

# **GWS C3-LP Li-Po Battery Charger Manual**

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**Available at <http://www.nqrc.com>**

# Introduction

The C3-LP's light weight, compact size and ease of operation make it an ideal field charger, second charger or charger for people who are just getting into the exciting world of lipoly battery packs

As always, we **STRONGLY** recommend that people who have never used lipoly packs obtain help or advice from fellow enthusiasts in their area.

The information provided in this manual is provided in *good faith* but does not come with any implied or expressed liability or guarantees.

## Product Features

- Over-Charge protection
- Short-circuit protection
- Reverse-polarity protection
- Adjustable charging capacity between 0mA to 1000mA
- Power and Charge LED status indicators

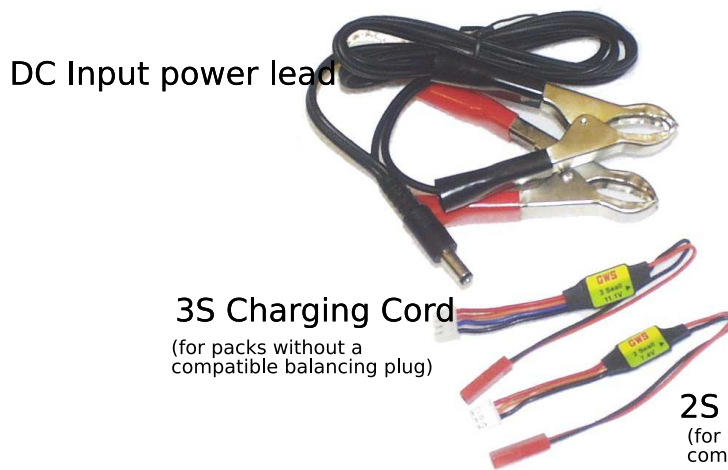
## Technical Specifications

- Compatible Battery: 2S (7.4V) or 3S (11.1V) Lithium-Polymer battery
- Charging Rate: 0mA to 1000mA, fully adjustable
- Input Power: DC 12V to 20V (either from AC to DC converter or 12V SLA / lead-acid battery). 13.8V minimum input recommended if charging 3S lipos.



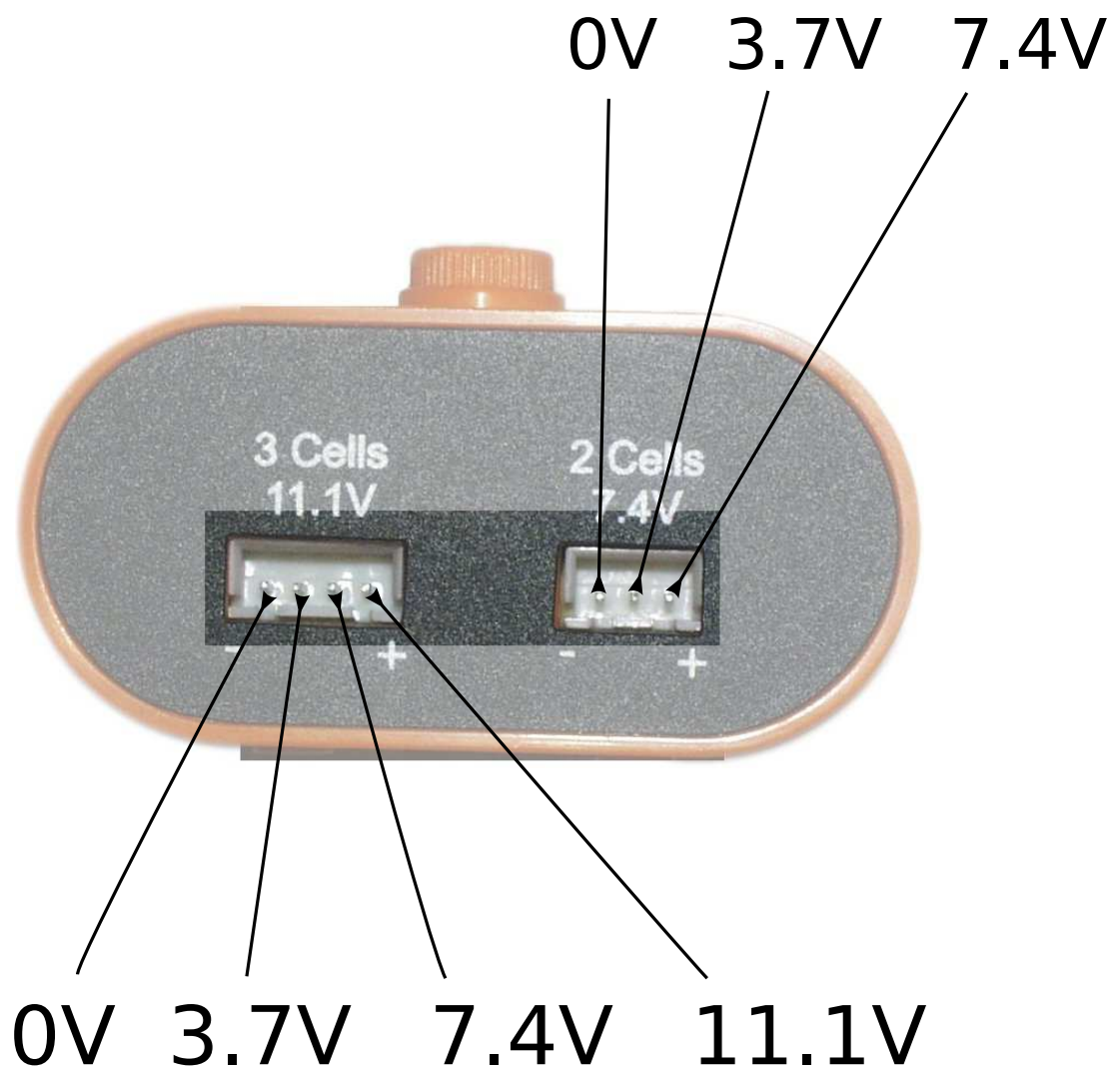
# GWS C3-LP Lipo Charger

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# GWS C3-LP Charge Port Pin Configuration



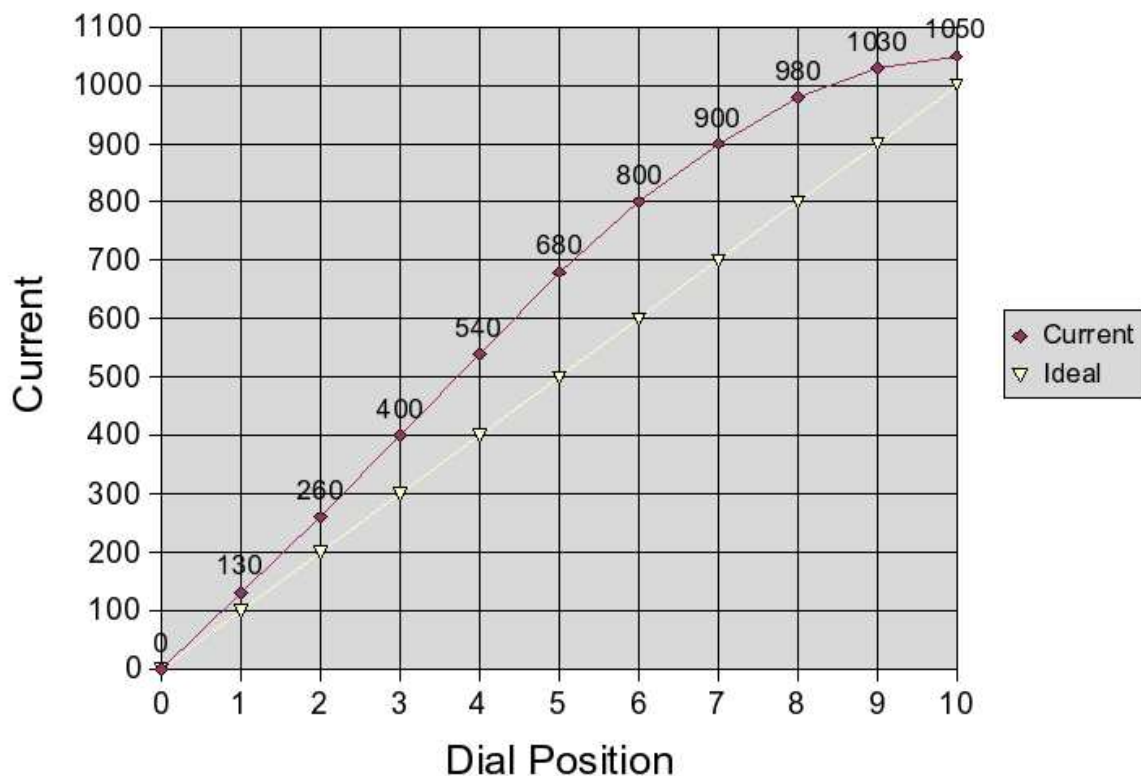
# Operating Procedure

- Connect input power to the DC input socket
  - Red Power-On LED should be illuminated
- Adjust charge rate knob (2) to desired current rate
  - To determine the correct knob position, select battery capacity in mAh on the graph and read off the knob position from the graph line (See graph on the following page)
  - eg, for charging a 450mAh lipo, we would select a dial position of between 3 and 3.5 (it's ideal to charge lipos at less than 1C, preferably at  $\sim 0.8C$  as this improves their life).
  - For batteries with a capacity over 1000mAh the charge selection knob dial can be set to maximum (10).
- Connect balancing plug of battery to the correct charger output terminal (3 pin for 2S or 4 pin for 3S).
  - After approximately 5 seconds the Blue charge LED should illuminate to indicate that charging has commenced
  - When the cell voltages have reached approximately 4.17V the Blue charge LED will start to blink
  - When the cell voltages have reached 4.20V the Blue charge LED will be completely turned off
  - Remove the battery balancing plug from the C3-LP charger

# Cautions

- Connect only ONE battery at a time to the C3-LP charger. You cannot charge both 2S and 3S packs simultaneously
- ALWAYS check the voltages of each cell with a multimeter to ensure that they are within 0.02V of each other.
- If the blue charge LED is weakly illuminated it can mean;
  - the charge rate dial is very near zero (0)
  - there is insufficient voltage from the DC INPUT to correctly charge the lipo (ie, only 12V input when attempting to charge a 3S lipo)

## GWS C3-LP Charge current vs Dial Position



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**For more information, please visit  
<http://www.nqrc.com>**