

# SimpCharge

By Simp Eco Engineering Ltd



## Disclaimer

Please read this manual and understand it, questions are allowed. You the purchaser of this product are responsible for installing this system yourself. You NEED knowledge of battery systems, automotive wiring.

### **THIS IS NOT A PLUG AND PLAY SYSTEM, USER CONFIGURATION AND WIRING REQUIRED**

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## Functionality

The SimpCharge is meant to allow a user an easy way to interface to an offboard AC charger otherwise known as an EVSE. This functionality can be standalone without the use of any other SimpEco products like the SimpBMS.

Basic functions that can be achieved with the SimpCharge are below:

### Functions without SimpBMS

1. Detect Plug (Type 1 or 2) based on the Proximity Signal – Dedicated 12V output when plug is inserted, EVSE does not need to be powered ON
2. Detect Active EVSE based on the Pilot Signal – Dedicated 12V output when Pilot Signal is ACTIVE
3. Switch on EVSE with simple 12V signal – Can come from any 12V source; A BMS signal (same as a charger activate signal) or a simple 12V switch

### Functions With SimpBMS

1. Detect available AC current from EVSE – Pilot Signal gets conditioned to be read by the SimpBMS, allows the automatic limiting of Canbus based chargers.

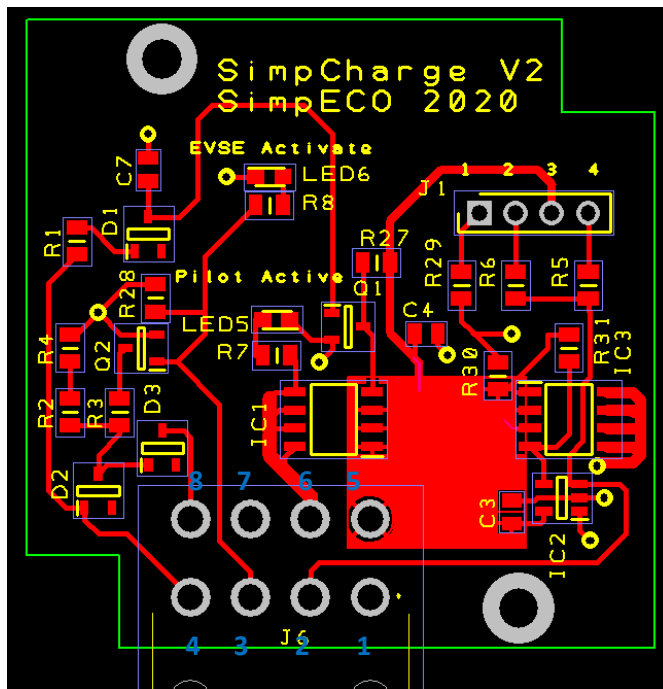
### SimpCharge Does NOT

- Limit AC Charge Current drawn by Charger
- Allow DC Fast Charging

The SimpCharge can be used for achieving the following:

1. Disable vehicle from driving when plugged in
2. Allow charging using an Offboard AC Charge / EVSE

## Pinouts



### Proximity Selector Connector J1

Socket Type	Jumpers
Type 1	Jumper 3-4
Type 2	Jumper 2-3

### Main Connector J6

Pin	Signal	Function
1	Ground	Chassis Ground, Shared with Charge Socket
2	Proximity Signal	From Charge Socket
3	EVSE Activate 12V in	Supply with 12V to switch on the EVSE to supply AC power
4	Pilot Signal In	From Charge Socket
5	12V	12V Fused Input (5Amp recommended)
6	Pilot Signal Active 12V Out	12V Out when Pilot Signal Active
7	Proximity Signal 12V Out	12v Out when Plug inserted with Proximity Resistor in Plug
8	Pilot Signal Out	Condition Pilot Signal for SimpBMS