



CoolLogic TOUCH CONTROL SYSTEM

QUICK START GUIDE



**For All R-454B Control System, Water-Source,
& Remote Air-Cooled Modules**
Models: UA & UW

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Introduction

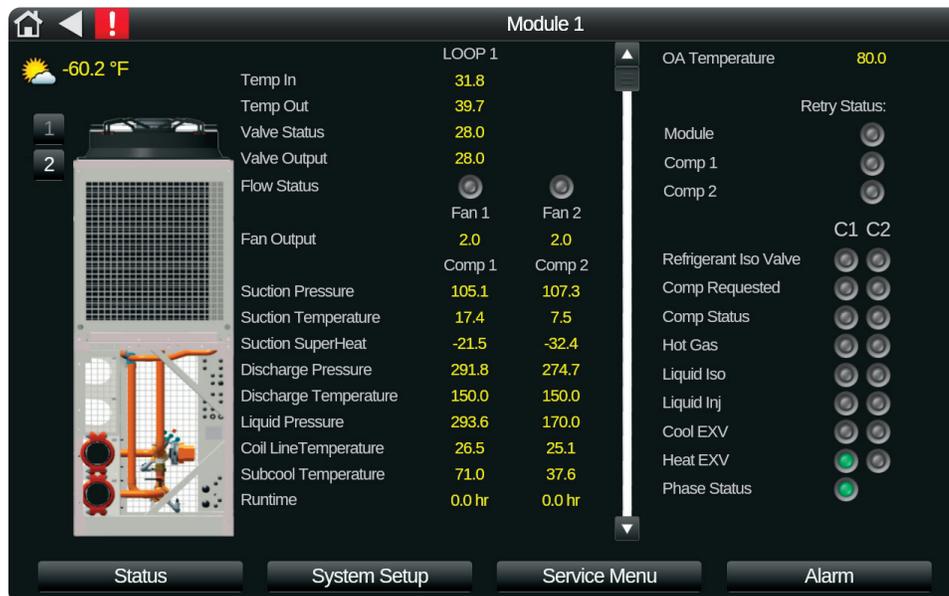
This document outlines the quick-start procedure for items that require configuration at initial system startup. Additional fine tuning may be required depending on the system's application.

This guide assumes the required software is installed on the CoolLogic Touch Control System and each of the Chiller Modules in the bank. It is important to verify that all sensors' input jumpers on the CoolLogic Touch Control System and Module Controllers are set properly per sensor type used (voltage, thermistor/dry contact, or current loop).

HOME SCREEN



View the status of the bank.



Select the module number to view the status of the module.

System Specifications and Initial Configuration

CONTROL SYSTEM SPECIFICATIONS

Operating Conditions:

- -4°F to 122°F (-20°C to 50°C)
- 10% to 90% RH (non-condensing)
- Front IP65 water and dust proof (rear: IP20)
- Vibration tested to EN 60068-64

Storage Temperature:

- -13°F to 158°F (-25°C to 70°C)

ESTABLISHING COMMUNICATION

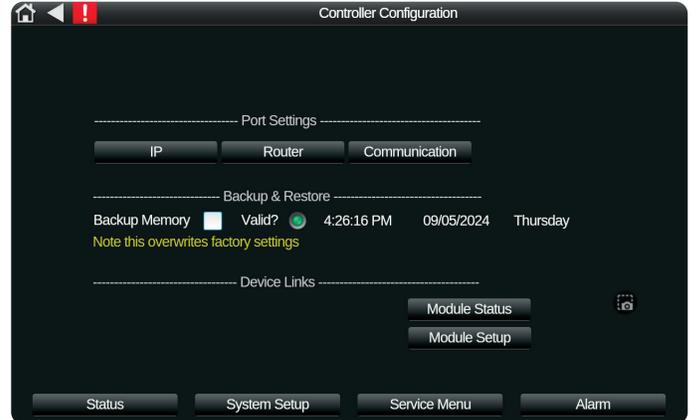
Use this guide after all devices are properly addressed. Address the CoolLogic Touch Control System and Modules using the rotary dials on each control board. All control boards require a power cycle after setting the address.

IMPORTANT: Save Settings.

SAVING YOUR CONFIGURATION

After all configuration items are set as desired for the chiller bank, access the Configuration Screen to save settings.

System Setup > Controller Configuration and select **Backup Memory** to save your settings.



After applied, verify the **“VALID?”** Indicator turns green.

Configuring System Type and Application

Select **System Setup** from the *Home Screen*.

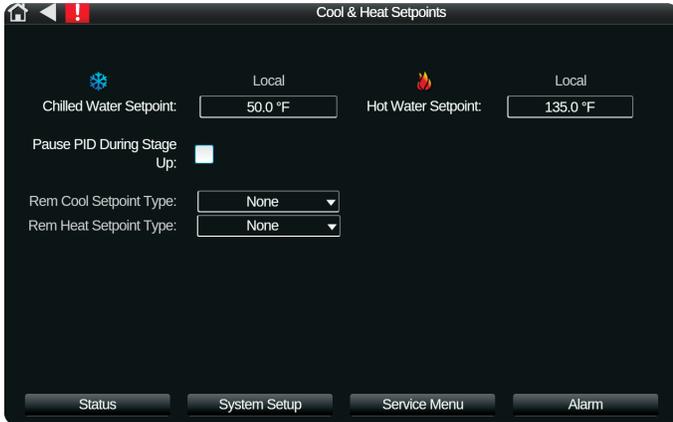
The default password to access the Setup menu is **2546**

- **Chiller Module Type:** Choose the type of module being controlled.
- **Control Type:** Make your selection based on the bank application from the following options: **Off, Cooling, Heating, Heat Recovery, SHC Pump, SHC Heat Recovery, SHC HR Cool Priority, SHC HR Heat Priority, or Constant Volume Cooling.**
- **Chiller Control Source:** selects the start/stop method the chiller bank uses.
 - **Digital Input** - enable with dry contact closure of the Remote Chiller Enable terminals within the CoolLogic Touch Control Panel **and** the three-way switch in the **REMOTE** position.
 - **Keypad** - enable using the keypad and the three-way switch in the **LOCAL** position.
 - **BAS** - enable via BACnet points and the three-way switch in the **REMOTE** position and the contact closure at the CoolLogic Touch Control Panel terminals 42 and 43 of the LVTB1.
- **Cooling Type:** selects the type of application in use.
 - **Comfort Cooling** - select if LWT is 40°F - 50°F (4.4°C - 10°C).
 - **Brine Duty Cooling** - select if cooling LWT is 20°F - 40°F (-6.7°C - 4.4°C). (Ensure adequate glycol mixture before selecting Brine Duty Cooling.)
 - **Data Center Cooling** - select if cooling LWT is above 50°F (10°C).
- **Glycol Enable:** select if using glycol in the source and/or load loops.
- **Chilled Water Design Delta:** the design difference between entering water and leaving water temperatures in cooling.

- **Hot Water Design Delta:** the design difference between entering water and leaving water temperatures in heating.
- **Cool Capacity Limiting:** assigns the maximum cooling capacity of the bank.
- **Heat Capacity Limiting:** assigns the maximum heating capacity of the bank.
- **Module used as N + 1:** assigns the module number that will be used as the redundant module.
- **Module used as N + 2:** assigns the module number that will be used as the second redundant module.
- **Smart Bypass:** when selected, the first module's valves always stay open acting as a bypass.
- **BAS OAT Enable:** on air-cooled products, select this to use the BAS-supplied outside air temperature instead of the outside air temperature measured on-board.
- **Use Average OAT:** select to use the average of the measured outside air temperature and the BAS-supplied outside air temperature
- **Use Adaptive Head Pressure:** when selected, a 4-pipe water-cooled or 2-pipe air-cooled configuration adjusts the head pressure target pressure relevant to the outside air temperature

Configuring System Type and Application

COOL AND HEAT SETPOINTS



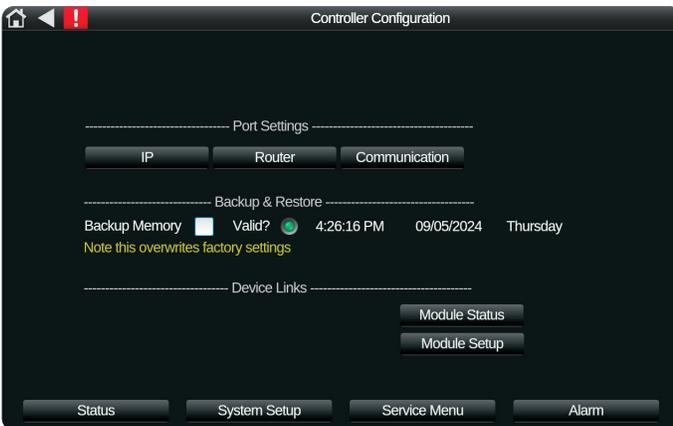
Chilled Water Setpoint: Enter the desired chilled water setpoint.

Hot Water Setpoint: Enter the desired hot water setpoint.

PID Hold: Checked box will not allow compressors to continue to stage up while there is a fault retry condition.

Remote Cool/Heat Setpoint Type: Assigns where the chiller bank reads its setpoints.

CONTROLLER CONFIGURATION



IP: Configures BACnet over IP settings.

Router: Configures BACnet communication settings.

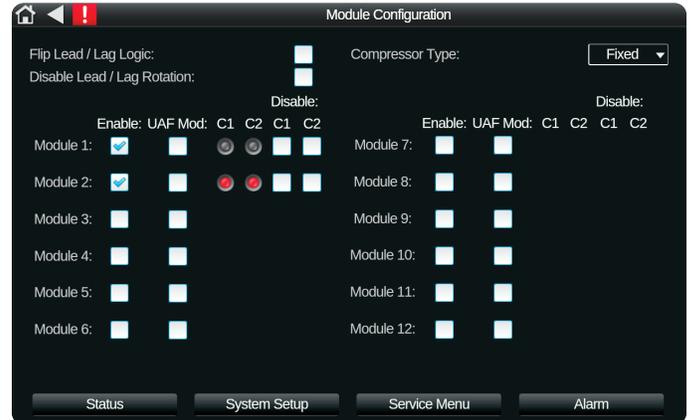
Communication: Configures BACnet Device Instance.

NOTE: If Port Settings need to be changed, please contact a ClimaCool Representative.

Module Setup: Setup the time and communications settings of the module(s).

MODULE CONFIGURATION

Enables/disables modules and sets the order that units will stage on.



Flip Lead/Lag Logic: Check Box to switch the leading and lagging compressors in a module.

Disable Lead/Lag Rotation: Check box to set compressor C1 to always lead.

Type of Variable Compressors:

- **Fixed:** No variable-speed compressors
- **VFD:** Variable Frequency Drive Installed in at least one compressor in the bank

Service Menu



TRENDS

View graphical trends

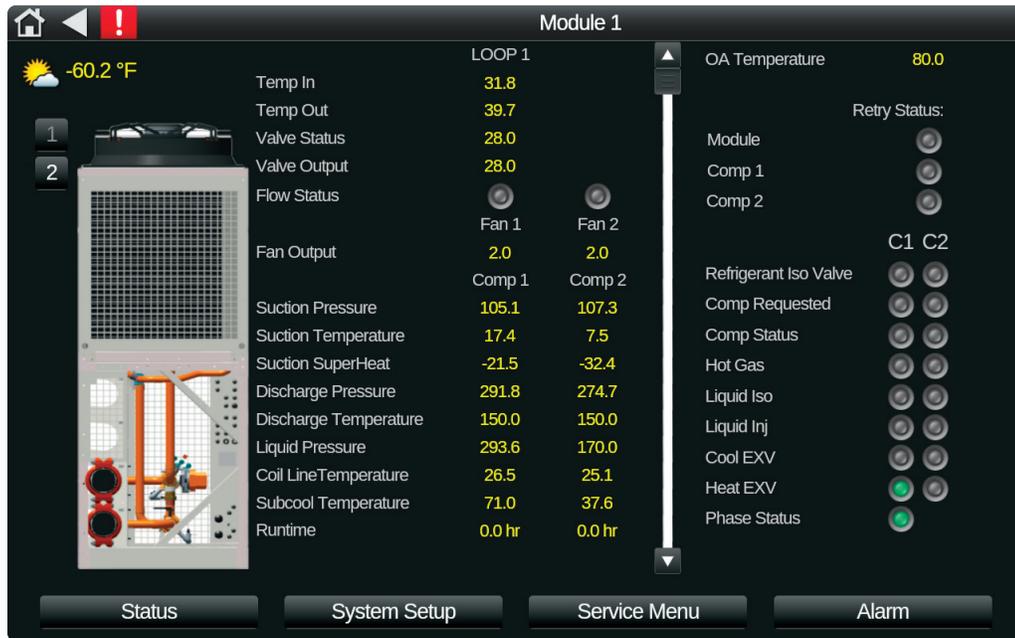


Note: Alarms are removed only if the cause of the alarm is solved/removed.

Verifying Communication with Modules

Communication between the CoolLogic Touch Control System and Chiller Modules can be confirmed by entering the module's Status Screen from the Home Screen. Selecting a module image displays the Module Status Screen for that module. From this status screen, refrigerant pressures and temperatures display as shown in the figure below. If the module temperature or pressure

field displays the value 0.0, then communication is not established with the module. Confirm that the STP CAT 6 ethernet cable is correctly connected and that power on all modules and the CoolLogic Touch Control System has been cycled. The CoolLogic Touch Control System must be powered on last. It takes two to three minutes for communication to be established to all modules.



Control System Specifications

Overall system status and commands.



The bank is ready to start and run with the minimum configuration completed. It is recommended that you verify additional configuration settings that may require adjustment for the intended application.

Contact Information

For more information on any of the previous configuration menus, contact ClimaCool Technical Services at 800-299-9747, Option 3 or www.climacoolcorp.com.

Notes

Revision History

Date	Section	Description
02/03/25	First Published	



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