
PoE+


Camera

Installation Guide

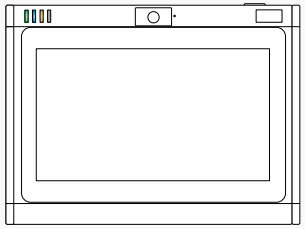
SwipeClock Vision

Time & Attendance Terminal

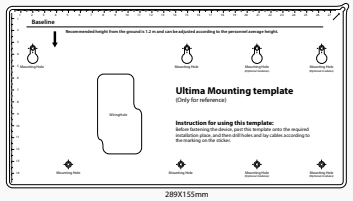
This guide provides installation instructions only. For information regarding actual operation and configuration of the SwipeClock Vision Time & Attendance terminal, refer to the user manual.

Contents

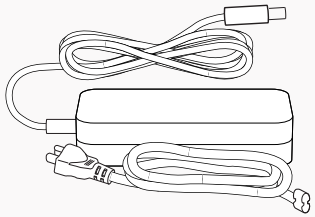
Packing list



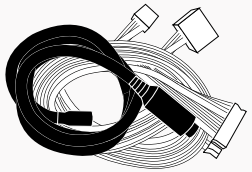
Base



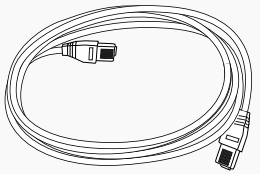
Mounting template



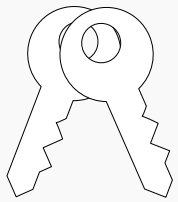
Power Supply



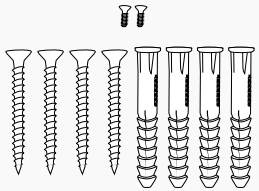
Power Cable



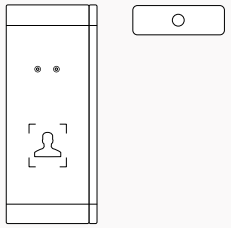
Network Cable



Keys (2)



Screws & Anchors



Modules

The contents of the package may vary depending on the modules that you choose.

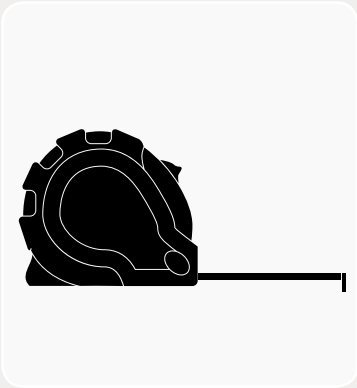
Pre-Installation

Required tools

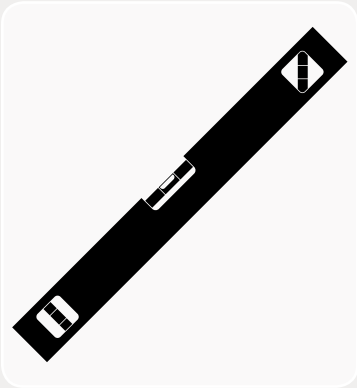
IMPORTANT

To avoid damaging the main board, always wear an anti-static wrist strap when touching the main board in any way, including connecting and disconnecting wires.

- Do not remove the cover assembly from its anti-static packaging until you are ready to install the device.
- Save the paper mounting template and any other printed documents.



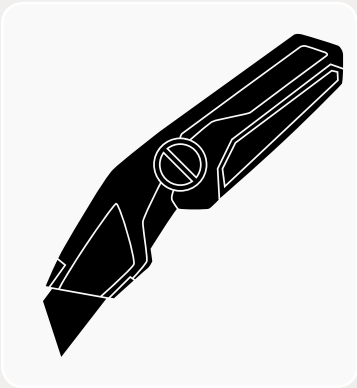
Tape Measure



Level

Wire Cutter

Screwdrivers



Drywall Knife

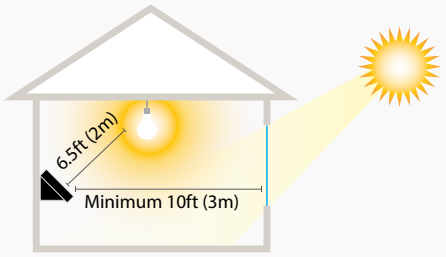
Power Drill

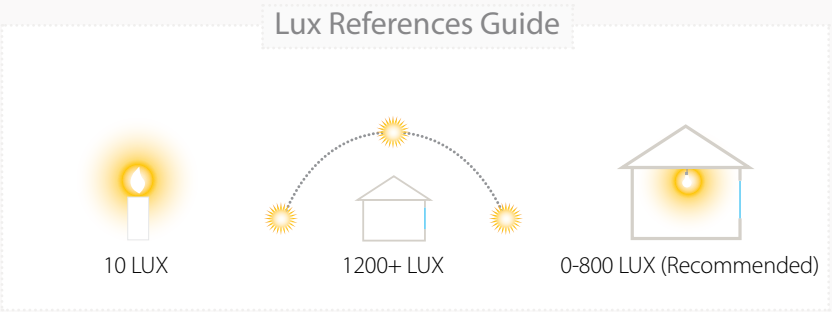
Note: Because of the small size of certain screws, we recommend that you use small screwdrivers with magnetic tips.

Installation Environment

Location

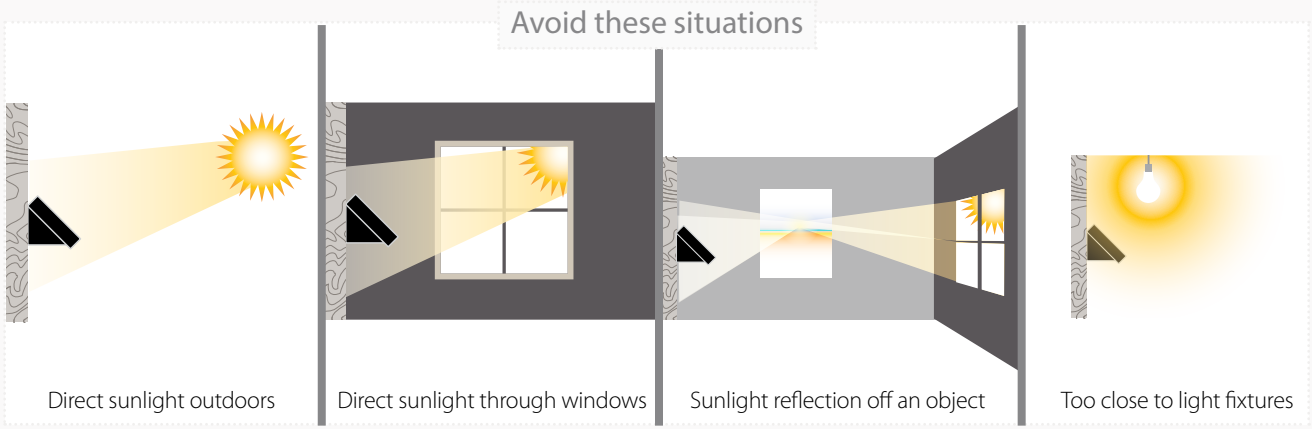
- SwipeClock Vision is designed for any internal environment. In rare cases, user sites may contain agents in nature that can corrode the electronics assemblies in these devices. In the event of this situation, users must move the devices to a suitable environment.
- Install the clock in an area where the screen is not exposed to direct sunlight or other high-intensity lighting that could make the screen difficult to read.





Recommended Locations

The device should only be installed indoors. The illuminance of the external light source is 0-8000LUX. Direct sunlight should be avoided. Install the device at least 10 feet (3m) away from windows, and 6.5 feet (2m) away from light fixtures.



Avoid direct sunlight, indirect sunlight reflected off mirrors, or bright artificial light.

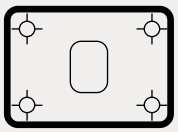
Planning

Required personnel

Depending on the modules that you purchased, and the implementation planned for your site, you will require the following:

- A licensed electrician to install or move AC outlets and power cables.
- A qualified person to run Ethernet cable.

One or more qualified installers to assemble the device and mount it on the wall (a second person may be necessary to hold the cover while the other person attaches components to the cover and base).



Mounting template

The packaging box includes a paper mounting template that you use to mark the wall with the following measurements and indicators:

- Where to screw the base of the unit into the wall
- Where cables enter the unit through access holes in the wall

Power sources and connections

Requirements:

- The AC power source must be grounded 100 to 240V AC, 50/60Hz input voltage.
- A licensed electrician must ensure that low-voltage wiring is routed securely away from high-voltage wiring.

Power source options:

The following power supply methods are available:

- Mounted near an AC outlet, with power supply plugged in
- Power-over-Ethernet (PoE)
- Backup battery

Ethernet connection

- Location - Plan to install the clock in a location that allows an easy and secure connection to an external network (for example, using the Ethernet cable).
- All cables must be in place before installing the clock.

Preparing the location

Determine the power source for your site

Before you start the installation, plan with your electrician (if required for the power option that you choose) how the clock will connect to the power at your site.

Choose from the following options and review the associated notes.

Power options

- Install near an AC outlet

Select a location where the distance from the wiring hole of the Ultima is not more than 5 feet (1.5 meters) from the AC outlet.

Note: Installing the device near an AC outlet does not protect against the AC power cord from being deliberately or inadvertently unplugged from the outlet.

- Power-over-Ethernet (PoE)

The device has a POE module in it. You can supply power to the device by connecting a network cable to the POE switch.

- Backup battery

When the power is off or in emergency, the backup battery can supply power to the device.

Notes:

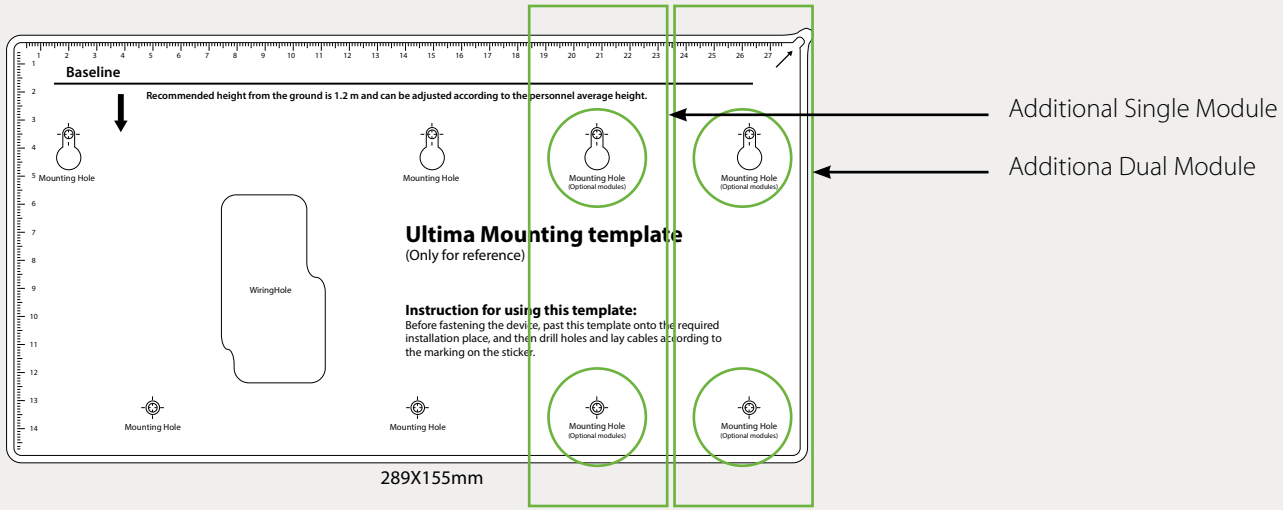
- A licensed electrician must install the AC outlet and associated wiring before you install the Ultima.
- Do not connect the Ultima power line to circuits that are being used for electrical devices that draw large amounts of power, such as air conditioning units, electrical motors, and compressors.
- Avoid running a communications cable near devices that interfere with data transmission.

Installation

Marking holes

Mark insertion points for the base

The mounting template is printed on a sheet of paper that is included in the package. Use that template to mark the areas of the wall where you plan to install the clock.



Mark the wall

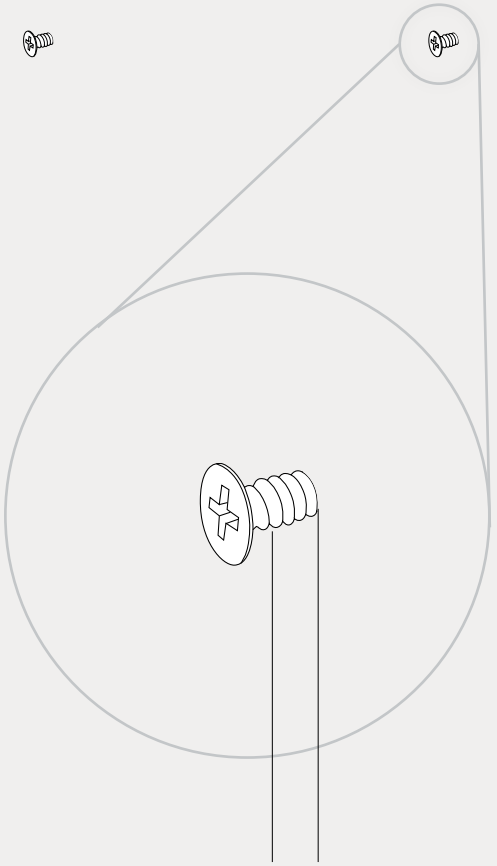
1. Tape the mounting template at the optimal height and location for the clock.
   - The baseline is recommended 1.2m above the floor and can be adjusted to the actual situation.
   - Use a level to ensure that the top of the template is horizontal to the floor.
2. Mark the location of the mounting screw holes.
3. If you plan to run an Ethernet cable through the wall to enter the clock from the back or through the top, use the template to mark the area of entry.
4. If you are installing the clock near an AC outlet, be sure the outlet is within 5 feet (1.5 meters) of the unit.
5. After you finish marking all screw holes and wiring hole, remove the mounting template from the wall.

Note: The mounting template contains four fixing holes for the optional modules (fingerprint & RFID module or RFID module, barcode/magnetic module), if you don't choose these modules, then you can just mark the left four fixing holes for the base.

Drilling holes and fixing plastic anchors and upper screws

Drill 1/4 inch holes and insert plastic anchors flush with the wall surface.

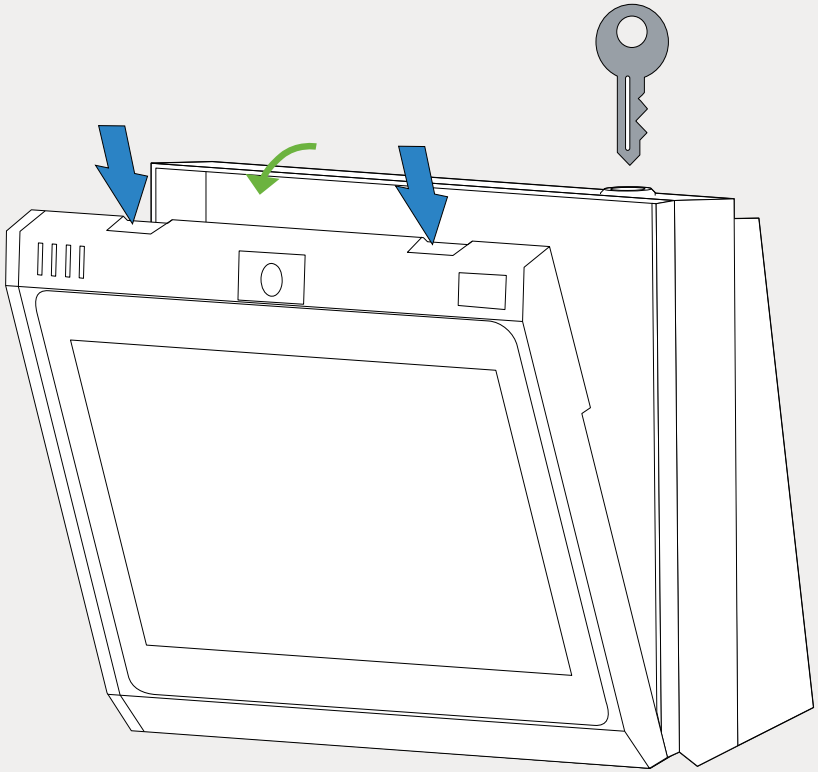
Fix the upper 2 screws *(base only installation)* on the wall.



3/8 inch space

Opening the front cover

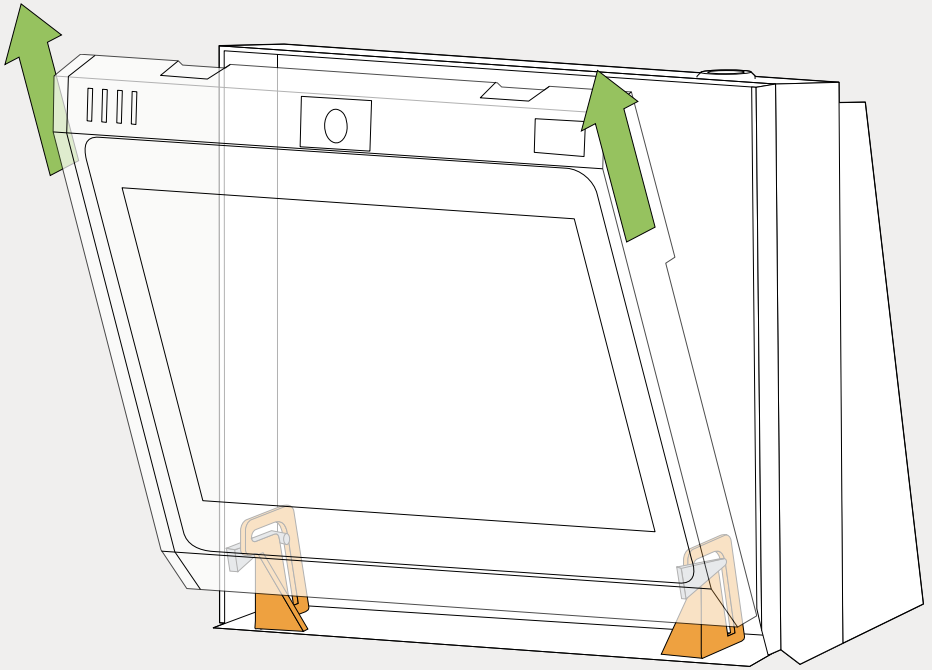
Step 1



Press down the tabs simultaneously and gently open it about 1.5 inch

Caution **Do not apply force.**

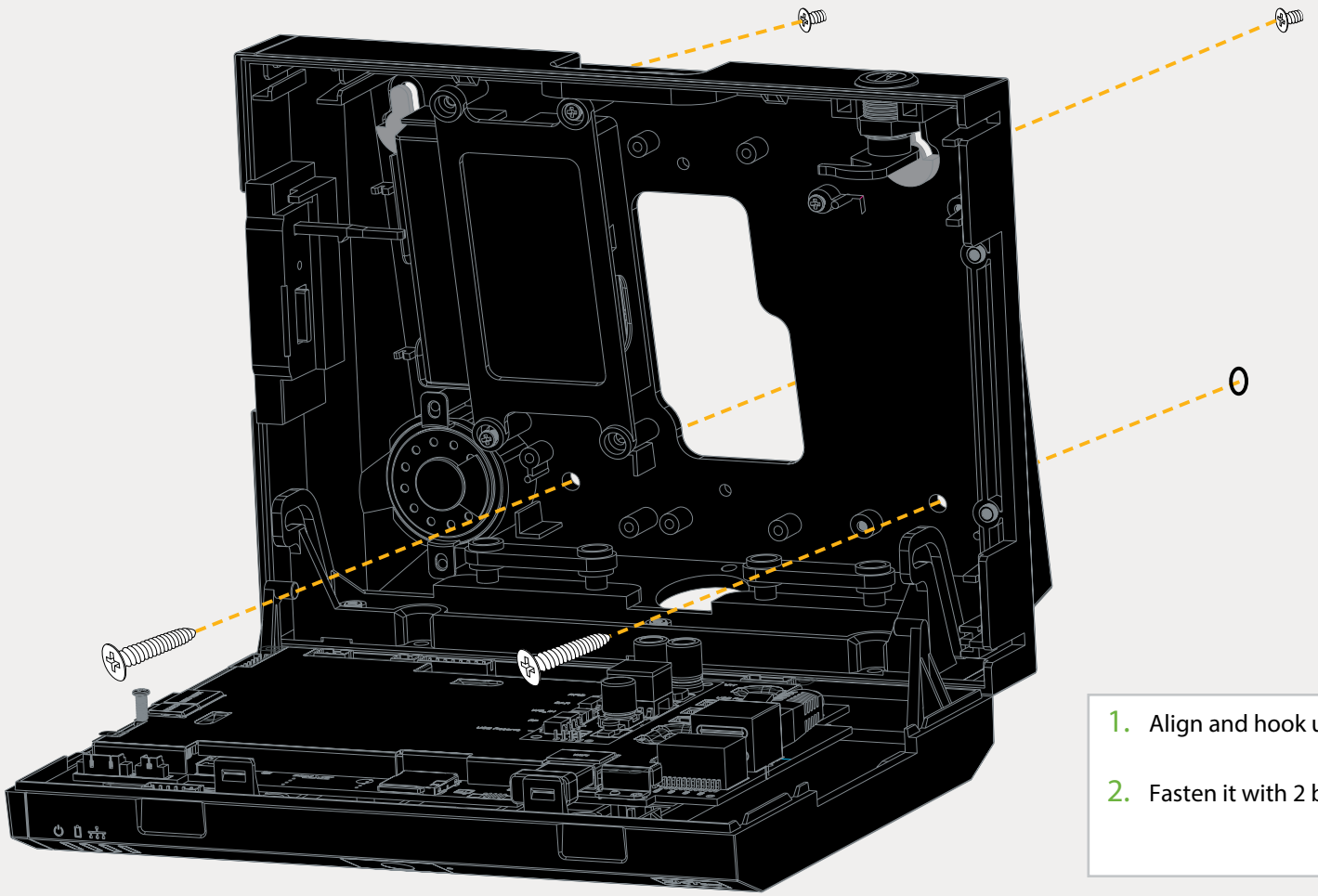
Step 2



Pull the door assembly UP about 1 inch to open it completely.

Caution **Do not apply force.**

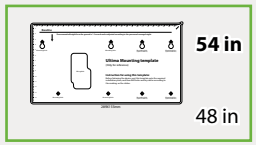
Mounting on wall



1. Align and hook up the clock on to the wall
2. Fasten it with 2 bottom screws.

Mounting the clock with facial and thermal scanner on a wall

Align the template top screw holes at **54 inch** from the floor surface.

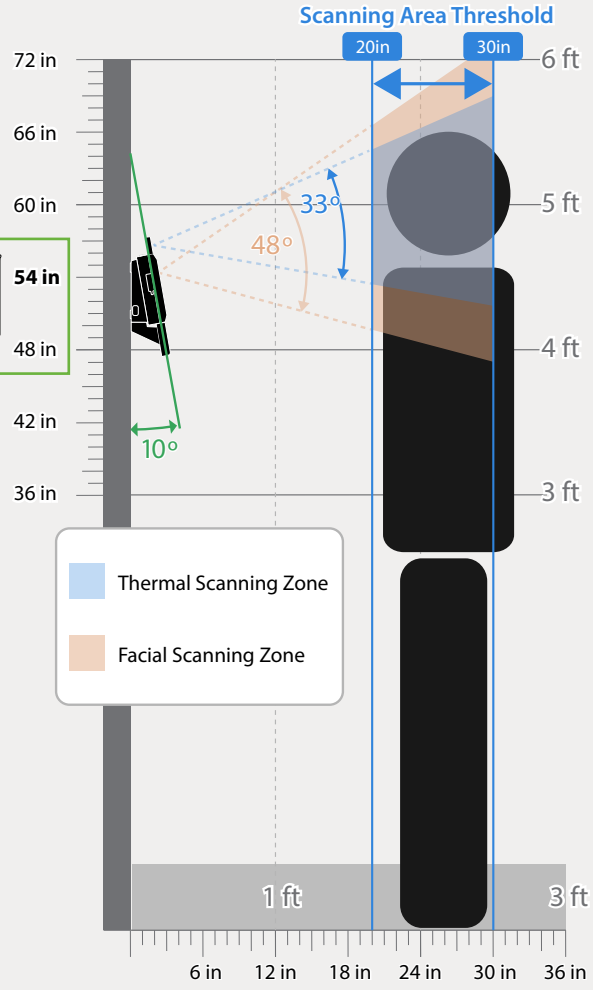


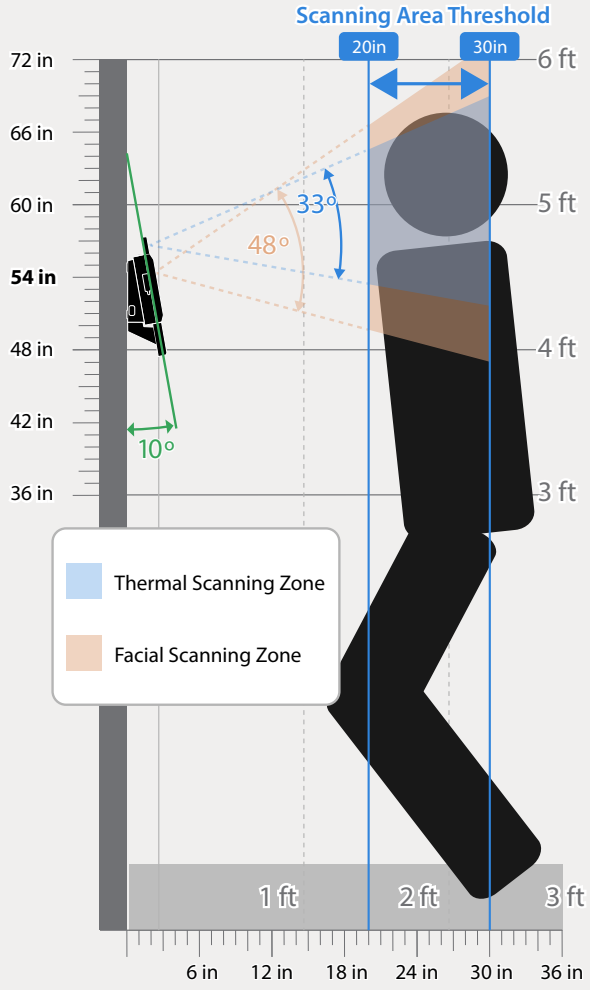
FOV (Field of view) for the combined facial and thermal sensors:

1. Per ADA regulations, ZK recommends installing the clock between **54 inches** from the top screw to 48 inches from the bottom above the ground.
2. The "strike zone" in which the user should present their face for identification should be between **20 to 30** inches from the clock.

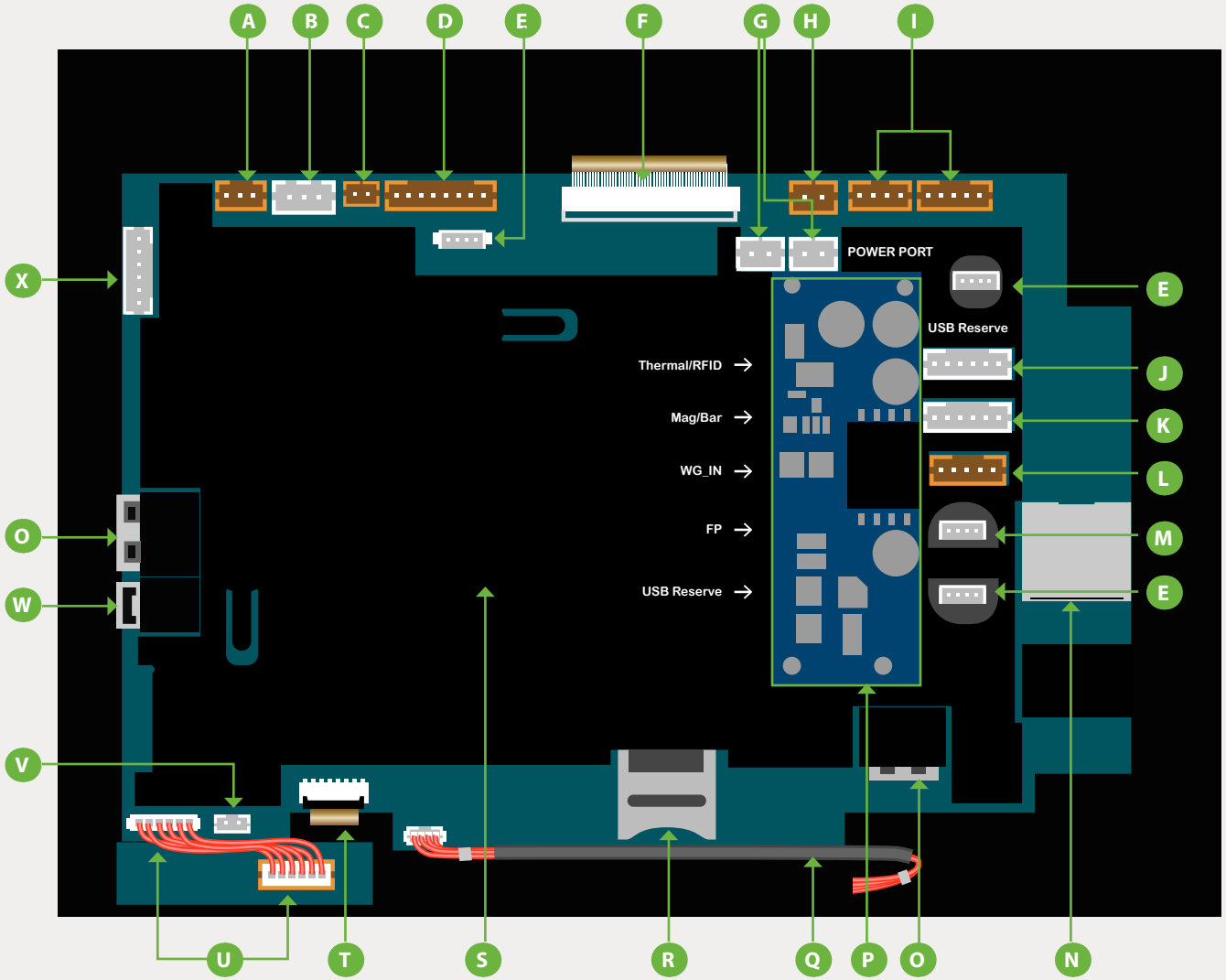
3a. The field of view for combined facial and thermal sensor fits anyone with a height of **4"8 to 6.0"** while standing up straight between **20 to 30** inches in the "strike zone" from the clock.

3b. Anyone with a height of **6.0 "to 6.6"** should bend at their knees and place their face within the strike zone which is between **20 to 30** inches to fit inside the camera's view angle for facial identification





Motherboard connectors

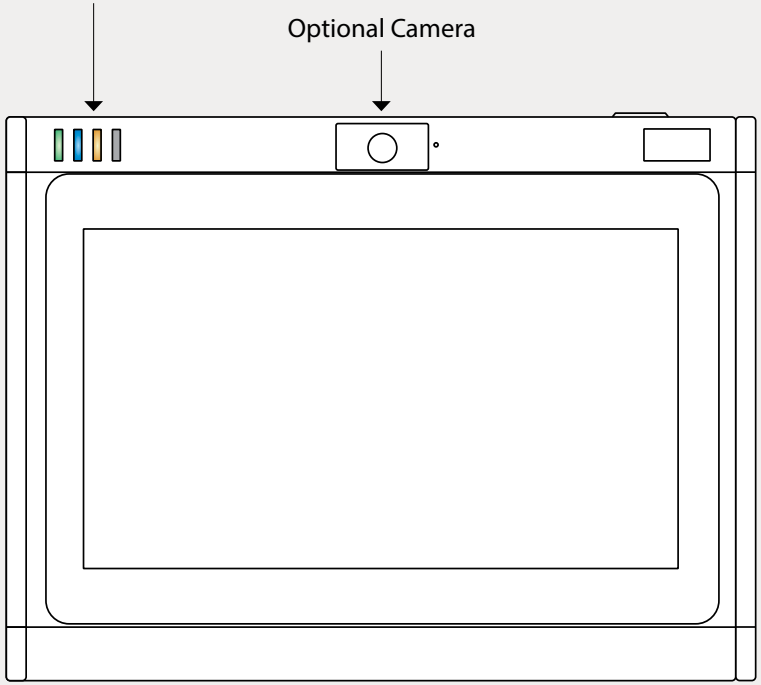


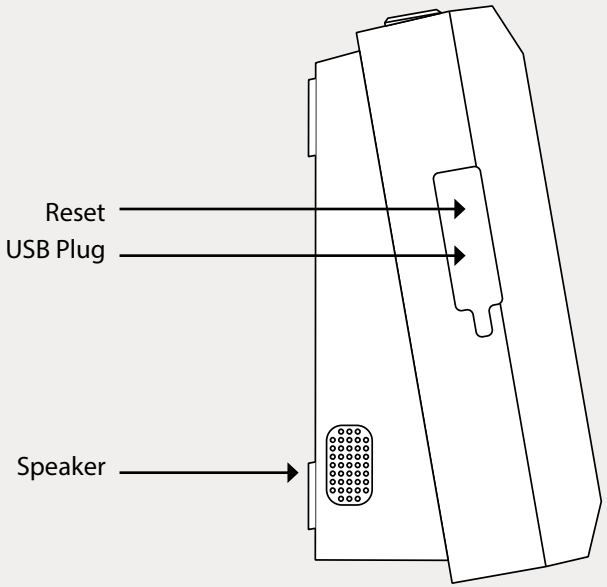
A. RS485
B. Battery
C. Speaker
D. Keyboard
E. USB Reserve
F. Display
G. 12 V 2A Power OUT
H. 12 V 3A Power IN
I. Relay Module
J. RFID Module
K. Barcode/Magnetic Reader
L. Wiegand IN
M. Fingerprint Module
N. Ethernet Port
O. USB Port
P. PoE Module
Q. Camera
R. SD Card
S. Heat Sink
T. Touch Screen Sensor
U. LED Status indicator
V. Microphone
W. Reset
X. GPS

External plug and indicators

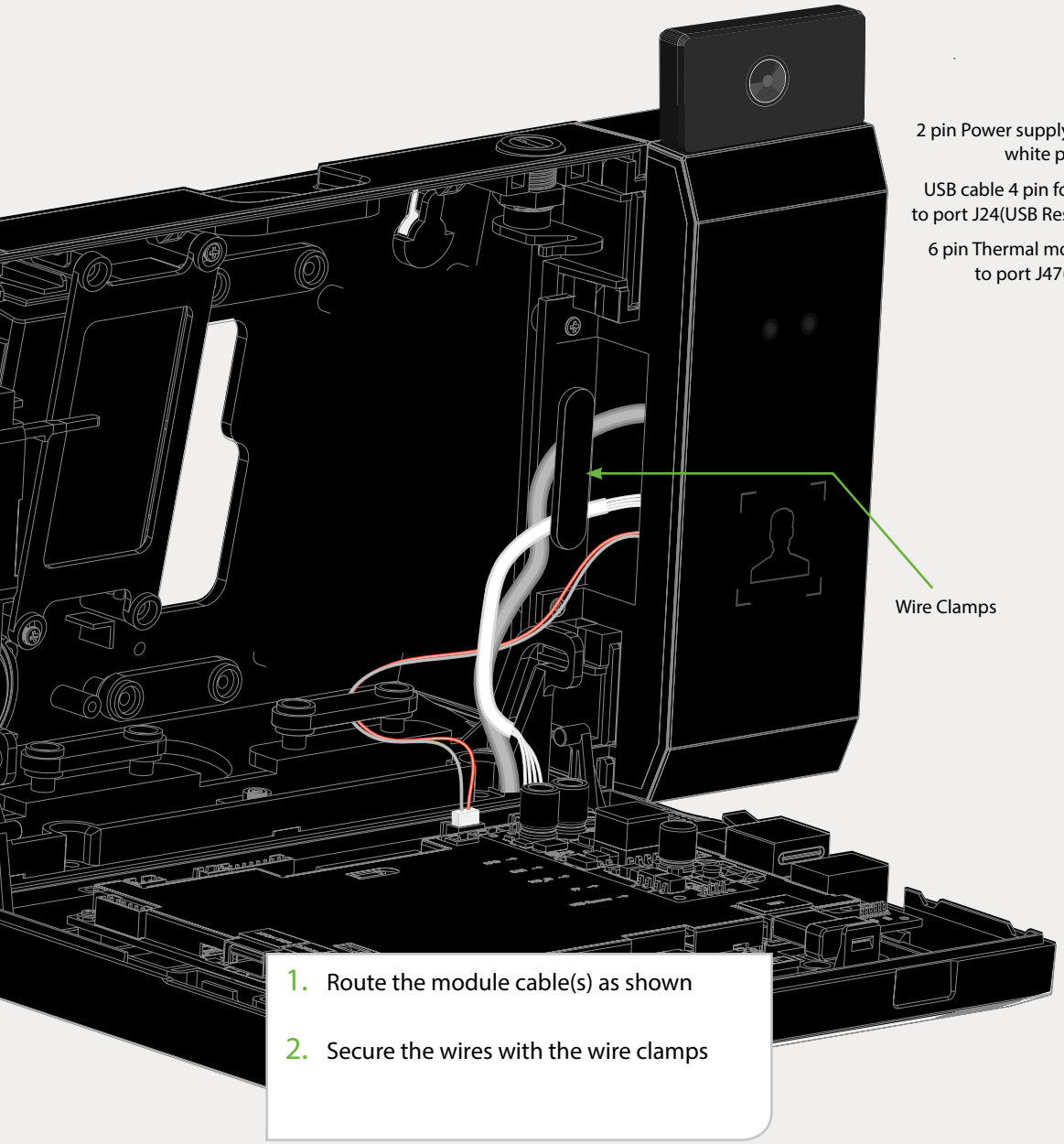
LED Indicators

- AC Power
- Battery Power
- Network
- Authentication Verification





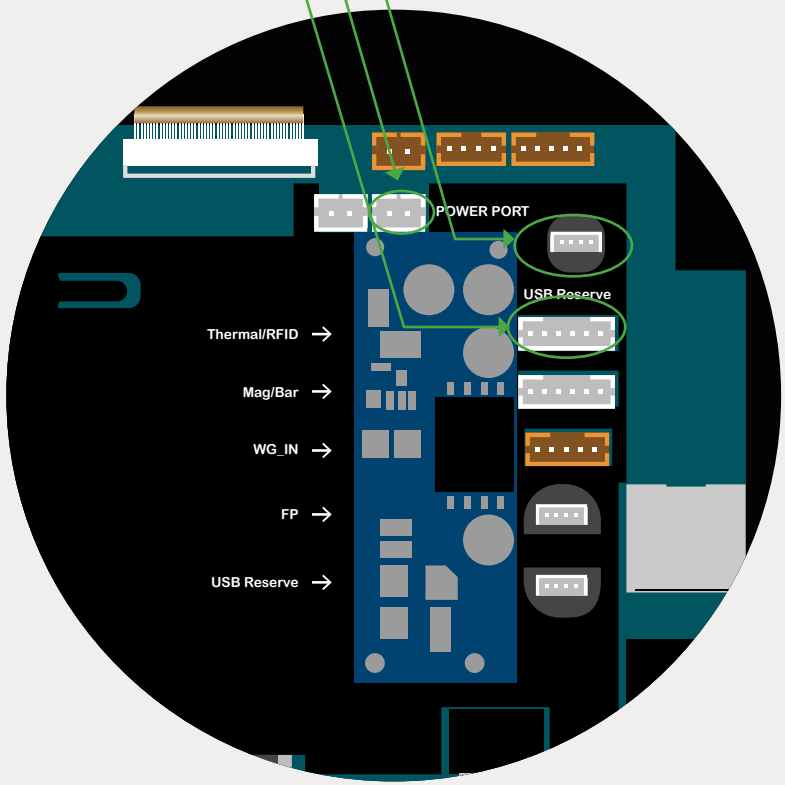
Connecting the Facial module wires to the motherboard



2 pin Power supply 12 V which connects to white port J3 on the mainboard

USB cable 4 pin for Face module connects to port J24(USB Reserve) on the mainboard

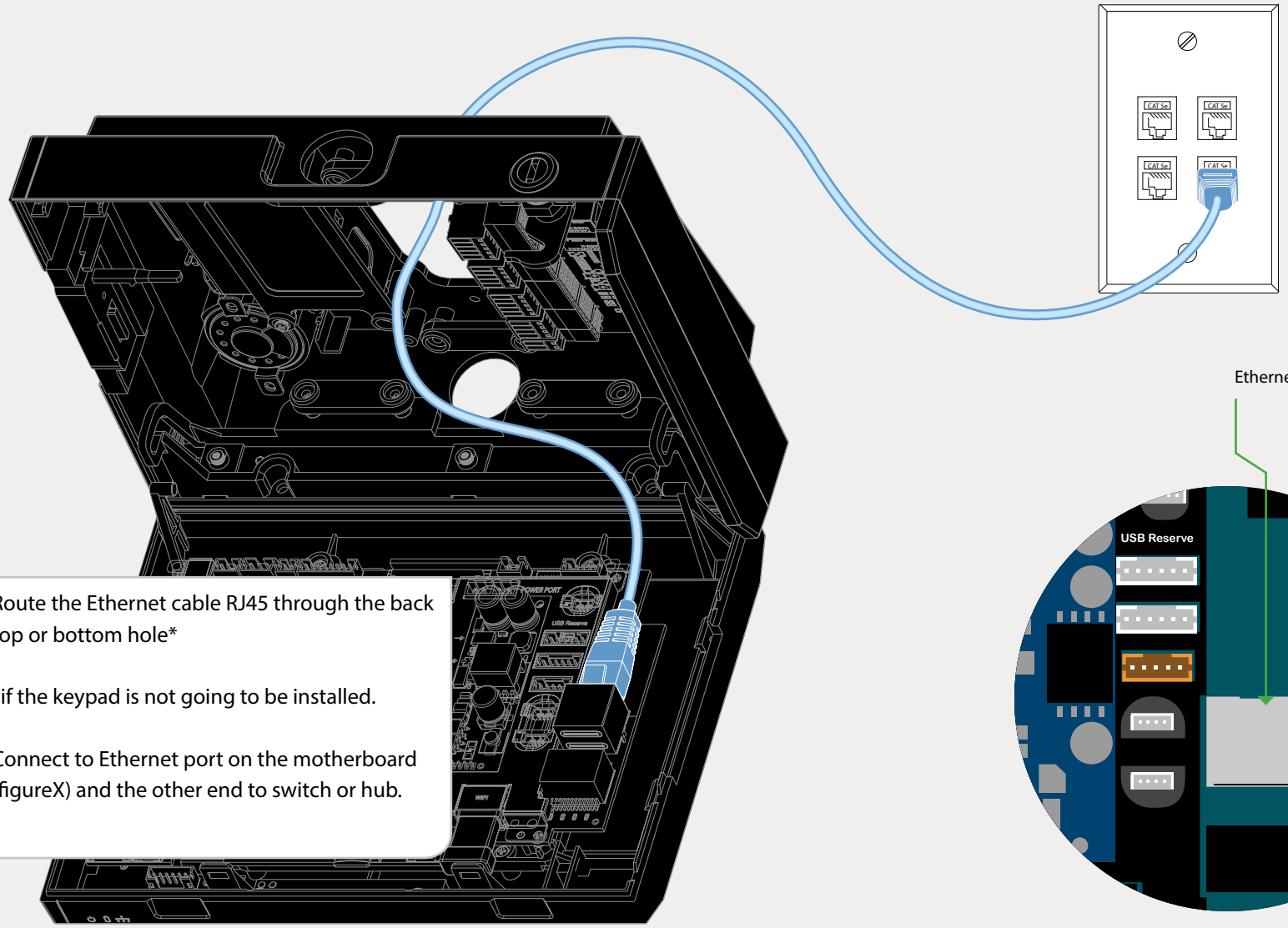
6 pin Thermal module cable is connected to port J47(RFID) on the mainboard



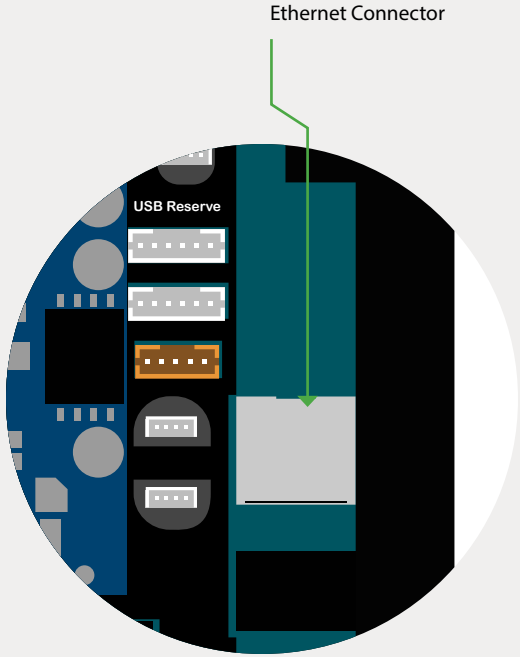
Motherboard

1. Route the module cable(s) as shown
2. Secure the wires with the wire clamps

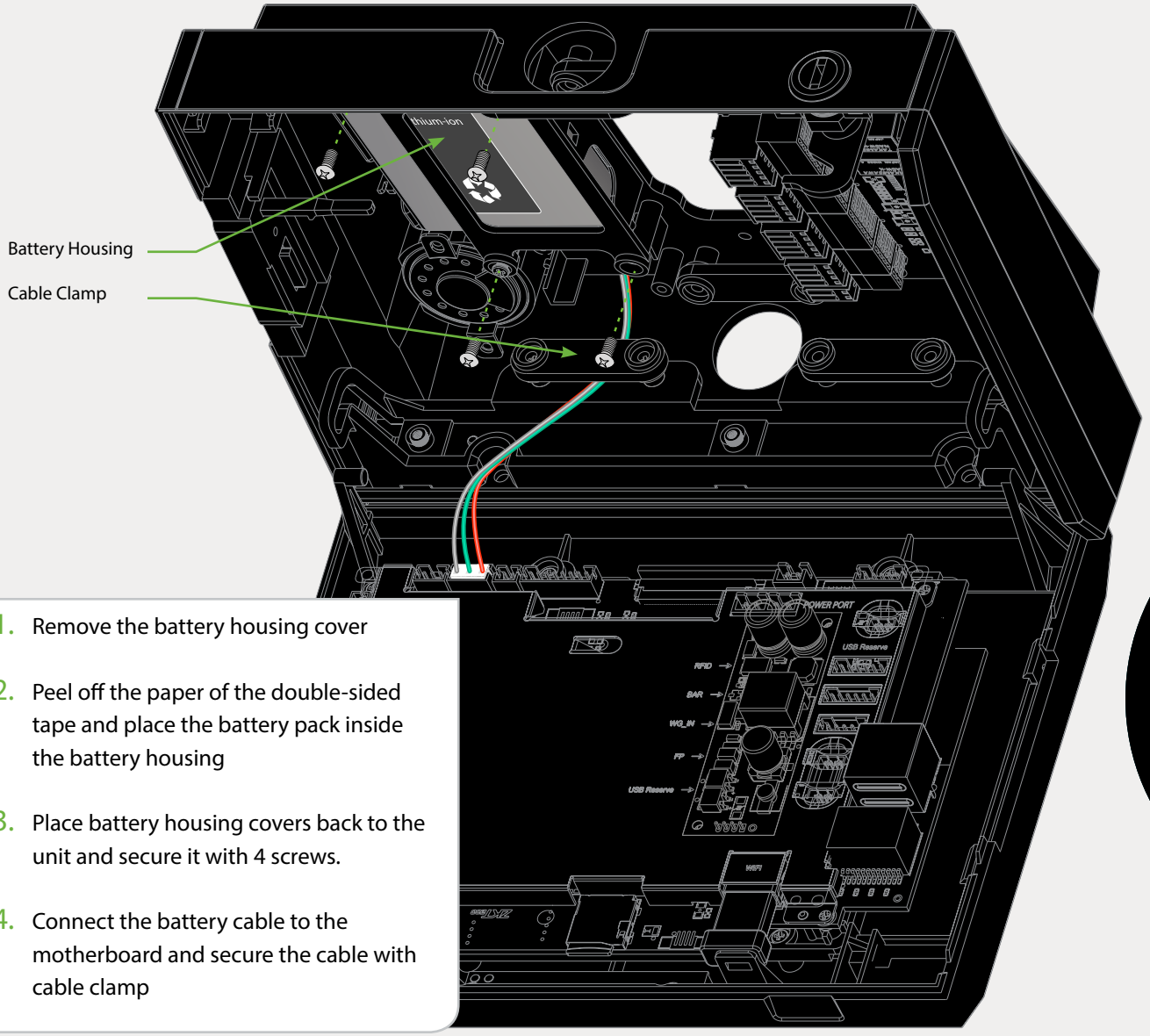
Connecting ethernet cable

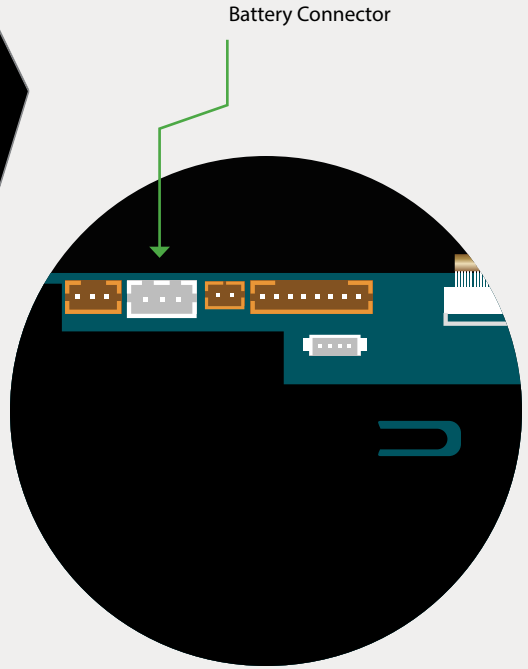


1. Route the Ethernet cable RJ45 through the back top or bottom hole*
2. *if the keypad is not going to be installed.
3. Connect to Ethernet port on the motherboard (figureX) and the other end to switch or hub.



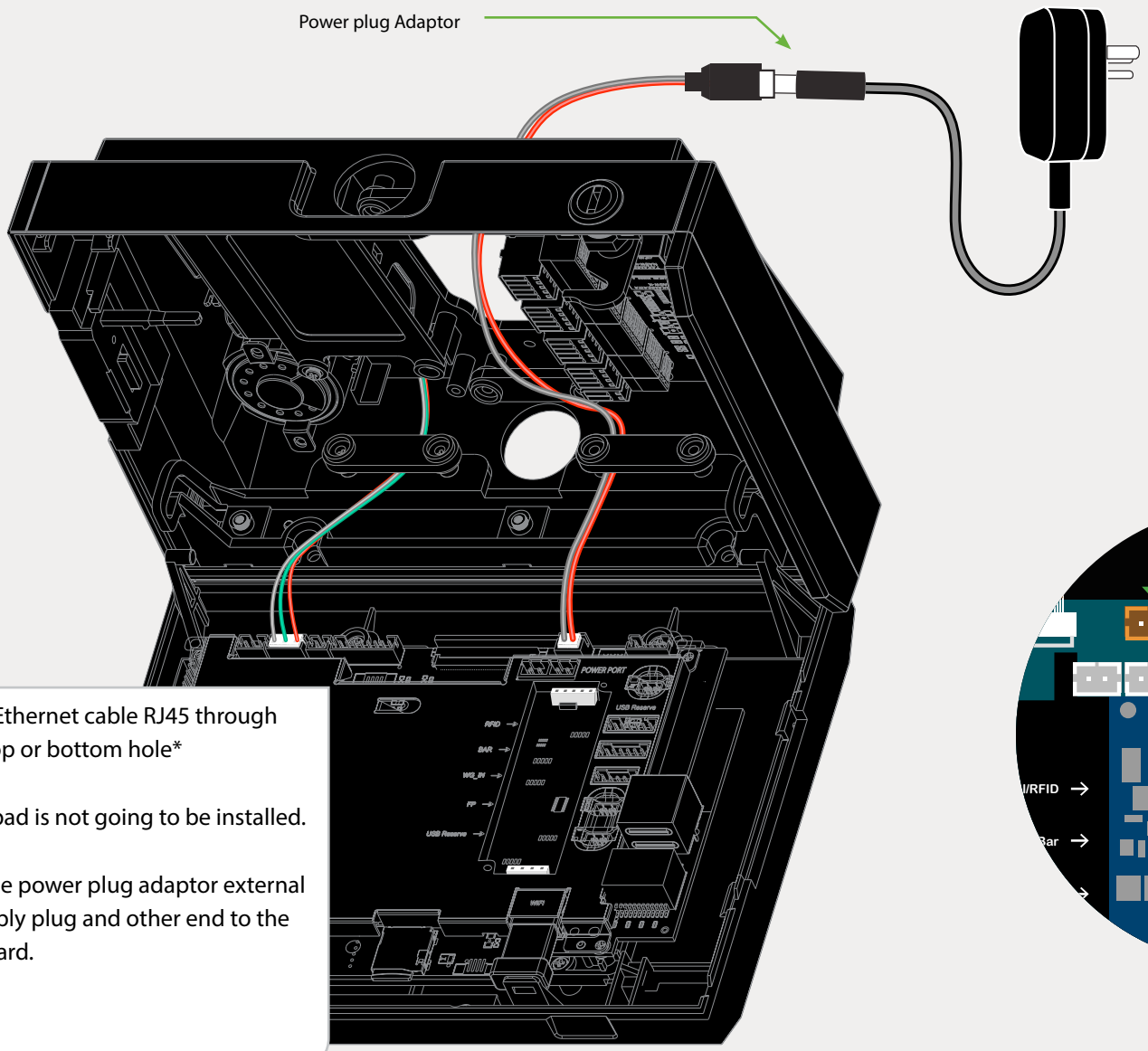
Installing optional internal battery pack

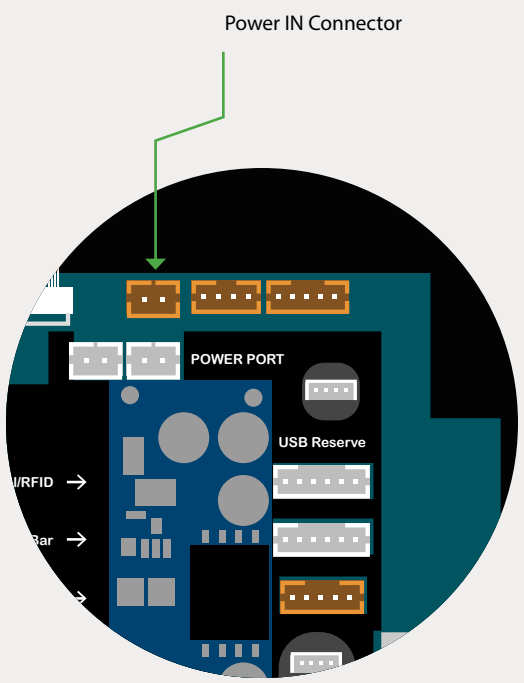




1. Remove the battery housing cover
2. Peel off the paper of the double-sided tape and place the battery pack inside the battery housing
3. Place battery housing covers back to the unit and secure it with 4 screws.
4. Connect the battery cable to the motherboard and secure the cable with cable clamp

Connecting AC power supply





1. Route the Ethernet cable RJ45 through the back top or bottom hole*
2. *if the keypad is not going to be installed.
3. Connect the power plug adaptor external power supply plug and other end to the mother board.

Troubleshooting

Issue	Probable Causes	Corrective Action
There is no power in the clock.	If the clock is powered using standard AC power cable, the power supply is not properly plugged into the main board, the AC outlet, or both.	Check the connections to the main board and the AC outlet. **Note:** Do not plug the power cord into the AC outlet until you ensure that the power supply is properly connected to the main board.
	If the clock is powered using Ethernet cable, the network may be down, or connections to and from the PoE module may not be secure.	• Ensure that the network is running. • Ensure that the network cable is connected to the main board.
The power LED is turned on, but nothing appears on the screen.	If the clock is powered using a standard AC power cable, the AC line is not live or is supplying improper voltage.	Measure voltage at the AC outlet and, if necessary, locate another power source.
	If the clock is powered using Ethernet cable, there is an issue with the network.	• Check the Ethernet connection at the clock, and all other network connections. • Ensure that the network is supplied with an 802.11af-compliant power source.
Communication fails.	Communication settings are incorrect either at the clock or the host PC.	Check and, if necessary, correct the device IP Address, Netmask, Gateway and DNS.
	Communications cabling is connected incorrectly.	Ensure that all communications cables are routed correctly and connected properly.