

CONTROL UNIT FOR ROLLER SHUTTERS WITH INTEGRATED COURTESY LIGHT SH230LUX

APE-528/1230



USER INSTRUCTIONS

Abexo[®]

AUTOMATION ACCESSORIES

ABEXO is a registered trademark owned by
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Technical data

- Power supply 230Vac +/-10%
- Motor power 1350W (1HP)
- Working time: adjustable from 0.5 min to 2 min.
- Pause time: adjustable till max 3 min.
- Courtesy light time: adjustable to max 3 min.
- Safety edge input: 8k Ω ohm or NC contact
- Courtesy light output: 12 V
- Flashing light output: 12 V
- Code combination: 72 million
- Number of transmitters: 25
- Radio code programming: self-learning
- Frequency: 433.92 Mhz
- Sensitivity: greater than -100dbm
- Antenna: built-in
- Operating temperature: -10°C, +70°C
- Application range: standard 50 mt - man present 10 mt

Code: AB9-00013 - rev.0 of 11/2021

WARNINGS FOR INSTALLER - GENERAL SAFETY RULES

1. Read the instructions carefully before proceeding with the installation of the control unit.
2. Keep these instructions for any future reference.
3. This product is designed and manufactured exclusively for the use intended and indicated in this documentation. Any other use not expressly indicated could impair the integrity of the product and/or represent a source of danger.
4. For the safety, you must carefully follow the instructions provided in this manual. Incorrect installation or incorrect use of the product may cause serious personal injury.
5. Materials used for packaging should not be left within the reach of children, as they are potential sources of danger, and should be properly disposed of.
6. AB Tecno Srl disclaims all liability for any consequences resulting from improper use or use other than that for which the device was designed and constructed.
7. AB Tecno Srl is not responsible for non-compliance with applicable EC standards for motorized locks, as well as any deformation that may arise in use.
8. Do not install the equipment in an explosive atmosphere: the presence of gas or inflammable fumes constitutes a serious source of safety hazard.
9. Installation must be effected in accordance with EN 12453 and EN 12445. For non-EEC countries, in order to achieve a sufficient level of safety the above standards must be observed in addition to the individual national regulatory references.
10. Before working on the system, disconnect any batteries and disconnect the power supply.
11. It is advisable to provide for the presence of an omnipolar switch with contact opening distance equal to or greater than 3 mm on the mains power supply of the automation. We recommend the use of a circuit breaker of 6A with an omnipolar breaker.
12. Check that there is a differential circuit breaker upstream of the system. With a 0.03A threshold.
13. Check that the grounding system is properly made, and connect the metal parts of the enclosure to it.
14. Even automations that have an internal safety anti-crushing function requires functional check in all cases in compliance with the standards indicated in Section 9.
15. Safety devices (EN 12978 standard) enable the protection of any hazard areas from mechanical Risks related to movement, such as crushing, conveying, shearing and lifting.
16. For each installation, we suggest using at least one signaling light (ex. flashing lights), as well as a warning sign properly fixed and clearly visible.
17. AB Tecno Srl disclaims any responsibility related to the safety and proper operation of the automation.
18. The installer must provide the final user with all information regarding manual operation of the automation in case of emergency.
19. During operation, do not allow children or others to stand near the system during operation.
20. Keep out of the reach of children any remote control or device to prevent the possible unwanted operation of the automation.
21. The transit of people and vehicles is permitted only and exclusively when the automation is fully opened.
22. The User of the automation must refrain from any attempt to repair and/or direct intervention and refer exclusively to qualified personnel. Otherwise, AB Tecno Srl declines all responsibility for any possible consequences.
23. Anything not expressly indicated in these instructions is not allowed.

DECLARATION OF EU CONFORMITY

Product: SH230LUX

Manufacturer: ABTECNO S.r.L. - Via Cicogna, 95 - 40068 San Lazzaro di Savena (BO)

The Manufacturer declares under its own responsibility that the product covered by the declaration meets all the provisions applicable in the following Directives: **2014/35/EU** - on the harmonization of the laws of the Member States relating to the making available on the market of electrical equipment intended for use within certain voltage limits.

2014/30/EU - for the harmonization of the laws of the Member States relating to electromagnetic compatibility and complies with the relevant harmonization legislation of the Union: **CEI EN 60947-1: 2008/A1: 2012/A2: 2015, CEI EN 60947-5-1: 2005/A1: 2010.**

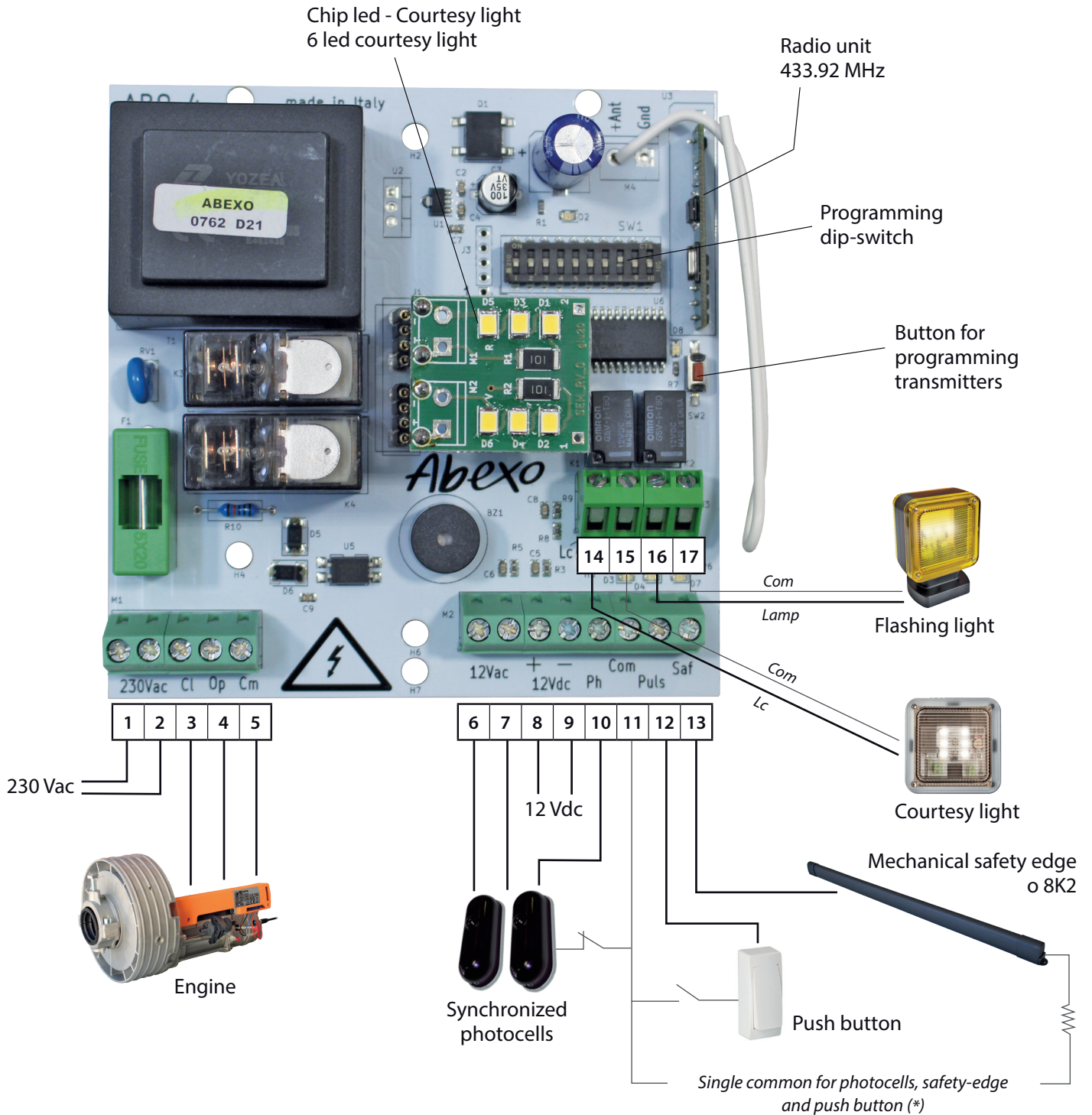
Bologna, 15/10/2021



AB TECNO's CEO

Ulisse Pagani

ELECTRICAL WIRING



1	2	3	4	5
Power supply 230 Vac	Power supply 230 Vac	Closing engine	Opening engine	Common engine

6	7	8	9	10	11	12	13
Power supply 12 Vac (synchronized photocells)	Power supply 12 Vac (synchronized photocells)	Power supply +12 Vdc	Power supply -12 Vdc	Security contact (input photocell)	Common (*)	P. ALT. External push button (N.O.)	safety edge input o 8K2

14	15	16	17
Courtesy light output	Common courtesy light	Flashing light output 12 Vdc	Common light flashing light 12 Vdc

For 230 V flashes connect in parallel to one of the motors or use an external relay

DIP-SWITCH PROGRAMMING

DIP-SWITCH 1: TIMER / AUTO CLOSING

ON	OFF
automatic closing with timer enabled	automatic closing disabled

To program the automatic closing timer (pause time) see procedure "**Programming pause time DIP-SWITCH 2'**". *Default pause time: 30 seconds.*

DIP-SWITCH 2: PROGRAMMING TIMER

ON				OFF
Enabled schedules				Programming DIP 2 DIP 1 DIP 10 disabled
DIP 2	DIP 1	DIP 10	pause time programming	
ON	OFF	ON	courtesy light time programming	
	OFF	OFF	working time programming	

WARNING: Before proceeding with the 3 programming, it is necessary to bring the motor to **the motor to the closing limit switch**, by performing a maneuver of complete closing.

Pause programming time (DIP-2: ON, DIP-1: ON, DIP-10: OFF) - default value: 30 seconds

- a. press the remote control/start button to start counting the pause time to be stored (max. 180 seconds). The buzzer will beep and the LED will flash once to signal the start of the memorization phase.
- b. once the desired seconds have been counted (pause time), press the remote control/start button again to stop the counting. The buzzer will beep 2 times and the LED will flash 2 times to signal the end of the memorization phase. set DIP-2 back to OFF

Programming courtesy light time (DIP-2: ON, DIP-1: OFF, DIP-10: ON) - default value: 180 seconds

- a. press the remote control/start button to start counting the courtesy light time to be stored (max 180 seconds): the central unit doesn't make an automatic count, you must manually count the desired seconds. The buzzer will emit 2 beeps and the led will flash 2 times to signal the start of the memorization phase.
- b. once the desired seconds have been counted (courtesy light time), press the remote control/start button again to stop the counting. The buzzer will beep 2 times and the LED will flash 2 times to signal the end of the memorization phase.
- c. To exit the memorization phase, set DIP-2 and DIP-10 back to OFF.

Programming working time - default value: 60 seconds

- a. press the remote control/start button to start the memorization of the opening working time: the motor arrives on the opening limit switch and stops automatically, even if the working time in opening is < 60 seconds (default value). The control unit stores the opening time + 3 sec (max 150 sec).
 - > **WARNING:** During opening, activation of the remote control / start / edge stops the memorization cycle, which resumes with a new activation of the remote control / start. The photocell is influential.
- b. press the remote control / start to start the closing movement and begin the working time memorization. The control unit stores the closing time + 3 sec (max 150 seconds).
 - > **WARNING:** During closing, activation of the remote control / start / edge / photocell stops the memorization cycle, which resumes with a new activation of the remote control / start.
- c. when the engine arrives on the limit switch (by performing a complete maneuver), the memorization phase of the working time. The buzzer will beep 2 times and the LED will flash 2 times to signal the start of the memorization phase.
 - > **WARNING:** if the remote control / start is pressed again, the control unit will start a new learning of working time
- d. set **DIP-2** back to OFF to exit memorization

DIP-SWITCH 3: "1 OR 3 KEYS" MODE

ON	OFF
3 KEY mode (UP-STOP-DOWN) > recommended with "dead man" function (DIP-4)	1-KEY (STEP-BY-STEP) mode. > default

3 KEY mode (UP-STOP-DOWN) > recommended with "DEAD MAN" (DIP-4) function.

In this mode, 3 keys of the remote control are configured to effect one maneuver each:

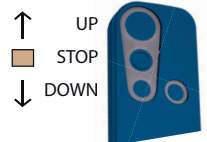
1st key = UP (opens), 2nd key = STOP, 3rd key = DOWN (closes).

- a. delete all memorized remote controls by following the procedure "Delete all memorized transmitters".
- b. press the PROG key once in order to enter the programming mode
- c. press the 3 desired keys (even of different transmitters) in sequence, remembering that: 1st memorized key = UP (opens), 2nd memorized key = STOP, 3rd memorized key = DOWN (closes). Each time one of the 3 keys is pressed, the central unit will beep 3 confirmation beeps with corresponding LED flashing.
- d. the control unit will automatically exit programming without beeps or visual signals.
 - > **WARNING:** if you have not memorized all 3 keys in the programming time (about 5 seconds), the central unit will automatically exit the "learn" and will delete the remote controls written in memory until that time.

Mode 1 KEY (STEP BY STEP) > default

In this mode, a different maneuver will be effected each time the remote control key is activated = STOP, 3rd press = DOWN (closes), 4th press = STOP, 5th press = UP (opens), etc. - in a cyclic manner.

- a. delete all memorized radio transmitters by following the procedure "Delete all memorized transmitters"
- b. press the PROG key once to enter the programming mode
- c. press the desired key and wait for the central unit to automatically exit the programming phase (about 5 seconds).



DIP-SWITCH PROGRAMMING

DIP-SWITCH 4: DEAD MAN

ON	OFF
function enabled	standard function

WARNING: DITEC's *** remote controls cannot be used with dead man function because they have a too short release time.

- "3 KEY" mode active (**DIP-3: ON**): hold down the DOWN button of the transmitter (UP-STOP-DOWN mode)
- "1 KEY" mode active (**DIP-3: OFF**): press and hold the button of the transmitter that controls the automation in STEP-STOP mode. Even with the dead man function active, the control unit will continue to work in STEP-DOWN mode so, with each press of the button, it will execute a different command.

DIP-SWITCH 5/6: DISABLING/ENABLING SAFETY EDGES


DIP-5	DIP-6	
ON	ON	photocell and safety edges disabled
ON	OFF	photocell and safety edges (NC) enabled
OFF	ON	photocell and safety edges 8K2 enabled
OFF	OFF	photocell enabled / safety edges disabled

DIP-SWITCH 7: SAFETY EDGES

ON	OFF
n.2 safety edges in series	n.1 safety edge 8K2

DIP-SWITCH 8: MEMORIA E CODIFICA TELECOMANDI

ON	OFF
capacità di memoria (HCS con chiave ABTECNO): <ul style="list-style-type: none"> • 24 radiocomandi - modalità 1 TASTO • 8 radiocomandi - modalità 3 TASTI 	capacità di memoria (vari codici: HCS, DIP, ecc): <ul style="list-style-type: none"> • 44 radiocomandi - modalità 1 TASTO • 14 radiocomandi - modalità 3 TASTI

Remote control compatibility list 

NB: see note (DIP-4) for DITEC / ENTREMATIC remote controls

DIP-SWITCH 9: LUCE DI CORTESIA (NO APERTURA SERRANDA)

ON	OFF
function enabled	function disabled

It is possible to make the switch-on of the courtesy light built into the control unit without opening the shutter. The courtesy light will remain on for the programmed time as per the procedure indicated in **DIP-SWITCH 2** (default time: 180 seconds).

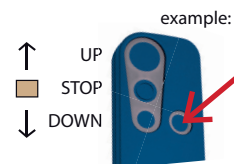
- Press the PROG key once to enter the storage mode. The control unit will beep.
- press the key of the selected remote control to activate the courtesy light.

The central unit will emit 3 confirmation beeps.

> **WARNING:** it is not possible to program for this function the key(s) already stored for a different function (ex: keys for automation control).

- set **DIP-9 back to OFF** to exit programming. The control unit will beep 2 times.

Per aggiungere un altro canale per comandare la luce di cortesia, ripetere la procedura.



DIP-SWITCH 10: COURTESY LIGHT TIMING

ON	OFF
customization function courtesy light time enabled	function disabled

Follow the procedure "Programming courtesy light time" indicated in **DIP-SWITCH 2**.

MEMORY AND CENTRAL RESET

DELETION OF ALL STORED TRANSMITTERS

- press and hold the **PROG** button for 8 seconds: the control unit will emit a series of flashes and beeps confirming erasure of all previously stored codes.
- release the PROG key to exit the procedure.

OUT OF MEMORY

The control unit will emit 7 beeps and 7 LED flashes.

FACTORY RESET

- Disconnect the control unit from the power supply and set the dip-switches as follows:

DIP-SWITCH 1 / 3 / 5 / 7 / 9 to OFF and DIP-SWITCH 2 / 4 / 6 / 8 / 10 to ON

- make sure that:

START button / photocell input / edge input: open (not connected).

- reconnect the central unit to the power supply. The control unit will emit a series of beeps to confirm that it has been reset to factory settings.
- replace the dip-switches to the desired position or all to OFF.