

CICP18ACCNETBD Ethernet Board Installation Instructions

For Superterm and Accelaterm Control Panels

WI1595A 2/13

FOR SUPERTERM INSTALLATIONS:

The CICP18ACCNETBD Ethernet board is mounted in the CICP18ACCBBD Accelerator board (see installation instructions WI1593 for more information regarding the installation of the CICP18ACCBBD Accelerator board).

Note: For best performance, one CICP18ACCNETBD Ethernet board should be installed in each CICP18ACCBBD accelerator board in each control panel. However, one CICP18ACCNETBD Ethernet board connection may be shared (networked) with up to 63 other Accelerator-equipped Superterm panels. See WI1073 for more information regarding Superterm network configurations.



Prior to opening the Ethernet board package or touching anything inside the control panel enclosure, discharge any static electricity from your body or clothing. Use a grounded wrist strap or touch an unpainted, grounded metal object such as the metal frame of the panel enclosure.

INSTALLATION

1. Find the MAC address located on the white label wrapped around the Ethernet plug (circled in Fig. 1 at right). Write the MAC address here: _____ and keep this paper in a safe location for future reference.



Fig. 1: MAC address location

2. Before installation, verify that the panel and Accelerator board are both working correctly. Verify that both the OK lamp (LED) on the Accelerator board and the heartbeat lamp on the motherboard (location T1) blink in unison once per second. Verify the MEMORY BACKUP CELL jumper is in the IN position providing memory data retention.

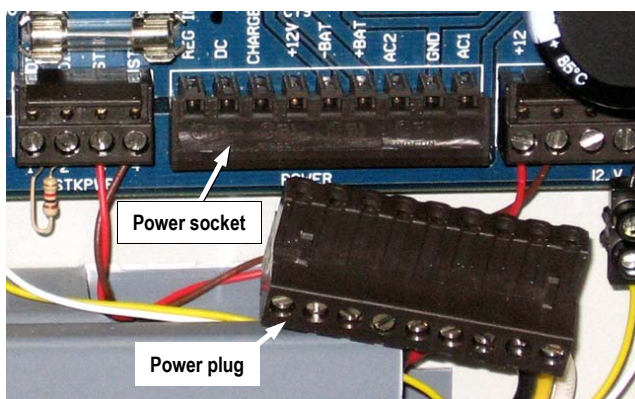


Fig. 2: Push POWER plug connector downward until removed

3. Inside the panel housing, remove power from the main control panel PCB by pushing the POWER plug connector (located on the lower right of the PCB) downward until the connector is completely separated from the PCB. Do not disconnect the battery wires. See Fig. 2, below (left).
4. **Align the board:** Use the image in Fig. 3 (above) to find the Ethernet board mounting location near the top of the CICP18ACCBBD Accelerator board. Carefully align the two Ethernet board snap-lock standoffs with the two Accelerator PC board mounting holes. Then align the Ethernet board plug with the Accelerator board receptacle (JP4) as shown below.

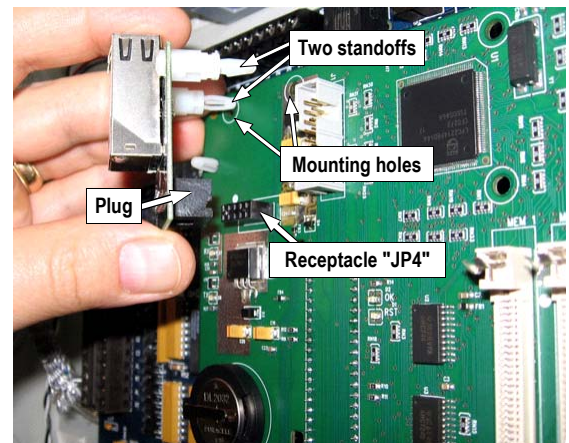


Fig. 3: Align the two snap-lock standoffs and plug with the Accelerator board holes and receptacle

Insert the board: With both standoffs and the plug aligned, firmly press the Ethernet board into the Accelerator board by squeezing the Ethernet board receptacle. Use your fingers to hold the accelerator board while squeezing the Ethernet board as shown Fig. 4.

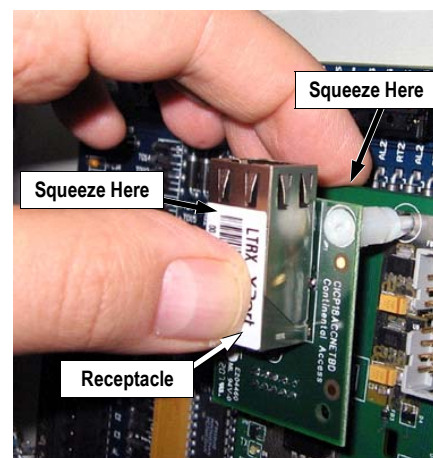


Fig. 4: Squeeze to insert the board

5. Insert your CAT5/6 Ethernet cable first through a cable clamp (Fig. 5) and then through a knockout located on the left side of the panel enclosure. Pull only enough of the Ethernet cable into the enclosure to allow the plug to be easily inserted into the Ethernet board receptacle.

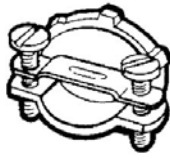


Fig. 5: Cable Clamp

6. In the parts bag, find the silver braided shield. For FCC compliance, this braided shield must be both secured to the cable clamp and placed over the Ethernet cable in the interior of the panel enclosure.

Note: The presence of this silver braided shield makes shielded twisted pair (STP) cable unnecessary. In addition, unshielded twisted pair (UTP) cable does not need to be routed in conduit.

Before tightening the cable clamp, place the braided shield over the Ethernet cable. *Pull the braided shield out through the panel knockout and into the cable clamp.* Thus, the braided shield is grounded to the panel enclosure by the cable clamp (as shown in Fig. 6).



Fig. 6: **PANEL EXTERIOR:** Both the Ethernet cable and the braided shield must be grounded to the panel enclosure by the cable clamp.

7. The Ethernet cable **must** be covered by the braided shield but leave about one inch of cable exposed near the plug. Note that this one inch of exposed cable should be measured with the Ethernet cable plugged into the Ethernet board receptacle. If desired, use electrical tape to cover the end of the braided shield as shown in Fig. 7, below.



DO NOT cover the plug with the braided shield.

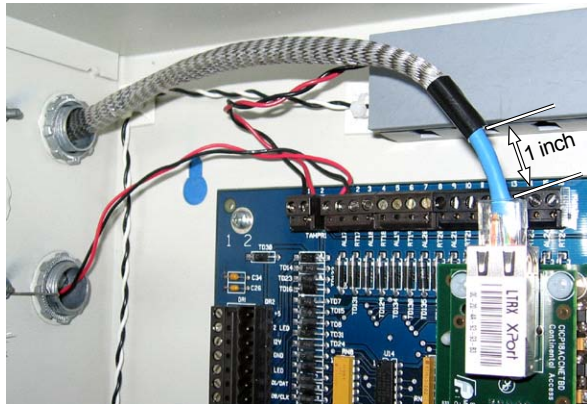


Fig. 7: **PANEL INTERIOR:** Leave one inch exposed as shown (if desired, use electrical tape to cover the end of the braided shield). **DO NOT cover the plug with the braided shield.**

Be sure to tighten the cable clamp screws securing both the Ethernet cable and the braided shield to the panel enclosure.

8. Plug the Ethernet cable into the Ethernet board receptacle.
9. Re-connect power from the main Superterm PCB by pushing the POWER plug connector on the lower right of the PCB upward into the PCB. Verify that the OK lamp (LED) on the Accelerator board blinks on and off once per second. Also verify the heartbeat lamp on the motherboard (location T1) blinks in unison with the OK lamp on the Accelerator board.

Note: The status LEDs on the top of the Ethernet board receptacle will blink when network activity is detected (see image in Fig. 8 for the location of these status LEDs).

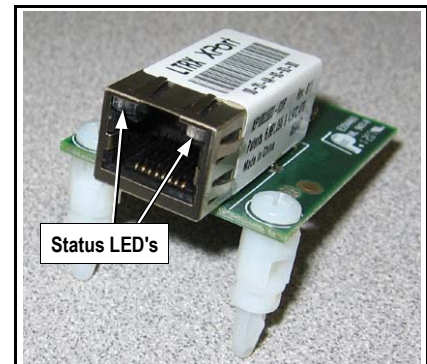


Fig. 8: Location of status LED's. These LED's will blink when network activity is detected.

Note: Be sure the MEMORY BACKUP CELL jumper is in the IN position to provide memory data retention. See Fig. 9.

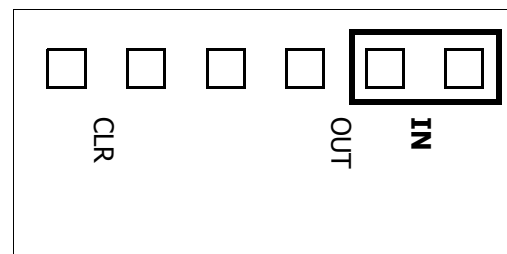


Fig. 9: "IN" Position

FOR ACCELATERM INSTALLATIONS

The CICP18ACCNETBD Ethernet board is mounted in the Accelaterm Interface board (see the Accelaterm installation instructions W11989 for more information regarding the Interface board installation).



Prior to opening the Ethernet board package or touching anything inside the control panel enclosure, discharge any static electricity from your body or clothing. Use a grounded wrist strap or touch an unpainted, grounded metal object such as the metal frame of the panel enclosure.

INSTALLATION

1. Find the MAC address located on the white label wrapped around the Ethernet plug (circled in Fig. 10 at right). Write the MAC address here: _____ and keep this paper in a safe location for future reference.
2. Before installation, verify that the Accelaterm control panel is working correctly.
3. Disconnect power to the system, including the battery wires.
4. **Align the board:** The Ethernet board is mounted in the top right corner of the Accelaterm Interface board. See Fig. 11. Carefully align the two Ethernet board snap-lock standoffs with the two Interface PC board mounting holes. Then align the Ethernet board plug with the Interface board receptacle "JP2" as shown below.



Fig. 10: MAC address location

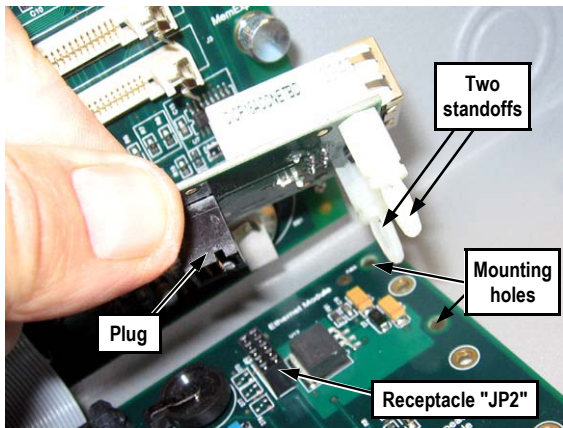


Fig. 11: Align the two snap-lock standoffs and plug with the Accelaterm Interface board holes and receptacle "JP2".

Insert the board: With both standoffs and the plug aligned, firmly press the Ethernet board into the Accelaterm Interface board by holding the Interface board with the tips of your fingers and squeezing the Ethernet board as shown Fig. 12.

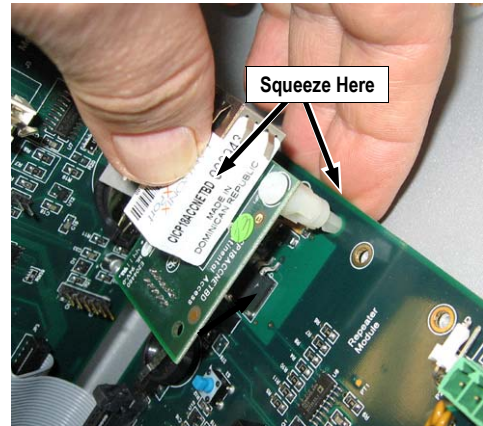


Fig. 12: Squeeze to insert the board

5. Insert your CAT5/6 Ethernet cable first through a cable clamp (Fig. 13) and then through a knockout located on the right side of the panel enclosure. Pull only enough of the Ethernet cable into the enclosure to allow the plug to be easily inserted into the Ethernet board receptacle.

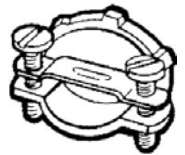


Fig. 13: Cable Clamp

6. In the parts bag, find the silver braided shield. For FCC compliance, this braided shield must be both secured to the cable clamp and placed over the Ethernet cable in the interior of the panel enclosure.

Note: The presence of this silver braided shield makes shielded twisted pair (STP) cable unnecessary. In addition, unshielded twisted pair (UTP) cable does not need to be routed in conduit.

Before tightening the cable clamp, place the braided shield over the Ethernet cable. *Pull the braided shield out through the panel knockout and into the cable clamp.* Thus, the braided shield is grounded to the panel enclosure by the cable clamp (as shown in Fig. 14).

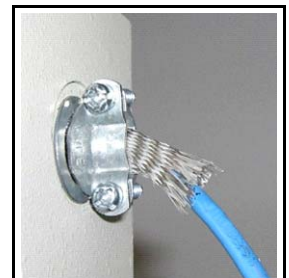


Fig. 14: **PANEL EXTERIOR:** Both the Ethernet cable and the braided shield must be grounded to the panel enclosure by the cable clamp.

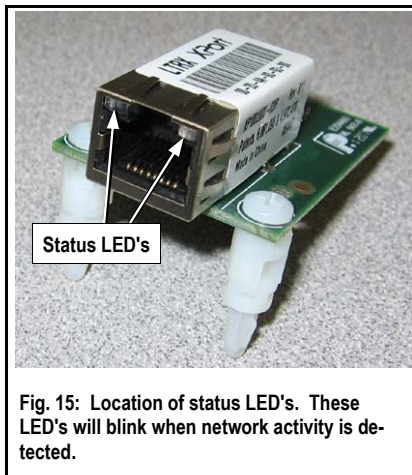
7. The Ethernet cable **must** be covered by the braided shield but leave about one inch of cable exposed near the plug. Note that this one inch of exposed cable should be measured with the Ethernet cable plugged into the Ethernet board receptacle. If desired, use electrical tape to cover the end of the braided shield similar to the image shown in the Fig. 7 photograph earlier in this manual.
DO NOT cover the plug with the braided shield.



Be sure to tighten the cable clamp screws securing both the Ethernet cable and the braided shield to the panel enclosure.

8. Plug the Ethernet cable into the Ethernet board receptacle.
9. Re-connect power to the system, including the battery wires. Verify that the OK lamp (LED) on the Interface board blinks on and off once per second. Also verify the heartbeat lamp on the motherboard (location T1) blinks in unison with the OK lamp on the Interface board.

Note: The status LEDs on the top of the Ethernet board receptacle will blink when network activity is detected (see image in Fig. 15 for the location of these status LEDs).



Note: Be sure the MEMORY BACKUP CELL jumper is in the IN position to provide memory data retention. See Fig. 16.

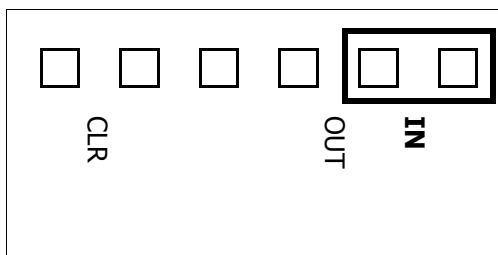


Fig. 16: "IN" Position