

INTERCONNECTION BOXES

JANUS MJB0X

GENERAL DESCRIPTION

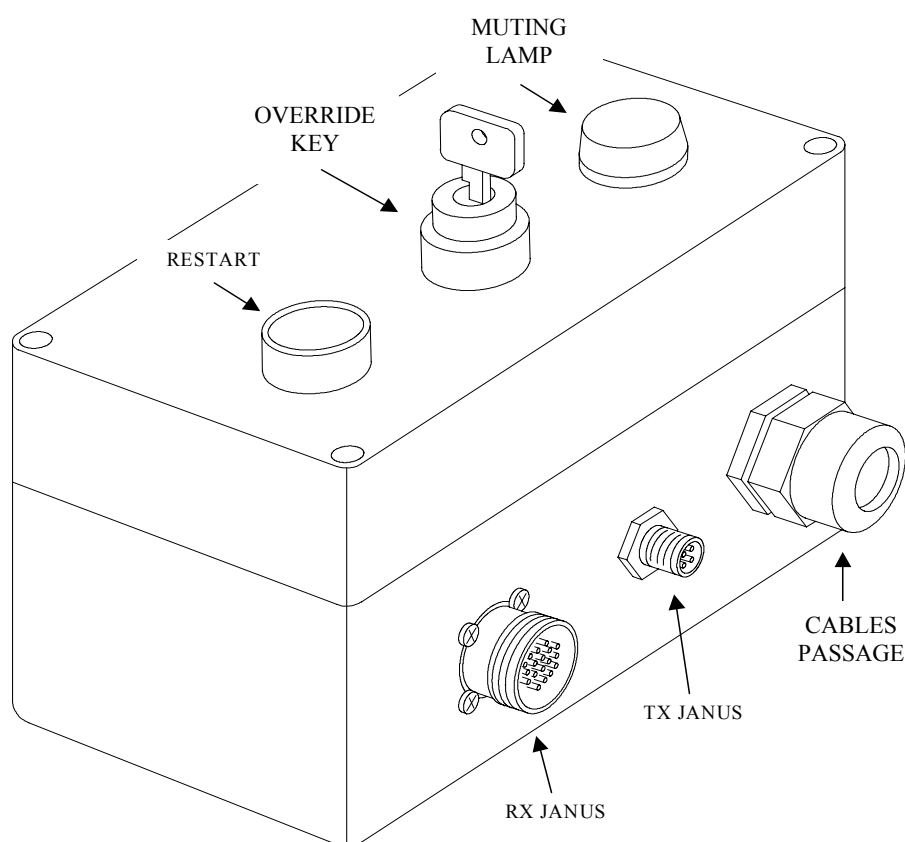
The REER MJBOX modules can be used for the electrical connection of the Janus light curtains. They provide the external commands of the light curtain as well.

The MJBOX modules contain terminal boards, pre-wired connections as well as dip switches for the configuration of the light curtain.

- MJB1 and MJB2 have two relays (K1 and K2 in picture 3), supplying two N.O. guided contacts
- MJB3 and MJB4 have two relays (K3 and K4 in picture 3), supplying two N.O. and one N.C. guided contacts.

Picture 1 shows the modules MJB1/MJB3. These two modules can be connected with the light curtains of the series Janus M (with the muting function).

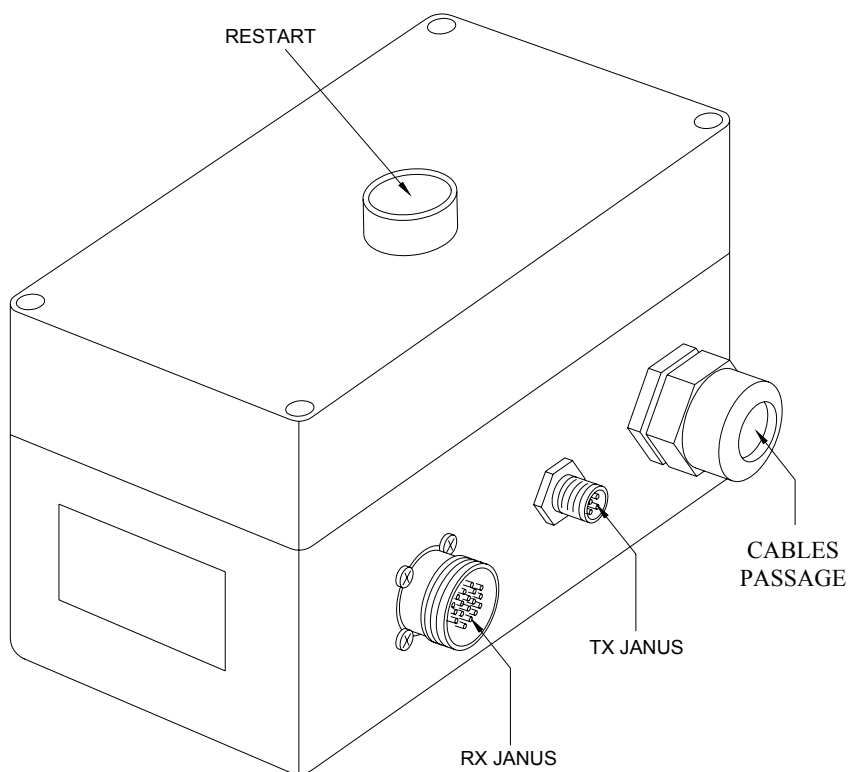
On the front panel the RESTART command button, the key selector for the muting OVERRIDE function and the active muting signal lamp are present.



Picture 1 – MJB1/MJB3

Picture 2 shows the modules MJB2/MJB4. These two modules can be connected with the light curtains of the series Janus J (no muting function).

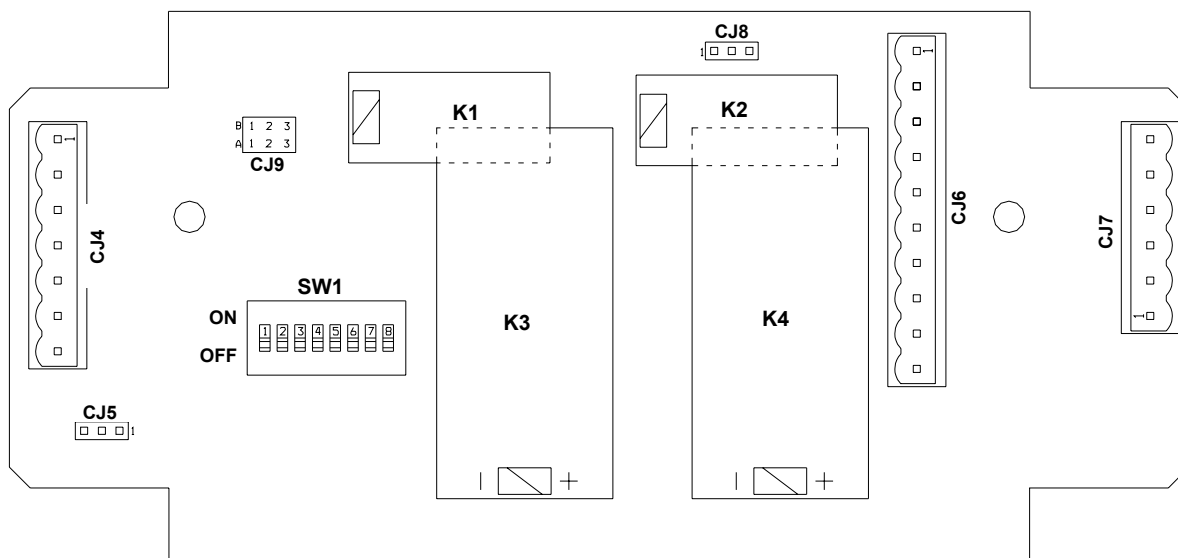
On the front panel the RESTART command button is present.



Picture 2 – MJB2/ MJB4

CONFIGURATION SELECTIONS

MJBOX are supplied with an initial factory configuration; if this selection does not respond to the customer necessities the microswitch SW1 (Picture 3) must be set referring to the table 1 and to the technical manual of the JANUS light curtain.



Picture 3

SW1	NAME	DESCRIPTION	FACTORY SELECTION	
1	CONF3	Muting features configuration	OFF	Muting timeout = 30sec selected ("L" or "T" operation)
2	CONF2		ON	
3	CONF1 *		OFF	
4	CONF0 *		OFF	
5	RESTART	Manual/Automatic operation selection and RESTART signal	OFF	Manual operation selected
6	MAN_AUTO		ON	
7	SEL_RANGE2	See table: "TEST AND RANGE SELECTION" on the JANUS Technical Manual	OFF	Low range selected
8	SEL_RANGE1		ON	

Table 1 – MJB1/MJB3 configuration

* CONF0 and CONF1 are not active on MT and ML models.

ON = Light curtain input connected to +24 Vdc

OFF = Light curtain input connected to 0 Vdc

Note: For the operation selection, please refer to the JANUS technical manual.

JUMPER	PIN	DESCRIPTION	FACTORY SELECTION
CJ5	1 – 2	External lamp enabled	Internal lamp enabled
	2 – 3	Internal lamp enabled	
CJ8	1 – 2	Internal relays feedback	Internal relays feedback
	2 – 3	External relays feedback	
CJ9	1A – 2A 1B – 2B	Override 1 (OVERRIDE KEY hold to run)	Override 1 (OVERRIDE KEY hold to run)
	2A – 3A 2B – 3B	Override 2 (OVERRIDE KEY hold and released)	

Table 2 – MJB1/MJB3 configuration

SW1	NAME	DESCRIPTION	FACTORY SELECTION	
1	-	Not applicable	-	-
2	-		-	
3	-		-	
4	-		-	
5	RESTART	Manual/Automatic operation selection and RESTART signal	OFF	Manual operation selected
6	MAN_AUTO		ON	
7	SEL_RANGE2	See table: "TEST AND RANGE SELECTION" on the JANUS Technical Manual	OFF	Low range selected
8	SEL_RANGE1		ON	

Table 3 - MJB2/MJB4 configuration

ON = Light curtain input connected to +24 Vdc

OFF = Light curtain input connected to 0 Vdc

Note: For the operation selection, please refer to the JANUS technical manual.

INSTALLATION AND ELECTRICAL CONNECTIONS

- The MJBOX modules can be fixed to the wall, using the proper plastic brackets inserted in the holes placed on the box rear side corners. These brackets can easily rotate to reach 90°.
- The curtain must be connected using cables to the respective M12 and M23 connectors (Fig. 1 e 2).
- The cables coming out from the fairlead must be connected - depending on its utilization - to the connectors CJ6 e CJ7 (Tables 4 and 5).

CJ6	NAME	DESCRIPTION
1	+24Vdc	24 ± 20%
2	0V	0 Vdc
3	PE	Earth terminal
4	SYSTEM STATUS	Ref. JANUS technical manual
5	NA2_B	Normally open contact n°2
6	NA2_B	
7	NA1_A	Normally open contact n°1
8	NA1_A	
9	NCB	Normally closed contact connected in parallel (only for models MJB3 and MJB4)
10	NCA	

Table 4

CJ7	NAME	DESCRIPTION
1	SEL_RANGE1	Possible range selection external command
2	EXT LAMP	External MUTING lamp (24Vdc; max 5W)
3	OSSD1	Self-checked PNP OUT1 – 500 mA @ 24 Vdc
4	OSSD2	Self-checked PNP OUT2 – 500 mA @ 24 Vdc
5	K1_K2	Feedback K1/K2
6	SEL_RANGE2	Possible range selection external command

Table 5

OUTPUT RELAYS FEATURES

The modules use for the output circuits (pin 5-6 and 7-8 of CJ6 on **MJB1 e MJB2**), (pin 5-6, 7-8 and 9-10 of CJ6 on **MJB3 e MJB4**) two safety relays with guided contacts.

These relays are specified by the supplier for voltages and currents higher than values of the technical data. Nevertheless for a correct insulation and to avoid damagement or quick ageing, protect every output line with a 6A delayed fuse and verify that the load features comply with the indications of the following table.

Maximum switching voltage	250 Vac
Maximum switching current	2A