

**Custom Solutions Start-up
Documentation: TEC – Expanded IO
Capability and Secure Mode**

TEC-1330B.11

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Workflow for IO Module Setup

1. At the job site, locate the major control system and the mechanical and electrical drawings. These components include dampers, motors, and any other components working in conjunction with the TEC.
2. Verify that the TEC's input/output (I/O) points are wired per the installation instructions.
3. Verify that the controller is powered up. Check that the BST LED on the controller is flashing (Figure 1). If the BST LED does not flash on/off once per second, see the *APOGEE Automation Service Procedures* on InfoLink for troubleshooting information.
4. Check out and commission the controllers according to the instructions in this document.

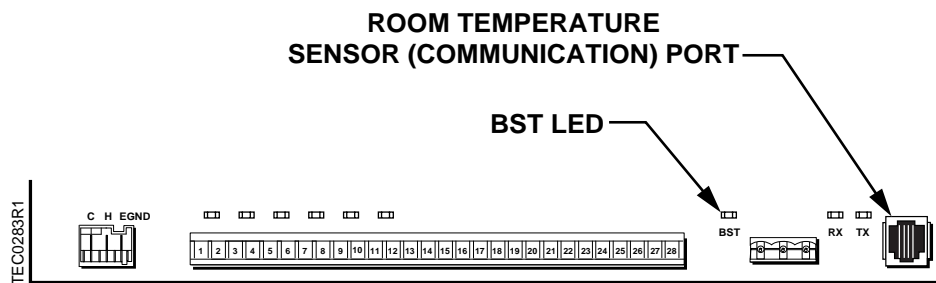


Figure 1. TEC Board Showing Location of BST LED and RTS Port.

Configuring the Controller

This section presents the steps for configuring each controller with the proper application number and initial values. All values are set using the appropriate tool.

1. Plug the MMI into the Room Temperature Sensor port (Figure 1).
2. Verify that the communication indicator on the appropriate tool's point database screen is rotating.
3. Verify that Application 2197 is running at the controller. The application number, controller address, and report name appear in the title line on the appropriate tool's point database screen.

Setting Room Temperature Offset (optional)

When the room has stabilized, take a precision temperature reading at the location of the room temperature sensor. Record any difference between this reading and the value of ROOM TEMP (Point 4), and set it (to the nearest 0.25 °F) into RMTMP OFFSET (Point 3).

$$\text{CTL TEMP (Point 78)} = \text{ROOM TEMP (Point 4)} + \text{RMTMP OFFSET (Point 3)}$$

Example

If the precision temperature reading is 72.0°F, and the value of ROOM TEMP is 73.0°F, then the value entered into RMTMP OFFSET is –1.0.

In this case, the value of ROOM TEMP would read 73.0°F, but the value of CTL TEMP would read 72.0°F.

Setting Controller Address

Set CTLR ADDRESS (Point 1) to the appropriate number. (Valid addresses are 0 to 31. Recommendation is 32 devices per FLN).

NOTE: Update each controller at the field panel immediately after you have completed the controller start-up procedures and made all other changes to the controller's point database, including balancing, tuning, etc.

Secure Mode

After updating the controller at the field panel, Secure Mode can be enabled/disabled through the Insight workstation.

NOTE: Once enabled, modification of any configuration or override points is prevented. See application documentation for more information.

Start-up of the TEC – Expanded IO Capability and Secure Mode is complete.