

INSTALLATION OF REMOTE-MOUNTED DISPLAY

OPTION RB5 FOR ZQYRA, PREEVA, MAPS, P125, AND R7DA MODELS

GENERAL INFORMATION

The factory-installed display in the electrical control compartment allows complete access to unit test features, schedules, discharge air set points, fan control, alarms, and other unit operational set points. The remote-mounted display (see [Figure 1](#)) is a second display, that allows the same system control as the unit-mounted factory-installed display. The remote display can be field-installed up to 656 feet (200 meters) from the unit. Required components are listed in [Table 1](#).



Figure 1. Remote-Mounted Display

Table 1. Required Components

Description	PN	Quantity
Option RB5 kit package	260436	1
Remote display	260178	1
6-pin connection cable	260175	2
Cable splitter/signal booster module	260735	2
Instruction sheet (this manual)	260737	1
22 AWG to 18 AWG shielded, twisted pair wire (EIA 485)	Field-supplied	As required
Electrical junction box		1

INSTALLATION

NOTE: If the remote display needs to be mounted more than 656 feet (200 meters) from the unit, contact the factory about adding a required field-supplied power supply to extend the range up to 1,640 feet (500 meters).

Install the remote-mounted display as follows:

1. Lock disconnect switch OPEN to turn OFF power to unit.
2. Install unit-mounted cable splitter/signal booster module (PN 260735) inside unit's control compartment:
 - a. Install module and secure using screws provided.
 - b. In unit's electrical compartment, locate 6-pin connection cable that connects unit display to main controller. Unplug cable from main controller and connect unplugged end to plug A on cable splitter and signal booster module (see). Module plugs and terminal screw connections are shown in [Figure 2](#) and identified in [Table 2](#).
 - c. Connect one (1) 6-pin connection cable (PN 260175) to plug C on cable splitter and signal booster module (see [Figure 2](#)). Connect other end of cable to main controller.

INSTALLATION—CONTINUED

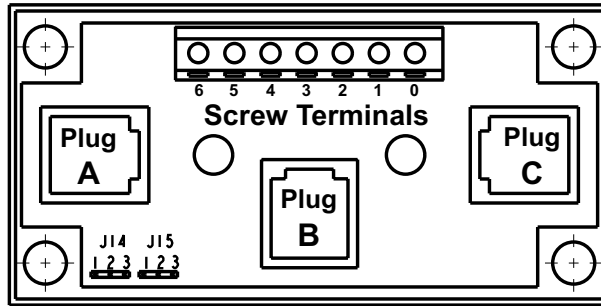


Figure 2. Wiring Connections on Cable Splitter/Signal Booster Module

Table 2. Cable Splitter and Signal Booster Module Wiring Connection Descriptions

Terminal Screw Connection	Pin Telephone Connection	Circuit
0	=	Earth
1	1	+VRL=30 Vdc
2	2	GND
3	3	Rx-/Tx-
4	4	Rx+/Tx+
5 (not used)	5 (not used)	GND
6 (not used)	6 (not used)	+VRL=30 Vdc

3. Install remote-mounted cable splitter/signal booster module (PN 260735) at remote location:

- a. Determine desired location for remote display (can be located up to 656 feet (200 meters) away from unit).

⚠ CAUTION ⚠

Improper wiring can damage the remote unit interface display as well as the main system controller.

NOTE: Ensure that the field-supplied twisted pair wire (EIA 485) used for communication is shielded to prevent noise.

- b. Run two (2) sets of field-supplied 22 AWG to 18 AWG shielded, twisted pair wire (EIA 485) from selected remote display location to unit—one for power and one for communication (see [Figure 3](#)).
 - c. Install cable splitter/signal booster module in field-supplied electrical junction box to be recessed behind remote display.
 - d. Connect twisted pair wire to remote-mounted cable splitter/signal booster module: shield to screw terminal 0, power wires to screw terminals 1 and 2, and communication wires to screw terminals 3 and 4 (see [Figure 3](#)). Ensure that power and communication polarity is maintained.
 - e. Connect one (1) 6-pin connection cable (PN 260175) to plug A on cable splitter/signal booster module (see [Figure 2](#)).
- 4. Connect twisted pair wire to unit-mounted cable splitter/signal booster module installed in step 2: shield to screw terminal 0, power wires to screw terminals 1 and 2, and communication wires to screw terminals 3 and 4 (see [Figure 2](#)).**

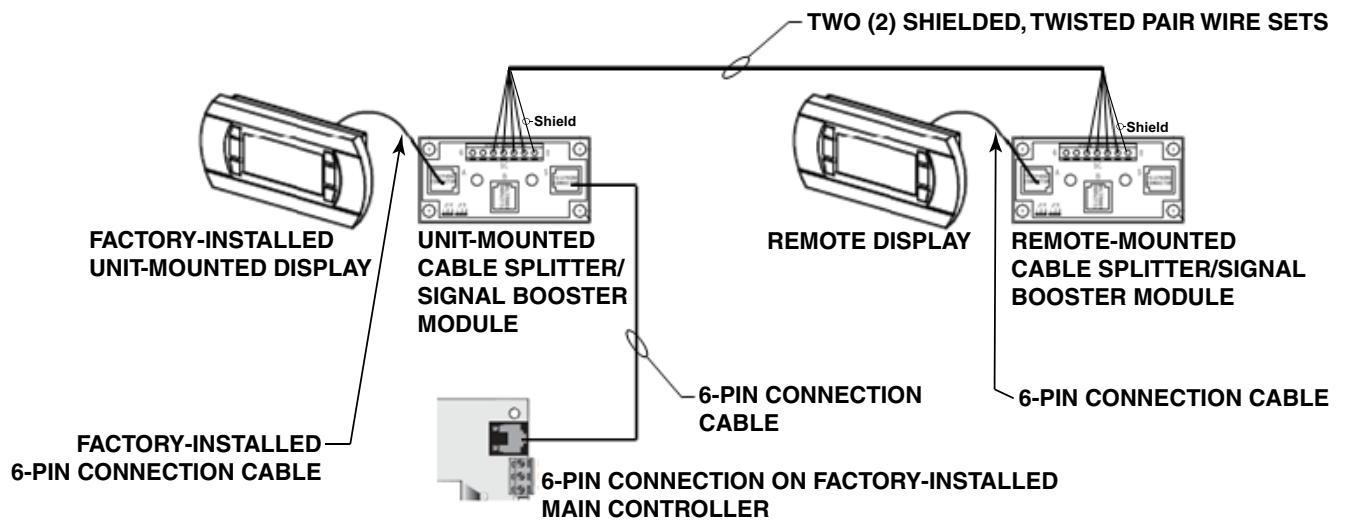


Figure 3. Wiring Connections on Cable Splitter/Signal Booster Module

5. Install remote display (PN 260178):

- a. Remove screws and remove back cover plate from remote display.
- b. Position back cover plate over remote-mounted cable splitter/signal booster module installed in step 3.
- c. Feed 6-pin connection cable out through hole in back cover plate and mount back cover plate to wall so that it covers remote-mounted cable splitter/signal booster module.
- d. Unsnap face cover from remote display and connect 6-pin connection cable from remote-mounted cable splitter/signal booster module to 6-pin wire connection on remote display.
- e. Install back cover plate on remote display using screws removed in step a.
- f. Snap face cover in place on remote display.

6. Verify power and communication polarity before re-powering unit.

7. CLOSE disconnect switch to turn ON power to unit.

SETUP (ZQYRA, PREEVA, AND MAPS MODELS)

NOTE:

- Remote displays on ZQYRA, PREEVA, and MAPS models have a factory-set address of 32, the address of the remote display must be changed.
- The following setup is not required for remote displays on P125 and R7DA models.
- Display function keys (see [Figure 4](#)) are used to navigate through the display menus and options.

ALARM	PROGRAM	ESCAPE	UP ARROW	ENTER	DOWN ARROW
	<i>Prg</i>	<i>Esc</i>			

Figure 4. Display Function Keys

SETUP (ZQYRA, PREEVA, AND MAPS MODELS)—CONTINUED

1. Follow steps listed in [Table 3](#) to set address of remote display.

Table 3. Setting Remote Display Address		
Step	Description	Display Screen
1	Press UP ARROW key, DOWN ARROW key, and ENTER key and simultaneously hold down all three for at least 5 seconds	Display address setting : 32
	Display address screen appears with cursor flashing in top left corner	I/O Board address: 01
2	Press ENTER key once (cursor moves to Display address setting field)	Display address
3	Change Display address setting field to 31 using DOWN ARROW key	Changed
4	Press ENTER key to confirm setting and to save setting to permanent memory	

2. List of terminal addresses associated with main control module is set at factory and should not need to be adjusted. If access is needed, proceed in accordance with [Table 4](#).

Table 4. Setting Remote Display Terminal Address		
Step	Description	Display Screen
1	Press UP ARROW key, DOWN ARROW key, and ENTER key and simultaneously hold down all three for at least 5 seconds	Display address setting : 32
	Display address screen appears with cursor flashing in top left corner	I/O Board address: 01
NOTE: I/O Board Address field should remain at default setting of "01".		
2	Press ENTER key four times to move to terminal configuration screen	P:01 Adr Priv/Shared
	First terminal (Trm1) should be 32 and second terminal (Trm2) will be at 31	Trm1 32 Pr
3	Set OK? field to Yes	Trm2 31 Pr
4	Press ENTER key to confirm and save setting	Trm3 None Pr -- OK? No

3. Check remote display for proper operation.

