

INSTALLATION GUIDE – 30 kW

Model(s) : TP5-30-480

DC quick charging stations Installation and operating instructions.
Please read all the instructions before installation and save them for future reference.



MANY THANKS!

Dear customer!

Thank you for purchasing this ChargeTronix product. Before using or operating this product, please read this manual carefully and keep it handy. The company is not liable for any accidents caused by breach of safety precautions or instructions in this manual. This product is live and should only be opened by instructed service personnel or a qualified electrician for service, maintenance or repair and fault handling to avoid electric shock.

ATTENTION

Our company will not assume any responsibility for power damage, personal injury, property loss or damage of charger caused by installation not in accordance with the instructions of this manual.

PLEASE NOTE

ChargeTronix reserves the right to make changes as necessary to comply with changes in the industry and due to errors and omissions to ensure a safe and reliable installation.

Please call our customer support line if there are any questions related to installation or operation of this equipment.

"Please don't make assumptions, call us!"

CONFIDENTIALITY

The materials contained in this document represent proprietary and confidential information pertaining to services and methods of ChargeTronix. By reading this document you agree that the information shall not be disclosed outside of and shall not be duplicated, used, or disclosed for any purpose other than what it was created for.

This manual covers the electrical and mechanical installation procedure for the ChargeTronix TP5-30-480 charger. The model hosts different voltage and connector configurations. Below are different product numbers.

| | |
|---------------------|---|
| TP5-30-480-1 | Max Voltage: 1000VDC; Connectors: CHAdeMO |
| TP5-30-480-2 | Max Voltage: 1000VDC; Connectors: CCS1 |
| TP5-30-480-3 | Max Voltage: 1000VDC; Connectors: NACS |

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CRITICAL SAFETY

READ THE ENTIRE MANUAL BEFORE DESIGNING OR INSTALLING EQUIPMENT

! WARNING

This unit is a high-powered electrical device and can be hazardous if improperly installed, serviced, or operated. Failure to follow procedures in this manual could result in extreme hazard to personnel and/or damage to the equipment and related infrastructure. In addition, the installation, service, and maintenance need to comply with local codes and the Authority Having Jurisdiction (AHJ).

! IMPORTANT SAFETY INSTRUCTIONS

The symbols used are international icons used to depict various levels of caution when installation, servicing or maintaining the equipment. Same symbols will also appear on the equipment for identifying caution levels required when accessing certain areas of the charger.

| | | |
|--|------------------------|---|
|  | DANGER | High voltage danger label to keep people safe from electrical discharge, which could result in injury or potential death. |
|  | WARNING | Warning icon represents hazard, that could result in severe injury or possibly death. |
|  | GENERAL CAUTION | Caution icon represents a potential hazard or unsafe practice that could result in injury. |

CRITICAL SAFETY

READ THE ENTIRE MANUAL BEFORE DESIGNING OR INSTALLING EQUIPMENT

! SERVICE WARNING

There are no serviceable items inside the equipment. There is high voltage inside the equipment which could cause severe injury or death. Do not attempt to repair the charge station yourself. This can only be performed by factory qualified personnel.

! CHARGING CABLE DAMAGE

Do not operate the charger if the charging cable is damaged or if there are exposed wires in the charging cord assembly. Shut off power at the electrical disconnect or at the breaker. Then immediately contact ChargeTronix service. If there are any questions, please contact customer service.

! SAFETY INSTRUCTIONS

Read the entire installation instructions before designing the installation and prior to installation. This equipment should be installed by a journeyman level electrician. Local building codes need to be complied with. In most jurisdictions the installation of this equipment requires plan check, building and electrical permits. Verify with the local Authority Having Jurisdiction prior to starting construction.

The charging station relies on the grounding system for safety. All grounding instructions should be strictly adhered to as prescribed in this manual and any applicable electrical safety requirements, all local electrical safety codes, and NEC.

CRITICAL SAFETY

READ THE ENTIRE MANUAL BEFORE DESIGNING OR INSTALLING EQUIPMENT

! HIGH VOLTAGE EQUIPMENT:

This charging system contains both AC and DC high voltage circuitry and devices and should only be installed by a qualified electrician trained to work on high voltage, high current AC and DC systems.

! ADDITIONAL CAUTIONARY NOTES

WARNING

Do not have power on while any of the maintenance doors are open unless proper personnel protection equipment is worn.

Only trained personnel should be working in this equipment while the doors are open, and the unit is powered on.

WARNING

There are high voltage and high-capacity energy storage components on this system. There are components and circuits that remain charged for some time (1 to 2 minutes) with high voltage power, even after main power is disconnected. Always test with a voltmeter before any maintenance or service is performed.

Only ChargeTronix authorized personnel are allowed to perform product repairs.

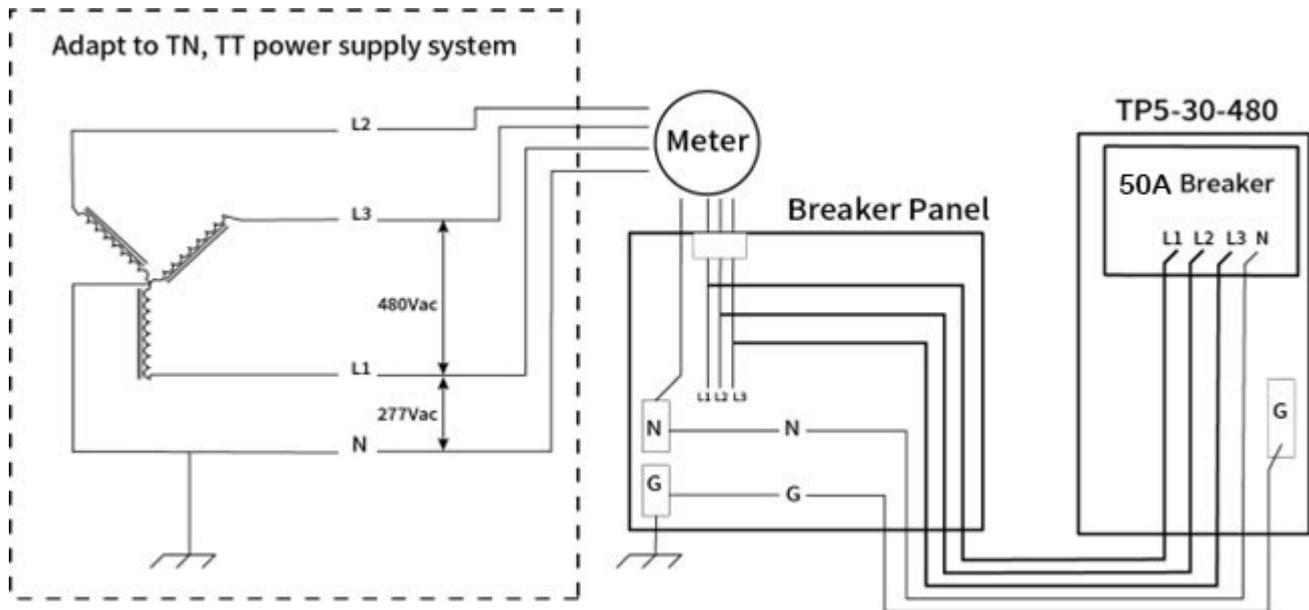
| Power | | TP5-30-480 |
|----------------------------|--|--|
| Maximum Power | | 30kW |
| Output Voltage | | 150 to 1000VDC |
| Max Output Current | | Up to 100A |
| Input Voltage Frequency | | 480VAC (3P+N+PE) 60Hz |
| FLA Breaker Rating | | 40A 50A |
| Rated Power | | 33.2kVA |
| Power Factor | | > 0.98 @ full load |
| Efficiency | | > 94% at nominal power output |
| Connectors | | TP5-30-480 |
| Connector Options | | CCS1 CHAdeMO NACS |
| CCS Cable | | Up to 125A – Air Cooled |
| CHAdeMO Cable | | Up to 125A – Air Cooled |
| NACS Cable | | Up to 250A – Air Cooled |
| Cycle Mode | | 1 x 30kW (Max: 100A) |
| Charging Protocol | | Mode 4, IEC-61851, ISO-15118, DIN SPEC 70121 Mode 4, CHAdeMO 0.9, 1.0 |
| Connector Cable Length | | CCS & NACS & CHAdeMO – 16ft (5m) |

Charger Properties **TP5-30-480**

| | |
|-----------------------------|---------------------------------------|
| Weight | 157lbs (71kg) |
| Dimensions (L x D x H) | 22.44" x 13.41" x 27.55" |
| Display | 7" LCD touch screen |
| Ingress Protection | NEMA 3S (IP54), IK 10 |
| Altitude | < 6,600ft (2,000m) |
| Operating Temperature | -20°C to 55°C (-4°F to 131°F) |
| Working Storage Humidity | ≤ 95% RH ≤ 99% RH (Non-condensing) |
| Insulation (input – output) | > 2.5kV |
| Interface Protocol | OCPP 1.6J |
| Access Control | RFID: ISO/IEC 14443A/B |
| Power Electronics Cooling | Air Cooled |

Compliance & Safety **TP5-30-480**

| | |
|-------------------------------------|---|
| Regulatory Compliance | UL 2202, UL 2231-2 EMC: EN 61000-6-1:2007, EN 61000-6-3:2007/At:2011/AC:2012 |
| Communication Protocol | Ethernet, 4G, Wi-Fi |
| Electrical Safety: GFCI | RCD 20mA Type A |
| Electrical Safety: Surge Protection | 20kA |
| Electrical Safety: General | Over Voltage, Under Voltage, Over Current, Missing Ground |
| Electrical Safety: Output Short | Output power disabled when output is short circuited |
| Electrical Safety: Temperature | Temperature Sensors @ Charge Coupler and Power Electronics |
| Emergency Stop | Emergency stop button disables output power |
| Metering | DC kWh meter |

ADAPTED GRID SYSTEM

INSTALLATION OVERVIEW

| | | |
|--------------------------------------|---|--|
| Electrical Input Requirements | Input voltage: 480Y VAC (3 Phase + Neutral + Earth), 60Hz | |
| | Full Load Amperage: 40 Amps (At Rated power) | |
| | Breaker Capacity: 50 Amps | |
| Location | These chargers can be installed on any stable wall or any pole structure with appropriate brackets. The input cable provision is provided from the bottom the charger . The height of the bottom mounting holes on the wall charger back panel should be 3.5 feet from the floor. | |
| | Charger Dimensions (L X D X H): | wall mount: 22.44" x 13.41" x 27.56" |
| | | pedestal mount: 22.44" x 18.13" x 63.09" |
| Mounting | Wall Mount / Pedestal Mount | |
| Cables | Input Cables must be Copper (3P+N+PE). Flexible copper is preferred. | |
| | Depending on the situation and cable type, the cables must be embedded in the ground with the proper cable ducts. | |
| Grounding | Reliable, protective grounding must be provided at all times. It is recommended to have a separate, dedicated ground exclusively for the charger in order to ensure the highest degree of safety. The ground resistance should be less than or equal to 4Ω.Copper cable in accordance with the NEC shall be used to connect charger housing to the external ground. | |

INSTALLATION OVERVIEW

| | |
|-------------------------|--|
| Breaker | Breaker (3P+N) with suitable current capacity depending up on the charger rating to be provided. This shall be in accordance with NEC, typically 1.25 X Full Load Amperage. |
| Miscellaneous | Copper lugs (Flat type) for input cable and earth cable should be provided based on size of cable. |
| Additional notes | Do not let any flammable or explosive chemicals, vapors, and/or other dangerous goods within close proximity of the charger |
| | The charger is rated IP54. In areas which see flooding, heavy rain, storms, snow, or other harsh weather conditions, ChargeTronix recommends erecting a canopy over and above the charger for the equipment' s protection. |
| | Confirm beforehand that the intended installation site has a load capacity sufficient to support this equipment. |
| | Charging cable length will vary between 13 ft. and 16 ft., depending on options. |

RECOMMENDED CABLE GAUGE

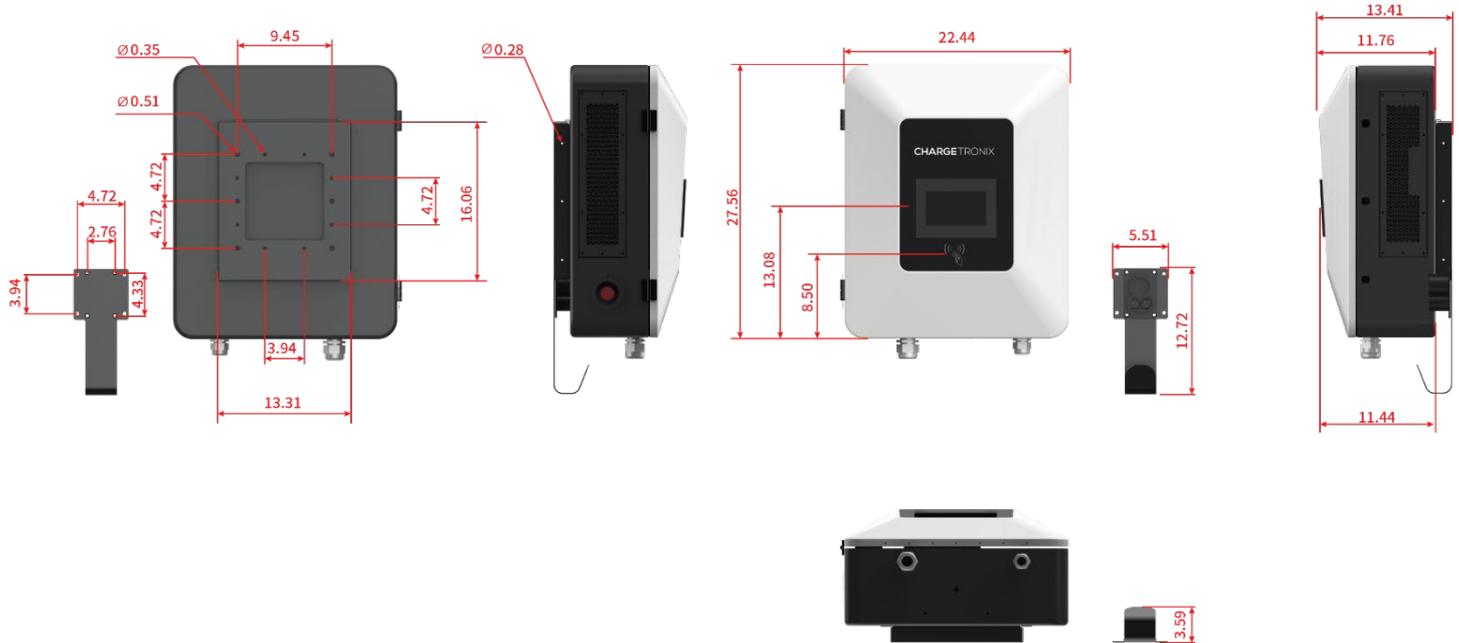
| Capacity | FLA(Amps) | Breaker(Amps) | AWG |
|----------|-----------|---------------|---------|
| 30kW | 40 | 50 | 8 |
| 60kW | 80 | 100 | 2 |
| 120kW | 160 | 200 | 3/0 |
| 160kW | 215 | 270 | 300MCM |
| 180kW | 240 | 300 | 350MCM |
| 200kW | 265 | 335 | 400MCM |
| 240kW | 320 | 400 | 600MCM |
| 300kW | 400 | 500 | 900MCM |
| 360kW | 480 | 600 | 1500MCM |

BOX CONTENTS

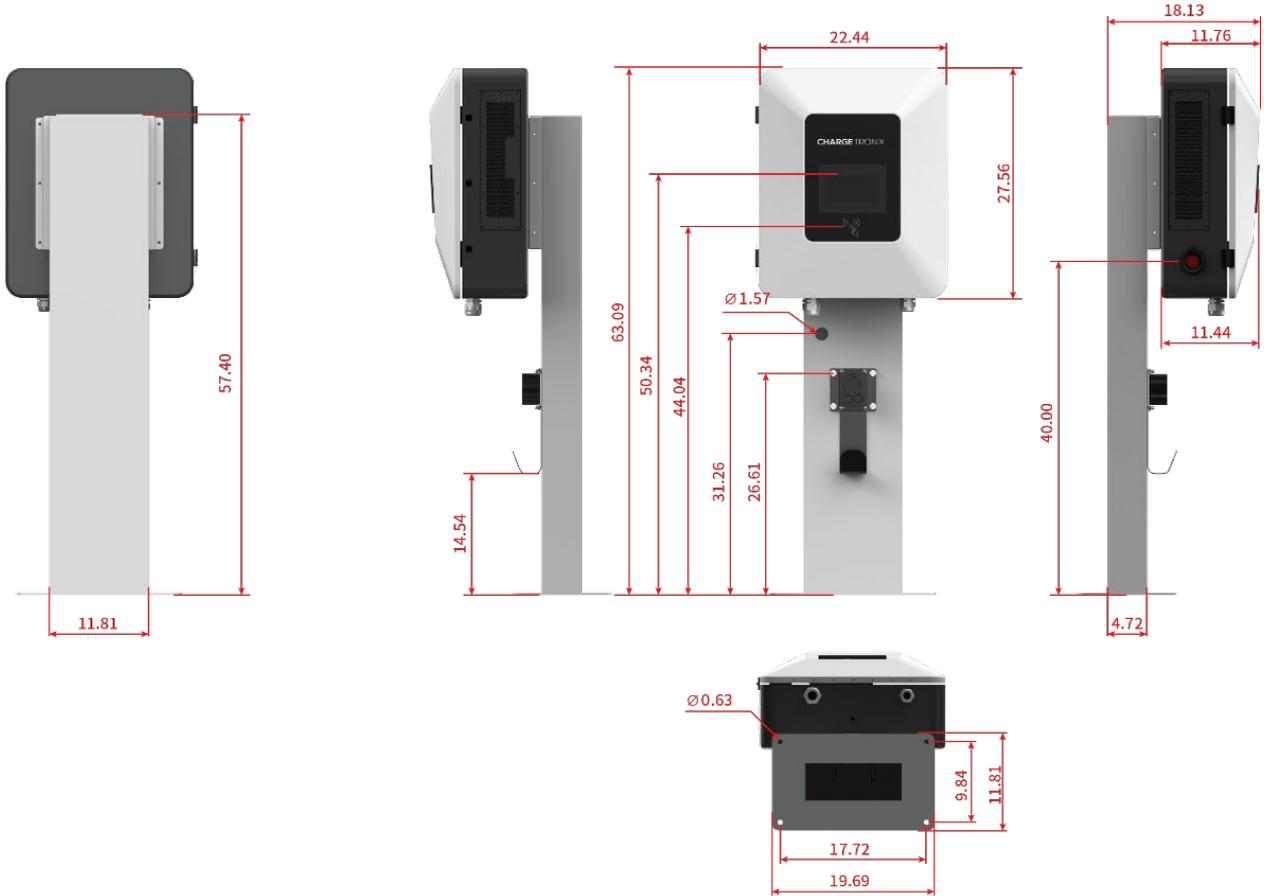
| Item | Quaifity |
|---|----------|
| Intelligent charger | 1 |
| Charging gun holder | 1 |
| Cable winder | 1 |
| Bolt M8 *70 | 4 |
| Bolt M10 *120 | 6 |
| Flat Head Screws M6*16 Fixed gun holder and cable winder | 4 |
| Screw nut | 4 |
| Key | 2 |
| Charging Card | 3 |
| Certificate | 1 |
| Factory inspection report | 1 |
| Pedestal Item | Quaifity |
| Screw M8*12 | 12 |
| Bolt M14 *100 | 4 |
| Pedestal | 1 |

| | | | | | |
|---|--|---|--|--|--|
| Charging gun holder | | Flat Head Screws M6*16 | | Certificate | |
|  | |  | |  | |
| Cable winder | | screw nut | | factory inspection report | |
|  | |  | |  | |
| Bolt M8 *70 | | Bolt M10 *120 | | Charging Card | |
|  | |  | |  | |
| Pedestal | | Bolt M14 *100 | | Screws M8 *12 | |
|  | |  | |  | |
|  | | | | | |

OUTLINE OF DRAWING - WALL MOUNT



OUTLINE OF DRAWING - PEDESTAL MOUNT



CHARGER ANATOMY

Screen

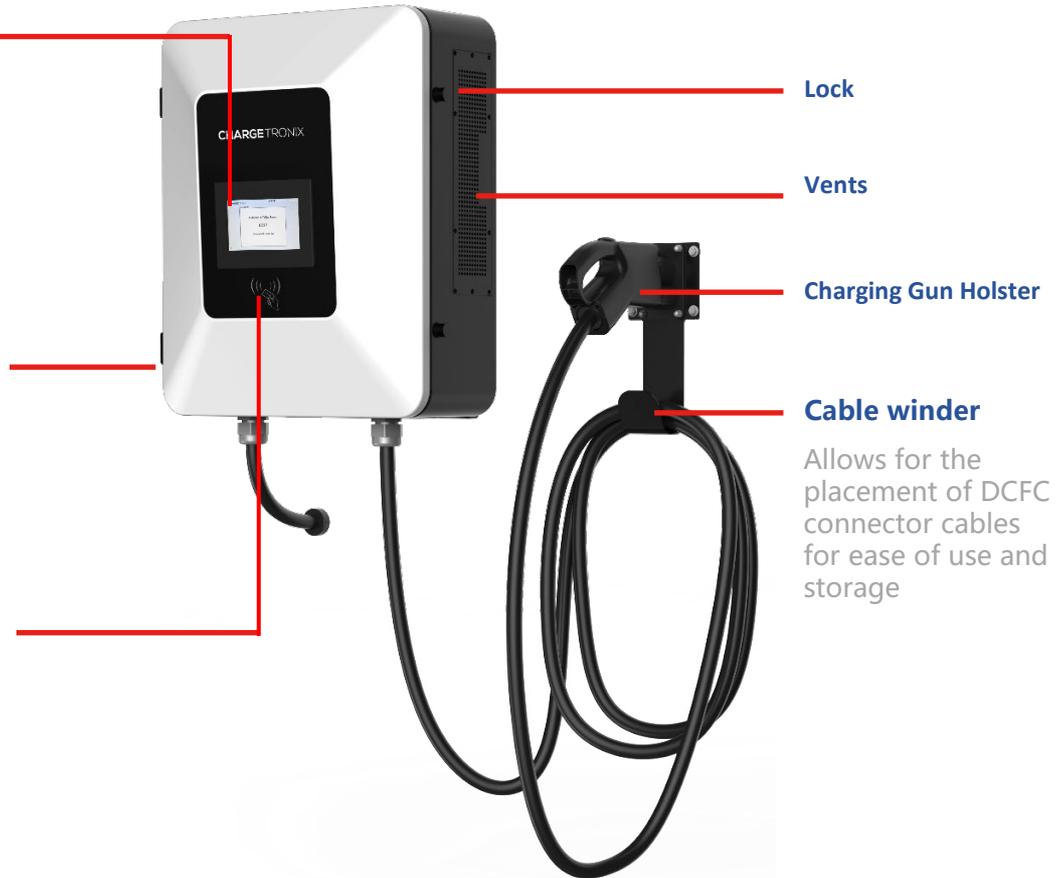
Touchscreen display provides real-time instructions and feedback to EV drivers about services available, payment options, and any errors

Emergency Stop Button

Safety Measure: If pressed, all charging activity will be stopped immediately

Encrypted RFID Reader

An RFID reader that identifies EV drivers when they place their RFID card on the pad



Cable winder

Allows for the placement of DCFC connector cables for ease of use and storage

INSTALLATION TOOL

The following tools may be needed

- Short driver handle (for standard bits).
- Right-angle driver ratchet (for standard bits).
- Set of SAE wrenches.
- Hole cutting drill bits to match conduit size.
- Spirit Level.

The following hardware may also be needed

- Wall anchors and fasteners.
- Washers.
- Pad mount concrete anchors.
- Anchor security hardware.

PLACING CHARGER ON THE WALL

A forklift will be required to move the charger into position. The charger will weigh approximately 240 lbs. The charger weight without the crate weighs approximately 176 lbs.

To lift the charger, use the forklift cut-outs in the lower frame of the charger. The charger will be provided with a mounting bracket, located on the rear of the charge. The mounting bracket comes with holes that are to be used during placement of the station.

Mounting screws are included in the delivery package and should be used on a brick or concrete wall to ensure appropriate support.

WALL MOUNT INSTALLATION

Step 1

Remove the screws on both sides of the installation backplane and take off the installation backplane, Save the screws for later installation.



Step 2

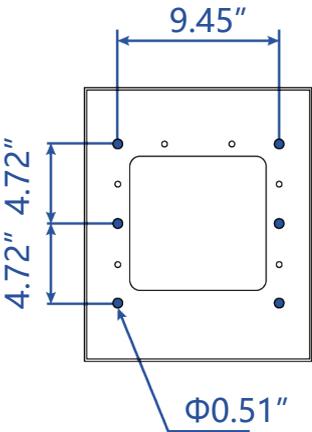
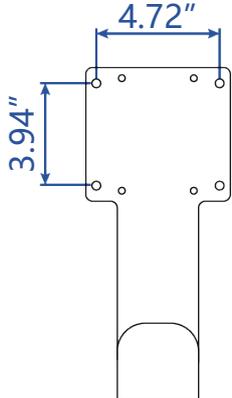
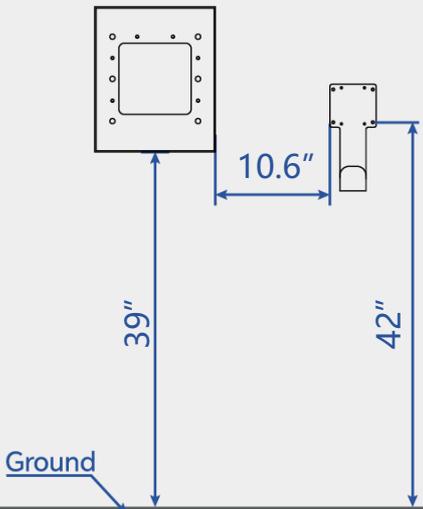
Fix the charging gun seat on the winder.

M6*16 flat head screws and nuts.



WALL MOUNT INSTALLATION**Step 3**

Drill holes on the wall according to the hole position of the backplane and the cable winder.

| | | |
|---|---|--|
| <p>Bolt M10*120</p>  <p>Use a 15/32" drill to drill a hole in the wall with a depth of 5.12" .</p> | <p>Bolt M8*70</p>  <p>Use a 25/64" drill bit to drill a hole with a depth of 3.15" in the wall.</p> | <p>Recommended installation distance between backplane and cable winder (Decide the installation height according to your needs)</p>  <p>Ground</p> |
|---|---|--|

WALL MOUNT INSTALLATION

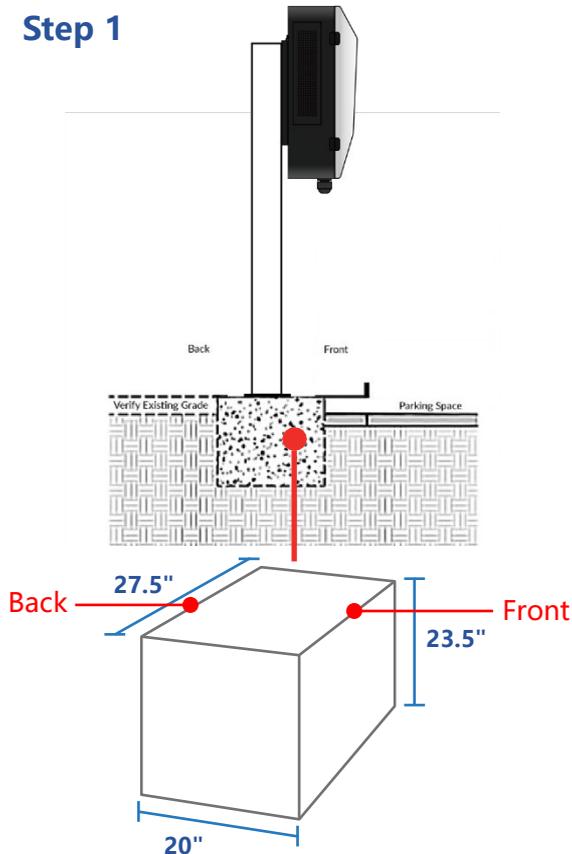
Step 5

Hang the charging pile on the installed backboard, align the upper hole slot, install the six screws on both sides.



PEDESTAL MOUNT INSTALLATION

Step 1



CONCRETE PAD

A concrete pad using 3,000 to 4,000 psi concrete should be used. Electrical for AC power should be positioned such that it exits the concrete pad at the Main AC Power Line Opening.

Important things to note

- When making the installation platform, a PVC pipe with a diameter of 100mm is pre-buried, and steel wires are reserved in the PVC pipe for the convenience of wiring.
- The reserved position of the PVC pipe corresponds to the position of the cable inlet at the bottom of the charging pile
- The dimensions of the concrete foundation will need to be determined according to the local jurisdiction. The reference foundation is 23.5 " deep below ground, Foundation fabrication uses steel bars in accordance with relevant standards. Concrete decks can be level with the ground or raised as you wish. Recommended 5/8 " threaded rebar.

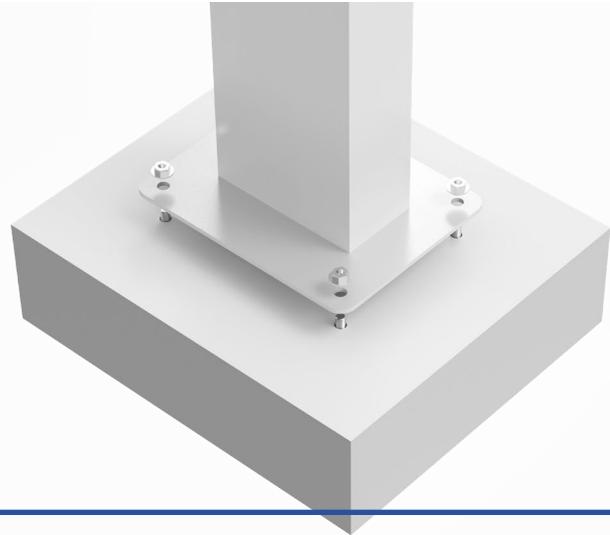
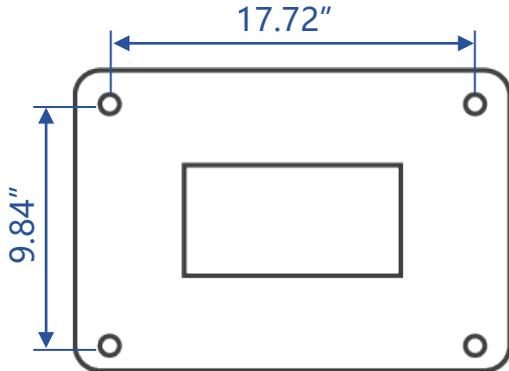
PEDESTAL MOUNT INSTALLATION

Step 2

Select the installation position of the product on the ground and determine the hole position. Next, use a hammer drill to drill the holes.

The ground holes are 0.71" in diameter and 4.33" — 4.72" in depth.

M14*100



PEDESTAL MOUNT INSTALLATION

Step 3

Remove the screws on both sides of the installation backplane and take off the installation backplane. Save the screws for later installation.



Step 4

Fix the charging gun seat on the winder.

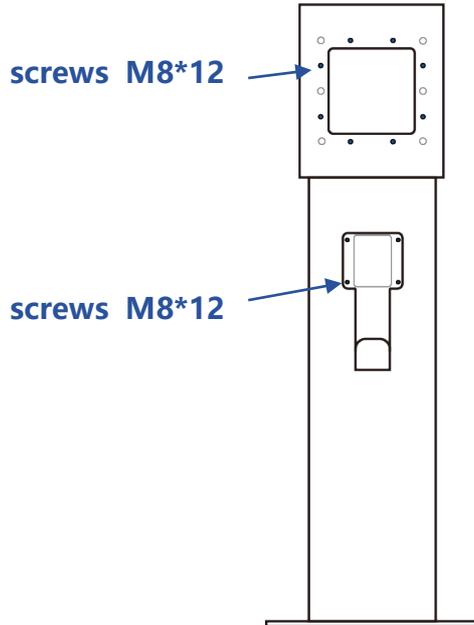
M6*16 flat head screws and nuts.



PEDESTAL MOUNT INSTALLATION

Step 5

Install the installation backplane and the winding hook on the column, and fix the screws.



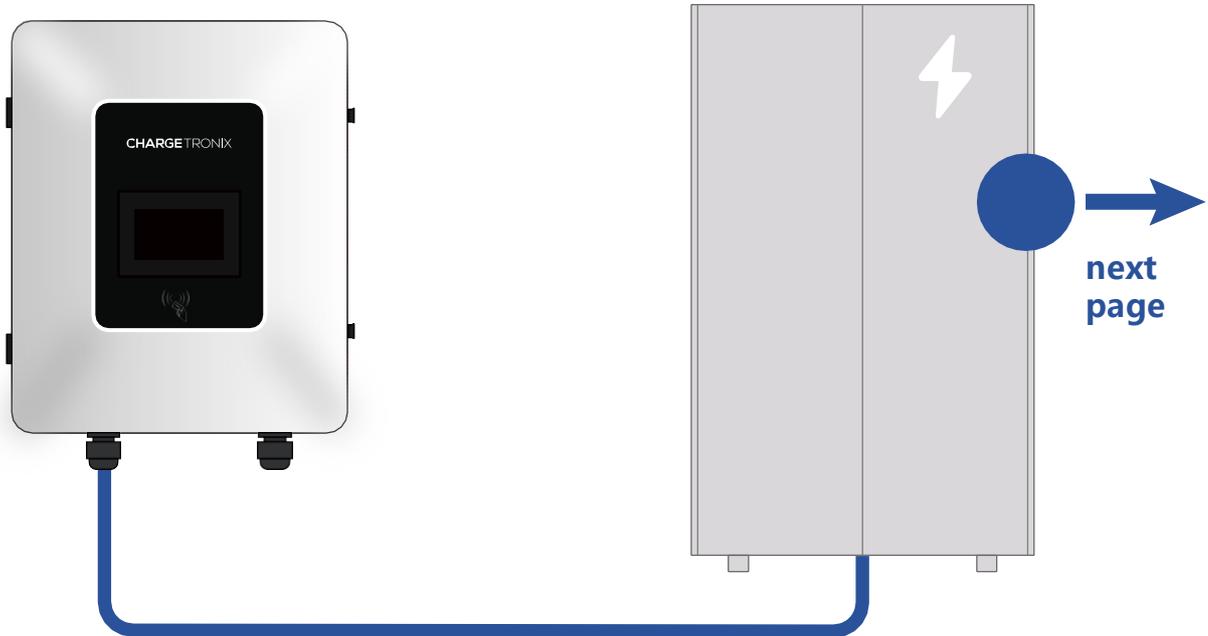
Step 6

Hang the charging pile on the installed backboard, align the upper hole slot, Install the six screws on both sides



INPUT CABLE INSTALLATION**Step 7**

The input cable is connected to the plastic case circuit breaker and grounding copper bar in the charging pile from the local power distribution network.



INPUT CABLE INSTALLATION

Use a 50A circuit breaker, The wire diameter is greater than 8AWG .

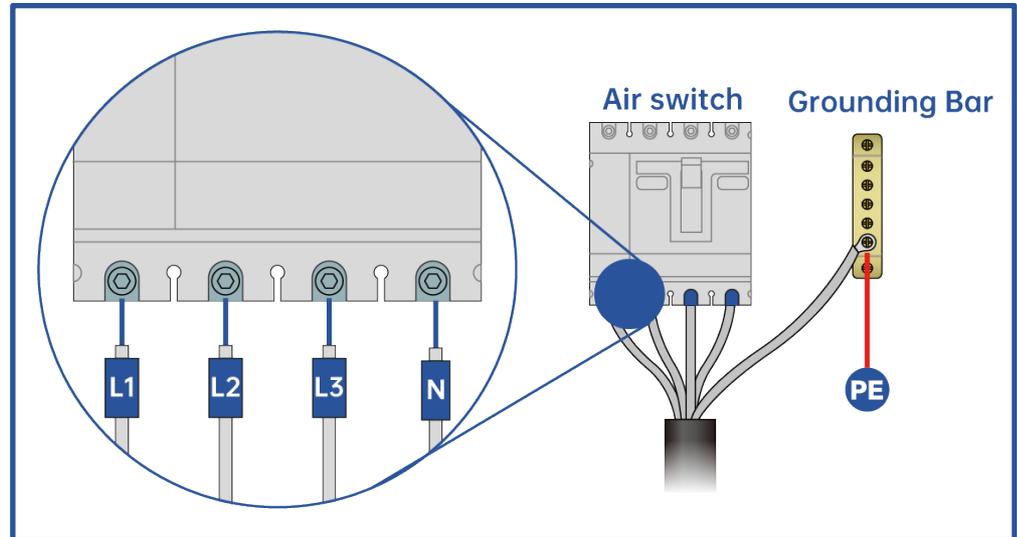
INPUT VOLTAGE

The charger requires an input voltage of 480 VAC (3 Phase + Neutral + Earth), 60Hz, and a current of 40 amps.

AC Input Termination

MAIN BREAKER

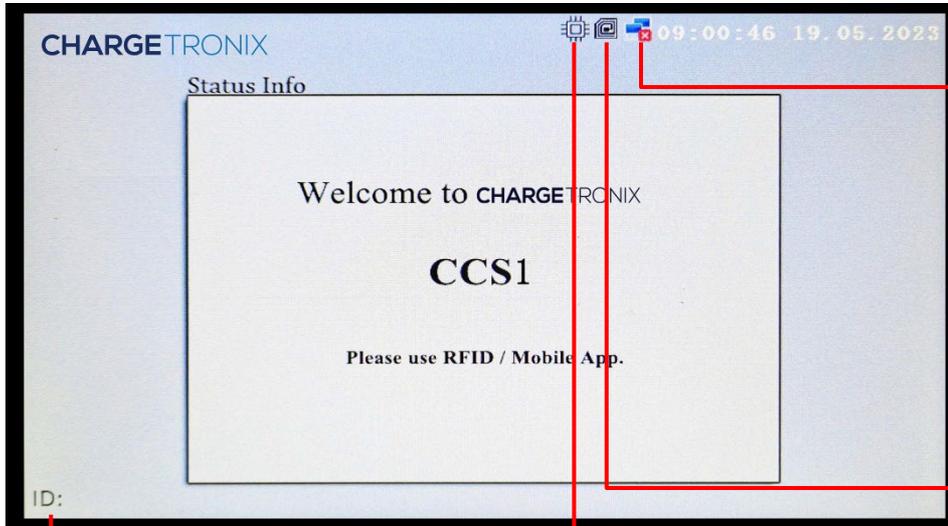
- ABC are the 3 Phase lines.
- N is the Neutral .
- PE is the Protective Earth, or Ground.



CHARGER SETTINGS

Setting Parameters

During the initial installation, the setting parameters must be set by the manufacturer, operating partner, or service partner. Changes may only be made by trained personnel.



Click the “logo” to enter the background login interface.



The icon indicates if the cradle is connected to a server network. If no network is connected, the station works as a stand-alone device with ChargeTronix RFID cards.



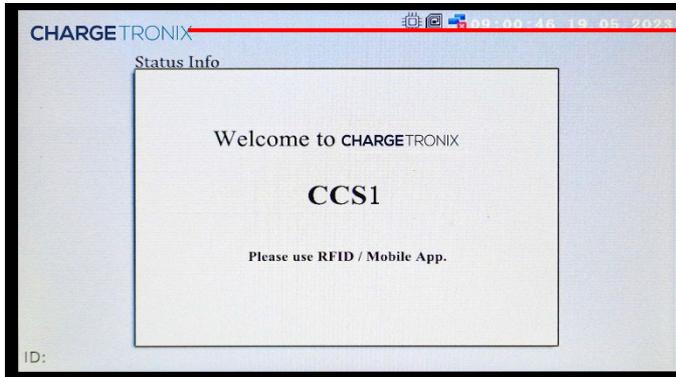
The network is connected, it can only be unlocked with registered RFID cards.

Card version

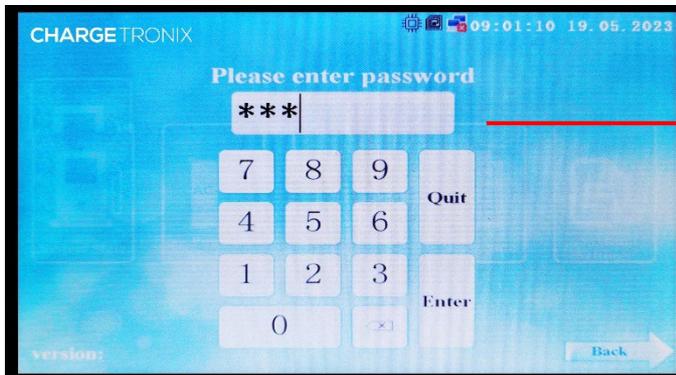
CM board

The lower left corner of the screen shows the device number.

CHARGER SETTINGS



Click the "logo" to enter the background login interface.



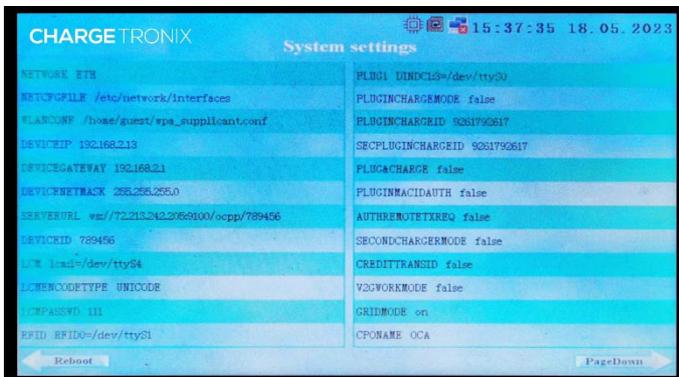
Enter the password to enter the background configuration parameter page.

Password will be shared with the authorized representative.

CHARGER SETTINGS



Click "System Settings" to start configuring parameters.



CHARGER SETTINGS

- If you need to connect to other platforms, you must change the following items, and change the corresponding parameters according to your needs.
- DEVICEID : Refer to charging pile nameplate.

DEVICEIP

DEVICEGATEWAY

DEYICENETMASK

SERYERURL

DEVICEID

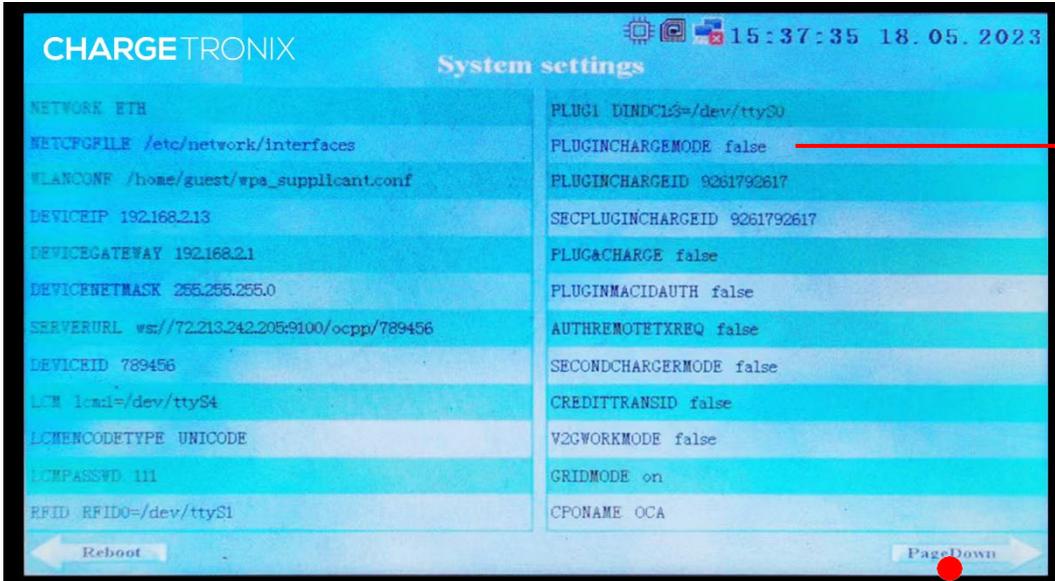
```
CHARGE TRONIX System settings 15:37:35 18.05.2023

NETWORK ETH
NETCFGFILE /etc/network/interfaces
WLANCONF /home/guest/wpa_supplicant.conf
DEVICEIP 192.168.2.13
DEVICEGATEWAY 192.168.2.1
DEYICENETMASK 255.255.255.0
SERVERURL ws://72.213.242.205:9100/ocpp/789456
DEVICEID 789456
L1M load1=/dev/ttyS4
LCMENCODETYPE UNICODE
LCMPASSWD 111
RFID RFID0=/dev/ttyS1

PLUG1 DINDCL3=/dev/tty30
PLUGINCHARGE MODE false
PLUGINCHARGEID 9261792617
SECPLUGINCHARGEID 9261792617
PLUG&CHARGE false
PLUGINMACIDAUTH false
AUTHREMO TETXREQ false
SECONDCHARGERMODE false
CREDITTRANSID false
V2GWORKMODE false
GRIDMODE on
CPONAME OCA

Reboot PageDown
```

CHARGER SETTINGS

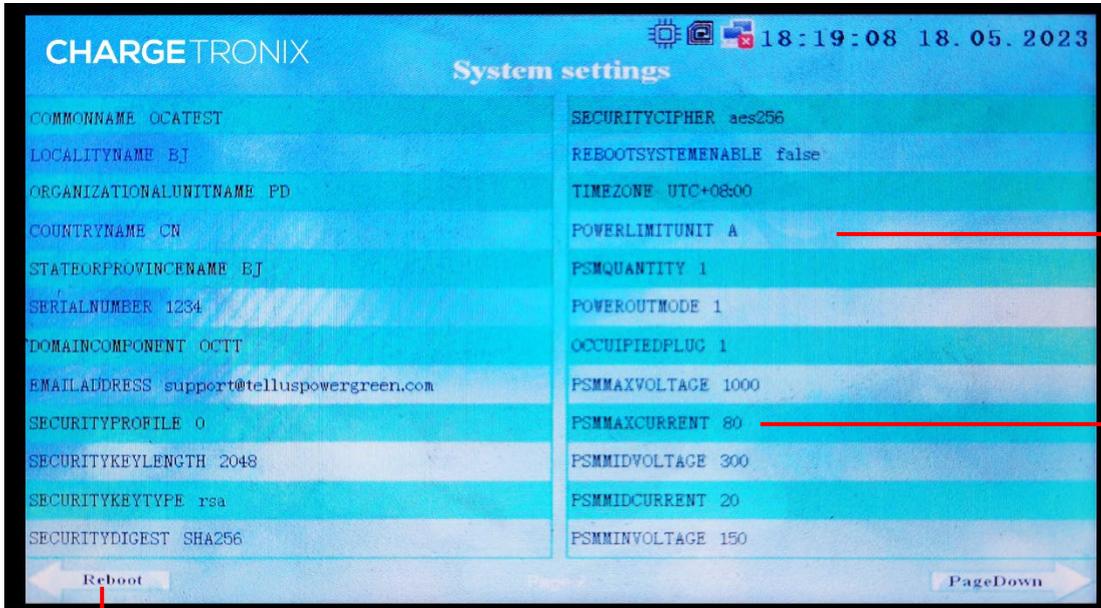
**PLUGINCHARGEMODE**

You can choose to open or close. If you choose to open, you need to click and enter "true" and then click "reboot" in the lower left corner to write successfully.

Click "PageDown"

CHARGER SETTINGS

Two ways to limit power—Limit current



1 Limit current

Click "POVERLIMITUNIT"



Enter the capital letter "A"



Click "PSMMAXCURRENT"

(limit the maximum current according to the parameters written on the nameplate of the charging pile)



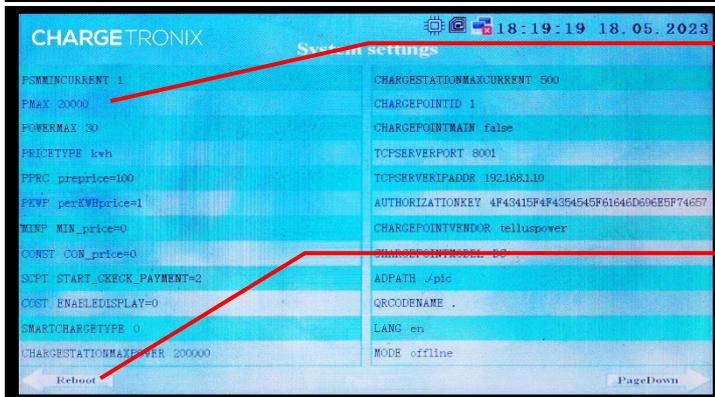
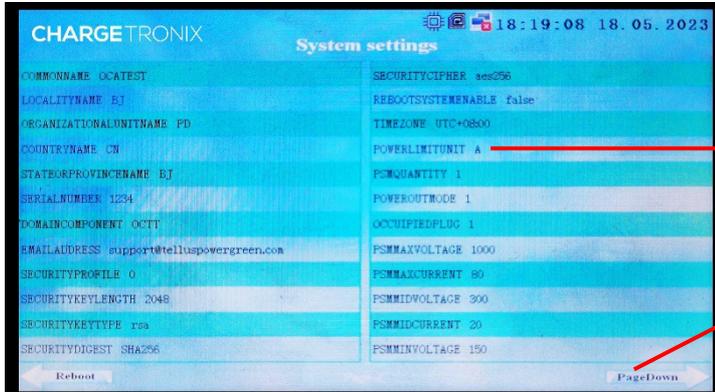
Click "reboot"



Write successfully.

CHARGER SETTINGS

Two ways to limit power—Limit power



② Limit power

Click "POVERLIMITUNIT"

Enter the capital letter "W"

Click "PageDown"

Click "PMAx"

(Set specific parameters according to the charging pile module . Note that the unit is W)

Click "reboot"

Write successfully.

CHARGER SETTINGS

| S.NO | PARAMETERS | VALUE | REMARKS |
|------|---------------|--|--|
| 1 | NETWORK | ETH | Ethernet, WLAN-wi-fi DO NOT CHANGE |
| 2 | NETCFGFILE | /etc/network/interfaces | Path- DO NOT CHANGE |
| 3 | WLANCONF | /home/guest/wpa_supplicant.conf | Path-DO NOT CHANGE |
| 4 | DEVICEIP | 192.168.2.13 | IP Address of Device |
| 5 | DEVICEGATEWAY | 192.168.2.1 | IP Address of Gateway |
| 6 | DEVICENETMASK | 255.255.255.0 | IP Address of mask |
| 7 | SERVERURL | ws://39.101.71.153:30042/center/cp/SONG001 | Server Address of OCPP |
| 8 | DEVICEID | 2020060510 | Device ID |
| 9 | LCM | lcm:1=/dev/ttyS4 | Screen and device communication serial port Settings |
| 10 | LCMENCODETYPE | UNICODE | Screen display coding |
| 11 | LCMPASSWD | XXX | Set the password on the screen |
| 12 | RFID | RFID0=/dev/ttyS1 | Swipe card board communication port |
| 13 | PLUG1 | GBTDC1:3=/dev/ttyS0 | Connector 1 configuration |

CHARGER SETTINGS

| S.NO | PARAMETERS | VALUE | REMARKS |
|------|------------------------|---------|---|
| 14 | PLUGINCHARGEMODE | false | Whether the charging gun mode is configured locally |
| 15 | PLUGINCHARGEID | / | NA |
| 16 | SECPLUGINCHARGEID | / | NA |
| 17 | PLUG&CHARGE | / | NA |
| 18 | PLUGINMACIDAUTH | false | PLC MAC certification |
| 19 | AUTHREMOETXREQ | false | Whether to send back authentication information |
| 20 | SECONDCHARGERMODE | false | Select whether to enable the charging mode |
| 21 | CREDITTRANSID | false | Whether to use trans of the remote pos machine |
| 22 | V2GWORKMODE | false | V2G workign mode |
| 23 | GRIDMODE | / | NA |
| 24 | CPONAME | OCA | Charging alliance |
| 25 | COMMONNAME | OCATEST | SSL CA parameters |
| 26 | LOCALITYNAME | BJ | SSL CA parameters |
| 27 | ORGANIZATIONALUNITNAME | PD | SSL CA parameters |
| 28 | COUNTRYNAME | CN | SSL CA parameters |

CHARGER SETTINGS

| S.NO | PARAMETERS | VALUE | REMARKS |
|------|---------------------|-------------------|---|
| 29 | STATEORPROVINCENAME | BJ | SSL CA parameters |
| 30 | SERIALNUMBER | / | NA |
| 31 | DOMAINCOMPONENT | OCTT | SSL CA parameters |
| 32 | EMAILADDRESS | @ChargeTronix.com | SSL CA parameters |
| 33 | SECURITYPROFILE | 0 | Whether to encrypt user passwords |
| 34 | SECURITYKEYLENGTH | 2048 | ssl key lenth |
| 35 | SECURITYKEYTYPE | rsa | Encryption type |
| 36 | SECURITYDIGEST | SHA256 | Certificate summary Complete verification rule |
| 37 | SECURITYCIPHER | aes256 | Certificate encryption type |
| 38 | REBOOTSYSTEMENABLE | false | Restarting the system enabled |
| 39 | TIMEZONE | UTC+08:00 | timezone |
| 40 | POWERLIMITUNIT | A | Power limit type A-current, W-watt |
| 41 | PSMQUANTITY | 1 | Output power current coefficient |
| 42 | POWEROUTMODE | / | NA |

CHARGER SETTINGS

| S.NO | PARAMETERS | VALUE | REMARKS |
|------|---------------|-------|--|
| 43 | OCCUPIEDPLUG | 1 | single connector number |
| 44 | PSMMAXVOLTAGE | 1000 | Maximum voltage of the power module |
| 45 | PSMMAXCURRENT | 80 | Maximum current of the power module |
| 46 | PSMMIDVOLTAGE | 300 | Normal voltage of the power module |
| 47 | PSMMIDCURRENT | 20 | Normal current of the power module |
| 48 | PSMMINVOLTAGE | 150 | minimum voltage of the power module |
| 49 | PSMMINCURRENT | 1 | minimum current of the power module |
| 50 | PMAX | 30000 | Maximum output power, amperes or watts |
| 51 | POWERMAX | 30 | Billing type |
| 52 | PRICETYPE | kwh | Billing type |
| 53 | PPRC | / | NA |
| 54 | PKWP | / | NA |
| 55 | MINP | / | NA |

CHARGER SETTINGS

| S.NO | PARAMETERS | VALUE | REMARKS |
|------|-------------------------|--|---|
| 56 | CONST | / | NA |
| 57 | SCPT | / | NA |
| 58 | COST | ENABLEDISPLAY=0 | Whether the screen displays consumption information |
| 59 | SMARTCHARGETYPE | 0 | Intelligent charging type, 0-ocpp |
| 60 | CHARGESTATIONMAXPOWER | 200000 | Maximum power of the charger |
| 61 | CHARGESTATIONMAXCURRENT | 500 | Maximum current of the charger |
| 62 | CHARGEPOINTID | / | NA |
| 63 | CHARGEPOINTMAIN | / | NA |
| 64 | TCPSERVERPORT | / | NA |
| 65 | TCPSERVERIPADDR | / | NA |
| 66 | AUTHORIZATIONKEY | 4F43415F4F4354545F61646D 696E5F74657374 | Server login authentication code |
| 67 | CHARGEPOINTVENDOR | ChargeTronix | CPO ID |
| 68 | CHARGEPOINTMODEL | DC | charger type, DC--fast charging station |

CHARGER SETTINGS

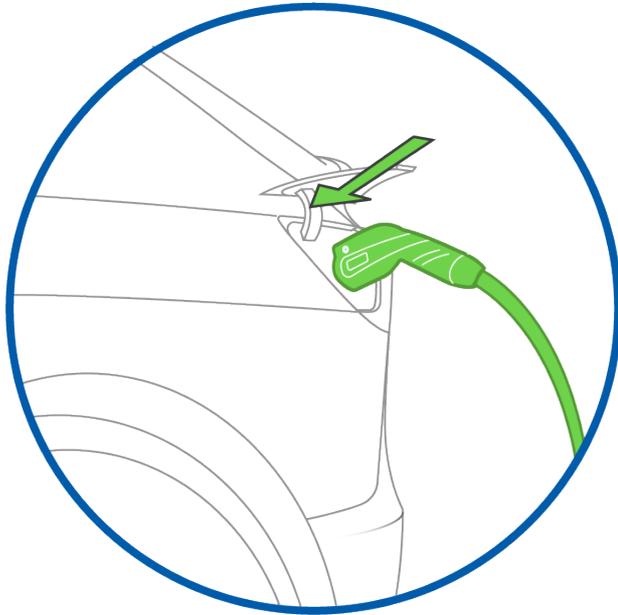
| S.NO | PARAMETERS | VALUE | REMARKS |
|------|--------------------|---------------|---------------------------------------|
| 69 | ADPATH | / | NA |
| 70 | QRCODENAME | / | NA |
| 71 | LANG | en | language setting |
| 72 | MODE | / | NA |
| 73 | APN | / | NA |
| 74 | CHARGINGPIC | / | NA |
| 75 | IDELPIC | / | NA |
| 76 | DC1QRCODENAME | / | NA |
| 77 | RFIDORIGINALNUMBER | 1 | Swipe data receiving type |
| 78 | SFTPHOST | 47.94.107.196 | sftp uploading server address |
| 79 | SFTPUSERNAME | root | sftp uploading user name |
| 80 | SFTPPASSWORD | Yue@Peng#ju | sftp uploading password |
| 81 | SFTPPORT | 20002 | sftp port number of the upload server |

CHARGER SETTINGS

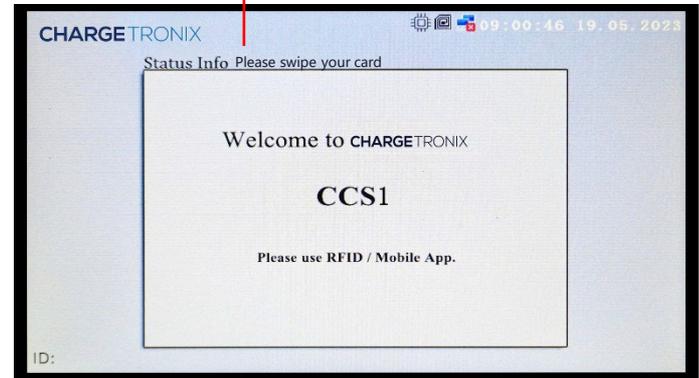
| S.NO | PARAMETERS | VALUE | REMARKS |
|------|-------------------|----------------------|-----------------------------------|
| 82 | ICCID | 89882280666023280757 | 4G modem iccid code |
| 83 | IMSI | 89882280666023280757 | 4G modem IMSI code |
| 84 | METERSERIALNUMBER | / | NA |
| 85 | METERTYPE | DC | ocpp protocol field Type of meter |
| 86 | CCSNETWORK1 | / | NA |
| 87 | INSYSPLCMAC1 | / | NA |

HOW TO START A CHARGING SESSION

01. Please select the connector compatible to your EV. Plug in the connector.
02. After the charging cable is plugged in, it will display "connected", click "connected".



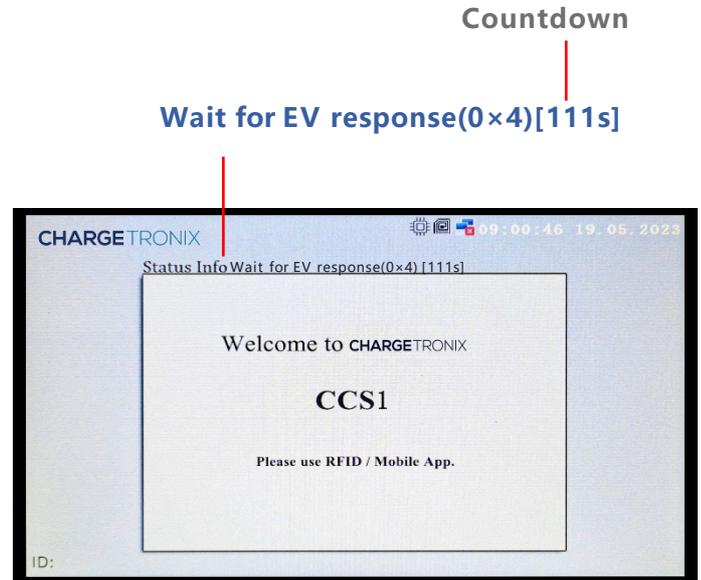
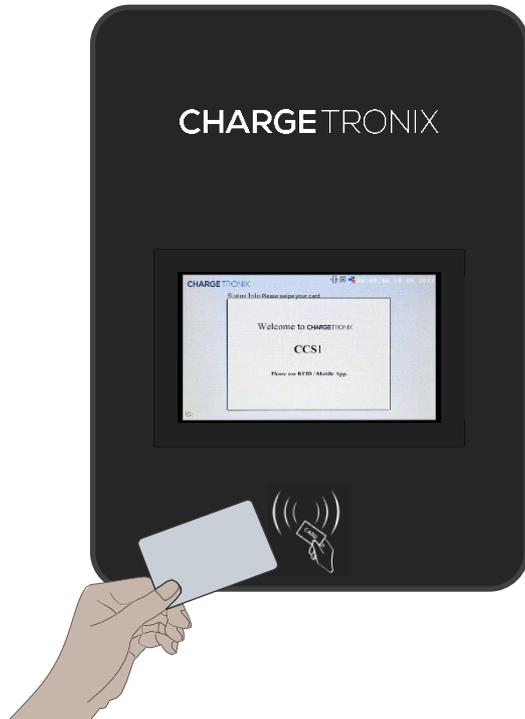
Please swipe your card



HOW TO START A CHARGING SESSION

3. Swipe the card.

4. wait about 30 seconds, then start charging.



HOW TO START A CHARGING SESSION

5. Start charging.



Charging-----[TO FULL]

User No. :ID card number

Start Time :Date and time to start charging

Voltage :Real-time voltage display

Current :Real-time current display

Time :Display charging time

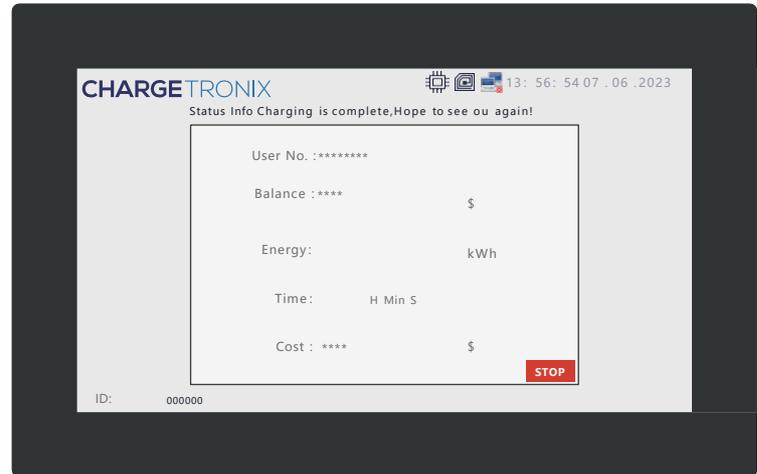
Remaining Time :The time it takes to fully charge

HOW TO START A CHARGING SESSION

6. Swipe the card to end charging. (Notice! Only after swiping the card can the charging gun be removed from the car) .

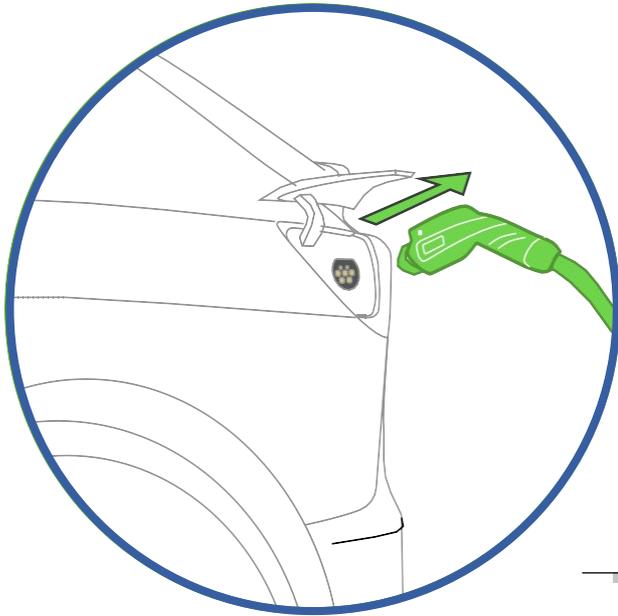


Swipe the card to end charging, or click "stop", the interface will jump to the end interface, and the interface will display charging information and deduction information.



HOW TO START A CHARGING SESSION

7. Take the charging cable out of the car.



Complete charging



MAINTENANCE AND SERVICE

DANGER

READ AND FOLLOW THE SAFETY CONCERNS AT THE BEGINNING OF THIS MANUAL BEFORE USING THIS DEVICE.

EV Charging Stations require regular maintenance beyond installation to ensure the charge quality of the vehicle, and the continued value of your electric vehicle. Whether you are installing a personal EV charger, or a public one for use, eventually you will require repair or maintenance services to keep your system working without flaws.

MAINTENANCE PRECAUTIONS

Each of the capacitors in this device have a high voltage for a time after shutting off the input power supply. Allow 1 minute after powering down before servicing internal components.

MAINTENANCE ITEMS

Perform periodic checks every 3 to 6 months based on the site conditions and the usage of the charging station.

1. Check the input voltage and ensure it is within the acceptable limits.
2. Check the Ground / Earth resistance and ensure it is within the acceptable limits
3. Clean the Air Filter periodically
4. Make sure that Power Module lights are solid green ONLY.
5. Ensure the charging cables are not worn out and gun pins are clean.
6. Make sure all the air-cooling fans are working normally.

MAINTENANCE AND SERVICE

VISUAL CHECK ITEMS

1. **Check for abnormal sounds from running fans and power units.** If there is any abnormal sound, please don't make assumptions! Call us for further assistance.
2. **Check for abnormal odor, changes of inner materials, corrosion, anomaly in appearance, etc., in this device.** If there are any anomalies, please don't make assumptions; call us for further assistance!
3. **Check for dust and dirt in this device regularly.** The air filters on the doors can be removed and cleaned using a vacuum cleaner or air blower. The cabinet can be cleaned using a vacuum cleaner. The dust on the components can be cleaned using a soft cloth. Please pay extra attention while using the vacuum cleaner, it should not apply pressure on the control boards or any components.

REPLACEMENT OF FIXED-LIFE COMPONENTS

To prevent the device from failure due to worn out components, it is necessary to replace the components before they reach the end of their lifespan. Use the following replacement intervals as a guideline for the estimate of the total running time. Please don't make assumptions, call us! for further assistance when you replace the parts.

- Intake and exhaust air filters (if present): Approximately three (3) years. The period depends upon the site conditions.
- Please keep in mind that the replacement interval of each part can vary depending on, for example, the usage environment of the device.

TROUBLESHOOTING

ERROR CODES

If an error occurs, check the nature of the error by referring to following Error Code List and take appropriate actions according to instructions by the manufacturer.

| ERROR | DESCRIPTION | POSSIBLE SOLUTION |
|--------------|---|---|
| ERROR FLAG 0 | Lightning protection device failure | Check the SPD and GFCI circuit |
| ERROR FLAG 1 | Insulation detection abnormal | The insulation check on the EV has failed. Please try to charge different EV. |
| ERROR FLAG 2 | Abnormal communication between Insulation Monitor and Main Control Board (CM) | Please check the connection between the IM and CM boards. Check the LED lights on the CM and IM |
| ERROR FLAG 3 | Abnormal communication between TR board and CM board | Please check the connection between the tr and cmboards. Check the LED lights on the CM and TR |
| ERROR FLAG 4 | Electronic lock failure | Possible failure of the gun to lock on the EV or the 24v supply voltage |
| ERROR FLAG 5 | Internal use | Reserved |
| ERROR FLAG 6 | Abnormal communication between DC meter and Main Control Board (CM) | Please check the connection between the DC and CM boards. Check the LED lights on the CM and communication lines of DC meter. |

TROUBLESHOOTING

| FAULT TYPE | SOLUTION |
|--|--|
| IP address communication failure or Server Communication Failure | Please check the parameter settings interface IP address information, such as the corresponding IP address is not correct, please re-enter the address, restart the charging station. |
| AC input over voltage / under voltage | Please check the AC input side of the voltage is too high or too low, excluding the input exception if there is a fault, and then check the parameters set the interface set the threshold is correct |
| DC output over voltage / over current | Please check whether the output voltage and current are within the range of parameter settings. If not, please check whether the output voltage, current is too high, or whether the parameter setting is reasonable |
| Card reader failure | The card reader is incorrectly wired, or the card reader is disabled. |
| Insulation fault | Please check whether the DC bus insulation is normal. |
| Monitoring board communication failure | Check whether the monitoring board communication line is correct |
| Charging gun connection failure | Charging gun connection disconnected, please check whether the charging gun is connected properly. |

TROUBLESHOOTING

| FAULT TYPE | SOLUTION |
|---|---|
| The emergency stop button is pressed | Check whether the emergency stop button is pressed, if it is, inspect the charger and if everything is normal, release the emergency button and restore the main breaker. |
| Charging Session shutdown is not successful | MCU board and power module communication failure. Please press emergency stop button to stop the charging. Check the MCU board and power module CAN communication bus. |

PHYSICAL DIAGNOSTICS AT CHARGER/ON SCREEN

Make sure that the 'emergency' button is turned off. Switch ON the charger from the main panel. Switch the Main MCBB and MCB(s) within the charger. Wait for 1 to 2 minutes to boot the machine, and check the three icons in the top-right corner of the charger display.

The icons below will be visible in the top-right corner of the charger screen:



This icon indicates that the charger is not connected to a server network. It can also indicate a loss of internet connectivity. If no network is connected, the charger works as a stand-alone device with ChargeTronix RFID cards.



This icon indicates that the charger is connected to a server network; it can be authorized with registered RFID cards or the mobile app.



This icon indicates the working condition of the charger. If the icon flashes or is not visible on the screen, the controller is inactive.



This icon indicates that the RFID card reader is active. If the icon is not visible on the screen, the RFID reader is inactive.

CUSTOMER RESPONSIBILITIES

1. To operate the charge station with the required protective devices such as MCBs and switches and proper cables installed.
2. The operator/owner/customer is cautioned that any changes or modifications not approved by ChargeTronix shall void ChargeTronix warranty policy
3. To write an emergency plan that instructs people what to do in case of emergency.
4. To locate and prepare the site as per the instructions laid out in this document.
5. To make sure that there is sufficient space around the charger to carry out any regular maintenance work.
6. To appoint a trained person(s) responsible for the safe maintenance/service of the charge station.
7. Neither ChargeTronix nor any of its affiliates shall be liable to the operator/owner/customer of this product or third parties for damages, losses, costs, or expenses incurred by as a result of: an accident, misuse or abuse of this product or unauthorized modifications, repairs or alterations to this product, or failure to strictly comply ChargeTronix operating and maintenance instructions.

WARRANTY AND SERVICE PLAN

ChargeTronix DC chargers comes with the 2 years parts only standard warranty (actual warranty length is subject to sales contract). However, we offer service plans which covers parts and labor as well for an additional add-on fee. We can train your operators or engineers and equip with basic understanding of the troubleshooting and part replacement to make sure the equipment downtime as well as total cost of ownership is minimized.

WARRANTY TERMS

LIMITED WARRANTY: Subject to the exclusions from warranty coverage set forth below, ChargeTronix warrants that the Product will be free from any defects in materials and/or workmanship (the Limited Warranty) for a period of two year after 30 days from the date of shipment or from date of the initial installation whichever is earlier (the Warranty Period). If the Product becomes defective in breach of the Limited Warranty, ChargeTronix will, upon written notice of the defect received during the Warranty Period, either repair or replace, at the choice of ChargeTronix, the Product if it proves to be defective. ChargeTronix will also pay for shipping charges for the failed part. If the returned part has not failed the customer will pay for shipping charges for the replacement part and the associated returned part. Under this guarantee, ChargeTronix liability is limited to repair or replacement of the product with the same or equivalent, or reconditioned product warranted for the original warranty period. The warranty will not include removal costs, reinstallation costs, loss of charging station revenue, nor loss or damage of any kind whatsoever, whether incidental, consequential, or otherwise.

EXCLUSIONS FROM LIMITED WARRANTY

IMPORTANT: The Limited Warranty and your Product shall not apply to defects, or service repairs, resulting from any of the following:

- Damages due to normal wear and tear to charging cords, connectors, LCD/LED display, Touch Screen, or any product alteration or modification, misuse, abuse, accident, vandalism, acts of nature, power surges, or use of software, parts, or supplies not supplied by ChargeTronix, and causes other than manufacturing defects not covered by the warranty.
- Force Majeure – any occurrence or extraordinary event or circumstance beyond the control of ChargeTronix that is an act of God whether that occurrence is caused by war, riot, storm, (such as hurricane, flooding, earthquake, volcanic eruption, etc.), or other natural forces, including high input voltage from generators or lightning strikes or acts of nature or other causes.
- Any alteration or modification of the Product in any way not approved in writing by ChargeTronix.
- Abuse, damage or otherwise being subjected to problems caused by negligence (including but not limited to physical damage from being struck by a vehicle) or misapplication, or misuse of the Products by customers or end users.
- Any damage to the EV charger cord, unless such damage is caused by a manufacturing defect in the cord or connector assembly.

EXCLUSIONS FROM LIMITED WARRANTY

- Improper site preparation or maintenance that has been improperly installed, operated, handled, or used, including use under conditions for which the product was not designed, use in an unsuitable environment, or use in a manner contrary to the ChargeTronix Installation and Operations Manual or applicable laws or regulations.
- Damage because of accidents, extreme power surge, extreme electromagnetic field.
- Use of the Product with software, interfacing, parts or supplies not supplied by ChargeTronix.
- ChargeTronix disclaims any liability for damage to product, property, or personal injury resulting in whole or in part from improper installation, maintenance, or use that is not in accordance with ChargeTronix installation and maintenance procedures.
- Maintenance or use that is not in accordance with ChargeTronix installation and maintenance procedures that has been subjected to incidental or consequential damage caused by defects of other components of the electrical system.

CONTACT US

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For any support on installation and commissioning, please contact below:

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