

# User Guide for Liitokala Lii-M4

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## Features:

Feature	Description
Input	Type-C 5V/2A
Channels	4 independent charging slots with independent management system
Capacity Test	Test mode allow to check the capacity of your batteries in mAH
Safety Protection	Over-charging, over-discharge, short-circuit, identifies broken/defective batteries, constant voltage and current charging.
LCD Display	Shows charging mode, battery voltage, current, time, capacity, and percentage.
Charging Current	Two optional charging currents: 500mA/slot or 1000mA/2 slots. Default is 500mA.
Battery Type	Charges various rechargeable batteries (18650/26650/AA/AAA) simultaneously.
Output	Standard 5V/1000mA USB output function.

4-slots independent charging and independent management system, Type-C 5V/2A input.

Multiple safety protection functions of over-charging, over-discharge, short-circuited and can automatically identify broken/defective batteries(will not charge bad batteries). Charging under constant voltage and current.

Built-in LCD display screen shows the Operating mode(CHARGE/TEST), battery voltage (V), working current (mA), charging time (H), battery capacity (mAh), percentage of electricity (%) and other parameters are clear at a glance.

2 optional charging currents:  $500\text{mA} * 4 / 1000\text{mA} * 2$ .

The default charging current of the charger is 500mA, and 500mA or 1000mA current can be selected for charging by current (CURRENT)key within 8s. Li-ion: 500mA/1000mA and Ni-MH/Ni-cd: 500mA.

Can charge rechargeable batteries of different specifications (18650/26650...../AA/AAA) at the same time.

## Specifications:

Brand Name	<b>LiitoKala</b>
Model Number	<b>Lii-M4</b>
Type	Battery Charger
Input voltage	DC 5V/2A
Lithium battery charging current	4.20V 500mA*4 /1000mA*2
NiMH battery charging current	1.48V 500mA*4
Rechargeable battery specifications	<b>18650</b> , 26650, 21700, 14500, <b>AA</b> , <b>AAA</b> , etc.
USB output	5V 1000mA
TEST Discharge current	500mA

## Functional characteristics

- 1. Using Type-c interface for 5.0v input;
- 2. Two optional charging currents:  
500mA/1000mA;
- 3. Battery capacity detection function;
- 4. It is possible to charge batteries of different specifications (18650/26650/.../AA/AAA) simultaneously;
- 5. This product adopts an independent LCD display, with clear parameters such as working mode (CHARGE and TEST), battery voltage (V), working current (mA), charging time (h), battery capacity (mAh), percentage of battery charge (%), etc;
- In CHARGE mode, 4 channels work independently and different charging currents can be selected to work simultaneously;
- 7. Test mode, the normal process of detecting battery capacity consists of three steps (1) fully charging, 2) discharging, and 3), and the process of detecting battery capacity;

- 8. CHARGE and TEST modes can work simultaneously; Independently set charging capacity detection/normal capacity detection function, without separate discharge detection function;
- 10. Multiple protection functions: overcharging and discharging, short circuit, 0V voltage activation function, 1.65V-2.2V cannot be charged, intelligent identification of faulty batteries and reverse battery detection protection;
- 11. With standard 5V/1000 mA USB output function.

## Description of key points :



The charger has 4 button points, including mode selection point (MODE), channel 1-2 query point, channel 3-4 query point, and current selection point. These 4 buttons also have the function of lighting up the LCD backlight, making it simple and convenient to use;

**1. MODE key:** mode selection; Including CHARGE charging mode and TEST capacity detection mode; Normally, long press and hold the MODE key to switch between CHARGE charging mode or TEST capacity detection mode: first, lightly press the 1-2 or 3-4 keys to select the channel, then long press and hold the MODE key to change the mode, and then

press the Current key to change the current size. After selection, there is no action for 8 seconds to enter the working state, which is easy to operate;

**2.1-2 channel buttons:** corresponding to the situation of the first and second channels; Continuously lightly pressing the button can take turns selecting and viewing the data of the first and second channels;

**3. 3-4 channel buttons:** corresponding to the situation of the 3rd and 4th channels; Continuously lightly pressing the button can take turns selecting and viewing data from the 3rd and 4th channels;

**4. Current key:** current selection; Li-ion:500mA/1000mA  
Ni-MH/Ni-cd : 500mA ; Long press this button to control the LCD screen to display frequently;

The charger can change independent charging or different current selection by pressing the corresponding function keys, as well as mixed charging of different batteries, making it easy to operate; In working mode, you can lightly press the (1-2, 3-4) key points to view the corresponding channel current (mA)/capacity (mAh)/voltage (V)/time (h) and other data reference values.

## Mode operation instructions:

When the charger is powered on, the LCD screen of the charger will instantly turn on and display all lights. After 3 seconds, it will enter the ready state. If the battery is not inserted, it will display "null". If a bad battery is inserted or the battery is reversed, it will display "Err". If the battery is fully charged, it will display End and 100%;

**CHARGES  
ALL!**

For Li-ion 3.7V  
(14500 18650 26650 21700)

For NiMH 1.2V  
AAA AA C SC



## **CHARGE (charging mode):**

**1.** Connect the charger to the power supply and insert it into the battery. The system automatically enters charging mode (CHARGE), and the charger automatically defaults to a charging current of 500mA. Within 8 seconds, you can select 500mA or 1000mA current through the current button (Current) to charge. After 8 seconds of inactivity, the system will lock the current you have selected for charging. At this time, the current and other functions are locked. If you need to change it, you can press and hold the MODE button to reselect;

**2.** In charging mode (CHARGE), while the "CHARGE" screen indicator is still flashing, lightly press the 1-2 and 3-4 keys to select the battery channel, and press the Current key to select the current size. After selection, there is no action for 8 seconds to enter the working state; Pay attention to selecting the charging current based on the battery capacity. If fast charging is not necessary, it is recommended to use 500mA for charging, which is the safest option;

**3.** charging mode, by lightly pressing buttons 1-2 and 3-4, you can view parameters such as charging power (mAh), charging time (h), charging current (mA), and battery voltage (V) for each channel. After the battery is fully charged, "End" will be displayed;

(Note: When using a 1000mA current for charging, only two channels can be used for charging and only lithium-ion batteries can be used. If there are more than two channels, the system will automatically reduce the 1000mA charging current to 500mA current for charging.)

## TEST (Capacity Detection Mode)

1. The TEST mode is to first fully charge the battery, then discharge the battery and record the discharge level and other parameters. Afterwards, the battery is automatically charged without recording the charging level, and the screen displays the discharge stage's level and other parameters; The detailed steps are shown in the following figure:

Enter TEST to select the current to charge the battery, discharge the battery, and then charge again END

Press and hold MODE in any state to re-enter the TEST mode;

2. After entering the TEST mode, you can select 500mA or 1000mA current through the current button (Current) within 8 seconds. The system will lock the current you have selected after 8 seconds. If no setting is made within this 8 seconds, the system will automatically lock the 500mA current for charging (the current at this time is the default charging current of the system) (Note: NiMH batteries only have a current range of 500mA)

**3.** When the battery is fully charged for the first time, the system automatically switches to discharge, and the discharge current is fixed at 500mA. At this time, the system will record the discharge data to detect the battery discharge capacity.

**4.** After the battery is discharged, the system will automatically switch to charging, and the charger will charge the battery again with the previously selected current parameters. At this time, the system will not record the charging capacity data, but will still display the discharge stage capacity. The End indicator will flash until fully charged, and finally the system will display End and 100% to stop charging.

(Note: When using 1000mA current for charging, only two channels can be used for charging, and only lithium-ion batteries are available. If there are more than two channels, the system will automatically reduce the 1000mA charging current to 500mA current for charging; the discharge current is fixed at 500mA.)

## USB 5V output :



1.USB is only used as a 5V mobile output with an output current of 1000mA;

2.It is necessary to connect the lithium battery with sufficient power to channel 4 for USB output to be effective; At this point, the 5V electronic product can be powered on.

### Package List:

- 1 \* LII-M4 Battery Charger
- 1 \* USB Cable
- 1 \* User Manual(Chinese English)