### **Installation Manual**

**Pro1 Technologies** 

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Hours of Operation: M-F 9AM - 6PM Eastern

Thermostat Application Guide

## **Power Type**

product.

Hardwire (Common Wire)

A trained, experienced technician must install this

Carefully read these

**T855iSH** 

Description	
Gas or Oil Heat	Yes
Electric Furnace	Yes
Heat Pump (No Aux. or Emergency Heat)	Yes
Heat Pump (With Aux. or Emergency Heat)	Yes
Multi-Stage Systems	Yes
Heat Only Systems	Yes
Cool Only Systems	Yes
Millivolt	No
Wired Remote Sensing	Yes
Any HVAC system up to 5H/3C with standard low voltage controlled humidifier.	Yes
Any HVAC system up to 5H/3C with standard low voltage controlled de-humidifier.	Yes

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this product or cause a hazardous condition if you fail to follow these instructions. Una version en espanol de este

instructions. You could damage

manual se puede descargar en la pagina web de la compania.

Rev. 2028



#### **Wall Locations**

The thermostat should be installed approximately 4 to 5 feet above the floor. Select an area with average temperature and good air circulation.

# \_\_\_\_ NO YES NO

#### Do not install thermostat in these locations:

Close to hot or cold air ducts

**Installation Tip** 

**Installation Tips** 

**Mount Thermostat** 

- That are in direct sunlight
- · With an outside wall behind the thermostat
- In areas that do not require conditioning
- Where there are dead spots or drafts (in corners or behind doors)

Pick an installation location that is easy for the user to access. The temperature

Where there might be concealed chimneys or pipes

of the location should be representative of the building.



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#### **Installation Tips**

#### **Subbase Installation**



#### Installation Tip: Electrical Hazard

Failure to disconnect the power before beginning to install this product can cause electrical shock or equipment damage.

### Mercury Notice

All of our products are mercury free. However, if the product you are replacing contains mercury, dispose of it properly. Your local waste management authority can give you instructions on recycling and proper disposal.





Align the 4 tabs on the subbase with corresponding slots on the back of the thermostat, then push gently until the thermostat snaps in place.

Note: To ensure a solid fit between the thermostat and the subbase:

- 1. Mount subbase to a flat wall
- **2.** Use screws provided
- 3. Drywall anchors should be flush with the wall
- 4. Wires should be pushed into the wall

3

(2)

#### Getting to know your thermostat



#### **Thermostat Quick Reference**

#### Getting to know your thermostat

- 1 Day of the Week
- (2) Setpoint Indicator: Displays the user selectable setpoint temperature.
- (3) Time of Day / Outdoor Temp / % Humidity
- (4) Indicates current room temperature
- (5) Indicates if heating or cooling equipment is running
- 6 Energy Efficient Globe: Indicates the setpoint temperature chosen is a efficient choice.
- (7) Hold Indicator: Displayed when the thermostat is in permanent hold
- (8) Indicates the number of heating or cooling stages running
- (9) Keypad Lockout: Indicates the thermostat is in keypad lockout
- (10) WIFI Indicator: Indicates if WIFI is connected.
- **Program Menu Buttons:** Shows different options during programming.
- **Fan Button:** Changes the fan operation between Auto, IAQ, and On.
- (3) System Button: Changes the system operation between Off, Cool, Auto, Heat, and Emergency Heat based on system tech setting.

### 5 Thermostat Quick Reference

#### 2) Mor 10:0 COOL ON FAN ON STAGE <u></u> MUKE (1)Mei Auto Coo (4) (5) 6 9 t Heat, Off, or Cool a (10)

- (1) LCD Display
- (2) Glow in the dark light button
- 3 Setpoint buttons
- **4-6** Program buttons
- (7) Menu button
- 8 Fan button
- 9 System button
- (10) Button access door

#### **Thermostat Quick Reference**

#### **About The Badge**

All of our thermostats use the same universal magnetic badge. Visit the company website to learn more about our free private label program.



Gently slide a screwdriver into the bottom edge of the badge. Gently turn the screwdriver counter clockwise. The badge is held on by a magnet in the well of the button door. The badge should pry off easily. **DO NOT USE FORCE.**  (6)

### Caution: **Electrical Hazard**

Failure to disconnect the power before beginning to install this product can cause electrical shock or equipment damage.

#### Wiring

- 1. If you are replacing a thermostat, make note of the terminal connections on the thermostat that is being replaced. In some cases the wiring connections will not be color coded. For example, the green wire may not be connected to the **G** terminal.
- 2. Loosen the terminal block screws. Insert wires then retighten the terminal block screws.
- 3. Place nonflammable insulation into the wall opening to prevent drafts.

### **Wiring Tips**

**C** Terminal This thermostat requires a 24V common wire to the C terminal.

#### **Wire Specifications**

Use shielded or non-shielded 18-22 gauge thermostat wire.

#### Note:

Outdoor temperature sensor, Indoor temperature sensors, and Slab sensor wiring diagrams are located in R250S and R251S manuals.



#### Wiring Diagrams

#### √1 Power supply

A 24 VAC common connection is required with this thermostat.

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L2

 $\Lambda$ 

#### Typical 2H/2C System: 1 Transformer







#### **Typical Heat Only System With Fan**



#### Note:

In many systems with no emergency heat relay a jumper can be installed between E and W2.

All components of the control system and the thermostat installation must conform to Class II circuits per the NEC Code.



Do not overtighten terminal block screws, as this can damage the terminal block. A damaged terminal block can keep the thermostat from fitting on the subbase correctly or cause system operation issues.

Max Torque = 6in-lbs.

#### Note:

In many heat pump systems with no emergency heat relay, a jumper can be installed between **E** and W2 to turn thermostat into a single stage control for Emergency Heat Operation.

## Wiring

#### **Terminal Designations**

This thermostat is shipped from the factory to operate a conventional heating and cooling system. This thermostat may also be configured for a heat pump system. See the "heat pump" configuration step on page 16 of this manual to configure the thermostat for heat pump applications.

Terminal	2 Heat 2 Cool Conventional System	2 Heat 1 Cool Heat Pump System	4 Heat 2 Cool Heat Pump System	5 Heat 3 Cool Heat Pump System
RC	Transformer power (cooling)	Transformer power (cooling)	Transformer power (cooling)	Transformer power (cooling)
RH	Transformer power (heating)	Transformer power (heating)	Transformer power (heating)	Transformer power (heating)
С	Transformer common	Transformer common	Transformer common	Transformer common
В	Reversing valve / configurable terminal	Reversing valve / configurable terminal	Reversing valve / configurable terminal	Reversing valve / 3rd stage of heat & cool
0	Reversing valve / configurable terminal	Reversing valve / configurable terminal	Reversing valve / configurable terminal	Reversing valve / 3rd stage of heat & cool
G	Fan relay	Fan relay	Fan relay	Fan relay
W/E	First stage of heat	Emergency Heat	First stage of auxiliary heat	First stage of auxiliary heat (4th stage of heat)
Y	First stage of cool	First stage of heat & cool	First stage of heat & cool	First stage of heat & cool
Y2	Second stage of cool	N/A	Second stage of heat & cool	Second stage of heat & cool
W2	Second stage of heat	Auxiliary heat	Second stage of auxiliary heat	Second stage of auxiliary heat (5th stage of heat)
S1/S2	Remote Sensor	Remote Sensor	Remote Sensor	Remote Sensor
Н	Humidify	Humidify	Humidify	Humidify
D	Dehumidify	Dehumidify	Dehumidify	Dehumidify

#### **Wiring Diagrams**

- (3) Use either O or B terminals for changeover valve
- If DEHUM relay requires a normally-energized input, set Dehumidify relay to NC in Technician Setup.

#### Typical 2H/2C System: 2 Transformer



#### Typical 2H/1C Heat Pump System



#### **Wiring Diagrams**

1 Power supply

2 Factory - installed jumper. Remove only when installing on 2 transformer systems.

Use either O or B terminals for changeover valve.

#### Typical 2H/2C system with 24 VAC Humidifier



#### Typical 2H/2C system with Dehumidify Terminal



#### B

#### Technician Setup Menu

This thermostat has a technician setup menu for easy installer configuration. To set up the thermostat for your particular application:

- 1. Press the **MENU** button.
- 2. Press and hold the **TECH SET** button for 3 seconds. This 3 second delay is designed so that homeowners do not accidentally access the installer settings.
- 3. Configure the installer options as desired using the table below.

Use the **+** or **-** keys to change settings and the **NEXT** or **PREV** key to move from one step to another. **Note:** Only press the **DONE** key when you want to exit the Technician Setup options.

4. Press the **DONE** key to exit.

Tech Setup St	eps	LCD Will Show	Adjustment Options	Default
Filter Change Reminder	This feature will flash a reminder after the elapsed run time to remind the user to change the filter. A setting of "OFF" will disable this feature.	FILTER	You can adjust the filter change reminder from "OFF" to 2000 hours of runtime in 50 hour increments.	OFF
Room Temperature Calibration	This feature allows the installer to change the calibration of the room temperature display. For example, if the thermostat reads 70° and you would like it to read 72° then select +2.	CAL IORATE	You can adjust the room temperature display to read up to 4° above or below the factory calibrated reading.	0°F
Cooling Swing	The swing setting often called "cycle rate", "differential" or "anticipation" is adjustable. A smaller swing setting will cause more frequent cycles and a larger swing setting will cause fewer cycles.	<b>8.5</b>	The cooling swing setting is adjustable from 0.2° to 2°. For example: A swing setting of 0.5° will turn the cooling on at approximately 0.5° above the setpoint and turn the cooling off at approximately 0.5° below the setpoint.	0.5°

#### **Swing Setting Tip**

B

The second stage will turn on at 2x the swing setting. The second stage will turn off when 1x the swing is reached. For example, if the swing setting is .5 degrees for heating and the thermostat is set at 70°F, the first stage will turn on at approximately 69.5°F. The second stage will turn on at 69°F. The second stage will turn off at 69.5°F and the first will turn off at 70.5°F. If the third stage is used, it will turn on at 68.5°F and turn off at approximately 69°F.

#### Wiring Diagrams

/4 A 24 VAC common connection is required with this thermostat.

5 If DEHUM relay requires a normally-energized input, set Dehumidify relay to NC in Technician Setup.

#### Typical 2H/2C system with Dry Contact Humidifier



#### Typical 5H/3C Heat Pump System



#### **Technician Setup Menu**

Tech Setup Ste	eps	LCD Will Show	Adjustment Options	Default
Heating Swing	The swing setting often called "cycle rate", "differential", or "anticipation" is adjustable. A smaller swing setting will cause more frequent cycles and a larger swing setting will cause fewer cycles.	HERT SHING	The heating swing setting is adjustable from $0.2^{\circ}$ to $2^{\circ}$ . For example: A swing setting of $0.5^{\circ}$ will turn the heating on at approximately $0.5^{\circ}$ below the setpoint and turn the heating off at $0.5^{\circ}$ above the setpoint.	0.4°
PTAC Mode	This setting allows the thermostat to operate a PTAC. This will allow for multiple fan speeds selectable in the next two tech settings.	PTRC MODE	Use the 🛨 and 🖃 buttons to select ON/OFF.	OFF
PTAC Fan Speeds (Only displayed if PTAC mode is "ON")	This setting allows you to choose the number of fan speeds the thermostat will control. G = Low Speed Fan $B/0 = Medieum Speed Fan$ $Y2 = High Speed Fan$	<b>C</b> FRN SPEEDS	Use the 🛨 and 🖃 buttons to select , 2 or 3. 1. Speeds: ON, Auto 2. Speeds: Low, High, Auto 3. Speeds: Low, Med, High, Auto	2
PTAC Medium Fan Speed Terminal (Only displayed if PTAC mode is ON and PTAC fan speeds is set to 3)	This setting will select the terminal for medium fan speed operations. The selected terminal cannot be used for reversing valve operations when heat pump is enabled.	C MED FRN TERM	Use the 🛨 and 🖃 buttons to select O/B terminals.	0
Heat Pump	When turned on the thermostat will operate a heat pump. EM. Heat will show as an option in the system switch tech setting. Use the $\pm$ and $-$ button to adjust.	HERT PUMP	OFF configures the thermostat for conventional systems. ON configures the thermostat for heat pump systems.	OFF

System Mode	Default Heat	Heat Options	Cool Default	<b>Cool Options</b>
PTAC (conventional)	1	1	1	1
PTAC (Heat Pump)	2	2, 1	1	1
Heat Pump		5, 4, 3, 2, 1	2	3, 2, 1
Conventional	2	2, 1	2	3, 2, 1

### **Technician Setup Menu**

**Technician Setup Menu** 

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Tech Setup St	teps	LCD Will Show	Adjustment Options	Default	Tech Setup St	eps	LCD Will Show	Adjustment Options	Default
System Stages	This setting allows you to select the number of heat and cool stages.	2H2C SET STRGES	Use the 主 and 🖃 buttons to select 1H/1C, 2H/1C, 2H/2C, 3H/1C, 3H/2C, 3H/3C, 4H/2C, 4H/3C, 5H/3C. Note: Heat and cool choices are limited based on conventional, heat pump, or PTAC system configuration.	2H	Satisfy Setpoint Staging (Only displayed if there are more than one stage of heat or cool)	This feature allows the thermostat to keep multiple stages of heat or cool energized until the setpoint is satisfied.	SS STRG ING	Use the    or    buttons to turn on of off.	OFF
Third Stage of Cool Terminal Designation (Only displayed if stages of cool is set to three on previous setting)	This setting allows the 0 or B terminal to be selected as the third stage of cool. The selected terminal will not be used for reversing valve functions in heat pump mode.	B COOL TERM	Use the 主 and 🖃 buttons to select O/B.	0	Staging Delay (Only displayed if there are more than one stage of heat or cool)	This feature allows a delay to occur if an additional stage is needed. This allows the previous stage extra time to satisfy the setpoint. Note: Will not show if using outdoor sensor with balance point temperature.	STRS INS DELRY	Use the 主 or 🖃 key to select OFF, 5, 10, 15, 30, 45, 60, or 90 minutes.	OFF
System Set	You can configure the system switch for the particular application. Heat - Off - Cool, Heat - Off, Cool - Off, Heat - Off - Cool – Auto. Note: Emergency Heat is available in heat pump mode only.	SYSTEM SET AutoOff Em.Heat Cool	Use the $\div$ or $-$ buttons until the desired application is flashing. AUTO = (Auto Changeover)	Heat Off Cool	Minimum Compressor On Time	This feature allows the installer to select the minimum run time for the compressor. For example, a setting of 4 will force the compressor to run for at least 4 minutes every time the compressor turns on, regardless of the room temperature.		You can set the minimum compressor run time to "OFF", "3", "4", or "5" minutes. If 3, 4 or 5 is selected, the compressor will run for at least the selected time before turning off. Use the ⊡ and ⊡ buttons to change the setting.	OFF
Dual Fuel Auxiliary For Heat Pump (Only displayed if heat pump is set to "ON")	This setting allows the system to run Gas, Oil, Propane or any other types of auxiliary heat. The thermostat will default to electric auxiliary heat in heat pump applications.	DURL FUEL	Use the 主 and 🗔 buttons to select ON/OFF.	OFF	Compressor Short Cycle Delay	The compressor short cycle delay protects the compressor from "short cycling". This feature will not altlow the compressor to be turned on for 5 minutes after it was last turned off.	COMP DELRY	Selecting "ON" will not allow the compressor to be turned on for 5 minutes after the last time the compressor was on. Select "OFF" to remove this delay. Use the 🕂 and 🖃 buttons to change the setting.	ON
Electric or Gas Fan Operation (Only displayed if heat pump is set to "ON")	Select GAS to have the system control the fan during a call for heat, select Electric to have the thermostat control the fan during a call for heat. Note: If heat pump is set to "ON" this step will not show, and will default to ELECTRIC.	GRS FRN SET	Use 主 and — buttons to change the setting.	GAS	Cooling Fan Delay	The cooling fan delay setting will delay the fan from coming on in cool mode and keep it running after the compressor shuts off for a short time to save energy in some systems.	COOL FRN DL	You can set the cooling fan delay to OFF, 10, 30, 60 or 90 seconds. If 10, 30, 60, or 90 is selected the fan will not turn on for that many seconds when there is a call for cool and will run for that many seconds after satisfying a call for cool.	OFF

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#### Technician Setup Menu

#### **Tech Setup Steps** LCD Will Show Adjustment Options Default **Tech Setup Steps** LCD Will Show Adjustment Options Default Use the 🛨 and 🖃 button to select 7d for 7 day or 0d for non-programmable. Keypad lockout allows you to Use the 🛨 and 🖃 buttons to You can configure this thermostat configure the thermostat so some select OFF, BASC, PART, FULL to have a 7 day program or No OF - OFF= keypad lock-out has been disabled. or all of the keys don't function. program. BA - BASIC = basic keypad lockout locks the menu key. Note: If 7d is selected, in set schedule you will program all seven days individually. Keypad PA - PARTIAL = partial keypad **OFF** lockout, which locks all the Lockout Program If Od is selected the thermostat 7d keys except the or setpoint becomes non-programmable and the Set Schedule button goes away Options keys. FU - FULL= full keypad lockout, which locks out all in Menu. the keys. KEY LOEKOUT PROGRAM Keypad lockout with code shows 1. When ON you must enter only when Keypad Lock is set to BASIC, PARTIAL or FULL the code after pressing the + and - buttons toegether You can configure this thermostat Use the 🛨 and 🖃 buttons to to have 2 or 4 programmable time periods per day. select 4, 2C, or 4C time periods for 3 secounds to take the per day. thermostat in or out of keypad lockout. You will then be taken **Time Periods** 4: Wake, Leave, Return & to a screen that allows you to Sleep. 4 (Only displayed if program optioin is set to 5d or 7d) enter the code. 2C: time periods are Occupied Keypad & Unoccupied. OFF Lockout Code 2. Use 🛨 and 🖃 to change 4C: time periods are Occupied each number. Use the Previous and Next keys to change from t ime Per iods 1, Unoccupied 1, Occupied 2, & (Only displayed if keypad lockout is set to Basic, Partial, or Full) Unoccupied 2 one number to the next. The number you are currently on This feature will start heating and Use the 🛨 or 🖃 key to will blink. cooling early to bring the building select on or off. **1**) temperature to its programmed **ON** 3. Press Done when completed. If entered correctly setpoint by the beginning of the WAKE, RETURN and OCCUPIED Pro Recovery the thermostat will be retime periods. moved from keypad lockout. RECONERA 85CONEBA KEY CODE This setting maximizes efficiency Use the 🛨 or 🖃 key to and equipment longevity by increasing the heating and select on or off. Cycle Minimizer cooling swing settings to 2° **Keypad Lockout Note:** The selected keypad lockout functionality must be activated after exiting tech setup. If you do not perform this procedure, all keys will function freely. To lock the keypad hold down during the unoccupied and leave time periods. This will result in OFF (Only displayed if significantly fewer system cycles. program optioin is set to 5d or 7d) the [+] and [-] keys for 3 seconds. You will see a lock in the display. To unlock the display hold down the [+] and [-] keys for 3 seconds.

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## Technician Setup Menu

Technician Setup Menu

LCD Will Show Adjust	LCI	Default Tech Setup St	Default	Adjustment Options	LCD Will Show	teps	Tech Setup Ste
play hheit F for Fal F GR C SET	Ceisius.	°For°C		OFF= Code is disabled and the lock icon is used to lock and unlock the display. ON = Create a 4 digit code that locks and unlocks the display.	0000	Keypad lockout with code creation is displayed when Keypad Lockout Code is turned on (Basic, Partial or Full is selected).	
24 Use the E select 12	u can select either a 12 or 24 ur clock setting. CLL	12 or 24 Hour Clock		NOTE: In this tech setting, the clock field will show all four characters as 0s, with the first 0 blinking.			Keypad .ockout Code Creation
he tila- ancy ly step r 4C.	time periods is set to 2C or 4C.	Pre Occupancy Fan	0000	Select the numbers of the code by using the ⊥ and - buttons and switch between numbers by using the "next" and "previous" buttons. After DONE is pressed, the created code will be saved and will be needed to activate or deacti- vate keypad lockout functions. The master code is 7761. The master code will override any created keynad lock code.			(Only displayed if keypad lockout is set to Basic, Partial, or Full)
d 🛛 🖕 🖕 OFF conf	e display light can be nfigured to stay on all the ne or turn on when any key pressed. There are LOW and SH selections for continuous ON RL: ection.	90°F	90°F	Use the + or - key to select the maximum heat setpoint and the minimum cooling setpoint.	KEY CODE	This feature allows you to set a maximum heating setpoint limit. The setpoint temperature cannot be raised above this value.	Heat Setpoint Limit
light to s intensity button is light will intensity HIGH cor		14°F Display Light	44°F	Use the 主 or 🖃 key to select the minimum cooling setpoint.		This feature allows you to set a minimum cooling setpoint limit. The setpoint temperature cannot be lowered below this value.	Cool Setpoint Limit
HREN RE DLY	() .499	4	4	Use the 主 and 🖃 buttons to select 0, 1, 2, 3, 4, 5 and 6.	L-	This feature will select a temporary hold time frame for the programmable mode of the thermostat. When the setpoint is changed, the thermostat will enter into a temporary hold for the number of hours selected from this tech setting.	Only displayed if rogram option is
		4	4		LLI Temp Hol Jers	the programmable mode of the thermostat. When the setpoint is changed, the thermostat will enter into a temporary hold for the number of hours selected	(Only displayed if program option is set to 5d or 7d)

## Technician Setup Menu

Tech Setup St	eps	LCD Will Show	Adjustment Options	Default	Tech Setup St	eps	LCD Will Show	Adjustment Options	Default
Contractor Call Number	This feature allows you to put your phone number in the display. You can choose ON or OFF. Notes: If contractor call number is selected ON, the phone number entered will show in the display if there has been a continuous call for heating or cooling for 24 hours or if the light button is held down for 3 seconds. To remove the phone number from the display,	96	If selected ON, you will see the input screen after pressing NEXT STEP. Use the	OFF	Economizer Mode (This feature cannot be used with non- programmable PTAC mode, three stages of cool, fresh air, of free cooling mode)	When this feature is enabled, the economizer terminal is energized in the WAKE, RETURN, SLEEP or OCCUPIED time periods. This feature will remain disabled if programming is OFF (0D). This feature will use one of the configurable terminals (0/B) to connect to the economizer.		Use the 🛨 and 🖃 buttons to select ON or OF.	OFF
	hold the light button down for 3 seconds.	PHONE NUMBER			Economizer	This setting provides the option to select a terminal for Economizer		Use the 🛨 and 🗕 buttons to select O/B.	
	This feature will configure the fan to run a selected number of cycles per hour. Note: This mode can be enabled or disabled at anytime during normal operation by selecting IAQ mode with the		Select OFF, 1, 2, 3 or 4 with the + or - buttons. This sets the number of cycles per hour that the IAQ fan mode will operate.		Terminal Designation (Only displayed if economizer is turned on)	functions. The selected terminal cannot be used for reversing valve operations when the heat pump setting is turned on.			0
IAQ Mode Cycle	fan key. Turning this feature on shows IAQ option in fan key. Notes: This programmable/selectable mode will operate the fan 1-4 cycles per hour, 1-45 minutes per cycle. Once programmed in tech setup, to enable this mode select "IAQ" with the fan	95		OFF	Fresh Air Minutes	This setting selects the minimum number of minutes that the fresh air damper will be energized.	FRESH R IR MIN	Use the [+] and [-] buttons to select 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55 or 60 minutes.	5
	key. Disable this mode by selecting "ON" or "AUTO" with the fan key.	RO MOJE CYCL			Contract	or Call Number Note			
140 Minutes	This allows you to select the minimum number of minutes that the fan will run per IAQ mode cycle. The thermostat will keep track of fan runtime from normal heat and cool operation. If additional fan runtime is needed,	<ul> <li>umber of minutes</li> <li>will run per IAQ</li> <li>The thermostat will</li> <li>f fan runtime from</li> <li>t and cool operation. If</li> <li>an runtime is needed,</li> <li>tat will run the fan to</li> <li>AQ mode minutes.</li> <li>ogrammable/selectable</li> <li>erate the fan 1-4 cycles</li> <li>S minutes per cycle. Once</li> <li>in tech setup, to enable</li> <li>ect "IAQ" with the fan</li> <li>his mode by selecting</li> </ul>		1	If contrac show in t cooling fo	tor call number is selecte he display if there has be or 24 hours or if the light he phone number from t	en a continu button is he	ous call for heating o Id down for 3 seconds	r s. To
IAQ Minutes Per Cycle	the thermostat will run the fan to satisfy the IAQ mode minutes. Notes: This programmable/selectable mode will operate the fan 1-4 cycles per hour, 1-45 minutes per cycle. Once programmed in tech setup, to enable this mode select "IAQ" with the fan key. Disable this mode by selecting "ON" or "AUTO" with the fan key.			1	This prog hour, 1-45 this mode	<b>bout IAQ Mode</b> rammable/selectable mo 5 minutes per cycle. Once e select "IAQ" with the far UTO" with the fan key.	e programme	ed in tech setup, to er	able

### **Technician Setup Menu**

**Technician Setup Menu** 

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Tech S	Setup Sto	eps		LCD Will Show	Adjustment Op	otions	Default	Tech
(This: cannot with PT stages or ecor	sh Air ode setting t be used (AC, three s of cool, nomizer ed on)	a unit for a sele of time. When I		FRESH R IR	Use the [+] and [=] select OFF, OC ON or OFF: Thermostat do enable Fresh Air Mo OC ON: Fresh Air Mo or abled during the WAKE, RETURN, and time periods (It will in fresh air during U and LEAVE time peri ON: Thermostat will Fresh Air Mode for e periods.	ON. es not de. OCCUPIED, I SLEEP not bring NOCCUPIED iods). enable	OFF	Loca Se (Only if rem setting Nu of I Re
(Only d if fresh is turr This s cannot with PT stages or econ	sh Air ninal displayed air mode ned ON. setting t be used AC, three s of cool, nomizer ed ON.)	to select a term damper function terminal canno reversing valve	wides the option ninal for Fresh Air ons. The selected t be used for operations when setting is turned	RESH R R TRI	Use the + and - to select 0/B.	Duttons	0	(Only if rem setting Dua Ba P (Only if rem settir 2 and AU
Ser Oper (Only d if a se conn to S1 a	note nsor ration displayed ensor is rected and S2 inals)			REMOTE MODE	Use the left and rig arrows to select on options. View the S terminal chart on r for an explanation options.	ie of three 51/S2 next page	0	Balar Elec Cu
ſ			S1 / S	2 Termina				(Only o
ļ	Option	ns Mode		Description		Require	!S	senso set to
l	1	Indoor	The local and re	emote temperatu	res are averaged.	R251S		Fuel /
	2	Outdoor	The outdoor	temperature is fla	shed in clock.	R250S	_	
	3	Floor		emperature is sho		R250S		

if remote sensor setting is set to 1)       show if remote sensor is set to 1.         Number of Indoor Remotes (Indoor Remotes reting is set to 1)       Enables the use of up to sixteen indoor sensors R2515. Note: Will only show Remote Sensor is set to 1 and Local Temp Sensor is set to 0.       You can use 1, 4, 9, or 16 indoor sensors. Refer to the R2515 Install Manual for de- tailed connection information         Dual Fuel Balance Point (Only displayed if remote sensor setting is set to 1)       An outdoor temperature above balance point will cause the thermostat to energize the Y terminal (s) only in calls for heat. AuX = 0n)       Use the ⊕ and ⊡ buttons to select OFF, 10, 15, 20, 25, 30, 35, 40, 45, 50 degrees.       0         Balance Point (Only displayed if remote sensor setting is set to 2 and Dual Fuel AUX = 0n)       Balance point with electric auxiliary will optimize heat pump usage. When the outdoor temperature is above the AUX CUT OUT selection, the thermostat to only allow the Y terminal(s) will energize and lockout the W2 terminal. When the outdoor temperature falls below the AUX CUT OUT selection and sits above the AUX CUT IN selection, the thermostat will allow the YY       Use the ⊕ and ⊡ buttons to select 10, 15, 20, 25, 30, 35, 40, 45, 50 degrees.       0	Tech Setup Ste	eps	LCD Will Show	Adjustment Options	Default
Interfact       indoor sensors R251S. Note: Will only show Remote Sensor is set to 1 and Local Temp Sensor is set to 1 and Local Temp Sensor is set to on.       indoor sensors. Refer to the R251S Install Manual for de- tailed connection information         Image: Construct to an experiment of the construction information if remote sensor setting is set to 1       An outdoor temperature above balance point will cause the thermostat to energize the Y terminal (s) only in calls for heat. An outdoor temperature below balance point will cause the thermostat to energize the W2 terminal only in calls for heat. An outdoor temperature below balance point will cause the thermostat to energize the W2 terminal only in calls for heat.       Image: Construction information       Image: Construction information         Balance Point AUX = On)       Balance point will cause the thermostat to energize the W2 terminal only in calls for heat. An outdoor temperature below balance point will cause the thermostat to energize the W2 terminal only in calls for heat.       Image: Construction information       Image: Construction information         Balance Point (Only displayed if remote sensor setting is       Balance point with electric auxiliary will optimize heat pump usage. When the outdoor temperature is above the AUX CUT OUT selection, the thermostat to only allow the Y terminal(s) will energize and lockout the W2 terminal. When the outdoor temperature falls below the AUX CUT OUT selection and sits above the AUX CUT IN selection, the thermostat will allow the Y       Image: Cut out	Sensor (Only displayed if remote sensor	the T855SH thermostat. At least one R251S indoor remote sensor must be connected to disable the local T855S sensor. Note: Will only		sensor. OFF disables local	ON
Balance Point       balance point will cause the thermostat to energize the Y terminal(s) only in calls for heat. An outdoor temperature below balance point will cause the thermostat to energize the W2 terminal only in calls for heat.       to select OFF, 10, 15, 20, 25, 30, 35, 40, 45, 50 degrees.       0         Will Aux = 0n       Balance point will cause the thermostat to energize the W2 terminal only in calls for heat.       Image: Wenthe energize the W2 terminal only in calls for heat.       Image: Wenthe energize the W2 terminal only in calls for heat.       Image: Wenthe energize the W2 terminal only in calls for heat.       Image: Wenthe energize the W2 terminal only in calls for heat.       Image: Wenthe energize the W2 terminal only in calls for heat.       Image: Wenthe energize the W2 terminal only in calls for heat.       Image: Wenthe energize the W2 terminal only in calls for heat.       Image: Wenthe energize the W2 terminal only in calls for heat.       Image: Wenthe energize the W2 terminal only in calls for heat.       Image: Wenthe energize the W2 to select 10, 15, 20, 25, 30, 35, 40, 45, 50 degrees.       Image: Wenthe for the w2 to select 10, 15, 20, 25, 30, 35, 40, 45, 50 degrees.       Image: Wenthe for the w2 terminal. When the outdoor temperature falls below the AUX CUT OUT selection and sits above the AUX CUT IN selection, the thermostat will allow the Y       Image: Winthe for the w2 terminal. When the outdoor temperature falls below the AUX CUT OUT selection and sits above the AUX CUT IN selection, the thermostat will allow the Y       Image: Winthe w2 terminal will allow the Y       Image: Winthe w2 terminal will allow the Y       Image: Winthe w2 terminal will allow the Y       Image: W1 terminal w2 terminal w2 terminal w2 terminal w2 te	of Indoor Remotes (Only displayed if remote sensor	indoor sensors R251S. Note: Will only show Remote Sensor is set to 1 and Local Temp Sensor is	I I NUMBER REMOTE	indoor sensors. Refer to the R251S Install Manual for de-	1
Balance Point Electric AUX Cut Out (Only displayed if remote sensor setting is AUX CUT OUT selection, the thermostat to only allow the Y terminal(s), will energize and lockout the W2 terminal. When the outdoor temperature falls below the AUX CUT OUT selection, and sits above the AUX CUT IN selection, the thermostat will allow the Y	Balance Point (Only displayed if remote sensor setting is set to 2 and Dual Fuel	balance point will cause the thermostat to energize the Y terminal(s) only in calls for heat. An outdoor temperature below balance point will cause the thermostat to energize the W2	OF RACE POINT	to select OFF, 10, 15, 20, 25,	OFF
Fuel Aux if Off)       to energize. When the outdoor temperature is below the AUX CUT IN selection, the thermostat will only energize the W2 termi- nal and lockout the Y terminal(s).	Electric AUX Cut Out (Only displayed if remote sensor setting is set to 2 and Duel	auxiliary will optimize heat pump usage. When the outdoor temperature is above the AUX CUT OUT selection, the thermostat to only allow the Y terminal(s) will energize and lockout the W2 terminal. When the outdoor temperature falls below the AUX CUT OUT selection and sits above the AUX CUT IN selection, the thermostat will allow the Y terminal(s) and the W2 terminal to energize. When the outdoor temperature is below the AUX CUT IN selection, the thermostat will only energize the W2 terminal	LUC RUX CUT OUT	to select 10, 15, 20, 25, 30,	OFF

#### Technician Setup Menu

#### LCD Will Show Adjustment Options LCD Will Show Tech Setup Steps Default **Tech Setup Steps** Adjustment Options Default Use the 🛨 and 🖃 buttons to select 10, 15, 20, 25, 30, Use the 🛨 and 🖃 buttons to select O/B. Balance point with electric This setting provides the option to Free Cooling select a terminal for Free Cooling functions. The selected terminal auxiliary will optimize heat Terminal 35, 40, 45, 50 degrees. pump usage. When the outdoor temperature is above the AUX CUT cannot be used for reversing valve (Fresh air OUT selection, the thermostat to only allow the Y terminal(s) operations when the heat pump mode and free **Balance Point** cooling can be used together. Free cooling cannot be used with PTAC mode, three stages setting is turned on. 0 Electric AUX to energize and lockout the W2 terminal. When the outdoor temperature falls below the Cut In (Only displayed if remote sensor setting is set to 2 and Duel AUX CUT OUT selection and sits of heat, or economizer mode) above the AUX CUT IN selection, OFF FREE COOLTRM the thermostat to allow the Y terminal(s) and the W2 terminal The temperature of the floor N/A RUX CUT IN Fuel Aux if Off) to energize. When the outdoor sensor will be displayed. temperature below the AUX CUT Floor IN selection, the thermostat will Note: Only shows when REOP is Temperature only energize the W2 terminal and lockout the Y terminal(s). set to 3. N/A (Only displayed if remote sensor setting is set to 3) Use 🛨 and 🖃 buttons to adjust. FLOOR TEMP This setting allows you to set Use the 🛨 or 🖃 buttons to select the High Limit for the floor sensor.35 - 120 Balance point run time will allow Off, 15, 30, 45, 60, 75, 90 a maximum floor temperature the W2 auxiliary terminal to ener-gize even if outdoor temperature Floor High Balance limit for heat. Heat will be locked Point Run out when the floor temperature is above selected balance point Limit Time is above this value. Note: Only temperature. If enabled, auxiliary (Only displayed if remote sensor setting is set 86 shows when REOP is set to 3. will energize for the current cycle (Only displayed after the balance point run time **OFF** f remote sensor setting is set to 2) if rer has expired. to 3) Note: Only shows if Balance Point is X GX L M C set to an outdoor temperature. This setting allows you to set a minimum floor temperature Use the + or - keys to select the Low Limit for the floor sensor. 3P RUN TIME Floor Low limit for heat. Heat will turn on Use the 🛨 and 🖃 buttons to select ON/OFF. This feature will bring in outside automatically when the floor temperature is below this value. Limit Free Cooling air for first stage cooling opera-35 - 120 50 tions, if the outdoor temperature (Only displayed if remote sensor setting is set to 3) Note: Only shows when REOP is (Only displayed if remote sensor setting is set to 2) OFF is 5 (or more) degrees lower than set to 3. the setpoint temperature. This setting can only be enabled if the FREE COOL ING LOWLMI thermostat is in cooling mode.

Tech Setup St	eps	LCD Will Show	Adjustment Options	Default
Humidify	This feature adds humidity when system key is in HEAT.		Use the $+$ and $-$ key to turn on or off. If ON is selected the humidity will be displayed on the main screen and HUM terminal will energize when humidity setpoint is above ambient humidity in Heat mode.	OFF
Dehumidify	This feature removes humidity when system key is in COOL.		Use the [+] and [-] key to turn on or off. If ON is selected the humidity will be displayed on the main screen and DUM terminal will energize when humidity setpoint is below ambient humidity in Cool mode.	OFF
Humidity Calibration (Only shows if Humidify or Dehumidify is set to "ON")	This feature allows the installer to change the calibration of the ambient humidity displayed.		Use the left and right arrows to adjust the calibration +/-3. Each one unit of adjustment amounts to approximately 5%.	0
Dehumidify With AC (Only shows if dehumidify is set to "ON")	This feature forces the A/C to run longer to remove humidity when needed. The A/C will "over cool" the room a few degrees until humidity reaches the desired setpoint. The numbers below are the maximum number of degrees the thermostat will overcool to satisfy humidity. For example, If temperature set point is 70 and humidity set point is 50 and swing is 1 degree and "Dehumidify with AC" is set to 3 and the ambient is 68 and indoor humidity is 60 the thermostat will continue to run air conditioning until 67 degree to try to satisfy the humidity set point of 50		Use the • and • buttons to select Off, 2, 3, 4, 5 If selected a number is selected the thermostat will use the air condition to "over cool" to control humidity in Cool mode. If Off is selected the system will not use over cooling.	OFF

#### **Technician Setup Menu**

This table references different humidity levels the thermostat will conform to, based on the outdoor temperature measurements. When the Automatic Humidity Adjusting tech setting selection is ON1 or ON2, the thermostat humidity will stay adjusted to the humidity level that correspond to the outdoor temperature based on the chart index below.

Automatic Humidity Adjusting Index				
When The Outdoor Temperature Is:	0n 1	0n 2		
> +40°F	45%	50%		
+30°F to 40°F	40%	45%		
+20°F to 29°F	35%	40%		
+10°F to 19°F	30%	35%		
0°F to 9°F	25%	30%		
-1°F to -10°F	20%	25%		
-11°F to -20°F	15%	20%		
<-20	10%	15%		

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#### **Technician Setup Menu**

#### **Technician Setup Menu** LCD Will Show Adjustment Options **Tech Setup Steps** Default Tech Setup Steps LCD Will Show Adjustment Options Default Use the [+] and [-] buttons to select OFF, ON 1 or ON 2. When ON 1 or ON 2 is selected and humidity level is adjusted, the thermostat The amount of over cooling Use the and left and right This feature will adjust the **Over Cool** allowed when using A/C to arrows to select the indoor humidity as the outdoor maximum number of remove humidity. This screen is only shown when ON is selected temperature changes. When OFF is selected, the humidity Automatic Limit degrees of over cool. 3 Humidity (Only displayed if Dehumidify with AC is turned "ON") in the Dehumidify with AC tech will constantly stay at the same Adjusting Options are: 2,3,4,5 will rever to the original humidity level after four hours. See Automatic Humidity Adjusting chart for humidity ranges. percentage. When ON is selected, the indoor humidity will fluctuate OFF setup step. OVER COOL LMT (Only displayed if remote sensor based on outdoor temperature. Use the left and right arrows to select one of the four options. Options for how the HUM setting is set to 2 and humidity is turned "ON") HUM terminal energizes Terminal Please see revious page for RUTO HUM ID ITY View the HUM terminal chart chart. See chart below 1 (Only shows if humidify is set to "ON") below for an explanation of these options. You can configure the D terminal Use the or key to select NO or NC. If NO is selected D will as Normally-Open or HUM TERM INRL energize to dehumidify. If NC is selected D will be Normally-Closed. Dehumidify Use the left and right arrows to select one of the four options. Options for how the DHM Relay normally energized. D will DUM NO = Normally Open terminal energizes. de-energize to dehumidify. NO NC = Normally Closed (Only shows if dehumidify is set Terminal See chart below 1 View the DHM M terminal to "0N") (Only shows if dehumidify is set to "ON") chart below for an explanation of these DH1 RELRY D/C Jum Terminal options. Summer Away Mode protects the home in unoccupied long periods Use the 🛨 and 🖃 buttons to select ON/OFF. When ON is selected, of time, during hot and humid Summer Away Mode is activated by pressing and holding the "HOLD" key on the thermostat screen, for 3 weather. This is done by main-**DHM** Terminal **HUM** Terminal taining programmed and desired humidity and temperature set-OF tings. Summer Away Mode will show in the text field and allows seconds.

Summer

Away Mode

(Only displayed if dehumidity is

turned "ON")

the thermostat to put the pro-

grammed set point and humidity

level in a permanent HOLD when

this setting is enabled (HOLD will

Dehumidity tech setting must be

ON for this feature to be available. Cycle Minimizer is turned ON

when Summer Away Mode is ac-

tivated by the user (usually cycle minimizer is based on Unoccupied and Leave time periods). Adds another Tech Setting: following this one

have to be manually removed).

#### HUM terminal energizes when the ambient OPTIONS humidity is... Below the humidity setpoint and heat or 1 fan is energized. Below the humidity setpoint and heat is 2 energized. Below the humidity setpoint. It will also 3 energize the fan during a call for humidity. 4 Below the humidity setpoint.

PTIONS	DUM terminal energizes when the ambient humidity is
1	Above the humidity setpoint and cool or fan is energized.
2	Above the humidity setpoint. It will also energize the fan during a call for dehumidity.
3	Above the humidity setpoint.
4	Above the humidity setpoint and the compressor is not running.

OFF

Tech Setup St	eps	LCD Will Show	Adjustment Options	Default
Summer Away Mode Humidity (Only displayed if summer away mode is turned "ON")	This tech setting will select the desired humidity level for Summer Away Mode. Note: The thermostat will default to the Dehumidify set point when this feature is enabled.	Humidity %	Use the 主 and 🖃 buttons to select the humidity level for Summer Away Mode.	OFF
Comfort Temperature (Only displayed if humidity is turned "ON")	This feature uses both air temperature and the relative humidity to control the indoor temperature based on how it actually feels for people to maximize comfort.		If ON is selected the ambient temperature will operate off of a combination of the air temperature and the relative humidity. When OFF the ambient temperatures will operate off of the air temperature only. The thermostat will show the comfort index in the ambient temp area and drive the heating and cooling based on this.	OFF
Humidity Pad Reminder	Enables a reminder for the user to change the humidity pad.		Use the 🛨 or 🖃 key to select OFF, 600, 1000, 1500, or 2000. These represent hours of heat operation.	OFF
UV Lamp Reminder	Enables a reminder for the user to change the UV light bulb.	UV LAMP	Use the 🛨 or 🖃 key to select OFF, 1 YR, 2 YR	OFF
IAQ Cell Reminder	Enables a reminder for the user to change the IAQ Cell after 25,000 hrs.	IRO CELL	Use the $[+]$ or $[-]$ buttons to select OFF, or 25 (stands for 25,000 hours).	OFF

#### WIFI Technician Setup Menu

These steps/options are only used for trouble shooting, re-setting or restoring to default the WIFI settings of the thermostat. They are not needed for installation or initial setup.

1. Press the MENU button. 2. Press the WIFI button.

3. Configure the WIFI options as desired using the table below. Use the + or - keys to change settings and the NEXT or PREV key to move from one step to another.

Note: Only press the DONE key when you want to exit the WIFI Menu

WIFI Menu		LCD Will Show	Adjustment Options	Default
SSID Number	This step shows the SSID number of the thermostat. (The network it is connected to)	SS Id SS Id HERE	Press NEXT to move to the next step. Press DONE to exit.	N/A
Firmware Version	This step shows the version of firmware that is installed on the thermostat.	FUJ WIFI-000000	Press NEXT to move to the next step. Press DONE to exit.	N/A
WIFI Provisioning Reset	This step allows you to reset the thermostats WIFI connection to change to a different WIFI network.	DELETE NETWORK	Press and hold YES for three seconds to reset.	N/A

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### **Setting the Humidity**

#### Ambient 20%-25% 26%-35% 36%-45% 46%-55% 56%-65% 66%-75% 76%-85% 86%-90% Temperature 50 50 50 50 50 50 50 50 50 51 50.6 50.7 50.7 50.9 51 51 51 51.2 52 51.2 51.5 51.5 51.7 52 52 52 52.5 53 52.3 52.5 52.5 52.8 53 53 53 53.5 54 52.9 53.3 53.3 53.6 54 54 54 54.8 55 54.5 55.3 53.5 54 54 55 55 55 56 54.6 54.7 56 54.1 56 56 56 57 55.2 54.7 55.4 56.2 56.9 56.9 57.9 57 56.9 57.3 58.1 58.1 59.1 58 55.8 56.3 56.6 58.1 59 56.4 56.9 57.3 58.2 59 59 59 60 60 57.5 60 60 57 58 59 60 61 58 58.9 58.5 59.4 61 59.1 60.1 60.9 60.9 61.1 61.9 62 60.1 61.1 61.9 61.9 62.1 62.9 63 60.1 60.6 61.4 62.4 63.1 63.1 63.4 64.1 64.1 64 61 61.6 62.4 63.4 64.1 64.4 65.1 62 62.7 62.5 63.3 64.5 65.3 65 65.9 65 65.9 65.5 66.5 65 63.5 66 64.3 66.9 66 63.4 64.1 65.1 66.1 66.8 66.8 67.6 67.8 67 68 64.6 65.4 67.4 68.2 68.2 68.9 69.2 66.4 69 65.3 66.2 67.2 68.2 69.1 69.1 70 70.1 70 69 70 70 71 71 66 67 68 71 72 67.2 68.2 69.1 70.1 71.1 71.4 72.4 72.6 68.3 69.3 70.3 71.3 72.3 72.8 73.8 74.3 73 69.7 70.7 71.7 72.7 73.7 74.2 75.2 75.8 74 74.9 70.8 71.9 72.9 73.9 75.6 76.6 77.4 75 74 76 77 72 73 75 78 79 73.9 77.1 78.6 79.6 76 72.9 74.9 76.1 80.6 77 74.7 73.8 75.7 77.2 78.2 80.2 81.2 82.7 78 76.3 77.3 79.8 75.2 78.8 81.8 82.8 84.3 79 76.1 77.1 78.1 79.9 80.9 83.4 84.4 86.2 80 77 78 79 81 82 85 86 88 81 77.9 79.1 80.3 82.3 83.6 86.6 88.3 91 82 78.7 80.2 81.7 83.7 85.1 88.1 90.6 94.1 83 84 80.3 81.8 83.3 85.3 86.9 89.9 92.4 96 91.4 94.7 99 81.1 82.9 84.7 86.7 88.4 85 84 85.1 90 92 82 86 88 93 97 102 95.8 86 82.8 89.5 100.5 87.3 106.4 87 94.1 <u>83.7</u> 91.1 88.6 98.5 104 110.9 86.1 88 87.9 90.4 92.9 96 100.5 106.1 113.1 85.3 89 94.5 98 86.2 88.9 91.7 103.2 109.5 117.6 100

### **Comfort Temperature Index**

#### **Setting the Humidty**

#### **Setting Target Humidity Setpoint**

Follow the steps below to change your target humidity setpoint.

#### Press the **HUMIDITY** key

Use the + or - key to select the target humidity setpoint. Press **DONE** when completed.

#### Note:



The target humidity setpoint is not programmable. Unlike temperature, humidity does not change quickly and should not be programmed.

Humidity is only energized during heat. Dehumidify is only energized during cool. Heat and Cool each have their own target setpoints.



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Setting the Humidity	Programming
Setting Target Humidity Setpoint	Set Time

#### Setting Target Humidity Setpoint

Ambient humidity will flash in the time field when Humidify or De-Humidify is Follow the steps below to set the day of the week and current time: set to ON.

HON will also flash when the Humidity terminal is energized. dON will also flash when the De-Humidify terminal is energized.



### **Recommended Heating Settings:**

Increasing Humidity

The table below shows recommended indoor humidity levels in relation to outdoor temperatures during heating (adding humidity).

### **Recommended Cooling Settings:**

Consult your professional HVAC technician for recommended settings for your climate.

Outside Temperature (0°F <b>)</b>	Recommended Relative Humidity	
+20° and above	35% to 40%	
+10°	30%	
0°	25%	
-10°	20%	
-20°	15%	

#### 1. Press the MENU button. 2. Press SET TIME.

- + | 3. Day of the week is flashing. Use the or kev to select the current day of the week.
- 4. Press NEXT.
- 5. The current hour is flashing. Use the + or key to select the current hour. When using 12-hour time, make sure the correct a.m. or p.m. choice is selected.
- 6. Press NEXT.
- 7. Minutes are now flashing. Use the + or + key to select current minutes.
- 8. Press DONE when completed.

### Programming

All our programmable thermostats are shipped with an energy saving default program. You can customize this default program by following the instructions in the set program schedule section starting on page 24.

Your thermostat can be programmed to have each day of the week programmed uniquely (7 days) or non-programmable. For the 7-day programming modes, there are three time period options.

#### 1."4" Residential (WAKE, LEAVE, RETURN, SLEEP)

2."2C" Commercial (OCCUPIED, UNOCCUPIED) 3. "4C" Commercial (OCCUPIED 1, UNOCCUPIED 1, OCCUPIED 2, UNOCCUPIED 2)

This thermostat has a programmable fan feature, which allows you to run the fan continually during any time period.

Reminders Once a reminder has been turned on and set, the elapsed time can be checked by navigating to its tech setup step. The elapsed time will then appear in the text field. It can also be reset at that time by holding down the set time/run sched button for 3 seconds. Resetting an expired reminder can be done without entering tech setup, by holding down the set time/run sched button for 3 seconds from the home screen.

Staging Delay Note: This step will not appear if using an outdoor balance point temperature.

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### Programming

## Programming

Custom Program				
Day of the Week	Events	Time	Setpoint Temperature (HEAT)	Setpoint Temperature (COOL)
	Wake/OCC1			
	Leave/UNOCC1			
Weekday	Return/OCC2			
	Sleep/UNOCC2			
	Occupied			
	Unoccupied			
	Wake/OCC1			
	Leave/UNOCC1			
Caturday	Return/OCC2			
Saturday	Sleep/UNOCC2			
	Occupied			
	Unoccupied			
	Wake/OCC1			
	LeaveUNOCC1			
Sunday	Return/OCC2			
	Sleep/UNOCC2			
	Occupied			
	Unoccupied			

To customize your 7 day 4 time period Program schedule, follow these steps:

#### Monday:

- 1. Select HEAT or COOL with the SYSTEM key. **Note:** You have to program heat and cool each separately.
- 2. Press the **MENU** button (If menu does not appear first, press RUN SCHED).
- 3. Press SET SCHED. Note: Monday is displayed and the **WAKE/OCC1** icon is shown. You are now programming the **WAKE/OCC1** time period for that <u>day.</u>
- 4. Time is flashing. Use the + or key to make your time selection for that day's WAKE/OCC1 time period. Note: If you want the fan to run continuously during this time period, select **ON** with the **FAN** key. If you want to use **IAQ** mode during this time period, select **IAQ** with the **FAN** key.

#### 5. Press NEXT.

6. The setpoint temperature is flashing. Use the + or + key to make your setpoint selection for that day's WAKE/OCC1 period.

#### 7. Press NEXT.

8. Repeat steps 4 through 7 for that day's LEAVE/UNOCC1 time period, for that day's RETURN/OCC2 time period, and for that day's SLEEP/UNOCC2 time period.

#### Repeat steps 4 through 8 for the remaining days of the week.

#### A Note About Auto Changeover:

In Auto you have the ability to switch between Auto Heat or Auto Cool by pressing the system key. This can be done once the current mode has reached its setpoint. For example: if in Auto Heat, the heat setpoint must be satisfied before the thermostat will allow you to switch to Auto Cool. You can switch out of Auto by holding down the system key. To get back into Auto, you must toggle the system key to Auto.

#### Programming

## To customize your 7 day 2 time period program schedule, follow these steps:

#### Monday:

- 1. Select **HEAT** or **COOL** with the **SYSTEM** key. **Note:** You have to program heat and cool each seperately.
- 2. Press the **MENU** button (If menu does not appear first press **RUN SCHED**).
- 3. Press SET SCHED. Note: Monday is displayed and the OCCUPIED text is shown. You are now programming the OCCUPIED time period for that day.
- Time is flashing. Use the + or key to make your time selection for that day's OCCUPIED time period.
   Note: If you want the fan to run continuously during this time period, select ON with the FAN key. If you want to use IAQ mode during this time period, select IAQ with the fan key.
- 5. Press NEXT.
- 6. The setpoint temperature is flashing. Use the + or key to make your setpoint selection for that day's OCCUPIED period.
- 7. Press NEXT.
- 8. Repeat steps 4 through 7 for that day's **UNOCCUPIED** time period.

#### Repeat steps 4 through 8 for the remaining days of the week.

#### A Note About Programmable Fan:

The programmable fan feature will run the fan continuously during any time period it is programmed to be on. This is the best way to keep the air circulated and to eliminate hot and cold spots in your building. If using **IAQ** mode, set fan to **IAQ** for any time period.

### Programming

#### **Default Programming**

Factory Default Program				
Day of the Week	Events	Time	Setpoint Temperature (HEAT)	Setpoint Temperature (COOL)
	Wake/OCC1	6 AM	70°F (21°C)	78°F (24°C)
Weekdeu	Leave/UNOCC1	8 AM	62°F (17°C)	85°F (28°C)
Weekday	Return/OCC2	6 PM	70°F (21°C)	78°F (24°C)
	Sleep/UNOCC2	10 PM	62°F (17°C)	82°F (26°C)
	Wake/OCC1	6 AM	70°F (21°C)	78°F (24°C)
Caturday	Leave/UNOCC1	8 AM	62°F (17°C)	85°F (28°C)
Saturday	Return/OCC2	6 PM	70°F (21°C)	78°F (24°C)
	Sleep/UNOCC2	10 PM	62°F (17°C)	82°F (26°C)
	Wake/OCC1	6 AM	70°F (21°C)	78°F (24°C)
Sunday	LeaveUNOCC1	8 AM	62°F (17°C)	85°F (28°C)
	Return/OCC2	6 PM	70°F (21°C)	78°F (24°C)
	Sleep/UNOCC2	10 PM	62°F (17°C)	82°F (26°C)

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#### Programming

#### **Default Programming**

Factory Default Program for 2 Time Periods				
Day of the Week	Events	Time	Setpoint Temperature (HEAT)	Setpoint Temperature (COOL)
Ma dalara	OCCUPIED	8 AM	70°F (21°C)	78°F (26°C)
Weekday	UNOCCUPIED	6 PM	62°F (17°C)	85°F (29°C)
Saturday	OCCUPIED	8 AM	70°F (21°C)	78°F (26°C)
	UNOCCUPIED	6 PM	62°F (17°C)	85°F (29°C)
Sunday	OCCUPIED	8 AM	70°F (21°C)	78°F (26°C)
	UNOCCUPIED	6 PM	62°F (17°C)	85°F (29°C)

You can use the table on the next page to plan your customized program schedule if using 5+1+1.

#### Features

#### Filter Change & Other Reminders

If the filter change reminder is enabled, you will see a reminder in the display when your air filter needs changed. The reminder will be shown in the display after your system has run long enough to require an air filter change.

**Resetting The Filter Change Reminder:** When the reminder is displayed, you should change your air filter and reset the reminder by holding down the 3rd button from the left side of the thermostat for 3 seconds.



This thermostat also has other maintenance reminders (Humidity Pad, UV lamp, and IAQ Cell), that are reset with the same procedure.

#### **Temporary & Permanent Hold Feature**

**Temporary Hold:** The thermostat will display **HOLD** and **RUN SCHED** on the bottom of the screen when you press the + or • key. If you do nothing, the temperature will remain at this setpoint temporarily for 4 hours. The program setpoint will then replace the temporary setpoint.

Permanent Hold: With a temporary hold set, If you press the HOLD key at the bottom of your screen, you will see HOLD appear below the setpoint temperature in the display. The thermostat will now permanently stay at this setpoint and can be adjusted using the + or - keys.

**To Return To Program:** Press the **RUN SCHED** key at the bottom of the screen to exit temporary and permanent holds.

#### **Remote Sensor Operation**

#### **Remote Sensor Operation Options**

#### Option #1 - Indoor / Local Temperature Sensor "ON":

**1.** The displayed room temperature will display the average temperature of the thermostat and all remote sensors.

**2.** By pressing the far left (Prev Step) button, the average temperature of just the remote sensor(s) will be displayed briefly in the clock field.

#### Option #1 - Indoor / Local Temperature Sensor OFF":

**1.** The displayed room temperature will only show the average temperature of the remote sensor(s).

#### **Option #2 - Outdoor:**

**1.** The outdoor temperature will alternate briefly with the clock display.

#### **Option #3 (Floor)**

**(5**)

**1.** By pressing the far left (Prev. Step) button, the temperature of the floor sensor will be displayed briefly in the clock field.

41°F to 95°F (5°C to 35°C) 44°F to 90°F (7°C to 32°C)
1 amp per terminal, 1.5 amp maximum all terminals combined
Heating is adjustable from 0.2° to 2.0°
Cooling is adjustable from 0.2° to 2.0° 18 to 30 VAC, NEC Class II, 50/60 Hz
for hardwire. 500 mA 32°F to +105°F (0°C to +41°C)
90% non-condensing maximum
4.7" W x 4.3" H x 0.9" D 2.4 GHz ISM radio band
Supporting 802.11 B/G/N Standards

**Specifications**