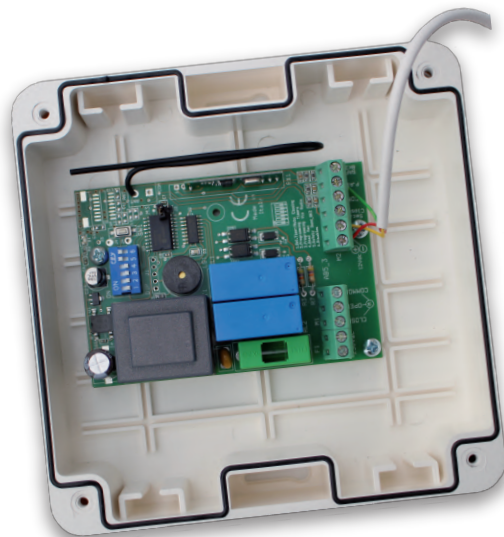


## SH230 CONTROL UNIT FOR SHUTTERS

# SH230

cod.  
**APE-528/0230**



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## Instructions for assembly and use

**ABEXO** is a registered trademark property of AB Tecno Srl

### TECHNICAL FEATURES

Before installing the product, be sure to disconnect the power supply. See the table opposite for product characteristics:

Power supply	230V ac +-10%
Motor power	1HP (1350 W)
Fuse	6,3 A
Run time	Default 25 sec, programmable up to 2.5 minutes
Closing time	Default 20 sec, programmable up to 3 minutes
Code combinations	72 million codes
Number of codes	50
Programming of codes	Self-learning
Function selection	Stores code function
Frequency	433.92 Mhz
Approval	2014/35/UE ,2014/30/UE,2014/53/EU
Sensitivity	Greater than -100 dBm
Application range	Standard 50m / man present 10m
Antenna	Built-in
Operating temperature	Da -10°C a 70°C

### PROGRAMMING OPERATION TIME

With the damper closed, set microswitch DIP2 to ON, DIP1 to OFF and DIP5/DIP6 to ON. Enter programming by pressing the external button (connected between DIP9 and 10) or a previously inserted transmitter. A beep and blink will indicate the start of programming, and the door will open until it reaches its end stop. Once reached transmit the close command by pressing the external button or a transmitter. The door will reach its closing limit and two beeps accompanied by a flashing will indicate the end of programming. Reposition the dipo to the previous position.

### PROGRAMMING AUTOMATIC CLOSING TIME

Programming can be done only with the door at rest and with DIP1 and DIP2 microswitches set to ON. Press the external button or inserted transmitter button; a beep and a flash will indicate the start of programming. Finish by pressing the button in question again after the desired time; Two beeps accompanied by a flashing will confirm successful programming. Reposition the dipo to the previous position.

### STANDARD RADIO CONTROL COMPATIBILITY TABLE

brand	model
<b>CAME</b>	TOP 433EE
<b>ENTREMATI</b>	ZEN
<b>ABEXO</b>	EGO 433
<b>DITEC</b>	BIXLS2
<b>TELCOMA</b>	TANGO 4SW
<b>PUJOL</b>	VARIO
<b>LUTEC</b>	HT12E
<b>SUPERLIFT</b>	N3588
<b>NICE</b>	FLO
<b>BFT</b>	MITTO433
<b>JCM</b>	NEO10

### HCS RADIO CONTROL COMPATIBILITY TABLE

brand	model
<b>GIBIDI</b>	AU03000 - AU03010 - AU01600
<b>APRIMATIC</b>	TM4
<b>ACM</b>	TX2 COLOR

### SETTING OPTIONS

DIP1: Timer/Auto closing selector:

- **ON** - automatic closing with timer.
- **OFF** - automatic closing disabled.

DIP2: Programming timer:

- **ON** - programming operation time (DIP1 OFF). Programming closing time (DIP1 ON).
- **OFF** - programming time disabled.

DIP3: Radio programming:

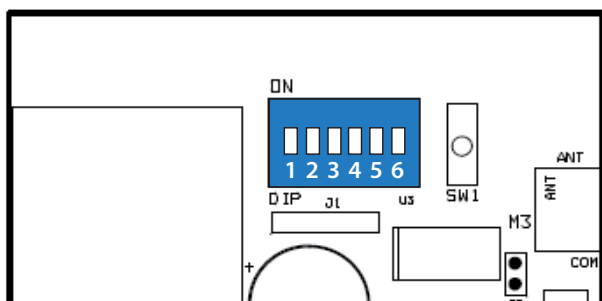
- **ON** - radio programming new transmitters enabled
- **OFF** - radio programming disabled

DIP4: Man Present (with jumper J2 closed hold down the transmitter Close button):

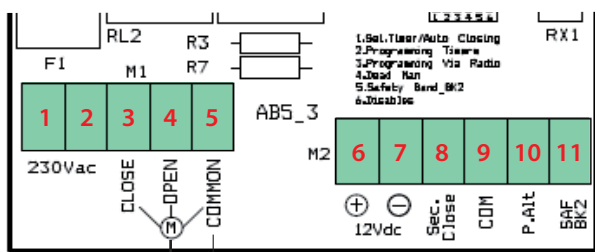
- **ON** - to realize the close, the transmitter button or external button must be held down. If not held down, the operation stops.
- **OFF** - normal operation.

DIP5-6: Disable/Enable photocell and wire or resistive border:

DIP5	DIP6	
ON	ON	Photocell and border disabled (BY DEFAULT)
ON	OFF	Flush photocell and border enabled
OFF	ON	Photocell and resistive border enabled.
OFF	OFF	Photocell enabled border disabled.



By default, with jumper J2 open, the control unit is stepping, so pressing the single button during opening or closing stops the door. Pressing it again will resume the reverse direction from the previous direction. With jumper J2 closed, the transmitter will instead operate with three buttons. (Open-Stop-Close). Recommended option for DEADMAN.



### TERMINAL DESCRIPTIONS

1. 230V ac power supply
2. 230V ac – power supply
3. Motor closing-
4. Motor opening-
5. Motor common-
6. +12 VDC power supply
7. -12 VDC power supply
8. Safety contact - photocell input
9. Common
10. P. Alt. External push button input STEP/STEP (N.O.)
11. mechanical border input or 8k2

FLASHER connection terminals 4 (open) and 5 (common)



**IMPORTANT: Permanently connected appliances shall have an easily accessible disconnecting device incorporated into the wiring.**

### TRANSMITTER CODE MEMORIZATION

To memorize transmitter codes, the control panel must be in stable condition and the door in stop.

#### ONE-BUTTON MODE TRANSMITTER MEMORIZATION.

To perform memorization, press the PROG/RES programming button and release it after the beep. The red LED will light steadily, indicating that the device is ready to memorize the transmitter code.

From this moment any code received will be memorized. Then press the button of the transmitter on which we want to activate the automatism. The red LED will begin to flash accompanied by three beeps to confirm that the operation has been carried out correctly. After 4 seconds have elapsed since the last reception of a code, the device will automatically exit programming with two beeps, turning off the red led.

#### RADIO MEMORIZATION WITH TRANSMITTER (WITH HCS TRANSMITTER ONLY).

To use this system you must have already manually memorized at least one transmitter (with HCS coding). On a previously memorized transmitter, press the programming key or the 3 keys at the same time or key 1 and 4 of an ABEXO-type transmitter (with programmed HCS codes) to make it learn new radio commands. As confirmation, the red LED lights up accompanied by a beep sound. Pressing a key on the new transmitter emits 3 beeps to confirm memorization. For the 3-button version, the Stop button is pressed.

#### 3-BUTTON MANUAL MEMORIZATION

Identical to the single-key procedure, but the Stop key must be pressed.

#### ERASING ALL CODES

Erasing all codes is achieved by "resetting" the memory. Press the PROG/RES key for 4 seconds. The red LED will flash several times and a series of beeps will indicate the erasure of all previously stored codes.

#### EXHAUSTED MEMORY INDICATION

Having exceeded 50 stored codes, in an attempt to store new codes, the red LED will start flashing accompanied by a series of beeps for 5 seconds.

#### RESET

To recover the automatic operation and closing times from factory data, remove the 220V power supply and set the DIP switches to the following position:

- DIP1: OFF
- DIP2: ON DIP3: OFF DIPS4: ON
- DIP5 - DIP6: UNAFFECTED

Remove any wires connected to terminal 9 and 4 and then power the panel to 220V.

An audible signal will warn that the process is successful. Reset the cables connected to terminal 9 and 4 and return the DIP switches to the position before the reset process began.

**EC DECLARATION OF CONFORMITY:** The manufacturer declares that the product complies with the regulations required by Directives 2014/35/EU, 2014/30/EU, 2014/53/EU. At the same time, he declares that it is forbidden to put the aforementioned products into service until the machine to which they will be incorporated or of which they will be a part is identified and declared to comply with the conditions required by Directive 89/392 EEC and the national implementing legislation, i.e. until the material covered by this declaration forms a whole with the final machine.

As required by the Directive 2012/19/CE concerning the Waste of Electronic and Electrical Equipment (WEEE) it is necessary: to not dispose of WEEE as municipal mixed waste and make a separate collection of such WEEE; contact your municipality of residence for information about the separate collection centers for WEEE. This symbol on the electronic device indicates the separate collection of electrical and electronic equipment (Ref. Directive 2012/19/CE). Appropriate separate waste collection for the subsequent start-up of the disposed appliance to environmentally compatible recycling and treatment and helps to avoid possible negative effects on the environment and on health and favors the recycling of the materials to which the product is composed.



### DECLARATION OF EU CONFORMITY

Product: SH230  
 Manufacturer: AB TECNO 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, li 01/02/2018

AB TECNO's CEO  
 Ulisse Pagani



*Ulisse Pagani*