
# ROAM
# 20kW / 30kW
# USER MANUAL

OCULAR

Version 2.0

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## WARNING

1. When operating the charger, please make sure the charger sits in a well-ventilated area and avoid direct sunlight to prevent it from overheating.

2. Please make sure the input voltage from the 5-pin socket has a line to neutral voltage above 216V, or line to line voltage above 374V, as low input voltage may cause the charger to over draw current. For reference, Australian grid standard has a line to neutral voltage between 216V to 253V.

3. Please do not use or store the charger in direct rain.

## PRODUCT FEATURES

- Portable, compact and user friendly
- High efficiency and reliable
- Built-in 4G modem and antenna
- OCPP 1.6J
- 4.3 inch touch screen
- Type B RCD, Short circuit, Undervoltage, Overtemperature, Overcurrent and Overvoltage protection
- Working ambient temperature ranges from -25°C to + 55°C

## PROTECTION FUNCTION

Electrical isolation between input and output of charger;

Safety functions verification such as Earth Presence Detection, Earth Continuity Check (EVSE-EV), Over Current and Short- Circuit Protection, Leakage Current (RCD), Dielectric withstand voltage; Mechanical Stability, Climatic Environmental Tests, EMC Verification conform to the relevant provisions of IEC 62196 2017, IEC 61851 2017, SAE J1772 and other relative items.

## APPLICABLE SCOPE

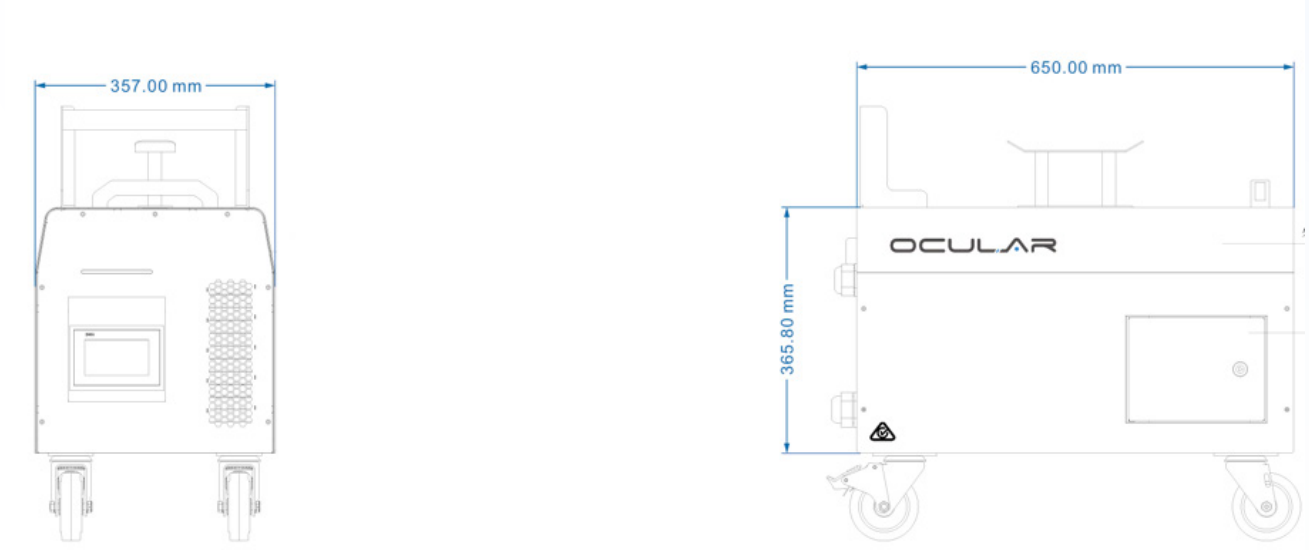
- For private use such as private cars, logistics vehicles, trucks, etc.
- Rental vehicles;
- It is especially suitable for rapid deployment in the case of site constraints.

# PRODUCT PARAMETERS

| Parameters | Requirements | |
|---|---|---|
| EV charger Type | DC | |
| Charger Capacity | 20kW | 30kW |
| Model No. | ENC-DCX020A | ENC-DCX030A |
| Mounting | Portable | |
| Power Cable Length | 5 meters | |
| CCS2 Cable Length | 5 meters | |
| AC Supply System | Three Phase | |
| Nominal Input voltage | AC400V +10%/-6% | |
| Input frequency | 45-65Hz | |
| Ambient Temperature Range | -25 to 55°C | |
| Ambient Humidity | 5 to 95% | |
| Storage temperature | -40 to 70°C | |
| IP Ratings | IP 54 | |
| Impact Protection Rating | IK10 | |
| Cooling | Air cooled | |
| Number of outputs | 1 | |
| Type of each output | 200-1000V | 200-1000VDC |
| Output Current | Max.66.6A | Max.100A |
| Power Factor | ≥0.99(50% load above) | |
| Display | 4.3 Inches Touch Screen | |
| User Authentication | APP | |
| Metering information | Electricity Consumption Information | |
| Communication between EVSE and Central Server | OCPP 1.6 Protocol | |
| Internet Connectivity | Ethernet/4G | |
| Safety Parameters | Over Current, Under Voltage, Residual Current, Surge Protection, Leakage Protection, Short Circuit, Over Temperature, etc. | |
| Certification | CE, IEC 61851-1, IEC 61851-23, IEC61851-21-2 | |

# PRODUCT OUTLINE

## DIMENSION




## WORKING ENVIRONMENT

| Parameters | Min | Typical | Max | Unit | Remarks |
|---|---|---|---|---|---|
| Working Temp. Range | -25 | 25 | 55 | °C | |
| Working Humidity Range | 5 | 25 | 95 | RH % | No condensation |
| Altitude | | | 2000 | m | |
| Atmospheric Pressure | 70 | | 106 | KPa | |
| Cooling | No Air cooling | | | | |

# PRODUCT OUTLINE

## DEFINITION OF LED INDICATOR

| Place | Function | Description | Remarks |
|---|---|---|---|
| A | POWER indicator | Yellow LED | When the light is on, it indicates that the input AC voltage has been turned on. |
| B | RUN indicator | Green LED | When the light is on, it indicates that the charger is charging. |
| C | FAULT indicator | Red LED | When the light is on, it indicates that the charger has fault. |

## CABLE CONNECTION

Note: We recommend using at least 6mm2 three phase cable for the 32A 5-pin socket.

Please ensure there is enough power supply to prevent tripping.

1. Ensure the input yellow PE cable is grounded reliably;
2. Do not use the charger in rain;
3. Keep away from flammable, explosive and corrosive sources;
4. Avoid steam and dust;
5. Keep away from electromagnetic interference sources;
6. Keep away from the heat source and make sure the charger locates in a well-ventilated area when operating.

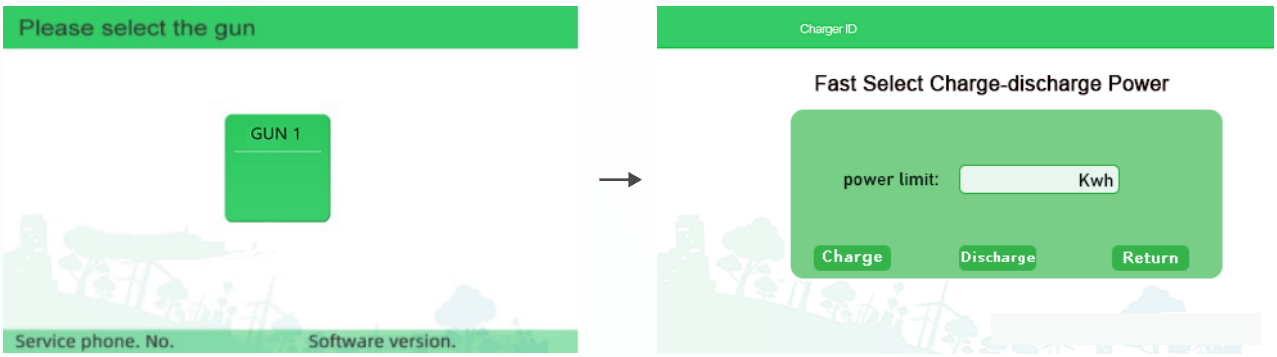
# OPERATIONAL INSTRUCTIONS

## CHARGER SCREEN

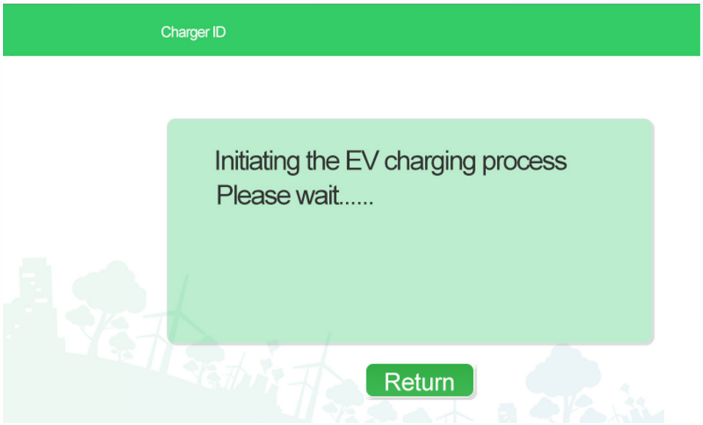
The charger has a 480x272 resolution colour touch screen displays charging parameters and is used to operate the charger.


## CHARGING INSTRUCTIONS

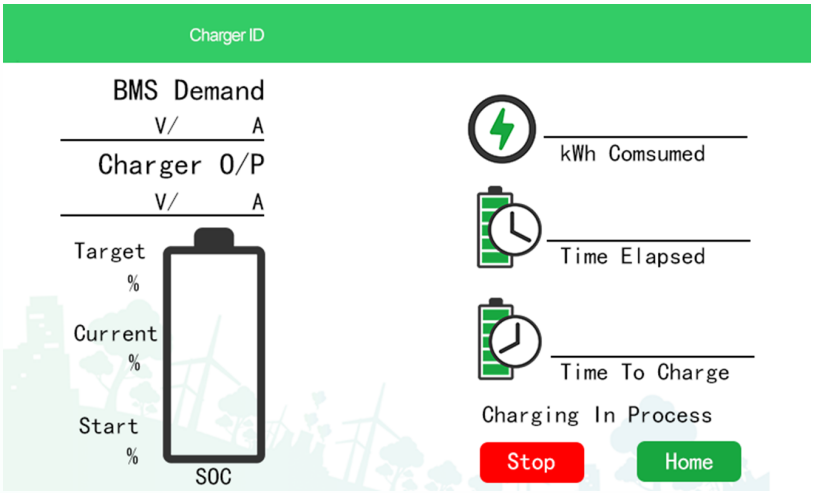
1. Power on for the charger, and then click on the screen to enter the main interface, please choose the gun and select charge-discharge power, as shown below.



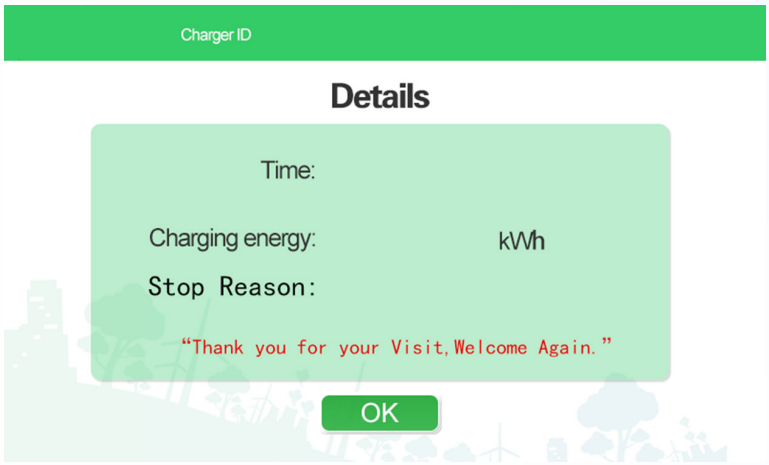
2. After choosing the charging connector/ charging power, click the confirmation button to initiate the EV charging process, as shown below.




3. After initiating, the charge monitoring interface will be displayed. It will show various battery information and the information output by the charger. The charging can be stopped manually after user pressed stop button. As shown below.



4. When the charging is completed, the summary page will show. As shown below.




**Start charging through OCPP:**

1. If the charger has enabled OCPP, first plug the charger into the car, then follow the OCPP provider's instructions to start a charging session.
2. To stop the charging session, you can terminate it through the OCPP APP, by pressing the STOP button on the charger screen or stop through the vehicle.

**Troubleshooting**

In case of fault and abnormal behavior during normal operation, please take a photo or video of the fault and contact Ocular Charging at your earliest convenience. Please do not dismantle or fix the charger by yourself. You can reach out to us at:

Phone: 1 300 912 650

E-mail: help@ocularcharging.com.au

# STORAGE AND TRANSPORTATION

## STORAGE AND TRANSPORTATION OF EQUIPMENT

During transportation, please make sure the charger is packed securely in a packing box, and the direction of loading and unloading should be marked. The charger should not be stored and transported upside down. Please avoid strong vibration and bump damage to equipment. After transportation, please check if there is any damage to the charger.

The packaged equipment should be stored in the room where the relative humidity is less than 95% and the ambient air temperature is between -25°C to +55°C. Storage places should be dry, clean, and well ventilated. It is strictly forbidden to store corrosive articles in the same place.

Note: Do not disassemble the charger without approval to prevent warranty being voided.

# MAINTENANCE OF CHARGER

## MAINTENANCE

- Shading and rainproof measures should be taken for chargers. It is suggested to use the charger under shades and well-ventilated area to prevent it from overheating.
- Check regularly whether all bolts on the charger are tightened.
- Attention should be paid to lightning protection to ensure effective shielding and reliable grounding of chargers.
- Before use, please make sure the power supply meeting the nominal voltage range of 216V to 253V, too low of input voltage may cause the circuit breaker for the socket to be tripped.
- Make sure the cable is wrapped and put back in place after use.



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