

The QRP Version of our SMART CHARGER



FRONT PANEL LABELING

Prior to mounting any of the front panel components, clean the panel thoroughly to remove any dust, dirt and skin oils. We recommend using a cleaner such as alcohol. An alcohol cleaning pad is provided in our QRP version of the charger KIT. Choose the two current levels you desire, cut the supplied adhesive labels to size and apply the labels as shown above, larger value above the switch.

When mounting the toggle switch, put the two lugs toward the bottom of the chassis. When the switch toggle is “UP”, the unit is set to the higher current

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When assembling the circuit board
DO NOT mount the sense resistors (RS1 thru RS4)
per the regular component layout instructions,
instead mount them per these instructions.

Make the following modifications to create a switchable “QRP Version” of our Smart Charger:

- 1) Drill a 1/4 inch hole in the front panel for the toggle switch. Depending on the current levels you have chosen, label the panel as required. We mount the switch with the two lugs toward the bottom of the chassis. When the switch toggle is “UP”, the unit is set to the higher current
- 2) Mount the power transformer back and at an angle to clear the toggle switch.
 - a) Use the existing hole behind and in line with the front panel AC switch.
 - b) Drill a second hole based on the transformer mounting dimension.

If you purchased a QRP version of the KIT from us,
the extra holes have already been drilled

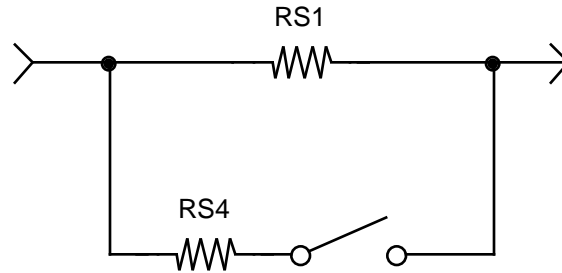
- 3) Mount RS1 and RS4 on the circuit board, the values will depend on current levels desired. See table next page for RS1 and RS4 values.
- 4) Wire the added switch to the pads labeled QRP. Cut the wire supplied to proper length as needed.

Parts Supplied for QRP modification

Modified chassis (added mounting holes)

Toggle switch	Front panel adhesive labels
14 inch length of wire	Alcohol cleaning pad
2 each 1 Ω resistors	1 each .33 Ω resistor
2 each .5 Ω resistors are included in the standar KIT	

RS values for the QRP Smart Charger



$$I_{\text{LOW}} = \frac{.25 \text{ V}}{RS1}$$

$$I_{\text{HIGH}} = \frac{.25 \text{ V}}{RS \text{ total}}$$

$$\frac{1}{RS \text{ total}} = \frac{1}{RS1} + \frac{1}{RS4}$$

Current Values	RS1	RS4	RStotal
1/4 A to 1 A	1.0 Ω	0.33 Ω	0.25 Ω
1/4 A to 3/4 A	1.0 Ω	0.5 Ω	0.33 Ω
1/4 A to 1/2 A	1.0 Ω	1.0 Ω	0.5 Ω
1/2 A to 1 A	0.5 Ω	0.5 Ω	0.25 Ω
1/2 A to 3/4 A	0.5 Ω	1.0 Ω	0.33 Ω
3/4 A to 1 A	0.33 Ω	1.0 Ω	0.25 Ω

1.0 Ω = BN-BK-GD-GD
 0.5 Ω = GN-BK-SL-GD
 0.33 Ω = OR-OR-SL-GD

