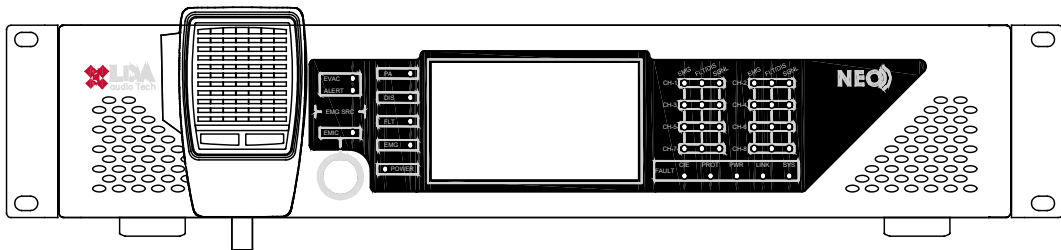


Support Handbook

Emergency power supply installation on NEO series devices



NEO

Ref: D-008024-EN-r03

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 EMERGENCY POWER SUPPLY

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

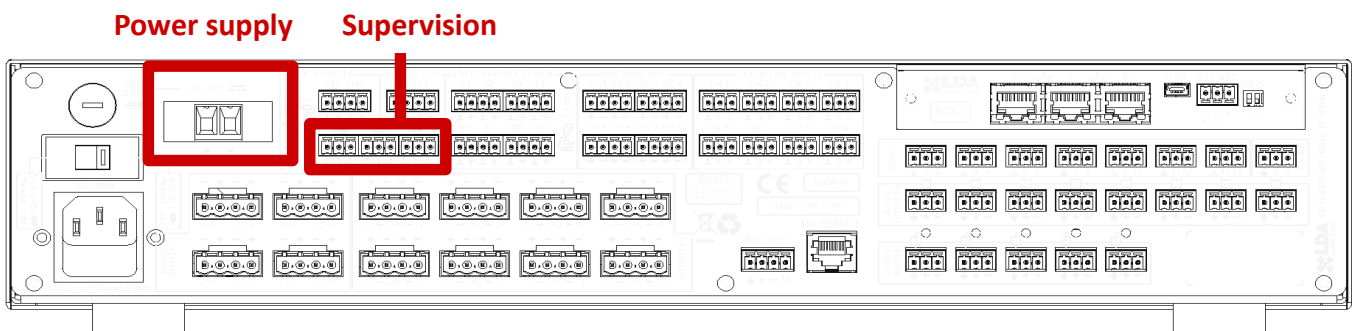


Diagram 1: NEO device rear side detailed

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 has three terminals: Normally Closed (NC), Common and Normally Open (NO). To activate any fault signals, a contact closure must occur on the NO input, while an opening of the NC input.

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*.

3 WIRING INSTRUCTIONS

1. Make sure the battery charger is actually disconnected before start the process.
2. Connect the negative pole from first battery to positive pole at second battery.
3. Connect the negative pole from second battery to the battery charger negative input.
4. Connect the positive pole from first battery to the battery charger positive input.
5. Connect battery charger output to NEO series device.
6. Connect the 9 pins of the supervision, from the charger to NEO device.

7. Turn on the general power supply of the battery charger.
8. Make sure the installation is wired as shown in *diagram 1* below.

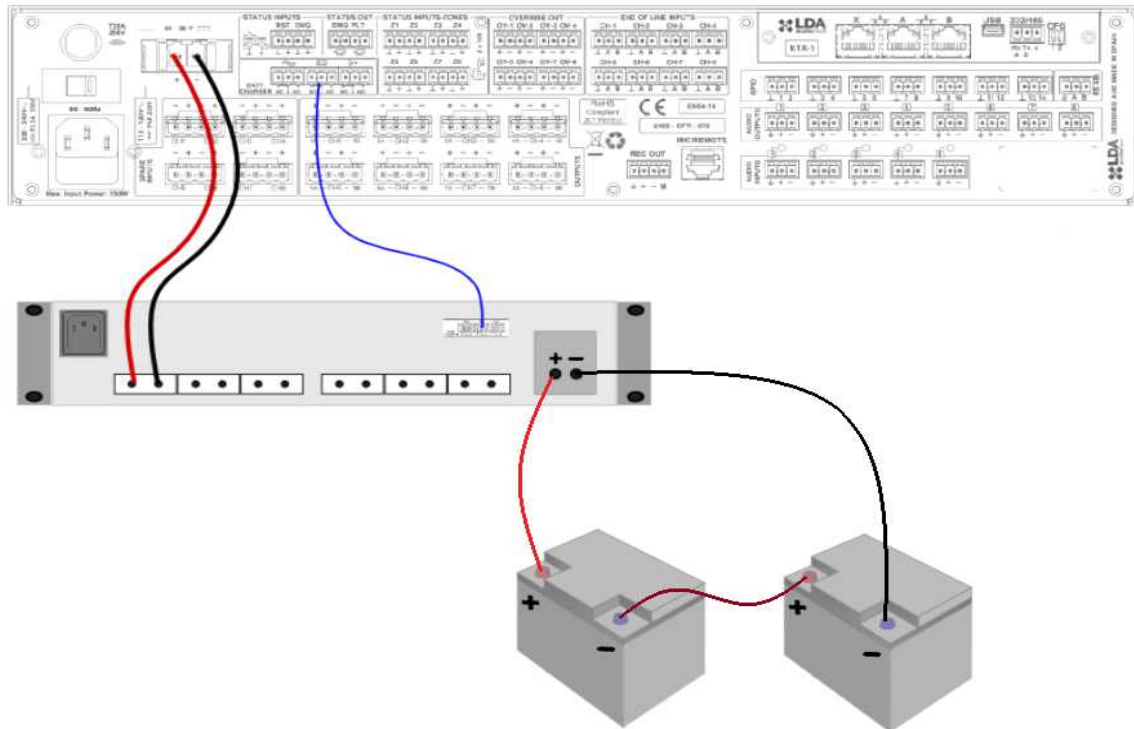


Diagram 2: Single-line battery connection diagram

4 CHARGER

The charger has the connections shown in the picture before to comply with EN 54-4 standard requirements. LDA supplies two models for PA/VA systems:

- SLAT SON 24V MS 150, 3600 W → Up to 3 NEO units are supported with two 120 Ah, 12V Batteries.
- SLAT SON 24V MS 40, 960W → One NEO unit is supported with two 45Ah, 12V batteries.

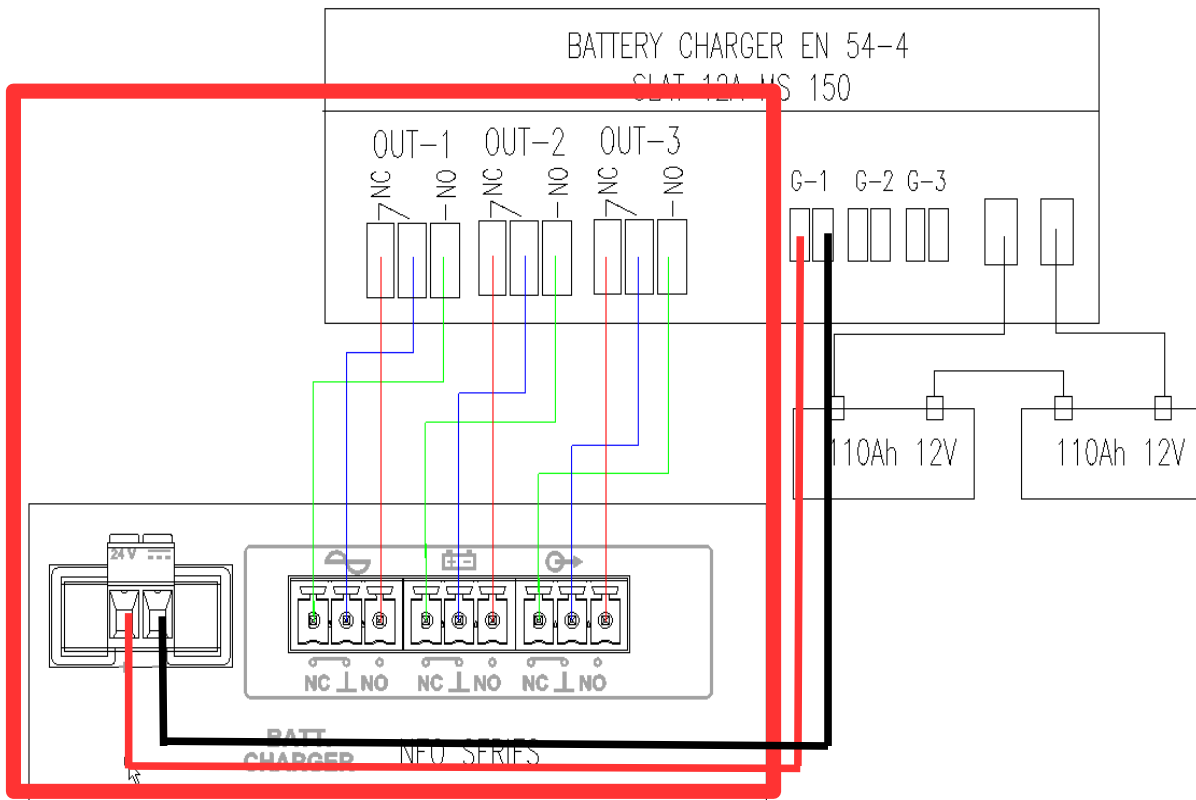


Diagram 3: NEO and battery charger connection detailed

5 SUPERVISION

Once power supply is connected to NEO unit, power supply monitoring must be engaged through system configuration. Use NEO Configurator software to access to configuration data. Items that must be enabled are found in the menu shown at *Image 1*.

For further information about NEO Configurator software there is a user manual available at LDA support website: [Link to LDA Support Web: NEO Configurator](#)

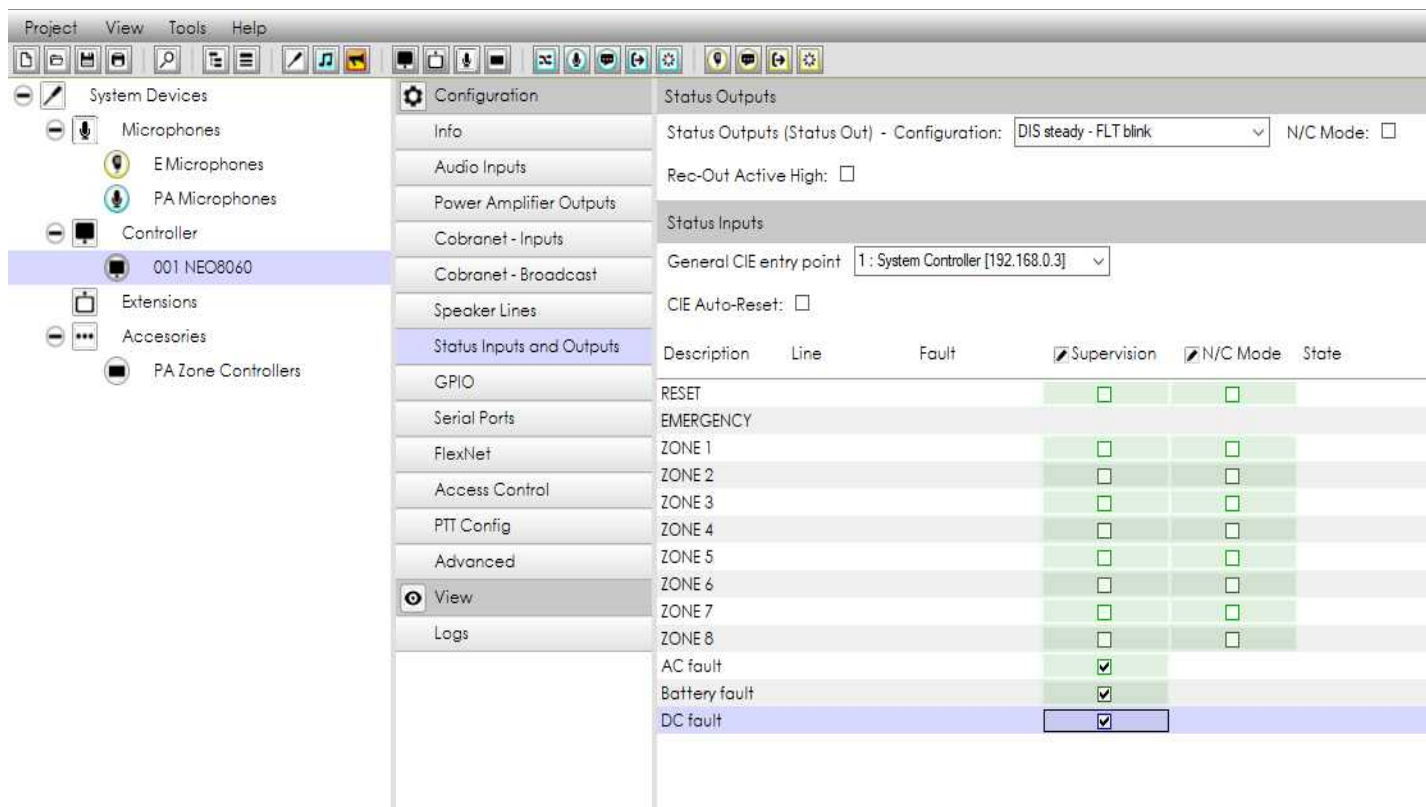


Image 1: Activate power monitoring, charger and emergency power supply

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, 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:

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