

Equipment Touch (EQT1-5)

User Guide





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Important changes are listed in **Document revision history** at the end of this document.

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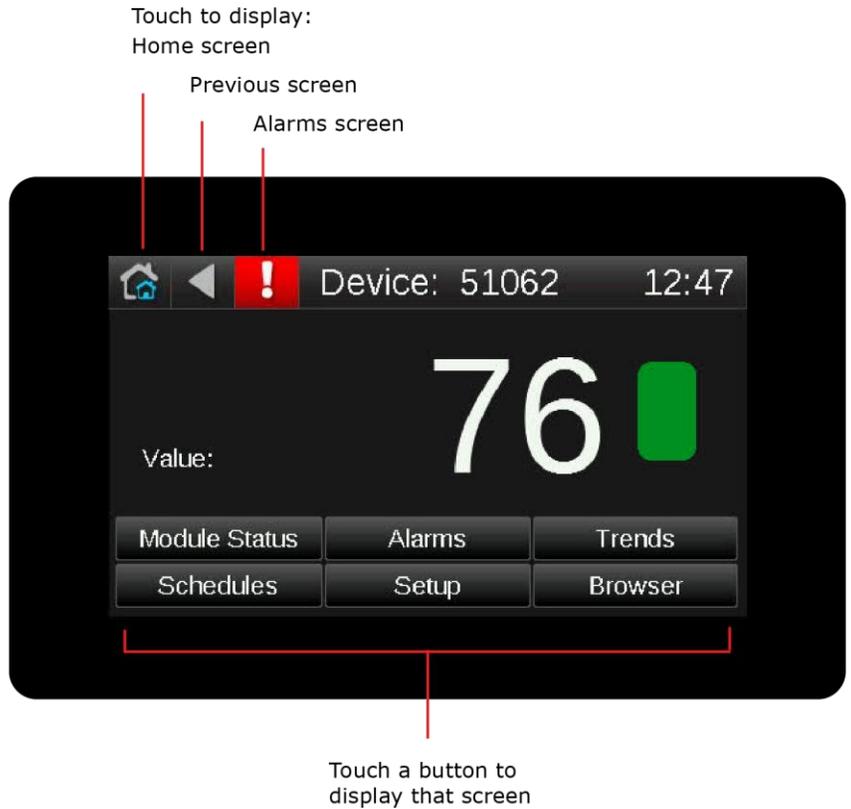
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What is the Equipment Touch?

The Equipment Touch is a touchscreen device that you can attach to a controller to view or change its property values, schedule equipment, view trends, and more, without having to access the system's server.



Equipment Touch screens

The Equipment Touch will display the system screens below as well as custom-designed screens.

Screen name	Description
Standby	If included in the touchscreen file, a custom screen that displays when the Equipment Touch has had no user activity for the time specified on the Inactivity Timeout screen. The Standby screen is not interactive, and as soon as you touch the screen, the Home screen displays. If the touchscreen file does not include a Standby screen, the Home screen displays after a period of inactivity.
Home	A custom screen for the Equipment Touch.

Login



Displays if the screen you selected requires a password. Enter your password, then touch **Done**.

Each screen is programmed with one of the following password levels:

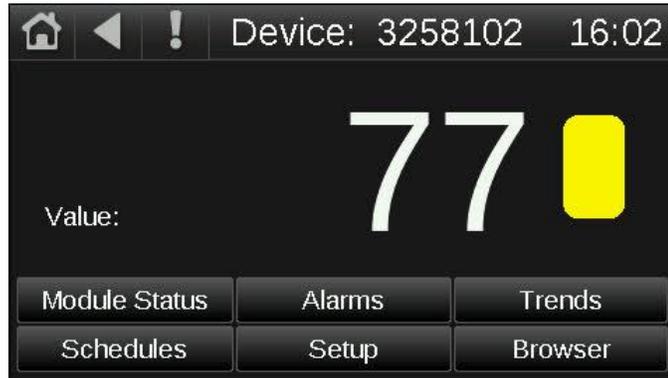
A screen requiring this password level...	Can be accessed by...
User	A user logged in with the User, Admin, or Factory password
Admin	A user logged in with the Admin or Factory password
Factory	A user logged in with the Factory password
No password	Anyone

NOTES

- You log out on the **Setup** screen.
- You can change passwords on the Touchscreen Setup > **Passwords** screen.

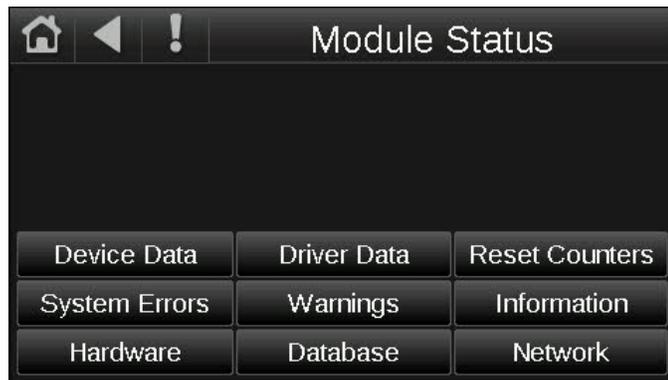
Screen name	Description
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System



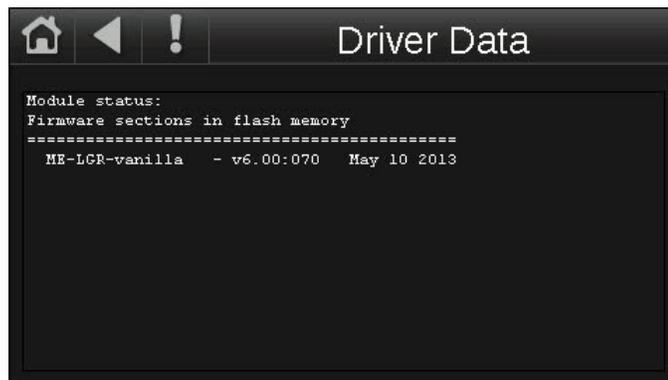
Displays the BACnet device instance number, the controller's time, temperature read from the controller's prime variable, and zone color. Touch a button to jump to the **Module Status, Alarms, Trends, Schedules, Setup, or Browser** screen.

Module Status

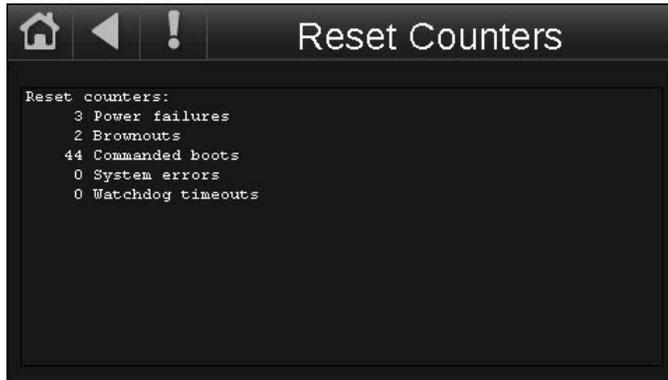


Touch a button to see one of the following sections of a Module Status report: **Device Data, Driver Data, Reset Counters, System Errors, Warnings, Information, Hardware, Database, Network.**

For example, the screens below show examples of the Driver Data and Reset Counters information.



Screen name	Description
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Alarms	
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Lets you view alarms from the controller. See *Viewing alarms* (page 11).

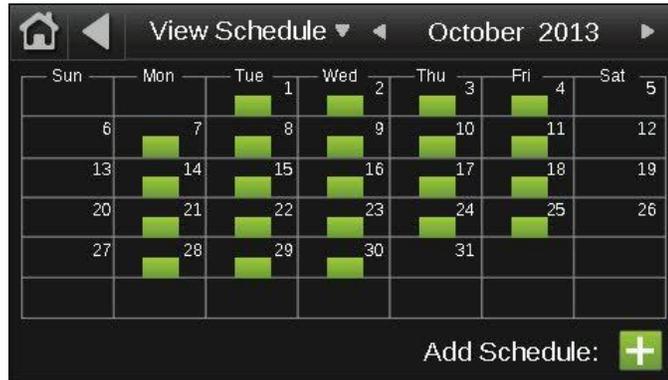
Trends	
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Lets you view trends for points that have trending enabled. See *Viewing trends* (page 12).

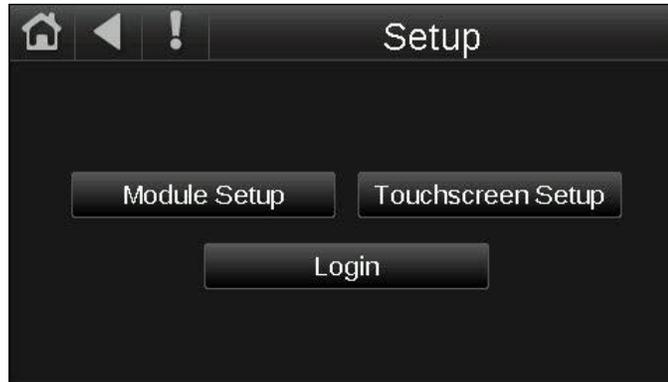
Screen name **Description**

Schedules



Lets you view, add, edit, or delete BACnet schedules in the controller. See *Viewing or creating schedules* (page 13).

Setup



Touch a button to jump to the **Module Setup**, **Touchscreen Setup**, or **Login** screen.

Screen name	Description
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Browser

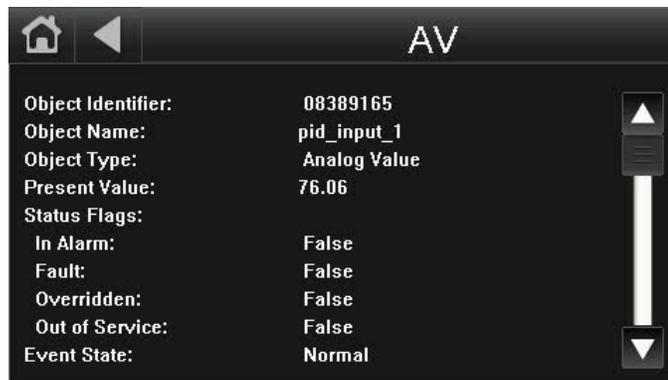


Touch a button to see that type of BACnet objects found in the controller. Each screen shows a list of network-visible BACnet objects with BACnet Object Name, Current Value, and BACnet Object Instance number.

Below is an example of AV BACnet objects in a controller.

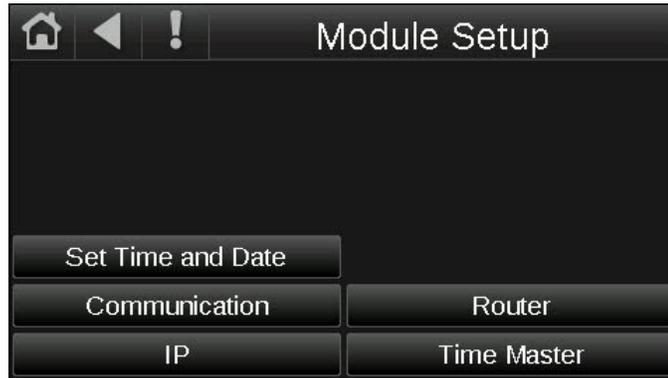


Touch an object in the above screen to see the details shown below.



Screen name	Description
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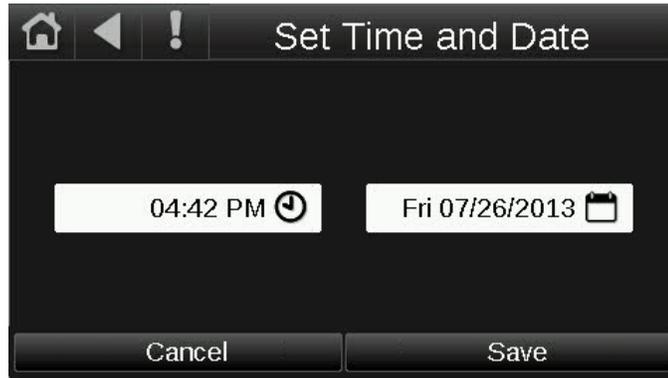
Module Setup



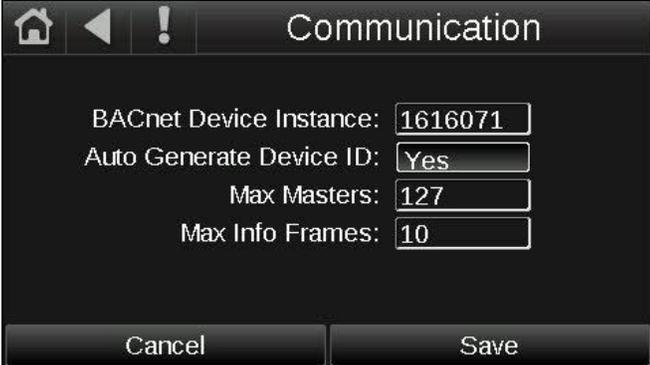
Touch a button to jump to the **Set Time and Date**, **Communication**, **Router**, **IP**, or **Time Master** screen.

NOTE A yellow value on a Module Setup screen indicates the value has been changed.

Set Time and Date



Touch the time or date field to edit it.

Screen name	Description
Communication	 <p>Lets you edit the information below for the controller. Touch a field to tap in new information.</p> <p>BACnet Device Instance number Auto Generate Device ID—Enter No or Yes</p> <p>You can edit the following fields that pertain to the controller's MS/TP network:</p> <p>Max Masters - Set this to the highest MAC address (up to 127) on the MS/TP network. If you later add a device with a higher address, you must change this field to that new address.</p> <p>Max Info Frames - Specifies the maximum number of information messages a controller may transmit before it must pass the token to the next controller.</p> <p>CAUTION Increasing this number allows the controller to transmit more messages while it has the token, but it also increases the overall time it takes for the token to pass through the network.</p> <ul style="list-style-type: none"> • For a router, set this value to a high number such as 200. • In non-router controllers, use the following formula to calculate this value: $[2 - (\text{devices} * (.002 + (80/\text{baud})))] / [(600/\text{baud}) * \text{devices}] = \text{Max Info Frames}$ For example, if the network has 15 devices at 19200 baud, Max Info Frames would be 4. <p>NOTE You may need to increase the result of the formula for controllers that need to communicate many values to other devices.</p>

Screen name	Description
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Router

Lets you view or edit the router's ARC156 or MS/TP network number. Touch a field to tap in the new number on the keypad.

NOTE BACnet Ethernet network support will be added in a future release.

IP

Lets you view or edit network addresses and the UDP Port. Touch a field to tap in the new number on the keypad.

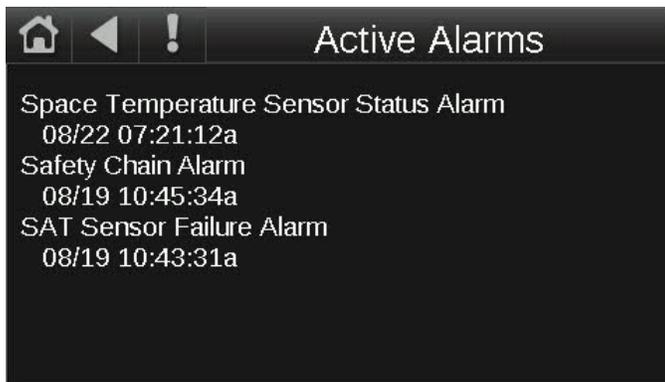
Screen name	Description
Time Master	
	<p>If the system does not have a front-end, you should designate a controller to be the BACnet Time Master. If a controller will be the BACnet Time Master, this screen lets you configure how it sends time synchronization broadcasts.</p>
	<p>Time Sync Mode - Tap in the number below that represents your selection:</p> <ul style="list-style-type: none"> • 0 = No Broadcast - The controller does not act as Time Master. • 1 = Local Broadcast - If it does not already exist, a BACnet address with network number and MAC address length both set to zero is added to the controller's Time Synchronization Recipients list found on the driver's Device page in the i-Vu® interface. The controller then sends time broadcasts only to controllers on its ARCnet or MS/TP network. • 2 = Global Broadcast - If it does not already exist, a global address with network number set to 65535 and MAC address length set to zero is added to the controller's Time Synchronization Recipients list found on the driver's Device page in the i-Vu® interface. The controller then sends time broadcasts to all its connected networks.
	<p>Time Sync Interval - Enter how often local or global time broadcast should be sent (1-9999 minutes). If Time Sync Interval is set to zero, no time sync messages are sent.</p>
	<p>NOTE If the controller looks through its Time Synchronization Recipient List and finds an entry with MAC address length set to zero and network number set to 65535, the controller's BACnet Time Master mode is set for Global Broadcast. If there is no global broadcast entry in the recipient list, the controller then looks for a local broadcast address (MAC address length set to zero and network number set to zero or to the same network number as the module's). If such an entry is found, the BACnet Time Master mode is set for Local Broadcast. Otherwise, the mode defaults to Disabled/None.</p>
Touchscreen Setup	Lets you edit the touchscreen settings.

Viewing alarms

When the controller generates an alarm, the following actions occur in the Equipment Touch:

-  turns red. The button remains red as long as Active Alarms or Active Faults exist.
- An audible alarm sounds if the alarm was set up in ViewBuilder to generate a sound and if Alarm Sounds are turned on in the **Touchscreen Setup** screen. Touch  to silence the alarm.
- The alarm is added to the **Active Alarms** or **Active Faults** screen. See table below.

To view alarms, touch  or touch **Alarms** on the **System** screen. The **Active Alarms** are displayed.



Touch  , then touch...	To...
Active Alarms	See all alarms except those that are defined as Faults in the control program.
Active Faults	See alarms that are defined as Faults in the control program.
Return-To-Normal	See alarms that returned to a normal state.
Manually cleared	See alarms that you cleared using the Clear Active button.
Clear Active	Clear all active alarms and faults.

NOTE The Equipment Touch can hold up to 100 alarms.

Viewing trends

A controller can read and store point values for any point in the control program that has trending enabled. On the Equipment Touch, you can view trend data for up to 4 points on a trend graph.

To view trends

- 1 On the **System** screen, touch **Trends**.
- 2 The **Trend Selector** screen shows any points in the control program that have trending enabled. To select the points you want to see on a trend graph (up to 4 points), touch the appropriate box for the point. For example, for the zone_temp_1 analog point, touch the **Analog** box.
- 3 Touch **Next**.
- 4 The **Trend Scaling** screen displays the **Date/Time** of the oldest and newest trend samples in the controller for the selected point(s). Touch a field to enter a new date or time.
- 5 Analog points only: The **Min Y** and **Max Y** fields show the range of the Y axis based on the lowest and highest trend sample values for the selected point(s). Touch either field and edit the value to define a new range for the Y axis.
- 6 Touch **Display Trends**.

Viewing or creating schedules

To view schedules

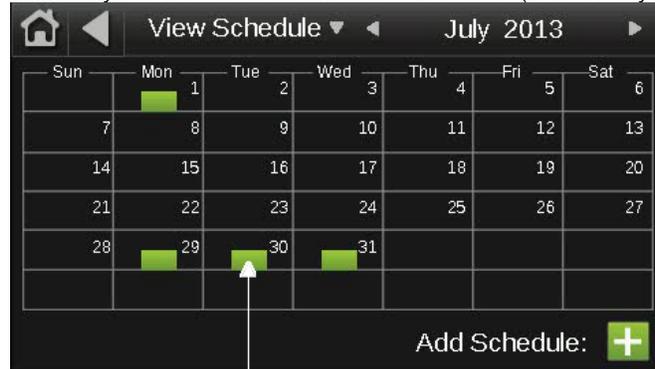
- 1 On the **System** screen, touch **Schedules**.
- 2 If the controller has multiple control programs that have a time clock microblock, touch the schedule object that you want to see.
- 3 Touch **View Schedule**, then:

Select...

To see...

Month View
(default view)

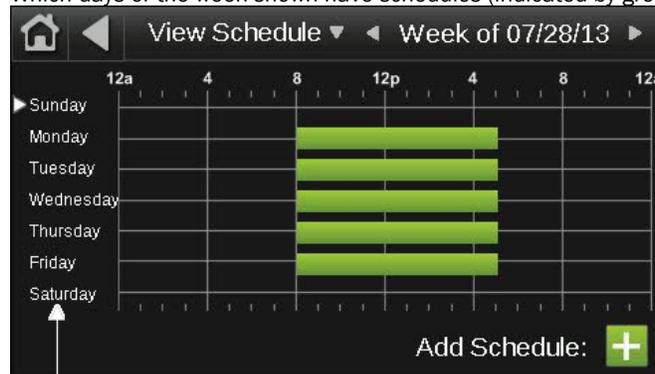
Which days in the current month have schedules (indicated by green boxes).



Touch day to see schedule(s)

Week View

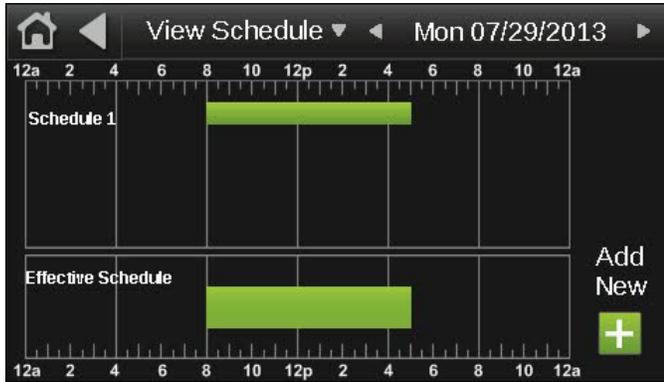
Which days of the week shown have schedules (indicated by green bars).



Touch day to see schedule(s)

NOTE If you see **Schedule editing disabled** at the bottom of the screen instead of **Add Schedule**, scheduling is being done through another application and is disabled for the Equipment Touch.

- 4 Touch a day to see the schedule(s) for that day.
- 5 In the screen below, touch a schedule's name or green bar (not the **Effective Schedule** bar) to edit or delete the schedule. See *To create a schedule* (page 14) for field descriptions.



NOTES

- o The **Effective Schedule** is the combined result of the day's schedule(s).
- o You cannot edit a schedule's **Type** (Dated, Weekly, Continuous), its **Priority** (Normal or Override), or whether the schedule is an **ON Schedule** or **Off Schedule**. If you need to change any of these settings, delete the schedule, and then make a new one.

To create a schedule

- 1 On the **System** screen, touch **Schedules**.
- 2 If the controller has multiple control programs that have a time clock microblock, touch the schedule object that you want to add a schedule to.
- 3 Touch the plus sign to the right of **Add Schedule**.
- 4 Touch the **Schedule Name** field, and enter a unique name.
- 5 Select one of the following:
 - **ON Schedule** for an occupied period
 - **OFF Schedule** for an unoccupied period that is to override an ON schedule. For example, a holiday schedule that is to override a weekly schedule.
- 6 Touch the **Type** field, then select one of the following:

Select...	To use the schedule...
Dated	For a specified period of time between a start and end date. For example, 7:00 am to 7:00 pm every day between July 1st and July 22nd.
Weekly	Every week on the specified days. For example, every Monday through Friday, 8:00 am to 5:00 pm.
Continuous	Continuously between 2 specified dates/times, For example, a non-stop schedule that starts June 1st at 12:00 am and ends August 31st at 11:50 pm.

- 7 ON Schedule only–Select one of the following:
 - **Normal** for a typical occupied period
 - **Override** for a occupied period that is to override an OFF schedule.
- 8 Touch **Next** to define the criteria for the type of schedule you selected in step 6.
- 9 Touch **Save** when finished.

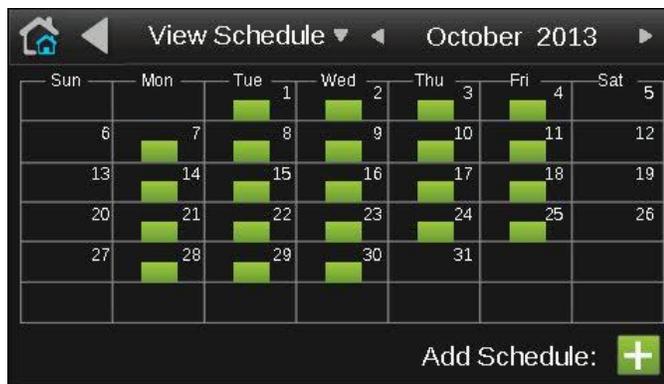
To add multiple periods to a schedule

A dated, weekly, or continuous schedule can have multiple periods. For example, the first period could be every Monday through Friday, 8:00 am to 5:00 pm. The second period could be every Monday through Wednesday, 6:00 pm to 8:00 pm.

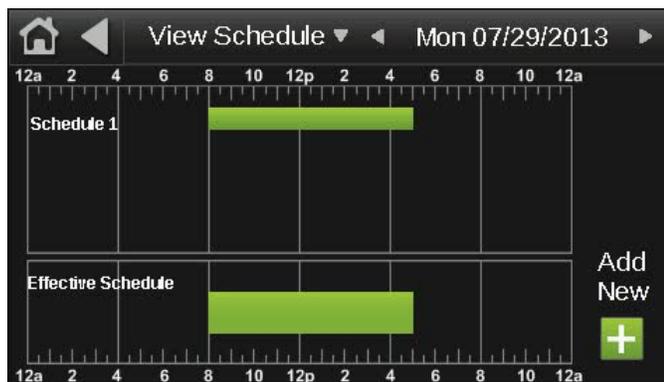
NOTES

- For weekly schedules, you can create up to 2 periods in a day and up to 14 periods in a week.
- For dated or continuous schedules, you can create up to 15 periods in a week.

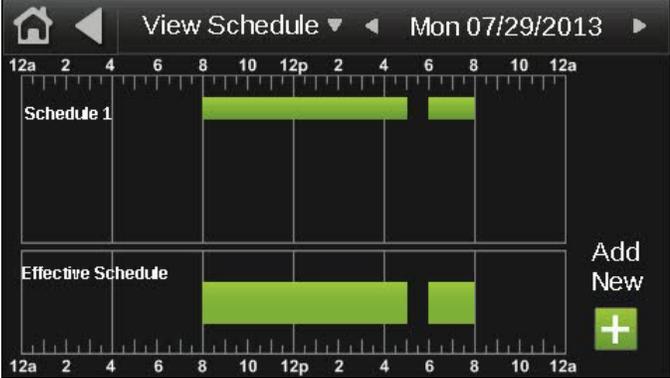
- 1 Following the instructions above, create a schedule for the first period.
- 2 In the screen below, touch the green bar for the schedule that you want to add a period to.



- 3 In the screen below, touch the schedule's name or green bar (not the **Effective Schedule** bar).



- 4 Touch **Next**.
- 5 Touch **+Period**.
- 6 Set the times and days for the new period. For example, Monday through Wednesday, 6:00 pm to 8:00 pm.
- 7 Touch **Save**. The screen below now shows both periods.



To edit touchscreen settings

- 1 On the **System View** screen, touch **Setup > Touchscreen Setup**.
- 2 Touch a button to jump to one of the following screens:

Screen	Description
About	Displays information about the touchscreen firmware.
Inactivity Timeout	Lets you define how long the Equipment Touch can have no activity before returning to the Standby screen and logging out the user. Set to 0 to deactivate this feature.
Sensor Setup	Lets the installer set up the Equipment Touch's temperature and humidity sensors.
Clean Screen	Displays a one-minute countdown timer so that you can clean fingerprints from the display window without touching something that would affect equipment operation.
Reload Firmware	Lets the installer update the firmware through the USB-C port. See "To update the Equipment Touch's firmware" in the <i>Equipment Touch Installation and Setup Guide</i> .

Language



English	German	Portuguese
Simplified Chinese	French	Italian
Korean	Spanish	Japanese
Traditional Chinese	Swedish	
Thai	Russian	

If optional languages were defined when the touchscreen file was created, this screen lets you select which language to use for Equipment Touch system screens. If custom screens were included in the touchscreen file, they will display in the language that they were created in.

Passwords

Lets you change the User or Admin password, if allowed.

NOTE The default password is **admin**.

Document revision history

Important changes to this document are listed below. Minor changes such as typographical or formatting errors are not listed.

Date	Topic	Change description	Code*
		No changes yet	

* For internal use only

