

The VC4000 Charger

- Is a rapid charger
- Is compatible with Li-Ion, Li-Polymer, NiCd, and NiMH battery packs
- Can be mounted in a vehicle or used as a desk charger



Standard Features

The VC4000 is a rapid charger with the capability to charge Nickel Cadmium (NiCd) and Nickel Metal Hydride (NiMH) batteries in about 1.5 hours and Lithium Ion (Li-Ion) and Lithium Polymer (Li-Polymer) batteries in about 4 hours. The charger supports the XG-75, P7300, P5500, P5400, P5300, XG-25P, and XG-15P portables, or P7200, P7100^{IP}, P5200, P5100 portables, and is independent from frequency or system operation. The VC4000 includes the following features:

- Colored LEDs: Provide charging status.
- Positive Latch: Ensures that the radio or battery pack is securely in place while it is in the charger.
- Versatile Mounting Options: Enables the charger to easily fit different vehicle mounting requirements.
- Automatic Restart: Constantly monitors the battery while it is in the charger and will start charging the battery as soon as it falls below 50 to 75% of capacity.
- Optimal Charging without Overcharging: Provides microprocessor-controlled charging for long battery life and maximum battery performance.
- Protective Circuitry: Prevents damage to battery resulting from charging batteries that are not within the required temperature or voltage range.
- Dual Charge Rate: Allows charge rate to be adjusted through dipswitch configuration.
- Dual Trickle Rate (only for Nickel): Allows trickle rate to be adjusted through dip-switch configuration.
- Repeater Control: Has an enable/disable circuit for use

with a vehicular repeater. The vehicular repeater is enabled when the radio is removed from the charger.

- Ignition Sense (Dipswitch configurable): Unit is turned off when the ignition is turned off, preventing vehicle battery drain, or unit is on at all times.

Versatile Design

The versatile design of the VC4000 provides the flexibility to meet different users' needs. The unit can charge the battery with or without the radio attached and can also accommodate a radio with the speaker mic still attached.

The charger may be hard wired for permanent installation or powered using the optional DC cigarette lighter adapter for temporary in-vehicle installation. The VC4000 may also be used for desktop charging with the optional AC adapter.

General Specifications

Applications:

Charges the following high or extra high capacity batteries:

XG-75/XG-25P – NiMH, Li-Ion, Li-Polymer

XG-15P – Li-Ion

P7300/P5500/P5400/P5300 – NiCd, NiMH, Li-Ion,
Li-Polymer

P7200/P7100^{IP}/P5200/P5100 – NiCd, NiMH, Li-Ion

Source Voltage:

11 to 16 VDC

Dimensions (D x W x H):

With Bracket:

3.125 x 5.125 x 5.437 in.

(7.94 x 13.02 x 13.81 cm)

Without Bracket:

3.125 x 4.312 x 4.375 in.

(7.94 x 10.95 x 11.11 cm)

Weight:

With Bracket:

13.0 oz (368g)

Without Bracket:

10.2 oz (289g)

Construction:

Polycarbonate and ABS blend

Color:

Black

Charge Currents:

1.5 or 0.75A (switch selectable)

Trickle Rate:

200 or 100mA (switch selectable)

Mounting:

Cables, hardware, U-shaped bracket for mounting above or beneath dash, fuse, connector terminals for repeater control, and ignition sense

Temperature Limits:

Operating: -22 to +140°F (-30 to +60°C)

Charging: +40 to +113°F (+5 to +45°C)

Options:

Power Supply Kit: Includes AC Adapter and
Cigarette Lighter Adapter

RoHS compliant

VC4000 Option Numbers

XG-75	MAH2-VC4PB
P7300	MAH2-VC4PB
P5500	MAH2-VC4PB
P5400	MAH2-VC4PB
P5300	MAH2-VC4PB
XG-25P	DP-CH4U
XG-15P	XR-VC4PB

Environmental Specifications

Standard	Parameter	Methods & Procedures
MIL-STD-810F	Vibration	514.5 I CAT 10
	Shock	516.5 PI
	Solar Radiation	505.4 PII
	Low Temperature	502.4 PI & II
	High Temperature	501.4 PI & II
	Temperature Shock	503.4
	Humidity	507.4 PI & II
	Low Pressure	500.4 PI & II

Regulatory Specifications

Meets FCC Part 15

Industry Canada ICES-003

Automotive Directive 72/245/EEC – 95/54/EC:

e11 10R-035194

