

Design a NEO series rack

How to build a NEO system rack cabinet

Ref: D-0007092-EN-r3.1



Support handbook

Design a NEO series rack

1. Description

This document details how to configure the elements required for a 22 or 42 unit LDA rack. The different possibilities offered by an LDA rack with respect to the control and connection devices such as PR and speakers connector terminal, as well as the different racking and commissioning services, are detailed in this manual.

2. How to choose a Rack of 22 or 42 units. Which of the following devices I am going to install?



ONE



NEO 8060



NEO Extension

Device	Number of Units
ONE	2 Ud.
NEO 8060	2 Ud.
NEO Extension	2 Ud.
Small charger	2 Ud.
Big charger	2 Ud.
NEO Batteries	7 Ud.

- Example of configuration in a certified installation:

(x1) NEO 8060..... 2 Ud.
(x2) NEO 4500 Extension..... 4 Ud.
(x1) Big Charger..... 2 Ud.
(x2) NEO Batteries..... 7 Ud.

Total 15 units, therefore you have to choose the rack of 22 units.

References

22 Ud. LDA Rack: LDARACK22ALTS01

42 Ud. LDA Rack: LDARACK42ALTS01

3 Do I need assembly, wiring and racking service?

The assembly, wiring and racking service consists of placing all the devices in the rack and making the appropriate connections between them. We at LDA strongly recommend this service so that the system is completely assembled at the factory.

References

22 Ud. LDA Rack: LDASRV06S02. Racking, wiring and 22U rack mounting at the factory. Includes:

- 1 Unit of black blind panel for 19" rack, DIN rail 200 cm, treated European pallet, caged nuts, washers, screws and auxiliary material, assembly labour, labelling, packing and palletising.
- For each NEO and NEO Extension equipment: FTP RJ45 CAT6A 100 cm hose, UTP RJ45 CAT5E 50 cm hose, 19" rack bracket, IEC black hose to Schuko 3x0.75mm, 4xSchuko 19" rack bracket, cage nuts, washers, screws and auxiliary material.
- For each battery charger: wired unit emergency power for you NEO series equipment, black hose IEC to Schuko 3x0.75mm, Hose emergency power monitor signals, wired unit for 12V batteries, Battery tray for 19" rack, Blind black panel 1U for 19" rack, 4xSchuko strip for 19" rack, cage nuts, washers, screws and auxiliary material.
- For each ZES22: FTP RJ45 CAT6A 100 cm hose, 19" rack bracket, cage nuts, washers, screws and auxiliary material.

42 Ud. LDA Rack: LDASRV04S02. Racking, wiring and mounting of 42U rack in factory. Includes:

- 1 Unit of black blind panel for 19" rack, DIN rail 200 cm, treated European pallet, caged nuts, washers, screws and auxiliary material, assembly labour, labelling, packing and palletising.
- For each NEO and NEO equipment Extension: FTP RJ45 CAT6A 100 cm hose, UTP RJ45 CAT5E 50 cm hose, 19" rack bracket, IEC black hose to Schuko 3x0.75mm, 4xSchuko 19" rack bracket, cage nuts, washers, screws and auxiliary material.
- For each battery charger: Wired unit emergency power for NEO series equipment, black hose IEC to Schuko 3x0.75mm, Hose emergency power monitor signals, wired unit for 12V batteries, battery tray for 19" rack, blind black panel 1U for 19" rack, 4xSchuko strip for 19" rack, cage nuts, washers, screws and auxiliary material.
- For each ZES22: FTP RJ45 CAT6A 100 cm hose, 19" rack bracket, cage nuts, washers, screws and auxiliary material.

4 How to choose the rack switch (optional). What amperage do all devices need in total?

Device	Amperage
ONE	1,5 A
NEO 8060	2 A
NEO Extension	4 A
Small Charger	6 A
Big Charger	12 A

What PR do I need to install in my rack?

References PR	Total Amperage of the Rack
LDAPR01PAS01	<16 A
LDAPR01VAS01	16 < A < 25
LDAPR02VAS01	25 < A < 40
Combination of several PR	> 40 A

LDAPR01PAS01. NETWORK PANEL BASE FOR PUBLIC ADDRESS RACK MODEL PR-01PA. Input for connection and electrical protection for public address racks. Includes 16A D-curved bipolar magneto-thermal magnetothermal and rack-mount electric base adapted to the power and distribution installed in the rack. Totally rackmounted.

LDAPR01VAS01. BASE PANEL NETWORK FOR PUBLIC ADDRESS RACK AND VOICE EVACUATION MODEL PR-01VA. Input for connection and electrical protection for voice evacuation racks. Includes 25A D-curved bipolar magneto-thermal magnetothermal and 2 rack-and-pin cable bases adapted to the power and distribution installed in the rack. Totally rackmounted.

LDAPR02VAS01. NET PANEL BASE FOR PR-02VA MODEL RACK. Input for connection and electrical protection for voice evacuation racks. Includes 40A D-curved bipolar magneto-thermal magnetothermal and 4 rack-and-pin cable bases adapted to the power and distribution installed in the rack. Totally rackmounted.

- Example:

Device	Amperage
(x1) NEO 8060	2 A
(x2) NEO Extension	2x4=8 A
(x1) Big Charger	12 A
TOTAL	22 A

For the chosen combination we have an amperage of 22A, therefore, we would need a PR01VAS01 which amperage is 25A.

WARNING!

Design a NEO series rack

If a rack with more than one magneto-thermal switch is configured, always protect the devices and its corresponding battery charger under the same magneto-thermal switch. Thus, if a magneto-thermal switch opens and remaining switches continue closed, the devices and its respective battery chargers will turn out of AC power at once. If the chargers remain powered by AC current while the devices protected by them has lost AC power, then the risk to damage the battery charger is taken.

5 Do I need speaker connector terminal? (optional)

LDA offers this new connector to simplify the connection of speaker lines to the NEO. With the speakers connector terminal the rack will have much more accessible connections. If necessary, one will be used for each line.

References

Speakers connector terminal: LDASRVACKSLIS01

6 Do I need system commissioning and configuration? (optional)

LDA offers the system tuning service. Our technicians are responsible for connecting and programming all the elements of the system so that when it is installed it is completely ready to operate.

There are two types of commissioning and configuration: factory or on-site. LDA offers on-site commissioning service primarily focused on the most complex systems to install.

References

Factory Start-up: LDASRV01S02

Commissioning, configuration and training of personnel on site: LDASRV02S02

Travel expenses outside Spain: LDASRV03S02

- Example of configuration in a certified installation:

In this case the final configuration of a rack would include the following elements:

(x1) LDARACK22ALTS01

(x1) LDASRV06S02

(x1) LDAPR01VAS01

(x1) LDASRV01S02

(x13) LDASRVACKSLIS01