AMANO Time Solutions

MTX-30F PUSH INSTALLATION & OPERATION GUIDE

Thank You….

For purchasing another fine product from 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

For on line help please visit our Knowledge base link at:

http://tkb.amano.com/phpkb/

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.

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MTX-30F Push Introduction

The MTX-30F Push is a sophisticated data collection terminal for use directly with Amano Time Guardian to provide a complete PC or cloud based time and attendance solution for small business.

The MTX-30F Push 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).

When using the fingerprint terminal, a user must enroll their fingerprint in the fingerprint template database. The MTX-30F Push 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-30F Push Fingerprint terminal.

The MTX-30F Push 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.
Note*: Additional module may be required.*

What's In the Box

Your MTX-30F Push terminal package should include the following:
- Fingerprint Data Collection Terminal
- 100-240 V AC Power Adapter
- 6 foot Cat 5 cable
- Mounting Bracket
- Plate and hardware
- One Prox ID card

Basic Installation for Time Guardian MTX-30F Push

Wall Mounting

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

- ✓ The mounting surface and hardware must be able to support the unit's weight, 1.35 lbs. (0.61kg).
- ✓ The area must be within the specified operating temperature & humidity range (see Specifications on page 27).
- ✓ The MTX-30F Push Fingerprint terminal should be mounted in an environment that avoids the following conditions:
    - X Heat Source – Direct Sunlight and Humidity
    - X Rain Water
    - X Strong Vibration and Shock
    - X Dust, Corrosive Gas, Steam and Salt Damage
- ✓ Close proximity to a wall outlet (6 ft.)
- ✓ If using Ethernet, close proximity to an Ethernet connection (6 ft.) or if connecting via WiFi check the location for a good signal.

Amano recommends the following wall mounting procedure:
1. Set the MTX-30F Push terminal face up on a flat surface to avoid scratches on display.

2. Using the mounting bracket as a guide, mark the location of the upper and lower mounting holes on the wall. It is recommended to mount the terminal 49.2" from the floor to the bottom of the bracket. *Adjust for staff height as necessary.

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.

Back of Terminal

Mounting Bracket

3. Install anchors at the marks and attach the mounting bracket to the wall.

4. Feed power and communication wires through the knockout in the bottom of the mounting bracket.

5. Install the four screws attaching the metal back plate to the mounting bracket. Make sure the two metal tabs are on top.

6. Plug in power connector and Ethernet cable (if using Ethernet) into the terminal. Also connect signal wiring if applicable.

7. Slide the terminal onto the two tabs located at the top of the back plate. Secure the reader to the back plate by inserting and tightening the screw located at the bottom of the unit.

Your terminal is now mounted to the wall and ready to connect the power supply to the outlet.

Understanding the MTX-30F Push Terminal Front Panel

Front/Side Panel Features

The front panel of the MTX-30F Push terminal contains the following controls:
- **LED Indicator**: During normal standby operation (power on), the Green LED will flash once per second. When a user successfully verifies the Green LED will stay solid for three seconds. If a user fails to verify, the Red LED will stay on for three seconds.
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 Screen**: Displays time, date, day, and operational information.
- **Fingerprint Sensor**: Enrolls (creates) template and verifies fingerprint.
- **Proximity Senor:** Proximity card must be presented approximately 1 inch in front of the reader to punch.
- **Keypad**: Used to input User ID, password, and perform menu operations.
- **USB Port**: Insert USB to download software, copy over passwords, etc.
- **Reset Button**: Clear all current settings and go back to all factory default settings.

Front View   Side View

Reset Button

USB Port

Keypad

LED Indicator

Proximity Card
Sensor

TFT Display Screen

Fingerprint
Sensor
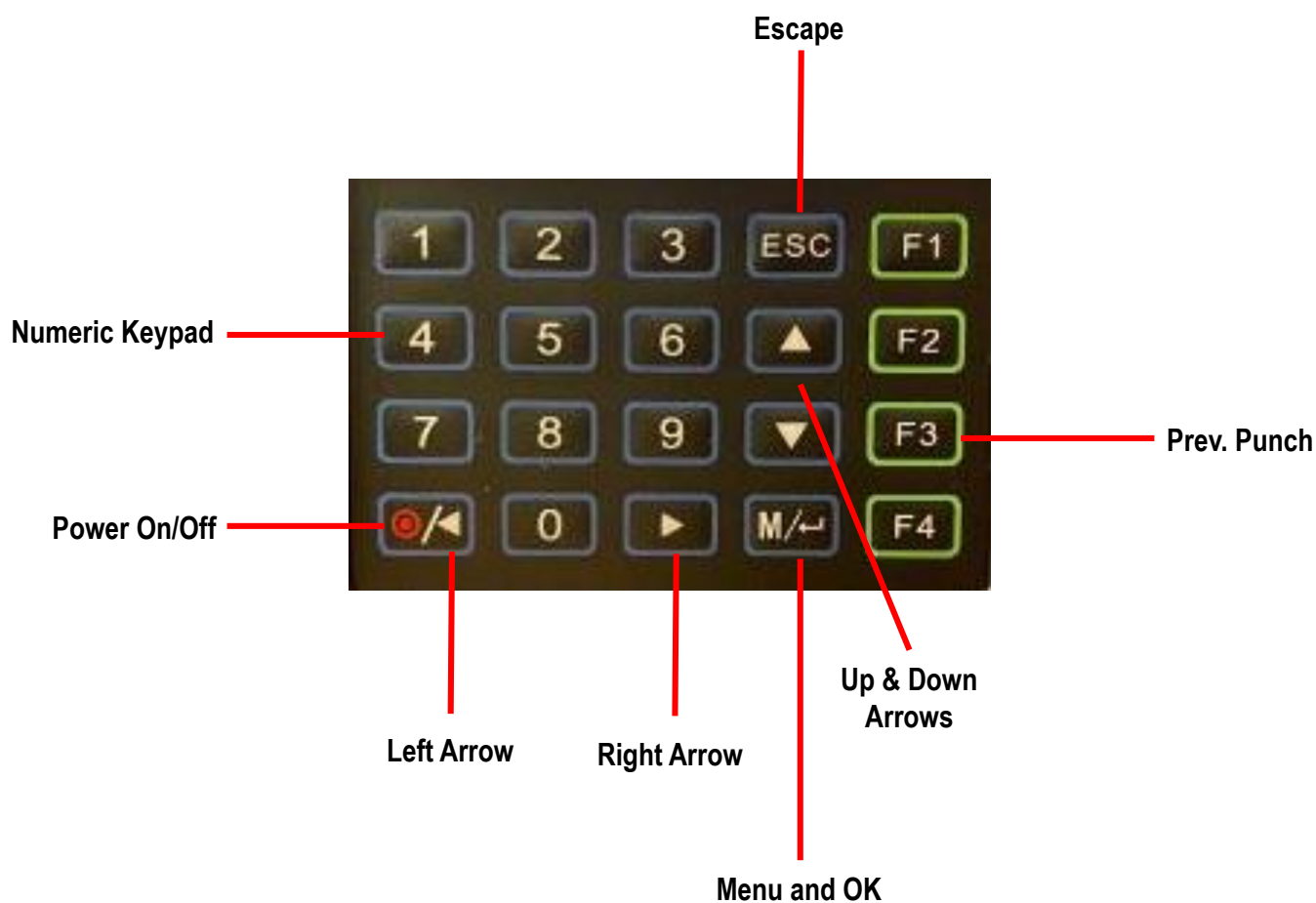
Speaker

Keypad Functionality

M/⌐ – Menu, OK

◎/◄ **Power ON/OFF** & space back.

▶ Modify current item value.

▼ or ▲ - to scroll down or up for menu operations.

F3 – View Previous Punch

ESC – to perform exit, cancel, ignore when using the Menus.

Escape

Numeric Keypad

Prev. Punch

Power On/Off

Up & Down Arrows

Left Arrow   Right Arrow

Menu and OK

Startup

MTX-30F Push Startup AMANO 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-30F Push terminal and plugged into an outlet. The MTX-30F Push terminal will display the splash screen, perform a diagnostic check, and then display the Welcome screen.

Note: The time and date can be set with the terminal keypad, or downloaded to the terminal from the host PC or cloud utilizing Time Guardian software. The information such as date, time, daylight saving time (DST), Fingerprint 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-30F Push Fingerprint terminal and display "halting system….Shutdown 2 secs, 1sec". The MTX-30F Push 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-30F Push terminal and the host PC with Time Guardian software or cloud based software are connected and setup. Upon user recognition at the terminal, the terminal will display his/her name - the first 8 characters of the first and last name combined, followed by the User ID and validation status.

If View Hours is enabled: The terminal will display the "As of" date followed by the current pay period hours worked for the user that just punched.

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.

Operation

Daily MTX-30F Push Use

The following "Daily Use" section assumes the MTX-30F Push Fingerprint terminal has been set up with enrolled users and system options have been defined. *Please see Enrolling Users on page 13 and the other sections for enrollment details, etc.*

Punching with a Fingerprint (FP)

From the Welcome screen place your enrolled Finger in the sensor window.

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

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

Punching with a Proximity Card

From the Welcome screen place your proximity card in front of the reader.

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

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

Punching with a Password (Pwd)

From the Welcome screen enter your User ID using the keypad and press **OK** to confirm.

Input your password and then press OK.

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. If the user does not have a password they will be prompted to "Place Finger".

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.

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)

From the Welcome screen either place your finger on the sensor **OR** enter your assigned User ID using the keypad.

Follow the on screen prompt to remove finger **OR** input your password.

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)

From the Welcome screen either place your finger on the sensor **OR** enter your assigned User ID using the keypad.

Follow the on screen prompt to **Please Input Password and OK** then **Please Press Finger** (if User ID and Password was used).

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 Previous Punch at the Terminal – F3

Press the F3 key to view Previous Punch. The terminal will ask for Badge No. or Fingerprint.

Select Date and press Ok to display previous punches.
Note: Previous punches are reset (cleared) every time the clock is polled.

Enrolling Users

Three Ways to Enroll

After installing the MTX-30F Push 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-30F Push Fingerprint reader provides the following three methods for enrollment:

- Fingerprint
- Password
- Proximity Card

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

There are three types of users:

- Normal User
- Registrar
- Super Admin

User Management

How to Enroll a User

1. Press the Menu button to display the Main Menu.

2. Using the arrows highlight the **User Mgt**. icon and then press **OK**.

3. Select **New User** and press **OK.**

4. Enter **User ID #** using the keypad and then press the down arrow.

5. Scroll down until Verification Mode is highlighted then press **OK**.

6. Use the arrows to highlight "Fingerprint only" and then press **OK**.

7. Use the down arrow to highlight "Fingerprint" and then press **OK.**

8. Select the finger to be enrolled by using the arrows and then press **OK.**

9. Follow the on screen instructions from the terminal until your Finger has been verified. The Terminal will show a green check mark to let you know this has been completed.

Confirmation of Finger Verification

To confirm that you have successfully enrolled your Finger use the back arrow to revert back to the Welcome screen using the ESC button.

From the Welcome screen place your enrolled finger on the fingerprint scanner. Once the verification is complete you will hear the terminal say *"Thank You"*.

All Users

1. Select **All Users.**

2. Press to select *"All Users"* - Here you can Edit the user information.

   If you would like to delete all users select *"Delete"* and the user will be deleted.

Display Style

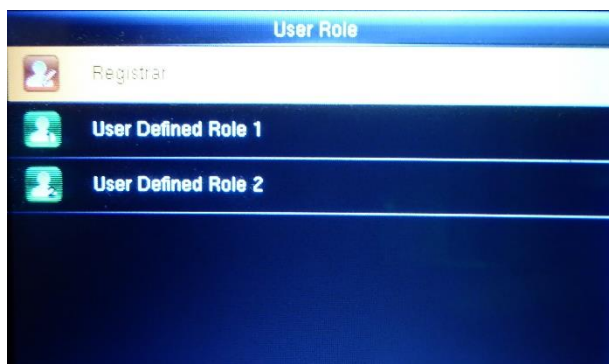Select your desired **Display Style** from the following:
- Single line
- Multiple line
- Mixed line

User Role

User Role

1. Press the Menu button to display the Main Menu.

2. Using the arrows highlight the **User Role** icon and then press **OK**.

3. Click on **Registrar** – From here you can select rights from the following options:
   - User Mgt.
   - Comm.
   - System
   - Personalize
   - Data Mgt.
   - USB Manager
   - Attendance Search
   - Short Message
   - Labor 1-6
   - Autotest
   - System Info

Communication

1. Press the Menu button to display the Main Menu.

2. Using the arrows highlight the **COMM.** icon and then press **OK**.

3. Highlight your preferred method of communication and then press **OK.**

Ethernet

You can modify the IP address. if necessary, however, it cannot be the same as that of the PC IP address.

Wireless Network

1. Click on **Wireless Network**

2. When you select the wireless network option the following window will appear in which as a default Wi-Fi would be ON.

3. After highlighting your WiFi network press **OK**.

4. Enter numeric password and then press OK to connect to WiFi or choose "Upload WiFi Password". (USB with password must be inserted prior to clicking on the Wireless Network option.
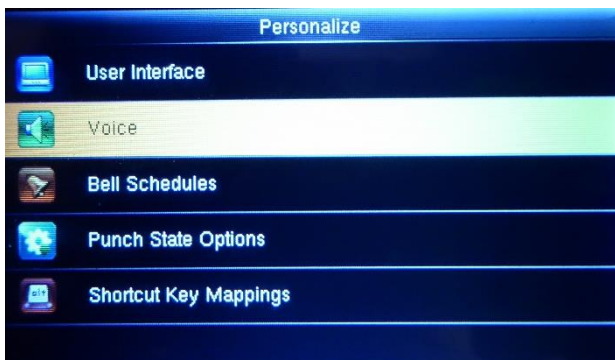
Personalize

1. Press the Menu button to display the Main Menu.

2. Using the arrows highlight the **Personalize** icon and then press **OK**.

3. Highlight User Interface and then press **OK.** Here you can Personalize settings such as Wallpaper, Language, Lock Power Key, Menu Screen Timeout(s), Idle Time to Slide Show(s), Slide Show Interval(s), Idle Time to Sleep(m), and Main Screen Style

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Voice

Select **Voice**.

Voice prompt: This parameter defines whether to play voice prompts during the operation of the MTX-30F Push terminal or not. Select **ON** to enable the voice prompt, and select **OFF** to mute.

Keyboard prompt: This parameter defines whether to generate a beep sound in response to every keyboard touch or not. Select **ON** to enable the beep sound, and select **OFF** to mute.

NOTE: Use the OK button to toggle between **ON/OFF**.

Data Management

1. Press the Menu button to display the Main Menu.

2. Using the arrows highlight the **Data Mgt.** icon and then press **OK**.

Backup Data

1. Highlight **Backup Data** and press **OK**.

2. Next click on (Option 1) **Backup to Device**

3. Select the content you want to backup. (business data and/or system data)

4. Select **Backup Start**

(Option 2) **Backup to USB disk** -This will enable Backup to a USB Disk in a fashion similar to the operations performed to "Backup to Device".

If the USB is not properly inserted the screen will read "Error – Failed to Read USB Disk". If this happens change the USB or try to reinsert it properly.

Restore Data

1. Highlight **Restore Data** and press **OK**.

2. Click on **Restore from Device** and select the local configuration items to be restored, and then save the selected items. (You can select the content you want to restore.)

3. If you choose "**Restore from USB Disk**" the operations are similar to those performed to "Restore from Device".

If the USB is not properly inserted the screen will read "Error – Failed to Read USB Disk". If this happens change the USB or try to reinsert it properly.

More Options

1. Press the Menu button to display the Main Menu.

2. Using the arrows highlight the **USB Manager** icon and then press **OK**.

From this screen the following options are available:

Download
- Attendance Data
- User Data
- User Portal
- Short Message

Download Options
- Encrypt Attendance Data   **ON/OFF**
- Delete ATT Data   **ON/OFF**

Autotest

1. Press the Menu button to display the Main Menu.

2. Using the arrows highlight the **Autotest** icon and then press **OK**.

Test All

Highlight **Test All** and press **OK**.

The terminal automatically tests the LCD, voice, keyboard fingerprint sensor, keyboard and clock.

Click OK to test each item in order or click ESC at any time to return to the Autotest main screen.
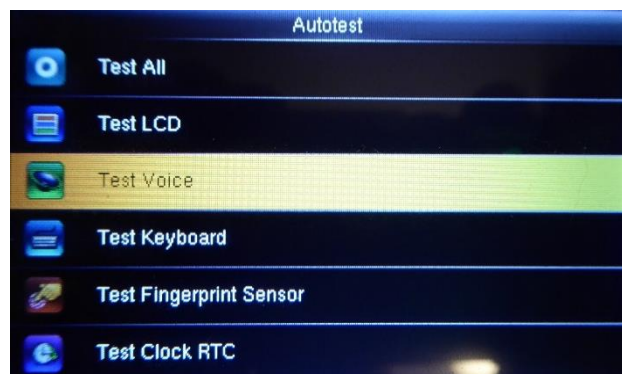
Test LCD

Highlight **Test LCD** and press **OK**.

The terminal automatically tests the display effect of the color TFT display by displaying full color, pure white, and pure black. It will also check to make sure the screen displays properly.

You can continue the test pressing OK or exit it by pressing ESC

Test Voice

Highlight **Test Voice** and press **OK**.

Here you can test the ten different voice wav files.

Click OK to go through all ten sounds or press ESC at any time to return to the Autotest main screen.

Test Keyboard

Highlight **Test Keyboard** and press **OK**.

Test Fingerprint

Highlight **Test Fingerprint Sensor** and press **OK.**

Here you can test the quality of the image.

Place your Finger on the sensor to test.

Test Clock RTC

Highlight **Test Clock RTC** and press **OK.**

The terminal tests whether its clock works properly by checking the stopwatch of the clock.

Press OK to start the stopwatch counting, and press OK again to stop the clock and check whether the counting is accurate.
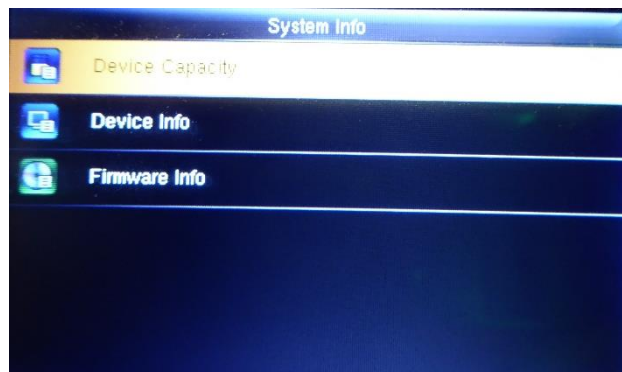
Press ESC to exit the test and return to the Autotest main screen.

System Information

1. Press the Menu button to display the Main Menu.

2. Using the arrows scroll down until the **System Info** icon is highlighted and then press **OK**

Device Capacity

Highlight **Device Capacity** and press **OK**.

From this screen you can see the following information:
- Number of Users that are enrolled
- Number of Admin Users
- Number of Passwords
- Total Fingerprint storage capacity/occupied capacity (used/max)
- Number of Badges/ID cards (used/max)
- Attendance capacity (used/max)
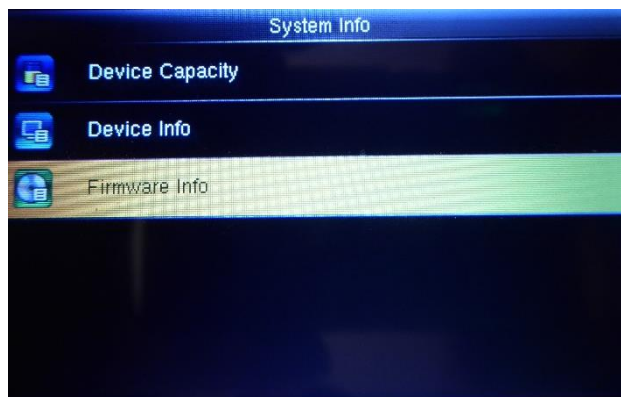- Number of User Photos (used/max)

Device Info

Highlight **Device Info** and press **OK.**

The Device name, serial number, MAC Address, Fingerprint Algorithm, platform information, and MCU version are displayed here along with the manufacturer name and manufacture date.

Firmware Info

Highlight **Firmware Info** and press **OK**.

Here the Firmware version, Bio Service, Push Service, Standalone Service, Dev Service and System Version are displayed.

MTX-30F Push Specifications

CAPACITY
Fingerprints: 3,000
ID Card: 10,000 (Optional)
Transaction: 100,000

TERMINAL DIMENSIONS
5.5" H x 6.5" W x 1.8" D (140mm x 165mm x 46mm)

OPERATING ENVIRONMENT
32°F to 105°F (0°C to 45°C), 20% to 80% relative humidity, non-condensing

WEIGHT
1.35 lbs. (0.61kg)

DISPLAY
3 in. TFT LCD Color Screen

FINGERPRINT SENSOR
Optical

POWER
INPUT: 100-240V AC, 50-60Hz
OUTPUT: Power Supply: 12V DC, 1.A

KEYPAD
3x2 keypad (0~9, M/⌐ , ESC) + 4 function keys

INTEGRATION CAPABILITIES
Payroll system integration

MEMORY BACKUP
Up to 3 years continuous memory backup without AC power

UNIT SERIAL # _____

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