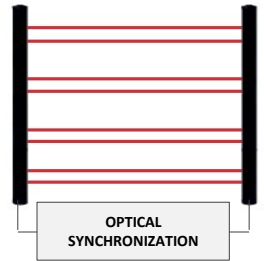


ROYAL is the double IR barrier with parallel beams with optical synchronization. It is composed of two symmetrical bars to be installed on either sides of the entrances to be protected and it allows to anticipate intrusion by leaving freedom to move indoors with even windows and doors open.

### TECHNICAL FEATURES AND CONSUMPTION:

Maximum range: 5 m  
 Minimum range: min. 20 cm  
 Operating temperature: -25°C + 70°C  
 Synchronization: optical  
 Detection system: OR-AND  
 Power supply: from 12V to 15V  
 Consumption: TX and RX motherboard 40 mA  
 Consumption: TX and RX additional expansion 8 mA  
 Protection class: IP54



### INSTALLATION

1. Remove the caps and the extruded cover.
2. Drill the aluminium bars at both ends and fix them to the wall paying attention to keep them on the same axis (Fig.1). For higher barriers drill additional holes as required. After drilling the aluminum profiles and / or the closing caps at the top and bottom, it is recommended to seal with silicone.
3. CONNECTIONS: Use shielded cables and connect the shield.
4. **Power the barriers and briefly press the reset button on the RX base board**, taking care not to interrupt the transmission beams; the buzzer will signal the activation of the single double beams (figure 2).  
**Subsequently a single long beep will confirm the programming in AND, while a double beep the programming in OR.**

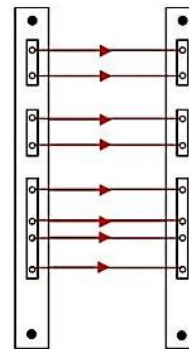


Figure 1

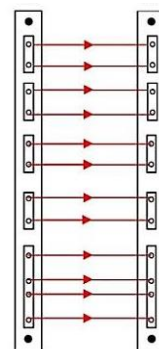


Figure 2

**MODULE 6 - 1 beep**

**MODULE 5 - 1 beep**

**MODULE 4 - 1 beep**

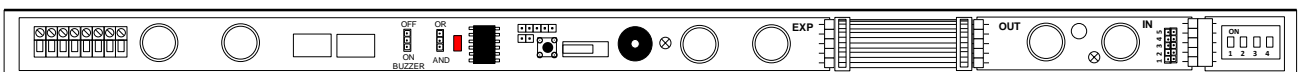
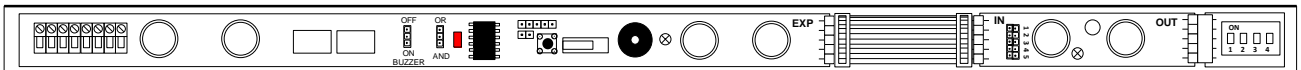
**MODULE 3 - 1 beep**

**MODULE 2 - 1 beep**

**MODULE 1 - 1 beep**

### WARNINGS

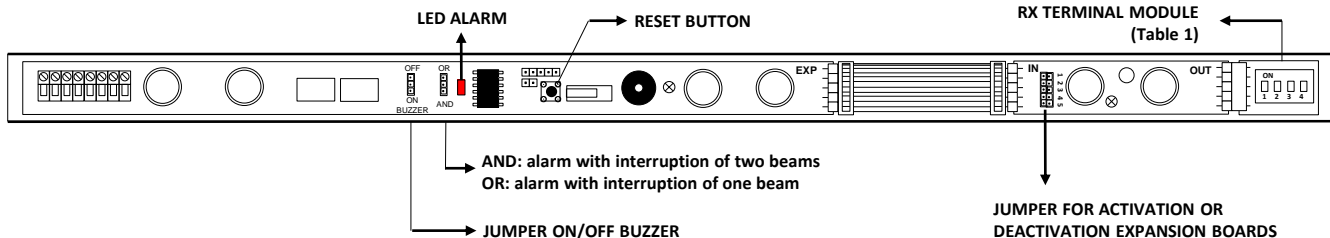
- Power the device using the 13.8 Vdc stabilised voltage only (Winner works from 12 to 15 Vdc).
- Install the additional modules in the correct direction (as shown in the following figure):



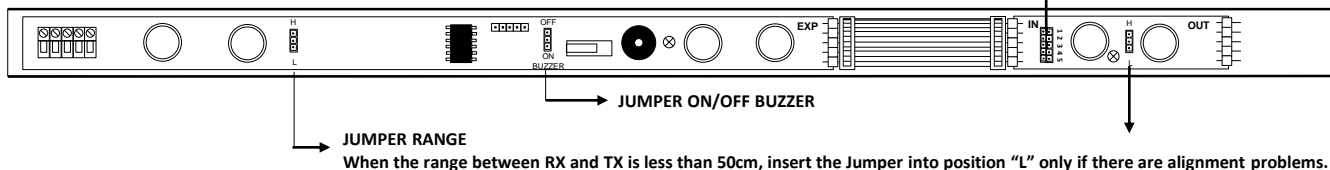
- Do not insert additional RX modules into the TX barrier and additional TX modules into the RX barrier.
- Do not change the settings of the dip-switch of the RX terminal module present on the RX profile.
- Avoid routing the connection cables in raceways where power leads are present.
- Do not install outdoors, in the open air, without a suitable covering.
- MITECH shall not answer for any barrier damage and/or malfunction caused by incorrect installation and/or improper use of same.

# MOTHERBOARDS AND EXPANSION BOARDS RX AND TX

## MOTHERBOARD AND EXPANSION BOARD RX



## MOTHERBOARD AND EXPANSION BOARD TX



**TABLE 1**  
**RX TERMINAL MODULE PROGRAMMING**

ON	MODEL BARRIER	DIP1	DIP2	DIP3	DIP4
1 2 3 4	ROY 103	OFF	ON	ON	ON
	ROY 104 ROY 154	OFF	OFF	ON	ON
	ROY 156 ROY 206 ROY 256 ROY 306	OFF	OFF	OFF	OFF

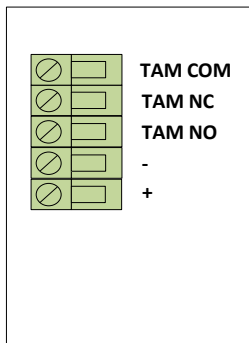
**TABLE 2**  
**ACTIVATION OR DEACTIVATION EXPANSION BOARDS**

EXPANSION BOARDS	J1	J2	J3	J4	J5
1	NOT USED	C	A	A	A
2	NOT USED	A	C	A	A
3	NOT USED	A	A	C	A
4	NO USED	A	A	A	C

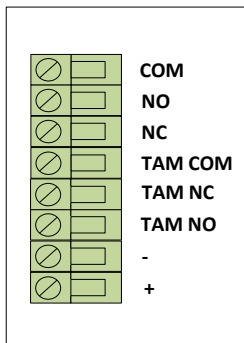
A = Jumper open  
C = Jumper closed

## CONNECTIONS

### TX



### RX



### WARNINGS

Power the device using the 13.8 Vdc stabilized voltage (Winner work from 12 to 15 Vdc).

**MITECH® srl**

Offices:  
Via Roncaglia, 14  
20146 Milano – Italy

Production:  
Via Ramazzone, 23  
43010 Fontevivo (PR) – Italy

Phone: +39 02.48006383  
Fax: +39 02.48025620  
tech@mitech-security.com



[www.mitech-security.com](http://www.mitech-security.com)