

EV-MASTER CONTROLLER 3.8 SERIES

For model number:
CS-EVMC-3.8

QUICK START INSTALLATION GUIDE

PRODUCT OVERVIEW / INTENDED USE: The CS-EVMC-3.8 Electric Vehicle Master Controller (EVMC) is a fully portable kit designed to charge up to 4 Electric Vehicles (EVs) from a single 208/240V-20A output using the EVMC's proprietary rotational charge control system. The supplied kit contains all elements required to charge up to 4 EVs from a single 20A output and include 4 – 16A level II charge stations, 1 – CS-EVMC-3.8 Master control unit and the necessary input cables (See figure below). The charge stations are SAE1772 connector rated to work with most Level II EVs.

SYSTEM COMPONENTS AND SETUP INSTRUCTIONS:

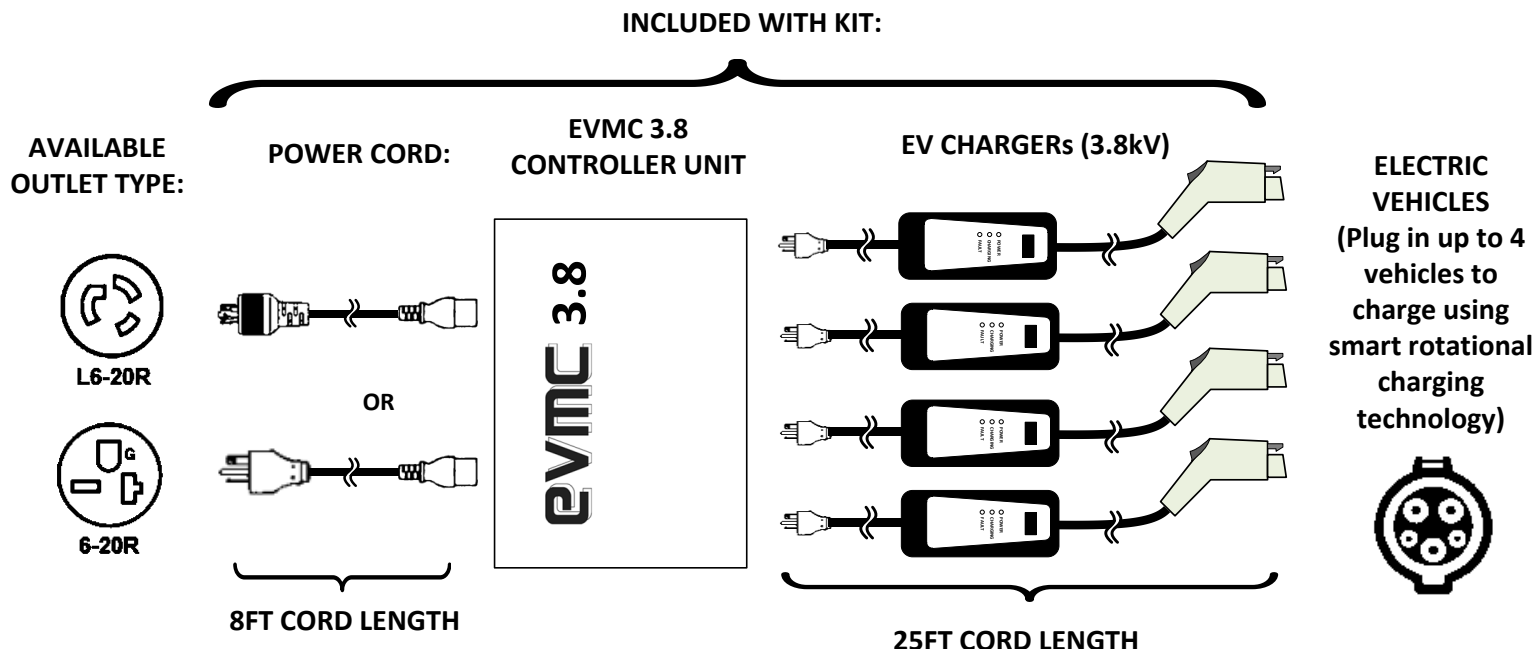
Input requirements: 208/240V – 20A receptacle, compatible with either 6-20R and L6-20R receptacle.

Kit Components (see figure below):

- Qty-1, CS-EVMC-3.8 Master Control Unit
- Qty-4, 208/240V-20A Level II car charging station (SAE1772 connector w/25 ft cord)
- Qty-1, L6-20P to C-19 power input cord, 8 ft.
- Qty-1, 6-20P to C-19 power input cord, 8 ft.

System Setup:

- 1) Select a convenient location to charge EV's that has access to 20A outlet (6-20R or L6-20R).
- 2) Select necessary input power cord from the kit and connect to input on EVMC 3.8 unit (see unit labeling figure on the next page).
- 3) Plug input cord from the EVMC to the receptacle. When energized, unit immediately powers up and will show green light on the power indicator LED.
- 4) Plug the supplied charge stations into the EVMC unit and connect to EV to initiate charging. Note, charge stations come with 25ft length cord length. EVs will need to be parked within this distance to reach the EV charger (see figure below for indicated cable lengths).
- 5) Charging will commence automatically, no further setup is needed.
- 6) To break down system simply disconnect the charge head from the vehicle, and disconnect chargers from the EVMC unit. Remove 20A input cord from outlet, and disconnect input cord from EVMC.



NOTES ON SYSTEM OPERATION:

1) Rotational charging using the automated EVMC smart rotational charging technology:

When energized, the software within the unit switches the 16A input power sequentially to each of the 4 output receptacles connected to the EV charge stations. If an EV connected to a charge station and requires power, the software will detect the demand and maintain the relay closed on that channel to a maximum of 30 min. If there is no car or if the car connected to the EV station is fully charged, the software will open the relay and move the next station after 30 seconds.

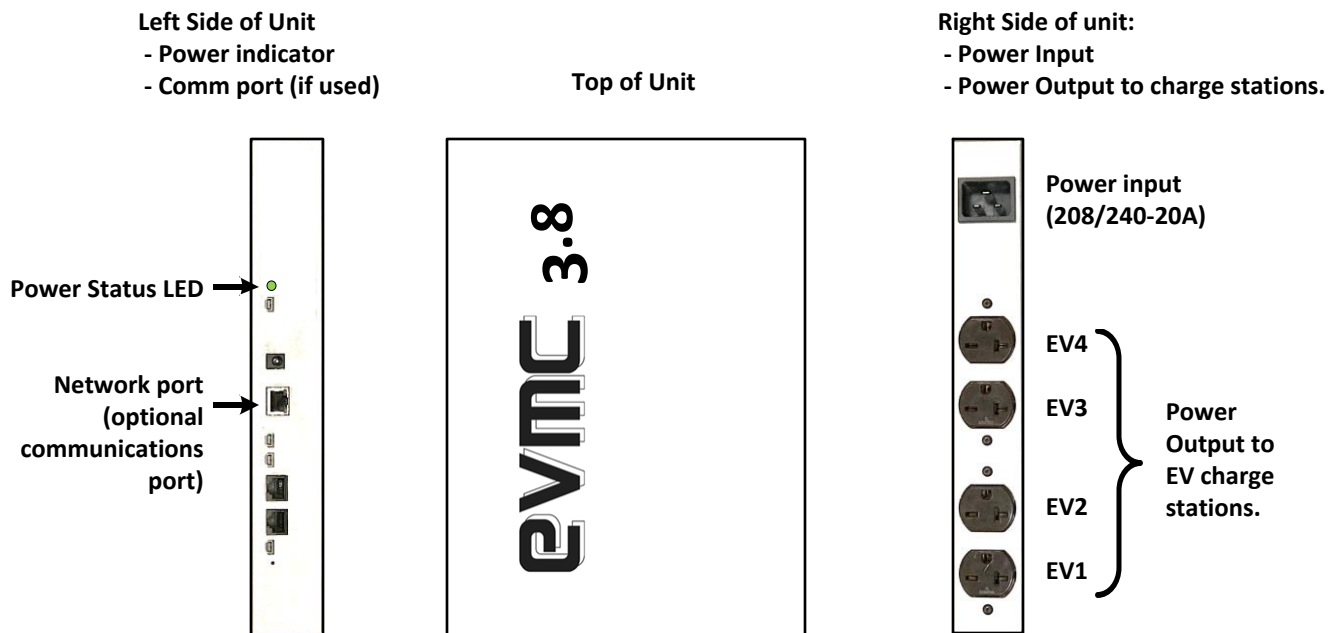
2) Initial power sweep at startup:

When energized, the EVMC runs 2 full sequential sweeps across all 4 output channels to evaluate if any EV's are connected to the system needing immediate charging. Therefore, during the first 2 minutes of system operation, every 30 seconds you will hear the relay operation which will stop either after 2 minutes or when the unit detects a channel with a load demand (EV vehicle requiring charge).

3) Software interface:

The unit contains an Ethernet network connection allowing communication with the device via standard TCP/IP network interface (see figure below). This communication allows remote monitoring of system usage and ability to remotely turn off / turn on charge stations. This interface is not required to operate the device but is included with the device if customization is desired. Go to www.Cyberswitching.com for more information on software interface capabilities or to download a detailed user manual on the software operation.

UNIT PORT IDENTIFICATION:



Top and side views of the power switching control unit supplied with the CS-EVMC-3.8 kit. Input and output connections are located on the right side as noted. If customization of operation is desired a network interface is available on the left side of the unit.