

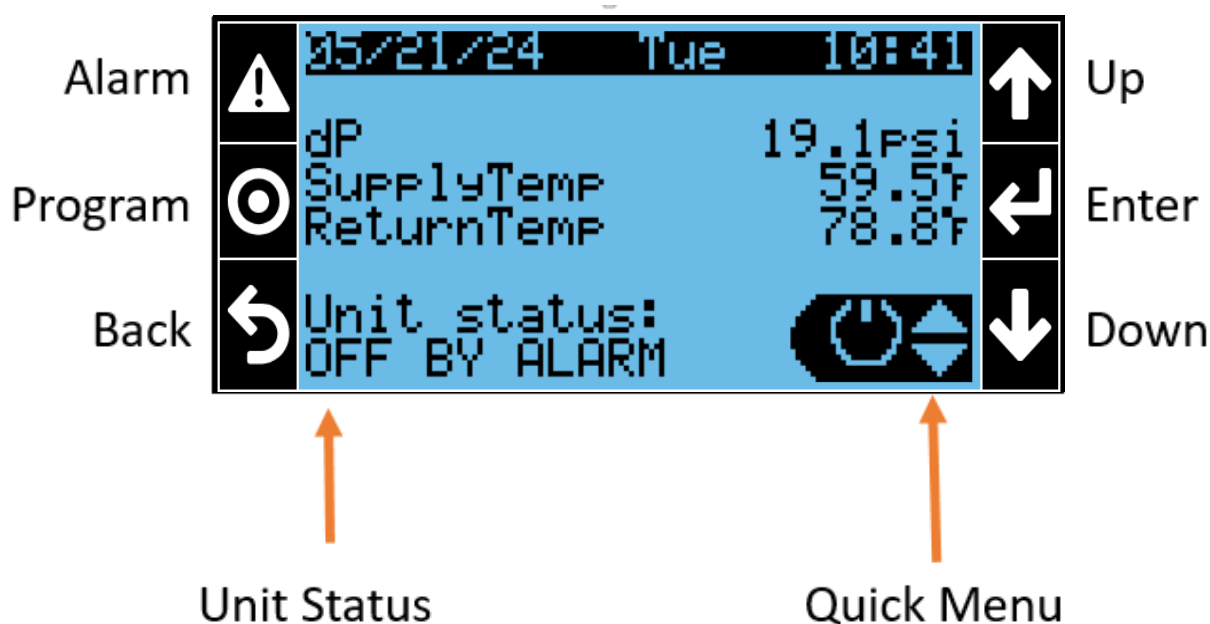


User Guide

Secondary Pump Skid (Glycol or CO₂)

21 May 2024

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Most settings and variables are accessible under the “Quick Menu”. Pressing the up  and down  keys on the home screen will cycle through the Quick Menu options. Pressing Enter  will open the contents of the Quick Menu option shown on the screen.

Quick Menu Options

The Power menu entry opens a screen that allows the user to toggle the unit on and off. If toggled Off using the Power menu, the unit status will display “OFF BY KEYBOARD”. If toggled off by physical switch or remote contact, the unit status will display “OFF BY DI”.



The Pump menu entry opens the pages showing variables and parameters related to the secondary fluid pump.



The Evaporator (pictured: expansion valve) menu entry opens the pages showing variables and parameters related to the chiller.



The Info menu entry opens a full list of all input and output and current value or status.



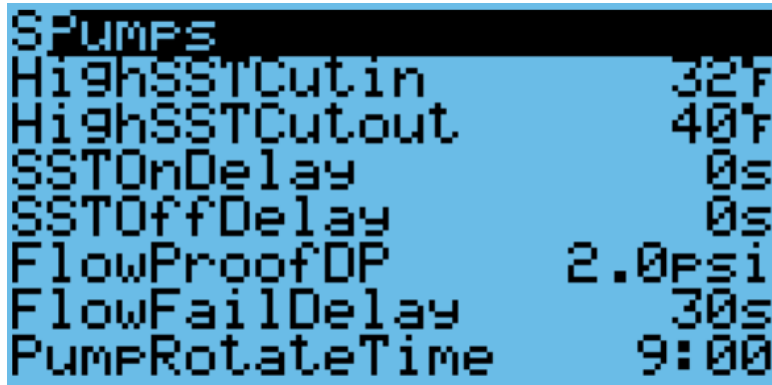
IO Info 1/3			
SUPPLY Temp	20.0	F	
Return Temp	26.4	F	
PUMP Suct Pre	25.7	PSI	
PUMP Disch Pr	36.2	PSI	
System dP	19.1	PSI	
Local Enable	TRUE		
PUMP 1 Fault	FALSE		

Press Program+Escape within the Info quick menu to display hardware and software info.

Info	
RAE CORPORATION	
Code: WMT_SecondGly	
SW ver.:	24.5.17
OS ver.:	4.8.005
BOOT ver.:	4.8.005

Pages

Within a menu, the Up and Down keys cycle through the pages. Press Enter to cycle through changeable parameters within a page. When a changeable parameter is selected, press Up and Down to change the value. Press Enter to save the value and move to the next field. Press Back/Escape to exit the page.



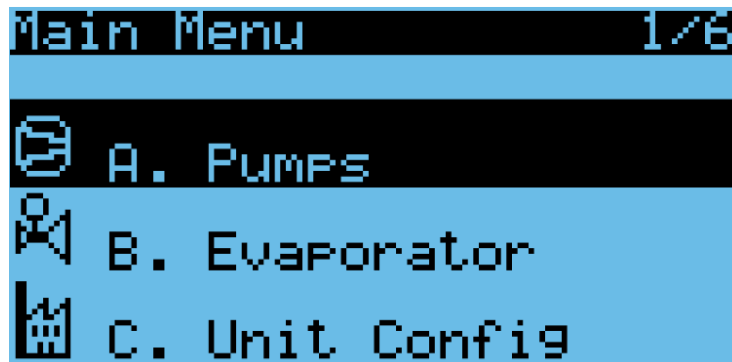
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SPUMPS
HighSSTCutin      32°F
HighSSTCutout     40°F
SSTOnDelay        0s
SSTOffDelay       0s
FlowProofDP       2.0Psi
FlowFailDelay     30s
PumpRotateTime    9:00
```

Alarm Menu

The Alarm  key will illuminate if there are active alarms. Press the key to silence the buzzer and access the list of current alarms. For any manual reset alarm, press and hold the Alarm key for 3 seconds while the active Alarm is on screen to reset the alarm. At the End of Alarm page, press and hold the Alarm key for 3 seconds to reset all active alarms.

Program Menu

Press the Program  button from the home screen to open the Main Menu. The display will prompt the user for a four digit password to access the menu.



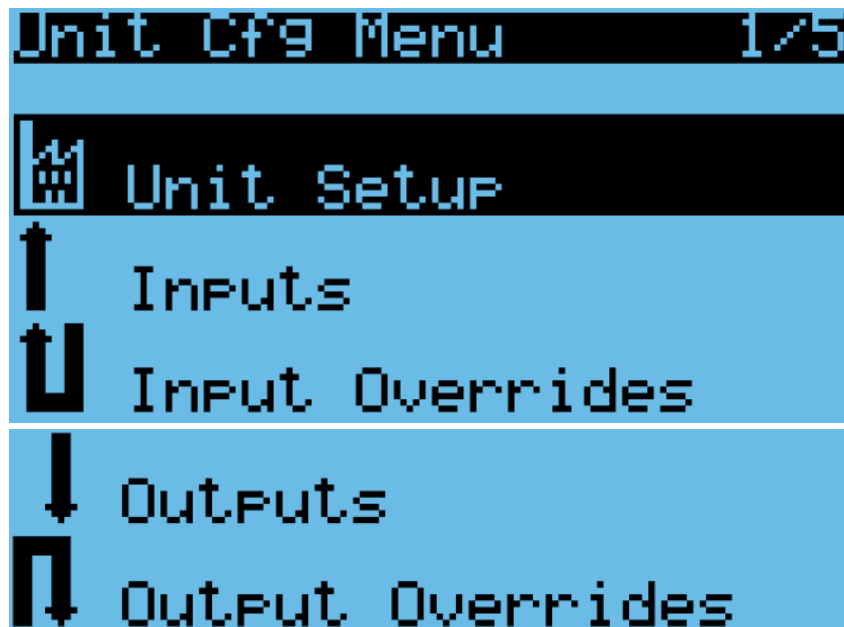
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Main Menu 1/6
A. PUMPS
B. Evaporator
C. Unit Config
```



Press the up  and down  keys on the main menu to cycle through the menu options. Press Enter  to open the contents of the menu entry highlighted on the screen.

1. Pump – modify pump related setpoints and parameters
2. Evaporator – modify evaporator related setpoints and parameters
3. Unit Config - Opens the Unit Config menu.
4. Alarm Logs – Displays the historical log of alarms.
5. Settings – Opens the Settings Menu.
6. Logout – Manually log out of the Service or Manufacturer profiles. This will take place automatically if left alone.

Unit Config Menu



1. Unit Setup – Contains initial configuration parameters such as rack assignment and temperature range.
2. Inputs – Contains a page for each controller input allowing the user to modify the input configuration. For analog inputs, this includes the channel (U1-U10) the sensor is connected to, the sensor or transducer type, Offset (calibration), scaling, and current status. For digital inputs, the user can modify

the channel, and the “Action” which determines whether the input is Reverse (Open=TRUE, Closed=FALSE) or Direct (Closed=TRUE, Open=FALSE).

3. Input Overrides – Allows the user to override the hardware value of an input. The override must be enabled, and a value set.
4. Outputs – contains a page for each controller output allowing the user to modify the output configuration. For all outputs, the user can modify the channel (Y1-Y2 for analog outputs, Relay 1-6 for relay outputs). For analog outputs, the current value is shown as well as the output type, which should be set to 0 for 0-10V. For relay outputs, the current value is shown as well as the option to set Action to Direct (Closed=TRUE, Open=FALSE) or Reverse (Open=TRUE, Closed=FALSE).
5. Output Overrides - Allows the user to override the hardware value of an output. The override must be enabled, and a value set.

Settings Menu



1. Date/Time – Set date format and current date/time.
2. Communications – Advanced communications options
3. Pwd Change – Change password. Must be logged in at or above permission level of intended profile for password change.
4. Import/Export – Exports all current settings to local storage or a USB drive, and imports stored settings from local storage or USB drive. Unit must be Off to perform Import/Export.

Finalizing Commissioning

To finalize commissioning with all parameters set, the parameters should be saved so that they can be reloaded if the Defrost controller permanent memory is cleared.

It is recommended to familiarize yourself with menu structure and how each of the following are accessed, as Refrigeration will be disabled all Liquid Solenoid valves closed until Step 7 is completed.



the
pages
and

Menu

1. Turn unit “off” using the Power Quick or the unit enable toggle switch.
2. Navigate to the Import Export screen from the Main Menu - > Settings -> Import/Export.
3. Set “Import/Export:” to “EXPORT”
4. Set Memory Type to INTERNAL FLASH MEMORY to store parameters on the device, or USB to export to a USB drive.
5. Set the number for the file name.
6. Change Confirm: to “YES”
7. Escape to home screen and re-enable the unit.

It is recommended to export to the controller internal memory to be available if the memory is cleared, and export a second copy to USB (step 4 above) to be maintained in the event the controller must be replaced. Otherwise, the configuration process will have to be repeated to restore settings.

To restore settings from a stored file, the process is the same except set the Import/Export direction to IMPORT.