

CHARGEMATE EV Charger

User Manual





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Welcome to ChargeMate

Introducing ChargeMate, the smart solar-savvy AC charger developed from the ground up in Australia by the JET Charge team.

We have packed ChargeMate with features to ensure that it meets the demands of your charging needs. Whether you are charging at home or at work, ChargeMate's highly flexible feature set, robust build quality, and technology can deliver the charging solution you need.

The best part about using a ChargeMate is that it's not only super easy, but it's also environmentally friendly and cost-effective. By charging at a public station or at home, you're doing your bit for the planet and you could be saving yourself some cash in the process. So why not give it a go and see just how easy it can be?

Components

- 1. Communications Port
- 2. LCD Screen
- 3. RFID Reader
- 4. Protective Enclosure
- 5. Type 2 (IEC 62196) Charging Port

Product Overview





Let's Get Started!

Are you charging at home?



Are you charging at a public station or in an apartment?



Head to page 03

Head to page 04



Charging at home?

Before you begin...

1. Set up the JET Charge Connect App on your smart phone

If you haven't already done so, download the **JET Charge Connect App** from the Apple App Store or Google Play Store.





If you're having trouble setting up the app, no worries! Check out **page 07** for a step-by-step guide to help you get set up in no time or head to **page 12** for more App features.

2. Grab the right cable

Make sure you have your own charging cable ready to go before starting.





START

When the LCD screen displays "charger is ready" plug your charging cable into the ChargeMate and then into your EV.



CHARGE

While charging you can check the App to monitor current, power and energy from the comfort of your couch!



STOP

Unplug your cable from your EV. Make sure your charge port is unlocked to do this.



Charging at a public station or in an apartment?

Before you begin...

1. Grab your RFID card or open your Public Charging App

Open your Public Charging App and follow the instructions **OR** swipe your RFID card on the JET Charge logo.

2. Grab the right cable

Make sure you have your own charging cable ready to go before starting.

 The charging cable MUST have a Type 2 (IEC 62196-2) connection end that plugs into the charging station in line with Australian standards.



PLUG IN

Plug your charging cable into the ChargeMate and then into your EV.

START CHARGE

Follow the instructions on the LCD screen and authenticate via your Public Charging App or by swiping your RFID card on the JET Charge Logo.

STOP CHARGE

Open your Public Charging App and follow the instructions or using your RFID card.

UNPLUG

Unplug your cable from your EV. Make sure your charge port is unlocked to do this.



Step-by-step

START CHARGING

1. Check the Screen

Before you get started check the LCD screen to ensure there is power and the charger is on.

Home: the LCD screen displays "Plug in Car to Start".



Can't see this on the screen? Check out **page 19** for some troubleshooting options.

2. Connect

You'll either need a **Type 2-to-Type 1** or **Type 2-to-Type 2** cable depending on your vehicle.

First plug your charging cable into the charger.

Next, plug the other end of your charging cable into your vehicle.

Home: charging will start automatically when you connect the cable (or press start in the JET Charge Connect App)

Apartments/Public: follow the instructions on the LCD screen and authenticate via your Public Charging App or by swiping your RFID card on the JET Charge Logo





3. Charging

Your car will start charging at the maximum rate that was set up by the installer or the default rate that was set up through the JET Charge Connect App.

Charging statistics will be displayed on the ChargeMate LCD screen.

Home: you can adjust the charging rate via the JET Charge Connect App, just head to **page 12** for more information.



STOP CHARGING 1. Stop Charge

Home: Open the JET Charge App to stop charge or jump to Step 2. You can also pause charging from the JET Charge App. See **page 14** for more details.

Apartments/Public: Open your Public Charging App and follow the instructions or swipe your RFID card then unlock your vehicle.

2. Unlock your EV and Unplug

Firstly make sure your charge port is unlocked.

Unplug your charging cable from your EV first. Then remove it from the charger if you need to take your cable with you.

Happy driving!



JET Charge Connect App

Using the JET Charge Connect App with your ChargeMate

With the JET Charge Connect App, you can easily customise your charging sessions to fit your home energy usage profile.

You can use the JET Charge Connect App to:

- Remote control charging (Start/stop)
- Adjust charging rates to suit you
- Set charging schedules
- Reconnect your Wi-Fi if needed
- Set solar charging modes (only available with the JET Charge solar power meter product)

Setting up the JET Charge Connect App

1. Download the JET Charge Connect App

To get started, download the JET Charge Connect App from either the Apple App Store or Google Play Store.







2. Connecting your charger to Wi-Fi

Your installer may have done this for you. If your charger is already connected to Wi-Fi, head to **page 09.**

To connect your charger to your Wi-Fi network, you can use the JET Charge Connect App.

When you first power up the charger, it will search for an internet connection and cycle through different modes.

You can see the connection status on the LCD screen with an icon located in the top left-hand corner.



If you change your Wi-Fi password, you will need to reset the ChargeMate The different modes and their corresponding icons are listed in the table below.

ICON	FLASHING	SOLID ON
(ק)	Setup Mode for Wi-Fi access	-
Ŷ	Searching for Wi-Fi connection	Connected to Wi-Fi
뫎	Searching for Ethernet connection	Connected to Ethernet
DR	-	Demand Response Event in Progress

Please wait for the Setup Mode Wi-Fi access icon to flash on the LCD display before starting to connect to the charger through the JET Charge Connect App.



Once you see the 'Set up' mode icon on the charger, open your JET Charge Connect App.

Then select 'Wi-Fi Setup' from the JET Charge Connect home screen.



Select the appropriate Wi-Fi Network and enter network password if required.





Please note that ChargeMate is only compatible with 2.4GHz Wi-Fi networks. Ensure you are not trying to connect to a 5GHz network band.



3. Open the Connect App

Open up the JET Charge Connect App on your phone and tap on 'Get Started'.



4. Sign In

To get started, sign in to the JET Charge Connect App with your JET Charge account. Don't have an account yet? No worries! Simply follow the easy prompts to create your account and get started.





5. Enter your Code

To link your ChargeMate with the JET Charge Connect App, just enter your mobile phone number that you used when setting up the installation.

You'll receive an SMS verification code on your device, which you can enter in the App.

Once verification is successful, your Charger will be linked with the JET Charge Connect App, making it easy for you to manage your charging sessions. Please enter the verification code we sent to your mobile phone number below. SEND CODE Didn't Get a Code? Resend Code Having trouble? Contact Us

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If you encounter any issues connecting your ChargeMate with the JET Charge Connect app, please contact JET Charge via the help section on the JET Charge Connect App



JET Charge Connect App Features

Monitoring your Charging

Once your charger is linked you will see it appear on the Devices screen.

The JET Charge Connect App allows you to monitor the status of your ChargeMate EV charger and manage your charging sessions.

It also allows you to customise your charging sessions to suit your energy usage profile.

Your charging rate can be adjusted to suit your charging schedules so you can charge using off-peak tarrifs.



- 1. Charger Name
- 2. Wi-Fi Connection
- 3. Charging Status
- 4. Time your EV has been charging

With the JET Charge Connect App you can easily keep track of the status of your ChargeMate EV charger and manage your charging sessions.



Charging Modes

Your charger will charge at the default rate, but you can also charge by using three modes:

- Manual Mode: change charge rate to suit you
- Fast Mode: charge quickly at the maximum charging rate
- Pause Mode: Pause charging session

This can be changed via the menu at the top of the selected Device screen.



Manual Mode

In this mode, you can modify the maximum charge rate you would like to charge your EV at. The sliding scale can be adjusted in **1A** increments.





Fast Mode

In this mode, you can charge quickly up to **32 A** (**7.4kW** single-phase and **22kW** three-phase).



Fast Mode overrides any current charging session for the current session only.

Please note maximum charging rate may be lower than 32A, depending on your vehicle specifications, your sites available capacity and local energy regulations.

Pause Mode

When you **Pause** a session it will pause your current session until you want to resume it. You can continue the session any time by selecting the 'Continue Charging' button in the **Pause Mode** screen.



Your previous scheduled session will automatically continue unless the previous charging session was in **Fast Mode,** then this mode will need to be selected again.



Charge Scheduling

The JET Charge Connect App allows you to schedule charging sessions either as a one-off, or on repeat.

The schedule menu can be accessed by clicking the calendar icon in the nav bar at the bottom of the screen.



Schedules can be turned on and off in the **'Your Schedules'** view. Conflicting schedules are unable be activated at the same time.



Create a new Charging Schedule

Start by pressing the plus icon at the bottom of the schedules view. Then you can select the charging mode, charging rate, time-period and days for your new charging schedule will occur.

You can also give this schedule a customised name and choose if it repeats or is a one-off instance. A one-off schedule will automatically toggle itself off after it has expired.

Active schedules can be seen in a weekly or daily calendar view by selecting the alternative view at the top of screen.

To delete a schedule, press and hold on the relevant schedule until the Editor window pops up, then select 'Delete' and confirm.



Charge Session History

Charging session history can be accessed by clicking on the graph icon at the bottom of the Device screen.



You can select the current or any previous charging session and view the energy usage and charging rate throughout the session. Use the date-range buttons at the top of screen to filter sessions from specific months.

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EXORT CSV	

This data can be exported as a CSV file to view elsewhere by clicking on the export CSV button.



Solar Integration

What is the JET Charge solar power meter?

If you have solar power at your house, you can add the JET Charge solar power meter to optimise matching your solar production and EV charging.

The JET Charge solar power meter is a ChargeMate accessory that can be installed in your switchboard to:

- Monitor solar production
- Monitor power imported/exported to the grid
- Provide dynamic charging rates based on your solar production.

Please note that the JET Charge solar power meter is currently only available for single-phase connection.

There are two solar modes with the JET Charge solar power meter:

ALL SOLAR MODE







Minimum Grid Import

When using both solar modes, a minimum charge rate is required to be set which will be drawn from the electricity grid. This is the rate that your EV will continue to charge, even if total/surplus solar falls to **OA**.

If you want to ensure that no grid energy is used to charge your EV, the minimum charge rate should be set at **OA**.

Please note that if your minimum grid import is set to **OA**, total/surplus solar generation must exceed **6A** for your EV to start charging.

JET Charge recommends setting your minimum charging rate at **8A**, approximately the same charge rate your EV receives when charging via a General Purpose Outlet. This is to protect the charger from switching on and off, which will help maintain the life of your charger.



All Solar Mode

Using all your solar to power your EV



What does it do?

In this mode, the JET Charge solar power meter monitors the total power being produced by your solar inverter and ChargeMate dynamically matches the charge rate with the solar power being generated, in addition to your minimum grid import setpoint.

This means that all your solar power being generated can be used to charge your electric vehicle.

Minimum Grid Setting So

Solar Generation Output

21A



13A

Please note that grid power may still be used to power any other appliances within the premises.

Export Solar Mode

Using your excess solar to power your EV

With the JET Charge solar power meter installed, Export Solar Mode will replace Manual Mode.



What does it do?

In this mode, the JET Charge solar power meter monitors the power being imported or exported on your grid supply. When you are exporting power to the grid, ChargeMate dynamically matches the charge rate with the surplus solar power being exported, in addition to your minimum grid import setpoint

This means that any surplus solar power not used within your premises can be used to charge your electric vehicle.

Minimum Grid Setting Solar Generation Output

8A + 10A

= 18A



Something wrong?

Troubleshooting Tips & Tricks

We want to make using ChargeMate as easy as possible, but sometimes you may encounter an issue.

Don't worry, we've got you covered! Check out the following list of common issues and their solutions on the next page to help you get the most out of your charger.

We recommend that you first follow the troubleshooting tips on **page 20**. If you still need support, please contact JET Charge directly.





How to Fix Common Issues

DESCRIPTION	SCREEN DISPLAY	SOLUTION
Wi-Fi Connection Lost: The ChargeMate will display this message when a connection with the network has been lost.	"Wi-Fi Connection Lost"	If you see this message displayed on your ChargeMate and have recently changed your Wi-Fi password you will need to reconnect your Wi-Fi. Go to page 08 for more details.
Charger Offline: The ChargeMate will display this message on startup when establishing a connection with the network.	"Waiting for Station Registration"	If you see this message displayed on your ChargeMate for more than 30 seconds, please check your Wi-Fi or Ethernet connection.
Cable Fault: The ChargeMate will display this message if the cable remains connected to the charger, if the charger is not configured as a tethered charger.	"Cable Fault Please Disconnect cable from charging station"	You can easily change ChargeMate to a tethered charger by going to the settings menu within the JET Charge Connect App and selecting the "cable lock" option.
Contactor Fault: The ChargeMate will display this message if the internal contactor has failed to open/close.	"Contactor Fault Please Contact support centre"	Power cycle the ChargeMate by turning the device off from the isolator switch, wait a few seconds, and then turn it back on again. This can help to resolve a variety of issues that may be caused by the device being in an abnormal state.
		If fault reappears, please contact JET Charge via the Help & Support section in the JET Charge Connect App.
Voltage Fault: In the event that the supply voltage falls outside of the charger's rated voltage, the device will display undervoltage and overvoltage fault messages. This feature ensures that you have a clear indication of any potential issues with the charger.	"Undervoltage Fault Please Contact support centre"	Please contact JET Charge via the Help & Support section in the JET Charge Connect App.
Meter Fault: The Chargemate will display this message if the it is unable to communicate with the internal power meter.	"Power Meter Fault Please Contact support centre"	Please contact JET Charge via the Help & Support section in the JET Charge Connect app.



Keeping your ChargeMate in top shape

Here are some important tips to keep your ChargeMate in tip-top shape.



Maintenance & Cleaning

- Before each use, be sure to do a quick visual check of the ChargeMate for any damage.
- Similarly, inspect the EV charge cables, outlet, and connectors for any signs of wear and tear.
- Remember to **TURN OFF** the power supply before doing any cleaning or maintenance on the charger.
- **AVOID** using sprays or direct water streams to clean the charger. Instead, use a soft, dry, or damp cloth.
- Use only non-corrosive cleaning agents with a **pH value between 6 and 8.**



Charging Cable Recommendations

- Do not use plug adaptors with your ChargeMate. It is important to use the proper cables and connectors to avoid any potential damage or safety hazards.
- If you notice any damage to the charging cable, vehicle plug, or electrical outlet, do not use them to charge your electric vehicle.
- Do not use contacts that are dirty, wet or have been exposed to water.
- Only connect the cable connector to the vehicle inlet if the electrical infrastructure is protected against water, moisture, and liquids.
- Never use force to disconnect the charging plug from the vehicle inlet during a charging session as this can cause serious injuries or even death. Stay safe and be sure to follow these tips for worry-free charging.

- Please note that plug adaptors are not to be used with ChargeMate. It's important to use the proper cables and connectors to avoid any potential damage or safety hazards.
- Similarly, cord extension sets should not be used with ChargeMate.

Thanks for using the right cables with your ChargeMate, and happy charging!



Tech Specs & More

▲ Safety

Please read and fully understand the safety instructions provided in this document. Disregarding any actions or recommendations provided by JET Charge may lead to electric shock, fire and/or severe injury. Disregarding actions provided in this document may also result in damage to the vehicle or ChargeMate. Any resulting damage from such actions is excluded from the warranty.

This document is also intended to be used as a reference guide for operating the ChargeMate EV Charger. JET Charge reserves the right to make changes to specifications and processes of the product at any time without prior notice.

- DO NOT operate the charger if there are physical defects such as cracking, breakage, corrosion or any other damage is observed. If this is the case, please immediately contact JET Charge.
- The ChargeMate EV charger can only be opened by an authorised and qualified specialist to disassemble, repair, alter or modify the unit. Unauthorised modification of JET Charge equipment makes the warranty void.

- Unauthorised modification to the enclosure will void the warranty and is **not allowed.**
- Do not remove any safety warnings on the device, warnings include safety symbols, rating information, identification codes and cable markings.
- Power cycle the Charger by turning the device off from the isolator switch, wait a few seconds, and then turn it back on again.
- ChargeMate can only be used under the operating parameters specified in the manual. The operating temperatures are within -25°C to +50°C ambient temperature.
- **DO NOT** use your charger under adverse climatic conditions that could affect the vehicle or ChargeMate. **DO NOT** open the cover in the rain.



Product Specifications

MAIN

PRODUCT NAME	CHARGEMATE 3P22/NMI/1/3
DIMENSIONS (H X W X D)	380mm x 180mm x 130mm
MOUNTING MODE	Wall-mounted or Pedestal mounted
AMBIENT AIR TEMPERATURE FOR OPERATION	-30°C - 50°C
AMBIENT AIR TEMPERATURE FOR STORAGE	-20°C - 85°C
RELATIVE HUMIDITY	5 - 95%
PRODUCT WEIGHT	3.0 kg
COLOUR	Black
ELECTRICAL	
RATED POWER	7.4 kwW / 22 kW
RATED CURRENT	Up to 32A
SOCKET TYPE	1 x Type 2 IEC-62169
POLES DESCRIPTION	L1, N, PE / L1, L2, L3, N PE
RATED SUPPLY VOLTAGE	240 V AC 50/60 Hz
ACCESS CONTROL SYSTEM	RFiD (13.56MHz)
INTERNAL PROTECTION	RCD with 6mA DC protection for use with 1/3-phase loads of up to 100A/400V Compliant with IEC62955 (Mode 3) EV Charging Stations & UL2231
CONNECTIVITY	
METERING	Integrated Non NMI Meter
OPTIONAL EXTRAS	4G Modem, JET Charge solar power meter Optimisation, NMI Meter
COMMUNICATIONS INTERFACES	Ethernet, Wi-Fi 802.11 b/g/n, Modbus-RTU
CONTROL TYPE	JET Charge Connect App
LOCAL SIGNALLING	1 LCD screen: status indication
SERVER COMMUNICATIONS PROTOCOL	OCPP 1.6J
OPERATING MODE	Networked/Standalone
MECHANICAL	
PRODUCT CERTIFICATIONS	IEC 61851-1 / IEC 60529
INGRESS PROTECTION	IP54
IMPACT PROTECTION	IK08



That's a wrap!

We hope that you find this product manual helpful in getting started with your ChargeMate.

However, if you have any questions or concerns, please don't hesitate to reach out to us. Our customer support team is available to assist you with any issues you may encounter while using your ChargeMate.

We're committed to providing you with a topnotch customer experience, and we're always happy to help in any way we can.

You can contact us via:

Phone: 1300 856 328 Email: info@jetcharge.com.au or via the JET Charge Connect App

Thank you for choosing ChargeMate, and we look forward to hearing from you soon!





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jetcharge.com.au