

# User Manual

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## Face Recognition Terminal

**Model: AC-FAD50**



**Note:**

AC-FAD50 is an information technology equipment rather than medical facility. Temperature measurement is only an auxiliary function and cannot be used as medical diagnosis basis.)

## **Remark**

*Please follow the user manual for correct installation and testing. It's recommended to test the terminal after powering on for 15 minutes. The terminal is for indoor installation only. If there is any doubt please call our tech-supporting and customer center.*

*Our company applies ourselves to reformation and innovation of our products. No extra notice for any change. The illustration shown here is only for reference. If there is any difference, please take the actual product as the standard.*

*The product and batteries must be handled separately from household waste. When the product reaches the end of service life and needs to be discarded, please contact the local administrative department and put it in the designated collection points in order to avoid the damage to the environment and human health caused by any disposal. We suggest recycling and reusing the material resources.*

## 1. Web interface login (non-touch screen initialization login):

- 1.1 Confirm the network connection between PC and Face Recognition Terminal before login. Use Microsoft Internet Explorer 8.0 or higher version as web browser.
- 1.2 Enter the IP address of the device in the IE browser address bar (IP displayed in the lower left corner of the device is 192.168.1.13 by default, and it can be changed in Setup - Ethernet), and press "ENTER".
- 1.3 When you log in to the web interface for the first time, you will be prompted to install the controls. Please follow the instructions to complete the controls installation. After installation, restart the browser to login the system. The system will enter into following interface:
- 1.4 Enter the username and password, click "Login" to log in to the web interface. The default user name is "admin" and the default password is "admin" or "123456" for non-touch screen type.



The image shows a web login interface for a device labeled "AC-FAD50". At the top, there is a blue header with the device name. Below the header, on the right, is a language dropdown menu set to "English". In the center, there are two input fields: "Username" and "Password". Below these fields is a checkbox labeled "Live View" which is checked. At the bottom of the login section, there are two buttons: "Login" (in blue) and "Reset" (in grey).

Figure 1-1: Web Login Interface

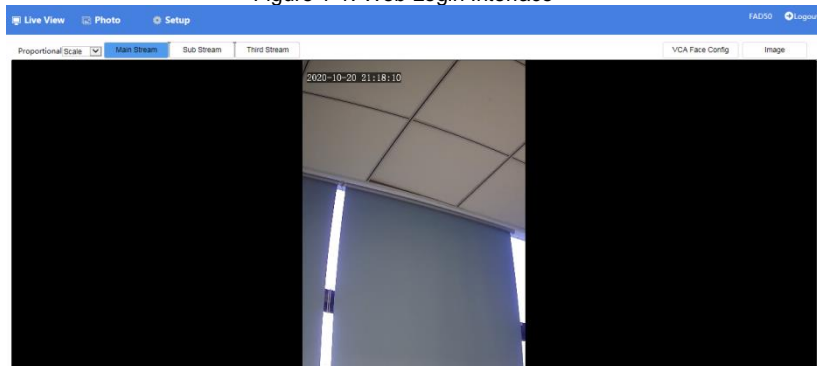


Figure 1 -2: Device Live View

# Face Library

Enter Setup → Intelligent → Face Library interface. Users can add face library and people information under each face library in this face library interface.

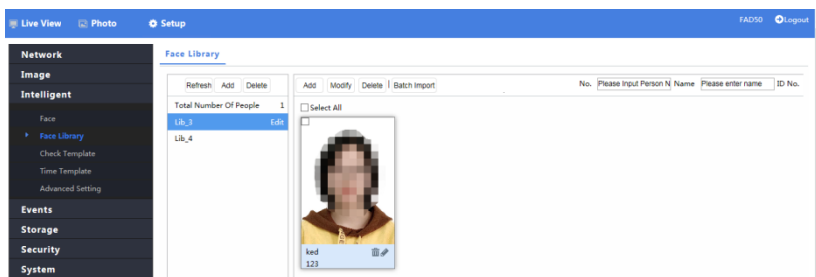


Figure 2-1: Face Library

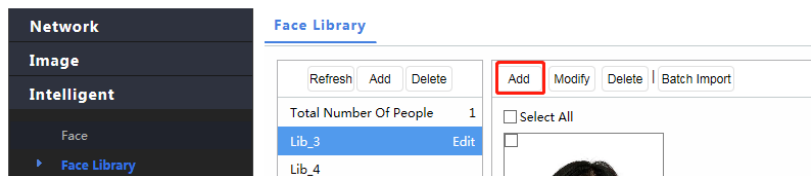
## 2.1 People Management

### 2.1.1 Add People

People information can be added individually or imported by batch. Please import the latest photos into the library.

### 2.1.1.1 Add Face Info

- Enter **Setup**→**Intelligent**→**Face Library** to select the face library for adding people.
- In the action bar, click “Add”.

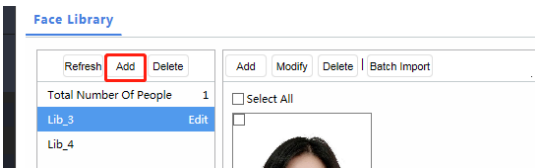


- In the pop-up interface, refer to the following figure to configure people information.

Figure 2-2: Add Face Info

### 2.1.2 Add Face Library

In the face library list bar, click Add .



In the pop-up interface, refer to the following figure to configure face library information.  
 ("Check Template" **must be selected, otherwise it will not take effect.**)

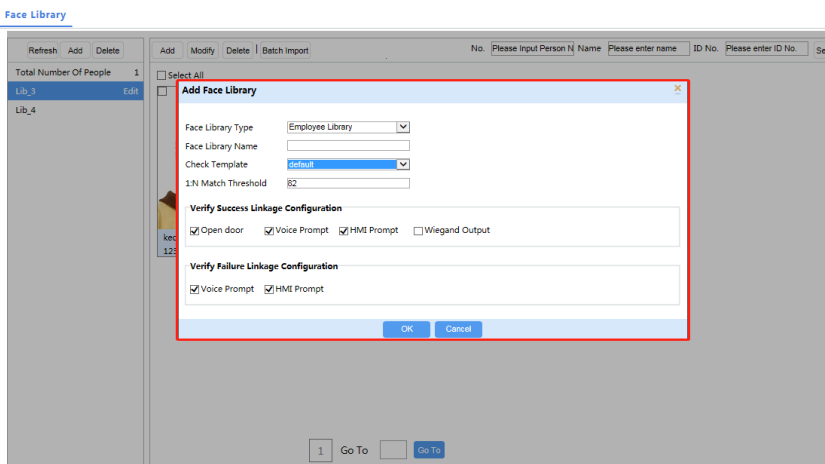


Figure 2-6: Add Face Library

The following table is the parameter configuration table:

Parameter Item	How to understand and configure
Library type	There are two options to select the library type according to the actual situation. 1 .Employee Library 2.Visitor Library
Library name	Enter a library name. You can enter 1-20 characters.
Check template	Select the check template from the drop-down box. Templates are created in the item "Check Template".
1 :N Match Threshold	1:N comparison for face recognition: when it reaches threshold value set here, the verification is successful.
Verify success linkage configuration	Here are the options: 1. Open door: after the verification is successful, the signal of opening door will be given and the door will be opened. 2. Voice prompt: give voice prompt after successful verification. 3. HMI prompt: give the human-machine interface prompt after the verification is successful. 4. Wiegand output: output through Wiegand interface after successful verification.
Verify failure linkage configuration	Here are the options: 1 .Voice prompt: give voice prompt after verification failed. 2.HMI prompt: give the human-machine interface prompt after the verification failed.

### 2.1.3 Query

People information can be searched by No., name, or ID No., etc.

No.	<input type="text" value="Please Input Person No."/>	Name	<input type="text" value="Please enter name"/>	ID No.	<input type="text" value="Please enter ID No."/>	<input type="button" value="Search"/>	<input type="button" value="Reset"/>
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Figure 2-7: Query Condition Box

Enter the **Setup** → **Intelligent** → **Check** Template Interface. Users can select the check mode or add new check template.

## 3.1 Configuration

Users can choose different verification way according to their needs, including unlocking door with password, face recognition, card, or card+face recognition, etc. (Unlocking by face recognition is the default setting.)

### 3.1.1 Add Check Template

1. Log in to the terminal's web interface and select Setup → Intelligent→Check Template.
2. The factory has a default template by default. The user can click "Add" in the list of check templates on the left.
3. Enter the new template name in the box on the right.
4. Click "Save" to finish template creation.

The screenshot shows the 'Check Template' configuration page. On the left, a sidebar menu has 'Check Template' selected. The main content area has a title 'Check Template' and buttons for 'Refresh', 'Add', and 'Delete'. Below these, a list shows a 'default' template. To the right, a form allows creating a new template. The 'Template Name' field contains 'default'. Below this is a table for configuring time intervals and check methods for each day of the week. The 'Time Interval' column has eight rows, each with a time range and a dropdown menu. The 'Face' method is selected for the first row. At the bottom, there are checkboxes for 'Copy To' and 'Select All', and a 'Save' button.

	Mon	Tue	Wed	Thu	Fri	Sat
Time Interval1	00:00:00	-- 23:59:59				
Time Interval2						
Time Interval3						
Time Interval4						
Time Interval5						
Time Interval6						
Time Interval7						
Time Interval8						

Figure 3-1: Check Template

### 3.1.2 Verification check template configuration

1. Set time interval.
2. Select the check method (the default check method is face recognition).
3. Copy the check method to other dates.
4. Save the settings.

Refresh Add Delete

default

\*Template Name default

	Mon	Tue	Wed	Thu	Fri
Time Interval1	00:00:00	23:59:59	Face X   Card + Face X		
Time Interval2			Quick Selection		
Time Interval3		23:58:00			
Time Interval4		23:58:30			
Time Interval5		23:59:00			
Time Interval6		23:59:30			
Time Interval7		00:00:00			
Time Interval8		Time 23:59:59			

Copy To ☒ Select All

☒ Mon ☒ Tue ☒ Wed ☒ Thu ☒ Fri ☒ Sat ☒ Sun

Save Copy

Figure 3-1-1: Check Template Setup

## 3.2 Unlock Door with Face Recognition (Default template is selected by default)

### 3.2.1. Enable Whitelisted Face Match

1. Log in to the terminal's web interface and select Setup → Intelligent → Check Template.
2. The factory has a default template by default. Select the default check template or add a new check template, and set white listed "Face" as the verification mode.

Refresh Add Delete

default

\*Template Name default

	Mon	Tue	Wed	Thu	Fri
Time Interval1	00:00:00	23:59:59	Face X		
Time Interval2			Face and ID Card Picture Match		
Time Interval3			Card		
Time Interval4			Face		
Time Interval5			Card + Face		
Time Interval6					
Time Interval7					
Time Interval8					

Copy To ☒ Select All

☒ Mon ☒ Tue ☒ Wed ☒ Thu ☒ Fri ☒ Sat ☒ Sun

Save Copy

Figure 3-2: Check Template Settings

3. Select Setup — Intelligent — Face Library.
4. There are two libraries by default: default employee library and default visitor library. Select the default face library or new face library, and associate it with the check template of whitelisted face.

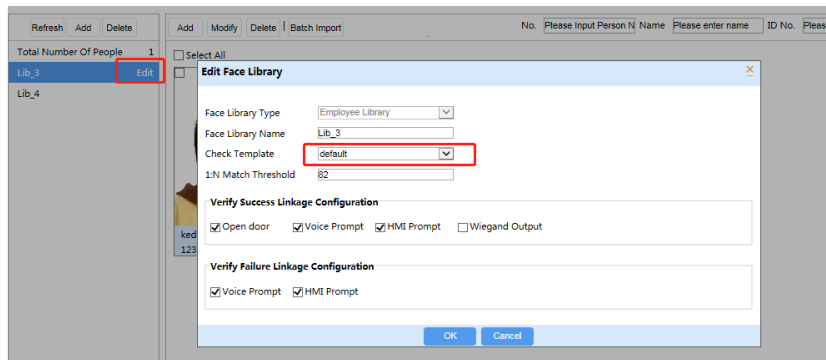


Figure 3-3: Face Library's Association with Check Template

### 3.2.2. Turn on Liveness Detection

Liveness detection is turned off by default. If it needs to be turned on, the setup is as follows.

1. Log in to the terminal's web interface and select Setup-Intelligent Face.
2. Select "On" for Liveness detection to set the corresponding live detection level.

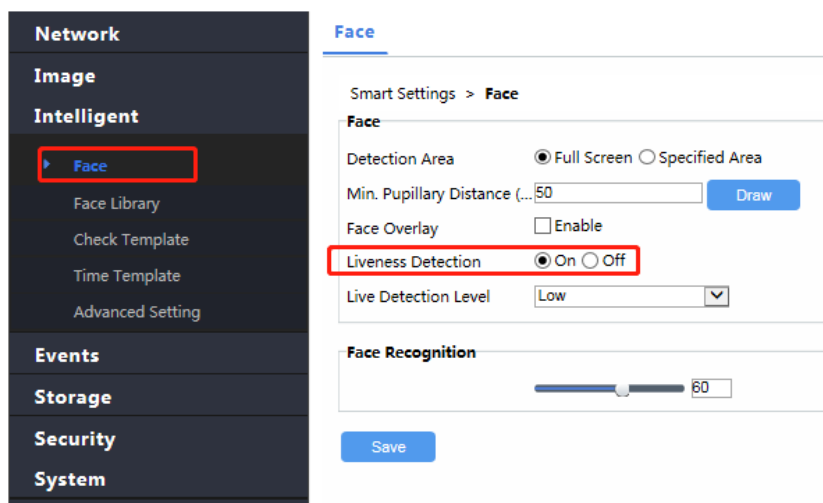


Figure 3-4: Liveness Detection Settings

# Epidemic Prevention Function

By default the product supports mask detection and other functions, which can realize fast access and face recognition without removing mask.

## 4.1 Mask Detection Setup

By default, the product turns on mask detection. During non-epidemic period, mask detection can be turned off to speed up recognition.

1. Log in to the terminal's web interface and select Setup → Intelligent → Advanced Setting.
2. Uncheck the box "Mask" in the item "Attribute Rule Configuration".
3. Click "Save" to turn mask detection off.

## 4.2 Temperature Measurement Setup

By default, the product turns on temperature measurement, it can be turned off or set to more.

1. Log in to the terminal's web interface and select Setup → Intelligent → Advanced Setting
2. Uncheck the box "Temperature Measurement" in the item "Attribute Rule Configuration" and click "save" to turn it off
3. If you turn on the option "Authentication Failed And open the door" in the item "Temperature Measurement", the relay will operate whether the detected temperature is normal or not.
4. Fill in the box behind "Temperature Alarm Thresholds" with a numeric value to modify alarm temperature thresholds. The default threshold temperature is 37.3 degrees.

## 4.3 Door opening mode setup

1. By default, the door opening mode is "Authentication" that the relay will only act when the device detects a registered face.
2. Log in the terminal's web interface and select Setup → Intelligent → Advanced Setting, you can find another mode named "Face" that Both registered and unregistered people can make relays operate.

**Network**

**Image**

**Intelligent**

- Face
- Face Library
- Check Template
- Time Template
- Advanced Setting

**Events**

**Storage**

**Security**

**System**

**Advanced Setting**

Door Opening Mode ☒ Authentication ☐ Face

Ascending

History Recording Sequence ☐ Order Report ☒ Descending Order Report

Call Mode

**Upload Setting**

Image Reporting Mode

Record Reporting Type

**Attribute Rule Configuration**

☐ Safety Helmet

☒ Mask

Authentication Failed A... ☒ Off ☐ On

☒ Temperature Measurement

Authentication Failed A... ☐ Off ☒ On

Temperature Alarm Thr...

Temperature Type ☒ Celsius ☐ Fahrenheit

Save

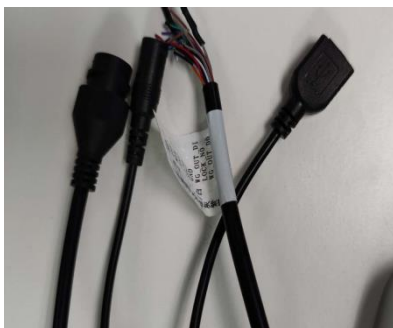
# Equipment Interface

## 5.1 Interface Label

The equipment interfaces are shown in the figure below. Please refer to the real object for details.

## 5.2 Interface Description (Please refer to the real object for details)

### 1. Interface of Face Recognition Terminal



Brown: SEN\_INPUT  
White/Brown: RS485+  
White/Blue: ALARM\_IN  
Blue: RS485-  
Black: GND  
White/Green: WG\_OUT\_D1  
Gray: LOCK\_NO  
Purple: WG\_OUT\_DO  
Orange: LOCK\_COM  
Red: WG\_IN\_D1  
White/Purple: LOCK\_NC  
White/Black: WG\_IN\_DO

5-2 Interface of Face Recognition Terminal

### 2. Interface of temperature sensor



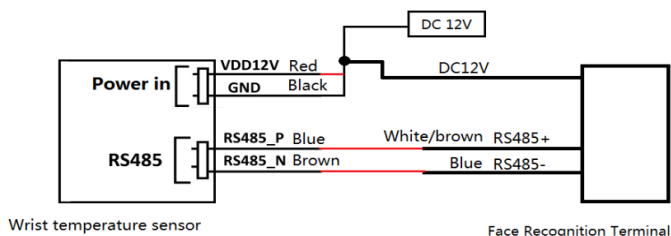
Red: DC 12V+ input

Black: DC 12V- input

Blue: RS485\_P

Brown: RS485\_N

### 3. Wiring Diagram



Interface name	No.	Wiring color	Wire name	Description
USB2.0	/	/	/	USB interface
Internet port	/	/	/	Access network
Power input(12V)	/	/	/	12V power input
Wiegand input	1	White/Black	WG_IN_D0	Wiegand input
Alarm output	2	White/Purple	LOCK_NC	Alarm output/door lock signal (normally closed)
Wiegand input	3	Red	WG_IN_D1	Wiegand input
Alarm output	4	Orange	LOCK_COM	Alarm output / door lock signal(common)
Wiegand output	5	Purple	WG_OUT_DO	Wiegand output
Alarm output	6	Gray	LOCK_NO	Alarm output/door lock signal (normally opened)
Wiegand output	7	White/Green	WG_OUT_D1	Wiegand output
GND	8	Black	GND	GND
GND	9	Black	GND	GND
GND	10	Black	GND	GND
RS485-	11	Blue	RS485-	RS485-
Alarm input	12	White/Blue	ALARMJN	Alarm input
RS485+	13	White/Brown	RS485+	RS485+
SENJN	14	Brown	Door magnetic signal	Alarm input/ door sensor signal

## Device Upgrade

### 6. Software Upgrade

1. Log in to the terminal's web interface.
2. Select Setup → **System** → Maintenance to enter the maintenance setting interface.
3. Click "Browse" on the right of item "Local Upgrade" and select the correct upgrade file.
4. Select the "Upgrade Boot Program" box.

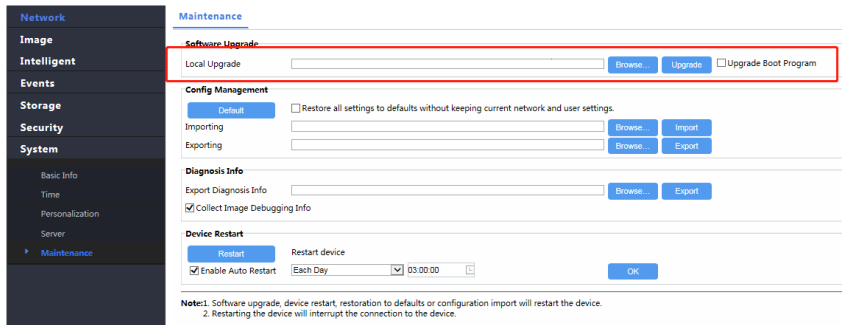


Figure 6-1: Local Upgrade Interface

5. After the file is specified, the button "Upgrade" will no longer show gray. Click "Upgrade" to start the software upgrade.
6. After upgrading, a prompt "Upgrade Successful. Please log in again after restart."

**Note:**

- The version to be upgraded must match the device, otherwise there may be some abnormal situations.
- The file to be upgraded is a compressed package in. ZIP format, and the compressed package must contain all upgrade files.
- During the upgrade process, power cannot be cut off. After the upgrade, the equipment will restart automatically.

# Personalization

## 7.1 Advertising Mode

1. Log in to the terminal's web interface.
2. Select **Setup**→**System**→**Personalization**→**Ad Mode**.
3. After the configuration is completed according to the following steps, the outdoor panel will display the imported image content in standby mode.

The screenshot shows the web interface for the 'Ad Mode' configuration. On the left is a dark sidebar menu with categories: Network, Image, Intelligent, Events, Storage, Security, and System. The 'System' category is expanded, showing sub-items: Basic Info, Time, Personalization (highlighted with a red box), Server, and Maintenance. The main content area has tabs: Ad Mode (selected), Custom Logo and Prompt, Custom Button, and Recognition Result Display. Under the 'Ad Mode' tab, there are fields for 'Ad Mode' (radio buttons for On and Off, with Off selected), 'Ad Image Play Interval(s)' (input field with '10'), and 'Standby time(s)' (input field with '10'). Below these is an 'Import Image File' section with a text input, a 'Browse...' button, and 'Upload' and 'Default' buttons. A note specifies: 'Note: 1.The image file must be a zip file including up to three BMP files named 1.bmp, 2.bmp and 3.bmp. 2.Image format: 32-bit 480\*800 BMP file with up to 16 characters in the filename.' A 'Save' button is at the bottom.

Figure 7-1: Personalization

## 7.2 Custom Logo and Prompt

1. Go to **Setup**→**System**→**Personalization**→**Custom Logo and Prompt**
2. Select to "Display" the title.
3. Select the title content: Default or Custom (default content: Welcome)
4. Choose the right logo image(Make sure the picture is formatted correctly)
5. Upload to device
6. Save

**Note:** only one logo image and title bar can be configured, and they do not affect each other.

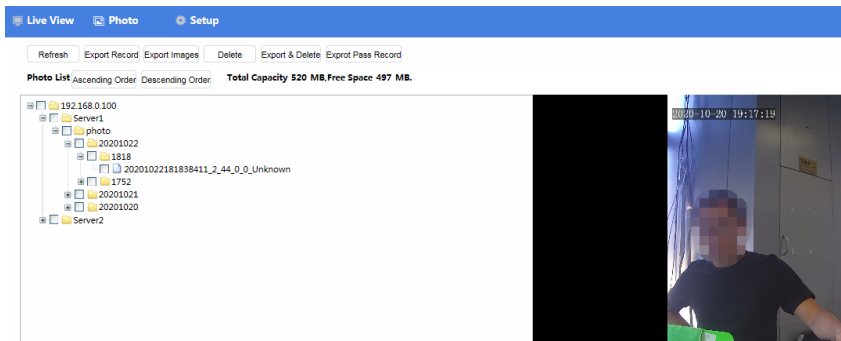
The screenshot shows the web interface for the 'Custom Logo and Prompt' configuration. The sidebar menu is the same as in Figure 7-1, with 'Personalization' expanded. The main content area has tabs: Ad Mode, Custom Logo and Prompt (selected), Custom Button, and Recognition Result Display. Under the 'Custom Logo and Prompt' tab, there is a 'Title' section with radio buttons for 'Display' and 'Hide' (with 'Hide' selected), and radio buttons for 'Default' and 'Custom' (with 'Default' selected). Below this is an 'Import Logo Image' section with a text input, a 'Browse...' button, and 'Upload' and 'Default' buttons. A note specifies: 'Note: Image format: 32-bit 110\*110 BMP file with up to 16 characters in the filename.' A 'Save' button is at the bottom.

Figure 7-2: Custom Logo and Prompt

# Image records

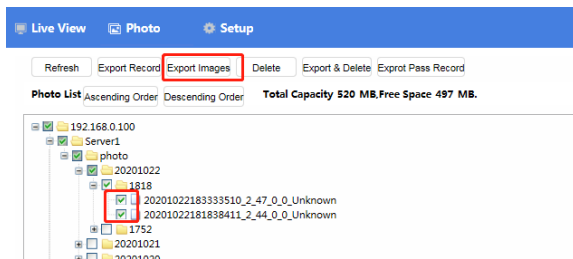
## 8.1 Image records query

1. Log in to the terminal's web interface
2. Enter "Photo".
3. Click on the folder under Photo List, and you can query the photo records by date.



## 8.2 Export Record

1. Log in to the terminal's web interface, click "Photo".
2. Select the box before the record which you want to export.
3. Click "Export Images" to export the record as photo, or click "Export Record" to export the record as a record file.



# Safety & Precautions

## Safety & Precautions

To protect you and others from harm or protect your device from damage, please read the following information before using your device.

Do not install equipment in the following areas:

- Do not install equipment in high temperature, humidity, near the magnetic field, such as generators, transformers or magnets, etc.
- Do not place the equipment near the heating items such as the electric heater or the liquid container.
- Do not place the device directly in the sun or near the heat source, which may cause the body to be discolored or deformed.
- Do not install the equipment in an unstable position to avoid the property losses or personal injury caused by the falling of device.

### Prevent electric shock, fire and explosion

- Do not use damaged power cord, plug or loose power outlet.
- Do not touch the power cord with wet hands or unplug the power source by pulling the power supply.
- Do not bend or damage the power cord.
- Do not touch the equipment with wet hands.
- Do not let the power slide, or cause a collision.
- Do not use power supply without manufacturer approval.
- Do not splash water or other liquids into the equipment.

### Clean surface

- Use a soft cloth dipped in a small amount of water to clean the surface of the machine and dry it with a dry cloth.

### Other matters needing attention

- In order to prevent damage to the paint or housing, do not expose the device to chemical products, such as thinner, gasoline, alcohol, insect repellent, sunscreen, or pesticides, etc.
- Do not beat or hit the device with a hard object.
- Do not disassemble, refit or modify the device at your own discretion. The arbitrary modification is not covered under warranty. When any repair required, please contact the customer service center.
- When the device emits abnormal sound, smell or smoke, unplug the power immediately and contact the customer service center in time.
- If you do not use the device for a long time, it is recommended to unplug the power adapter, take out memory card and put the device in a dry environment.