




## EV400 Series Charging Station



**BOSCH**

en Installation and Operating Instructions for EV400 Charging Station



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**Contents English. . . . .4**

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# 1 Introduction

The EV400 Charging Station is designed for the North American, European, Japanese, and other markets to charge plug-in electric vehicles (PHEV) and battery electric vehicles (BEV).

This document provides instructions for the EV400 Charging Station and is not for use for any other product. Before installation or use of this product, you should review this manual carefully and consult with a licensed contractor, licensed electrician, or trained installation expert to ensure compliance with building codes and safety standards.

# 2 Important Safety Warnings and Cautions

Please read and follow these safety Warnings and Cautions carefully before operating the EV400 Charging Station. Failure to follow these instructions may result in serious injury or property damage.

## SAVE THESE INSTRUCTIONS!



### WARNINGS

- ▶ When using electrical products, basic precautions should always be followed, including the following. This manual contains important instructions for models EL-52503-XXX that shall be followed during installation, operation, and maintenance of the unit.
- ▶ Read all the instructions before using this product.
- ▶ Children should be supervised when this product is used around children.
- ▶ Do not put fingers into the EV connector.
- ▶ Do not install the EV400 near flammable, explosive, or combustible materials. Do not locate or store flammable, explosive, or combustible materials near the EV400.
- ▶ Do not use this product if the flexible power cord or EV cable are frayed, have broken insulation, or display any other signs of damage.
- ▶ Do not use this product if the enclosure or the EV connector is broken, cracked, open, or show any other signs of damage.
- ▶ The EV400 contains no user-serviceable parts. Do not attempt to open, repair, or service the EV400 yourself. Do not attempt access to the internal components of the EV400 unit in any way. Do not tamper with any of the product labeling and/or the clear back overlay that is meant for Bosch technical maintenance personnel only. If the EV400 requires servicing, contact Bosch.
- ▶ Disconnect main service power to the EV400 before cleaning the unit. Do not use cleaning solvents to clean any part of the EV400. Clean enclosure, cable, and connector with a clean, dry cloth to remove dust and dirt accumulation.

- ▶ Disconnect main service supply or unplug unit to achieve electrical isolation.
- ▶ If the EV400 fails to operate correctly in accordance with the operation manual, do not use this device. Contact Bosch for repair or replacement.
- ▶ Improper installation of the EV400 can result in personal injury or product damage.
- ▶ This EV400 installation guide is not a substitute for electrical safety precautions.
- ▶ Use this EV400 within the specified operating parameters. Failure to do so may result in injury or death.
- ▶ Locate and install this EV400 in a location where the charge cable will not be stepped on, tripped over, or subject to damage or stress.
- ▶ The EV400 must be connected to a grounded, metal, permanent wiring system, or an equipment-grounding conductor must be run with the circuit conductors and connected to the equipment-grounding terminal on the EV400.
- ▶ DO NOT USE AN EXTENSION CORD ON THE EV400. This can cause a shorting or over-heating condition that could lead to injury or death.



### CAUTIONS

- ▶ Incorrect installation of the EV400 can result in damage to the vehicle's battery and to the EV400 itself. These damages will void the warranty for the vehicle and the EV400.
- ▶ Do not operate the EV400 in temperatures beyond its operating range of -31°F to +122°F (-35°C to +50°C).

## 3 Regulatory Information

### 3.1 Environmental Considerations

At the end of service life, the EV400 should be recycled according to local laws and regulations.

### 3.2 Product Specification

All EV400 specifications and descriptions are accurate at the time of this document's printing. We always strive to constantly improve and update our products. Bosch reserves the right to make changes at any time, without notice and without obligation.

### 3.3 Radio and Television Interference

The equipment described in this manual has been designed to protect against Radio Frequency Interference (RFI). However, there are some instances where high-powered radio signals or nearby RF-producing equipment (such as digital phones, RF communications equipment, etc.) could affect EV400 operations. If interference to the EV400 occurs during charging, contact Bosch.

## 4 Features and Specifications

The EV400 includes ground-fault protection, automatic reset upon grid power loss, ground assurance monitoring, and self-testing capabilities. Manual resetting of the EV400 is not necessary.

Exception: European model EL-52503-FEU requires manual resetting after a ground-fault condition.

### 4.1 Ground Fault Protection

Continually provides a safe power supply to the vehicle. If a ground fault is present, the EV400 detects it and cuts power flow, protecting people and the vehicle from an electric shock hazard.

### 4.2 Automatic Reset

If main line side power supply is interrupted during charging, the EV400 will reset itself automatically and re-attempt charging after main line side power supply is restored.

If the problem is associated with a ground fault, the EV400 makes automatic reset attempts in sequential 15 second periods. If the charging mode can not be restored, the appropriate failure indication of a solid red Status light will appear on the unit's front panel.

NOTE: Not applicable on European models; European models require pressing of the master-clear "Reset" button on the front panel of the EV400 to restore power. See the Power and Status LED Indications Table (page 19). The automatic reset feature ensures that your vehicle will be charged and ready to use by automatically restoring power after temporary interruptions (grid-power outages, temporary ground faults, and power surges [US models only]).

### 4.3 Ground Assurance Monitoring

A proper electrical ground is critical to reliable ground-fault protection. The EV400 includes a ground monitoring circuit to assure presence of a safe electrical ground.

### 4.4 Self-Testing

To assure proper functionality and safety, the EV400 includes self-testing and diagnostics circuitry, which is automatically performed prior to each charging cycle.

**Product Features - US & EU Versions**

***Applies to both US and EU models unless specified***

<b>Ground Fault Trip Level</b>	18 mA (nominal; 20mA Max) (US) AC I <sub>Δn</sub> 30 mA (EU)
<b>Ground Assurance</b>	50K ohm Max (US), 120VAC-Earth 100K ohm Max (EU), 240VAC-Earth
<b>Ground Fault Test</b>	Automatic before each cycle (Firmware controlled)
<b>Ground Fault Retry</b>	Automatic retries at 15-sec intervals (per UL2231-2) (US)  EU models - no retry permitted.
<b>Stop Charge</b>	Manual, 2 minute time-out
<b>Master Clear</b>	For System Reset (Overrides Ground Fault Retry and all other fault conditions)
<b>Power Indication</b>	Amber LED
<b>Charge Status Indicators</b>	Amber (Ready) Cyan (EV Plugged In) Green/Blue Flashing (Charging) Red Flashing (Fault) (see tables)
<b>Ratings and Agency Approvals</b>	<p><b><u>Agency Approvals</u></b> Standard Compliances through a National Registered Testing Lab (NRTL)</p> <p><u>North American (US) Operation</u> UL 2594 Ed. 2 (2016) UL 2251 UL 2231-1 &amp; -2 Ed. 2 (2016) UL1998 SAE J1772 NEC Article 625 (2017)</p> <p><u>European Union Operation</u> IEC 61851-1 IEC 61851-22 IEC 61000-6-3 EMC Emissions IEC 62196 Coupler Type 2</p>

**Technical Specifications- US & EU Versions**

***Applies to both US and EU models unless specified***

<b>Voltage and Wiring (120V above ground)</b>	<p>* 240VAC single-phase (US): L1, L2, and safety ground.</p> <p>*208VAC 3-phase, wye-connected (US): Any 2 phases and safety ground.</p> <p>* 240VAC 3-phase, delta-connected (US): with center tap on one leg. Use only the two phases on either side of the center tap. <u>The two phases must both measure 120V AC to ground.</u> Do not use the third leg (208VAC to ground "stinger")</p>
<b>EU Model (230V above ground)</b>	* 230VAC Single-phase (EU):L1, N, PE (Protective Earth)
<b>Product Usage</b>	Unit must be properly secured to a vertical surface and is rated for stationary use only. The unit may be relocated if mounted in a similar manner.
<b>Dimensions &amp; Weight</b>	<p>Height = 9.0" (229mm)</p> <p>Width = 7.3" (185mm)</p> <p>Depth = 2.8" (71mm)</p> <p>Cable Length = 25ft(7.6m) per NEC625</p> <p>Weight = 12-lbs (5.4kg)</p>
<b>Input Voltage Phase AC</b>	175 VAC – 264 VAC and 50/60Hz
<b>Output Amperage</b>	32A Max (model dependent - see output spec. label on side of Power Xpress-2 )
<b>Surge Protection</b>	6kV @ 3000A
<b>Temperature Storage</b>	-40°F to +185°F (-40°C to +85°C)
<b>Temperature Operating Humidity</b>	-31°F to +122°F (-35°C to +50°C) Up to 95% non-condensing
<b>Enclosure</b>	NEMA 3R (rain-proof) & per UL 50E

## Product Features - JP Version

<b>Ground Fault Trip Level</b>	18 mA (nominal; 20mA Max)
<b>Ground Assurance</b>	50K ohm Max, 100VAC-Earth
<b>Ground Fault Test</b>	Automatic before each cycle (Firmware controlled)
<b>Ground Fault Retry</b>	Automatic retries at 15-sec intervals (per UL2231-2).
<b>Stop Charge</b>	Manual, 2-minute time-out
<b>Master Clear</b>	For System Reset (Overrides Ground Fault Retry and all other fault conditions)
<b>Power Indication</b>	Amber LED
<b>Charge Status Indicators</b>	Amber (Ready) Cyan (EV Plugged In) Green/Blue Flashing (Charging) Red Flashing (Fault) (see tables)
<b>Ratings and Agency Approvals</b>	<b>Agency Approvals</b> Standard Compliances through a National Registered Testing Lab (NRTL)  Safety: Appendix-4 EMC: Appendix-10 Chapter-5 SAE J1772

## Technical Specifications- JP Version

<b>Voltage and Wiring (100V above ground)</b>	* 200VAC single-phase: L1, L2, and safety ground.
<b>Product Usage</b>	Unit must be properly secured to a vertical surface and is rated for stationary use only. The unit may be relocated if mounted in a similar manner.
<b>Dimensions &amp; Weight</b>	Height = 9.0" (229mm) Width = 7.3" (185mm) Depth = 2.8" (71mm) Cable Length = 25ft(7.6m) per NEC625 Weight = 12-lbs (5.4kg)
<b>Input Voltage Phase AC</b>	200VAC and 50/60Hz
<b>Output Amperage</b>	30A Max (model dependent - see output spec. label on side of Power Xpress-2 )
<b>Surge Protection</b>	6kV @ 3000A
<b>Temperature Storage</b>	-40°F to +185°F (-40°C to +85°C)
<b>Temperature Operating Humidity</b>	-31°F to +122°F (-35°C to +50°C) Up to 95% non-condensing
<b>Enclosure</b>	Rain Proof Type



## 5 Applicable Electrical Systems



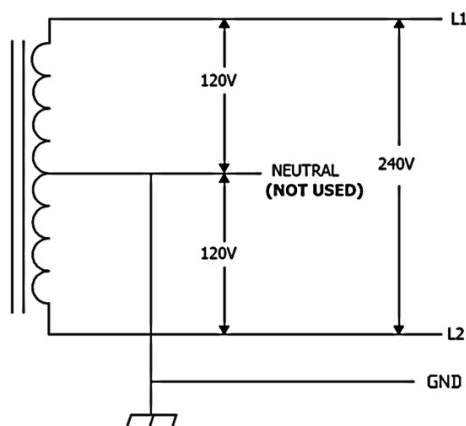
**IMPORTANT** Identify the onsite service connection before installing the EV400. If you are unsure of the available service connection, consult the local utility company.

**DO NOT USE AN EXTENSION CORD ON THE EV400.** This can cause a shorting or over-heating condition that could lead to injury or death.

The L1, L2, and Ground outputs (H, N for Europe) in the following illustrations correspond to the inputs on the EV400. For the (earth) ground connection, always connect the neutral at the service panel to earth ground. Ground fault protection is not possible unless the neutral (center tap on the service transformer) is connected to an earth ground.

### 5.1 Applicable US Systems

#### 5.1.1 220/240V Single Phase Connection



220/240V Single Phase (US)

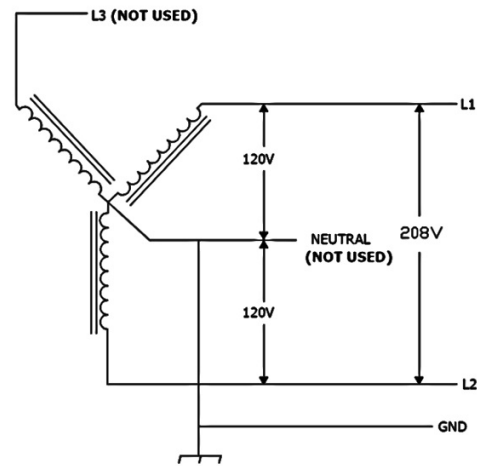
**WARNING:** The EV400 is a single-phase device. Do not connect all three phases of a 3-phase feed. Only three wires are connected (2 conductors and 1 ground). Take care that the service transformer secondary connection is known and that the three wires from the main-panel circuit breaker are correctly connected and labeled.

**WARNING:** The EV400 must be installed by a licensed electrician and in accordance with all local electrical codes, ordinances, and authorities having jurisdiction.

**WARNING:** Do not install the EV400 near flammable, explosive, or combustible materials. Do not locate or store flammable, explosive, or combustible materials near the EV400.

#### 5.1.2 208V 3-Phase Wye Connection

Any two of the legs can be used to provide 208V to the EV400 with a Wye-connected secondary. For example, L1 and L2, or L1 and L3, or L2 and L3. Reference the wiring diagram below.



208V 3-Phase Wye Connection (US)

**NOTE:** A current-carrying neutral is not required for the Charging Station for 208V connections.

#### 5.1.3 Wall Receptacle Geometry

The drawing below represents the appropriate wall receptacle in which the US-version of EV400 plugs-in. This receptacle is to be installed by a licensed electrician.



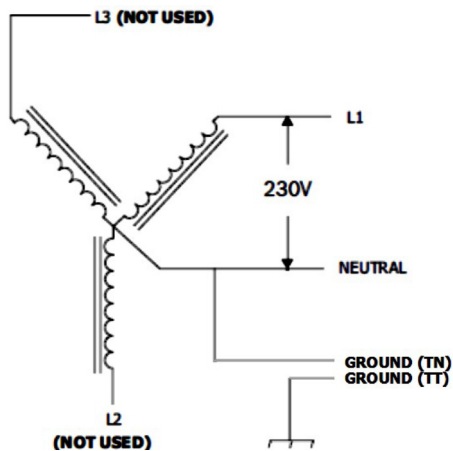
NEMA 6-50 Receptacle (US)

## 5.2 Applicable EU Systems

**! IMPORTANT** Identify the onsite service connection before installing the EV400. If you are unsure of the available service connection, consult the local utility company.

The L1, L2, and Ground outputs (H, N for Europe) in the following illustrations correspond to the inputs on the EV400. For the (earth) ground connection, ground fault protection is not possible unless the neutral (center tap on the service transformer) is connected to an earth ground.

### 5.2.1 230V 3-Phase Wye Connection



230V 3-Phase Wye Connection (EU)

**! WARNING:** Do not use more than one of the three (3) phases and neutral in 230V referenced-to-earth systems.

**! WARNING:** The EV400 must be installed by a licensed electrician and in accordance with all local electrical codes, ordinances, and authorities having jurisdiction.

**! WARNING:** Do not install the EV400 near flammable, explosive, or combustible materials. Do not locate or store flammable, explosive, or combustible materials near the EV400.

### 5.2.2 Wall Receptacle Geometry

The drawing below represents the appropriate wall receptacle in which the EU-version of EV400 plugs-in. This receptacle is to be installed by a licensed electrician.



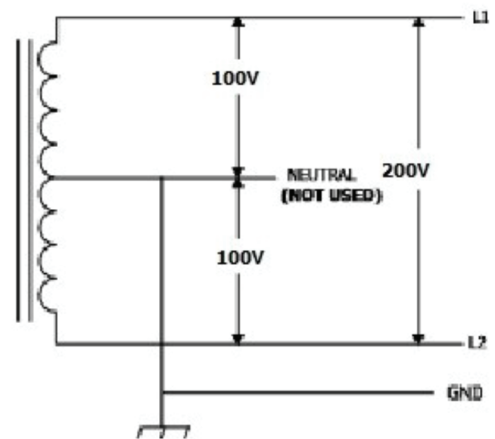
YP-332 Receptacle (EU)

## 5.3 Applicable JP Systems

**! IMPORTANT** Identify the onsite service connection before installing the EV400. If you are unsure of the available service connection, consult the local utility company.

The L1, L2, and Ground outputs (H, N for Europe) in the following illustrations correspond to the inputs on the EV400. For the (earth) ground connection, always connect the neutral at the service panel to earth ground. Ground fault protection is not possible unless the neutral (center tap on the service transformer) is connected to an earth ground.

### 5.3.1 200V Single Phase Connection



200V Single Phase Connection (JP)

**! WARNING:** The EV400 must be installed by a licensed electrician and in accordance with all local electrical codes, ordinances, and authorities having jurisdiction.

**! WARNING:** Do not install the EV400 near flammable, explosive, or combustible materials. Do not locate or store flammable, explosive, or combustible materials near the EV400.

### 5.3.2 Wall Receptacle Geometry

The drawing below represents the appropriate wall receptacle in which the JP-version of EV400 plugs-in. This receptacle is to be installed by a licensed electrician.



NEMA L6-30 Receptacle (JP)

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## 5.4 Electrical Requirements



### CAUTION

The AC electrical connection must have a grounded, dedicated servicemain. No other loads shall be connected to the same circuit. Use of a non-dedicated circuit could exceed the current rating of the circuit breaker and cause it to trip or open.



### CAUTION

Do not use portable or stationary backup generating equipment to charge the vehicle. This may cause damage to the vehicle's charging system. Only charge the vehicle from utility-supplied power.

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## 5.5 Grounding Instructions



**WARNING:** This product must be grounded. If it should malfunction or break down, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This product is equipped with a cord having an equipment grounding conductor and a grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.



**WARNING:** Improper connection of the equipment grounding conductor is liable to result in a risk of electric shock. Check with a qualified electrician or serviceman if you are in doubt as to whether the product is properly grounded. Do not modify the plug provided with the product; if it will not fit the outlet, have a proper outlet installed by a qualified electrician.

## 6 Amperage and Breaker Parameters

The EV400 has been factory set at an output current setting of 4 for Table 1 and 5 for Tables 2 and 3. For all other amperages, changes to output amperage may be made by a qualified electrician as follows:

1. Unplug the EV400 from the wall outlet and turn power off to the outlet at the breaker panel.
2. Remove the adhesive overlay from the molded well on the back of the EV400.
3. Using a small flat-blade screwdriver, set the current-adjustment selector to the applicable output current-limiting setting indicated in the appropriate table below.

### NOTE:

1. North American current setting is 30A (setting 4). This setting is **NOT** to be exceeded. Settings of 30A or less (settings 1-4) only are permitted on North American models.
2. Adhesive overlay must be replaced securely to the molded well to preserve the EV400's environmental ratings and warranty.

**Table-1 - North American Current Adjustment Settings**

Current Adjustment Selector Setting	Output (Amps)	Corresponding Breaker Required
1	12	15
2	16	20
3	24	30
4	30	40
5	DO NOT USE	DO NOT USE

**Table-2 - European Current Adjustment Settings**

Current Adjustment Selector Setting	Output (Amps)	Corresponding Breaker Required
1	13	16
2	16	20
3	20	20*
4	30	40
5	32	40

\* Line service breaker, not appliance service breaker

**Table-3 - Japan Current Adjustment Settings**

Current Adjustment Selector Setting	Output (Amps)	Corresponding Breaker Required
1	7	15*
2	10	15*
3	15	15*
4	20	20*
5	30	30*

\* Line service breaker, not appliance service breaker

## 7 Mounting Instructions

### 7.1 Package Contents

- ▶ (1) EV400 Series Charging Station
- ▶ (1) EV400 Series Charging Station hardware kit:
  - (2) #8 x 1-1/4" Pan-head Screws (for EV400 stud-mount applications)
  - (2) 3/16" x 1-1/4" (5mm) Tapered-head Masonry Screws (for EV400 masonry-mount applications)
- ▶ (1) EV400 Cord-set Hanger
- ▶ EV400 Cord-set Hanger hardware kit:
  - (2) Cord-set Hanger Spacers
  - (2) #10 x 2-1/2" Philips Black-oxide Screws (for Cord-set Hanger stud-mount applications)
  - (2) 3/16" (5mm) x 2-1/4" Flat-head Philips Masonry Screws (for Cord-set Hanger masonry-mount applications)

### 7.2 Tools Required for Package Contents

- ▶ Level
- ▶ 1/8" drill-bit (for EV400 and Cordset-hanger stud-mount applications)
- ▶ 5/32" masonry drill-bit (for EV400 and Cordset-hanger masonry-mount applications)
- ▶ Power drill
- ▶ Pencil
- ▶ Screw driver – Phillips#2
- ▶ Stud finder
- ▶ Tape measure
- ▶ Adhesive tape

### 7.3 Optional Kit #1: Metal Mounting Bracket

- ▶ 1 Metal wall bracket
- ▶ (3) #10 x 2-1/2" Black-oxide Metal Wall Bracket Mounting Screws (for stud-mount applications)
- ▶ (3) 3/16" x 1-1/4" Masonry Screws (for Metal Wall Bracket Mounting (for masonry-mount applications)
- ▶ (8) #8 x 1/2" Pan-head Screws (for mounting 2-Metal EV400 Brackets to EV400 Unit)

### 7.4 Tools Required for Optional Kit #1

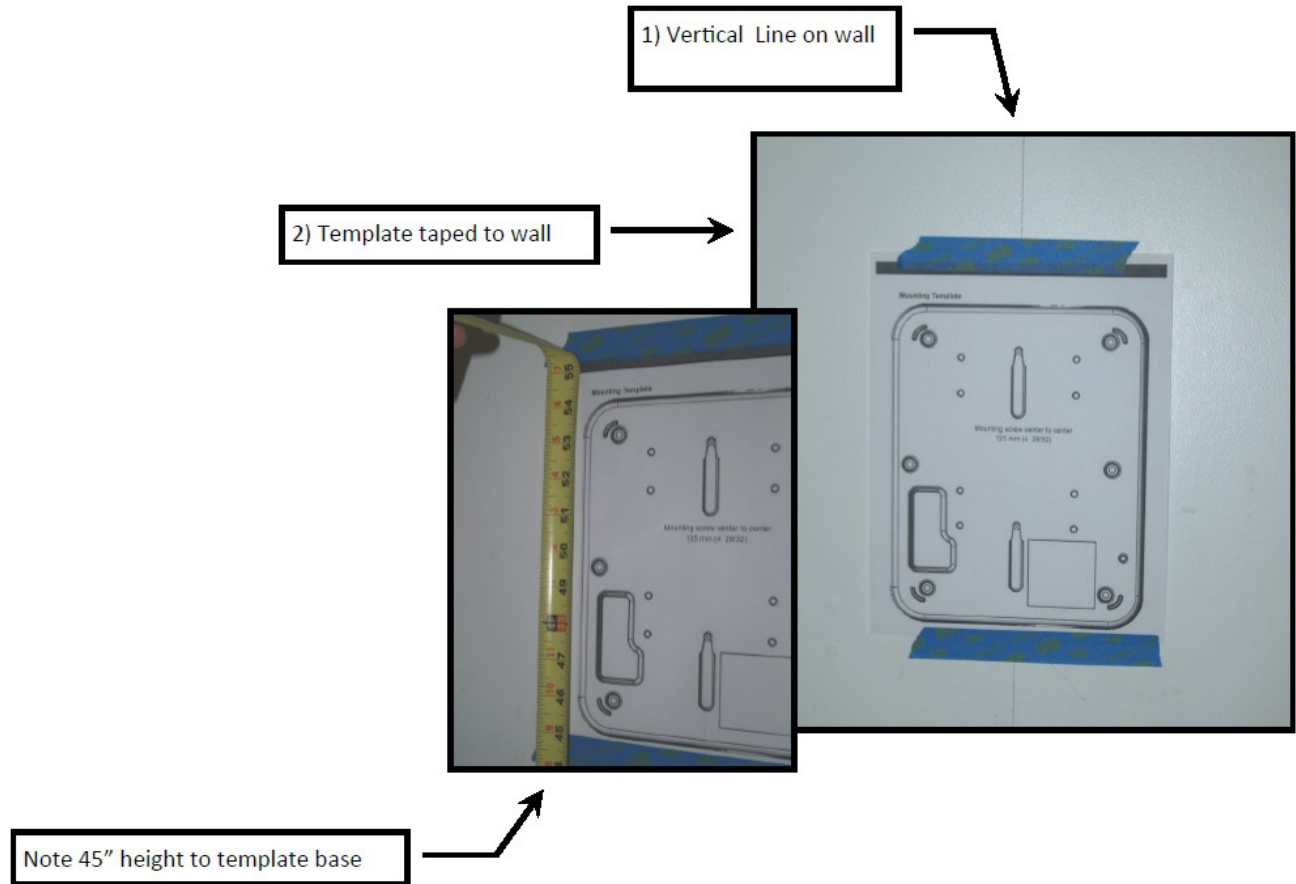
- ▶ Level
- ▶ Power drill
- ▶ Pencil
- ▶ Screw driver – Phillips#2
- ▶ Stud finder
- ▶ Tape measure
- ▶ 1/8" drill-bit (for EV400 and Cordset-hanger stud-mount applications)
- ▶ 5/32" masonry drill-bit (for EV400 masonry-mount applications)

## 7.5 Finished Wall Installation

**⚠ WARNING: Read all instructions before installing the EV400.**

The EV400 must be mounted to the studs of a drywall/wood-stud structure, or to a masonry-wall. For a drywall/wood-stud structure the EV400 is specifically designed to be secured to the studs. This is the reason the two mounting slots are designed into the EV400's back mounting surface in a centered, vertical in-line configuration (not unlike that of a standard multi-plug power-strip).

1. Using a stud finder, locate the desired mounting points for the EV400's two (2) mounting screws (denoted on the template with the symbols), and draw a vertical line to mark the stud site.
2. Using adhesive tape, secure the mounting template (included on page 18 of this manual) to the desired mounting location wall surface. Mount the template at a height of 45" from the floor to the bottom of the template.

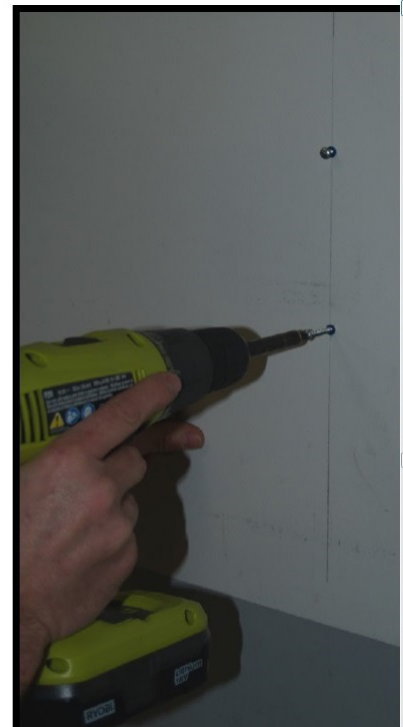
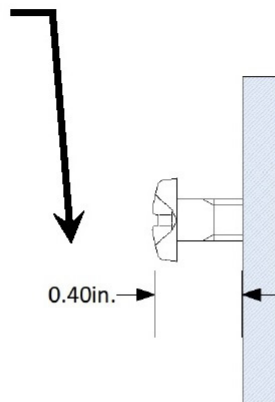


3. Using a 1/8" (3-mm) drill bit, drill 2-holes at the target-points on the template. These two points are vertically located with reference to each other (they are also 4.9 in [125-mm] apart).



4. Install two (2) #8 pan-head screws to the screw holes; drive these screws leaving a 0.40" space from the top of the screw head to the wall surface. This will provide the proper spacing required for the mounting slots on the back of the unit.

Side-elevation of mounting screw on finished-wall surface—note recommended screw-head height.



5. Align the EV400 to the mounting screws and gently slide the unit down to secure it within the rear mounting slots. Plug the EV400 into the appropriate, existing power receptacle.

NOTE: The EV400 has 4 radiused corner standoffs that must be touching the wall-mounting surface to assure stability. Tighten the 2 mounting screws as needed to accomplish this.

Hold unit with both hands, locate screw-hole keys (2) on back of unit, seat the unit and gently slide the unit down until it stops on the mounting screws

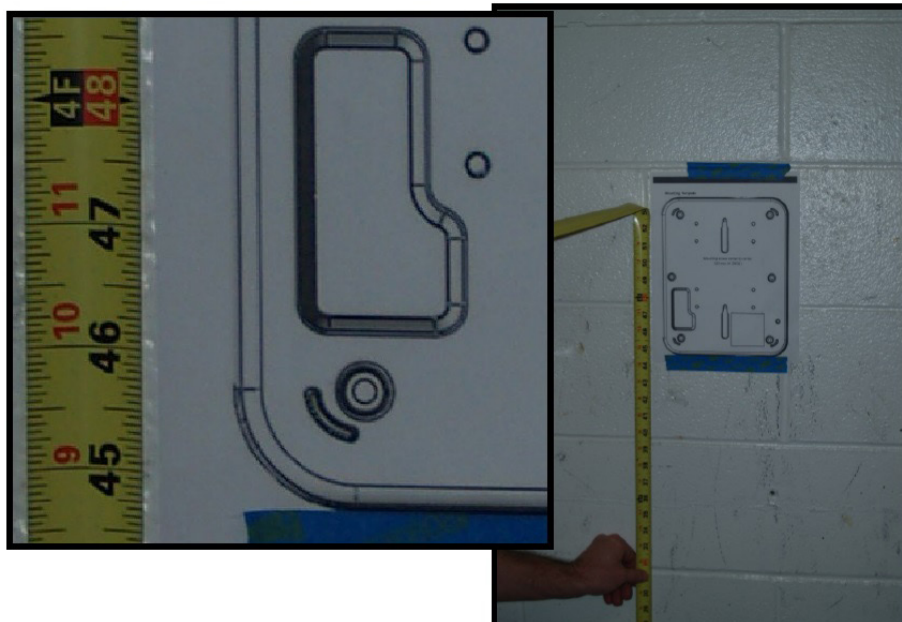




## 7.6 Masonry Wall Installation

1. Using adhesive tape, secure the mounting template (included on page 18 of this manual) to the desired mounting location on the wall surface. Mount the template at a height of 45" from the floor to the bottom of the template.

Inset photo showing  
measurement detail



2. Using a 1/8" (3-mm) masonry drill bit, drill 2-holes at the target-points (denoted with the symbol) on the template. These two points are vertically located with reference to each other. (They are also 4.9 in [125-mm] apart.)





3. Remove the template from the wall and install two (2) 3/16" (5-mm) tapered-head masonry screws. Drive these screws leaving a 1/2" space from the top of the screw head to the wall surface. This will provide the proper spacing required for the mounting slots on the back of the unit.

Side-elevation of mounting screw on finished-wall surface—note recommended screw-head height.

0.50in.



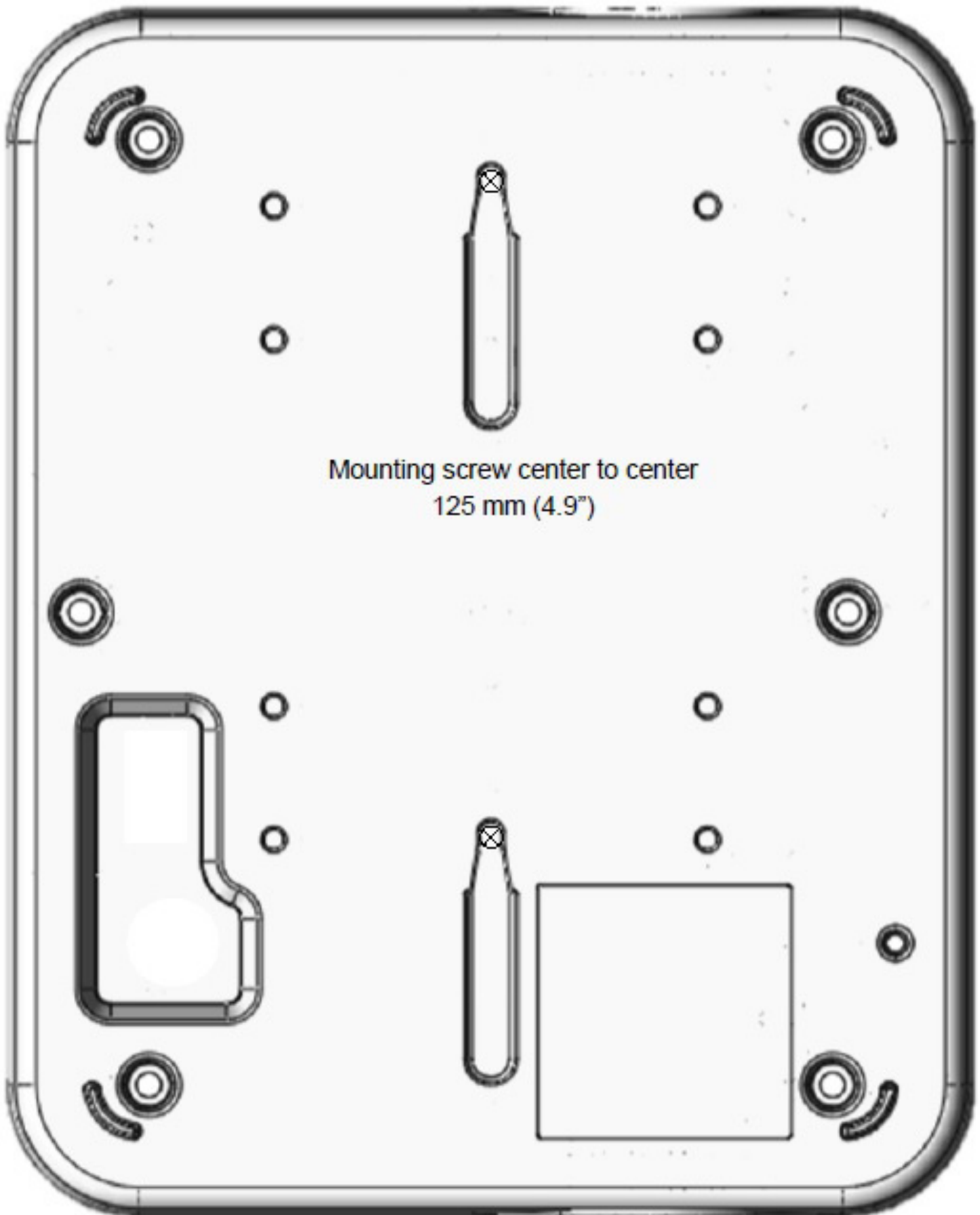
4. Align the EV400 to the mounting screws and gently slide the unit down to secure it within the rear mounting slots. Plug the EV400 into the appropriate, existing power receptacle.

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Hold unit with both hands, locate screw-hole keys (2) on back of unit, seat the unit and gently slide the unit down until it stops on the mounting screws

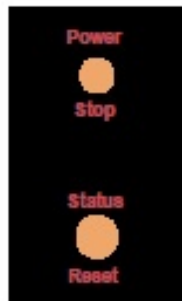


## 7.7 Mounting Template



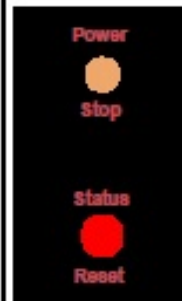
## 8 Power and Status LED Indications

### Operating Instructions - Power and Status LED Indications

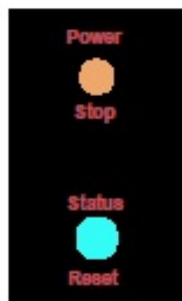


Normal standby indication, both lights are amber.

EV400 Status—Vehicle not coupled.

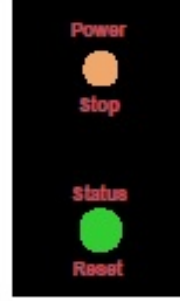


Apply AC power. If Status light blinks red, uncouple vehicle and press the reset button to begin self test. If the error persists, there may be an AC power problem such as incorrect voltage, grounding, or polarity. For safety turn off AC breaker at panel; uncouple vehicle if connected; contact a service professional. Do not re-power.



Power on, status light is cyan.  
This indicates a normal start or stop of the charging sequence between the EV400 and the vehicle.

EV400 Status—Vehicle has just coupled; systems communicate desired power; beginning (or ending) of charging.



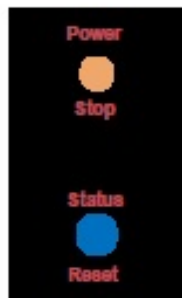
Power on, status light is green.  
This indicates either that charging has completed or that the vehicle has decided to delay charging.



Power on, status light is a slow blue/green transition.  
Normal charging in progress.  
Charging completes automatically or when the stop button is pressed.

Charging resumes automatically, with vehicle request, if power is lost and restored.

EV400 Status—Normal charging operation



After pressing the power/stop button, a steady blue indicator lights for a 2-minute period during which the vehicle can be uncoupled. If the coupler is latched, press the stop button again.

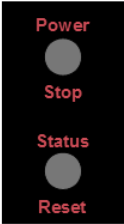
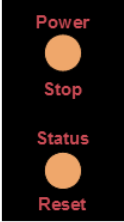
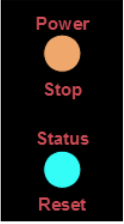
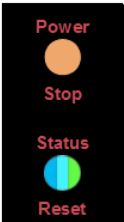
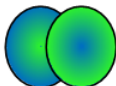
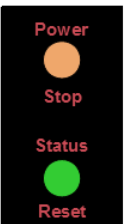
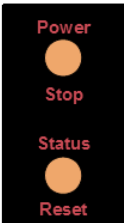
Once uncoupled, both indicators turn to standby.

See advanced details of operation on the following page.

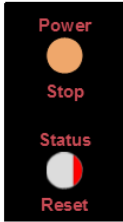
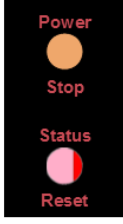
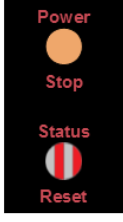

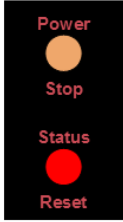

EV400 Status—Manual end of charge to uncouple.

## Power and Status LED Indications (cont'd)

### Normal Charging Sequence

	Supply power is off	Indicators are dark
	Supply power is on; no vehicle connected	Both indicators are steady amber
	Vehicle connects; system normal; EV400 communicates...	Status indicator is cyan
	Normal charging	Color alternates blue/green 
	Charge completed	Steady green; (European models: press Stop-button to release charge coupler from vehicle)
	Supply power is on; vehicle disconnected	Steady amber

## 9 Troubleshooting

	<p>Connection to vehicle unsatisfactory.</p> <p>First, press reset button on EV400.</p> <p>If needed, then try removing and re-inserting coupler to vehicle.</p>	Short red flash
	<p>EV400 over-heated (this may be caused ambient temperature exceeding 50C {122F}).</p> <p>After cooling system may restart.</p>	Dim red; bright red flash
	<p><u>Safety ground not detected (do not touch vehicle)</u> or wrong supply voltage detected</p> <p>Supply power must be disconnected at disconnect or breaker before servicing</p>	Fast-blinking red
	Momentary fault - EV400 retries automatically in 16 seconds	Red; short green flash
	<p>GROUND FAULT or system failure.</p> <p>Remove coupler then press EV400 reset button</p> <p>Otherwise, supply power must be disconnected at disconnect or breaker</p>	Steady red
	<p>Remove coupler then press EV400 reset button</p> <p>EV400 failure</p> <p>Otherwise, supply power must be disconnected at disconnect or breaker before servicing</p>	Indicator dark

## 10 Miscellaneous

### 10.1 Maintenance

**⚠ WARNING: Do not attempt to service the EV400. The EV400 has no user-serviceable components.**

If the unit is not operating properly, contact Bosch at 1-877-805-EVSE (3873) for assistance. The EV400 requires no scheduled maintenance, only periodic cleaning.

Always be sure to return the charging cable and coupler to its proper storage area to avoid potential damage to the unit and to prevent potential trip hazards.

Regularly inspect the EV400 unit and charging cable for signs of damage. If the EV400 unit or charging cable are damaged, contact Bosch for service or repair.

### 10.2 Cleaning

**⚠ CAUTION**

Always turn off service power (supply-side power at the main service panel) before cleaning the EV400 and/or charging cable.

**⚠ CAUTION**

Never use cleaning solvents, abrasive powders/liquids or scouring pads to clean the EV400 and cable/coupler.

Clean the EV400 unit and cable/coupler with a soft damp or dry cloth to remove dust or dirt.

### 10.3 Storage and Moving

Unit storage temperature range: -40°F to +185°F (-40°C to +85°C). When transporting the EV400 unit, do not carry by only the plug or by the charging cable.

Contact Bosch for EV400 relocation or storage requirements at 1-877-805-EVSE (3873).

## 11 Warranty

### 11.1 Limited Warranty

THIS LIMITED WARRANTY IS EXPRESSLY LIMITED TO THE ORIGINAL PURCHASER ("PURCHASER") OF THE BOSCH EV400 SERIES CHARGING STATION ("CHARGING STATION").

**IMPORTANT:** It is the Purchaser's obligation to register the Charging Station with Bosch and failure to do so may delay warranty support. To register a Charging Station online, go to [BoschEVSolutions.com](http://BoschEVSolutions.com) or call 1-877-805-3873 or a regional vendor for assistance.

Bosch Automotive Service Solutions Inc. ("Bosch") warrants to the Purchaser that the Charging Station will be free from defects in materials and workmanship for a period of three years from the date of purchase ("Warranty Period"). This warranty is valid for purchasers located in the U.S.A. and Canada only.

ALL WARRANTY CLAIMS MUST BE MADE WITHIN THE WARRANTY PERIOD AND PROOF OF PURCHASE ACCEPTABLE TO BOSCH MUST BE SUPPLIED.

The sole and exclusive remedy for any Charging Station found to be defective is repair or replacement, at the option of Bosch. The warranty covers both parts and factory labor necessary to repair the Charging Station, but does not include any onsite labor costs related to un-installing or reinstalling the repaired or replacement Charging Station. This warranty does not cover cosmetic damage such as scratches and dents, or normal aging. Repair parts and replacement Charging Stations may be either new or reconditioned at Bosch's discretion. Any replacement Charging Stations so furnished will be warranted for the remainder of the original Warranty Period. Should Bosch be unable to repair or replace the Charging Station with a comparable Bosch product of Bosch's choice, Bosch will refund the purchase price of the Charging Station to you.

This warranty does not cover the cost of freight to return the Charging Station to Bosch. This warranty does include freight to ship repair parts and or a replacement Charging Station to the Purchaser, using a shipping carrier of Bosch's choice.

This warranty covers only those defects that arise as a result of normal use of the Charging Station and does not cover Charging Stations subject to improper installation, improper connections with peripherals, external electrical faults, accident, disaster, misuse, abuse, neglect, improper maintenance and care, modification, disassembly, operation outside of the Charging Station specifications or in a manner inconsistent with instructions regarding use. This warranty does not apply if the Charging Station's original identification markings (for example, serial numbers and trademarks) have been defaced, altered, or removed. The Charging Station is not certified for plugin applications and any modification to create a plugin application will void this warranty.

The existence of a defect shall be determined by Bosch in accordance with procedures established by Bosch. No one is authorized to make any statement or representation altering the terms of this warranty.

This warranty gives the Purchaser specific legal rights. The Purchaser may also have other rights which vary from state to state. To the extent that this warranty is inconsistent with applicable law, this warranty will be deemed modified to be consistent with such local law.



## 11.2 Disclaimer

TO THE EXTENT PERMITTED BY APPLICABLE LAW AND EXCEPT AS EXPRESSLY PROVIDED IN THE LIMITED WARRANTY, BOSCH MAKES NO WARRANTY WITH RESPECT TO THE CHARGING STATION, WHETHER EXPRESS, IMPLIED, STATUTORY, OR OTHERWISE. BOSCH EXPRESSLY DISCLAIMS ALL OTHER WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT OF THIRD PARTY RIGHTS, MERCHANTABILITY, AND FITNESS FOR A PARTICULAR PURPOSE. BOSCH DOES NOT WARRANT UNINTERRUPTED OR ERROR-FREE OPERATION OF THE CHARGING STATION.

## 11.3 Limitation of Liability

TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, IN NO EVENT SHALL BOSCH, ITS AFFILIATES, OR ITS SUPPLIERS BE LIABLE FOR ANY, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, WHETHER BASED ON CONTRACT, TORT, OR ANY OTHER LEGAL THEORY EVEN IF BOSCH AND ITS SUPPLIERS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Some states do not allow the exclusion or limitation of incidental or consequential damages for some products, so the limitations or exclusions contained herein may not apply.

## 11.4 To Obtain Warranty Service

THIS PROCESS APPLIES TO PRODUCT SOLD DIRECTLY FROM BOSCH IN NORTH AMERICA. IF YOU OBTAINED YOUR PRODUCT IN ANOTHER REGION OR SALES CHANNEL, PLEASE CONTACT THE APPROPRIATE VENDOR.

To obtain warranty service during the Warranty Period, the Purchaser may contact Bosch Technical Support Services (TSS) at 1-877-805-3873 or email to [oetech@service-solutions.com](mailto:oetech@service-solutions.com) for assistance. A Bosch TSS agent will troubleshoot the Charging Station and determine if it has a defect, and if it is covered under this warranty.

In connection with a warranty inquiry, you will be asked for each of the following:


1. Your name and address;
2. A detailed description of the problem you are experiencing with the Charging Station;
3. The model number and serial number of the Charging Station;
4. Proof of purchase; and
5. Return Shipping information.

If Bosch confirms a defect covered under this warranty, you will:

- Obtain a Return Goods Authorization Number (RGA#) number from Bosch;
- Directed to ship the Charging Station, at your expense, in accordance with the instructions provided by Bosch, in either its original package or packaging providing the Charging Station with a degree of protection equivalent to that of the original packaging, to Bosch at the address so instructed at that time.
- You agree to obtain adequate insurance to cover loss or damage to the Charging Station during shipment and you understand prior to receipt by Bosch, you assume risk of any loss or damage to the Charging Station.
- If the Charging Station is covered under this warranty, Bosch will either repair or replace the defective Charging Station at no charge to you and ship the repaired or replaced Charging Station back to you at Bosch's expense, using a carrier of Bosch's choice.
- Any Charging Station that is found by Bosch to be out-of-warranty or otherwise ineligible for warranty service will be repaired or replaced upon your approval and payment of Bosch's standard charges.
- Bosch is not responsible for any unauthorized shipments to Bosch, and under no obligation to return the Charging Station, at its expense. If you do not contact Bosch within five (5) business days of its delivery, Bosch will dispose of the shipment in a manner of its choice without any liability to you. Any damage incurred returning an unauthorized shipment back to you is not Bosch's responsibility.

This warranty is not transferable to subsequent owners of the Charging Station. No attempt to alter, modify, or amend this warranty shall be effective unless authorized in writing by an officer of Bosch. This warranty shall be governed by and construed in accordance with the laws of the State of Michigan U.S.A., exclusive of its conflict of laws principles.

The U.N. Convention on Contracts for the International Sale of Goods shall not apply. Bosch reserves the right to amend this warranty policy as required.



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