

EN WHY-CBOARD • UNIVERSAL CONTROL BOARD

Cod. 6900106

USER MANUAL

1. POWER SUPPLY

Connect power supply to the board as described in paragraph "Electrical connections".
If there is a selector on power supply, select the torque: from 1 (minimum torque) to 4 (maximum torque).
Low torque selections can give not useable slower modes at the end of movement (see paragraph "Lower speed").

2. ELECTRICAL CONNECTIONS

This table gives electrical connections:

Entity	connections	Entity	connections
230 V power supply	NT,LT	stop button (N.C.)	C,ST
leaf 1 motor	AP1,CH1,COM	open button (N.O.)	C,AP
leaf 2 or single leaf motor	AP2,CH2,COM	partial open button (N.O.)	C,APP
flashing light 230 V	COM,L	close button (N.O.)	C,CH
courtesy light 230 V	L,L, C	command button (N.O.)	C,PAP
24 V open gate signalling	24V,SP	auxiliar services power supply 24V A.C.	0V,24V
opening safety devices (N.C.)	C,FAP	antenna	antenna symbol
closing safety devices (N.C.)	C,FCH	power supply: NT, LT, CT, 0, 12, 24	
electrolock (12 V,15 W max)	24V,ES	capacitors: motor 1 COND. M1, motor 2 COND. M2	
auxiliary relais (230 V,15 A max)	OUT CH2 RADIO	not used: +5V, EM1, EM2, GND	

N.C.: normally closed contact, N.O.: normally open contact.

It is possible to insert more than one button in parallel on terminals AP,APP,CH e PAP, but all of them must be normally open. It is possible to insert more than one safety devices in series on terminals FAP, FCH, or stop buttons in series on terminal ST, but all of them must be normally closed. Capacitors must be connected only if not yet present on motors, and they must be of the correct value.

3. SETTINGS

This table gives settings:

Number	Dip-switch on OFF	Dip-switch on ON
1	automatic closing deactivated	automatic closing activated
2	open-close with command button	open-stop-close-stop with command button
3	transmitter works like command button	transmitter opens ever
4	pre-flashing in opening and closing deactivated	pre-flashing in opening and closing activated
5	obstacle detection deactivated	obstacle detection activated
6	maintained action deactivated	maintained action activated
7	ram blow deactivated	ram blow activated
8	safety devices on terminal FAP activated	safety devices on terminal FAP deactivated
9	safety devices on FCH will open during closing	safety devices on terminal FCH deactivated
10	safety devices on FAP will close immediately in opening	safety devices on FAP will close at release in opening and closing
11	two leaves	one leaf
12	all movement at full speed	lower speed at the end of movement
13	13 OFF and 14 OFF = torque 100 %; 13 OFF and 14 ON = torque 75 %;	
14	13 ON and 14 OFF = torque 66 %; 13 ON and 14 ON = torque 50 %;	

3.1.1 Obstacle detection

If obstacle detection is activated, with motors stopped, which is at gate closed, open, or stopped at a partial opening, movement will not start if one of security devices on terminals FAP or FCH is active.

3.1.2 Maintained action

If maintained action is deactivated, movement will persist since its natural end, if there is no activation of a security device or a different command. If maintained action is activated, movement will persist during button pressed, and it will end at button release or at security device activation.

3.1.3 Ram blow

At every opening, leaves will press against mechanical locks for 2 seconds to help the release of the electrolocking.

3.1.4 One or two leaves

The number of leaves will change the function of trimmer TR2M: see paragraph "Trimmers".

3.1.5 Lower speed

If lower speed mode is deactivated, all the movement will be done at constant speed.

If lower speed mode is activated, there will be a slow down at the end of the movement.

4. TRIMMERS

Trimmer TL: it regulates working time of leaves from 5 s to 80 s.

Trimmer TCA: it regulates waiting time for automatic closing from 3 s to 120 s.

Trimmer TR2M:

- in case of one leaf: it regulates the percentage of opening of the leaf in case of a partial opening.
- in case of two leaves: it regulates the delay of movement starting of second leaf in closing from 0 s to 15 s.

5. TRANSMITTERS

5.1 Useable radio modules

The board can work with these radio modules:

- radio module Came 30.9 MHz;
- radio module Came 433.92 MHz;
- radio module Sice Tech Srl 433.92 MHz.

Working frequency selection is automatically done at plugging-in of radio module;

Radio module can be plugged-in, removed or changed with board under voltage or with some transmitters in memory, without any trouble.

5.2 Deleting all the transmitters

- To delete all transmitters in memory, press both button T1 and T2 for 5 seconds;
- deleting will be signalled by a fast flashing of led 2.

5.3 Memorization of a transmitter button for movement of gate

- To memorize a transmitter button for the gate movement press button T1 once;
- led 2 will flash repeatedly with a single flash: press the transmitter button to memorize within 30 seconds;
- at button pressure, led 2 will light for 1 second;
- now the transmitter button will control the movement of gate;
- to exit without memorization, press again button T1 two times.

5.4 Memorization of a transmitter button for auxiliary relais

- To memorize a transmitter for the auxiliary relais press button T2 once;
- led 2 will flash repeatedly with a double flash: press the transmitter button to memorize within 30 seconds;
- at button pressure, led 2 will light for 1 second;
- now the transmitter button will control auxiliary relais;
- to exit without memorization, press again button T2 two times.

5.5 Deleting a single transmitter button

- To delete a single transmitter press T1 or T2 twice;
- led 2 will flash repeatedly with a fast blinking: press the transmitter button to delete within 30 seconds;
- at button pressure, led 2 will light for 1 second;
- now the transmitter button has been deleted;