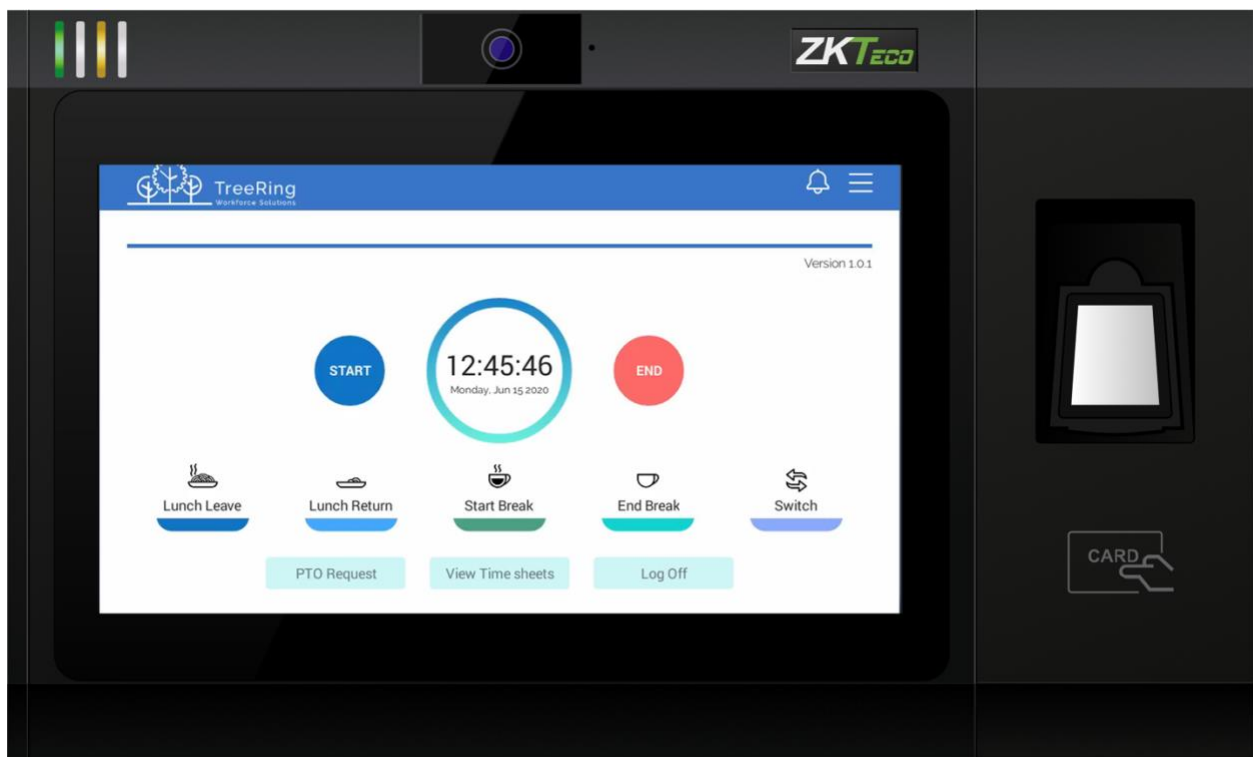


TreeRing
Workforce Solutions

Administrator Manual

Ultima Time Clock



Enterprise
Time, Attendance and
Workforce Management

July 2022 | Version 1.3.7

Notices

© 2022 TreeRing Workforce Solutions, Inc. All Rights Reserved.

TreeRing Workforce Solutions, Inc., 4780 Ashford Dunwoody Rd, Suite A-145, Atlanta, GA, 30338
TreeRing Time, TreeRing HRIS, TreeRing Payroll and TreeRing Visitor are either registered trademarks or trademarks of TreeRing Workforce Solutions, Inc. in the United States and/or other countries.

Information in this document is subject to change without notice. Without limiting the rights under copyright, no part of this document may be reproduced, in whole or in part, without the express written permission of TreeRing Workforce Solutions, Inc.

Unless otherwise noted, the example companies, organizations, and employees depicted herein are fictitious and no association with any real company, organization, or person is intended or should be inferred.

TreeRing Workforce Solutions, Inc. makes no representation or warranty, either expressed or implied, by or with respect to the TreeRing Time software or anything in this manual or reports created in, but not limited to warranties or merchantability and fitness for a particular purpose.

Contents

- Ultima Configuration Options 1
- TreeRing Time for Ultima 2
- Setting up TimeClock Server URL and Company Code 3
- Adding Your Device to TimeClock Server 9 5
- Adding a Time Clock Schedule 9
- Viewing the Activity Page 11
- Wireless Configuration 12
- Wired Connection 14
- Adding Users on Ultima Time Clocks 15
- Tips to Punch In/Out 19
- Entering Time 19
- Switching Organizational Levels during a Shift 22
- Entering a PTO Request 23
- Viewing Timesheet 26
- Entering Time in Swipe and Go 27
- Updating Clock Firmware 28
- Sending Punch Logs to Support 31
- Installing Physical Clock 32
- Packing List 32
- Required Tools 33
- Installation Environment 33
- Planning 34
- Prepare the location 34
- Marking Holes 35
- Drilling holes and fixing plastic anchors and upper screws 36
- Opening Ultima front cover 36
- Mounting on wall 37
- Connecting AC power supply 38
- Connecting Ethernet cable 39
- Connecting AC Power 40
- Connecting internal battery pack 41
- External plug and indicators 42
- Troubleshooting 43
- Getting Assistance 43

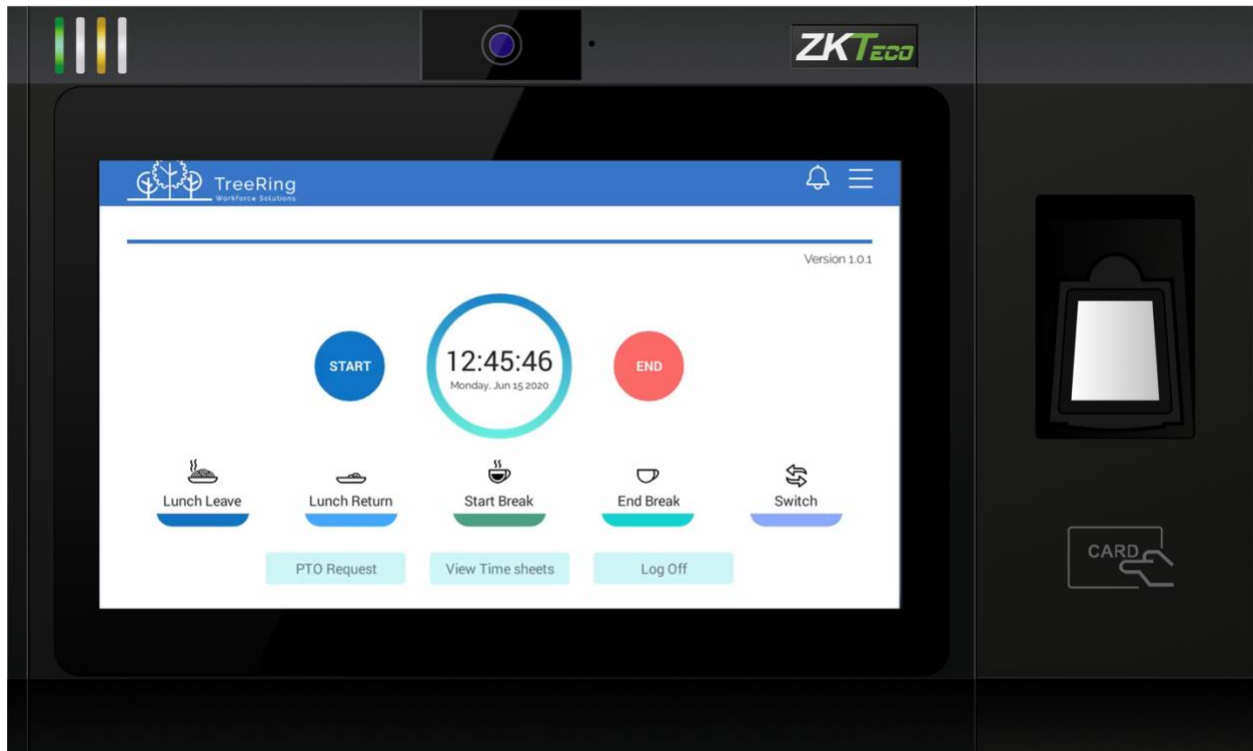
Ultima Configuration Options



The modules combination can be as follows:

- Base+ Fingerprint & RFID module;
- Base+ RFID module;
- Base+ Barcode/Magnetic module;
- Base+ Fingerprint & RFID module+ Barcode/Magnetic module;
- Base+ RFID module+ Barcode/Magnetic module.
- Internal Relay Module
- Internal PoE Module

TreeRing Time for Ultima



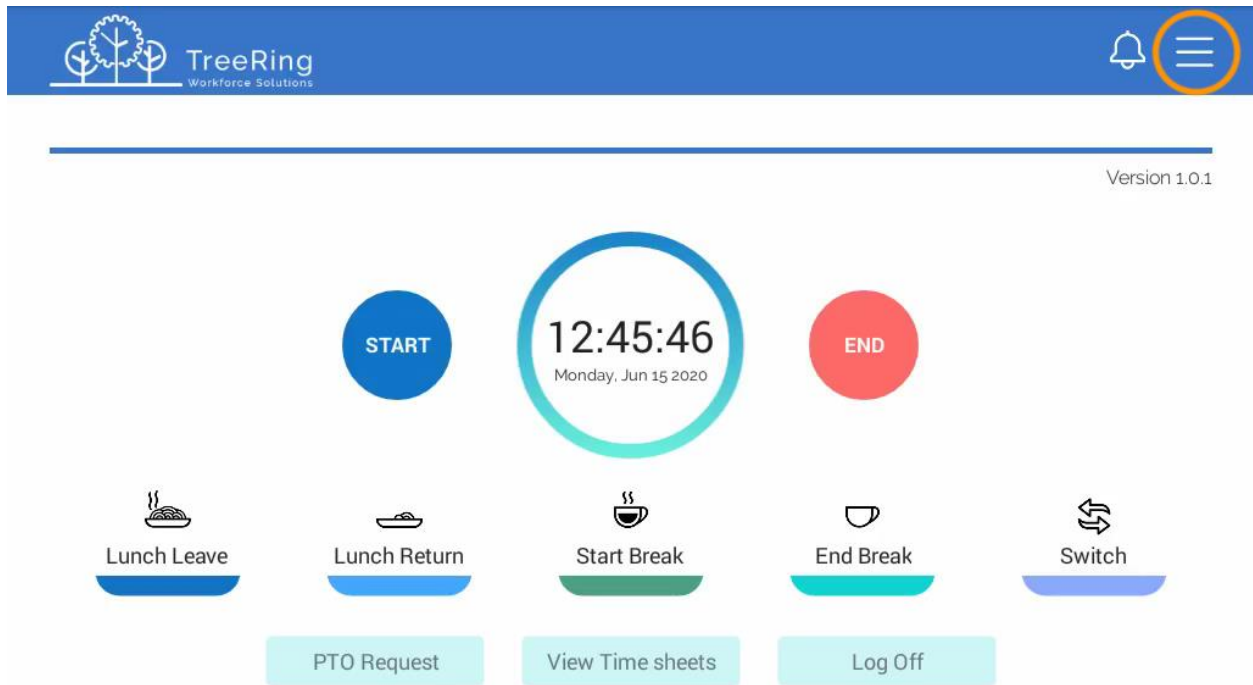
This is a multi-functional Android based fingerprint terminal with an elegant design, a 7” TFT touch display, and offering unparalleled performance using an advanced algorithm for reliability, precision and excellent matching speed. The Ultima Clock features the fastest commercial-based fingerprint matching algorithm and high performance, high-image quality optical fingerprint sensor. The 7” TFT can display more information vividly, including reports, fingerprint image, and verification results. Start: Press to begin a shift. You may be prompted for your organizational level and activity.

- End: Press to end your shift. You may be asked for the number of hours you worked.
- Lunch Leave: Press to take your lunch break.
- Lunch Return: Press when returning from lunch.
Note: If a Minimum Lunch Time is configured for your organization, and you try to punch in for a Lunch Return before that time is up, you will be prevented from punching back in until the Minimum Lunch Time has passed.
- Start Break: Press when taking a break.
- End break: Press when returning from your break.
- Switch: You can switch organizational levels during a shift when the department, task, pay, or benefits change.
- Language: Press to select an alternate language.
- View Schedule: Displays your schedule for the current pay period.
- PTO Request: You can use Ultima to enter a paid time off (PTO) request.
- View Time Sheet: Displays your time sheet for the current pay period.
- Attestation Question
- More Options: Used to configure users (admin only), connection settings, logs, clear data and log off.

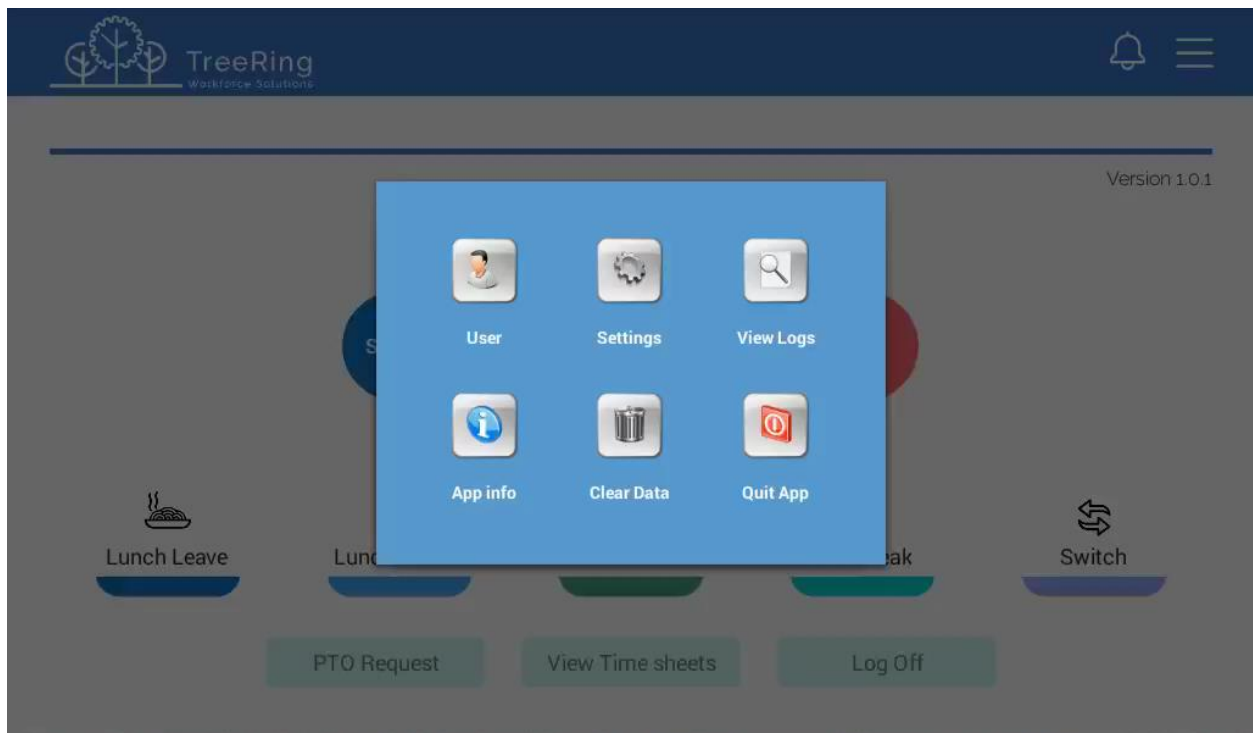
Setting up TimeClock Server URL and Company Code

Before employees can use the device, you will need to configure the connection to the TimeClock Server.

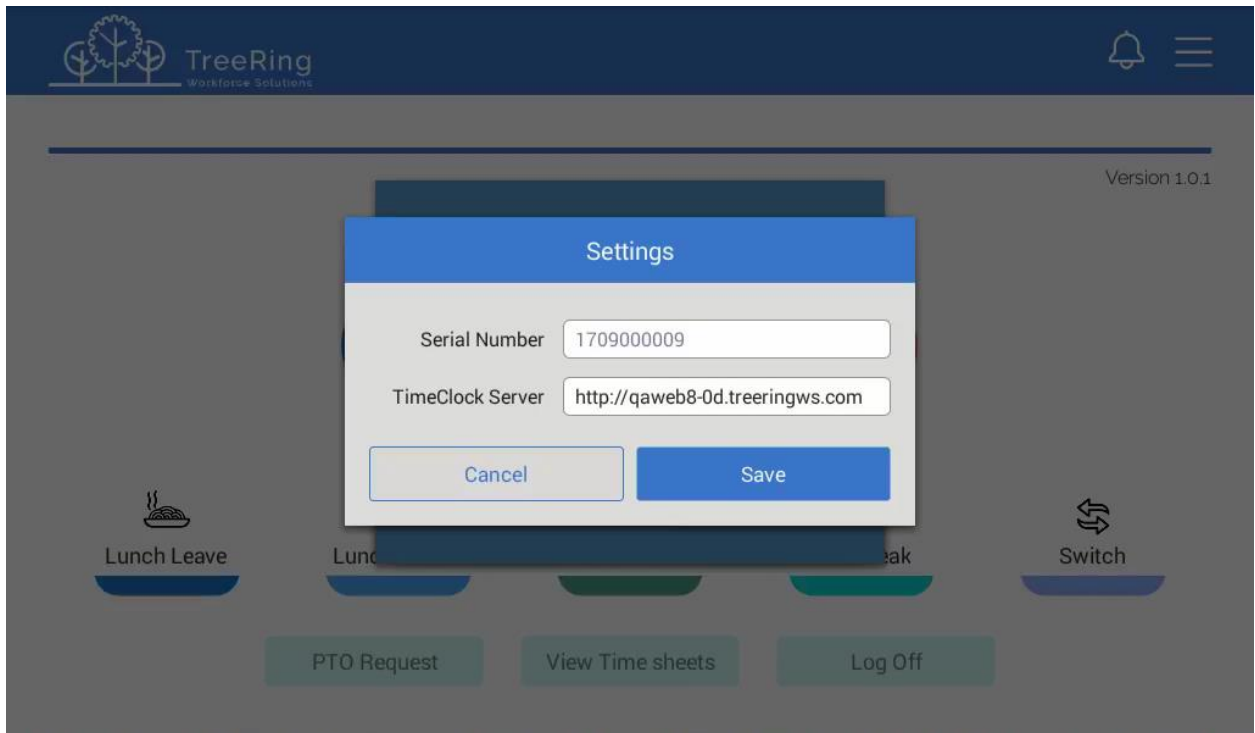
1. In the Ultima device, press the **More Options** button.



2. Press the **Settings** button.



3. Enter the TimeClock Server URL and Company Code.
Please contact support to obtain the TimeClock Server URL and Company Code.



4. Press **Save**.

Adding Your Device to TimeClock Server 9

The administrator will need to add the device to TimeClock Server 9. This will provide additional security and ensure the proper punch types are available to the employee. To add a device:

The screenshot shows the 'Time Clock Server 9' web application interface. The top navigation bar includes links for Edits, Employees, Security, Reports, Dashboard, Configuration, Payroll Routines, eTimeClock, and eTimeClock 9. The main header is 'Time Clock Server 9'. On the left, there is a sidebar with 'Clock Server' and 'Android Clocks'. The main content area is titled 'Details | Schedule | Levels | Activity'. The form contains the following fields and options:

- Serial Number * (text input)
- Description (text input)
- Active (checkbox)
- Clock Model (text input)
- Model * (dropdown menu)
- Authentication (text input)
- Authentication Mode * (dropdown menu)
- Last Notification (text input, value: None registered)
- Clock Timezone (text input, value: Timezone * (UTC-05:00) Eastern Time (US & Canada))
- Configuration (checkboxes):
 - Use Validation Groups
 - Use Swipe and Go (checkbox) With Lunch (checkbox)
 - Enable Start/End (checkbox) Enable Switch (checkbox) Enable Break (checkbox) Enable Lunch (checkbox)
 - View PTOs (checkbox) View Schedules (checkbox) View Timesheet (checkbox) Attestation Questions (checkbox)
 - Require Photo (checkbox) Enforce Schedule (checkbox) Enforce Level Hierarchy Plan (checkbox)
 - Ask COVID attestation questions (checkbox)
 - Require Tip (checkbox)
 - Require Quantity (checkbox)
- Tip Prompt English (text input)
- Tip Prompt Spanish (text input)
- Quantity Prompt English (text input)
- Quantity Prompt Spanish (text input)
- Duplicated Punch Tolerance 0 (text input)
- Minimum Lunch 0 (text input)
- Communication Threshold: 30 (text input) minutes

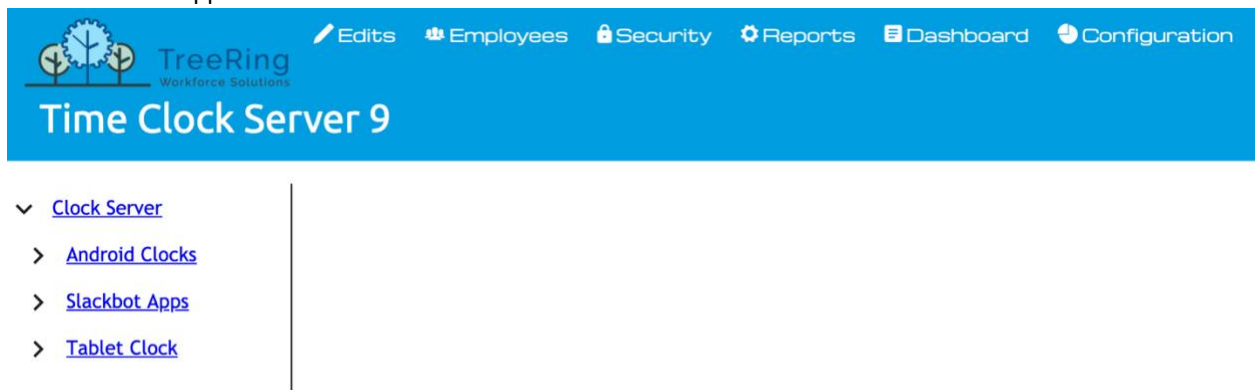
Buttons at the bottom: Cancel, Save, Delete Device.

The Details Tab displays.

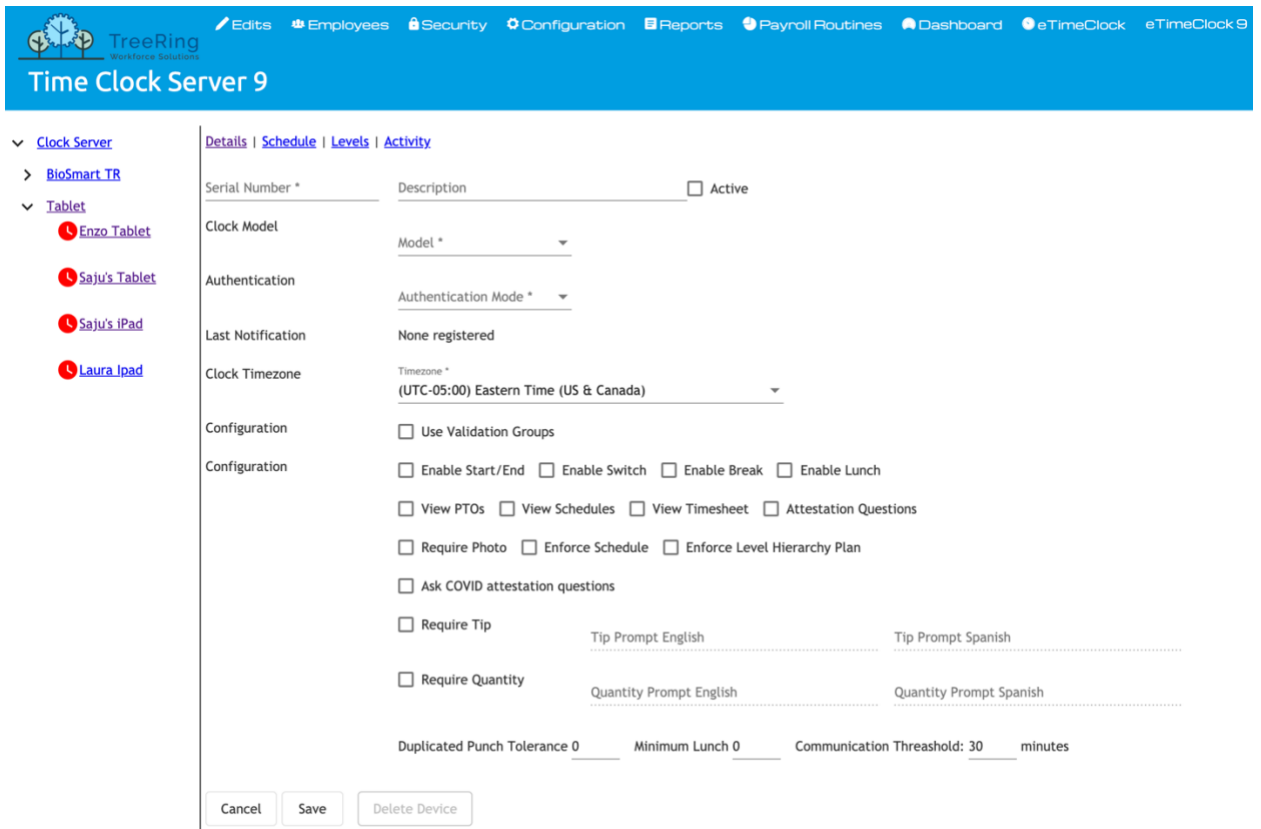
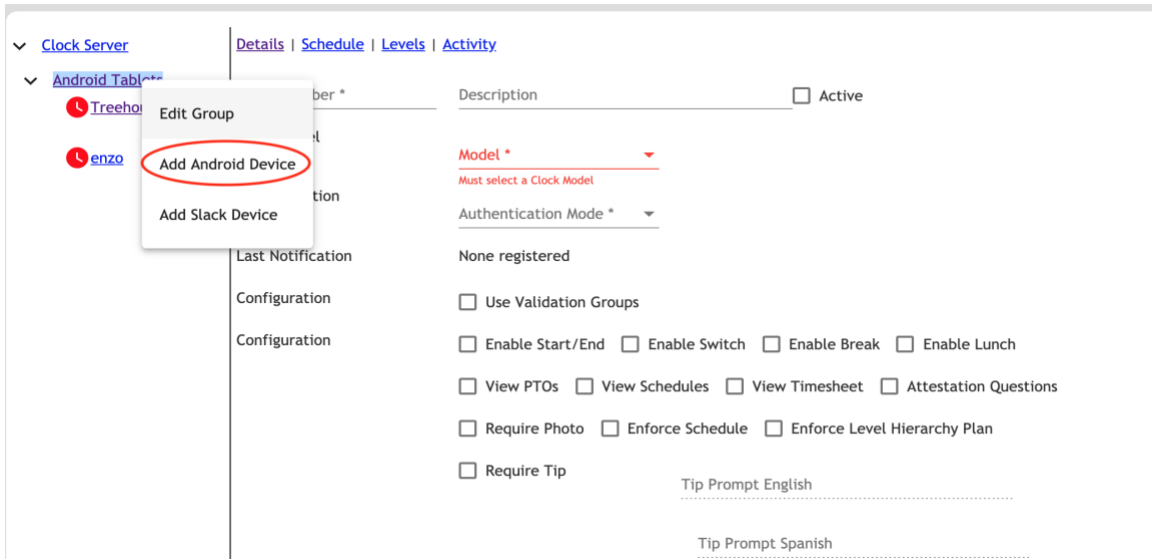
- Serial Number: Enter serial number that is shown on clock / tablet setup screen.
- Description: Enter appropriate description to identify this clock. For example, description can be the location of clock.
- Active: Check box to indicate whether a clock is active or not. Unchecking this box will prevent the clock from communicating with server.
- Model: Select appropriate clock modem from drop down list
- Authentication Mode: Select appropriate clock authentication mode from drop list. Authentication mode varies depends on clock model.
- Clock Time Zone: Select the time zone where this clock is located.
- Validation Groups:
 - Use Swipe and Go: Check box to enable Swipe and Go mode. Swipe and Go function is available to as In and Out only or with Lunch as an option.
 - Enable Start / End: Check box to enable start and end punches on this clock
 - Enable Switch: Check box to enable switch function. This function is used to switch level codes during work day.
 - Enable Break: Check box to enable break punches on this clock.
 - Enable Lunch: Check box to enable lunch punches on this clock.

- View PTOs: Check box to enable the ability to view PTOs
- View Schedules: Check box to enable the ability to view schedules
- View Timesheet: Check box to enable the ability to view timesheet
- Attestation Questions: Check box to enable break and safety attestation questions
- Require Photo: Check box to require clock to take a photo of employee at start and end punch
- Enforce Schedule: Check box to enforce schedule
- Enforce Level Hierarchy Plan: Check box to enable level hierarchy. Checking this box will cause all levels entered at a clock to be validated using level hierarchy.
- Ask COVID attestation Questions: Check box to enable health attestation questions
- Require Tip: Check box to require employees to enter tip amount
- Require Quantity: Check box to require employees to enter quantity
- Duplicate Punch Tolerance: Enter minimum time before clock should accept a punch from same employee
- Minimum Lunch: Enter minimum lunch requirement
- Communication Threshold: Enter minimum time system should wait for pin from clock. Default setting is 30 minutes

1. In TreeRing Time top level menu, go to **Configuration > Time Clocks > TimeClock Server 9**.
A list of devices appears.



2. Right click on **Android Device** and select **Add Android Device**.
The Details Tab displays.



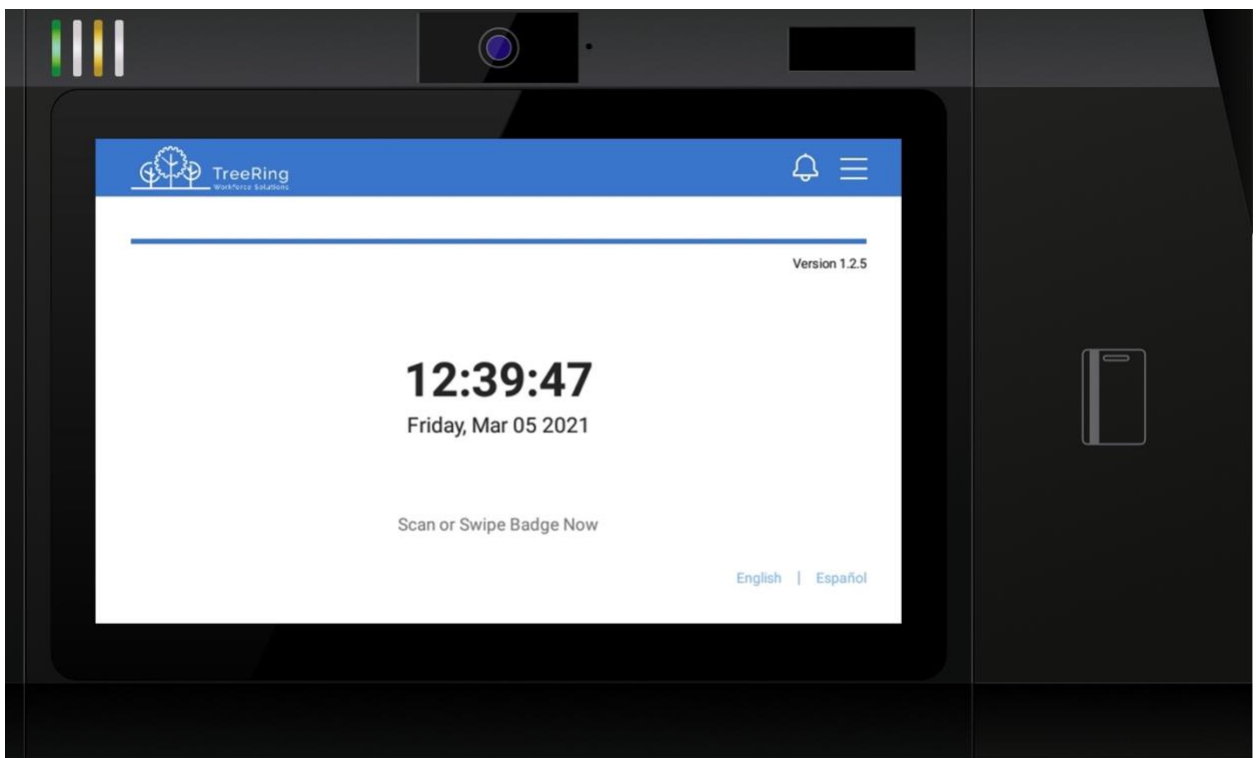
3. Enter the **Serial Number** (from your devices settings)
4. Enter **Description** (e.g. location of tablet)
5. Select the **Authentication Mode** from drop down list – Authentication Mode must match clock functionality

Authentication Mode	Description
Use Fingerprint Only	Fingerprint Only
Use Typed Card ID Only	Typed Card ID Only

Use Scanned Card ID and PIN	Scanned Card ID and PIN
Use Fingerprint or Scanned Card ID	Fingerprint or Scanned Card ID
Use Fingerprint or Scanned Card ID and PIN	Fingerprint or Scanned Card ID and PIN
Use Fingerprint and Typed Card ID	Fingerprint and Typed Card ID
Use Fingerprint and Scanned Card ID	Fingerprint and Scanned Card ID
Use Fingerprint and Scanned Card ID and PIN	Fingerprint and Scanned Card ID and PIN
Use Fingerprint and Typed Card ID and PIN	Fingerprint and Typed Card ID and PIN

6. Check if you are using **Validation** groups.
7. Check if you are using **Swipe and Go**. Note: Swipe and Go function is available to as In and Out only or with Lunch as an option. When Swipe and Go is selected clock screen changes to Swipe and Go mode – see image bellow

Swipe and Go Mode Display



8. Check all the punch types, scheduling, and level hierarchy you want the employee to use on their tablet.
9. Check if you want to display **Tips** or want the employee to enter **Quantities**.
10. Enter values for the **Duplicate Punch** tolerance or **Minimum Lunch break** duration.
11. Click **Save**.

Ring color around clock will change to blue green once clock is connected to server



Swipe and Go Mode

Adding a Time Clock Schedule

The next step in making your time clock ready is to create its schedule. The schedule works basically the same way for all time clocks.

TimeClock Server 9 utilizes the following events to communicate with the Kiosk App time clock:

Event Name	Purpose	Frequency
Send clock setup	Set up the device per the TCS configuration on details page	As required
Send level codes	Sends level codes details to clock. Check required levels on levels page.	As required and/or as a recurring event
Synchronize templates	Send employees and collected templates to device (non-employee templates per the company rules as with other devices)	Required before clock can be used

To add a schedule:

1. In TreeRing Time top level menu, go to **Configuration > Time Clocks > TimeClock Server 9**.

A list of devices appears.

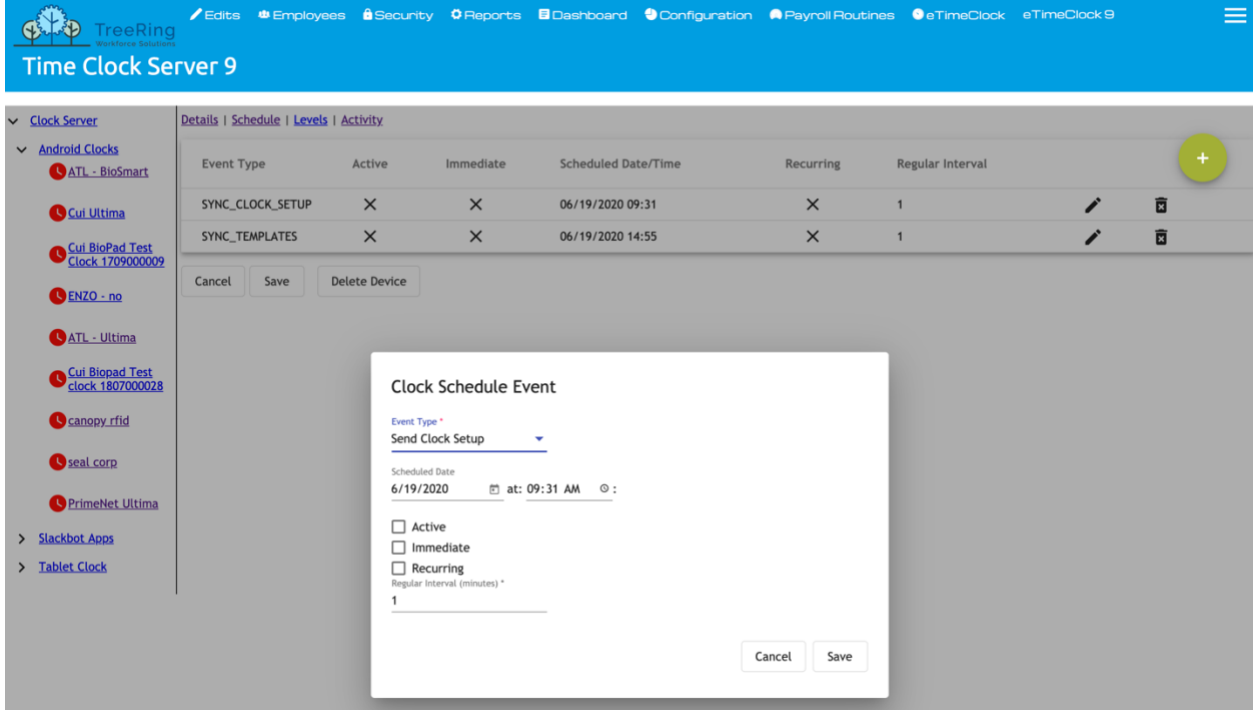
TreeRing Workforce Solutions

Edits Employees Security Reports Dashboard Configuration

Time Clock Server 9

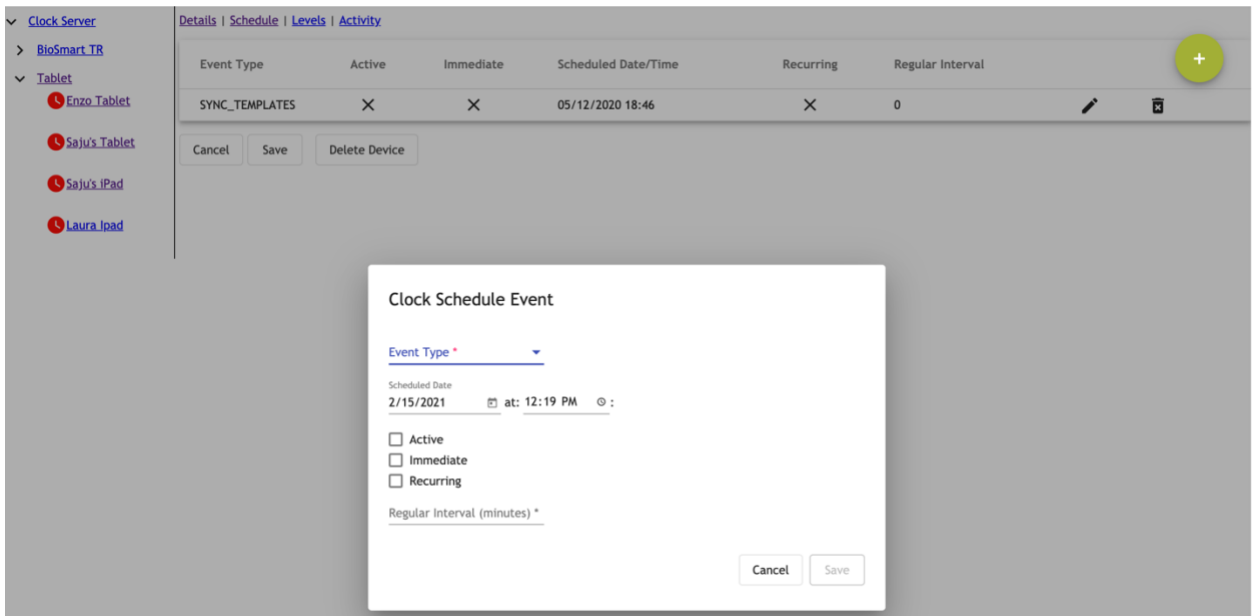
- ✓ [Clock Server](#)
 - > [Android Clocks](#)
 - > [Slackbot Apps](#)
 - > [Tablet Clock](#)

- Click the 'Green Plus' button at the top of the screen.



The Clock Schedule Event dialog displays

- Select the **Event Type** from the drop-down list. For 'Ultima' you need to setup 'Sync_Clock_Setup' and 'Sync_Template' events.



- Enter the following options:

- **Event** – This is the type of event that will occur. This is chosen from a drop-down menu.
- **Active** – Check box specifying whether an event is active. Checking this box means that the Time Clock Server will schedule the event to happen; leaving it unchecked means that Time Clock Server will ignore it.

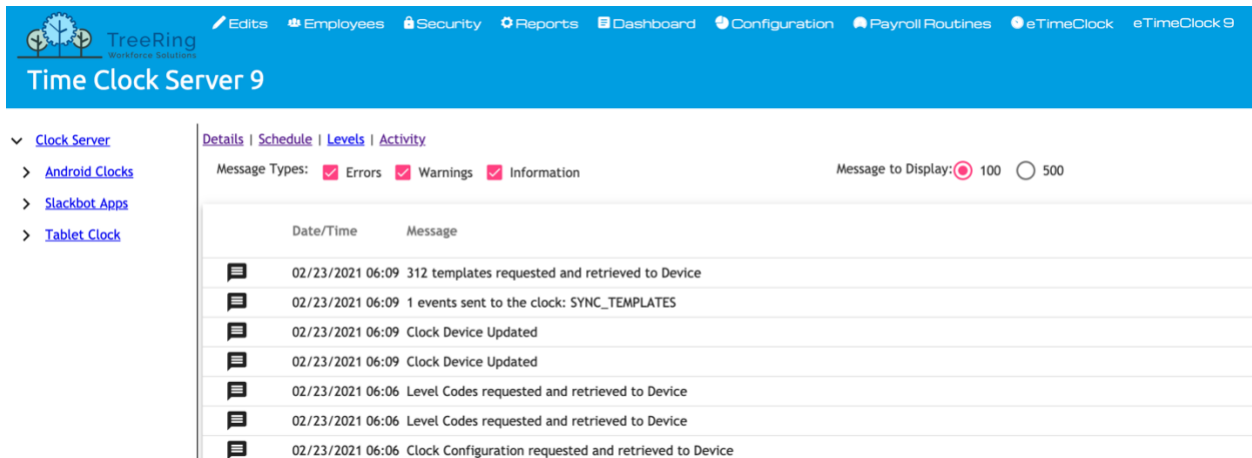
- **Immediate** – Check box specifying whether the event should occur immediately. If you leave this box unchecked, then the event will be scheduled to occur in the future if the Reoccurring check box is selected. If you check the **Immediate** check box, then the server will automatically uncheck it for you when the event completes.
 - **Schedule** – The next date and time the event is scheduled to occur.
 - **Reoccurring** – Check box whether you want this event to be re-scheduled to occur again in the future. The **Reoccurring** check box is the counterpart of the **Immediate** check box. You must check one or the other or the event will not fire at all. You may check both if you want the event to occur now and on a recurring basis in the future.
 - **Regular Interval (minutes)** - The number of minutes between successful events. Use this field to indicate the normal period for the reoccurrence of the event, if everything goes as planned. (60 for hourly, 1440 for daily, 10080 for weekly, etc.)
5. Click **Save**.

Viewing the Activity Page

The TimeClock Server 9 Activity tab shows a listing of server messages associated with the selected clock.

To view the activity log:

1. In TreeRing Time top level menu, go to **Configuration > Time Clocks > TimeClock Server 9**.
A list of devices appears.
2. Click the **Activity** tab.
3. The Activity tab displays.

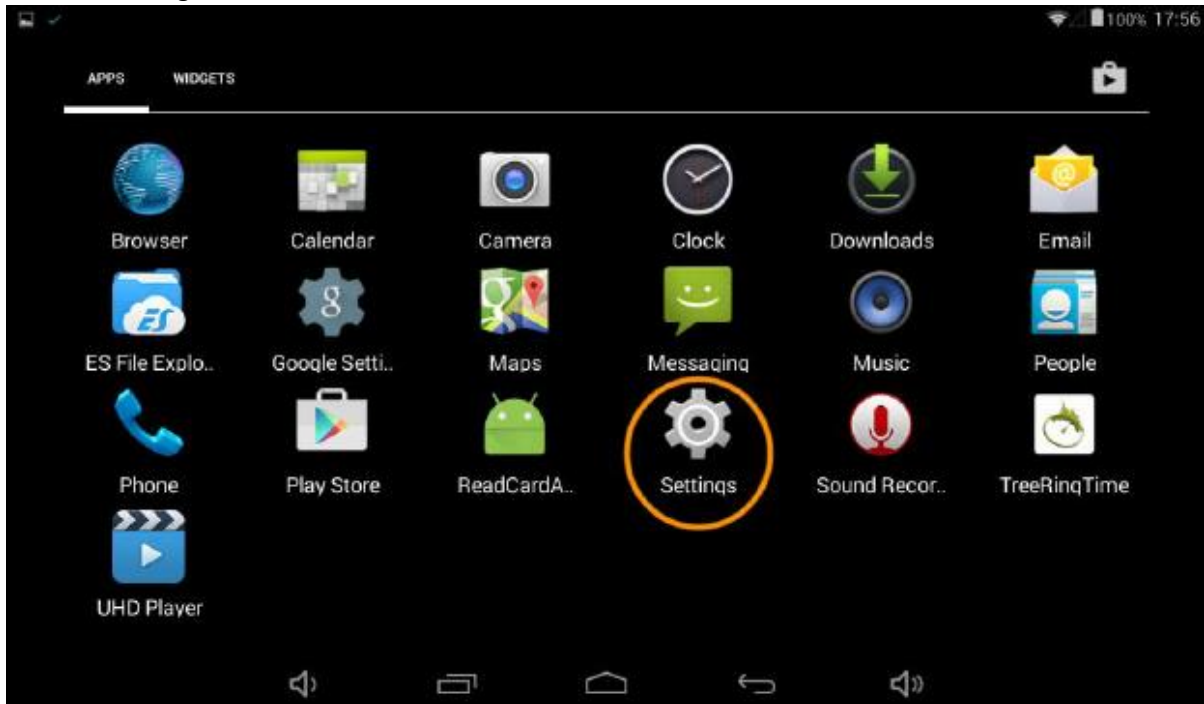


The screenshot shows the TreeRing TimeClock Server 9 interface. The top navigation bar includes links for Edits, Employees, Security, Reports, Dashboard, Configuration, Payroll Routines, eTimeClock, and eTimeClock 9. The main header is 'Time Clock Server 9'. On the left, a sidebar menu shows 'Clock Server' expanded with sub-items: 'Android Clocks', 'Slackbot Apps', and 'Tablet Clock'. The main content area has tabs for 'Details', 'Schedule', 'Levels', and 'Activity'. Below the tabs, there are 'Message Types' (Errors, Warnings, Information) and 'Message to Display' (100 or 500). The activity log table is as follows:

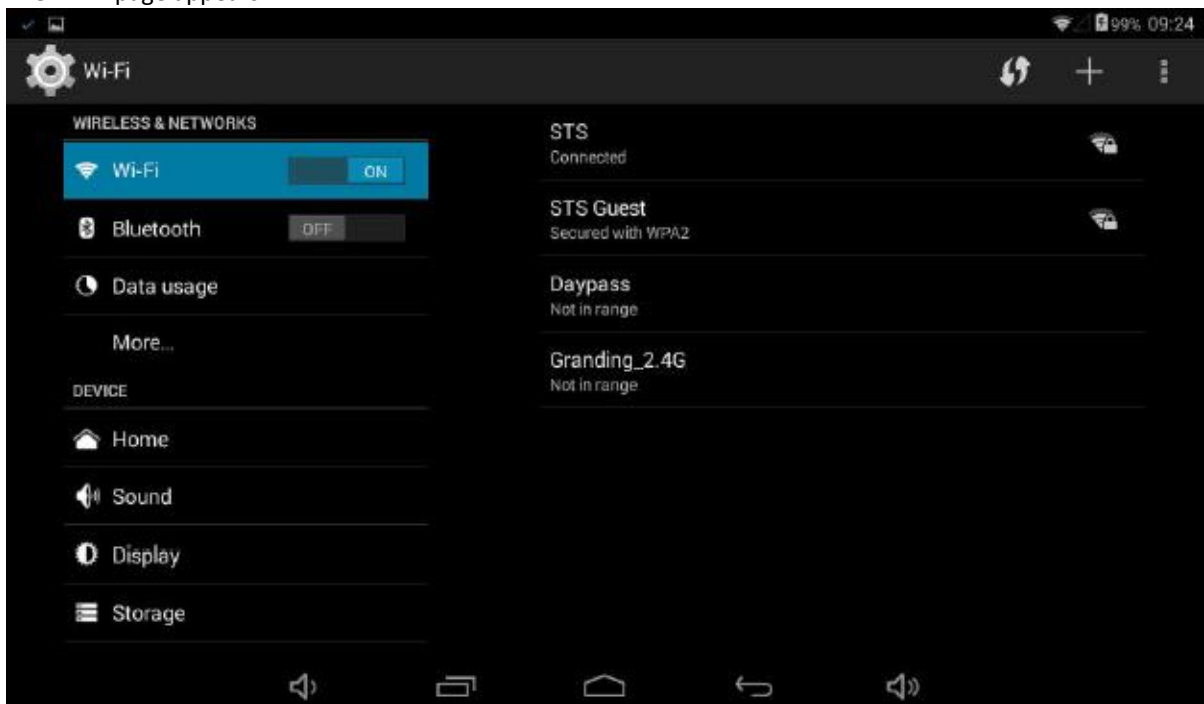
Date/Time	Message
02/23/2021 06:09	312 templates requested and retrieved to Device
02/23/2021 06:09	1 events sent to the clock: SYNC_TEMPLATES
02/23/2021 06:09	Clock Device Updated
02/23/2021 06:09	Clock Device Updated
02/23/2021 06:06	Level Codes requested and retrieved to Device
02/23/2021 06:06	Level Codes requested and retrieved to Device
02/23/2021 06:06	Clock Configuration requested and retrieved to Device

Wireless Configuration

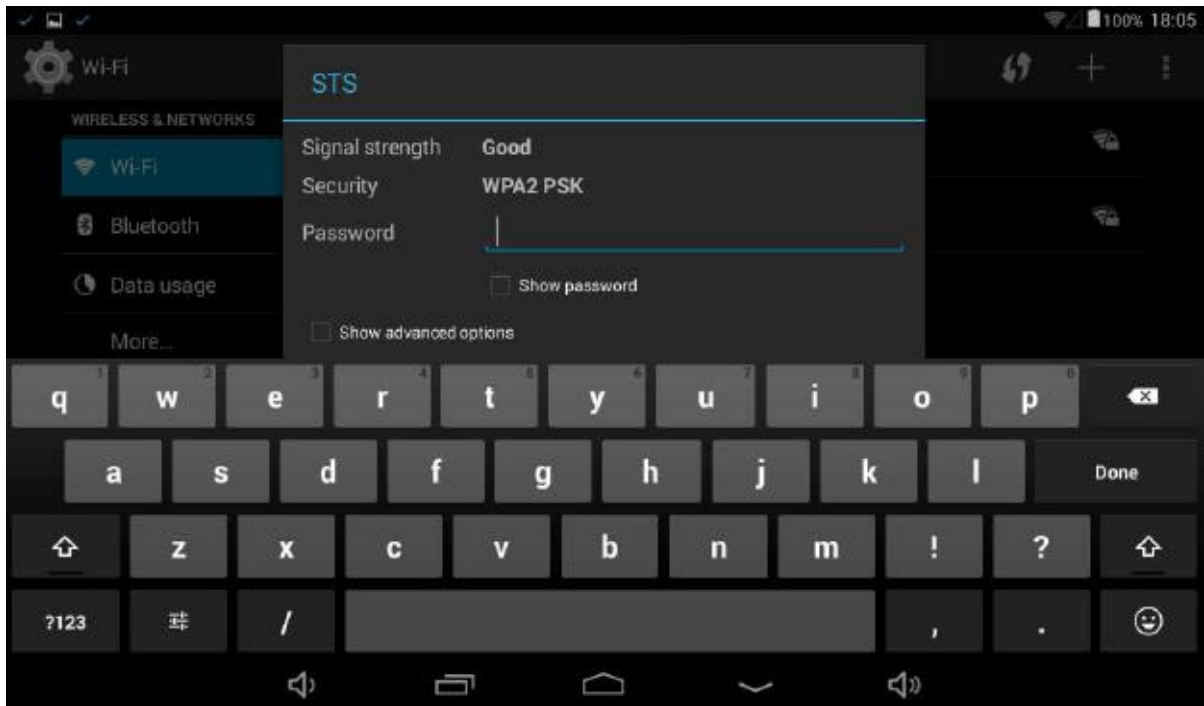
1. Press the **Settings** button.



2. Select **Wi-Fi**.
The Wi-Fi page appears.



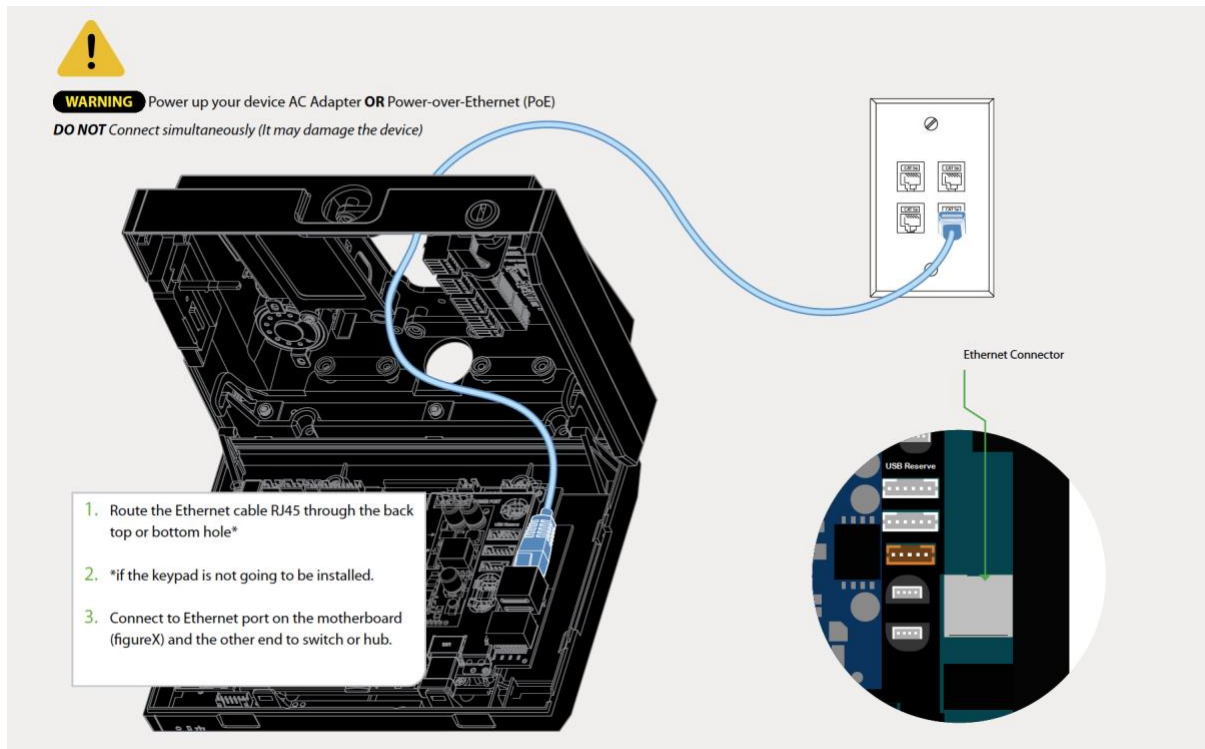
3. Select a **Wireless Network**.
The Password Setup screen will appear.



4. Type the **Password** into the device and press **Done**.
5. Press **Connect**.

Wired Connection

1. Plug power into the Time Clock.
2. Plug in a CAT5 Ethernet cord into the Time Clock.



3. Select DHCP or setup static ip addresses

Adding Users on Ultima Time Clocks

The Ultima Clocks are shipped with no security or Users defined. There are 2 types of users that can be setup.

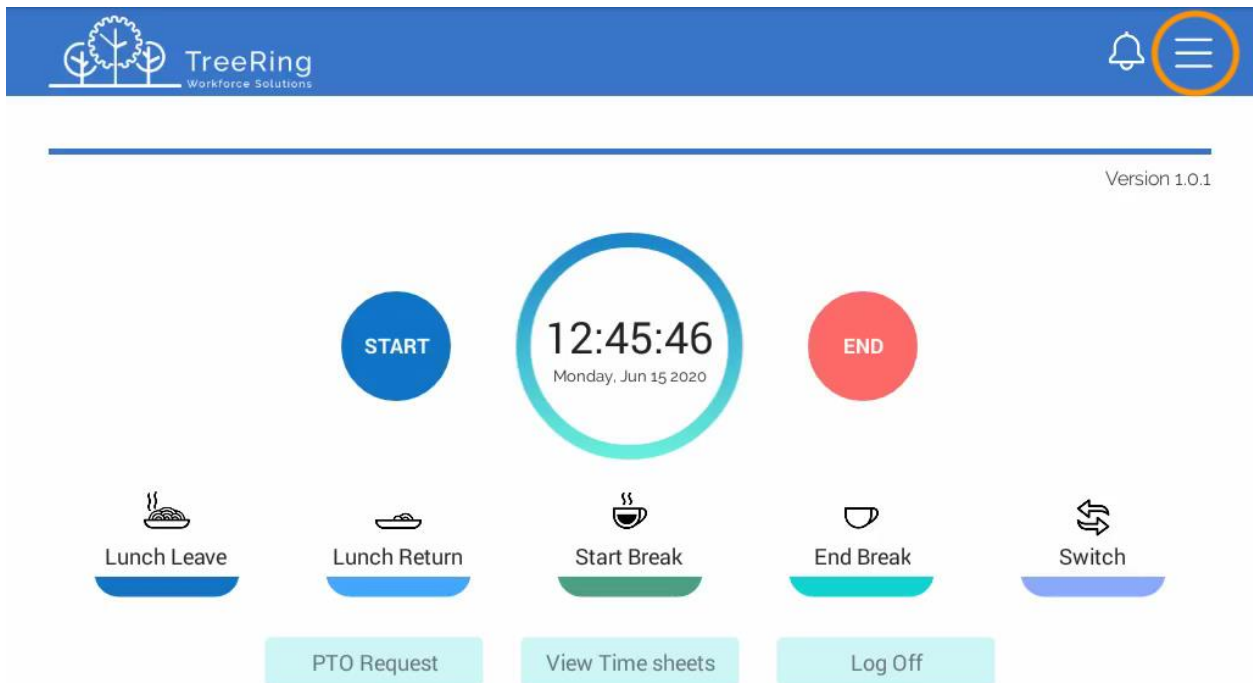
Administrator – Administrators can login into the clock and configure the network, can manage and add users. Administrators can also clock in and out.

Employee – Users can clock in and clock out. They are not authorized to get into the admin menus. To record time, the user needs to first be defined to the clock and TreeRing Time.

Once you create an Admin user, the clock will be locked down and only Admins can get into the Admin Menus.

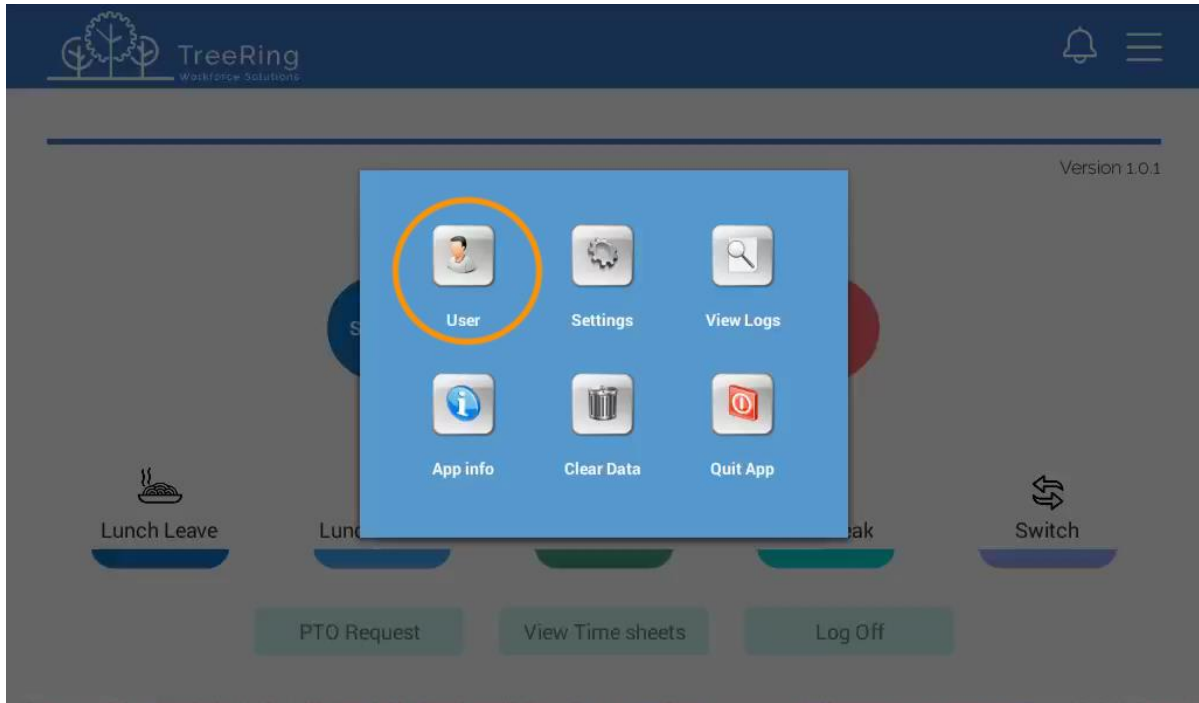
To create a user:

1. In the Ultima, press the **More Options** button.

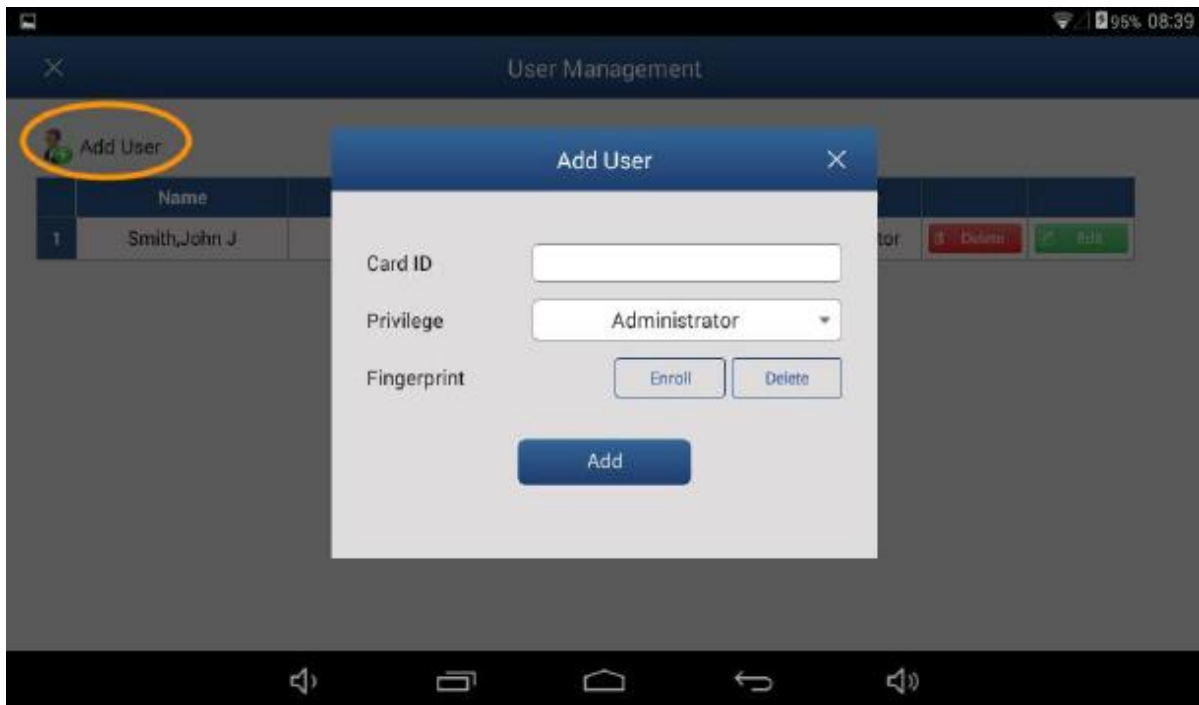


If there is an Admin user defined, it will prompt you to login with an Admin account.

2. Press the **User** button.



3. Press the **Add User** button.



4. Enter the Card ID, select a **Privilege** and you are ready to click **Enroll** to scan your fingerprint.

Choose an Ideal Finger to Enroll

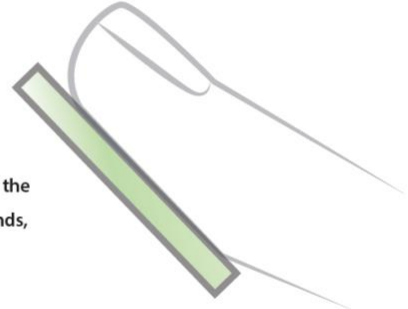
- a. Select a finger with the most visible ridge pattern and one that you can comfortably place on the reader. Avoid using the pinky finger, as it is typically too small for good verification. We recommend using the thumb or index finger.

Proper Finger Placement

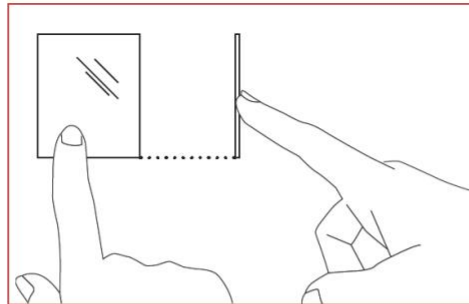
The user's finger should completely cover the sensor. The finger should be placed flat and in the center of the sensor. The finger should cover at least 80% of the sensor as shown below



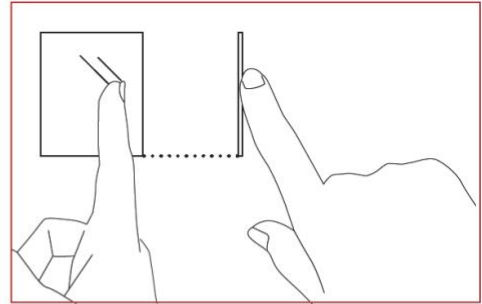
Be sure to maintain contact with the fingerprint sensor for 2 full seconds, until the Time Clock responds.



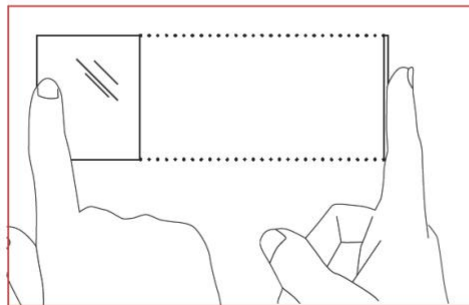
The finger should NOT be placed in the following positions:



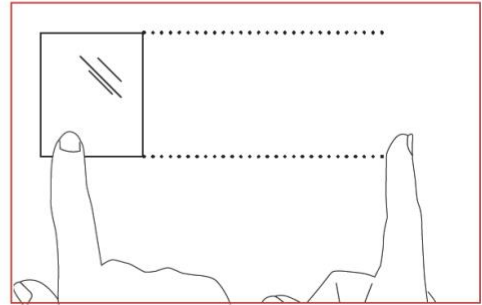
Upright



Skewed



Sideways

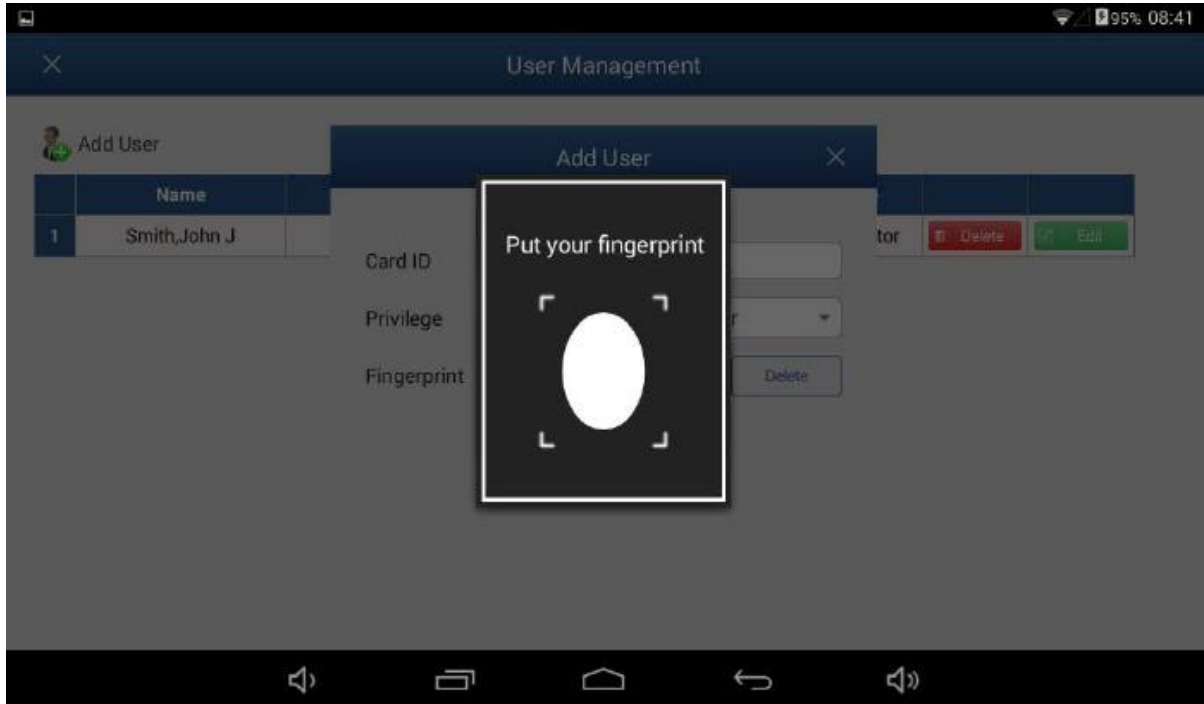


Partial

Best Practices

- **Mount the reader on the wall before enrolling the users**
- **Train users to place the finger correctly on the fingerprint scanner**

To get the best fingerprint mages, the finger should be placed directly on the finger scanning area of the fingerprint sensor. Usually, the tip of the finger is at the top of the finger sensing area and the finger is centered from left to right.



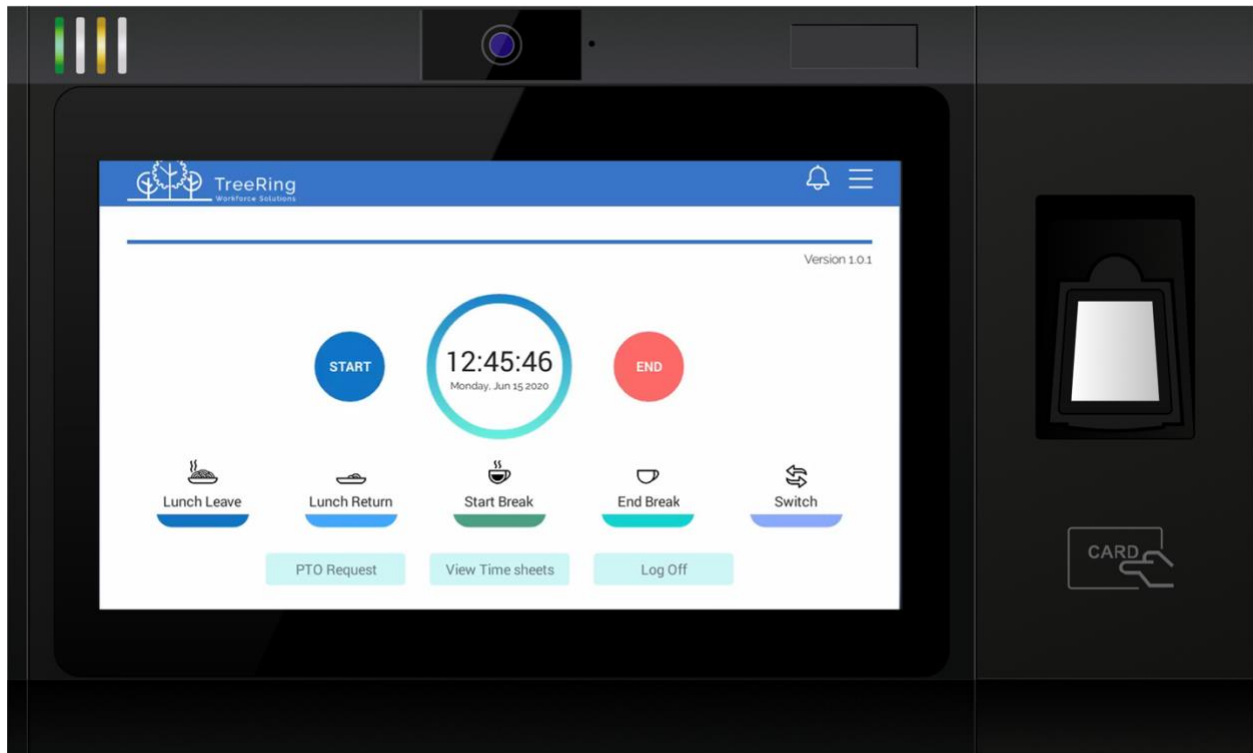
5. When prompted, scan your finger. If the scan is not successful, enter your employee card ID number and begin the enrollment process again.
6. Once the fingerprint reader takes 3 good quality images of your fingerprint, the message Enrollment Successful displays.
7. You are now ready to begin clocking In and Out from the time clock.

Tips to Punch In/Out

Use hand lotion or blow warm breath on your hand for a higher quality scan.
Press down with gentle pressure when scanning your finger.
If your fingerprint is rejected at a high rate, have your manager help you enroll again.

Entering Time

Entering time using Ultima is easy



1. Select a Function button for the appropriate part of the workday:

- Start
- End
- Lunch Leave
- Lunch Return

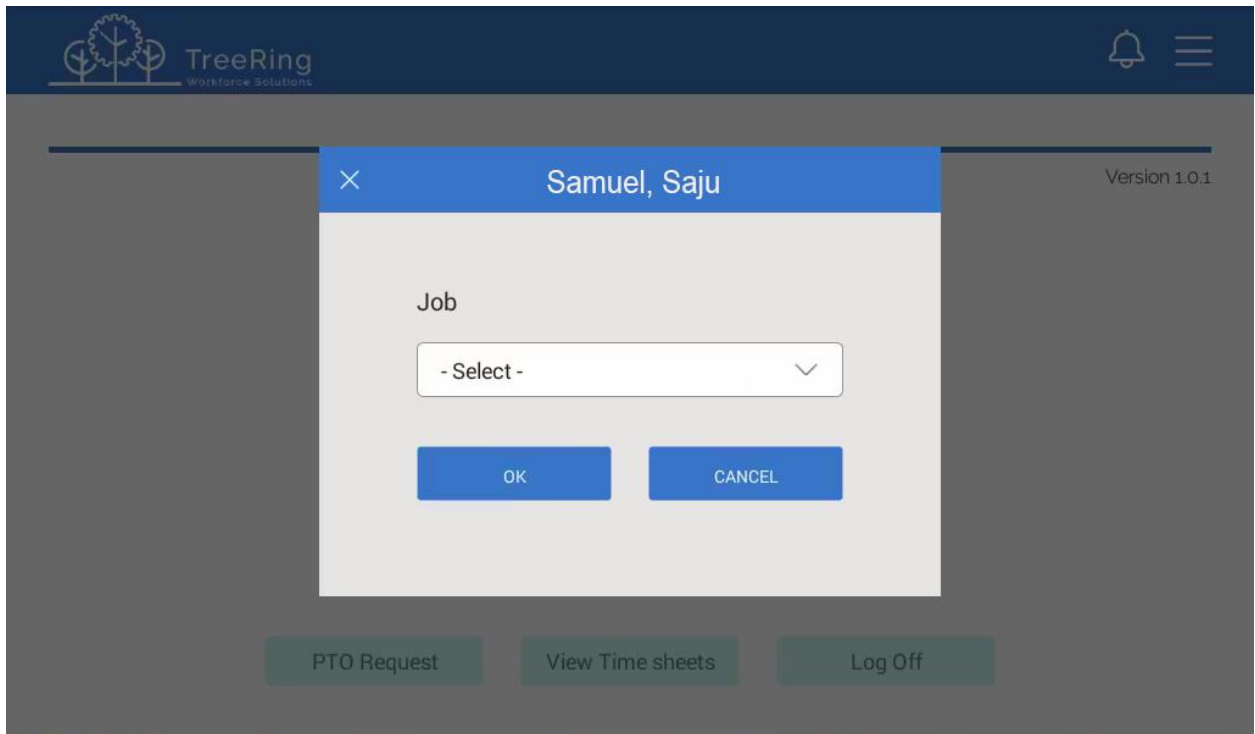


Note: If a Minimum Lunch Time is configured for your organization, and you try to punch in for a Lunch Return before that time is up, you will be prevented from punching back in until the Minimum Lunch Time has passed.

- Start Break
- End Break
- Switch

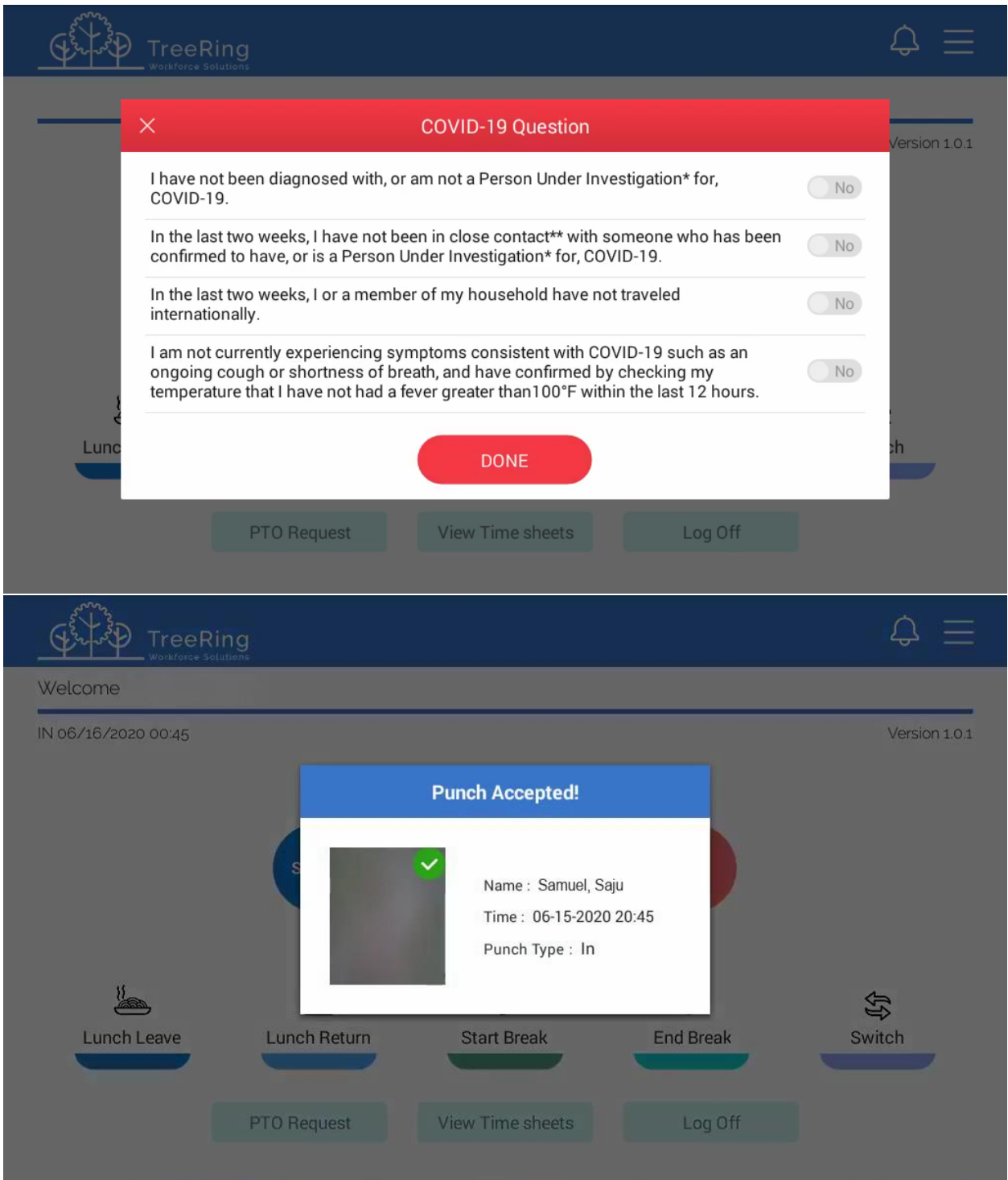
2. Scan your fingerprint.

3. If you are prompted for Department, Job, or any other organizational level codes, select from the drop-down list provided or enter the code and click **OK**.



Count Option: This is used to track a numerical count. If necessary, you will be prompted during an End/Out, Lunch Leave, or Switch punch to enter a Count value.

Covid-19 Attestation Option: This is used to gather important health and safety information and provide insight into your workforce



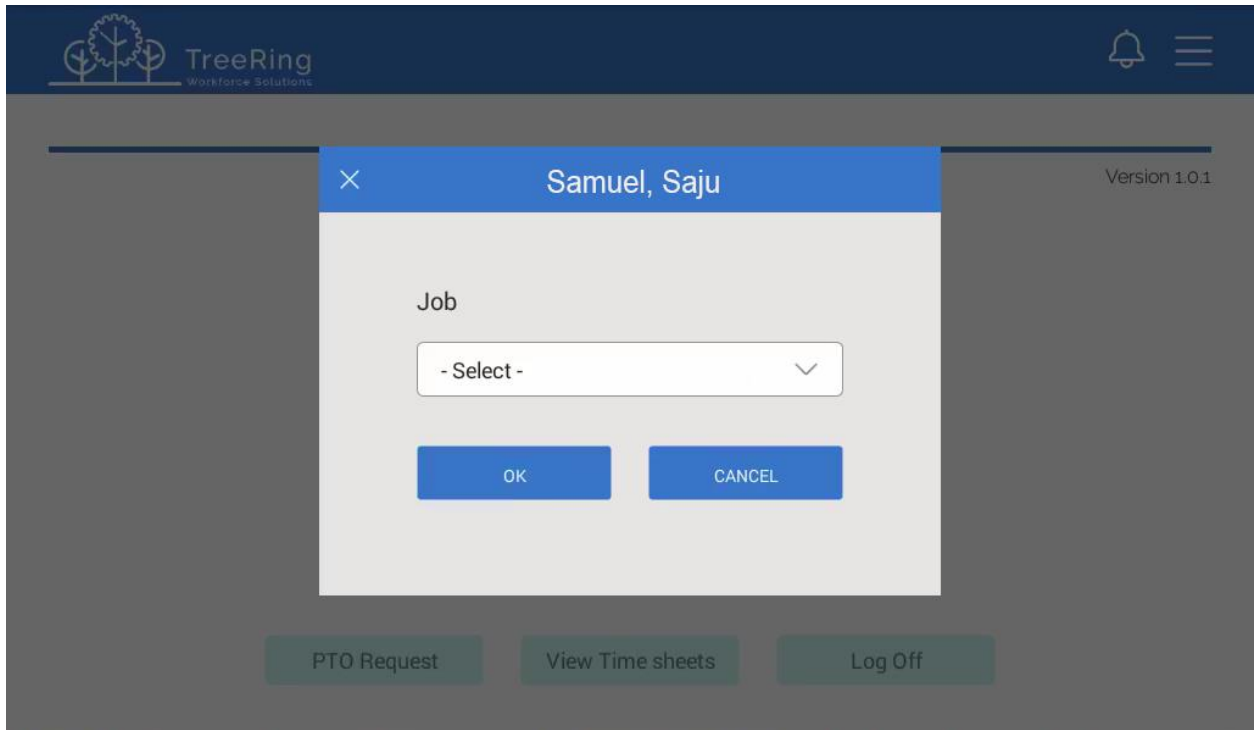
Your punch will be accepted. After a few seconds the app will refresh and return you to the default screen.

Switching Organizational Levels during a Shift

You can switch organizational levels during a shift when the department, task, pay, or benefits change.

If your employer requires you to switch between organizational levels during the shift, then a **Switch** button will display on the time clock after you enter your ID.

1. Select the **Switch** button.
2. Scan your fingerprint.
3. Enter the code you want to switch to or select the code from the drop-down list and select **OK**.
4. If prompted to do so, enter any other codes requested, selecting **OK** after each one.



Count Code: This is used to track a numerical count. If necessary, you will be prompted during an End/Out, Lunch Leave, or Switch punch to enter a Count value.

Entering a PTO Request

You can use Ultima to enter a paid time off (PTO) request. Follow the instructions below to enter a PTO request.

1. Select **PTO Request**.

PTO Request form displays showing a section for you to submit your request for time off, the amount of paid time you have already taken in each applicable category of paid time off, and the approvals/disapprovals for requested time off.



2. Click the Add PTO Request or click **Add PTO Request**.

The New PTO Request displays.

The screenshot shows a 'New PTO Request' form with the following fields and controls:

- Date From:** A text input field with a calendar icon.
- Date To:** A text input field with a calendar icon.
- All Day:** A checked checkbox.
- Start Time:** A dropdown menu.
- Hours per Day:** A text input field.
- Bank:** A dropdown menu.
- Note:** A large text area for entering explanatory notes.
- Generate Request:** A blue button at the bottom of the form.

3. In the **Date From** field, click on the calendar and select the date of the first day off you want to take off.
4. Select how much of the day you want off: **Leave All Day** checked if you want the whole day; otherwise deselect it and enter a **Start Time**.
5. In the **Date To** field, click on the calendar and select the date of the last day off you want to take off. By putting a **Date From** and **Date To**, you can ask for a period off longer than a day. A request generates for each day for with the **Hours Per Day** value you enter in a following step.
6. In the **Pay Type** field, select from the drop down list the pay type which will apply to the time off request.
7. In the **Hours Per Day** field, specify the amount of time off you are requesting in a day or the duration of the workday you are asking for off
8. In the **Notes** field, enter any explanatory notes pertaining to the request.
9. In the **Bank** drop down menu, select the appropriate PTO type (Personal, Sick, Vacation, and so on).
10. Click the **Generate Request** button.
The display refreshes with your request. If you ask for more than one day off, there will be a row for each day.

New PTO Request

Date From All Day Start Time

Date To Hours per Day

Note Bank

Generate Request

	Date	Start Time	Hours Bank	Hours to Deduct	Remaining Hours
1	02/26/2020		Vacation	8.0	100.0

Confirm Request

11. If the request looks all right, click **Confirm Requests**. Otherwise, click **Edit**, revise the information, click **Save**, and then click **Confirm Requests**.
You return to the My PTO Requests Screen. Your request will now be listed.
12. Click the **X** in the top right of the report to return to the time clock.

Viewing Timesheet

You can view your time sheet for the current pay period.

Follow the instructions below to view your time sheet for the current pay period.

1. Select **View Time Sheets** in the grey box to the right of the time clock.
Your time sheet for the current pay period displays.

	Punch Type	Date In	Time In	Date Out	Time Out	Lunch	Total	Note
1	Work	10/23/2019	1:03	10/23/2019	1:39	0.0	0.60	

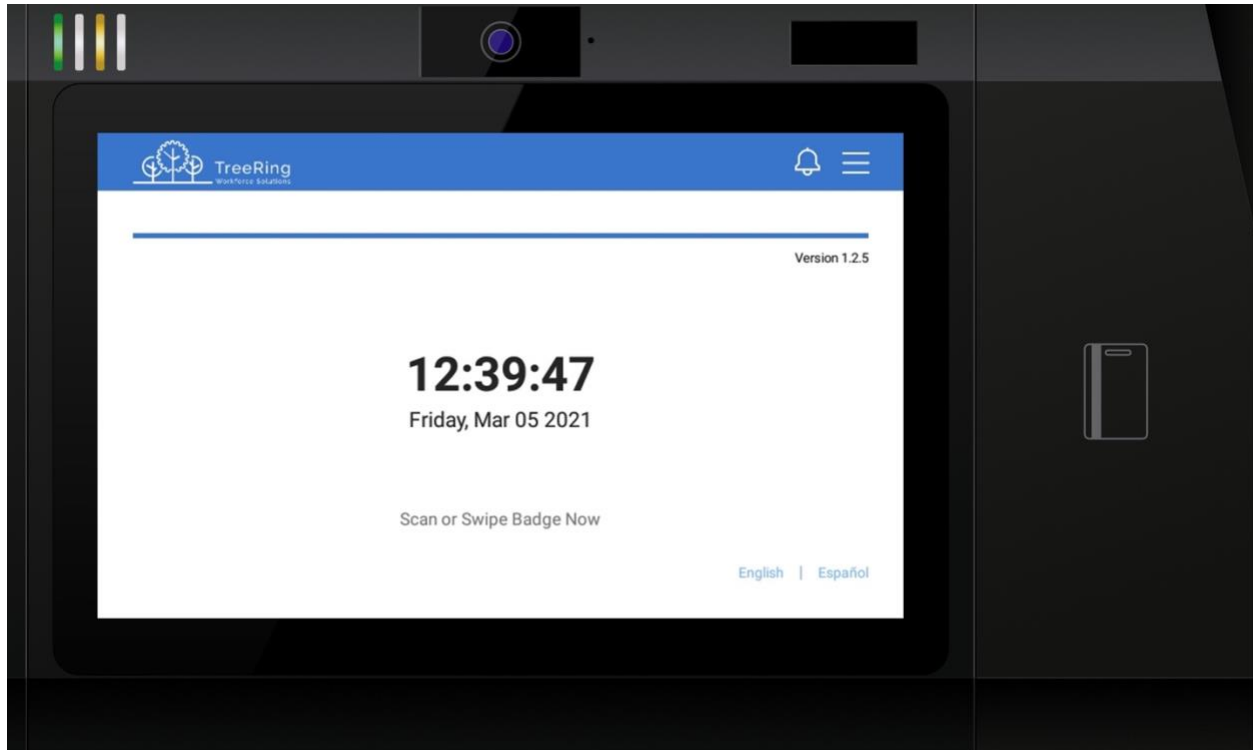
Total		
Total Paid Hours	Worked 0.60	Not Worked 0.00
0.60	Unpaid 0.00	Dollars 0.00

2. Click the **X** in the top right of the report to return to the time clock.

Entering Time in Swipe and Go

Swipe and Go function turn Ultima clocks into touchless Badge Readers. No need to touch the clock - employees simply wave their badge in front for quick clock IN and clock OUT.

Ultima clocks offer attachments for reading proximity, barcode, and magnetic badges. Regardless of which device you choose, all our badge-readers optimize clock operations and even provide a touchless experience

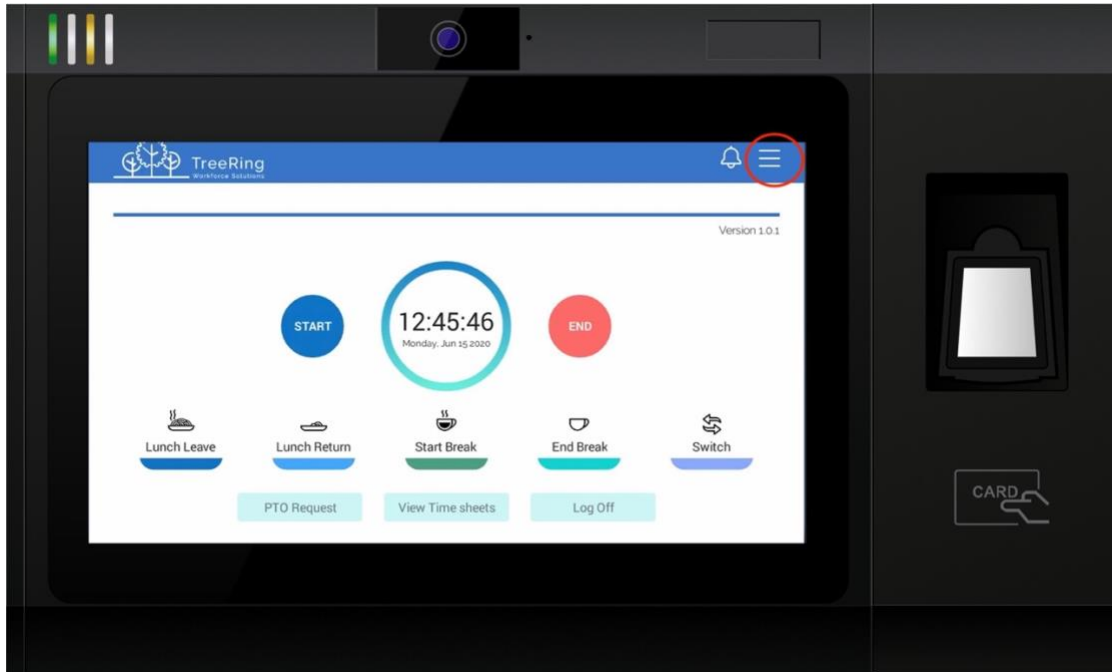


Entering time in Swipe and Go mode is easy just swipe your badge and go, no touching required. TreeRing Time will automatically add punch type to each punch.

Updating Clock Firmware

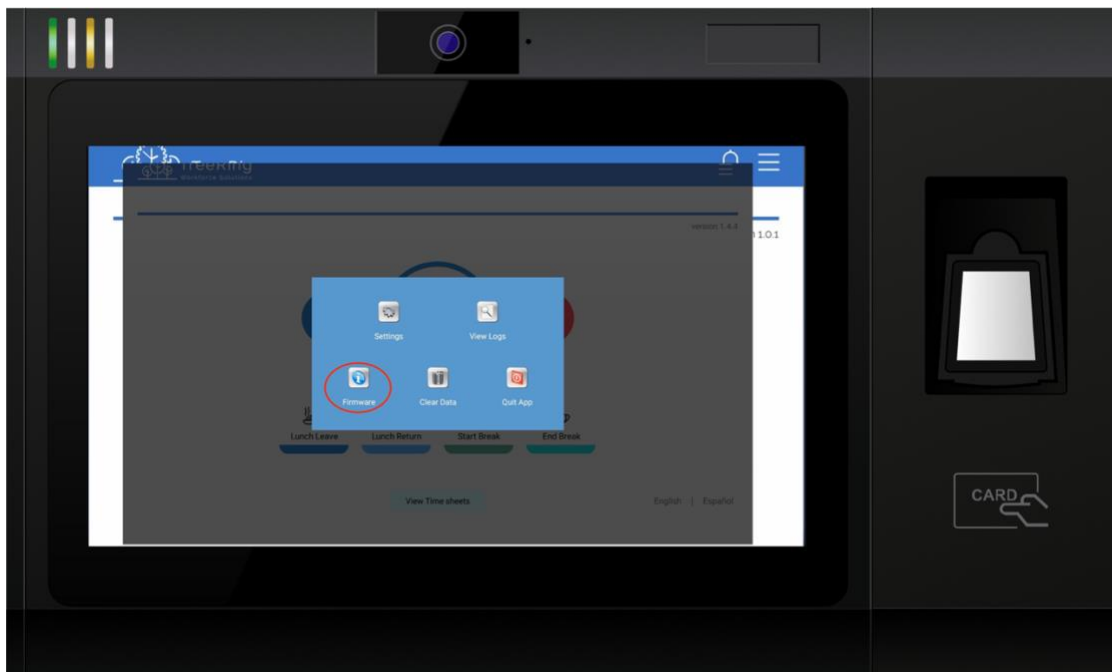
To update firmware

1. In the Ultima, press the **More Options** button.

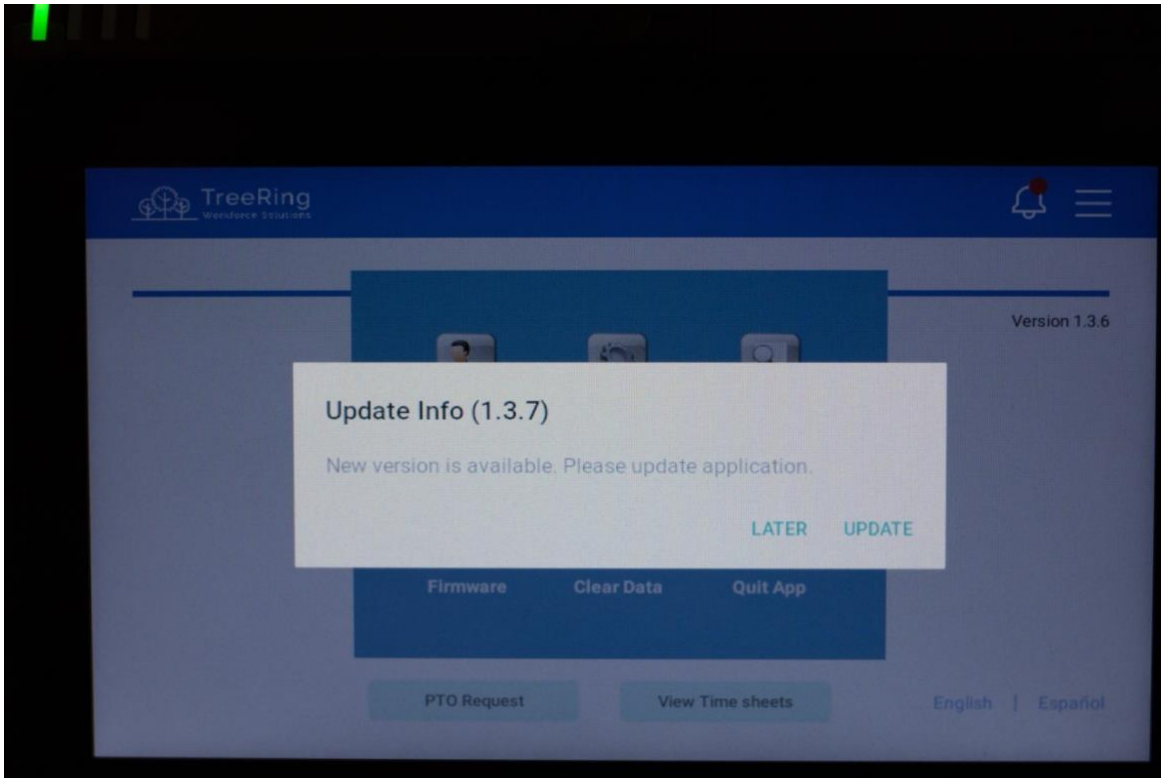


If there is an Admin user defined, it will prompt you to login with an Admin account.

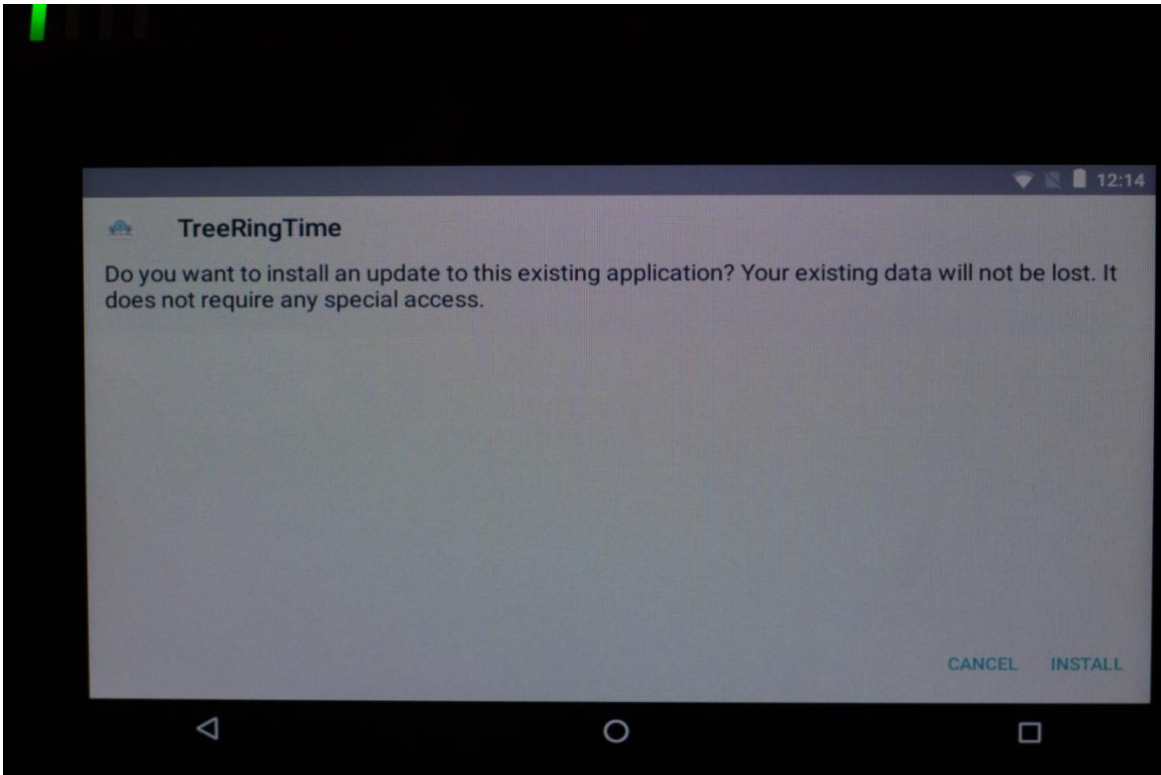
2. Press the **Firmware** button.



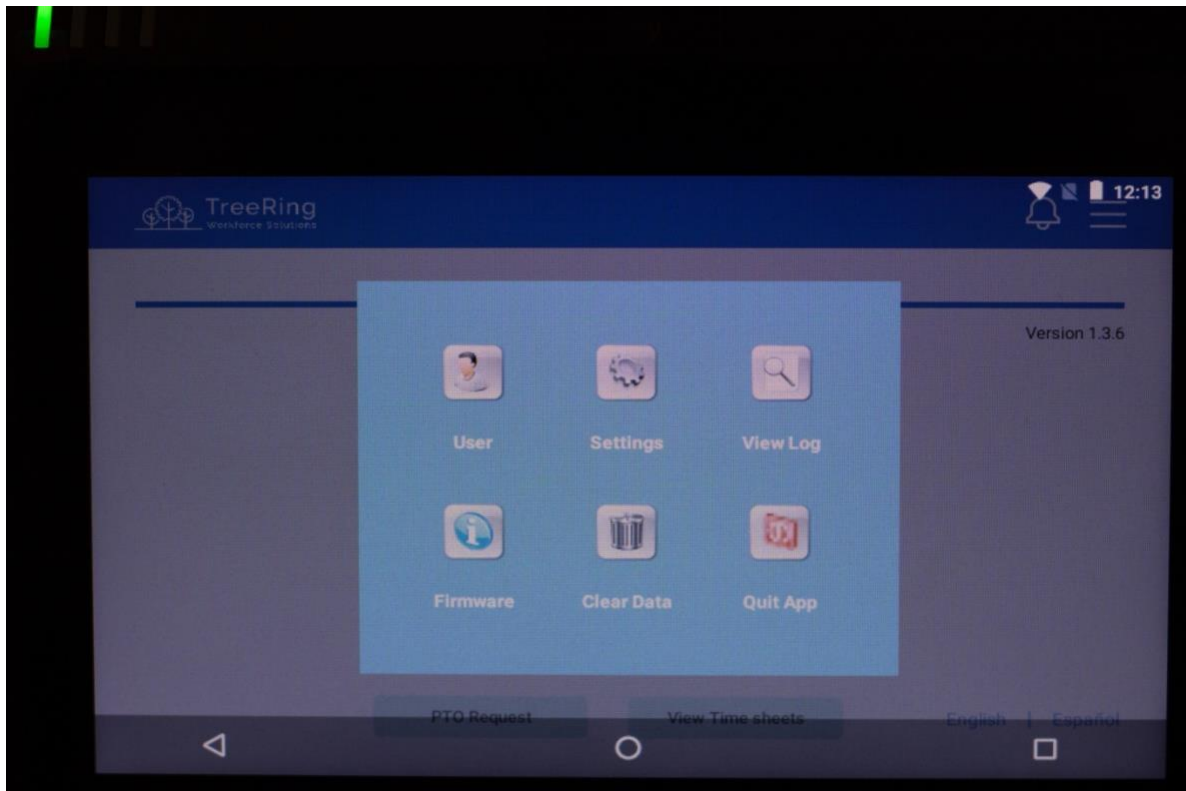
3. Click firmware button.



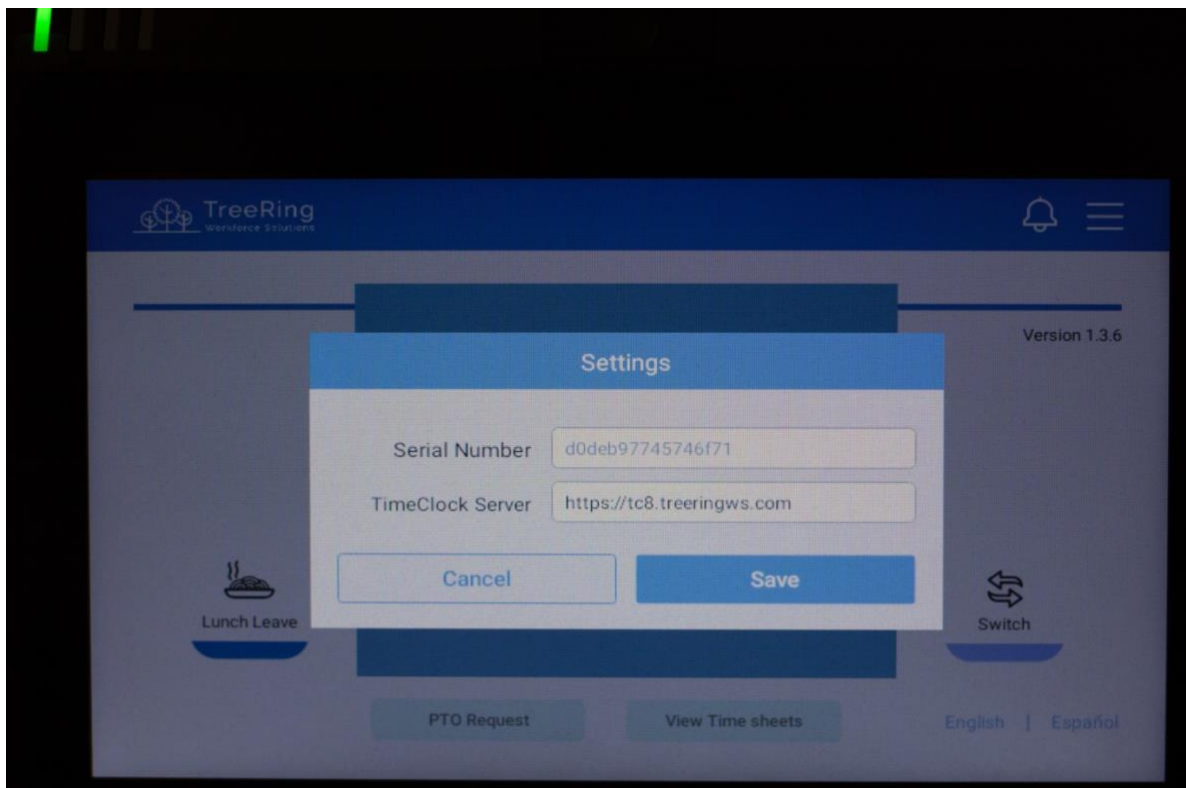
4. Click install button.



5. Press the **More Options** button, then Settings button



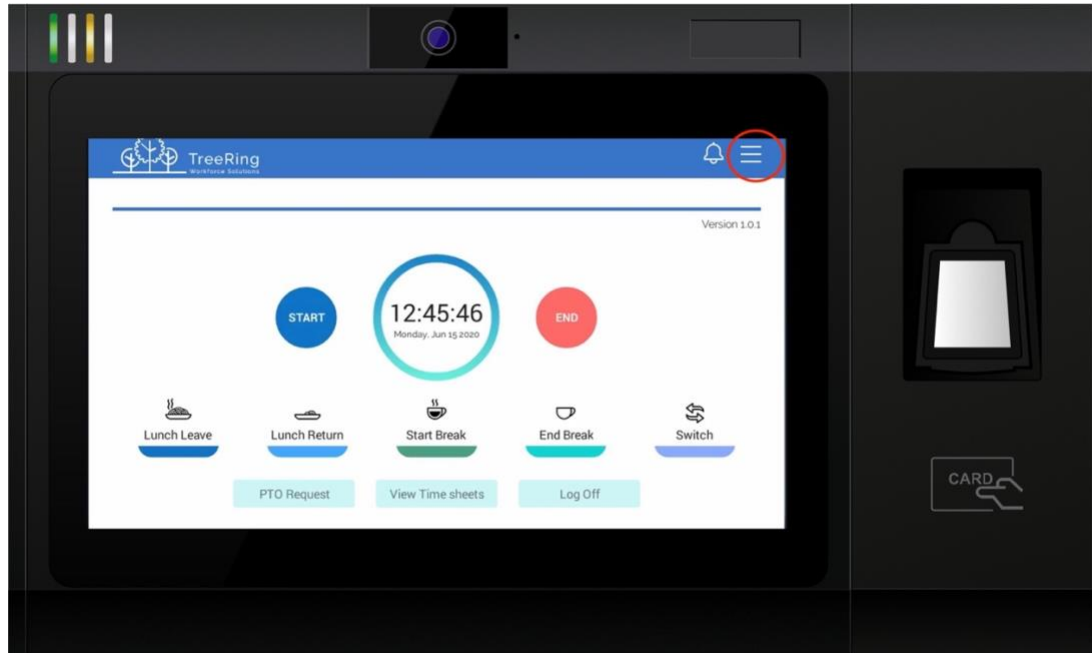
6. Press save button



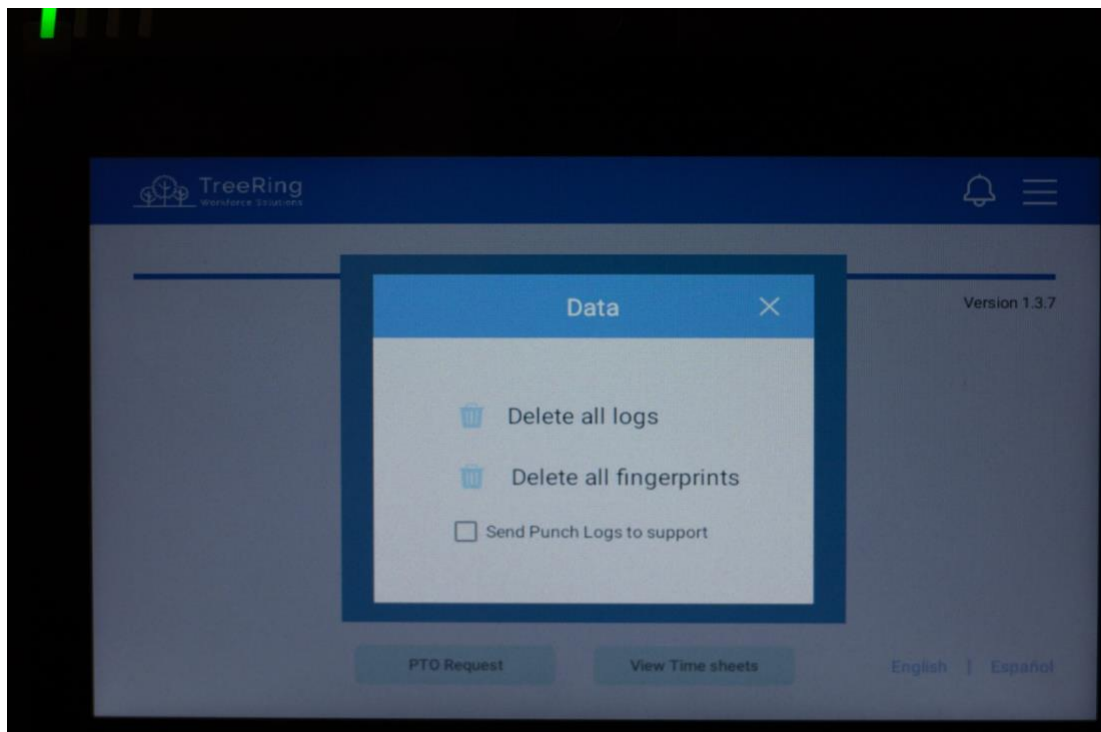
Sending Punch Logs to Support

Occasionally TreeRing support may ask to you send punch logs for troubleshooting purpose

1. In the Ultima, press the **More Options** button.

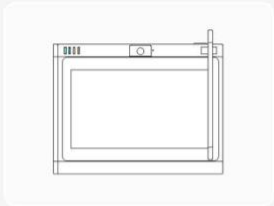


2. Click "Send Punch Logs to Support".

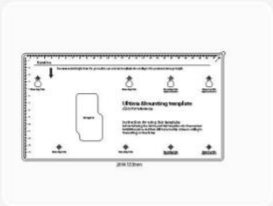


Installing Physical Clock

Packing List



Base



Mounting template



Power Supply



Power Cable



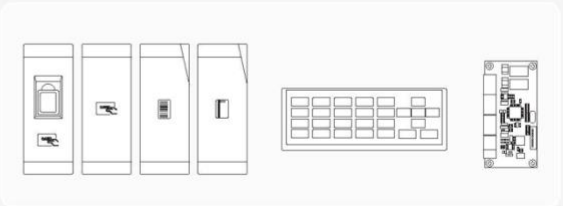
Network Cable



Keys (2)



Screws & Anchors



Optional Modules

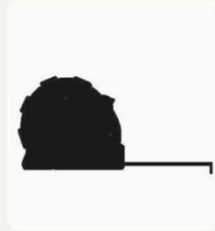
The contents of the package may vary depending on the modules that you choose.

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.

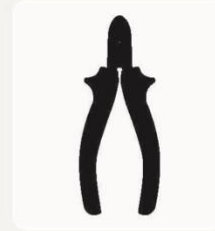
- Do not remove the cover assembly from its anti-static packaging until you are ready to install the device.
- Save the paper mounting template and any other printed documents.



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

- The Ultima is designed for mounting on walls in typical office and indoor manufacturing environments. Recommended wall surfaces are drywall (sheetrock) and wood.
- Install the Ultima 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.
- Ultima is designed for office and manufacturing environments. In rare cases, user sites might contain agents that are corrosive in nature and which could corrode the electronics assemblies in these devices. In the event of this situation, users must move the devices to a suitable environment.

Lux References Guide

Recommended Locations

The device can be installed in indoor and outdoor places; the illuminance of external light source is 0-8000LUX. Direct sunlight shall be avoided if the device is installed in outdoor places. Install the device indoors at least 10 feet (3m) away from windows, and 6.5 feet (2m) away from light fixtures.

Avoided Situations

Avoid direct sunlight, indirect sunlight reflected off mirror or similar objects, very bright spot light.

Planning

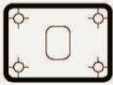


Required personnel

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

- 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 Ultima 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.

Prepare 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 Ultima 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 the device 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

Note:

A licensed electrician must install AC outlet and associated wiring before you install the Ultima.

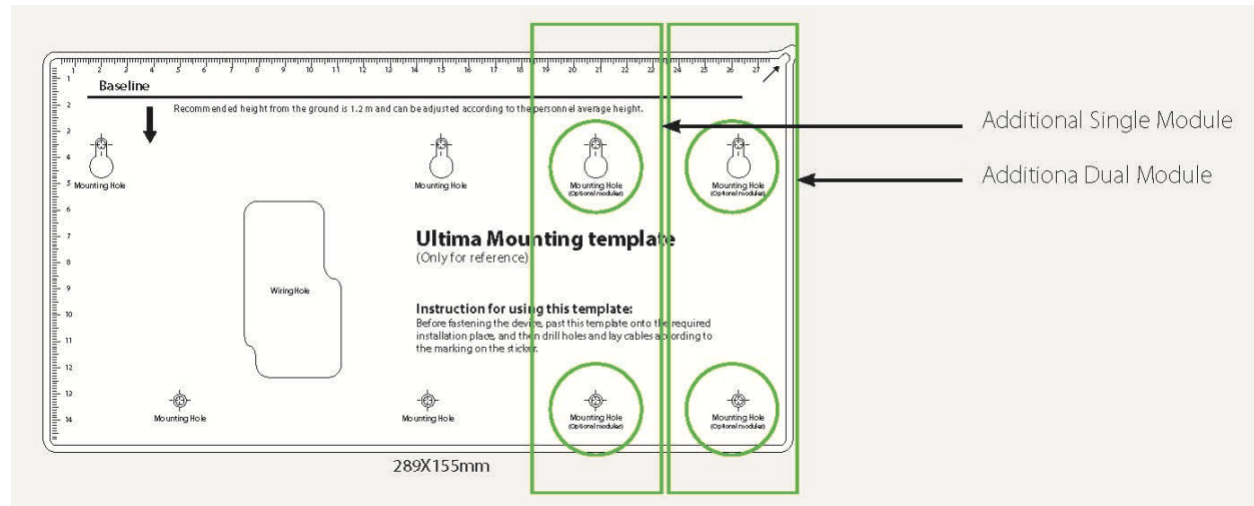
Do not connect the Ultima power line to circuits that are being used for electrical devices that draw large amounts of power, such as conditioning units, electrical motors, and compressors.

Do not connect to AC outlet and POE at the same time.
Avoid running a communication cable near devices that interfere with data transmission.

Marking Holes

Mark insertion points for the base

To mark areas on the wall where you will install the device, use the mounting template. 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 can plan to install the Ultima.



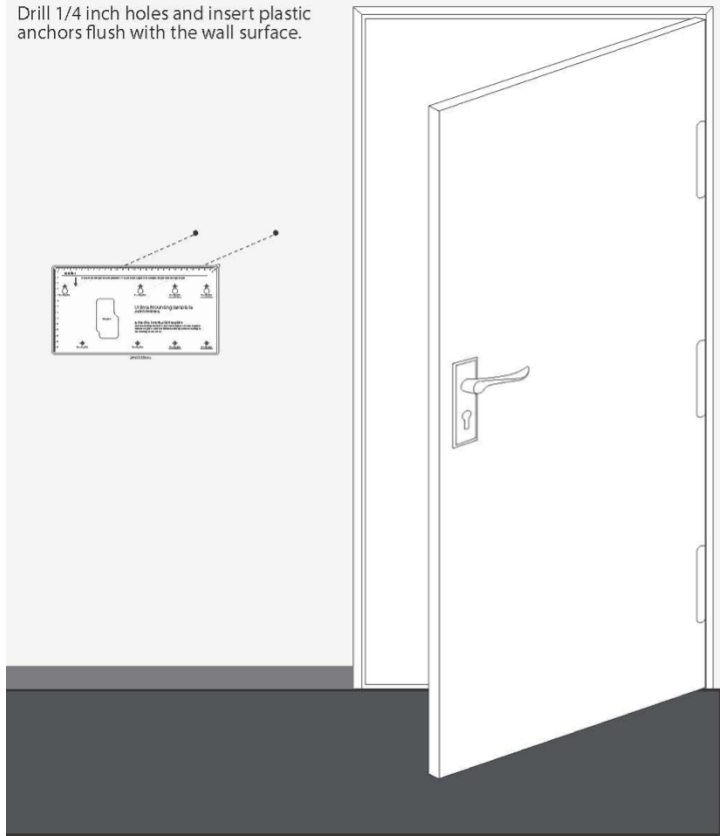
Mark the wall

1. Tape the mounting template at the optimal height and location for the Ultima
 - a. The baseline is recommended 1.2m 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 from the back or through the top, use the template to mark the area of entry.
4. If you are installing the Ultima 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

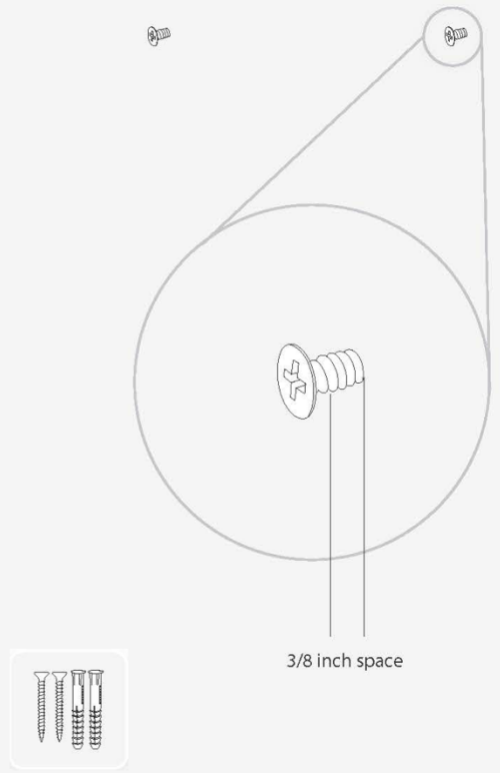
Note: The mounting template contains four fixing holes for the optional modules (fingerprint & RFID module, barcode / magnetic module), if you don't choose these modules, then you can just mark the left four fixing holes for the base unit.

Drilling holes and fixing plastic anchors and upper screws

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

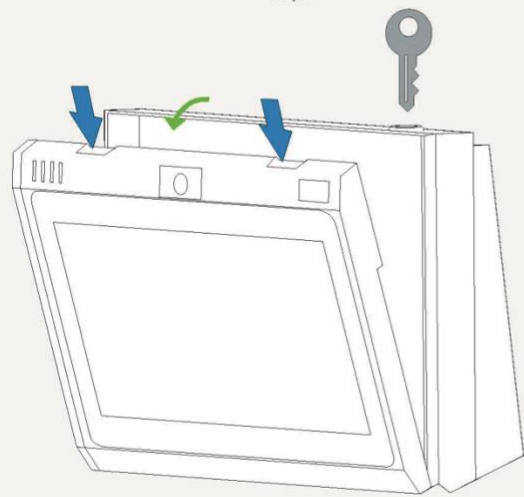


Fix the upper 2 screws (base only installation) on the wall.

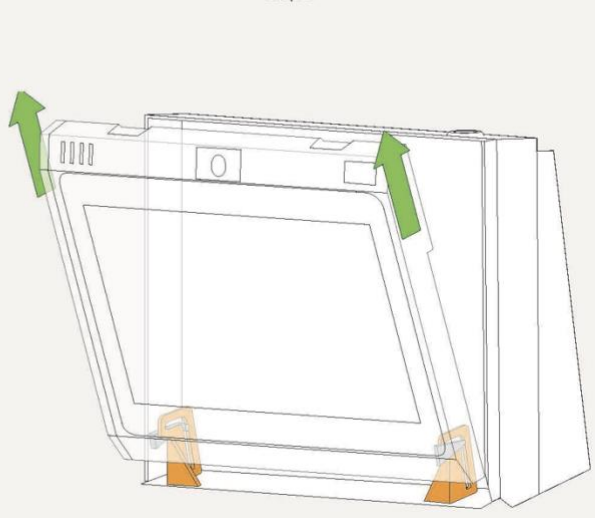


Opening Ultima front cover

Step 1



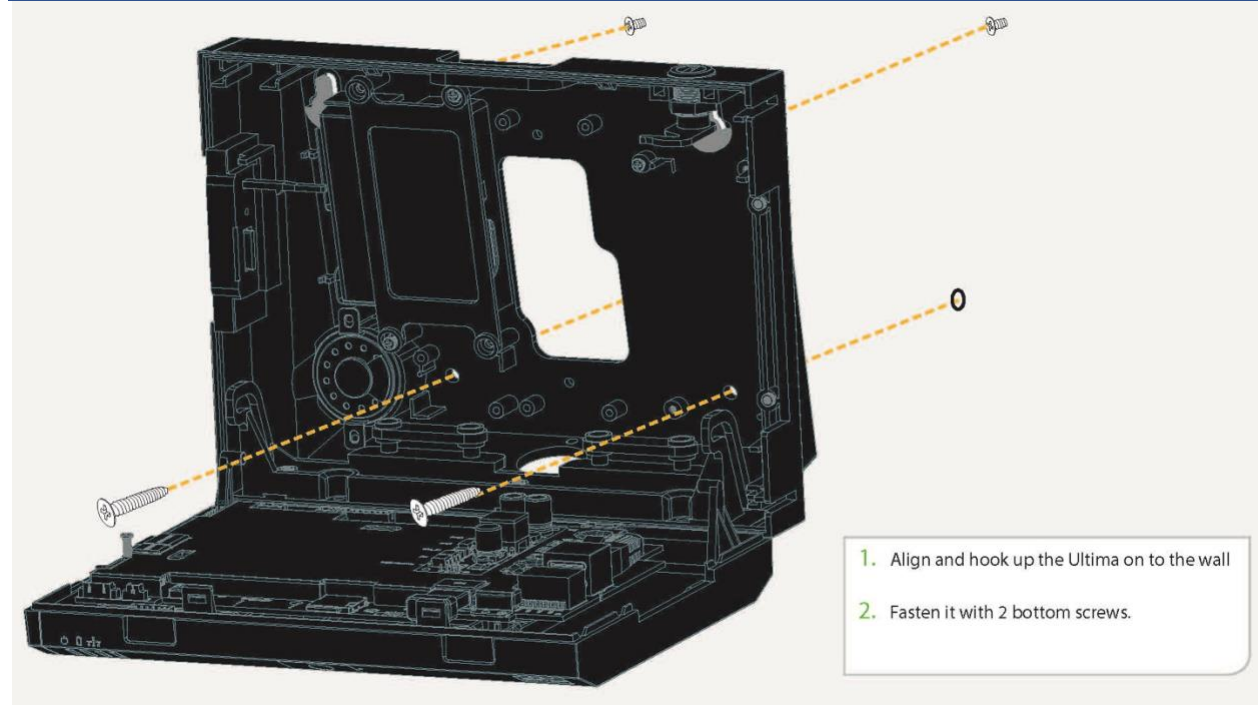
Step 2



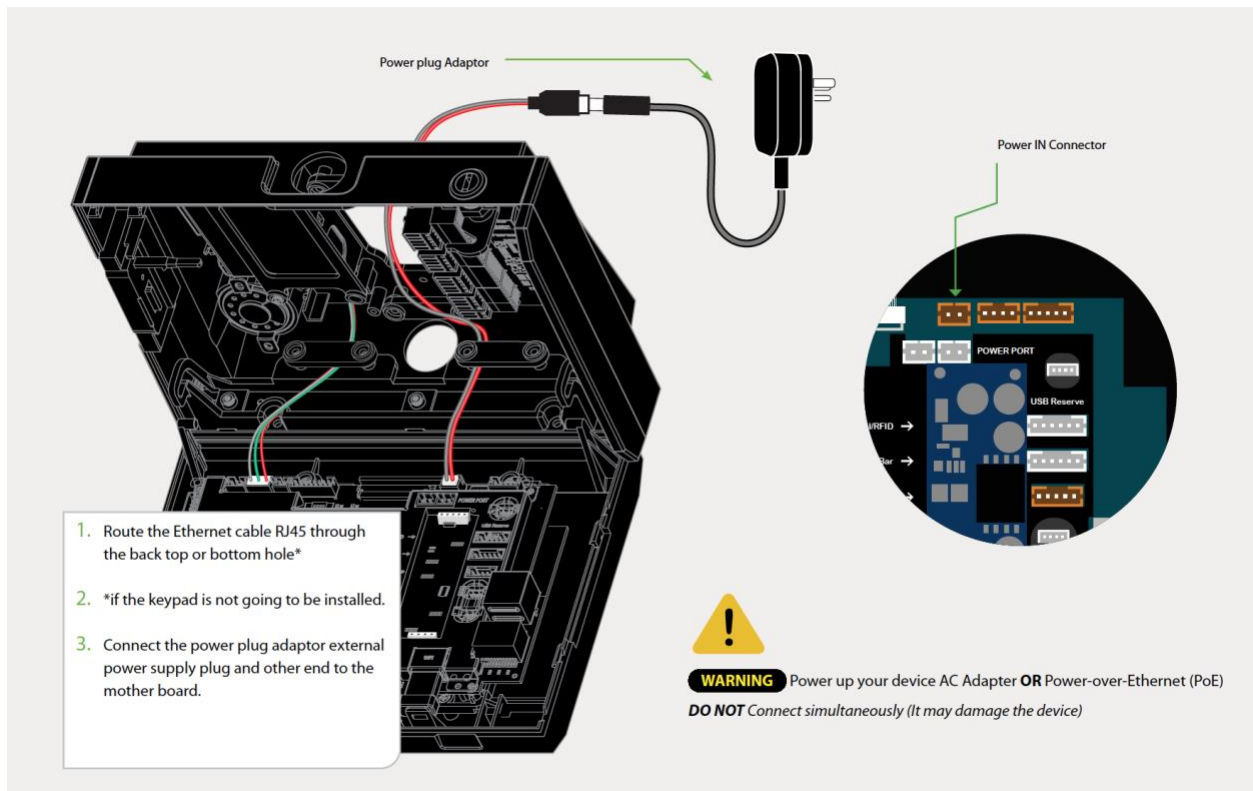
- Step 1 - Press down the tabs simultaneously and gently open it about 1.5 inch
- Step 2 - Pull the door assembly UP about 1 inch to open it completely

Caution – Do not apply force

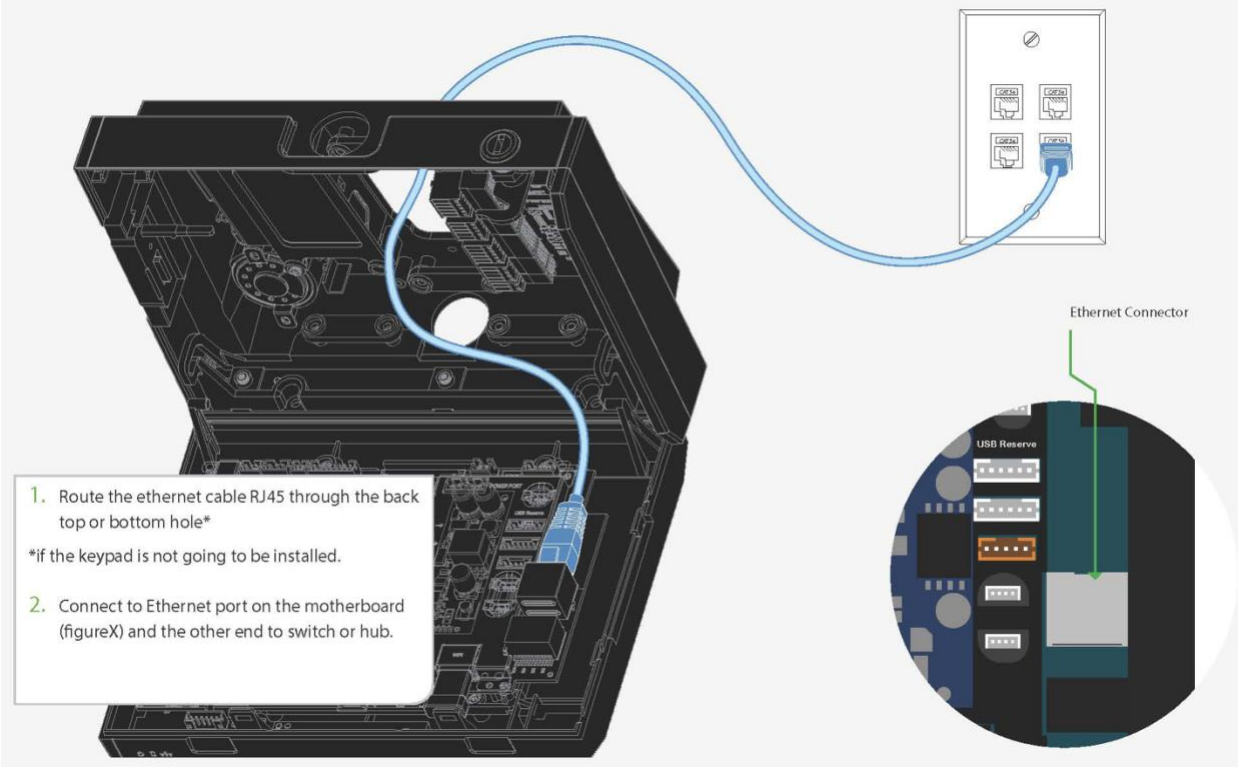
Mounting on wall



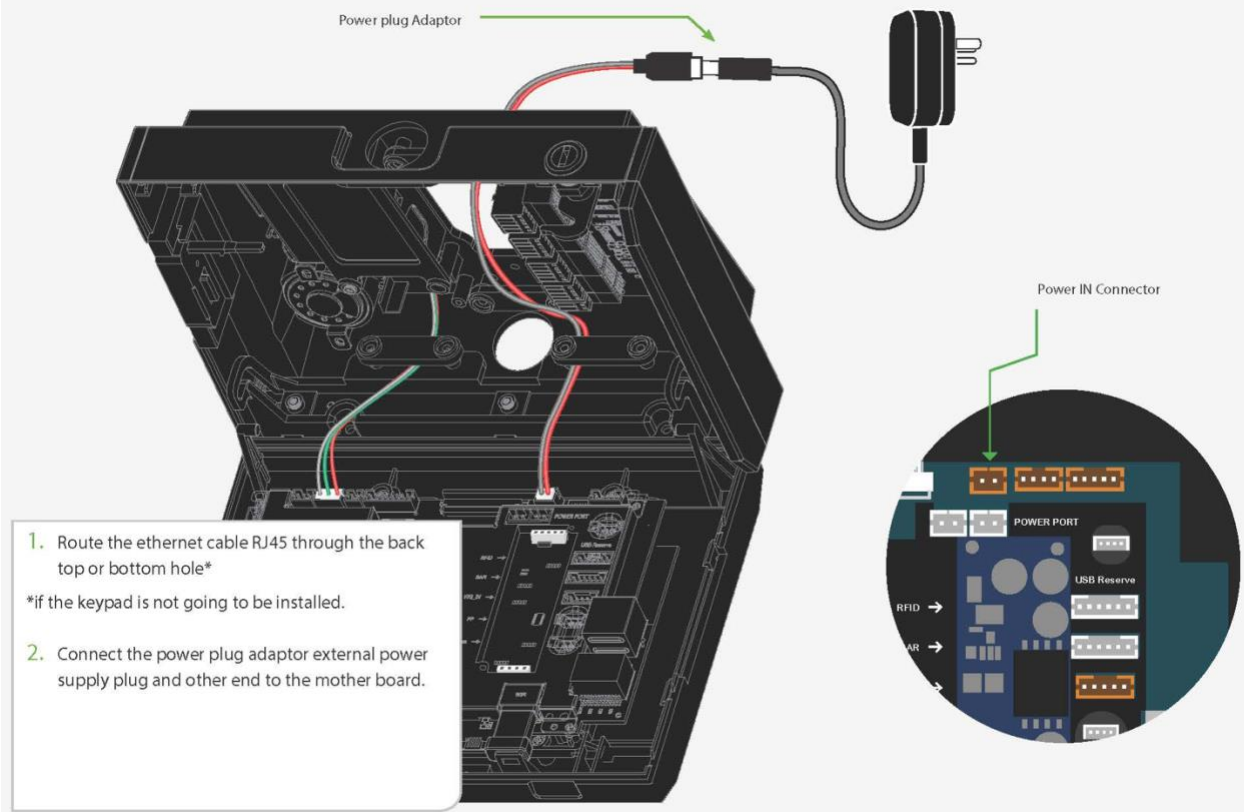
Connecting AC power supply



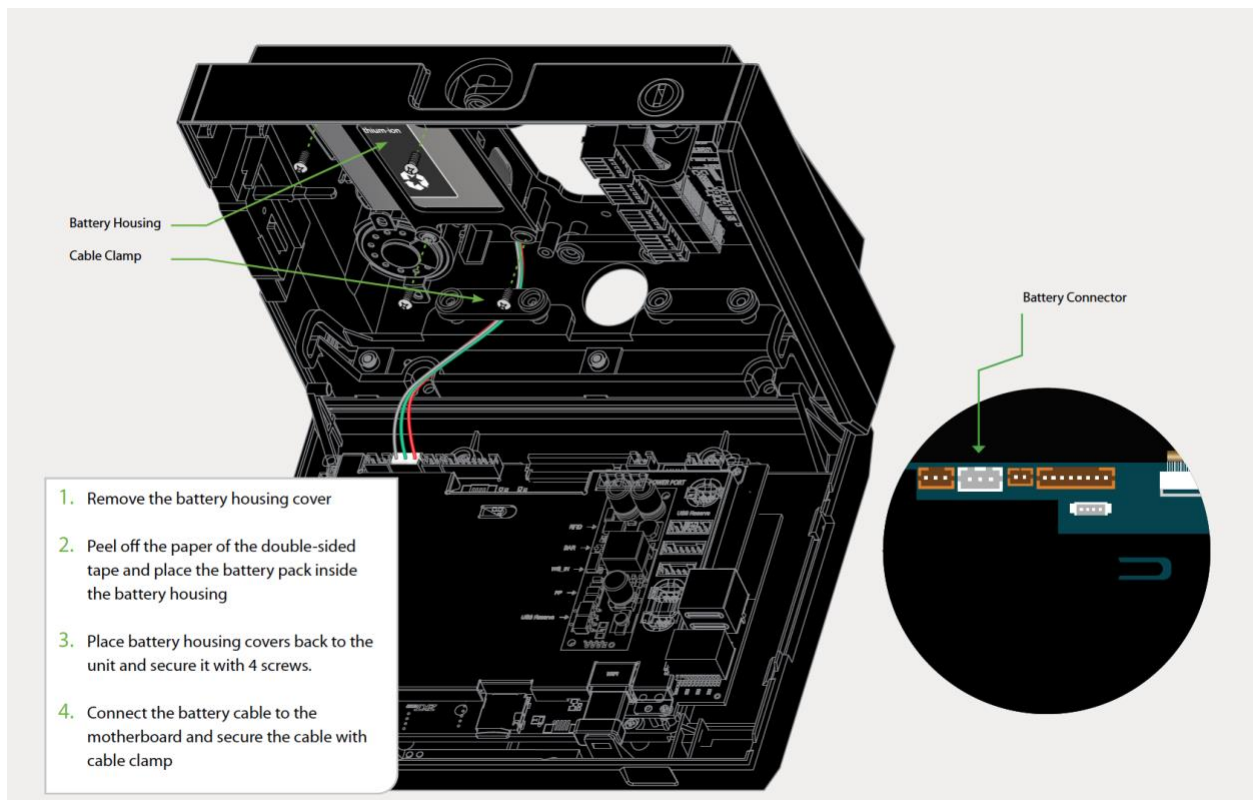
Connecting Ethernet cable



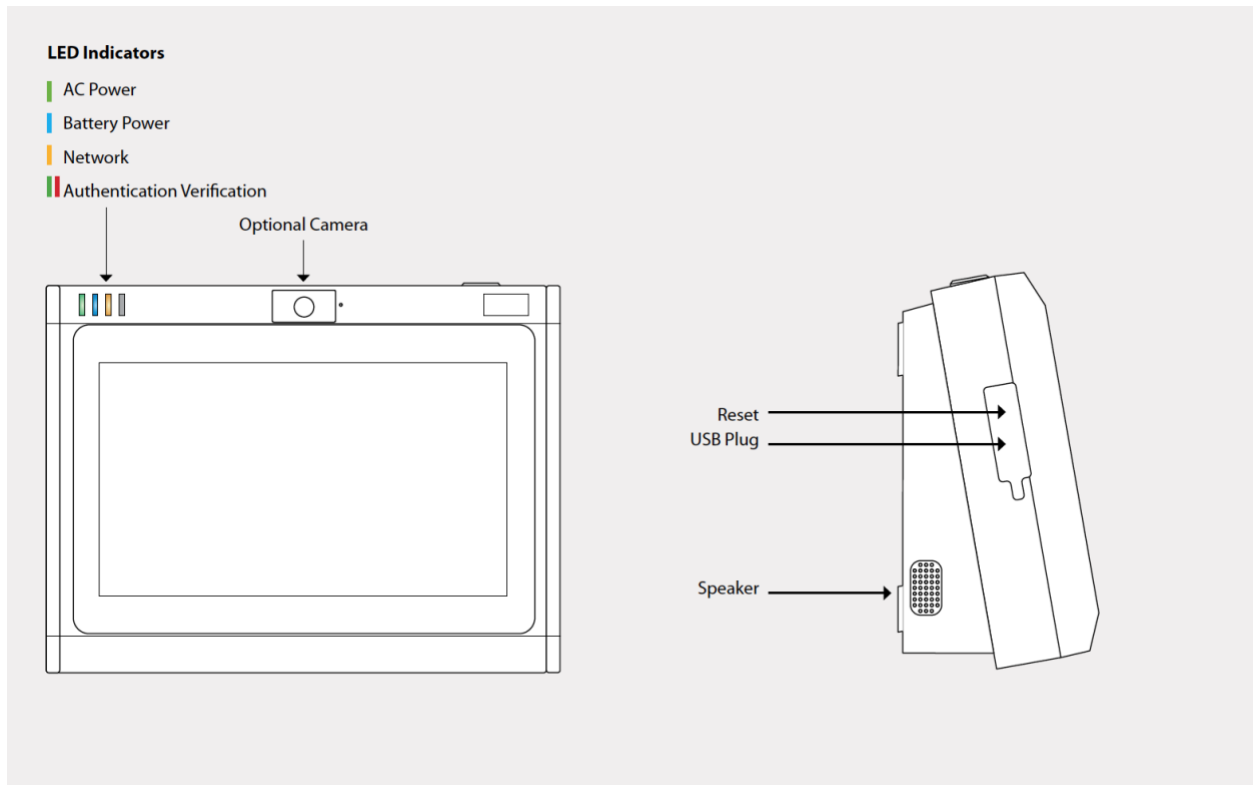
Connecting AC Power



Connecting internal battery pack



External plug and indicators



Troubleshooting

Symptom	Probable Causes	Corrective Action
There is no power in the Ultima.	<p>If the Ultima is powered using standard AC power cable, the power supply is not properly plugged into the main board, the AC outlet, or both.</p> <p>If the Ultima is powered using Ethernet cable, the network may be down, or connections to and from the PoE module may not be secure.</p>	<p>Check the connections to the main board and the AC outlet.</p> <p>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.</p> <ul style="list-style-type: none"> • 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.	<p>If the Ultima is powered using a standard AC power cable, the AC line is not live or is supplying improper voltage.</p> <p>If the Ultima is powered using Ethernet cable, there is an issue with the network.</p>	<p>Measure voltage at the AC outlet and, if necessary, locate another power source.</p> <ul style="list-style-type: none"> • Check the Ethernet connection at the Ultima, and all other network connections. • Ensure that the network is supplied with an 802.11af-compliant power source.
Communication fails.	<p>Communication settings are incorrect either at the Ultima or the host PC.</p> <p>Communications cabling is connected incorrectly.</p>	<p>Check and, if necessary, correct the device IP Address, Netmask, Gateway and DNS.</p> <p>Ensure that all communications cables are routed correctly and connected properly.</p>

Getting Assistance

Contact our Technical Support Department with questions and troubleshooting assistance at **1.855.861.4381 option 2** or support@treeringws.com.