

ESP 8-BUS

8 INPUTS 2 OUTPUTS EXPANSION BOARD

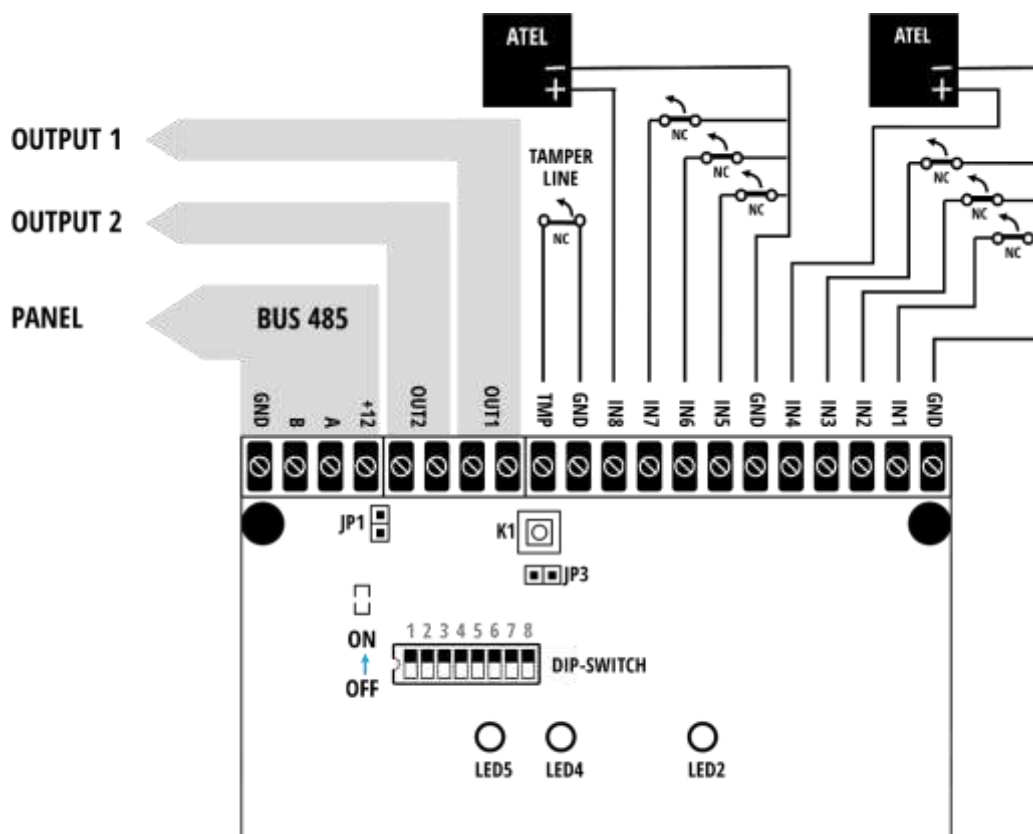


Installation and use manual

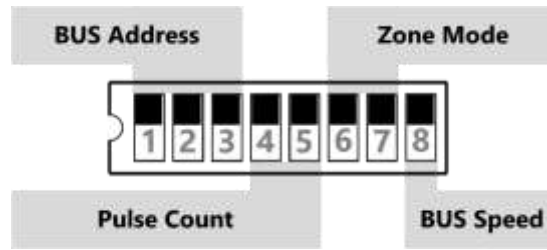
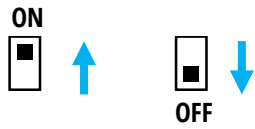
16.01-M:1.2.1-H:1.0-F:1.0-ENG

ESP8-BUS is a wired zones expansion board dedicated to the CE818 control panel.
This expansion can be addressed and can manage up to 8 inputs + 2 outputs + 1 wired tamper line.
The configuration is made by jumpers and DIP-switches.

CONNECTION SCHEME



DIP-SWITCH



ADDRESS

	1	2	3		1	2	3
Address 1	OFF	OFF	OFF	Address 5	OFF	OFF	ON
Address 2	ON	OFF	OFF	Address 6	ON	OFF	ON
Address 3	OFF	ON	OFF	Address 7	OFF	ON	ON
Address 4	ON	ON	OFF	Address 8	ON	ON	ON

PULSE COUNT

Valid only if the zones are set as "Fast inputs" (**DIP6 = OFF, DIP7 = ON**)

	4	5
1 pulse > 200 ms	OFF	OFF
2 pulses > 1 ms	ON	OFF
4 pulses > 1 ms	OFF	ON
8 pulses > 1 ms	ON	ON

ZONE MODE

	6	7
N.C. Zones closed directly to GND Work only with single pulse count		
Single End-of-line Zones closed to GND via R = 2,2 kΩ Work only with single pulse count		
Fast inputs Zones closed directly to GND Minimum pulse time: 1 ms Pulse number: set by DIP4 and DIP5 Pulses evaluation window: 60 seconds	Enabling this function ALL the inputs will be fast type. Thus, connect only devices with pulse alarm outputs.	
Double End-of-line Zones closed to GND via R1 = 2,2 kΩ and R2 = 12 kΩ Work only with single pulse count		

BUS SPEED

	8
HIGH SPEED (38400 bps)	OFF
LOW SPEED (19200 bps)	ON

JUMPERS

		CHIUSO	APERTO
JP1	120 Ω end-of-line resistor for BUS 485	ACTIVE	NOT ACTIVE
JP3	Internal tamper (K1 button)	EXCLUDED	ACTIVE

MOUNTING ONLY ONE EXPANSION BOARD ESP8-BUS, ENABLE THE 120 Ω END-OF-LINE RESISTOR (JP1 CLOSED).

BY MOUNTING MORE THAN ONE EXPANSION BOARDS, IT IS NECESSARY TO FOLLOW INSTRUCTIONS IN NEXT PARAGRAPH.

SET PULSE COUNT TO 1 (DIP4 AND DIP5 TO OFF) IN CASE THE ZONES ARE CONNECTED TO WIRED CONTACTS OR INFRARED SENSORS.

SET PULSE COUNT TO 2/4/8 (SEE SCHEME FOR DIP4 AND DIP5) IN CASE OF USE OF ATCM OR ATEL DEVICES.

DO NOT USE THE SAME EXPANSION BOARD FOR SINGLE PULSE COUNT (CONTACTS / INFRARED DETECTORS) AND MULTIPLE PULSE COUNT (ROLLER).

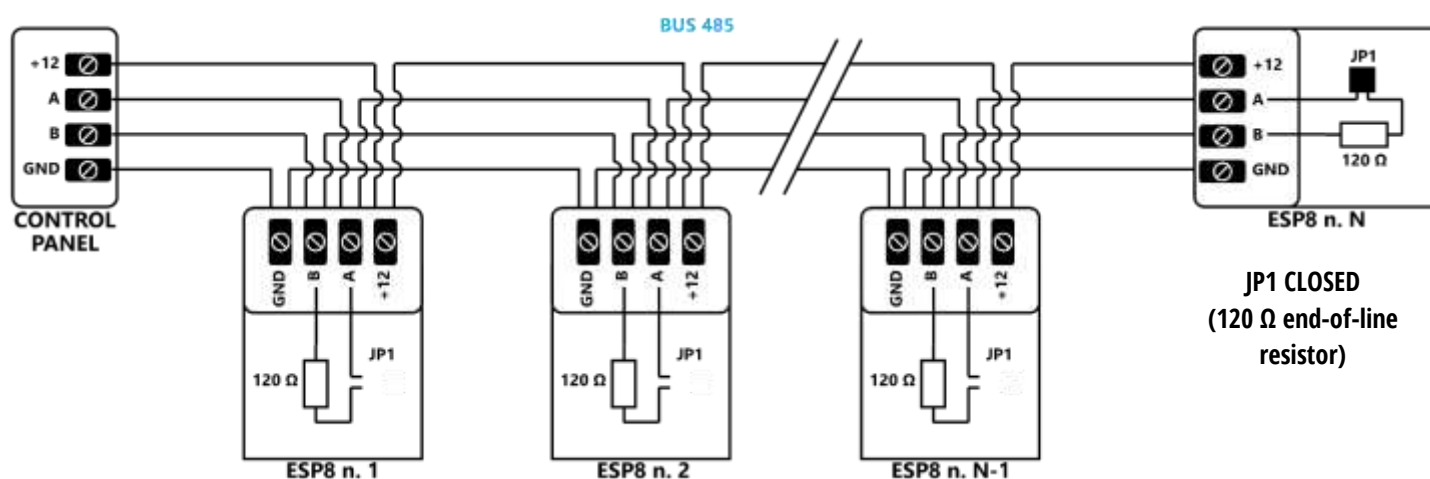
LED

LED2	RED	BUS ACTIVITY			
LED4	GREEN	OFF	ON	ON	OFF
LED5	GREEN	OFF	OFF	ON	ON
		NC	SINGLE END-OF-LINE	DOUBLE END-OF-LINE	FAST INPUTS

BUS 485

For a reliable communication on RS485 BUS it is **MANDATORY** connect the expansion boards in “cascade”, that is start from control panel with one cable and reach the first expansion then re-start from here towards the next expansion and so on (cascade connection).

On the last expansion board enable (**JP1** closed) the 120 Ω end-of-line resistor, disable it (**JP1** opened) on all other expansion in the middle.



TECHNICAL

Working voltage	10 ÷ 14 V _{DC} (from BUS RS485)
Current absorption	Max 40 mA (only expansion card)
Zone Inputs	n. 8 inputs referred to GND Option: Normally Closed, Single End-of-line, Double End-of-line
Programmable Outputs	n. 2 programmable outputs (programming via control panel): <ul style="list-style-type: none">• OptoMOS N.C. (40 V_{DC}/100 mA max)• Normally Closed or Normally Opened• Activation from event (please refer to the control panel events available)
Zone opening time	Zones set as "N.C.", "Single End-of-line", "Double End-of-line": <ul style="list-style-type: none">• > 60 ms Zones set as "Fast inputs": <ul style="list-style-type: none">• Pulse count = 1: > 300 ms• Pulse count = 2, 4 or 8: > 1 ms
Wire-cut time	500 ms
Working temperature	From 0°C to 50°C
Dimension (L x H x W)	102 x 59 x 14 mm (only electronic board) 123 x 88 x 33 mm (case)
Compatibility	Control panels mod. CE818

MADE IN ITALY



This device meets the R&TTE requirements (European Union)