

# PRO Controller Manual

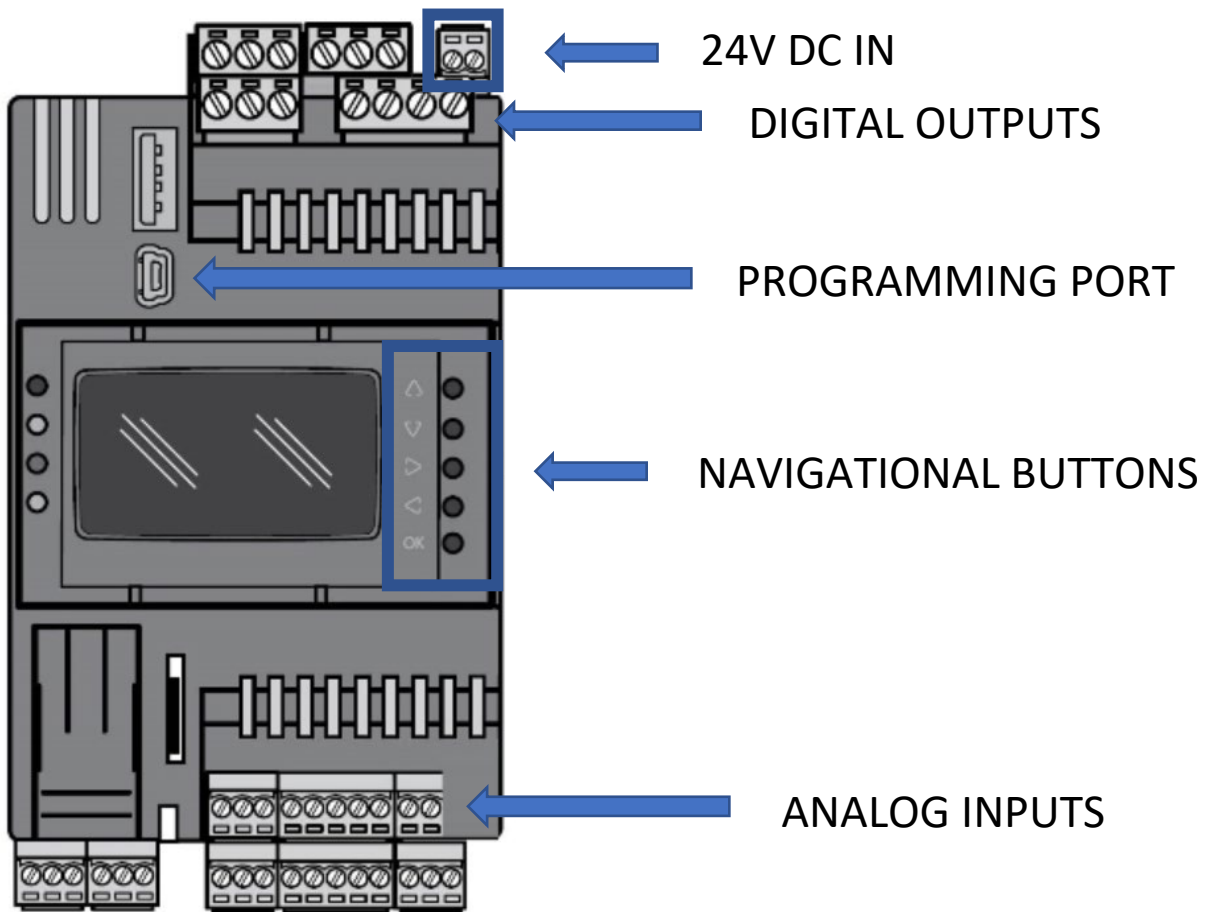
**PRO** ENGINEERING

**Guide Contents:**

1. Hardware
2. Operation
3. Elliot Setup

**1 Hardware:**

**PRO CHILLER CONTROLLER**

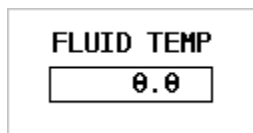




## **2. OPERATION:**

### **MAIN SCREEN:**

The main screen of the temperature controller shows FLUID TEMP. This is the fluid temperature of the system.



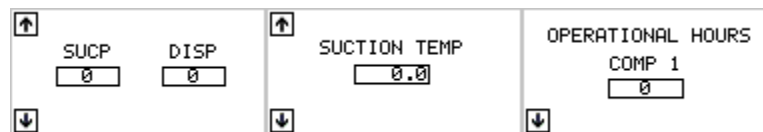
### **MENU:**

To navigate from the home screen to the menu the ok btn is pressed. While on the main menu screen with the PRO logo pressing the ok btn again will take the user back to the main screen. Settings and sensors can be viewed via the up and down btns on the controller.



### **SENSORS:**

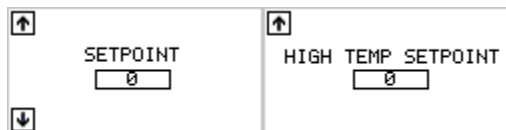
The sensor pages are navigated to by pressing up from the main menu. In these screens you can view suction and discharge pressure, suction temperatures and compressor status. All pressures are expressed in psi and all temperatures are expressed in degrees Fahrenheit.





## SETTINGS:

The setting pages are navigated to by pressing down from the main menu. In these screens you can view and change setpoint and high temp. To change a value first highlight the value that you wish to change using the left and right btns on the screen. Once a choice has been highlighted press the ok btn to change the value. Use the up and down arrows to cycle through values and the left and right btns to change which numerical is being edited. Once a value has been chosen, press the ok btn to set the value.



## HIGH TEMP ALARM (2 STAGE):

First Stage- When the chiller Tank temperature rises above the High Temp Set Point value the Temperature Controller turns off the Process Pump (pump that provides chilled fluid flow out to the plant/facility) until the TANK temperature is 5 °F below the HIGH TEMP SET POINT value. This temporarily decreases the thermal load on the chiller to allow it to cool the chiller tank back down closer to setpoint. Once the TANK temperature has decreased to 5 °F below the HIGH TEMP SET POINT value the Process Pump will turn back ON.

Second Stage-When the Chiller TANK Temperature rises 5 °F or more above the HIGH TEMP SET POINT value all pumps (Circulation Pumps and Process Pumps) will be turned OFF. Turning OFF the circulation pump also turns the refrigeration circuits OFF. Once the TANK temperature has decreased to 5 °F below the HIGH TEMP SET POINT value the Circulation Pump and Process Pump will turn back ON and allow the chiller system to run.

## DISABLING THE HIGH TEMP ALARM:

During chiller startup or troubleshooting it may be necessary to increase the HIGH TEMP SET POINT to deactivate it and allow the chiller to operate at higher than normal TANK temperatures. Temporarily increase and set the HIGH TEMP SET POINT up as necessary to allow the chiller to run and cool the temperature down below the normal high temp setting. After troubleshooting verify that the HIGH TEMP SET POINT has been restored to normal operating value (recommended setting 45 °F).



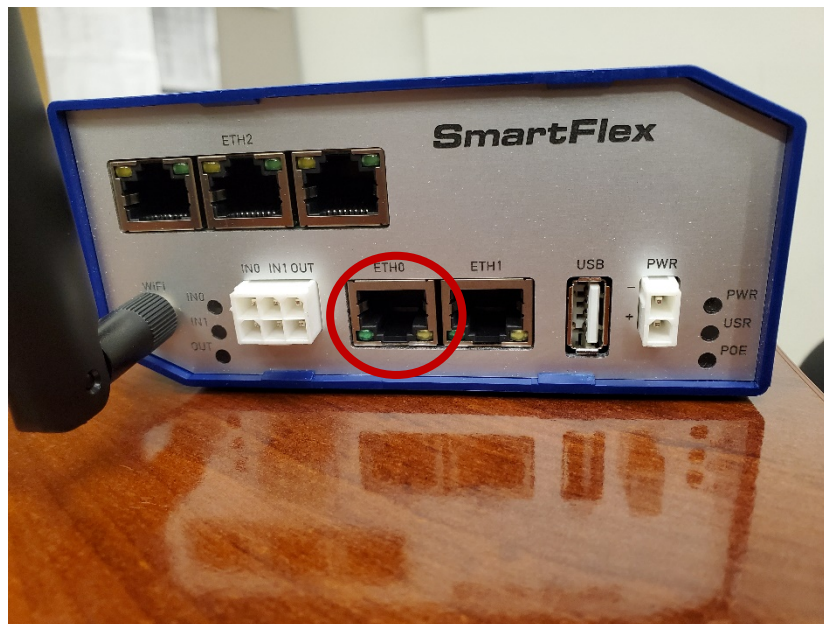
## **CHILLER CIRCULATION PUMP OPERATION:**

When the chiller Tank Temperature is at or below setpoint and both refrigeration circuits are commanded off the Chiller Circulation Pump will continue to run for an additional 180 seconds (3 minutes) and then cycle off. The Circulation Pump will cycle back on with the refrigeration circuits when the Tank Temperature rises above setpoint.

### 3. PROELLIOT SETUP:

#### Ethernet Setup:

To setup the PRO Elliot device for Ethernet plug host network cable into port ETH0 on Elliot module. The port is setup to use DHCP and will automatically associate with the host network if possible.





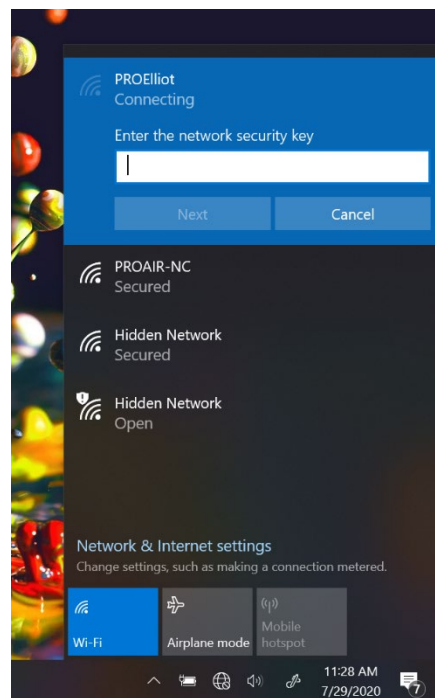
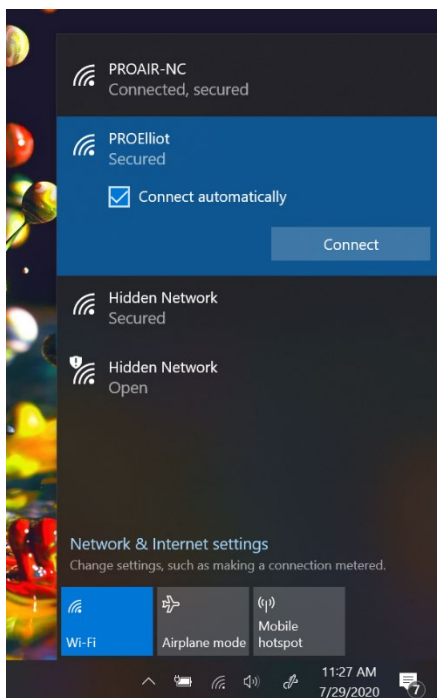
## Wi-fi Setup:

### Requirements

- A device that can connect to a wireless hotspot.
- SSID of target network
- Password of target network

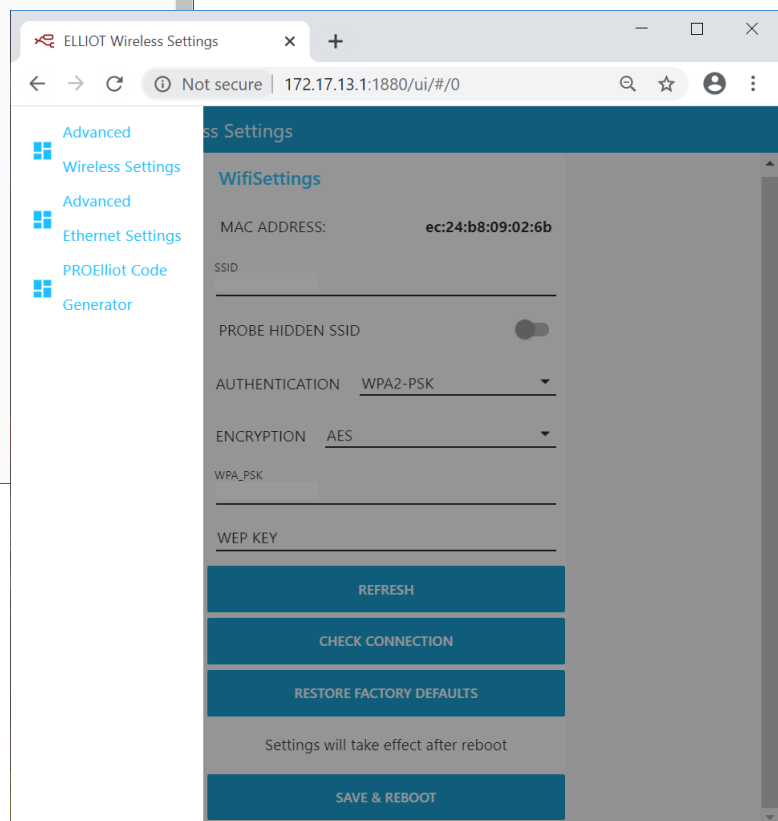
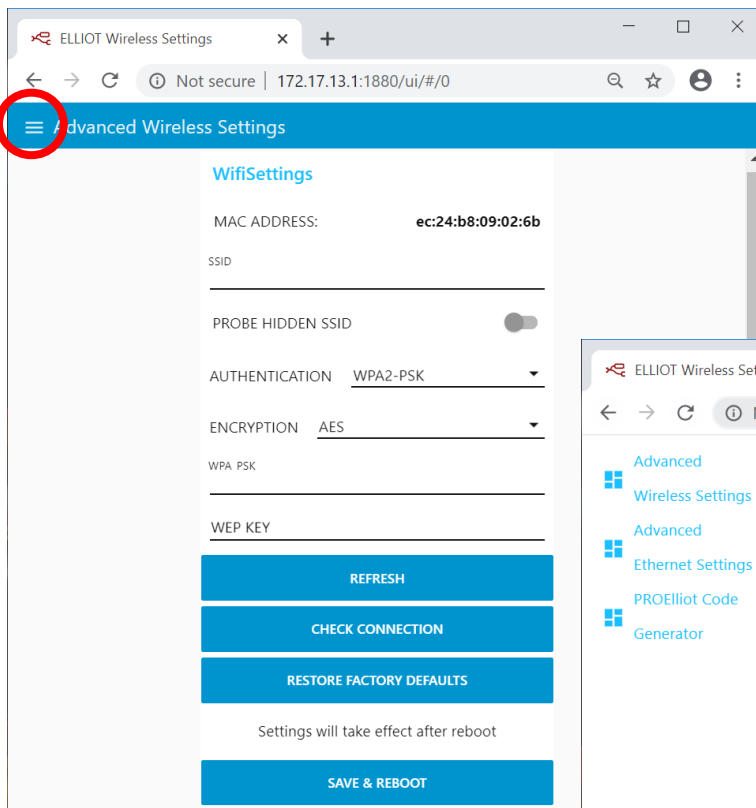
To reach your PROElliot device you will need to connect the wireless access point that it is broadcasting. The access point will be named PROElliot followed by the unit serial#. The access point will ask for a password when connecting.

**The password for these units is pr@Chill**





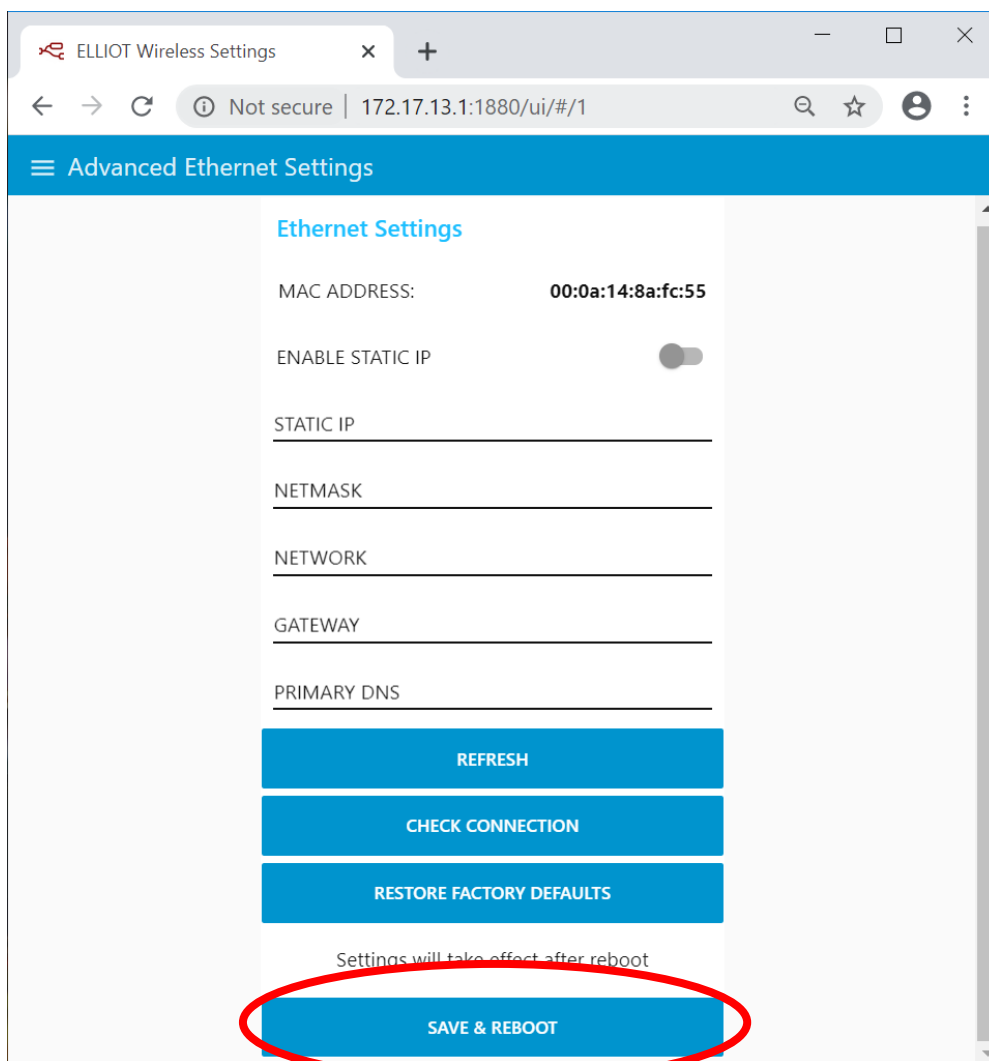
Once you have connected to the access point navigate to the address <http://172.17.13.1:1880/ui>. This is the settings page for the device. The first page will have the options available for connecting to a wireless network. Using the menu button on the top right of the screen you can navigate to the ethernet settings page or the PROElliot code generation screen.







Once all settings have been entered you will need to save and reboot. This will take a few minutes to complete.





Once connected you will need to connect to the Elliot device again to generate your registration code. Pressing the generate button will generate a registration code for use on [elliot.mychiller.com](http://elliot.mychiller.com).

