

Six-Bay Multi-chemistry Charger

OPERATIONS MANUAL





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Introduction

The Patriot® Six Bay Battery Charger is a charger for the Motorola® XTS3000, XTS3500, XTS5000, HT1000, MT1000, JT1000, MTS2000, MTX8000, and MTX9000 Radio batteries. The product is designed for Multi-Chemistry (Li-Ion, Ni/CD or Ni/MH) operation.

The Patriot® Charger has the capability of charging the specified GTS Batteries as well as batteries provided by other suppliers (as approved by GTS Battery Services).

The Patriot® Charger is user friendly and does not require manual setting for charging or battery maintenance parameters. The product is designed for desk top operation and as an in-vehicle charger/conditioner when used with the appropriate car power adapter.

The 6 bay Patriot® charger is design for desk top or wall mounted operation without the need for any additional bracketing hardware.

This reference guide provides basic instructions on the set-up and use of the Patriot® Charger. Unless otherwise noted, the term charger refers to the single bay version of the Patriot® Charger series of products.

It is suggested that the Motorola® radios listed above be inserted into the charger in the OFF mode. Upon charge initialization the radio battery will accept a full charge in the following operating modes: standby, receiving, or transmitting modes.

Please contact your HB service representative for information on the in-vehicle DC mounting bracket.

Global Technology Systems Inc. reserves the right to change, update and modify procedures and specifications without notice.

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■ Equipment Supplied

The equipment supplied is:

- One six bay version of the Patriot® Charger
- One AC power supply with cabling
- One operation manual

■ Safety Guidelines

Before using the Patriot® Charger, please read all instructions and cautionary notations on the Patriot Charger, the GTS Battery and on the radio host device.

■ Warning

- To reduce risk of injury only use authorized battery products with this charger Other non-approved batteries may cause personal injury and or damage to the equipment.
- Do not expose the charger to excessive moisture, temperature extremes or direct sunlight.
- Place charger in a well ventilated area which is free of foreign materials.
- To reduce risk of electric shock, unplug charger from power source before cleaning.
- Dispose of used batteries in accordance with your state or local hazardous material laws.
- Do not disassemble, incinerate, modify or short circuit the charger any battery or related components.

■ Product Specification

Input Voltage:	115V 50/60Hz AC 12 volt DC
Temperature:	Operating: 0°C to 55°C (32° F to 130° F)
Battery:	0°C to 50°C (32° F to 122° F)
Storage:	0°C to 49°C (32° F to 122° F)
Charge Time:	2.5-5 hrs maximum, depending on battery capacity
Charge Current:	1300 mA in Constant Current Charge phase
Charge Method:	Constant Current - Constant Voltage with end-of-charge current termination, temperature controlled
Dimensions:	Length: 18" (45.7 cm)
Width:	5" (12.7 cm)
Height:	3.5" (8.9 cm)
Weight:	5 lbs (2.27 kg) (without batteries)

■ Operation

1. The charger is comprised of six single port charging slots.
2. For AC operation:
Plug the power supply into the wall and the power cord into the charger.
 - a. It is recommended that a grounded 3 prong AC outlet be used to power this device. The user should insure that the AC outlet is grounded before using this device. If you are not sure that AC outlet has appropriate ground, we suggest that a qualified electrician be called for verification.
 - b. A temporary grounding adapter can be used to properly ground a two prong only outlet.
3. Insert the battery. The unit will begin to charge when it detects the presence of a battery.
4. Ensure that the charger housing air slots are unobstructed.
5. Each charging station is equipped with three LED's to indicate charging status.
 - a. (See Figure 1).

Figure 1 - LED Indicators

Charger Mode	Green	Yellow	Red	Comments
No Battery Power On	FLASH	OFF	OFF	Charger Ready Reading battery
On Insert Of Battery	STROBE	STROBE	STROBE	
Precondition	OFF	FLASH	OFF	Charging complete
Charging	OFF	ON	OFF	
Ready	ON	OFF	OFF	

Temperature Mode

Hot Battery Temp	OFF	OFF	ON	Charging interrupted until battery reaches restart temperature
Warm Battery Temp	OFF	OFF	FLASH	Battery is over temp

Other

Fault	FLASH	FLASH	FLASH	System Fault - Remove Battery
No AC Power	FAST FLASH	OFF	FAST FLASH	Battery Inserted - Lost Power

■ **Compatible Batteries**

The following list is comprised of supported batteries that are approved for use with the Patriot® Multi-chemistry charger.

GTS Batteries for Motorola XTS3000, XTS3500, XTS5000

Battery Model	Capacity	Chemistry
H8299-M (21)	2100 mAh	NiMH
H8299-M (27)	2700 mAh	NiMH
H8299-M (40)	4000 mAh	NiMH
H8294-C (17)	1700 mAh	NiCad
H8294-C	1500 mAh	NiCad
H8610-Li (38)	3800 mAh	Li
H9858-LiP	3600 mAh	LiP
H9858-M(27)	2700 mAh	NiMH

GTS Batteries for Motorola HT1000, MT1000, JT1000, MTS2000,
MTX8000, MTX9000

Battery Model	Capacity	Chemistry
H7143-C	1200 mAh	NiCad
H7143-M	1450 mAh	NiMH
H7143-M(18)	1800 mAh	NiMH
H7144-C	1500 mAh	NiCad
H7144-C(17)	1700 mAh	NiCad
H7144-M	2150 mAh	NiMH
H7144N-(27)	2700 mAh	NiMH

Motorola® Batteries for Motorola® XTS3000, XTS3500, XTS5000

Battery Model	Capacity	Chemistry
NTN9862A	2000 mAh	Li
NTN8610B (IP)	1650 mAh	Li
NNTN4435B (IP)	2000 mAh	NiMH
NNTN4436B (IP)	2000 mAh	NiMH
NNTN4437B (IP) (RG)	2000 mAh	NiMH
NTN8299BR	1700 mAh	NiMH
NTN8923AR	1800 mAh	NiMH
RNN4006B	3500 mAh	NiMH
RNN4006AR	3500 mAh	NiMH
RNN4007AR (IS)	3500 mAh	NiMH
HNN9031B (IP)	1525 mAh	NiCad
NTN9032B (IP)	1525 mAh	NiCad
NTN8294BR	1525 mAh	NiCad
NTN9295AR	1525 mAh	NiCad
NTN8297AR (RG)	1525 mAh	NiCad

Motorola® Batteries for Motorola® HT1000, MT1000, JT1000, MTS2000,
MTX8000, MTX9000

Battery Model	Capacity	Chemistry
WPNN4013A	2000mAh	NiMH
WPNN4037A	1900mAh	NiMH
HNN9028AR (IP)	1500mAh	NiCad
HNN9029AR (IP)	1500mAh	NiCad
NTN7143CR	1200mAh	NiCad
NTN7144CR	1500mAh	NiCad
NTN7146AR	NA	NiCad
NTN7147AR	1300mAh	NiCad
NTN7149BR	1300mAh	NiCad
NTN7150AR	1200mAh	NiCad
NTN7341AR	1400mAh	NiCad
NTN7372AR	1200mAh	NiCad

■ Troubleshooting

If the Patriot® Charger does not operate after you have followed these operating instructions:

- Check the system power
- Check for loose cable connections
- Check to insure radio or battery are properly inserted into charger

■ Cleaning

Periodically wipe the charger with a dry lens tissue or other cleaning materials suitable for optical applications: such as eyeglasses

CAUTION

Do not pour, spray or spill any liquid into or onto the charger.

■ RF Devices

Global Technology Systems, Inc. products are designed to be compliant with the rules and regulations in the localities in which the products are sold and will be labeled as required. The limits are designed to provide reasonable protection against harmful interference when electronic devices are operated in a commercial environment.

■ Replacement Parts

Please contact:

Global Technology Systems, Inc.,
551 Cochituate Road, Framingham,
MA 01701 ■ 800.267.2711,
In Europe call: 00800.5390.5390,
www.GTSpower.com

■ Warranty and Support

For warranty and service information call 1-508-650-1172. Outside North America, please contact your local Global Technology Systems representative.

Global Technology Systems, Inc. products and devices are warranted against defects in workmanship and materials for a period of one year from the date of shipment. The product or device must remain unmodified and must be operated under normal and proper conditions.

The warranty is limited to repair or replacement at Global Technology Systems, Inc. option, with reasonable promptness after being returned and received by Global Technology Systems, Inc. These provisions do not extend the original warranty term for any product or device which was repaired or replaced.

This warranty applies to the original owner and does not extend to any product or device which was subject to misuse, neglect, accidental damage, unauthorized repair or tampering. Preventive maintenance activities are not covered by this warranty.



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Global Technology Systems, Inc.
550 Cochituate Road Framingham, MA 01701
US: 1.800.267.2711 ■ EU: 00800.5390.5390
www.GTSpower.com
