

## Intelligent In-Vehicle Charger

## **For Two-Way Radio Batteries**

The Logic in-vehicle charger, or LEVCA, is an innovative and ultra-rugged product designed for public safety, emergency, construction, and utility vehicles. It provides a number of advanced charging features, yet is easy to install and use. Key features include:

- Intelligent charging that maximizes battery shift life and overall cycle life.
- High impact and vibration tolerant contact for greater reliability. (See alpha contact minformation).
- Highly compact and low profile which allows placement in vehicles where space is limited.
- Charges a battery while on the radio or separately.
- Tie-down stap securely holds a radio or battery and is easy to attach and easy to release.
- Charging electronics and radio holder are integrated in a single unit to simplify permanent installation or for "plug-and-play" use.
- LEVCA chargers are available for Motorola, Kenwood, EF Johnson, Tait, Hytera, Icom, and other two-way radios.
- Three-year warranty.



The LEVCA provides significant benefits through a technology called Battery Acceptance Charge™, or BAC™. BAC uses an advanced pulse charging method to determine the maximum amount of energy a battery can accept. During the charging process there are short rest periods between pulses, which allow the chemical actions in the battery to stabilize. After stabilizing, the open circuit voltage (OCV) is sampled and this data is used to determine the maximum charge current. The rest periods also minimize the generation of gases and charge related temperature increases, allowing batteries to remain cooler while charging.

BAC is also able to account for any poor performing cells and through a process called cell equalization, adjusts the charge to ensure the maximum possible capacity is achieved. By continually pulsing, analyzing, and adjusting the charge, the LEVCA is able to maximize the shift life of the battery and overall cycle life. After a battery is fully charged and the charge has terminated, the LEVCA is constantly measuring pack capacity such that when self-discharge occurs, the charging resumes. This ensures that a battery left in the charger for extended periods is maintained at full charge.







## **Specifications For Logic In-Vehicle Charger**

Dimensions (L x W x D)	113mm x 66mm x 57.3mm / 4.4" x 2.7" x 2.3"
Weight	245g / 0.5 lbs.
Compatible battery chemistries	Li-lon / LiPo or NiCd / NiMH (see product label)
Battery voltage range	7.2V – 10.8V
Operating temperature	0° C - 45° C / 32° F - 113° F
Charger input voltage	10V - 30V DC @ 1.0A (minimum)
Charge rate	Up to 1000 mA
Contact type	High impact and vibration tolerant <i>alpha contact</i> ™
Contact cycle life	20,000+ insertions
Radio holder material	Precision machined black acetyl
DC power cable	16 AWG / 3A in-line fuse / 3.0m (9.8')
Status LED	Tri-color (red/amber/green)
Warranty	Three years (see User Manual)





A heavy duty floor mounting bracket (LEVCA-MHD) and a multi-directional dash mounting bracket (LEVCA-M) are optional accessories available for LEVCA chargers.



LEVCA-M

With the optional vehicle power adapter (TWC6M-VPA), the LEVCA can be used "plug-and-play".



The DC power cable (LEVCA-HW) features a locking connector plug and is included with the LEVCA.

## High Impact And Vibration Tolerant: alpha contact™



The contacts incorporated in the LEVCA are highly robust, corrosion resistant, and maximize positive contact with the radio, even when traveling over rough roads. In addition, the contacts have a cycle life rating of more than 20,000 battery insertions, far superior to the typical in-vehicle charger. The *alpha contact*<sup> $\mathsf{TM}$ </sup> is one of many reasons you can expect LEVCA chargers to perform reliably.

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