HYDRA®
ELECTRIC VEHICLE CHARGERS

This is a quick-connection guide only. To view the full installation manual for this and all Hydra EV chargers go to **www.hydraev.co.uk/support**

ZODIAC

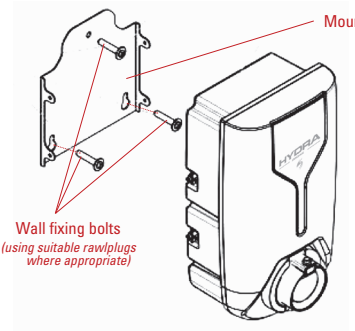
ELECTRIC VEHICLE CHARGER QUICK INSTALLATION GUIDE

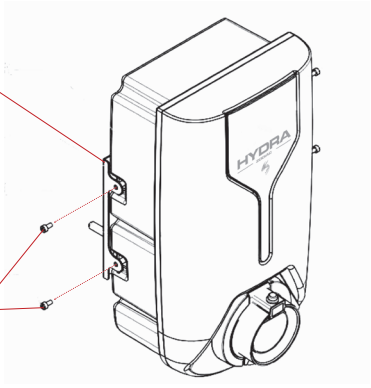
INSTALLATION USING QUICK-CONNECT FLY LEAD

PLEASE NOTE: THE ZODIAC HAS BEEN DESIGNED TO BE CONNECTED USING THE QUICK-CONNECT FLY LEAD. THIS SIMPLIFIES THE INSTALLATION PROCESS AND ENSURES THE ELECTRONIC COMPONENTS WITHIN THE EV CHARGER HOUSING ARE NOT DISTURBED. IT ALSO ALLOWS THE ZODIAC TO BE WALL OR PEDESTAL MOUNTED BEFORE IT IS CONNECTED TO THE AC SUPPLY.

INSTALLATION

- Secure the base to the wall. NB: To avoid the back plate distorting when being screwed onto the wall, it is recommended that you fix each screw loosely one at a time and then tighten slowly once all screws are in place.
- Carefully and slowly lower the charger into place.
- Ensure that the cabinet holes and bolts are aligned.
- Lock the nuts to 95.5 Nm.
- Keep the device upright – do not tilt more than ±15°
- Mount the charging pile on the hanger and lock the charging pile





CONNECT THE POWER CABLE

Note: Turn off switches and pull out all fuses before connecting electrically

CONNECT THE GROUND CABLE

The charging system uses a common grounding method, using a ground cable to connect the ground copper row of the charging unit with the main ground row.

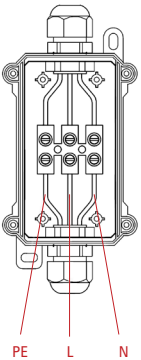
CONNECT THE AC INPUT

1 The AC input cable is routed from the user's power distribution switch and is connected to the output terminal of the user switch when power is ready to be turned on. The user distribution switch should have over-current, short circuit, lightning strike and other protective devices. The capacity of the power distribution switch is recommended as not less than 1.5 times the actual load capacity.

Please ensure the The Zodiac has its own dedicated circuit – EV charging equipment in the UK is required by law to have its own dedicated circuit.

2 The L1-phase, L2-phase, L3-phase and N-zero cables of the AC input cable should use brown, black, grey and blue cables (standard reference right). If the cable has only one colour, the line number identification is pasted or marked with different colour insulation at both ends of the cable.

3 Cables should not have severed heads, broken heads or scratches.



Yellow/Green	PE
Brown	L
Blue	N

INSTALLATION WITHOUT USING QUICK-CONNECT FLY LEAD

OPENING THE ZODIAC EV CHARGER HOUSING

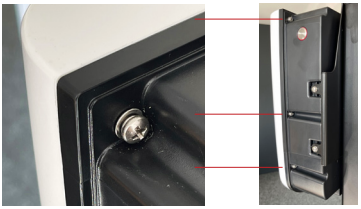
The faceplate of the Zodiac EV charger is held in place with six small screws (three each side). These cannot be accessed once the EV charger has been mounted onto the wall.

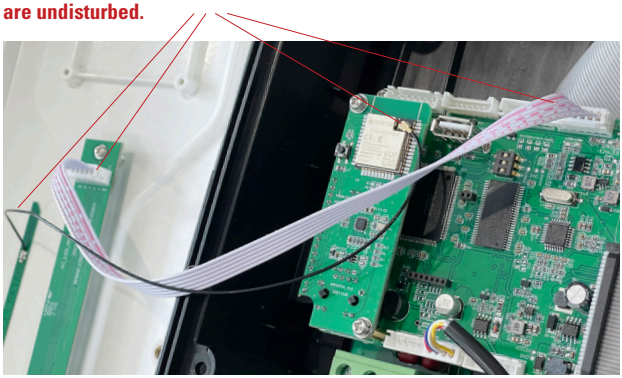
Lay the Zodiac face down on a level surface taking great care not to scratch the faceplate. Use the foam sheets from the original packaging to protect it.

In addition to the power cables to the charging socket (Untethered version) there is a communications antenna wire (black) and power cable to the LED status indicator light (white/red ribbon) attached to the back of the faceplate.

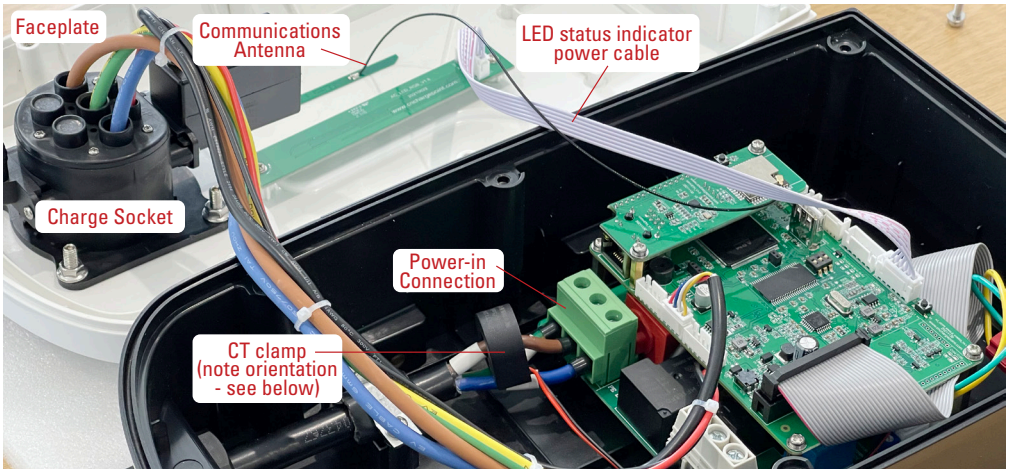
On some models there is an additional antenna wire (black) for the RFID card reader.

It is vitally important to the function of the EV charger that these wires are undisturbed.



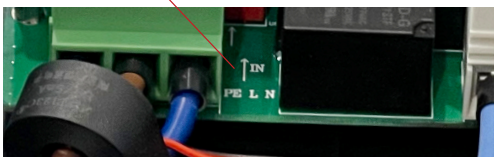


INSIDE THE ZODIAC EV CHARGER (UNTETHERED MODEL)



Above shows a single-phase 7kW Hydra Zodiac with the Power Cable attached. The terminals on this model (from left) are PE, L, N

Please always check the board for correct orientation and wiring order. Some Zodiac models may be configured as PE, N, L *(see below for location)*

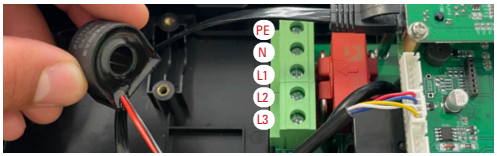


A 5-terminal block is fitted to the 22kW, three-phase model, and also on some 7kW models. (see below)

Here the terminals are designated PE, N, L1, L2, L3

Always check wiring order marked on PCB

Always note the CT orientation, where fitted (see bottom)

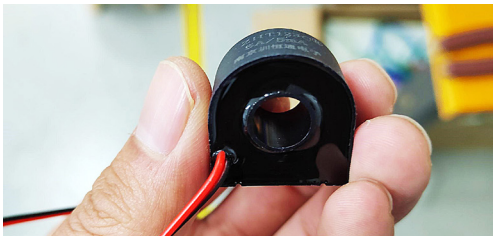


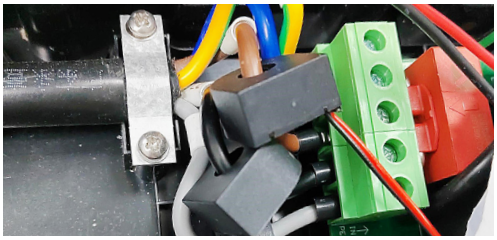
CT CLAMP ORIENTATION

Please make sure that the orientation of the CT clamp is correct (where fitted): The Black/Red wire exiting the CT clamp should face the direction of the board to achieve a correct reading. If the side of the CT clamp with these wires is facing away from the board it will not give accurate readings.

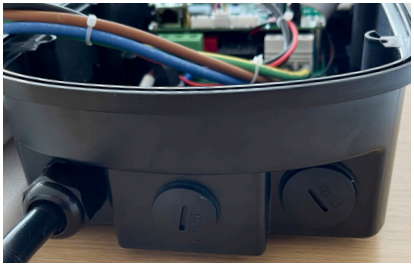
For the three-phase Hydra Zodiac (below right) each CT clamp needs to be re-attached to the correct feed and with the correct orientation (black/red wire facing the board).

(Please Note: Some models take the reading direct from the board and no separate CT clamp is used)





ACCESS PORTS UNDER THE ZODIAC CHARGER



The Hydra Zodiac has three access ports underneath, these are for:

Power in (LEFT on all models),

RJ45 Ethernet cable (CENTRE on some models),

Charging Cable Out (RIGHT on tethered models)

RJ45 Ethernet port
(centre on some models)

POWER-ON PROCESS

Ensure that the charger is installed properly and attached securely to the wall. Check that the wires are wired correctly and the charger can be powered up.

After the Zodiac charger is powered up the LED indicator light on the faceplate should be blue, either flashing or steady and constant.

If it does not show a blue indicator light please refer to the appendix of the manual where it describes different LED indicator status lights.

CHARGING OPERATION

There are two methods to commence charging: simple Plug and Play or via the smart-phone App, HOMECHARGE.

Before charging, please make sure that the charging cable is firmly inserted into the charging port of the vehicle.

If you intend to use the App to facilitate charging, please use the APP to scan the QR code when using it for the first time, and turn on Bluetooth of the smart-phone for Bluetooth networking. After the pairing process is completed, follow the App prompts to commence charging.

Click the charger information in the App to view the current output capability of the Zodiac EV charger and information of the running status.

If the running status displays an alarm or error message, charging cannot be performed. You will need to go through the troubleshooting process outlined at the end of this document.

When the preselected charge level is reached or the vehicle sends a stop command, the charger automatically stops charging.

Emergency Stop button and its location

(right hand side of the Zodiac if facing the charger)

EMERGENCY OPERATION

Refer to this section only if an exception has occurred or the charger has been mishandled.

Emergency stop: In the event of an emergency, quickly remove the transparent protective cover (if present) and press the metal/silver Emergency Stop button to cut off the output power supply. Do not use the Emergency Stop button for normal shut-down.