

PEERLESS® PINNACLE® BOILERS

ANALOG INTERFACE ADAPTER Installation Instructions

The analog interface adapter (91488) allows the **PINNACLE®** Boiler to connect to an external control that produces a 0-10 volt analog signal. Depending on the configuration of the P125 control board, the external control can control the modulation (use with Tekmar 263 and 265 controls) or the temperature set point. The following are instructions for installation of the adapter, and programming the P125 control board to accept an external signal.

Before you begin:

Turn off all electrical power to the **PINNACLE®** Boiler using the service switch on the unit. Make sure to follow the instructions in order. **Do not reprogram the P125 control board before installing the interface adapter.**

Mounting the Interface Adapter:

Adhesive backed Velcro® is provided to mount the interface adapter in a convenient location inside the boiler cabinet. Be sure that the installed location does not interfere with the unit cover. See Figure 1.

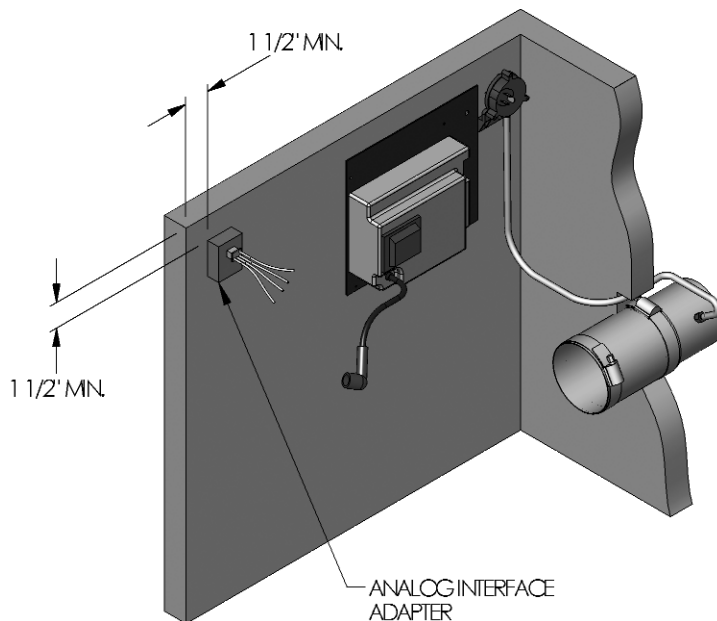


Figure 1

Wiring the Interface Adapter:

Wire the analog interface adapter as shown in Figure 2. The two grey wires are to be capped with wire nuts. The thermostat is to be connected to the external control. Be sure to attach the pink wire to the 10 pin Molex® connector on the boiler control board and the light blue wire to the 20 pin connector. These wires are provided with female Molex® connection pins attached.

To install, pull the connector from the control board and insert the connection pin into the connector until it locks in place. Connect the other two wires to the 0-10 volt DC source.

Programming the P125 Control Board.

Using the display module on the P125 control, press & hold the S3 "PROGRAM" key and S4 "RESET" key simultaneously for 3 seconds. The module will display a blinking "000."

Use the S1/- and S2/+ keys to change the display to read "125."

Press the S3 "PROGRAM" key to enter the installer menu. (The control will shut down the boiler if it is in operation.)

The display will alternate between "1", which represents the parameter number, and a value of either "0" or "1" which represents the function selection. Use the S1/- and S2/+ keys to set the function value of this parameter.

Press the S3 "PROGRAM" key to advance to the next parameter. Table 1 shows the parameter numbers and function values.

Parameter Number	Function
1	0 = Internal Control (Default) 1 = External Control from Analog Interface Adapter
2	0 = External Set Point Input (Default) 1 = External Modulation Input
3	0 = Step Modulation Disabled (Default) 1 = Step Modulation Enabled

To save the parameter function value and exit the menu press and hold the S4 "RESET" key for 3 seconds.

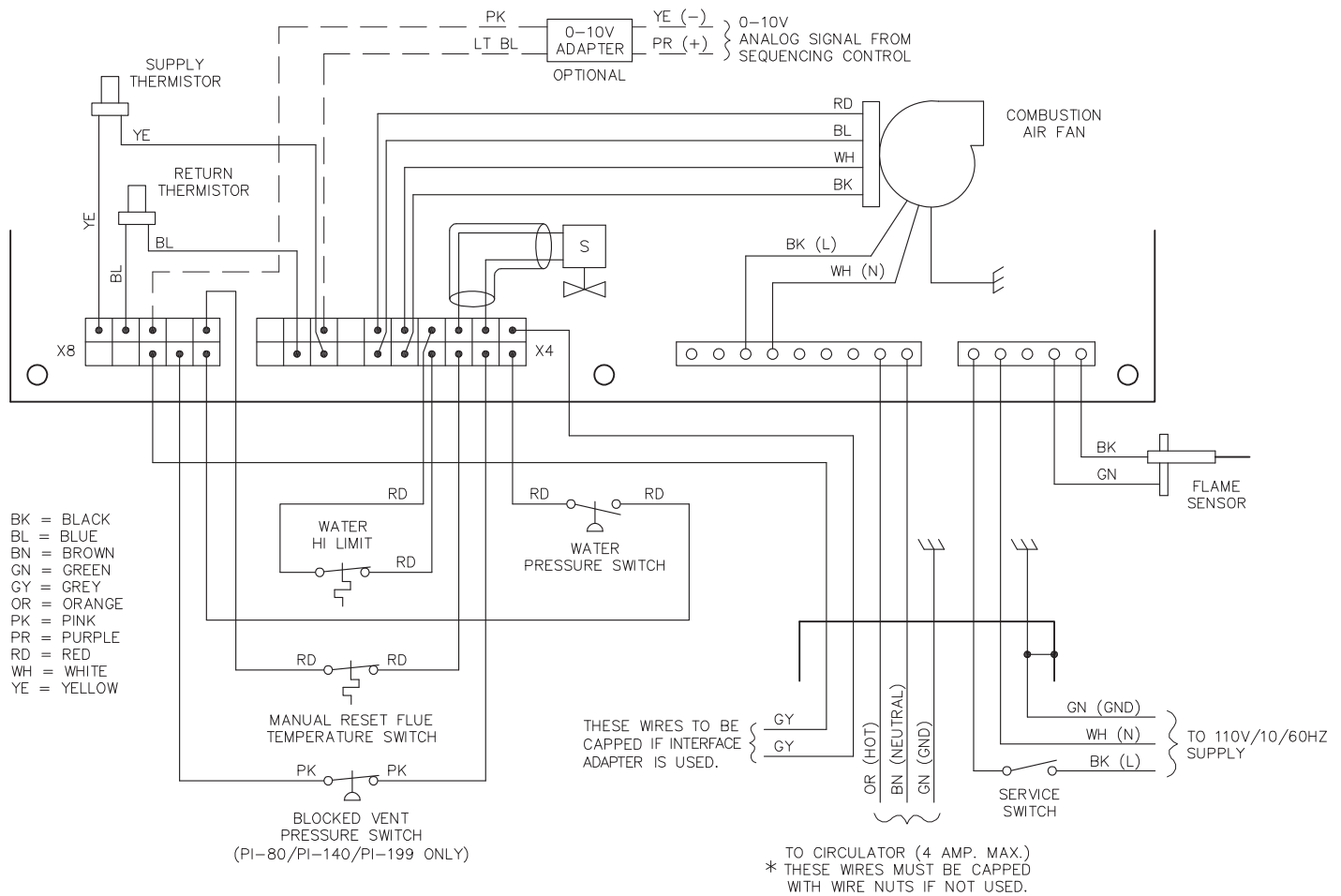
Example:

To configure the Pinnacle Boiler for use with a Tekmar 263 or 265 control, change parameter number "1" to a value of "1" for external control. In addition, change parameter "2" to a value of "1" for modulation control. Parameter "3" should remain on its default value of "0". The temperature set point of the Pinnacle boiler should be set to its maximum of 201°F when parameter number "2" is set to "1".

Troubleshooting:

If the analog interface adapter is not installed when the P125 control board is programmed to accept a 0-10 volt DC signal, the boiler will run continuously until it reaches the temperature set point. This may lead to overheating the intended space.

If the analog interface adapter is used with the Tekmar 263 and 265 control, be sure that the 500 Ω resistor to the modulation output terminals of the Tekmar control and that the control is set to 0 to 20 mA output range. Failure to do so will result in erratic operation.



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