

June 2024

**Battery Charger TC40 family**

# Owner's Manual

## Introduction

The TC40 Battery Charger is electrically compatible with all 7.2V Li-Ion camera batteries rated 2200 mAh or higher. The modular design allows for different battery models to be charged when the appropriate adapter plate is fitted. With the appropriate power cord, the charger can be powered by a 12V automobile power source.

## Standard Features

- Four simultaneous charge positions for fast charging of 4 batteries.
- Fast, safe, and reliable charging. The battery pack can be left on the charger after the charge is complete.
- Dynamic Power Management (DPM) minimizes battery charge time. By dynamically adjusting battery charge current, more current is allocated to the deeper discharged battery. Through this process all batteries are ready to use at about the same time.
- Wide range input power compatibility (100-240VAC 50-60Hz), 12V with the DC cigarette lighter cord.
- Compact, lightweight design for easy portability. Dimensions 10.5"x 4"x 1.5"

## Batteries

The charger is capable of charging 4 batteries at the same time. It accepts Sony (NP-F975, BP-U60, NP-FZ100 etc.), Panasonic (AG-VBRxxx, DMW-BLJ31, etc.), Canon (BP-945, BP-970G, BP-828, LP-E6N etc.), JVC BN-VF823 style batteries, and other common types. The charger must be configured with the appropriate plate to match the battery style. The charger is also compatible with non-OEM batteries.

## Charging time

The time to full charge depends on the battery pack rated capacity, its state of charge prior to insertion, and its age. A fully discharged new 2200 mAh battery will be fully charged (more than 90%) in about 2.5 hours (3.5 - 4 hours when 2 batteries in the same bank\* are being charged). A 5600 mAh pack will take approximately 3.5 - 4 hours to charge (4.5 - 5 hours when 2 batteries in the same bank\* are being charged). Since a depleted battery pack absorbs charge current faster, than a partially charged one, most of the charge energy is absorbed during the initial stage of charging and then the rate of charge levels off towards the end.

## Charge channels

LEDs indicate each battery's state of charge. Dynamic Power Management (DPM) minimizes battery charge time. By dynamically adjusting battery charge current, more current is allocated to the deeper discharged of the two batteries (in the same bank). Through this process both batteries are ready to use at about the same time

## Operation

### Charging

Upon plugging the charger in into an electrical source the green and red LEDs will blink every 3 seconds to indicate the charger is powered on. Insert a battery into the battery plate and the charger will initiate the charge routine. While charging is in progress, the red LED will illuminate. Approaching charge completion, the Green LED will blink at 75%/90% readiness level, and will be steady ON on completion.

### Status LEDs

1. Red ON Battery is inserted; charge in progress
2. Green blinking (short) Battery is charged over 75%
3. Green blinking (long) Battery is charged over 90%
4. Green ON Ready

\* Charging positions are grouped in 2 banks of 2 plates. In order to get the fastest charge time, when charging 2 batteries, place them in positions 1, 3.