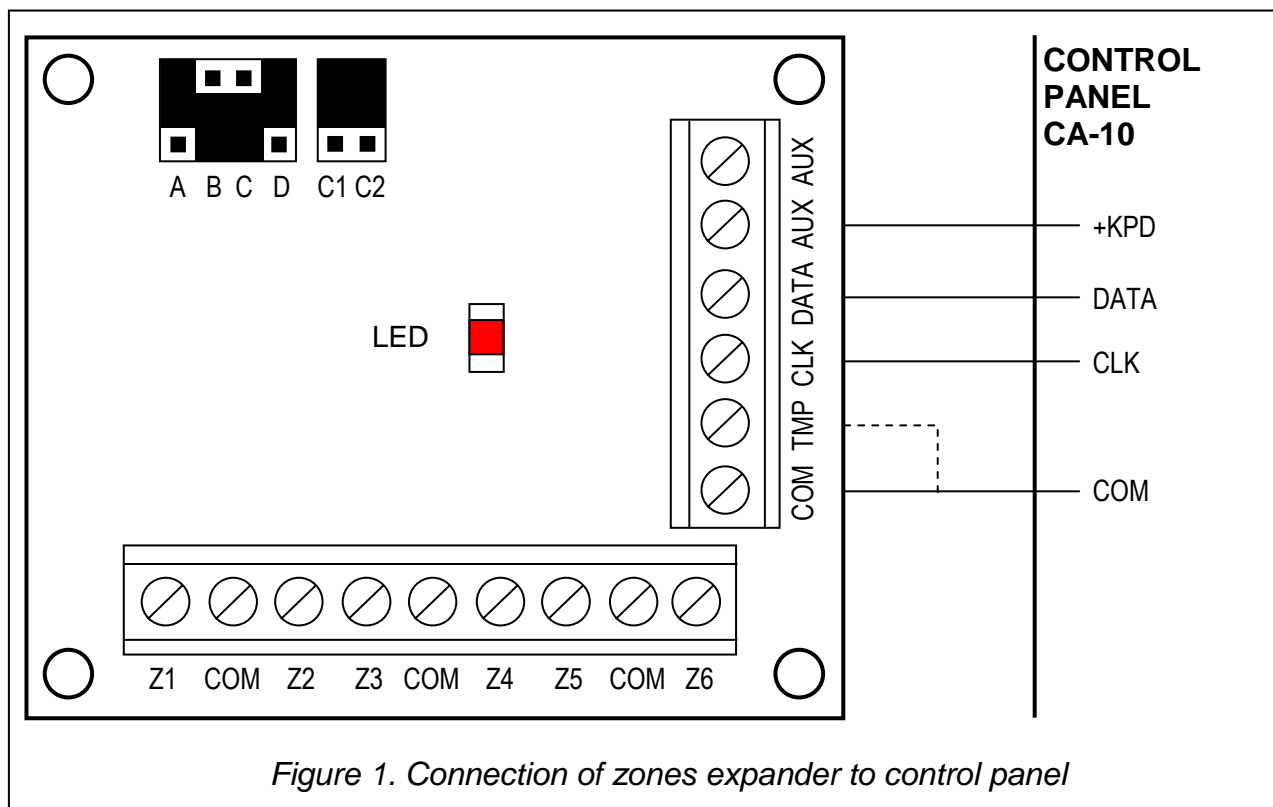# CA-10E
ZONE EXPANDER

CE

The CA-10E zone expander is designed to work together with the CA-10 alarm control panel. It allows extension of the alarm system by 6 zones without additional keypads.
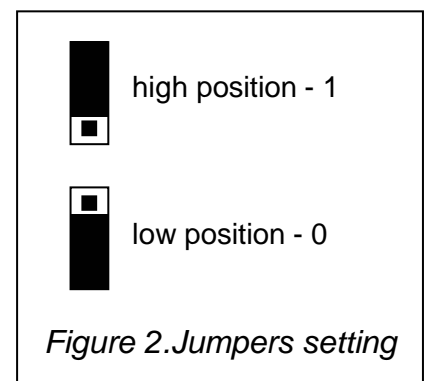
Description

Figure 1. Connection of zones expander to control panel

Description of terminals:

Z1 to **Z6** – zones,

COM – common (0V),

TMP – input of expander tamper circuit (NC) – if not used, connect to a COM terminal

DATA, **CLK** – communication with control panel,

AUX – power supply (+12V).

The jumpers A B C D are used to set the expander's address (high jumper position – 1, low jumper position – 0). **The expander address must be programmed in the control panel (FS111 or FS124) as the address of every keypad replaced by expander.**

The jumpers C1 and C2 allow the system to work in any configuration (1 keypad + 6 expansion zones, 2 keypads + 4 expansion zones, 3 keypads + 2 expansion zones). Jumpers C1 and C2 are used to bypass sending information about zones Z3 and Z4 (C1), Z5 and Z6 (C2). Jumpers must be set in high or low position – they can not be taken off permanently.

high position - 1

low position - 0

Figure 2.Jumpers setting

The expander zones Z1 - Z6 have the same abilities as control panel and keypad zones.

The LED indicates zones status:

LED lit – all zone circuits are open,

LED off – all zone circuits are closed,

LED blinks once – all zones with 1,1kΩ EOL resistor,

LED blinks twice – all zones with 2,2kΩ EOL resistor,

LED blinks continuously – different status of zones.

CONNECTION

The zone expander connects to the keypad bus of the control panel. The distance between the expander and the panel can be up to 200m (it depends on the cable type – see: CA-10 Installer Manual➔Connection of Keypads). The LCD keypads can only interface in the alarm system with the expander in version: **v02.98**.

Rules of connection:

number of keypads in system	connection of the keypads to control panel- CLK terminals	connection of the zone expander to control panel				jumpers setting		expander zones in system					
		CLK	DATA	AUX	COM	C1	C2	Z1	Z2	Z3	Z4	Z3	Z4
1	CLK1	CLK2	DATA	+KPD	COM	high	high	Z11	Z12	Z13	Z14	Z15	Z16
2	CLK1 CLK2	CLK3				high	low	Z13	Z14	Z15	Z16	-	-
3	CLK1 CLK2 CLK3	CLK4				low	low	Z15	Z16	-	-	-	-