

AMANO Time Solutions

MTX-30 INSTALLATION & OPERATION GUIDE



Thank You....

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Amano Cincinnati, Inc.

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Amano Cincinnati, Inc. reserves the right to make equipment changes and improvements, which may not be reflected in this document. Portions of this document may have been updated to include the latest hardware or firmware version, if applicable.

To ensure safe use of this terminal, be sure to thoroughly read this manual in its entirety before any attempt is made to operate the equipment. After you have finished reading this manual, be sure to store it in a safe place for further reference.

For more information about Amano's complete line of products, visit our web site at:

www.amano.com/time

For on line help please visit our Knowledge base link at

<http://tkb.amano.com/phpkb/search.php>

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

About This Operation Guide

This Operation Guide covers the following MTX-30 Fingerprint terminal with Amano Part Numbers for use with Amano Time Guardian:

MTX – 30 Terminal (Terminal Only no software or CommStik included)	
MTX-30/A965	Finger Print Terminal
MTX-30/A966	Barcode Terminal
MTX-30/A967	Magnetic Stripe Terminal (same magnetic cards as MTX-15)
MTX-30/A968	Proximity Terminal (will work with MTX-15 proximity cards)

MTX – 30 - Package with USB 50 ft. CommStik™ cable, 6ft Cat 5 network cable, and Time Guardian software	
MTX-30/A969	Finger Print Terminal Package
MTX-30/A970	Barcode Terminal Package
MTX-30/A971	Magnetic Stripe Terminal Package (same magnetic cards as MTX-15)
MTX-30/A972	Proximity Terminal Package (will work with MTX-15 proximity cards)

- **AMX-306900** - CommStik 50 ft. (15m) cable only.
- **EOE-108540** - Ethernet 6 ft. (1.83m) Cat 5 cable only.

This Operation Guide covers the MTX-30 Terminals for use with Amano Time Guardian for the following versions; Time Guardian v5.6, and Time Guardian Pro v4.6.

CommStik™ is a trademark of Amano Cincinnati, Inc. Other brand names mentioned herein are for identification purposes only and may be trademarks of their respective holder

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Basic Installation for Time Guardian MTX-30/AXXX

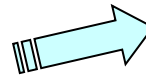


Step 1 – Wall Mount the MTX-30 (see page 7). Connect the MTX-30 terminal using direct connection with included USB cable to host PC, or Ethernet cable for network connection. Plug in the AC adapter to the MTX-30 then to an AC outlet and the MTX-30 terminal will power up.

If using biometric terminal all employees must be enrolled at the MTX-30 terminal for identification and validation. This employee information will be synchronized with Time Guardian by performing polling and downloading commands from the Time Guardian software. This action is necessary to save the biometric fingerprint templates for newly enrolled employees in the Time & Attendance database. Download also sends time, Daylight Saving Time settings, hours worked (if enabled) for the current pay period, and employee assignments to the MTX-30 terminal.



Step 2 – Install the Time Guardian Software on the host PC. The installation should start automatically, but if it stalls, browse on the CD to Disk1\InstData\Windows\VM\install.exe



Step 3 – Perform software activation by entering the activation code Number (found on your disk or clock sticker) when requested after the initial software installation and complete on-line registration for Time Guardian.

Note: QuickBooks® integration is available, but it needs to be setup in Time Guardian. Also, it's recommended that QuickBooks be installed on the same host computer and running for synchronization.



Step 4 – Perform Wizard Setup by completing the Steps 1 - 9 and end Time Guardian installation by pressing Wizard Complete



button.



Synchronization will occur with employee data (punches) to Time Guardian when the MTX-30 terminal is polled. The hours worked will be retained at the MTX-30 terminal from the date of the last download for up to 14 days. When Time Guardian downloads to the MTX-30, the terminal display will show Downloading..., followed by Working..., and finish with Restarting.... The terminal will power off then back on to refresh with the options just downloaded to it.



Chapter 2: MTX-30 Installation

Introduction

The MTX-30 is a sophisticated data collection terminal for use directly with Amano Time Guardian to provide a complete PC-based time and attendance solution for small business. There are four different models to choose: Biometric, Proximity, Magnetic Stripe, and Barcode.

The MTX-30 terminal with Amano Time Guardian provides a system that automatically calculates and accumulates hours worked based on the company's payroll policies. This system separates the hours worked into regular and overtime pay categories and displays them at the terminal (if enabled).

The Amano Time Guardian also offers many sophisticated features to simplify payroll preparation, such as: Revision, Grace Zones, Flexible Rounding Rules, Unpaid and Paid Breaks, and Time Card Reports, to name a few. In addition, easy-to-read management reports are available in hours or dollars to provide accurate and timely labor information. Note: Paid breaks requires additional module.

See Chapter 3 for details on setting up the Amano Time Guardian on the host PC to communicate with the Fingerprint terminal.

When using the fingerprint terminal, a user must enroll their fingerprint in the fingerprint template database. The MTX-30 Fingerprint terminal will record the user's fingerprint template, encrypt it, and store the data. When a user presents their finger for verification, a new template is captured and compared to the pre-enrolled fingerprint in the database. If there is a match, the user will be accepted by the MTX-30 Fingerprint terminal.

The MTX-30 Fingerprint terminal also provides re-punch protection at the terminal when the "Recheck Min" feature is set. Multiple punches within the setting time frame will be verified but not recorded at the terminal in flash memory.

Unpacking Your MTX-30 Terminal

In addition to this guide, your MTX-30 terminal package should include the following:

- Fingerprint Data Collection Terminal
- AC Adapter
- USB-50ft cable
- 6 foot Ethernet cable
- Terminal mounting plate and hardware
- Time Guardian/MTX-30 Quick-Start Guide (Axxx package only)
- Time Guardian CD (Axxx package only)

Understanding the MTX-30 Terminal Front Panel

The front panel of the MTX-30 terminal contains the following controls:

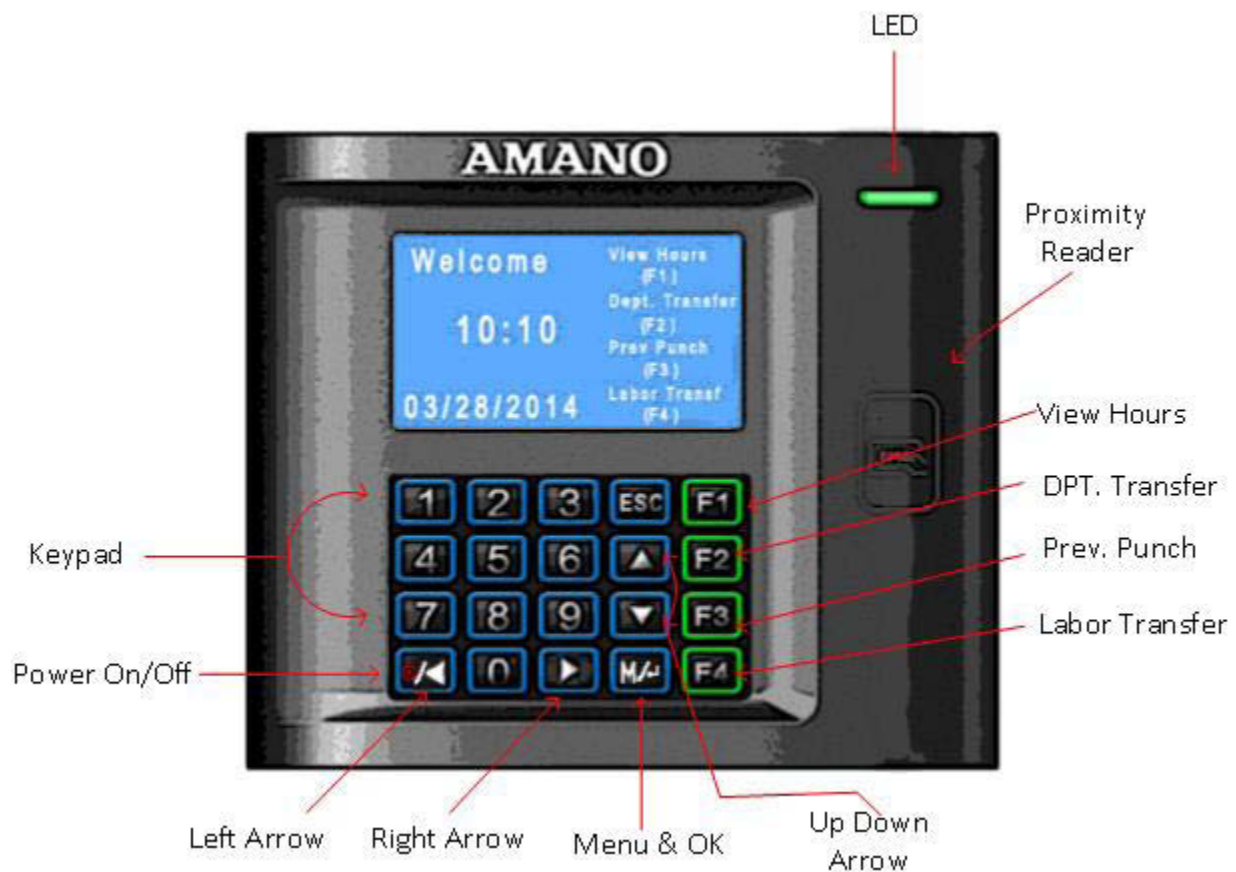
- **LED:** During normal standby operation (power on), the **Green LED** will flash once per second, and stay on momentarily when a user successfully verifies. If a user fails to verify, the **Red LED** will momentarily stay on.

Note: If the fingerprint reader does not follow the standard LED operational parameters, please consult support.

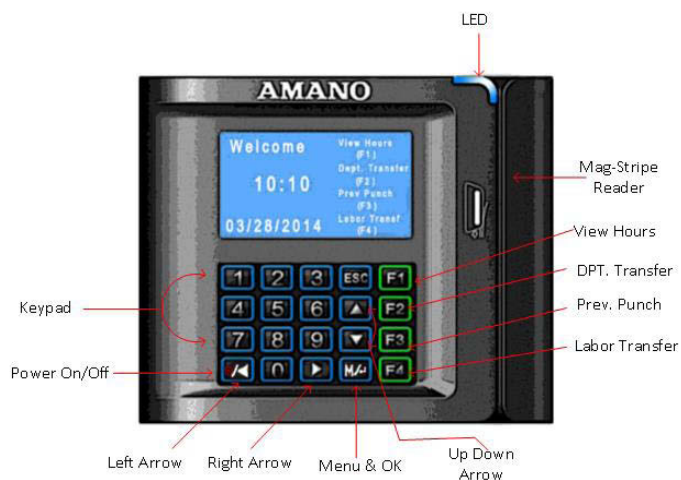
- **Speaker:** Provides audible voice verification of operations, i.e., "Thank you", "Incorrect Password", "Access Denied", "Invalid Id", "Please try again", etc.
- **TFT Display:** Displays time, date, day, and operational information.
- **Biometric Terminal - Fingerprint Sensor:** Enrolls (creates) template and verifies fingerprint.
- **Proximity Terminal** – Proximity card must be presented approximately 1 inch in front of the reader to punch.
- **Swipe card Terminal** – there are two different clocks available with swipe card reader – Barcode or Mag-stripe.
- **Keypad:** Used to input User ID, password, and perform menu operation with the following keys:
 - **ESC** – to perform exit, cancel, ignore when using the Menus.

- **M/** – Menu, OK
- **⊙/◀** – Power ON/OFF & space back.
- **▶** - Modify current item value.
- **▼** or **▲** - to scroll down or up for menu operations.
- F1 – View Hours
- F2 – Department Transfer
- F3 – View Previous Punch
- F4 – Labor Transfer (Note: In Time Guardian this is only available with optional module - Advance Labor.)

Note: Press the Power ON/OFF **⊙** button to turn off the terminal. Department Transfer and View Hours requires configuration and download from Time Guardian Software.



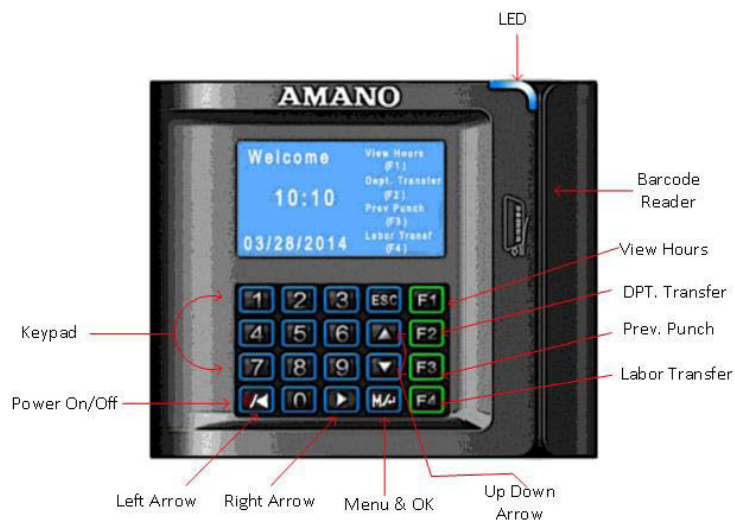
Magnetic Card Terminal



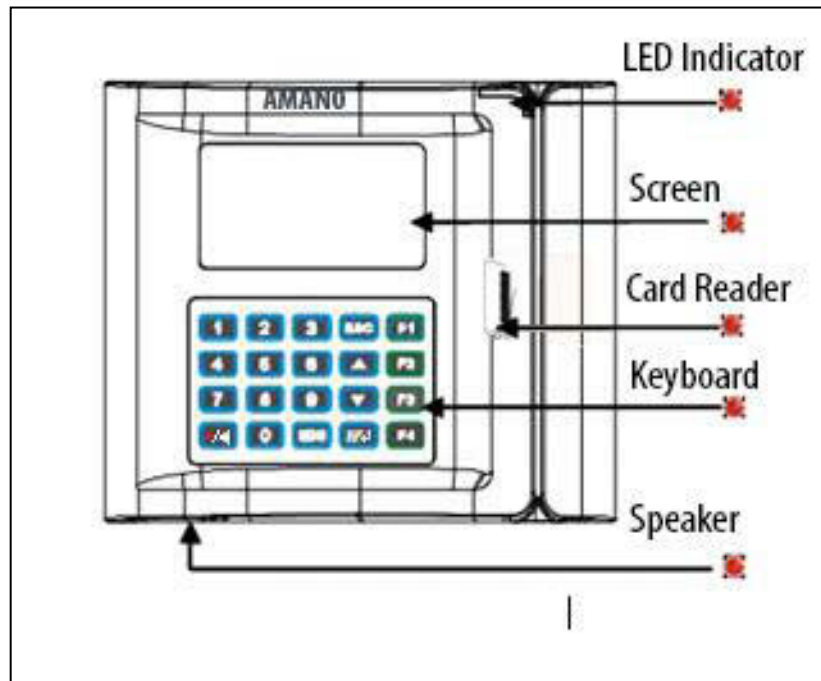
Fingerprint Terminal



Barcode Terminal




2. Device Appearance



- LED Indicator: In normal state, the green LED blinks once every second. If the verification is successful, the green indicator is solid on for three seconds. If the verification is a fail, the red indicator is solid on for three seconds.
- Speaker: Used to play the beep sound and voice prompts.
- Screen: Display the time and date information, used for user to get the operation prompt.
- Card Reader: Used to enroll or verify user identity.
- Keyboard: Used to input the number or execute the menu operation.

Wall Mounting

 **Warning!** Before selecting a mounting location for your MTX-30 Terminal, you must consider the following:

- The mounting surface and hardware must be able to support the unit's weight, 1.35 lbs. (0.61 kg).
- The area must be within the specified operating temperature & humidity range (see Specifications on page [43](#)).
- The MTX-30 Fingerprint terminal should be mounted in an environment that avoids the conditions pictured in the following figure:



- Close proximity to a wall outlet (≤ 6 ft), and a wall that can accommodate signal and/or power conduits.
- If using Ethernet, close proximity to an Ethernet connection (≤ 6 ft).

Amano recommends the following wall mounting procedure:

1. Loosen and remove the back plate retaining screw to remove the back plate as shown (see **Figure 0-1**). Set the MTX-30 terminal face up on a flat surface to avoid scratches on display.

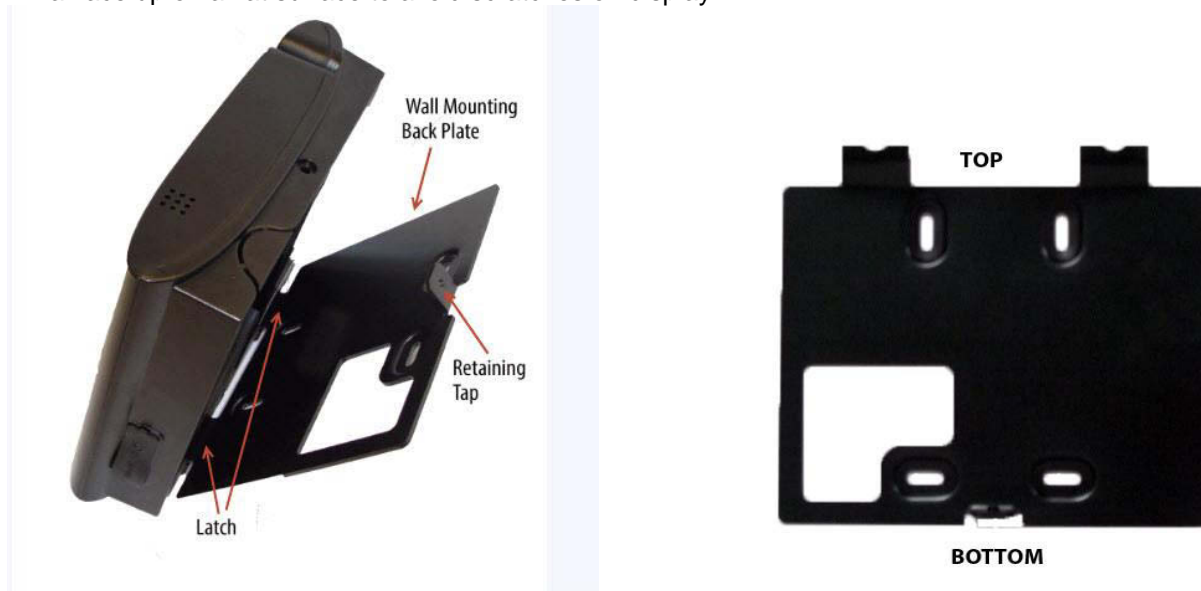


Figure 0-1 Back Plate For Wall Mounting

2. Using the back plate as a template, mark the location of the upper mounting holes on the wall. Mark a vertical line on the wall as a guide to align the lower mounting holes.

Note: Pay attention to the orientation. The back plate should only be mounted one-way as it is keyed to fit into the back of the fingerprint reader.

3. Install a screw or anchor at the mark and hang the back plate from the top-mounting holes. Level the back plate by centering the vertical line in the bottom holes.

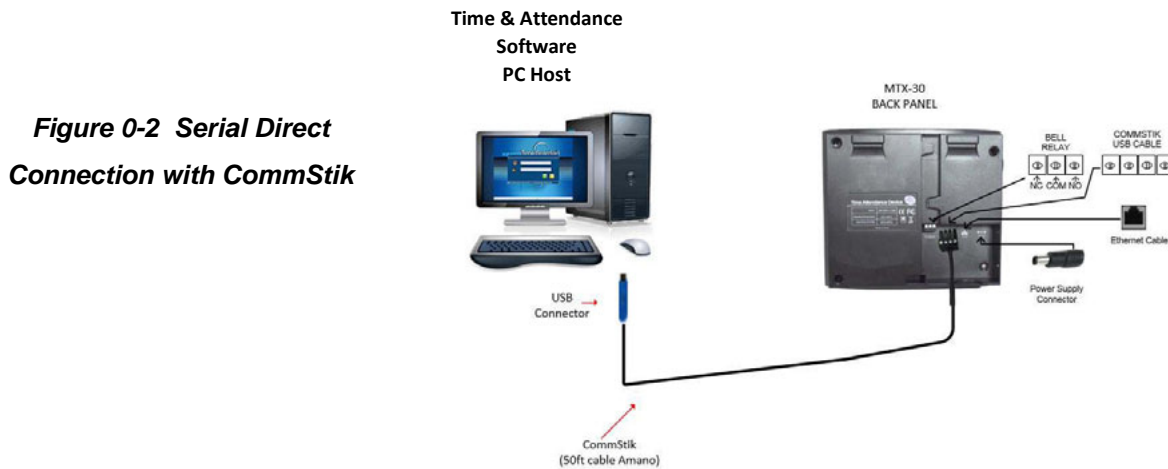
4. Mark the location of the bottom holes.
5. Install the screws or anchors for the bottom-mounting holes and secure the back plate to the wall.
6. Slide the terminal onto the two latches located at the top of the mounting plate. Secure the reader to the mounting plate by inserting and tightening the screw located at the bottom of the unit.
7. Your terminal is now mounted to the wall and ready to connect the data and power lines.

Communication Connections

A connection between your Host PC with Time Guardian and the MTX-30 terminal(s) is/are based upon your setup.

USB Connection (Direct Connect)

You should use the Amano CommStik™ [part number AUS-10035x] (50 foot 4-pin Molex to USB) Communications Cable (included) to interface with the host PC and Time Guardian.



Ethernet Connection (Network)

Networked terminals can be connected to a standard 10Base-T or 100BaseTX computer network. In addition, each networked terminal can have a group of up to 29 serial terminals connected via RS-485.

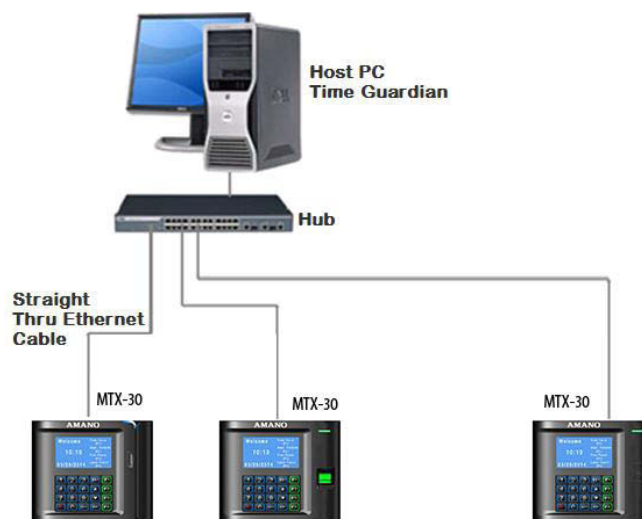


Figure 0-3 Networked Terminal(s)

MTX-30 Startup Welcome Screen (Power On)

Once the terminal is wall mounted and the communication connections have been made, connect the terminal to AC power and proceed on to setup and enroll users.


To start-up, perform the following:

- Ensure the AC Power Adapter is connected to the MTX-30 terminal and plugged into an outlet. The MTX-30 terminal will display the splash screen, perform a diagnostic check, and then display the Welcome screen (see figure).



Figure 0-6 Welcome Screen

Note: The time and date can be set with the terminal keypad, or downloaded to the terminal from the host PC utilizing Time Guardian software. The information such as date, time, daylight saving time (DST), finger templates, and hours worked sent from Time Guardian software will have precedence over existing similar information. That is to say Time Guardian software will act as the master / source.

- Upon power up, the **Green LED** indicator will blink once every second to signify the terminal is operating properly.
- All normal time and attendance functions (validation for punch in/out) must be performed from the "Welcome" screen.
- Press the power On/Off  button to shut down the MTX-30 Fingerprint terminal and display "*halting system....Shutdown 2 secs, 1sec*". The MTX-30 terminal will retain all templates and transactions while the power is off.

Normal Punch IN/OUT Display

The system is ready to use after the MTX-30 terminal and the host PC with Time Guardian software are connected and setup. Upon user recognition at the terminal, the terminal will first briefly display his/her name [first 8 characters of the first and last name combined], followed by the User ID and validation status (see figure).



Figure 0-7 Validation Screen

If View Hours is enable: The terminal will display the "As of" date followed by the current pay period hours worked for the user that just punched in (see figure for example).

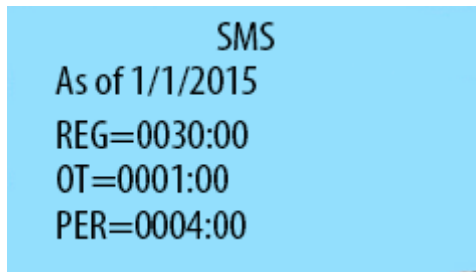


Figure 0-8 Hours Worked for Pay Period

Note: The current pay period information is transferred from Time Guardian to the terminal during a download and can be retained at the terminal for up to 14 days between downloads.

Chapter 2: MTX-30 Operation

Daily MTX-30 Use

The following "Daily Use" sections assume the MTX-30 Fingerprint terminal has been setup with enrolled users and system options have been defined. Please see Enrolling Users on page 17 and the other sections for enrollment details, etc.

Punching with a Fingerprint (FP)

1. From the Welcome screen place your enrolled finger in the sensor window (see figure).



2. Upon verification, the **Green LED** will momentarily stay on; the screen will briefly display your User ID, Name and the confirmation "Verified." (see figure) with the voice prompt "Thank you".



Validation Screen

Note: The name, assignments, and current pay period information can be downloaded from Time Guardian to the MTX-30. An invalid finger entry will flash the error message, "FP Verify fail ". The **Red LED** will momentarily stay on.

Punching with magnetic or barcode card

1. From the Welcome screen swipe your magnetic or barcode badge. (see figure).



2. Upon verification, the **Green LED** will momentarily stay on; the screen will briefly display your User ID, Name and the confirmation "Verified." (see figure) with the voice prompt "Thank you"



Validation Screen

Note: The name, assignments, and current pay period information can be downloaded from Time Guardian to the MTX-30. An invalid finger entry will flash the error message, "FP Verify fail ". The **Red LED** will momentarily stay on.

Punching with proximity card

1. From the Welcome screen place your proximity card in front of the reader. (See figure).



2. Upon verification, the **Green LED** will momentarily stay on; the screen will briefly display your User ID, Name and the confirmation "Verified." (see figure) with the voice prompt "Thank you"



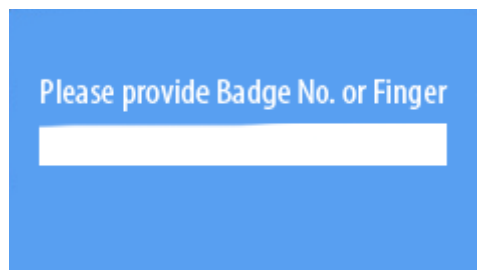
Validation Screen

Note: The name, assignments, and current pay period information can be downloaded from Time Guardian to the MTX-30.

Note: An invalid finger entry will flash the error message, "FP Verify fail ". The **Red LED** will momentarily stay on.

Punching with a Password (Pwd)

1. From the Welcome screen enter your User ID using the keypad and press **OK** to confirm ID (see figure).



Enter User ID

2. Input your password and ok (see figure).



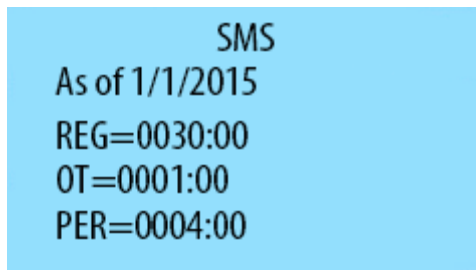
Punch Accepted

Note: An invalid password entry will flash the error message, "Error Pwd.", and the voice prompt, "Incorrect password". The **Red LED** will stay on until the correct password is entered or the password entry times out and the terminal returns to the Welcome screen.

Note: The user will be prompted to "Place Finger" if they do not have a password.

3. Upon verification, the screen will display your Name, User ID, and the confirmation "Verified." with the voice prompt "Thank you".

If View Hours is enable: The display will momentarily show the "As of" date followed by the current pay period hours worked for the user that just punched in (see figure for example).



Hours Worked for Pay Period

Note: When Recheck Min is set, if an employee punches more than once within the time setting [usually 1 – 2 mins.], the voice prompt will be "Punch accepted...thank you" and no pay period hours will be displayed

Punching with a Fingerprint (FP) or Password (Pwd)

1. From the Welcome screen either place your finger on the sensor OR enter your assigned User ID using the keypad.
2. Follow the on screen prompt to remove finger OR input your password.
3. Upon verification, the screen will display your Name, User ID, and the confirmation "Verified." with the voice prompt "Thank you" followed by the momentary display of your hours worked for the active pay period.

Note: The advantage of being enrolled as a user with a fingerprint template and password is that you can use either method to punch. This provides an automatic backup should you encounter any problems with fingerprint validation. Therefore, the first method used and accepted is the only method you need to validate a punch.

Punching with a Fingerprint (FP) and Password (Pwd)

1. From the Welcome screen either place your finger on the sensor OR enter your assigned User ID using the keypad.
2. Follow the on screen prompt to **Please Input Password and OK** then **Please Press Finger** (if User ID and Password was used).

3. Upon verification, the screen will display your Name, User ID, and the confirmation "Verified." with the voice prompt "Thank you" followed by the momentary display of your hours worked for the active pay period.

View Hours at the Clock **F-1**

1. Press the F1 key and the terminal will ask for Badge No. or Finger Print
2. Enter Badge No or place finger on the fingerprint reader and hours will show on display.

Note: If View Hours is enable: Hours displayed are from the last download to the terminal.

Department Transfer at the Terminal **F-2**

1. Press the F2 key and select department by using the up and down keys (▲▼)
2. Press ok after selecting the department
3. Enter Badge No or place finger on the fingerprint reader. Employee name and hours worked will show after punch.

Note: Department Transfer needs to be configured and downloaded to the clock from Time Guardian.

View Previous Punch at the Terminal **F-3**

1. Press the F3 key View Previous Punch and the terminal will ask for Badge No. or Finger Print
2. Select Date and press Ok to display previous punches.

Note: Previous punches are reset (cleared) every time the clock is polled.

Labor Transfer at the Terminal **F-4 (optional module in Time Guardian)**

1. Press the F4 key and select number 1 through 4 by using the up and down keys (▲▼)
2. Press ok after selecting one of the options
3. Enter Badge No or place finger on the fingerprint reader. Employee name and hours worked will show after punch.

Note: Labor Transfer needs to be configured and downloaded to the clock from Time Guardian. This is an optional module sold separately.

Enrolling Users at the MTX-30 – Finger Print Terminal

After installing the MTX-30 Fingerprint terminal and powering on, you may begin enrolling users. If this is the first enrollment in a new or empty clock system, everyone will be able to enroll. However, if there are any users with privileges already setup in the system, you will have to be enrolled by a user with privileges. The MTX-30 fingerprint reader provides the following two methods for enrollment; fingerprint and password.

Use care when enrolling users at the terminal as the **ESC** button can alter the entry functions during some operations.

Enrolling Users at the MTX-30 – Proximity, MAG-Stripe, BarCode Print Terminal

After installing the MTX-30 card terminal and powering on, you may begin enrolling users. If this is the first enrollment in a new or empty clock system, everyone will be able to enroll. However, if there are any users with privileges already setup in the system, you will have to be enrolled by a user with privileges. The MTX-30 Card reader provides the following two methods for enrollment; password and card.

Use care when enrolling users at the terminal as the **ESC** button can alter the entry functions during some operations.

Enrolling Users at at the MTX-30 – Fingerprint terminal

After installing the MTX-30 Fingerprint terminal and powering on, you may begin enrolling users. If this is the first enrollment in a new or empty clock system, everyone will be able to enroll. However, if there are any users with privileges already setup in the clock system, you will have to be enrolled by a user with privileges. The MTX-30 fingerprint reader provides the following four methods for enrollment; fingerprint, password, fingerprint and password and fingerprint or password.

Use care when enrolling users at the terminal as the **ESC** button can alter the entry functions during some operations.

Introduction to Fingerprint Recognition Technology

User Identification/Verification

This is the process of comparing a user's finger against the stored map, and/or verifying a user from a stored password number. After performing the verification process the system will indicate success or failure while also storing all verified punches for transfer to the Time Guardian software.

Threshold

The threshold is a predefined number, often controlled by the administrator, which establishes the degree of correlation necessary for a successful match. If the score from the template comparison exceeds the threshold, the templates are considered a match. The threshold establishes a balance between False Acceptance Rate (FAR) and False Rejection Rate (FRR). FAR indicates the probability that a biometric system will incorrectly identify an individual or will fail to reject an imposter.

You can set the threshold for all users. For a user who has a difficult fingerprint verification, it is recommended to use ID & fingerprint verification (match one-to-one). Raising the threshold increases security, while lowering it increases the passing ratio. The correct balance can be vital. For example, a user whose finger is worn or injured should have a reduced threshold.

The FAR and FRR values affect each other. As FAR is increased, FRR should be decreased. The default one-to-many threshold is 35, while the 1:1 matching default threshold is 15 (see the following table).

Table 0-1 Recommended Threshold Level Settings

FRR	FAR	One-to-Many	One-to-One
High	Low	45	25
Middle	Middle	35	15
Low	High	25	10

Privilege (Status) Levels

The status levels define the ability of a user to perform specified administrator and other tasks including the ability to view, edit, add, and renew specified information categories. Two status levels can be assigned at the MTX-30 terminal or from Time Guardian, and modified as required. These two levels are:

- User – person whose identity must be verified to punch and have their attendance recorded in Time Guardian. Cannot perform any administrator functions.
- Administrator – person who has access to all functions, including system setup..

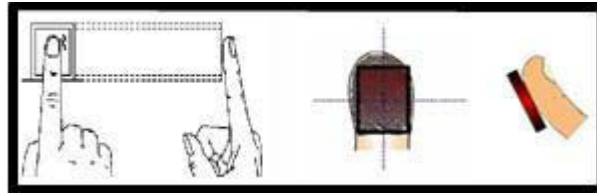
Proper Finger Placement

Make sure the fingerprint image captured contains the core part of desired finger, because a fingerprint is the impression of the friction ridges of all or any part of the finger. Also when enrolling a finger, use a slightly adjusted angle for each finger press, i.e, one to the center, one inclined slightly to the left, and a third inclined slightly to the right. If these techniques are followed; the success rate should increase dramatically.

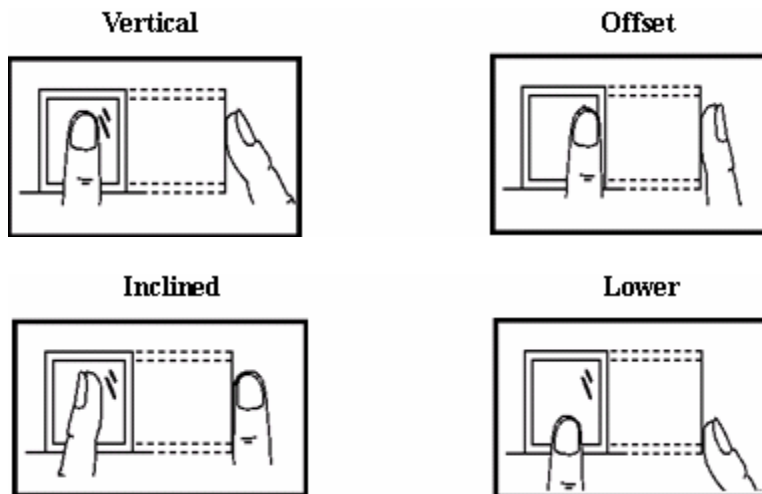
The correct way to place a finger on the sensor is:

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:

Place the finger flat on the center of the sensor surface



The wrong ways to place a finger on the sensor are:

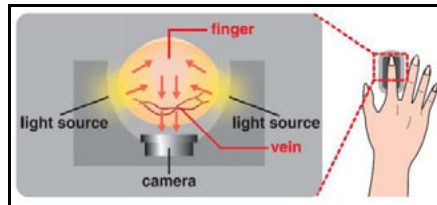


The following hints are provided as suggestions to help obtain a good fingerprint enrollment.

Table 0-2 Fingerprint Enrollment Hints

Problem	Suggested Solution
Fingerprint is too dry or dirty.	Wipe finger, and/or moisten.
Not enough pressure.	Place finger firmly and flat on the sensor.
How to select finger?	Use the finger alongside your thumb. Select fingers that are not worn or injured. If the fingers are small, use the thumb.
Finger placement?	Place at least 2/3 of the finger firmly on the sensor. Do not touch the finger too fast and do not move the finger on the sensor until prompted.
Finger pattern change?	Re-enroll your finger if your fingerprint changes as a result of an injury, etc.
Other reasons	Use password registration as an alternative for people with poor quality fingerprints. Also, the threshold setting can be reduced.

Enrollment is the procedure to associate a User ID with a fingerprint by scanning a user's finger three (3) times to create a template (see figure).



Finger Template Creation

Note: Enrolling more than two (2) fingers per user might adversely effect the amount of user templates that can be stored in the fingerprint reader

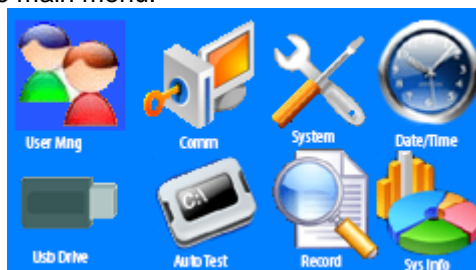
User Option Menu (MTX-30)

Note: If no administrator has been enrolled in the device, everyone can access the user management menu.

If there is an administrator in the system, only the administrator can access this menu.

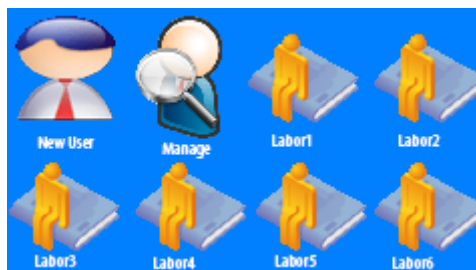
How to Enroll a User

1. Press the **Menu** button to display the main menu.



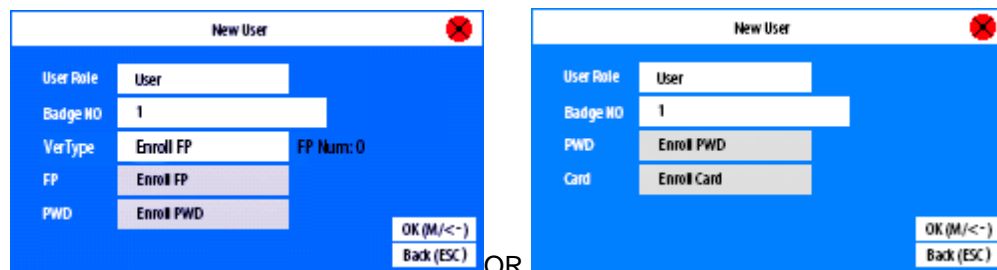
Main Menu

2. Select User Mange to display the User Manage menu (see figure)



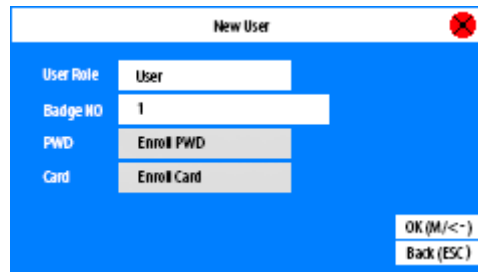
User Manage Menu

3. Select New User to display the New User menu - The possible enrollment by using the up and down keys (▲▼) are;
 - a) Biometric Terminal = FP = fingerprint, PWD = password only, FP OR PWD = fingerprint or password and FP & PWD = fingerprint & password.
 - b) Card Terminal PWD = enroll password or Card = enroll card

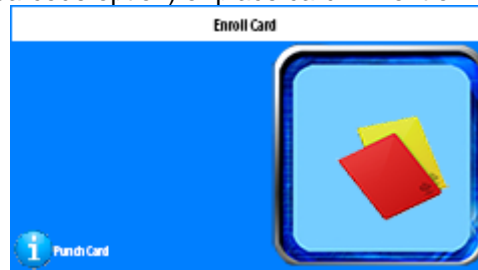


New User Menu

4. MTX-30 Card Enrollment (Card Terminal)
 - a) Scroll down and select 'Enroll Card'

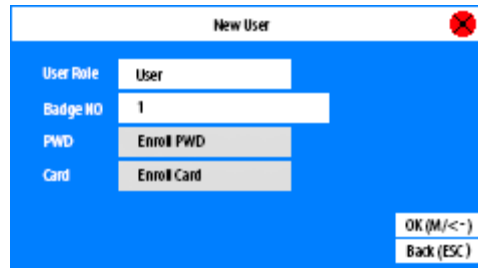


- b) Swipe card (Magnetic stripe or barcode option) or place card in front of reader (Proximity option)

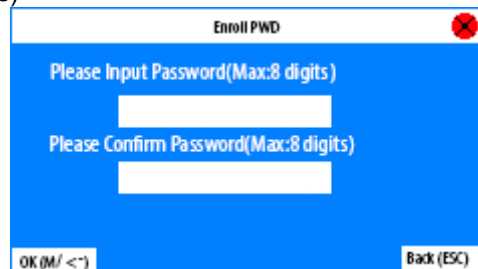


5. MTX-30 password enrollment

- a) Scroll down and select 'Enroll PWD'

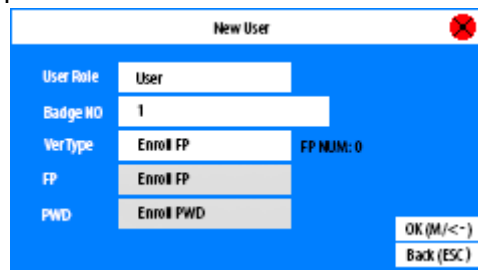


- b) Enter number (maximum 8 digits)



6. MTX-30 Finger print Enrollment (Finger print Terminal)

- a) Scroll down and select 'Enroll FP'



New User Menu

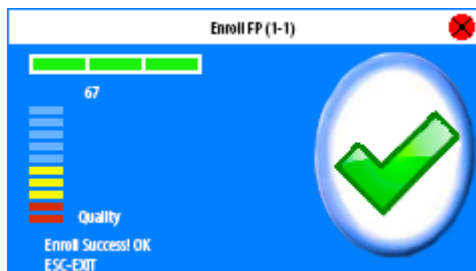
7. Press **OK** and Enroll FP menu will appear.



Note: The system may prompt you with voice and on screen warnings if errors in the FP enrollment process occur. For example, if that ID already has the same finger enrolled, the voice prompt will say "Duplicate Finger" while the screen will display "FP Enrolled AId" [for fingerprint enrolled already].

Note: The system will not allow duplicate enrollment of the same finger for the same or different User IDs. You must enroll a different finger.

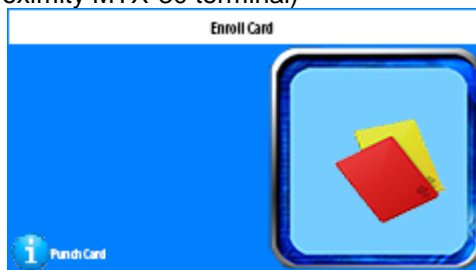
- a) After the 3rd successful finger press, the display will show the User ID followed by "xx" (see figure) to indicate that one (1) finger template exists for this ID.



Save User ID with FP Template

- b) Press **OK** to save the finger template, and enroll a backup finger or ESC to enroll a new user.
8. Card Reader Terminal
- a) If enrolling card (note only available on card terminal) Press **Up or down keys to select (▲ ▼)** "Enroll Card" and press enter (M/↵).

- b) Swipe (Mag-stripe or Barcode card depending on MTX-30 model) or present proximity card approximately half inch from reader (proximity MTX-30 terminal)

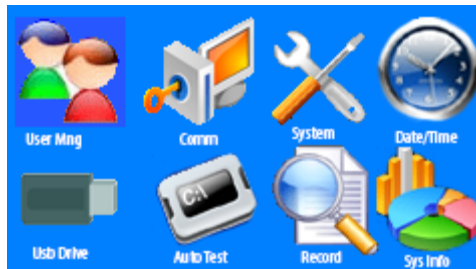


Note: When finished entering PWD, FP or card, please ensure to select OK (M/↵) to save employee

How to Enroll a User with a Password

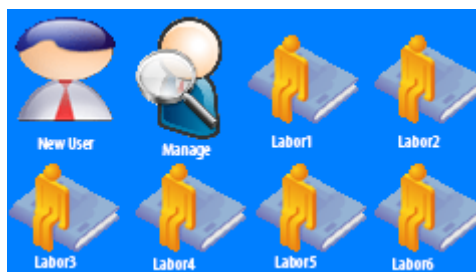
To enroll at the MTX-30 terminal with a password:

1. Press the **Menu** button to display the main menu.



Main Menu

2. Select User Mange to display the User Manage menu (see figure)



User Manage Menu

3. If enrolling password (note only available on card terminal) Press **Up or down keys to select (▲▼)** "Enroll PWD" and press enter (M/↵). After entering new password and confirm password, select OK to save password and OK to save employee.

The New User Menu screen is divided into two panels. The left panel shows fields for 'User Role' (User), 'Badge NO' (1), 'PWD' (Enroll PWD), and 'Card' (Enroll Card). The right panel shows fields for 'User Role' (User), 'Badge NO' (1), 'VerType' (Enroll FP), 'FP' (Enroll FP), 'PWD' (Enroll PWD), and 'FP Num: 0'. Both panels have 'OK (M/↵)' and 'Back (ESC)' buttons at the bottom.

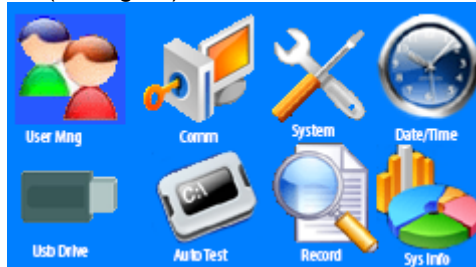
New User Menu

How to Change, Edit or Delete User(s)

The following procedure details how to change an existing user password, privileges or punching options . The FP & Pwd Enroll procedure could also be used to change the password, but you will have to enroll another finger to get password access. Therefore, the following is recommended as the easiest method for changing a password.

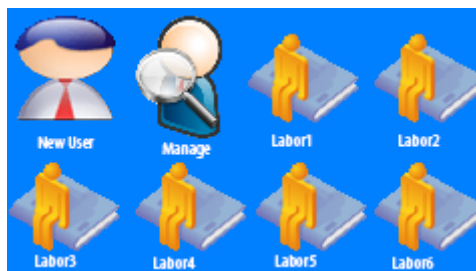
To edit users

1. Select User Mng icon in the main menu (see figure)



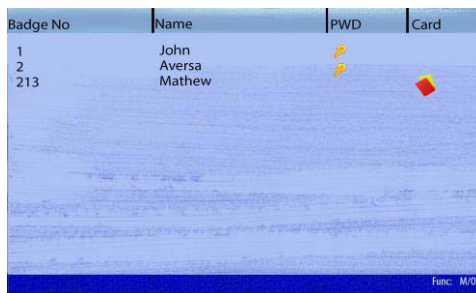
Menu Screen

2. Select Manage icon (see figure).



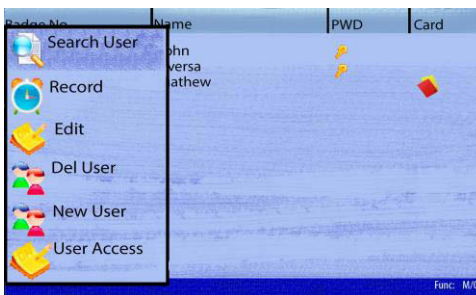
User Manage Menu

3. Select Employee



Manage Menu

4. Select one of the available options.





Manage Menu

Note: Badge Number cannot be changed, user must be deleted & re-enrolled.

How to Restore Users From Time Guardian Software

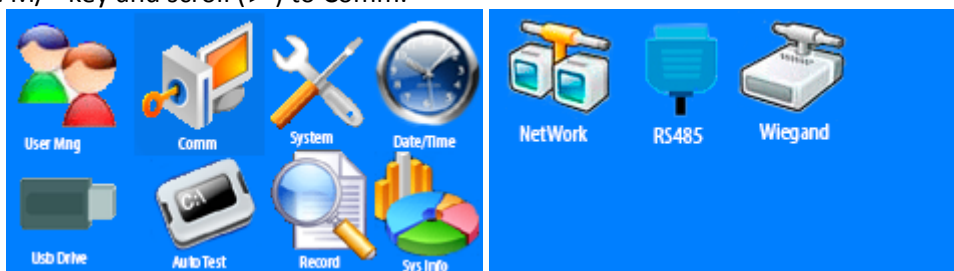
You can retrieve the Users you just deleted at the terminal [location] from Time Guardian. Also, it is recommended to utilize Time Guardian backup feature to protect the database which contains the maps, etc.

The sequence to restore users from Time Guardian is:

1. First press the  button from the Time & Attendance Communications screen (see Using the Fingerprint Commands) to load employee ID's, etc. into the MTX-30 terminal.
2. Next press  from the Time & Attendance Fingerprint Communications screen to transfer all template maps to the terminal.

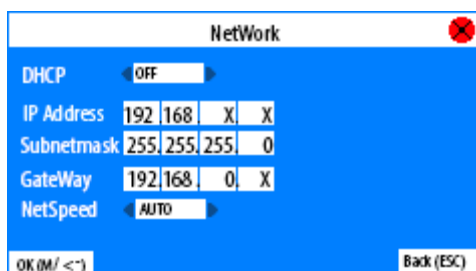
Communication Option Menu (MTX-30)

1. Press the M/↓ key and scroll (▶) to Comm.

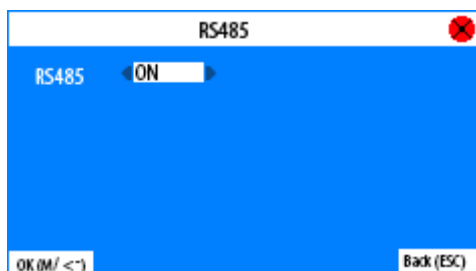


Note: Please verify network cable is connected first and power cycle the unit.

Network – Change DHCP from ON to OFF and write the IP Address to be used in the software configuration:



RS485 – Enable RS485 when using the AMANO USB Commstick. (Default is off).



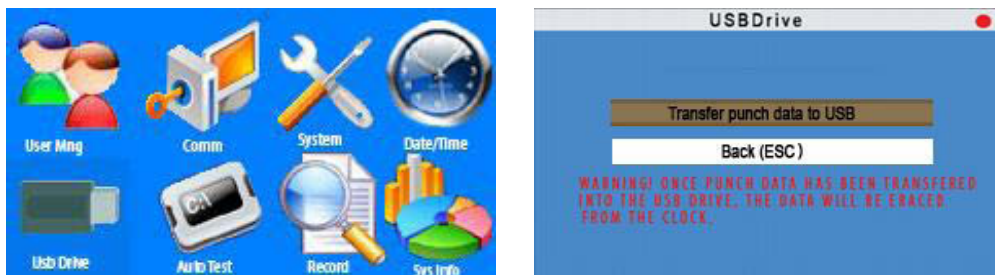
Note: There is no conflict if RS485 is setup to ON but not used (connected).

USB Drive

1 Press the M/↵ key and scroll (▼) to Usb Drive and then the M/↵ key one more time.

USB (Connector located on the side of the terminal) – Allows to download accumulated punches on a USB drive.

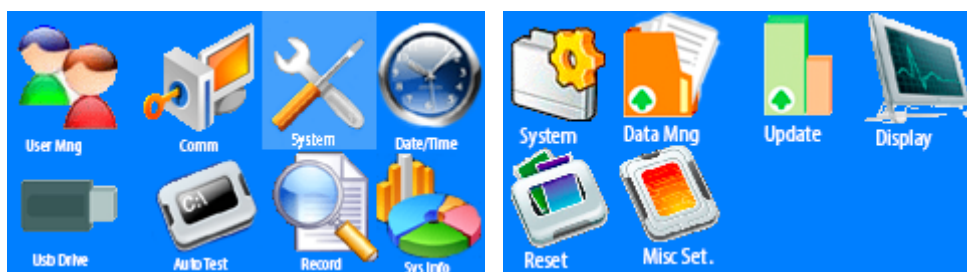
Note: Once the punches have been downloaded in the USB drive, they will be erased from the clock.



Note: USB can be used on multiple units but it is recommended upload USB from TG immediately to avoid loss of data.

System Option Menu

1. Press the M/↵ key and scroll (►) to System and M/↵ key.



- **SYSTEM PARAMETERS**

Threshold:

1:1 matching threshold value: The similarity of ID+fingerprint verification and the enrolled template

1:N matching threshold value: The similarity of verification and the enrolled template

Recommended matching threshold value:

		Matching threshold value	
FRR	FAR	1:N	1:1
high	low	45	25
middle	middle	35	15
low	high	25	10

Date Fmt: Date Format

Time format: Time format displayed on the initializing interface of fingerprint sensor

Press ◀/▶ to select format. The fingerprint sensor supports ten date format: YY-MM-DD, YY/MM/DD, YY.MM.DD, MM-DD-YY, MM/DD/YY, MM.DD.YY, DD-MM-YY, DD/MM/YY, DD.MM.YY and YYYYMMDD. Select your desired date format.

Keybeep: Keyboard beep: Press ◀/▶ to set whether the key has sound or not. “Yes”

Voice: Voice prompt: Press ◀/▶ to select whether to give voice prompt or not. The device will give corresponding voice prompt during operation.

Vol.: Press ◀/▶ to adjust volume.

Recheck Min: It is in the set time range unit (minute). If an employee’s attendance record has been recorded already there, then the record of a second attendance won’t be saved. (Effective value is 0-60 minutes. 0 means all the records after verification are saved.)

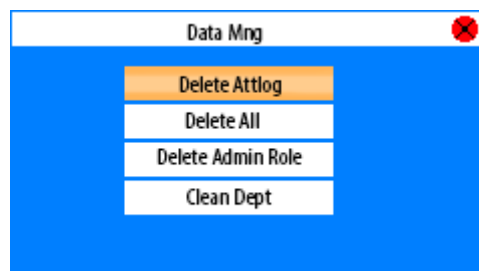
•**DATA MANAGEMENT**

Delete Att Log: Delete all attendance records.

Delete All: Delete all enrolled employees’ information, fingerprint and attendance record.

Delete Admin Role: Change all administrators into common users.

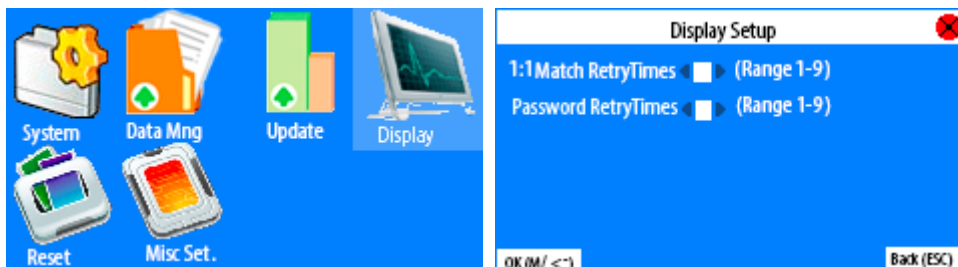
Clean Dept.: Delete all Departments



• **UPDATE** = ONLY USE IF ADVISED BY AMANO SUPPORT STAFF.

•**DISPLAY**

Display Setup – allows configuration of the match retry times and password retry times.



RESET

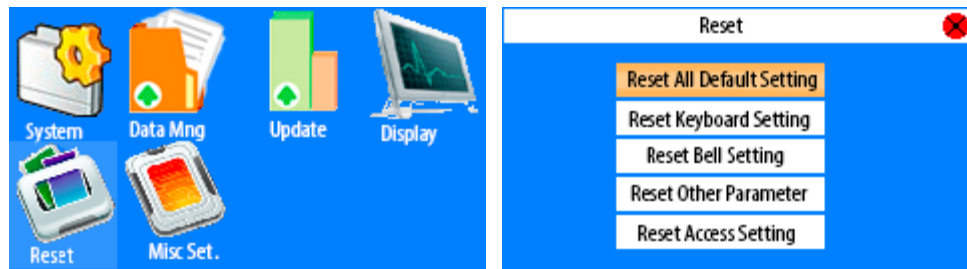
Reset all Default Setting

Reset Keyboard Setting

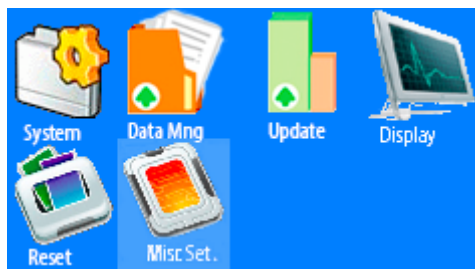
Reset Bell Setting

Reset Other Parameter

Reset Access Setting



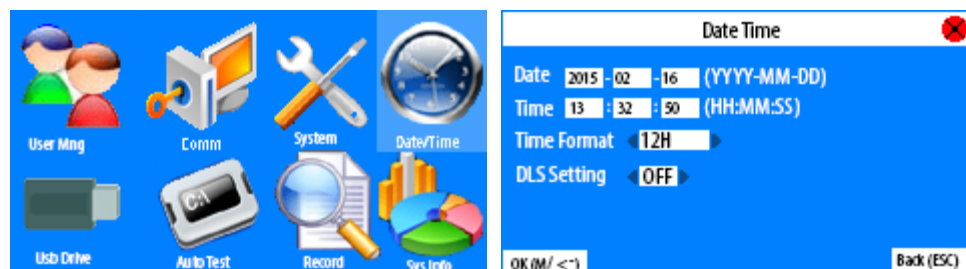
Miscellaneous Settings



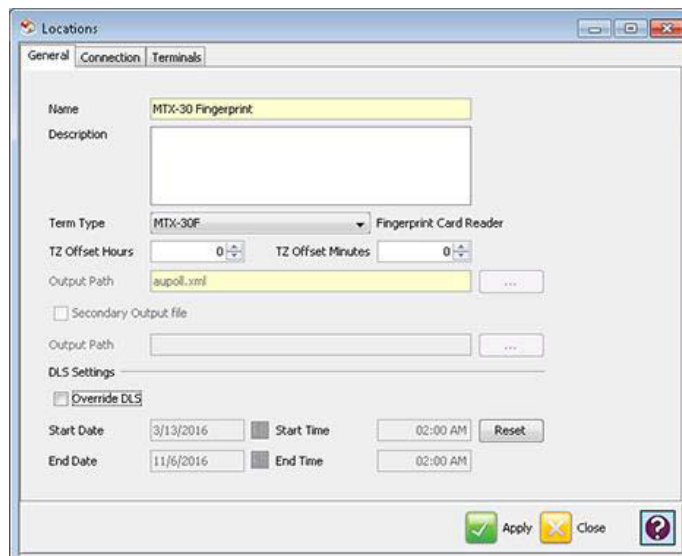
Settings for Sleep Time, Lock Power (on or off) and Language (English or Spanish)

Date and Time Menu

Date/Time



Time settings and day light savings can be entered at the clock or setup in Time Guardian and downloaded to the clock.

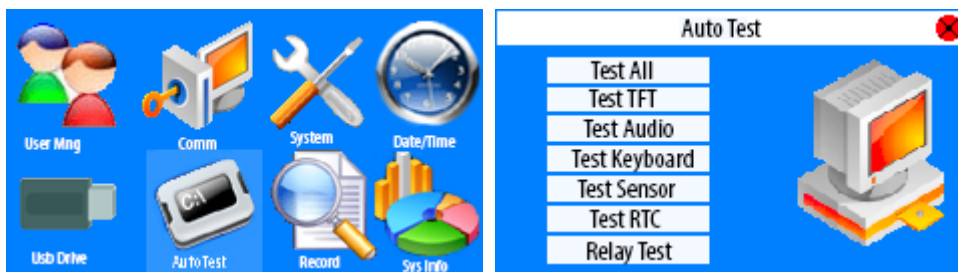


Time Guardian DLS Settings

Note: Only check override if dates are incorrect.

Auto Test Menu

The device can test various modules automatically to help the operator discover a fault quickly. Auto test includes TFT display Test, Audio Test, Keyboard Test, Sensor Test and RTC Test.



Press "▲/▼" to select desired test. Press OK to start test.

7.1 TFT display test

The device can automatically test TFT color display effect through color display, white display and black display to see whether the screen works normally. Press OK to continue and press ESC to exit.

7.2 Audio test

The device can automatically test voice prompt effect through playing voice files in the device to see whether the files are complete and the voice effects are good or not.

Press OK to continue and press ESC to exit.

7.3 Keyboard test

The device can automatically test various keys to see whether the keys work normally or not.

Press any key on the test interface (**except for OK and ESC**) to check whether the pressed key is in accordance with that displayed on the screen.

■ will appear if it's the right key, and ■ will appear if it's not the right key.

Press ESC to exit.

7.4 Sensor test

The device will automatically test the sensor to see whether it works normally. Press fingerprint to see whether the image is clear and useable.

Press fingerprint on the sensor window and the fingerprint image will appear on the screen.

Press ESC to exit.

7.5 Real-time clock

The device can automatically test the clock to see whether it works normally.

Press OK to start time and then press OK to stop time.

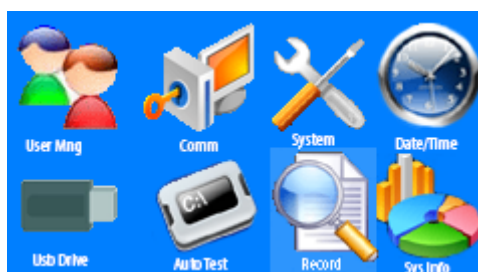
Press ESC to exit.

7.6 Relay Test

The device can automatically test the relay to see whether it works normally.

Press OK to start time and then press OK to stop time.

Press ESC to exit.



7.7 Record

Employee's attendance records will be saved in the device. For convenience, query record function is provided.

According to user's input query condition, the record will be displayed on the screen for user to check.

Enter **query attendance**, input corresponding information in the **query condition** input box.

- 1) When the User ID is blank, all employees are queried.
- 2) When input a User ID, only this employee's attendance record can be queried.

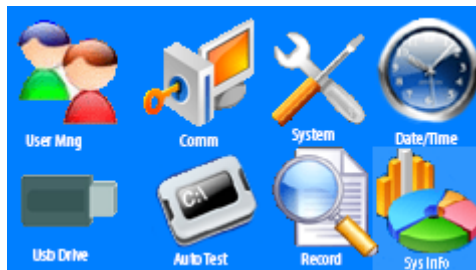
After query, the records in accordance with the conditions will be displayed on the screen:

Date	Badge No: 1 Name: John Doe
05/07	07:25 12:24 13:30 18:10
	07:54 12:05 13:31 18:24
05/08	07:35 12:22 13:22 18:04 18:04
	07:42 11:59 13:24 18:12
	07:21 12:14 13:12 18:30
	07:45 13:25 18:00
05/09	07:55 08:56 08:56 08:56 08:56 08:57
	08:57 11:20 12:25 13:21 19:00

Detail Rec : M/↵

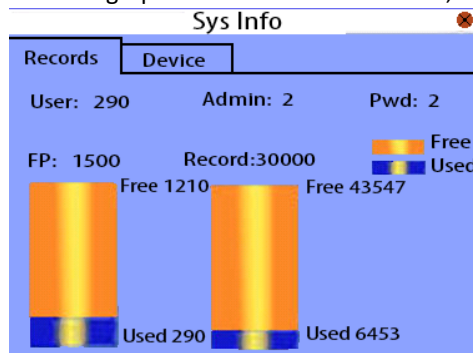
7.8 System Information Menu (SYS INFO)

Use **SYS INFO** to check the current device's saving status, its version information and other useful info.



Record

Display the count of enrolled users, administrator, password enrollment, the current enrolled fingerprint and the current saved attendance record. Also display the capacity of the fingerprint and attendance record, as show below:



Device

Display device name, serial number, version information and manufacture date in device information.

Field	Value
DeviceName	MTX-30
Serial	3426700000010
MAC Address	00:17:61:55:23:01
Alg Version	Finger VX10.0
Firmware Ver	Ver 6.6.0(build 138)
Manu Time	1/6/2014 9:18:50

Chapter 3: MTX-30 Setup with Time Guardian

See the Time & Attendance User's Guide [AMX-502700] for more detailed operation and setup information for Time Guardian.

MTX-30 Terminal Communications

The **Communications module** in Time Guardian can be used to communicate with MTX-30 terminals when setup. Locations and terminals can be configured utilizing Time Guardian Clock tab in the Setup Wizard. Operations from this module include polling, downloading, setting the time, and viewing specific terminal settings in a location. **Polling**, or **polled** operation, refers to actively sampling the status of the external terminals by the client Time & Attendance program. **Downloading** is utilized to send data to the remote terminals from Time Guardian.

Note: All operations at the clock including time and employee ID's are controlled by downloading information from Time Guardian.

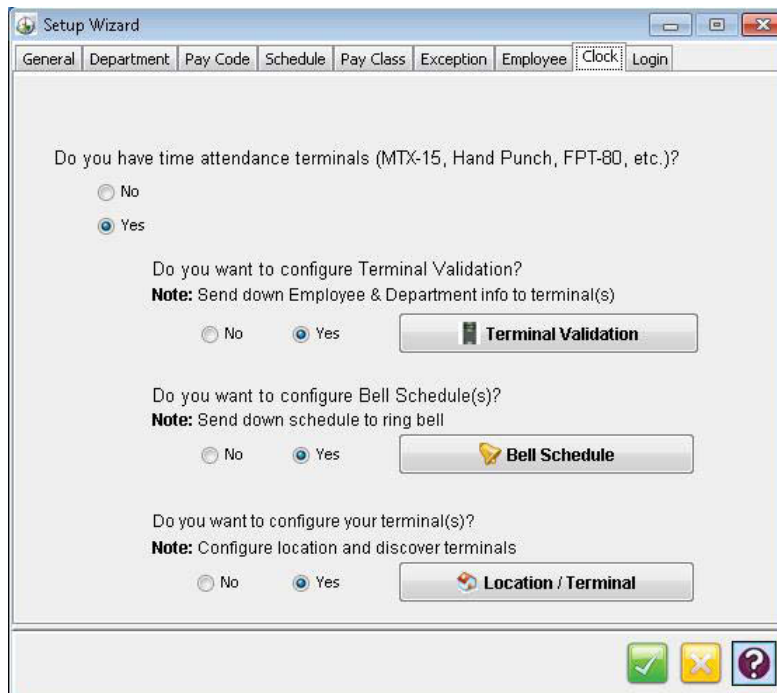
The following sections describe how to setup the Amano Time Guardian to communicate with the MTX-30 terminal for normal time and attendance functions.

MTX-30 Setup with Amano Time Guardian

Note: Prior to commencing with Time Guardian Setup Wizard, Amano recommends that you install the MTX-30 terminal(s), using this MTX-30 Terminal Installation and Operation Guide. The MTX-30 terminal is installed to communicate with your PC.

If you are setting up a networked Ethernet MTX-30 terminal, you may need to obtain the correct IP address from your network administrator for each Ethernet MTX-30 terminal(s) connected to the system and enter the IP address in the Location screen of Time Guardian. Also, see the section on "Communications Options Menu" for how to enter a specific IP into your MTX-30 terminal.

During the installation and setup of Time Guardian the Setup Wizard for **Step 8: Clock Setup** should be used to setup your MTX-30 terminal;



Clock Setup from Time Guardian

Use Step 8 if:

Do you have Terminals other than Access Control Terminals?

If **Yes**, Time Guardian will enable access and communications module.

If **No**, communications will be disabled until ready for clock setup.

Do you want to configure Terminal Validation?

If **Yes** is selected for Terminal Validation, click the **Terminal Validation** button and the Terminal Validation screen will appear . Terminal validation provides employee filtering from the setup configured in the **General**, **Department**, and **Employee** tabs in Time Guardian.

Terminal Validation is used to assign employees and Labor Levels to specific MTX-30 terminals in the system. When validation is used, only employees assigned to a particular terminal with the selected Labor Levels can use that terminal. Labor transfers at the terminal can only occur within the selected Labor Levels. Terminal Validations are downloaded to the selected MTX-30 terminals by location from the Communications module. To do so, see Time Guardian User Guide for more detailed information:

The screenshot shows the 'Terminal' configuration window with the 'General' tab selected. The fields are as follows:

Field	Value
Name	Default Validation
Number	1
Serial No	0695135200114
Bells	None
Validation	Default Validation
Active	<input checked="" type="checkbox"/>

At the bottom right, there are three buttons: a green checkmark, a yellow 'X', and a purple question mark.

Software Setup for Terminal Validation

Do you want to configure Bell Schedules?

If **Yes** is selected for Bell Schedules, click the **Bell Schedule** button for the Bell Schedules screen.

The screenshot shows the 'Bell Schedules' configuration window with the 'General' tab selected. The fields are as follows:

Field	Value
Name	Ohio Factory Summer schedule
Description	

Below the description is a 'Bells' section with a table showing the schedule for each day of the week. The table has columns for Time, Duration, and days of the week (Sun, Mon, Tue, Wed, Thu, Fri, Sat, Hol). The 'Add' and 'Remove' buttons are on the right.

Time	Duration	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Hol
07:50 AM	5	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10:00 AM	5	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10:10 AM	5	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12:00 PM	5	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
01:00 PM	5	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

At the bottom right, there are three buttons: a green checkmark, a yellow 'X', and a purple question mark.

Software Setup for Bell Schedules

Note: Duration entered in the first line will be the same to as following lines.

A Bell schedule requires you to enter the Duration for the bell to ring, the time of day for the bell to ring and the days of the week. Multiple entries can be made for Bell Schedules with different duration and day assignments. Bell Schedules are downloaded to the selected terminals by location by using the **Communications** module in Time Guardian. To do so, see the next section and/or Time Guardian User Guide for more details.

Do you want to configure Terminals?

Answer **Yes** to this question if you are using terminals such as a MTX-30 terminal via a serial (USB direct) or Ethernet (network) connection.


Direct (serial) Connection

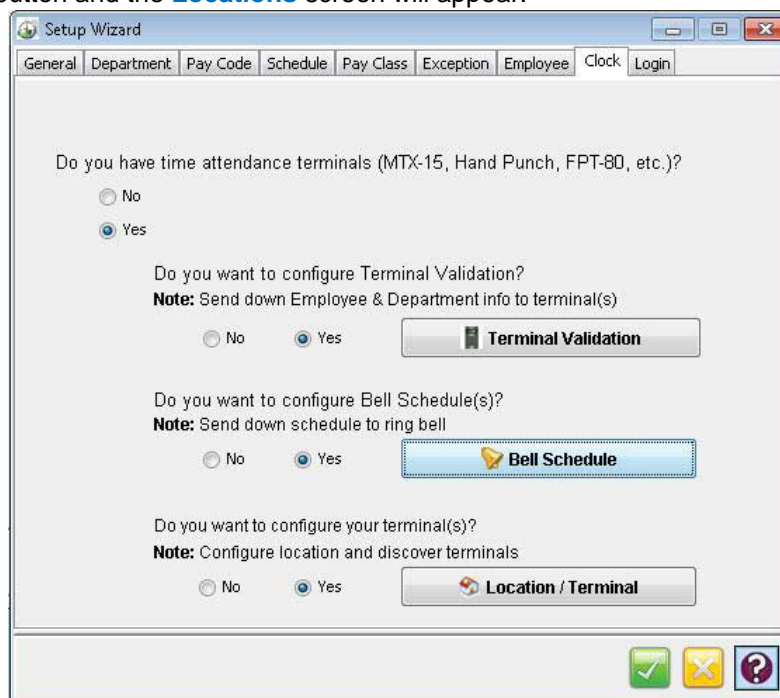
If **Yes** is selected, and a **Direct connection** using the included 50 foot USB/serial cable is desired, you can just use the **"MTX-30 Default"** location. You do not have to do anything else. The MTX-30 terminal, if connected, will automatically be detected upon login.


Note: The default terminal connection is for a USB (serial-direct) MTX-30 Terminal.

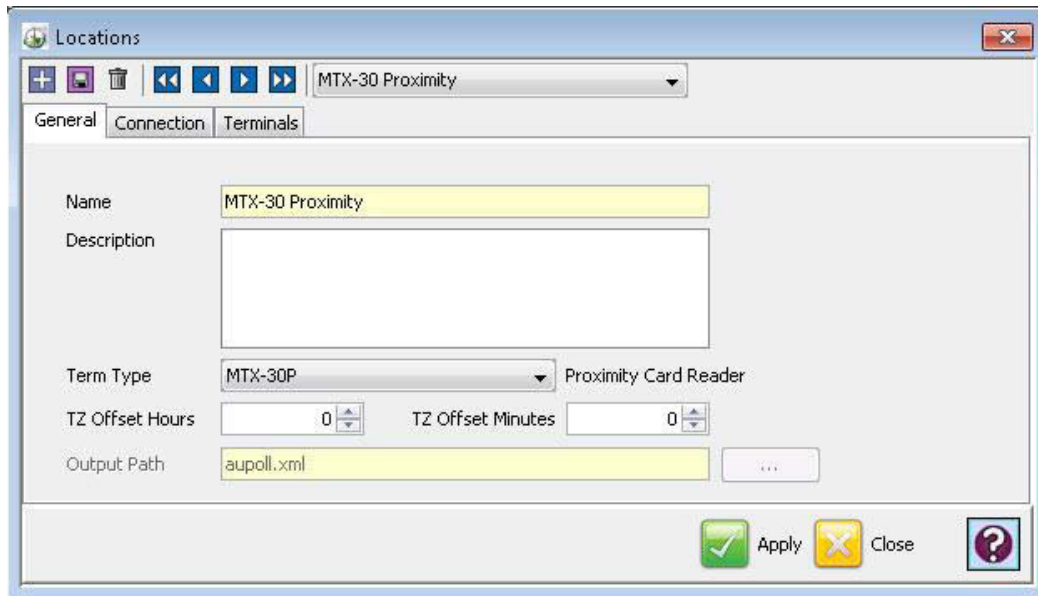
Ethernet (network) Connection

If **Yes** is selected, and you are installing an **Ethernet connection** for the MTX-30 click on the **Location/Terminal**

 button and the **Locations** screen will appear.



- Select **"MTX-30 Default"** on the General tab from the dropdown menu for Locations [recommended for easy configuration].
- Click on Connection tab to select **Ethernet** for Connection Type and enter your **IP Address**. The default MTX-30 Location automatically defines other necessary options for Ethernet. Click on  button.




Before a Location can be created, a Bell Schedule (optional) and Terminal Validation list should be present.

You may have to create a Location to communicate with your MTX-30 terminals. A Location enables Time Guardian to distinguish and interact with the desired terminal(s). Only one terminal type can be used per Location. If you have more than one terminal type [i.e, MTX-30 and MTX-15], you must have multiple Locations.

If you are configuring a direct connect serial MTX-30 terminal, you may have to determine the PC Comm port that the USB CommStik is connected to and select it in **Connection** tab from the **Locations** screen. Check your windows device manager.

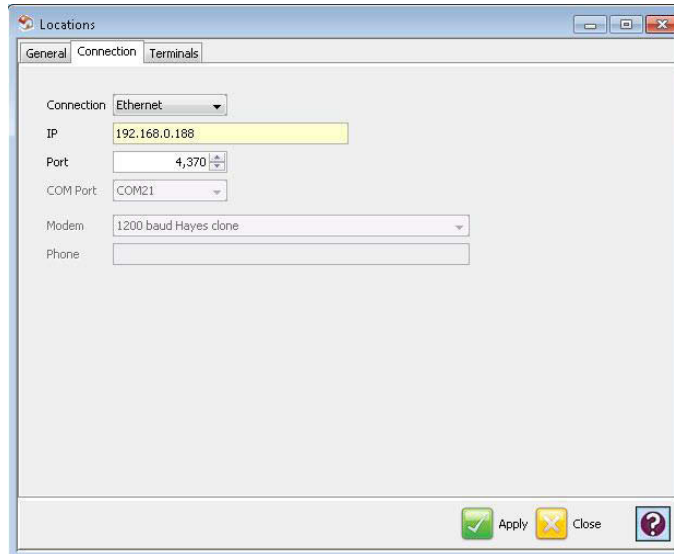
The window will open on the **General** tab with a default Location Name. It is recommended to use the “**MTX-30 Default**” name.

To create a new Location in Time Guardian for MTX-30 terminal:

- Step 1.** Click the Add  button to create a new Location. You will be required to enter a unique **Name** [yellow required field] that will be used to describe the area or site where a terminal or group of terminals is located.
- Step 2.** In the **Description** field, enter a brief description of the Location. This field is optional.
- Step 3.** In the **Term Type** field; select MTX-30.
- Step 4.** In the **TZ (Time Zone) Offset** field, select the time zone difference (if applicable) between the physical location of your PC and the MTX-30 terminals. If same time, leave settings at 0.
- Step 5.** **Output Path** field - Please do not change this!
- Step 6.** If necessary, check the “Secondary Output File” box, and In the Output Path field, enter the path of the secondary output file. Press the Browse button to navigate to the location of the secondary output file and include complete output file name.
- Step 7.** Click on the Override DLS for **DLS (Daylight Savings Time) Settings** override and enter the following only if dates are wrong:
 - **Start Date:** The date that the DLS period will begin.
 - **Start Time:** The time of the day of the Start Date that the DLS period will begin.
 - **End Date:** The date that the DLS period will end.
 - **End Time:** The time of the day of the End Date that the DLS period will end.

Press the **Reset** button to Reset the DLS at the Terminal.

- Step 8.** From the Locations screen click on the **Connection** tab.



Software Setup for Connection Type

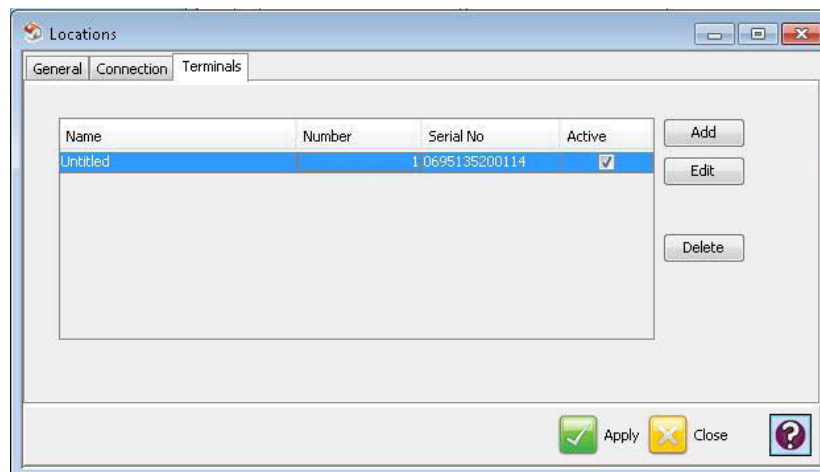
Step 9. In the Connection field, select the type of connection you are using to communicate with the MTX-30 terminal(s). The required information in the Connection Info depends on your connection.

- **Ethernet:** The MTX-30 terminals communicate to the Host PC via Ethernet connection. If selected, you must enter the IP Address and Port **4370**. [Obtain the correct IP address from your network administrator], or alternatively, please consult Chapter 3: Network Configuration of this Guide for additional information about hardware configuration].

Note: Default Port number for Ethernet terminals are; (Do not change default ports)
MTX-15 = **2101**, MTX-10 & 20 = **401**, MTX-30 = **4370**, and HandPunch's = **3001**.

- **Direct:** The MTX-30 terminal(s) are directly connected to the Host PC via Com Port. If selected, you must select the Com Port only .

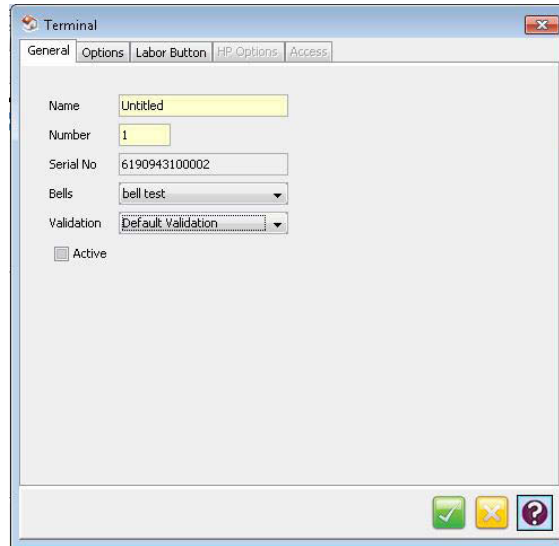
Step 10. Click on the **Terminals** tab to add, edit, delete, or communicate with MTX-30 terminals.



Setup for Locations with Terminals Tab

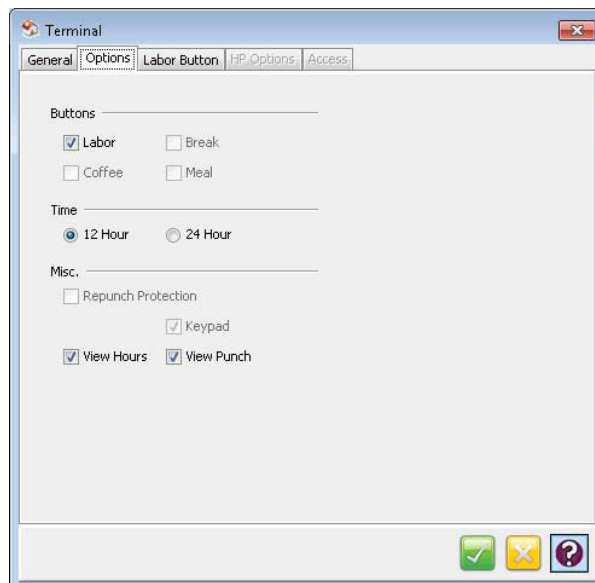
Step 11. The Ethernet and direct connection MTX-30 terminals in this location should appear in the Terminals list (see figure).

Step 12. Double-click on the found terminal or highlight the terminal and click on the **Add** button to add a new Terminal to the Location and the Terminal window **General** tab will appear for setup.



Software General Terminal Setup

- Step 13.** In the **Name** field, enter in a unique name [required field] that will be used to describe the terminal. This field will be automatically populated with the MAC address when the **eyeglass** button is used.
- Step 14.** In the **Number** field, enter 1 for all models except 0 for Hand Punch Ethernet.
- Step 15.** In the **Serial No.** field, a unique number will appear automatically for a found MTX-30 terminal after the first communication..
- Step 16.** Click on Bell option (if needed).
- Step 17.** If you wish to assign a Terminal Validation setting to the terminal, select one from the dropdown list in the Validation field. Assignment is recommended for backup of enrollments.
- Step 18.** Click on the **Options** tab to activate the Department Labor at the MTX-30 terminal with a check.
- Step 19.** In the Time Format box, select the time format (12-hour or 24-hour) for the terminal.

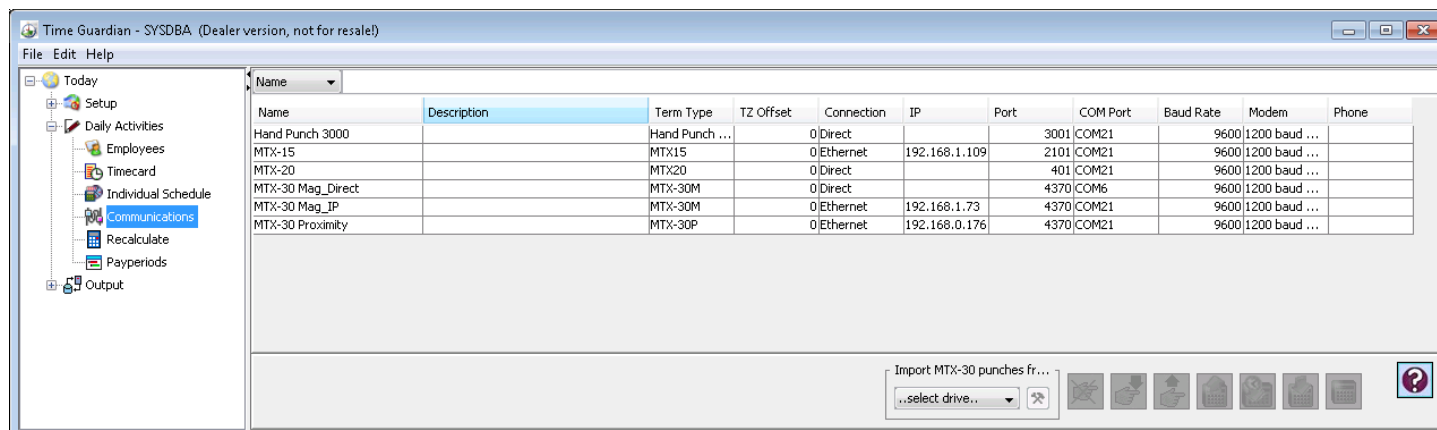


Software Terminal Options Setup

- Step 20.** In the Misc box, select whether to enable the view hours and View Punch at the terminal.
- Step 21.** To update the terminal settings, click on the Apply button.

Time Guardian Communications Module

With Time Guardian open on the host PC, from the tree view, click on the **Communications** module within the Daily Activities group and the following type of screen should appear for Time Guardian. Note – the tree view can look a little different depending upon which modules are activated and/or whether it is Time Guardian Pro (all modules will be active). The figure below shows the tree view for Time Guradian with all modules activated.

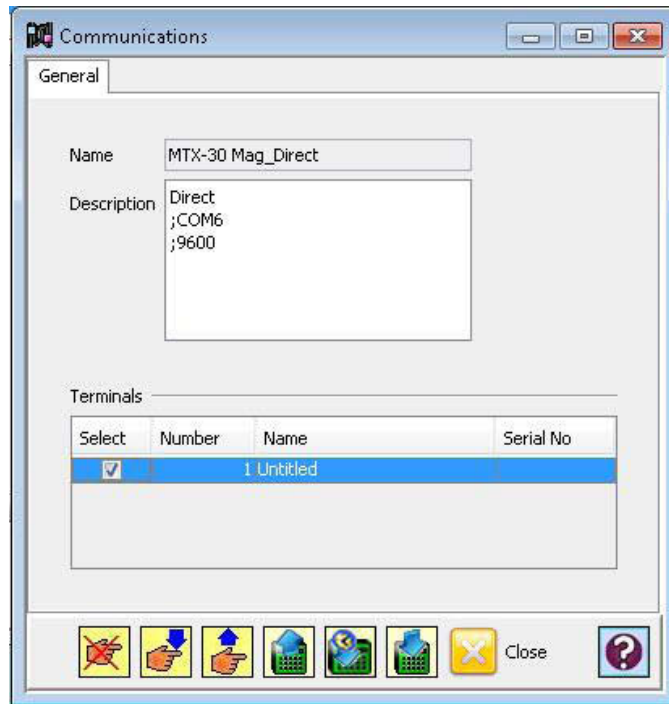


Time Guardian Tree View

Locations are selected by clicking on the desired row . You can select multiple locations by holding down the Ctrl or Shift Key and clicking on other locations. Also, you can sort the displayed Locations list by clicking on the dropdown list in the upper left-hand corner and selecting on; Name, Description, Term Type, TZ Offset, Connection, IP, Port, COM Port, Baud Rate, Modem, and Phone. Once the location is selected use the following commands found at the bottom of the screen to communicate with the connected MTX-30 terminal(s) at that location:

Button	Description
	Poll all term inals o f the selected locations
	Set the time for all terminals at the selected locations
	Download validations and settings to all terminals at the selected locations
	View and communicate with specific or multiple terminals at a location
	Clear maps at a FPT-80 terminal locations or multiple FPT-80 terminal locations
	Send maps at a FPT-80 terminal locations or multiple FPT-80 terminal locations
	Receive maps at a FPT-80 terminal locations or multiple FPT-80 terminal locations

You also have the option to select specific terminals within a location, double-click on the desired location row, and the following Communications dialog will appear:





Software Communications Screen

Select terminals in the Terminals list by placing a check in the Select box of each terminal. When you have finished making your selections, use the commands to communicate with the MTX-30 terminals.

Using the Fingerprint Commands

From Time Guardian Communication screen, this allows you to perform the following functions with the MTX-30 Fingerprint terminal:

- Poll:** Press the  button to collect the most recent data from the terminal(s) (i.e., punches). When checked, Time Sync. performs time synchronization between the Host PC and the terminal(s) including Daylight Saving settings.
- Download:** Press the  button to send Daylight Saving Time settings, hours worked (optional) for the current pay period, and employee assignments. The hours worked will be retained at the terminal from the date of the last download for up to 14 days. If no new download occurs within 14 days, the hours worked will not appear after 14 days.


Note: When this button is pressed, the terminal display will show **Downloading....**, followed by **Working....**, and finish with **Restarting.....**. The terminal will power off then back on to refresh with the options just downloaded to it. Simultaneously the lower portion of Time Guardian Fingerprint Commands screen will display the location, terminal # downloaded date/time, hours worked sent for users X to Y, time format changes, restarting device, and download operation done (see figure). Click on Clear Display to clear the displayed information.

Biometric Maps: The terminal must be polled before performing the following operations. Received maps to the terminals will save biometric fingerprint templates for newly enrolled employees, automatically update the database with templates for employees who have been enrolled at the terminal, and create undefined records for employees that have not yet been enrolled in the database.


Note: If a newly enrolled employee does not exist in the **employee database**, then the template in the terminal will not be saved. If the template data is inadvertently lost from the unit, it must be reassigned to the terminal through the **Assignments** tab.

Once an employee is added to the **Employee** section of Time Guardian, their template will automatically not be uploaded unless the employee enrolled at the terminal, and received maps is performed under communications. Once this is done, however, the employee's template will be saved and the assignment will automatically be updated.




- **Send Maps:** Press the  button to send user(s) biometric map(s) from Time Guardian to the selected terminals. Only employees assigned to terminals will be sent. Employees are assigned to terminals from the terminal validation. Because the “Send Maps” operation consists of first clearing all templates from the terminal and then loading assigned employee templates. (Please be careful with sending maps)



- **Receive Maps:** Press the  button to receive employee templates from the selected terminal(s) to Time Guardian database. Only templates assigned to the selected terminals will be uploaded to TG. This is recommended to be done periodically for backing up enrollments.



- **Clear Maps:** Press the  button to clear (delete) all assigned employee templates from the terminal. Because the Clear Maps operation consists of clearing all templates from the terminal, a confirmation dialog box will appear before this command executes.

Caution! This command can be used to clear [reset] the terminal if an Administrator has been setup and the password is lost, etc. Access at the terminal to the menu options, etc. maybe denied unless it is an Administrator. Call Amano support for assistance.

Note: All the above command options can be performed at either the MTX-30 or FPT. Whereas, the "Polling" and "Set time", "Downloading" commands from the Communication menu can only be performed on all models.

Chapter 5: Miscellaneous

Frequently Asked Questions (FAQs)

1. **Q: Some user's fingerprints occasionally cannot be verified?**

A: The following reasons could lead to a poor fingerprint template:

- Smooth fingerprint
- The fingerprint contains too many drapes [ridges] and/or they change too often
- The fingerprint in question has serious skin shed

Resolution: Select a different fingerprint (less crinkle, no sloughed off skin, clear image), and make your fingerprint touch a larger area of the sensor. Also, enroll more than 1 fingerprint, and use 1:1 match method with password verification method.

2. **Q: MTX-30 Fingerprint terminal(s) fail to communicate?**

A: The following reasons could lead to faulty communications:

- COM port configuration is not correct. COM port currently selected is not the actual COM port being used in device management.
- The Baud rate settings between the fingerprint reader and the PC COM port are different
- The fingerprint reader has failed to connect with the network.
- The fingerprint reader has connected but its block by firewall.
- The USB connector is not fully plugged.
- The Data line or converter (CommStik) fails to communicate due to cable damage.
- The PC COM port is faulty.

3. **Q: Upon power up, the MTX-30 Fingerprint terminal TFT displays incompletely; only half, sometimes jumbled, etc.?**

A: The possible reasons are:

- Bad motherboard in fingerprint terminal.
- Bad TFT display, seek service/repair/replacement.

4. **Q: How to clear administrator from the MTX-30 terminal?**

A: The following method could be used:

Privileges utilizing the "*Clr Admin Pri*" [clear administrator privileges] command from the Adv Option menu. However, if you cannot gain access to do this, you must use the "Clear Maps" command from Time Guardian. See Using the Fingerprint Commands. Warning! Cleaning maps will erase your clock, contact support if cannot gain access to the clock.

From the Fingerprint terminal follow this procedure:

- Step 1. Press the **MENU** button.
- Step 2. Enter administrator User ID.
- Step 3. Press **OK**, and enter password or press enrolled finger.
- Step 4. Select **User Mng** menu and press **OK**.
- Step 5. Select **Manage** and press **OK**.
- Step 6. Select **Badge No.**, press **OK**
- Step 7. Select **Edit** and press **OK**.
- Step 8. Change **User Role** from **Admin** to **User**
- Step 9. Select **"(OK M/L)"** and press **OK**.
- Step 10. Press **ESC** to go back to **main menu**.

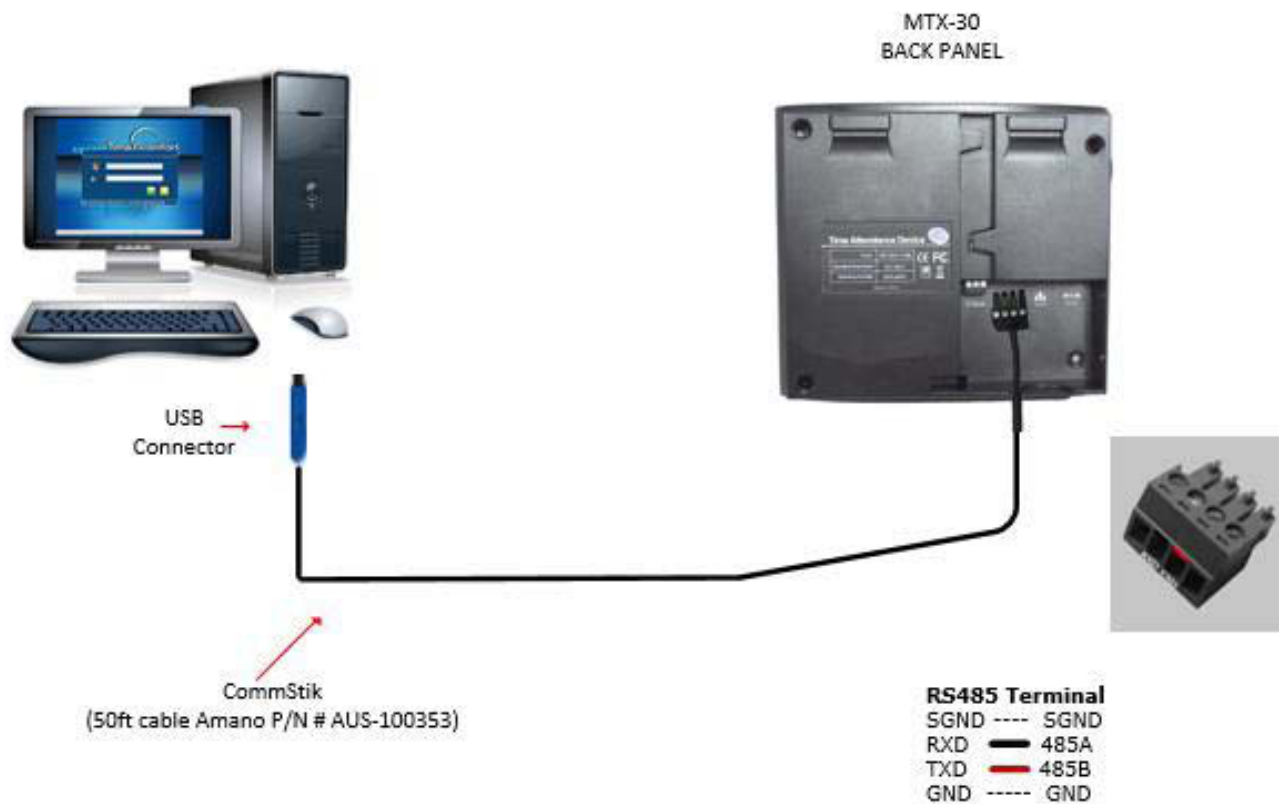
Note: Until an actual “Administrator” is enrolled in the MTX-30, ALL “users” enrolled have “temporarily” administrative access. Therefore it is important to enroll an “administrator” on the MTX-30 soon after initial installation. Administrator must be added in Time Guardian as an employee.

5. **Q: When the fingerprint terminal connects serially, and the sound "ding, ding" occurs?**

A: The possible reasons are:

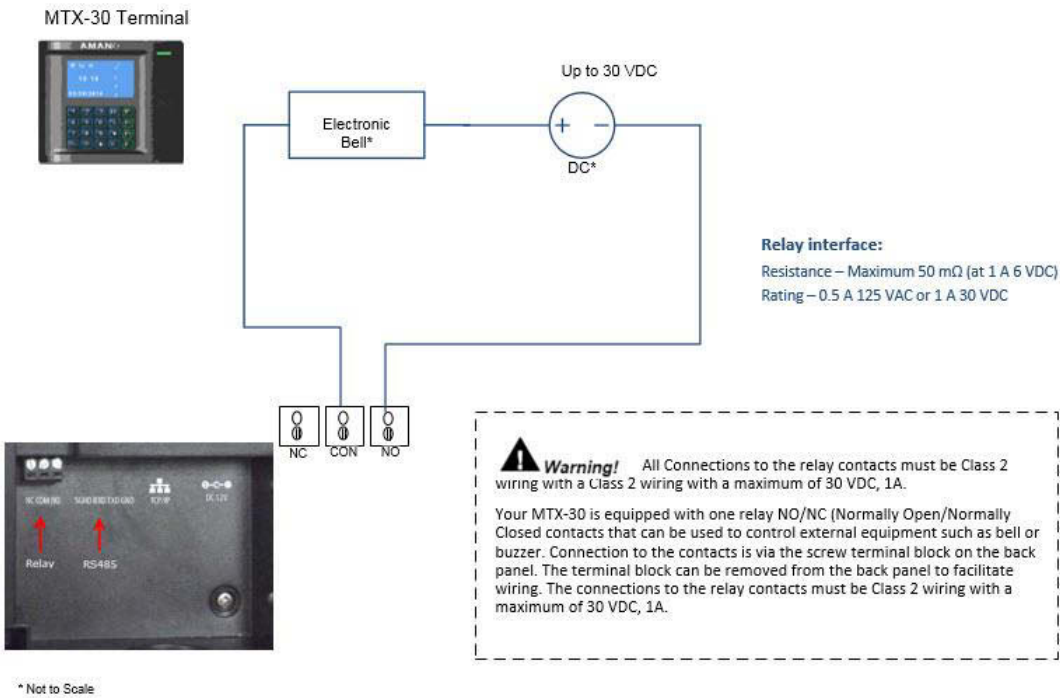
- With RS-232 communications, the computer Baud rate may not match the terminal setting.
- With RS-485 communication, two lines of the converter may be joined.

MTX-30 CommStik

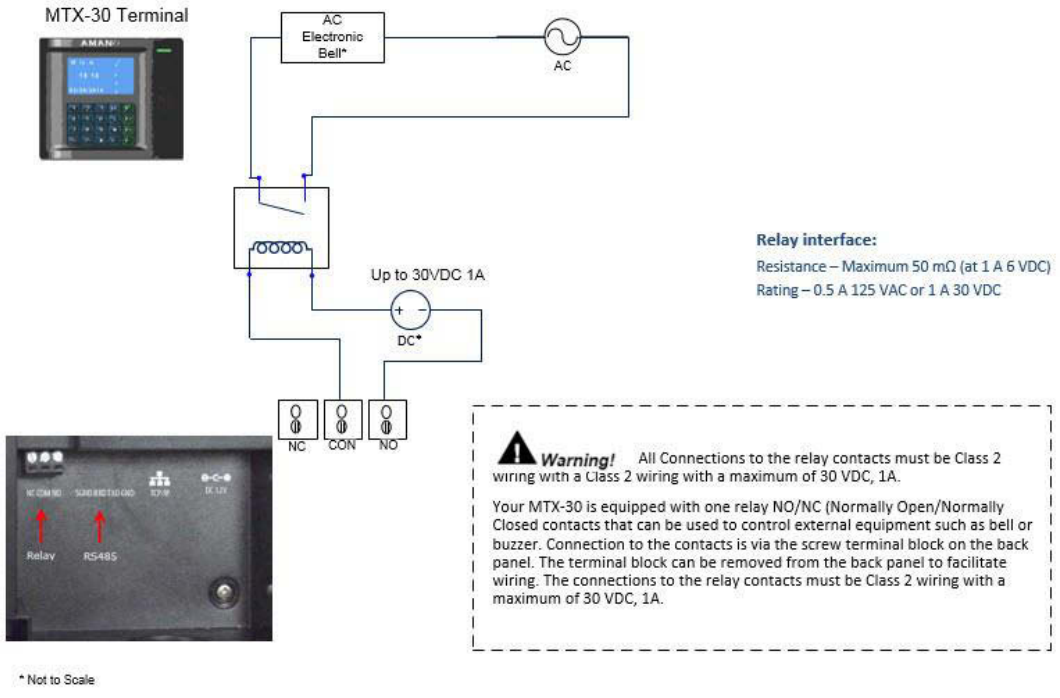


MTX-30 Bell Wiring

DC Bell:



AC Bell:



MTX-30 Specifications

Capacity:	10,000 Cards / 5,000 templates (depending on model / index) Transactions: 10,000 transactions
Communication:	RS485 (USB 50 ft. (15m) CommStik™), TCP/IP
Power:	INPUT: 100-240V AC, 50/60Hz OUTPUT: Power Supply: 12V DC, 1.5A
Environment:	Operating Temp: 32-105° F (0-45° C) Operating Humidity: 20% to 80%
Dimensions:	Height: 5.5" (140 mm) Width: 6.5" (165 mm) Depth: 1.8" (46 mm)
Packaging:	Dimension: 9.84" x 12" x 4.53" (250mm x 305mm x 115mm) • Weight: 3 lbs. (1.36kg)
Memory Backup:	Provides up to 3 years of continuous memory backup without AC power.
Display:	3 in. TFT LCD color screen
Keypad:	3x2 keypad (0~9, M/⏏, ESC) + 4 function keys.
Clock:	Quartz oscillator, accuracy within ± 3 seconds per week at normal temperature.

* Specifications and/or operational characteristics are subject to change without notice.

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