

INSTRUCTION MANUAL

Thank you for purchasing this outstanding Jupio quality product!

Important Safety Instructions:

1. Before using the Jupio Intelli Charger, read these instructions carefully.
2. The charger is restricted to charging NiCd and NiMh rechargeable batteries only. Never use this charger to other types of batteries such as alkaline, lithium, carton zinc or other types that are not specified.
3. Do not expose the Jupio Intelli Charger to rain or moisture. The charger is designed and intended for indoor use only.
4. Do not mix battery types NiCd and NiMh.
5. Always follow the charging instructions for the battery. Pay attention to the recommended charging current of the rechargeable batteries. Never use a charging current higher than recommended.
6. Never use any power cable and transformer other than those originally supplied with the Jupio Intelli Charger.
7. The rechargeable batteries may become hot during charging (especially when a high charging current is chosen). Always take extra care when taking out the batteries after charging.
8. Always unplug the Jupio Intelli Charger from its power source when not in use.
9. Never disassemble the Jupio Intell Charger. If you suspect a problem have it serviced by a qualified Jupio service technician.
10. When you don't comply to the safety instructions mentioned above it may lead to fire, electrical shock or personal injury.

Features:

1. Charge rechargeable batteries in with 200, 500, 700 and even 1000 mAh .
2. Individual LCD display for each charging bay.
3. Charge both "AA" and "AAA" rechargeable batteries simultaneously.
4. Overheat detection to protect rechargeable batteries from over-charging and overheating.
5. Minus delta voltage (- dV) detection for ending the charge process.
6. Damaged and worn out batteries detection.
7. Discharge mode. This completely discharges the battery thus making sure the battery is empty before being fully charged again. This prevents future memory effects on batteries.
8. Refresh mode. Old rechargeable batteries can be discharged and charged several times to refreshen the batteries.
9. Test function to check the real capacities of rechargeable batteries.
10. Charge / Discharge functions can be chosen independently per battery bay.
11. Multiple display modes during the charging / discharging process. The display show the actual charging current (in mAh) , elapsed time (in hh: mm), the terminal voltage (in V) and accumulated capacities (in mAh or Ah).
12. USB output (5V, 1A) for charging smartphones, tablets or other USB devices.

Function Keys:

There are three easy-to-use function keys and four number keys in the charging unit.

BAY NUMBER key:

Press and release the Number key to select a particular battery bay for charge/discharge modes and / or display mode adjustment.

MODE Key :

The mode key has to be pressed and held for about 1 second to activate the mode change , The subsequent pressing of the mode key will enable to toggle between the "Charge", "Discharge" ," Test" and "Refresh" mode. To change the operating mode for individual rechargeable battery, first press corresponding BAY NUMBER key , then press the MODE key.

The Jupio Intelli Charges provides the following 4 operating modes:

1, **Charge mode:** To charge up the rechargeable battery, it automatically switches to trickle charge after rechargeable battery is full.

2. **Discharging mode:** To discharge the rechargeable battery, then immediately charge it for minimizing the memory effect.

3. **Refresh mode:** To refresh the rechargeable battery to its maximum capacity by charging and discharging the rechargeable battery repeatedly until no further increase in the capacity is expected. For old rechargeable batteries or those which have not been used for a long time , refreshing may bring the rechargeable battery back to its optimum condition.

4. **Test mode:** Check the real battery capacity of a AAA or AA battery in mAh/ Ah .

Charge Mode:

Charging at 200 mAh is the default-operating mode of the charging unit. User may select a quicker charging current of 200, 500, 700 or 1000 mAh.

Battery model	Capacity	Charging current selected	Estimated charging time
AA	2400mAH	200mA	12 hr

		500mA	4 hr 48 min
		700mA	3 hr 26 min
		1000mA	2 hr 24 min
AAA	800mAH	200mA	4 hr
		500mA	1 hr 36 min
		700mA	1 hr 9 min
		1000mA	48 min

Attention:

Always observe the recommended maximum charging current of the rechargeable batteries. In general, 200 mA is a recommended charging current if rapid charging is not necessary, it is definitely safe and the optimal setting to the rechargeable batteries.

When you start using new batteries, it is recommended to start with using the REFRESH mode. This charges and discharges the battery several times to achieve its standard capacity.

For new rechargeable batteries batteries, they are recommended to charge it with 200 mAh current for reconditioning it from the long storage status.

DISPLAY key:

Press and release to select the displays of the charging current (in mA), time elapsed (in hh:mm), the terminal voltage (in V) and accumulated capacities (in mAh or Ah) during the charging process.

To change the display content of a particular rechargeable battery, first press corresponding BAY NUMBER key , then press the DISPLAY key.

CURRENT key :

Press to select the amount of current to be applied (within the first 8 seconds after batteries are inserted) in different operating modes (Charging / Discharging current).

Using the Jupio Intelli Charger:

When the transformer has been plugged to the power source, the version number of the charger will be displayed first. Then all the segments will light up momentarily and the "Null" sign will be shown before batteries are placed , If damaged batteries are placed to the charging unit, the charger will also show " Null" on LCD.

Once a rechargeable battery is inserted after the transformer has been plugged to the power source, the battery voltage will be displayed for 4 seconds . Then "200 mA" charge (default mode) will be shown on LCD for another 4 seconds , indicating that charging with 200 mA is to be started if no alternation in setting is made.

Within this 8-second time from inserting the batteries , you can first select the operating mode by the MODE key. Then within 8 seconds from the last key pressing, you may select the charging/ discharging current by pressing the CURRENT key.

The MODE key has to be pressed and held for about 1 second to activate the mode change . The subsequent pressing of the mode key will enable to toggle between the "Charge" "Discharge" "Test" and "Refresh" modes.

There is a 8-second time allowed for choosing further functions after each key pressing. If no more keys are pressed, the LCD will blink one time to indicate the end of setting. After that the current can no longer be changed during the process and the selected mode will be set. If you want to change the applied current afterwards, the rechargeable batteries must be taken out and inserted again.

During charging, the different displays - charging current (in mA) , Time elapsed (in hh:mm). Terminal voltage (in V) and Accumulated capacities (in mAh or Ah) may be toggled and selected by pressing the DISPLAT key.

After the rechargeable battery is fully charged , "Full" sign will be shown on the display and you can take out the batteries. If you decide to keep the batteries inside the Jupio Intelli Charger the charge process will automatically switch to trickle charging. The trickle charging current is around 5% of the selected charging current to keep the rechargeable batteries being full at all times.

Important:

The maximum charging current of the rechargeable batteries are restricted by the current setting of the first inserted rechargeable battery. Therefore, it is recommended to place the battery with the highest expected charging current into battery bay 1 first. To be able to use a higher current for the other battery bays you will have to remove all batteries from its bay and start again.

To change the operating mode during charging, you can press the MODE key (this selects all battery bays) or the NUMBER key, then MODE key (for selecting an individual battery bay). 8 seconds after the last key press the LCD will blink one time to indicate the end of changing.

When overheating condition occurs (temperature rises above 65C) , the charging will be stopped immediately and the display will show " Full" .

DISCHARGE MODE:

Discharge mode will first discharge the rechargeable battery, then charge it completely . Its main use is to prevent memory effects occurring.

By pressing the MODE key within 8 seconds after inserting the rechargeable batteries, the Discharge mode can be selected. (The mode key has to be pressed for about 1 second) You can also select different discharging current by pressing the CURRENT key within 8 seconds after inserting the batteries. The display will blink once to indicate the setting has been confirmed. The current can not be changed afterwards.

The discharging current is always set to be half to the charging current. For instance , when the discharging current is 250 mAh, then the charging current is 500 mAh . The user can select different discharging current : 100/ 250/ 350/ 500 mA. When the Discharge / Charge process is completed the LCD display will mention 'Full.

REFRESH MODE:

Old rechargeable batteries and those have not been used for a long time require refreshing.

This process will recover the optimal capacity of the rechargeable batteries. By pressing the MODE key within 8 seconds after inserting the rechargeable batteries the Refresh mode will start with discharging the rechargeable batteries, then charge them, This process will repeat itself until the Jupio Intelli Charger notices no more increase in the batteries capacity.

Note: It may take several days to finish the refreshing batteries, depending on the selected current.

TEST MODE:

In Test mode, the rechargeable batteries will be fully charged first and then discharged to determine its capacity. Finally, the batteries will be charged again and the actual capacity (in mAh or Ah) will be shown on the LCD.

When selecting the Test mode, you can select different charging currents : 200/ 500/ 700/ 1000 mAh . And then, the afterwards the discharging current will be half of the selected charging current: 100/ 250/ 350/ 500 mAh.

After the Test mode is finished, the display will shift between the " FULL" sign and the battery capacity automatically in 3-second intervals until the rechargeable batteries are removed. You can also press the DISPLAY button to show alternate information.

TRICKLE MODE:

After the rechargeable battery is fully charged, the charger will drive a small amount of current to the rechargeable batteries to maintain the fully charged level. (TRICKLE MODE). At the same time, the signal "FULL" will be displayed on the LCD.

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