

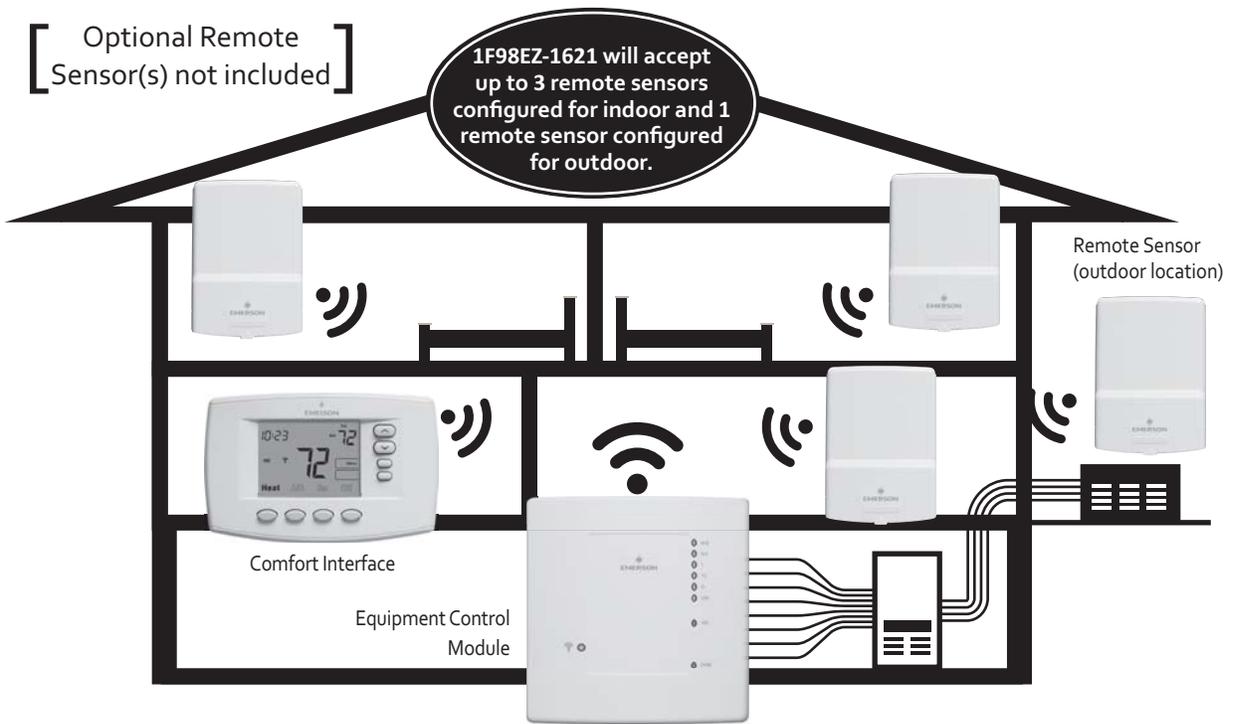
# 1F98EZ-1621

## Emerson® Blue™ Wireless Easy Install™

Provides Wireless Control for up to 4 Heat/2 Cool Heat Pump Stages  
or up to 2 Heat/2 Cool Stages on Conventional Systems

### INSTALLATION INSTRUCTIONS

**FAILURE TO READ AND FOLLOW ALL INSTRUCTIONS CAREFULLY  
BEFORE INSTALLING OR OPERATING THIS CONTROL COULD CAUSE  
PERSONAL INJURY AND/OR PROPERTY DAMAGE.**



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## APPLICATIONS

Configuration Options	Applications	Maximum Stages
Single Stage	Gas, Oil, Electric, Heat Only, Cool Only or Heat Cool Systems	1/1
Multi-Stage	Gas, Oil, Electric, Heat Only, Cool Only or Heat Cool Systems	2/2
Heat Pump	Single or Two Compressor Systems with up to 2 Stages of Aux / Em Heat	4/2
Heat Pump with Dual Fuel	Single or Two Compressor Systems with up to 2 Stages of Fossil fuel Heat	4/2

## SPECIFICATIONS

### Electrical Rating:

Input-Hardwire.....	20 to 30 VAC
Terminal Load.....	1.0A per terminal, 2.5A maximum all terminals combined
Setpoint Range.....	45° to 99°F (7° to 37°C)
Operating Ambient.....	32°F to +105°F (0° to +41°C)
Operating Humidity.....	90% non-condensing max.
Shipping Temperature Range.....	-40° to +150°F (-40° to +65°C)
Dimensions Interface.....	4-1/2"H x 6"W x 1-1/4"D
Dimensions Control.....	5-1/2"H x 5-3/4"W x 1-1/2"D

### CAUTION

To prevent electrical shock and/or equipment damage, disconnect electric power to system at main fuse or circuit breaker box until installation is complete.

### WARNING

Comfort Interface installation and all components of the control system shall conform to Class II circuits per the NEC code.

### ATTENTION: MERCURY NOTICE

This product does not contain mercury. However, this product may replace a product that contains mercury.

Mercury and products containing mercury must not be discarded in household trash. Do not touch any spilled mercury. Wearing non-absorbent gloves, clean up any spilled mercury and place in a sealed container. For proper disposal of a product containing mercury or a sealed container of spilled mercury, place it in a suitable shipping container. Refer to [www.thermostat-recycle.org](http://www.thermostat-recycle.org) for location to send product containing mercury.

# MOUNT RETURN AIR SENSOR AND EQUIPMENT CONTROL



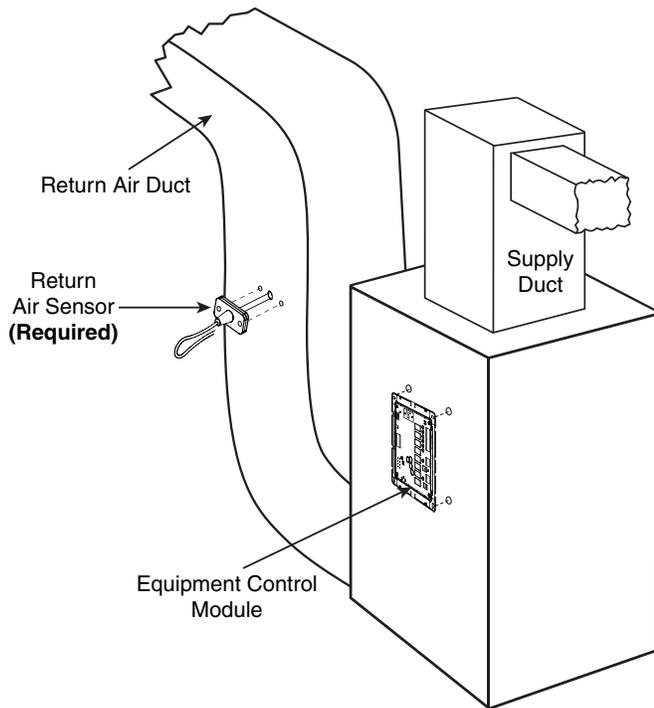
Return Air Sensor (RAS)

The RAS monitors temperature of the return air and is needed at all times for system operation.

Drill 1/4" hole in return air duct at least 18" upstream from humidifier, dehumidifier or any other HVAC accessories.

Insert RAS into duct and fasten with two sheet metal screws.

If the system is hydronic, locate return air sensor in conditioned space.



**Note:** Ten (10) feet of wire is supplied with the RAS.

## IMPORTANT

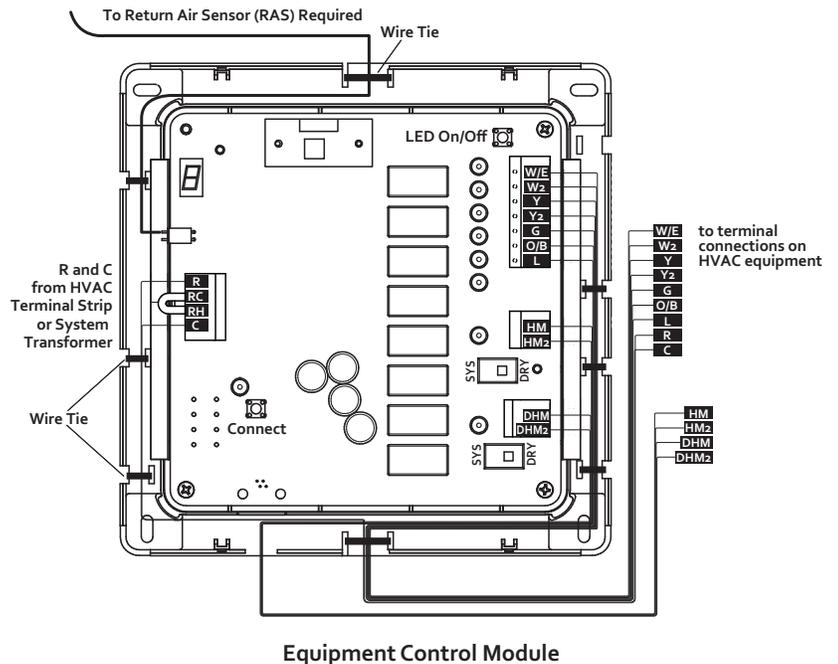
**Do not provide battery power to Comfort Interface or remote sensor (if installed) until instructed. All wireless components in the kit are configured to communicate at the factory.**

Mount Equipment Control Module on wall near HVAC equipment, or on the air handler. Do not install Equipment Control Module inside of the HVAC equipment. Use screws to securely fasten control in place. Do not drill into critical furnace components. Wall anchors and screws are provided for dry wall mounting (3/16"). See next page for wiring.

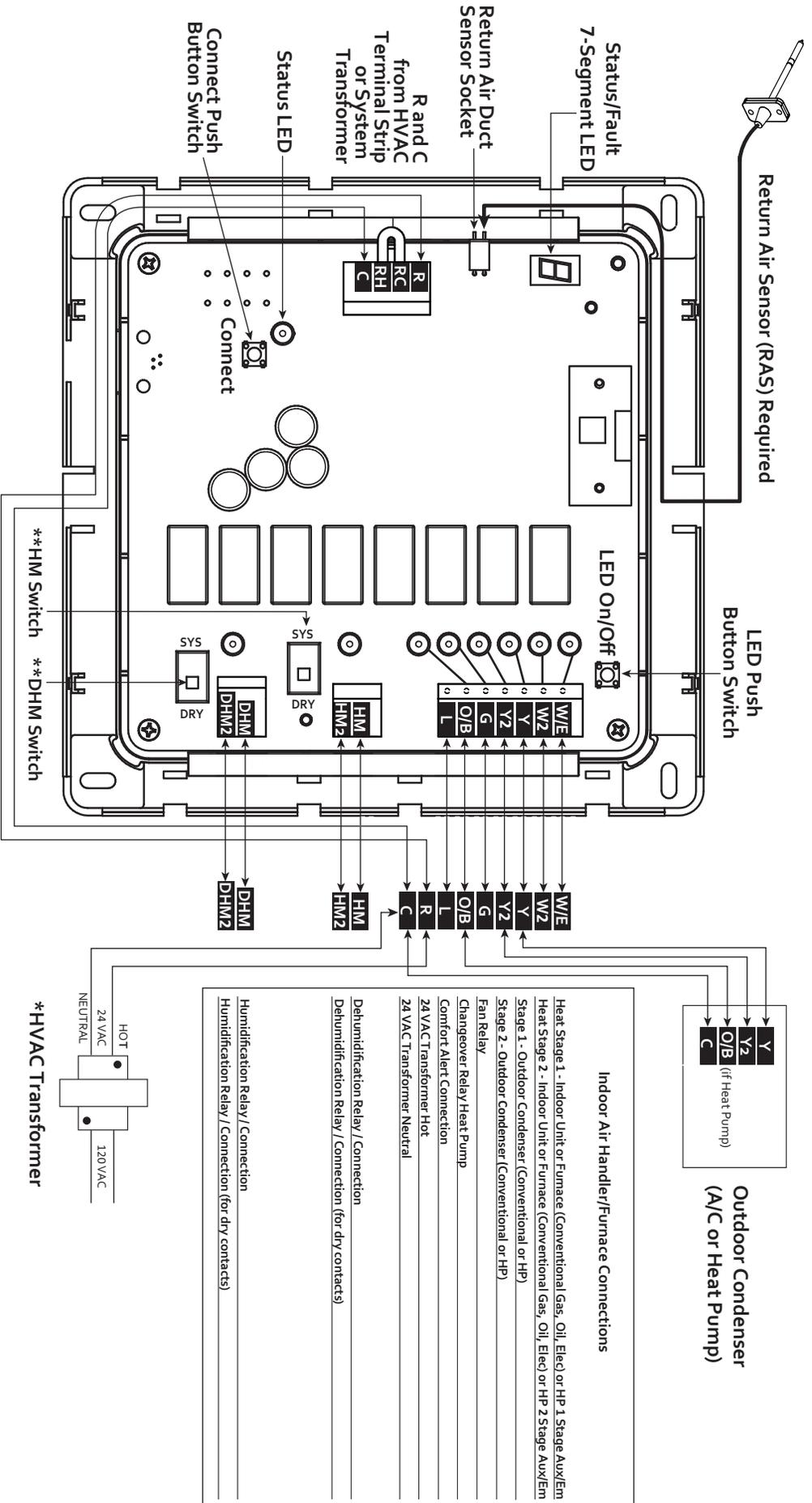
### Wiring Steps

1. Remove the cover from the Equipment Control Module.
2. Plug Return Air Sensor (RAS) lead into return air sensor connection on the Equipment Control Module (**required**). Route the sensor lead into the wiring channel and out the top of the control.
3. Use thermostat wire to make the connections from Equipment Control Module to the HVAC equipment or terminal strip. Strip the sheath of the wire bundle back approximately 10".
4. Insert wire bundle into the bottom of Equipment Control Module. Two slots are provided if more than one bundle of wire are required.
5. Route two wires from the bundle to the left side of the Equipment Control Module for terminals R and C.
6. Route the rest of the wires in the bundle to the right side of the Equipment Control Module and fasten loosely with wire ties.
7. Trim wires to length for each connection required, strip ends and insert into control quick connect block.

Refer to wiring diagram for terminal functions and wire routing.



# EQUIPMENT CONTROL WIRING TO HVAC EQUIPMENT



\*\*To use the HVAC transformer to power humidification/dehumidification switch HM/DHM switches to "SYS" position:

- Connect humidifier to HM
- Connect dehumidifier to DHM

If humidifier or dehumidifier has a separate transformer switch HM or DHM switch to "DRY" position:

- Connect humidifier to HM and HM2 (or)
- Connect dehumidifier to DHM and DHM2

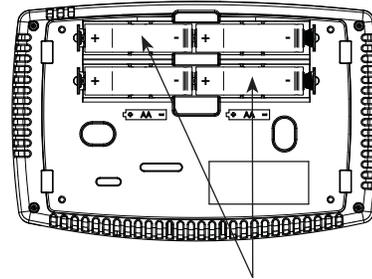
\* For two transformer system, cut and tape off one transformer. If transformer safety circuits are only in one of the systems, remove the transformer of the system with NO safety circuits. If required, replace remaining transformer with a 75 VA Class II transformer. After disconnecting one transformer, the two commons must be jumpered together.

# INSTALL BATTERIES

## IMPORTANT

Wireless communication for the Comfort Interface and Equipment Control Module have already been configured at the factory. It is not necessary to press the connect buttons at installation.

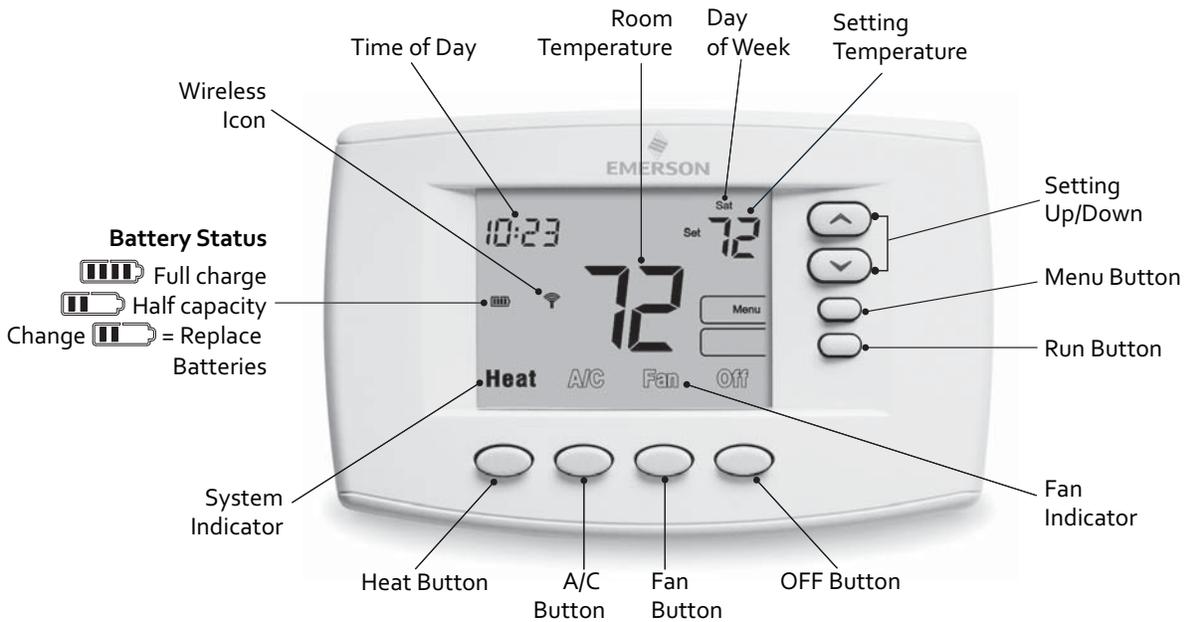
Install batteries in the Comfort Interface.



4 "AA" Batteries

Comfort Interface

# INSTALLER QUICK REFERENCE



# CONFIGURE COMFORT INTERFACE FOR SYSTEM

Before operating the heating and cooling system enter the installer menu and configure the Comfort Interface for the system

## Entering and Navigating the Advanced Installer Configuration Menu

On the Home Screen Display, press and hold the **Menu** button for approximately 5 seconds to enter the Comfort Interface Options Configuration Menu. Press and hold the **Menu** button again for approximately 5 seconds to enter the Advanced Installer Configuration Menu. Press **Next** button to step through configuration menu items.

Menu Reference Number	SS1 MS2	HP1 HP2	Displayed (Factory Default)	Press  or  to select options	Description
01	●	●	MS2	SS1, HP2, HP1	<i>System Configuration</i> MS2 = Multi-Stage conventional (no heat pump) HP1 = Single compressor HP2 = 2 compressor 2 speed compressor SS1 = Single Stage conventional (no heat pump)
02	●		(GAS)	ELE	Gas setting: Furnace controls blower
	●	●	(ELE)	GAS	Elec setting: Comfort Interface controls blower
03		●	(O) On	B	<i>Changeover Relay</i> "O" Energizes O/B reversing valve terminal in cooling "B" Energizes O/B reversing valve terminal in heating
04	●		Heat-A/C-Off	Heat-A/C Auto-Off, Heat-Fan-Off, Heat-Off, A/C-Off	Switch Configuration for SS1 or MS2
		●	Aux Heat-A/C-Off	Aux Heat-A/C Auto-Off, Aux Heat-Fan-Off, Aux Heat-Off, A/C-Off	Switch Configuration for HP1 or HP2
05	●		(ME) CR Heat	FA, SL	<i>Adjustable Anticipation for MS2 or SS1. If longer cycles are desired, set to SL.</i> Heat cycle rate: Fast, Med, and Slow
06	●		(ME) CR A/C	FA, SL	<i>Adjustable Anticipation for MS2 or SS1</i> Cool cycle rate: Fast, Med, and Slow
07		●	(ME) CR Heat A/C	FA, SL	<i>Adjustable Anticipation for Heat Pump (HP1 or HP2)</i> Heat Pump cycle rate: Fast, Med, and Slow
08		●	(FA) CR Aux Heat	SL	<i>Adjustable Anticipation for Auxiliary (HP1 or HP2)</i> Auxiliary cycle rate: Fast, Med, and Slow
09	●	●	(Off) CA	On	<i>Comfort Alert active protection On or Off.</i> <b>On</b> - Enables active protection for the compressor. If the CA module sends alerts for condition number #2, 3, 4, 6 or 7 the interface will cancel the call for cool to protect compressor. The interface will blink setpoint and display "Call for Service" as well as the Comfort Alert numbers. (see troubleshooting for Comfort Alert) <b>OFF</b> - Will disable the active protection for the compressor
10	●	●	(Off) Id DeHum	On	<i>Independent Dehumidification</i> Dehumidifies in both heat and cool modes. (Independent of a call for heat or cool) <b>OFF</b> (default) cancels independent dehumidification option. To return to dehum Off press "+" past 80% until Off appears Selecting <b>On</b> energizes the DHM terminal(s) and fan terminal (G) when humidity is above the de-humidification setting. This feature is often used for dehumidification systems independent from the heating and cooling system. <b>Note:</b> You must have the Dehumidification feature activated. (See Homeowner Configuration Menu #8)
11	●	●	(Off) ID Hum	On	<i>Independent Humidification</i> Humidifies in both heat and cool modes. (Independent of a call for heat or cool) <b>OFF</b> (default) cancels independent humidification option. <b>On</b> energizes the HM terminal(s) and fan terminal (G) when humidity is below the humidification setting. This feature is often used on steam systems and is independent from the call for heat or cool. <b>Note:</b> You must have the humidification feature activated. (See Homeowner Configuration Menu #7)
12	●	●	(Off) CL	On	<i>Compressor Lockout</i> <b>CL ON</b> - Will cause the interface to wait 5 minutes between cooling cycles. This is intended to help protect the compressor from short cycling. Some newer compressors already have a time delay built in and do not require this feature. Your compressor manufacturer can tell you if the lockout feature is already present in their system. When the Comfort Interface compressor time delay occurs, it will flash the setpoint for up to five minutes. <b>CL OFF</b> - Will disable the feature
13	●	●	(Off) CO	On	<i>Compressor Optimization</i> <b>CO ON</b> - provides a delay in circulator fan operation after the compressor turns on or off. When compressor turns on (for a call for heat in heat pump or a call for cool) the fan will be delayed for five seconds before turning on to allow the air to be heated or cooled. After the compressor turns off for a call for cool, the fan will continue to run for 20 seconds to capture additional cooling from the system. <b>CO OFF</b> - There will be no delay in fan operation
14	MS2	●	(ON) FA Heat	Off	<i>Fast Heat Stages</i> <b>ON</b> - Will enable this feature if you need to rapidly heat your home. Manually changing the setpoint by 3 degrees or more will enable all stages of heat. <b>OFF</b> - May not bring on secondary rapidly because it allows the Comfort Interface to compute the optimum time to stage.
15	MS2	●	(On) FA A/C	Off	<i>Fast Cool Stages</i> <b>ON</b> - Will enable this feature if you need to rapidly cool your home. Manually changing the setpoint by 3 degrees or more will enable all stages of cool. <b>OFF</b> - May not bring on secondary rapidly because it allows the Comfort Interface to compute the optimum time to stage.

# CHECK SYSTEM OPERATION

## NOTE

Installer can operate the Comfort Interface at the equipment before mounting to wall. This is more convenient than walking back and forth between Comfort Interface and HVAC system checking components are energized.

Apply power to Equipment Control Module.

### Fan Operation

If your system does not have a **G** terminal connection, skip to **Heating and Cooling System** section.

1. Press **FAN** button. Blower should turn on.
2. Press **FAN** button. The blower should stop immediately.
3. "FAN" indicates fan is in auto mode.

### Heating and Cooling System

1. Press **Heat** or **A/C** button to heat or cool. Run temperature 1° above or below room temperature. The heating or cooling system should start.
2. For staging systems, run temperature 3° above or below room temperature. Heat or Cool - LED display will be indicated on equipment control.
3. Run temperature to below or above room temperature. The system should shut off.

### Humidification/Dehumidification Operation

#### 1. Heating/Humidifier and Cooling/Dehumidifier

To set humidification or dehumidification setpoint, refer to the Homeowner Configuration Menu #7 and 8.

#### Second Stage Time Delay

Your Comfort Interface is designed to determine the optimum time to activate the second stage. Simply raising the temperature in heating or lowering it in cooling will not always force the Comfort Interface to bring the second stage on quickly. There is a time delay from 0-30 minutes depending on the performance of the first stage of the system.

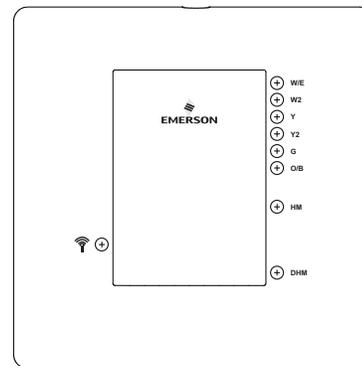
EXAMPLE: For the last 2 hours the Comfort Interface is set on 70° and the room temperature is 70° with the equipment using only the first stage of heat. Since the equipment is keeping the temperature within 1° of setpoint, the Comfort Interface will delay the second stage for a longer time if you manually raise the temperature or if the room temperature quickly changes. Once the second stage comes on, it will come on sooner the next time there is a difference between the setpoint and the room temperature. The net effect of the staging program is that when the first stage is capable of making temperature the second stage will delay longer. When the Comfort Interface calculates that first stage cannot make temperature in a reasonable time, the second stage will come on sooner. This built in function automatically optimizes the use of additional stages of heat or cool.

After Advanced Installer Configuration, LEDs on the control will indicate the selections of the Comfort Interface. The following tables show the LED indications if LED indications are turned on. Remove Equipment Control Module cover and press the LED switch to view LEDs. Press the button again to turn LED indicators off.

Conventional	Pump	
Gas or Elect	Gas or Elect	
Amber	Amber	W/E
Amber	Amber	W2
Amber	Green	Y
Amber	Green	Y2
Amber	Green	G
Amber	Green	O/B

RH	DRY	
Green	Amber	HM

RH	DRY	
Green	Amber	DHM



Equipment Control Cover

LED Indicator legend:

= Amber
  = Green
  = Off

LED's will be on constant to show configuration.  
LED's will flash to indicate the terminal output is active.

- W/E – 1st Stage Heating or Auxiliary
- W2 – 2nd Stage Heating or Auxiliary
- Y – 1st Stage Cooling
- Y2 – 2nd Stage Cooling
- G – Fan
- HM – Humidification
- DHM – Dehumidification

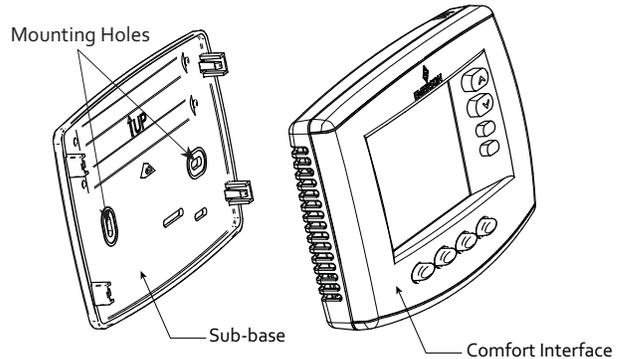
# LOCATE AND MOUNT COMFORT INTERFACE

## IMPORTANT

Before drilling holes for mounting the Comfort Interface, verify the areas chosen for mounting to allow good wireless communication. Place the Comfort Interface where it will be mounted (but do not drill holes yet) and follow steps in "View Wireless Devices (see below)." If the Comfort Interface is out of range, the display will read "Failed" so a different location may be required.

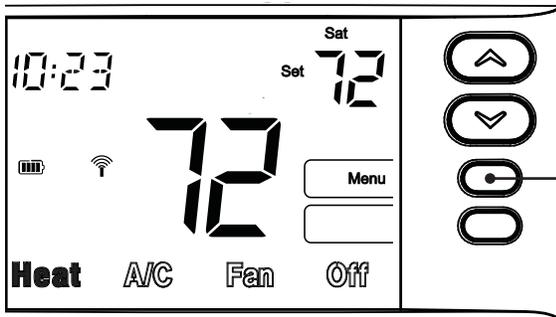
### Comfort Interface

1. Locate Comfort Interface on interior wall approximately 5 feet off the ground in an area representative of average room temperature.
2. Pull the Comfort Interface off the base. Forcing or prying Interface will cause damage to the unit.
3. Place sub-base on wall and mark mounting hole locations on wall using base as a template.
4. Move sub-base out of the way. Drill mounting holes. Use plastic screw anchors if needed to secure the base.
5. Fasten sub-base snugly to wall using two mounting screws. Leveling is for appearance only and will not affect Comfort Interface operation.
6. Comfort Interface can be attached after checking operation.

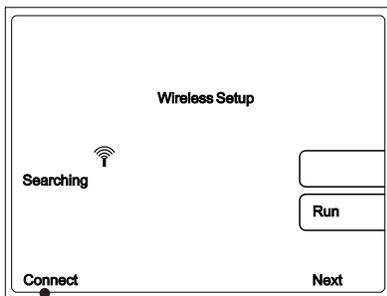


# VIEW WIRELESS DEVICES

Enter wireless set-up menu - checking wireless components installed.

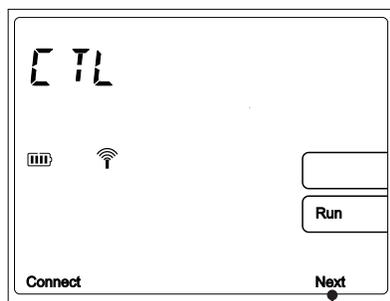


- 1 At Comfort Interface, press the **Menu** button once and release



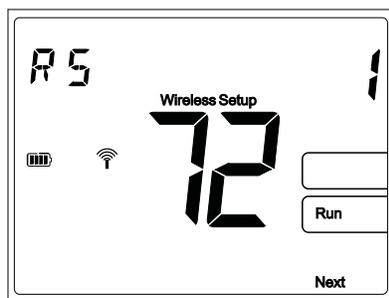
- 2 Press the **Connect** button once and release. The Comfort Interface will indicate "Searching" and then display "CTL" (for Equipment Control Module) when communication has been confirmed. If no communication, it will show "Failed" or CTL will not appear on screen. (see Troubleshooting)

# VIEW WIRELESS DEVICES

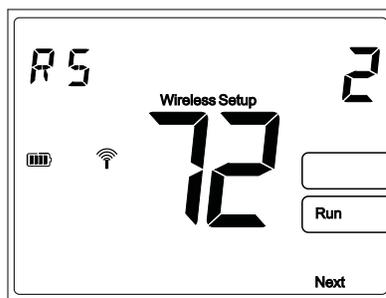


**3** Press the **Next** button once, **RS-1** (Remote sensor) should be displayed if a remote sensor is installed. Press **Next** again to confirm additional sensor(s) **RS-2**, **RS-3**, **ORS-4** (outdoor), **RAS**.

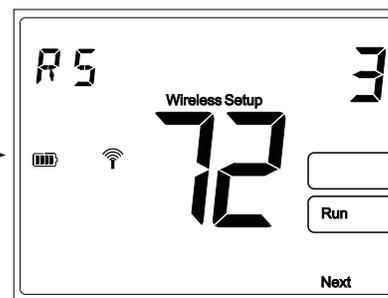
Equipment Control Module (Required) ↓



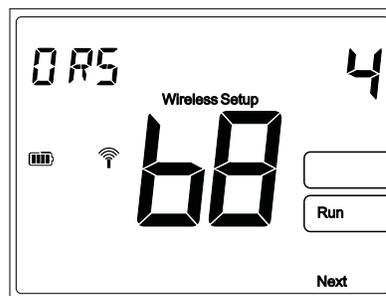
Remote Sensor 1 (if installed)



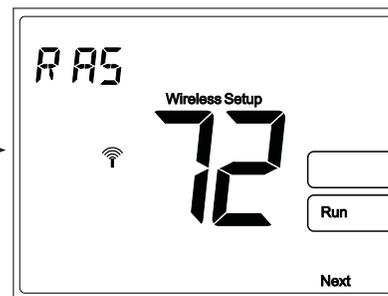
Remote Sensor 2 (if installed)



Remote Sensor 3 (if installed)



Outdoor Remote Sensor (if installed)



Return Air Sensor (required)

**4** Press the **Run** button to return to Home screen.

**Note:** The battery life for each wireless device is shown as it is being displayed on the Comfort Interface display.

# TROUBLESHOOTING

## Reset Operation

If a voltage spike or static discharge blanks out the display or causes erratic Comfort Interface operation, you can reset it by removing batteries for 2 minutes. After resetting it, replace the batteries and reset clock. If it still does not function correctly, press  and  and **Fan** button simultaneously. The Comfort

Interface should go blank and then all segments will be displayed momentarily.

**Note:** Be sure to review the installer configuration menu settings. When Comfort Interface is reset, installer configuration menu settings and programming will reset back to factory settings.

Symptom	Possible Cause	Correction Action
<b>Communication Failure</b> 	<ol style="list-style-type: none"> <li>Loss of 24 volt power to Equipment Control Module.</li> <li>Comfort Interface &amp; Equipment Module are located too far apart.</li> <li>Too much interference between devices.</li> </ol>	<ol style="list-style-type: none"> <li>Check 24 volt power at R-C on Equipment Control Module.</li> <li>Relocate Comfort Interface closer to the Equipment Control Module.</li> <li>Relocate Comfort Interface away from obstruction or closer to Equipment Control Module.</li> </ol>
<b>Comfort Interface temperature disagrees with another device</b>	Comfort Interface display setting requires adjustment.	The display can be adjusted +/-5°. See Temperature Display Adjustment in the Comfort Interface Configuration Menu Section.
<b>Furnace (Air Conditioner) Cycles Too Fast or Too Slow (narrow or wide temperature swing)</b>	The location of the Comfort Interface and/or the size of the heating system may be influencing the cycle rate.	Digital Comfort Interfaces provide precise control and cycle faster than older mechanical models. The system turns on and off more frequently but runs for a shorter time so there is no increase in energy use. If you would like an increased cycle time, choose SL for slow cycle in the Advance Installer Configuration menu.
<b>No Cooling</b>	Cooling system requires service.	Verify you are set to cool. Lower the setting below the room temperature.  Check Easy Install module <b>Y</b> terminal(s) LED's. If flashing, Comfort Interface/Equipment Control Module is calling for cool. Check for broken or shorted wire from Equipment Control Module to HVAC Equipment. If LED is <b>OFF</b> or solid <b>ON</b> Comfort Interface not calling.  Check 24 volt power to <b>C - Y, G</b> from Equipment Control Module to HVAC Equipment.  See fault code table for Comfort Alert Systems.
<b>No Heating (conventional furnace or Heat Pump Aux)</b>	<ol style="list-style-type: none"> <li>Furnace lock-out condition. Heat may also be intermittent.</li> <li>Heat pump system requires service.</li> <li>Pilot light not lit.</li> </ol>	<ol style="list-style-type: none"> <li>Verify you are set to heat. Raise setpoint above the room temperature.                Check Easy Install module terminal(s) LED's. If flashing, Comfort Interface/module is calling for heat. Check for broken or shorted wire from module to HVAC Equipment. If LED is <b>Off</b> or solid <b>ON</b> Comfort Interface not calling.                Check for 24 volt power to <b>C- W/E, W2</b> from module to HVAC Equipment.</li> <li>Many furnaces have safety devices that shut down when a lock-out condition occurs. If the heat works intermittently, contact the furnace manufacturer or local HVAC service person for assistance.                See fault code table for Comfort Alert Systems.</li> <li>Re-light pilot.</li> </ol>
<b>Heat, Cool or Fan Runs constantly</b>	<ol style="list-style-type: none"> <li>Possible short in wiring.</li> <li>Possible short in Comfort Interface.</li> <li>Possible short in heat/cool/fan system.</li> <li>Fan Switch set to Fan <b>ON</b>.</li> </ol>	Check each wire connection from module to HVAC Equipment to verify they are not shorted or touching together.  Check Equipment Control Module LED's. If flashing, Comfort Interface/Equipment Control Module is calling for heat, cool or fan. If heat or cool runs with LED <b>OFF</b> solid <b>ON</b> check for shorted wire from module to HVAC Equipment.
<b>Forgot Keypad Lockout Code</b>		Press and hold the <b>Menu</b> button for a minimum of 15 seconds. The Comfort Interface lock icon will be removed and Comfort Interface will return to normal operation.

**Note:** For troubleshooting Wireless Remote Temperature Sensors, refer to Installation Instructions for F145RF-1600.

## Rebooting Wireless Devices

If the system does not operate or communicate properly using the previous troubleshooting page, follow the steps below. This procedure removes and reconnects all wireless devices in the system to assure communication.

### Remove Wireless Devices

1. At the Comfort Interface, press **Menu** button once.
2. Press the **Connect** button.
3. Press and release the **Next** button until the display shows the device you want to delete, **CTL**, **RS 1**, **RS 2**, **RS 3** or **ORS**.  
CTL (Equipment Control Module )  
RS 1 (Indoor remote sensor 1)  
RS 2 (Indoor remote sensor 2)  
RS 3 (Indoor remote sensor 3)  
ORS (Outdoor remote sensor 4)  
RAS (Return Air Sensor - do not delete)
4. Press and hold the  and  buttons simultaneously to delete each device. Press **Next** until the display shows the next device to delete.
5. Press the **Run** button to exit the menu.

## Add Wireless Devices

1. Power the device.
2. Go to **Equipment Control Module** and press the **Connect** button. **Equipment Control Module** Status LED will flash green indicating searching for wireless devices.
3. Press the **Connect** button on the device you want to add.

### Confirm Wireless Devices are Communicating

1. Using the Comfort Interface, press the **Menu** button once.
2. Press the **Connect** button once and release. Comfort Interface will display (CTL) control and wireless icon.
3. Continue pressing and releasing the **Next** button to view all connected and communicating wireless devices. They will appear in the following order to a maximum of:  
CTL (Equipment Control Module)  
RS 1 (Indoor remote sensor 1)  
RS 2 (Indoor remote sensor 2)  
RS 3 (Indoor remote sensor 3)  
ORS (Outdoor remote sensor 4)  
RAS (Return Air Sensor)

# TROUBLESHOOTING

**Note:** This is only applicable for systems featuring **Comfort Alert** (or similar) technology.

## Comfort Alert™ Troubleshooting

Indicator			
Comfort Alert Module	Equipment Control Module 7-Segment LED	Status LED Description	Comments
Green "POWER"		Module has power	Supply voltage is present at module terminals
Red "TRIP" Flash		Comfort Interface energizing "Y" terminal to call for cool but the compressor is not running	<ol style="list-style-type: none"> <li>1. Compressor protector is open. Check high head pressure and compressor supply voltage.</li> <li>2. Check for open unit power disconnect, circuit breaker or fuses, low pressure switch if present in system or Compressor contact or has failed open.</li> <li>3. Broken wire or connector not making contact.</li> </ol>
Yellow "ALERT" Flash 1	1	Long Run Time Compressor is running extremely long run cycles	<ol style="list-style-type: none"> <li>1. Low refrigerant charge.</li> <li>2. Evaporator blower is not running. Check blower relay, blower motor capacitor, motor failure or blockage, wiring and connectors, blower control board, Comfort Interface wiring for open circuit.</li> <li>3. Evaporator coil is frozen. Check for low suction pressure, low Comfort Interface setting, evaporator air flow (blockages in coil, return air filter, ductwork or registers)</li> <li>4. Condenser coil is dirty, liquid line restriction (filter drier blocked if present in system)</li> <li>5. Check Comfort Interface sub-base or wiring for short circuit, Comfort Interface installation (location, level)</li> <li>6. Faulty TXV (Thermostatic Expansion Valve). Check TXV bulb installation (size, location and contact) also if TXV/fix orifice is stuck closed or defective.</li> </ol>
Yellow "ALERT" Flash 2	2	System Pressure Trip Discharge or suction pressure out of limits or compressor overloaded	<ol style="list-style-type: none"> <li>1. High head pressure. Check high pressure switch if present in system, overcharge with refrigerant, non-condensable in system.</li> <li>2. Condenser coil poor air circulation (dirty, blocked, damaged)</li> <li>3. Condenser fan not running. Check fan capacitor, wiring and connectors, motor for failure or blockage.</li> <li>4. Return air duct has substantial leakage</li> <li>5. If low pressure switch present in system, check Flash Code 1 information.</li> </ol>
Yellow "ALERT" Flash 3	3	Short Cycling Compressor is running only briefly	<ol style="list-style-type: none"> <li>1. Comfort Interface demand signal is intermittent</li> <li>2. Time delay or control board defective</li> <li>3. If high pressure switch present go to Flash Code 2 information</li> <li>4. If low pressure switch present go to Flash Code 1 information</li> </ol>
Yellow "ALERT" Flash 4	4	Locked Rotor	<ol style="list-style-type: none"> <li>1. Run capacitor has failed.</li> <li>2. Low line voltage (contact utility if voltage at disconnect is low) check wiring.</li> <li>3. Excessive liquid refrigerant in compressor. Compressor bearings are seized, measure compressor oil level.</li> </ol>
Yellow "ALERT" Flash 5	5	Open Circuit	<ol style="list-style-type: none"> <li>1. Open Outdoor unit power disconnect, circuit breaker, fuse(s). Compressor contactor failed to open. Check wiring on compressor contactor and between supply and compressor, contactor failure (burned, pitted), low pilot voltage at compressor contactor coil.</li> <li>2. High pressure switch is open and requires manual reset.</li> <li>3. Unusually long compressor protector reset time due to extreme ambient temperature.</li> <li>4. Compressor windings are damaged. Check compressor motor winding resistance.</li> </ol>
Yellow "ALERT" Flash 6	6	Open Start Circuit Current only in run circuit	<ol style="list-style-type: none"> <li>1. Run capacitor has failed.</li> <li>2. Open circuit in compressor start wiring or connections. Check wiring and connectors between supply and the compressor "S" terminal.</li> <li>3. Compressor start winding is damaged. Check compressor motor winding resistance.</li> </ol>
Yellow "ALERT" Flash 7	7	Open Run Circuit Current only in start circuit	<ol style="list-style-type: none"> <li>1. Open circuit in compressor run wiring or connections. Check wiring and connectors between supply and the compressor "R" terminal.</li> <li>2. Compressor run winding is damaged. Check compressor motor winding resistance.</li> </ol>
Yellow "ALERT" Flash 8	8	Welded Contactor Compressor always runs	<ol style="list-style-type: none"> <li>1. Compressor contactor has failed closed</li> <li>2. Comfort Interface demand signal not connected to module</li> </ol>
Yellow "ALERT" Flash 9	9	Low Voltage Control Circuit < 17 VAC	<ol style="list-style-type: none"> <li>1. Control circuit transformer is overloaded</li> <li>2. Low line voltage (contact utility if voltage at disconnect is low). Check wiring connections</li> </ol>
Red Trip Flash and Yellow Alert Flash at the same time		Control circuit voltage too low for operation	

On Comfort Alert Module, flash code number corresponds to a number of LED flashes, followed by a pause and then repeated.

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