

APPLICATION

The **75F** Central Control Unit (CCU) is the local interface and access point for the entire **75F** System. With the help of cloud computing and wireless sensors, the CCU optimizes the efficiency of existing building equipment while keeping occupants comfortable, healthy, and productive.

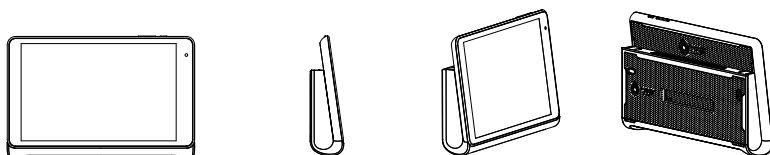


Fig.1

PRECAUTIONS

- Failure to wire devices with the correct polarity when using a shared transformer may result in damage to any device powered by the shared transformer.
- Remove power before installing. Never connect or disconnect wiring with the power applied.
- Do not run the low voltage wiring in any conduit with line voltage.
- Install in accordance with all State and local codes.

FEATURES

- Intuitive interface
- Centralized control of zone temperatures
- Comprehensive scheduling control
- Communicates information to the cloud for remote access and control of system information and configuration
- Multiple levels of security

SPECIFICATIONS

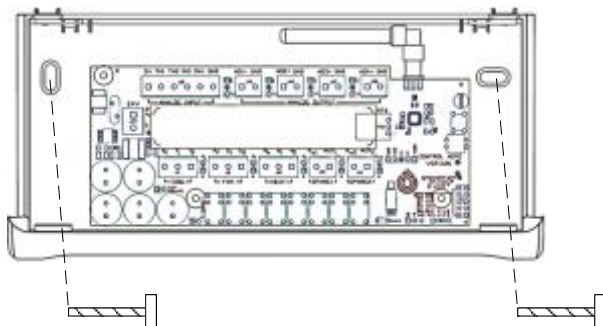
75F Central Control Unit

- Input Voltage: 24VAC
- Output Voltage: 5VDC
- Analog Inputs: 0-10VDC

- Operating Environment: 32 – 144F
- Dimensions: 8.25" x 5.5" x 1.5"

MOUNTING

Mount the Control Mote (CM) level 5' from the floor. When using drywall anchors, drill a 5/16" hole and insert the provided anchors. Screw the CM into place using the provided #6-32 1" screws.



*Mount the **75F** Tablet. Be sure the power and volume buttons are facing upward. Two slots on the bottom of the tablet match two tabs on the CM plastics. Align the tabs to the slots, tilt and push back on the tablet until it clicks into place. If power is supplied to the CM and the tablet is powered on, you will see a USB icon in the upper left status bar of the tablet. The blue outline of a cloud signifies that data is being transmitted. See troubleshooting for more.*

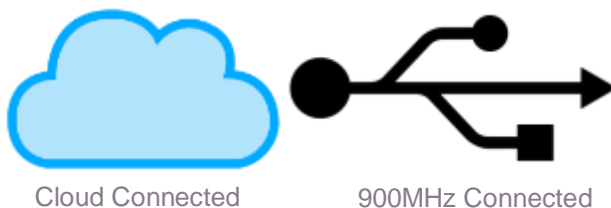
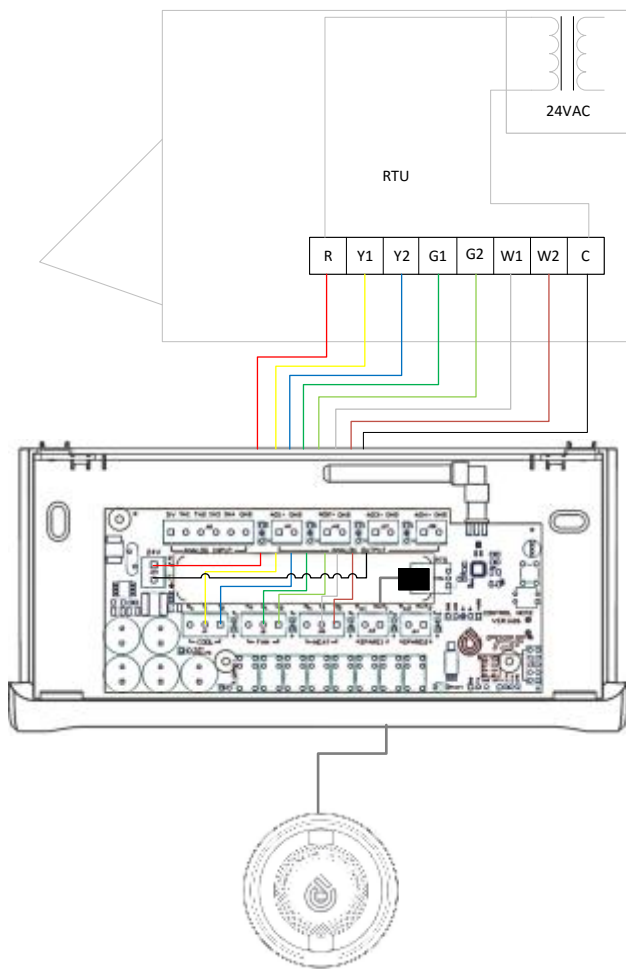


Fig.3

WIRING



Connect Power and Thermostat Wires on the CM. Connect the power and common wires to the two terminals on the left side of the opening. Terminals for Cool, Fan, and Heat are located along the bottom of the opening. Each block has three terminals. From left to right, these are Power (internally connected – generally not used), Stage 1, and Stage 2. Connect the thermostat wires to their respective terminals.

Connect the Remote Temperature Sensor (RTS) using the provided grey harness. Connect one end of the gray RTS cable to the port on the right side of the opening and connect the other to the back of the RTS, Fig.4.

After wiring of the CCU is completed, be sure to mount the tablet.

SETUP & CONFIGURATION

The CCU may come preconfigured. If it has, you will have received a 6-digit code that corresponds to your job.

If the CCU did come pre-configured see difference under Pre-Configured Setup.

MANUAL CONFIGURATION:

1. *Welcome Screen*: press “Get Started” in bottom right corner.
2. *Select the wireless network* from the list and enter the password. If you are connecting to a hidden network, select the “+” in the upper right corner, and enter the SSID and password. “Connected” will be displayed below the selected network. Select the right arrow to continue.
3. *Select Registration Type*.
 - a. **Standard Install** – Use this option if you are registering the first tablet in a new building
 - b. **Add CCU to existing building** – Use this option if you are registering a tablet in a building that has one or more tablets already associated with it.
 - c. **Pre-Configured** – Use this option if you have a six-digit configuration code provided by 75F.
 - d. **Replace Existing CCU** – Use this option if the existing tablet in an already installed building is damaged and needs to be replaced.

Select the right arrow to continue.

4. *Account Setup – Standard Install*
 - a. **Email**: enter the email of the Facility Manager
 - b. **Installer Email Address**: enter the email of the lead installer
 - c. **CCU Name**: Enter a unique identifier for the CCU and the equipment it controls (e.g. West Wing, RTU 4, Exterior offices)
 - d. **Building Name**: Enter the name of the building
 - e. **Address**: Enter the street address of the building

Once complete, select “Register.” If this is the first building associated with the Facility Manager’s email address, they will be sent an email with a password. Otherwise, the

password must be provided. Once registered, select the right arrow to continue.

5. *Product Options:* select all options that will be installed in this system. 75F can edit these options. Select the right arrow to continue.
6. *Installer Options*
 - a. **WRM Pairing Start Address:** Drop-down menu specifying the start address for components paired to this CCU. You should not need to change this option.
 - b. **Use Celsius:** select to show temperatures in Celsius instead of Fahrenheit
 - c. **Use Military Time:** Select to show times and schedules using a 00:00 – 23:59 clock instead of a 12-hour AM / PM clock
 - d. **Use Same Occu Temp for All Days:** When selected an occupied temperature change will change for all days in system or zone schedule.
 - e. **Follow Schedule for Auto Mode:** Selecting this allows the user to set four mode change times of year.
 - f. **Use Outside Temperature Lockout:** Selecting this allows the user to prevent the use of either Cooling or Heating modes based on the Outdoor Temperature.
 - g. **Use Instant Gratification Mode:** Selecting this does nothing and is strongly discouraged, you naughty boy.

Select the right arrow to continue.

7. *Security:* this page allows you to set up passwords to access Settings and/ or Setup. This can be accessed and changed later. It is recommended to skip this for now, as configuration will take less time without it. Select the right arrow to continue.
8. *System Profile:* Select the type of system on which the CCU is being installed.
 - a. **Dx-Unit:** Any DAB system. Unit uses mechanical cooling and gas or electric heat in a split system or package unit.
 - b. **VAV with Reheat:** Unit installed with VAV control dampers, with or without reheat coils.
 - c. **Select the stages** of equipment that are available for use with the check boxes on the left.

Select the right arrow to continue.

9. *Floor Plan and Configuration:* Setup floors, rooms, and pairings. To pair devices follow the pairing instructions on the Installation guide of the device you are pairing.
10. *System Settings:* Change settings operational system settings.
 - a. **Conditioning Mode:** Set the mode of the system. “Auto” will allow the system to decide to heat or cool.
 - b. **Use DX for Overnight Dehumidification:** When humidity is high mechanical cooling will run during unoccupied hours to reduce the indoor humidity level.
 - c. **Compensate for Humidity:** selecting this option will control the space temperature based on the total enthalpy of the air instead of just the dry-bulb temperature. For example, in very humid situations, the system will cool the space below the setpoint. This will make it so it “feels like” the desired setpoint.
 - d. **Stage 1 Fan Always ON:** selecting this option will run stage 1 fan even during unoccupied times.
 - e. **Schedule**
 - i. Drop-down Menu: Allows for selection of System Schedule (editable locally) or a Named Schedule (editable from Facilisight)
 - ii. Pencil Symbol: Click to edit system schedule
 - iii. Status: Displays the System Status
 - f. **Vacation:** Set vacation days where the system can operate in setback to save energy.

Select the right arrow to continue.

11. **CONGRATULATIONS!** You have finished configuring the CCU. You may review your selections on this page. Press the left arrow to make changes, or press finish if you are satisfied.

PRE-CONFIGURED SETUP

A preconfigured setup is essentially the same as manual configuration except that you will receive a 6-digit code that will auto fill most options to the tailored requests of the client. You will enter the 6-digit code during step 4 in the manual configuration process. Confirm all values seem accurate and continue to click the right arrow until the congratulations screen appears.

EDIT CONFIGURATION



If you need to edit one of the configuration lines (e.g. the building address). Setup > Settings > Account > Edit. Click the edit button. A prompt will request the facility manager’s password. Enter the password, make any changes, then save.

Troubleshooting

Tablet will not charge OR USB trident will not appear	<p>Check for 24VAC at R and C terminals.</p> <p>Check for 5VDC at GND and VUSB (pogo pin strip). If 24VAC is supplied but there is no 5VDC, check for proper positioning of the pogo pin board on its standoffs. Check that the 5.2V Isolate jumper is in place (located below the COOL terminals).</p> <p>Check for 3VDC at GND and D+ (pogo pin strip).</p> <p>Under certain conditions, the board may become slightly warped during installations. Check that the screws holding the CM to its plastics are tight. Check that the mounting screws are not twisting the frame.</p>
Will not pair	<p>Check that the tablet is connected to the CM (USB trident).</p> <p>If the CCU app restarts during pairing (75F logo will flash), it may be necessary to change screens briefly and return before pairing will work.</p>
Cannot register CCU or edit building information	<p>Check for Wi-Fi connection</p> <p>If the CCU app restarts during registration (75F logo will flash), it may be necessary to change screens briefly and return before pairing will work.</p> <p>During registration, it is occasionally necessary to return to the “Get Started” screen before the “register” button will work. Tap the left arrow, and then select “Get Started” again. Information you have already entered will be saved.</p>

<p>CCU calls for heat/cool/fan but controlled unit does not respond</p>	<p>Under Setup -> Settings -> HVAC Equipment, ensure that the proper stages have been selected.</p> <p>Ensure that the selected conditioning mode is not preventing the desired action.</p> <p>When in Auto Mode, average current temperature must be greater than two degrees different than setpoint to change from HEAT to COOL, or from COOL to HEAT. The differential may be greater, depending on the Economy/Comfort slider and the Auto Mode Changeover Multiplier tuner.</p> <p>Check that jumpers are in place next to the terminal blocks of the affected equipment. If none of the equipment is running on a call, check the jumper labeled "R Connect" located along the bottom of the CM between the capacitors and the relays.</p>
<p>No Connection to Cloud!</p>	<p>Check for Wi-Fi connectivity. It may be necessary to contact the IT department to confirm access to some networks.</p>

75F TECHNICAL SUPPORT

If you need more information, please visit www.75f.io/support. A site specifically for our installers, you will find instructional videos, manuals and more. You can also call 888.590.8995 x2 if you need technical support.