

# BC-1205 3 Stage Switch Mode Battery Charger

## ELECTRO

### USER MANUAL

#### Introduction

This compact portable battery charger gives complete charge to Sealed or Wet type battery within the capacity range of 25AH to 50AH.

Bulk – Absorption – Float Charge

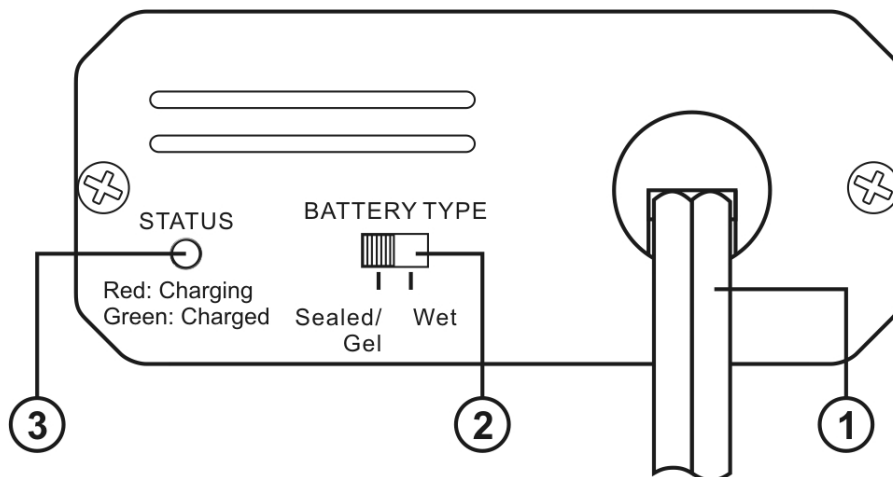
The Bulk stage charges the battery at a full constant current (5A) until the battery voltage reaches Absorption Stage at which the battery is kept at Absorption voltage while charging current decreases to a low value.

When the battery is fully charged, it switches to Float voltage where it can be maintained indefinitely.

#### Safety Precautions

1. Operate this charger from 240VAC mains.
2. Connect the charger to battery first. Then to AC mains.
3. Make sure all connections between the charger and the battery are secured before connecting to AC mains.
4. Check for correct polarity connection between charger and battery.
5. Always unplug the charger before disconnecting the battery .
6. Do not smoke, strike a match, place metal tools on battery or cause a spark in the vicinity of the battery. When removing battery cables, remove ground cable first.
7. Lead Acid Battery contains highly corrosive sulphuric acid. Avoid contact with eyes, skin and clothing while working with battery.
8. Working in vicinity of a Lead Acid Battery is dangerous. Batteries generate EXPLOSIVE gases during normal operation.
9. Do not expose charger to wet conditions.
10. Do not attempt to repair the battery charger.

#### Control and Indicators



1. Cable connection to battery
2. Battery Type Switch for selection charged battery : SEALED or WET type.
3. Charging Status LED :  
When charger is connected to a battery Green - Charger is ON / Battery is charged  
When charger is connected to a battery Red – Charging is in progress  
When charger is not connected to a battery Green means charger is powered on .

## **Installation Procedures**

- A. Use Switch (2 ) to select the correct type of battery for charging.
- B. Connect the positive charger terminal to the positive battery terminal.
- C. Connect the negative charger terminal to the negative battery terminal.
- D. Double check for correct polarity and all the connecting joints are secured.
- E. Turn on the charger and take note of the green LED.
- F. Unplug the A C mains to the charger before disconnecting battery.

*Note: The charger can be safely left connected to battery permanently.*

## **Specifications**

	<b>BC - 1205</b>
AC Input Voltage 180-260V, 50Hz~	Yes
AC Input Current at full load at 230Vac	0.8A
Output (Charge) Voltage Selections (2 Battery Type)	
SEALED Battery - Absorption (13.8V to 14.1V); Float (13.2V to 13.5V)	Yes
WET Battery - Absorption (14.1V to 14.4V); Float (13.5V to 13.8V)	Yes
Maximum Output Charging Current (Continuous)	5A
Line Regulation (180V to 260V) for Charging Current	0.6%
Ripple and Noise (Peak to Peak)	120mV
Efficiency at Maximum Power	84%
Protection :	
Short Circuit Protected	Yes
Overload Protection (Automatic Reset)	Yes
Reverse Polarity Protection (Automatic Reset)	Yes
Over Temperature Protection (Automatic Reset)	Yes
OVP (Output Over Voltage Protected (Automatic Reset)	Yes
Battery Under Voltage Protection (Automatic Reset), <i>when battery voltage &lt;7.5V, charger will stop charging battery</i>	Yes
CE Approvals and Standard	EN60335, EN55014
Charge Indication	1 LED, Red : Charging, Green : Full or Float
Anodised Aluminum Casing	Yes
Size in mm (Width x Height x Depth)	142 x 75 x 32mm
Weight in gm	380g
Included Accessories (Mounting Clips)	Yes
Recommended Battery Capacity Range	25AH to 50AH

*All values are based on the Standard ambient Temperature 25°C and Pressure 0.1Mpa.*

*\* SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE \**