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QUICK REFERENCE GUIDE

MODEL: EFTC-140W

WARNING!

Read the Installation Manual that comes with the unit carefully and be sure that the appliance has been properly assembled BEFORE reviewing these instructions. Failure to follow the Installation Manual exactly as written could result in fire, explosion, electrical shock, or other situation that could result in property damage, serious personal injury, or death. Installation and service must be performed by a qualified plumber, licensed gas fitter, or a professional technician in accordance with all local codes. Improper installation and/or operation by an unqualified person WILL VOID the warranty. This appliance must be installed in accordance with all local codes. In the absence of local codes, follow ANSI Z223.1 / NFPA 54 or CAN/CSA B149.1, Natural Gas and Propane Installation Code, as applicable.

STEP 1 – INSTALLATION SITE

DO NOT install this appliance outdoors or in a bathroom. In addition, install this appliance in a location that allows for proper clearances to combustible and noncombustible construction. Consult the rating plate on the appliance for proper clearances.



Installation Clearances from Non-combustibles/ combustibles	Recommended Service and Proper Operation Clearances	
Тор	18 in. (45.7 cm)	
Back	0 in. (0 cm)	
Bottom	12 in. (30.45 cm)	
Front	24 in. (60.9 cm)	
Right Side	3 in. (7.6 cm)	
Left Side		

MINIMUM CLEARANCES

STEP 2 – UNPACKING



INCLUDED ACCESSORIES

Elite Fire Tube Combi Boiler	Spare parts kit
Installer, User, and H-2 documents	Outdoor sensor
Condensate hose	Anchors and wall mount bracket



STEP 3 - MOUNTING ON THE WALL

1. Attach the wall bracket on the location where you want to install the appliance. Ensure it is level and on stud (16" centers) before proceeding. 2. Mark the four drill holes with a pencil or marker. Remove the wall bracket.

3. Drill four (4) holes using a 5/32 drill bit at the marked hole locations. 4. Mount the wall bracket to the wall with the four (4) included anchor bolts. Ensure the mounted bracket is level.

5. Align the heater bracket grooves on the back of the appliance with the tongues on the wall bracket and hang the appliance on the bracket.



STEP 4 - GAS PIPING

This appliance is configured for Natural Gas from the factory. If conversion to Propane (LP) gas is required, the conversion kit supplied with the appliance must be used. Before connecting the gas supply, determine the gas type and pressure by referring to the rating plate. The supply line must be sized for the maximum outputs of the appliance model being installed.

WARNING!

Failure to follow the conversion instructions will result in death or personal injury.



NOTE: The gas meter capacity needs to be more or equal to the total capacity of the connected appliances.

STEP 5 – WATER PIPING

Ensure the pipe material is suitable to meet local codes and standards. The pipe must be clean and without blemish. DO NOT apply torch heat within 12" of the bottom connections of the appliance. The pipe size used for DHW is 3/4" and central heating should be 1" in diameter.



STEP 6 - CONDENSATE DRAIN CONNECTION

Condensate must be drained in accordance with all local regulations. A condensate drain must be connected to the $1/2^{\circ}$ connection at the bottom of the appliance. Route the drain line to a near by floor drain, laundry tub, or condensate pump.



STEP 7 - VENTING

2" COMBINED VENT LENGTH	3" COMBINED VENT LENGTH
MAXIMUM	MAXIMUM
50' (15 M)	100' (30 M)

You must follow the installation manual for recommended vent materials and guidelines.

- 1. Clean and dry the appliance connection. DO NOT use primer or
- cement on the appliance connection. 2. Push the included 6" length CPVC pipe into the vent connection until it touched the bottom of the fitting.
- 3. Tighten the clamps using a screw driver.
- 4. Ensure the pipe is secure before continuing installation.
- 5. For 2" installation, install a reducing coupling in a vertical section of pipe.

WARNING!

Failure to properly install the included 6" length of 3" CPVC pipe BEFORE venting the appliance could result in product damage, severe personal injury, or death.



Installing the included 6" length CPVC pipe into the exhaust connection on the appliance.



STEP 8 - ELECTRICAL CONNECTION AND DIP SWITCH The power supply required is 120VAC at 50/60 Hz. Failure to provide correct power could result in electric shock or fire.



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Electrical

Outlet

Use a Phillips Head screw driver to remove four screws on the front cover. Then remove the front cover of the unit.

Ensure the Appliance is Properly Grounded





THIS GROUNDING PRONG FROM THE APPLIANCE PLUG!

Confirmation of the DIP Switch Default Setting:



DIP S	WITCH	OFF	ON
1 – 3	DO NOT MOVE	DO NOT MOVE	
4	Vent Size	2"	3"
5	Gas Type	LP	NG
6	High Fire	Normal Operation	High Fire
7	Low Fire	Normal Operation	Low Fire

STEP 9 – SYSTEM PURGE

Ensure the automatic feed valve is open to fill the central heating loop with water until 15 PSI is reached. Ensure the automatic air vent is open to release the air from the system. If the system is not filled with enough water or if there is air trapped in the system Er. 80 will appear.

Open hot water faucets in the DHW loop until water flows freely from all hot water faucets.

Use this mode to run the pump to circulate the water and aid in air removal from the system.

Press 'current status button' for 5 seconds while display is powered off to enter into installer mode settings.



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Press the dial for a second when 'AP:CP' is displayed. Turn the dial to the desired tim ' is displayed



Turn the dial to 'on' status when off" is displayed.(Default : off)



Press the dial to run the pump.



Press the dial to save the

setting (pump run time).

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Press 'current status button' to stop the pump and exit this mode. NOTE: The pump will automatically stop after the set time even if user does not exit this mode.

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Turn the dial to set desired heating

water temperature

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heating temperature control button' to enter temperature

setting mode. The

is set to 180°F

default temperature

Press 'Central





Press dial button to complete setting.

SET DHW TEMPERATURE (95F - 120F)





temperature control button to enter DHW temperature setting mode. The default temperature is set to 125°F

Press hot water

Press dial button to complete setting.

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NOTE: To set the DHW temperature higher than 120F (Range: 120F -140F), press the top left button for 1 second, then hold it for more than five second. The temperature will be shown with H. Scroll the dial CLOCKWISE to set the temperature. Then press the dial to confirm the set temperature.

OUTDOOR RESET MODE Set the Maximum Outdoor Temperature:





Press 'current status button' for 5 Turn the dial until '6:oH' shows up. secs while display is powered off to enter into installer setting mode.



when initial 68 setting is displayed

Press dial button to save the Press 'current status button' for a sec to go back to initial status after confirmation.

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Press dial button for a sec when '6:oH' is displayed.



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Set the Minimum Outdoor Temperature:





Turn the dial until '7:oL' shows up

Press dial button for a sec when '7:oL' is displayed

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Press dial button to save the setting

Set the Maximum CH Supply Temperature:





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Press dial button for a sec when '16:cH' is displayed







Press dial button for a sec when '17:cL' is displayed.

Press 'current status button' for 5

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Turn the dial to the desired setting when initial setting is displayed. (Range: miniimum supply tempera-ture + 9 °F ~ 180 °F) - Default: 180°F

Set the Minimum CH Supply Temperature:



Press 'current status button' for 5 secs while display is powered off to enter into installer setting mode.

Press 'current status button' for a sec to go back to initial status after confirmation

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Turn the dial until '16:cH' shows up









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Press 'current status button' for 5 secs while display is powered off to enter into installer setting mode.

when initial 5 setting is displayed

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Press dial button for a sec again, to

go back to the previous mode

Turn the dial to the desired setting when initial setting is displayed. (Range: 86 °F - maximum CH supply temperature -9°F, Default: 86 °F)

To View Outdoor Temperature:



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Press 'current status button' for a sec to go back to initial status after

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confirmation.

Press 'current status' button with

'0:ot" mode to go back to initial



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To View CH Target Temperature:

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Press 'current status button' to exit.

2. Open a hot water faucet to allow

domestic water to flow through the appliance (DHW Demand).

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Hot Wate

status

Press this button to view CH target temperature.

STEP 11 - MEASURING GAS INLET PRESSURE

1. Open the gas shut-off valve to start running the appliance. Loosen the inlet gas pressure tap screw and connect a manometer to read the inlet pressure.



3. The gas inlet pressure should be in the following range for proper operation and to assure the appliance operates safely.

Natural Gas L		LP	' Gas	
Max.	14"	Max.	14" WC	
Pressure	WC	Pressure		
Min.	3.5"	Min.	3.5"	
Pressure	WC	Pressure	WC	



SYSTEM WATER PIPING METHODS

Primary/Secondary Piping with Zone Valves (DHW Priority)



Primary/Secondary piping with pumps (DHW priority)



STEP 12 - FINAL CHECK

VERY IMPORTANT! SEE INSTALLATION MANUAL FOR FURTHER DETAILS.

1. Check installation conditions.

- 2. Check gas pipe installation for leaks.
- 3. Check exhaust vent and intake pipe installation for leaks. Ensure all
- vent pipes are properly supported and sealed.
- 4. Check condensate drain installation.
- 5. Ensure DIP Switches are properly set for installation.
- 6. Check the power supply and connections.
- 7. Check burner flame for proper operation.
- 8. Close the front cover of the appliance.
- 9. For any troubleshooting refer to the Installation Manual.

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