

# Teison

*Portable*

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## **Portable *PRO*** **EVcharger Manual**



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Thank you for purchasing your new Teison  
PRO portable EV charger.

Our products are tested before being  
dispatched from our factory so you should  
find that everything performs as it should and  
that there are no visible signs of damage on  
the product.

Please take a few minutes to go through this  
short instruction manual paying attention to  
the important safety information.

**Thanks again and lets get charging.....**



## Product Overview Portable PRO

Teison portable EV charger is a portable charging device for electric vehicles. The product meets the requirements of IEC 61851-1:2017 and IEC/EN 62752:2016 Mode 2 AC charging system. AC charging connector meets EN 62196-2:2017 and SAE J1772.

### Product Safety

- Ensure the charging unit is always stored in a clean and dry condition.
- Before connecting to a power outlet a visual check of cables must be undertaken.
- This device is not suitable for charging in public places where there is a risk of injury to children.
- Dropping charger onto hard surfaces should be avoided.
- Never insert either end of cable to power or vehicle if the connectors are damp or wet.

### Personal Safety

- Never attempt to disassemble any part of the unit or plug connector.
- This device is not suitable for use by children.
- Disconnect the device immediately should you notice any damage to the charger or cables.
- Cables or connectors are not repairable, unit should be replaced in case of physical damage to any part.
- Do not allow the charger unit to get wet during charging.
- Ensure your home electrical system can supply the power setting you have set on the device.
- Always allow sufficient slack on the cable, move your vehicle closer to the power outlet to avoid excessive pressure on the cable.
- Do not expose or use the charging unit in direct sunlight.
- Never attempt to insert any object into the charging plug.
- This Teison product is for charging electric vehicles equipped with the specific plug attached at the factory. Never attempt to charge anything but an electric vehicle or modify the plug.



# QUICK START

- 1. Charging.** Connect the charging unit to a power supply, the blue indicator light will illuminate to confirm the power supply. Press the function button to set your desired charging current, connect the vehicle plug to your vehicle and the charger will begin charging as soon as communication is established. Should the connect symbol not change to charging you may need to press the control button again. Screen will switch to display power, charge rate, temperature and elapsed charging time. While charging the solid green indicator light will pulse.
- 2. Scheduled charging.** To use the scheduled charging feature, keep the function button pressed for 3 seconds, the screen will show the time delay, keep pressing the function button to set desired delay time. Release the function button and delay is set. To reset delay feature simply unplug the unit from the power supply and reconnect to use.
- 3. Monitoring the charging process.** During the charging process the current, current leakage and temperature of the control box are all monitored. If a fault occurs the power supply stops, the indicator light flashes red and the screen will display the fault description.



- 4. Charging is over.** As soon as your vehicle tells the charger that the battery is full charging will stop and the green indicator will change from pulsing to solid green again. Disconnect the power plug from the outlet (socket). Disconnect the plug from the vehicle inlet.

| Article                     | Specification             |
|-----------------------------|---------------------------|
| Output current              | 6A/8A/10A/13A/16A/20A/32A |
| Leakage Protection          | AC 30mA+DC 6mA            |
| Under voltage protection    | Supported                 |
| Over voltage protection     | Supported                 |
| Over temperature protection | Supported                 |
| Over current protection     | Supported                 |
| Short circuit protection    | Supported                 |
| Screen display              | Supported                 |
| Schedule charging           | Supported                 |
| Surge protection            | Supported                 |
| EFT                         | Supported                 |

### Auto Temperature Adjustment

During operation it is normal that the charger will generate a certain amount of heat. Should however there be too much heat generated due to long term charging in warmer conditions, your Teison portable charger has under and overheat protection to keep everything working correctly.



Should the unit temperature rise above 75 degrees the charger will automatically adjust the current to allow everything to cool down, once below 75 degrees the current and charge rate will increase to its original set level. Above 85 degrees your charger will shut down, the indicator light will flash red and "over temperature" will show on the screen. You can leave the charger connected and as soon as the temperature falls the charger will automatically begin charging again.

|                                |                              |
|--------------------------------|------------------------------|
| Waiting for charging indicator | Blue light is on constantly  |
| Connection indicator           | Green light is on constantly |
| Charging indicator             | Green light                  |
| Fault notification             | Red light flashes            |

| LCD display instruction |  |
|-------------------------|--|
| Status of Standby       | <p>The LCD display shows the following information: 0.0A current, 21.7°C temperature, 217.5V voltage, 0.00Kwh power consumed, 00:10:25 charging time, and 32A MAX current limit. The status is STANDBY.</p>    |
| Status of Connecting    | <p>The LCD display shows the following information: 0.0A current, 21.7°C temperature, 217.5V voltage, 0.00Kwh power consumed, 00:10:25 charging time, and 32A MAX current limit. The status is CONNECTING.</p> |
| Status of charging      | <p>The LCD display shows the following information: 16A current, 21.7°C temperature, 217.5V voltage, 0.00Kwh power consumed, 00:10:25 charging time, and 32A MAX current limit. The status is CHARGING.</p>    |

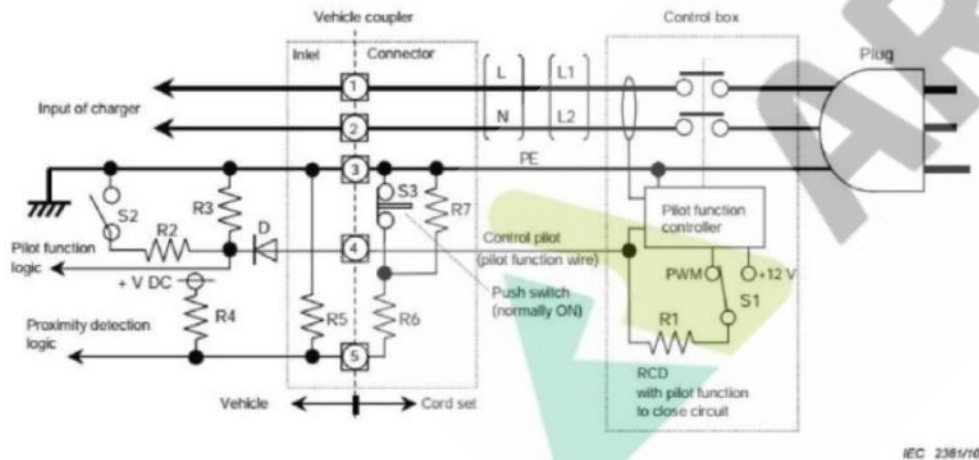


## Reference Standard

| NO. | Standard No.       | Statement  |
|-----|--------------------|--|
| 1   | IEC 61851-1:2017   | Electric vehicle conductive charging system – Part 1: General requirements   |
| 2   | IEC/EN 62752' 2016 | In-cable control and protection device for mode 2 charging of electric road vehicle (IC-CPD)   |
| 3   | EN 62196-2:2017    | Plugs, socket-outlets, vehicle connectors and vehicle inlets –Conductive charging of electric vehicles – Part 2: Dimensional compatibility and interchangeability requirements for a.c. pin and contact-tube accessories |
| 4   | SAE-J1772-2017     | SAE Electric Vehicle and Plug in Hybrid Electric Vehicle Conductive Charge Coupler   |

## Product Specification

| Subject  | Specification            |   |
|--|--------------------------|---|
| Item No.   | TS-PEC-002               |   |
| Product  | Portable EV Charger      |   |
| Flammability   | Control box              | Meets: UL94 LV: V-0   |
|  | EV Charging Plug         | Meets: UL94 LV: V-0   |
|  | EV Charging Cable        | Meets: UL1581 LV: VW-1  |
| EV rolling test  | Meets: IEC/EN 62752:2016 |   |
| Cable Deflection   | Meets: IEC/EN 62752:2016 |   |
| Drop   | Meets: IEC/EN 62752:2016 |   |
| Note: Plug-in and plug-out test is under no-load condition |                          |   |
| Specification  | Power plug               | Schuko/UK/AU/NEMA/CEE or customized   |
|  | Power side cable L1      | Length 1000 mm, Specification 3*2.5mm <sup>2</sup> /3*6mm <sup>2</sup>  |
|  | Control box on cable     | IEC 61851-1:2017 & IEC/EN 62752' 2016<br>Control box size: 255mm(L)Hx109mm(W)x55mm(D)                                     |
|  | Car side cable L2        | Length: 4500mm or customized SIZE<br>3*2.5mm <sup>2</sup> +2*0.5mm <sup>2</sup> /3*6mm <sup>2</sup> +2*0.5mm <sup>2</sup> |
|  | Car side plug            | 16/32A, TYPE1/2, Meet EN 62196-2:2017/SAE_J1772-2017  |
|  | Total cable Length       | 5.5M or customized  |
| Weight   | ≤3.6kg                   |   |



## Environmental Performance

|   |                                |
|---|--------------------------------|
| Working temperature                                       | -30°C~~60°C                    |
| Storage temperature                                       | -40°C~~70°C                    |
| Working humidity  | 5%~~95%e No condensation       |
| IP level  | Control box IP67               |
|   | Plug on carŮ UnconnectedŮ IP54 |
|   | Plug on carŮ connectedŮ IP55   |
| Altitude  | ≤2000m                         |
| Salt spray test   | MEET IEC/EN 62752:2016         |
| Atmospheric pressure                                      | 80kPa~101kPa                   |
| Temperature and humidity cycle                            | MEET IEC/EN 62752:2016         |
| Note Ů Avoide use in flammable or corrosive environments. |                                |

## Electrical Properties

|                       |                   |        |
|-----------------------|-------------------|--------|
|                       | Specification     |        |
| Rated voltage         | 254V AC           |        |
| Operating Voltage     | 120/230V          |        |
| Rated frequency       | 50/60Hz           |        |
| Rated current         | 16A               |        |
| Control Pilot         | IEC/EN 62752:2016 |        |
|                       | Duty Ratio        | 53.3%  |
|                       | Frequency         | 1000Hz |
| Leakage Protection    | Type A            |        |
|                       | AC leakage        | 30mA   |
|                       | DC leakage        | 6mA    |
| Insulation Resistance | ~ 10MΩ            |        |

## Mechanical Properties

|                       |                  |             |
|-----------------------|------------------|-------------|
|                       | Specification    |             |
| EV expected plug life | CEE 16A PLUG     | 5000 times  |
|                       | AC charging plug | 10000 times |

## After Sale service

At Teison we are proud of the quality and care we put into every one of our products. Your Teison device has undergone thorough testing before leaving our factory to ensure many years of uninterrupted use.

### Product warranty policy:

Your Teison product is guaranteed for a period of 2 years after purchase. Should your device develop a fault within the warranty period it may be returned to us for repair or replacement.

### Product warranty conditions:

- Physical damage to the unit or cables is not covered by the warranty.
- Units that have been opened or tampered with are not covered by the warranty.
- Units that have been used for anything other than the intended purpose are not covered by the warranty.
- Warranty only covers products purchased in the UK by an approved Teison distributor.

|                |  |
|----------------|--|
| Purchase date  |  |
| User name      |  |
| Contact phone  |  |
| Address        |  |
| Purchased from |  |
| Email address  |  |
| Product name   |  |
| Model          |  |

