



United Technologies  
turn to the experts

# Equipment Touch Installation and Setup Guide





Verify that you have the most current version of this document from [www.hvacpartners.com](http://www.hvacpartners.com) or your local Carrier office.

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

CARRIER CORPORATION ©2016. All rights reserved throughout the world. i-Vu is a registered trademark of Carrier Corporation. BACnet is a registered trademark of ASHRAE. All other trademarks are the property of their respective owners.

# Contents

---

<b>What is the Equipment Touch? .....</b>	<b>1</b>
Specifications .....	2
Equipment Touch screens .....	3
<b>Wiring and mounting the Equipment Touch .....</b>	<b>13</b>
Wiring specifications .....	14
To wire and mount the Equipment Touch.....	15
<b>To set up scheduling functionality.....</b>	<b>18</b>
<b>Using the Equipment Touch's temperature and humidity sensors to control equipment.....</b>	<b>19</b>
<b>To edit touchscreen settings.....</b>	<b>21</b>
<b>To update the Equipment Touch's firmware .....</b>	<b>23</b>
<b>Resetting the Equipment Touch .....</b>	<b>24</b>
<b>Compliance .....</b>	<b>25</b>
FCC Compliance .....	25
CE Compliance .....	25
<b>Appendix: External sensor resistance requirements .....</b>	<b>26</b>
<b>Document revision history .....</b>	<b>27</b>



## What is the Equipment Touch?

The Equipment Touch is a touchscreen device with a 4.3 in. color LCD display that you connect to one of the following controllers to view or change its property values, schedule equipment, view trends and alarms, and more, without having to access the system's server.

- i-Vu® Open Link
- AppController
- Fan Coil Open
- MPC Open XP
- RTU Open
- UC Open
- UC Open XP
- UPC Open \*
- Unit Vent Open
- VAV Zone Single Duct
- VAV Zone Fan Terminal
- VVT Bypass
- VVT Open Zone
- WSHP Open

**NOTE** Requires controller driver v6-00-082 or later.

\* The Equipment Touch does not support the following microblocks in a UPC Open controller:

Carrier Schedule  
Carrier Binary Point  
Carrier Binary Value  
Carrier Zone Setpoint for Integration



## What is the Equipment Touch?

You wire the Equipment Touch to the controller's Rnet port. The Rnet can have one Equipment Touch device plus ZS Sensors.

**NOTE** The Equipment Touch Rnet does not support SPT Sensors.

You can install and run the Equipment Touch with only its built-in system screens, or you can create a customized touchscreen file in ViewBuilder. This requires that you:

- 1 Create custom screens in ViewBuilder, and then save the touchscreen (.touch) file. See "Working with touchscreens" in ViewBuilder Help.
- 2 In the i-Vu® interface, right-click the controller and select **Driver Properties** to attach the touchscreen file.
- 3 Download **All Content** to the controller. See "Downloading to controllers" in i-Vu® Help.

## Specifications

---

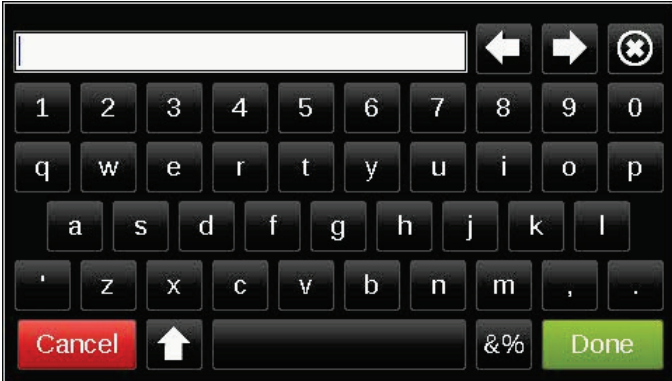

Power	24 Vac (±15%), 5 VA, 50–60 Hz, Class 2.	
Display	4.3 in. resistive touchscreen color LCD display with backlighting (Wide Quarter VGA, 480x272 pixels)	
Enclosure	ABS plastic with polycarbonate bezel	
Ports	<ul style="list-style-type: none"><li>• EIA-485 based serial port for Rnet communication</li><li>• USB host port</li></ul>	
Microcontroller	32-bit	
Memory	<ul style="list-style-type: none"><li>• 16 MB Flash memory to store program code and screen file.</li><li>• 1.5 MB RAM to store variable data and LCD data.</li><li>• 4 KB Serial EEPROM to store non-volatile configuration data.</li></ul>	
Real-time clock	A 365-day real time clock/calendar chip. The time and date will be maintained for a minimum of 72 hours after loss of power (at room temperature).	
Audible alarm notification	A piezoelectric sounder	
Temperature sensor	Range:	-4.0°F to 140°F (-20°C to 60°C)
	Accuracy over 30.0°F to 100°F:	±1.0°F (±0.55°C)
	Accuracy over full range:	±2.0°F (±1.1°C)
	Resolution:	0.2°F (0.1°C)
Humidity sensor	Range:	0 to 100% RH
	Accuracy over 20 to 80% RH:	±3.0% RH
	Accuracy over full range:	±5.0% RH
	Resolution:	0.05% RH
Environmental operating range	-4°F to 140°F (-20°C to 60°C), 10–90% RH, non-condensing	
Mounting	Wall or panel mounting within the building interior.	

Overall dimensions	Width: 5.44 in. (13.82 cm) Height: 4.55 in. (11.56 cm) Depth: 1.24 in. (3.15 cm)
Backplate dimensions	Width: 4.79 in. (12.2 cm) Height: 3.94 in. (10 cm)
Weight	8 oz. (0.23 kg)
Listed by	UL-916 (PAZX), CE, FCC Part 15-Subpart B-Class A
Device identification	The Equipment Touch's box contains a label with the product name and the serial number that begins with <b>EQC</b> . Remove the front of the Equipment Touch and turn it over to see the serial number on a label attached to the control board.

## Equipment Touch screens

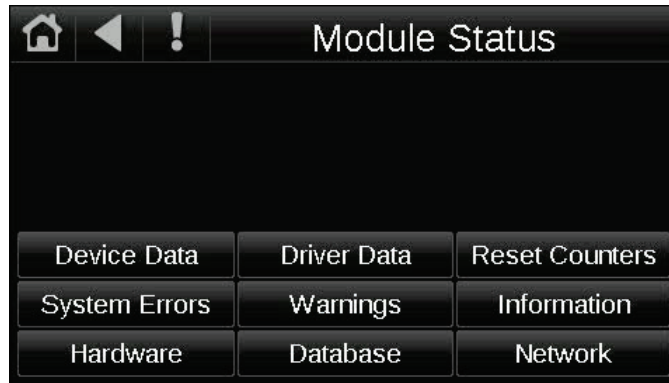
The Equipment Touch will display the system screens below as well as custom-designed screens.

Screen name	Description
<b>Standby</b>	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 <b>Inactivity Timeout</b> screen. The <b>Standby</b> screen is not interactive, and as soon as you touch the screen, the <b>Home</b> screen displays. If the touchscreen file does not include a Standby screen, the Home screen displays after a period of inactivity.
<b>Home</b>	A custom screen for the Equipment Touch.

Screen name	Description										
<b>Login</b>	 <p data-bbox="516 674 1414 726">Displays if the screen you selected requires a password. Enter your password, then touch <b>Done</b>.</p> <p data-bbox="516 743 1222 768">Each screen is programmed with one of the following password levels:</p> <table border="1" data-bbox="516 783 1437 1031"> <thead> <tr> <th data-bbox="524 789 756 842">A screen requiring this password level...</th> <th data-bbox="824 789 1045 814">Can be accessed by...</th> </tr> </thead> <tbody> <tr> <td data-bbox="524 863 574 888">User</td> <td data-bbox="824 863 1414 888">A user logged in with the User, Admin, or Factory password</td> </tr> <tr> <td data-bbox="524 909 591 934">Admin</td> <td data-bbox="824 909 1349 934">A user logged in with the Admin or Factory password</td> </tr> <tr> <td data-bbox="524 955 602 980">Factory</td> <td data-bbox="824 955 1252 980">A user logged in with the Factory password</td> </tr> <tr> <td data-bbox="524 1001 656 1026">No password</td> <td data-bbox="824 1001 899 1026">Anyone</td> </tr> </tbody> </table> <p data-bbox="516 1041 586 1066">NOTES</p> <ul data-bbox="516 1079 1422 1161" style="list-style-type: none"> <li>• The default password for a new Equipment Touch is <b>admin</b>.</li> <li>• You can change passwords on the <i>Touchscreen Setup</i> (page 21) &gt; <b>Passwords</b> screen.</li> <li>• You log out on the <b>Setup</b> screen.</li> </ul>	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
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										
<b>System</b>	 <p data-bbox="516 1568 1422 1650">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 <b>Module Status, Alarms, Trends, Schedules, Setup, or Browser</b> screen.</p>										

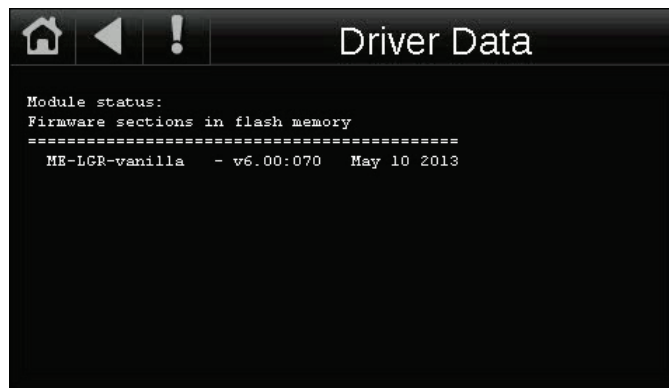
Screen name	Description
-------------	-------------

**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
-------------	-------------

**Alarms**



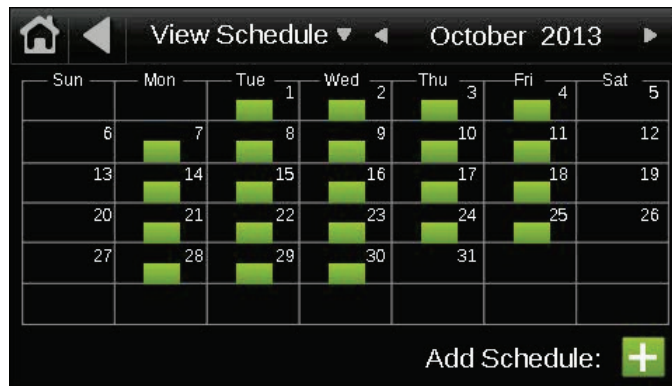
Lets you view alarms from the controller. See "Viewing alarms" in the *Equipment Touch User Guide*.

**Trends**



Lets you view trends for points that have trending enabled. See "Viewing trends" in the *Equipment Touch User Guide*.

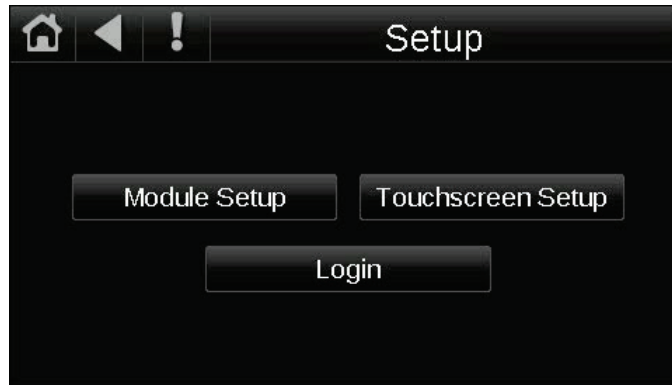
**Schedules**



Lets you view, add, edit, or delete BACnet schedules in the controller. See "Setting up schedules" in the *Equipment Touch User Guide*.

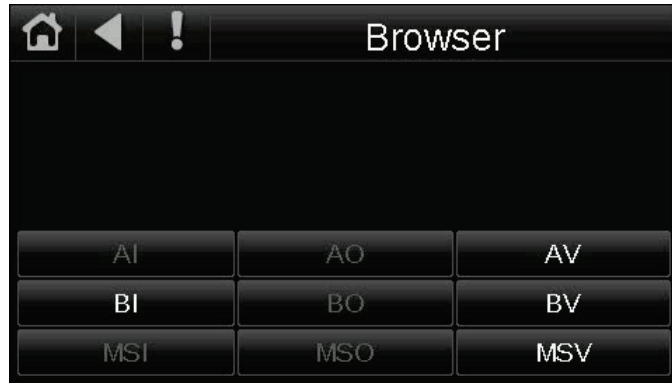
Screen name	Description
-------------	-------------

**Setup**



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

**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.

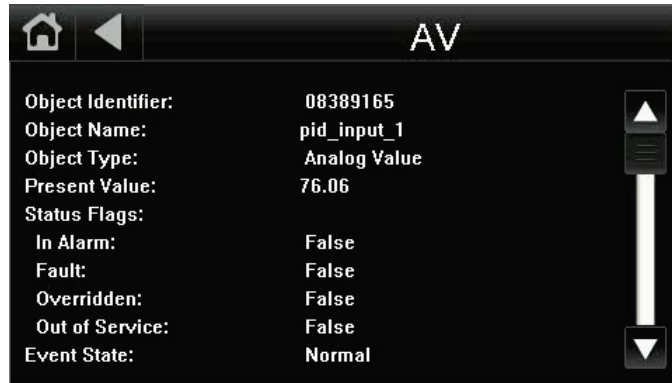
Below is an example of AV BACnet objects in a controller.



What is the Equipment Touch?

Screen name	Description
-------------	-------------

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



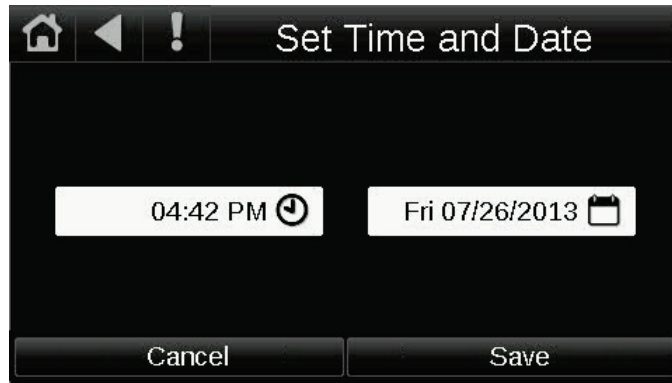
**Module Setup**



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.

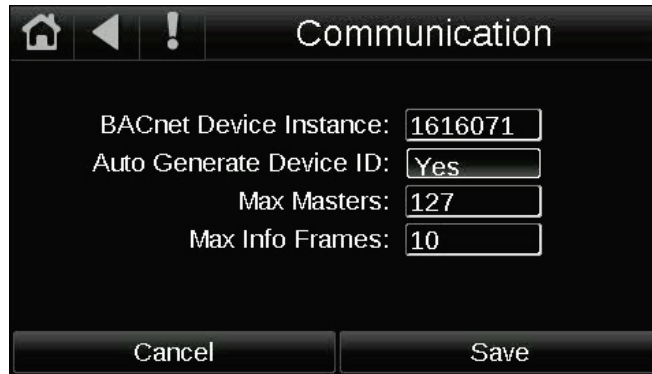
**Set Time and Date**



Touch the time or date field to edit it.

Screen name	Description
-------------	-------------

Communication



Lets you edit the information below for the controller. Touch a field to tap in new information.

**BACnet Device Instance** number

**Auto Generate Device ID**—Enter No or Yes

You can edit the following fields that pertain to the controller's MS/TP network:

**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.

**Max Info Frames** - Specifies the maximum number of information messages a controller may transmit before it must pass the token to the next controller.

**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.

- 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.

**NOTE** You may need to increase the result of the formula for controllers that need to communicate many values to other devices.

What is the Equipment Touch?

---

Screen name	Description
-------------	-------------

---

Router

BACnet Network Number	MAC Address
ARC156: 0	101
MSTP: 16160	0
Ethernet: 0	00-E0-C9-20-73-C9

Cancel Save

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 adeed in a future release.

IP

IP Network:	1600
Current IP Address:	161.145.81.124
Current Subnet Mask:	255.255.255.0
Current Gateway IP Addr:	161.145.81.1
Current UDP Port:	47808
Assigned IP Address:	161.145.81.124
Assigned Subnet Mask:	255.255.255.0

Cancel Save

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**



If the Equipment Touch is serving as the front-end for your system, 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.


**Time Sync Mode** - Tap in the number below that represents your selection:

- **0 = No Broadcast** - The controller will not act as Time Master.
- **1 = Local Broadcast** - If it doesn't 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 i-Vu®. The controller will then send time broadcasts only to controllers on its ARCnet or MS/TP network.
- **2 = Global Broadcast** - If it doesn't 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 i-Vu®. The controller will then send time broadcasts to all its connected networks.

**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.

**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.

What is the Equipment Touch?

Screen name	Description
Touchscreen Setup	
	Lets you edit the touchscreen settings (page 21).

## Wiring and mounting the Equipment Touch

**⚠ CAUTION** If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

### Mounting

The Equipment Touch must be mounted within the building interior. You can mount the Equipment Touch:

- In a panel with the controller or on the panel door
- On a wall up to 500 feet from the controller

### Wiring

- The Equipment Touch requires a 24 Vac power supply. It is not powered by the Rnet.

**⚠ CAUTION** The Equipment Touch can share a power supply with the Carrier controller as long as you:

- Maintain the same polarity.
  - Use the power supply only for Carrier controllers.
- You can also wire an external 10 kOhm, Type II thermistor (Carrier part number 33ZCT55SPT) to the Equipment Touch. See *Appendix: External sensor resistance requirements* (page 26).

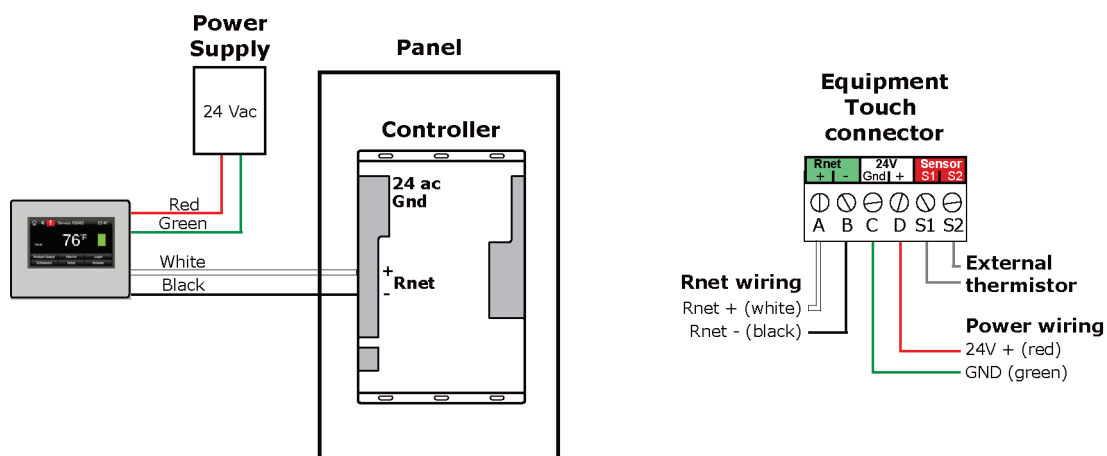
See:

*Wiring specifications* (page 14)

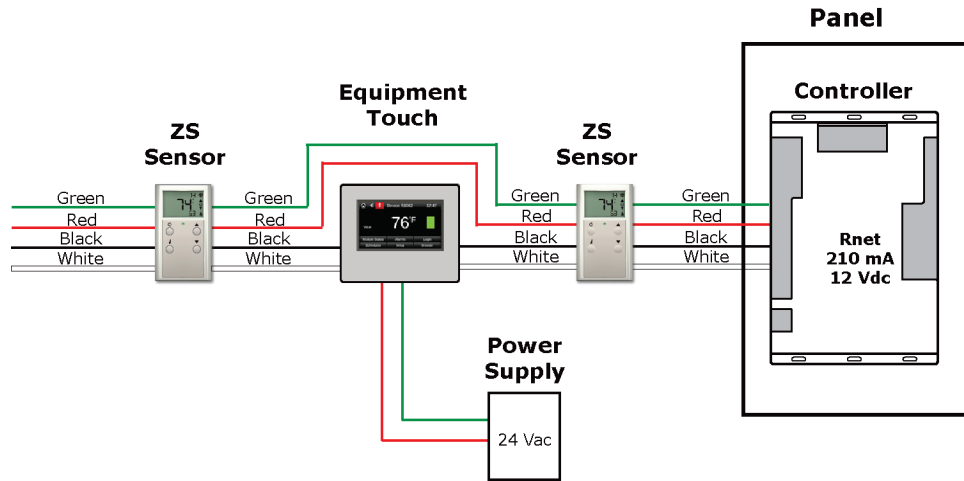
*To wire and mount the Equipment Touch* (page 15)

Wire the Equipment Touch in one of the following ways:

- Wire the Equipment Touch directly to the controller's Rnet port as shown below.



- Wire the Equipment Touch in a daisy-chain configuration with up to 5 ZS zone sensors as shown below.



**NOTE** You do not need to set an address for the Equipment Touch.

## Wiring specifications

### Power wiring

2-conductor wire 18 AWG for distances up to 100 feet. All transformer secondaries must be grounded. Wiring connections must be in accordance with NEC and local codes.

### Rnet wiring

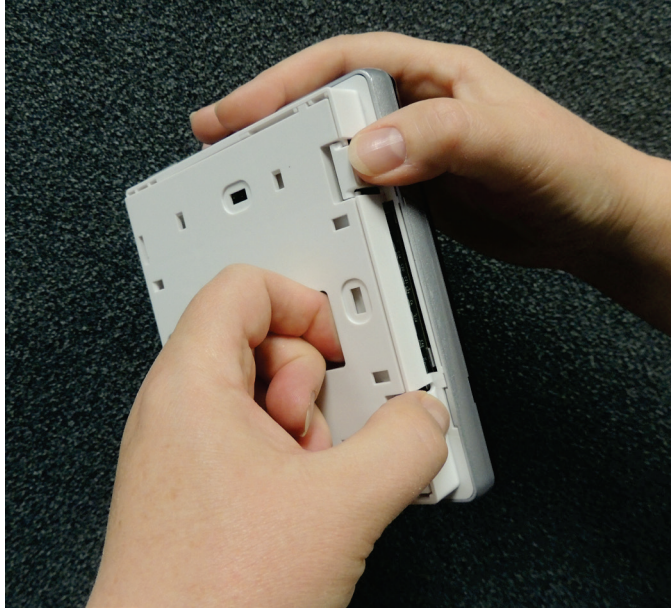
**NOTE** If you wire the Equipment Touch directly to the controller's Rnet port, you can use a 2-conductor cable instead of the standard 4-conductor Rnet cable.

Description	4-conductor, shielded or unshielded, CMP, plenum rated cable
Conductor	22 AWG (7x0096) bare copper
Maximum length	500 feet (152 meters)
Insulation	Low-smoke PVC (or equivalent)
Color Code	Black, white, green, red
Shielding	If shielded, Aluminum/Mylar shield (100% coverage) with TC drain wire
UL temperature rating	32–167 °F (0–75 °C)
Voltage	300 Vac, power limited
Listing	UL: NEC CL2P, or better

## To wire and mount the Equipment Touch

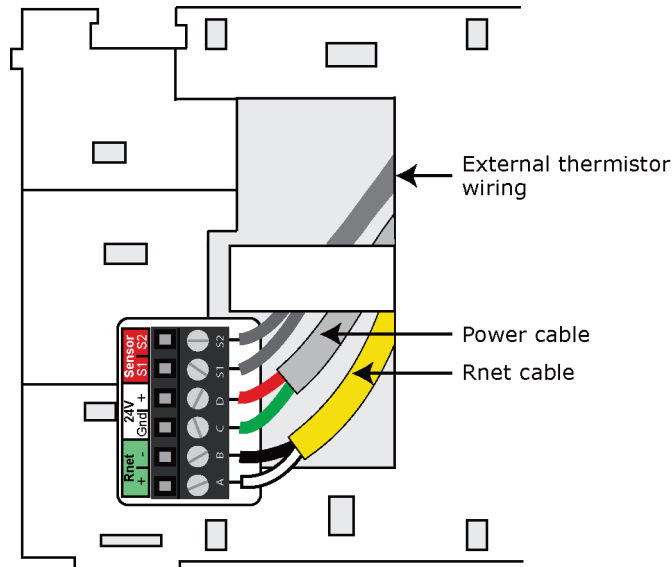
---

- 1 Remove the backplate from the Equipment Touch:
  - a) Hold the Equipment Touch as shown in the picture below.

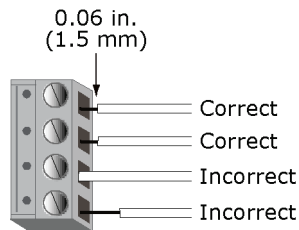


- b) While firmly pressing the 2 tabs on top of the Equipment Touch, pull on the backplate with your index finger until the backplate releases from the Equipment Touch.
- 2 Pull the communication cable, power cable, and external thermistor wiring (if applicable) through the large hole in the center of the backplate. See figure in step 5.
- 3 Partially cut, then bend and pull off the outer jacket of the Rnet cable(s). Do not nick the individual wire insulation.
- 4 If wiring 1 cable to the Equipment Touch, cut the shield wire off at the outer jacket, then wrap the cable with tape at the outer jacket to cover the end of the shield wire.  
If wiring 2 cables in a daisy-chain configuration, twist together the shield wires, then wrap the shield wires with tape.
- 5 Strip about 0.25 inch (0.6 cm) insulation from the end of each wire.

**6** Connect wiring to the Equipment Touch as shown below:



**⚠ CAUTION** Allow no more than 0.06 inch (1.5 mm) bare communication wire to protrude. If bare communication wire contacts the cable's foil shield, shield wire, or a metal surface other than the terminal block, the device may not communicate correctly.



**7** Attach the backplate to the wall or panel. If mounting in or on a panel:

- a) Drill two 3/16 inch (4.8 mm) pilot holes in the panel.
- b) Attach backplate using pan head 6-32 x 3/8" to 1/2" long machine screws. Do not overtighten screws to prevent damage to plastic housing.  
**RECOMMENDATION** Use Loctite 220 on screw threads if the Equipment Touch will be subject to vibration.

**8** Attach the Equipment Touch to the backplate:

- a) Place the bottom of the Equipment Touch onto the backplate by aligning the 2 slots on the Equipment Touch with the tabs on the backplate.
- b) Push the Equipment Touch onto the backplate until the tabs at the top of the Equipment Touch snap onto the backplate.

**9** Turn off the controller's power.

- 10 Connect the other end of the Rnet wiring to the controller's **Rnet** port or to a zone sensor.

**NOTES**

- Insert the shield wire with the ground wire into the controller's **GND** terminal.
  - Use the same polarity throughout the Rnet.
- 11 Connect power wiring to a 24 Vac power supply.
  - 12 Turn on the controller's power.

## To set up scheduling functionality

You can define BACnet schedules for each time clock microblock in the controller's control program(s).

To allow a user to create schedules on the Equipment Touch:

- 1 In the i-Vu® or Field Assistant tree, right-click the controller, and then select **Driver Properties**.
- 2 On the **Settings** tab, scroll down to **TouchScreen Control** and verify that **TouchScreen Schedule Edit Enable** is checked.



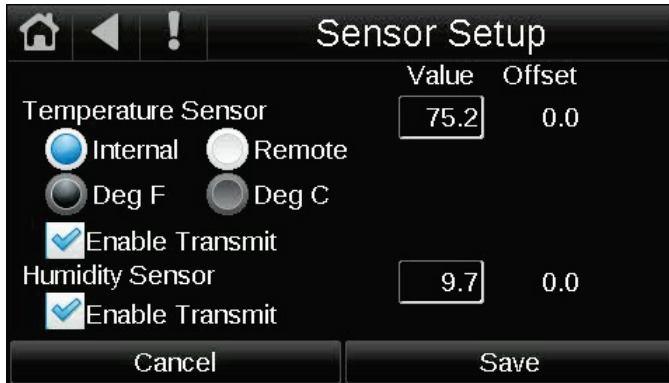
**CAUTION** If scheduling will be done in the i-Vu® interface, you should disable scheduling in the Equipment Touch so that they do not overwrite each other's schedules. To disable scheduling, uncheck **TouchScreen Schedule Edit Enable**.

See "To create a schedule for a group of equipment" in the *Equipment Touch User Guide*.

## Using the Equipment Touch's temperature and humidity sensors to control equipment

### To set up the sensors on the Equipment Touch

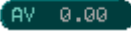
Go to **Setup > Touchscreen Setup > Sensor Setup**.



On this screen, you can:

- **Select the temperature sensor**—You can use values from the Equipment Touch's internal temperature sensor. Or, you can wire an external (remote) thermistor to the Equipment Touch and use its temperature value instead of the internal temperature sensor's value.  
**NOTE** The **Deg F** and **Deg C** setting is determined by the controller's control program.
- **Disable transmission of the temperature and humidity**—See NOTE below.
- **Set an offset**—Enter a correct temperature/humidity value to create an offset for all future values.

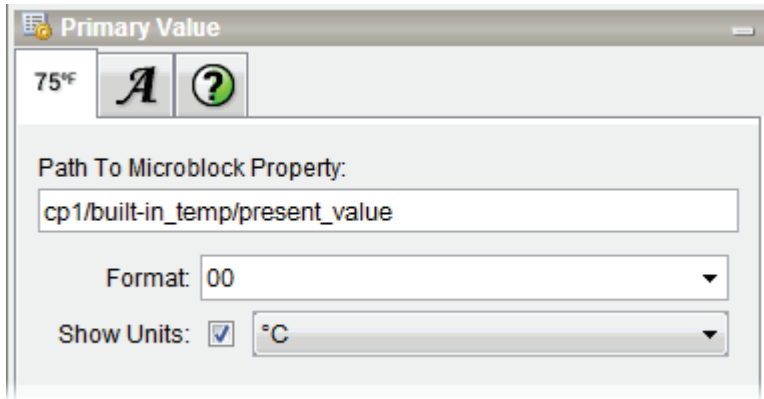
### To use the temperature or humidity value in a control program

- 1 In Snap, place a BACnet Analog Value Parameter microblock  in your control program.
- 2 Enable the **Network Visible** field.
- 3 In the **Object Instance** field, select **Use specific value**, then enter one of the following:  
1902 for Temperature  
1904 for Humidity

**NOTE** By default, the Equipment Touch transmits its temperature value (1902) and humidity value (1904). If the 1902 or 1904 object instance numbers are to be used in a different manner, you can turn off the transmission of the temperature and humidity values. See *To edit touchscreen settings* (page 21).

### To display the temperature or humidity value on a custom screen

In ViewBuilder, add a Primary Value or Number control to the screen, and then set the **Path To Microblock Property** to `<control program instance>/<AV mb reference name>/present_value`.



**NOTE** The Units setting (°F or °C) affects only what you see in ViewBuilder, not the primary value shown on the Equipment Touch.

## 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
<b>About</b>	Displays information about the touchscreen firmware.
<b>Inactivity Timeout</b>	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.
<b>Sensor Setup</b>	Lets you set up the Equipment Touch's temperature and humidity sensors. See <i>Using Equipment Touch's temperature and humidity sensors to control equipment</i> (page 19).
<b>Clean Screen</b>	Displays a one-minute countdown timer so that you can clean fingerprints from the display window without touching something that would affect equipment operation.
<b>Key Click Off/On</b>	Touch <b>Key Click Off</b> to turn off the sound when you touch a field or button. Touch <b>Key Click On</b> to turn on the sound.
<b>Alarm Sound Off/On</b>	Touch <b>Alarm Sound Off</b> to turn off the alarm notification sound or touch <b>Alarm Sound On</b> to turn on the sound. An alarm will generate a sound only if it is set up in ViewBuilder to do so.
<b>Reload Firmware</b>	Erases the current firmware so that you can load new firmware through the USB port. See <i>To update the Equipment Touch's firmware</i> (page 23).

To edit touchscreen settings

Screen	Description															
<b>Language</b>	 <p data-bbox="656 680 1214 810"> <table border="0"> <tr> <td>English</td> <td>German</td> <td>Portuguese</td> </tr> <tr> <td>Simplified Chinese</td> <td>French</td> <td>Italian</td> </tr> <tr> <td>Korean</td> <td>Spanish</td> <td>Japanese</td> </tr> <tr> <td>Traditional Chinese</td> <td>Swedish</td> <td></td> </tr> <tr> <td>Thai</td> <td>Russian</td> <td></td> </tr> </table> </p> <p data-bbox="602 831 1442 940">                     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.                 </p>	English	German	Portuguese	Simplified Chinese	French	Italian	Korean	Spanish	Japanese	Traditional Chinese	Swedish		Thai	Russian	
English	German	Portuguese														
Simplified Chinese	French	Italian														
Korean	Spanish	Japanese														
Traditional Chinese	Swedish															
Thai	Russian															
<b>Passwords</b>	Lets you change the User or Admin password, if allowed.															
<b>Calibrate Touch Panel</b>	Lets you recalibrate the Equipment Touch by touching targets. The device is calibrated in the factory, but time, temperature, or handling could affect the calibration. Recalibrate the screen if you touch it in one location and it responds as if you touched it in another.															

## To update the Equipment Touch 's firmware

The Equipment Touch has a USB port at the bottom that allows you to update the device's firmware from a USB flash drive.

**PREREQUISITE** The USB flash drive must be formatted as FAT, FAT16, or FAT32. To verify, right-click the flash drive in Windows Explorer, then select **Properties**. **File system** should show **FATxx**. If **File system** shows NTFS or anything else, you must reformat the drive. Right-click the flash drive, then select **Format**. In the **File system** field, select **FAT (Default)**, then click **Start**.



**CAUTION** Follow the steps below in order. If you select **Reload Firmware** (step 3) on the display before you insert the USB drive (step 2), the touchscreen will become inoperable.

To update the firmware:

- 1 Create a folder on the flash drive called **Touch**, then put the ETxxxxx.hex file in the folder.
- 2 Plug the flash drive into the Equipment Touch's USB port.
- 3 From the System screen, touch **Setup > Touchscreen Setup > Reload Firmware**.
- 4 A warning message appears. Touch **Yes** to continue.
- 5 The following series of messages appear:  
**Verifying Firmware Image.**  
**Reading Firmware Image from USB.**  
**Installing Application.**  
**Verifying Firmware Image.**

When the Home screen displays, remove the flash drive.

## Resetting the Equipment Touch

You can create a reset.dat file and put it on a USB flash drive to reset some of the Equipment Touch's functionality.

**PREREQUISITE** The USB flash drive must be formatted as FAT, FAT16, or FAT32. To verify, right-click the flash drive in Windows Explorer, then select **Properties**. **File system** should show **FATxx**. If **File system** shows NTFS or anything else, you must reformat the drive. Right-click the flash drive, then select **Format**. In the **File system** field, select **FAT (Default)**, then click **Start**.

- 1 Insert the USB flash drive into your computer.
- 2 Create a folder on the flash drive named **Touch**.
- 3 In a text editor such as Notepad, start a new file.
- 4 In the file, type a function number from the table below.
- 5 Save the file to the flash drive's **Touch** folder with the name **reset.dat**.
- 6 For function 01 or 02, copy any updated firmware .hex file or .stv file in the **Touch** folder.
- 7 Insert the flash drive into the USB port at the bottom of the Equipment Touch.
- 8 Cycle power to the Equipment Touch.

If...	Then you should...	Function number
You cannot get to the <b>Touchscreen Setup</b> screen	Reload the firmware	01
You need to quickly update the firmware on several Equipment Touch devices	Reload the firmware - Put the new firmware in the <b>Touch</b> folder with the reset.dat file.	01
<ul style="list-style-type: none"> <li>• You want to carry your Equipment Touch from site to site</li> <li>• Your Equipment Touch has a unrecoverable error</li> </ul>	Reset factory defaults	04
The Equipment Touch does not respond correctly to the location where you touched the screen	Calibrate the touchscreen	08

## Compliance

### FCC Compliance

---

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.



**CAUTION** Changes or modifications not expressly approved by the responsible party for compliance could void the user's authority to operate the equipment.

### CE Compliance

---



**WARNING** This is a Class A product. In a domestic environment, this product may cause radio interference in which case the user may be required to take adequate measures.

## Appendix: External sensor resistance requirements

Temp (°C)	Temp (°F)	Resistance (Ohms)
-40	-40	335,651
-35	-31	242,195
-30	-22	176,683
-25	-13	130,243
-20	-4	96,974
-15	5	72,895
-10	14	55,298
-5	23	42,315
0	32	32,651
5	41	25,395
10	50	19,903
15	59	15,714
20	68	12,494
25	77	10,000
30	86	8,056
35	95	6,530
40	104	5,325
45	113	4,367
50	122	3,601
55	131	2,985
60	140	2,487
65	149	2,082
70	158	1,752

## Document revision history

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

<b>Date</b>	<b>Topic</b>	<b>Change description</b>	<b>Code*</b>
7/8/16	What is the Equipment Touch?	Removed i-Vu® Open Router from list of controllers	C-TS-RD-E
5/7/15	What is the Equipment Touch Equipment Touch screens	Replaced System screen image with one that does not show units	X-O-GA-BR
	To edit touchscreen settings	Replaced language screen image and listed languages	X-D-CP
	Resetting the Equipment Touch	New topic	X-O-TC-O
	To update the Equipment Touch's firmware	Changed list of messages in step 5.	X-D-CP
9/10/14	Wiring and mounting the Equipment Touch	Changed Carrier part number 33ZCT57SPT to 33ZCT55SPT.	C-TS-PH-E
7/29/14	Equipment Touch screens	Added note under Login screen that the default password for a new Equipment Touch is admin.	X-TS-RB-E-RB

\* For internal use only







CARRIER CORPORATION ©2016

A member of the United Technologies Corporation family · Stock symbol UTX · Catalog No. 11-808-443-01 · 7/8/2016