User Manual

FX100 Series

NFC Device

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1. Copyright

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We reserve the right to make modifications on print errors or update specifications without prior notice.

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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

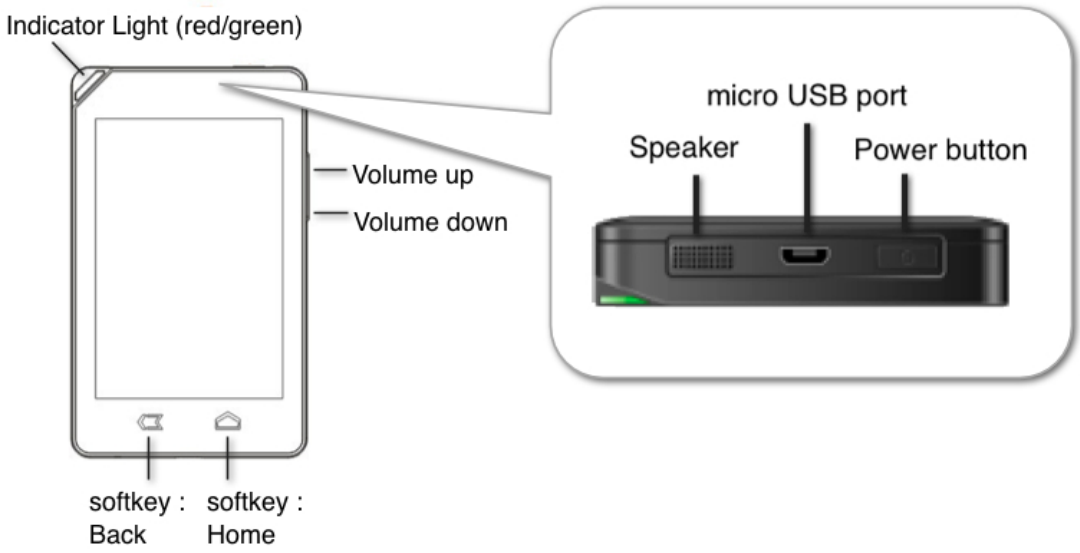
Congratulations on becoming an owner of FAMOCO Fx 100 Series Device, world's first cost-effective standalone NFC device. This user manual is specially designed to detail the device's functions and features.

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

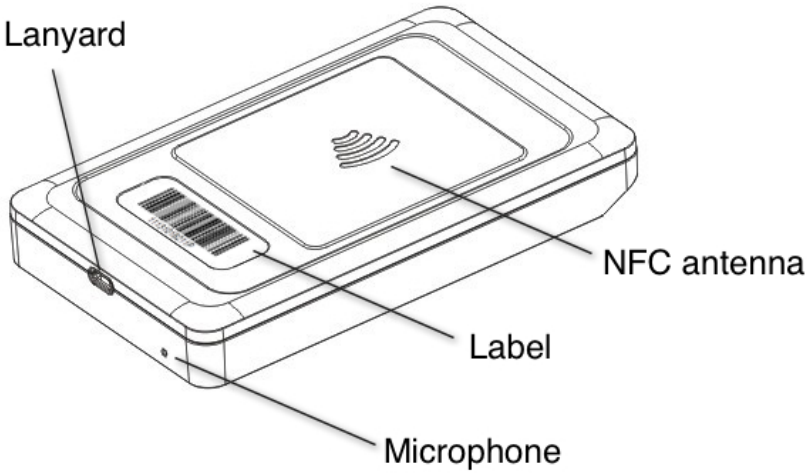
- Descriptions are based on the device's default settings.
- Images and screenshots may differ in appearance from the actual product.
- Content may differ from the final product, or from software provided by service providers or carriers, and is subject to change without prior notice.
- Available features 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 improperly.

6. Device layout

6.1 Overview



6.2 Back view



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:

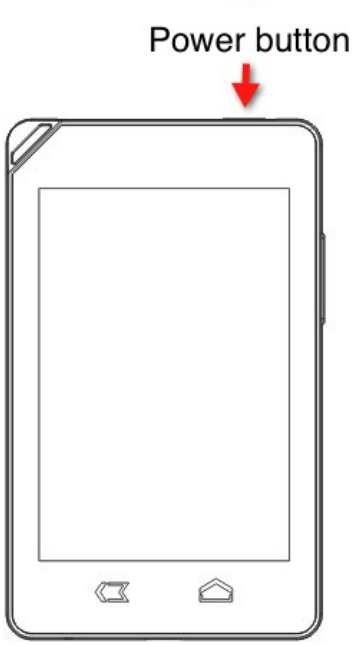
- Device (battery installed)
- USB Wall Charger
- USB cable (1 meter)
- Lanyard
- User manual

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.
- Other accessories may not be compatible with your device.

8. Getting started

8.1 How to switch the device ON or OFF



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 to turn off the device.

Standby mode:
The device enters the standby mode in 30 seconds if left alone. Press Power button once to switch back.

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:

- Connectivity (SIM card / Wi-Fi / no connection)
- Synchronization status (done / in progress / aborted)

<u>If there is no connection, the following screen will appear:</u>

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

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

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 in the APK but there are default features:

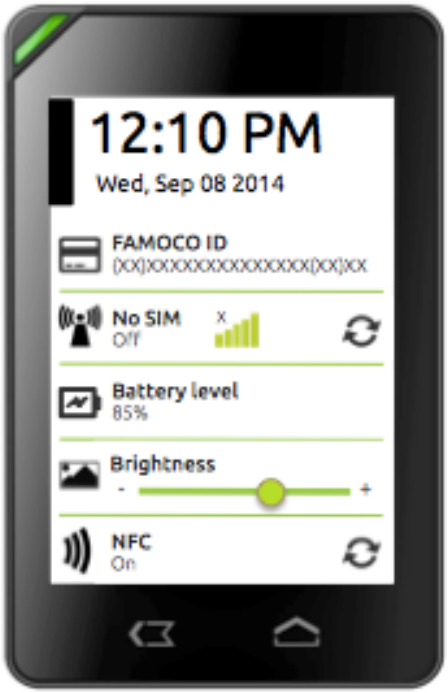
Blinking red
Low battery

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:



- Time and date
- Serial number
- Connectivity
- Battery level
- Brightness (that you can modify)
- NFC status (on/off)

8.5 How to find your device's serial number

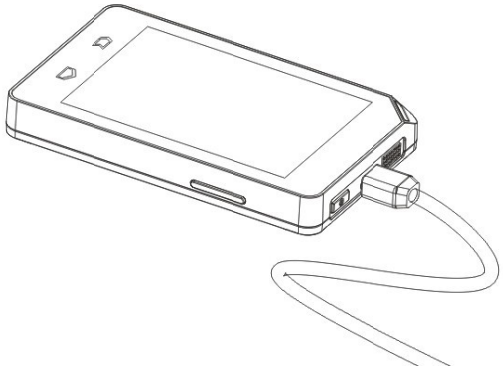
There are two ways of finding the serial number:

- 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:

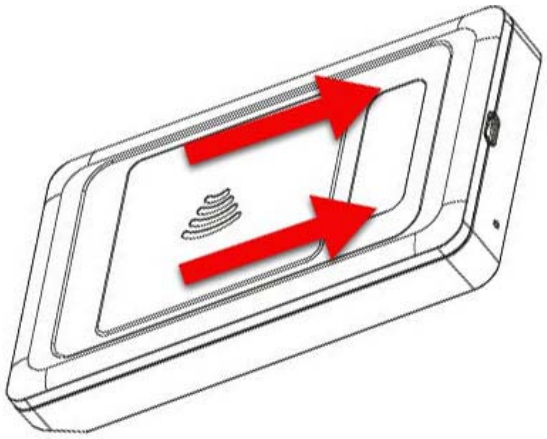
1. Insert the charger cable carefully. Check that the plug and socket are aligned.
2. The indicator light will turn red to indicate when the device is charging and should turn green when full charge level is reached.
3. The battery should reach full change in maximal 5 hours.

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

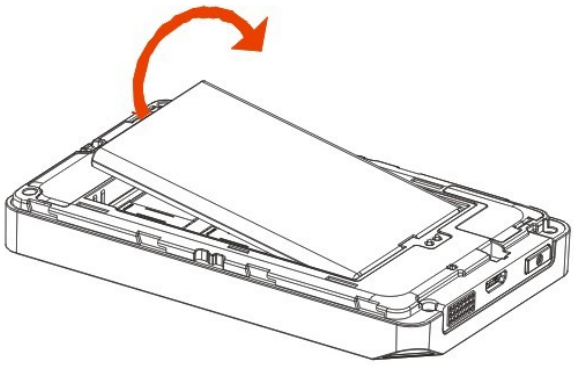
Connecting the charger improperly may cause serious damage to the device. Any damage caused by misuse is not covered by the warranty.

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.

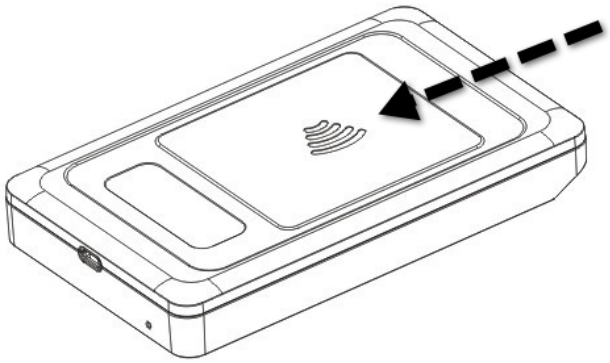
Keep your device and battery cool. High temperatures degrade the battery more quickly.

Do not leave on charge for more than 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.

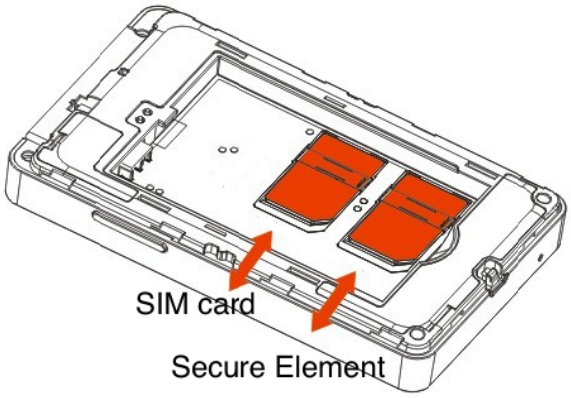


The NFC performance of the device is between 3-5 cm while reading an NFC card.

The device is able to 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	MediaTek
	Speed	1 GHz
OS		Secure Android (4.x)
Memory	SDRAM + Flash	512MB Nand + 512 MB DDR1
Display	Characteristics	HVGA 320x480 pixels True colors – 3,5”
	Capacitive TouchPanel	Yes – 5 points
Secure Elements	Embedded SE	Internal SE
	Removable SE	SIM SWP slot (UICC)
NFC	Operating modes	Reader/writer/peer-to-peer Card emulation (14445-A/B)
	Type of tags supported	NFC Forum 1,2,3,4 MIFARE, Desfire
Connectivity	GPRS, EDGE	850/1900 MHz
	WCDMA	850, 1900 MHz
	Wifi	Optional, 802.11 b/g/n
	Bluetooth	Optional, 3.0, 4.0
Camera		2 MP
Speaker		Yes
Microphone		Optional
Size	L x W x H	10.3 cm (L) × 6.3 cm (W) × 1.4 cm (H)
Weight		121 g
Battery		1300 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.

Note: Consult the warranty card for full information

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. Donot drop or throw the device. Do not immerse it in any liquid.

- Do not place the device nearcomputer disks, credit cards, and other magnetic media. The information contained on disks or cards may be erased or damaged.
- Keep the device and all accessories away from children.

- In the unlikely event of a battery leak avoid contact with your eyes or skin. In case it happens, flush 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 awaycover 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.

- Only use the supplied charger.

- Do not attempt to dismantle the device or any of its accessories.

- Do not place the device close to the edge of a table in case it moves when set on vibrate mode.

- Do not put the device into a microwave oven, dryer, or high-pressure container.

- Don’t 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 thebottom of a bag where it may bedamaged by sharp objects.

- Take care when the device is inyour pocket.

- Sitting down or sharpobjects may damage the device.

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

- Do not leave the device discharged or disconnected for a long 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.

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.

SAR tests are conducted using standard operating positions accepted by the FCC with the phone transmitting at its highest certified power level in all tested frequency bands, although the SAR is determined at the highest certified power level, the actual SAR level of the phone while operating can be well below the maximum value, in general, the closer you are to a wireless base station antenna, the lower the power output. Before a new model phone is a available for sale to the public, it must be tested and certified to the FCC that it does not exceed the exposure limit established by the FCC, Tests for each phone are performed in positions and locations (e.g. at the ear and worn on the body)as required by the FCC.

For body worn operation, this model phone has been tested and meets the FCC RF exposure guidelines when used with an accessory designated for this product or when used with an accessory that Contains no metal and that positions the handset a minimum of 10 mm from the body.Non-compliance with the above restrictions may result in violation of RF exposure guidelines.

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