

**MULTI-UNIT CHARGER
USER MANUAL**

6-SHOT

6-Way Charger User Manual

Intended Use

The RocketScience® Charger is a universal charger that can charge a wide range of rechargeable batteries, by themselves or while attached to a radio.

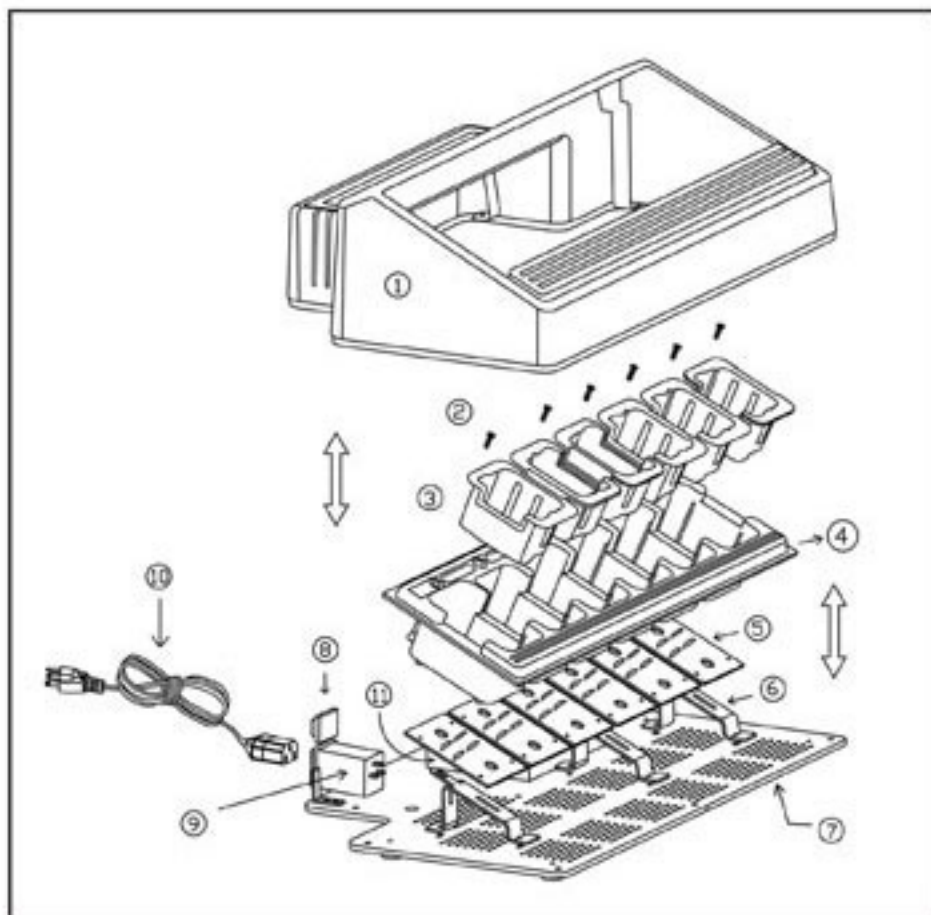
The charger can charge -

- (1) Rechargeable batteries of different chemicals: Lithium ion, NiCd and NiMH.
- (2) Rechargeable batteries of different capacities, from 700mAh to 4000mAh

Caution

1. User must not make any modification to the unit.
2. User must not replace the battery adaptor or the power adaptor with similar parts in the market. Such actions can cause damage to the charger unit or to the rechargeable batteries, and will void the warranty of the unit.
3. Never attempt to charge alkaline or dry cell batteries. They may burst causing damage and personal injury.
4. Never let metal, wire etc. touch any internal part of the charger.
5. Make sure battery and charger contacts are always clean, otherwise batteries may not fully charge.
6. Use indoors only. Never expose the charger to rain, snow or any liquids.
7. Never incinerate used batteries. This may cause an explosion.
8. Keep the charger away from TV sets or Radio to prevent interference.
9. Must charge Li-ion battery with a protection circuit.
10. **Avoid overcharging**- batteries must be removed from the charger to stop charging. Batteries must not charge for more than **15 hours** after the LED indicator turns green.
11. If your batteries seem to have no capacity even after being fully charged, completely discharge them, then fully charge them again. If they still do not retain a charge (or very little), new batteries must be purchased.

RocketScience® Charger Configuration



- ① Main Body A
- ② Locking Screw
- ③ Charge Pod
- ④ Main Body B
- ⑤ P C B
- ⑥ Steel Supprter
- ⑦ Aluminium Bottom
- ⑧ Switch
- ⑨ Filter
- ⑩ Power Cord
- ⑪ Switching power Supply

Charging Procedure

1. Install the suitable battery adaptor in the charger unit. The battery adaptor **MUST** be locked into place using the Locking Screw, to ensure good electrical contacts (refer to fig 1).
2. Connect the AC adaptor to the charger jack on the rear of the unit.
3. Connect the AC adaptor to an AC outlet.
4. The LED indication will be orange for a few seconds during unit diagnostic, and then off when the unit is ready for operation.
(Note that the LED will remain orange, until a battery adaptor is properly installed.)
5. Slide a battery pack or a transceiver equipped with a battery pack into the battery adaptor.
6. The LED indicator will be orange during battery diagnostic, which may last from a few seconds to a few minutes.
7. The LED indicator will be red during charging.
8. The LED indicator will be green and blinking when the charged capacity is over 80%.
9. The LED indicator will be green when the charging is completed.
10. User may remove the battery when the LED indicator is green (steady or blinking).

Notes:

- 1) In case of battery faults, the LED will be blinking in red colour. The error codes (number of blinks) are listed below –

# Of blinks	Descriptions
1	Over current error during precharge – The battery may have a shorted circuit between "P+" and "P-" contact.
2	Precharge time out – Precharge operation failed because the battery level remains at a low level.
3	Reserved
4	Overheat error while charging Li ion battery – Battery temperature is over 43 deg C, which is abnormal while charging a Li ion battery.
5	Battery contact is open – No charging current is passing thru the "P+" and "P-" contact.
6	Battery is under charged – Charging is completed, but the final battery voltage is below normal level.

- 2) IMPORTANT – After a charged battery is removed, the LED indicator may remain on for a few seconds. User MUST wait for the LED to turn off, before putting another battery in the charging slot.
- 3) Using the charger outside the specified temperature range (15 – 30 deg C) may lead to erratic operation, and batteries can be under-charged.

Unit specification

Dimension:	445 x 230 x 295 mm
Weight:	approx. 4.20 kgs
Power Input:	110VAC 50/60Hz@2.5A
Supported batteries:	NiCd, NiMH and Li ion, 700 mAh to 4000 mAh,
End of charging detection:	Temperature, delta temperature, voltage, zero delta voltage, -ve delta voltage, and timer
Operating Temperature:	15 – 30 deg C
Storage Temperature:	0 – 65 deg C
Safety standard:	UL / CUL / CE

Radio Pods Available:

BlackBox: Blackbox, Blackbox+, Blackbox Bantam

Motorola: MagOne, CP185, CP200/150/040/PR400/EP450, CT250, CP125/GP2000/PRO2150, HT750/1250/1550/GP320/328/360/EX500/600/HT1550/MTX8250/8250LS/850/850LS/9250/950/PR860, GP300/350/P1225, HT1000/MTS2000/GP900, RDX series/CP110, Saber/MX1000, Visar, TRBO/XPR series, XTN series/CP100/XU2600/XV2600, XTS3000/5000

Icom: IC-F14/24/33/33GT/43GT/43GS/44/3161/3161DT/4161/3021T/3021S/4021T/4021S/3011/4011, IC-F50/60/M88, IC-F3001 (for NI-CD, NI-MH battery)/3001-LI (for Li-ion battery), IC-F3/F4/F3S/F4S/IC-T2A, IC-F3GT/4GT/30/40/30GS/40GS/21S

Kenwood: TK190, 260, 270, 280, 290, 360, 370, 380, 390, 480, 481, 2100, 2140, 2160, 2170, 2180, 2200, 2212, 2300, 3100, 3140, 3160, 3170, 3173, 3180, 3200 (now fits KNB45L battery), 3200L, 3212, 3300, 5210, 5310, 5410, NX200/210/300

Relm: RP16/RP99 Plus series, RPV3000/3600 (TK260 pod)

TEKK: XT800/900

Vertex: VX160, 131, 132, 150, 180, 210, 230 series, 350 series, 400, 410, 417, 450, 800, 820, 821, 824, 920, 921, 924

Maxon: SL100/25/55, SP120/130/200

Bearcom: BC120 (CP125 pod), BC130 (MAGONE pod)

HYT: TC610, TC518