

Nexxtender Single & Dual Pole

Installation, Connection and Start-up Instructions

Introduction:

This document describes the standard installation procedure for the Nexxtender SINGLE & DUAL pole charging station.

As a general rule, the installation must be performed by a capable and qualified individual, in compliance with local laws and regulations, following the proper rules and safety measures.

As concerns the Start-up: besides possessing the necessary technical competences required for the installation and connection of the charging station, the installer must also possess sufficient knowledge and skills concerning electric vehicles (ISO standard 61851-1).



Installation instructions for a single or dual pole charging station:

Unpacking and opening the station

In order to install the charging station, open the rear panel to access the different connection points.

To do this, place the station vertically on its base and remove the 8 screws on the rear door. Disconnect the ground wire between the pole and the door.

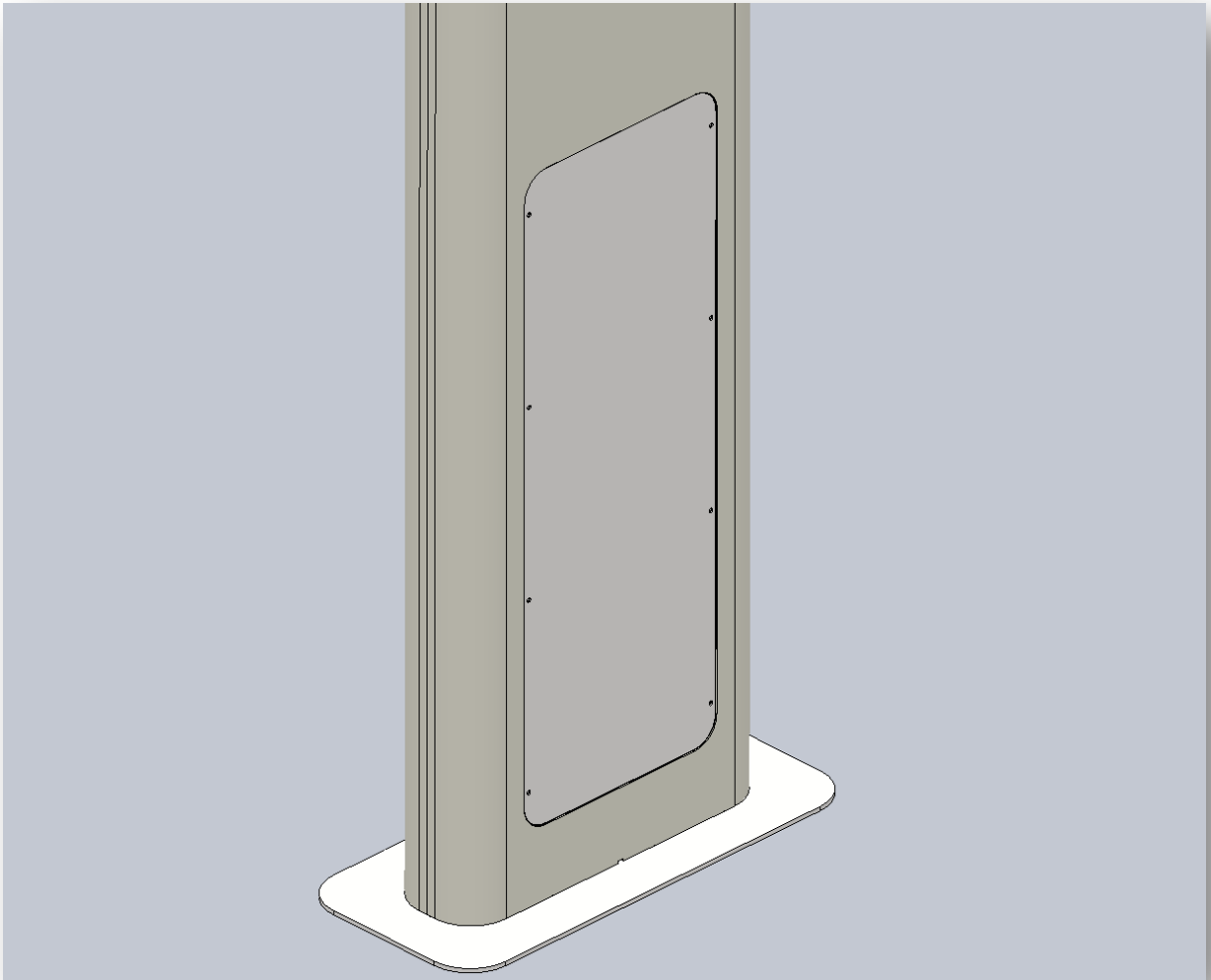


Figure 1: rear view of the station pedestal with door closed

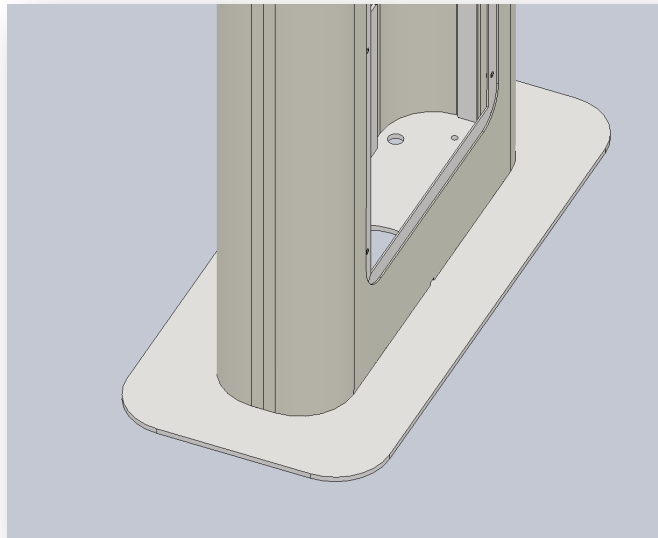


Figure 2: station pedestal with door opened

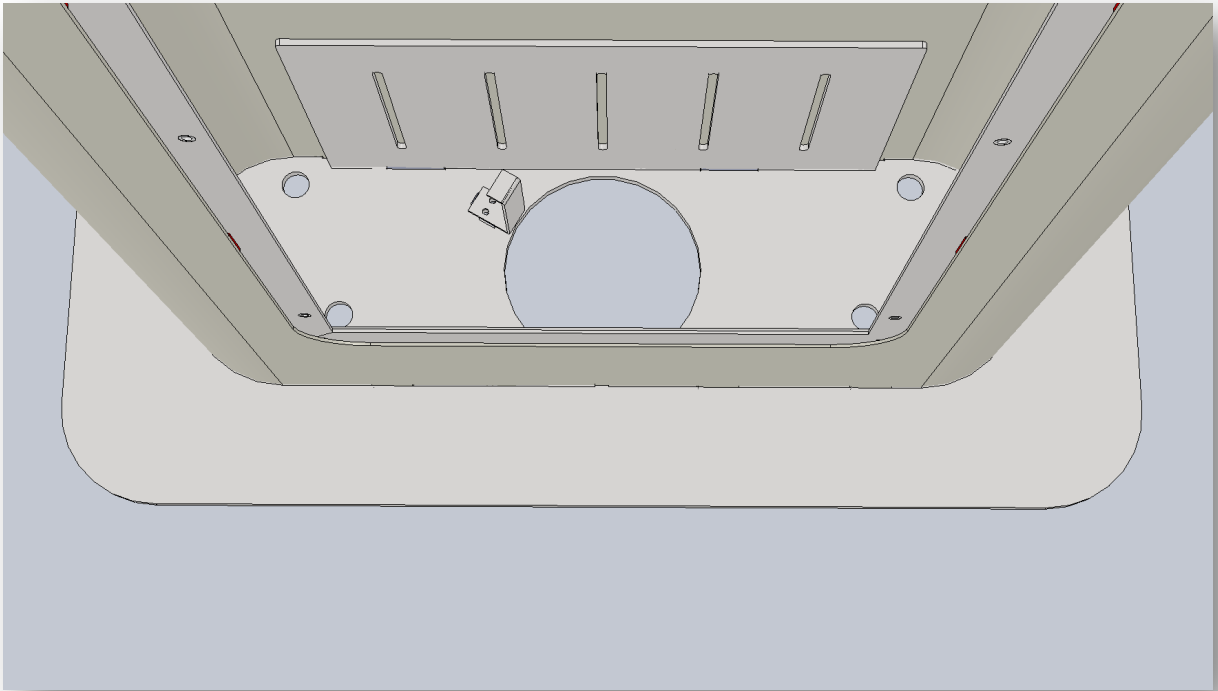


Figure 3: anchorage zone

Example of ground preparation:



Figure 5: example of pedestal preparation with incoming power and data cables

The pedestal will have a visible surface of min. 540 mm x 245mm.

Prepare, per charge line, a power cable of 6mm² or 10 mm², according to the distance from the start panel.

For a single pole: ONE single-phase cable (240VAC) or 3-phase cable + N (380VAC +N)

For a dual pole: TWO single-phase cables (240VAC) or 3-phase cables + N (380VAC +N).

Allow for 120 cm of cable length above the concrete level, so as to easily make the connection.

If a network cable is used, allow for 220 cm of cable above ground.

Installing the terminal

After drilling 4 anchoring holes in the concrete base and placing the fixing rods, position the station's terminal while making sure that the cables are inserted through the central hole, as shown in the figure below:

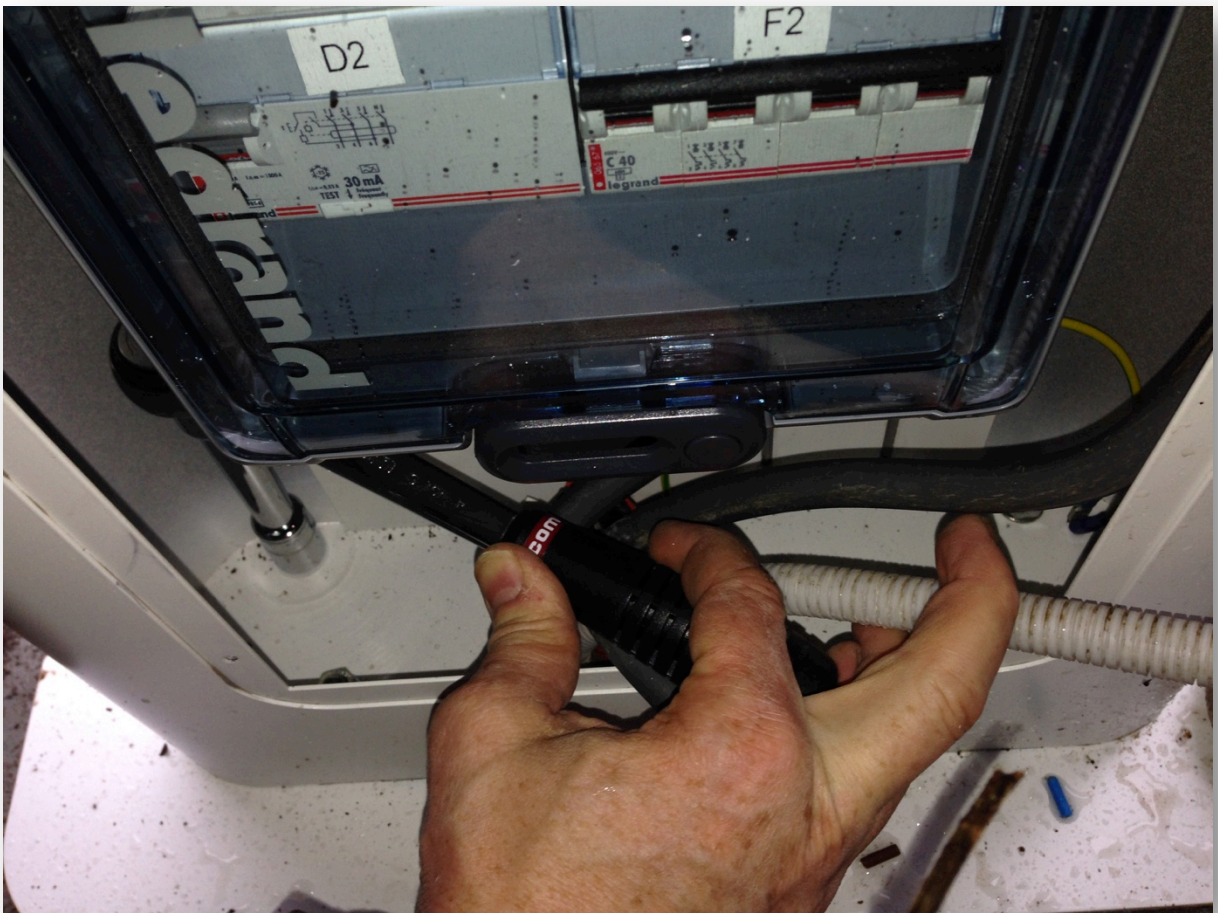


Figure 6: clamping the anchorage

Recommended fixings:

Anchor FIX3 (code 057450)

The anchor that nears concrete's resistance!



Features:

Drill diameter (mm)	8
Max. thickness (mm)	5
Anchor length (mm)	55
Drilling depth (mm)	50

Making the connections in the junction box

Every power entry (1 per charging point) has a junction box, itself equipped with a differential switch and a circuit breaker with the following features:

Circuit breaker:



Ref. 006567

DX Circuit Breaker -6 kA – tetrapolar – Curve C – nominal current 40 A – four 17.5 mm modules – Lexic 400 V

Differential switch:



Reference 008865

Differential switch – tetrapolar – 30 mA – 40 A – Type A – Lexic 400 V – four 17.5 mm modules

Connect every entry point completely and make sure that the ground wire is also connected.

Insert the cables and thread into the cable glands provided for that purpose.

It should be noted that the cable coming from the ground will be mechanically locked with the fixing lug (see picture below) with cable ties (colson).

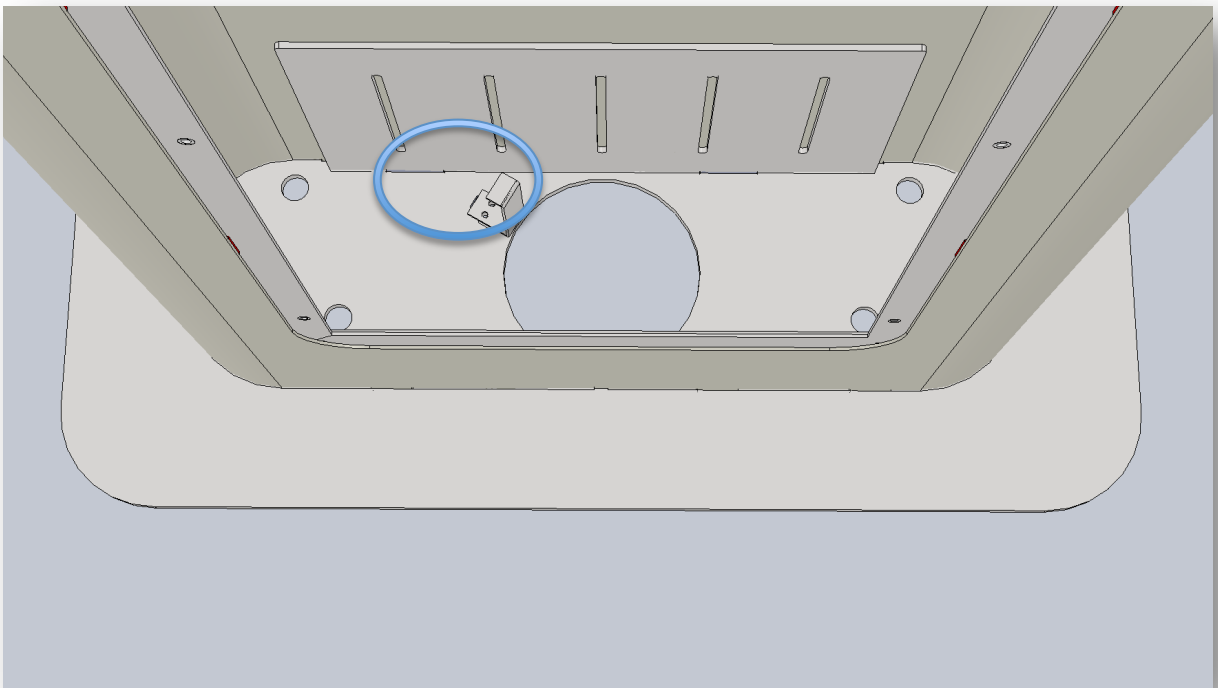




Figure 7: example of preparing the cables with open panelboard

After completely connecting the power cables, check the connection clamping and check the ground wiring on the metal frame. Then put the ground wire back on the holding socket provided for that purpose on the service door.



Start-up Instructions

In case the Nexxtender is connected with GPRS/3G or with LAN, the following text will appear on the screen after turning it on and complete boot-up:

- LED in bleu
- NET = OK
- Automatically synchronized time via the network.

Then, test the proper functioning of the station with a station simulator. This will simulate all the states planned by the ISO standard 62851-1.

If possible, start a power test with an electric vehicle.

Complete start up requires a specific training provided by Powerdale.

Main features of the single or dual Nexxtender station:

- Single-phase 230 VAC or 3-phase 380VAC with Neutral
- Up to 32A per phase adaptable on demand
- Mode 3 type 2
- Mechanical locking of the Type 2 plug
- GPRS Communication available
- RFID reader available
- LAN Communication available

Also see the product datasheet.

Annexes:

Pedestal template

Overall dimensions