

OC20-BA-7KW / OC20-BC-7.2KW OC20-BA-22KW / OC20-BC-22KW ocularcharging.com.au

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### **IMPORTANT!**

Read this entire document before installing or using the charger. Failure to do so or to follow any of the instructions and warnings in this document can result in fire, electrical shock, serious injury, or death.

The charger must be installed by a qualified electrician.

The entire installation must comply with the latest "AS/NZS3000:2018 & AS/NZS:3008 standards"

# Welcome to your Ocular LTE!









**FAQs** 

Follow the links or scan to QR codes to access all our user manuals and technical documents. You will also find answers to the most common questions we receive.

# **USER MANUAL**

### **SECTION 1**

# **HOW TO CHARGE - LTE**

### 1. STARTING A CHARGING SESSION

#### LTE socket model

- 1. Grab a charging cable and plug each end into their respective ports.
- 2. Press the sliver button on the side of the charger to start charging.

### LTE tethered model

- 1. Plug the attached charging cable into your car port.
- 2. Press the sliver button on the side of the charger to start charging.





### 2. STOPPING A CHARGING SESSION

The charging sessions can be terminated either by the car or the charger.

- To stop charging via the car please consult your car manual.
- To stop charging via the charger, simply press the silver button on the side of the charger.

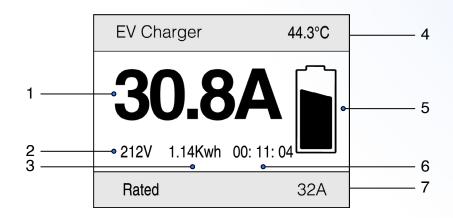
### 3. CHANGING THE CHARGING SPEED

The charging speed of the charger can be changed by pressing the silver button on the side of the charger before plugging the cable into the car. Charging speed will be shown on the screen of the charger when the button is pressed.

# **SECTION 2**

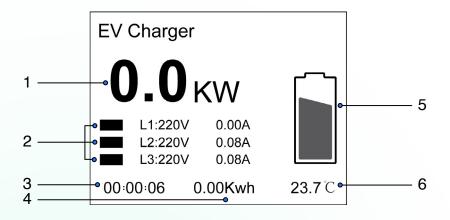
# **FUNCTIONALITIES OF THE CHARGING SCREEN**

### **SINGLE PHASE**



- 1. Real-time current
- 2. Real-time voltage
- 3. Power consumed
- 4. Temperature
- 5. Charging icon
- 6. Charging time
- 7. Rated current

### THREE PHASE



- 1. Real-time power
- 2. Three Live Wire data
- 3. Charging Time
- 4. Power Consumption
- 5. Charging Icon
- 6. PCB Temperature

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# **SECTION 3**

# **TROUBLESHOOTING**

PROBLEMS	SOLUTIONS
My charger will not charge the car	<ol> <li>Unplug and plug in the charging head, make sure it's fully plugged in.</li> <li>Check if your car is fully charged or if there's a charging limit set on your car.</li> </ol>
Leakage protection warning	<ol> <li>Check if there is any foreign objects or water in the charging plug or in the vehicle socket.</li> <li>Switch the charger off and on again, if the fault persists, please stop using the charger and contact Ocular Charging immediately.</li> </ol>
Over temperature waring	The current temperature is too high for the charger to safely operate, charging session will restart automatically once the temperature returns to normal operating range.
CP error warning	Unplug and plug into the car again, make sure the plug and socket are clean.      If the fault persists, please contact us for further information.
Over current warning/ Short circuit warning	For any of these faults, please contact us for further information.
Over current warning/ Short circuit warning	<ol> <li>The current limit may be set incorrectly on the charger.</li> <li>View the current rated Amps on the charger screen.</li> <li>While the charger is not plugged into a vehicle, press the silver button on the right side of the charger to cycle through the available charging rates.</li> <li>Double check if there's a charging current limit on your car.</li> <li>EVs can draw up only a certain kW. It depends on the car itself, but most of the cars available today are only drawing up to 11kW but the EV chargers we have can be up to 22kW for future purposes.</li> <li>Please note: There may have been a hard limit set by the electrician according to the power available at your house.</li> </ol>

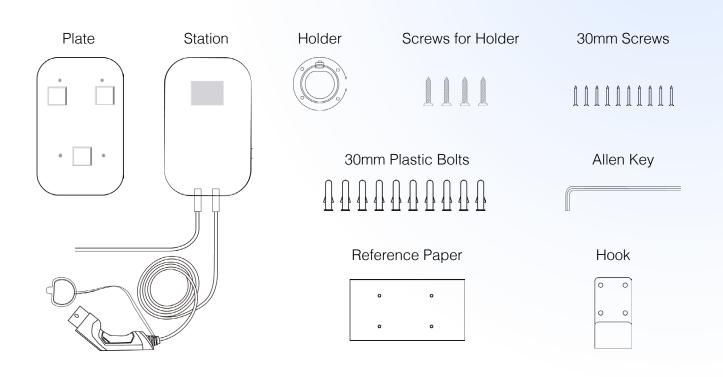
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# INSTALLATION GUIDE

SPECIFICATIONS						
Model Number	OC20-BA-7.2kW	OC20-BC-7.2kW	OC20-BA-22kW	OC20-BC-22kW		
Power Output	7.2kW (1- Phase)		22kW (3- Phase)			
Charging Connector	Type-2 Socket	6m Type-2 Cable	Type-2 Socket	6m Type-2 Cable		
Display	3.5" LCD Screen + LED indication lights					
Frequency (Hz)	50Hz					
Input and Output Voltage	230V ± 20% per phase					
Input and Output Current	32A MAX per phase					
Operating Temperature	-30 to +55 in operation					
Storage Temperature	-40 to +75 in storage					
Working Humidity	95% relative humidity, non-condensing					
IP Performance	IP66					
Internal RCD	Type A RCD + 6mA DC					
Electrical Protection	Over current, Short circuit, Over voltage, Under voltage, Ground fault, Lightning surge, Over temperature, Earth leakage					
Meter	Integrated Energy Meter					
Standby Power Consumption	<8W					
Mounting	Wall mountable					
Dimension (H x W x D, mm)	295 x 195 x 65 mm					
Net Weight	5.5 kg	7.7 kg	5.5 kg	7.7 kg		
Recommended Cable Size (50m run)	40A single phase type A RCBO		40A three phase type A RCBO			
Recommended Circuit Breaker	10mm2 2C+E		10mm2 4C+E			
Certification	CE, TUV, FCC, CSA, RoHS, RCM					
Warranty	2 years					

# **OCULAR LTE OVERVIEW**

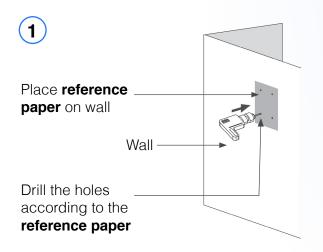
### **ACCESSORIES OF TETHERED MODEL**

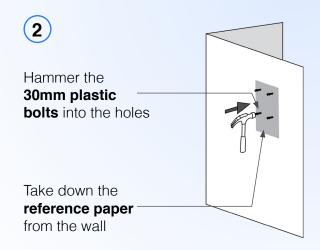


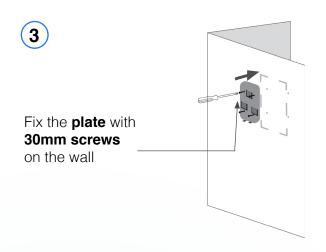
### **PRODUCT OVERVIEW**

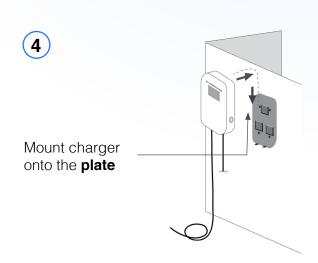


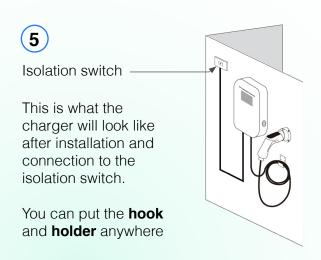
### **INSTALLATION GUIDE**

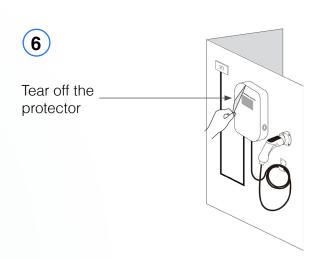






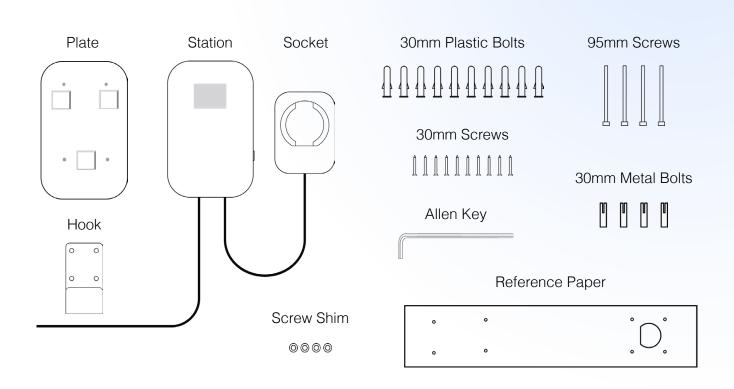






# **OCULAR LTE WALLBOX OVERVIEW**

### **ACCESSORIES OF UNIVERSAL MODEL**



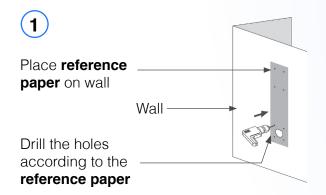
### **PRODUCT OVERVIEW**

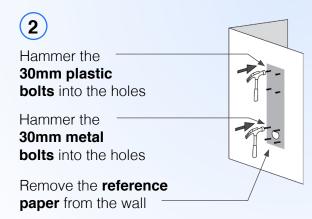


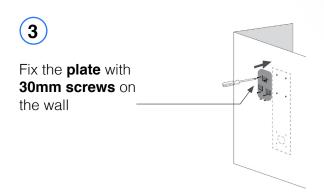
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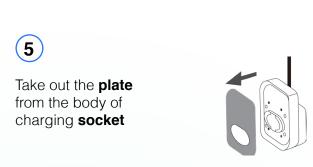
### **INSTALLATION GUIDE**

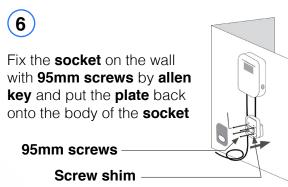


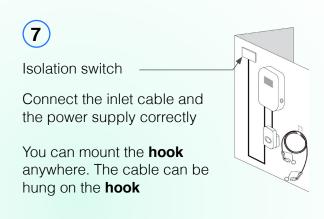


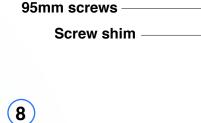




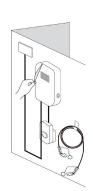






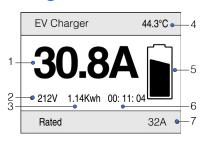


Tear off the protector

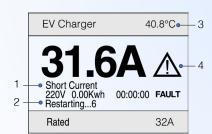


### **ILLUSTRATION OF SCREEN AND LED**

### **Single Phase**

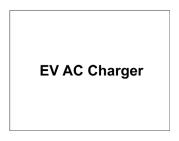


- 1. Real-time current
- 2. Real-time voltage
- 3. Power consumed
- 4. Temperature
- 5. Charging icon
- 6. Charging time
- 7. Rated current

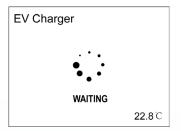


- 1. Cause of fault
- 2. Temperature
- 3. Fault icon
- 4. Automatic restart

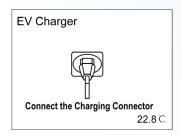
### **Three Phase**



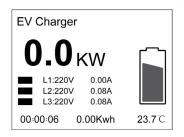
Start-up screen (the version no. is for reference only)



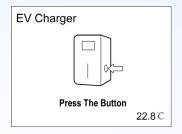
Wait for the car to be ready



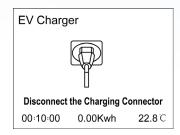
Wait for inserting the plug



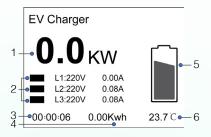
During the charging process



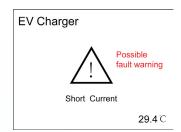
Wait for identification



Stop charging and wait for pulling out the plug



- 1. Real-time power
- 2. Three Live Wire data
- 3. Charging Time
- 4. Power Consumption
- 5. Charging Icon
- 6. PCB Temperature



- 1. Emergency stop
- 2. Over Current
- 3. Over Temperature
- 4. Leakage protection

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5. Short Current

Instruction	Idle	Connected	Charging	Finished	Error
of LED status			ļ		≒
Status	Off	Continuous light	Rolling	Continuous light	Red flashing

Note: The Ocular wallbox will automatically restart when minor problems occur.

For serious failures, the system cannot automatically recover. In order to remind user of this failure, the system will automatically countdown 10 seconds to restart.

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### ADJUSTMENT OF MAXIMUM CHARGE RATE

The maximum charge rate of the charger can be permanently set. This is useful when the charger is installed at a location where the default maximum of 32amps cannot be safely supplied, or in areas where the maximum rate is restricted by local regulations. Once the maximum charge rate has been set, it will remain set even when the charger is turned off and on again. The user will still be able to select a charge rate between the minimum rate (8A) and the maximum rate. They can do this by pressing the button on the side while not plugged into a vehicle.

To permanently set the maximum charging rate of the charger:

- 1. Switch off the charger using the isolation switch.
- 2. Switch on the charger using the isolation switch.
- 3. Wait for the system self-check to complete (5 second countdown timer in green text).
- 4. Within 20 seconds of the charger turning on, press the button on the side of the charger 12 times in quick succession. On the 12 button press, do not release but hold the button down for 5 seconds.

Note: If you miss the window, start the process again from Step 1.

- 5. A new screen will be displayed showing a warning that only licensed electricians are authorized to set the maximum charging limit.
- 6. You will have twenty seconds to select a new maximum charging speed. Press the button on the side of the charger to cycle through the available options. The options include, 8A, 15A, 20A, 24A, 32A.
- 7. Once the required maximum rate is selected, wait 20 seconds and the selection will be automatically confirmed.
- 8. Verify that the maximum rate has been correctly selected by checking the bottom right-hand corner of the screen. It should read "MAX xxA" with the selected maximum Amp value being displayed.

Caution: The maximum charging rate can only be set and modified by an authorised and licensed electrician.

Changing the maximum charging rate without authorisation will void warranty and may go against local regulations.

### **SAFETY WARNING**

Failure to follow instructions may result in danger!

- Regularly check whether the charging station has visible damage.
- Make sure that all safety facilities are available at all times and are tested regularly to ensure they can operate normally. Visit ocularcharging.com.au for a yearly maintenance check according to Australian standards.
- If a ground fault occurs, it must be assumed that the cable carries voltage. Please confirm that there's no high-voltage power in the system before inspecting the charging station.
- Persons who install and use charging stations must obey the principles and regulations mentioned to ensure personal and equipment safety.
- Before powering on the device, please confirm that the device is properly grounded to avoid unnecessary accidents.
- All tools' unnecessarily exposed metal parts should be insulated to prevent them from touching the metal frame to avoid short circuits.
- Do not modify, retrofit, or change any part by yourself under any circumstances.
- To ensure the service life and stable operation of the charging station, the operating environment should be kept clean as possible with a relatively stable temperature and humidity. The charging station must not be used in a flammable environment or environments with volatile gas.
- Be sure to confirm that the input voltage, frequency, circuit breakers and other conditions of the device meet the specifications before the device is powered on.



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