INSTALLATION AND
OPERATION MANUAL

HEAT-TIMER® CORPORATION

PLATINUM COMMUNICATION UPGRADE RINET (INTERNET), MODBUS AND BACNET

01 PLATINUM COMMUNICATION UPGRADE

INTRODUCTION

All Heat-Timer Platinum Controls are made to function as a stand-alone control. However, for better performance, fuel saving, and data analysis, the Platinum control can be upgraded to one of the many communication options. Some of the communication options allow for the addition and monitoring of a variety of sensors including wireless space temperature sensors, temperature sensors, stack sensors, oil tank level monitoring, water meter counter, pressure, vacuum and humidity, are just some of the many sensors that can be used.

UPGRADE KIT DESCRIPTION

The Platinum Communication Upgrade kit includes the following items that mount to to the back of the panel's motherboard:

- **CPU Board** The CPU board includes the control's operating software
- **Communications Board** The Communications board allows the Platinum control to communicate via RINET (Internet), BACnet or Modbus protocols.

GENERAL GUIDELINES

Before upgrading the Platinum control for RINET (interent), BACnet or Modbus communications, please note the following prior to installation:

- For RINET (internet) communications, a dedicated high-speed internet connection is require.
- For BACnet and Modbus connection, the customer must provide the appropriate cable that is connected directly to the Communication board.
- For BACnet communications, a BMS/EMS with BACnet IP or MSTP is required.
- When replacing the Communications board, the proper CPU board must be installed to guarantee software and hardware compatibility.
- When replacing the Communications board, ensure the proper standoff posts are used.

INSTALLATION OF THE CPU AND COMMUNICATION BOARDS

⚠ WARNING ⚠

ELECTRICAL SHOCK HAZARD! Disconnect electrical power to the device before servicing or making any electrical connections. Failure to do so may result in severe personal injury or death. Follow all local and state electrical codes when installing this unit. All wiring must meet or exceed local, state, or federal requirements

1. Disconnect service power to the panel prior to removing the main panel from the enclosure box.
2. To remove the main panel from the enclosure box, begin by removing the top mounting screw and loosen the two lower mounting screws that hold the main panel in place. Then tilt the top of the Platinum main panel forward and out. As shown in Figure 1.

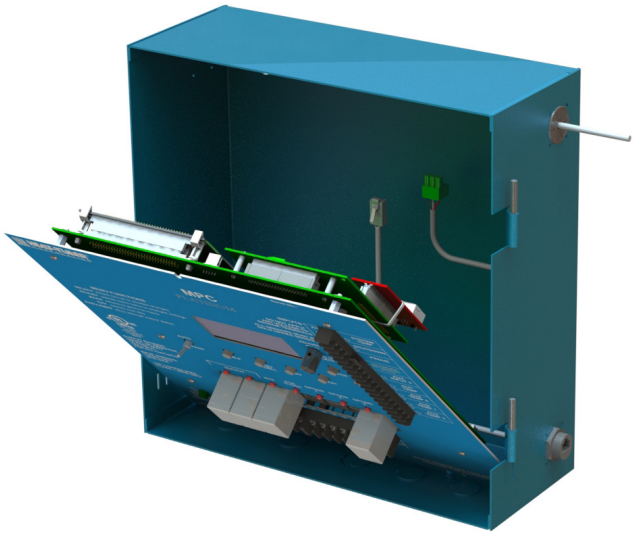

Figure 1 - Removal of the Main Panel from the Enclosure

NOTICE

Existing wiring may prohibit the removal of the panel from the enclosure, so it is not necessay to remove the Platinum main panel completely out of the enclosure to perform necessary task for the upgrade. These task can be perform with the main panel leaning forward as shown in Figure 1 as long as excess to the rear of the panel is achieved. However, it is generally easier to perform the tasks with the panel completely remove.

3. Remove the old CPU board from the Platinum control Motherboard. See Figure 2.
   a Push the 4 standoff posts mounting clips away from the circuit board.
   b Carefully pull the CPU board away from the Motherboard disconneting the CPU board from the plug-in socket.
4. Installing the new CPU board:
   a Firmly seat the new CPU board into the plug-in socket on the Motherboard.
   b Snap the 4 stand-off past mounting clips into position, locking the new CPU board in place.
5. Remove the old Communication board if one is currently installed. If there is no Communication board currently installed proceed to the next step in the installation:
   a Carefully pull the existing Communication board from the plug-in socket on the Motherboard as shown in Figure 2.
   b Carefully remove all existing Communication board stand off posts from the Motherboard.
6. Install the new Communication board, see Figure 2:
   a Push the 4 new standoff posts (provided in the kit) into the appropriate holes on the Motherboard.
   b Firmly seat the new Communication board into the plug-in socket on the Motherboard.
   c Ensure the 4 standoff posts snap into the Communication boad and secures the board in place.

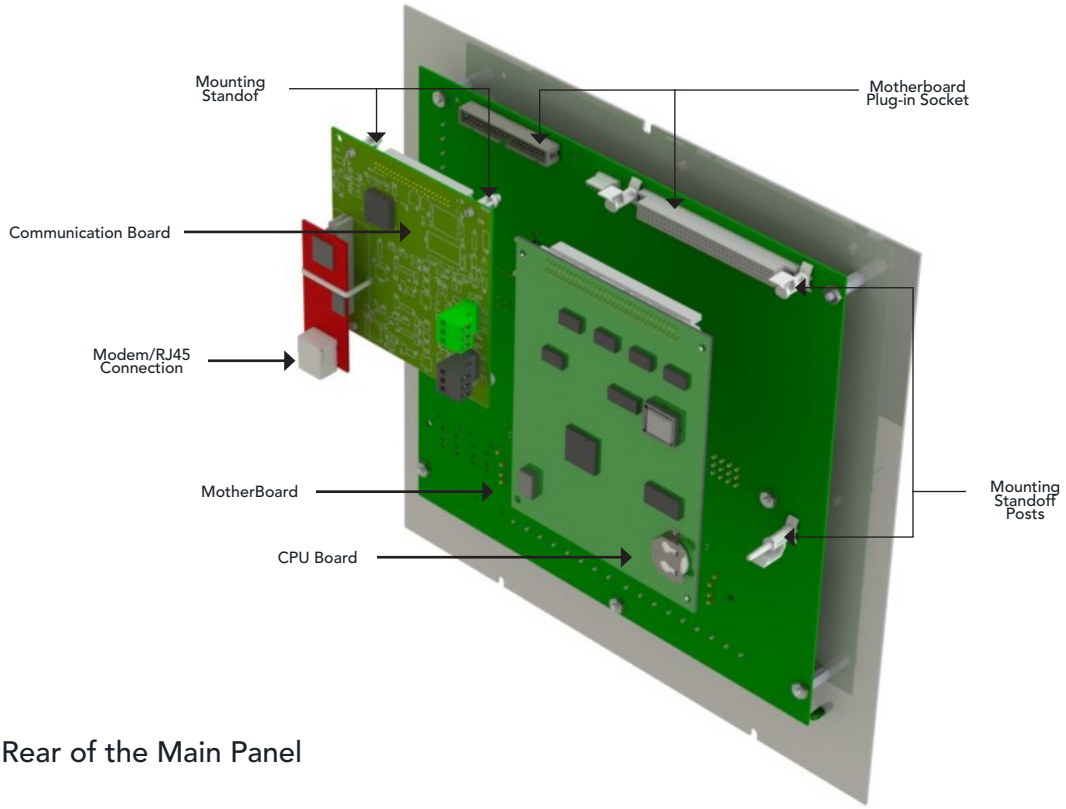

Figure 2 - Rear of the Main Panel

RINET (INTERNET) COMMUNICATION

Install the Platinum Control ethernet cable included in the kit.

1. On the Platinum Control enclosure, remove the knockout from the lower- right corner as facing the front of the enclosure.
2. Remove the mounting nut from the ethernet port end of the Platinum Control ethernet cable.
3. Place the Platinum Control ethernet cable inside the enclosure, with the ethernet port end of the cable through the enclosure knockout.
4. Secure the ethernet port end of the cable to the enclosure using the mounting nut that was removed previously. Ensure the nut is securely tightened.

Install the MSI Hub Cable included with the MSI Hub PN 904384-00 if applicable.

1. On the Platinum Control enclosure, remove the knockout from the upper - right corner as facing the front of the enclosure.
2. Insert the bushing plug included with the MSI Hub into the Platinum Control enclosure..
3. With the MSI Hub Cable plug inside the Platinum Control enclosure, thread the MSI Hub cable wiring through the bushing plug.

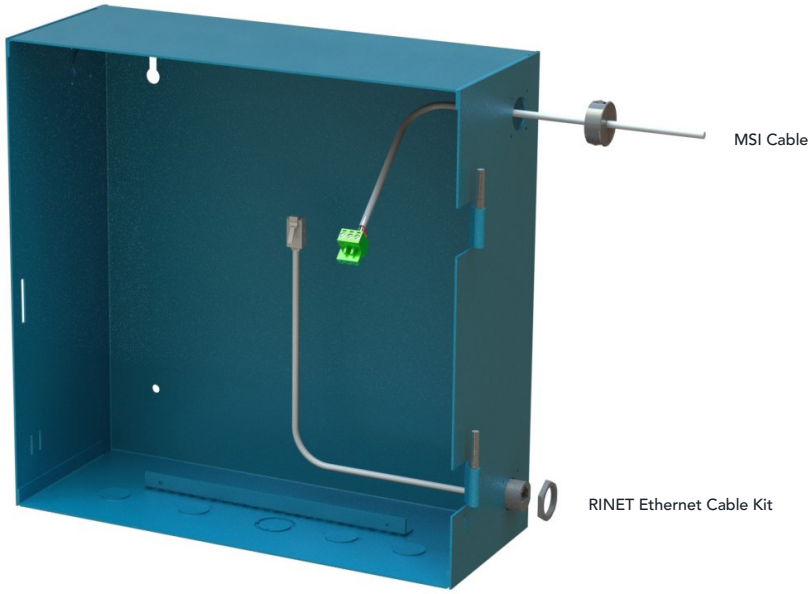

Figure 3 - RINET Ethernet Cable and MSI Cable Installation

Figure 4 - RINET Ethernet Cable Kit

Connection of the Platinum Control Ethernet Cable.

1. Connect the Platinum Control Ethernet cable to the RJ45/CAT5 connector on the Communication Board. See Figure 5
2. Connect the ethernet cable from the modem / router to the ethernet connector on the side of the Platinum enclosure.

Connection of the MSI Hub Cable if applicable.

1. Connect the MSI Hub Cable RS485 cable from the MSI Hub to the MSI Hub connector on the Communication board. Refer to the MSI Hub Installation manual for additional information. See Figure 5

BACNET AND MODBUS COMMUNICATION

1. On the Platinum Control enclosure, remove the knockout from the lower- right corner as facing the front of the enclosure.
2. Insert the bushing plug included in the Communication Upgrade kit into the knockout hole in the enclosure.
3. For BACnet MSTP or Modbus insert the RS485 cable through the knockout bushing plug.
4. For BACnet IP insert the Ethernet CAT-5E cable through the knockout bushing plug.

NOTICE

The RS485 cable or the Ethernet CAT-5E cable for the BACnet or Modbus communication must be supplied by the customer.

Connection of the BACnet or Modbus RS485 cable.

1. Connect the BACnet or Modbus RS485 cable to the RS485 socket connector on the right side of the Communication board. See Figure 5

Connection of the BACnet Ethernet CAT-5E cable.

1. Connect the BACnet Ethernet CAT-5E cable to the ethernet connector on the lower left side of the Communication board. See Figure 5

COMPLETION OF THE COMMUNICATION UPGRADE KIT

1. Place the Platinum Control panel back into the enclosure by aligning the panel behind the two lower mounting screws.
2. Tilt the panel up into the enclosure and insert the top mounting screw.
3. Secure all three mounting screws tightly to ensure the panel is secured in the enclosure.
4. Restore power to the Platinum Control and place the control back into service.
5. Refer to the information given in the Installation manuals to complete the installation of the Communication Upgrade kit.
   - **RINET (internet) -** Installation and Operation Platinum Internet Setup and Installation PN 059080-00
   - **BACnet -** Installation and Operation Platinum BACnet IP / MSTP PN 059082-00
   - **Modbus -** Installation and Operation Platinum Modbus RS485 PN 059266-00

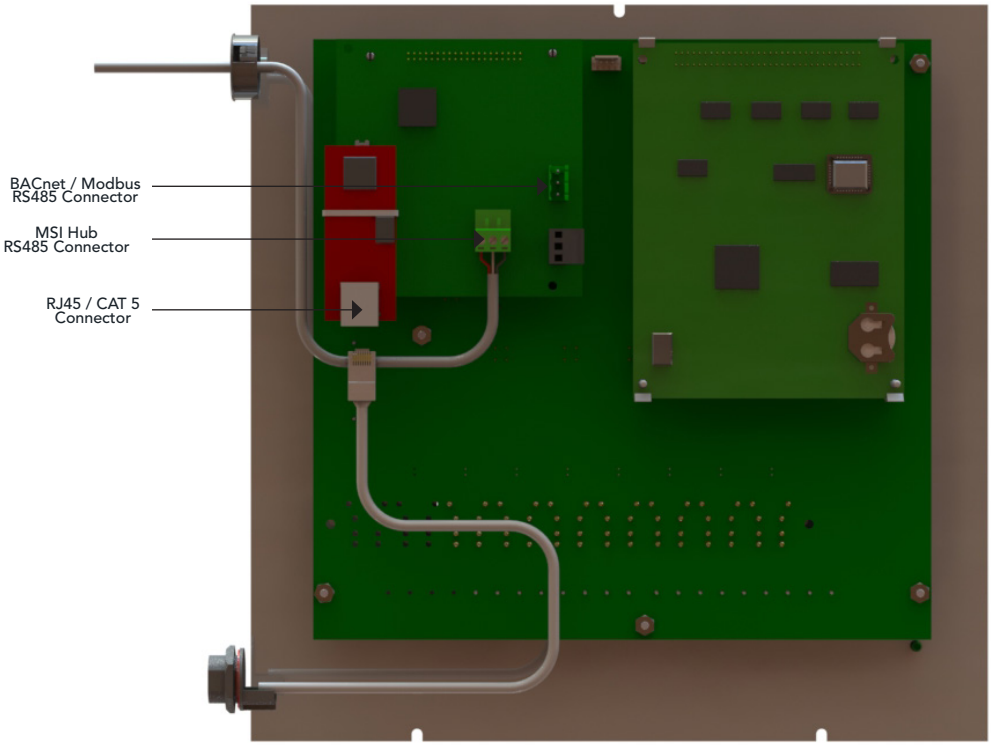

Figure 5 - Communication Cable Connections

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BuildingNet Internet Access Service and BuildingNet Data Service are not provided as part of the sale of any RINET control unless specifically included on the invoice. These services must be purchased separately. The Internet Access provider may retain ownership of any modems provided as part of Internet Access Service. Such modems shall be returned to the Internet provider at the time of termination of such Internet Access Service, otherwise the Purchaser may be charged for the price of such modem.

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HEAT-TIMER® CORPORATION

20 NEW DUTCH LANE,
FAIRFIELD, NJ 07004

PHONE: **973-575-4004**

FAX: **973-575-4052**

HEAT-TIMER.COM