



VISUAL-ACOUSTIC
SIGNALING DEVICE

SPLZ-1011B

spl1011_e 12/02

1. GENERAL

The SPLZ-1011B outdoor visual-acoustic signaling device is designed for use in burglary and assault signaling systems, as well as in fire alarm systems. The signaling function is performed in two ways: **visually** (by red color lamp blinking) and **acoustically** (by a modulated, high-volume sound signal). A xenon lamp (flash) is the source of light, while the sound signal is generated by means of a piezoelectric transducer. The design of the signaling device housing, as well as its inner enclosure made from galvanized sheet, ensure a high degree of anti-tampering protection (against opening, tearing off from the base, an attempt to cover the transducer with foam). The electronic circuitry is made in SMD technology and protected by impregnation against unfavorable effects of weather conditions, thus ensuring high reliability of the equipment. The SPLZ-1011B external housing is made of the highly impact resistant PC LEXAN polycarbonate, hence it features a high mechanical strength and guarantees aesthetic appearance of the signaling device even after many years of operation.

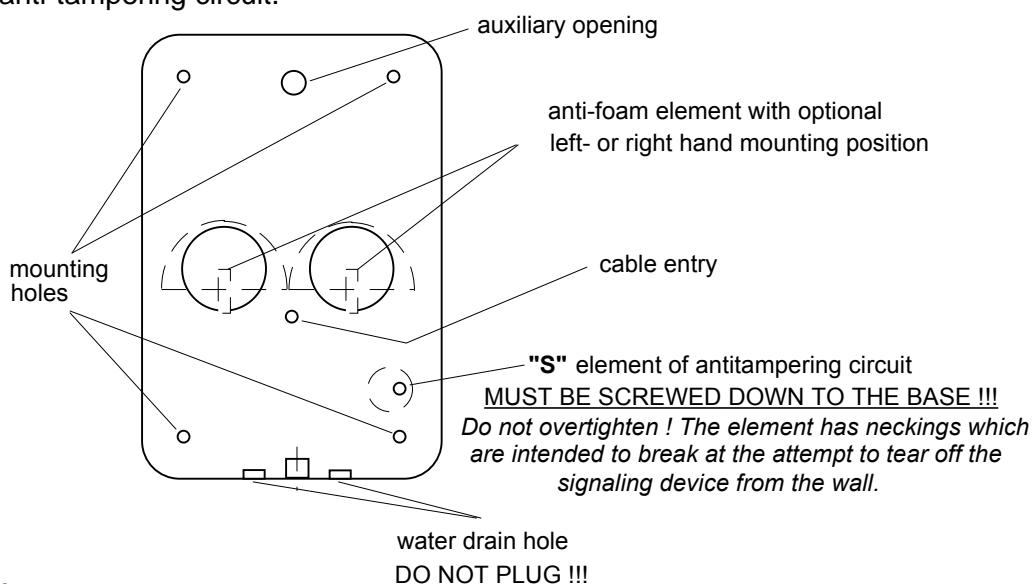
2. INSTALLATION

The signaling device should be mounted on a flat base in a location as inaccessible as possible to minimize the tampering risk. The unit should be attached to the base by means of screws and expansion studs (the mounting hardware is delivered together with the signaling device).

CAUTION: *Keep a clearance of approx. 4.5 cm between the upper edge of signaling unit chassis and the ceiling or other obstacle limiting the mounting position from above. The lack of such clearance can make the attachment of external housing difficult.*

The anti-tampering circuit of the signaling device protects the unit against removal of external housing or tearing the unit off the wall. For the circuit to operate correctly, the „S” element must be screwed to the base.

The anti-foam circuit is designed for signaling the attempts to tamper with the signaling device transducer. The circuit can operate independently or be connected in series with the signaling device anti-tampering circuit.



After installing the signaling device, it is recommended to seal the mounting holes and the cable entry with silicone compound.

3. OPERATION OF SIGNALING DEVICE

CAUTION! *The way of activating the SPLZ-1011B signaling device is different from that of the SPLZ1010B unit (read carefully the text below).*

The SPLZ-1011B signaling device can operate with any source of alarm signal. The circuits for acoustic and visual signaling have separate control inputs. Signaling is triggered after a change of polarity or a loss of signal (cut wire) on the control input. The acoustic signaling is controlled by the **STA** input, while the visual signaling - by the **STO** input. The voltage defining the state of **no signaling** is set by means of the jumpers **PLA** and **PLO**.

The signaling device has been designed so as to be **inactive on connecting power supply to it**, irrespective of the status of inputs STA and STO. Only after elapse of 20 seconds in the stable, inactive state (constant power supply from the control panel and input signals corresponding to the jumper settings) it is possible to trigger the signaling. After each switching the power supply off and on, the time is counted over again. This function allows an accidental activation of the signaling device to be avoided during installation of the system.

The test mode makes it possible to activate signaling without the need to wait for 20 seconds. In order to do so, remove the jumper **O+A**, switch the signaling device on and, within 5 seconds, put the jumper on again.

The SAB terminals are used for connecting the signaling unit to the anti-tampering circuit of the alarm system. When the signaling unit is correctly mounted and the contacts of onboard microswitches are closed, the **SAB** terminals are shorted, too.

The signaling device is adapted for operation with a 6 V battery installed (internal power supply). The external power supply should be connected to the terminals **+12V** and **GND**. The loss of voltage on these terminals will trigger a tamper alarm, the duration of which depends on the settings of jumpers **TM0** and **TM1**. The kind of signaling is set with the jumper **O+A**. Restoration of the supply voltage will cancel the tamper alarm. Having mounted the signaling unit, check the performance of this function by disconnecting and re-connecting the power supply voltage.

CAUTION! *The jumpers **TM0**, **TM1** determine the maximum active time of acoustic signaling. Afterwards, irrespective of the value set on the control panel, the signaling device will go silent. Signaling can only be triggered again after the **STA** input voltage returns to the state corresponding to the **PLA** jumper "no alarm" setting.*

The LED placed on electronic circuit board blinks when the +12V input power voltage is applied. The LED can be switched off by removing the JP8 jumper.

4. CONNECTION

There are two types of alarm outputs which are used in alarm control systems: common ground outputs and common supply outputs. The signaling unit can be activated by any type of output, provided that suitable connections are made. If the control panel alarm outputs have no polarizing resistors, then, in order to ensure proper operation of the signaling device, it is necessary to connect $2,2\text{k}\Omega$ resistors as shown in drawing 2 or 3 (depending on the output type). Such resistors must also be connected for outputs with load control.

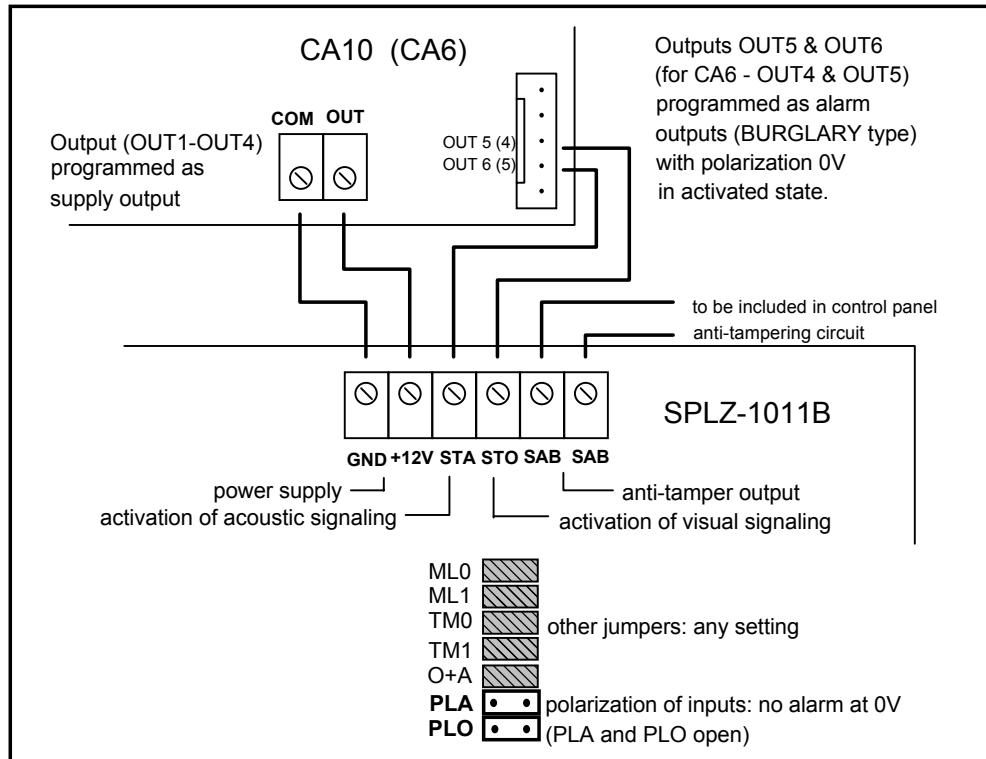


Figure 1: Signaling device connection to CA10plus (CA6plus) control panel, using the low-current outputs OUT5 & OUT6 (OUT4 & OUT5 in CA6). These outputs are of the „common supply” type (Fig. 2) with internal polarizing resistors (no additional resistors are required).

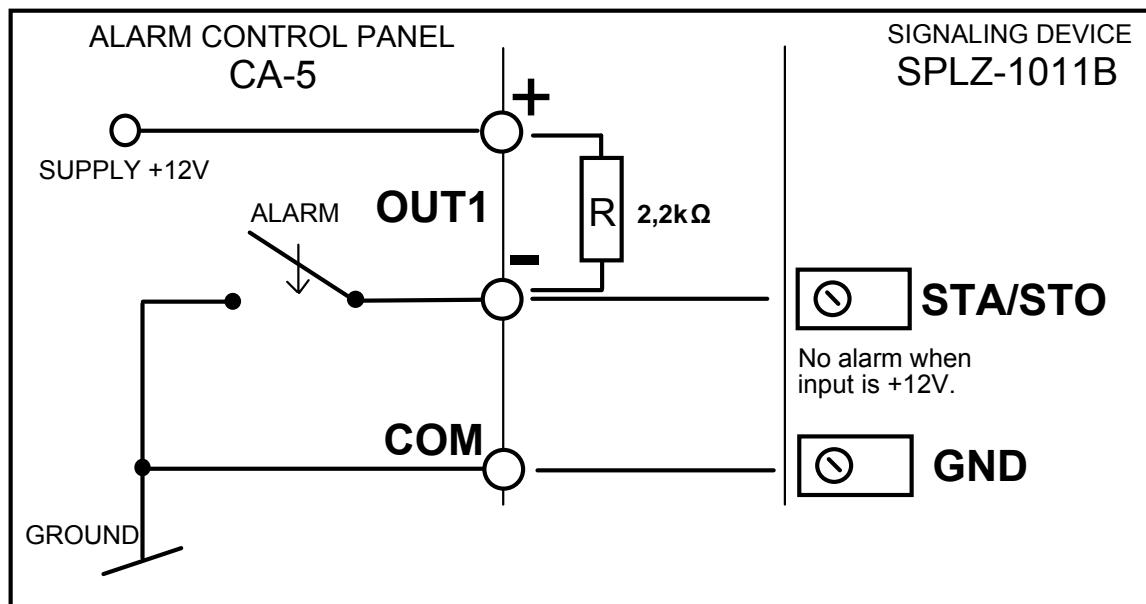


Figure 2: Activation connection to the „common supply” type output in: CA-4V1, CA-5 panels.

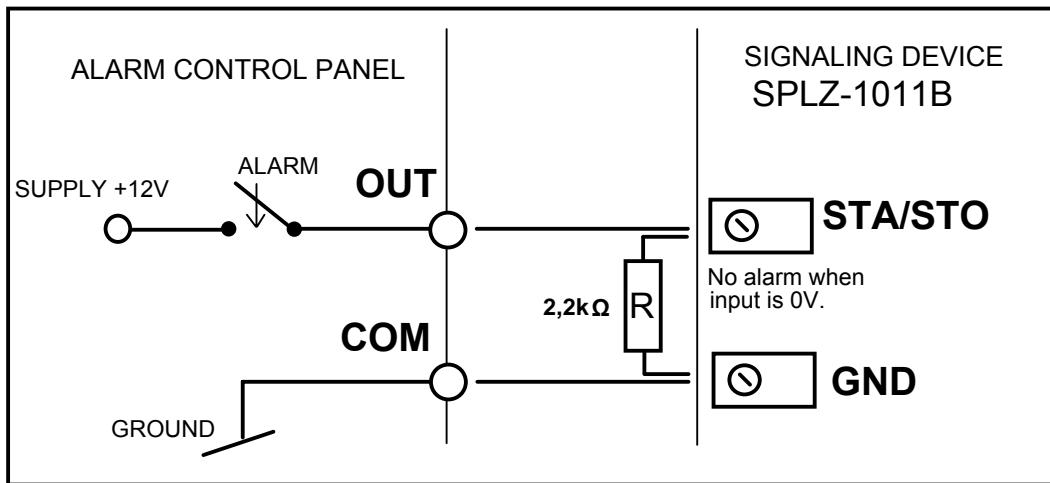


Figure 3: Activation connection to the „common supply” type output (e.g.: CA4MX, CA6plus panels - outputs OUT1 through OUT3; CA10plus – outputs OUT1 through OUT4).

5. JUMPER SETTINGS.

	Acoustic signal type selection.	
ML0 ML1	<input checked="" type="checkbox"/>	Two-tone signal, step modulated
	<input type="checkbox"/>	Smooth modulated signal
	<input type="checkbox"/>	Smooth modulated signal
	<input type="checkbox"/>	Smooth modulated signal
TM0 TM1	Limitation of acoustic alarm duration to:	
	<input checked="" type="checkbox"/>	approx. 1 minute
	<input type="checkbox"/>	approx. 5 minutes
	<input type="checkbox"/>	approx. 10 minutes
	<input type="checkbox"/>	approx. 15 minutes
O+A	Signaling mode after power supply loss.	
	<input checked="" type="checkbox"/>	Acoustic alarm only.
PLA	STA input polarity (acoustic).	
	<input type="checkbox"/>	No alarm alarm when STA input is at 0V.
	<input checked="" type="checkbox"/>	No alarm alarm when STA input is at 12V.
PLO	STA input polarity (visual).	
	<input type="checkbox"/>	No alarm alarm when STA input is at 0V.
	<input checked="" type="checkbox"/>	No alarm alarm when STA input is at 12V.

CAUTION!

The converter powering the optical signaling circuit generates high voltage, which can result in electric shock. Therefore, all connections have to be made while the battery is disconnected, and the +12V wire is to be connected last.

6. TECHNICAL SPECIFICATION:

Average current consumption:

- acoustic signaling up to 270 mA
- visual signaling 270 mA
- signaling + charging up to 650 mA

Back-up battery 6V/1.3 Ah

Back-up battery protection fuse WTAT 3,15A

Sound intensity level min. 120 dB

Operating temperature -35°C ... +60°C

Dimensions 300 x 200 x 90mm

Weight (without battery) 0.9 kg