

Installation and commissioning of an EmLOC system

To get an overview of the system, you should familiarize yourself with the contents of the EZ1 operating manual. If you are installing or commissioning such a system for the first time, this is unavoidable. As a "shooting guide", this point-by-point instruction is only intended to outline the procedure so that problems can be identified at the outset and major rework can be avoided.

And this is how it is done:

1. Installation and commissioning of the EZ1 control panel. Programming the system parameters:

- a. Press the F6 key in the main menu (date, time, system status), then you are in the area menu (manual operation, test results, printing, system settings). Press F6 again to enter the system programming.
- b. System addresses: Select the first system address with F4 and enter the address with the numeric keys (e.g. "001"). Proceed in the same way with F5, the last system address. Press the UP arrow (F2).
- c. Reinitialization: In this menu, the factory setting can be restored with F6. All programming is lost as a result. Press the UP arrow (F2).
- d. Delete all test results: In this menu, press F6 to delete the last saved test results (not the test book!). Press the UP arrow (F2).
- e. Weekday: Here you set the current weekday (F4/F5). Press the UP arrow (F2).
- f. Time: Here you can change the time and date. Both must be changed and the change confirmed with F6. Press the UP arrow (F2).
- g. Test day: In this menu, select the day and time on which the control panel is to perform the automatic test. Select the day with F4/F5, enter the test time with the numeric keys. Press the UP arrow (F2).
- h. Automatic check Central: You have the possibility to choose the weekly or monthly check or to switch off the auto check (F4/F5). Attention. If the autocheck is switched off, the key combination "A,P,F2" (trigger autocheck) does not work in the main menu. With F1 you can now leave the system menu. You are now back in the area menu. Here you can then query or check individual addresses in the "Manual" submenu.

2. **Section-by-section installation of the EmLOC terminal devices** (luminaires, inverters, etc.). It is useful to check the connected devices in groups already during installation. In this way, wiring errors or incorrect addressing can be quickly rectified. On the data side, all EmLOC devices and the control panel are simply connected in parallel (diagram on page 15 of the EZ1 operating instructions).
3. If 10-20 devices are installed, these should be checked via the EZ1 in order to correct incorrect addressing or bus rotators quickly. Of course, this is only possible when the luminaires are connected to the mains.

With the system setting, the EZ1 is ready for operation and requires no further operation. If you want to work on the system manually, there are a number of functions available in the "Manual" submenu, which are described in detail in the operating instructions starting on page 6.

Troubleshooting.

Usually, these are not actually "errors" but interpretation problems that lead to queries or deficiency reports. The most common cases are these:

- **No communication possible.** If there is no communication at all, measure the voltage at the data line terminal. A DC voltage of +14 to +16 volts (C= GND) should be measured between C and D at EZ1. Disconnect the data line if necessary. If the value is below +10 volts, check the connected devices for polarity reversal or short circuit of the data line. If the supply voltage at the EZ1 is OK, there may be an error due to line breakage (measure data voltage at EmLOC device) or incorrect addressing (check).
- **A lamp error** is reported **although the lamp function** is **OK**. In the case of EmLOC devices with optical lamp control, the phototransistor may be damaged or bent due to mechanical overstressing during installation. Check.
- **A lamp error is signaled.** The lamp switches off shortly after switching over. In most cases, the battery capacity of the lights is completely low (battery empty) or the battery is not connected or the polarity is reversed. When the lights are delivered, the battery is generally disconnected and must be reconnected by the customer. After commissioning, the lights / devices require at least 24 hours charging time before checks or tests are carried out.
- Connected **devices switch to test independently** without a control panel connected. All EmLOC devices have their own automatic weekly test cycle, which enables self-diagnosis when no control panel is present. This is activated during commissioning. A connected EmLOC central unit automatically switches off this internal test cycle for all devices after the first auto-test.