS1-R1	DS1 Receive OUT Ring (to Customer Interface)
17	-48VR	-48VDC Return
27	CH GND	Chassis Ground
35	-48V	-48VDC
41	H2-T	HDSL Loop 2 Tip (Facility)
47	H2-R	HDSL Loop 2 Ring (Facility)
49	DS1-R	DS1 Transmit IN Ring (from Customer Interface)
55	DS1-T	DS1 Transmit IN Tip (from Customer Interface)

Power

CAUTION

A separate frame ground wire must be connected to the frame ground lug. A frame ground lug from an AC supply is not an acceptable frame ground connection.

The T200 Dual Slot Housing is designed to house a loop-powered or locally-powered circuit card. The terminal barrier strip provides the ability to connect an external -48 VDC supply to the circuit card. These connections are made to the -48V and GND on the barrier strip, as illustrated in Figure 2. Connection from the barrier strip to the edge card connector is illustrated in Figure 2. A ground lug (P1), illustrated in Figure 2, is provided to connect an external frame ground wire to the unit.

6. SPECIFICATIONS

The specifications for the ADTRAN T200 Dual Slot Housing are listed in **Table 3**.

7. MAINTENANCE

The ADTRAN T200 Dual Slot Housing requires no routing maintenance to operate properly. In case of equipment failure, remove the unit and replace it with another unit optioned in an identical manner.

ADTRAN does not recommend that repairs be performed in the field. Repair services may be obtained by returning the defective unit to ADTRAN.

Table 3. Specifications

Mechanical	
Size	6" wide by 9 3/4" deep by 2" high
Weight	Less than 1 lb.
Mounting	Tabletop or wall-mount
Environment	
Temperature	Operating: -40°C to +70°C Storage: -40°C to +85°C
Relative Humidity	Up to 95% non-condensing

8. WARRANTY AND CUSTOMER SERVICE

ADTRAN will replace or repair this product within 10 years from the date of shipment if it does not meet its published specifications or fails while in service (see *ADTRAN Carrier Network Equipment Warranty, Repair, and Return Policy and Procedure*, document 60000087-10A).

Contact Customer and Product Service (CAPS) prior to returning equipment to ADTRAN.

For service, CAPS requests, or further information, contact one of the following numbers:

Part Number

1245034L1

ADTRAN Sales

Pricing and Availability
(800) 827-0807

ADTRAN Technical Support

Presales Applications/Post-sale Technical Assistance
(800) 726-8663

Standard hours: Monday-Friday, 7 a.m. - 7 p.m. CST
Emergency hours: 7 days/week, 24 hours/day

ADTRAN Repair/CAPS

Return for repair/upgrade
(256) 963-8722

Repair and Return Address

ADTRAN, Inc.
CAPS
901 Explorer Boulevard
Huntsville, Alabama 35806-2807