

Mi THE MASTER SERIES

Model No MW302CR

12VDC Regulated Constant Current Charger for Ni-Cd / Ni-MH Batteries

Input Voltage: 12 - 13.8VDC (CE Approved)

This is a key operated selectable output current charger for charging Nickel Cadmium & Nickel Metal Hydride cells & batteries.

The MW302CR charger is capable of charging between 1 & 7 cells or batteries packs made up of 1-7 cells (i.e. nominal voltage of 1.2V – 8.4V).

Charger current outputs available are 100, 200, 400, 600, 800 & 1000mA.

Output is via a standard male Tamiya hobby connector.

LED indicator shows power is on.

Charge termination is determined by the user.

General rule for charging NiCd & NiMH batteries and battery packs is:

$$\text{Charge Time Applicable in Hours} = \frac{\text{Capacity (C) rating of battery in (mA) x 1.4}{\text{Output current in (mA)}}$$

Additional Safety Features: Short Circuit Protection, Automatic thermal cut off, Automatic overload cut off.

For 240V operation please use the optional external plug in power supply model MP3440CIG.



MW302CR

Available from:-

Mi Master Instruments

Sydney 33-39 Sloane St Marrickville NSW 2204

Phone (02) 95191200 Fax (02) 95194604 Email sales@master-instruments.com.au

Melbourne Unit 13 107 Heatherdale Rd Ringwood VIC 3134

Phone (03) 98726422 Fax (03) 98726466 Email vic@master-instruments.com.au

OPERATING INSTRUCTIONS

MW302CR CONSTANT CURRENT CHARGER

1 to 7 Cell Ni-Cd/Ni-MH – Key Adjustable Current

1. Select the appropriate current (mA) setting on the charger using the key provided.
2. Assuming battery is in fully discharged state (1V per cell), **calculate the charge time in Hours** for the battery pack using the following formula:

$$\text{Charge Time (Hours)} = \frac{\text{Battery capacity in mA} \times 1.4}{\text{Output current selected in mA.}}$$

3. Connect the charger to the battery pack to be charged.
4. Connect the charger to the power supply.
The red LED should come on and the charger will begin to charge the battery pack.
5. The charger will automatically detect the amount of cells you are trying to charge and provide the appropriate charge voltage.
Only 1 to 7 cell battery packs should be used with this Charger.
6. Note the time that you have put the battery pack on charge and its rated capacity. Once calculated charge time is reached using the calculation in step 2 above the battery should be fully charged and you should disconnect the battery from the charger.
This charger does not switch off automatically.
7. Once the battery pack is fully charged, switch off the power supply and disconnect the battery pack from the charger.
You will overcharge the battery and therefore possibly damage the cells if the charger is not disconnected once the battery is fully charged.