I) Orientation and Electrical Connections

**BACnet IP**

The following figure illustrates the correct BACnet IP bridge (ProtoCessor/ProtoCarrier) orientation and electrical connections. This is an older style bridge; most installations will use the BACnet MSTP/IP bridge shown in the next section.

Figure 1. BACnet IP bridge orientation and electrical connections.

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1. No Connection.
2. Power connection to 24VDC output on HeatNet board.
3. 3-wire RS485 connection to Modbus Port on HeatNet board.
**BACnet MSTP/IP**

The following figure illustrates the correct BACnet MSTP/IP bridge (ProtoCessor/ProtoCarrier) orientation and electrical connections.

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**Figure 2. BACnet MSTP/IP bridge orientation and electrical connections.**

1. No Connection.
2. Power connection to 24VDC output on HeatNet board.
3. 3-wire RS485 connection to Modbus Port on HeatNet board.
4. 3-wire RS485 connection to BACnet network.
LonWorks
The following figure illustrates the correct LonWorks bridge (ProtoCessor/ProtoCarrier) orientation and electrical connections.

![Figure 3. LonWorks bridge orientation and electrical connections.](image)

1 No Connection.
2 Power connection to 24VDC output on HeatNet board.
3 3-wire RS485 connection to Modbus Port on HeatNet board.
4 2-wire connection to LonWorks network.
II) Installation on HeatNet™ Boards that require a mounting plate (Rev 1.x)

1. Four (4) nylon standoffs must be used for electrical isolation.
2. 24VDC watch polarity.
3. Do not connect power ground to FG (frame ground).
4. MODBUS RS485 port (A(+), B(-), G(GND))

* * * * WIRING MISTAKES MAY DAMAGE THE BRIDGE * * * *

Figure 4. Mounting Plate
III) Installation on HeatNet™ Boards with an Integrated ProtoCessor Slot (Rev 2.x)

The following picture shows an example of a HeatNetTM board with an integrated ProtoCessor slot. To install a bridge, line up the U-shaped plug(s) on the bottom of the ProtoCessor with the U-shaped slot on the HeatNetTM board. For proper installation, the inner tabs of the plug must be broken off in the areas shown in yellow on the exploded view. This is normally done at the factory.
The following picture shows a LonWorks bridge installed on a board with an integrated ProtoCessor slot.

Figure 6. Installed (LonWorks) Bridge