



# **Automatic Battery Charger & Maintainer**

**Input: 100-240Vac / Output: 6/12 Volt DC (1 Amp)**

## **User's Manual and Important Safety Information**

# **Model: OC-61201**

### **----- WARNINGS -----**

- Read instructions prior to use. These instructions form part of the warranty conditions.
- This appliance must not be used or played with by infirm persons or children.
- If using Generator power, please use a Surge Protector to protect the unit from Voltage Spikes.
- Do not attempt to use the charger if it has been dropped or damaged.
- Never attempt to charge a damaged battery, frozen battery or non-rechargeable battery.
- Do not use the charger in a closed area or poorly-ventilated area.
- Never smoke, use an open flame, or create sparks near a battery or charger during charging operation as this may cause an explosion / explosive gas.
- Do not operate the charger if the cord or plug is damaged.
- Do not disassemble the charger. Take it to a qualified person if a repair is required. (No serviceable Parts inside)

### **FEATURES**

Congratulations on purchasing an AS/NZS Approved OzCharge Automatic Switching Mode Battery Charger and Maintainer.

- High frequency, High Efficiency Switching Mode Charger and Maintainer
- Suits all Lead Acid Type Batteries. (Conventional, AGM & Gel)
- Selectable 6 Volt & 12 Volt Output
- Includes both crocodile clips and ring terminal leads

## CONTROL AND INDICATORS



### ① Charging Status Display LED (3 x LED's)

Power - Red  
Charging - Orange  
Fully Charged / Float - Green  
Fault - Red

### ② Voltage Output Select Switch

Select 6 Volt or 12 Volt Output

## RECOMMENDED BATTERY CAPACITY

The maximum recommended battery Capacity for OC-61201 (1 Amp) Battery charger is **20AH**. We always recommend that you check the Battery Manufacturers specifications before using this charger.

# OPERATING INSTRUCTIONS

The OzCharge Battery Charger is easy to operate and requires no technical experience.

It comes with a quick connect fly lead and 2 different kinds of connectors, crocodile clips and a ring terminals. The ring terminals are perfect for permanent connection to your battery. You can connect the lead to the battery and tuck the lead away while you are using your vehicle and when you get back to your garage simply plug the lead back into the charger.

The intelligent integrated charging circuit in this charger is designed for permanent connection to your battery, it senses when your battery is charged and it will maintain your battery in prime condition for when you need to use it.

Its small current and intelligent charging circuit will help you to maintain your battery in excellent condition so you get the maximum life out of it.

## **1. Pre-Charge Check**

- (a) Check the Battery Electrolyte level (Non-sealed Batteries). - If necessary, remove the vent caps and add distilled water so the levels are halfway between the upper and lower fill lines.
- (b) Check the Voltage Output Switch on the charger and make sure it's on the correct voltage.
- (c) Location – Ensure the Battery is in a well ventilated area. Keep the Charger as far away from Battery as the cables permit. Never place the charger directly above the battery being charged as gasses from the Battery will corrode and damage the charger. Also, keep the charger away from high corrosion / wet and moist areas.

## **2. Connecting the Battery charger to you Battery**

- (a) ***If the Battery is out of the vehicle***
  - (i) Connect the Red lead from the charger to the positive (+) battery terminal.
  - (ii) Connect the Black lead from the charger to the negative (-) battery terminal.
- (b) ***If the Battery is still in the vehicle***

Determine if the vehicle is positively (+) or negatively (-) earthed.

  - (i) If ***Negatively Earthed (Most Common)*** – FIRSTLY Connect the Red (+) battery charger lead to the positive (+) Battery post and then connect the Black (-) battery charger lead to the vehicle's chassis and away from the fuel line.
  - (ii) If ***Positively Earthed*** – FIRSTLY Connect the Black (-) battery charger lead to the negative (-) battery post and then connect the Red (+) battery charger lead to the vehicle's chassis and away from the fuel line.

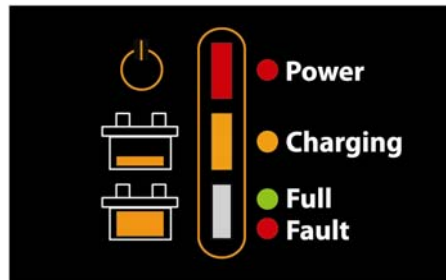
## **3. Connect the battery charger to the Mains power (240Vac)**

- (a) The Charger will automatically start when AC power is connected and switched on.  
*(Note: If the Fault Indicator LED illuminates Red, please check your connections as it's likely that the Positive and Negative Leads are reversed. Refer to Trouble Shooting Page for further information)*

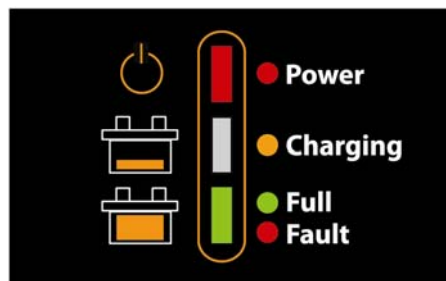
## The Charging process

The charging stages are as follows:

- **Bulk Charge:** Charges using a constant maximum current (1A) until the battery reaches 7.2V (6 Volt Batteries) or 14.4V (12 Volt Batteries)  
(LED Colour - **ORANGE**)



- **Fully / Float:** Battery is fully charged and is being maintained.  
(LED Colour - **GREEN**)



### 4. Disconnecting the Battery charger from Battery.

#### (a) *If the Battery is out of the vehicle.*

- Switch OFF and Remove the AC Power Socket from the outlet.
- Remove the Black lead and then the Red lead.
- Check electrolyte levels if possible.  
(As they may need topping up with distilled water after charging)

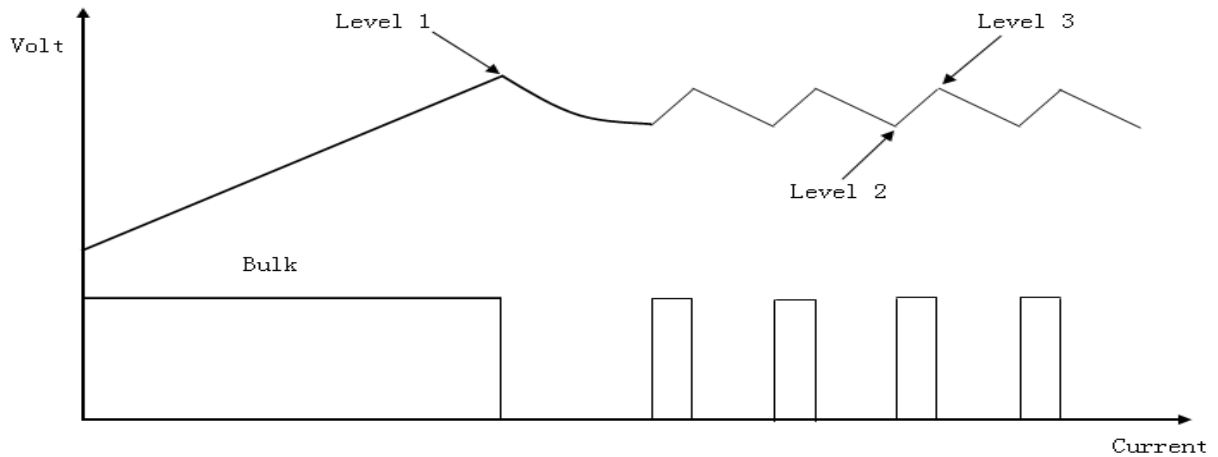
#### (b) *If the Battery is in the vehicle.*

- Switch OFF and Remove the AC Power Socket from the outlet.
- Remove the lead from the vehicle chassis.
- Remove the lead from the battery.
- Check electrolyte levels if possible.  
(As they may need topping up with distilled water after charging)

## **LED STATUS INDICATOR TABLE**

	<b>Power Red</b>	<b>Charging Amber</b>	<b>Full Green</b>	<b>Fault Red</b>
A.C. Power connected, battery disconnected	ON	OFF	OFF	OFF
Bulk Charging	ON	ON	OFF	OFF
Level 1 Charging	ON	ON	OFF	OFF
Level 2,3 Charging	ON	OFF	ON	OFF
Battery Reverse polarity connection	ON	OFF	OFF	ON
A.C. Power OFF	OFF	OFF	OFF	OFF

## CHARGING CURVE (VOLTAGE)



## TROUBLE SHOOTING

Problems	Indication	Possible causes	Suggested solution
Charger does not work	No Indicator lights on	- No AC power	- Check AC connections and make sure Power Point is switched ON
Charger has no DC output	Fault LED is On.	- Output is short circuited - Reverse polarity connection to Battery	- Check DC connection between charger and battery and make sure they are not short circuiting. - Check that the crocodile clips haven't fallen off the battery. - Check that the crocodile clips / ring terminals are connected to the correct polarity.
No Charging Current	Fault LED is ON	- Battery is severely sulphated - Battery has a damaged cell - Overheat protection mode	- Check the Battery condition, age etc. - Battery may need replacement. - Move battery & Charger to cooler environment
Long charging time, Full light does not come on	Fault LED is ON	- Battery capacity too large - Battery is defective	- Check the charger specification matches the battery capacity. - Battery cannot be charged and must be replaced.

# SPECIFICATIONS

1	AC Power Input Characteristics	Normal	Withstand	Unit
1-1	Input voltage :	100-240	90~264	Vac
1-2	Input frequency :	50/60	47-63	Hz
1-3	Unload input power : at 230Vac input	1.5	max.	W
1-4	Input current consumption at 230Vac input, output 13.5V 1000mA loading	.019	±10%	Aac
1-5	Nominal efficiency: at 115Vac, output 13.5V 1000mA loading Nominal efficiency: at 230Vac, output 13.5V 1000mA loading	>78% >82%		
2	Charging Output Control Characteristics			
2-1	<b>Battery Condition Check → Bulk Charge → Float Charge (Full)</b>			
2-2	Charging output control for 6V mode			
2-2-1	Bulk charging activity conditions: Battery Voltage is above	4.4	±0.3	Vdc
2-2-2	Bulk charging current control	1000	±10%	mAdc
2-2-3	Level 1 upper limited	7.2	±0.2	Vdc
2-3-4	Level 2 lower limited	6.75	±0.2	Vdc
2-3-5	Level 3 upper limited	7.0	±0.2	Vdc
2-3	Charging output control for 12V mode			
2-3-1	Bulk charging activity conditions: Battery Voltage is above	8.8	±0.3	Vdc
2-3-2	Bulk charging current control	1000	±10%	mAdc
2-3-3	Level 1 upper limited	14.4	±0.2	Vdc
2-3-4	Level 2 lower limited	13.5	±0.2	Vdc
2-3-5	Level 3 upper limited	14.0	±0.2	Vdc
2-4	Unload output voltage when disconnected from battery	0.5	Max.	Vdc
2-5	Battery flow back current (to the charger) when connected to 12V battery, AC power disconnected	1	Max.	mAdc
3	Safety & Protection			
3-1	Built in Temperature Protection.			
3-2	Output Short Circuit Protection, Reverse Polarity Protection			
4	Electrical Parts			
4-1	Input Connector	Wall mount / 3 Pin		
4-2	Out Put Connector	4 feet - Quick connect		
4-3	Extension leads	2 feet – Crocodile clips / ring terminals		
5	Physical Parameters			
5-1	Plastic Enclosure Dimensions	100(L) x 65(W) x 36(H) mm		
5-2	Net weight :	approx. 400g		
6	Environmental Characteristics			
6-1	Operating temperature :	0 to 45 °C		
6-2	Storage temperature :	-25 to 85 °C		
6-3	Operating Humidity range :	0 to 90% RH		
6-4	Cooling:	Passive / Natural		

\* Specifications subject to change without notice

## 2 YEAR MANUFACTURER WARRANTY

Zylux Distribution Pty. Ltd. (OzCharge) warrants to the Customer that this product is substantially free from defects in materials and workmanship under normal use for a period of 2 Years from the Date of Purchase.

Please ensure you keep a copy of your receipt on file as this will be required for proof of purchase and to validate your warranty.

### **Obtaining Warranty Service**

Within the warranty period, the Customer must contact the authorised supplier / retailer where the product was purchased or alternatively you can contact the OzCharge service centre through one of the following methods:

**Hotline:** (03) 9482 2203

**Website:** [www.ozcharge.com.au](http://www.ozcharge.com.au)

If the Authorised Supplier and / or OzCharge service centre concludes that while under normal use, a product failure or malfunction occurred during the warranty period and was caused by a defect in material or workmanship (see Exclusions), the Customer will be asked to ship to the nearest service point. The product must be packaged appropriately for safe shipment. To prove that the product is under warranty, the customer should enclose a copy of their receipt for proof of purchase. It is recommended that returned products be sent by registered mail as Zylux Distribution Pty. Ltd. (OzCharge) accepts no responsibility / liability for goods lost or damaged in transit. Return Shipping costs to be incurred by the Customer.

### **Exclusions**

If upon receiving a product for repair and if testing and examining the product has disclosed that the alleged defect or malfunction in the product does not exist or was caused by the Customer or any third persons misuse, physical abuse, water damage, unauthorised attempts to open, repair or modify the product or improper installation, this will not be covered under this warranty.

### **This Warranty is void if:**

1. The product has been tampered or repaired by unauthorised personnel.
2. If connected to generator power without using surge protector
3. The warranty seal is broken or altered.
4. The warranty period has expired.



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Website: [www.ozcharge.com.au](http://www.ozcharge.com.au)