

Emergency lighting panel

EXI-1000 AND

EXI-2000

230 V AC



Exilight emergency lighting panels operate with 24V battery voltage and output circuits have 230VAC voltage. This enables the use of affordable emergency and exit luminaires.

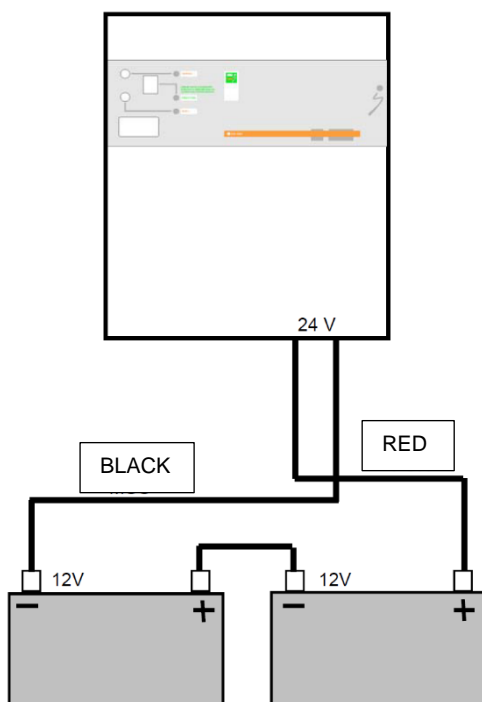
1. Mounting

The panel needs to be securely mounted to the wall from the mounting points (4 pcs). Emergency lighting panel needs to be located in a closed room.

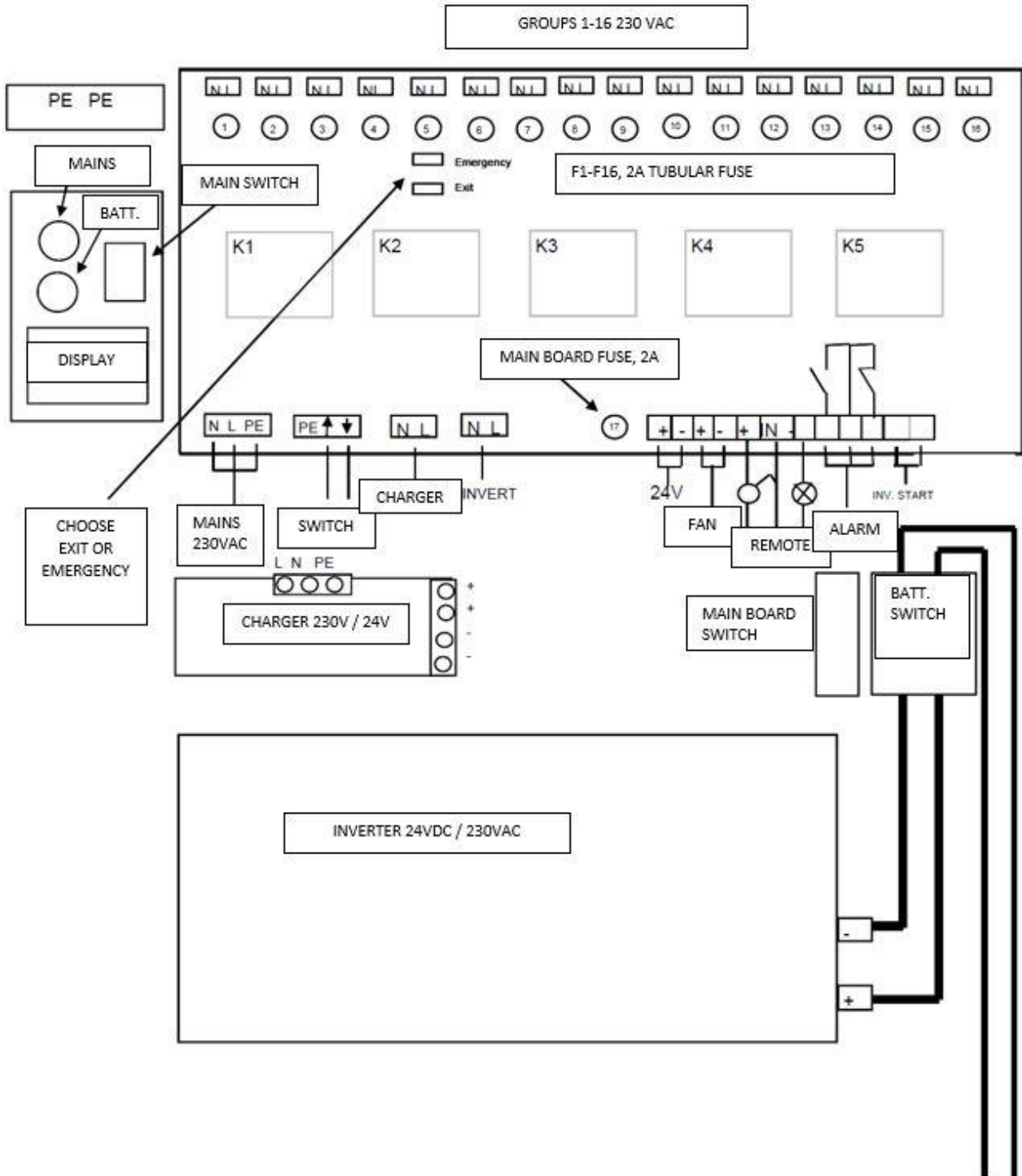
2. Connections

- Connect the mains cable to the terminals L, N and PE.
- Make sure that all the switches in the panel are in 0-position.
- Connect the battery cables to the batteries, 24V.

MAKE SURE THAT POLARITY IS CORRECT! WRONG POLARITY MIGHT DAMAGE THE EMERGENCY LIGHTING PANEL.



- Batteries need to be located outside the panel into a separate housing right next to the panel. **It is recommended to use a fuse as a short circuit protection in the battery housing or right next to it.**
- **DON'T MAKE ANY CONNECTIONS WITH LIGHTING LOAD CONNECTED!**
- Connect mains to the panel, turn main switch to 1 and then connect the batteries.
- Panels "MAINS" light should turn on when mains switch is on 1 and mains is connected.



3. Testing

Testing the emergency lighting panel while commissioning.

ALWAYS FIRST TEST THE PANEL WITHOUT LIGHTING LOAD.

- Testing is done with the main switch when mains and batteries are connected to the panel.
- When main switch is in 1 position, the mains light is on. Exit circuits have 230V mains voltage and Emergency circuits doesn't have any voltage.
- When mains is on the inverter is in shutdown state and doesn't have output voltage. **The inverter display is OFF when mains is ON.**
- When main switch is turned to 0 the panel will switch to battery use and the inverter will start supplying 230VAC to the circuits and "BATT"-light will be ON. In battery use the display will start and show load and the current coming from batteries.
- Contactors on the main board will activate and the inverter will supply both emergency and exit circuits.

- Light circuits have 2A tubular fuse. Don't change the enlarge the fuse without permission from manufacturer.

- When the panel is tested without load and it has functioned as intended connect the circuits to the main board while mains and batteries are disconnected.

- **SWITCHING MAIN SWITCH TO 0 OR DISCONNECTIN MAINS DOESN'T CUT THE VOLTAGE FROM LIGHTING CIRCUITS.**
- **ALWAYS WHILE MAKING CONNECTIONS TO THE PANEL OR LIGHTING CIRCUITS DISCONNECT THE MAINS AND BATTERIES. THIS IS HOW YOU CAN MAKE SURE THAT THERE ARE NO VOLTAGE IN THE PANEL OR CIRCUITS. VOLTAGE IS ALWAYS 230VAC.**

- When testing the panel with load Exit luminaires must be ON always when using the panel with mains or batteries.
- When mains are OFF or the panel is tested from main switch the Emergency luminaires must switch ON. In this case both Emergency and Exit luminaires must be ON.
- When testing the panel will switch to batteries and all the luminaires will be ON. The panel will use batteries until the battery voltage is 20,5V or less. In this case the panel will disconnect the load and low batt. alarm will be indicated. Back up time depends on the size of batteries and load. Normal back up time for the panel is 1h.

- **AFTER TESTING MAKE SURE THAT MAIN SWITCH IS IN 1 POSITION AND THAT THE BATTERIES ARE CHARGED.**

4. Batteries

The panel is supplied with two 12V batteries (24V). Always use maintenance free closed lead-acid batteries. Charging of the batteries will be done with separate charger inside the panel. Max charging voltage is 27,2V when the batteries are fully charged.

The panel has deep discharge protection that disconnects the load when battery voltage is less than 20,5V. This doesn't disconnect the electronics from the batteries and electronics will keep functioning as long as the batteries have current. This might cause deep discharge to the batteries if the panel is left in low batt -mode for days without charging the batteries. For such low battery cases there is a potential free contact alarm in the panel.

Don't leave the panel without charging for long periods of time. Warranty doesn't cover the batteries.

Alarm

The panel has changeover connection for low voltage when battery voltage is less than 21V.

Remote control

Remote control switch or some other external normally closed connection such as voltage control relay can be connected to the panel. External NC connection will always activate the luminaires when the connection is open. With remote control the panel doesn't switch into battery mode but uses mains. Remote control always needs to be closed to get the panel into normal mode.

REMOTE CONTROL NEEDS TO BE RETURNED TO NORMAL MODE AFTER BEING USED.

In order for the panel to function normally there needs to be a loop in the remote terminal if there is no remote control connected.

Multiple remote controls have to be connected in series.

External connections such as voltage monitoring relays can be connected into the remote terminal.

Connection voltage for remote control is 24 V.

5. Errors

Panel doesn't work with batteries

- Battery voltage is too low (low voltage). Check the battery voltage, charging, battery-load ratio and battery connections.
- Inverter error/fail. Inverter has failed and can't stand the load.

Panels functions normally without load but not with load

- Overload, too big luminaire load connected into the panel. The display shows "overload". Don't connect more load into the panel than the rated load indicates. Overload might damage the panel.
- Battery voltage is too low (low voltage). Check the battery voltage, charging, battery-load ratio and battery connections.
- Inverter error/fail. Inverter has failed and can't stand the load. Test the inverter by gradually increasing the load.

The panel doesn't stay in normal mode but is but is in battery mode or the emergency luminaires are ON

- Remote control is ON.
- The loop from remote control terminal is missing and no remote controls or external controls are connected.

6. Service and Maintenance

Service and maintenance of system has to be conducted by professional and knowledgeable person. Constant maintenance is needed in order to ensure the proper function of the system.

7. Warranty

Warranty terms under the supplier's standard terms. In case of system faults always consult your sales representative:

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