

Serial Control Open Source Tesla Charger

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Command Index

's' to toggle the charge on and off by serial command, will be overridden in auto start and can control

'd' stops the debug and displays all the values currently set, will bring up display like below

Settings Menu

```
1 - Auto Enable : OFF
2 - Modules Enabled : 123
3 - Can Mode : Off
4 - Port Type : 2
5 - Phase Wiring : 2
6 - DC Charge Voltage : 320V
7 - AC Current Limit : 0A
8 - CAN0 Speed : 500
9 - CAN1 Speed : 500
a - Can Debug : OFF
b - EVSE Debug : ON
q - To Quit Menu
```

'1' to toggle auto enable, this looks at the pilot and proximity signal to turn the charger on and off.

'2' followed by which charger modules to enable; '12' would enable module 1 and 2

'3' followed by a

'0' to disable can mode

'1' to enable can mode : Master

'2' to enable can mode : Master Elcon

'3' to enable can mode : Slave

'4' followed by a '1' for a type 1 socket and '2' for a type 2 socket.

'5' followed by a '1' for single phase setup and '3' for a three phase setup

'6' followed by the value for desired DC voltage in whole numbers in V

'7' followed by the value for desired AC current in whole numbers in A

'8' followed by a number to set canbus 1 speeds; ex: '8 250' will give you a speed of 250 000 baud

'9' followed by a number to set canbus 1 speeds; ex: '9 250' will give you a speed of 250 000 baud

'a' to toggle the Can Debug to be enabled once exiting the settings menu

'b' to toggle the EVSE Debug to be enabled once exiting the settings menu

Recommended test settings

Setup for using **with** EVSE

This setup is meant to be used when a charger is connected to a charging port and is meant to be used with an EVSE

- set it to can mode Master
- set it to autostart mode
- set 5 amp ac input limit per phase
- set end voltage limit suited to pack
- set to type 2 socket or set it to 't1' for the type 1 socket
- Phase '3' – if all modules are on their own phase, else use '1'

To initiate charge connect HV to charger and insert EVSE plug into socket.

If all works as expected change the input limit to match the wiring and breaker limits.

Setup for using **without** EVSE

This setup is meant to be used when a charger is connected to a charging port and will not be used with an EVSE.

- set it to can master mode
- set it to No autostart mode
- set a 5 amp ac input limit per phase
- set end voltage limit suited to pack
- Phase '3' – if all modules are on their own phase, else use '1'

To initiate charge connect HV to charger, command 's' and apply AC power once module readouts appear on serial console.

If all works as expected change the input limit to match the wiring and breaker limits.

Setup for configuring a Slave Charger

This setup is meant to be used when a charger is the second charger in a set. The other charger needs to be set to Can Mode: Master or Master Elcon.

- set it to can mode Slave
- set it to no autostart mode
- set a 5 amp ac input limit per phase
- set end voltage limit suited to pack
- Phase '3' – if all modules are on their own phase, else use '1'

To initiate charge connect HV to charger and get the master charger to start charging (AC current limit for master charger needs to be above 15A). The slave charger will initiate shortly after the master.

If all works as expected change the input limit to match the wiring and breaker limits.