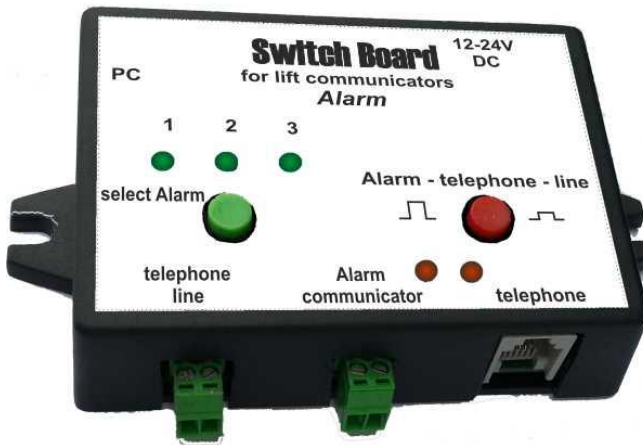


Switch Board

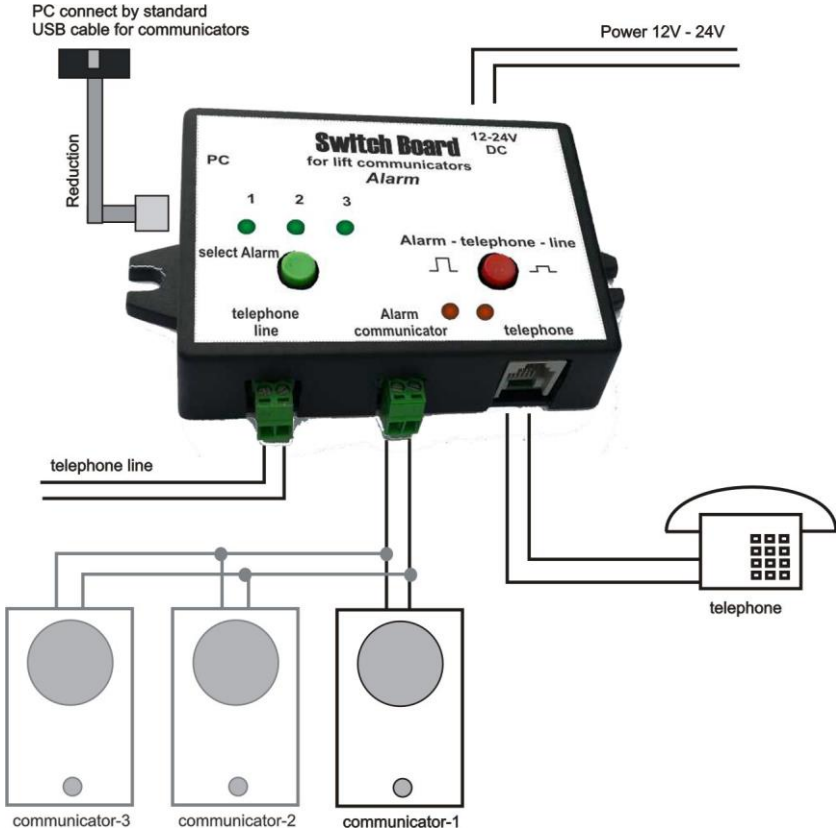
for communicator Alarm



User Guide

1 Connection SwitchBoard

Switch board is simply device for communication between machine room and lift cabin.



2 Wiring SwitchBoard

SwitchBoard is connected between the telephone line and lift communicator (only two wires). For correct function, just more connect 12V or 24V DC. Power is independent of the polarity. Consumption is 10mA in an inactive state, at communication consumption is 300 mA at 12V and 180 mA at 24V.

3 Functions SwitchBoard

So that SwitchBoard worked with connected communicators, they must have some programmable parameters. Switchboard can be used to connect one elevator communicator (single mode) or for 2 to 5 parallel connected Communicators (parallel mode).

Single mode:

In this mode, only two important parameters: disable **parallel connection** and **call duration**. These two parameters must be set in the SwitchBoard as well as in the lift communicator. It is also necessary for the correct function a set same character prolongation call duration and code for hanging communicator.

Indication: Green *LED 1* flashes, green button does not respond.

Function: After picking up handset of the telephone is disconnected telephone line begins to ring and then lift communicator pick. Normal call progress. Whenever is allotted time to expire maximum call duration, so Switchboard automatically dial DTMF the prolongation character. If you hang up the phone, so to the communicator will send hanging code.

Parallel mode:

In this mode it is necessary to set the same parameters in the SwitchBoard and connected communicators. Without this, you can not synchronize operation. These are the parameters: 42 character prolongation, 43 hangup code, 45 activate parallel mode, 4* constant time detection, 51 maximum call duration.

Indication: Green *LEDs* light, green button switch address where do will be called. Switches in the order (only from FW 2.1-2019):

LED1	– 1
LED2	– 2
LED3	– 3
LED1+LED3	– 4
LED2+LED3	– 5
LED1+LED2	– 1+2
LED1+LED2+LED3	– 1+2+3

Function: Select the address (by green button) where do will be called. After picking up handset of the telephone is disconnected telephone line begins to ring and parallel connected communicators gradually pick up and Switchboard selects the desired communicator. Normal call progress. Whenever is allotted time to expire maximum call duration, so Switchboard automatically dial DTMF the prolongation character. If you hang up the phone, so to the communicator will send hanging code.

Red button:

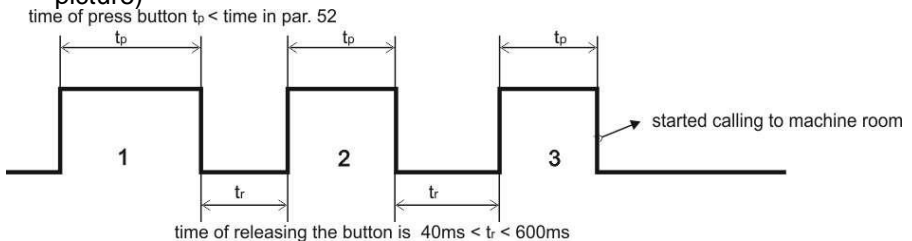
Red switch enables the possibility to connect your phone in the machine room with external line. This is mainly for safety reasons, to call for help (ambulance, fire brigade). If the switch is closed, so the external line is connected directly to the phone and communicators in the elevator is not working.

Call from cabine to Machine room:

From version V3.4 of firmware is possible call to the machine room.

For call use not blocked BTN2. This Button has three function:

1. emergency call – press BTN2 longer than time parameter 52 (2sec)
2. technical call – press BTN2 longer than (time param. 52) x 8 (16sec)
3. cal to the machine room – three times press button BTN2 (explain in picture)



Picture explain how pressed button for successful call to the machine room.

4 Programming SwitchBoard

SwitchBoard is possible programming only from PC, from program AlarmSet. Connector for PC has only 4 pins and we need use reduction between 4 pins connector and standard 10 pins programming connector. Programming is easy, in program AlarmSet we have settings for connected communicators and now we connect SwitchBoard, and write this parameters (without changes) to the SwitchBoard, so this is all. This settings we recommended save to the PC for next other possible future servicing.

Programming SwitchBoard need if you want to maintain good cooperation with connected Alarm. Constants at the Alarm, which will be connected to the SwitchBoard, must mutually agree. Therefore, the following procedure is recommended after setting parameters in Alarm connect via the reduction SwitchBoard and write the same parameters in SwitchBoard.

Parameters affected thereby:

- 42 Character to prolong the call
- 43 Command to hang up communicator by phone
- 45 Activation parallel mode of communicators
- 4* Constant for parallel mode - time for receive DTMF address of communicator
- 51 Maximal call duration

Only from version FW V2.0 - 2018

4.1 Easy to switch to Single mode / Parallel mode

It can be done using the green button when the power is connected.

The assumption is that the communicators and SwitchBoard have the same settings (see Chapter 4).

Procedure:

1. Press and hold the green button
2. Connect the power supply
3. The middle green LED lights up (2)
4. Release button, middle LED (2) blinks and one of adjacent LEDs lights up

5. The left LED (1) lights up - means that the Single mode is now selected in SwitchBoard
- The right LED (3) lights up - means that the Parallel mode is now selected in the SwitchBoard
6. Press shortly green button to switch mode - the selected mode is signaled by the light of the adjacent LED
7. Long press the green button (hold until the middle LED (2) goes out) to exit this mode setting.

5 Technical parameters

Parameter	Value	Conditions
Power supply - voltage	12-24V	DC, independent of polarity
Power supply - current	max. 0,30A	12V
	max. 0,18A	24V
Public line current detection	min. 8mA	$U_{line} > 15V$
Line current for telephone	min. 25mA	
Line current for Alarm	min. 40mA	
Insertion Loss public line - Alarm	< 1dB	1KHz, 600ohms
Insertion Loss Alarm - telephone	< 3dB	1KHz, 600ohms
Ring generator voltage	min. 55V _{p-p}	at 10mA load
Ring generator waveform	rectangle	
Flash (pulse dial 1) - pulse - space	min. 80ms / max. 400ms	
	min. 200ms	
Dimension in [mm]	112 x 65 x 22	
Operation temperature	- 20 to + 50 st	

