Part No: AQ1210 AQ2410 AQ3610 AQ4810 AQ6010





Sterling Power Products
12V | 24V | 36V | 48V | 60V - 10A
AC to DC Battery Charger

AQUA range of Waterproof AC to DC chargers











www.sterling-power.com www.sterling-power-usa.com

Warranty (2 years return to factory)

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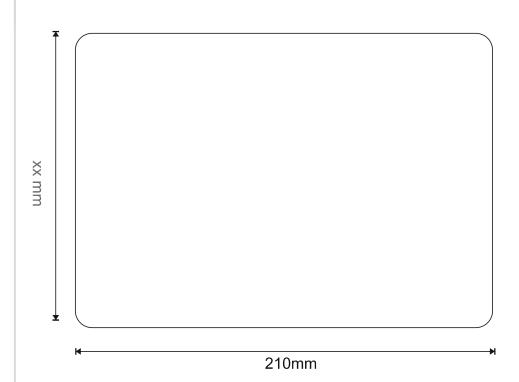
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ModelDimensionsWeightAQ1210:12cm x 21cm x 6.5cm2.1kgAQ2410:18.5cm x 21cm x 6.5cm3.85kgAQ3610:25cm x 21cm x 6.5cm5.5kgAQ4810:32.5cm x 21cm x 6.5cm7.5kgAQ6010:39cm x 21cm x 6.5cm9.35kg

Input voltage range AC: 100VAC - 250VAC 40-70Hz

Output target voltage: 14.4V to 13.5V float

**Absorption time:** Varies based on state of charge.

Output continuous current: 10A per output

Charge curve: Constant current until 14.4V

Efficiency: 92%

AC plug fitted: Hardwired (Plug type G)

**DC terminations:** Crocodile clip x2 or 8mm rings x2

DC cable length: 1160mm AC cable length: 960mm

Unit dimensions, LWD (mm): varies depending on model

Lithium compatible: Yes.

Warranty period: Two years from purchase

SAFETY: EN60950-1 EN60335

EMC: EN55022

APPROVED: CE RoHS FCC SAA C-TICK

Can be installed in series and parallel



# INTRODUCTION

# SIMPLY PLUG AND PLAY

AC input UK plug

100VAC - 250VAC 40-70Hz

# AQ models

Due to the unique nature of the AQ range each of the outputs of the charger is totally isolated from the other.

If you have a multiple output model, you can:

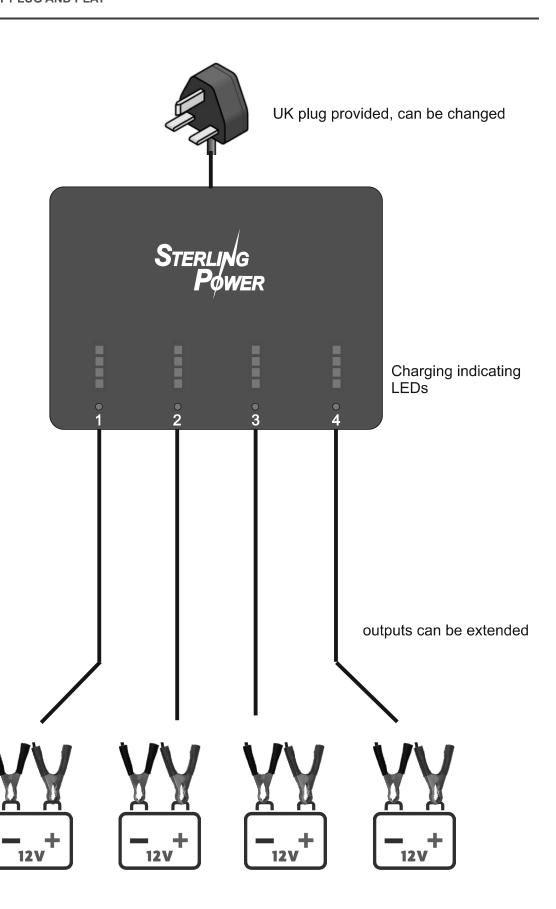
Parallel the outputs to multiply charging currents

Series the outputs to multiply charging voltages.

The charge voltage is 14.4V float voltage is 13.5V

Use either croc clips or the ring terminals provided to connect the charger's outputs to the 12V batteries.

Once connected, apply AC voltage to the AQ charger.



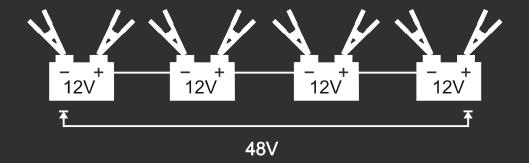


# **TROUBLESHOOTING**

Problem	Error Code	Possible Cause	Solution
No LEDs Charger not on	No LEDs lit	No AC power	Ensure AC is on 100V-250V
No DC output	4 LEDs flashing simultaneously	- Output is short circuit Reverse polarity	- Check DC connection - Ensure polarity is correct - Check Batt V
No Charging current	4 LEDs green LEDs are OFF	- no battery voltage	- battery may be defective - Croc clips loose

#### **SERIES CONNECTION**

AQ4810 can be wired up in series. Simply wire the croc clips of each of the outputs across the 12V batteries that make up the high voltage battery bank, as below. These shall act like very able battery balancers across your higher voltage stack.



# **PARALLEL CONNECTION**

AQ4810s outputs can be wired up in parallel. This shall amplify the charging current. You can simply stack the croc clips on top of each other on 1 battery, or wire them to other 12V batteries within your 12V system, as below. This shall give you 20/30/40A etc.

