

### **IF THE CHARGER DOES NOT OPERATE**

Switch the charger OFF and remove the AC plug from the wall socket and check the AC power lead, charging leads and connectors for any damage, **do not use** the charger if any damage is discovered, return to your supplier for repair.

Reconnect in the approved manner, and turn on charger. If it is still not working, call your supplier for advice &/or return the charger complete with original packaging and leads for testing, remember that the green light may not immediately come on if the battery is extremely deeply discharged -- The charger will not start charging if the battery is under 8 volts for a 12 volt battery and 16 volts for a 24 volt system.

# Operation & Installation Manual

## Switch-mode Charger for lead-acid batteries



**1214** [use for 6-cells]  
**2407** [use for 12 cells]

### **CAUTION!!!!**

This charger is not intended for use by children or the infirm.

Please ensure adequate supervision if they are to use the charger.

The charging process can cause the battery to generate explosive gasses, always ensure both charger and battery are provided with adequate ventilation. Keep clear of sparks or other ignition sources.

This charger must never be used on non-rechargeable batteries.

### **SERVICE**

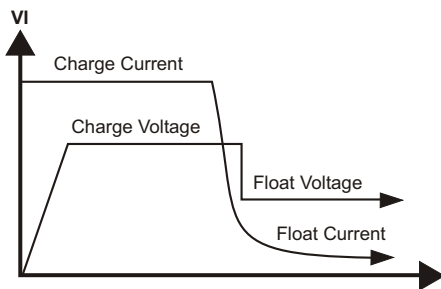
There are no user serviceable components inside. Service personnel should ensure that the AC line source is disconnected prior to the case being opened for service. If the mains power cord is damaged, it must only be replaced with an approved type.

### **Common Specifications**

Mains Input Voltage	220/240 VAC
Mains Frequency	47-63 Hz
Efficiency	85% max.
Total Output Regulation	+/-5%
Operating Temperature	0-40°C
Operating Humidity	10-90% RH
Safety	Meets CSA T-mark
EMI	FCC Class B, CE, C-Tick
Aust. Standard Approvals	AS/NZ 3350.2.29

Max battery capacity	
12V to 80% in 8 hours	100 A.H.
24V to 80% in 8 hours	40 A.H.

## Charging Characteristics



- ✍ Automatic boost charge
- ✍ Automatic preservation of fully charged condition
- ✍ Insensitive to fluctuations in mains voltage and mains frequency

## GENERAL INFORMATION

*This sophisticated switch-mode charger has been specially developed for use with all deep-cycle sealed lead-acid batteries including "Dryfit" gel batteries. It is light-weight, compact and efficient. It will operate on any AC input voltage between 180 VAC to 260VAC - this means it works ANYWHERE without an additional transformer. It automatically charges, without requiring monitoring, all sealed lead-acid, maintenance type and gel batteries with a nominal voltage of 12/24 volts. Charging begins immediately if the battery has been properly connected. The output of the charger is electronically protected against short circuit, reverse polarity connection and extremely deeply discharged batteries.*

*A 3-Colour Light Emitting Diode (LED) on the front panel is used as a charging and state of charge indicator..*

*RED Boost charging*

*GREEN Float charging*

**YELLOW Float charging Safety Boost Timer period expired**

**An inbuilt timer will limit the maximum Boost charging period to 4 hours**

## MOUNTING

The 1214/2407 Switch-mode Charger should be installed in a moisture-free environment. Care should be taken to ensure that both the charger and the battery are securely mounted and positioned with adequate ventilation!

## Operation

**IMPORTANT!** This type of charger must be connected to the battery before being switched ON.

**AUTOMOTIVE APPLICATIONS:** connect to the non-chassis terminal of the battery first then make chassis connection. Ensure the points of connection are well clear of the automobiles fuel lines.

When the charging process begins, the RED LED illuminates. After reaching approx. 80% charge, the RED LED will change to GREEN, BUT LEAVE BATTERIES CONNECTED UNTIL READY FOR USE. To check that battery is fully charged, turn AC power OFF for about 30 seconds then turn back ON. The RED LED should light momentarily then go to GREEN. A Yellow LED means the inbuilt timer has terminated the BOOST charge phase.

This battery charger may be left connected to a fully charged battery indefinitely as overcharging is impossible.

**Always turn AC power OFF before disconnecting charger from battery.**

To ensure a full charge in the shortest time and the longest possible battery life, make sure all leads and connectors are clean and undamaged.

## TROUBLE SHOOTING GUIDE

1. Check that connectors on lead from charger to battery are correctly wired i.e. RED to positive (+) and BLACK to negative (-).
2. Check all connections thoroughly and that the power switch of charger and the AC mains are turned ON.
3. If a short circuit or reverse connection is accidentally applied to the output, the charger will immediately shutdown. Remove the short circuit or reverse polarity connection, turn-off charger and re-connect to battery correctly, and turn charger back on to resume normal charging operation.
4. Note that the green light may not immediately come on if the battery is extremely deeply discharged, the charger will not charge a battery under 8 volts for a 12 volt battery, OR 16 volts for a nominal 24 volt system.
5. If the LED does not go to GREEN within 12 hours, your battery should be tested at the place of purchase.
6. During the first charging phase, the charger may become quite warm or hot to touch -- this is normal if charging deeply discharged batteries.