UNIVERSAL BANK RAPID CHARGER FOR RECHARGEABLE LMR BATTERIES (18 / 12 / 6 / 3 BANK)



IMPORTANT

- **1.** Read all Caution statements below in this User Manual before attempting to charge a battery.
- 2. Always charge new batteries completely before initial use. Recycle batteries when they can no longer be used. Do not discard unwanted batteries in the trash or incinerate. Batteries exposed to fire or excessive heat may explode.
- **3.** For best battery performance, charge NiCd and NiMH batteries when they are fully discharged.

CAUTION

- 1. Never charge alkaline or dry cell batteries with this charger. Do not charge Li-ion, LiPo. NiMH, or NiCd batteries unless they are designed with overcharge protection.
- 2. Use charger in areas protected from the weather. Do not expose the charger to rain, any liquids, or excessive moisture.
- **3.** Do not attempt to charge a battery without first installing the appropriate charging pod. Use only charging pods designed for the charger. Disconnect charger from power supply before installing, adjusting, or removing the charging pod.
- **4.** Make sure contacts in charging pod and battery are clean. Do not allow wire or metal objects to touch contacts in charging pod or any internal part of the charger.
- 5. Do not remove the charger's housing or make any modification to the charger.
- **6.** Use only the power supply provided with the the charger. If a replaceable power supply is required, please to the local dealers. Use of other power suppliers may damage the charger or batteries you may be attempting to charge.

CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER. NO USER SERVICEABLE PARTS ARE INSIDE. REFER ANY SERVICING TO QUALIFIED SERVICE PERSONNEL.



The lightning flash and arrowhead within the triangle is a warning sign alerting you of 'dangerous voltage' inside the product.



The exclamation point within the triangle is a warning sign alerting you of important instructions accompanying the product.

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INTRODUCTION

Thank you for purchasing a universal rapid charger. This high quality product is designed for charging two-way-radio batteries whether on of off a radio. Using replaceable pods, the charger can charge multiple batteries at the same time and the batteries maybe the same of different chemistries. Separate LEDs and LCDs show the charge status of each battery.

With the appropriate charging pod installed, can charge these battery chemistries: Lithium ion (Li-ion),lithium polymer (LiPo), nickel-metal hydride (NiMH), or nickel cadmium(NiCd).

For a complete list of charging pods available for this charger, please contact your dealer.



- ① DC power connection socket.
- 2 Power ON/OFF switch (top of right side of unit).
- ③ Removable charging pod for three batteries (shown for first position only).
- ④ Charge status LEDs for front, middle and rear positions.

Note: For more information of LEDs, please check the bottom sticker.

- 5 Logo.
- 6 Rapid charger base.
- ⑦ DC plug of power supply.
- (8) Power adapter (UL listed).
- (9) Power cord to connect power adapter with AC wall outlet.

Note: DC power connection ① is a custom design for holds the DC plug ⑦ securely.

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Note: For more information of LEDs, please check the bottom sticker.

- (5) Charge status LCD display for front, middle and rear positions.
- 6 DC plug of power supply.
- ⑦ Power adapter (UL listed).
- (8) Power cord to connect power adapter with AC wall outlet.

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- ① DC power connection socket.
- 2 Power ON/OFF switch (top of right side of unit).
- ③ Removable charging pod for three batteries (shown for first).
- ④ Charge status LEDs for front, middle and rear positions.

Note: For more information of LEDs, please check the bottom sticker.

- (5) Charge status LCD display for front, middle and rear positions.
- 6 Power adapter (UL listed).
- ⑦ Power cord to connect power adapter with AC wall outlet.

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① Charge status LEDs – for front, middle and rear positions.

Note: For more information of LEDs, please check the bottom sticker.

- 2 Charge status LCD display for front, middle and rear positions.
- ③ Removable charging pod for three batteries (shown for first).
- ④ DC power connection socket.
- 5 Power adapter (UL listed).
- 6 Power cord to connect power adapter with AC wall outlet.

REPLACING A CHARGING POD

The charging pod is made from quality materials and designed to provide years of service when properly used. In most cases, the charging pod will only be replaced when you want to use the charger with a different battery. Each pod charges three batteries for a specific radio; the three batteries may have different capacities of chemistries.

Follow these steps to change the charging pod:

- 1. Obtain a charging pod made specifically for the charger. Confirm that the charging pod is compatible with the battery you want to charge.
- 2. Unplug the power supply from the charger.
- **3.** The charging pod is secured to the base with a single screw. Turn the locking screw on the bottom of the rear charging pod counter-clockwise until it no longer holds the pod. Lift the charging pod from the charging base.
- **4.** Insert the replacement charging pod into the charging base in a right way and secure with the locking screw. Do not over tighten screw.
- 5. Inspect the charging contacts to ensure they are clean and unobstructed.
- **6.** Connect the power supply to the charger. You are now ready to charge a battery compatible with the charging pod.

Note: There are two kinds of charging pod for batteries with 7.4V charging voltage and batteries with 3.7V charging voltage. 7.4V and 3.7V charging pods may be mixed according to user's own situations. Please contact your dealer to order and customize them.

CHARGING A BATTERY

- 1. Confirm that the charging pod and battery are compatible.
- 2. Insert the DC plug from the power supply well into the opening on the right side of charger, connect the AC wall plug to a 110V(or 220V) outlet, and turn the power switch (top of right side) to the on position. The status LEDs marked "P" illuminate BLUE to confirm the front, middle and rear positions for each pod are receiving power. When the rest LEDs marked "F," "M" and "R" display ORANGE, it means the charger starts up and ready for charging.
- **3.** Place the battery to be charged in either the front, middle or rear position of the charging pod. The status LED marked "F," "M" or "R" will illuminate RED to confirm which position is charging the battery. The battery may be charged while attached to the radio and three batteries may be charged simultaneously.
 - **P** Illuminates BLUE when the charger is connected to power.
 - **F** Status LED for front position.
 - M Status LED for middle position.
 - **R** Status LED for rear position.



CHARGING A BATTERY

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- 4. When a battery is placed in the charging pod and while charging, the charge status LED (F, M or R) will illuminate RED with no flashing. If the charge status LED is red and flashes, a fault has been detected. The flash pattern represents a specific fault condition. See section Fault Conditions for details.
- 5. When the battery is charged to 80% of capacity, the charge status LED will change to GREEN and begin to flash. It is recommended that the battery be charged to at least 80% capacity before use.
- 6. The charge status LED will illuminate GREEN with no flashing when the battery is fully charged.
- 7. After removing a fully charged battery, the charge status LED will illuminate ORANGE for a new seconds. Allow the charge status LED to go off before placing another battery in the charging pod.
- The charger is designed to operate at room temperatures between 15°C and 30°C (59°F 86°F). Do not charge batteries at temperatures below 0°C (32°F) or above 45°C (113°F).

LED DISPLAY INFORMATION

Chart 1: LEDs display information for 7.4V batteries

LED Display	Charging status
Solid blue	Power supply connected
Solid red	Battery charging
Solid green	Fully charged
Flashing red	Fault condition
Flashing green	80% charged
Solid orange	Charger reset

Chart 2: LEDs display information for 3.7V batteries

LED Display	Charging Status	
Solid blue	Power supply connected	
Alternately flashing red&green	Ready mode	
Solid red	Battery charging	
Solid green	Fully charged	

FAULT CONDITIONS

When the F, M or R charge status LED flashes RED, a fault condition exists. There are two different flash patterns, each indicating a specific type of default. The flash patterns and fault conditions are as follows:

Flash Pattern	Fault Type
Flashes 2 Time	Indicates battery contact is "open" and current is not passing through the (+) and (-) contacts on the battery. This warning is provided after the initial diagnostic stage is complete. Check charging pod to confirm compatibility with battery.
Flashes 3 Time	Indicates over-current condition caused by battery short circuit. Have the battery checked by a qualified technician. Do not attempt charging the battery if a short circuit exists.

WARRANTY AND SERVICE DURING WARRANTY

The charger is made from high quality materials and designed to provide years of reliable service. The following warranty applies:

This product to be free from defects in workmanship and materials for one-year from date of purchase by the end user. This warranty applies to the original purchaser and is void if the products has been altered, misused, damaged, neglected, or if repair is required because of normal wear and tear. In no event will our company, its affiliates, subsidiaries, related entities, or their respective directors, officers, or employees, be liable for any damages beyond repair or replacement as described above, including without limitation, incidental, or consequential damages.

PRODUCT SPECIFICATIONS

18 BANK

Dimensions (W×L×H)	$550 \times 180 \times 86$ mm / 21.7 \times 7.1 \times 3.4 inches
Weight (Charger Only)	2.1kg / 4.6 lbs
Weight (Power Supply)	0.82 kg / 1.8 lbs
Compatible Chemistries	Li-ion / LiPo / NiMH / NiCd
Recommended Operating Temperature	15°C - 30°C / 59°F - 86°F
Storage Temperature	0°C - 65°C / 32°F - 149°F
Power Supply Input	100V - 240V AC / 50Hz - 60Hz 2.2A (max)
Charger Input	12-24V DC / 15A
Charge Rate	800mA (10.6V - 13.5V)
Product Approval	FCC, CE, UL (power supply)

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Dimensions (W×L×H)	390 \times 248 \times 86 mm /15.4 \times 9.8 \times 3.4 inches
Weight (Charger Only)	1.66kg / 3.7 lbs
Weight (Power Supply)	0.64 kg / 1.4 lbs
Compatible Chemistries	Li-ion / LiPo / NiMH / NiCd
Recommended Operating Temperature	15°C - 30°C / 59°F - 86°F
Storage Temperature	0°C - 65°C / 32°F - 149°F
Power Supply Input	100V - 240V AC / 50Hz - 60Hz 2.2A (max)
Charger Input	13.8V DC / 9A
Charge Rate	800mA (10.6V - 13.5V)
Product Approval	FCC, CE, UL (power supply)

Specification subject to change without notice.

This device complies with Part 15 of the FCC Rules. Option is subject to the following conditions:

(1) this device may not cause harmful interference.

(2) this device must accept any interference received, including interference that may cause undesired operation.

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Dimensions (W×L×H)	193 \times 248 \times 86 mm / 7.6 \times 9.8 \times 3.4 inches
Weight (Charger Only)	0.88kg / 2.0 lbs
Weight (Power Supply)	0.41 kg / 0.9 lbs
Compatible Chemistries	Li-ion / LiPo / NiMH / NiCd
Recommended Operating Temperature	15°C - 30°C / 59°F - 86°F
Storage Temperature	0°C - 65°C / 32°F - 149°F
Power Supply Input	100V - 240V AC / 50Hz - 60Hz 2.2A (max)
Charger Input	13.8V DC / 9A
Charge Rate	800mA (10.6V - 13.5V)
Product Approval	FCC, CE, UL (power supply)

3 BANK

Dimensions (W×L×H)	113 \times 248 \times 86 mm / 4.5 \times 9.8 \times 3.4 inches
Weight (Charger Only)	0.5kg / 1.2 lbs
Weight (Power Supply)	0.38 kg / 0.83 lbs
Compatible Chemistries	Li-ion / LiPo / NiMH / NiCd
Recommended Operating Temperature	15°C - 30°C / 59°F - 86°F
Storage Temperature	0°C - 65°C / 32°F - 149°F
Power Supply Input	100V - 240V AC / 50Hz - 60Hz 2.2A (max)
Charger Input	13.8V DC / 2.5A
Charge Rate	800mA (10.6V - 13.5V)
Product Approval	FCC, CE, UL (power supply)

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RELATED ACCESSORIES

STANDARD ACCESSORIES

Description	Quantity
Rapid Charger	1
Power Adapter	1
AC Cord for Power Adapter	1
User Manual	1

OPTIONAL ACCESSORIES



UNIVERSAL RAPID CHARGER FOR RECHARGEABLE LMR BATTERIES