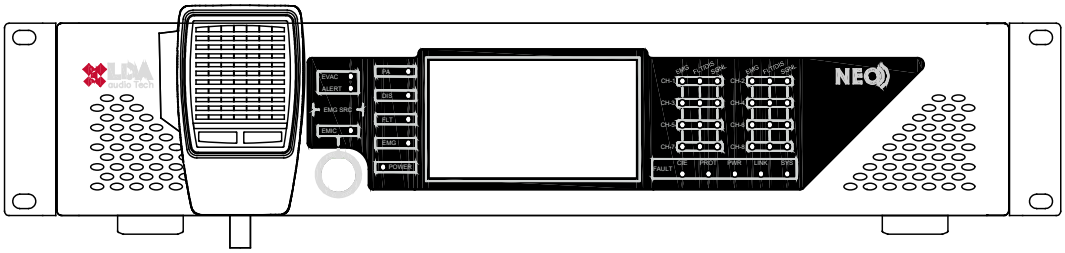
Support Handbook

Emergency power supply installation on NEO series devices



Reference: **NEO series**

1 DESCRIPTION

The emergency power supply ensures the unit's functionality in the event of failure of the main power supply. It will be carried out by a system of charger and batteries certified according to EN 54.

2 WIRING INSTRUCTIONS

1. Make sure the battery charger are actually disconencted before start the process.
2. Connect the negative pole from first battery to possitive pole at second battery.
3. Connect the negative pole from second battery to the battery charger negative input.
4. Connect the possitiv pole from first battery to the bttery charger posittive input..
5. Connect baterry charger output to NEO series device.
6. Connect the 9 pins of the supervision, from the charger to the NEO equipment.
7. Turn the general power supply of the battery charger (ON).
8. Make sure the installation is wired as shown in *diagram 1* below.

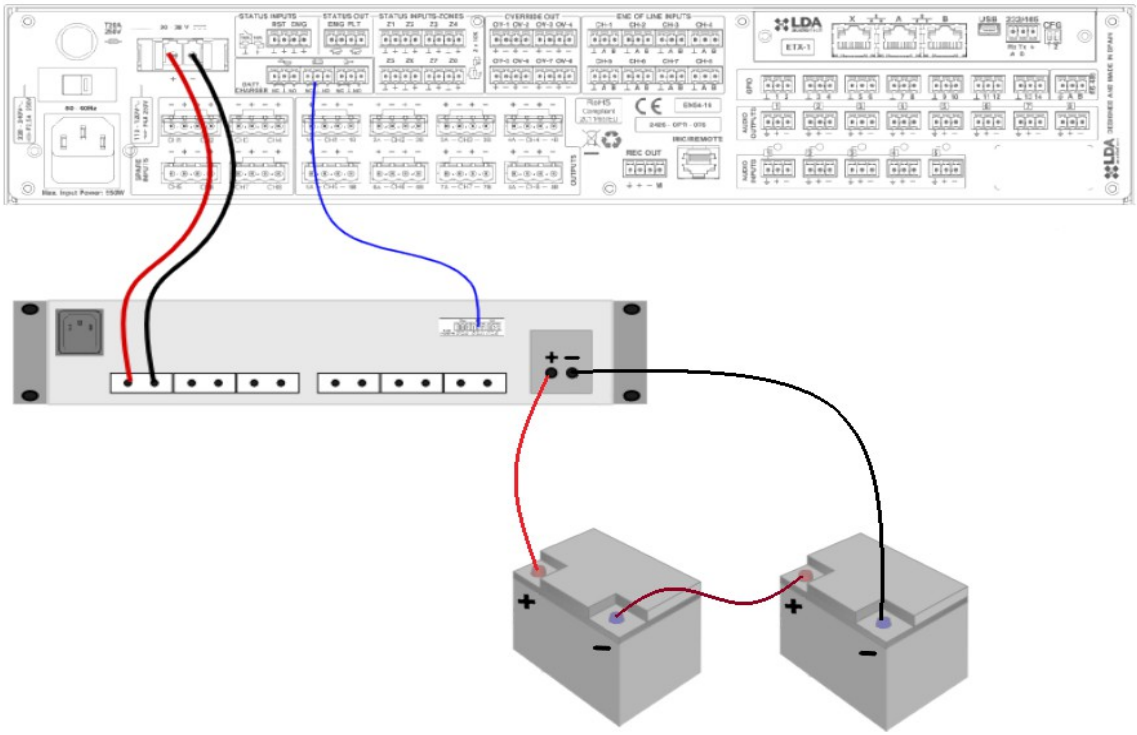


Diagram 1: Single-line battery connection diagram

3 EMERGENCY POWER SUPPLY

For maintenance and revision, the different components of the emergency power supply in the NEO series equipment are detailed. Their sections are shown in *diagram 2*:

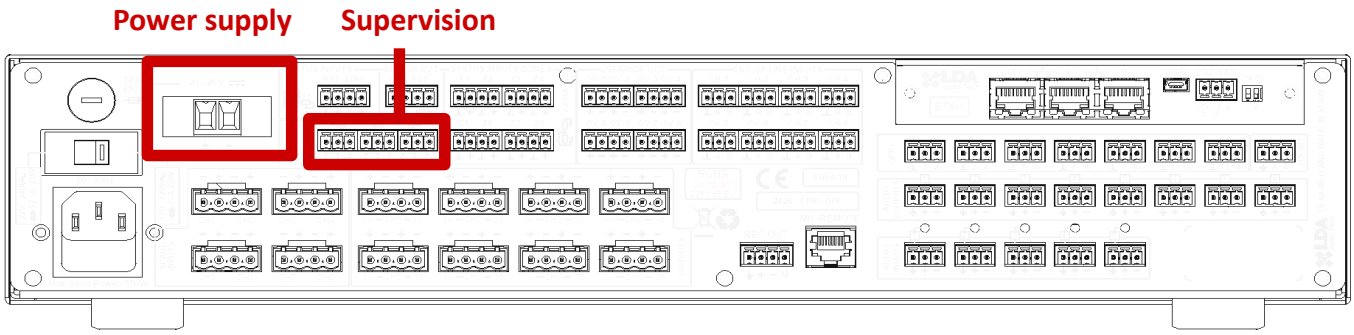


Diagram 2: NEO device rear side detailed

Power supply: Emergency power input terminal, specific to each NEO series device.

Supervision: emergency power supply pins (power supply status outputs) including three contact closure inputs.

Each monitoring input consists of three pins: Normally Closed (NC), Common and Normally Open (NO). To activate any of the fault signals, a contact closure must occur on the NO input, and an opening of a closure on the NC input simultaneously.

The NEO series devices read the fault signal when the contact closure on the NC input is opened. Note that this logic is opposite to that used by the chargers supplied by LDA, so the wiring should be connected as shown in *diagram 3*.

4 CARGADOR

El cargadora contará con las conexiones antes indicadas para cumplir con los requisitos de la norma EN 54-4. Para los sistemas de evacuación por voz, LDA suministra los modelos:

- SLAT SON 24V MS 150, 3600 W → soporta hasta 3 unidades NEO con 2 baterías de 120Ah, 12V.

- SLAT SON 24V MS 40, 960W → soporta una unidad NEO con 2 baterías de 45Ah, 12V.

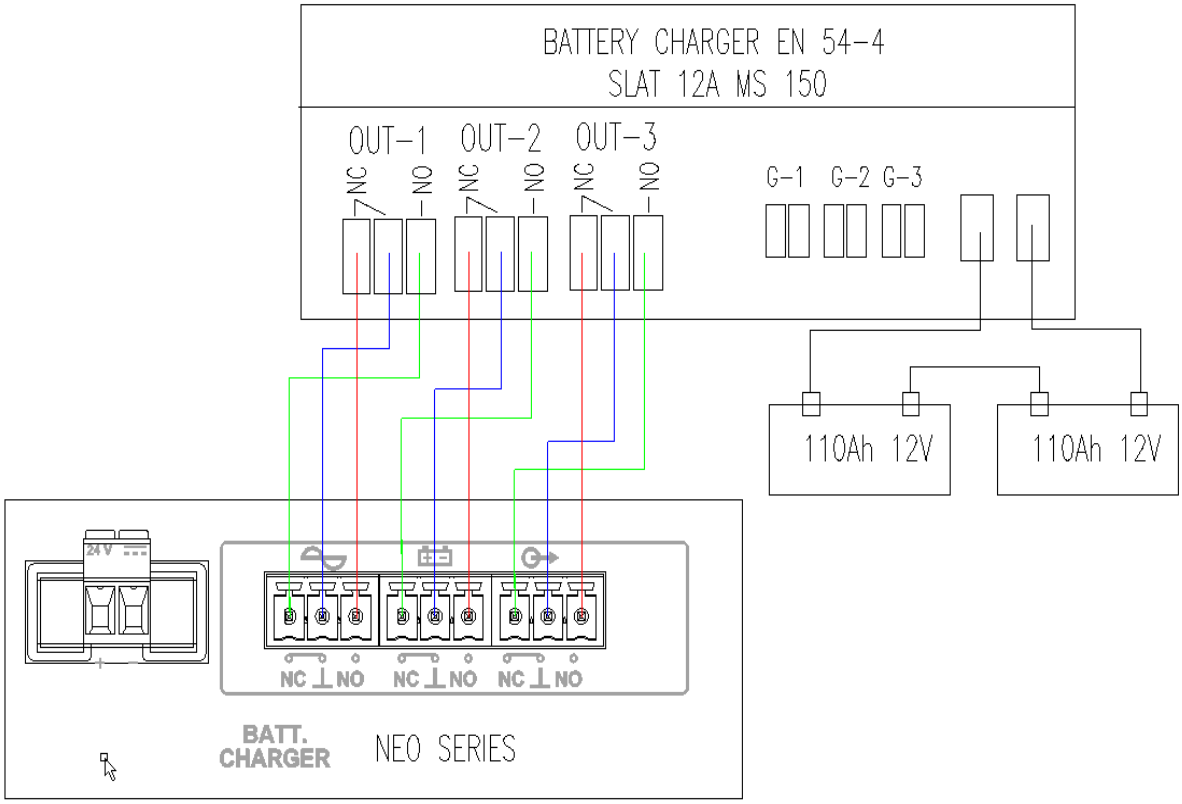


Diagram 3: NEO and battery charger connection detailed

5 SUPERVISION

After connecting the power supply to the NEO unit, it is necessary to enable the monitoring of the power supply in the system configuration. This is accomplished via "NEO Configurator" software. The items to be activated can be found in the menu described in *image 1*.

For more information about the NEO Configurator software, please refer to the user manual available on the LDA support website:

Link to LDA Support Web: NEO Configurator

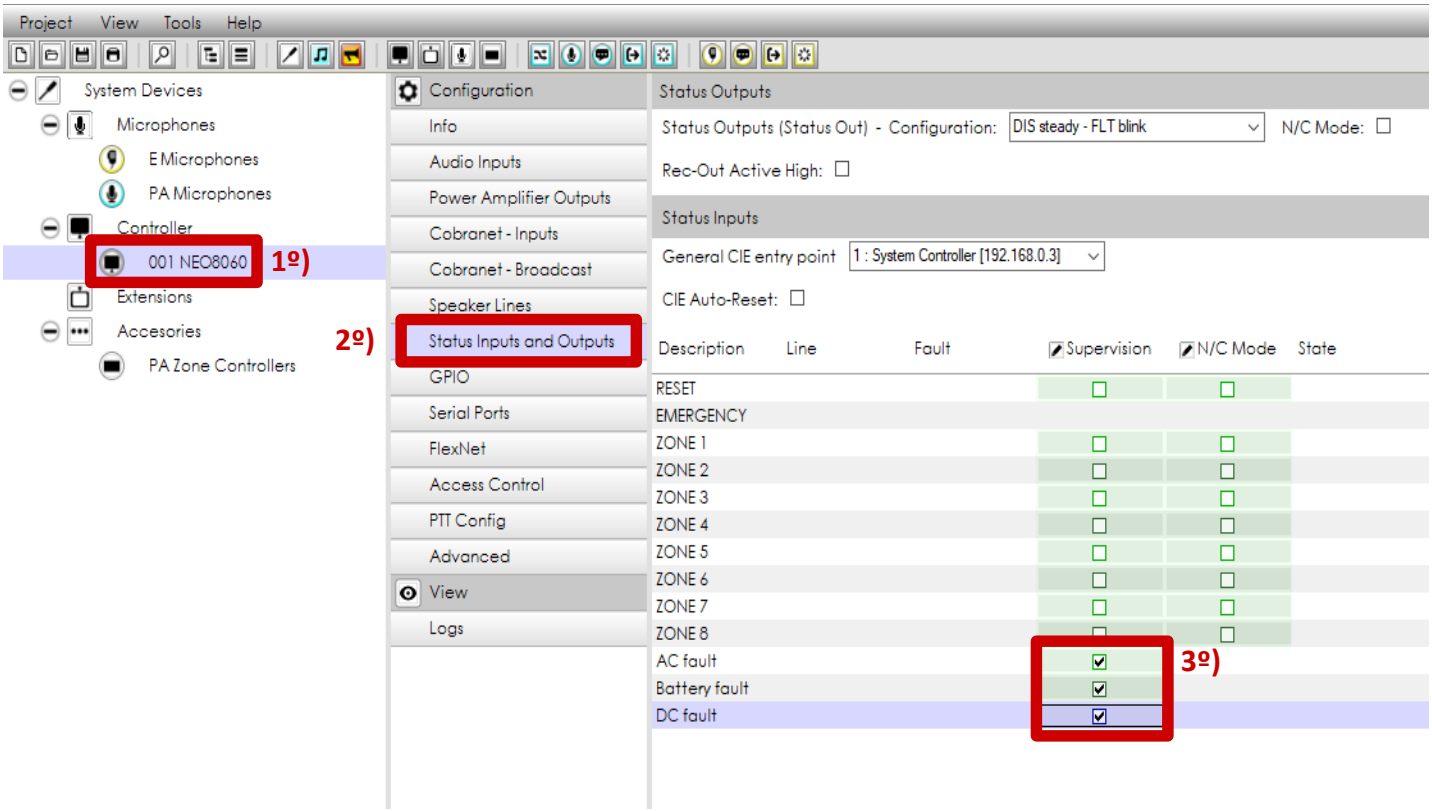


Image 1: Activete power monitoring, charger and emergency power supply

ANNEX I: SAFETY NOTICE

Please read this handbook carefully to safely connect the batteries and the battery charger to the PA/VA system.

Under the electrical safety regulations EN 62368, these components may only be handled by skilled personnel (it is considered) as category ES3.

Always use EN-54 certified battery chargers, such as those supplied by LDA in addition to our NEO series public address and voice alert systems.

For more information, please, contact with our Support Department at:

support@lda-audiotech.com