



## **MA4INONE**

4 in 1 Battery Charger



## **Instruction Manual**

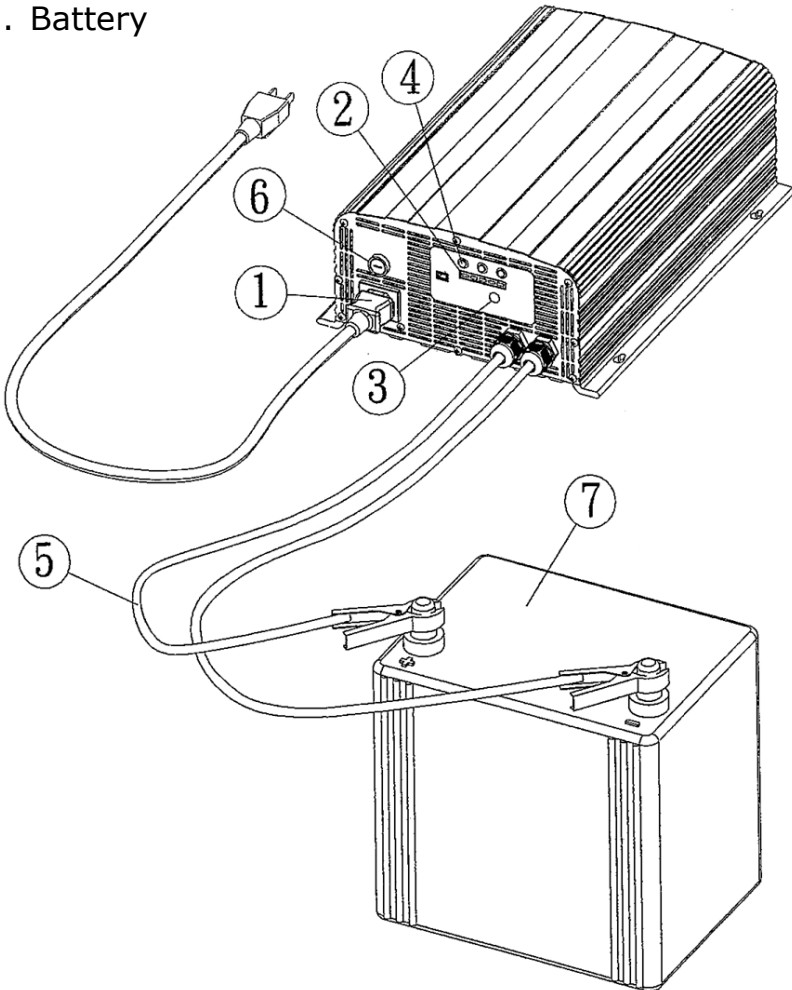
**12V**

**24V**

**36V**

**48V**

1. AC Input Cord
2. LED Display Bar
3. "Battery Voltage Selection" button
4. Status Display
5. DC Output Cord
6. AC Fuse
7. Battery



# User Guide

## 4 in 1 Charger

1. Confirm that the correct input voltage is being used (200v – 240v).
2. Plug in the AC cord. DO NOT CONNECT THE CLAMPS TO THE BATTERY YET.
3. Press the “Battery Voltage Selection” button and select from the following options:
  - a. When charging a 12V battery, 1 LED will light up.
  - b. When charging a 24V battery, 2 LEDs will light up.
  - c. When charging a 36V battery, 3 LEDs will light up.
  - d. When charging a 48V battery, 4 LEDs will light up.
4. Check that the correct setting has been selected and then connect the clamps to battery (Red first and black second).
5. LED indicator guide:

	<b>LED</b>	<b>Description</b>
Yellow LED	Steady	The charger is in Soft Start mode. Current is charging slowly.
	Slow Flash	The charger is in Absorption C.C (Constant Current) mode
	Fast Flash	The charger is in Absorption C.V (Constant Voltage) mode.
	Rapid Flash	The charger is in Float C.C (Constant Current) mode.
Green LED	Slow Flash	The battery is fully charged and is now in Float mode.
	Fast Flash	The battery is fully charged and is now in Float mode with a current of < 0.5A.

# LED troubleshooting

	<b>LEDs</b>	<b>Description</b>	<b>Solution</b>
Red Light	Flashes 2 times	The charger isn't connected to the battery or the DC fuse is broken	Connect the battery. If there is no response, check the fuse.
	Flashes 3 times	The voltage of the battery is too high or too low.	Check the voltage of the battery and select the correct setting.
	Flashes 4 times	The thermal sensor has shorted out.	Thermal sensor is broken. Please return to distributor.
	Flashes 5 times	Inside temperatures are too high (Unit is too hot)	Wait for the unit to cool down. The charger will automatically restart.

## **Note:**

1. While the battery is charging, the settings will not change if you press down the "Battery Voltage Selection" key.
2. When the green LED switches on, the battery is fully charged. You can disconnect now or leave the battery connected proceed into Float mode.
3. Unplug the AC power cord and then unplug the DC output cord to end charging.



# Specifications

Input voltage		200~240 Vac			
Input Frequency		50 / 60 Hz			
Current (Without Load)		< 0.1A			
Maximum Input Current		< 15 A (under)			
Maximum Efficiency in Max. Power		> 80% (above)			
Output Voltage		12V	24V	36V	48V
Maximum Amperage		30A	30A	25A	15A
Maximum Output Charging Power		450W	900W	1000W	900W
Voltage Sensor Start-up Position		5V			
Charging Range		8 ~ 14.8V	16 ~ 26.4V	27 ~ 39V	40 ~ 55V
Average Charging Voltage (Vblk)		14.5V	29.0V	42.6V	56.5V
Floating Charging Voltage (Vflt)		13.8V	27.6V	39.9V	53.2V
Protection Function	Short Circuit Protection	Yes			
	Reverse Connection Protection	Yes			
	Overheat Protection	Yes			
Voltage / Current Precision		< 5%			
Maximum Float Charging Time		No Limit			
Operating Ambiance Temperature		In Full Load: -20 ~ 60°C			
Operating Ambiance Humidity		Maximum 95% RV, Not Condensing			
Cooling System		The fan automatically adjusts according to the inner temperature.			
Average Temperature in Housing		< 70°C			
Dimensions		300 x 223 x 101mm			
Weight		4.5kg			

# Warning

1. This product is designed to charge batteries only. It cannot be used as a power supply.
2. This charger is designed to work with the following batteries:
  - a. Lead Acid Cell
  - b. NiMH Cell
  - c. Enclosed Cell
3. Do not use batteries with a different voltage than that of the charger.
4. Do not operate this charger in direct sunlight and in environments of high humidity.
5. If the LED does not change to green after charging for a long period of time, the battery may be damaged.
6. The charger uses an aluminium housing which can reach temperatures of 50°C and over. To prevent injury, do not touch the charger while it is in use.
7. Check that the AC input voltage is within the voltage range of the charger.

# Warranty

Products developed and sold by Tridon Australia Pty Ltd come with a guarantee for the reasonable life of the product, for the purpose it is commonly used. This is in addition to the rights of the consumer under the Australian Consumer Law. To be considered for warranty please take the product with proof of purchase to the store where you purchased the product or contact Tridon Australia

The warranty is given by:

Tridon Australia  
21-25 Derby St  
Silverwater, NSW 2128

Tel: 1300 362 263.

Email: [mail@tridon.com.au](mailto:mail@tridon.com.au)

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