Allure UNITOUCH™

Product Description

The Allure UNITOUCH is an elegant and occupant focused room device that provides an intuitive user interface, allowing wireless control of room comfort parameters from a smartphone using *Bluetooth*® low energy technology. Its compact style and slim profile provides a modern appearance when installed in any setting.

The high resolution 3.5" capacitive touchscreen makes this communicating sensor the ideal all-in-one solution for a wide range of HVAC, lighting, and sunblind application; a perfect addition to the Smart Room Control solution.

General Wiring Recommendations

⚠ **Risk of Electric Shock:** Turn off power before any kind of servicing to avoid electric shock.

☐ Comply with all network and power supply guidelines outlined in the Network Guide.
☐ Use the screws, wall anchors, and wire nuts included for wall mounting and wiring.
☐ All wiring must comply with electrical wiring diagrams as well as national and local electrical codes.
☐ We recommend using Cat5e cable to connect the Allure UNITOUCH to the controller.
☐ For an easier installation, a flat style Cat5e cable with a low profile connector is recommended. See Distech Controls Field Device product offerings for more information.

General Installation Requirements

For proper installation and subsequent operation of the device, pay special attention to the following recommendations:
☐ Allow for proper clearance around the device's enclosure and wiring terminals to provide easy access for hardware configuration and maintenance.
☐ Orient the device with the ventilation slots towards the top to permit proper heat dissipation.
☐ The device is designed to operate under the following environmental conditions:
   – Operating temperature from
   – Storage temperature from
   – Relative humidity from 0% to 90%, non-condensing.

⚠ Any type of modification to any Distech Controls product will void the product's warranty

☐ Upon unpacking, inspect the contents of the carton for shipping damages. **Do not install a damaged device.**
☐ Ensure proper ventilation of the device and avoid areas where corroding, deteriorating or explosive vapors, fumes or gases may be present.

⚠ Make wiring connections to the device last. Pulling the cable while it is connected can damage the connector.

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Take reasonable precautions to prevent electrostatic discharge to the device when installing, servicing or during operation. Discharge accumulated static electricity by touching one's hand to a well-grounded object before working with the device.

Device Markings

Certain markings (symbols) can be found on the side of the product and are defined as follows:

| Symbol	Description
CE	CE marking: the device conforms to the requirements of applicable EC directives.
UKCA	UKCA marking: the device conforms to the requirements of applicable Great Britain regulations.
cULus LISTED	UL marking: conforms to the requirements of the UL certification.
FCC	FCC marking: This device complies with FCC rules part 15, subpart B, class B.
⚠	Warning Symbol: Significant information required. Refer to the Hardware Installation Guide.

Device Information
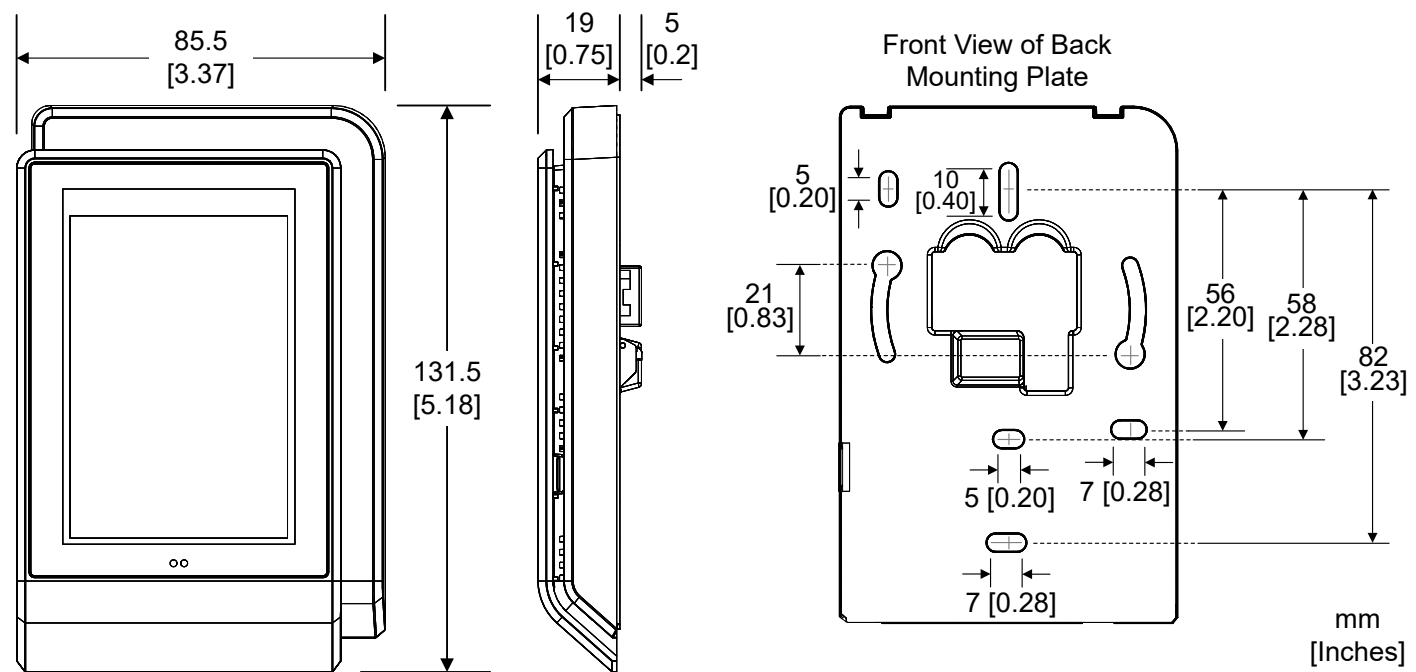
Figure 1: UNITOUCH Dimensions
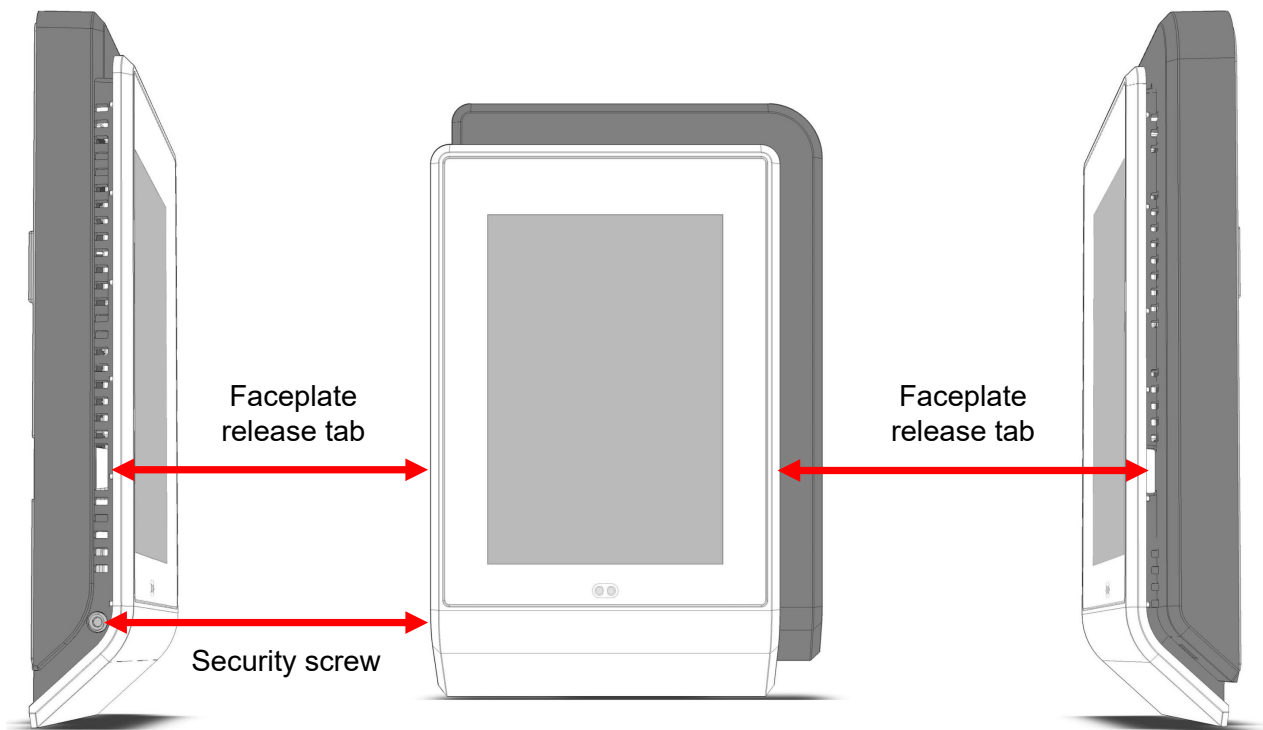
Figure 2:   UNITOUCH Security Screw and Faceplate Tab Locations
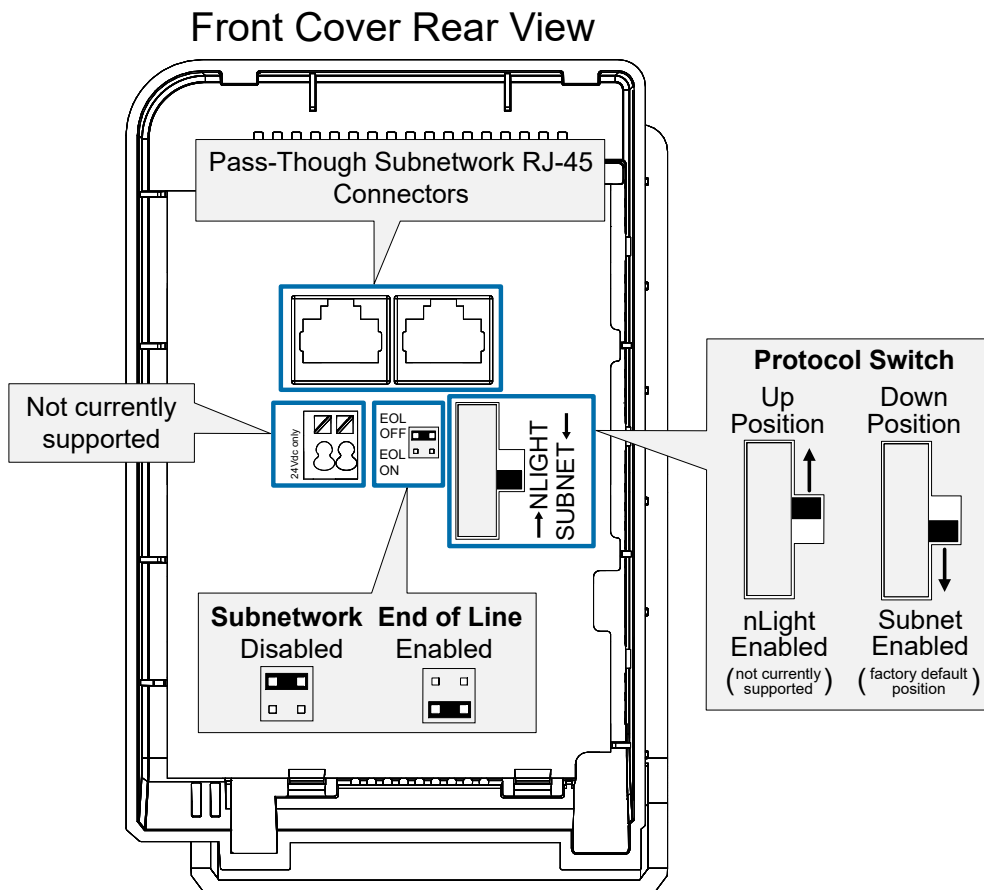
Front Cover Rear View

Figure 3:   UNITOUCH Jumper and Dip Switch Locations

Mounting Instructions

The Allure UNITOUCH has been specially designed for easy installation. However, certain conditions apply when choosing a suitable location for the device:

☐ Install the device in a location of average temperature and approximately 1.5 m (5 ft) above the floor

☐ The device should be installed approximately 15cm (6") from a corner to provide sufficient access to the faceplate release tabs.

☐ The device should not be installed on an exterior wall.

☐ The device should not be installed near a heat source.

☐ The device should not be installed near an air discharge grill.

☐ The device should not be installed in a place where it can be affected by the sun.

☐ Install the device in an area that provides proper device ventilation. Nothing must restrain air circulation to the device.

⚠ The Allure UNITOUCH has not been designed for outdoor use.

Mounting hardware with a separate sub-base is provided with the device for installation on drywall or on an electrical junction box.

Electrical Junction Box Installation Procedure

The Allure UNITOUCH sensor can be mounted in most American, European or Asian style electrical junction box using screws.

1. Remove the front cover of the device:
   – Remove the security screw
   – Using an appropriately sized tool, press in the two (2) release tabs on the sides of the device and pull the front cover out from the bottom. See Figure 2 [pg. 3] for security screw and release tab locations.
2. Pull all cables 15cm (6") out of the wall and insert them through the central hole of the back plate.
3. Ensure the EOL jumpers are correctly set and that the protocol toggle is in the SUBNET (default) position. See Figure 3 [pg. 3] for jumper and dip switch component locations.
4. Make sure that the mounting surface is flat and clean.
5. Screw the back plate onto the electrical junction box.
6. Plug the wire(s) into the connector(s). Gently push excess wiring back into the wall.
7. Reattach the front plate and make sure it clips tightly into place. Tighten the security screw.
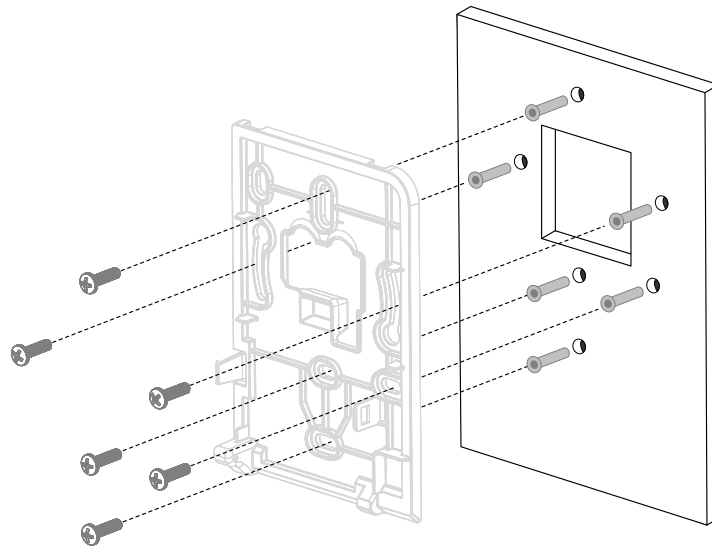
Wall Mounting Installation Procedure

Figure 4:   UNITOUCH backplate screw positions

The Allure UNITOUCH can be mounted on drywall using the supplied screws.

1. Remove the front cover of the device:
   – Remove the security screw
   – Using an appropriately sized tool, press in the two (2) release tabs on the sides of the device and pull the front cover out from the bottom. See Figure 2 [pg. 3] for security screw and release tab locations.
2. Pull all cables 15cm (6") out of the wall and insert them through the central hole of the back plate.
3. Ensure the EOL jumpers are correctly set and that the protocol toggle is in the SUBNET (default) position. See Figure 3 [pg. 3] for jumper and dip switch component locations.
4. Align the back plate with the wall and mark the location of the mounting holes on the wall. Make sure to orient the proper end of the back plate facing upwards.

5. Remove the back plate and drill holes in the wall if necessary.

6. Install anchors in the wall if necessary.

7. Make sure that the mounting surface is flat and clean.

8. Screw the back plate onto the wall. Do not over tighten.

9. Plug the wire(s) into the connector(s). Gently push excess wiring back into the wall.

10. Reattach the front plate and make sure it clips tightly into place. Tighten the security screw.

About an Allure UNITOUCH Equipped with a CO_2 Sensor

The Allure UNITOUCH equipped with a CO_2 sensor are factory calibrated to accurately read CO_2 concentration levels.

Under normal conditions, an Allure UNITOUCH equipped with CO_2 sensor will typically reach its operational accuracy after 24 hours of continuous operation on the condition that it was exposed to ambient air reference levels of 400 ppm ±10 ppm CO_2.

The sensor will maintain accuracy specifications using the automatic self-calibration, assuming that it is exposed to the atmospheric CO_2 concentration of 400ppm for at least 15 minutes per 7-day period, which is typically seen during unoccupied periods.

Bluetooth Connection Modes

The Allure UNITOUCH supports several Bluetooth communication modes. Please refer to the Xpress*Network* Utility or ECLYPSE user guide for more details on how to change this mode.

Mode	Description
Commissioning	Bluetooth connection is used for commissioning the device. This option is the factory default mode (default PIN code 999995) and has short range for commissioning purposes only.
Disabled	Bluetooth connection is disabled and does not allow any wireless connections to the device.
Open	Bluetooth connection is open and is not authenticated with a PIN code. We recommend this option for rooms or areas that are accessible to anyone.
Private	Bluetooth connection is authenticated with a six (6) digit PIN code. When this mode is selected, you will be prompted to change the PIN code as the default PIN code is not allowed while using Private mode. We recommend this option for private rooms and areas.

Subnet Information and Communications Wiring

The Allure UNITOUCH is only compatible with ECLYPSE Series controllers, namely the ECY-TU/PTU, ECY-VAV, ECY-303, and ECY-CSC. Subnet cable length is limited to 100m (328ft) between the controller and the last device on the subnet for all Bluetooth low energy devices. This maximum subnet length must be respected to ensure the proper functioning of all devices.

If the UNITOUCH is the last device on the subnetwork, its EOL termination must be set to ON. All other subnetwork devices must have their EOL terminations set to OFF.

The ECLYPSE User Guide provides extensive information and requirements to implement this subnetwork. It contains information about network length, cable type, addressing, etc. It can be downloaded from the Distech Controls website.

If you make your own patch cable, use Category 5e cable crimped with RJ-45 connectors either as T568A or T568B.

⚠ Do not crimp one connector as T568A and crimp the other connector as T568B on the same cable.

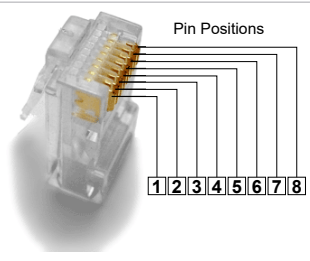| PIN 1	Not used (but linked)
PIN 2	Not used (but linked)
PIN 3	+15V
PIN 4	GND
PIN 5	NC
PIN 6	GND
PIN 7	BUS A
PIN 8	BUS B

Table 1: RJ 45 Pinout Description

Maximum Allure UNITOUCH Devices on the Subnet

☐ Maximum of two (2) UNITOUCH devices regardless of the model.

Subnet ID

If there are several devices being used on the same subnet, each device must be configured to have a unique subnet ID. The subnet ID can be changed directly on screen from the UNITOUCH's subnet ID configuration menu.

⚠️ 5 different Subnet ID codifications are used on the subnetwork :

☐ 1 for Allure UNITOUCH™ sensors and EC-Multi-Sensor-BLE sensors

☐ 1 for Allure EC-Smart-Vue sensors

☐ 1 for Allure EC-Smart-Comfort and Allure EC-Smart-Air sensors

☐ 1 for EC-Multi-Sensors

☐ 1 for ECx-Light/Blind expansion modules

Consequently, for example, the same Subnet ID can be assigned to an ECx-Light/Blind module, to an EC-Multi-Sensor and to an Allure EC-Smart-Vue sensor without any addressing issue.

Bluetooth Low Energy Smart Room Control Subnetwork

The Allure UNITOUCH can be freely combined in a daisy chain configuration.
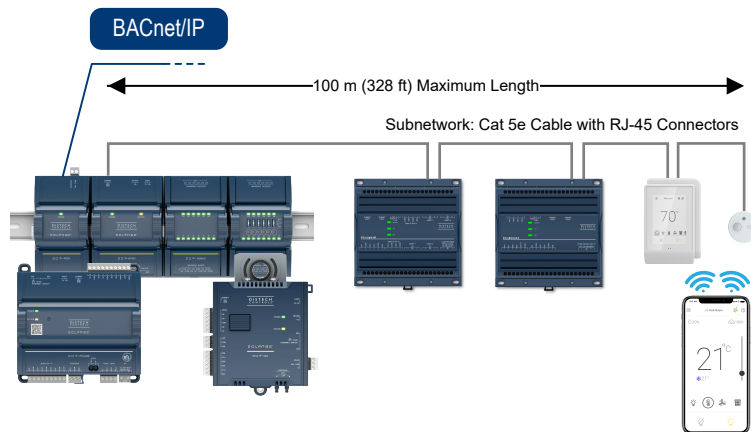
⚠️ A mixed architecture with standard room devices and Bluetooth low energy enabled devices is not recommended.

Changing the Subnet ID

Each device on the subnet requires a unique subnet ID. If a connected device's subnet ID does not match its programmed ID, or if two or more devices have the same subnet ID, there will be a communication error. A communication error screen will be displayed and you will be prompted to enter the default password (9995) to access the subnet ID settings.
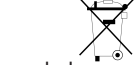
Maintenance and Cleaning

Gently clean the device with a soft, lint-free cloth slightly moistened with a solution of mild liquid dish soap and warm water or disinfect the device with a soft cloth slightly moistened with a 70% isopropyl alcohol.

Do not directly spray any liquid or disinfecting solution on the device. Do not clean with any other chemicals products.

Disposal

The Waste Electrical and Electronic Equipment (WEEE) Directive set out regulations for the recycling and disposal of products. The WEEE2002/96/EG Directive applies to standalone products, for example, products that can function entirely on their own and are not a part of another system or piece of equipment.

For this reason Distech Controls products are exempt from the WEEE Directive. Nevertheless, Distech Controls products are marked with the WEEE symbol , indicating devices are not to be thrown away in municipal waste.

Products must be disposed of at the end of their useful life according to local regulations and the WEEE Directive.

FCC Statement

Changes or modifications not expressly approved by Distech Controls could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- ☐ Reorient or relocate the receiving antenna.
- ☐ Increase the separation between the equipment and receiver.
- ☐ Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- ☐ Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC rules and with Industry Canada's license exempt RSS. Operation is subject to the following two conditions:

- ☐ This device may not cause harmful interference, and
- ☐ This device must accept any interference received, including interference that may cause undesired operation of the device.