

## PROGRAMMING MANUAL FOR THE AC 277-01 CONTROL UNIT

**Failure to comply with this Manual may result in injury or death.  
Keep the Manual for reference.**

### 1. INSTALLATION SAFETY

**NOTE: Follow these instructions: non-compliant installation and/or removal may cause severe injury!**

- Read this Manual before installing the product.
- Have this control unit installed/removed and wired by a suitably licensed electrician (with an electrician's license for electrical installations  $\leq 1$  kV).
- Caution: Disconnect the power cable from the supply voltage before removing the product.
- The control unit is intended for operation in dry indoor rooms. Do not expose it to weather.
- The control unit requires a separate power supply line, connected to the power sub-distribution switchboard with a short-delay current breaker, e.g. a B10 over-current CB.
- If the control unit power cable is damaged, replace it.
- Fasten and route the power cable to prevent the condensate (water) from flowing into the control unit enclosure.
- A single control unit must not operate more than one drive unit
- Install the control switch at a safe distance from all moving parts of the roller shutter / gate and at a distance which will permit watching the operation of the roller shutter / gate, and at least 1.5 m above the floor (the minimum height above the floor requirement does not apply to key-operated switches).
- After installation, make sure that the gate / roller shutter inverts directions properly.
- The installer must comply with the standards and regulations in force in the country where the installation is carried out.
- Users should be trained to operate the control unit.

### 2. SAFETY OF CONTROL UNIT OPERATION AND MAINTENANCE

**NOTE: Follow these instructions: non-compliant operation and/or maintenance may cause severe injury!**

- Keep children away from the central unit and its controls: they are not toys.
- Isolate the power supply from the control unit before cleaning, maintenance or replacement of parts.
- Do not operate the control unit if it needs to be repaired or readjusted.
- Whenever the roller shutter / gate is running there must be no obstacles on its way until it is completely closed or open.
- Test the control unit for proper reversing of the sense of rotation at least every month.
- Do not attempt to open the roller shutter / gate if it is stuck with heavy ice.
- Do not attempt to alter or modify the product without authorization; otherwise your product warranty will be void and the product may become hazardous in use. Have all maintenance and repairs done by a qualified technical service provider, the manufacturer, or the manufacturer's authorized agent.



*In accordance with the provisions of the Directive of the European Parliament and of the Council 2012/19 / EU of 4 July 2012 on waste electrical and electronic equipment (WEEE), it is prohibited to place of used equipment together with other wastes, marked with crossed out wheeled bin symbol. The users are obliged to transfer their used equipment to a designated collection point for proper processing. The marking means, at the same time, that the equipment was put on the market after 13 August 2005. These legal obligations have been introduced to reduce the amount of waste generated from waste electrical and electronic equipment and to ensure an appropriate level of collection, recovery and recycling. The equipment does not contain any dangerous components, which would have any particularly negative impact on the environment and human health.*

3. TECHNICAL SPECIFICATIONS

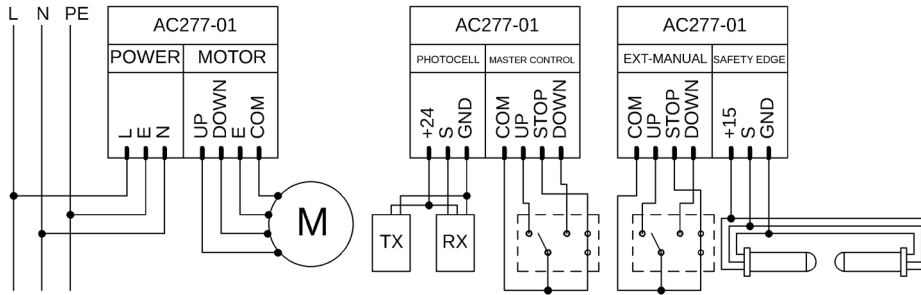


Power supply: 230 VAC / 50 Hz  
 Frequency: 433.92 MHz  
 Operating temperature: ~ -20°C - ~ +55°C  
 Maximum output power: 750 W  
 Average range: 120 meters (in open space), 20 meters (inside buildings)

Works exclusively with motors without built-in radio control.  
 Works with all AC series transmitters included in the ALUPROF S.A. offer.  
 Possibility to program up to 20 transmitters, Each next transmitter will erase the first one.

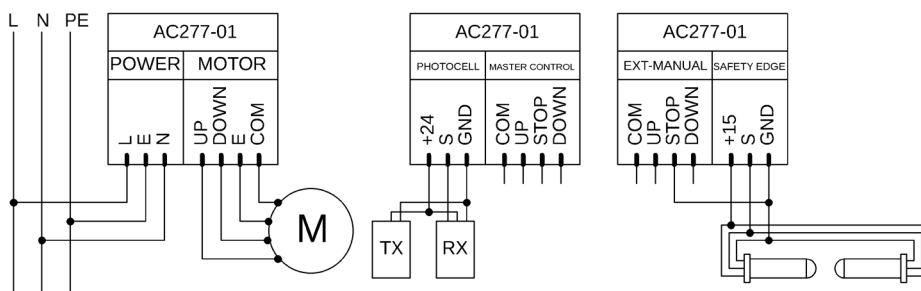
Company reserves the tolerance of catalog data due the different conditions usage.

4. CONNECTION OF THE TRANSMITTER

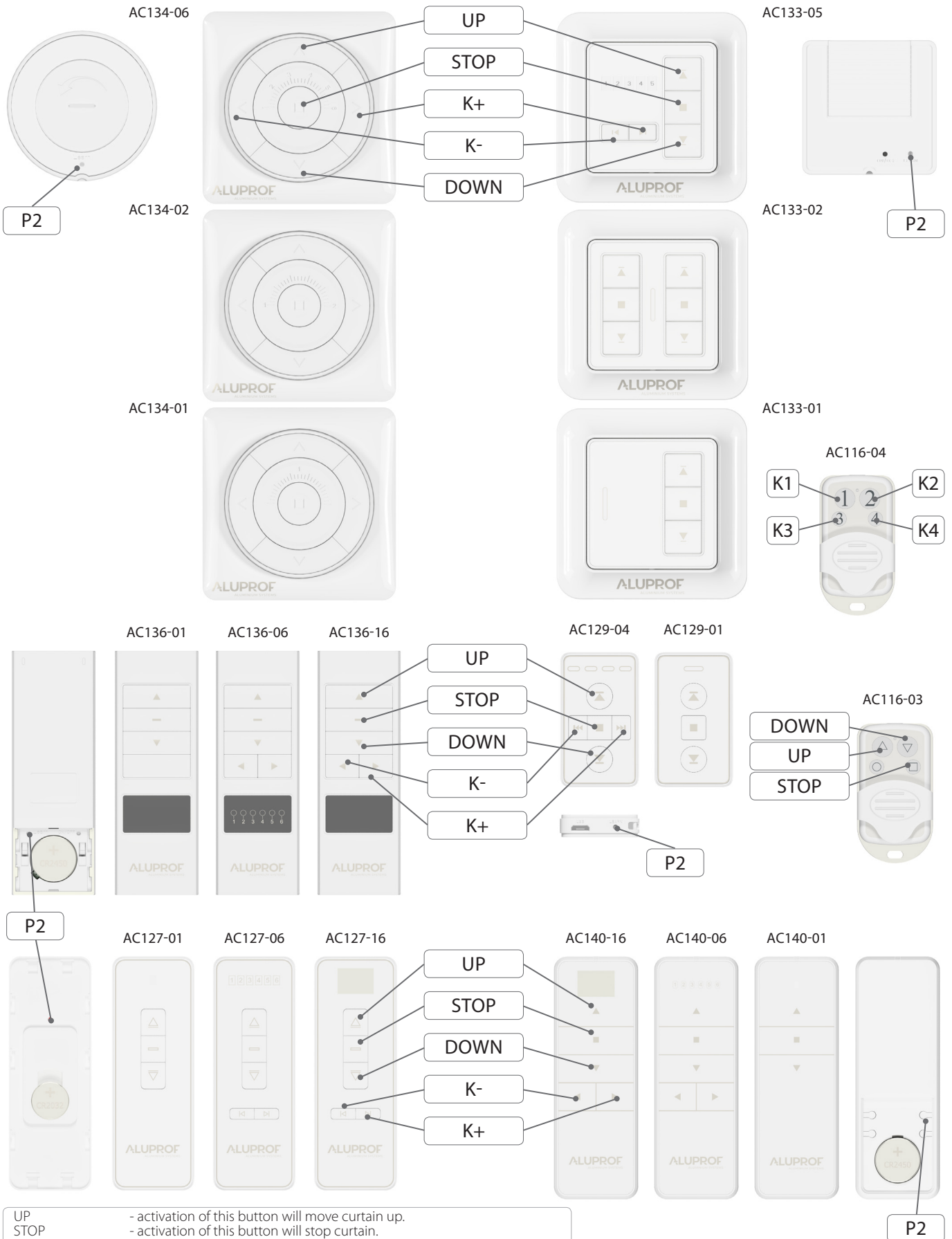


- |                |                              |
|----------------|------------------------------|
| POWER          | - power connectors           |
| MOTOR          | - motor connectors           |
| PHOTOCELL      | - photocell connectors       |
| MASTER CONTROL | - external switch connectors |
| EXT-MANUAL     | - external switch connectors |
| SAFETY EDGE    | - safety edge connectors     |
- 
- |        |                       |
|--------|-----------------------|
| L      | - phase wire          |
| E      | - protective wire     |
| N      | - neutral wire        |
| UP     | - UP direction        |
| DOWN   | - DOWN direction      |
| COM    | - power connector     |
| +15    | - Power supply: +15 V |
| +24    | - Power supply: +24 V |
| S/STOP | - STOP                |
| GND    | - ground              |

! If no external switches are connected to the control unit, you must put the jumper between "STOP" and "GND".

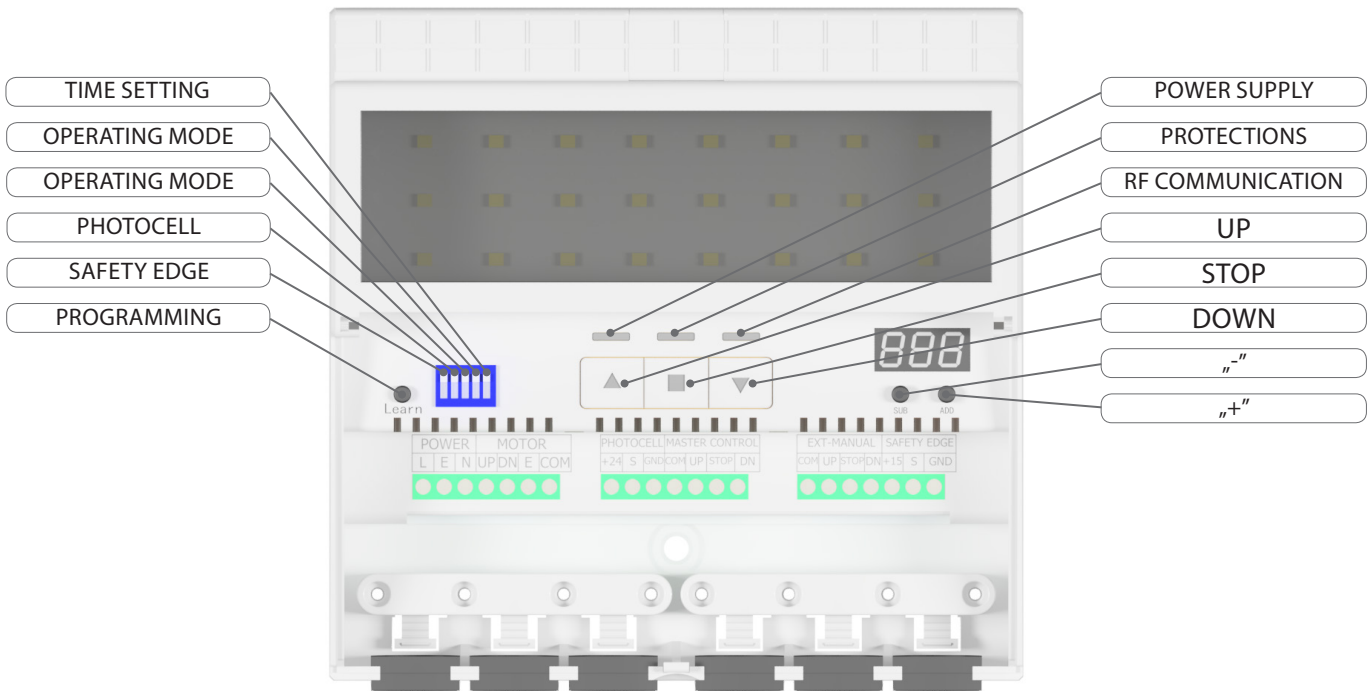


5. REMOTE CONTROLLERS



- UP - activation of this button will move curtain up.
- STOP - activation of this button will stop curtain.
- DOWN - activation of this button will move curtain down.
- K1/K2/K3/K4 - individual channel buttons.
- K- - activation of this button will switch to the previous channel.
- K+ - activation of this button will switch to the next channel.
- P2 - activation of this button will switch to programming mode.

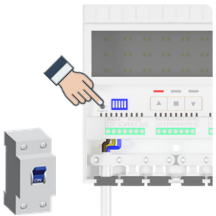
6. DIAGRAM OF THE FRONT PANEL



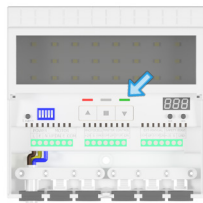
7. PROGRAMMING THE TRANSMITTER

Control unit works with two types of remote controls - 1) directional 2) impulse

**DIRECTIONAL**



With the control unit powered on, press the "Learn" button.



The green LED will flash slowly.



Press the "TOP" button on the transmitter. The green LED will quickly flash 3 times.

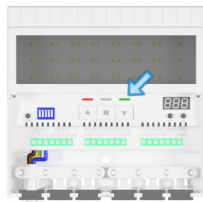


The transmitter has been added.

**IMPULSE**



With the control unit powered on, press the "Learn" button.



The green LED will flash slowly.




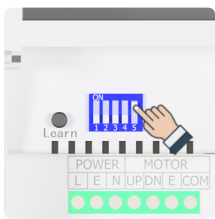
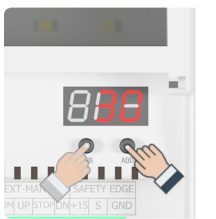

Press the button twice on the transmitter. The green LED will quickly flash 3 times.




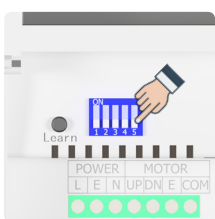
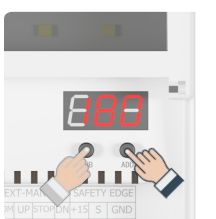

The transmitter has been added.

! "Learn" mode after 10 seconds of inactivity will close and no changes will be saved.

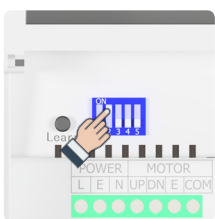

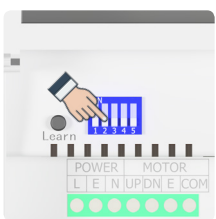

**8. SETTING OF THE CONTINUOUS OPERATION TIME**

			
<p>Turn on the power of the control unit.</p>	<p>Set switch 5 to the "ON" position.</p>	<p>Press the "SUB" or "ADD" button to set the time in seconds.</p>	<p>The setting has been saved.</p>

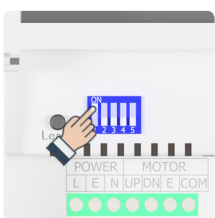

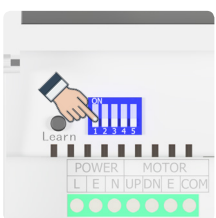

**9. SETTING THE AUTOMATIC CLOSING TIME**

			
<p>Turn on the power of the control unit.</p>	<p>Set switch 5 to the "OFF" position.</p>	<p>Press the "SUB" or "ADD" button to set the time in seconds.</p>	<p>The setting has been saved.</p>

**10. PHOTOCELL SETTINGS**

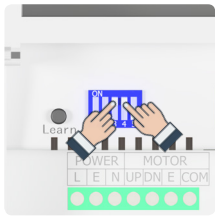
			
<p>Set switch 2 to the "ON" position.</p>	<p>active photocell</p>	<p>Set switch 2 to the "OFF" position.</p>	<p>inactive photocell</p>

**11. SAFETY EDGE SETTINGS**

			
<p>Set switch 1 to the "ON" position.</p>	<p>safety edge is active</p>	<p>Set switch 1 to the "OFF" position.</p>	<p>safety edge is inactive</p>

12. OPERATING MODES

I

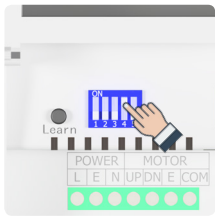


Set switch 3 and 4 to the "ON" position.



Press the "TOP" or "DOWN" button to switch motor to impulse mod.

II



Set switch 4 to the "ON" position.

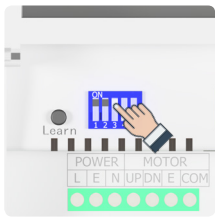


Press the "TOP" button to run the motor continuously.



Press the "DOWN" button to switch motor to impulse mod.

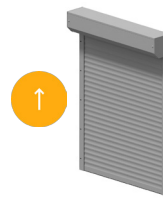
III



Set switch 3 to the "ON" position.

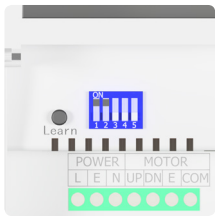


Press the "TOP" or "DOWN" button to run the motor continuously.



After protection is triggered the direction of the motor changes. (UP).

IV



Set switch to the "OFF" position.



Press the "TOP" or "DOWN" button to run the motor continuously.



After protection is triggered the direction of the motor changes. (UP).



After the motor has stopped, the countdown of the time after which it will close automatically (point 9).

! Mode III and IV requires protections to be connected.

**13. ERASING ONE TRANSMITTER.**

**DIRECTIONAL**



With the control unit powered on, press the "Learn" button.



The green LED will flash slowly.



Press the "DOWN" button on the transmitter. The green LED will quickly flash 3 times.

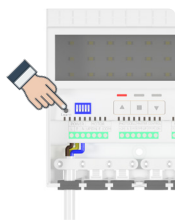


The transmitter has been deleted.

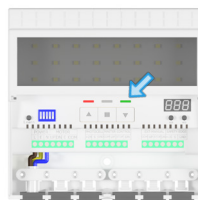
**IMPULSE**



With the control unit powered on lift and stop garage door in the top position.



Press the "Learn" button



The green LED will flash slowly.



Press the button on the transmitter. The green LED will quickly flash 3 times.



The transmitter has been deleted.

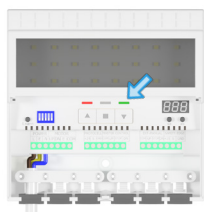


"Learn" mode after 10 seconds of inactivity will close and no changes will be saved.

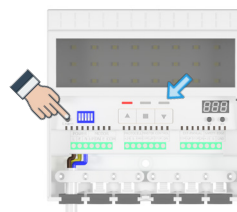
**14. ERASING ALL OF THE TRANSMITTERS.**



With the control unit powered on, press and hold the "Learn" button.



The green LED will flash rapidly. Release the button.



Press the Learn button again. The green LED will turn off.



The transmitters have been deleted.

