

# INSTALLATION AND OPERATING INSTRUCTIONS



# Save these instructions for future use!



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

# Communicating Touchscreen Thermostat

Model R02P029

# SUP modulating quick configuration flowchart



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# 1-INTRODUCTION TO THERMOSTAT AND COMMUNICATING SYSTEM

The system consists of a premium indoor furnace or air handler, an outdoor AC condensing unit or heat pump and touchscreen thermostat that is the HVAC (Heating, Ventilation & Air Conditioning) command center. All these devices are linked together and communicate using ClimateTalk language protocol. The benefits of ClimateTalk are autoconfiguration of the system, the ability to share information throughout the system for enhanced diagnostics and control, and straightforward wiring since communications requires attaching only four wires. This ensures simple, reliable operation and an accurate installation.

# 2-SAFETY

# 

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



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. 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 or www.switchthestat.ca for location to send product containing mercury.

# **3-INSTALLATION**

This document provides information for installation of the touchscreen thermostat only. Installation instructions of the furnace or air handler and outdoor AC condensing unit or heat pump are provided with each of these devices.

### 3.1- BATTERY LOCATION

#### Figure 1: Battery Location



2 "AA" alkaline batteries are included in the thermostat to keep time during a power outage.

If "LOW BATTERY" is displayed in the scrolling area, the batteries are low and should be replaced with fresh batteries. For best results use premium brand alkaline batteries

To replace batteries, set thermostat **SYSTEM** touch key to Off, remove thermostat from wall by grasping the top and bottom of the thermostat and pulling straight away from the wall. The base will remain on the wall. Install the batteries in the rear along the top of the thermostat. Reposition the thermostat over the base plate and gently snap into place.

#### **3.2- 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.

#### Figure 2: Wiring diagram



#### 3.3- QUICK INSTALL STEPS

- 1. Determine location of thermostat installation.
- 2. Mount thermostat base to wall.
- 3. Connect wires to thermostat base.
- 4. Remove battery tag to provide battery power to the thermostat.
- 5. Attach thermostat to base.
- Turn on power to system. Allow approximately 1 minute for the system to configure.
- 7. Set the time
- 8. Select thermostat operating options in the Thermostat Options Configuration
- 9. Menu.
- 10. Perform thermostat/system operation checkout.
- 11. Program thermostat or accept factory programming.
- 12. Touch Hold.

#### 3.4- INSTALLING THERMOSTAT

- Pull the thermostat body off the thermostat base. Forcing or prying thermostat will cause damage to the unit.
- Place base at installation location and mark mounting hole locations on wall using base as a template.
- 3. 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.
- 5. Connect wires to terminal block on base.
- 6. Remove battery tag to provide battery power to thermostat.
- 7. Carefully line the thermostat up with the base and snap into place.

**NOTE:** Push excess wire into the wall to prevent any interference when attaching the thermostat to the base, ensuring a good connection to the terminals.

# 4-POWER UP

Turn on AC power to the system. The thermostat will automatically identify the communicating components installed.

## 4.1- MESSAGE AT THERMOSTAT



During power up, the thermostat will scroll the word "SEARCHING" in the message area, indicating that the system is looking for components (Air Handler, Furnace, Heat Pump, Air Conditioner) on the Climate Talk network. Once the components are identified the message display will indicate the components found. Confirmation will be given in the message area that the equipment has been found with the message (equipment) FOUND.

**NOTE:** If the thermostat display continuously shows **"SEARCHING** check the wiring to the thermostat.

#### **4.2- COMMUNICATION SYSTEMS**



The thermostat will recognize the system devices that are connected and the capacities to set the system up to the operating settings. The system has additional flexibility which allows for the customization of certain parameters.

### **4.3- CHECK SYSTEM OPERATION**

#### 4.3.1- Fan Operation

- Turn power on to the system.
- Press Run Schedule.
- Press FAN until **FAn on** is displayed. The fan should begin to operate.

• Press FAN until **FAn Auto** is displayed. The fan should stop operating.

#### 4.3.2- Heating System

- Press Run Schedule.
- Press SYSTEM key until Heat is displayed.
- Press \Lambda to adjust thermostat setting above room temperature. The heating system should begin to operate.
- Press  $\nabla$  to adjust thermostat setting below room temperature. The heating system should stop operating.

#### 4.3.3- Cooling System

- Press SYSTEM key until Cool is displayed.
- Press  $\nabla$  to adjust thermostat setting below room temperature. The cooling system should begin to operate.
- Press \Lambda to adjust thermostat setting above room temperature. The cooling system should stop operating.

# 5-THERMOSTAT SETUP

### 5.1- SET CURRENT TIME AND DAY

On Home Screen Display, touch the menu key to display additional key choices.



Touch **Set Time** once to display hour and AM or PM designation in clock display.



Touch either the P or  $\Huge{l}$  key until you reach the correct hour and AM or PM designation. Then touch **Set Time** again to display minutes only in clock display.



Touch and hold either the  $\triangleright$  or  $\triangleleft$  keys until you reach the correct minutes. Then touch Set Time once again to display the day of the week.



Touch either the  $\triangleright$  or  $\triangleleft$  key until you reach the correct day.

Touch **Run Schedule** to save the Time and Day settings and return to the Home Screen Display.

#### 5.2- CHOOSE THE SYSTEM SETTING (COOL, OFF, HEAT, EM, AUTO)



Touch the SYSTEM key to select:

**Cool**: Thermostat controls only the cooling system.

Off: Heating and Cooling systems are off.

**Heat**: Thermostat controls only the heating system.

**Em**: Thermostat controls emergency heating only. **Auto**: Auto Changeover is used where both heating and cooling may be required during the same day. Auto allows the thermostat to automatically select heating or cooling depending on the indoor temperature and the selected heat and cool setpoints. This thermostat will not allow you to program a conflict between Heating and Cooling setpoints. For setting Auto mode see Auto Mode page 10.

#### **5.3- SETUP THERMOSTAT OPTIONS**

The Thermostat has options that can be selected and adjusted. These options are in the Thermostat Options Configuration Menu. On the Home Screen Display, touch the Menu key to display additional key choices.



Touch and hold the **Installer Config** key for 3 seconds. This displays the first menu item as shown in the next step. Touch  $\Rightarrow$  or  $\triangleleft$  to change

a menu option. Touch  $\triangle$  to advance to the next menu item or  $\nabla$  to return to the previous menu item. Touch **Run Schedule** at any time to exit the menu and return to Home Screen Display.



#### Select continuous FAN speed.

Default is Medium. It can be set to High, Medium or Low. In High, the fan will run at the highest speed when **FAN** key is selected to On. In high, the fan speed will be approximately 75%, in medium the fan speed will be approximately 50% of the maximum speed of the fan, and in low the fan speed will be approximately 25% of the maximum speed of the fan.



Select continuous backlight. Scrolling message will show "BACKLIGHT". When bL is selected On the backlight will be on continuously. Selecting bL OFF will allow the backlight to turn on momentarily when any key is touched. If system power is off and thermostat is operating on battery only, and bL is On, bL will turn the backlight on momentarily when a key is touched.



Select temperature offset. Scrolling message will show "TEMPERATURE ADJUSTMENT". Your thermostat was accurately calibrated at the factory, however this option allows you to change the display temperature to match your previous thermostat if you prefer. Default is 0° with current temperature. Adjustment can be made from 5°F Lo to 5°F HI to change the displayed temperature.

Touch **Run Schedule** at any time to exit the Menu and return to Home Screen Display.



**Select temperature display** as Fahrenheit or Celsius. Scrolling message will show "**SELECT TEMPERATURE DISPLAY**". This option selects the temperature display as °F or °C.



**Select beeper** (audio prompt) Default is On for the beeper to indicate a touch key selection. It can be changed to OFF.



Select air filter maintenance reminder. Scrolling message will show "AIR FILTER MAINTENANCE". Default is OFF. It can be changed to a setting from 25 to 1975 hours in increments of 25 hours to select the amount of time for the reminder. Consult your installer for the hours and type of filter.

When the system has run for the selected length of time, the scrolling message area will show "CHANGE FILTER" to indicate maintenance is required.



Select UV lamp maintenance reminder. Scrolling message will show "UV LAMP MAINTENANCE". Default is OFF. It can be changed to a setting from 25 to 1975 days in increments of 25 days to select the amount of time for the reminder. Setting of 350 days is an annual reminder.

Based on this setting, the scrolling message area will show "CHANGE UV LAMP" to indicate maintenance is required.



Select humidifier pad maintenance reminder. Scrolling message will show "HUMIDIFIER PAD MAINTENANCe". Default is OFF. It can be changed to a setting from 25 to 1975 hours in increments of 25 hours to select the amount of time for the reminder. Setting of 100 hours is typically 6 months of run time.

Based on this setting, the scrolling message area will show "CHANGE HUMIDIFIER PAD" to indicate maintenance is required.

# 6-USING THE THERMOSTAT

#### **6.1- SYSTEM OPERATION**



Touch the **SYSTEM** key to select the thermostat operating mode desired. The setpoint temperature can be changed by touching the  $\mathbf{A}$  or  $\mathbf{\nabla}$  keys.

#### 6.2- AUXILIARY HEATING

#### 6.2.1- Heat Pump Disable

This feature is applicable only when a heatpump is connected on the communication network. When this feature is selected, the thermostat will switch to electric heat and shut off the compressor when the outside temperature falls below the HP balance point. In the Thermostat User Menu, use

 $\triangleleft$  or  $\triangleright$  to select the temperature which can be between 5 to 50°F.

#### 6.2.2- Dual Fuel System Disable

This feature is applicable only when a heatpump is connected on the communication network. When this feature is selected, the thermostat will switch to fossil fuel heat and shut off the compressor when the outside temperature falls below the DF balance point. In the Thermostat User Menu, use  $\triangleleft$  or  $\triangleright$  to select the temperature which can be between 5 to 50°F.

#### 6.2.3- Air Handler Lockout Temperature

This feature is applicable only when a heatpump is connected on the communication network with electric auxiliary heat. When the outdoor temperature is above the Air Handler Lockout Temperature balance point, the auxiliary heat stage(s) will be inhibited so the thermostat setpoint will be maintained by only the heat pump. Factory default is OFF which disables the feature. The Lockout Setpoint cannot be set at or below the Heat Pump Disable (HP) balance point. In the Thermostat User Menu, use or to select the temperature which can be between the Heat Pump Disable setting value (HP) to 95°F.

#### 6.3- PERMANENT TEMPERATURE HOLD

The Permanent Temperature Hold feature bypasses the program and allows you to adjust the temperature manually as needed. The temperature you set in HOLD will be maintained indefinitely. Touch **Run Schedule** to cancel HOLD and resume the programmed schedule. Touch  $\triangle$  or  $\nabla$  keys to adjust the temperature. The **Hold** key will appear on the screen. Touch the **Hold** key to maintain the new setpoint temperature. "Hold At" will display to the left of the temperature setpoint. To cancel the permanent hold setting at any time and return to the program, touch **Run Schedule**.

EXAMPLE: If you turn up the heat during the Morning program and touch the Hold key, it will remain at the new temperature until you touch **Run Schedule** or you manually adjust to another temperature.

#### 6.4- NORMAL MODE

If Program days per week is set for 0 Days (Normal mode) in the Thermostat Options Configuration Menu, the thermostat will not follow any program periods. Time of day and day of week will not display. Touch the **SYSTEM** key to select Heat or Cool and use the  $\triangle$  or  $\nabla$  buttons to adjust the temperature to your desired setting.

#### 6.5- AUTO MODE

In Programmable mode or Non-programmable mode, you can touch the **SYSTEM** key to select **AUTO** to allow the thermostat to automatically change between Heat and Cool. When the **SYSTEM** key is touched to select Auto the thermostat will change to Heat or Cool, whichever ran last. If it switches to heat but you want cool, or it changes to cool but you want heat, touch both  $\triangle$  or  $\nabla$  keys simultaneously to change to the other mode.

#### 6.6- CHOOSE THE FAN SETTING (AUTO OR ON)

**FAN Auto** is the most commonly selected setting and runs the fan automatically when the heating or cooling system is on.

**FAN On** selection runs the fan continuously for increased air circulation or to allow additional air cleaning. When **FAN** is selected on, it will run at the speed selected in the Thermostat Options Configuration Menu.

NOTE: **FAN On Prog** will display to indicate that the fan has been programmed to be on for the complete period.

#### 6.7- CHECK SYSTEM STATUS



If the Home Screen Display indicates "**Call for Service**" and "**Check (equipment name)**" in the scrolling message area, there is a fault in the system. When this fault is displayed, refer to the Advanced Installer Configuration Menu Fault status.

If the thermostat indicates "**SEARCHING**" for too long, the thermostat has detected a functional error.

#### 6.8- MAINTENANCE REMINDER MESSAGE

A reminder will display in the scrolling message area when it is time for accessory maintenance if selected in the Thermostat Options Configuration Menu. When a reminder appears, it can be cleared by touching the **Clean Display key**. This will also reset the timer to begin a new time period for the reminder.



Air Filter maintenance - When the system has run for the selected length of time, the scrolling message area will show "CHANGE FILTER".

Humidifier Pad Maintenance - Based on the reminder setting, the scrolling message area will show "CHANGE HUMIDIFIER PAD" to indicate maintenance is required.

**UV Lamps Maintenance** - Based on the reminder setting, the scrolling message area will show "CHANGE UV LAMP" to indicate maintenance is required.

# 7-ADVANCED INSTALLER CONFIGURATION MENU

The Advanced Installer Configuration menu provides access to equipment fault status and equipment operating information and options.

#### 7.1- ENTERING AND NAVIGATING THE ADVANCED INSTALLER CONFIGURATION MENU/SERVICE INFORMATION

On the Home Screen Display, touch the **Menu** key to display additional key choices.



Touch and hold the **Installer Config** key to approximately 3 seconds to enter the Thermostat Options Configuration Menu.

Touch and hold the **Installer Config** key again for approximately 3 seconds to enter the Advanced Installer Configuration Menu.

## 7.2- FAULT STATUS



The display will change to the Fault Screen indicating the equipment connected. **ADVANCED** will appear on the right of the display to indicate the Advanced Installer Configuration Menu.

The equipment connected will show above the  $\triangleleft$ or  $\triangleright$  keys. The scrolling message area will show "**NO FAULTS**" or will show a description of the fault with an error code in the temperature display area. Touch  $\triangleleft$  or  $\triangleright$  keys to view the fault status of each piece of equipment connected.



To change the display to the Equipment User Menu, touch  $\triangle$  or  $\nabla$ .

## 7.3- EQUIPMENT USER MENUS

The equipment found in the system will display in the scrolling message area.



Touch  $\triangle$  or  $\nabla$  to step through the list of equipment connected, including thermostat.

To view the Equipment Menus information for the equipment displayed in the scrolling message area, touch **Installer Config** to enter that equipment submenu listing. The scrolling message area will show "**WORKING**" to indicate that the thermostat is retrieving data. Then the first equipment submenu name appears in the scrolling message area.



Touch **Menu** to step out of the equipment submenu parameters back to the equipment submenu. Each touch of **Menu** will step up one menu level back to the Thermostat Options Configuration Menu. Touch the **Run Schedule** to step out of all menus and back to the Home Screen Display.



Touch  $\triangle$  or  $\nabla$  to step through the list of equipment submenus. Each equipment may have different submenus.

When the equipment submenu you want is showing in the scrolling message area, touch **Installer Config**. The scrolling message area will show "**WORKING**", then change to the first parameter on the equipment submenu. Settings for the parameter will also appear on the display.



Touch  $\triangle$  or  $\nabla$  to step through the items of the equipment submenu and view settings.

If a setting can be adjusted, the  $\triangleleft$  or  $\triangleright$  keys will appear. Change the setting as required. Then touch  $\blacktriangle$  or  $\bigtriangledown$  to step to the next item. "WORKING" will appear and then the display will show "Done" to indicate the change is accepted or "FAIL" to indicate the change was not made. The display will return to the fault status screen. Repeat the process.



Some of the parameters being displayed on a submenu are long and switching between the name and the value. Touch the Hold key to momentarily stop the display from switching.

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

## 7.4- THERMOSTAT USER MENU

Status		
Parameter	Indications	Comments
Configuration	HP - Heat Pump DF - Dual Fuel GH - Gas Heat ES - Electric System AC - Air Conditioner FN - Fan EH - Electric Heat Furnace and Air Conditioner	Indication in center of screen shows the configuration of the thermostat based on the equipment connected. The type of system with the number of stages will be displayed above the ♀ or ≯ . Additional system types and stages can be viewed by pressing ♀ or ≯

#### Table 1: Status User Menu

Setup		
Parameter	Options	Comments
Outdoor Temperature Display	bL, On, OFF	<ul> <li>bL – (7 Days Programming only) Factory default is (bLink), alternates time display between time and outdoor temperature.</li> <li>On – (0 Days Programming default) The outdoor temperature is displayed continuously on the time display.</li> <li>OFF – Only Time is displayed.</li> </ul>
Balance Pt	OFF, 5° to 50°F	Available only for air handler with heat pump systems. Disables heat pump and turns on electric heat below the selected outdoor temperature.
Dual Fuel Disable (DF)	OFF, 5° to 50°F	Available only for furnace with heat pump systems (dual fuel systems). Switches from heat pump to fossil fuel equipment (furnace) below the selected temperature.
Air Handler Lockout Temperature (AH)	OFF, Heat Pump Disable setting to 95°F	Available only for air handler with heat pump systems. Disables electric heat above the selected outdoor temperature. OFF defaults to 50°F.
<equipment>_ Test</equipment>	No, Yes	Steps the selected equipment through its sequential mode of operation.
Reset System	No, Yes	This will reset ALL of the communicating system components to their factory set values.

#### Table 2: Setup User Menu

# 7.5- CHINOOK GAS FURNACE USER MENUS

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
Dipswitches	Displays current setting of dipswitches on equipment.

### Table 3: User Menus

# "X" in the following tables indicate alpha or numeric character.

Table 4: Statu	s 1 CHINOOK	gas Furnace	<b>User Menu</b>
----------------	-------------	-------------	------------------

Status I			
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	

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		

## Table 5: Status 2 CHINOOK gas Furnace User Menu

## Table 6: Fault History CHINOOK gas Furnace User Menu

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

# Table 7: Unit Info CHINOOK gas Furnace User Menu

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

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

## Table 8: 2 week history CHINOOK gas Furnace User Menu

## Table 9: Life History CHINOOK gas Furnace User Menu

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

## Table 10: Setup CHINOOK gas Furnace User Menu

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

Dipswitch*			
Dip Switch	Indications	Comments	
Cool Airflow	XXXXCFM	Airflow Dipswitch Settings	
Heat Rise	Nom, Nom+10	Heat Rise Airflow Settings	
Hi Heat Adj	-15%, -7%, 0%, 7%, 15%	High Heat Airflow Settings	
Lo Heat Adj	-15%, -7%, 0%, 7%, 15%	Low Heat Airflow Settings	
Fan Spd Select	Lo, Hi	Fan Speed Settings	
AC-HP Adj	-10%, 0%, 10%	Heat Pump AC Airflow Settings	
On-Demand Dehum	On, Off	Dehumidification Settings	
Test Mode	Off, 40% (70%), 100%	Test Mode Settings	
AC HP Stg Mult	NA, 50%, 75%	Heat Pump AC Stage Multiplier	

## Table 11: Dipswitch CHINOOK gas Furnace User Menu

\* 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.

## 7.6- SUPREME ELECTRIC FURNACE USER MENUS

#### "X" in the following tables indicate alpha or numeric character.

#### Table 12: Status SUPREME User Menu

Status			
Parameter	Indications	Comments	
CFM	XXXX CFM	Current CFM	
% ELMT	XXX %	Active electric elements %	
Version	X_X_X	Firmware version	

#### Table 13: AC/HP User Menu

AC/HP		
Parameter	Indications	Comments
AC/HP 1/2 ton	0-10, FC*	Size of outdoor unit in ½ tons. This value is frozen when connected to the Alizé heat pump.
Mode	EFF, CO	Efficient or comfort mode
CFM/TON	300-500, FC*	CFM/TON when not using the Alizé
AC Y1 Ratio	70-90, FC*	First stage cooling CFM %

#### Table 14: Dehumidification User Menu

Dehum User Menu		
Parameter	Indications	Comments
Dehum Ratio	80-90	Dehumidification CFM %
Active Low	No, Yes	Whether DH is active low or not

#### Table 15: Fan User Menu

Fan		
Parameter	Indications	Comments
Cont Fan Ratio	0-100, FC*	Continuous fan CFM %
Rise	20-80, FC*	

#### Table 16: Autobackup User Menu

Autobackup		
Parameter	Indications	Comments
Enabled	No, Yes	If autobackup is enabled or not
Wait Time	0-120, FC*	Time in minutes before checking for the autobackup
Update Delay	0-30, FC*	Time in seconds between autobackup adjustments
Set PT Offset	0.0-3.5, FC*	Minimal offset of set point allowing autobackup
Rise	20-80, FC*	Autobackup rise

#### Table 17: System User Menu

System		
Parameter	Indications	Comments
AC/HP ON Delay	005-120, FC*	Delay before starting fan after AC/HP is started
AC/HP OFF Delay	005-240, FC*	Delay before stopping fan after AC/HP is stopped
Ratio Max Pwr	20-100, FC*	Maximal power % of the machine

#### Table 18: Reset User Menu

Reset		
Parameter	Options	Comments
Factory Values	No, Yes	Restore factory values

\* FC values are shown when a finer configuration value has been set directly through the furnace interface (see the Supreme user manual).

## 7.7- HEAT PUMP / AIR CONDITIONER USER MENUS

"X" in the following tables indicate alpha or numeric character.

Table 19: Status Heat Pump Us
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Status		
Parameter	Indications	Comments
Comp Speed	XX%	Compressor speed %
Fan speed	XXX RPM	Outdoor fan speed
Coil Temp	XX DF	Coil temperature (°F)
Comp temp	XX DF	Compressor temperature (°F)
Version	X_X_X	Interface Board Firmware version

#### Table 20: CFM/TON User Menu

CFM / TON			
Parameter	Indications	Comments	
Heat CFM/TON	250-750	CFM/TON for heating	
Cool CFM/TON	250-750	CFM/TON for cooling	
Dry CFM/TON	250-750	CFM/TON for dehumidification	

#### Table 21: Defrost User Menu

Defrost		
Parameter	Indications	Comments
Defrost Fan %	0-100	Fan % used during defrost
Defrost Heat	No, Yes	Use backup heat during defrost. The defrost fan % will be used to set the heat demand %

#### Table 22: Reset User Menu

Reset		
Parameter	Indications	Comments
Factory Values	No, Yes	Restore factory values

# 8-MODULATING CHINOOK FURNACE 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
26	Line Neutral Reversed
27	Check Line Voltage
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
66	RPM out of range (over 1200 RPM)
68	No Blower Communication
77	Servo circuit open
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
93	Board Failure
<u>Р</u>	Compressor Protector Fault
d1	No Shared Data
d3	Insufficient Indoor CFM
d4	Nemory Card Invalid
<u> </u>	
00 d7	Diower Dorsepower Conflict
d/	
as	Old Shared Data