

# ELCA nova 2

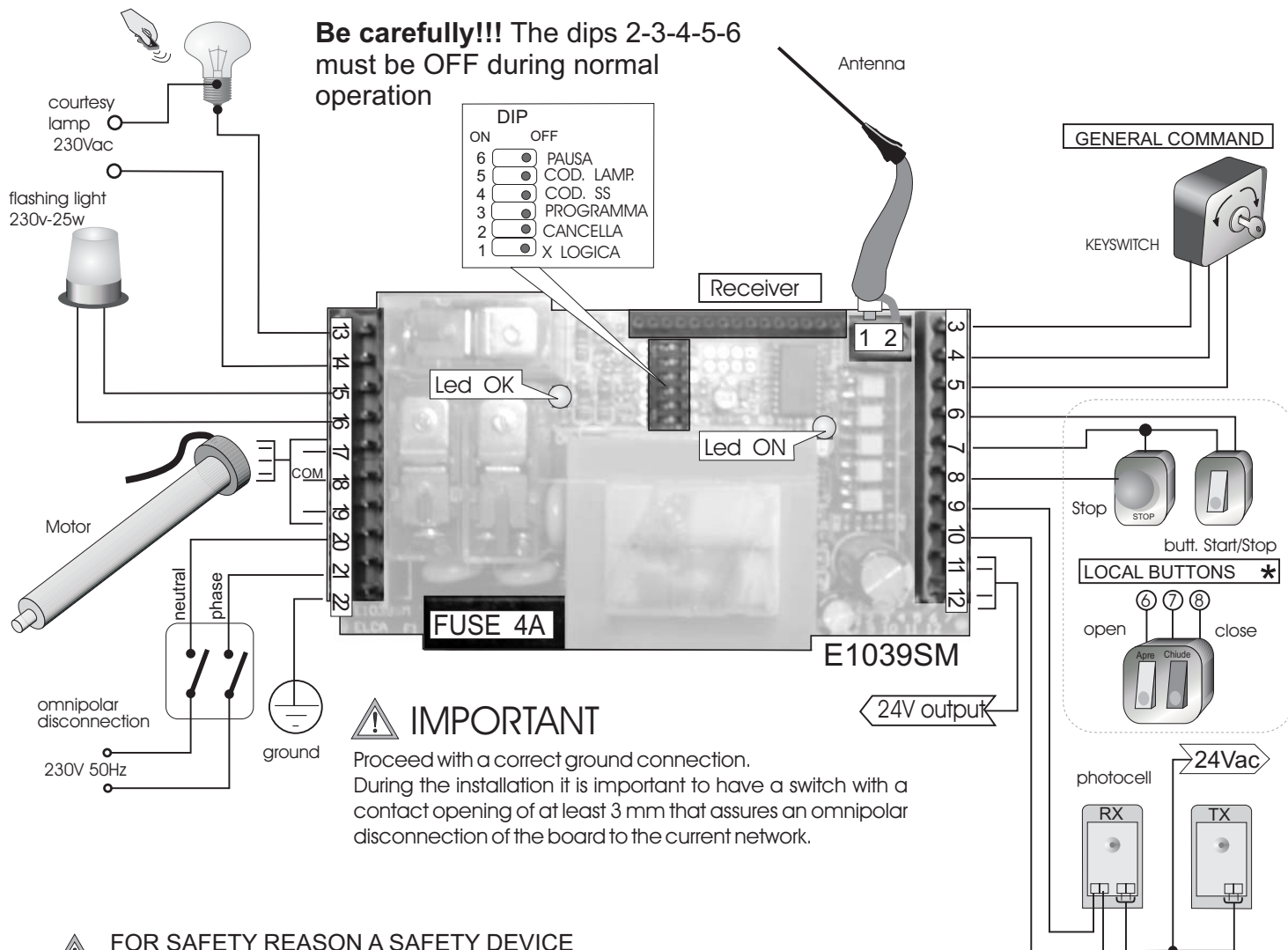
Installation and use manual electronic control board for garage and rolling shutters.

Rev.02

## Follow these instructions carefully

This manual contains very important instructions for the installation and use of this control board mod.,NOVA'. Do not install before reading this manual the security of the product depends on a correct installation. The producing company declines any responsibility in case of a not correct instalment or improper use. This product has been created by keeping the strictest safety norms following 'EC' directives : CEE 73/23, CEE 89/336, CEE 93/68, CEE 89/106, CEE 89/392.

**This manual has to stay with the equipment at all time, must not remove!**

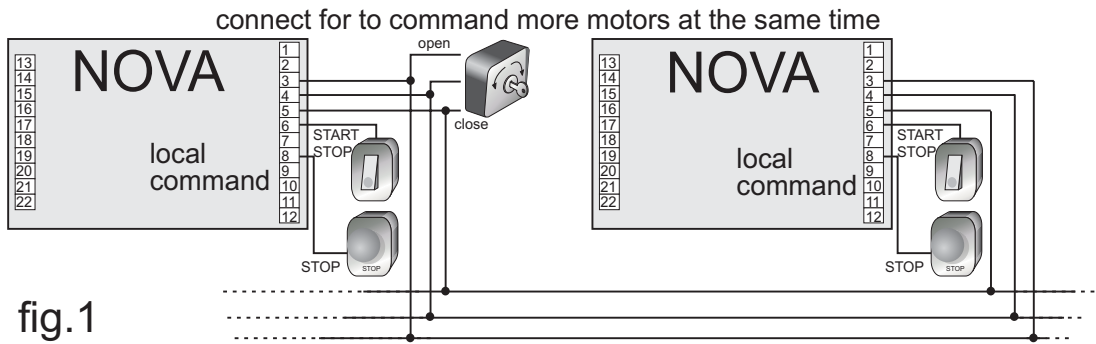


## TERMINALS CONNECTION

- 1-2 ANTENNA terminal n.1 = RF
- 3-4 Push button "GENERAL OPEN" (normally opened contact )
- 4-5 Push button "GENERAL CLOSE" (normally opened contact )
- 6-7 \* Push button "LOCAL OPEN"(become START/STOP if dip 1 is OFF - see detail 'F) norm. open cont.
- 7-8 \* Push button "LOCAL CLOSE" norm.open(become STOP if dip1 is OFF-see detail 'F-norm.close cont.)
- 9-10 Security contact norm close contact ( photocell, rubber bar, stop ecc.)
- 11-12 24Vac output (feeding for two pairs of photocells)
- 13-14 Courtesy lamp contact (max230V 500W; see detail -D- for programming ); free of power
- 15-16 Flashing light connection (230V 25W)
- 17-18-19 Connection for single phase motor 500W max ( terminal n. 18 = common )
- 20-21 POWER: 230Vac 50Hz
- 22 GROUND

# PROGRAM AND FUNCTION

Please never connect more than one motor per Nova printed circuit board. Although the relays are strong enough to cope, the limit switches on the motors are not, the correct way to connect up 2 or more motors, using Nova p.c.b.'s is as follows, by using one station open/close/stop buttons, wired into more boards will allow this procedure to happen, each P.C.B. will have its own time incorporated for its own motor so there will not be a surge from one capacitor to another. fig 1 The general button have top priority. If a control board is effecting a "local" opening phase, and contemporarily receives a "general close" impulse, it will invert to a closing phase. Sending impulse by handset you have STEP BY STEP logic in



either an opening or a closing phase. You may have the receiver at 300,433.92,40.685 mhz with standard o rolling code.

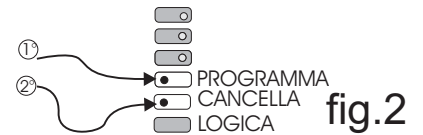
fig.1

## BASE PROGRAM

The control board is ready to operate with following set-up given directly from the Company

return to the BASIC PROGRAM

work time = 30 seconds  
 CODE S/S IN MEMORY :dips 1-3-5-7-9 in ON position channel n 1  
 (Base code of handset)  
 photocell : active in closing only  
 without pause time  
 courtesy light timing contact = 3 minutes



You can always return to a **BASE PROGRAM** at any time by setting the dips n 2 and n 3 in ON position after the OK led turns on set the dips 2 and 3 in OFF position. (SEE fig.2)

### A) Code SS (start/stop) programming

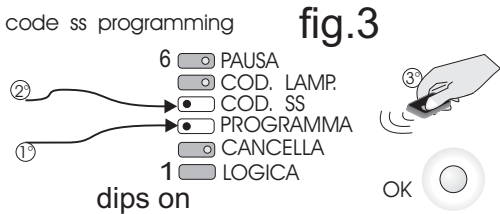


fig.3

It is possible to program 53 different standard codes or 15 rolling-code (see fig.3) :

- 1- set the desired code on handset.
- 2- place dips n 3 and n 4 in ON position.
- 3- send an impulse with handset (0,5 meter plus ), you will see that the led OK turns ON this indicates that the code is memorized.
- 4- replace dips 3 and 4 in OFF position.

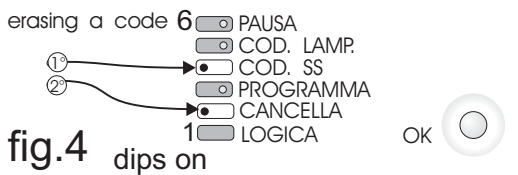


fig.4

By memorizing the first code, the base code will disappear. for memorizing more codes repeat from step -1-

- ERASING AN SS CODE (see fig.4) :
- 5- place dips n4 and n 2 in ON position, when OK led turns on, set dip 4 and 2 in OFF;
- following this procedure the last code will be erased, when all the codes will be erased, th base code will reappear.

### B) WORKING TIME PROGRAMMING ( see fig.5)

1- place garage door in a closed position, place dip 3 in ON position; send impulse with handset or by 'local open pushbutton', the garage door should open, if not invert the terminal connection n 17-19 and repete.;

2- when the garage door is completely opened, send an impulse to stop it. the same procedure may be done for closure (not indispensable).

3- replace dip 3 in OFF position, if you wish to change the time repete B1

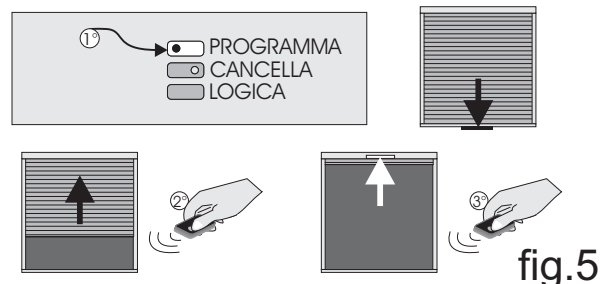
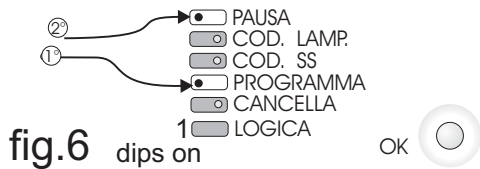


fig.5

## C) PAUSE TIME PROGRAMMING .

pause time programming

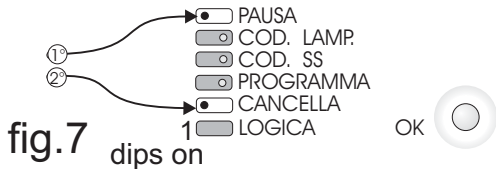


- 1- place dips n 3 and n 6 in ON position leaving it for the pause time desired before having the automatic closing.It may be memorized from 1 second up to 4 minutes.(see fig.6)
- 2- replace dips 3 and 6 in OFF position

if you do not want an automatic closure :

- 1- place dips n 6 and n 2 in ON position when the OK led turns on
- replace dips 6 and 2 in OFF position (see fig.7)

pause time erasing

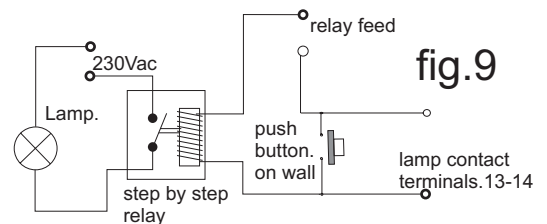
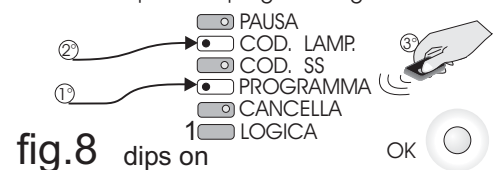


## D) DIFFERENT WAY OF COURTESY LAMP PROGRAMMING

HANDSET CODE FOR COURTESY LAMP ( see fig.8 )

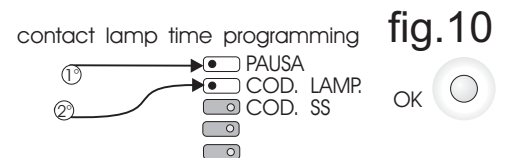
- 1- place dips n 3 and n 5 in ON position
  - 2- send an impulse with handset ( ex channel n 2 ),the led OK will turns ON
  - 3- replace dips 3 and 5 in OFF position
- at this point by sending the memorized code the courtesy lamp contact will close for two seconds,you may extend the time by sending the code more time.The lamp may be connected as fig.9.where you can use wall pushbutton or handset to switch on-off the lamp.

lamp code programming



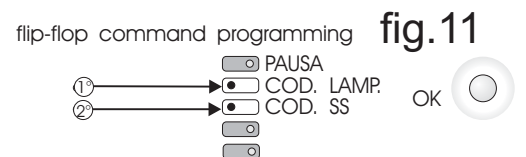
CHANGING THE CONTACT LAMP TIME-see fig 10

- 1- place dips n 5 and n 6 in ON position and leaving for the lamp time desired ( from 2 seconds up to 4 minutes ) In this way the lamp ( connected as page 1 ) turns on by an handset or button impulse and stay on for time programmed.
- 2- replace dips 5 and 6 in OFF position



LAMP AS FLIP-FLOP WAY BY HANDSET -see fig 11

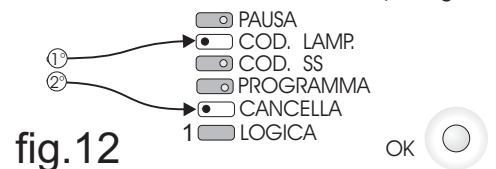
- 1- place dips n 5 and n 4 in ON position ,after the OK led turns on
  - replace dips 5 and 4 in OFF position
- in this way the lamp ( connected as pag n 1 ) is switched ON/OFF by handset ,not linked to the door opening.



CONTACT LINKED TO THE DOOR OPENING ( 3 minutes timer )

- 1- place dips n 5 and n 2 in ON position (see fig.12)
  - 2-replace dips 5 and 2 in OFF position
- in this way every time the door is opening the lamp contact (connected as pag 1 ) close for 3 minutes

timer 3 minutes linked to door opening



## E) CODES FOR OPEN-CLOSE FUNCTIONS PROGRAMMING

- 1- place dip n 3 in ON position (see fig.13)
- 2- push button 'GENERAL OPEN' or link the terminals n 3-4 and send an impulse by handset( ex channel n 3 ) ,the led OK turns on.
- 3- replace dip n 3 in OFF position





4- repete the same procedure for 'GENERAL CLOSE' memorizing for example channel n4 from handset (terminals 4 - 5).  
memorizing the same codes on more than one control board,you will have a handset centralization,also maintaining the single command. (SS).

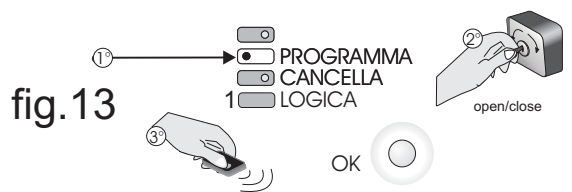


fig.13

### RADIO CODE FOR STOP

> set dip n3 =ON, (Dip n 1 must be OFF ),open contact terminal n 7-8,  
send an impulse from handset, REPLACE DIP N 3 =off.

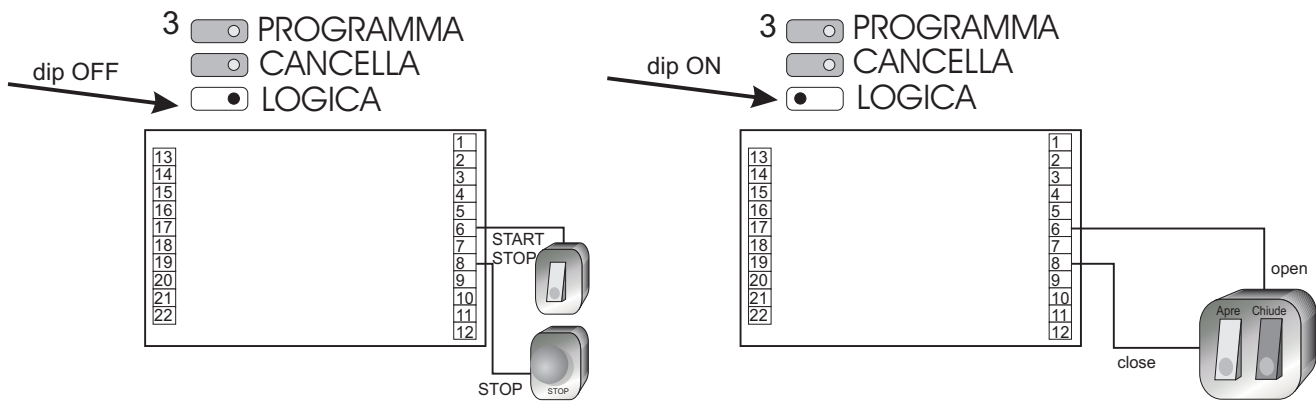
## F) LOGIC PROGRAMMING

if the DIP N 1 is in OFF position( leave in this position ) :

- the terminals 6-7 make START/STOP functions
- the terminals 7-8 make EMERGENCY STOP functions ( normally close contact )

if the DIP N 1 is in ON position ( leave in this position ) :

- the terminals 6-7 make 'LOCAL OPEN' functions
- the terminals 7-8 make 'LOCAL CLOSE' functions



## WARRANTY

ELCA devices and accessories are guaranteed for a period 15 months after production,whose date is printed on each items.ELCA will replace or repair its devices,provided that they are returned to our plant in order to check the actual functioning of the returned pieces,they will remain the property of the manufacturer.The warranty does not include damages due to any incorrect use, such as : non fulfilment of the instructions detailed for each device.Moreover,warranty does not cover any damage due to wrong tension supply and any other reason for wich the manufacturer cannot be made responsible.Any device returned must be delivered to ELCA with carriage paid and will be sent back with freigth collect.

Warranty validity ceases in case of the customer's non fulfilment of payment.

