

## Product Manual

### EVC50 | EVC50 LTE

#### Level 2 Electric Vehicle Charging Station



MADE IN THE USA



FROM DOMESTIC AND FOREIGN PARTS

ATTENTION: Read and follow all instructions, warnings, dangers, and notifications before installation. After installation, return this guide to the owner.

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# 1. IMPORTANT SAFETY INFORMATION

Read and follow all instructions, warnings, dangers, and notifications before installing and using EvoCharge Electric Vehicle Supply Equipment (EVSE) Products. THIS CHARGING STATION MUST BE INSTALLED BY A LICENSED ELECTRICIAN. Failure to follow these guidelines may result in death, injury, or property damage and will void the product warranty. Save these instructions.

## **WARNING**

- High Voltage present, disconnect all power before servicing or installing the product. Failure to follow these guidelines may result in death, personal injury, or damage to property.
- Do not install or use the EVSE near flammable, explosive, harsh, or combustible materials, chemicals, or vapors. Failure to follow these guidelines can result in death, personal injury, or damage to property.
- Improper amperage setting to the supply wire sizing that does not meet NFPA 70 NEC 625 specifications, temperature rating and breaker sizing may result in death, personal injury, or damage to property.
- Installation must be done following an approved EvoCharge installation practice. Failure to follow these guidelines can result in death, personal injury, or damage to property.
- Do not use the EVSE if the flexible power cord or cable is frayed, broken, damaged, or fails to operate. Failure to follow these guidelines can result in death, personal injury, or damage to property.
- Operating temperature range is -30°C to +50°C (-22°F to +122°F); operating this device outside of this operating range may result in death, personal injury, or damage to property.

## **CAUTION**

- Copper wire must be used and sized to follow NFPA 70 NEC wiring code guidelines.
- Children should not operate and must be supervised when around the equipment.
- Do not touch EVSE Connector's end terminals with fingers or sharp metallic objects, such as wire, tools, or needles. Damage to the terminals can result in damage to property.
- This product can expose you to one or more chemicals that are known to the state of California to cause cancer. Please see product packaging for Proposition 65 warning.

## **NOTICE**

- This equipment must be grounded through a dedicated permanent wiring system or an equipment-grounding conductor according to the NFPA 70 NEC 626 specifications. Failure to properly ground this equipment could result in damage to property, serious injury, or death.
- Handle the equipment with care during transportation. To prevent damage to the equipment and its components, do not subject it to strong force or impact and do not pull, twist, tangle, drag or step on the equipment.
- Incorrect installation and testing of the equipment could potentially damage the vehicle's battery, components, and/or the equipment itself.
- In areas that experience frequent thunderstorms with lightning or areas that experience frequent power outages and power supply issues, add surge protection at the service panel for all circuits. Ensure all ground and power connections follow NFPA 70 NEC guidelines.
- Installation must be done by a licensed electrician.
- Device changes or modifications are not allowed at any time or for any reason.

- Ensure that the charging cable is positioned so it is not stepped on, tripped over, or subjected to damage or stress. Do not close a garage door on the charging cable.
- Do not drive over the charging cable or handle.

## **2. INSTALLATION**

### **2.1 Included in the Box**



- EV Charger with Cable (1)
- Mounting Bracket (1)
- Cable Holster (1)
- Mounting Screws (4)
- Quick Installation Guides (1)
- Amperage Label Sheet (1)

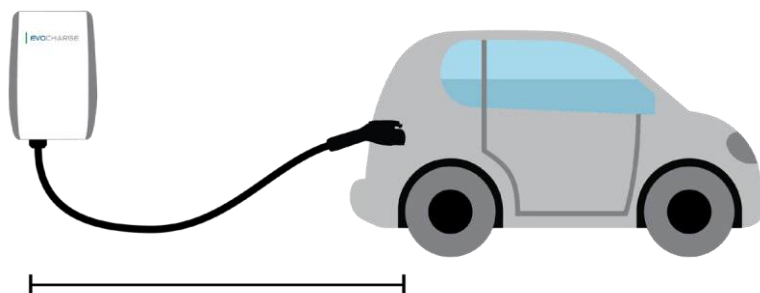
### **2.2 Tools Required**



- T10 Driver
- T25 Driver
- #3 Phillips Screwdriver
- 5/16" Hex Screwdriver
- 3/8" Flathead Screwdriver
- 2mm Precision Flathead Screwdriver
- Level
- Pencil
- Stud Finder
- Wire Cutter
- Wire Stripper
- Drill with 3/16" Drill Bit (if pre-drilling holes is required)

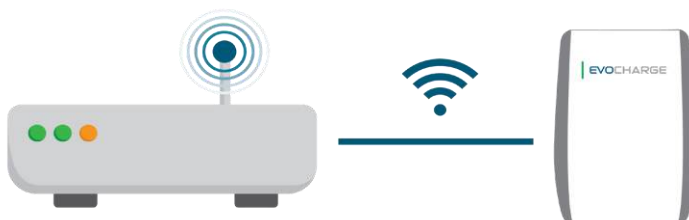
## 2.3 Planning Installation

When planning for the installation location, several factors should be taken into consideration to result in the best possible user experience.

- 
**Electric Service**  
 The EV charger requires a two-pole circuit breaker and circuit directly from a service panel. Ensure there are two open spaces within the panel and a clean path from the panel to the charger. (Note: a licensed electrician must confirm that the panel can accept the additional load.)
- 
**Charge Port of the Vehicle vs Cable Length**  
 Install the EV charger in a location that allows the charging cable to reach the car's charge port without putting strain on the cable.



- 
**WiFi Signal Strength**  
 The EV charger can use a WiFi connection to access the internet and provide remote access via a network service provider. Use a WiFi connected device capable of measuring signal strength to verify that the WiFi signal is present and strong where the EV charger is intended to be installed.
- 
**LTE Signal Strength**  
 The EVC 50 LTE charger can use an LTE (Verizon) connection to access the internet and provide remote access via a network service provider. Use an LTE connected device capable of measuring cellular signal strength to verify that the cellular signal is present and strong where the EV charger is intended to be installed.



**Outdoor Installations**

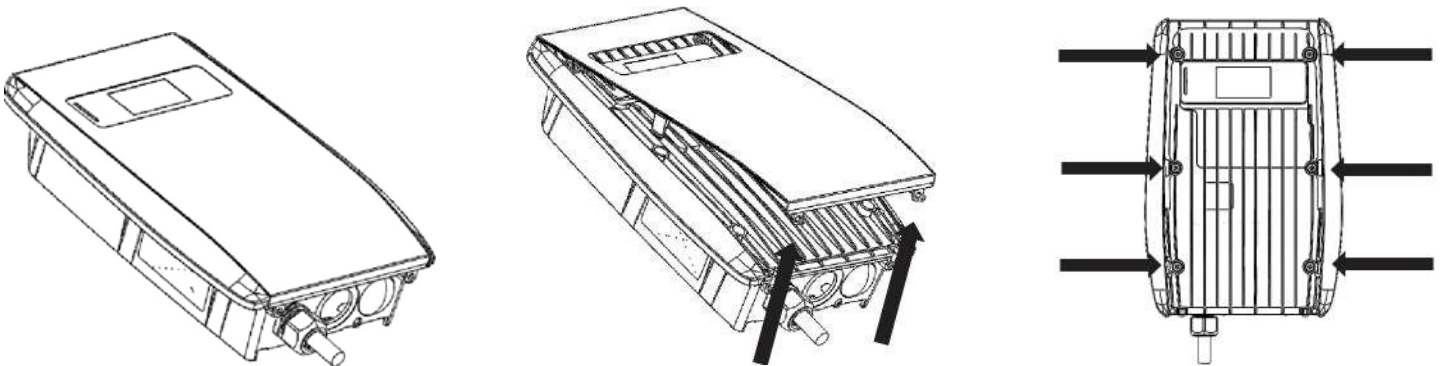
While the charger is weather-resistant, take care NOT to expose it to excessive heat or water when installing outdoors. Prevent moisture from entering the charger. If there is moisture ingress, immediately discontinue charger use.

## 2.4 MOUNTING

### 2.4.1 Prepare the Charger

To prepare the charger for installation, remove the EV charger and charging cable from all packaging and place it on a level workspace. Removal of two covers from the rear enclosure is required to expose the wiring terminal block and the power output selector dial.

1. Loosen the T10 fasteners located on the bottom of the front cover.
2. Lift the front cover from the bottom to expose tabs located midway. Disengage the tabs while continuing to lift the cover to remove it from the rear enclosure. The cover will bend. Care is required to prevent irreversible damage when disengaging the tabs.
3. Loosen the six T25 fasteners holding down the sealed enclosure cover.



## 2.4.2 Mounting Bracket Installation

The EV charger and cable holster must be mounted to a solid surface such as a stud framed wall, concrete wall, or anchored post/pedestal. Mounting the charger directly to drywall **WITHOUT** screw thread engagement to an underlying wood stud is **NOT RECOMMENDED**.

The mounting bracket has two rows of five mounting holes. Only two mounting holes are required for installation: one top hole and the corresponding bottom hole. The range of holes allows for centering the charger directly on a wood stud when using the bottom wire entry, or for positioning the unit off center of the stud to the left or right when using the rear wire entry option.

Suggestions:

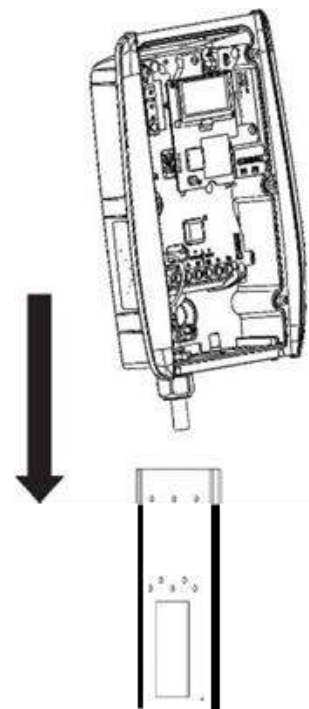
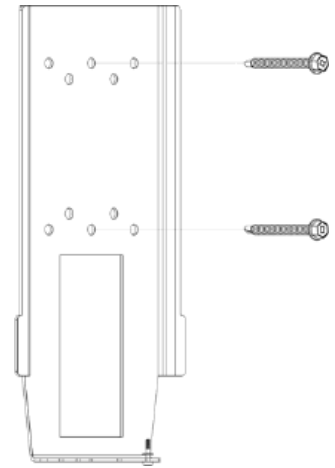
- For masonry walls, use 5/16" x 2" concrete screws.
- Utilize the mounting bracket as a template for pre-drilling holes if needed.
- Pre-drill holes with a 3/16" drill bit for wood studs.
- When installing the mounting bracket ensure there is 6" minimum clearance above the bracket to allow for charger placement.

To install the mounting bracket, follow these steps:

1. Locate a stud or solid surface to mount the bracket.
2. Make a pencil mark at the desired mounting height.
3. Hold the bracket in place with the pencil mark aligned to the top center mounting hole (for rear entry conduit select either the far right or left holes depending on conduit location to stud).
4. Using a level, align the mounting bracket and mark the location of the bottom hole.
5. Remove the bracket and pre-drill (using a 3/16" drill bit) the wall at the marks to a depth of 2".
6. Replace the mounting bracket and secure it to the wall using the included mounting screws.

## 2.4.3 Mount Charger to Bracket

- Slide the charger onto the mounting bracket.
- Fix the charger with the T10 screw and washer at the bottom of the bracket.



*Install torque 3-4 in-lb*



## 2.4.4 Cable Holster Installation

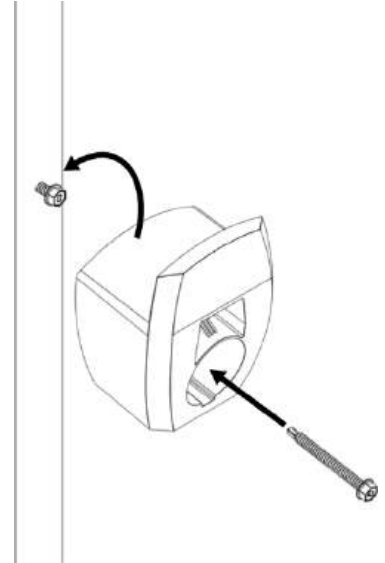
The cable holster can be located next to OR independent of the charger in a position that is most convenient with day-to-day charging.

Suggested locations for placement:

- Below the charger.
- Immediately to the left or right.
- Closest to the charging port of the EV when parked for charging.

To install the cable holster, follow these steps:

1. Locate a stud or solid surface to mount the cable holster.
2. Using the included mounting screws, drive one screw leaving a 1/8" gap between the head of the screw and mounting surface.
3. Position the top holster mounting U-slot on the protruding screw head.
4. Using the cable holster as a guide, drive a second mounting screw into the bottom holster mounting hole.
5. Snug the top screw to fully secure the cable holster.

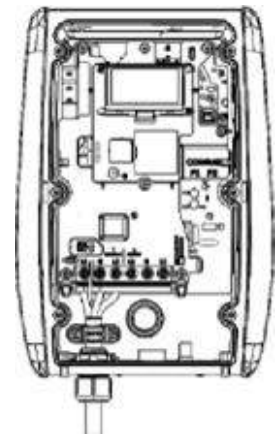


## 2.5 Wiring

**WARNING:** Failure to disconnect power prior to installation can lead to serious injury or death.

**CAUTION:** To reduce the risk of fire, connect only to a circuit that has the correct overcurrent protection in accordance with the National Electrical Code, ANSI/NFPA 70, and the Canadian Electrical Code, Part I, C22.1.

**CAUTION:** If this unit is installed outdoors, all conduit, fittings, junction boxes, receptacles, etc. must be rated for outdoor installation. If using a wall receptacle, the receptacle must be installed properly to maintain the proper NEMA rating of the enclosure.

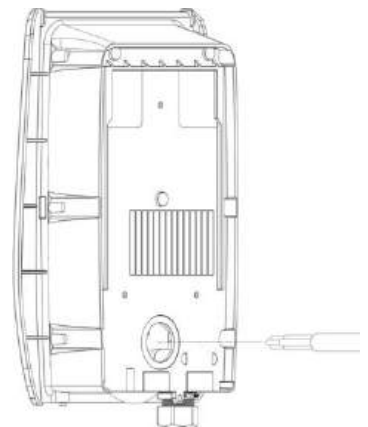


### 2.5.1 Wiring Entry

The charger is capable of accepting supply wiring from either a conduit knock-out located on the bottom of the charger, or a conduit knock-out located at the rear of the charger. Installation of all conduit and fittings should be completed in accordance with applicable NEC codes.

#### Bottom Entry


For bottom entry wiring, the charger only requires installation of NEC approved conduit fittings to complete the electrical installation.



## Rear Entry

For rear entry wiring, the rubber blanking plug should be relocated from the rear knock-out to the now unused bottom knock-out. This can be performed by pressing on the plug with moderate force. Reapplication of the blanking plug to the bottom knock-out is essential for maintaining environmental rating. No tools are required. When using the rear entry knock-out, it is important to use fittings that preserve a watertight seal for outdoor installations. The charger does not sit flush to the wall or mounting surface when installed. Appropriate conduit fittings should be used when installing.


### 2.5.2 Electrical Wiring to the Charger

 **CAUTION:** Use copper conductors only. Fix wire on the corresponding terminal block position. The wiring instructions are printed on the terminal block L2/G/L1.

The charger is designed to be supplied with 120/208VAC WYE 3Phase or 120/240VAC 1Phase. All other utility service voltages are unsupported. The charger DOES NOT utilize a neutral conductor.

When wiring the charger to a 120/240VAC single-phase service, Line 1 and Line 2 are required in addition to a grounding conductor. The terminal block in the charger is labelled L2/G/L1 to facilitate the correct placement of the conductors.

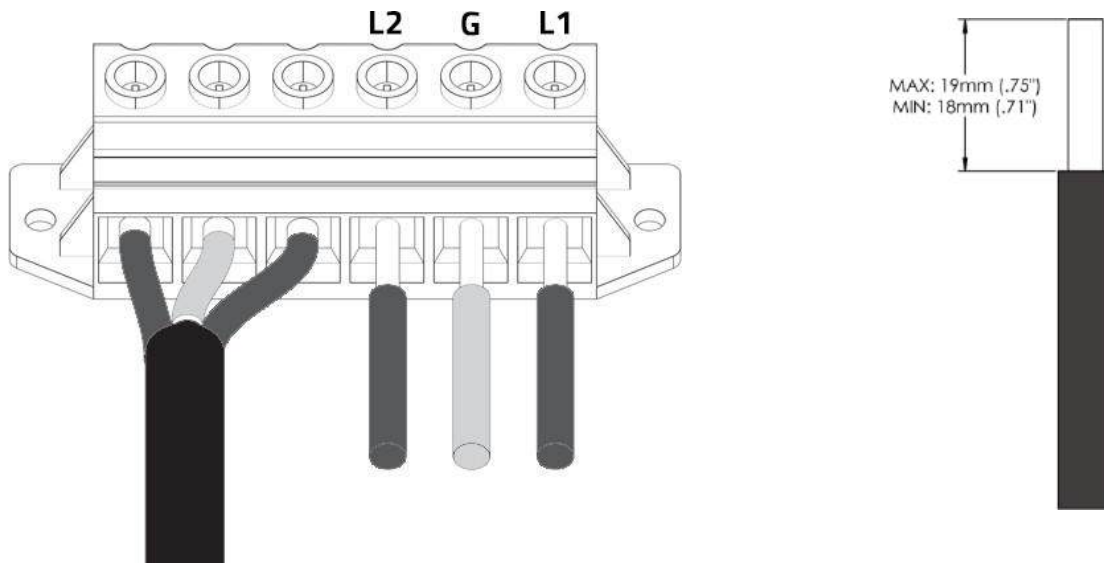
When wiring the charger to a 120/208VAC three-phase service, only two of the live conductors should be used: A-B, B-C, or A-C in addition to a grounding conductor. The charger does not require the use of the neutral conductor.

 **CAUTION:** The EV Charger CANNOT be used on services with voltages exceeding 120VAC to ground from and one powered leg. 240 Delta service IS NOT compatible.

- Strip 18mm length on terminal block.
- Insert wire to the correct terminal locations.
- Torque the terminal screws according to the table below.

AWG	Torque Pound Inches (N*m)
18-10	20 (2.3)
8	20 (2.8)
6-4	35 (4.0)
3	35 (4.0)
2	40 (4.5)

Select the applicable conduit in accordance with local and national electric code standards to the EVSE to maintain NEMA 4 rating.



## 2.6 Complete the Installation

To complete the installation:

- Carefully re-install the seal enclosure cover and front cover.
- Turn the breaker on.
- LED indicator light will illuminate YELLOW while the charger initializes.
- LED indicator light will illuminate GREEN when ready to charge. If it is not green after approximately three minutes, see section 6 on troubleshooting.












### 3. OPERATION

#### 3.1 Start a Charging Session

1. To initiate a charging session, insert the charging cable connector handle into the charging port of an EV.
2. Verify that the connector handle is fully engaged with the charging port. When seated in the port, the retaining latch will click, and the connector handle will be locked in position.
3. Verify that the plug is fully engaged by trying to remove the connector handle without depressing the handle's release button.
4. When fully engaged, the charger and EV will begin communication and a charging session will start.

#### 3.2 Indicator Light

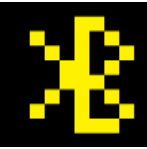

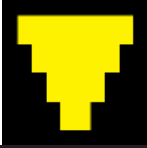

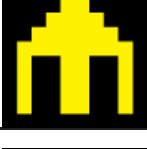
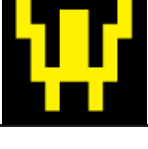
The charger indicator light informs the user a quick status on the condition and state of the charger without requiring the use of the mobile app. When the charger is supplied power the indicator light will represent one of the conditions listed in the table below:

State/Message	LED Action	Color	Description
EVSE Available State	Solid		EV not connected
EVSE Preparing State	Solid		EV connected, waiting for slide to start
EVSE Preparing State	Pulse		EV connected, waiting for vehicle to accept charging
EVSE Charging state	Pulse		Charging
EVSE Suspended EVSE state	Pulse		Charging complete
EVSE Suspended EV state	Pulse		Charging complete
EVSE Finishing state	Pulse		Charging complete
Rebooting/ Unavailable	Pulse		Rebooting/Unavailable
Fault	Solid		Fault, reference appendix
Fault	Pulse		Fault, reference appendix
Firmware upgrade in progress	Pulse		Firmware update

*Indicator Light Reference Table*

#### 3.3 OLED Display

The charger OLED display informs the user a status on the condition and state of the charger. When the charger is supplied power the OLED display will the information in the table below:

OLED Symbol	Name	EVC 50	EVC 50 LTE	Description
	Bluetooth	X	X	Charger is broadcasting a Bluetooth signal that can be used for onboarding the charger to different OCPP networks. Power cycle the charger to have it rebroadcast a Bluetooth signal.
	Access Point	X	X	Charger is broadcasting a WiFi access point signal. This WiFi signal will match the chargers ChargePoint ID and will start with "ST" followed by the last 11 digits of the chargers' serial number.
	Wi-Fi	X	X	Charger is connected to a local 2.4Ghz or 5Ghz WiFi signal.
	Cellular		X	Charger is connected to a cellular network.
	Ethernet	X	X	Charger has Ethernet enabled.
	WebSocket	X	X	Charger has a connection with a backend network via a WebSocket URL.

*OLED Display Reference Table*

### 3.4 Stop a Charging Session

1. To stop a charging session, simply press the latch release button on the handle.
2. The charging session will terminate, and the connector handle can be removed from the EV and returned to the cable holster.

Note: In some cases, the connector will remain locked in the vehicle's charging port. If this occurs, please refer to the owner's EV manual for the proper procedure to release the connector handle after ending the charging session.

## 4. EvoCharge Web Portal

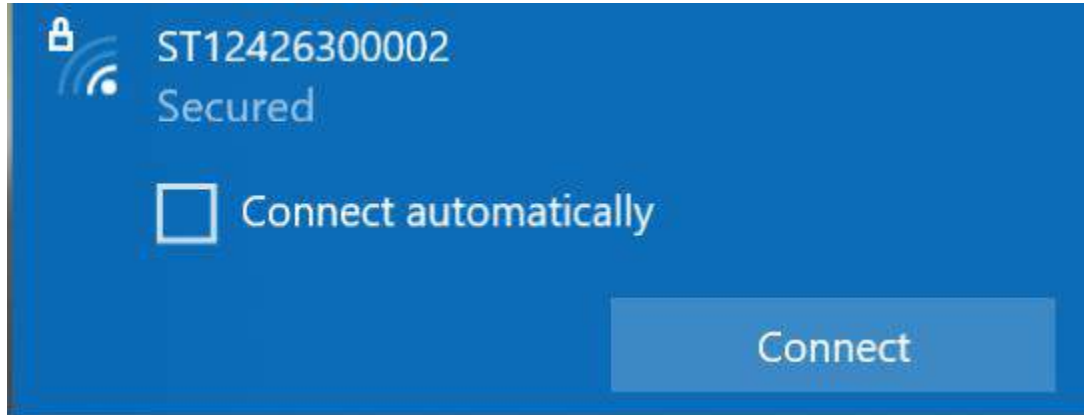
### 4.1 Overview

This guide outlines the steps to connect to the EvoCharge Web Portal. The portal enables you to configure and manage various local settings for your charger. Key features include connecting your charger to a network,

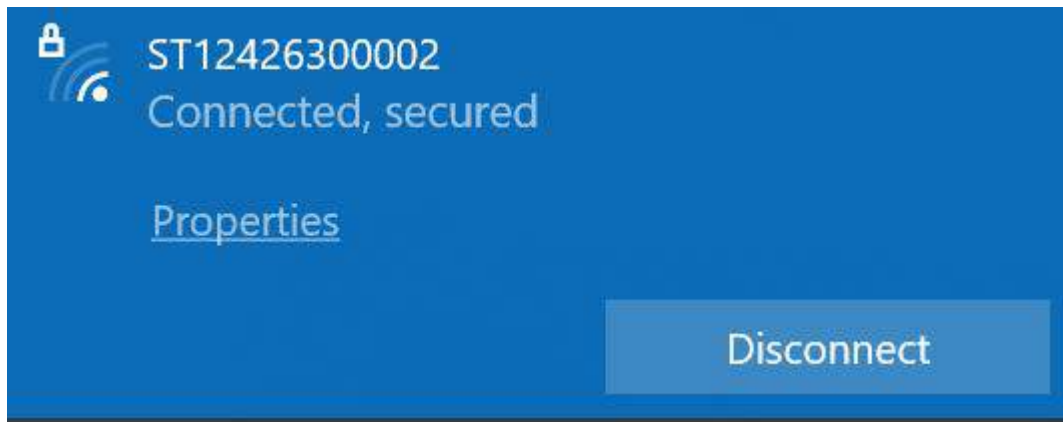
adjusting the maximum amperage output, uploading RFID access lists, and more.

## 4.2 Access the EvoCharge Web Portal via Wi-Fi Connection

1. First, we need to connect a laptop or mobile phone to the EvoCharge charger. Each EvoCharge charger has a unique WiFi signal that is identified based on the unique serial number of the charging station. To start, first note down the serial number of the EvoCharge charger charging station you would like to connect to via WiFi.
  - (a) The unique serial number is located on the Product ID label located on the side of the charging station and will consist of the following structure: "STXXXXXXXXXX" (e.g. ST12345678910)
2. Next, using laptop or mobile phone, proceed with setting up a WiFi connection and locate the EvoCharge charger WiFi signal that correlates with the unique serial number.
  - (b) The WiFi signal name will match the charger's serial number. Similar to the image below.



- (c) Next, click "Connect" and proceed to enter the password (network security key). The network security key is: Evo@123456
  - (d) Upon successful Wi-Fi connection to the EvoCharge charger, you will see the unique WiFi signal connection such as shown below:



### 4.3 EvoCharge Web Portal Access

1. Once your laptop or cellular phone is connected to the EvoCharge charger via WiFi, open a web browser (e.g. Google Chrome or Internet Explorer) and enter the following IP address into the address bar and press "enter":

192.168.1.1 or click on the following hyperlink: <http://192.168.1.1>

Once the IP address is entered, you should see the EvoCharge Web Portal login screen:

The image shows the EvoCharge Web Portal login screen. At the top, the 'EVOCHARGE' logo is displayed in a blue and grey font. Below the logo, there are two input fields. The first is labeled 'User Name' and contains the placeholder text 'User Name'. The second is labeled 'Password' and contains the placeholder text 'Password'. Below these fields is a blue button with the text 'Sign in' in white.

For Administrator access, use the following default username and password:

Username: **admin**

Password: **EvoCharge-50EVSE**

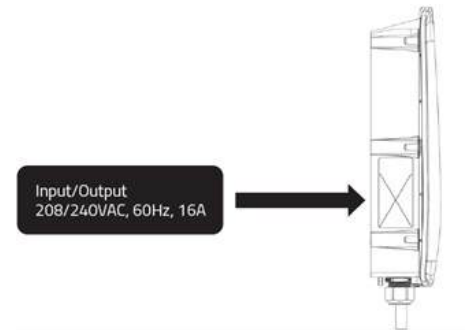
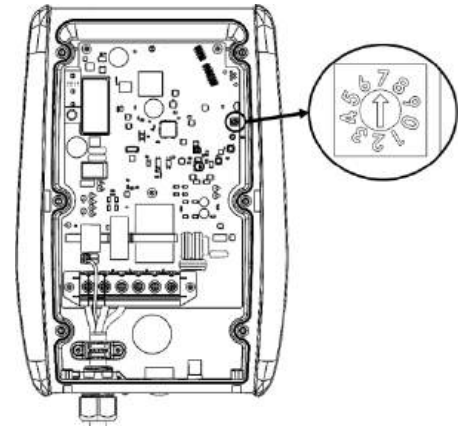
For descriptions of the EvoCharge Web Portal parameters please see Section 7.2.

## 5. ADVANCED FEATURES

### 5.1 Setting the Amperage of the Charger

The EV charger is designed to manually adjust the maximum power output. This feature is useful when installing the charger in a location where the electrical service has limitations on the available power to the charger. The charger's default power out is set to a maximum of 48A when installed on a 60A-rated branch circuit. If less than a 60A rated circuit is available or cannot be added to the existing service, the charger can be adjusted to a setting that matches the installed circuit capacity by following these steps:

1. Determine the maximum branch circuit rating.
2. Turn the power off to the unit. Wait 5 seconds before removing the front cover.
3. Adjust the amperage output dial according to the table below.  
NOTE: The charger output dial setting ARE NOT the same. According to the NEC, an EV charger can only output 80% of the branch circuit's rating.
4. Using a 2mm flathead screwdriver, rotate the arrow on the rotary switch to the desired amperage setting.
5. The table below provides a reference for the minimum conductor size for the circuit from the panel to the EVSE via raceway (NEC 310.16). The required conductor size may be larger than the table indicates due to application. A licensed electrician should be engaged for any wiring installations and modifications to existing wiring.
6. Apply corresponding amperage sticker from supplied decal sheet to charger (as shown to the right) and service panel.



Switch Position	Charger Rating	Breaker Rating	Minimum Conductor Size (75 °C) AWG (L1/L2)	Minimum Equipment Grounding Conductor AWG (G)
3	16A	20A	12	12
4	24A	30A	10	10
5	32A	40A	8	10
6	40A	50A	8	10
7	48A	60A	6	10
8	50A	70A	4	8
0, 1, 2, 9	Switch positions not used			

Switch position table



## 6. TROUBLESHOOTING

Issue	Description of Problem	Solution
Indicator light or OLED does not illuminate	Charger lacks power	Ensure the circuit breaker is in "ON" position. Have an electrician ensure the wiring is completed according to Section 2.5.
Indicator light is solid red	The charger has worked for an extended period but no longer works	Contact EvoCharge technical support: 888-653-0160
	The charger has only worked one or two times	The wiring may be incorrect. Have an electrician ensure the wiring is completed according to Section 2.5.
Indicator light is flashing red	EV Charger has gone into fault state	<ul style="list-style-type: none"> <li>Power Cycle charger</li> <li>Check voltages</li> <li>Check terminal connections/torques</li> </ul>
Breaker is tripping	Breaker trips during initial start-up self-test	Do not use a GFCI breaker.
	When charging, service panel breaker trips	Ensure the breaker size is correct for the charger rotary switch position according to Section 5.1.
Charger does not work after a power outage	There are several possible failures	Reset the circuit breaker.* Contact EvoCharge technical support if the problem persists.
Charging handle is stuck in EV		See EV Owner's Manual for release procedure.
Charger will not charge EV	Indicator light is solid blue	
	Indicator light is green	Check EV for Charge Schedule EV not recognized or no communication. Re-engage the charging connector handle.
Charger is charging slow	Charge rate is slower than expected	Check Charger Output Switch setting, reference Section 5.1.

\* The car must be disconnected from the charger when resetting the circuit breaker.

## 7. APPENDIX

### 7.1 Product Specifications

Electrical	
Power Output Rating	Maximum 12kW, 50A (at 240VAC) Adjustable to: 48A (Factory Setting), 40A, 32A, 24A, 16A
Input Voltage	208 / 240 VAC, 60Hz, 1Ø, Max 120VAC from Ground
Power Wiring	3 Wire - L1, L2, G (No Neutral)
Connector Type	SAE J1772 and NACS
Safety Protections	Ground Fault Detection (Internal GFCI): 20 mA CCID Earth Ground Detection Over/Under Temperature Surge Protection per IEC 61851-21-2
Charging Cable Length	18 ft (5.49 m)
Metering Accuracy	1.0%
Communication	
WiFi	2.4 GHz and 5 GHz (802.11 b/g/n/ac)
Bluetooth®	Version 5.0 (BLE)
Protocols	OCPP 1.6J, ISO 15118 Ready
Cellular	4G-LTE
Ethernet	Active Dual Ethernet Port
RFID	RFID ISO14443A/B, ISO15693, 13.56mHz
Network	EvoCharge Network or Select Network Partners
Certifications and Standards	
Certification	UL2594, UL2231-1, UL2231-2, UL1998, Energy Star®, FCC
EMC Compliance	FCC Part 15 Class B
NEC 625 Compliant	
Warranty	Standard 3 Year Manufacture Limited Liability
Enclosure	
Charger Weight and Dimensions	10.91 lbs (4.6 kg) Shipping Weight: 14.03 lbs (6.74kg) 9.7 in (W) x 13.8 in (H) x 3.5 in (D) (245 mm x 51 mm x 88 mm)
Operational Ratings	NEMA 4, Indoor/Outdoor Rated -22°F to 122°F (-30°C to 50°C) IK10 Impact Rating Humidity: up to 95% Non-Condensing
Storage Ratings	-40°F to 158°F (-40°C to 70°C) Humidity: up to 95% Non-Condensing
Display	OLED Display, Charge Status Indicator (Power/Ready, Charging, Fault)
Mounting Options	Mounting Bracket for Wall or Pedestal Installation
Cable Management	Remote Charging Handle Holster and Cable Hook Included

## 7.2 EvoCharge Web Portal Parameters

Parameter	Description
<b>System Information</b>	
Final assembly Serial Number	Unique serial number of the charger
Final Assembly Model	Model name of the charger
<b>Control Board</b>	
Control Board Firmware Version	Firmware version on the control board
Control Board Serial number	Unique serial number of the control board
Control Board Hardware Revision	Hardware revision of the control board
Control Board Part Number	Part number of the control board
<b>Connectivity Board</b>	
Connectivity Board Firmware Version	Firmware version on the connectivity board
Connectivity Board Hardware Revision	Hardware revision of the connectivity board
Connectivity Board Serial Number	Unique serial number of the connectivity board
Connectivity Board Part Number	Part number of the connectivity board
<b>System Settings</b>	
Max Amp HW setting	Rotary switch (Hardware) setting to limit the maximum charging current
Max Amp FW setting	Firmware setting to limit the maximum charging current
Under Voltage Threshold	Value at which the charger will set an under voltage fault
Over Voltage Threshold	Value at which the charger will set an over voltage fault
Over Temperature Warning Threshold	Value in Celsius at which the charger will reduce amperage
Over Temperature Fault Threshold	Value in Celsius at which the charger will set a temperature high fault
LED Brightness	Brightness of the indicator LED ranging 0-100%
PWM Amperage	Charging current offered by EVSE
Real Amperage	Real-time current being drawn by vehicle
Resume Charging Delay	Maximum delay to resume charging after boot
Ventilation Required	Indicates if ventilation fault will be set
ISO15118PnCEnabled	Indicates if ISO 15118 Plug and Charge is enabled
<b>Network</b>	
Network Mode	Set standalone, client or gateway mode for the charger
Gateway LAN IP	LAN IP of the gateway unit
Gateway LAN Port (SOAP)	LAN Port of the gateway unit
Maximum Group Size	Maximum number of chargers in the client & gateway group
Gateway Serial Number	Gateway unit's unique serial number
Group Use External Gateway	Enable the use of an external gateway for a gateway/client group
Hide AP SSID	Hide charger's Access Point SSID
Connectivity	Set connectivity type

Client Connection	Connectivity type for clients in a client & gateway configuration
Station Only Mode	Disable Access Point
<b>Active Device Status</b>	
Active Device	Active network interface
Active IP Address	Active network interface IP address
Active Netmask	Active network interface netmask
Active Gateway	Active network interface gateway
Active Primary DNS	Active network interface Primary DNS
Active Secondary DNS	Active network interface Secondary DNS
<b>Wi-Fi Settings</b>	
SSID	Local WiFi network the charger will attempt to connect to
Security	Local WiFi network security type
Password	Local WiFi network password
BSSID	Hardware address of router/switch
Wi-Fi MAC Address	Mac Address of the EVSE
Wi-Fi Signal Strength	WiFi wireless signal strength
Wifi Connection Timeout	Local Wifi network connection attempt period
<b>Cellular</b>	
MNC	Mobile Network Code
ICCID	Integrated Circuit Card Identifier
IMEI	International Mobile Equipment Identification
MEID	Mobile Equipment Identifier
Cellular APN	Access Point Name
Cellular APN PDP Type	Type of IP address assigned APN
Cellular Signal Strength	Cellular signal strength in dBm
Cellular WAN IP Address	Wide Area Network IP address
<b>Ethernet</b>	
IP Configuration Mode	Use DHCP or Static mode for ethernet connection
IP Address	IP address of the ethernet connection
Subnet Mask	Subnet mask of ethernet connection
Default Gateway	Default gateway of ethernet connection
MAC Address	MAC address of the ethernet connection
<b>Bluetooth</b>	
Enable Bluetooth	Enable EVSE Bluetooth
Bluetooth Connection Timeout	Bluetooth enable period
<b>RFID</b>	
RFID Settings	Enable charger's RFID scanner
<b>Firmware Update</b>	
<b>Firmware Package</b>	
Current Version	Charger's Control board and Connectivity board firmware versions

Browse File	Select a firmware file to upload
<b>Diagnostic</b>	
Export Diagnostic	Export charger diagnostic files
<b>Local Authorization</b>	
<b>Local Authorization List</b>	
Show Authorization List	Show the RFID authorization list
Clear Authorization List	Clear the RFID authorization list
Browse File	Select and upload RFID authorization list file
<b>Authorization Cache</b>	
Show Authorization Cache	Show the authorization cache
Clear Authorization Cache	Clear the authorization cache
Browse File	Select and upload an authorization cache file
<b>Charging Profile</b>	
Show Charging Profile	Show charging profiles
Clear Charging Profile	Clear charging profiles
<b>Configuration Backup/Restore</b>	
Backup Configuration	Backup the charger's configuration
Restore Configuration	Select and upload a charger configuration file
<b>Reset</b>	
EVSE Reboot	Reboot the charger
Reset to Factory Default	Restore charger's factory default settings
<b>Change Password</b>	
Old Password	Current web portal password
New Password	New web portal password
Confirm New Password	Confirm new web portal password
<b>OCPP Service Settings</b>	
Charge Point ID	Identity of the charger as known in the OCPP Central System
Protocol Name	OCPP version used by charger
Message Transport Layer	Transport layer for OCPP websocket connection
Server URL	URL of OCPP Central System service
Server User Id	HTTP basic authorization user Id
Server Password	HTTP basic authorization password
FTP User Id	FTP server username
FTP Password	FTP server password
Boot Notification Interval	Boot Notification retry interval
Boot Notification Retries	Boot Notification retry attempts
PDU Timeout	Interval until charger stops waiting for a PDU response
Download Firmware Interval	Firmware Download retry interval
Download Firmware Retries	Firmware Download retry attempts

Upload Diagnostic Interval	Upload Diagnostic retry interval
Upload Diagnostic Retries	Upload diagnostic retry attempts
Status Notification After Soft Reset	Send status notification to Central System after soft reset
PlugAndChargeEnable	Enable Plug and Charge
Plug and Charge Id	Plug and Charge identifier
TLSType	Full or abbreviated TLS handshake for Central Server connection
Resume Transaction After Reboot	Allow a transaction to resume after a reboot
<b>Pricing</b>	
Unit Price	Price per kWh
Idle Fee	Price per minute when not in charging state during a transaction
Initiation Fee	One-time fee per transaction
Custom Display Cost and Price	Use Central Server based pricing display
<b>OCPP Settings</b>	
AllowOfflineTxForUnknownId	Enable Unknown Offline Authorization
AuthorizationCacheEnabled	Enable Authorization Cache
AuthorizeRemoteTxRequests	Authorize remote transaction requests
BlinkRepeat	Number of times to blink charger lighting when signaling
ClockAlignedDataInterval	Interval for sending clock-aligned meter values
ConnectionTimeOut	Interval until charging session is automatically ended due to failure to plug in a vehicle
ConnectorPhaseRotation	Phase rotation per connector in respect to the connector's energy meter
Connector Phase Rotation Max Length	Maximum number of items in a ConnectorPhaseRotation Configuration Key
GetConfigurationMaxKeys	Maximum number of requested configuration keys in a GetConfiguration request PDU
HeartbeatInterval	Interval of inactivity with Central System after which the Charge Point should send a Heartbeat request
LightIntensity	Intensity of LED indicator
LocalAuthorizeOffline	Whether the charger, when offline, will start a transaction for locally authorized identifiers
LocalPreAuthorize	Do not wait for central server authorization when online
MaxEnergyOnInvalidId	Maximum energy in Watt-hour (Wh) delivered when an identifier is not valid but allowed
MeterValuesAlignedData	Clock-aligned measurand(s) to be included in a MeterValues requests
MeterValuesAlignedDataMaxLength	Maximum number of items in a Meter Values Aligned Data Configuration Key
MeterValuesSampledData	Sampled measurands to be included in a Meter Values requests
MeterValuesSampledDataMaxLength	Maximum number of items in a Meter Values Sampled Data Configuration Key
MeterValueSampleInterval	Interval for sending sampled meter values
MinimumStatusDuration	The minimum duration that a charger status is stable before a Status Notification request is sent to the Central System
NumberOfConnectors	The number of physical charging connectors
ResetRetries	Number of times to retry an unsuccessful reset of the charger
StopTransactionOnEVSideDisconnect	The charger shall administratively stop the transaction when the cable is unplugged from the EV
StopTransactionOnInvalidId	Charger will stop an ongoing transaction when non-Accepted after going from offline to online
StopTxnAlignedData	Clock-aligned periodic measurands to be included in Stop Transaction

StopTxnAlignedDataMaxLength	Maximum number of items in a StopTxnAlignedData Configuration Key
StopTxnSampledData	Sampled measurands to be included in Stop Transaction
StopTxnSampledDataMaxLength	Maximum number of items in a StopTxn Sampled Data Configuration Key
SupportedFeatureProfiles	List of supported Feature Profiles
SupportedFeatureProfilesMaxLength	Maximum number of items in a Supported Feature Profiles Configuration Key
TransactionMessageAttempts	How many times the charger should try to submit a transaction-related message when the Central System fails to process it
TransactionMessageRetryInterval	How long the charger should wait before resubmitting a transaction-related message that the Central System failed to process
UnlockConnectorOnEVSideDisconnect	Charger shall unlock the cable on the charger side when the cable is unplugged at the EV
WebSocketPingInterval	Ping pong interval for Web Socket protocol
LocalAuthListEnabled	Enable Local Authorization List
LocalAuthListMaxLength	Maximum number of identifications that can be stored in the Local Authorization List
SendLocalListMaxLength	Maximum number of identifications that can be sent in a single SendLocalList request
ReserveConnectorZeroSupported	Charger will support reservations on connector 0
ChargeProfileMaxStackLevel	Max Stack Level of a Charging Profile
ChargingScheduleAllowedChargingRateUnit	A list of supported units for use in a Charging Schedule
ChargingScheduleMaxPeriods	Maximum number of periods that may be defined per Charging Schedule.
ConnectorSwitch3to1PhaseSupported	If defined and true, this charger supports switching from 3 to 1 phase during a charging session
MaxChargingProfilesInstalled	Maximum number of Charging profiles installed at a time

## 8 WARRANTY

The EvoCharge warranty statement is located here: <https://evocharge.com/legal#limited-warranty-content/>

FCC ID: 2BEYO-PEVC50

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by EVOCHARGE INC. could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device contains license-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's license-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operation of the device.

The device operates in the band 5150–5250 MHz to reduce the potential for harmful interference to co-channel mobile satellite systems.

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