



Ultima 7P

Workforce Data Collection Terminal



Installation Guide

This guide provides installation instructions only. For information regarding actual operation and configuration of the **Ultima 7P** Time & Attendance terminal, refer to the user manual.



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Standard Modules

Wi-Fi
4G
GPS
POE+
Backup Battery

Internal Optional Modules

Fingerprint:

White-light Fingerprint/ No Fingerprint

Cameras:

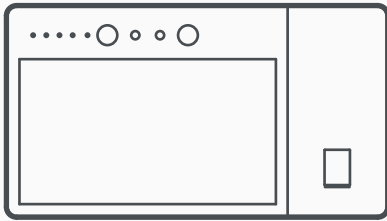
F33L Facial & Palm Recognition/ No Camera

Card modules:

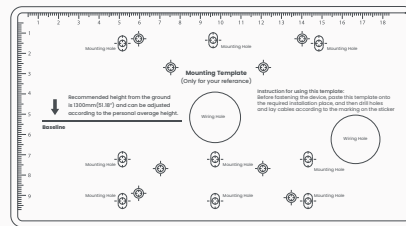
Card Reader_MT10/ MultiCard reader_MT30/
MultiCard reader_U356/ MultiCard reader_U356i/
MultiCard reader_U356LG

External Optional Modules

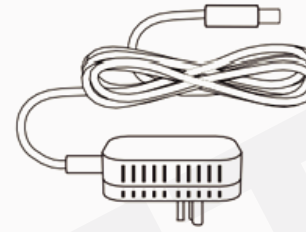
Rubber Casing



Terminal



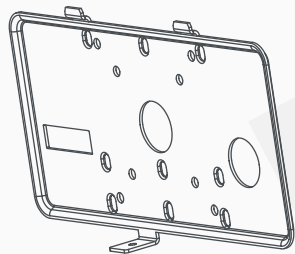
Mounting Template



Power Supply



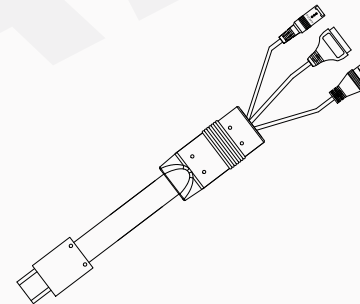
Network Cable



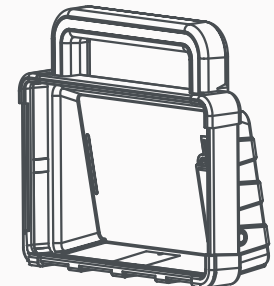
Mounting Plate



Screws & Anchors



Multi-Functional Cable



Rubber Casing

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

Pre-Installation

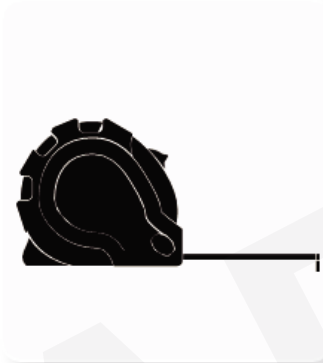


Important

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

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



Measuring Tape



Level



Wire Cutter



Screwdrivers



Drywall Knife

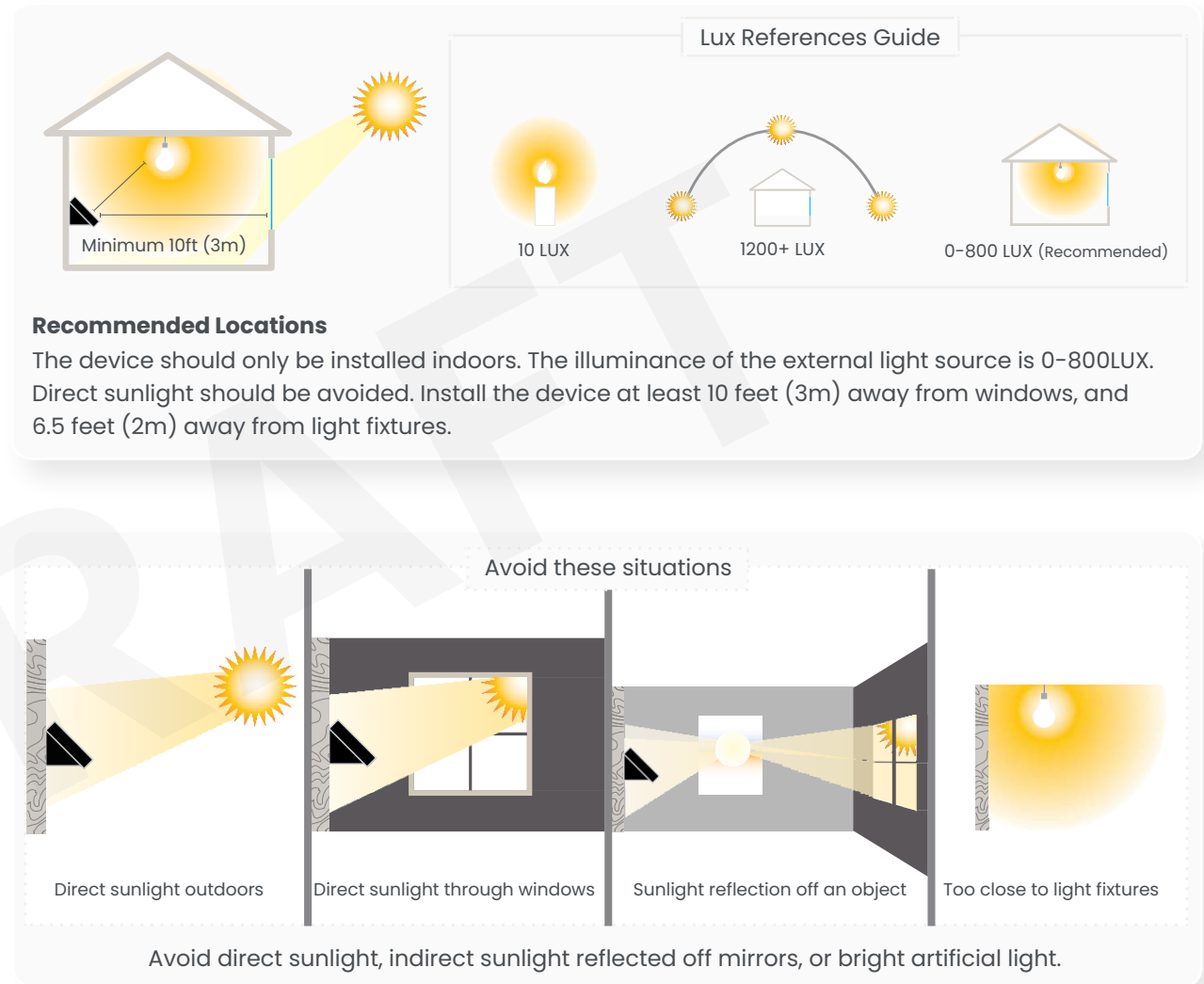


Power Drill



Location

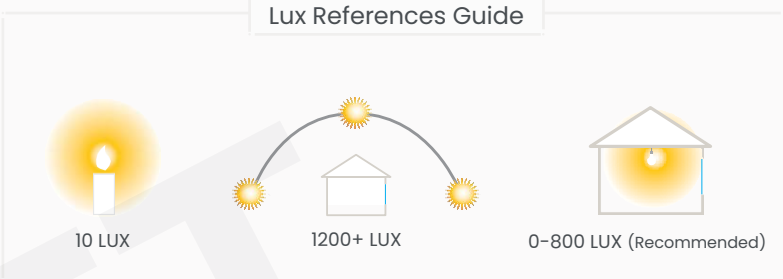
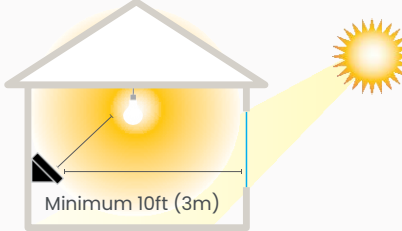
- Ultima 7P is designed for any internal environment. In rare cases, user sites may contain agents in nature that can corrode the electronics assemblies in these devices. In the event of this situation, users must move the devices to a suitable environment
- Install the Ultima 7P in an area where the screen is not exposed to direct sunlight or other high-intensity lighting that could make the screen difficult to read





Location

- Ultima 7P, when used with the portable rubber casing, is designed for rugged and flexible use across temporary or mobile worksites, such as construction sites, outdoor job locations, or remote facilities
- Although the rubber casing provides protection against dust, splashes and minor impact, the device should still be used in shaded environments where direct sunlight is limited and screen visibility is not compromised
- Avoid placing the unit on surfaces where heat builds up quickly (such as metal tables under sun) or where the device may be exposed to high moisture or corrosive substances
- Place the device on stable, flat surfaces when in use to prevent it from falling or shifting during punches



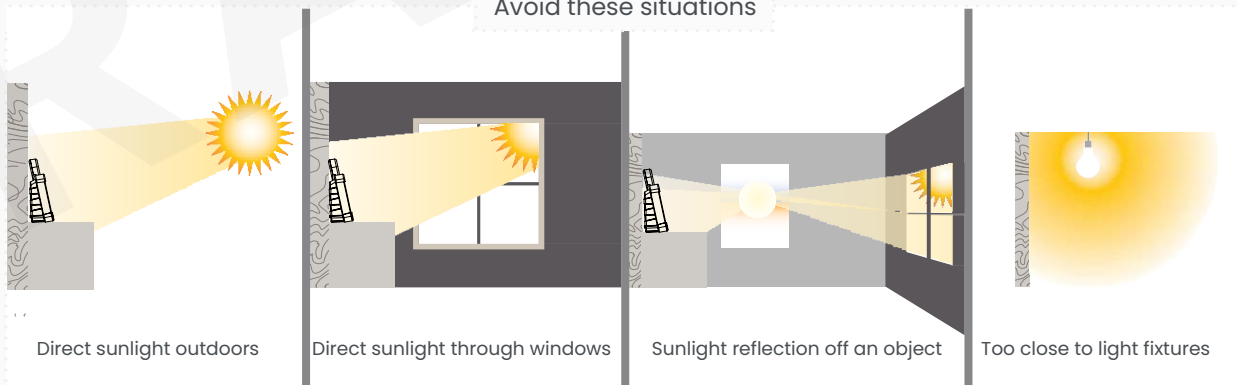
Lux References Guide

10 LUX 1200+ LUX 0-800 LUX (Recommended)

Recommended Locations

The device should only be installed indoors. The illuminance of the external light source is 0-800LUX. 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 these situations



Direct sunlight outdoors Direct sunlight through windows Sunlight reflection off an object Too close to light fixtures

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



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+)
 - Warning** Power up your device with AC adapter or Power-over-Ethernet+ (PoE+). Do not connect simultaneously (It may damage the device)
- Backup battery



Ethernet Connection

- Location - Plan to install the Ultima 7P 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 Ultima 7P



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 Ultima 7P 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 7P 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 7P
- Do not connect the Ultima 7P 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

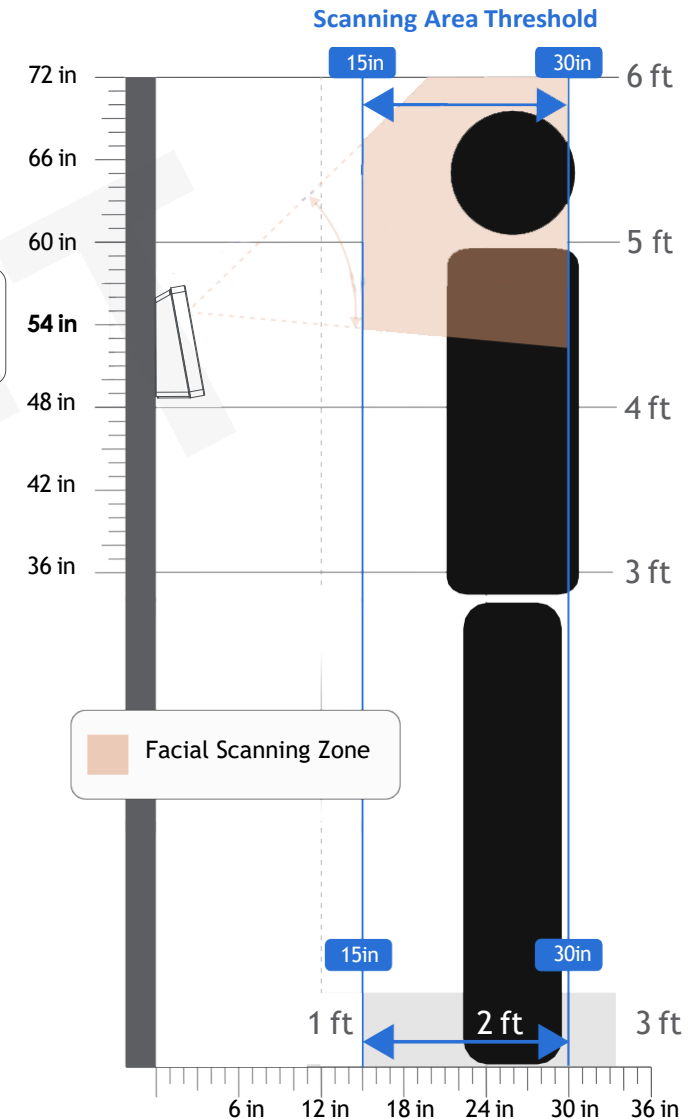
Without Rubber Casing



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

1. As per ADA regulations, ZKTeco WFM recommends installing the Ultima 7P 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
3. The field of view for combined facial sensor fits anyone with a height of 4’08” to 6’00” while standing up straight between 20 to 30 inches in the “strike zone” from the clock
4. Anyone with a height of 6’00” to 6’06” 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

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



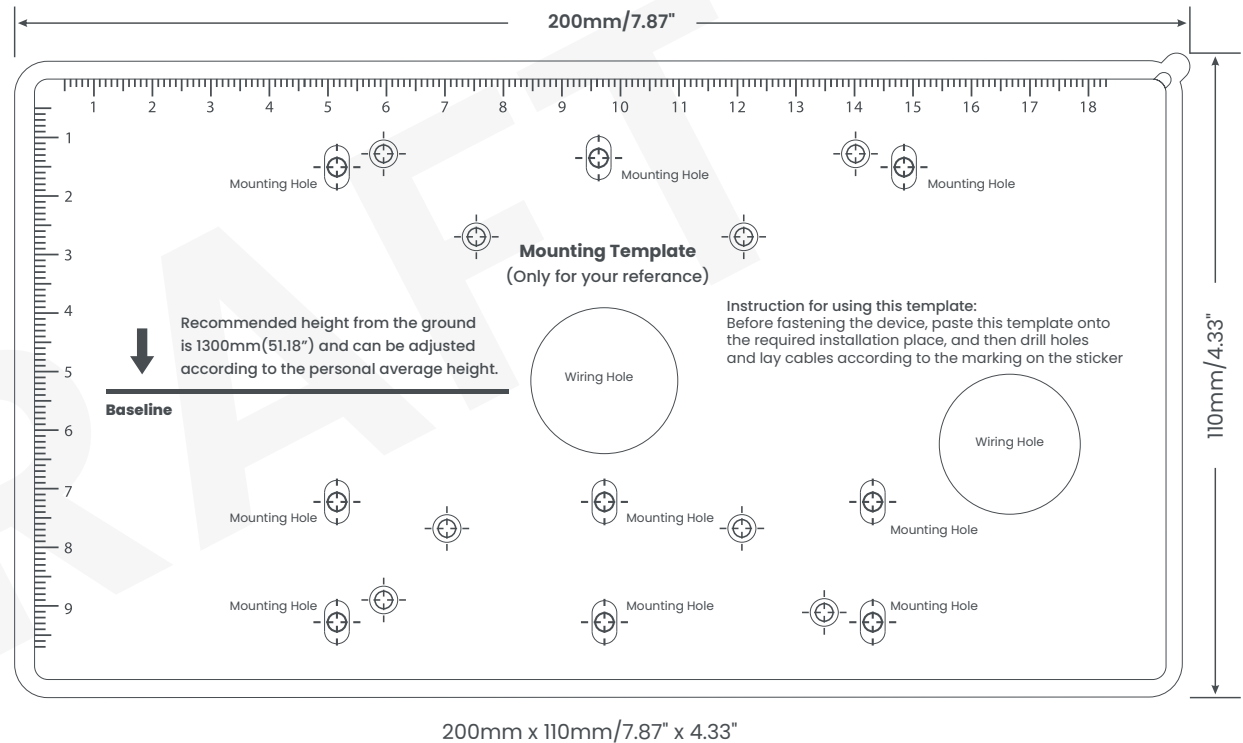


Mark insertion points for the base

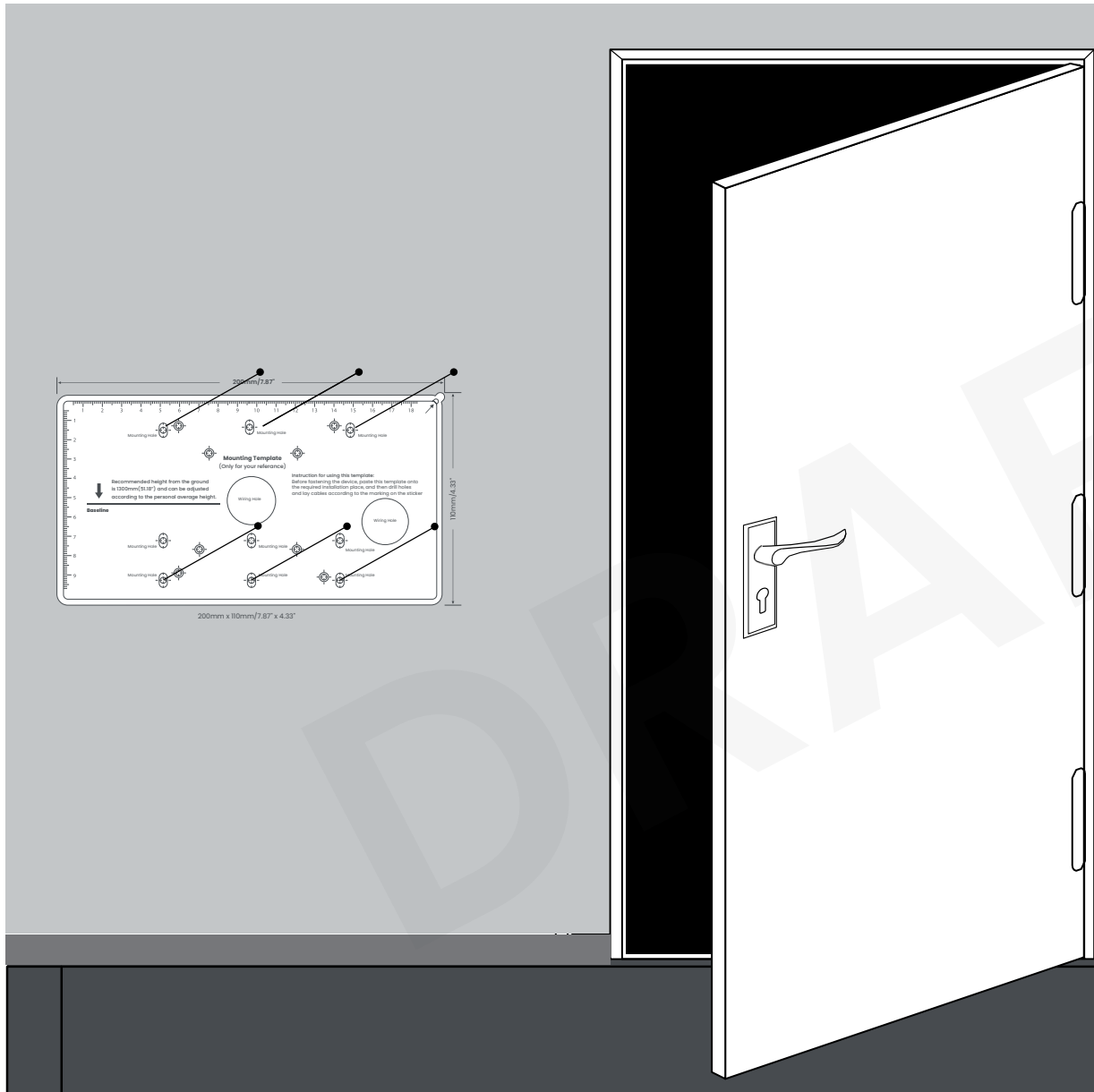
The mounting template is printed on a sheet of paper that is included in the package. Use that template to mark the areas of the wall where you plan to install the Ultima 7P.

Mark the wall

1. Tape the mounting template at the optimal height and location for the Ultima 7P
 - a. The baseline is recommended 1.3m above the floor and can be adjusted to the actual situation
 - b. 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 Ultima 7P from the back or through the top, use the template to mark the area of entry
4. If you are installing the Ultima 7P 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

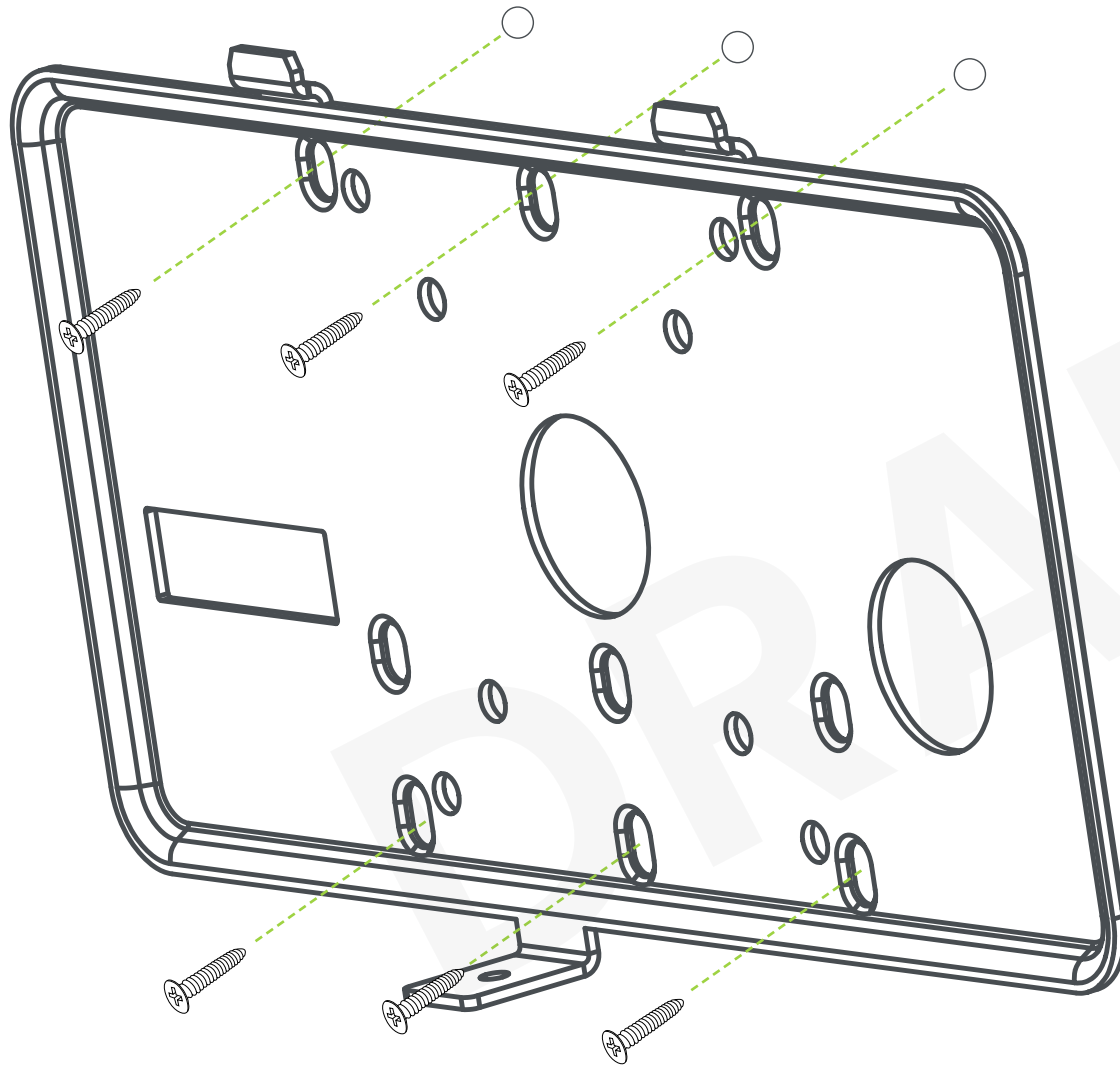


Drilling Holes and Fixing Plastic Anchors



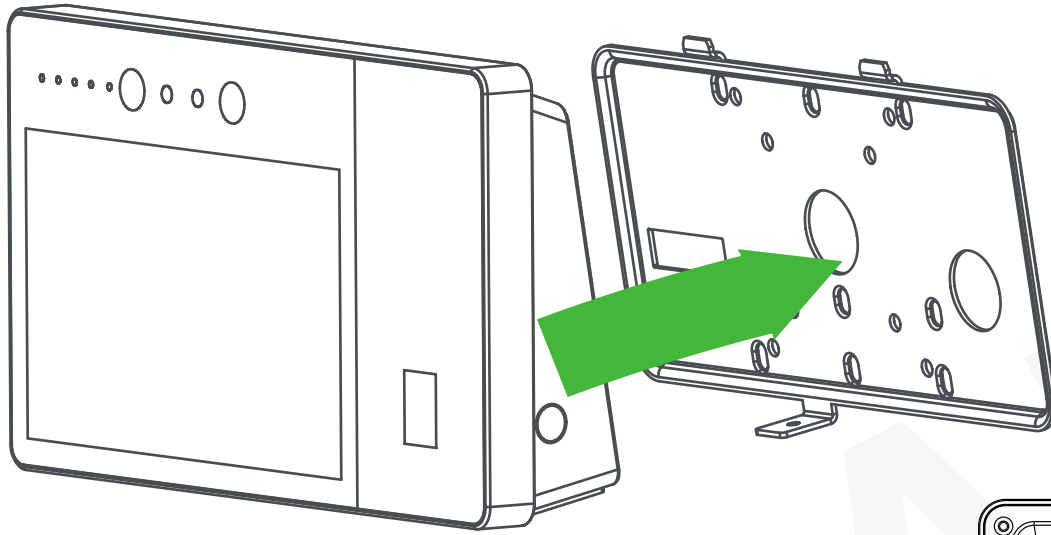
Drill 1/4 inch holes and insert plastic anchors flush with the wall surface

Fixing Mounting Plate on wall

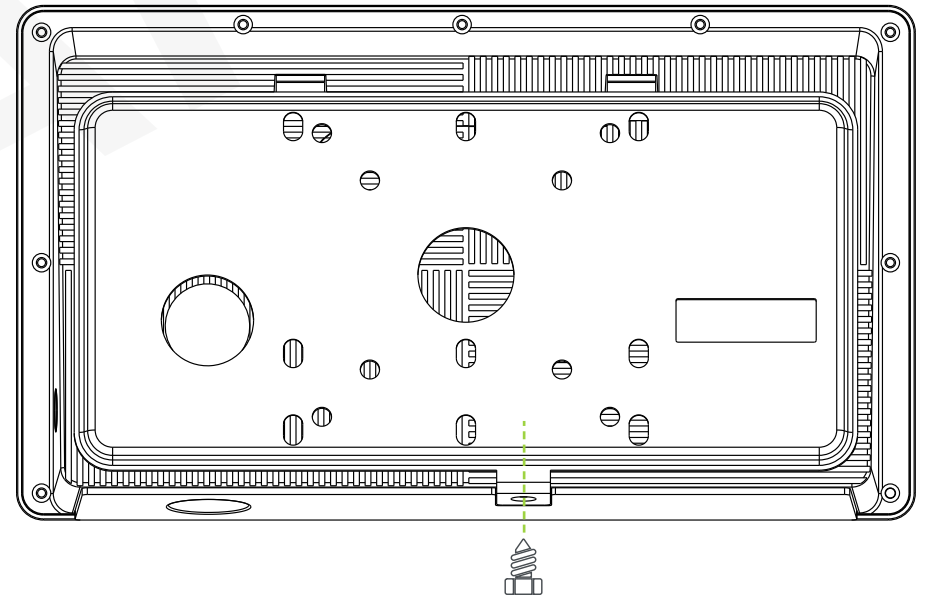


1. Align and hang the Ultima 7P mounting plate on to the wall
2. Fasten it with 6 screws to secure it on the wall

Attaching Terminal with Mounting Plate



1. Align the back of the device with the installed mounting plate on the wall
2. Slide the device downward until it clicks into place
3. Fix the device with the plate using small screw as shown
4. Check that it's firmly secured before connecting any cables



Installation

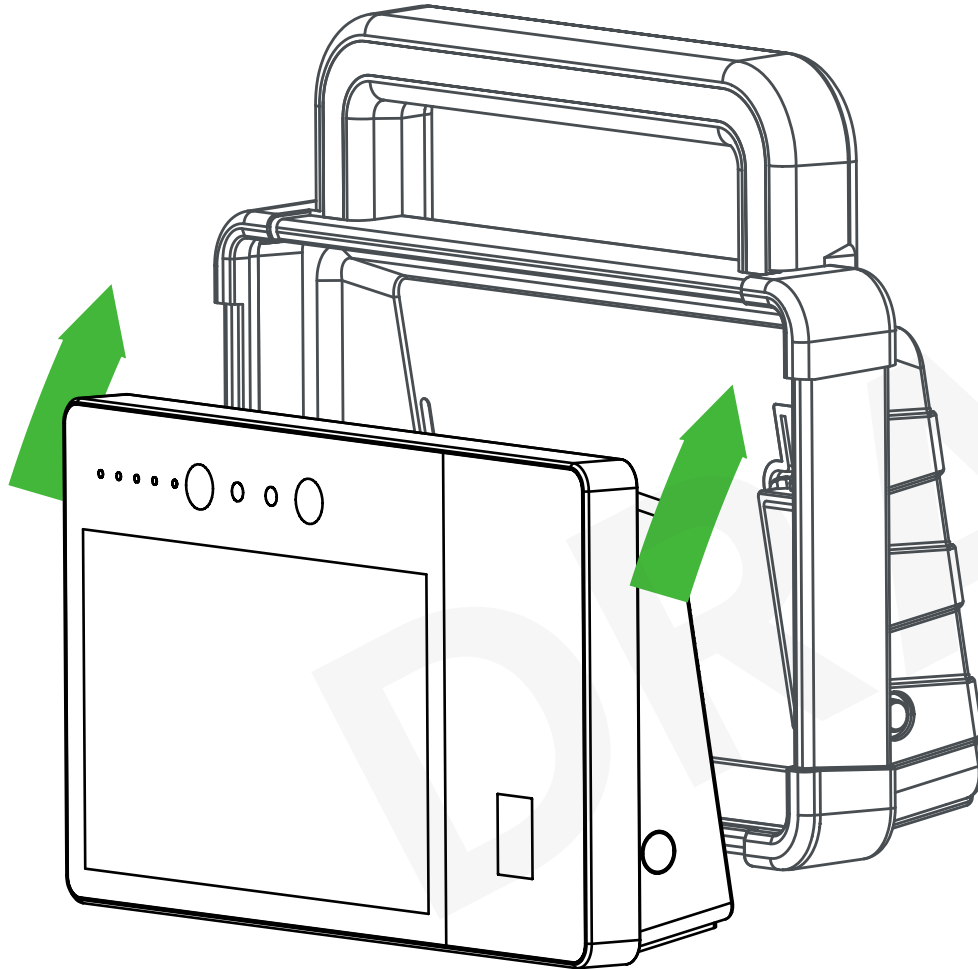
With Rubber Casing

Inspect the Rubber Casing



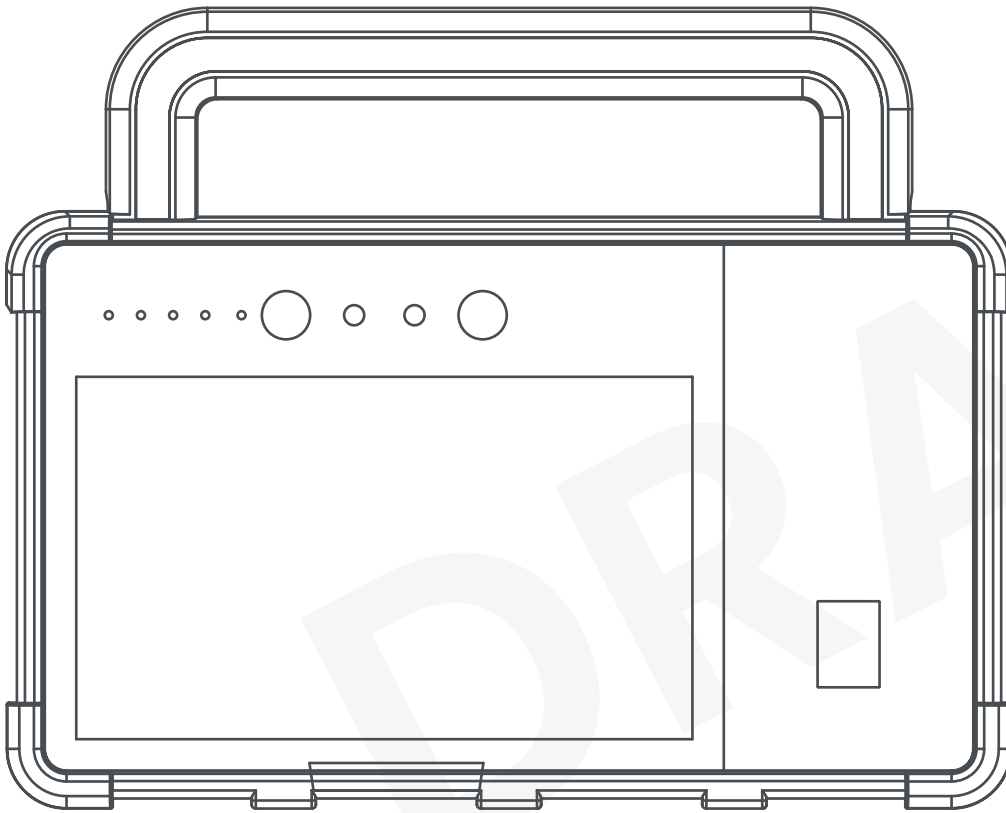
1. Check the orientation of the rubber casing
2. Identify the front face, port openings (for power, Ethernet, etc.) and side button cutouts
3. Make sure the casing is clean and flexible, with no blockages in the openings

Insert the Ultima 7P into the Casing

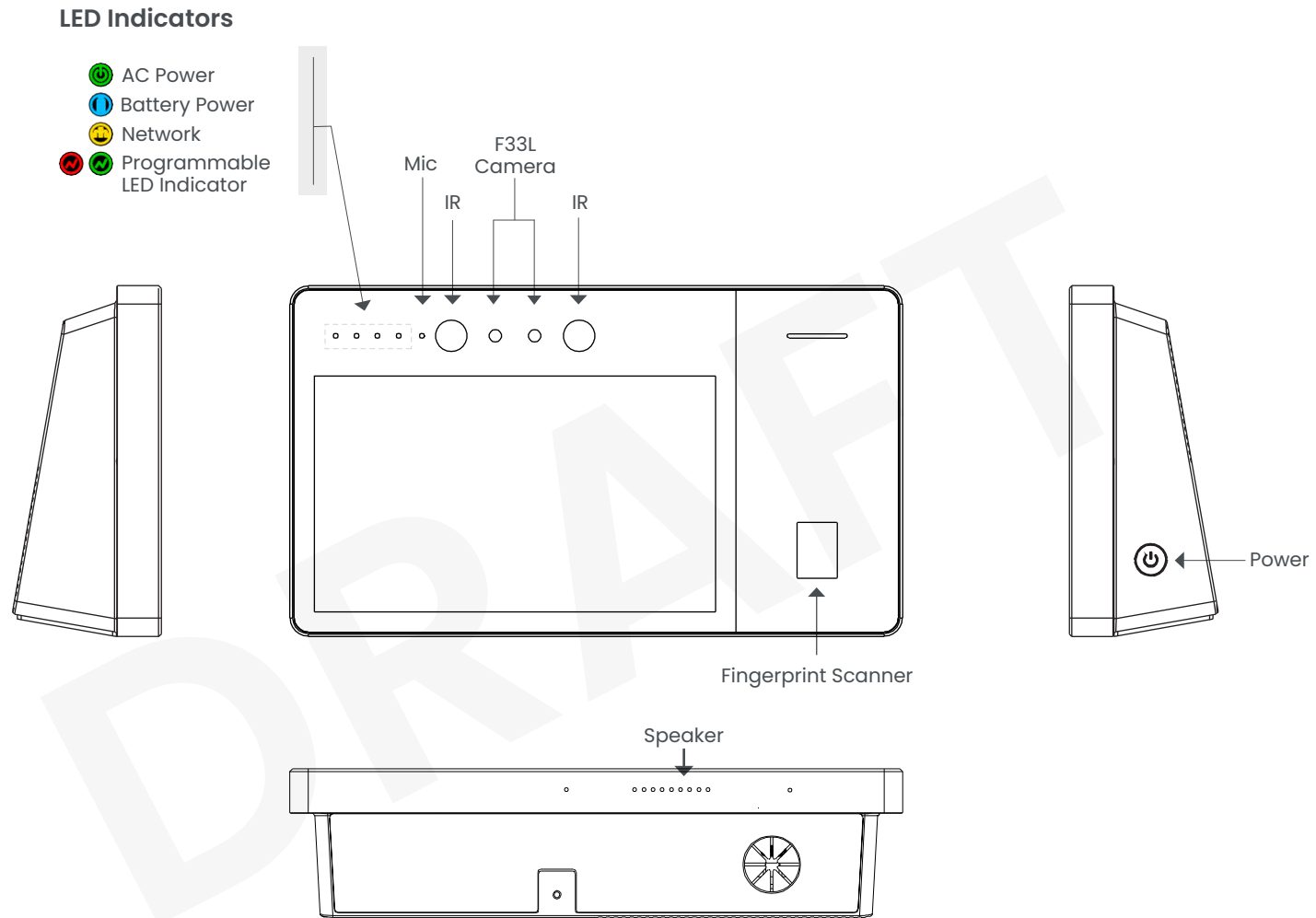


1. Hold the Ultima 7P with the screen facing you
2. Align the bottom of the device with the bottom opening of the casing
3. Gently slide or push the device into the casing from the top, starting at one end
4. Use even pressure on both sides to avoid twisting or forcing it in

Tip: If the fit is tight, slightly stretch the casing edges outward as you insert the device.



1. Once inserted, ensure all side ports, camera and speaker are properly aligned with the casing cutouts
2. Press around the edges to ensure the device is fully seated inside the casing
3. Check that the casing wraps snugly around the device without gaps or sagging

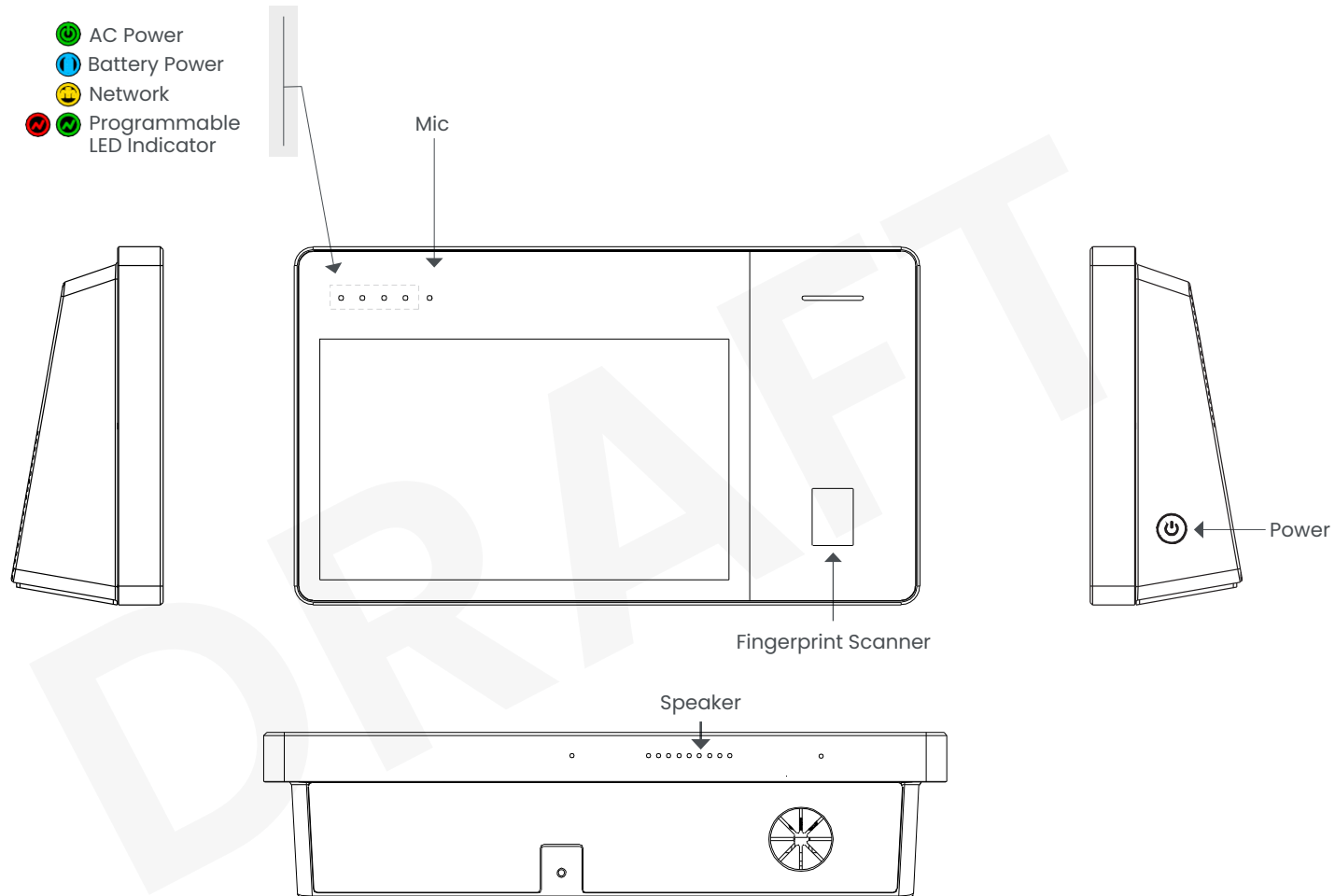


Ultima 7P with F33L Camera + Fingerprint Scanner



LED Indicators

- AC Power
- Battery Power
- Network
- Programmable LED Indicator

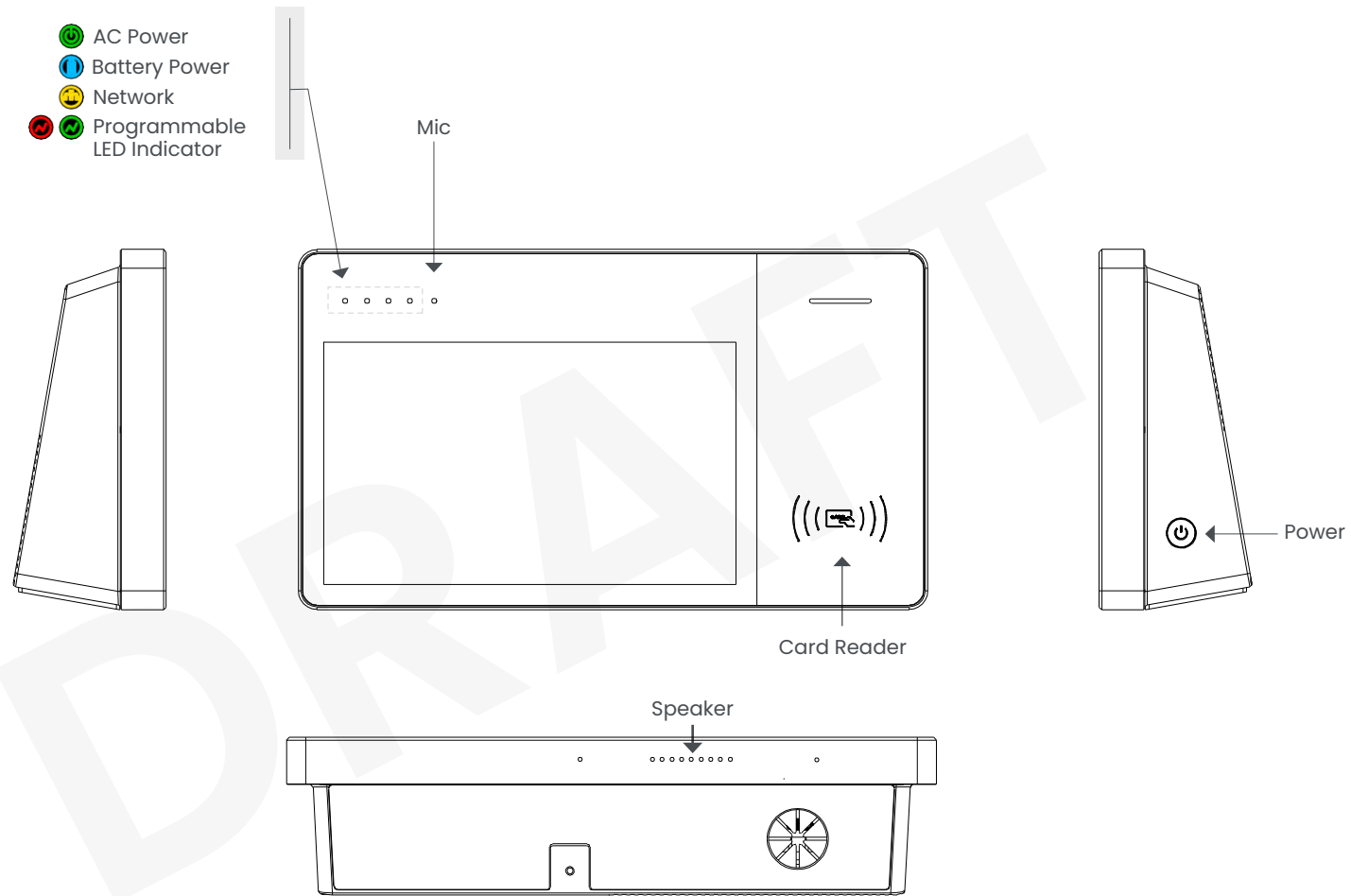


Ultima 7P with No Camera + Fingerprint Scanner

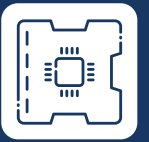


LED Indicators

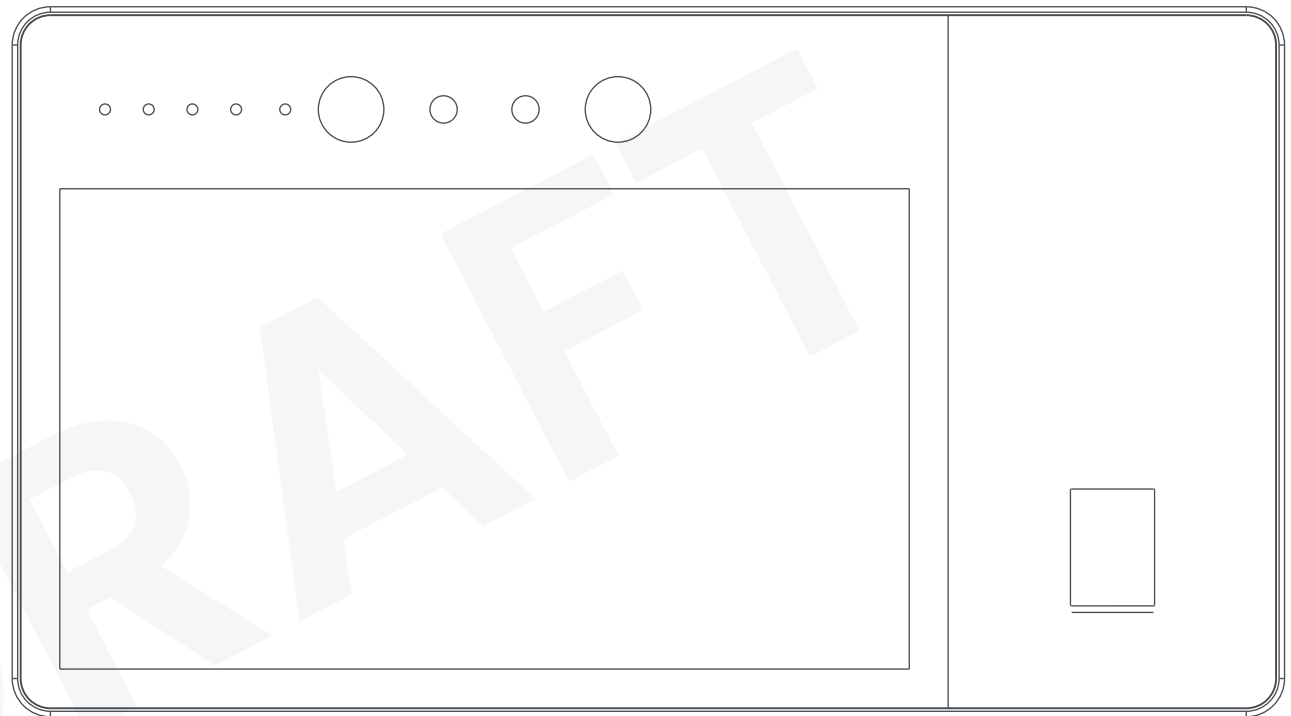
- AC Power
- Battery Power
- Network
- Programmable LED Indicator



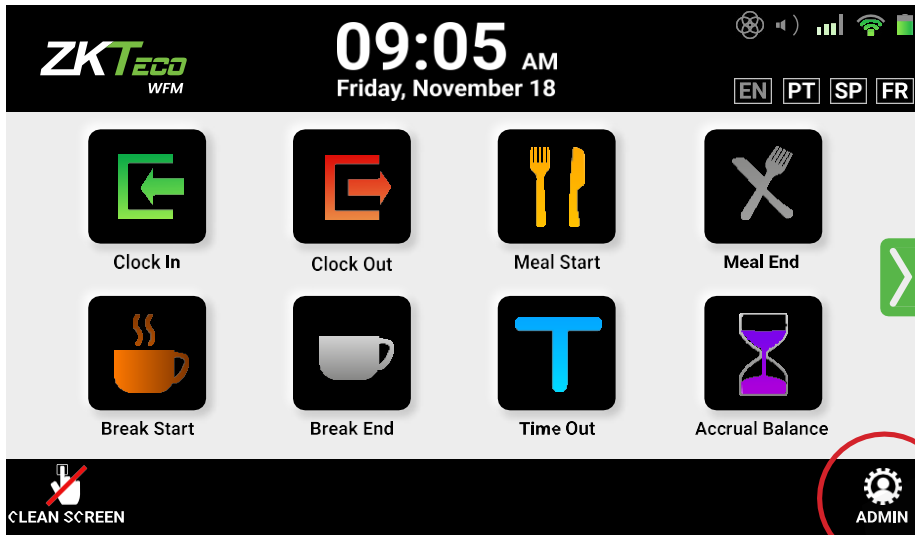
Ultima 7P with No Camera + Card Reader



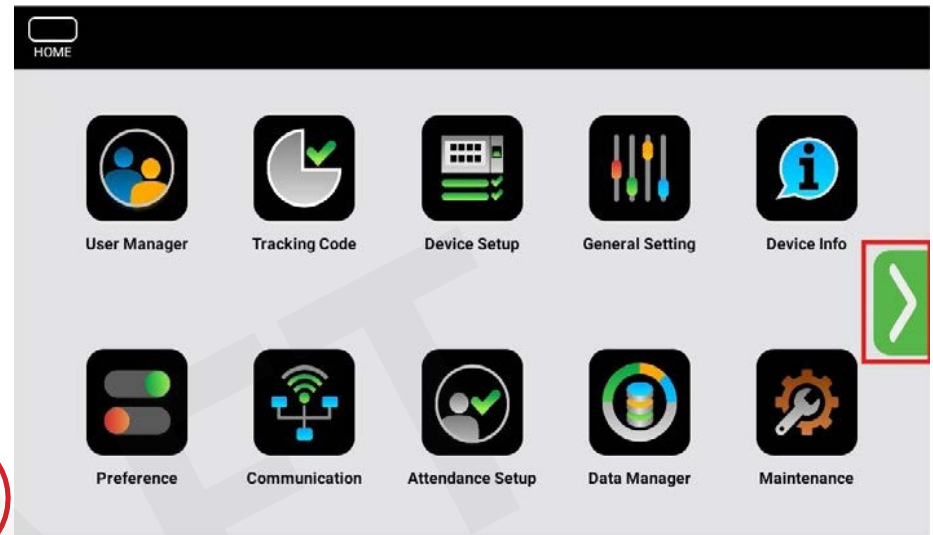
1. Testing Display & Touch
2. Testing Voice
3. Testing Fingerprint
4. Testing RFID



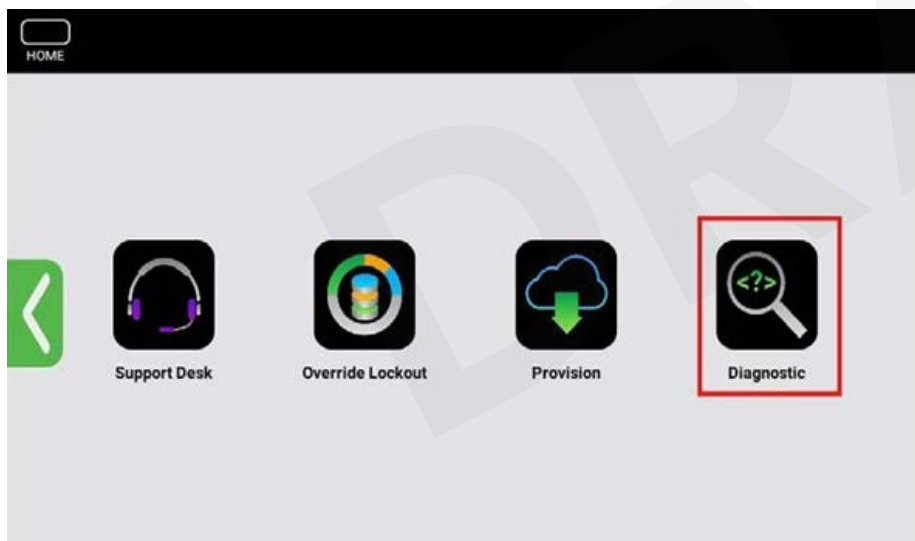
D - Display & Touch | **V** - Voice | **F** - Fingerprint | **R** - RFID



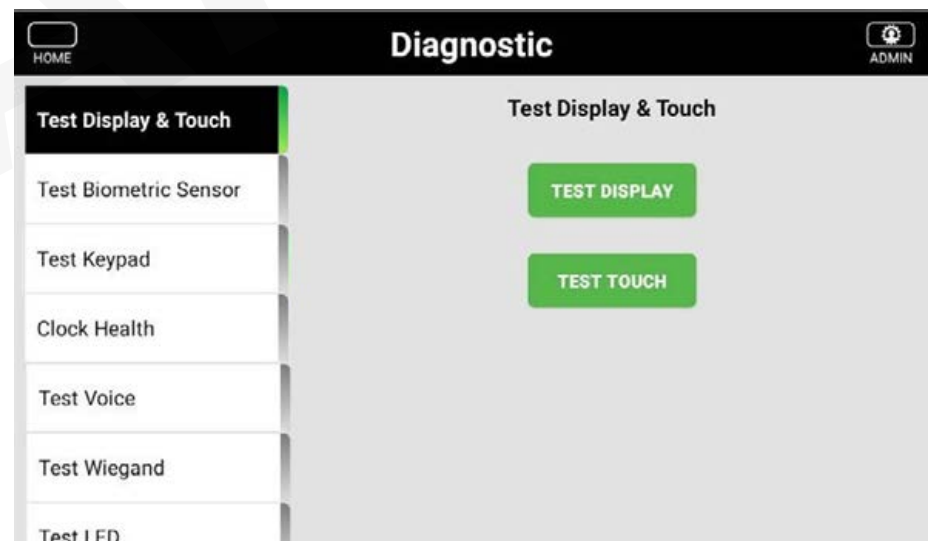
Press Admin  to login



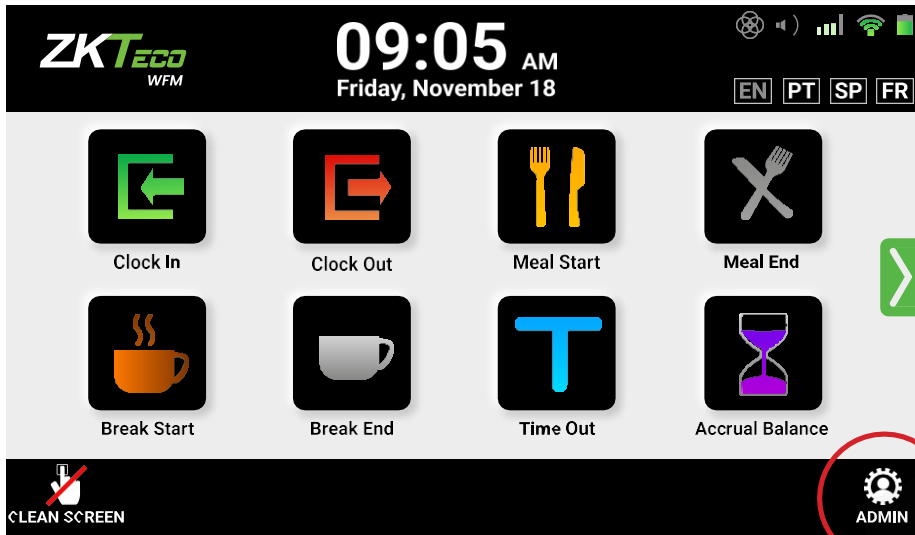
Press next screen >



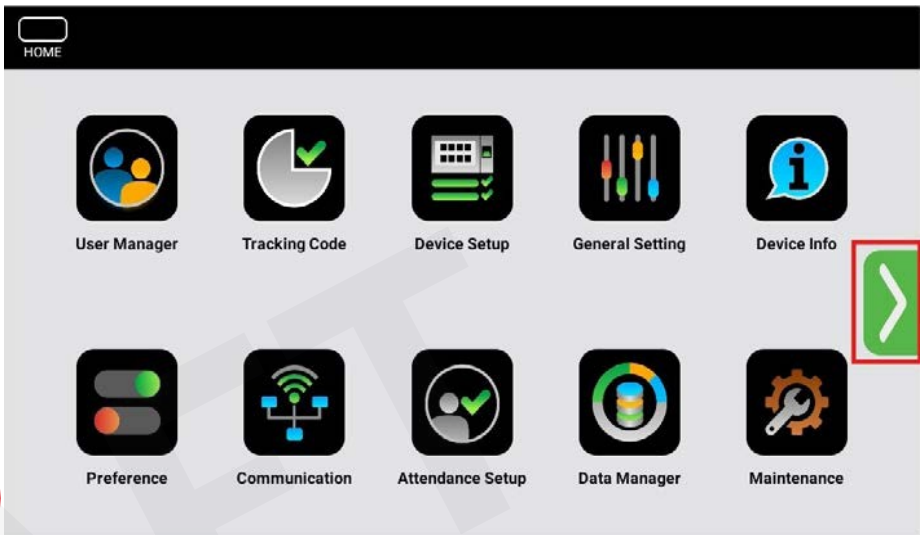
Press Diagnostic



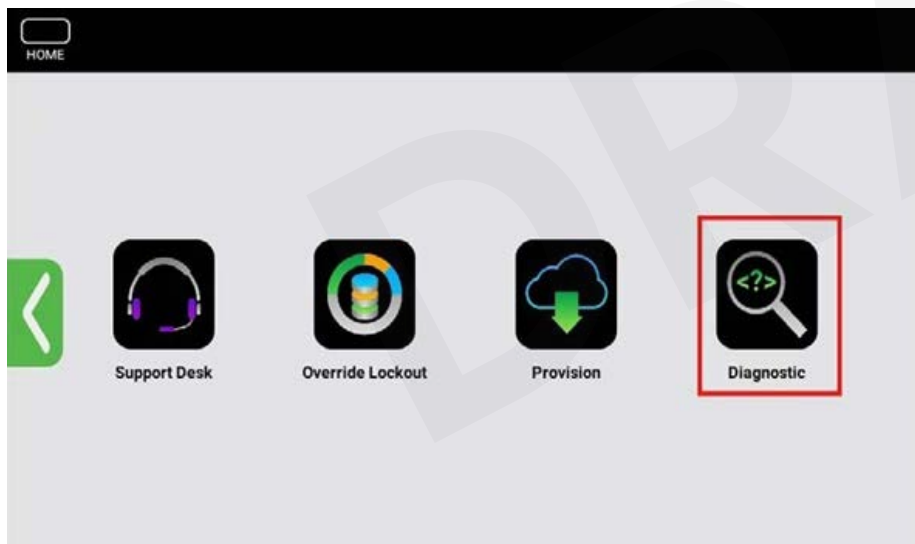
Test Display & Touch



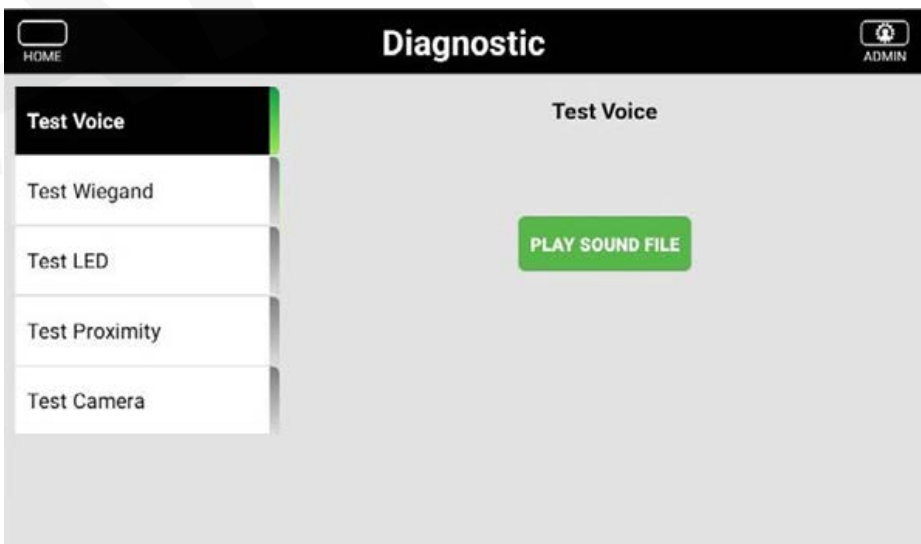
Press Admin to login



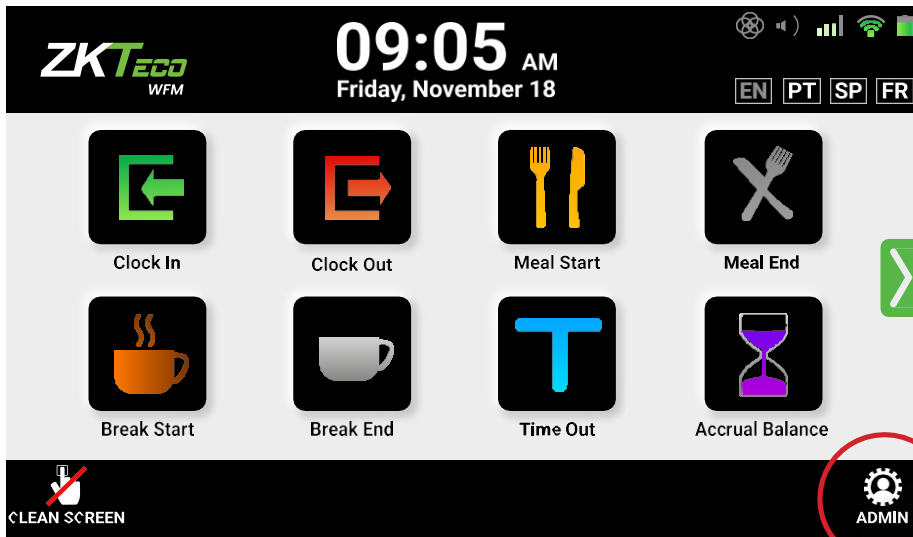
Press next screen >



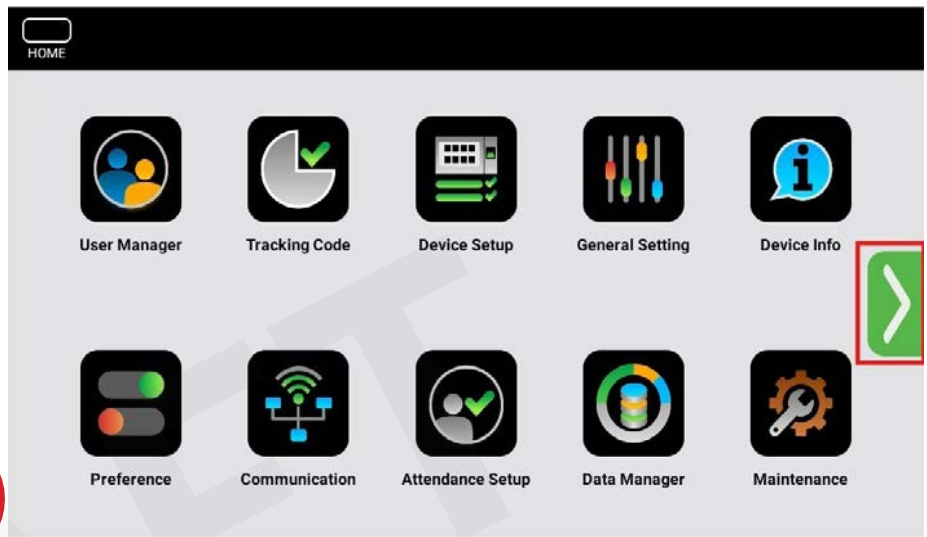
Press Diagnostic



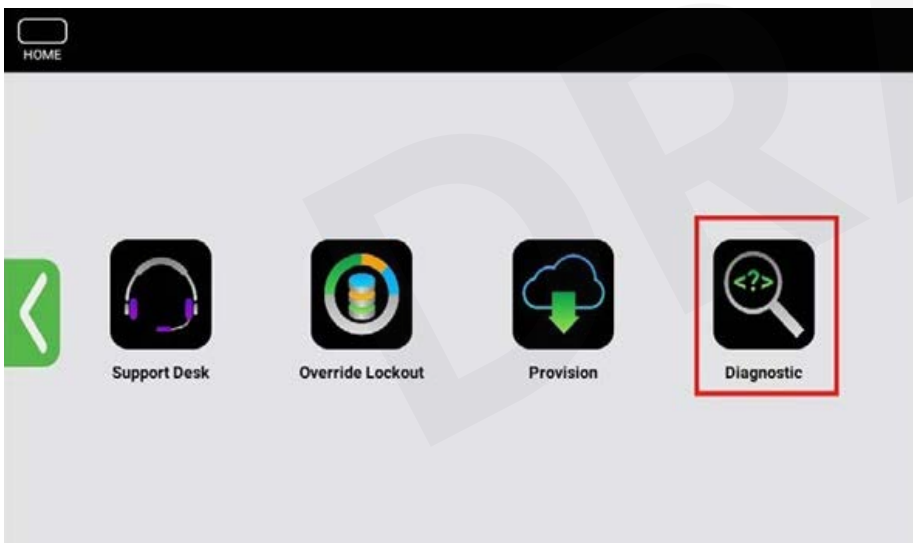
Test Voice



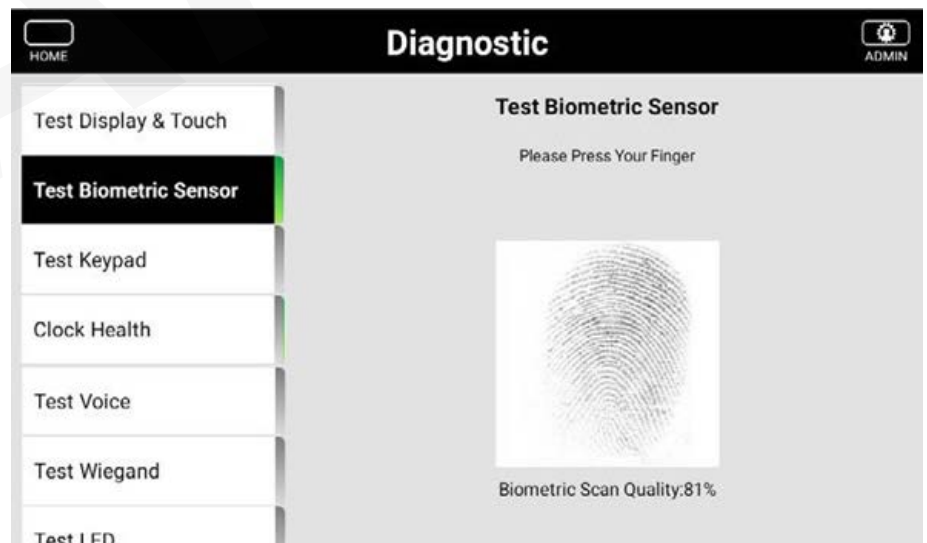
Press Admin  to login



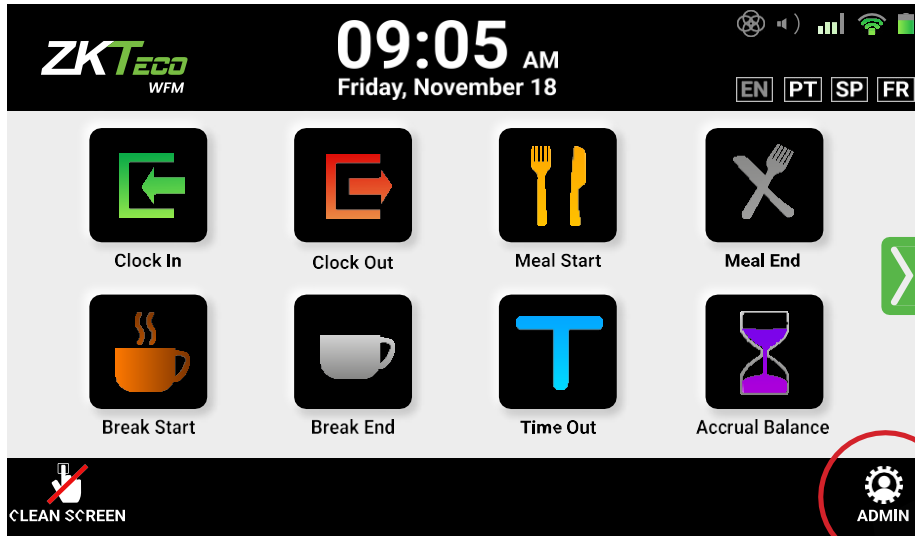
Press next screen 



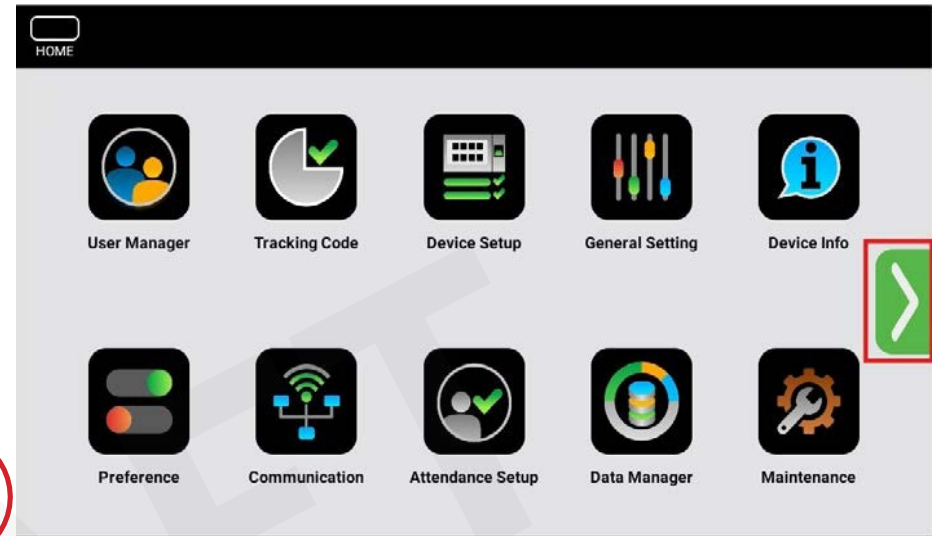
Press Diagnostic



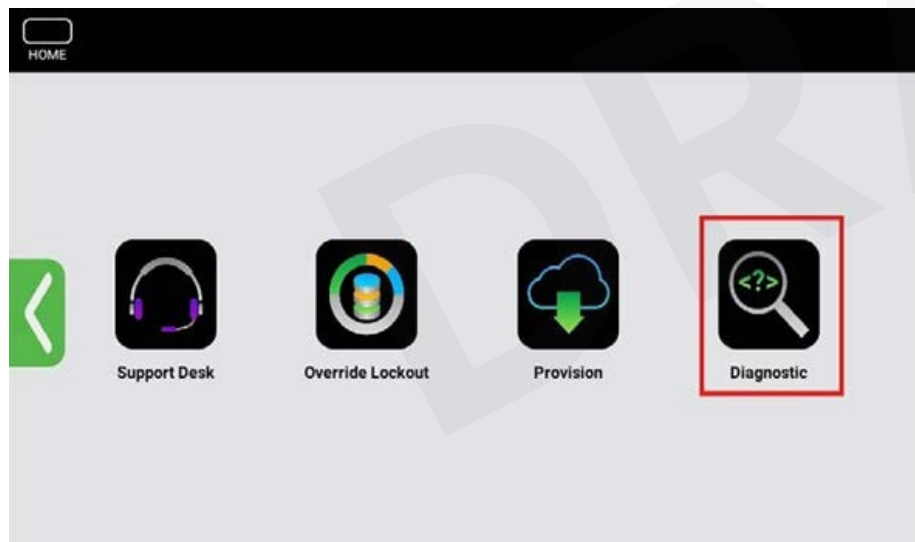
Test Biometric Sensor



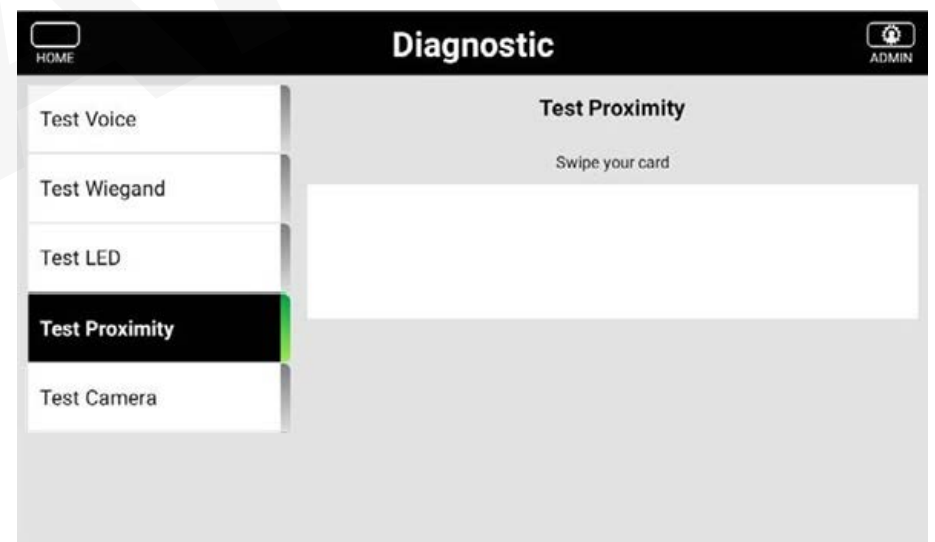
Press Admin  to login



Press next screen 



Press Diagnostic



Test Proximity



Issue	Probable Causes	Corrective Action
There is no power in the Ultima 7P	If the Ultima 7P 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 Ultima 7P 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 Ultima 7P 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 Ultima 7P is powered using Ethernet cable, there is an issue with the network	• Check the Ethernet connection at the Ultima 7P 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 Ultima 7P or the host PC	Communication settings are incorrect either at the Ultima 7P or the host PC
	Communications cable is connected incorrectly	Ensure that all communications cables are routed correctly and connected properly



Part I

Warning about battery

- Replacement of a battery with an incorrect type that can defeat a safeguard. Therefore, please make sure that the device uses alkaline button cell batteries
- Disposal of a battery into fire or a hot oven, or mechanically crushing or cutting of a battery, that can result in an explosion
- A battery subjected to extremely low air pressure that may result in an explosion or the leakage of flammable liquid or gas

Part II

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: 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

Operation in the band 5150–5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems.

RF exposure information and statement

This device meets government requirements for exposure to radio waves.

To maintain compliance with FCC's RF exposure guidelines, this equipment should be installed and operated with minimum distance of 20cm between the radiator and your body. Use only the supplied antenna.



ZKTECO WFM declares that this product is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU.

The wireless operation frequency:

Frequency bands	Maximum output power
Wi-Fi 2.4G: 2412-2472MHz	15.74dBm
Wi-Fi 5G: 5150-5725MHz	15.29dBm
Wi-Fi 5.8G: 5725-5850MHz	10.31dBm
LTE Band7/41:2500-2570MHz, 2496-2690MHz	25dBm
13.56MHz	-21.88dBuA/m @10m
125kHz	-17.14dBuA/m @10m
GPS receiver:1559-1610MHz	

Restrictions in the 5 GHz band

According to Article 10 (10) of Directive 2014/53/EU, the packaging shows that this radio equipment will be subject to some restrictions when placed on the market in Belgium (BE), Bulgaria (BG), the Czech Republic (CZ), Denmark (DK), Germany (DE), Estonia (EE), Ireland (IE), Greece (EL), Spain (ES), France (FR), Croatia (HR), Italy (IT), Cyprus (CY), Latvia (LV), Lithuania (LT), Luxembourg (LU), Hungary (HU), Malta (MT), Netherlands (NL), Austria (AT), Poland (PL), Portugal (PT), Romania (RO), Slovenia (SI), Slovakia (SK), Finland (FI), Sweden

(SE), the United Kingdom (UK), Turkey (TR), Norway (NO), Switzerland (CH), Iceland (IS) and Liechtenstein (LI).
The WLAN function for this device is restricted to indoor use only when operating in the 5150 to 5350 MHz frequency range.

	AT	BE	BG	HR	CY	CZ	DK
	EE	FI	FR	DE	EL	HU	IE
	IT	LV	LT	LU	MT	NL	PL
	PT	RO	SK	SI	ES	SE	UK(NI)



Fingerprint Enrollment
Matching Information



Datasheet



Privacy Concerns

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