Exalt Floor Standing
Control Module Replacement

Kit Part Number	Description	Model
EXRKIT134	Control Module Replacement	All Exalt Floor Standing Models

Each Kit Includes:
- Control Module

Recommended Tools:
- Phillips Head Screwdriver

⚠ **WARNING**

Indicates a potentially hazardous situation which, if ignored, can result in serious injury or substantial property damage.

NOTICE

Indicates special instructions on installation, operation or maintenance, which are important to equipment but not related to personal injury hazards.

⚠ **WARNING**

For your safety, turn off electrical power supply at service panel and allow unit to cool before proceeding to avoid possible electrical shock and scald hazard. Failure to do so can cause severe personal injury or death.

⚠ **WARNING**

Failure to follow instructions below can result in severe personal injury or damage if ignored.

- **Instructions are for a qualified installer/ service technician only.**
- **Read all instructions before proceeding.**
- **Follow instructions in proper order.**

Exalt
Control Module Replacement

1. Preliminary Instructions

1. Verify that the replacement kit is correct for the model of boiler. See table on page 1.

2. Carefully open and unpack the PARTS BOX from its shipping carton.

3. Carefully remove and check for any damage.

NOTICE

Installing a damaged equipment will cause malfunction of the boiler. Contact IdealUSA right away if the Control module is damaged in any way.

4. Close the manual gas shut off valve to the unit.

2. Save Settings

NOTICE

Prior to replacing the control module and/or display module, it is important to access and document the boiler's settings. This will ensure any settings revised from factory defaults are transferred to the new module(s). Use Table 1 to record the existing settings. Do not revise any settings when recording settings.

1. To access the Installer screen, touching simultaneously the up and down soft keys for 3 seconds as shown in Fig. 1.
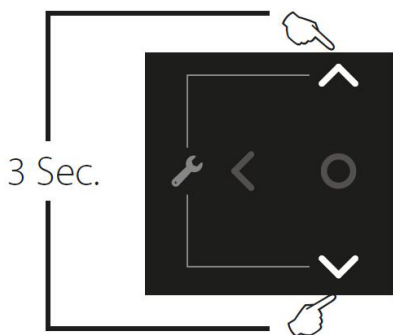

Fig. 1: Installer Button

2. Enter the installer access code "054" by using the **LEFT** and **RIGHT** buttons to select a digit and the **UP** and **DOWN** buttons to change the digit. Press the OK button to enter the access code.
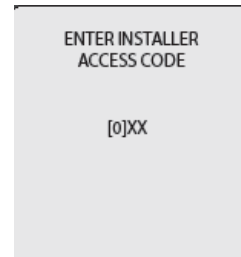

Fig. 2: Installer Access Code

3. Press the OK button while the CH & DHW Settings icon is highlighted.
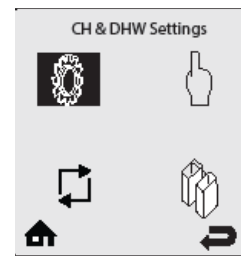

Fig. 3: CH & DHW Settings

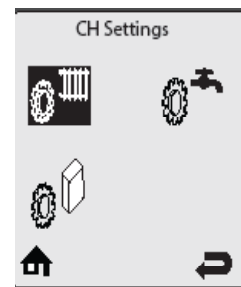4. Press the OK button while the CH Settings icon is highlighted.

Fig. 4: CH Settings

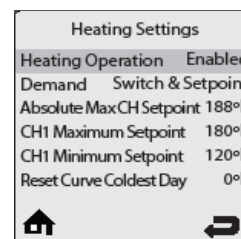5. Press the **UP** and **DOWN** buttons to scroll thru the various settings.

Fig. 5: Heating Settings

6. Record all CH Settings in Table 1. Once completed, press the **RIGHT** button to highlight the Previous Screen icon, then press the OK button.

7. Press the **RIGHT** button to highlight the DHW Settings icon then press the OK button.
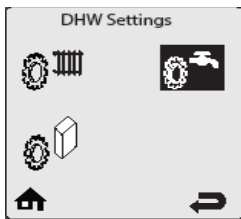
Fig. 6: DHW Settings

8. Press the **UP** and **DOWN** buttons to scroll thru the various settings and record all DHW Settings in Table 1. Once completed, press the **RIGHT** button to highlight the Previous Screen icon, then press the OK button.

Fig. 7: DHW Settings

9. Press the **DOWN** button to highlight the Boiler Settings icon if present icon, then press the OK button.

10. Press the **UP** and **DOWN** buttons to scroll through the various settings and record all Boiler Settings in Table 1. Once completed, press the **RIGHT** button to highlight the Previous Screen icon, then press the OK button.

NOTICE

Perform the following steps if the Exalt is part of a Cascade System or the System Temperature Sensor is being used on a single Exalt.

11. Press the **RIGHT** then **DOWN** buttons to highlight the Previous Screen icon, then press the OK button.

12. Press the **RIGHT** then **DOWN** buttons to highlight the Cascade icon, then press the OK button.

13. Press the **RIGHT** button to highlight the Cascade Settings icon, then press the OK button.

14. Press the **UP** and **DOWN** buttons to scroll thru the various settings, and record all Cascade Settings in Table 1.

3. **Remove Control Module**

1. Turn the electrical power "OFF".

2. Remove the front jacket panel by removing the screws on panel. Pull the panel out and up to remove the panel. Do not discard these screws as they will be reused.

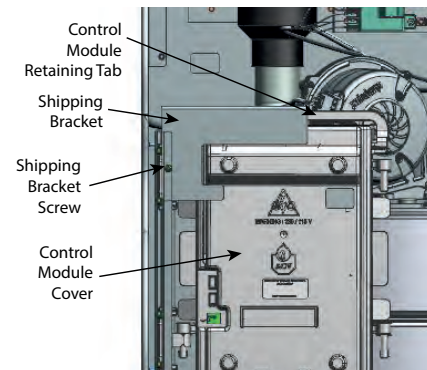3. Remove the screw holding the metal shipping bracket in place as shown in Fig. 8

Fig. 8: Control Module

4. The shipping bracket and screw can be discarded.

5. Pull the retaining tab on top of the control module case to remove the cover.

6. Record the current location of all plugs.

7. Remove all Molex wiring connectors from the Control Module. Some plugs are equipped with a locking clip. Squeeze the clip to unlock the plug. Support Control Module with one hand while removing individual Molex connectors. Press tabs on Molex plugs for quick release.

8. Unclip the 1 clip on the side of the control module

and pull the module out.

4. Installation of Control Module

1. Mount the control module into the case by secureing it behind the mounting clips on both sides of the case.

2. Reconnect the Molex connectors to proper position. Each connector is designed to fit only in its respective mating connector. If the plug is equipped with a locking clip, ensure the clip is engaged.

3. Place the cover in place and lock in the top retaining tab.

4. Remount the front jacket panel to the boiler.

5. Turn power to the unit "ON" and return the boiler to service.

5. Programming new Control Board

1. Follow the instructions in step 2 to gain access to the installer menu.

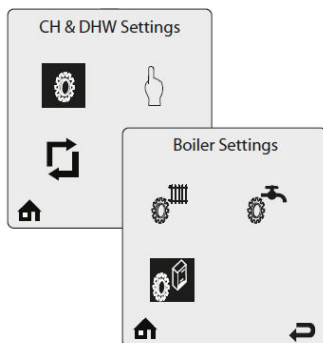2. Go to boiler settings and click appliance setting, as seen in Fig. 9 and Fig. 10.
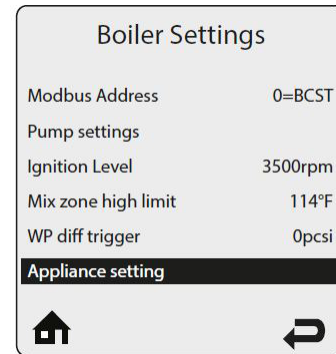

Fig. 9: Installer Menu

Fig. 10: Appliance setting

3. The required code is written on the data plate located at the side of the boiler. Use the code for the gas type, either Natural Gas or Propane.

4. Increase/decrease the value (from 0 to 9, then A to Z) using the UP or DOWN keys to, then change position with the LEFT or RIGHT keys.

5. Follow the instructions on the screen to enter the appliance code for your boiler.

6. The boiler will now be factory set for that particular model. Return to step 2 and enter settings recorded in Table 1 back into the controls to return the boiler to the customized settings of the old control.

7. Return to step 2 and enter settings recorded in Table 1 back into the controls.

Table 1: Controls Settings

HEATING SETTING	FACTORY DEFAULT	MINIMUM SETTING	MAXIMUM SETTING	EXISTING SETTING
Heating Operation	Enabled			
Demand Type	Thermostat & Outd. Curve			
Absolute Max CH Setpoint	185°F [85°C]	68°F [20°C]	188°F [87°C]	
CH1 Maximum Setpoint	180°F [82°C]	68°F [20°C]	188°F [87°C]	
CH1 Minimum Setpoint	80°F [27°C]	60°F [15°C]	188°F [87°C]	
Outdoor Curve Coldest Day	10°F [-12°C]	-30°F [-34°C]	50°F [10°C]	
Outdoor Curve Warmest Day	64°F [18°C]	60°F [15°C]	78°F [25°C]	
CH2 Circuit	Enabled			
CH2 Maximum Setpoint	140°F [60°C]	68°F [20°C]	194°F [90°C]	
CH2 Minimum Setpoint	80°F [27°C]	60°F [15°C]	190°F [88°C]	
Warm Weather Shutdown	Off	Off	78°F [25°C]	
Circulation Pump Permanent	Disabled			
CH Post Pump Time	5 Minutes	Off	20 Minutes	
Freeze Protection	Enabled			
Frost Protection Setpoint	-22°F [-30°C]	-22°F [-30°C]	50°F [10°C]	
Parallel Shift Value	0°F [0°C]	0°F [0°C]	144°F [80°C]	
CH Call Blocking	2 Minutes	0 Minutes	30 Minutes	

DOMESTIC SETTING	SOLO FACTORY DEFAULT	COMBI FACTORY DEFAULT	MINIMUM SETTING	MAXIMUM SETTING	EXISTING SETTING
DHW Operation	Enabled	Enabled			
Demand Type	Thermostat	N/A			
DHW Boiler Setpoint	168°F [76°C]	168°F [76°C]	96°F [35°C]	188°F [87°C]	
DHW Setpoint	140°F [60°C]	140°F [60°C]	68°F [20°C]	168F [75°C]	
DHW Warmstart Setpoint	N/A	125°F [52°C]	86°F [30°C]	140°F [60°C]	
DHW Warmstart Hysteresis	N/A	30°F [17K]	9K	36K	
DHW On Differential	6°F [3°C]	N/A	4°F [2°C]	18°F [10°C]	
DHW Storage Adder	27°F [15°C]	18°F [10°C]	10°F [5°C]	54°F [30°C]	
DHW Post Pump Time	2 Minutes	2 Minutes	Off	30 Minutes	
DHW Priority Timeout	Off	Off	Off	120 Minutes	
DHW Priority	Enabled	Enabled			
DHW Call Blocking	1 Minute	1 Minute	0 Minute	30 Minutes	
DHW to CH Call Blocking	1 Minute	1 Minute	0 Minute	30 Minutes	
Antilegionella Function	Disabled	Enabled			

Table 1 Cont:

BOILER SETTING	FACTORY DEFAULT	MINIMUM SETTING	MAXIMUM SETTING	EXISTING SETTING
Lockout Temp.	210°F [99°C]			
Modbus Address	0=BCST	0=BCST	247	
Flex. Relay 1(CH)	CH1			
Flex. Relay 2(DHW)	DHW			
Flex. Relay 3(P3)	CH1/CH2/DHW			
Flex. Relay 4(ERR)	ERROR			
Flex. Relay 5(Flame)	FLAME			
Flex. Relay 6(P4)	CH2			
Error Relay	On Lockout, Blocking and Warning			
Pump PWM Minimum	30%	1%	100%	
Ignition Level	Varies by model			
Mix Zone High Limit	114°F [45°C]	68°F [20°C]	176°F [80°C]	
Appliance Setting	Varies by model			
Altitude Setting	0 ft	0 ft	20,000 ft	