





# Shell Recharge

Electric Vehicle Charger SEV-40-03

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# **IMPORTANT SAFETY INSTRUCTIONS**

#### **A** CAUTION

INSTRUCTIONS PERTAINING TO A RISK OF FIRE OR ELECTRIC SHOCK: To reduce the risk of fire, connect only to a circuit provided with 50 amperes maximum branch circuit over current protection.

#### **A** WARNING

When using electric products, basic precautions should always be followed, including the following. This manual contains important instructions that shall be followed during operation and maintenance of the unit.

- a) Read all the instructions before using this product.
- b) This device should be supervised when used around children.
- c) Do not put fingers into the electric vehicle connector.
- d) Do not use this product if the flexible power cord or EV cable is frayed, has broken insulation, or any other signs of damage.
- e) Do not use the product if the enclosure or the EV connector is broken, cracked, open, or shows any other indication of damage.
- f) To avoid a risk of fire or electric shock, do not use this unit with an extension cord.

#### **A** WARNING

Risk of electric shock! Do Not Disconnect Under Load.

#### **A** WARNING

This product is intended only for charging vehicles not requiring ventilation during charging.

#### **A** CAUTION

Do not expose to liquid, vapor or rain.

#### CAUTION

Risk of electric shock! Do not remove the cover 9 or attempt to open the enclosure. No user serviceable parts inside. Refer servicing to qualified service personnel.

#### **A** CAUTION

Do not use this product if there is any damage to the unit. Send the unit back to the manufacturer in the event the unit is not operational.

- g) This product must be only plugged into 1-phase outlet. If you are in doubt, consult with your local electrician.
- h) Do not touch the terminals or other current-carrying parts when your hands are wet.
- i) Do not trample or drive over the product's cables.
- j) Do not put any foreign objects into the enclosure.
- k) Do not start the engine when the charging gun is still connected.
- I) Do not use power generators as a power source for charging electric vehicles.
- m) Do not plug the product into a damaged, loose or worn outlet. Ensure that the prongs on the plug fit snugly into the outlet.
- n) Do not disconnect the product from the outlet when the vehicle is charging.
- o) Do not use the product with adapters other than those indicated in this manual.
- p) Do not use or expose the product to flammable or harsh chemicals or vapors.
- q) Do not use or store the product in a recessed area or below the floor level. Position the product main unit at least 18 inches (46 cm) above the floor level.

#### **GROUNDING INSTRUCTIONS**

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.

#### **A** WARNING

Improper connection of the equipment grounding conductor can 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.** 



The lightning flash with arrowhead within a triangle is intended to tell the user that parts inside the product are a risk of shock to persons.

# SAVE THESE INSTRUCTIONS

# **BEFORE FIRST USE**

#### **A** DANGER

Keep any packaging materials away from children and pets – these materials are a potential source of danger, e.g. suffocation.

- · Remove all the packing materials.
- Remove and review all components before use.

## **EXPLANATION OF SYMBOLS**



The lightning flash with arrowhead within a triangle is intended to tell the user that parts inside the product are a risk of shock to persons.



Alternating current (AC).

# **SIGNAL WORDS**

**A** DANGER

Indicates a hazardous situation that, if not avoided, will result in death or serious injury.

**A** WARNING

Indicates a hazardous situation that, if not avoided, could result in death or serious injury.

**A** CAUTION

Indicates a hazardous situation that, if not avoided, could result in minor or moderate injury.

NOTICE

Indicates information considered important, but not hazard related.

### INTENDED USE

#### **A** WARNING

Do not use the product when either you, the vehicle or the product is exposed to severe rain, snow, electrical storm or other inclement weather.

#### **A** WARNING

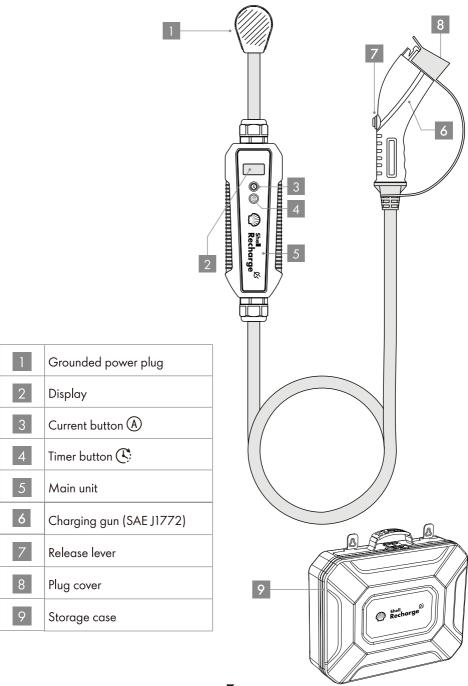
If rain falls during charging, do not allow rain water to run along the length of the charging cable. It may cause the electrical outlet or charging port to become wet.

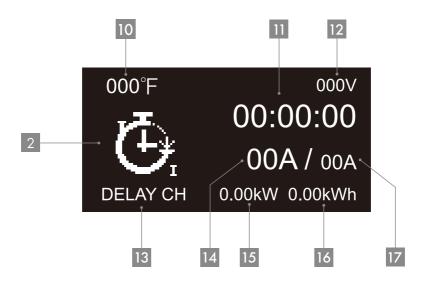
- This product is intended to charge electric vehicles compatible with SAE J1772 AC Level 2 charging standard.
- This product is intended for household use only. Not for use in commercial garages
  where a COMMERCIAL GARAGE is defined as a facility, or portion of a facility, used to
  repair of internal combustion engine vehicles, in which the area may be classified due to
  vapors of flammable liquids (gasoline) being present.
- This product is not intended to work with electric vehicles that require an external ventilation system.
- No liability will be accepted for damages resulting from improper use or noncompliance with these instructions.

#### **NOTICE**

This product is compatible with other brands electric vehicles, however a designated adapter must be purchased separately. Read your vehicle's user manual for more details.

# **PARTS AND FEATURES**





2	Display
10	Main unit's temperature
11	Charging time
12	Input voltage
13	Mode
14	Actual current output
15	Instantaneous power
16	Consumed power
17	Set current output

# **OPERATING INSTRUCTIONS**

#### Connecting to the outlet

# **A** CAUTION

- The product's maximum working current is 40A (model SEV-40-03).
   Ensure the circuit breaker of the outlet or the GFCI outlet supports current of 50 A or more.
- Ensure the outlet used is of NEMA 14-50
- Fully plug the power plug 1 into the outlet.

# **Charging parameter estimation**

Required circuit / Breaker rating	Charger amperage	Estimated driving range added per hour of charging
18A	16 A	12 miles (19 km)
26A	24 A	18 miles (29 km)
35A	32 A	25 miles (40 km)
44A	40 A	30 miles (48 km)

#### **Automatic charging**

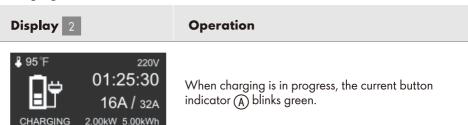
#### NOTICE

- When connected to the outlet, the product starts charging few seconds after connecting the charging gun 6 to the vehicle's charging socket.
- The product automatically detects outlet voltage and maximum allowable input current of your vehicle.
- The product switches off automatically once the vehicle's battery is fully charged.
- 1. Remove the plug cover 8
- 2. Connect the charging gun's 6 plug to the vehicle's charging socket. The current button indicator (A) lights up green.
- 3. After few seconds, the product enters the **Charging** mode. The current button indicator (A) blinks green.
- 4. To stop charging, press and hold the timer 🕒 and current (A) buttons for 2 seconds or unplug the charging gun (6).
- 5. Press the release lever 7 and disconnect the charging gun 6 from the vehicle's charging socket. Reinstall the plug cover 8.

#### Ready

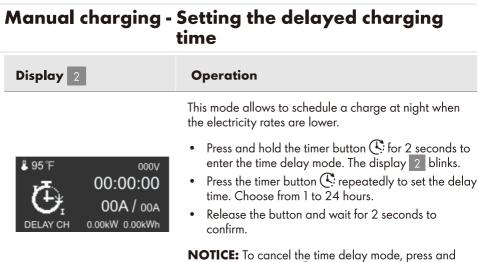
# Operation 220V 01:25:30 16A / 32A CONNECT 2.00kW 5.00kWh Operation If time delay mode was not set, the product is ready to charge. Current button indicator (A) lights up green.

#### **Charging**



#### Manual charging - Setting the output current

Manual charging - Setting the output current		
Display 2	Operation	
	<ul> <li>Press and hold the current button (A) for 2 seconds to enter the output setting.</li> <li>Press the current button (A) repeatedly to select desired output current:</li> </ul>	
\$ 95°F 220V 01:25:30 16A / 32A 2.00kW 5.00kWh	For 240 V: <u>SEV-40-03</u> 12 A → 16 A → 24 A → 32 A → 40 A	
	<ul> <li>Release the button and wait for 2 seconds to confirm.</li> </ul>	
	<ul> <li>The product starts charging automatically few seconds after it is connected to vehicle's charging socket.</li> </ul>	
	NOTICE: The voltage is detected automatically and	



cannot be changed by the user.

hold the timer button indicators go off.

**NOTICE:** Using both vehicle and EV charger delayed charging may cause charging anomalies.

#### Display 2

#### **Operation**



- The countdown starts when the delayed charging time is set. Current button indicator (A) lights up yellow.
- The charging time indicator 11 shows the time remaining to start the charging.

#### **⚠** Error

#### Display 2

#### **Operation**



Operation error (see **Error Codes** chapter). Current button indicator (A) blinks red.

# USER MAINTENANCE INSTRUCTIONS

#### **A** WARNING

- Risk of electric shock! To prevent electric shock, unplug before cleaning.
- Risk of electric shock! During cleaning do not immerse the electrical parts of the product in water or other liquids. Never hold the product under running water.

#### **A** CAUTION

- Install the plug cover 8 before cleaning and/or storage.
- Disconnect the charger from the wall outlet before cleaning it.

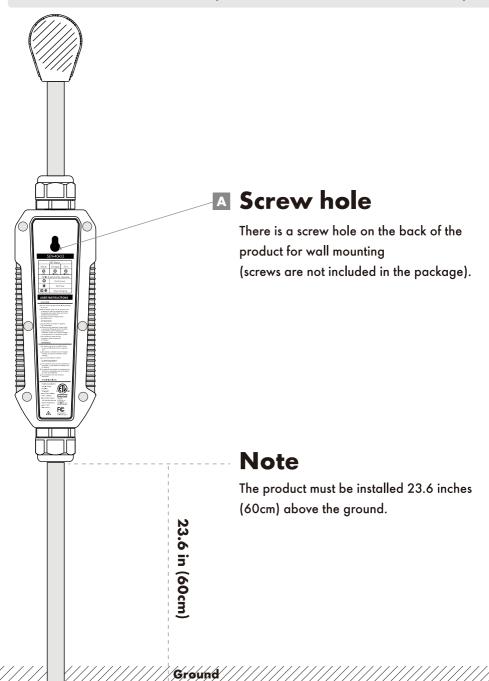
#### Cleaning

- To clean, wipe with a soft, slightly moist cloth.
- Never use corrosive detergents, wire brushes, abrasive scourers, metal or sharp utensils to clean the product.

#### **A** WARNING

This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer. For more information go to: <a href="https://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>

# **INSTALLATION (WALL MOUNTABLE)**



#### Moving and storage instructions

#### **A** CAUTION

Do not store the product in hot place exposed to direct sunlight.

- Never lift or carry the product by the flexible power cord or the EV cable. Carry by the
  main unit 5 and support the cable with the other hand.
- Handle the product with care to prevent damage to any of its components. Do not subject the product to strong force or impact. Do not pull, twist, tangle, drag or step on the product or any of its components.
- Store the product in the provided storage case 9 in a dry indoor area. Keep away from children and pets.

# **SPECIFICATIONS**

Model:	SEV-40-03
Rated input/output voltage:	240 V AC single-phase
Rated frequency:	50/60 Hz
Rated current:	40A(model SEV-40-03)
Charging connector:	J plug (SAE J1772)
Power plug type:	NEMA Type 14-50
Compatible outlet:	NEMA 14-50
Cable length:	Approx.25ft(7.5m)
Operating temperature:	-22 to 122°F (-30 to 50°C)
Storage temperature:	-22 to 140°F (-30 to 60°C)
Protection class:	Class I
IP degree of protection:	IP66 (main unit 5 and charging gun 6 )
Net weight:	12.6 lb (5.7kg)
Circuit breaker rating:	44A(model SEV-40-03)

<sup>\*</sup> The weight and dimensions may vary due to measurement errors. Please refer to the actual measurements.

# **TROUBLESHOOTING**

Problem	Solution
The product does not switch on	Check if the product is properly connected to the outlet.
The product does not charge	<ul> <li>Ensure the vehicle is turned off.</li> <li>Check if the product is properly connected to the vehicle and the outlet.</li> </ul>
Current button indicator is not illuminated	<ul> <li>Cycle utility power to the product by moving the circuit breaker switch to the "OFF" position and then back to the "ON" position.</li> <li>If the problem persists, call for service.</li> </ul>
Display never shows "CONNECT", "CHARGING" or error icons	<ul> <li>Cycle utility power to the product by moving the circuit breaker switch to the "OFF" position and then back to the "ON" position.</li> <li>If the problem persists, call for service.</li> </ul>
Display never shows "CONNECT" when the product is connected to the vehicle	<ul> <li>Disconnect the product's plug from the vehicle receptacle and then connect again. Ensure that the plug engages completely.</li> <li>Inspect the product's output cable and connector terminals for damage. If damaged, discontinue use immediately and call for service to have the damaged equipment replaced.</li> <li>Inspect the product for damage. If damaged, discontinue use immediately and report the problem to your nearest dealership.</li> </ul>

# **ERROR CODES**

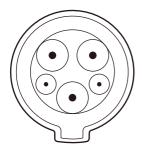
Error code	Problem	Display notice	Solution
01	Product over-temperature	OVER-TEMP	The product will automatically stop charging. Wait until the product cools down, then use the product again.
02	AC input under voltage	LOW Vin	The product will automatically stop charging. Wait until the voltage returns to optimal range, then use the product again.
03	AC input over voltage	OVER Vin	The product will automatically stop charging. Wait until the voltage returns to optimal range, then use the product again.
04	Outlet is not properly grounded	UN-GND	appears on the display 2. Switch off the product. Ensure the outlet is properly grounded. Contact qualified electrician if in doubt.
05	Output over current	over-curr	The product will automatically stop charging. Switch the product off. Unplug the product from the vehicle and then from the outlet. Connect the product to the vehicle and the outlet. Set the correct output current.
06	Ground Fault alarm	GFCI ER ROR	GFCI Protection: The charger is equipped with a Ground Fault Circuit Interruption (GFCI) reaction system to protect against electric shock. If the charger module detects an output ground fault, please ask dealer and manufacturer to check your EV.

Error code	Problem	Display notice	Solution
07	Contactor stick/shake	RELAY-ERR	Fail on internal relay, please call our customer support.
08	CP error	CP-ERR	The product will automatically stop charging. Unplug the product from the vehicle. Troubleshooting, automatic recovery.
09	Leak self check error	LEAK-TEST	Fail on internal charger, please call our customer support.
10	The Charging time is too long	OVER- CHARGE	The product will automatically stop charging. Unplug the product from the vehicle,, then use the product again.
29	Other error	SYS-ERR	Internal system error. Try to cut off the power and restart the charger. If problem can't be solved, please call our customer support.

# NOTICE

If the above solutions did not solve the problem, Visit https://egevgoer.com or contact customer service.

# **CONNECTOR TYPE**



The product is compatible with connector type 1 (J1772) only.

## WARRANTY CONDITIONS

- a) We will, at our discretion, repair any product that proves to be defective in material or workmanship during the warranty period of 12 months.
- b) A valid proof of purchase must be presented upon request for warranty service.
- c) The warranty shall not apply if:
- the product was modified or repaired in any way by persons other than our technicians
- the product has been damaged through misuse, negligence or inflow of any liquid
- the product was not used according to user manual
- losses or damages are caused by force majeure or natural disasters
- d) The warranty terms and conditions are subject to change without prior notice.
- e) Product specifications are subject to change without prior notice.
- f) Shell shall not be liable for technical or editorial errors or omissions contained herein.
- g) Visit https://egevgoer.com for support and the latest product information.

# **FCC STATEMENT**

#### FCC SUPPLIER'S DECLARATION OF CONFORMITY

Unique Identifier	SEV-40-03
Responsible Party	Intertek Testing Services Shenzhen Ltd. Guangzhou Branch
Contact Information	Room 02, Room 01 1-8/F., No. 7-2. Caipin Road, Science City, GETDD,Guangzhou, Guangdong, China
Email	support@egevgoer.com

#### **FCC COMPLIANCE STATEMENT**

- 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, and
  - (2) this device must accept any interference received, including interference that may cause undesired operation.
- Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

#### **FCC INTERFERENCE STATEMENT**

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.

#### IC Statement

This device complies with Industry Canada license-ICES-002. Operation is subject to the following two conditions: (1) This device may not cause interference, and (2) This device must accept any interference, including interference that may cause undesired operation of the device. Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.



# Shell Recharge

Electric Vehicle Charger SEV-40-03

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