

User manual

FX100

NFC Android Reader



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1. Copyright

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3. Warnings and safety notices

Please read all the safety notices before using this device. Do not use the device near fuel or chemicals or in any prescribed area such as service stations and refineries. Do not transport or store flammable gas, liquid or explosives in the same compartment of your vehicle as your device and accessories.

4. Limitation of liability

FAMOCO shall not be liable for any loss of profits or indirect, special, incidental or consequential damages resulting from or arising out of or in connection with using this product, whether or not FAMOCO had been advised, knew or should have known the possibility of such damages. The user should refer to the enclosed warranty card for full warranty and service information.

5. About this manual

Congratulations on becoming an owner of FAMOCO FX100 device. This user manual is specially designed to detail the device's functions and features.

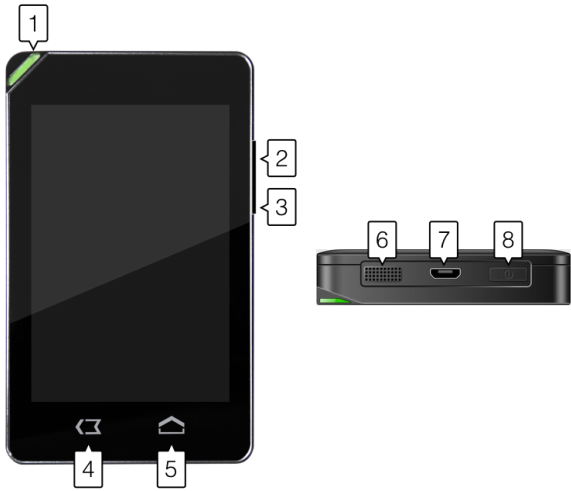
Please read this manual before using the device to ensure safe and correct use.

- Descriptions are based on the device's default settings.
- Images and screenshots may differ in appearance from the actual product.
- Content may differ from the final product, or from software provided by service providers or carriers, and is subject to change without prior notice.
- Available features and additional services may vary by device, software, or service provider.
- Applications and their functions may vary by country, region, or hardware specifications. FAMOCO is not liable for performance issues caused by applications from any provider other than FAMOCO.
- FAMOCO is not liable for performance issues or incompatibilities caused by edited registry settings or modified operating system

software. Attempting to customize the operating system may cause the device or applications to work incorrectly.

6. Device layout

6.1 Overview



- 1 Indicator light (red / green)
- 2 Volume up
- 3 Volume down
- 4 Soft key: Back
- 5 Soft key: Home
- 6 Speaker
- 7 Micro USB port
- 8 Power button

6.2 Back view



- 1 Rear camera
- 2 NFC antenna
- 3 Label
- 4 Microphone
- 5 Lanyard

6.3 Soft keys and buttons

Name	Function
Power button	Long press: turn the device ON/OFF Short press: screen ON/OFF (standby mode)
Volume up & down	Press to turn the volume up or down
Home screen (soft key)	Tap to return to the home screen
Back (soft key)	Tap to return to the previous screen
Micro USB port	Connect the device to a USB power source
Indicator light	Turn red to indicate when the device is charging and green when full charge level is reached

7. Package contents

Check the product box for the following items:



1 Device



1 Battery



1 USB Wall Charger



1 USB cables



1 Lanyard



1 User manual

Note:

- The items supplied with the device and any available accessories may vary depending on the region or service provider.
- The supplied items are designed only for this device and may not be compatible with other devices.
- Appearances and specifications are subject to change without prior notice.
- Third party accessories may not be compatible with your device.

8. Getting started

8.1 How to switch the device ON or OFF



1 Power button

To power ON:

Press and hold the power button for three seconds then release. The home screen will be displayed after a few moments.

To power OFF:

Press and hold the power button for two seconds, then select the shutdown option on screen.

Standby mode:

The device enters the standby mode after 30 seconds if left alone. Press Power button once to switch back on.

8.2 Home screen and synchronization

Once your device is switched on it will start synchronizing.

If there are no applications installed on it yet, the device will be locked on a screen that shows the following indication to configure the internet connection:

If there is no connection, the following screen will appear:



To set up your device you need connectivity so that it can synchronize. Please install a SIM card, set up Wi-Fi or contact your customer support.

If the synchronization is in progress, please wait until it is complete.

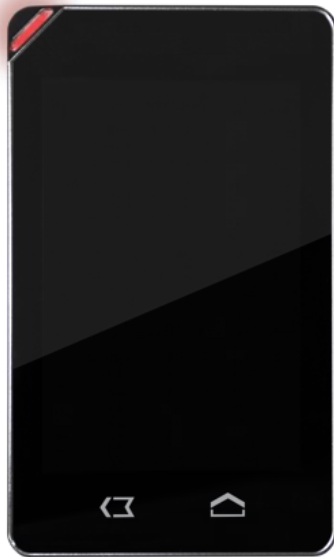
If the synchronization is complete but no applications have been installed, or if the synchronization has been aborted, please contact your customer support.

8.3 LED colors

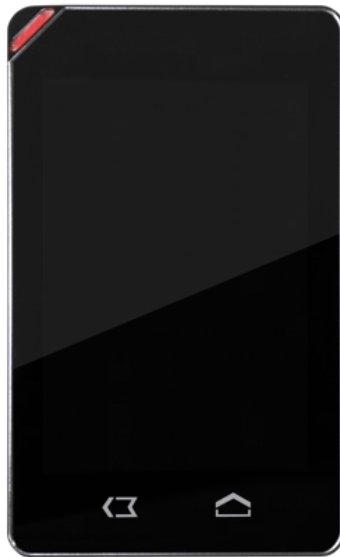
The LED on the device can show different colors.

Those colors are defined by the application but there are default features:

If there is connection, one of the following screens will appear (depending on the synchronization status):



Blinking red
Low battery



Red
Battery charging



Green
Battery charged

8.4 How to access the dashboard

When your device is switched on you can access the dashboard by pressing the volume up button for three seconds. In the dashboard, you will find:



- Battery level
- Time
- Serial number
- Connectivity
- Brightness (that you can modify)
- Sound level (that you can modify)

8.5 How to find your device's serial number

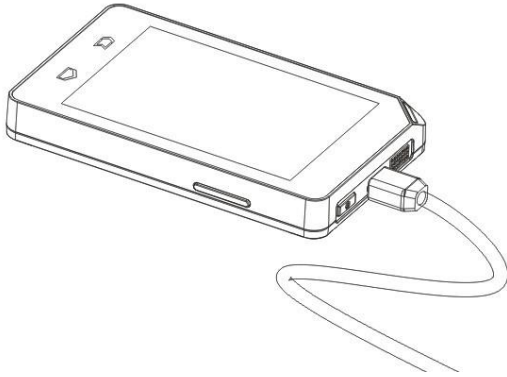
There are two ways of finding the serial number:

- Press the volume up button to access the dashboard. The serial number is written in the dashboard.

Or:

- Open your device and remove the battery (see 8.6 for more information). The serial number is written on the device under the battery.

8.6 How to charge the device



To charge the device, only use the AC charger and micro USB cable supplied:

1. Insert the charger cable carefully. Check that the plug and socket are aligned.
2. The indicator light will turn red to indicate when the device is charging and will turn green when full charge level is reached.
3. The battery will reach full charge in 5 hours.

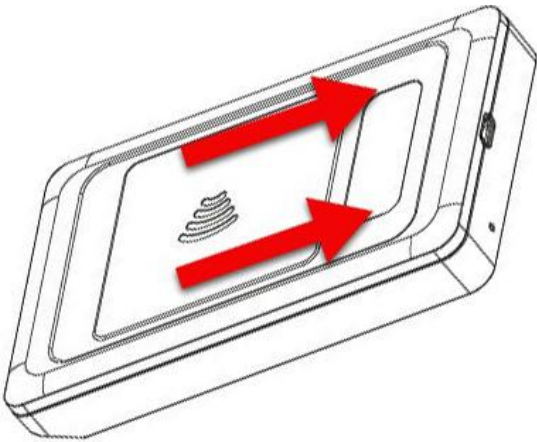
The device can also be charged by connecting it to a computer using the micro USB cable supplied.



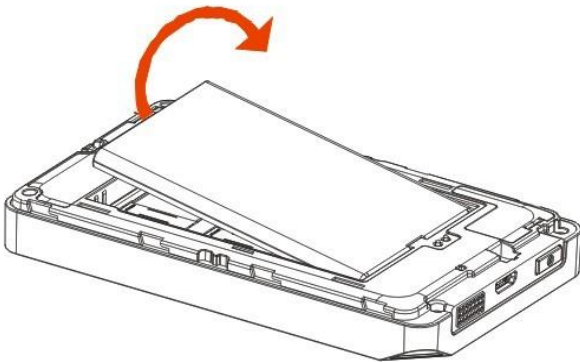
Connecting the charger improperly may cause serious damage to the device. Any damage caused by misuse is not covered by the warranty.

8.7 How to change the battery

1. Press two thumbs against the back cover and push in the direction shown below to remove the cover. Do not bend or twist the back cover excessively. Doing so may damage the cover.



2. Remove the battery.



3. Insert the new battery with the contacts located against the gold springs (with label up).
4. Press the battery down into the case.

5. To replace the back cover, reverse step 1 and push gently to close.

8.8 How to use the battery

Charge the battery promptly when flat. Do not leave the battery in a discharged state.

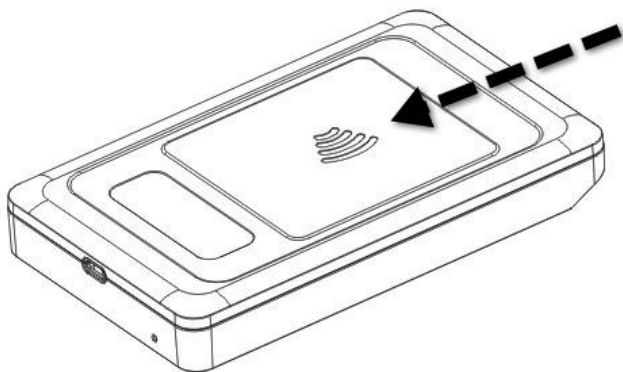
Keep your device and battery cool. High temperatures degrade the battery more quickly. The battery will not charge when over 45°C.

Do not leave on charge for more than 10 hours.

When not using the device for long periods, charge to approximately 40% and remove the battery.

8.9 How to read an NFC card

To read an NFC card, flip the device over and bring the card near the NFC logo in the back of the device.

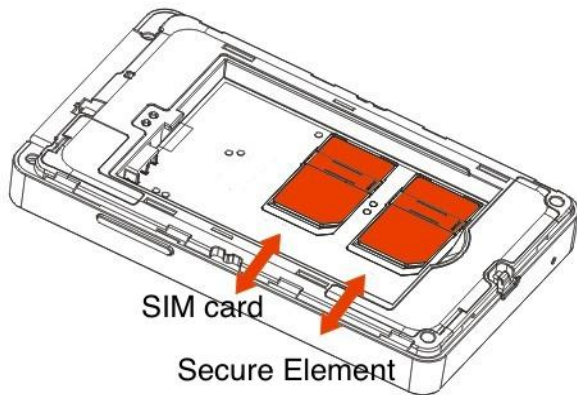


The NFC performance of the device is less than 4 cm when reading an NFC card.

The device can read/write full Mifare ultralight/1K/4K, Mifare Desfire, NFC forum tags 1,2,3,4

8.10 About the SIM slots

There are two SIM slots at the back of the device. The first one is for SIM card, and the second one for external Secure Element.



Do not attempt to remove any of the installed cards.
In case of any operational problem, contact your administrator.

9. Technical specifications

Processor	Type	Quad core
	Speed	1.3 GHz
OS		Secure Android (6.x)
Memory	RAM	1GB
	ROM	8GB
Display	Characteristics	HVGA 320x480 pixels True colors – 3,5”
	Capacitive Touch Panel	Yes
Secure Elements	Embedded SE	Internal SE
	Removable SE	SIM SWP slot (UICC)
NFC	Operating modes	Reader/writer/peer-to-peer Card emulation (ISO 14443-A/B)
	Type of tags supported	NFC Forum 1,2,3,4 MIFARE, Desfire
Connectivity	2G/GPRS/EDGE	850/900/1800/1900 MHz
	3G	900/2100 MHz
	Wi-Fi	Optional, 802.11 b/g/n
	Bluetooth	4.0
Camera		2 MP
Speaker		Yes
Microphone		Yes
Accelerometer		Yes
Gyroscope		Yes
Size	L x W x H	104 x 63 x 13.6 mm
Weight		121 g
Battery		1400 mAh
Power supply		Micro USB

10. Warranty information

The warranty does not apply to defects or errors in the product caused by:

1. Normal wear and tear, misuse, mishandling, and physical damage.
2. Exposure to water or any other liquids or solvents.
3. Any unauthorized disassembly, repair or modification.
4. Power surges, lightning, fire, flood or other natural events.
5. Use with unauthorized third-party products such as generic chargers.
6. Any other cause beyond the range of normal usage for products.
7. The end user shall have no right to reject, return, or receive a refund for any product under the above-mentioned situations, not excluding your statutory rights under national law.

11. Safety and general information

The device contains delicate electronic circuitry, magnets and battery systems. You should treat it with care and pay attention to the following points:

- Handle the device with care. Do not drop or throw the device. Do not immerse it in any liquid.
- Do not place the device near computer disks, credit cards, and other magnetic media. The information contained on disks or cards may be erased or damaged.
- Do not leave the device or battery in direct sunlight or near other heat sources where temperatures could exceed 45°C.
- Keep the device and all accessories away from children.
- In the unlikely event of a battery leakage, avoid contact with eyes or skin. In the event of contact, rinse with water and consult a doctor.
- Observe and obey warning signs at petrol stations, airports and hospitals.

- The operation of some medical electronic devices, such as hearing aids and pacemakers, may be affected by the device.

- Take care not to allow metal objects such as coins or keys to come into contact with the battery terminals.

- Do not dispose of batteries in a fire.

- Do not throw used batteries into household rubbish, return them to a recycling point.

- When the battery is thrown away cover the terminals with insulating tape.

- Be careful not to pierce the battery with sharp objects and do not use damaged batteries.

- Do not disassemble or modify the battery.

- Stop using the battery if abnormal heat, smell, discoloration, deformation, or abnormal condition is detected during use, charge, or storage.

- Do not put the battery in your mouth.

- Only use original replacement batteries.
- Do not connect the device to non-genuine or 3rd party chargers.
- Do not attempt to dismantle the device or any of its accessories.
- Do not put the device into a microwave oven, dryer, or high-pressure container.
- Do not use the device immediately after a sudden temperature change e.g. from an air-conditioned environment to high temperature and humidity outside. In such cases there could be condensing moisture inside the device, which can cause internal damage. Switch off and leave for 30 minutes before use.
- Do not use the device where blasting is in progress.
- Do not leave the device at the bottom of a bag where it may be damaged by sharp objects.
- Take care when the device is in your pocket.
- Sitting down or sharp objects may damage the device.

- At high volume, prolonged listening to audio devices can cause hearing loss.

- Do not leave the device discharged or disconnected for long periods of time; your personal data may be lost and your battery life will be reduced.

- Under poor network conditions battery life is considerably reduced.

- Please recycle the packaging and all parts.

- Emergency service coverage is dependent on network availability and battery status.

- It is always good practice to switch off the device regularly.

- Do not expose the device to oils or solvents.

- It is normal for the device to become warm while the battery is being charged.

- Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
- This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

BODY-WORN OPERATION:

This device was tested for typical body-worn operations with the back/front of the phone kept 1cm from the body. To comply with FCC RF exposure requirements, a minimum separation distance of 1cm must be maintained between the user's body and the back/front of the phone, including the antenna. Body-worn accessories that cannot maintain 1cm separation distance between the user's body and the back/front of the phone, and have not been tested for typical body-worn operations may not comply with FCC RF exposure limits and should be avoided.

For more information about RF exposure, please visit the FCC website at www.fcc.gov

Your NFC Android Reader is a low power radio transmitter and receiver. When it is ON, it receives and also sends out radio frequency (RF) signals. In August, 1996, the Federal Communications Commission (FCC) adopted RF exposure guidelines with safety levels for NFC Android Reader. Those guidelines are consistent with the safety standards previously set by both U.S. and international standards bodies:

<ANSI C95.1> (1992) / <NCRP Report 86> (1986) / <ICNIRP> (1999)

Those standards were based on comprehensive and periodic evaluations of the relevant scientific literature. For example, over 120 scientists, engineers, and physicians from universities, government health agencies, and industry reviewed the available body of research to develop the ANSI Standard (C95.1). Nevertheless, we recommend that you use a hands-free kit with your NFC Android Reader to avoid potential exposure to RF energy. The design of your NFC Android Reader complies with the FCC guidelines (and those standards).

Use only the supplied or an approved replacement antenna. Unauthorized antennas, modifications, or attachments could damage the phone and may violate FCC regulations.

NORMAL POSITION:

Hold the phone as you would any other telephone with the antenna pointed up and over your shoulder.

RF Exposure Information:

This product is compliance to FCC RF Exposure requirements and refers to FCC website <https://apps.fcc.gov/oetcf/eas/reports/GenericSearch.cfm> search for FCC ID: **2AGQIFX1009A** to gain further information include SAR Values.

NOTE: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help

Do not use the device with the environment which below minimum -10°C or over maximum 50°C, the device may not work.

This device is acting as master and operating in the 2.4 GHz (2412 ~2462 MHz) band. Ad Hoc function is supported but not able to operate on non-US frequencies.



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