



# SmartStat™ Wireless

## Overview

The EnergyLogic SmartStat™ Wireless provides set-back temperature programmability and added monitoring and feedback on EnergyLogic waste oil furnaces. Also provides internet and cell connectivity through Honeywell Prestige IAQ Thermostat.

## What it Does

- Allows you to lower the set point automatically when less heat is needed, such as nights and weekends as well as allowing remote monitoring and settings changes.
- Monitors low fuel sensor and alerts you when you are out of fuel. It will then automatically shut the furnace off to prevent air from entering the pump and fuel lines and send email/message alert.
- Records total furnace run time.
- Allows you to track run time since the last service was performed. Sends email/message alert per 800 hr. run time.
- Monitors burner lock out to let you know if the primary control needs to be reset and sends email/message alert.
- Monitors fuel filter or pickup and sends email message/ alert for high vacuum.



## Product Features

- Designed for use with all EnergyLogic furnaces equipped with a Carlin Primary Control.
- Simple Installation.
- Programmable for improved comfort and energy savings.
- Internet connected monitoring for low fuel, blocked fuel filter, maintenance run time and Primary Control trip

# Installing SmartStat™ Wireless



Electrical Shock / Electrocution

There are potential hazards associated with the installation of this product. Codes, regulations, and general safety rules should be followed at all times to prevent accidents leading to injury, death, and property damage.

## WARNING

Do not allow unqualified personnel to install and operate this product. Failure to install and maintain your system properly will void your warranty. Contact EnergyLogic for assistance.

## DANGER

The transformer box operates on 115V/60 Hz electrical power from the furnace. Turn power off at the circuit breaker and lock it out prior to performing any work on the system.

### INCLUDED ITEMS



### Installation Instructions:

- Mount the low volt transformer box on the furnace and wire per the connection diagram on page 5 (wire and conduit assembly is part of the box assembly). **NOTE: High Volt connections are made to the furnace. Turn off and lock out power to the furnace.** The black wire connects to furnace wire box black (stripped wire - insert). The orange and white wires have a terminal with a "piggyback" male tab. Disconnect the orange and white wires from the hour meter in the furnace box, connect the piggyback wires to the hour meter and then put the original orange and white wires from the furnace on the tabs, matching white to white and orange to orange.
- Mount the hour meter box, equipment interface module and Honeywell Prestige IAQ thermostat in a convenient location (install battery + side up). Attach wiring per the connection diagrams on page 5. 25' of Cat5e supplied for low volt connections.

(continued on next page)

## Installation Instructions cont:

- Install the brass tee on the metering pump inlet assembly. Mount the vacuum switch and the vacuum gauge on the brass tee. (For add – on, the vacuum gauge must be removed from the pump inlet assembly before installing the Brass Tee and then re-installed) (See Picture 5) Use the appropriate thread sealer. Do not use Teflon tape!

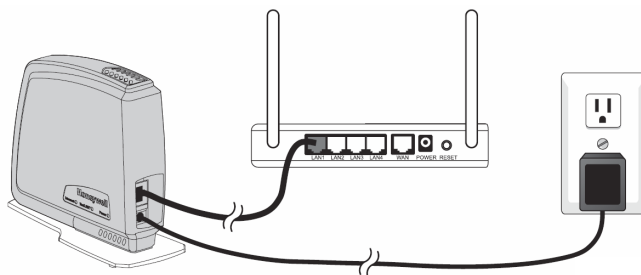
## Wiring SmartStat™ Wireless

- Connect leads from vacuum switch on pump assembly (See Picture 3) to “S1” of the EIM.
- Connect Low Fuel Cut-Off wires (See Picture 4) to “S2” of the EIM.
- Connect Hour Meter “S3” to “S3” of the EIM.
- Connect “AA” of the Primary Control to “S4” of the EIM. (see Picture 2).
- Connect RedLINK Internet Gateway to router or modem with Ethernet cable (RJ45). Then connect gateway’s power cord to an electrical outlet that is not controlled by a wall switch. (see Illustration 1).

Connect spade end of primary control Wire Assy. Connect opposite end to “S4” of EIM.

Plug in connector of thermostat wire assy. Connect opposite end to “W” and “RH” of the EIM.

Illustration 1 - RedLink Internet Gateway

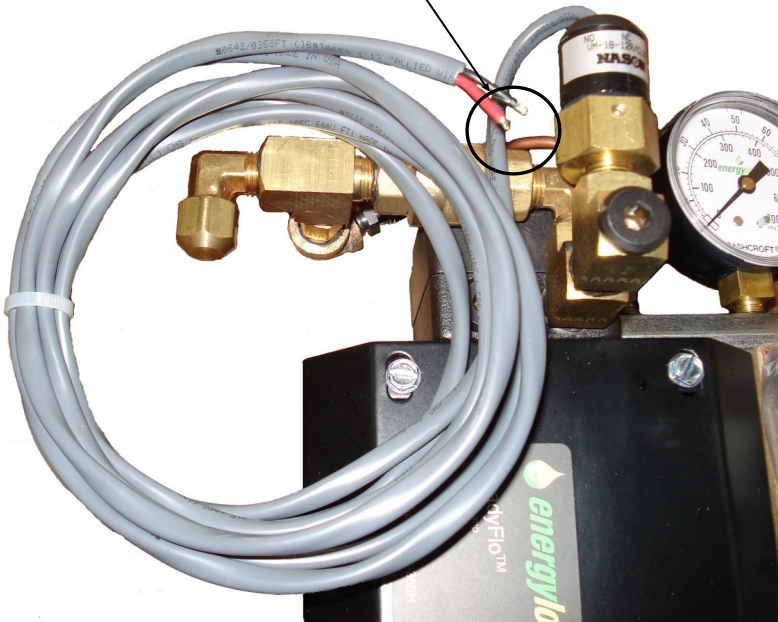


Picture 2 — Burner Assembly

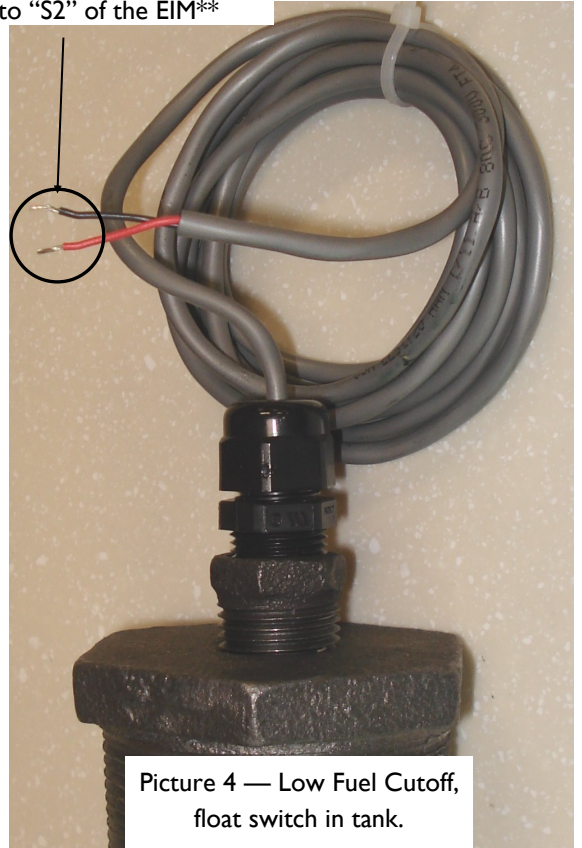
# Wiring SmartStat™ Wireless (cont)

Connect to "S1" of the EIM

Connect to "S2" of the EIM\*\*

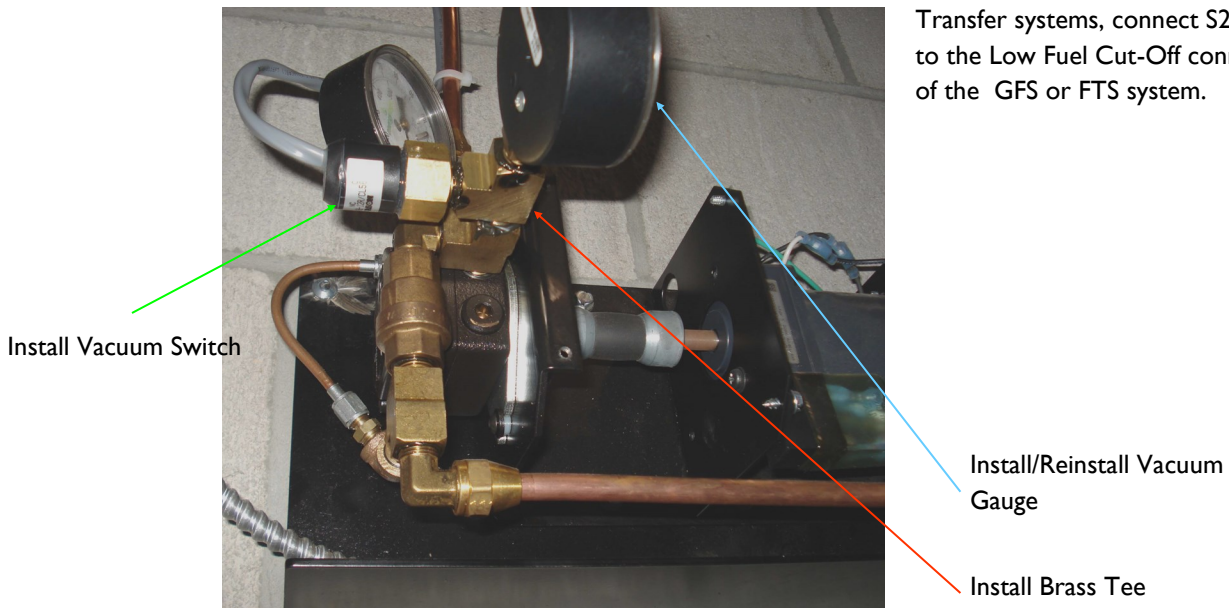


Picture 3 — Metering Pump Vacuum Switch



Picture 4 — Low Fuel Cutoff, float switch in tank.

\*\* When used with Gravity Feed or Fuel Transfer systems, connect S2 of each EIM to the Low Fuel Cut-Off connection pairs of the GFS or FTS system.



Install Vacuum Switch

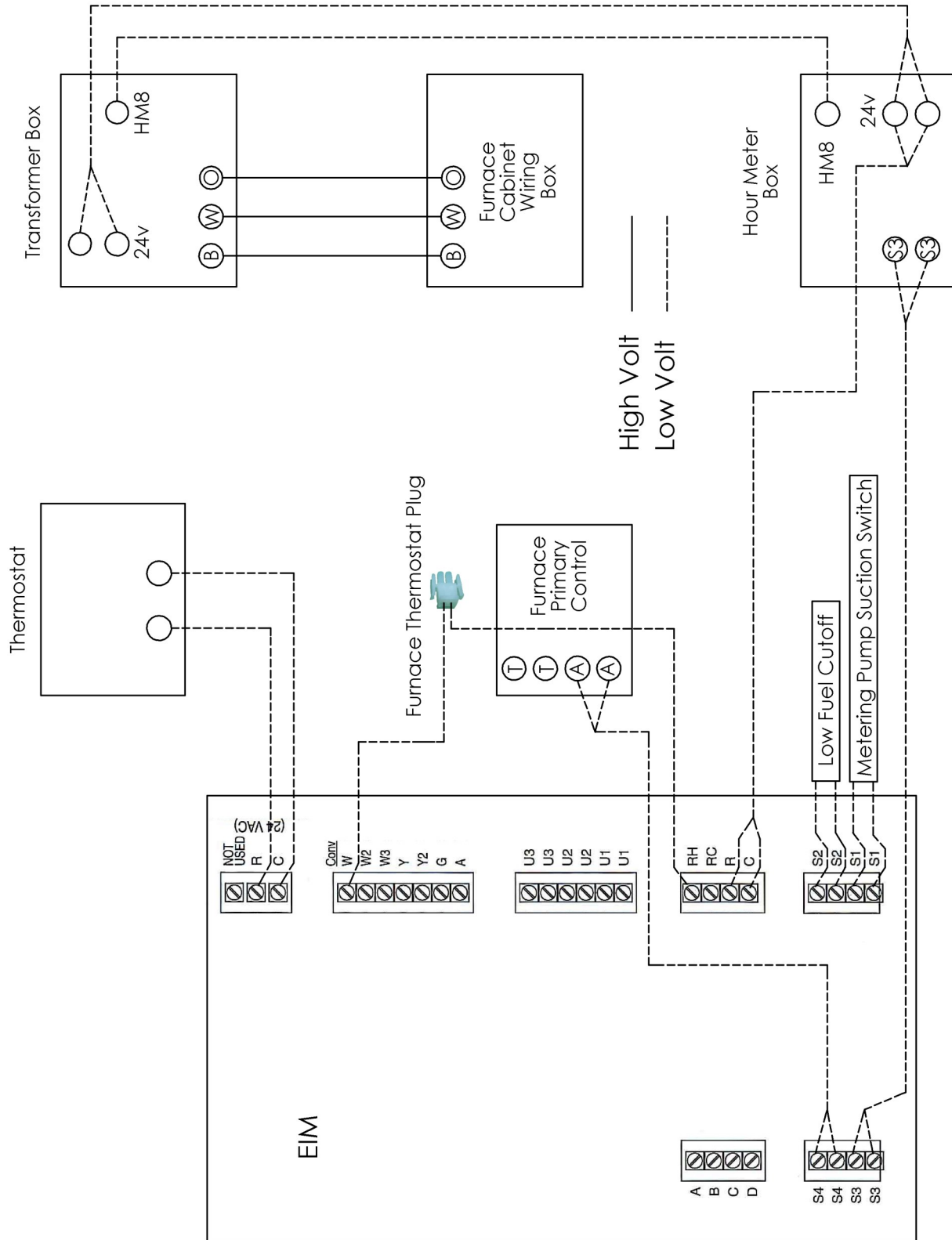
Install/Reinstall Vacuum Gauge

Install Brass Tee

Picture 5 — Metering Pump Vacuum Switch

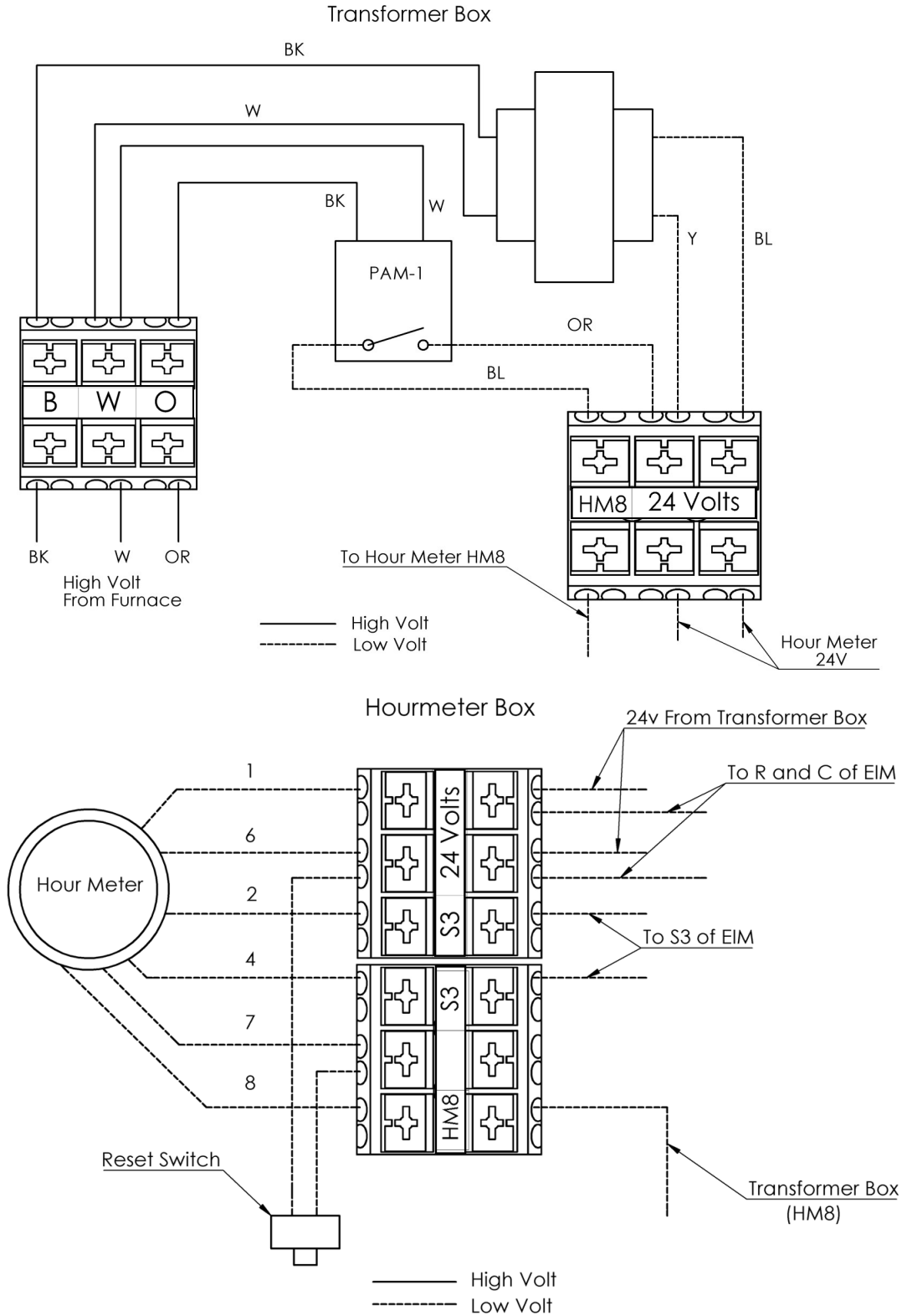
# Wiring SmartStat™ Wireless

## Connection Diagram

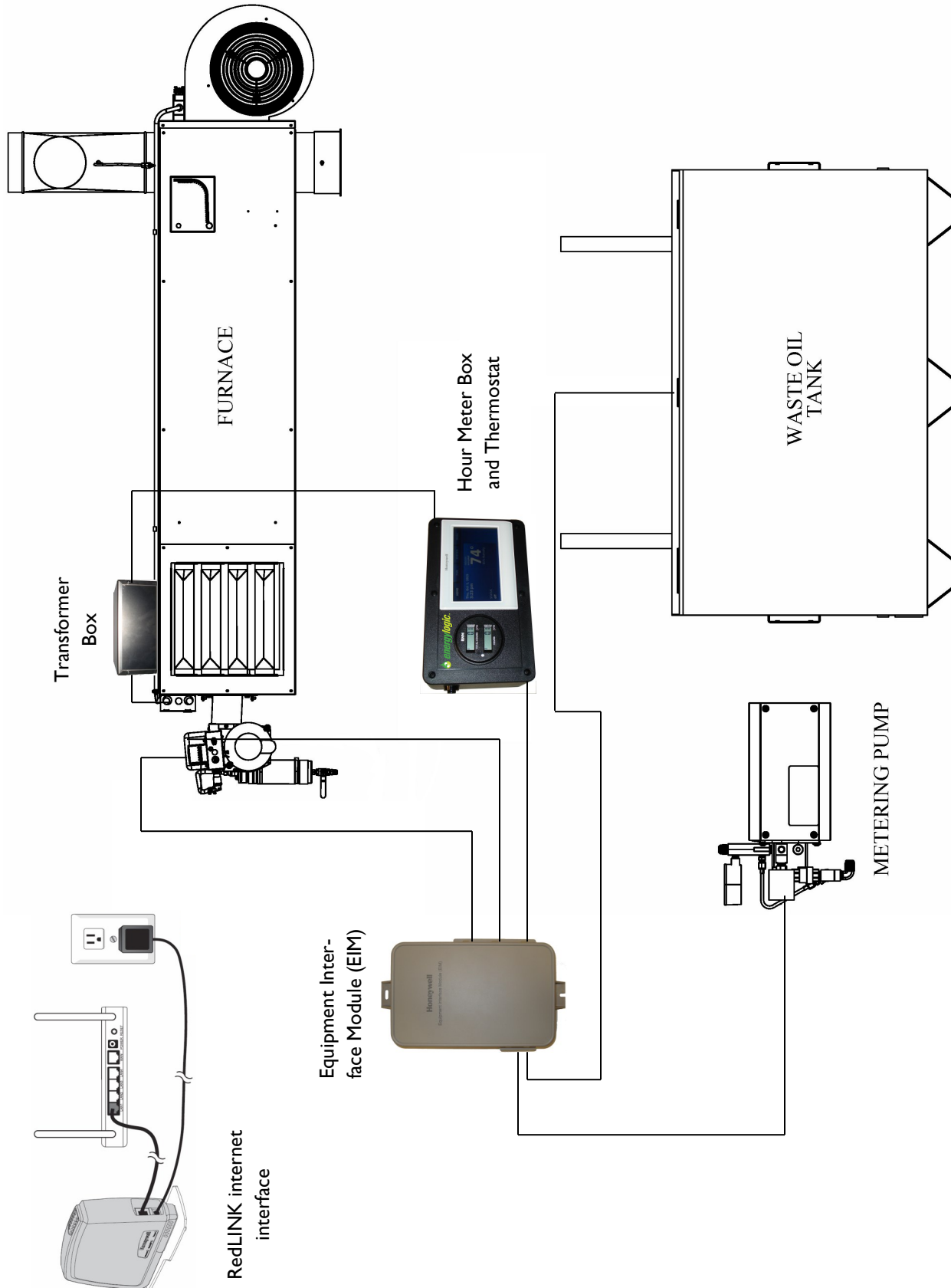


# Wiring SmartStat™ Wireless

## Connection Diagram



# Wiring SmartStat™ Wireless



# SmartStat™ Wireless Message Key

Event	Thermostat Report	Thermostat Info Screen	Email Report	MyTotalConnect Report
Suction Gauge Open - Plugged Oil Filter	Replace Your Air Filter	Replace Air Filter. Press dismiss after it is replaced. Your system was shut down because there is a problem with the system. Contact your dealer for service.	The following Alert has occurred: Replace your Air Filter	Replace your Air Filter. Press Dismiss after it is replaced. Your system was shutdown because there is a problem with the system. Contact your dealer for service.
Low Fuel	Your System Was Shut Down	Your system needs service. Contact your dealer.	The following Alert has occurred: Your system was shutdown	Your system needs service. Contact your dealer.
Primary Control trip	Your system needs service	Runtime alert cleanout	The following Alert has occurred: Custom Dry Contact Alert	A custom dry contact alert has been activated. Please refer to the thermostat for more detailed information.

## NOTICE - Message Key

“Replace Your Air Filter” means CHANGE SPIN ON OIL FILTER

“Your System Was Shut Down” means LOW FUEL LEVEL

“Your System Needs Service” means PRIMARY CONTROL IS TRIPPED

“Clean Ash” means 800+ RUN HOURS SINCE LAST SERVICE

