Ohme

ePod

[7.4kW] Wifi

[V2.0]

AUS - Product manual

Product code: EP0-07AU-WI-BLSTD-01

Ohme ePod - Type 1 and Type 2

Scan the QR code for more information on how to set up your Ohme charger

Contents

Safety Precautions

This document contains important safety information relating to your Ohme ePod charger. Please retain this document for future reference.

Please read the document fully before using the Ohme ePod. Not following the safety instructions can result in electric shock, fire, serious injury or death.

⚠️	The charger should be inspected periodically to check for damage to the cabling and the enclosure. Do not use if the product is defective or appears damaged. Contact the Ohme Helpdesk for advice
⚠️	Do not attempt to open, repair, tamper or modify the Ohme Charger in any way. There are no user-serviceable parts
⚠️	We strongly recommend that a competent person (e.g. qualified electrician) installs and/or inspects the installation to check for safety and supply adequacy before use
⚠️	The overall installation should be in accordance with the IET Wiring Regulations and the IET Code of Practice for Electric Vehicle Charging Equipment (Australia & New Zealand) - AS/NZS 3000:2018
⚠️	Handle the Ohme ePod with care. Do not expose any part of the unit or cable to severe forces, impact, or sharp objects
⚠️	The Ohme ePod is only intended for vehicles that do not require ventilation during charging (NB all mainstream electric vehicles do not require ventilation)
⚠️	You may clean the Ohme ePod with a soft damp cloth. Do not use solvents or abrasives

Welcome to Ohme

This handy guide contains everything you need to know to set up your new charger and get started on the Ohme app. It also covers some important safety information. If you need a bit more information there are plenty of useful resources available on our website and if you can't find what you're looking for, our Customer Care Team will be happy to help.

Download the app

Downloading the Ohme app is an important part of setting up your charger. Go to the App Store/Playstore on your smart phone or tablet, and search for 'Ohme'.

Your charger information

Use the section below to make a note of your charger's serial number and installer, this is important if you ever need to contact the Ohme Helpdesk.

Serial Number	
Installer	
Name	
Contact Number	
Installation Date	

Product Description

The Ohme ePod is an Electric Vehicle (EV) smart charging device, with:

- Charge controller, including integral RCD
- Type 2 socket
- Cable clamp for use with load balancing

The product conforms to the latest safety standards including:

- RCD functions to disconnect the power supply if AC or DC current leakage occurs

The ePod is provided with use of the Ohme app and backend services. Updates are provided to the product as a minimum whilst the product is under Warranty (usually three years).

Product Specification

Voltage	240 V AC
Frequency	50 Hz
Max Current, Power Output	32 A, 7.4 kW
Operating Temperature	-25 $^{\circ}$C to 50 $^{\circ}$C
Storage Temperature	-40 $^{\circ}$C to 85 $^{\circ}$C
Cable connection	Type 2 socket to IEC62196
Residual current function	Type A 30 mA DC 6 mA
Overcurrent protection	Not fitted, overcurrent protection to be fitted separately as part of installation
Ingress protection	IP54 (suitable for use outdoors in all weather)
Data Communication	Wi-Fi only
Shipping weight	1.9 kg
Colour	Black

Vehicle Integrations – An Ohme Labs feature

Some car manufacturers provide an API (Application Programming Interface) which allows access to information about your car via your manufacturer's smartphone app. Providing your login details in the Ohme app allows Ohme to see your car's current state of charge, which is then used to work out how much charge you need.

This is an Ohme Labs feature and is currently available for a limited number of manufacturers. We're always working to offer the latest in technology to our customers. As a part of Ohme Labs, we're continuously improving this feature and, from time to time, it may not work as intended.

Please note, certain functionality may also be limited based on manufacturer-specific API restrictions or limitations. If you have any issues, or you're worried something just isn't quite right, our Customer Care Team are happy to help.

Installation

At a glance…

- The RCD inside the unit is Type A and 6mA DC
- The units use the customers Wi-Fi network
- Load balancing can be setup with the current sensor (CT) clamp

Mounting the unit

The Ohme ePod is designed to be wall mounted to a flat surface. Fixings are included which are suitable for most wall surfaces (e.g. brick/render) but the installer should select their own if these are not appropriate.

Use the drill template provided with a 7mm masonry drill bit. Mount the rear of the ePod using four screws. Where the surface is uneven, it is essential that the rear of the ePod is not twisted when secured to the wall. It may be necessary to add spacers between the unit and the wall to avoid twisting the unit, otherwise the unit may not seal correctly.

To avoid breaking the plastic screws, do not use a power tool when securing the front to the rear.

Check there are no gaps around the join line that could allow water ingress. Finally, attach the rubber covers to the front plastic screws.

Electrical connection

The overall installation must be compliant with the IET Wiring Regulations and the IET Code of Practice for Electric Vehicle Charging Equipment. Installation should be carried out by a competent electrician with knowledge of EV charge point installations.

The ePod has a terminal block for Live, Neutral and Earth. The terminal block can accept a $10mm^2$ conductor. There are cable entry points at the bottom and rear. A 25mm gland and a blanking grommet is provided. The blanking grommet is attached to the rear entry hole. If feeding the cable in from the rear, it will be necessary to move the grommet to the bottom.

Installer Mode

On first power up, the ePod will be in installer mode allowing the setting of the maximum rating, enabling load balancing and the setting the fuse rating using the buttons. We recommend that the Ohme Installer Web App is used. Contact the customer care team at help.au@ohme-ev.com to get set up.

RCD

The Ohme ePod has a Type A 30mA and DC 6mA RCD built in. To avoid blinding of RCDs, we recommend that any upstream RCD is at least Type A. Type AC RCDs may saturate and fail to operate in the presence of smooth DC currents below 6mA.

In the event of an RCD activation in the Ohme charger, the unit is reset by power cycling (switching the supply off, wait 5 seconds, and switch on) or by unplugging and re-plugging the vehicle. The RCD in the unit is certified as an RCD-DD, conforming to IEC62955.

Overcurrent Protection

No overcurrent protection is provided in the Ohme Home Pro, separate provision is to be provided as part of the installation. We recommend the installation of an MCB with a tripping characteristics type C.

> **Note**
>
> The breaker value depends on the diameter and the length of the cable, the EVSE rating, and the environmental parameters (for electrician to decide)

Installing the CT Clamp

The Ohme ePod has a dynamic load balancing feature. A current sensor (CT) clamp is provided to measure the electrical demand of the property, or sub-board. The unit will limit the maximum current available to the vehicle to keep the household demand below the set threshold/fuse value.

We recommend installing the clamp regardless of whether load balancing is needed as it future proofs the installation for advanced features, such as solar.

The unit is designed to comply with the relevant parts of Engineering Recommendation (ER) G100, which is a requirement of some DNOs to permit installation in circumstances where the property has insufficient capacity.

Once load balancing is activated, if the CT clamp is removed, or is faulty, the unit will revert to 16A. It is therefore sensible to ensure the spare capacity, after taking account of other loads and diversity, is at least 16A.

Note: where the dynamic available capacity for the charger drops below 6A, the ePod will pause the charging for at least five minutes to prevent rapid switching of the vehicle where the current is hovering above and below the threshold.

Ohme units calculate the direction of the current automatically after the first charging session. The clamp can be installed in either direction.

Spring connectors are provided on the circuit board to attach a cable used for connecting to the clamp. The spring connectors will accept a maximum 1.6mm^2 conductor size.
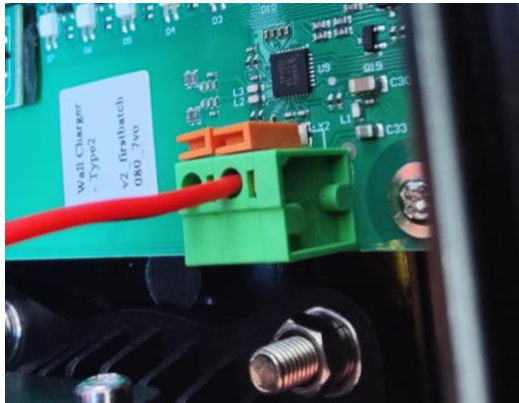
Figure 1 – Clamp connection using spring connectors

Connect up the CT clamp and follow the commissioning procedure either using the Web App or on the unit using the buttons:

- Web App: once the CT clamp is connected, click *Check Clamp* to check for correct connection. Click *Enable Load Balancing*, then *Save Settings*
- Buttons: see the ePod Quick Set Up Guide provided in the box. During the clamp check process, the LED light bar will turn from red to amber when a clamp value has been successfully received.

The CT clamp and wiring is not polarity sensitive – you can install the CT clamp in either direction.

Ohme recommends EV Ultra Cable 3 Core + Data as a convenient single cable solution. This cable contains two data cores and can be used to extend the clamp cable up to 60 metres. Cat5e Ethernet cables or alarm wire (e.g. Belden) can also be used to extend the CT clamp.

There are two marked areas (+) for drilling to install a separate gland, suitable for a M12 or M16 gland.

Figure 2 – Areas marked for installing additional glands

Network/Internet Connection

The Ohme ePod uses the customers Wi-Fi data connection. Set-up can be completed via the Ohme App.

Where Wi-Fi is known to be unreliable, the customer should be made aware that the smart features of the Ohme unit will also be unreliable. Ohme cannot be held responsible for the installation location and issues with the customers' network.

Where the unit cannot establish data transfer at the time of plug in, the unit will behave like a dumb charger and will not schedule the charging session.

Troubleshooting

If there are any queries or issues regarding using the Ohme Charger, please contact the Ohme Helpdesk via email: help.au@ohme-ev.com.

Maintenance

The Ohme ePod can be cleaned with a soft damp cloth. Avoid the use of cleaning agents and solvents. The Ohme ePod is maintenance free. If the charger appears defective or damaged, please discontinue use and contact the Ohme Helpdesk for advice.

Compliance

The product complies with the relevant elements of:

- IEC 61851-1:2017 Electric vehicle conductive charging system. General requirements
- IEC 62955:2018 Residual direct current detecting device (RDC-DD) to be used for mode 3 charging of electric vehicles.
- IEC 61000-6-3:2021 Electromagnetic compatibility (EMC). Generic standards. Emission standard for equipment in residential environments
- IEC 61000-6-1:2019 Electromagnetic compatibility (EMC). Generic standards. Immunity standard for residential, commercial, and light-industrial environments
- IEC 62196-1:2022 Plugs, socket-outlets, vehicle connectors and vehicle inlets.

Disposal

Information on Disposal for Users of Waste Electrical & Electronic Equipment (private households)

This symbol on the product and accompanying documents means that used electrical and electronic products should not be mixed with general household waste. For proper treatment, recovery and recycling, please take this product to designated collection points where it will be accepted free of charge. Alternatively, in some countries you may be able to return your products to your local retailer upon purchase of an equivalent new product.

Disposing of this product correctly will help save valuable resources and prevent any potential negative effects on human health and the environment, which could otherwise arise from inappropriate waste handling. Please contact your local authority for further details of your nearest designated collection point. Penalties may be applicable for incorrect disposal of this waste, in accordance with your national legislation.

For business users in the European Union: if you wish to discard electrical and electronic equipment, please contact your dealer or supplier for further information.

Information on Disposal in other Countries outside the European Union: this symbol is only valid in the European Union. If you wish to discard this product, please contact your local authorities or dealer and ask for the correct method of disposal.

Further information on disposal and general recycling can be found at www.complydirect.com/the-recylcing-room.

Contact Details

This warranty is provided by:

Ohme Operations Australia Pty Limited ABN 662743711

A: Suite A, 35 Alexandra St, Hunters Hill NSW 2110 Australia

T: +61 2 8311 0097

E: help.au@ohme-ev.com

(Referred to in this warranty as **"Ohme"**, **"we"**, **"us"** or **"our"**.)

Manufacturer's Warranty

The terms of this warranty are set out in clause 13.3 of our Website Terms and Conditions (see below).

The key terms of the warranty for the Ohme ePod are as follows:

- The device is protected by a manufacturer's warranty for 36 months from the date of installation (**warranty period**).

- The minimum operational life of the Ohme ePod exceeds 36 months.

- The warranty covers on-site assistance, repairs and replacements, at no cost to you (except for your own expenses in claiming the warranty).

The warranty covers any defects in materials or workmanship under normal use. During the warranty period, Ohme will refund, repair or replace, at its discretion, at no charge, products or parts of the product which prove defective because of improper materials or workmanship under normal use and maintenance. This will include labour costs to repair or replace the unit at the installation site.

Ohme will either repair the product or replace the product. Goods presented for repair may be replaced by refurbished goods of the same type rather than being repaired. Refurbished parts may be used to repair the goods.

A replacement product will be subject to the remaining warranty period of the original product or for 180 days from the date of the replacement or repair, whichever is longer.

The warranty does not cover any issues that are caused by conditions, malfunctions, or damage not resulting from defects in the charging unit. The warranty does not cover damage or malfunction directly caused by abuse, misuse, negligence, accident, improper use, including but not limited to:

- change of mind purchases

- defects that are brought to your attention before your purchase (such as goods labelled as seconds with their faults clearly marked)

- Failure to follow the instructions and warnings provided in the product literature.

- The environment or "Acts of God" such as fire, earthquake, flood or other event beyond Ohme's control

- General appearance of the product such as discolouration or damage to paint, labels, scratches, dents and cracks

- Any repair, alteration, or modification to the product other than those authorised by Ohme.

The benefits to you given by this warranty are in addition to other rights and remedies you may have under applicable consumer protection law in relation to the goods to which this warranty relates.

Ohme ePods that are purchased in Australia come with guarantees that cannot be excluded under the Australian Consumer Law (**Consumer Guarantees**). Australian Consumer Law also specifies the circumstances in which you will not be entitled to a repair, replacement or refund for problems with your purchase. The Australian Consumer Law applies to your purchase of the Ohme ePod.

If the product has a minor problem, Ohme will repair that problem at no cost to you and within a reasonable time. If the product has a major problem, you are entitled to a replacement or refund of the Ohme ePod. Ohme will review the product and advise you whether the product has a minor problem or a major problem. See clause 13.3 of the Website Terms and Conditions (see below) for further details.

Contact Ohme in the first instance to discuss your options.

Claims process

To initiate a service from Ohme under this warranty during the warranty period, please contact Ohme at help.au@ohme-ev.com. Please have the serial number of the charging unit to hand and it will help if you have the details of your installer. You must bear your own expenses in claiming the warranty.

Further details about the claims process can be found in clause 12 of the Website Terms and Conditions (see below).

Limitation of Liability

Subject to applicable consumer protection law and to the maximum extent permitted by law, no liability will be accepted for any loss, costs or damage as a consequence of using or misusing the product except, and only to the extent, where this is caused by our negligence.

Terms and Conditions

For full Terms and Conditions of the product please visit our Website Terms and Conditions at www.ohme-ev.com/au/terms-and-conditions.