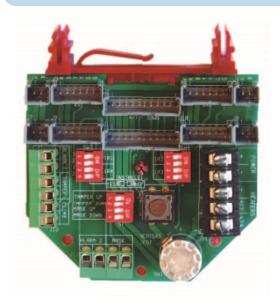
Tx-Rx MOTHER BOARD



The Tx-Rx Mother Board receives all the wires from the tower (those from IR/microwave beam transmitters and receivers and, those from the rest of elements). This makes easier the organization of all the accessories and beam detectors inside the tower.

Besides, the mother board is provided with a thermostat that becomes active at low temperatures, allowing the current to get to the heaters and fan (in case the fan were configured to work at low temperatures).

Connectors:

- Ten-pin flat cable connectors to easily install heaters, tamper switches and fans
- Power supply connectors to install up to 4 Tx and Rx devices (sensors).
- A terminal block for the installer to safely connect the wires.

Outputs:

and environmental disqualification outputs.
It contains alarm, anti sabotage tamper switch, anti climb tamper switch

Programming:

There are DIP switches to indicate whether the beams are connected or not and the same for the tamper:

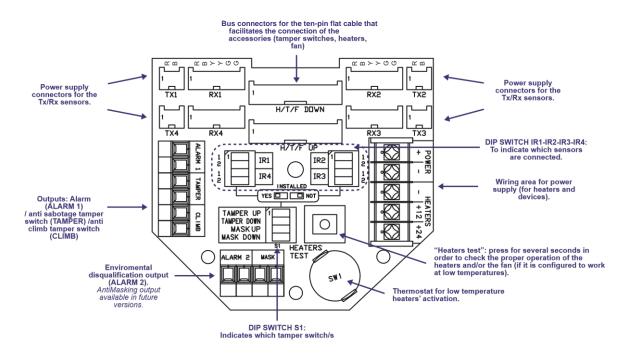


- DIP SWITCHES IR1-I2-IR3-IR4: To indicate if the beam 1-2-3-4 is connected (Tx or Rx) (positions 1 and 2 YES).
- DIP SWITCH S1: To indicate to the mother board which anti sabotage tamper is installed, because in wall mounted towers there are two anti sabotage tampers (at the top and at the bottom).

Button "Heaters Test"

On the mother board, there is a button called "HEATERS TEST" which can be used to test the heaters (and the fans if they were configured to work at low temperatures). When the button is pressed, the current draw passes through the resistors with "TEST" serigraphy and they heat up in few seconds. They can be touched, for a very short time, to confirm that they are hot and therefore, they work properly.

O !Caution: High temperature is reached in few seconds and it might cause burns.

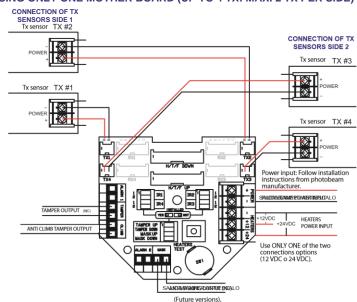


WIRING SCHEME - MOTHER BOARD Tx-Rx

WIRING SCHEME FOR TOWER OF TRANSMITTERS WITH UP TO 4 TX ON ONE SIDE

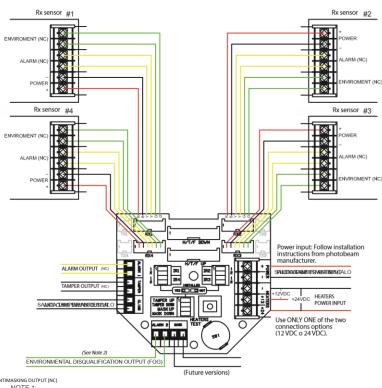
Tx sensor #1 Tx sensor TX #2 Tx sensor #4 Tx sensor TX #3 -Power input: Follow installation instructions from photobeam manufacturer. ALASE 1 TAMES CLIN IR2 1 0 **K**3 /DC HEATERS POWER INPUT SAANTACIAWBPEAWARRICESEPAALO 0 Use ONLY ONE of the two connections options (12 VDC o 24 VDC).

WIRING SCHEME FOR DOUBLE SIDED TOWER OF TRANSMITTERS USING ONLY ONE MOTHER BOARD (UP TO 4 TX: MAX. 2 TX PER SIDE)



WIRING SCHEME FOR TOWER OF RECEIVERS WITH UP TO 4 RX ON ONE SIDE

(Future versions)



If we use one mother board to connect only one side of the tower:

OUTPUT "ALARM1" = DETECTION (ALARM)

OUTPUT "ALARM2" = ENVIRONMENTAL DISQUALIFICATION (FOG)

NOTE 2:

Alarm output (ALARM 1) and environmental disqualification (ALARM 2) will be connected to different zones in the control panel, so that the end user can distinguish between a real alarm and an alarm generated by the fog. NOTE 1:

If we use one mother board to connect only two sides of the tower, it is not possible to connect the environmental disqualification (fog) signal

WIRING SCHEME FOR DOUBLE SIDED TOWER OF RECEIVERS USING ONLY ONE MOTHER BOARD (UP TO 4 RX: MAX. 2 RX PER SIDE)

CONNECTION OF RX SENSORS SIDE 2 Rx sensor #3 CONNECTION OF RX SENSORS SIDE 1 Rx sensor #2 ENVIROMENT (NA)
** (Optional See Note ENVIROMENT (NA Rx sensor #4 Rx sensor #1 **-**ALARM OUTPUT SIDE 1 (N IR2 - K3 -₩ -₹3 DC HEATERS POWER INPUT Use ONLY ONE of the two connections options (12 VDC o 24 VDC). ALARM OUTPUT SIDE 2 (NC)

OUTPUT "ALARM1" = DETECTION (ALARM) SIDE 1 OUTPUT "ALARM2" = DETECTION (ALARM) SIDE 2 NOTE 2:

Wiring the environmental disqualification output (fog), NO circuit, in parallel with the Alarm output, results in the cancellation of all unintentional alarms caused by fog. This feature works automatically without user intervention.

VERY IMPORTANT: The realization of this connection results in a failure to detect intrusion during periods of intense fog. It is therefore a low security option and the user shall be duly informed. It is the responsibility of the installer and user to do a proper use. The manufacturer declines any responsibility for misuse of this feature. DO NOT use in high-