



PRI-ISA T1/E1 ISDN Controller Hardware Installation

This guide provides a PRI-ISA hardware installation summary. For detailed descriptions of the procedures in this card, refer to the controller *Technical Description*.

Board Configurations

PRI-ISA adapters provide either one or two T1/E1 ports. T1 models are available with or without integral CSU support.

Depending on your model, the PRI-ISA ISDN adapter can be configured with up to 2 MB of additional memory, and up to 64 HDLC channels.

System Resources

Before installing the PRI-ISA adapter in your server, determine if the following system resources are available:

- An I/O port address between 0x1E0 and 0x3E0
- A 16K byte memory window area
- An available IRQ Setting
IRQs 3, 4, 5, 7, 10, 11, 12, and 15

Setting the I/O Port Address

Before installing the adapter, the I/O port address switches (located to the left of the MVIP connector) must be set.

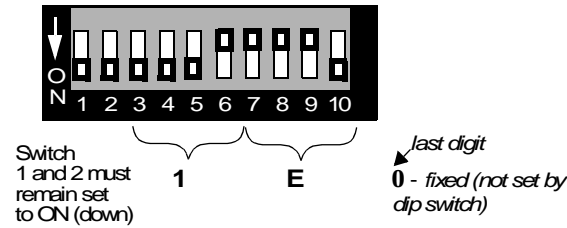


Figure 1: I/O Port Address Switches

The default port address is **0x1E0**. If this address is unavailable, select an alternate 16-byte address between **0x1E0** and **0x3E0**

- Switches 1 and 2 must be set in the down position
- The first digit is set using switches 3 - 6
- The second digit is set using switches 7 - 10
- The last digit is always 0 (not set by switches)

Installing the PRI-ISA Controller



The PRI-ISA adapter is an electrostatic-sensitive device. Use ESD procedures when handling it.

CAUTION

This section provides installation and removal instructions for the PRI-ISA adapter.

Board Installation

1. Place the PRI-ISA adapter on an antistatic mat.
2. Set the I/O base address for the adapter using the DIP switches at SW1. If you are replacing an adapter, the settings should match those of the board you removed.
3. Turn the PC power OFF.
4. Disconnect all cables connected to the PC chassis.
5. Remove the cover from the PC chassis; refer to the documentation supplied with the PC for instructions.

6. Select an available 16-bit expansion slot. If necessary, remove the bracket that covers the chassis opening for that slot.
7. Holding the PRI-ISA adapter by the rear bracket and board edges, gently insert the board into the expansion slot. Make sure the adapter is seated securely in the expansion slot by pressing down on the top edge.
8. Secure the adapter to the chassis using a bracket screw.
9. *If you are using the MVIP bus*, connect the 40-pin ribbon cable to the MVIP connector on the top edge of the adapter.
10. Replace the PC chassis cover.
11. Reconnect the cables you removed in Step 4.
12. Connect the T1/E1 span(s) to the RJ-45 connector(s) on the adapter's rear bracket. If you are using a non-CSU T1 model, connect the digital line to an external CSU, and the external CSU to the adapter port.

Note: For 2-port models, the first port is the top connector on the bracket (labeled Port B).

13. *If you are using the diagnostic port*, connect the serial line to the RJ-45 connector on the board's rear bracket.
14. Turn the PC power ON. The LEDs on the rear bracket remain extinguished until the board is reset and firmware is downloaded. Once the download is complete, the green RUN LED should remain lit and the yellow LEDs extinguished (refer to "Status Indicators" for more information on PRI-ISA adapter status indicators).

If the adapter fails to initialize, check your PC power connections and then contact Brooktrout Customer Support.

Board Removal

1. Turn the PC power OFF and verify that the adapter's LEDs are extinguished.
2. Disconnect the T1/E1 spans(s) from the RJ-45 connector(s) on the adapter's rear bracket.
3. *If you are using the diagnostic port*, disconnect the serial line from the RJ-45 connector on the adapter's rear bracket.

4. Disconnect all other cables connected to the PC chassis.
 5. Remove the cover from the PC chassis; refer to the documentation supplied with the PC for instructions.
 6. *If you are using the MVIP bus*, disconnect the 40-pin ribbon cable from the MVIP connector on the top edge of the adapter.
 7. If necessary, loosen and remove the bracket screw securing the adapter to the PC chassis.
 8. Holding the adapter by the rear bracket and edges, gently remove it from its expansion slot.
- Place the PRI-ISA adapter in an antistatic bag while it remains out of the PC chassis.

Status Indicators

PRI-ISA adapters contain four LEDs that can be viewed through the rear bracket (Figure 2).

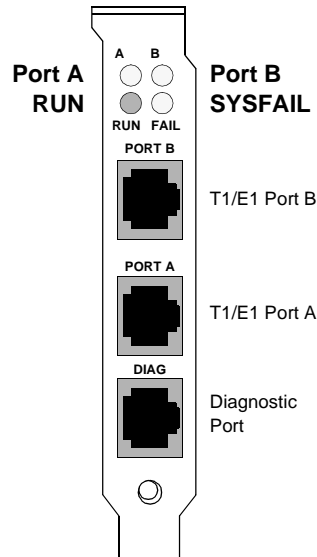


Figure2: Front of Mounting Bracket

The following table lists the name, color, and meaning of the LEDs

Name	Color	Indicates
A	Yellow	Off - Normal operation On - Carrier failure on PRI line connected to Port A
B	Yellow	Off - Normal operation On - Carrier failure on PRI line connected to Port B
Run	Green	Off - Not running On - Normal operation
Fail	Yellow	Off - Normal operation On - Board failure

Note: If your PRI-ISA model is a single port version, the Port A LED can be ignored. If you insert a loopback plug into Port A, this LED remains OFF.

Hardware Specifications

PRI-ISA adapters can be inserted into any available 16-bit ISA expansion slot on a PC backplane. The connector signals conform to the *Intel ISA Bus Specification and Application Notes* dated January 30, 1990.

Note: Pin assignments for the PRI-ISA connectors are located in *Chapter 3* of the *PRI-ISA Technical Description*.

Operating and Environmental Specifications

- Power:
+5 Vdc, $\pm 5\%$, 2.0 A typical
- Temperature (Operating):
0° C to 40° C
(32° F to 104° F)

Technical Support

Use one of the following methods to contact Brooktrout Technical Support:

- Telephone::
U.S.: (781) 433-9600
- E-Mail/Fax:
E-mail: techsupport@brooktrout.com
Fax: (781) 449-9009
- Web Site: <http://www.brooktrout.com>