



AMANO Time Solutions



AFR-200 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 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.



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About This Operation Guide

This Operation Guide covers the following AFR-200 Face and Fingerprint Scan terminal with Amano Part Numbers for use with Amano Time Guardian:

AFR-200/A976

Time Guardian AFR-200 complete package, includes terminal, software, 6' network cable and manual. Real-time communication via WiFi or ethernet. Employee punch using face, fingerprint sensor, prox card, or pin.

AFR-200/A975

Time Guardian AFR-200 additional terminal only, software not included.



AFR-200 Introduction

The AFR-200 is a sophisticated facial recognition data collection terminal for use exclusively with Amano Time Guardian software to provide a complete PC-based time and attendance solution for small business. Employees can have the option of punching using face, fingerprint, Prox card or pin.

The AFR-200 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. In addition, easy-to-read management reports are available in hours or dollars to provide accurate and timely labor information.

Note: Additional module may be required.

What's In the Box

Your AFR-200 terminal package should include the following:

- Face Scan Data Collection Terminal
- 100-240 V AC Power Adapter
- Mounting Guide
- Wire Connectors
- Back Plate
- Measuring Tape
- One Prox ID card
- 6 foot Cat 5 cable
- Screws
- Screwdriver



AFR-200



Mounting Guide



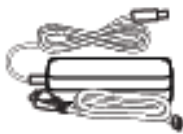
Back Plate



Measuring Tape



6' Cat 5 Cable



AC Power Adapter



Wire Connectors



Prox Card



Screws



Screwdriver

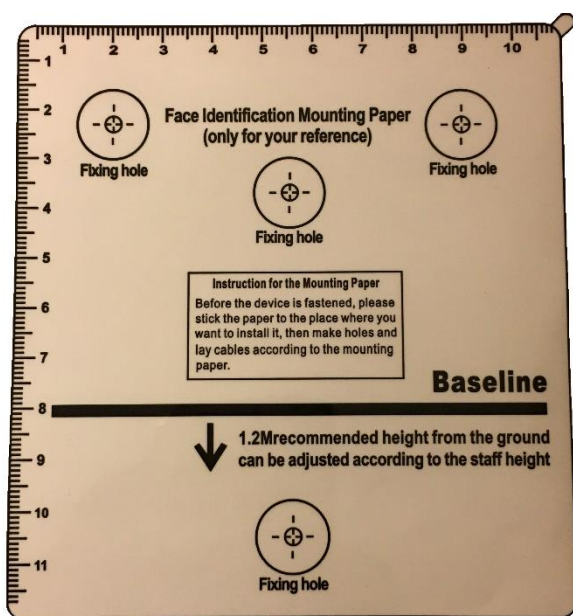
Basic Installation for Time Guardian AFR-200

Wall Mounting

- Warning!** Before selecting a mounting location for your AFR-200 Terminal, you must consider the following:
- ✓ The mounting surface and hardware must be able to support the unit's weight 1.75 lbs
 - ✓ The area must be within the specified operating temperature & humidity range (see Specifications on page 29).
 - ✓ The AFR-200 Face Scan terminal should be mounted in an environment that avoids the following:
 - 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 AFR-200 terminal face up on a flat surface to avoid scratches on display.



Mounting Guide



Mounting Bracket

2. Using the mounting guide as a template, 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 baseline on the template. *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 face scan reader.

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.

Software Installation

1. Wall Mount the AFR-200 (see page 7-8). Connect the AFR-200 terminal using the Ethernet cable for network connection or configure WiFi network..
2. Install the Time Guardian Software on the host PC. The installation should start automatically, but if it stalls, browse on the USB to Disk1\InstData\Windows\VM\install.exe
3. Perform software activation by entering the activation code Number (found on the USB drive 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.

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

Understanding the AFR-200 Terminal Front Panel

The front panel of the AFR-200 terminal contains the following controls:

- **LED Indicator:** During normal standby operation (power on), the **Green LED** will flash once per second, and stay on momentarily when a user is successfully verified. If a user fails to verify, the **Red LED** will stay on momentarily.
 - Note:** If the face scan 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.
- **Camera - Face Scan Sensor:** Enrolls (creates) template and verifies face scan.
- **Fingerprint Scanner:** Enrolls (creates) template and verifies fingerprint scan.
- **ID Swipe Card Area** – 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 operation





Startup

AFR-200 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.

After the unit is plugged into an AC power outlet, press the power button on the left side to turn on the unit.

To start-up, perform the following: Ensure the AC Power Adapter is connected to the AFR-200 terminal and plugged into an outlet. The AFR-200 terminal will display the splash screen, perform a diagnostic check, and then display the AMANO 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), face scan 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 AMANO screen.

Normal Punch IN/OUT Display

The system is ready to use after the AFR-200 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 photo.

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 AFR-200 Use

The following "Daily Use" section assumes the AFR-200 Face Scan terminal has been setup with enrolled users and system options have been defined. Please see Enrolling Users on page 12 and the other sections for enrollment details, etc.

Punching with a Face Scan

From the AMANO screen place your enrolled face in the sensor window.

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

Punching with a Fingerprint

From the AMANO screen place your enrolled finger in the fingerprint sensor window.

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

Punching with a Proximity Card

From the AMANO 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 Face and the confirmation "*Verified*" with the voice prompt "*Thank you*".

Punching with a Password

From the AMANO screen click on the keypad icon on the bottom left corner of the display. Once the keypad comes up, enter your User ID and press **OK** to confirm.

Press the "KEY" icon and enter your password then press OK.

Notes: *If an invalid password entry is entered the user will hear "incorrect password" at which point you can try to enter your password again. The password screen will stay on until a verified password is used or the unit times out and the terminal returns to the AMANO screen.*

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.

Enrolling Users

Four Ways to Enroll

After installing the AFR-200 face scan 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 AFR-200 face and fingerprint scan reader provides the following four methods for enrollment:

- Face Scan
- 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

Normal users only have access to face, fingerprint, password, or card verification.

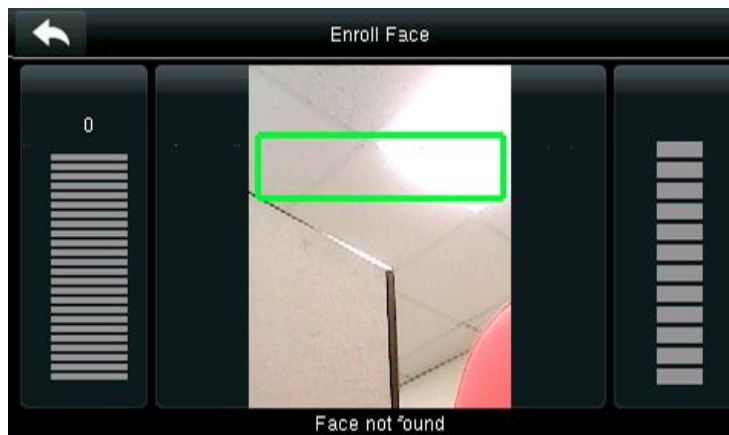


User Management

New Users



1. Go to the main menu and select **User Mgt.**
2. Select **New User**
3. Select **User ID** - enter the User ID by using the keypad and then pressing **OK**.
4. Click on **Face**
5. Focus your eyes inside the green box
6. Follow verbal instructions from the terminal until your face has been verified. The Terminal will respond with "Thank You" to let you know this has been completed.



Confirmation of Face Verification

To confirm that you have successfully enrolled your face use the back arrow to revert back to the AMANO screen.

From the AMANO screen, face forward and look directly at the screen. At the top of the screen it will say "Face Detection Start". Hold still in front of the screen as it counts down on the screen from >4< to >1<. Once the countdown is complete the terminal will instruct you that you have been "Verified by Face".

User Management

New Users

1. Go to the main menu and select **User Mgt.**
2. Select **New User**
3. Select **User ID** - enter the User ID by using the keypad and then pressing **OK.**
4. Click on **Fingerprint**
5. Select which finger you would like to use for verification.



6. Place finger on the fingerprint scanner until you hear a chime, lift finger and replace on scanner until you hear a chime, and then repeat a third time. The screen will then show a check mark to verify enrollment with fingerprint.



Confirmation of Fingerprint

To confirm that you have successfully enrolled your fingerprint use the back arrow to revert back to the AMANO screen.

From the AMANO screen, place the selected finger on the scanner. The screen will show "verifying". Once the fingerprint is verified the screen will show "FP Verified" and it will say "Thank you".



User Role

User Role



1. Select **User Role**
2. Click on **Registrar** – Here the Registrar is able to view “*Standard Attendance Data*” for existing users on the clock. They can also add, delete, and edit standard users.
3. If desired, enable the defined role for the user by turning it **ON**.
4. Select **Define User Role**
From here you can select rights from the following options:
 - User Mgt.
 - Comm.
 - System
 - Personalize
 - Data Mgt.
 - USB Manager



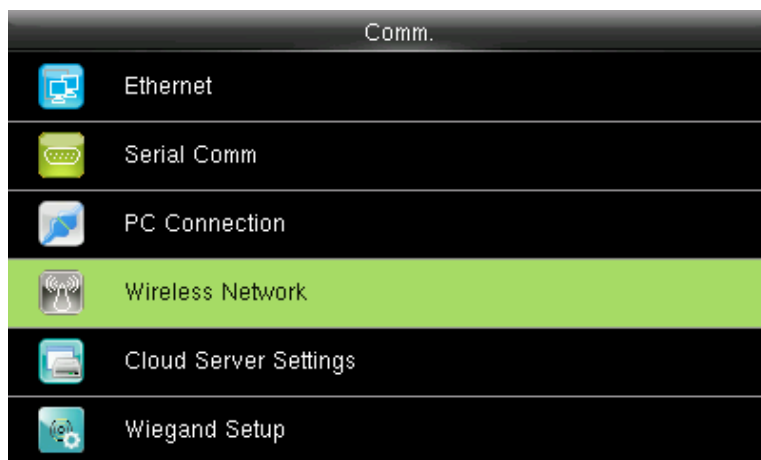


Communication



From the main menu select **COMM.**

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 OFF.
3. You can turn the wireless network to "ON" to connect to your own network.



Cloud Server Settings	
Server mode	PUSH
URL Mode	<input checked="" type="checkbox"/> ON <input type="checkbox"/>
Server Address	192.168.10.206
Upload Server Address	
Enable Proxy Server	<input type="checkbox"/> OFF

- URL Mode **On** is not available/implemented at this time. Please set to **OFF**.
- Server Address – Enter Time Guardian server or standalone IP, this is the PC where the db folder resides. (c:\timeguardian\db)
- When you enable the proxy function, set the IP address and port number of the proxy server. This option indicates whether to use a proxy IP address. You may choose to enter the proxy IP address or the server address for Internet access.

Cloud Server Setting	
Server mode	PUSH
Server Address	192.168.10.206
Server port	80
Enable Proxy Server	<input type="checkbox"/> OFF

Cloud Server Setting	
Server mode	PUSH
Server Address	192.168.10.206
Server port	80
Enable Proxy Server	<input type="checkbox"/> OFF

Cloud Server Setting	
Server mode	PUSH
Server Address	192.168.10.206
Server port	80
Enable Proxy Server	<input checked="" type="checkbox"/> OFF

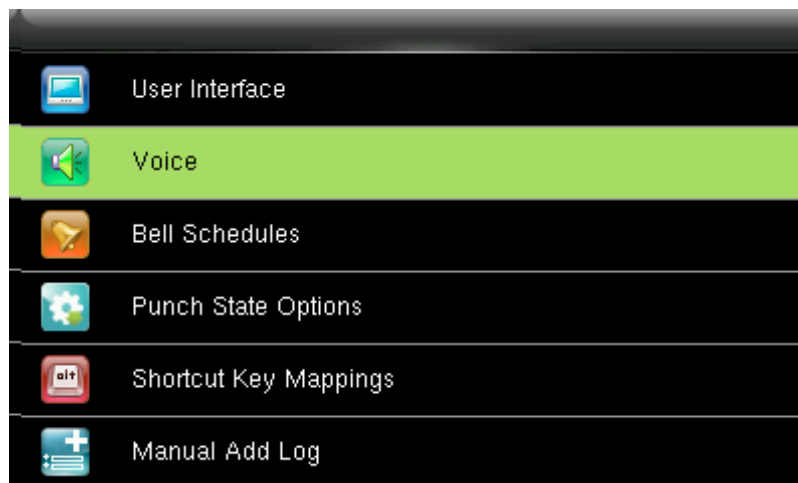
NOTE: The new file name for uploading Wi-Fi password or URL Webserver: updataoptions2.cfg
 Inside this file you can either use: WirelessKey= [for uploading Wi-Fi password]

Personalize



From the main menu select **Personalize**.

Voice



Select **Voice**.

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

Touch 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.

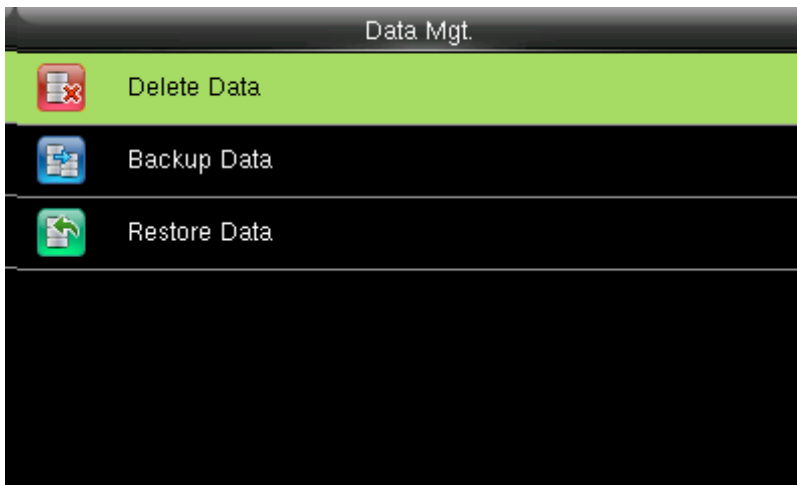


Data Management



From the main menu select **Data Mgt.**

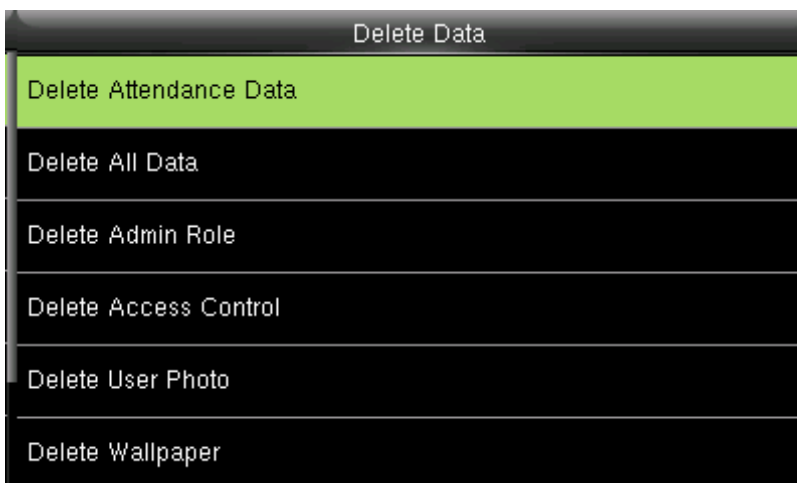
Delete Data



1. Select **Delete Data**
2. Click on one of the following options:

Delete Attendance Data

- Select **Delete All** to remove the attendance records.
- By selecting **Time Range** you can select the time you want the data to be deleted. It will delete the data only for that specific time selected.



Delete All Data - This will delete all data when selected.

Delete Admin Role - This will delete the admin role if selected.

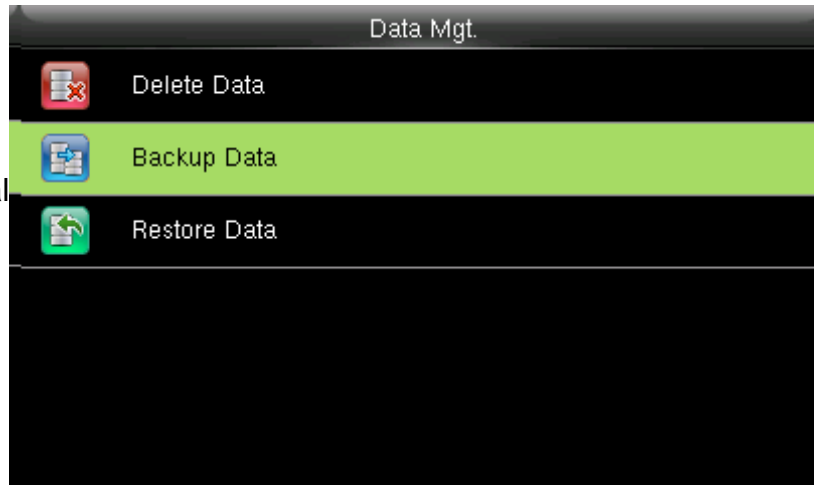
Delete Access Control

Delete User Photo

Delete Wallpaper

Backup Data

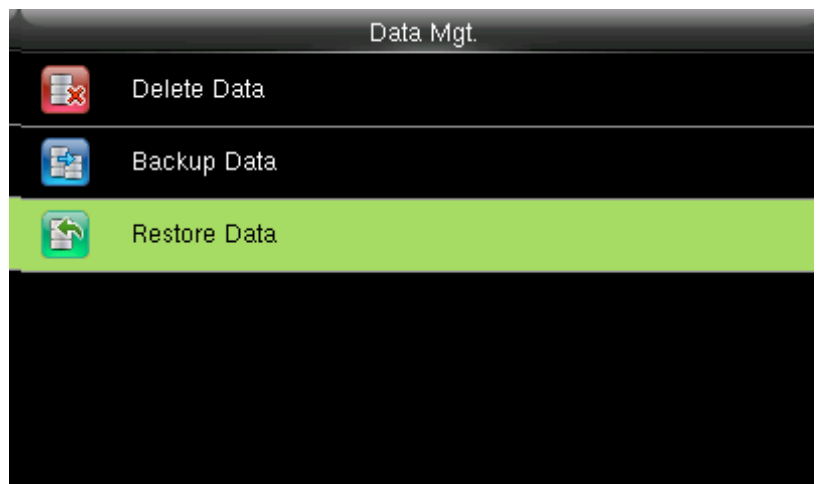
1. Select **Backup Data**
2. Next click on **Backup to Device**
3. From here you can choose the local configuration items to be backed up to your device. Next, select the content you want to backup.
4. Select **Backup Start** - This will enable Backup to a USB Disk in a fashion similar to the operations 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

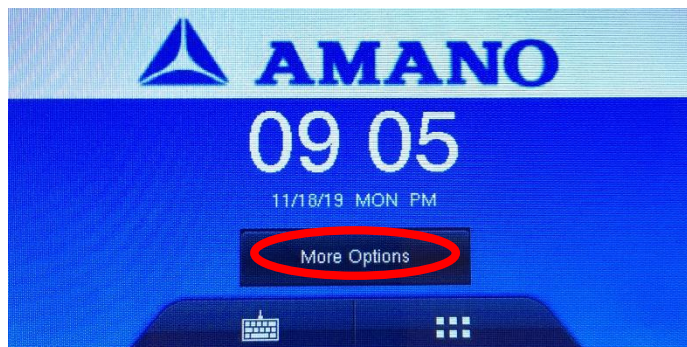
1. Select **Restore Data**
2. Click on **Restore from Device** and select the local configuration items to be restored, and then save the selected items. (You can select the content you want to restore.)
3. If you choose "Restore from USB Disk" the operations are similar to those performed to "Restore 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



From the main menu select **More Options**.

There are four options to choose from:

- View Hours
- Dept Transfer
- Prev Punch
- Labr Transfer

View Hours

Review all your hours that have been recorded.

Department Transfer at the Terminal

1. Press **More Options**, then **Dept Transfer**, and select department.
2. Enter Badge Number, scan proximity card, or scan face

Note: Department Transfer needs to be configured and downloaded to the clock from Time Guardian using communication – set time.

Previous Punch at the Terminal

1. Press the **More Options** and then **Previous Punch**. The terminal will then ask for a Badge Number, proximity card or face scan.
2. Previous punches will be display
3. Press back arrow to escape

Labor Transfer at the Terminal (optional module in Time Guardian)

1. Press **More Options**, then **Labr Transfer**, and then select which combo for multi-transfer
2. Follow the next few screens
3. Enter Badge Number, scan proximity card, or scan face

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

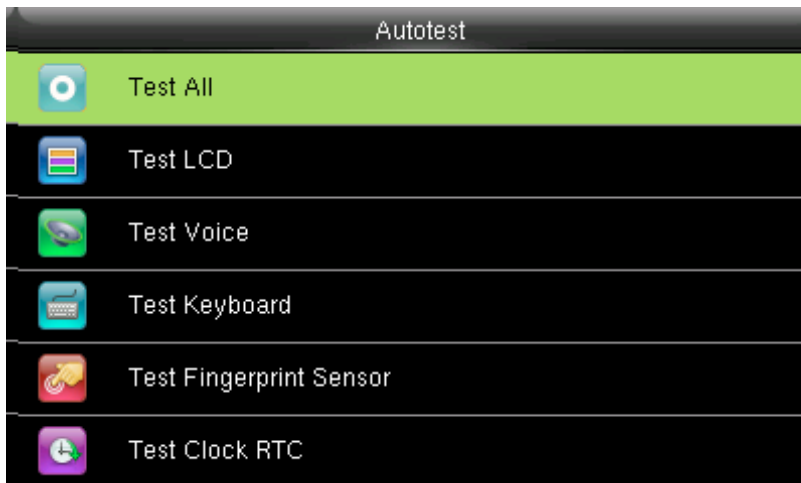


Autotest



From the main menu select **Autotest**

All Test



Click on **Test All**

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

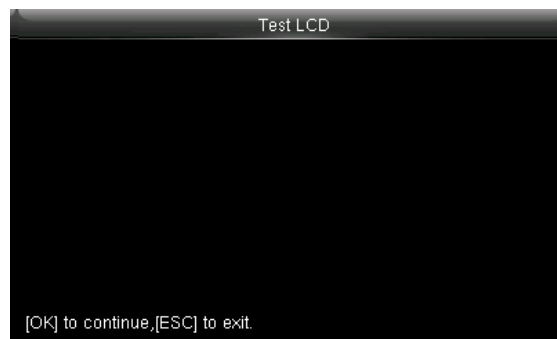
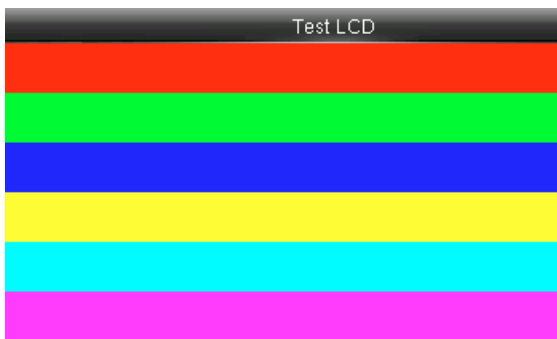
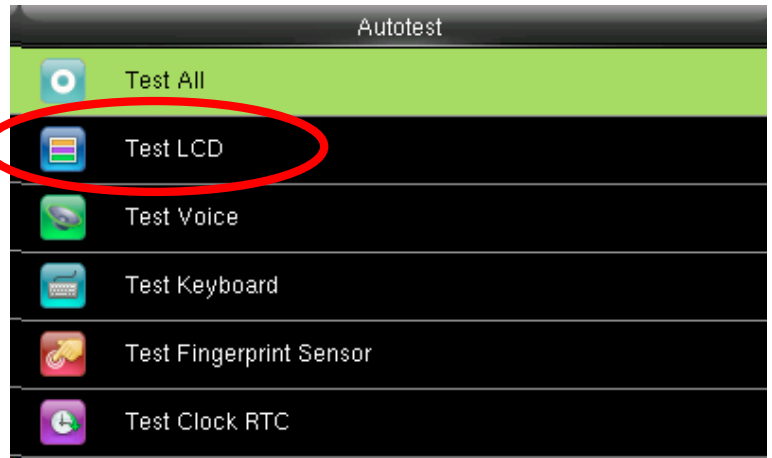
Test LCD

Click on **Test LCD**

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 by touching the screen or exit it by pressing [ESC]

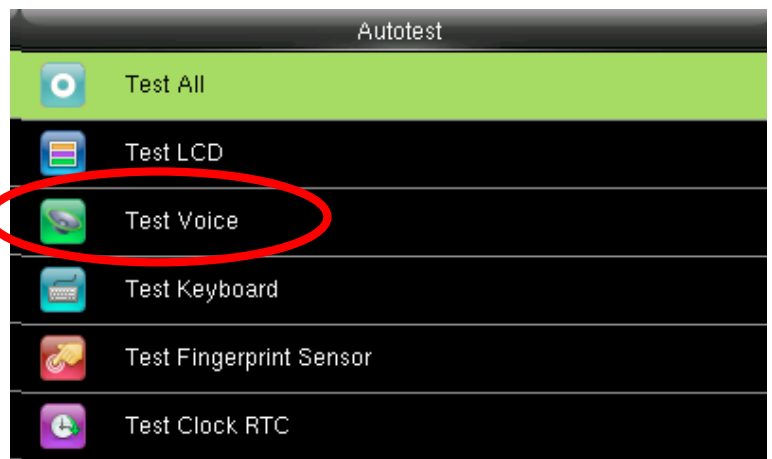
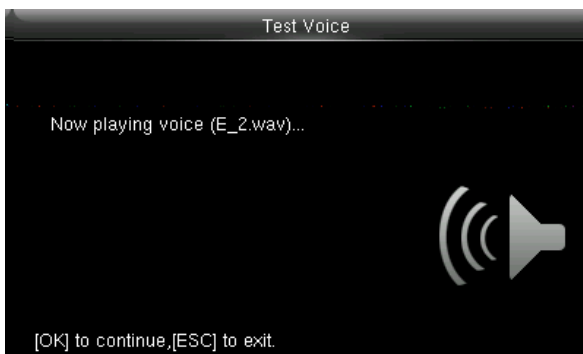
The terminal automatically tests the display effect of the color TFT display by pure black.



Test Voice

Click on **Test Voice**

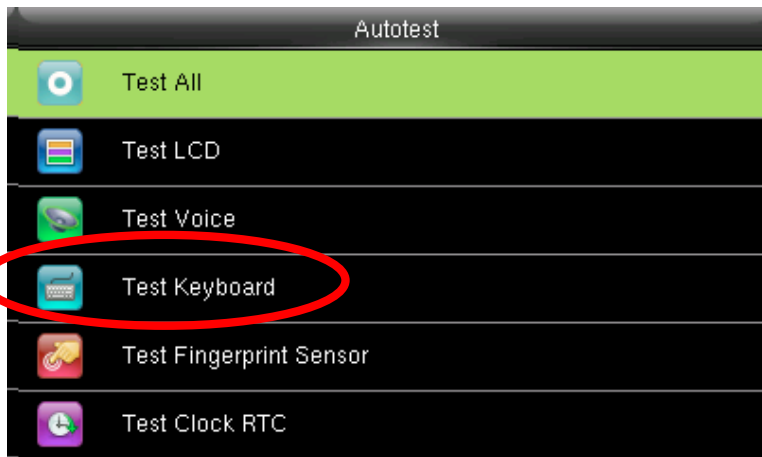
Here you can test the different voice wav files.



Test Keyboard

Click on **Test Keyboard**

The terminal tests whether every key on the keyboard works normally. Press any key on the [Keyboard Test] interface to check whether the pressed key matches the key displayed on screen. The keys are dark-gray before pressed, and turn blue after pressed. Press [ESC] to exit the test.

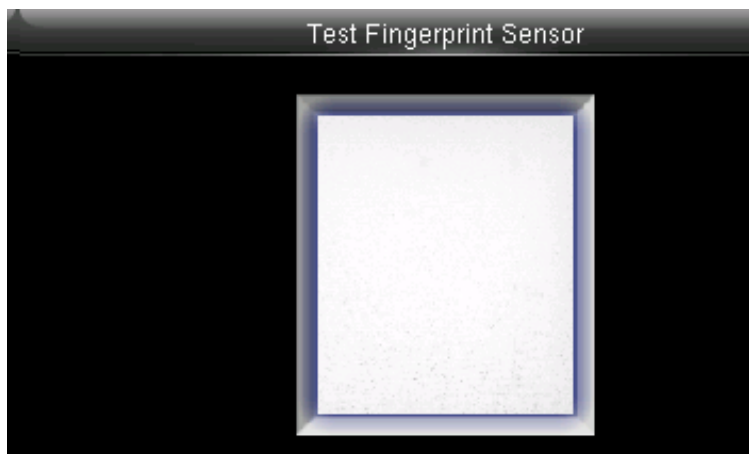
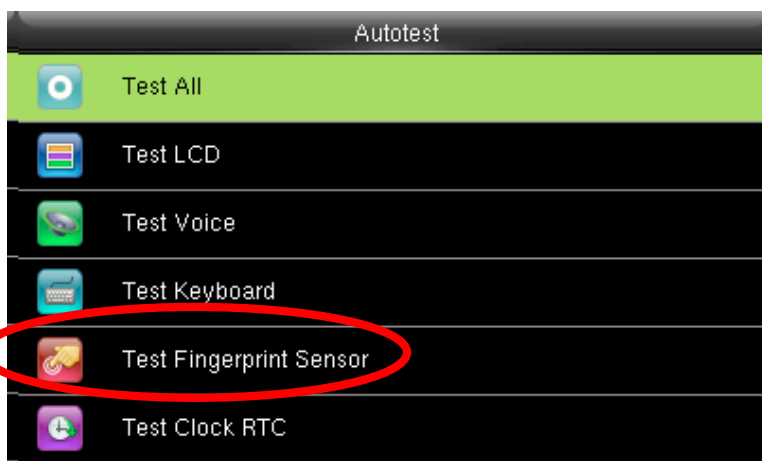


Test Fingerprint Sensor

Click on **Test Fingerprint Sensor**

The terminal automatically tests whether the fingerprint collector works properly by checking whether the fingerprint images are clear and acceptable.

When the user places his/her finger in the fingered guide, the collected fingerprint image is displayed on the screen in real-time. Press [ESC] to exit the test.



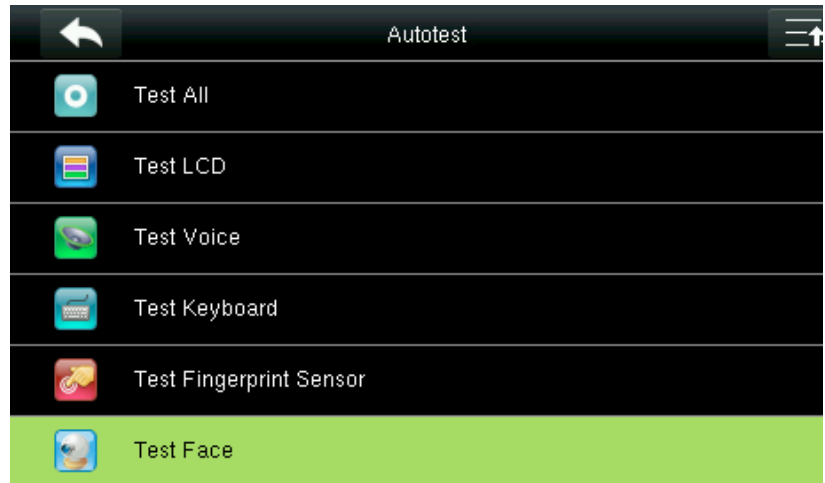


Test Face

Click on **Test Face**

Here you can test the quality of the image.

Place your face in front of the camera to test.



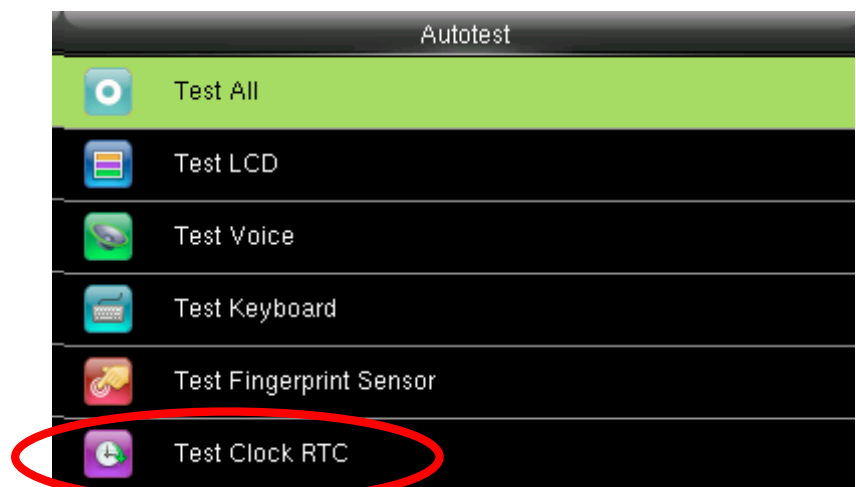
Test Clock RTC

Click on **Test Clock RTC**

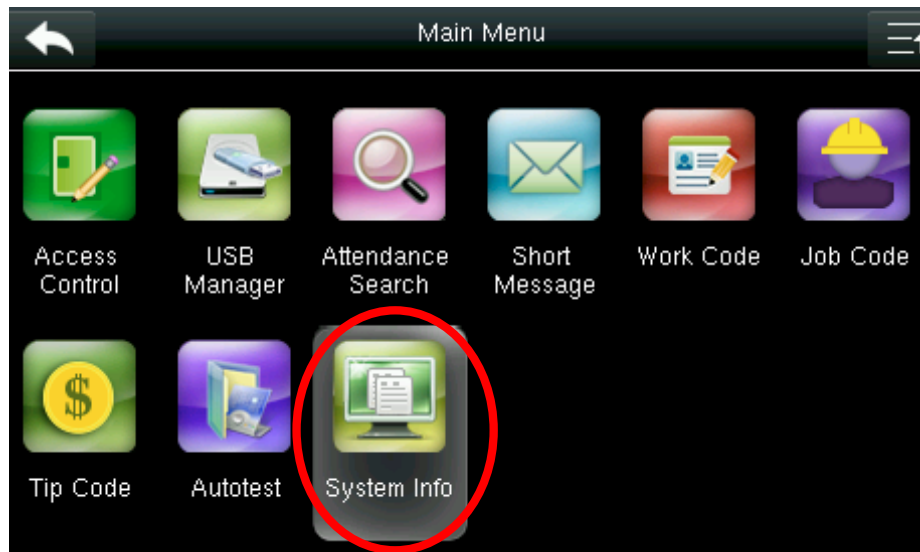
The terminal tests whether its clock works properly by checking the stopwatch of the clock.

Touch the screen to start counting, and touch it again to stop to check whether the counting is accurate.

Press [ESC] to exit the test.



System Information



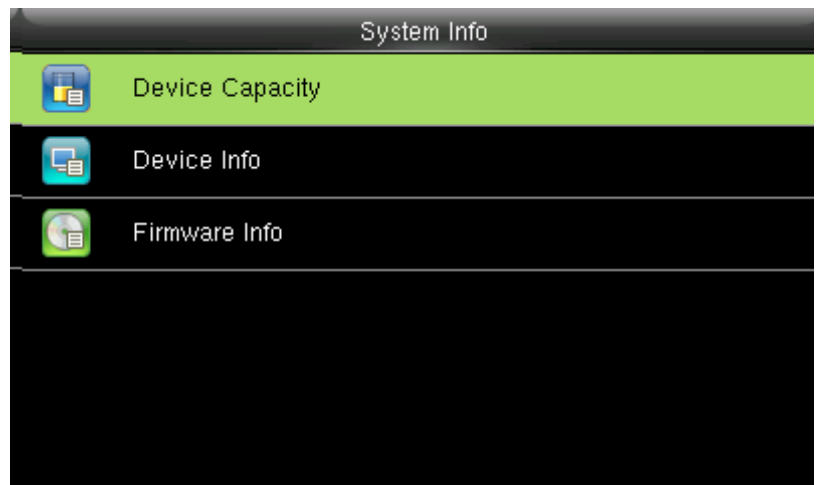
From the main menu select **System Info**

Device Capacity

Click **Device Capacity**

From this screen you can see the following information:

- Number of Users that are enrolled
- Number of Admin Users
- Number of Passwords
- Total face storage capacity/occupied capacity
- Number of Badges/ID cards
- Attendance capacity
- Number of User Photos



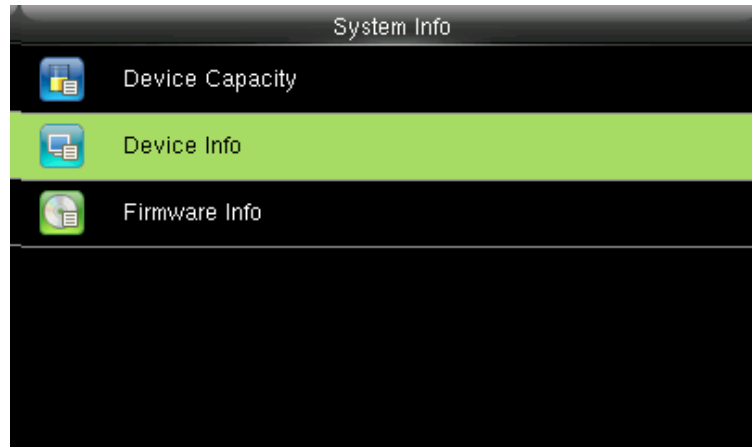
Device Capacity	
User (used/max)	1/10000
Admin User	0
Password	1
Fingerprint (used/max)	1/3000
Badge (used/max)	1/10000
ATT Record (used/max)	4/50000



Device Info

Click on **Device Info**

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



Device Info	
Device Name	uFace800-ID-WIFI
Serial Number	AF44174260019
MAC Address	00:17:61:12:ab:a2
Fingerprint Algorithm	Finger VX10.0
Face Algorithm	Face VX7.0
Platform Information	ZMM220_TFT

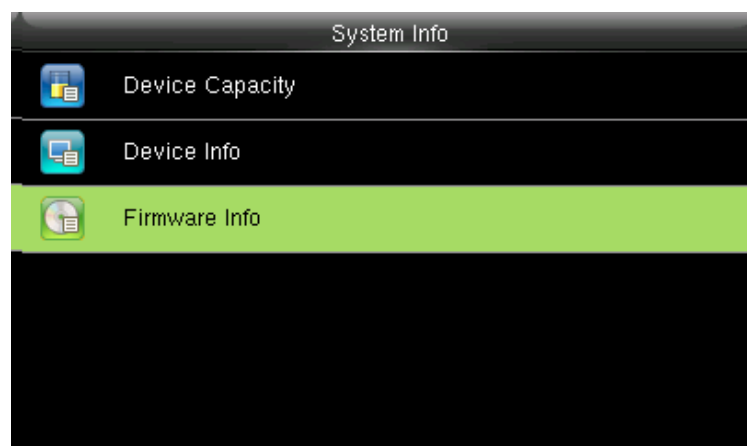
Device Info	
MAC Address	00:17:61:12:92:52
Fingerprint Algorithm	Finger VX10.0
Platform Information	ZMM200_TFT
MCU Version	24
Manufacturer	ZK Tech
Manufacture Date	07/31/2017 01:09:15

Firmware Info

Click on **Firmware Info**.

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

Firmware Info	
Firmware Version	Ver 8.0.3.6-2.12
Bio Service	Ver 2.1.12-20160926
Push Service	Ver 2.0.24S-20170120
Standalone Service	Ver 2.1.0-20160426
Dev Service	Ver 1.0.101-20151031
System Version	Ver 14.12.29-20161214



AFR-200 Specifications



UNIT SERIAL

CAPACITY

Face: 1,200
Fingerprints: 2,000
ID Card: 10,000 (Optional)
Transaction: 100,000

TERMINALS

Dimensions: 7.6" x 6.7" x 3.75" (19.3cm x 16.5cm x 9.5cm)

OPERATING ENVIRONMENT

32°F to 113°F (0°C to 45°C), 20% to 80% relative humidity, non-condensing

WEIGHT

1.75 lbs. (794 g)

DISPLAY

800 x 480 Pixel, LCD Capacitive Touch Screen

FINGERPRINT SENSOR

Optical

POWER INPUT

AC Adapter 100-240V AC, 50-60Hz

SOFTWARE

Time Guardian Windows-based employee time tracking software

REPORTS GENERATED*

Time card, hours worked, exceptions, and much more

INTEGRATION CAPABILITIES

Payroll system integration

SETTING

Programmable: Daylight saving time downloaded through Time Guardian software

MEMORY BACKUP

Up to 2 years continuous memory without power

*Time Guardian provides a wide range of standard reports. Consult with your Time Solutions Dealer for details. Time Guardian integrates with numerous payroll systems including: ADP, Quickbooks, Paychex, PeachTree, and more. *Specifications and/or operational characteristics are subject to change without notice.*



AMANO

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