INSTALLER GUIDE

Comfort Control^2 HD Thermostat

featuring Serial Communications



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

INTRODUCTION TO THERMOSTAT AND COMMUNICATING SYSTEM

This is the dealer installation and start-up instruction guide for the Comfort Control² HD Communicating Thermostat. It features a flexible programming sequence for residential applications. It is designed to control components of a 24 VAC residential ClimateTalk™ communicating system consisting of gas or electric heat, heat pump, and central air conditioning applications. The high-resolution color display offers easy readability, intuitive programming with individual touch buttons to the right of the screen, on-screen prompting, pop-up message alerts to change filter, or regular servicing check-ups, and an exchangeable faceplate. The thermostat has a USB port for contractor setup.

The thermostat's major features include 40° to 99°F setpoint range, 1° resolution, 3.5-inch diagonal ¼ VGA LCD, auto configure, auto-changeover, selectable continuous fan speeds, humidity control, dehumidification control, dual fuel control, advanced diagnostics and fault code display, advanced installer menu, simultaneous heat and cool program storage, a four-step daily schedule sequence, energy management recovery, filter change-out indicator, replace UV lamp indicator, change Humidifier pad and program loss start up temperature.

Note: If system power is lost for more than eight hours, the clock will have to be reset. Programming and configuration settings will be saved.

WARNING

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

WARNING

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

ATTENTION: MERCURY NOTICE

This product does not contain mercury, but it 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 it 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.

On the Internet, visit www.white-rodgers.com for a location where the product containing mercury can be sent.

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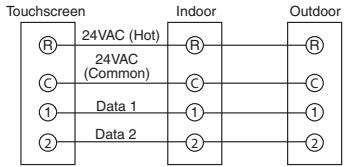
Installation

This booklet contains installation instruction and information on the thermostat only. Separate installation instructions for the furnace or air handler and outdoor AC condensing unit or heat pump are provided.

This thermostat is designed exclusively for the ClimateTalk™ communicating system.

Wiring Requirements

Each communicating device in the system has a four wire connection labelled (R, C, 1, 2). Each R, C, 1, and 2 terminals must be wired consistently. Maximum length from the thermostat to the indoor unit is 100 feet. Maximum length from the indoor unit to the outdoor unit is 125 feet.



Quick Installation Steps

- Determine location of thermostat installation.
- Mount thermostat base to wall.
- Connect wires to thermostat base.
- Attach thermostat to base.
- Turn on power to system. Allow approximately 1 minute for the system to configure.
- Set the time
- Select advanced installer menu settings or use USB upload feature to install Thermostat Configuration information
- Perform thermostat/system operation checkout.
- Program thermostat or accept factory programming.
- Touch ◁ to run schedule.

Installing thermostat

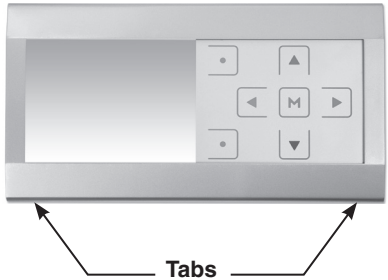
- Carefully separate the thermostat body from the thermostat base.
- Place base at installation location and mark mounting hole locations on wall using base as a template.
- Move base out of the way. Drill mounting holes.
- Attach base snugly to wall using two mounting screws. Levelling is for appearance only and will not affect thermostat operation.

- Connect wires to terminal block on base.
- Push excess wire into wall and plug hole with a fire resistant material (such as fiberglass insulation) to prevent drafts from affecting thermostat operation.
- Carefully line up the thermostat with the base and snap into place.

Removable Faceplate

The silver faceplate on the thermostat can be removed and replaced with the white faceplate included. To change the faceplate:

- Remove faceplate by gently pulling on the tabs behind the lower edge of the faceplate. Lift faceplate off of thermostat.
- Position faceplate on top edge of thermostat.
  Press on bottom of faceplate to snap faceplate back into position.



Initial Power Up

Turn on AC power to the system. The thermostat will automatically identify the communicating equipment installed and configure for the equipment as required.

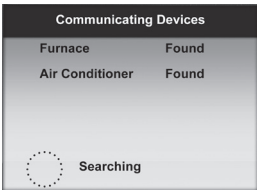


Messages at Thermostat

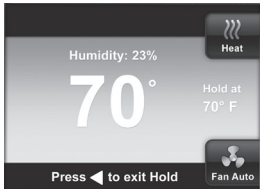
As equipment is found on the network, the display will show, **"device"** Found. The Searching icon will show until all equipment is found and configured. If no equipment is found on the network after approximately five minutes, the home screen will appear and indicate a Fault.

If the indoor unit is not detected by the network, **"Check System Fault"** will be found.

Check system wiring if one of these faults occur.



The display will change to Start-up, Hold screen showing the actual temperature, **SYSTEM** position **(HEAT)** mode, **FAN** setting **(AUTO), HOLD AT** with the setpoint temperature **62** for heat or **85** for cool and real time clock (hour, minute, AM or PM, day).



Communications Systems

The ClimateTalk™ protocol will set the identification of the individual nodes connected to the thermostat. The Network Device display will appear during initial power up and when a new device is found on the network.

Check System Operation

Heating System (Heat Pump only/Furnace only/Dual Fuel)

1. Press SYSTEM button until **Heat** is displayed.
2. Press ▲ to adjust thermostat setting 1° above room temperature. The heating system should begin to operate and the display will indicate **Heat On**.
3. If the heating system has additional stages, adjust the thermostat setting to 3°F (2°C) or more above the actual temperature. The next heat stage will energize.

Note: To check heat pump systems, it is better to use Equipment Heat Pump User Menu, Heat Setup to disable heat pump staging. Also, set Aux Lockout Temperature so indoor heat is not disabled. Be sure to enable heat pump staging and set Aux Lockout Temperature after checking system.

4. Press ▼ to adjust thermostat setting below room temperature. The heating system should stop operating.

Cooling System

1. Press SYSTEM button until COOL is displayed.
2. Press ▼ to adjust thermostat setting below room temperature. The cooling system should begin to operate and the display will indicate **Cool On**.
3. If the cooling system has additional stages, adjust the temperature to 3°F (2°C) or more below the actual. The second cool stage will energize within 10 seconds.

4. Press ▲ to adjust thermostat setting above room temperature. The cooling system should stop operating.

Fan Operation

1. Press FAN button until **Fan On** is displayed. The fan should begin to operate.
2. Press FAN button to change the display to **Fan Auto**. The fan should stop operating as long as there is no call for heat or cool.

Thermostat Overview

Navigating through your thermostat menus

Your thermostat features a simplified easy to understand menu structure.

- Press [M] to enter the Main Menu
- Highlight a menu item using the ▲ or ▼ buttons
- Enter the item by pressing [M]
- Use the ◁ or ▷ and the ▲ or ▼ to change menu items and settings
- Press the **Home** button to display the Home Screen.



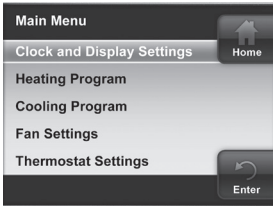
- Press the **Enter** button to save any changes you have made and display the previous menu item.



- **If no button is pressed for two minutes, you will return to the home screen without saving changes.**

Main Menu

Press [M] to enter menu. The Main Menu lists the menus that access and set thermostat operating options and programming. Use ▲ or ▼ to highlight selection



Thermostat Setup

Set the Current Time and Day

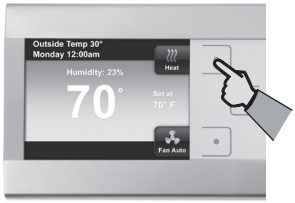
- On the Main Menu, select and enter **Clock and Display Settings**.
- Select and Enter **Time & Date**.
- The Hour is selected. Adjust the hour with ▲ or ▼.
- Press ▷ to select Minutes, AM/PM, Month, Day and Year and adjust.
- The thermostat will automatically assign the correct day of the week after the date is set.
- Press the **Enter** button.



Choose the System Setting

- From the Home screen, press the button as shown to choose the system setting: **Heat, EM, Cool, Auto,** or **Off**.





Energy Saving Factory Pre-Program

Your thermostat is programmed from the factory with the energy saving settings shown below for every day of the week. If this program meets your needs, simply select either **Heat**, **Cool**, or **Auto** with the System button.

Factory Pre-Programmed Heating and Cooling Schedule

	Wake Up (Morning)		Leave for Work (Day)		Return Home (Evening)		Go to Bed (Night)	
Heating Program	6:00 AM	70°F	8:00 AM	62°F	5:00 PM	70°F	10:00 PM	62°F
Cooling Program	6:00 AM	75°F	8:00 AM	83°F	5:00 PM	75°F	10:00 PM	78°F

If you want to change the heating and/or cooling programs in your thermostat, see the **"Programming Your Thermostat"** section in the Homeowner's Guide.

Advanced Installer Menu

This menu allows the installer to check installer-specific information or set advanced settings. It is accessible from the Home screen when the ◁ and ▷ buttons are pressed at the same time for three seconds.

Select the items using the ▲ or ▼ buttons and press the M button to enter the item to view information or change settings. Press **Enter** button to save any changes and display the previous menu or press **Home** to display the Home Screen. If 2 minutes pass without any buttons pressed, the Home Screen will return and changes will not be saved.

Items on the Advanced Installer Menu are:

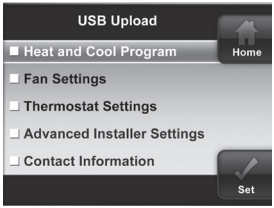
- Communicating Devices
- Fault Status
- USB Upload
- Thermostat Summary
- Heat Pump Disable*
- Aux Lockout*
- Dual Fuel Setpoint: 5°*
- Heat Cycle Rate: Medium
- Cool Cycle Rate: Medium
- Humidity Display Adjust

*Items marked with * may or may not appear in the list depending on the configuration of the system.

Communicating Devices: This menu item will list each piece of system equipment connected to the ClimateTalk™ network. The equipment can be selected and entered to view identifying information, operating information and setup status as described in Equipment User Menus.

Fault Status: This menu item lists current equipment fault conditions. The system equipment experiencing the Fault will be listed with details of the fault. If no faults are detected, this screen will show nothing.

USB Upload: The USB load menu displays a list of thermostat parameters that can be loaded to the thermostat from a USB memory device. If the USB port detects a USB memory device, this menu will automatically display.



Contractors should link to www.Rheemote.net and select: Departments/PTS/Thermostats.

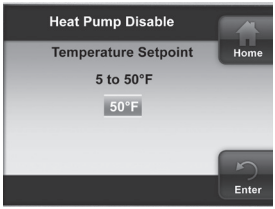
In the USB **Upload** menu, select the item to upload and press M to mark the item with a red box. After all items to upload are selected, press the Upload button.

The USB media must have properly formatted information to be recognized by the thermostat. If the thermostat does not find information, when the Upload button is pressed, the display will indicate, **"Invalid Data Found. Installation Failed!"**

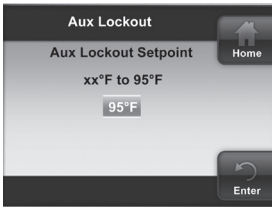
Once the **Upload** button is pressed and the upload is accomplished, the display will indicate **"Successfully Installed"** for 3 seconds then the display will display the menu or mode prior to entering the USB upload menu.



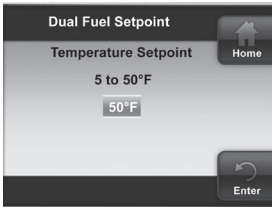
Heat Pump Disable - Available only for heat pump systems with indoor electric heat. This feature disables the heat pump and turns on electric heat below the selected outdoor temperature. The temperature range is from 5˚ to 50˚F.



Aux Lockout Temperature - Available for heat pump systems. This feature disables the indoor (electric or gas) heat above the selected outdoor temperature. The temperature range is from the Heat Pump Disable setting to 95°F.



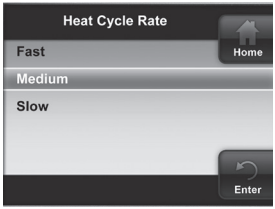
Dual Fuel Setpoint: If the heating system is a heat pump with gas heat and the outdoor sensor is installed, the thermostat can monitor outside temperature to determine when to begin using the gas heat system and stop the compressor. This temperature is the Dual Fuel temperature setpoint. The Dual Fuel feature eliminates the need for a fossil fuel kit.



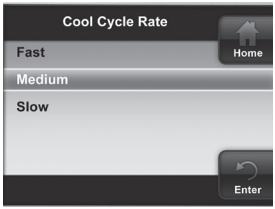
The display will indicate **5**° (default). The temperature can be adjusted to a value between **5**° to **50**°. The temperature will appear as °F unless °C is selected for temperature display.

As long as the outside temperature is above the Dual Fuel Setpoint, the compressor will operate. When the temperature drops below the setting the thermostat will start the gas heat and shut off the compressor.

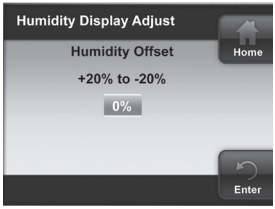
Heat Cycle Rate - Anticipation for heat cycle can be adjusted. Default setting is **Medium**. If you wish to have longer heat cycles, change to **Slow**. For shorter heat cycles change to **Fast**.



Cool Cycle Rate - Anticipation for cool cycle can be adjusted. Default setting is **Medium**. If you wish to have longer heat cycles, change to **Slow**. For shorter heat cycles change to **Fast**.



Humidity Display Adjust - Default is **0%**. This option allows you to change the humidity displayed to match other thermostats in your home.



Equipment User Menus

Equipment operating information and options will be found on the **Advanced Installer Menu** in **Communicating Devices**. Equipment fault status and details will be found in **Fault Status**.

Equipment User Menus

In the **Communicating Devices** menu, select the equipment listed that you wish to see information for. The display will indicate **"Accessing the Device"**. The list of parameters for the equipment will appear. Select the parameter you wish to view.

Each Equipment User Menu has submenus to divide the information into categories. Each piece of equipment has a different set of submenus, with different parameters depending on the equipment. The submenus show similar information for each piece of equipment. The submenus and the information they provide are:

Status	Used to display or modify equipment settings
Fault History (FAULT HIST)	Displays information on the last six faults by code and description that occurred throughout the system and the number of days ago that the fault occurred.
2 Week History (2 WK HIST)	Displays information on the number of hours of unit/ mode operation and the number of cycles the unit has operated in for the last two weeks.
Life History (LIFE HIST)	Displays information on the lifetime number of hours of unit/mode operation and the number of cycles the unit has operated in.
Unit Info	On new system installations displays the model number and serial number of the selected unit. If a control has been replaced the equipment will be recognized but will only show the unit model number.
Setup	Used to display or modify equipment settings

“X” in the following tables indicate alpha or numeric character

Furnace User Menus

Status 1		
Parameter	**Indications**	**Comments**
Main Limit	Closed, Open	Main Limit Control Status
MRLC Input	Closed, Open	Main Reset Limit Control Status
HALC Input	Closed, Open	Heat Assist Limit Control Status
IDM Output	Off, Lo, Hi	Inducer Output Status
Furn Lo Pr Sw	Closed, Open	Furnace Low Pressure Switch Status
Furn Hi Pr Sw	Closed, Open	Furnace High Pressure Switch Status
Gas VLV Prcnt %	XXX%, Off	Mod Gas Valve % Open
Gas VLV Relay	Lo, Hi, On, Off	Gas Valve Control Output Status
Flame	Off, Marginal, Good, Unexpected	Status of Flame Sensor
Blower CFM	CFM XXXX	Furnace Blower CFM

Furnace User Menus *(cont.)*

Status 2		
Parameter	**Indications**	**Comments**
Mode	Mod Heat, Lo Heat, Hi Heat, AC1, AC2, Fan Only, Off, HP1, HP2	Indicates Operating Mode of System
Motor Mfgr	Regblt, Emerson	Blower Motor Manufacturer
Motor RPM	RPM	Blower Motor RPM
Maximum CFM	CFM XXXX	Maximum CFM Blower Provides
Blower CFM	CFM XXXX	Displays Current Operating CFM
Temp Rise	NA, XXXF	Difference between the Supply and Return Air Temperature
Return Temp	XXXF, FLT	Displays Return Air Temp (if installed)
Supply Temp	NA, (If disabled), XXXF, FLT	Displays Supply Air Temp (if installed and enabled in setup)
HUM Output	On, Off	Humidifier Output Relay Status
EAC Output	On, Off	Electronic Air Cleaner Output Relay Status

Furnace User Menus *(cont.)*

Fault History (FAULT HIST)		
Fault Code	**Fault Occurred**	**Comments**
XXXXXXXXXXXXXXX	Days XX	Displays up to 6 Faults; Days (XX) indicates how many days ago the fault occurred
Clear Faults	No, Yes	

2 Week History (2 WK HIST)		
Parameter	**Indications**	**Comments**
2wk Lo HT Hrs	XXX	2 Weeks Low Heat Hours of Operation
2wk Lo HT Cycls	XXXX	2 Weeks Low Heat Cycles
2wk Hi HT Hrs	XXX	2 Weeks High Heat Hours of Operation
2wk Hi HT Cycls	XXXX	2 Weeks High Heat Cycles
2wk Y1 Hrs	XXX	2 Week First Stage Cooling/Heat Pump Hours of Operation
2wk Y1 Cycles	XXXX	2 Week First Stage Cooling/Heat Pump Cycles
2wk Y2 Hrs	XXX	2 Week Second Stage Cooling/Heat Pump Hours of Operation
2wk Y2 Cycles	XXXX	2 Week Second Stage Cooling/Heat Pump Cycles
2wk G Hrs	XXX	2 Week Indoor Blower Hours of Operation
2wk G Cycles	XXXX	2 Week Indoor Blower Cycles

Furnace User Menus *(cont.)*

Life History (LIFE HIST)		
Parameter	**Indications**	**Comments**
Total Days Pwrd	XXXX	Total number of days control has been powered
Lo HT Hrs	XXXXXX	Low Heat Hours of Operation
Lo HT Cycles	XXXXXX	Low Heat Cycles
Hi HT Hrs	XXXXXX	High Heat Hours of Operation
Hi HT Cycles	XXXXXX	High Heat Cycles
Y1 Hrs	XXXXXX	First Stage Cooling/Heat Pump Hours of Operation
Y1 Cycles	XXXXXX	First Stage Cooling/Heat Pump Cycles
Y2 Hrs	XXXXXX	Second Stage Cooling/Heat Pump Hours of Operation
Y2 Cycles	XXXXXX	Second Stage Cooling/Heat Pump Cycles
G Hrs	XXXXXX	Indoor Blower Hours of Operation

Furnace User Menus *(cont.)*

Unit Info		
Parameter	**Indications**	**Comments**
Model Number	XXXX-XXXXXXXXXXXXXXX	Unit Model Number
Serial Number	XXXXXXXXXXXXXXXXXX	Unit Serial Number (Not available if control is replaced)
Software Vers	XXXXXX	Control Software Version

Setup		
Parameter	**Options**	**Comments**
Heat Rise Adjust	55F, 65F	Change airflow to adjust heat temperature rise
Min Heat Adj %	-15, -7, 0, 7, 15	Selectable Airflow Adjustments at 40% Firing Rate
Max Heat Adj %	-15, -7, 0, 7, 15	Selectable Airflow Adjustments at 100% Firing Rate
Supply Air Sens	On, Off	Factory default is On, if Sensor is not installed turn Off
Reset All Dflts	No, Yes	Resets the Furnace to the Factory Default Configuration by selecting Yes

Furnace User Menus *(cont.)*

Dipswitch*		
Dipswitch	**Indications**	**Comments**
Cool Airflow	XXXXCFM	Airflow Dipswitch Settings
AC-HP Adj	-10%, 0%, 10%	Heat Pump AC Airflow Settings

*** Dipswitch status is not required when the system is set up for 4-wire communications. It is only displayed when a conventional 24V thermostat input is active.**

Air Handler User Menus

Status		
Parameter	**Indications**	**Comments**
Auxiliary Heat	On, Off	Auxiliary Heat Status
Blower CFM	CFMXXXX	Air Handler Blower CFM
Motor Mfgr	Rgblt, Emerson	Blower Motor Manufacturer
Motor RPM	RPMXXXX	Blower Motor RPM
Maximum CFM	CFMXXXX	Maximum CFM of the Air Handler
Temp Rise	NA, XXXF, FLT	Difference Between the Supply and Return Air Temperature (NA if either sensor is disabled)
Return Temp	NA (if disabled), XXXF, FLT	Displays Return Air Temperature (if installed and enabled in Setup)
Supply Temp	NA (if disabled), XXXF, FLT	Displays Supply Air Temperature (if installed and enabled in Setup)

Fault History (FAULT HIST)		
Fault Code	**Fault Occurred**	**Comments**
XXXXXXXXXXXXXXX	Days XX	Displays up to 6 Faults; Days (XX) indicates how many days ago the fault occurred
Clear Faults	No, Yes	Air Handler Blower CFM

Air Handler User Menus *(cont.)*

2 Week History (2WK HIST)		
Parameter	**Indications**	**Comments**
2wk AuxHT Hrs	XXX	2 Week Auxiliary Heat Hours of Operation
2wk AuxHT Cycls	XXXX	2 Week Auxiliary Heat Cycles
2wk G Hrs	XXX	2 Week Blower Hours of Operation
2wk G Cycles	XXXX	2 Week Blower Cycles

Life History (LIFE HIST)		
Parameter	**Indications**	**Comments**
Total Days Pwrd	XXXX	Total number of days control has been powered
Aux HT Hrs	XXXXXX	Auxiliary Heat Hours of Operation
Aux HT Cycles	XXXXXX	Auxiliary Heat Cycles
G Hrs	XXXXXX	Continuous Fan Hours of Operation
G Cycles	XXXXXX	Continuous Fan Cycles

Unit Info		
Parameter	**Indications**	**Comments**
Model Number	XXXX-XXXXXXXXXXXXXXX	Unit Model Number
Serial Number	XXXXXXXXXXXXXXXXXX	Unit Serial Number (not available if control is replaced)
Software Vers	XXXXXX	Control Software Version

Air Handler User Menus *(cont.)*

Setup		
Parameter	**Options**	**Comments**
Return Air Sens	Off, On	If Return Air Sensor is field installed, turn On. Factory Default is Off
Supply Air Sens	Off, On	If Supply Air Sensor is field installed, turn On. Factory Default is Off
Reset All Dflts	No, Yes	Resets the Air Handler to the Factory Default Configuration by selecting Yes

Dipswitch*		
Dipswitch	**Indications**	**Comments**
Cool Airflow	XXXXCFM	View Airflow Dipswitches
HT Pump Airflow	XXXXCFM	View Heat Pump Airflow Dipswitch Settings
Cool Air Adj	-10%, 0%, 10%	View Airflow Trim Settings
On-Demand Dehum	On, Off	Activate Dehumidification Feature

*** Dipswitch status is not required when the system is set up for 4-wire communications. It is only displayed when a conventional 24V thermostat input is active.**

Heat Pump User Menus

Status		
Parameter	**Indications**	**Comments**
Compressor	Off, On	Compressor Status
Mode	AC, AC1, AC2, HP, HP1, HP2, Defrost, Time Delay, Off	System Mode of Operation
Comp Hi Pres SW	Closed, Open	Heat Pump High Pressure Switch Status
Comp Lo Pres SW	Closed, Open	Heat Pump Low Pressure Switch Status
Outdr Temp Sens	FLT, XXXF	Outdoor Ambient Temperature
Coil Temp	FLT, XXXF	Outdoor Coil Temperature

Fault History (FAULT HIST)		
Fault Code	**Fault Occurred**	**Comments**
XXXXXXXXXXXXXXX	Days XX	Displays up to 6 faults; Days (XX) indicates how many days ago the fault occurred
Clear Faults	No, Yes	

Heat Pump User Menus *(cont.)*

2 Week History (2 WK HIST)		
Parameter	**Indications**	**Comments**
2wk Y1 Hrs	XXX	2 Week First Stage Cooling Hours of Operation
2wk Y1 Cycles	XXXX	2 Week First Stage Cooling Cycles
2wk Y2 Hrs	XXX	2 Week Second Stage Cooling Hours of Operation
2wk Y2 Cycles	XXXX	2 Week Second Stage Cooling Cycles
2wk Lo HT Hrs	XXX	2 Week First Stage Heat Pump Hours of Operation
2wk Lo HT Cycls	XXXX	2 Week First Stage Heat Pump Cycles
2wk Hi HT Hrs	XXX	2 Week Second Stage Heat Pump Hours of Operation
2wk Hi HT Cycls		2 Week Second Stage Heat Pump Cycles
2wk Dfrst Cycls		2 Week Heat Pump Defrost Cycles

Heat Pump User Menus *(cont.)*

Life History (LIFE HIST)		
Parameter	**Indications**	**Comments**
Total Days Pwrd	XXXX	Total Number of Days Control has been Powered
Y1 Hrs	XXXXXX	First Stage Cooling Hours of Operation
Y1 Cycles	XXXXXX	First Stage Cooling Cycles
Y2 Hrs	XXXXXX	Second Stage Cooling Hours of Operation
Y2 Cycles	XXXXXX	Second Stage Cooling Cycles
Lo HT Hrs	XXXXXX	First Stage Heat Pump Hours of Operation
Lo HT Cycles	XXXXXX	First Stage Heat Pump Cycles
Hi HT Hrs	XXXXXX	Second Stage Heat Pump Hours of Operation
Hi HT Cycles	XXXXXX	Second Stage Heat Pump Cycles
Defrost Cycles	XXXXXX	Total Defrost Cycles

Unit Info		
Parameter	**Indications**	**Comments**
Model Number	XXXX-XXXXXXXXXXXXXXX	Unit Model Number
Serial Number	XXXXXXXXXXXXXXXXXX	Unit Serial Number (not available if control is replaced)
Software Vers	XXXXXX	Control Software Version

Heat Pump User Menus *(cont.)*

Cool Setup		
Parameter	**Options**	**Comments**
AC Profile	A, B, C, D	Selectable Airflow Profiles (see Heat Pump Installer Guide)
Cool Air Adj %	-10, 0, 10	Selectable Cooling Airflow Adjustments
On Demand Dehum	On, Off	Select Blower Operation on based on humidity
Reset All Dflts	No, Yes	Resets the Heat Pump to the Factory Default Configuration by selecting Yes

Heat Setup		
Parameter	**Options**	**Comments**
HP Profile	A, B, C, D	Selectable Airflow Profiles (See Heat Pump Installer Guide)
Heat Air Adj %	-10, 0, 10	Selectable Heat Pump Airflow Adjustments
Dfrost Cmpr Dly	0, 5	Selectable Compressor Delay during defrost
Reset All Dflts	No, Yes	Resets the Heat Pump to the Factory Default Configuration by selecting Yes
HP Staging (Multi-Stage Units Only)	On, Off	For Multi-Stage Heat Pumps Factory Default is On. This allows Low/High stages of capacities. To only allow High capacity in Heat Pump Mode select Off

Air Conditioner User Menus

Status*		
Parameter	**Options**	**Comments**
Compressor	Off, On	Compressor Status
Mode	AC, AC1, AC2, Time Delay, Off	System Mode of Operation
Comp Hi Pres SW	Closed, Open	AC High Pressure Switch Status
Comp Lo Pres SW	Closed, Open	AC Low Pressure Switch Status
Outdr Temp Sens (if enabled)	XXXF, FLT	Outdoor Ambient Temperature Display (if installed and enabled in setup) This option will not appear unless the sensor is enabled

Fault History (FAULT HIST)*		
Fault Code	**Fault Occurred**	**Comments**
XXXXXXXXXXXXXXX	Days XX	Displays up to 6 faults; Days (XX) indicates how many days ago the fault occurred
Clear Faults	No, Yes	

***Status and Fault History also available on tandem unit Compressor 2 menu.**

Air Conditioner User Menus *(cont.)*

2 Week History (2 WK HIST)		
Parameter	**Indications**	**Comments**
2wk Y1 Hrs	XXX	2 Week First Stage Cooling Hours of Operation
2wk Y1 Cycles	XXXX	2 Week First Stage Cooling Cycles
2wk Y2 Hrs	XXX	2 Week Second Stage Cooling Hours Operation
2wk Y2 Cycles	XXXX	2 Week Second Stage Cooling Cycles

Life History (LIFE HIST)		
Parameter	**Indications**	**Comments**
Total Days Pwrd	XXXX	Total number of days control has been powered
Y1 Hrs	XXXXXX	First Stage Cooling Hours of Operation
Y1 Cycles	XXXXXX	First Stage Cooling Cycles
Y2 Hrs	XXXXXX	Second Stage Cooling Hours of Operation
Y2 Cycles	XXXXXX	Second Stage Cooling Cycles

Air Conditioner User Menus *(cont.)*

Unit Info		
Parameter	**Indications**	**Comments**
Model Number	XXXX-XXXXXXXXXXXXXXX	Unit Model Number
Serial Number	XXXXXXXXXXXXXXXXXX	Unit Serial Number (not available if control is replaced)
Software Vers	XXXXXX	Control Software Version

Cool Setup		
Parameter	**Options**	**Comments**
AC Profile	A, B, C, D	Selectable Airflow Profiles (See AC Installer Guide)
Cool Air Adj %	-10, 0, 10	Selectable Cooling Airflow Adjustments
On Demand Dehum	On, Off	Select Blower Operation based on humidity
Reset All Dflts	No, Yes	Resets the AC to the Factory Default configuration by selecting Yes
Outdoor Temp Sens	On, Off	If Outdoor Ambient Temperature Sensor is Field installed, turn On. Factory Default is Off

SYSTEM FAULT CODES

Display Code	Diagnostic Description
1	Long Run Time
2	System Pressure Trip
3	Short Cycling
4 (L4)	Locked Rotor
5 (L5)	Open Circuit
6 (L6)	Open Start Circuit
7 (L7)	Open Run Circuit
9	Low Secondary Voltage
11	Failed ignition
12	Low flame sense current
13	Flame lost after established
14	Flame present with gas valve off
21 (L21)	Low Pressure Switch Trip
22	Main limit switch open.
23	Auxiliary limit switch open
25	Condensate Overflow
26	Line Neutral Reversed
27	Check Line Voltage

Display Code	Diagnostic Description
28	High Line Voltage
29 (L29)	High Pressure Switch Trip
30	Fuse Open
33	MRLC Open
44	Low pressure switch closed, inducer off
45	Low pressure switch open, inducer on high speed
46	Low pressure switch open, inducer on low speed
55	High pressure switch closed, inducer off
57	High pressure switch open, inducer on high speed
60	Blower Fault Run
61	Blower Fault No Run
62	Check inducer motor and indoor blower motor
66	RPM out of range (over 1200 RPM)
68	No Blower Communication

SYSTEM FAULT CODES

Display Code	Diagnostic Description
71	No inducer control communication
77	No gas valve feedback
78	Servo control fault
79	No Gas Valve Feedback
80	Low Airflow
81	Return air sensor out of range
82	Supply air sensor out of range
83	Coil Temperature Sensor Fault
84	Outdoor Ambient Temperature Sensor Fault

Display Code	Diagnostic Description
85	Freeze protection
86	Air Freeze protection
P	Compressor Protector Fault
d1	No Shared Data
d3	Insufficient Indoor CFM
d4	Memory Card Invalid
d5	Card Hardware Conflict
d6	Blower Horsepower Conflict
d7	Blower Manufacturer Conflict
d8	Old Shared Data

Please refer to equipment instructions for additional fault information.

Part No. 37-7309A

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