



iFAN CONFIGURATION AND OPERATION GUIDE

Part Number 6022672C



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How to Use this Manual

This section explains the organization of this manual and the visual clues and conventions to help you quickly scan text and locate the information you need.

Every effort has been made to ensure that this document is accurate and represents the basic functionality of the Software and Hardware you have purchased.

Audience

This manual is intended for:

- Distributors
- Fan installers
- End users

How this Manual is Organized

The following table lists the chapter names and a brief description of each chapter.

Chapter Name	Description
How to Use this Manual	Lists the intended audience, chapters, and the documentation conventions used in the manual.
Introduction	Explains what the iFan is and optional configurations you may encounter during the configuration process.
Navigation	Explains the buttons and icons used.
Device Configuration	Explains how to configure the devices using either the auto configurator or manual configuration.
Fan Operations	Explains how to operate the fan.

Documentation Conventions

The following documentation conventions are used in this manual.


Elements

- Names of buttons, icons, and fields are highlighted in bold text.
- Text highlighted in blue indicates a link you can click to navigate to another topic.


Tables

This manual may contain special tables that provide additional information or an example to help clarify what you need to do.


Note Table

	This table is a Note table. It contains information that emphasizes the main text or provides information that may be valid for certain special cases.
---	--

Example Table

	This table is an Example table. It provides examples of the types of data you may enter.
---	--

Caution Table

	This table is a Caution table. Failure to take or avoid this action may result in loss of data or system failure.
---	---

Introduction

This document explains how to setup, configure, and operate your iFan All-in-One (AIO).

The iFan software allows you to configure and monitor your HVLS Fans. You can configure the system for:



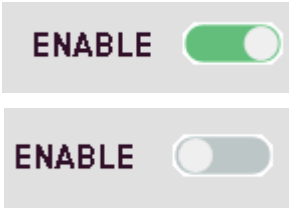





- Individual Fans
- Groups of Fans
- All Fans













Navigation





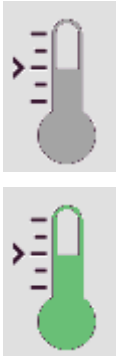

This chapter defines the buttons used when you are configuring your fans and sensors.

Buttons

The following table shows the buttons used during configuration and defines the function.

Name	Example	Description
Confirm		Allows you to confirm the changes you made.
Deny		Allows you to deny the information found when the auto configurator ran. Choosing Deny allows you to rerun the program.
Enable		Makes the control you are setting up active or inactive. When you want to use a function, the Enable button displays green. When you do not want to use a function, the Enable button should be gray.
Humidity		Pressing this icon places the fans in humidity control mode. When the humidity control mode is on, the icon displays green. The light gray icon indicates humidity control is deactivated.
Manual Setup		Allows you to configure your fans and devices manually.
Menu		Displays the main menu.
Alarms		Displays the Alarms screen.
Time Control		Displays the Time Control screen.

Name	Example	Description
Temperature		Displays the Current Temperature screen.
Humidity		Displays the Relative Humidity screen.
Network		Displays the Network screen.
Group Settings		Displays the Group Settings screen.
Fan Settings		Displays the Fan Settings screen.
Passcode		Displays the Passcode screen.
Setup		Displays the Setup screen.
Wind Control		Displays the Wind Control screen.
No		Allows you to indicate the NEMA 4X Sensor will not be used.
Yes		Allows you to indicate when NEMA 4X sensors should be used.
Start Fan		Starts the fan on setup screens and control screens.
Stop		Stops the fan(s).

Name	Example	Description
Fan direction up		Changes the direction of the fan to pull the airflow upward.
Fan direction down		Changes the direction of the fan to push the airflow down.
Search		Allows you to search for any fans that were not found when the auto configuration is complete.
Speed		<p>Allows you to set the speed for the fan(s).</p> <p>Press the up arrow to increase the fan speed.</p> <p>Press the down arrow to decrease the fan speed.</p>
Temperature		<p>Pressing this icon places the fans in temperature control mode.</p> <p>When the icon is green, the fans are in temperature control mode.</p>
Update		Allows you to make the new passcode effective.

Device Setup

On initial Startup, the iFan displays a screen for language selection. Upon confirmation of language, the iFan performs a search to find all connected fans and devices. When the search is complete, the auto configurator displays the Found Device screen.

Set Up iFan with the Auto Configurator

Your iFan comes preprogrammed. This unit, when first powered up, runs an auto configurator that finds all fans and devices in your facility. After the auto configurator finds the fans and devices, it configures them using the information from the preprogrammed unit.

Some devices, such as humidity and temperature sensors are optional, and will not be configured during this process unless you have purchased and connected these sensors. The configuration screen for each of these optional sensors will have a note on them explaining what device you must have installed before you can configure that option.

To configure your iFan:

1. Turn on the device.

The Initializing screen displays, and the auto configurator starts its search for fans and devices.



Figure 1: Initializing Screen

When the auto configurator completes its search successfully, the Language Selection screen displays.

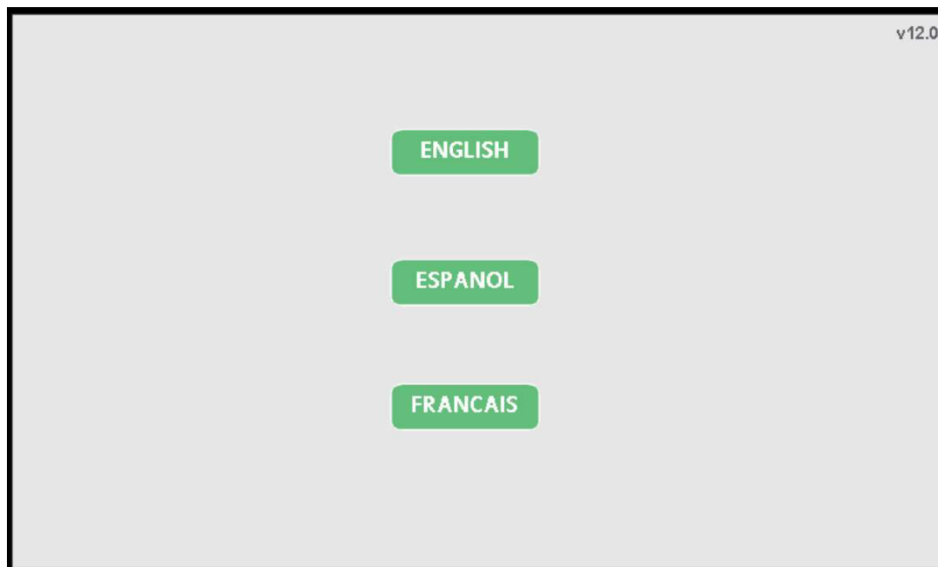


Figure 2: Language Selection Screen

1. Select the language you want to use.

After the language is selected, the Found Device screen displays.

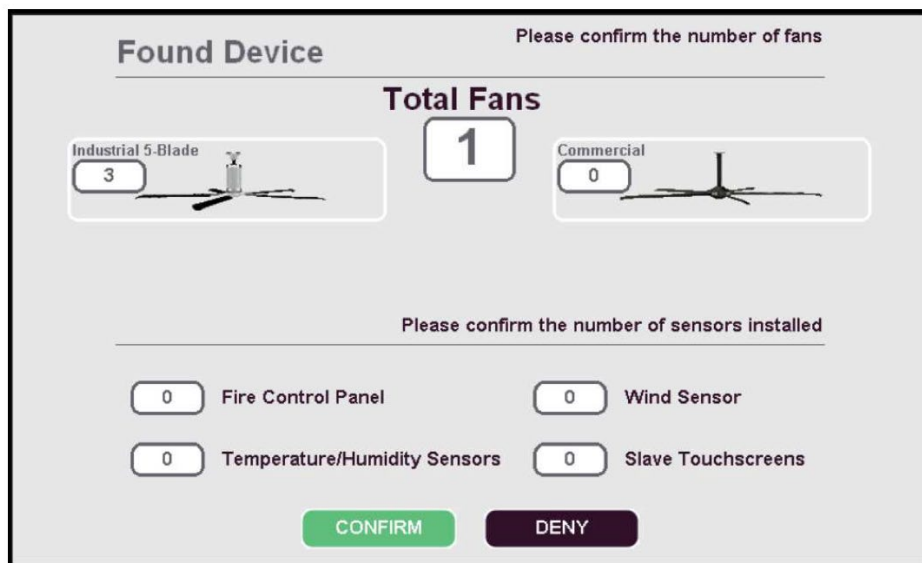


Figure 3: Found Device Screen

Verify that all fans were found by comparing the quantity and model with the original order quantity and model. If all fans and devices were found, press **Confirm** to continue the device configuration.

If all fans and devices were not found, press **Deny** and then complete the following troubleshooting steps.

1. Check that all Fans are powered.
2. Check the communications cables to ensure they are connected and working properly.
3. Check the connections into the VFD panels.
4. Check the wiring consistency such as colors matching through the chain.
5. If additional support is needed, please contact the factory.

The Search/Manual Setup screen displays.

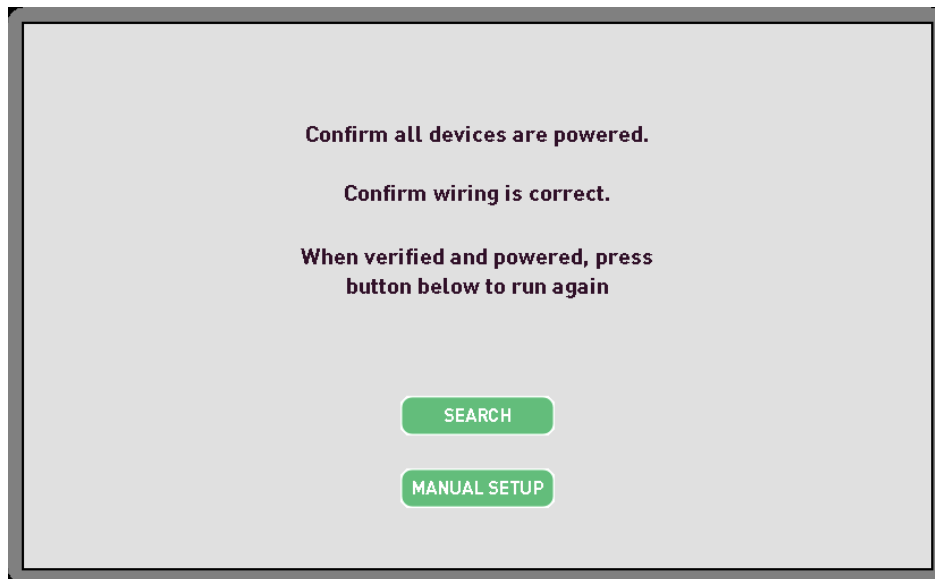


Figure 4: Search/Manual Setup Screen

6. After two additional attempts to locate fans and devices using the auto search function, you can press **MANUAL SETUP** to manually configure the fans and devices. Please see [Set Up iFan Manually](#).

Set Up iFan Manually

Depending on the additional devices you use in your facility, there are several required and optional processes to manually configure your Fans. The processes are:

- [Set Up the Number of Fans](#)
- [Set Up Fan Groups](#)
- [Set Up Individual Fans](#)
- [Set Up Slave Devices](#)

- [Set Up Temperature/Humidity Control](#)
- [Set Up Wind Control](#)
- [Set Up the Networked Fire Control Panel](#)
- [Set Up the Passcode](#)
- [Set Up the Network](#)
- [Set Up MSTP \(if applicable\)](#)

Set Up the Number of Fans

To define the number of fans in your facility:

1. Press **MANUAL SETUP** on the Search / Manual Setup screen.

The Total Fan Setup screen displays.

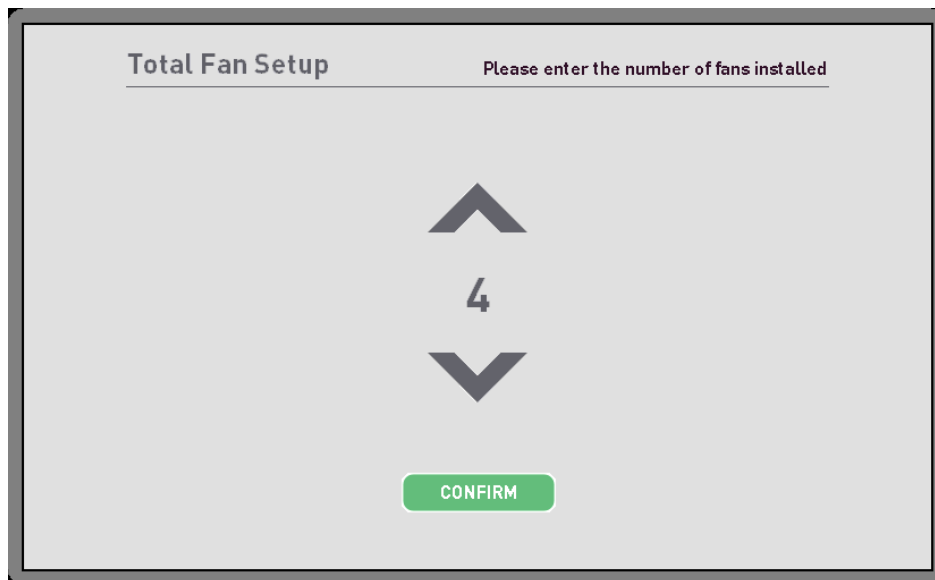


Figure 5: Total Fan Setup Screen

2. Use the arrow keys to select the number of fans you have in your facility.
3. Press **Confirm**.

Set Up Fan Groups

After you confirm the auto-search or set your fans manually, you can create Groups to link together devices that:

- Are located in the same general area
- Have the same fan blade length



If you select more than one group and have additional options such as temperature or humidity, you need a sensor for each group.

When total fan setup is complete, the Fan Groups screen displays.

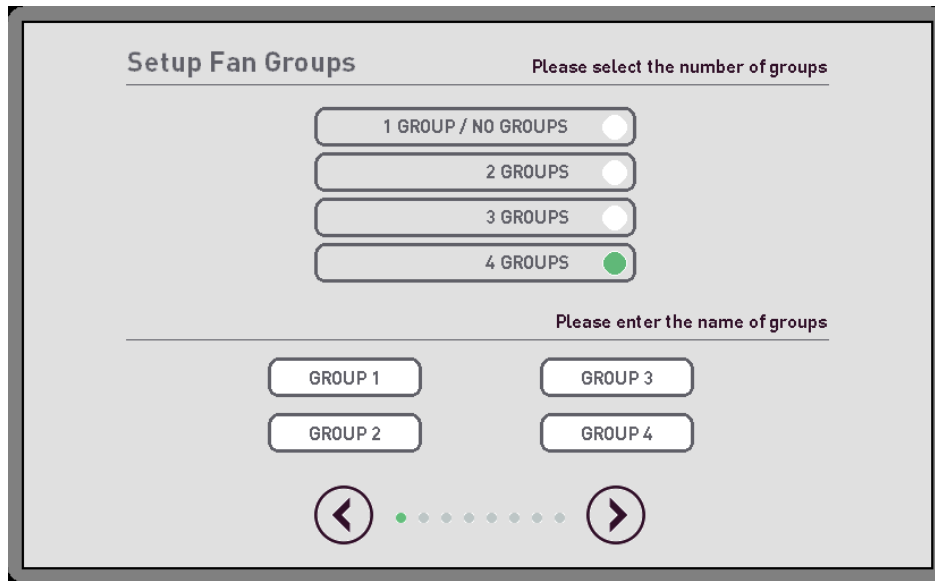


Figure 6: Setup Fan Groups Screen



If you select two or more Groups, you can assign a custom name to each of your groups.

To configure an iFan Group:

1. Select the number of groups you have.



If are not grouping your Fans, select 1 GROUP / NO GROUP.

2. Press **GROUP 1**.

The soft keyboard displays.

3. Type the name for the first Group.

4. Press **GROUP 2**.

The soft keyboard displays.

5. Type the name for the second Group.

6. Press **GROUP 3**.

The soft keyboard displays.

7. Type the name for the third group.

8. Press **GROUP 4**.

The soft keyboard displays.

9. Press the purple right arrow at the bottom of the screen to proceed to the next configuration screen.

Set Up Individual Fans

You configure individual fans on the Setup Fan screen. If the auto configurator ran successfully, the fan type will be set for you.

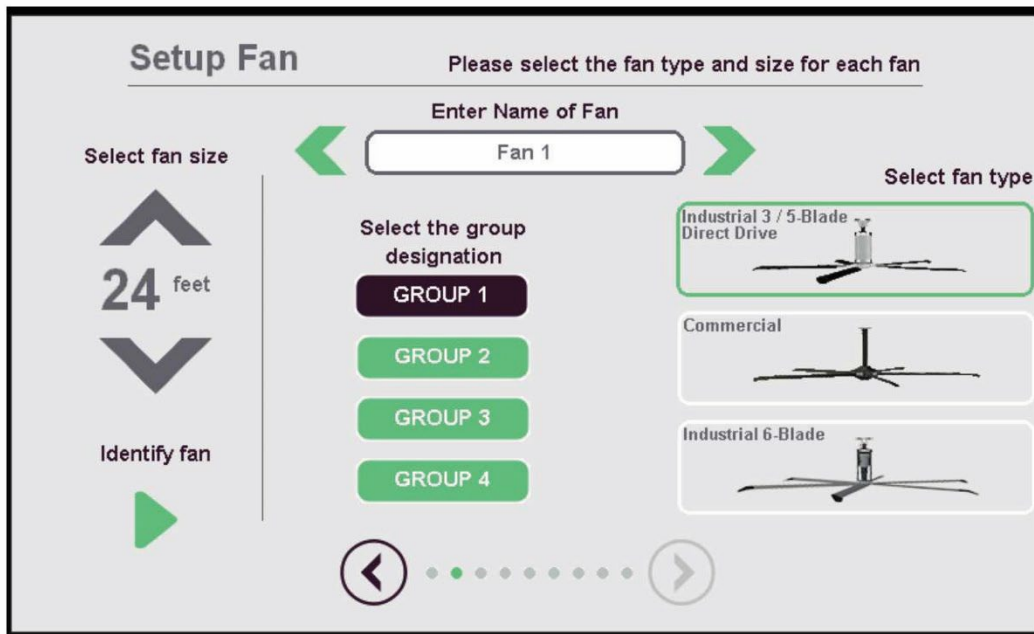


Figure 7: Setup Fan Screen

To configure an individual fan:

1. Use the up and down arrows to select the fan size.



If you select Commercial as the fan type, a popup appears asking if the fan has the Legacy or Premier VFD. If Legacy is selected, the size is set automatically.

2. Press the Identify fan button  to identify the location of the fan, if necessary.



The selected fan starts at the lowest speed.

3. Type a name for the fan in the **Enter Name of Fan** field.
4. Select the group for the fan from the **Select the group designation** list, if you want to group your Fans.



You can only select a group if you have configured more than one group. See [Set Up Fan Groups](#).

Select the fan type, if necessary, from the **Select fan type** list.



If you select an industrial 3 or 5 blade, direct drive, six blade or commercial fan with premier VFD, you must set the fan diameter.

5. Press the green right arrow next to the fan name.
6. Configure the next fan using the steps 1 through 6 above.
7. Press the purple right arrow at the bottom of the screen to proceed to the next configuration screen.



You cannot press the right arrow until all fans are setup.

Set Up Slave Touchscreens

The Setup Slave Touchscreen screen only displays if slave touchscreens were found during the auto-configurator run, or if you are in manual configuration.

You should only enable slave touchscreens if you ordered the additional small touchscreens to go with the iFan.

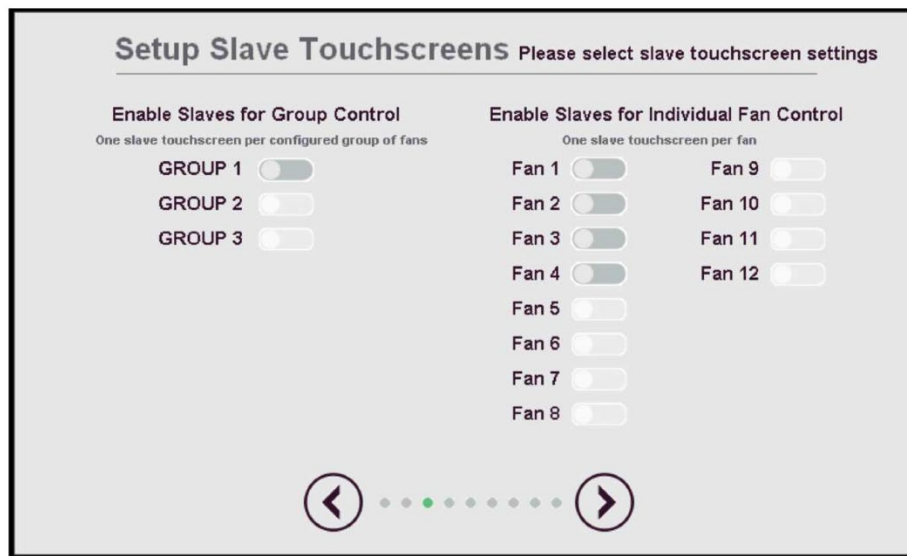





Figure 8: Setup Slave Screen

You can enable the slave touchscreens to work for a group of fans or an individual fan.

	For group control, a single slave touchscreen controls all fans in that group.
	For individual fan control, there needs to be a slave touchscreen for each fan desired.
	Touchscreens must be addressed in correlation to the group or fans. Address 120 works for either group 1 or fan 1. Address 121 works for group 2 or fan 2, and so on.

1. Slide the **Enable** button for each touchscreen that is present and the configuration desired.
2. Press the purple right arrow at the bottom of the screen to proceed to the next configuration screen.

Set Up the Temperature/Humidity Control

The Setup Temperature/Humidity Control screen only displays if the Temperature/Humidity Sensor is enabled when the auto configurator runs or you are in manual configuration.

You should only enable Temperature/Humidity Control if you ordered a combination temperature/humidity sensor.

Enabling temperature control allows you to configure the fan to start/stop or change speeds based on the temperature reading from the temperature/humidity sensor.

Enabling humidity control allows you to configure the fan to start/stop or change speeds based on the humidity reading from the temperature/humidity sensor.

To configure the Humidity control:

1. Slide the **Enable** button next to the water droplet to the right.

The Humidity control is now enabled.

To configure the Temperature Control:

2. Slide the **Enable** button to the right.

The Temperature Control sensor is now enabled.

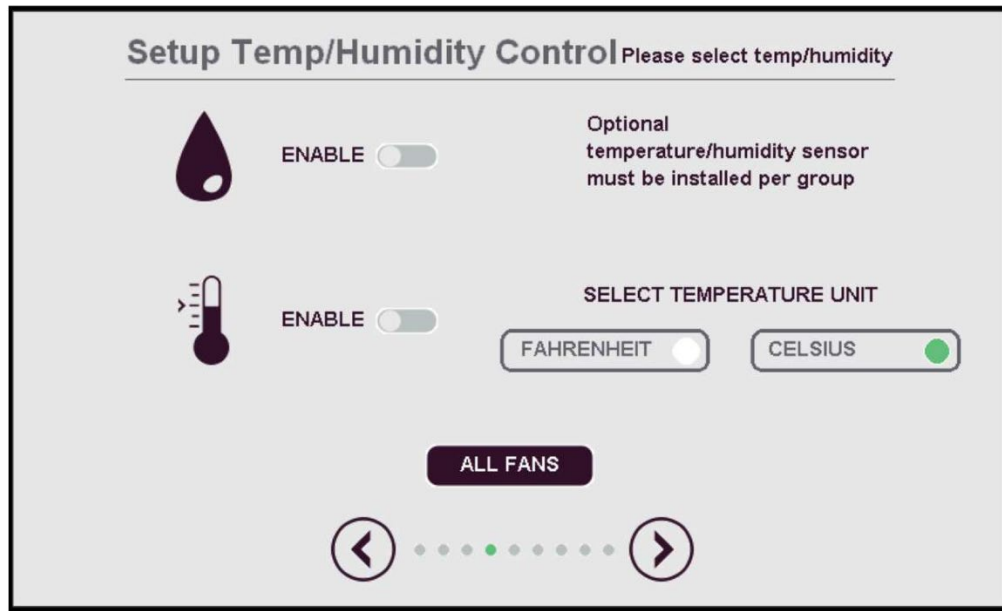


Figure 9: Setup Temperature/Humidity Control Screen

3. Select one of the following:
 - FAHRENHEIT if you want to view the temperature by the Fahrenheit scale.
 - CELSIUS if you want to view the temperature by the Celsius scale.
4. Press the green right arrow next to the Group name, and then configure the Temperature/Humidity Control sensor for the next fan group.



If you are not using fan Groups or have only one fan group, this arrow does not display.

5. Continue configuring the Temperature/Humidity Control sensors until all your Groups are configured.
6. Press the purple right arrow at the bottom of the screen to proceed to the next configuration screen.

Set Up Wind Control

The Setup Wind Control screen only displays if the anemometer sensor is enabled when the auto configurator runs, or you are in manual configuration.

You should only enable the Wind Control option if you ordered the Wind Sensor.

Enabling the wind sensor allows for the fans to shut off automatically in the event of a high wind gust. They automatically turn back on after the wind dies down for a set amount of time.

To configure the Wind Sensor:

1. Slide the **Enable** button to the right.

The Wind Control sensor is now enabled.

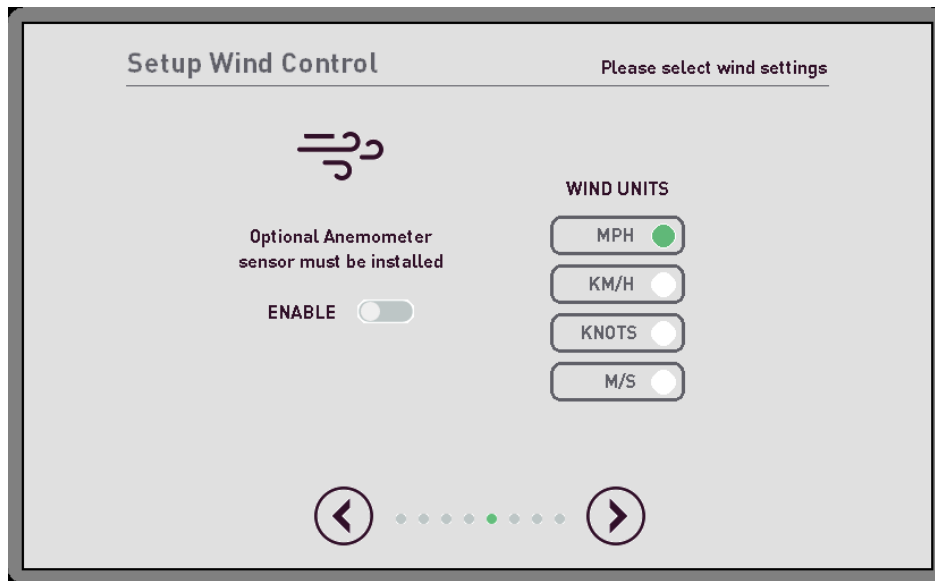


Figure 10: Setup Wind Control Screen

2. Select the Wind Units you want to use for wind measurement.
3. Press the purple right arrow at the bottom of the screen to proceed to the next configuration screen.

Set Up the Networked Fire Control Panel

The Setup Network Fire Control Panel screen only displays if the Networked Fire Control Panel is enabled when the auto configurator runs, or you are in manual configuration.

If you ordered the optional Network Fire Control panel, use the following steps to enable it.

To configure the Networked Fire Control Panel:

1. Slide the **Enable** button to the right.

The Fire Control Panel is enabled.

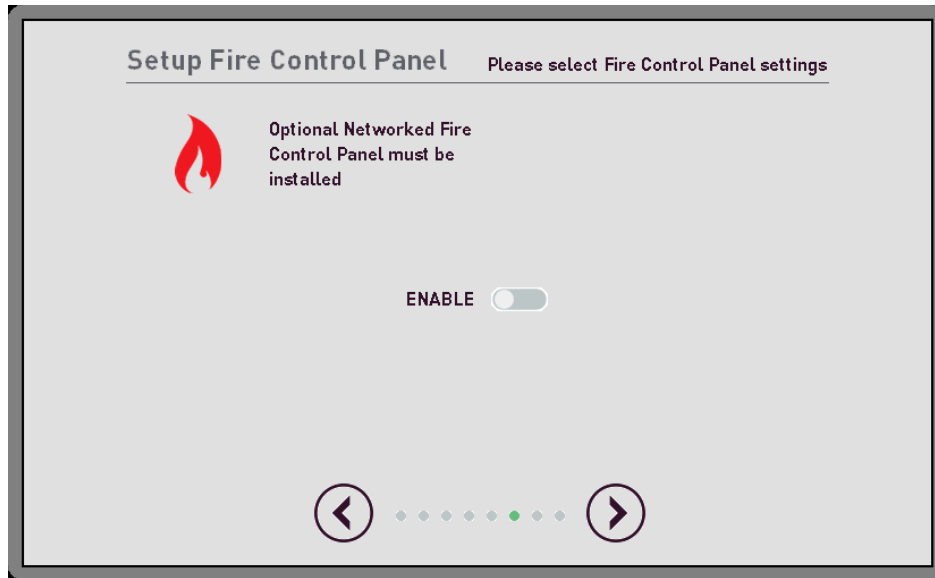


Figure 11: Setup Fire Control Panel Screen

2. Press the purple right arrow at the bottom of the screen to proceed to the next configuration screen.

Set Up a Passcode

You can create a four-digit passcode to log back in after a set period of inactivity. You can define the length of the inactivity from 30 to 180 seconds. If no one touches the screen before the defined time is reached, you will have to enter your passcode.

	The default passcode is 1111.
---	-------------------------------

To setup a passcode:

1. Slide the **Enable** button to the right.

The timeout option is enabled.

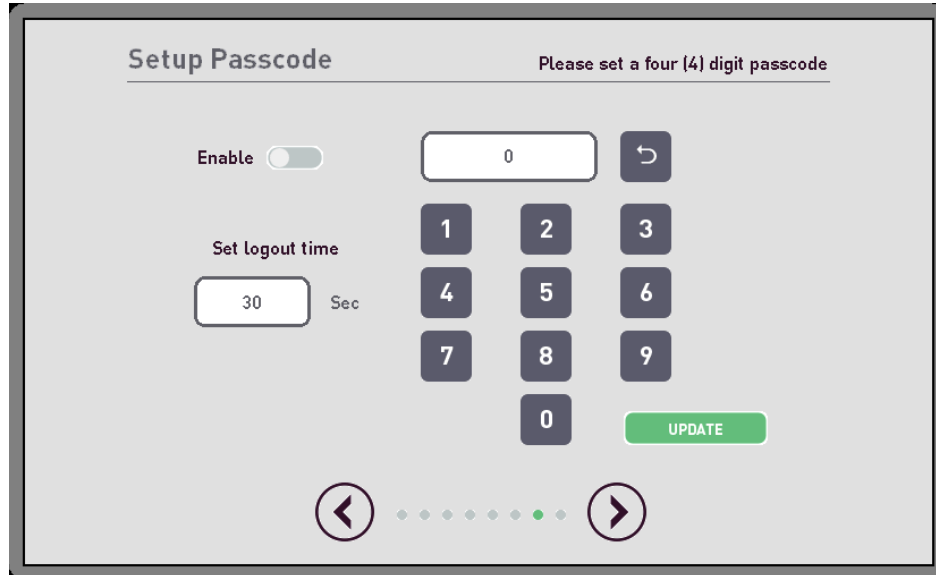




Figure 12: Setup Passcode Screen

2. Click in the **Set Logout time** field, and then type the number of seconds for the timeout to begin in the **Set logout time** field.
3. Press the number keys to enter the passcode.

 You cannot start your passcode with the number 0 (zero).

4. Press **Update**.

The new passcode is activated.

 The displayed passcode changes to green to show that it was accepted.

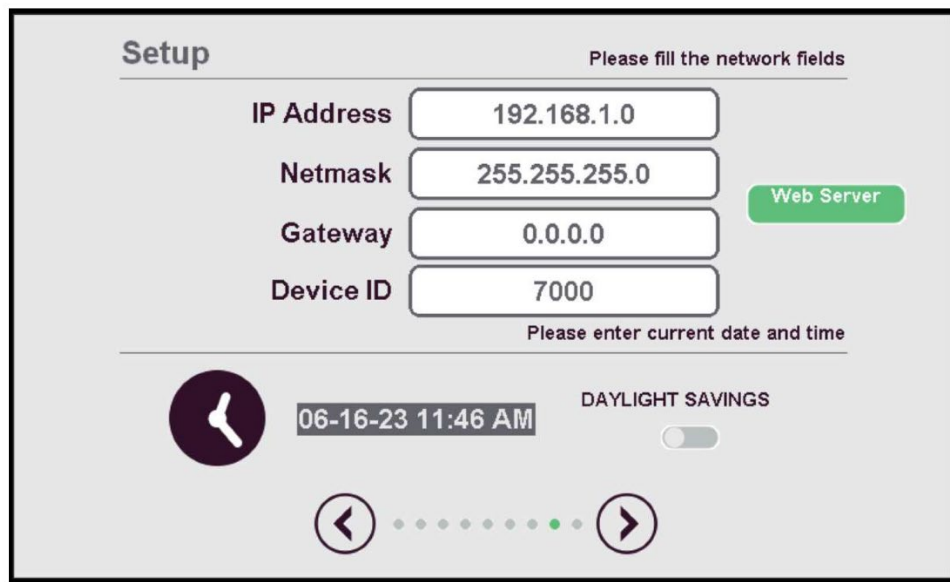
5. Press the purple right arrow at the bottom of the screen to proceed to the next configuration screen.

Set Up the Network

If you are using a BACnet TCP/IP system for your Building Management System (BMS), or you wish to use the web server viewing capabilities, you can set the IP address Netmask (SubNet Mask) and Gateway.

NOTE: iFan 4.3 does not have webview capability.

You define the network you are using on the Setup Network screen.



The screenshot shows a 'Setup' screen with the following fields and controls:


- IP Address:** 192.168.1.0
- Netmask:** 255.255.255.0
- Gateway:** 0.0.0.0
- Device ID:** 7000
- Web Server:** A green button labeled 'Web Server'.
- Date and Time:** 06-16-23 11:46 AM
- DAYLIGHT SAVINGS:** A toggle switch.
- Navigation:** A back arrow, a series of seven dots (the fourth is green), and a forward arrow.

Figure 13: Setup Network Screen


To define the Network:

1. Type the IP address in the **IP Address** field.
2. Type the Netmask address in the **Netmask** field.
3. Type the Gateway address in the **Gateway** field.
4. Type the device ID in the Device ID field.
5. If you have an iFan 7.0 or iFan 10.0, the iFan has Webserver capability. Press the **Web Server Login** button to change the web access login information. This login information is used when you try to view and control the fans via the webserver. On a computer or mobile phone, enter the IP address of the iFan in the browser. A login screen appears which uses the credentials setup in this step.

1. Press the Username field to type in a new username

 The default username is “iFan”.

2. Press the **Password** field to type in a new password.

 The default password is “admin”.

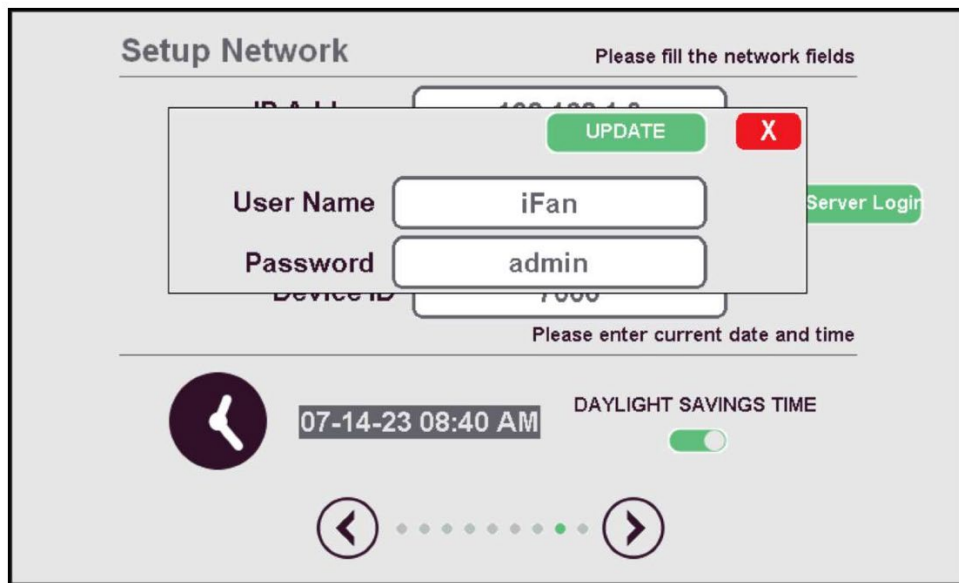


Figure 14: Web Server Login Screen

3. Press Confirm to close the web server login screen and confirm changes.
6. Set the current date and time:
 1. Press the date and timestamp to the right of the clock icon.
 2. Select the date and time using the arrow keys at the bottom of the screen, and then press the Enter button.

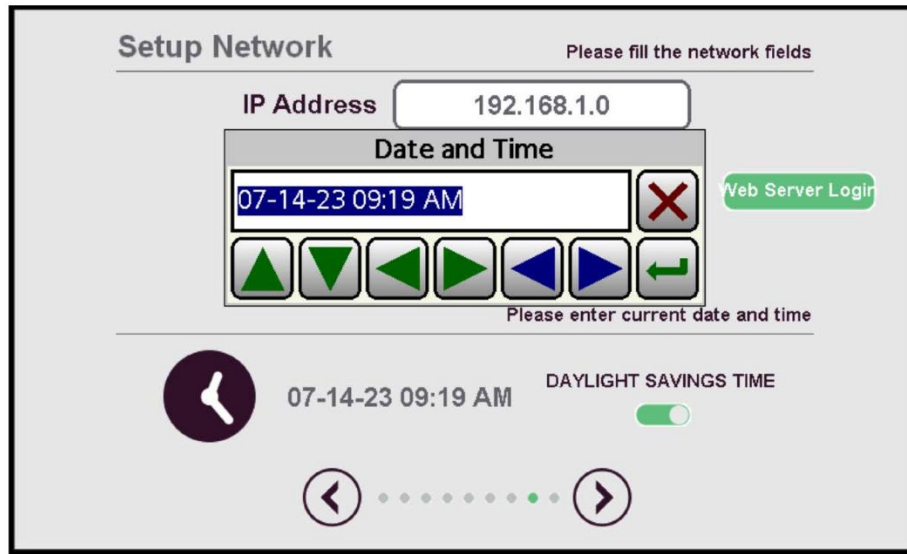


Figure 15: Entry Box Screen

7. Slide the **Enable** button to the right if you want Daylight Saving Time enabled
When this function is enabled, the time automatically adjusts when Daylight Saving Time begins or ends.
8. Press the purple right arrow at the bottom of the screen to proceed to the next configuration screen or complete the configuration for an iFan 4.3.



The device restarts if you have an iFan 4.3 and uses the configurations you have defined.

Configure BACnet MSTP Port

If you have an iFan 7.0 or iFan 10.0 and you are using BACnet MSTP for your BMS, you can set your MSTP port settings on this screen.



iFan 4.3 does not allow for BACnet MSTP.

Setup BACnet MSTP port Please set the port setting fields

Baud Rate 19200

Data Bits 8

Stop Bits 1

Parity None

Mode 2 Wire RS485

Device ID 7000

System will restart

Figure 16: Setup MSTP Screen

1. Enter the baud rate into the **Baud Rate** field.
2. Enter the number of data bits in the **Data Bits** field.
3. Enter the number of stop bits in the **Stop Bits** field.
4. Enter the parity in the **Parity** field.
5. Enter the mode in the **Mode** field.



The options are 2-wire RS485 or 4-wire RS485 or RS422.

6. Enter the device ID into the **Device ID** field.
7. Press the purple right arrow at the bottom of the screen to complete the configuration.



The device restarts and uses the configurations you have defined.

Fan Operation

You can operate your fans individually, as a single group, or as multiple groups.

All Fans Control

The main fan screen provides an overall view of all fans.

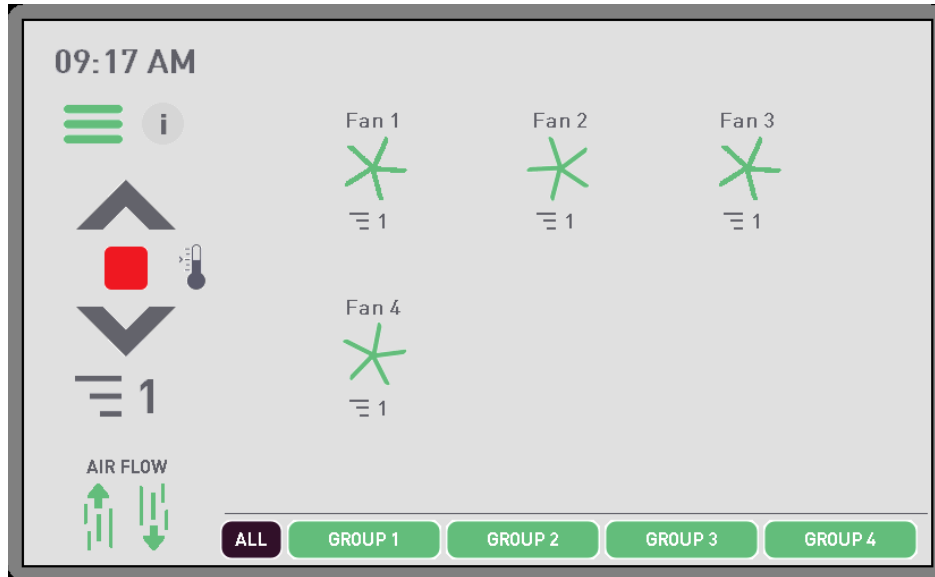












Figure 17: Main Screen

The following table shows the visual icons and conditions when they display on the on this screen.

Icon Name	Icon	Status
Bell alarm		Indicates the fan has a motor or drive fault.
Disabled		Indicates a fan is disabled.
Fan		Indicates there is no issue with the fan and it is in run mode. The fan icon runs clockwise for forward and counter-clockwise for reverse.

Icon Name	Icon	Status
		Indicates fan status change. The command to stop or change direction of the fan was sent, but the fan is still slowing down and rotating. The fan icon runs clockwise for forward and counter clockwise for reverse.
		Indicates the fan is stopped.
Fan direction up		Indicates the airflow is up toward the ceiling.
Fan direction down		Indicates the airflow is down toward the floor.
Fire alarm		Indicates a signal from the building fire control panel to shut the fans down.
Loss of Communication alarm		Indicates communication was lost between the iFan System and the fan or the sensors.
Wind alarm		Indicates wind conditions are too high or there is a fault in the sensor

Controlling All Fans

If you have multiple Fan groups set up, make sure the ALL FANS button is highlighted.

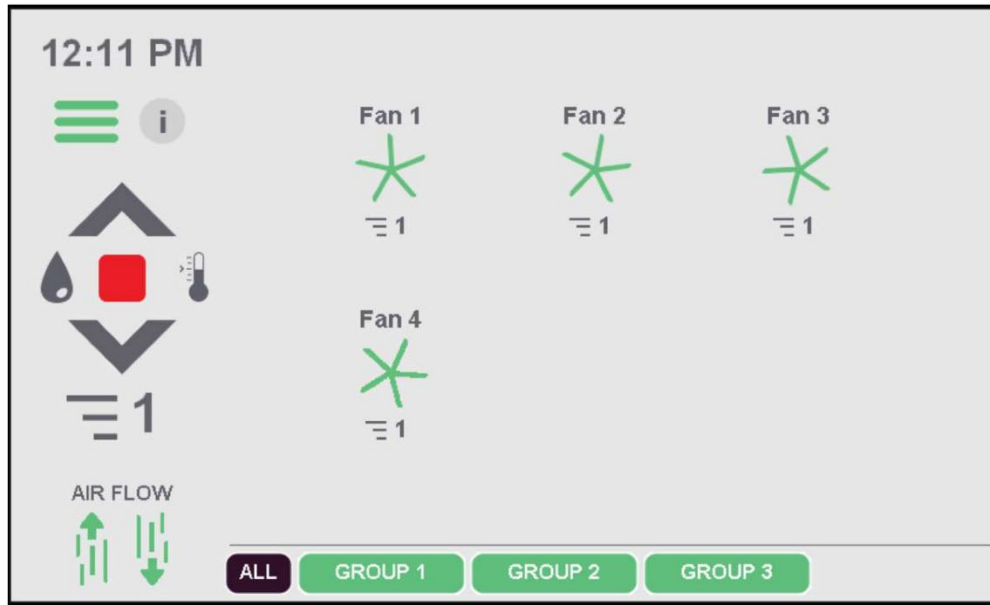




Figure 18: Main Screen

1. Press the up or down arrow to select the desired speed for the fans.

 In Temperature or Humidity controls, the speed is overridden by the program.

2. Press the airflow direction icon to choose the direction of the desired flow.
 - Up arrow – The fan direction is clockwise, pulling the airflow upward
 - Down arrow – The fan direction is counterclockwise, pushing the airflow down.

 In Temperature or Humidity controls, the direction is overridden by the program.

3. Press the play button to start the fans.

OR

Press **Stop** to stop the fan.

OR

Press the **Thermometer** icon to access the temperature mode.

OR

Press the **Water Drop** icon to access the humidity mode.

Control a Group of Fans

You control a group of fans through the Main Screen. All Fans will show, but Fans not in the selected group will be greyed out.

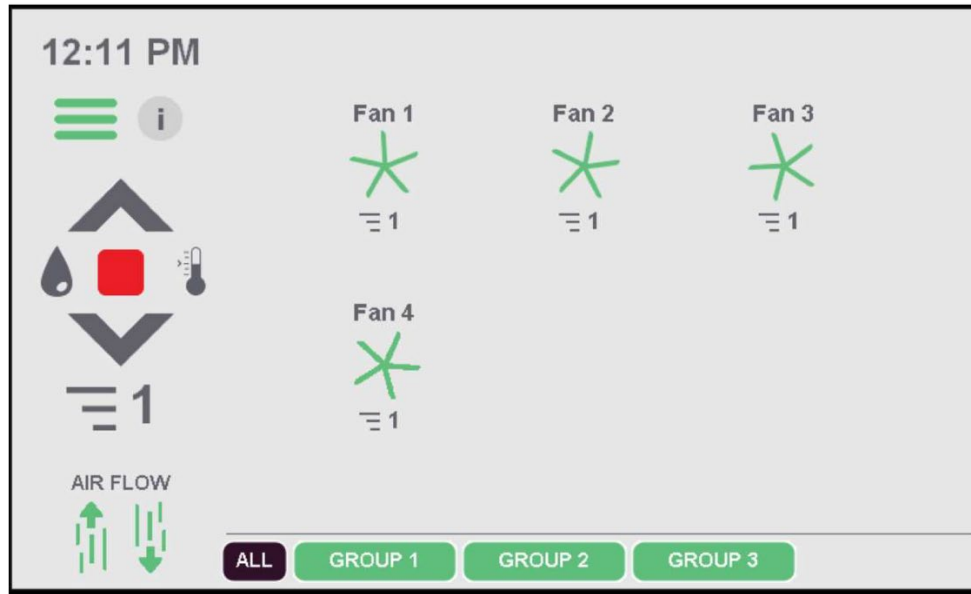



Figure 19: Main Screen


To control a group of Fans:

1. Press the **Group** button for the Group you want to control.

You can deselect a Fan group by pressing the Group button again.

	You can select more than one group.
---	-------------------------------------

2. Press the up or down arrow to select the desired speed for the fan.

	In Temperature or Humidity controls, the speed is overridden by the program.
---	--

3. Press the airflow direction icon to choose the direction of the desired flow.
 - Up arrow – The fan direction is clockwise, pulling the airflow upward
 - Down arrow – The fan direction is counterclockwise, pushing the airflow down.



In Temperature or Humidity controls, the direction is overridden by the program.

4. Press the play button to start the fans.

OR

Press **Stop** to stop the fan.

OR

Press the **Thermometer** icon to access the temperature mode.

OR

Press the **Water Drop** icon to access the humidity mode.





Control Fans Individually

You can control fans individually through the individual Fan screen.




Figure 20: Fan Screen

This screen displays the fan status below the fan name:


Text Color		Status
grey		Stopped. There is no fan motion.
green		Forward or Reverse. Indicates the fan direction.
yellow		Forward or Reverse. Indicates the fan is stopping or changing motion, but the motion is still in the initial direction.
red		Fan Alarm. Alarms display under the fan image. Additional text (purple) displays below the fan to clarify the reason for the alarm.

To control an individual Fan:

1. Press the fan icon on the main screen for the fan you want to set controls for.
2. Press the up or down arrow to select the desired speed for the fan.

	In Temperature or Humidity controls, the speed is overridden by the program.
---	--

3. Press the airflow direction icon to choose the direction of the desired flow.
 - Up arrow – The fan direction is clockwise, pulling the airflow upward
 - Down arrow – The fan direction is counterclockwise, pushing the airflow down.

	In Temperature or Humidity controls, the direction is overridden by the program.
---	--

4. Press the play button to start the fans.

OR

Press **Stop** to stop the fan.

OR

Press the **Thermometer** icon to access the temperature mode.

OR

Press the **Water Drop** icon to access the humidity mode.

Reset the Fan Alarm

To reset the Fan after an alarm:

1. Correct the issue that caused the alarm.
2. Press the reset alarm button.

Stop the Fan for Maintenance

To stop the fan for maintenance:

1. Press the fan you want to stop.
The screen for the individual fan you selected displays.
2. Press the stop button to stop the fan.
3. Slide the enable button to the left to disable (stop) the fan.

Communications to the fan drive are disabled stopping all start and stop signals including:

- Time Control
- Temperature Control
- Humidity Control



This action only stops signals to the selected fan. All other fans continue to operate as normal.

Set the Time Controls

If the system has more than one group chosen, the time controls can be set individually for each group. The current Wind Control settings are not overridden.

If you have more than one fan group, each group has its own set of time controls.

To set the Time Controls:

1. Press the main menu icon.

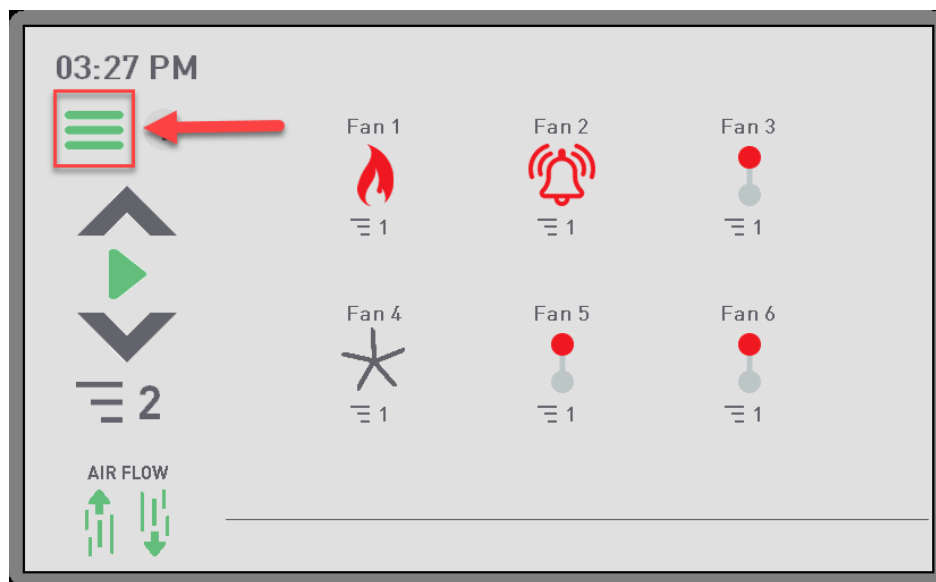


Figure 21: Main Screen

The main menu screen displays.



Figure 22: Main Menu Screen

2. Press **Time Control**.

The Time Control screen displays the Time Control for the group you selected to edit.

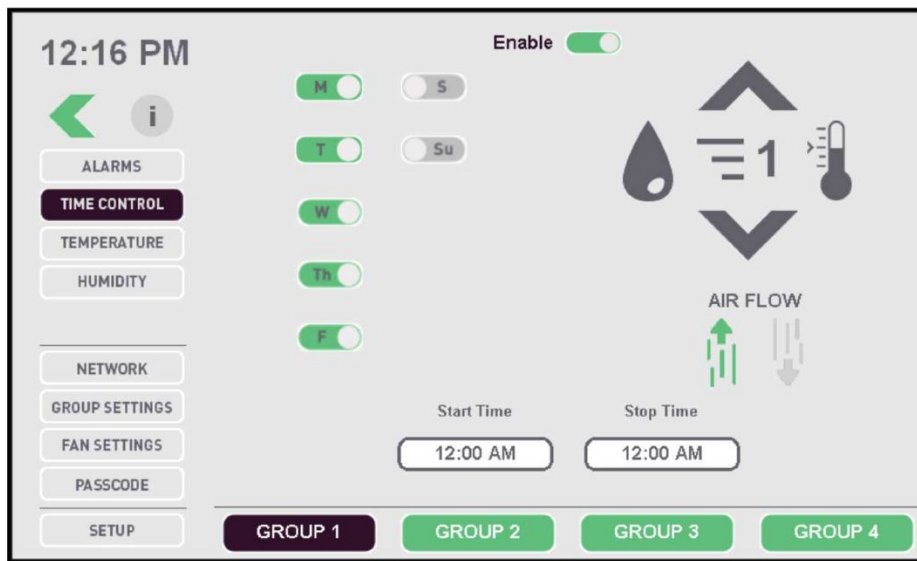


Figure 23: Time Control Screen

3. Select the desired group.
4. Select the days you want to set Time Controls for.
5. Slide the enable button to the right to allow Time Control for the Fan Group.
6. Set the start time for each group using the 12 hour format.

1. Press **Start Time**.
2. Press the green arrow to select the hour field.
3. Press the green up or down arrows to select the desired hour.
4. Press the green arrow to move to the minute field.
5. Press the green up or down arrows to select the desired minute.
6. Press the green arrow to move to the AM PM field.
7. Press the green up arrow to select PM.

OR

Press the green arrow down to select AM.

8. Press the green arrow to save your selections.
7. Set the stop time for each group.
 1. Press **Stop Time**.
 2. Press the green arrow to select the hour field.
 3. Press the green up or down arrows to select the desired hour.
 4. Press the green arrow to move to the minute field.
 5. Press the green up or down arrows to select the desired minute.
 6. Press the green arrow to move to the AM PM field.
 7. Press the green up arrow to select PM.

OR


Press the green arrow down to select AM.

8. Press the green arrow to save your selections.
8. Select the direction of the airflow.





This option is only available if a temperature sensor is not available and or disabled.

9. Press the up or down arrow to set the speed at which the fans run.
10. Press the Thermometer area to disable the fan direction and speed selection buttons and operate the fan in Temperature mode during the desired times.

	<p>The fan starts in Temperature Control mode at startup and stops at the stop time.</p> <p>For more information about Temperature Control Settings, please see Configure the Temperature Control.</p>
---	--

11. Press the Humidity icon to disable the direction and speed selection buttons and operate the fan in Humidity mode during the desired times.

	<p>The Humidity option is only available if a temperature/humidity sensor is available and enabled.</p>
	<p>The fan starts in Humidity Control mode at startup and stops at the stop time.</p> <p>For more information about Humidity Control Settings, please see Configure Humidity Control.</p>

Set the Automated Temperature Control

If you have a temperature sensor, you can set the automated temperature control on this screen. This screen only displays if a temperature sensor is found during auto setup or if you manually configure a temperature sensor.

If you are setting temperature controls for groups, you must set the temperature controls for each group individually. Groups can be configured differently.

To set automated temperature control:

1. Press the main menu icon.

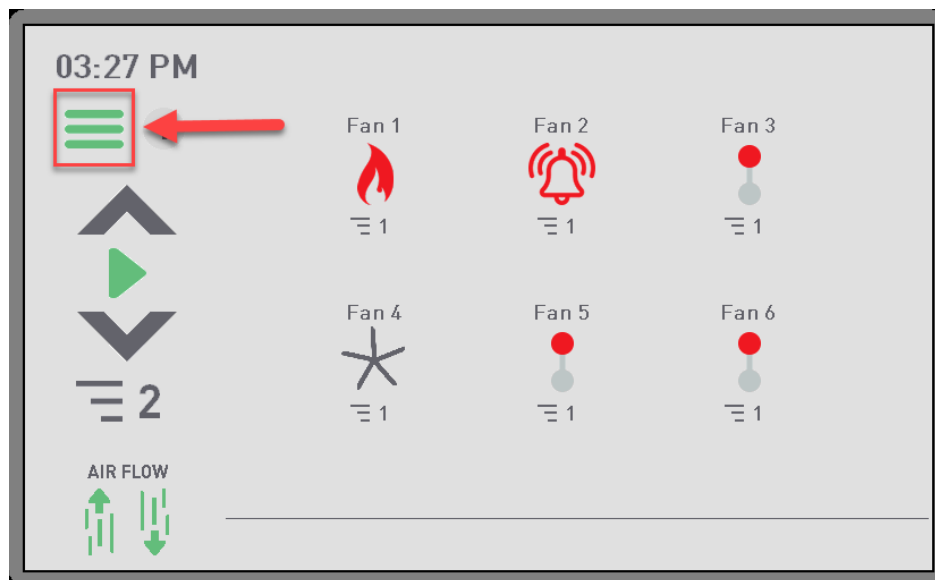


Figure 24: Main Screen

The main menu screen displays.



Figure 25: Main Menu Screen

2. Press Temperature.

The Current Temperature screen displays the temperature for the displayed group.

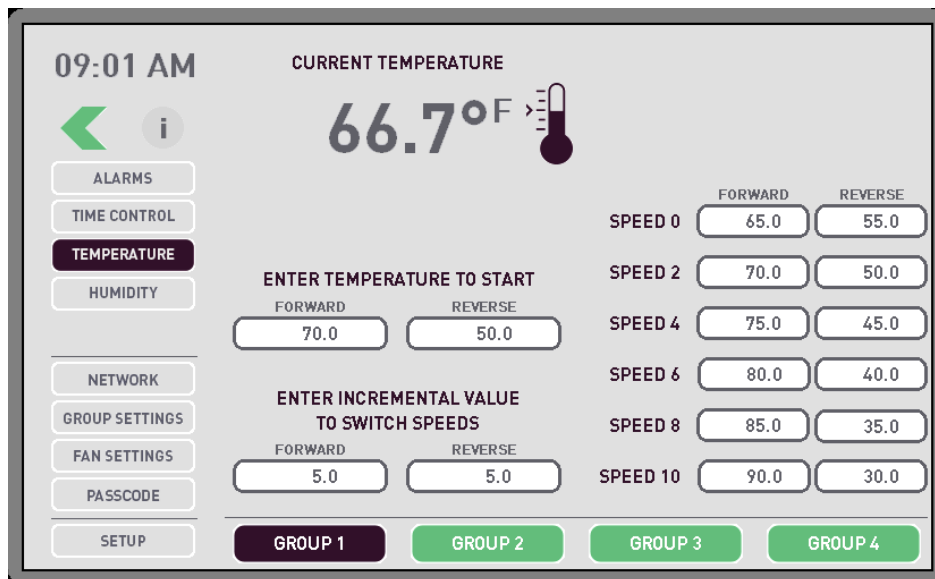





Figure 26: Current Temperature Screen

3. Press the fan group for which you want to define the temperature control.
4. Enter the temperature for fans to start when they are going forward.
5. Enter the temperature for fans to start when they are going in reverse.
6. Enter the desired temperature increment value for the fans to ramp up when going forward.

	<p>If you set the starting temperature to 70° and the increment temperature to 5°, the fans start at 70° at speed 2 and increment 5° at each additional speed until it reaches the maximum speed of 10 at 90°.</p> <p>The fans continue to run at the set speed until the temperature reaches 65° at which point, they will stop.</p>
---	---

7. Enter the desired temperature increment value for the fans to ramp up when going in reverse.

	<p>This number should be set so that there is no overlap in the forward and reverse running speeds.</p>
---	---

	<p>If you set the starting temperature to 50° and the increment temperature to 5°, the fans start at 50° at speed 2 and decrease 5° at each additional speed until it reaches the maximum speed of 10 at 30°.</p> <p>The fans continue to run at the set speed until the temperature reaches 55° at which point they will stop.</p>
---	---

Set the Humidity Control

If you have a humidity sensor, you can set the automated humidity level on this screen. This screen only displays if a humidity sensor is found during auto setup, or if you manually configure a humidity sensor.

If you have more than one fan group, you must have a humidity sensor installed for each group.

If you are setting humidity controls for groups, you must set the humidity controls for each group individually. Groups can have settings that differ from group to group.

To set automated humidity control:

1. Press the main menu icon.

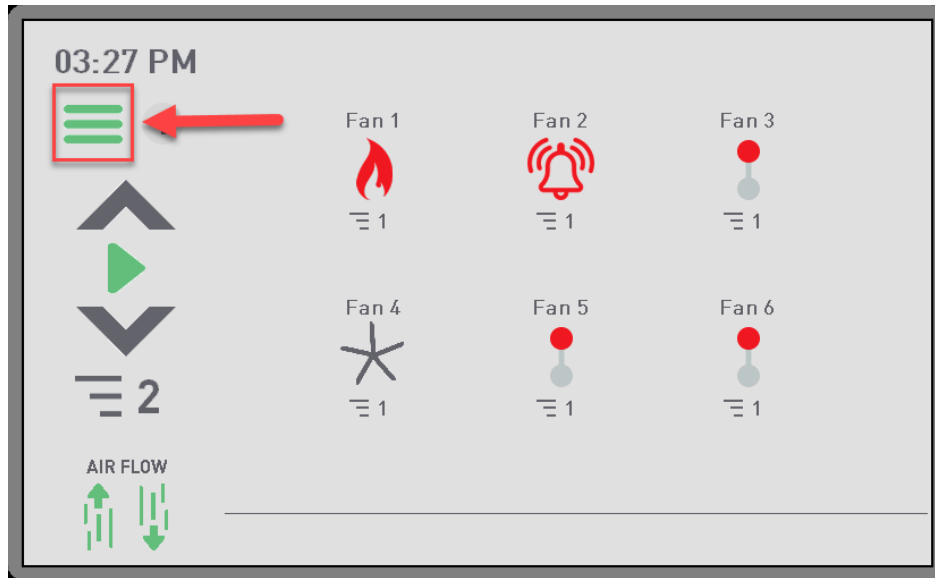


Figure 27: Main Screen

The main menu screen displays.



Figure 28: Main Menu Screen

2. Press **Humidity**.

The Relative Humidity screen displays the current humidity level set for the group shown at the bottom of the screen.

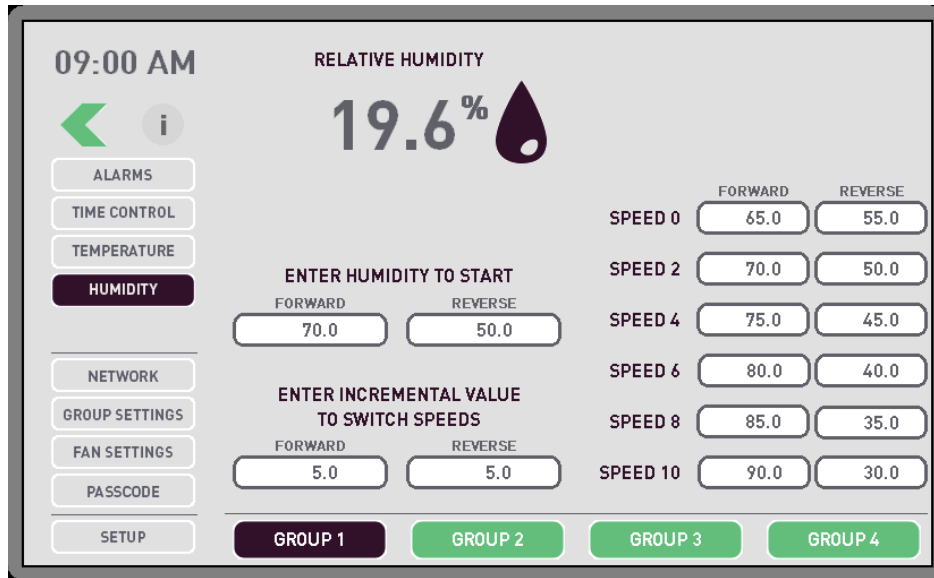





Figure 29: Relative Humidity Screen

3. Press the group you want to set the humidity level for.
4. Enter the Humidity for fans to start when they are going forward.
5. Enter the Humidity for fans to start when they are going in reverse.
6. Set the desired humidity increment value for the fans to ramp up when going forward.

 If you set the starting humidity level to 70% and the increment humidity to 5%, the fans start at 70% at speed 2 and decrease 5° at each additional humidity level until it reaches the maximum speed of 10 at 50%°. The fans continue to run at the set speed until the humidity reaches 65% where they will stop.

Set the desired humidity increment value for the fans to ramp up when going in reverse.

 This number should be set so that there is no overlap in the forward and reverse running speeds.

 If you set the starting humidity level to 50% and the increment humidity to 5%, the fans start at 50% at speed 2 and decrease 5° at each additional humidity level until it reaches the maximum speed of 10 at 30%°. The fans continue to run at the set speed until the humidity reaches 55% where they will stop.

Set the Wind Controls

The Wind Control option displays only if a Wind sensor is found during auto configuration, or you manually configured a Wind sensor.

1. Press the main menu icon.

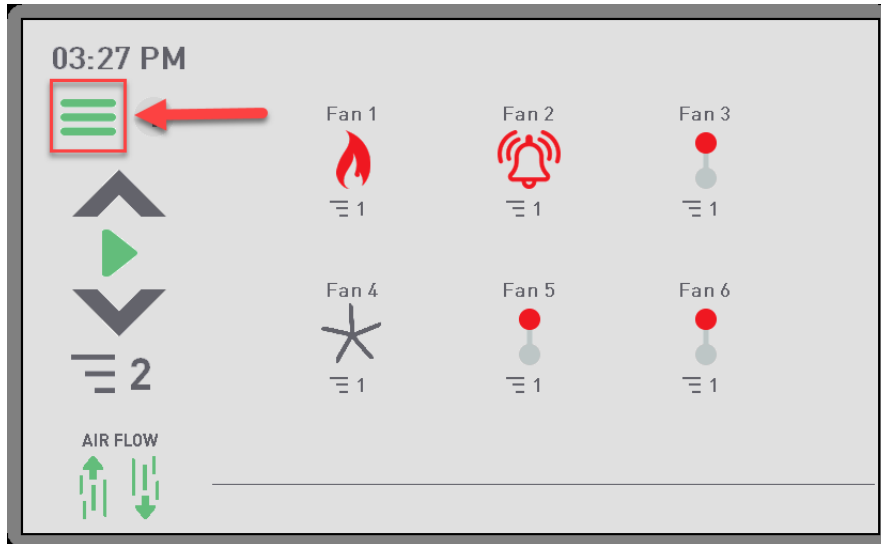


Figure 30: Main Screen

The main menu screen displays.

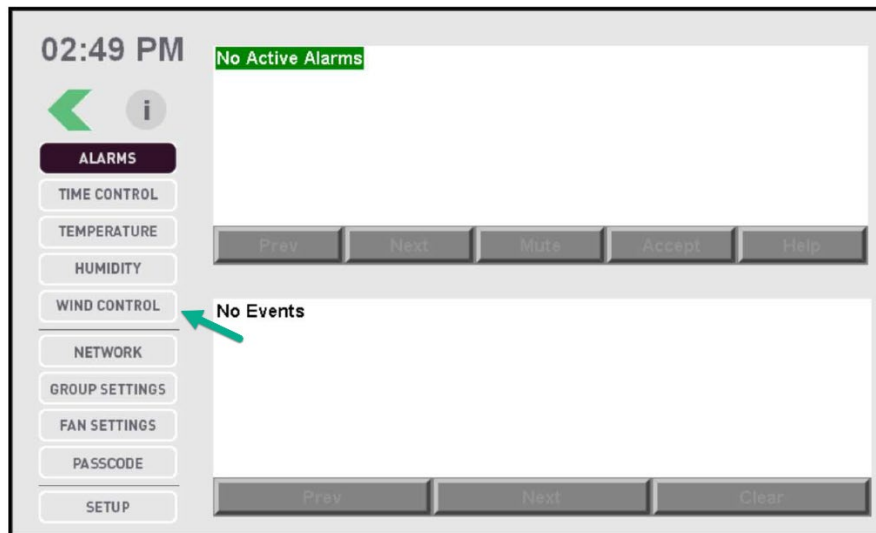


Figure 31: Main Menu Screen

2. Press **Wind Control**.
3. Enter the master Passcode.



Contact the factory for assistance.

The Wind Control screen displays the current wind speed and wind direction.

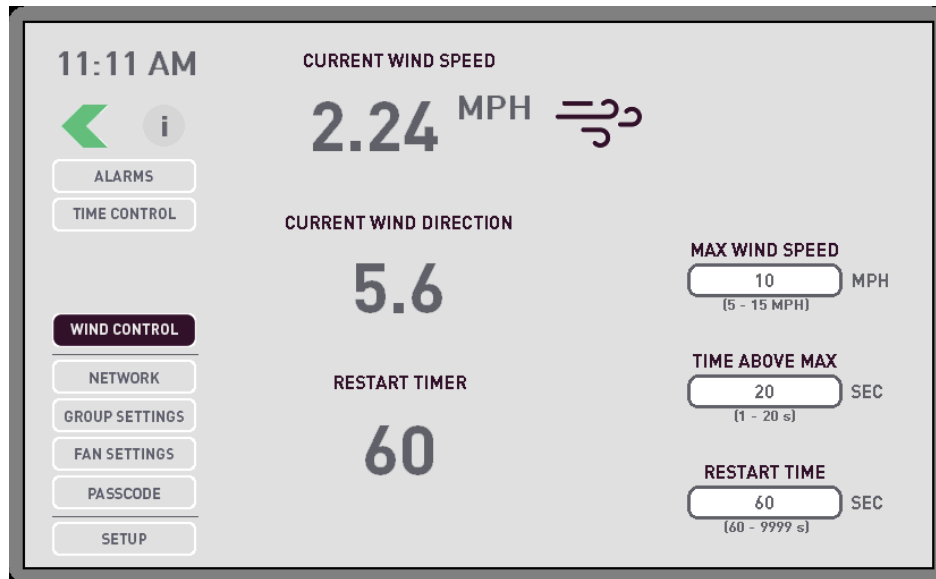


Figure 32: Wind Control Screen

- Set the desired maximum Wind Speed.



You can set the maximum Wind Speed from 5 to 15 mph.

- Press **Enter** to save your changes.
- Set the desired length of time that the fan can exceed the maximum Wind Speed allowed.



You can set the time from 1 to 20 seconds.

- Press **Enter** to save your changes.
- Set the length of time at which the fan restarts after maintaining a Wind Speed less than the set point.



You can set the time from 60 to 9999 seconds.

- Press **Enter** to save your changes.

Configure the Network – After Initial Setup

The settings you define on this screen are used to integrate with a BACnet system such as Building Management System (BMS).

Change the network settings when a modification to the settings is needed during set up.

To set up the network:

1. Press the main menu icon.

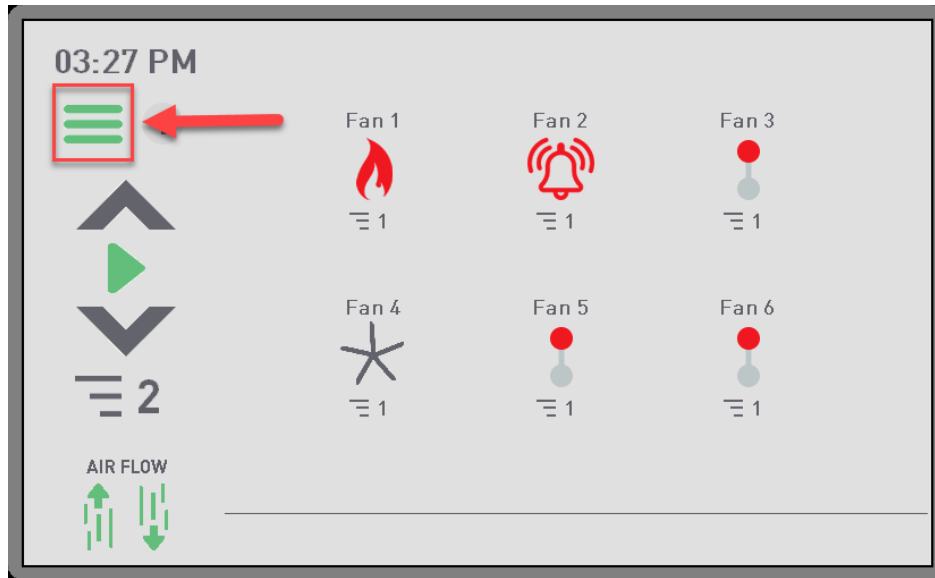


Figure 33: Main Screen

The main menu screen displays.



Figure 34: Main Menu Screen

2. Press **Network**.
3. Enter your Passcode.

The Network screen displays.


Figure 35: Network Screen

4. Type your IP address in the **IP Address** field.
5. Enter the Device ID in the **Device ID** field.
6. Type the Netmask address in the **Netmask** field.
7. Type the Gateway address in the **Gateway** field.
8. Set the current date and time:
 1. Press the date and timestamp to the right of the clock icon.
 3. Select the month from the **Month** list.
 4. Select today's date from the **Date** list.
 5. Select the current year from the **Year** list.
 6. Select the hour from the **Hour** list.
 7. Select the minute from the **Minute** list.
 8. Select AM or PM from the **AM PM** list.
 9. Press the arrow to save your changes.
 9. Slide the button next to Daylight Saving Time so the system automatically adjusts when the time changes (optional).

Press the **Update** button to save settings. The screen restarts.

Change MSTP Settings

If you have an iFan 7.0 or iFan 10.0 and you are using BACnet MSTP for your BMS, you can set your MSTP port settings on this screen. Follow the steps in Configure the Network – After Initial Setup on page 38 to get to the network screen. Once there, press the MSTP Settings button.

 iFan 4.3 does not allow for BACnet MSTP.

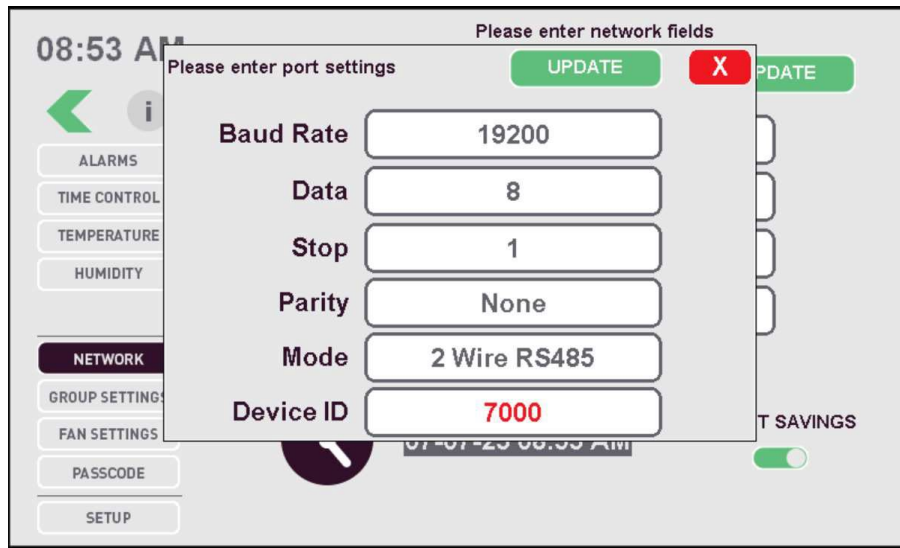



Figure 36: Setup MSTP Screen

1. Enter the baud rate into the **Baud Rate** field.
2. Enter the number of data bits in the **Data Bits** field.
3. Enter the number of stop bits in the **Stop Bits** field.
4. Enter the parity in the **Parity** field.
5. Enter the mode in the **Mode** field.

 The options are 2-wire RS485 or 4-wire RS485 or RS422.

6. Enter the device ID into the **Device ID** field.
7. Press the purple right arrow at the bottom of the screen to complete the configuration.



The device restarts and uses the configurations you have defined.

Web Server Login

If you have an iFan 7.0 or iFan 10.0, the iFan has Webserver capability. Follow the steps in Configure the Network – After Initial Setup on page 38 to get to the network screen. This login information is used when you try to view and control the fans via the webserver. On a computer or mobile phone, enter the IP address of the iFan in the browser. A login screen appears which uses the credentials setup in this step. Once there, press the Web Server button to change the web access login information.

1. Press the Username field to type in a new username



The default username is “iFan”.

2. Press the **Password** field to type in a new password.



The default password is “admin”.

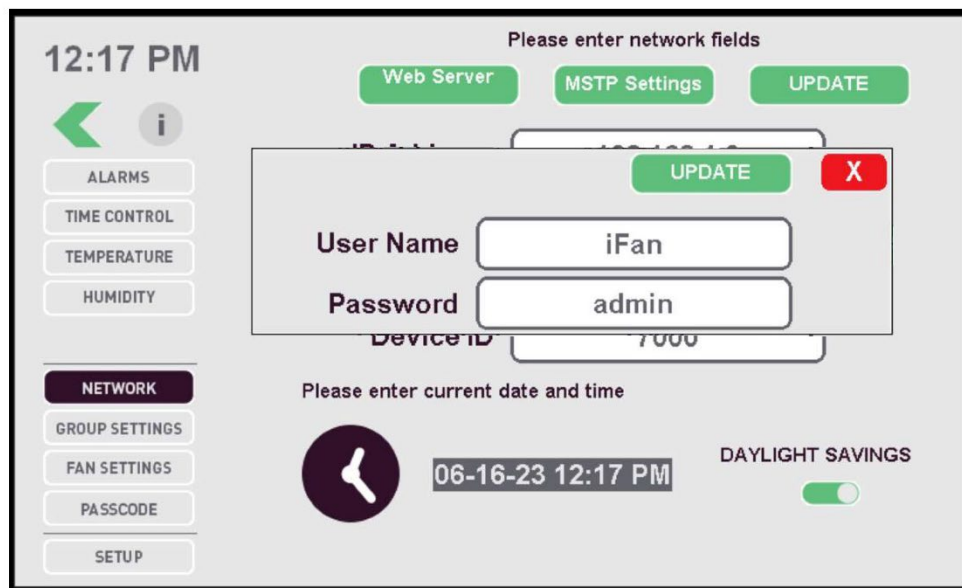


Figure 37: Web Server Login Screen

3. Press Confirm to close the web server login screen and confirm changes.

Configure the Group Settings – After Initial Setup

If you need to adjust Group Settings after the initial setup, use the Group Settings screens. Fans that are available to be added to a group display in the top four rows. You can also add, delete, or change Group names on this screen.

To set the group settings:

1. Press the main menu icon.

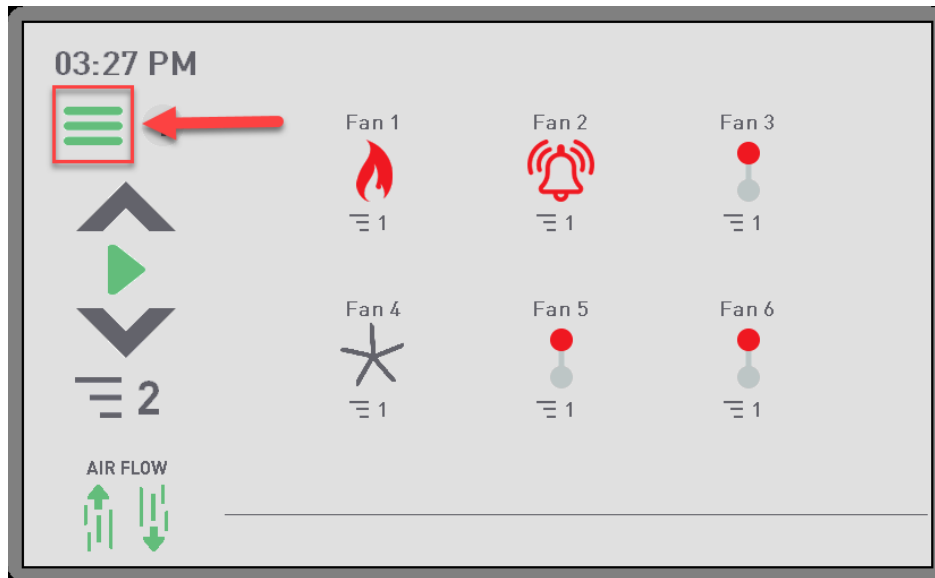


Figure 38: Main Screen

The main menu screen displays.



Figure 39: Main Menu Screen

2. Press **Group Settings**.

3. Enter your Passcode.

The Group screen displays.

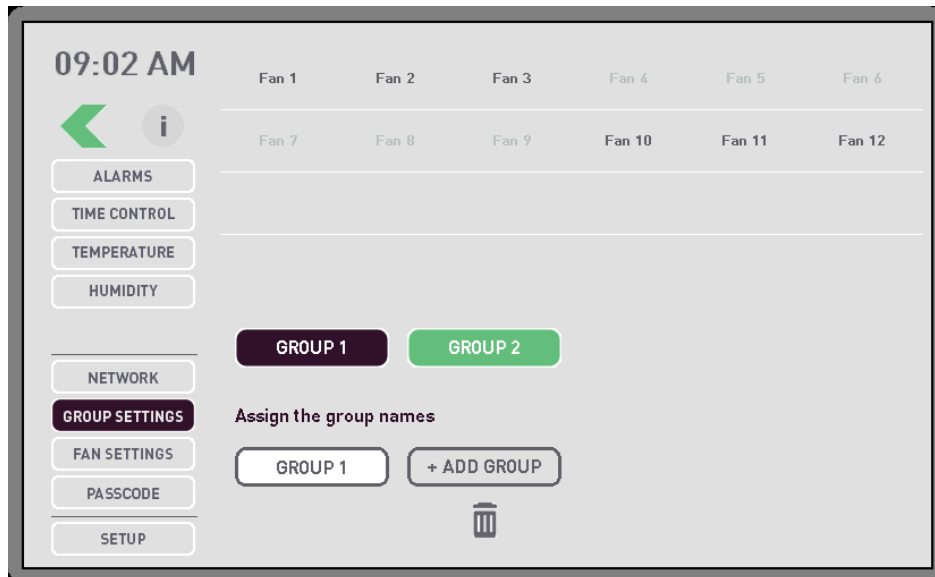


Figure 40: Group Screen

4. Select the group you want to add fans to.



You can add more groups. For more information about adding fan groups, please see Add a New Group on page 45.

5. Press the name of the fan you want to add to the group you selected.

The fan name displays in bold text, and the fan is removed from all other groups.

Add a New Group

You add a new fan Group on the Group screen.

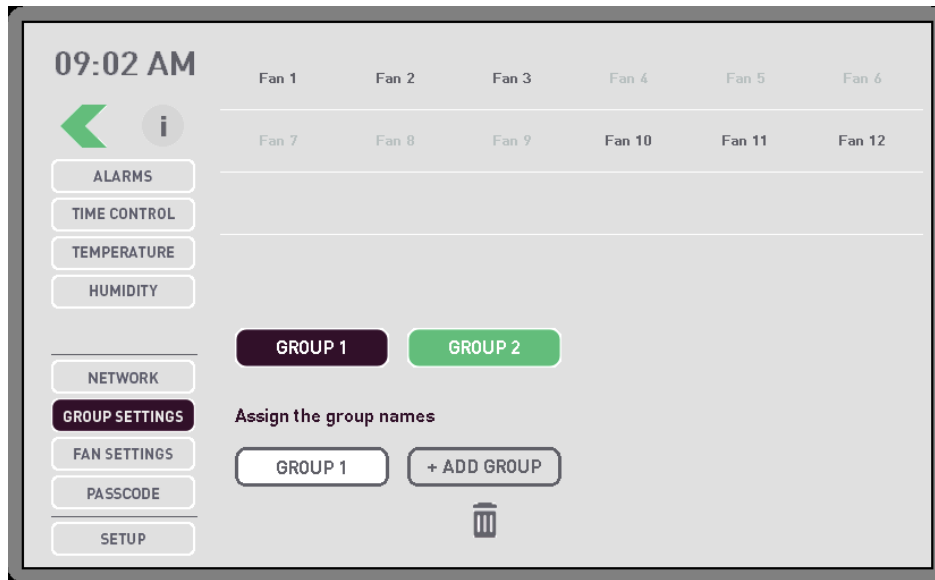


Figure 41: Group Screen

To add a new Group:

1. Click **Add Group**.
2. To rename a Group, click the button labeled with the name you want to change.
3. Type the name for the Group.

Delete a Fan Group

To delete a fan group, press the trash can under the group name.



All fans that were configured for the Group you are deleting are moved to the next highest Group.

For example:

If you delete Group 4, all fans that were configured for Group 4 are moved to Group 3.

Configure/Add Fans – After Initial Setup

To set fan settings:

1. Press the main menu icon.

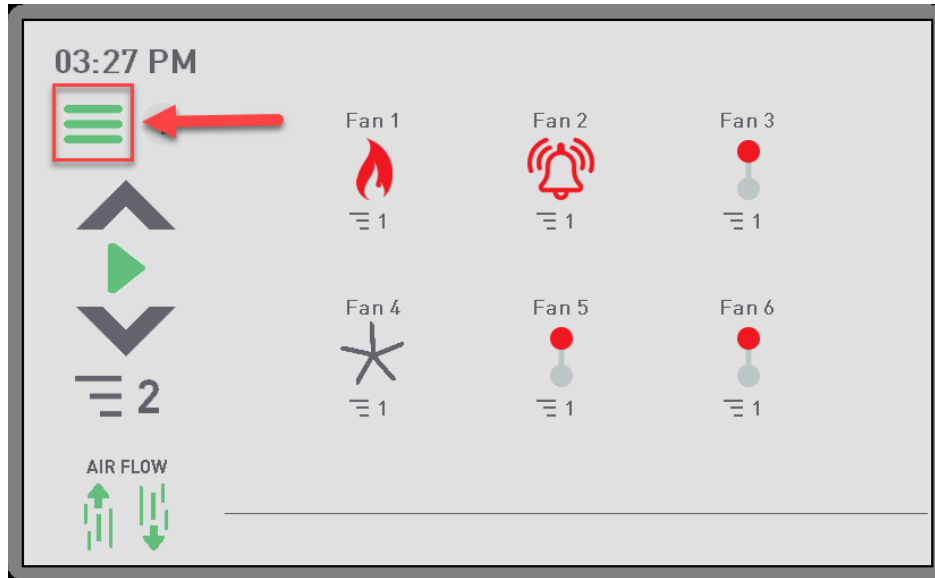


Figure 42: Main Screen

The main menu screen displays.



Figure 43: Main Menu Screen

2. Press **Fan Settings**.

3. Enter your Passcode.

The Fan Settings screen displays.

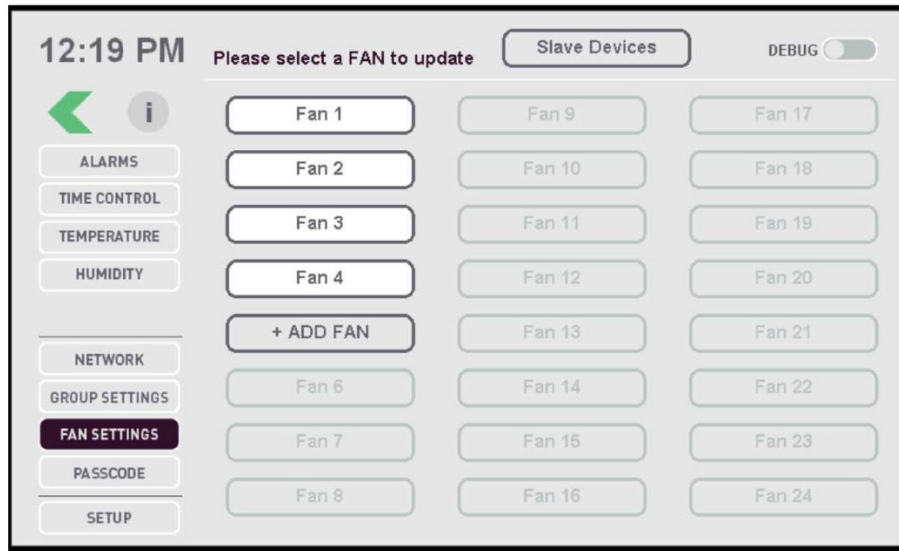


Figure 44: Fan Settings Screen

4. Press **+ADD FAN** to add a fan to the system.

The Fans Setting screen displays.

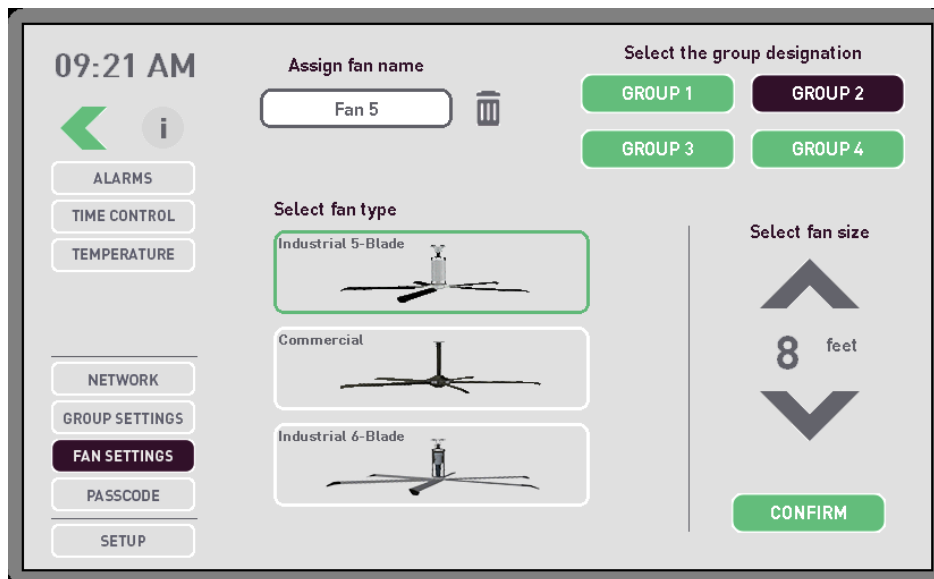


Figure 45: Fan Settings Screen

5. Type a name for the fan in the **Assign Fan** field.
6. Press the name of the group you want to assign the fan to.

7. Press the icon that matches the type of fan:
 - Industrial class fans – Select the size of the fan.
 - Commercial class fans – The fan size is set by the fan controller if communications can be established.
8. Press **Confirm**.

Reconfigure a Fan

To reconfigure a fan:

1. Select the fan you want to reconfigure.
2. Change the type size and/or group.
3. Click **Confirm** to save the changes.

Delete a Fan

1. Select the fan you want to delete.

Press the trash can next to the fan you selected.

Configure Slave Devices – After Initial Setup

1. Press the main menu icon.

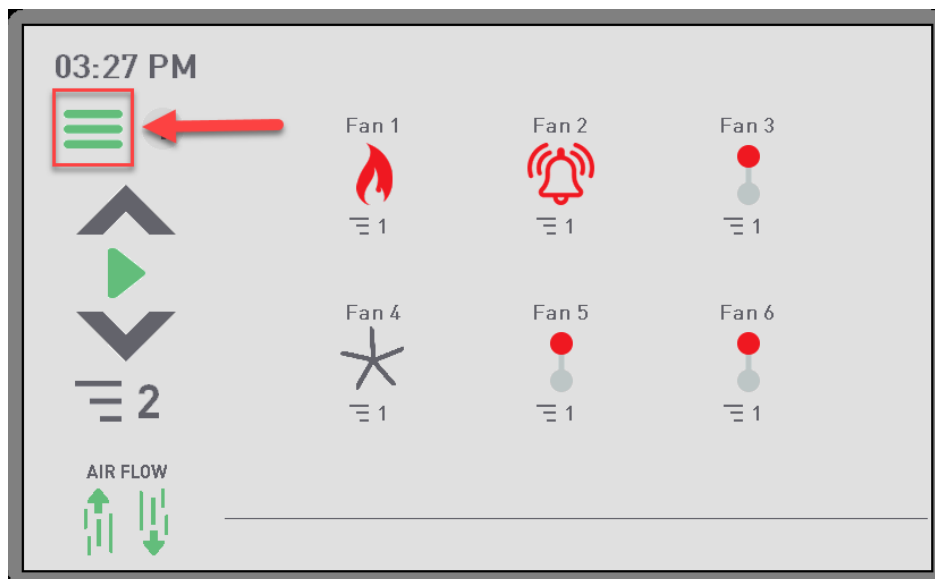


Figure 46: Main Screen

The main menu screen displays.



Figure 47: Main Menu Screen

2. Press **Fan Settings**.
3. Enter your Passcode.
The Fan Settings screen displays.

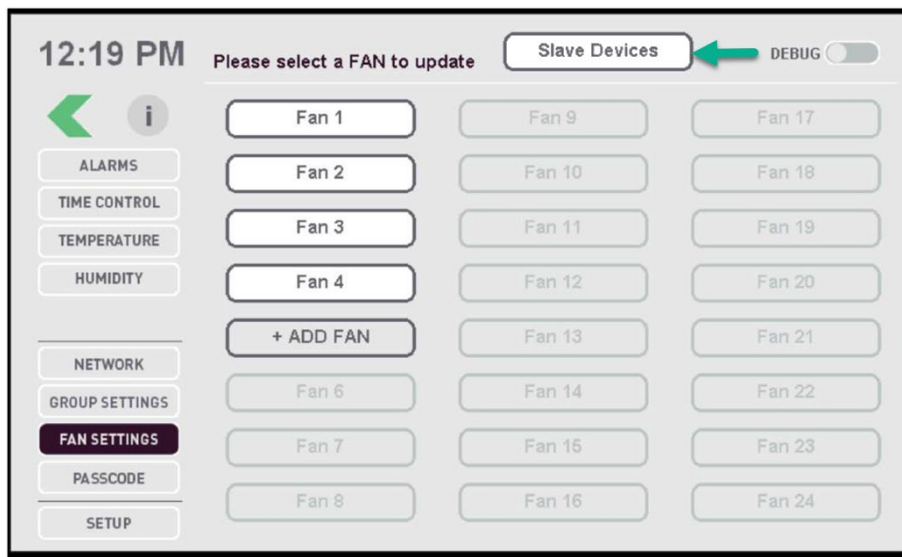


Figure 48: Fan Settings Screen

4. Press Slave Devices button on the top of the screen.

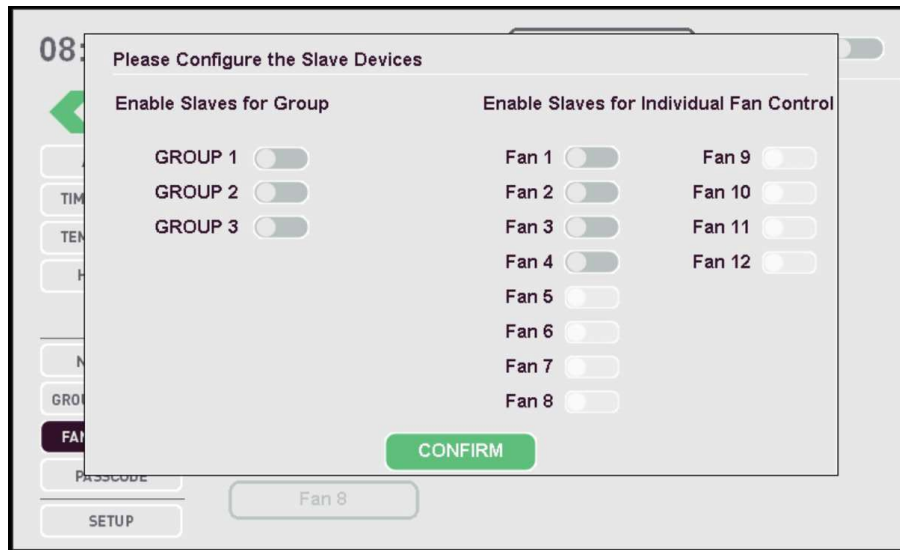





Figure 49: Setup Slave Screen

You can enable the slave touchscreens to work for a group of fans or an individual fan.

	For group control, a single slave touchscreen controls all fans in that group.
	For individual fan control, there needs to be a slave touchscreen for each fan desired.
	Touchscreens must be addressed in correlation to the group or fans. Address 120 works for either group 1 or fan 1. Address 121 works for group 2 or fan 2, and so on.

5. Slide the **Enable** button for each touchscreen that is present and the configuration desired.

Configure a Passcode – After Initial Setup

If you enable using a passcode, the Passcode Entry screen displays after the device has been inactive greater than the logout time set.

To require a passcode to access the application:

1. Press the main menu icon.

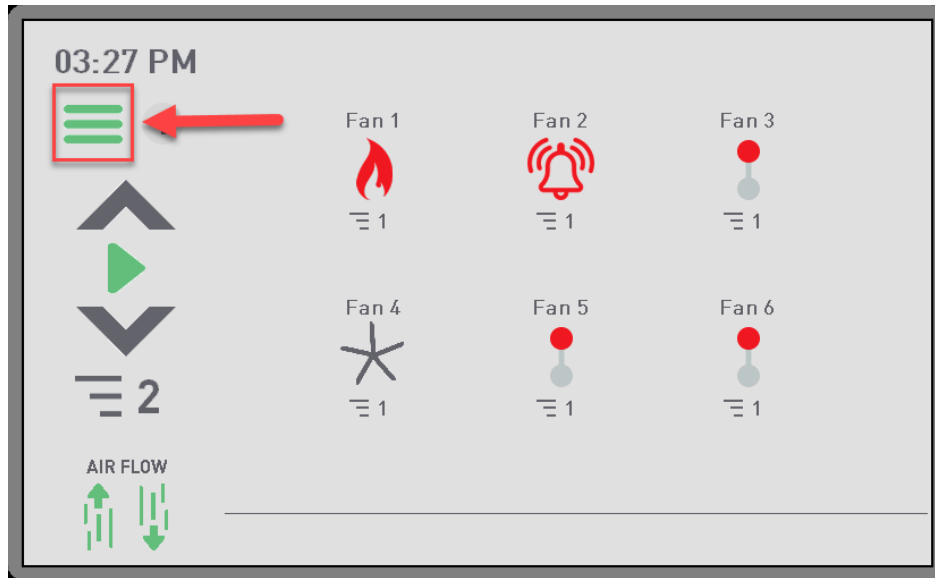


Figure 50: Main Screen

The main menu screen displays.



Figure 51: Main Menu Screen

2. Press **Passcode**.
3. Enter your Passcode.

The Passcode screen displays.

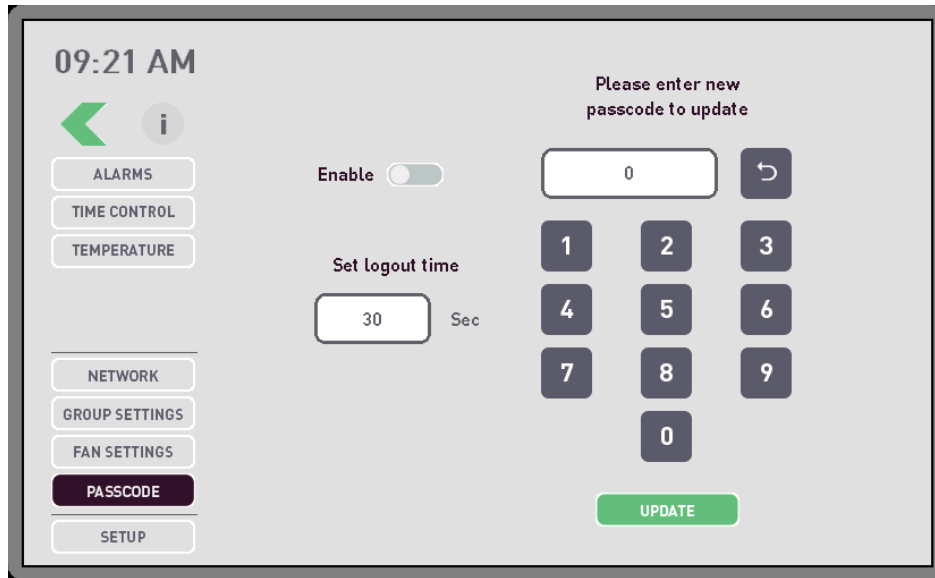



Figure 52: Passcode Update Screen

4. Slide the Enable button to the right to require a passcode to access the application.
5. Use the soft keypad to type a new passcode.

 You can use any four-digit number but you cannot start the passcode with zero (0).


6. Press **Update**.

Your new passcode displays in green text indicating that the passcode has been changed.

Set a Logout Time

To set a logout time:

1. Type the number of seconds in the **Set Logout Time** field that should elapse before the Passcode Entry screen displays.

 The valid timeout range is between 30 and 180 seconds.

Configuration Setup

To setup configurations:

1. Press the main menu icon.

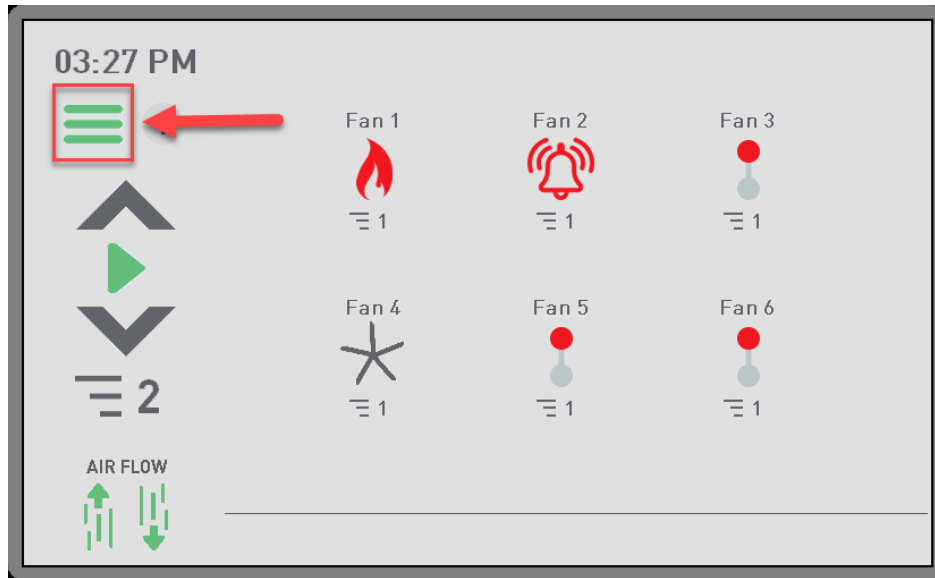


Figure 53: Main Screen

The main menu screen displays.

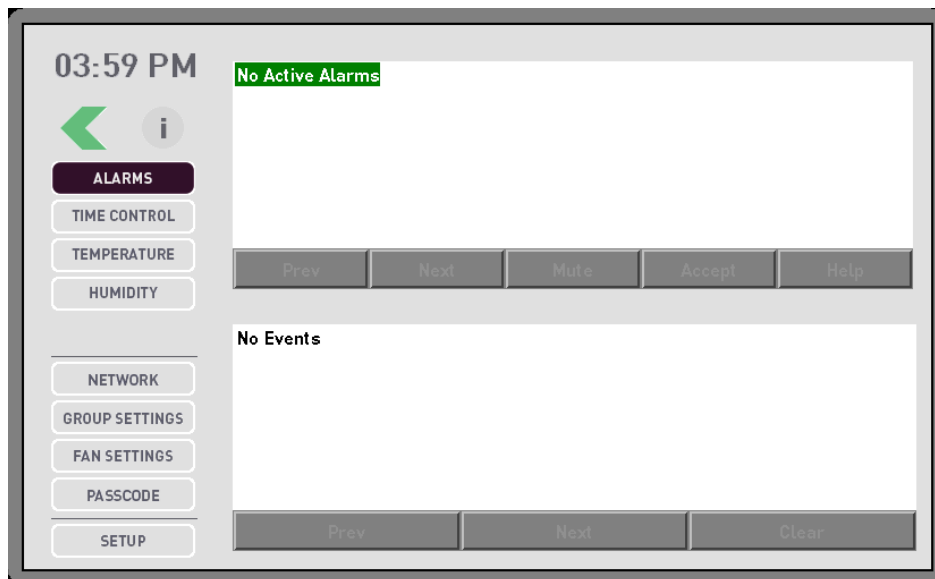


Figure 54: Main Menu Screen

2. Press **Setup**.
3. Enter your Passcode.

The Setup screen displays.

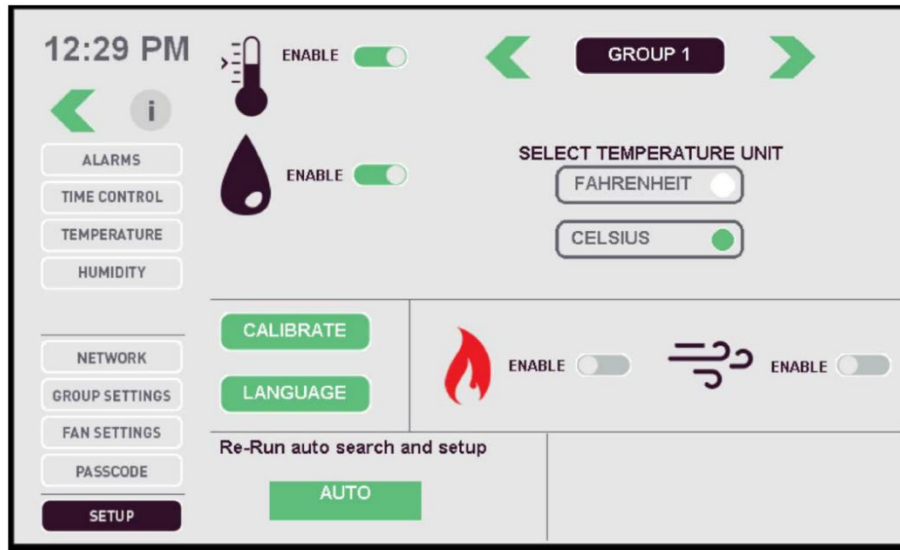




Figure 55: Setup Screen

4. Use the green arrows next to the Group name to cycle through your fan groups, if you are using groups.
5. Slide the enable button next to the thermometer icon:
 - Left if you want to disable Temperature Control for the selected Group.
 - Right if you want to enable Temperature Control for the selected Group.

	Temperature Control should only be enabled if you have temperature sensors installed.
---	---

6. Select one of the following:
 - FAHRENHEIT if you want to view the temperature by the Fahrenheit scale.
 - CELSIUS if you want to view the temperature by the Celsius scale.
7. Slide the enable button next to the water drop icon:
 - Left if you want to disable Humidity Control for the selected Group.
 - Right if you want to enable Humidity Control for the selected Group.

	Humidity Control should only be enabled if you have temperature and humidity sensors installed. Each group must have these sensors installed.
---	--

8. Slide the enable button next to the network fire control icon:
 - Left if you want to disable Network Fire Control for the selected Group.

- Right if you want to enable Network Fire Control for the selected Group.



Network Fire Control should only be enabled if you have the Network Fire Control panel installed.

9. Slide the enable button next to the wind control icon:

- Left if you want to disable the Wind Speed Control for the selected Group.
- Right if you want to enable Wind Speed Control for the selected Group.



Wind Speed Control should only be enabled if you have the anemometer installed.

10. Select the measurement unit for Wind Speed from the Wind Unit field.

11. Change Language: Press the **Language** button to choose the desired language on the popup. Press **Confirm**.

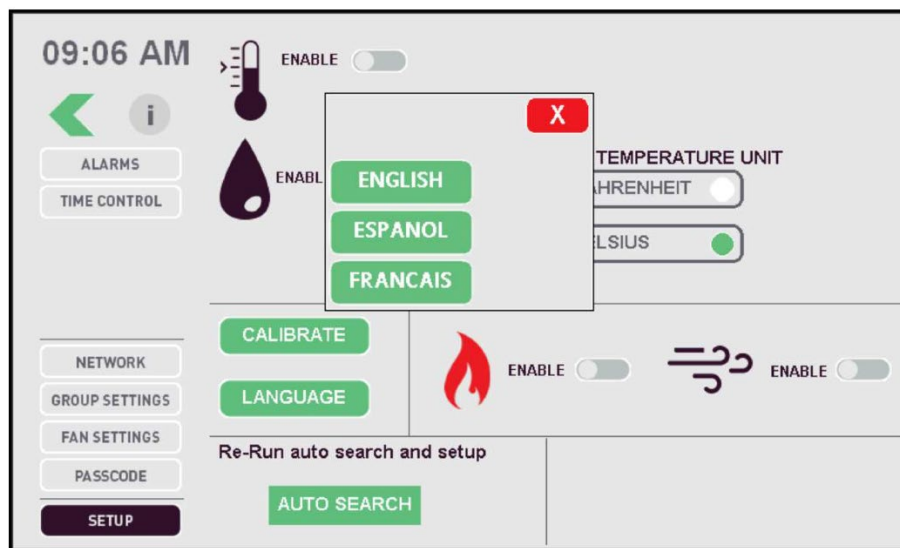


Figure 56: Language Popup Screen

Rerun Auto Configuration

To rerun auto configuration:

1. Press **Setup**.

The Passcode screen displays.

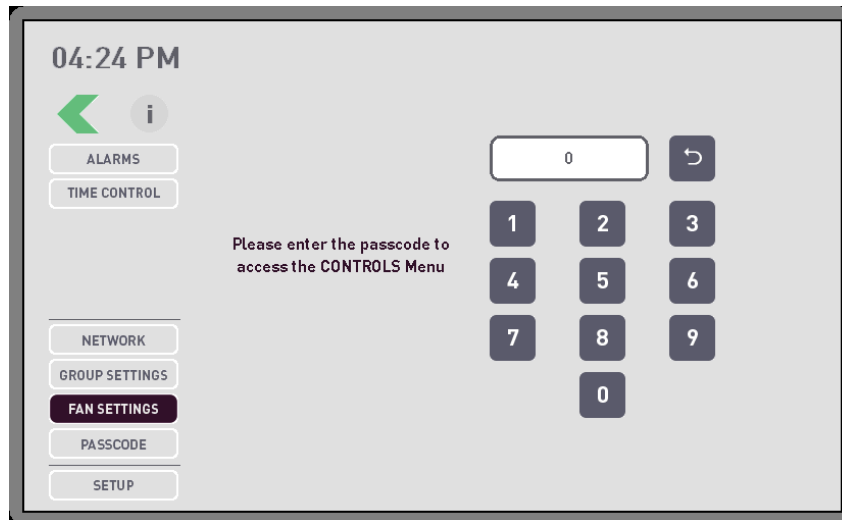
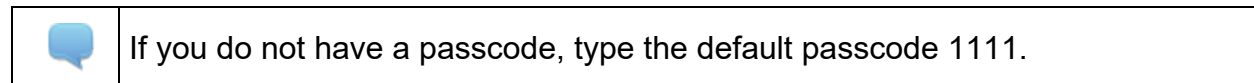


Figure 57: Passcode Screen

2. Type your passcode.



The Setup screen displays.

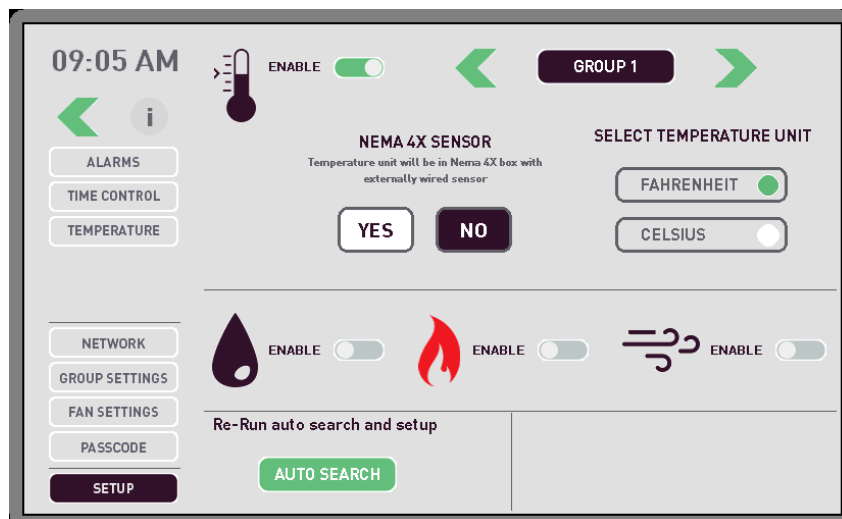


Figure 58: Setup Screen

3. Press **AUTO SEARCH**.

The Auto Configurator runs again and displays the results it has found.

Calibrate Touchscreen

1. Press Setup.
2. Enter the passcode.

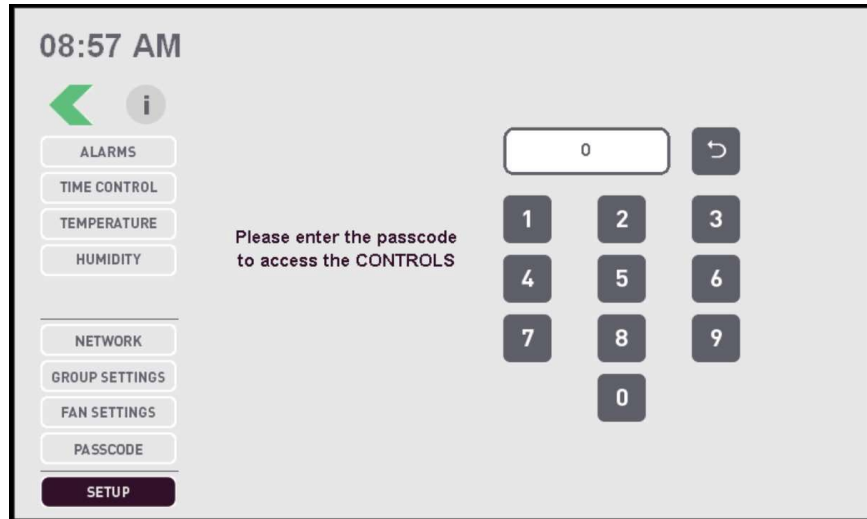


Figure 59: Passcode Screen

3. Press the **Calibrate** button.

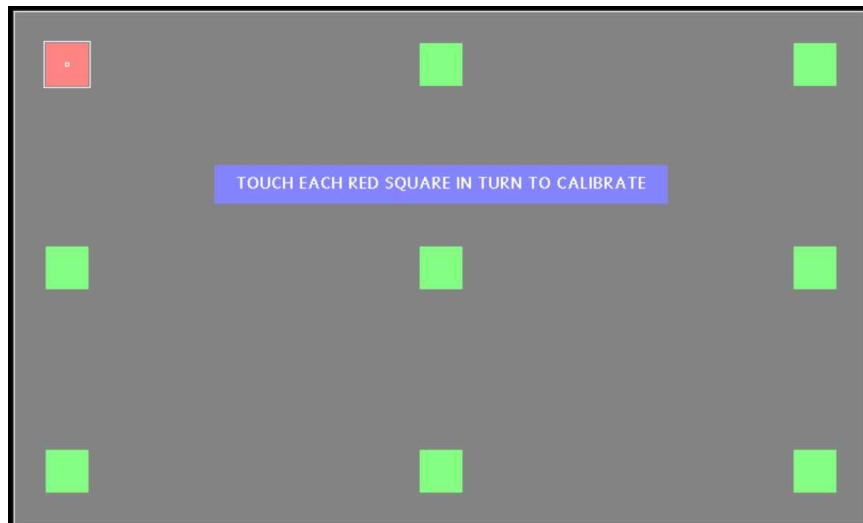


Figure 60: Calibration Screen

4. Follow the onscreen instructions.

Troubleshooting

Problem	Possible Cause	Solution
Screen does not light up.	No incoming power to power supply.	Check for primary power at the power supply connection. Confirm breaker is on.
	Bad power supply – no DC out.	Check DC voltage at terminals of screen. Replace power supply if bad.
	Resettable fuse tripped.	Disconnect power for 5 seconds and reapply.
	Failed screen	Replace screen
No communication to fans/ no fans found during search.	Communication cable not connected properly.	Confirm communication cable to fans is connected to RS485 port A on back of screen.
	Fans do not have power applied.	Confirm power is connected to the VFDs of the fans. Confirm the fans' disconnects are on.
	Fire control panel (if applicable) not powered or does not have fire connection.	Confirm FCP is powered and communication cables are connected. Confirm fire alarm connection is Normally Closed Dry contact and contact is closed, or jumper is present if not connected yet. Confirm the power, run, x0, and all y lights are on.

Problem	Possible Cause	Solution
No communication to some fans.	Communication daisy chain disconnected at some point or wiring issue.	Confirm wiring is correct based on schematics.
	Fans do not have power applied for those not communicating.	Confirm power is connected to the VFDs of the fans. Confirm the fans' disconnects are on.
Must touch slightly off of buttons to make them work.	Calibration is off.	Go to Menu -> Setup -> Calibration and perform the screen calibration
Fan not operating – icon has a circle with a line over the fan.	Fan disabled.	Select the fan and then move the Enable/Disable switch to green.
Fan showing an alarm.	Fan faulted.	Select the fan to determine the alarm. Remove the fault condition and reset the fan.
Fan or several fan icons appear to be grayed out.	Different group control selected.	Select the proper group or All Fans.
Screen display states “Invalid Database.”	Database has been lost or deleted.	Contact the factory.