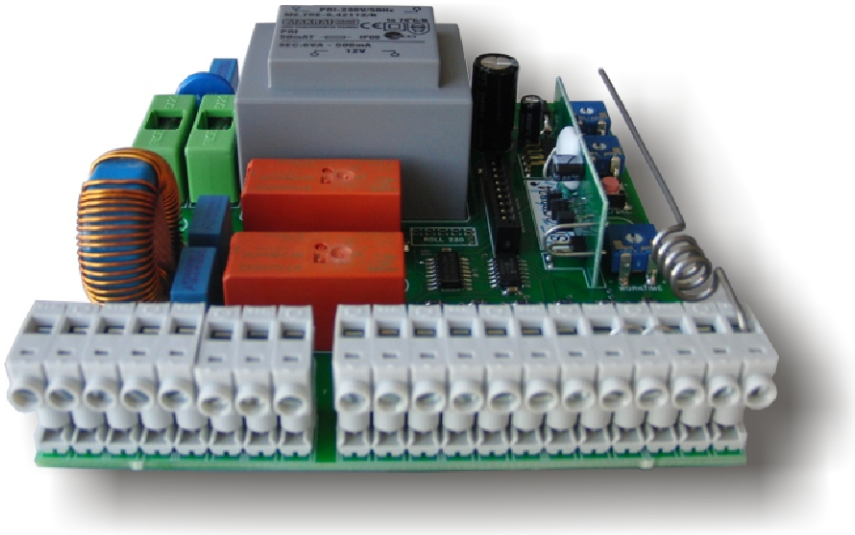
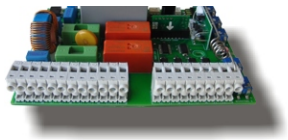
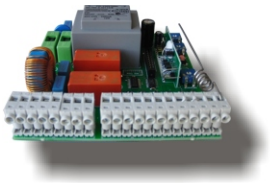
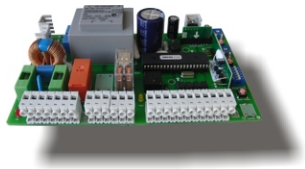
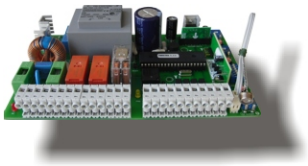
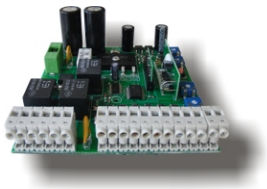
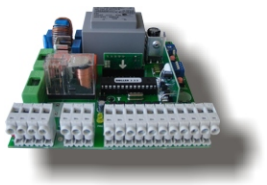
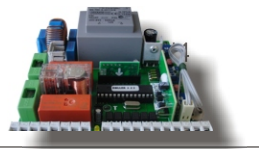


ROLL 230

CONTROL UNIT FOR SWING OPERATOR
SLIDING OPERATOR

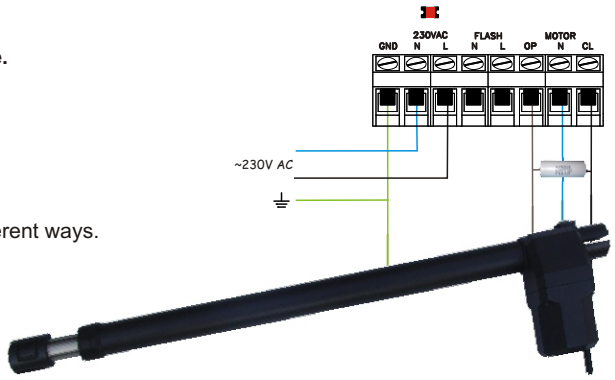
DIRECTION FOR USE

ROLL 230

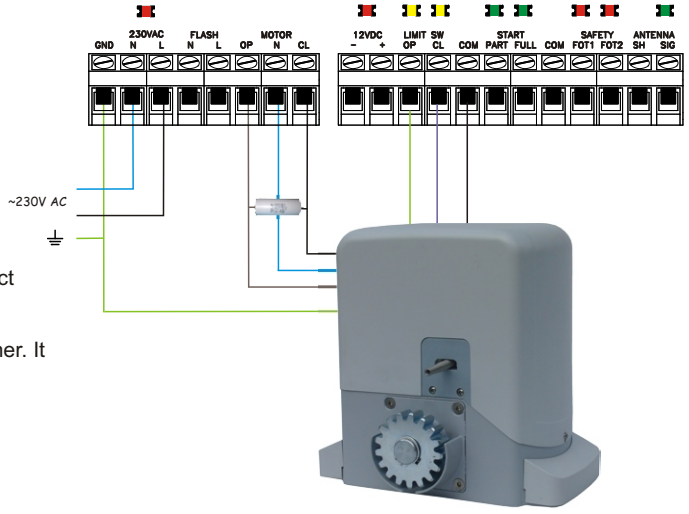
The setup of the apparatus presupposes technical skill.
If necessary ask for technican's help.
The quarantee is valid only in case of professional setup and proper usage.
Don't place the board and connections under voltage during installation.
Before changing the fuse check that the power supply has been cut off.



CONNECTIONS
The terminal boards of the unit can be pulled off in case of easier installation, and as an illustration we have plugged the terminal boards of the unit in two different ways.

230VAC – Input for the electric board power supply (230V AC)
GND – Ground cable connection
N – 230Vac main power supply neutral
L – 230Vac main power supply phase

FLASH – Connections for amber blinker with flashing panel (230V AC)
N – Blinker zero clam
L – Blinker phase clam



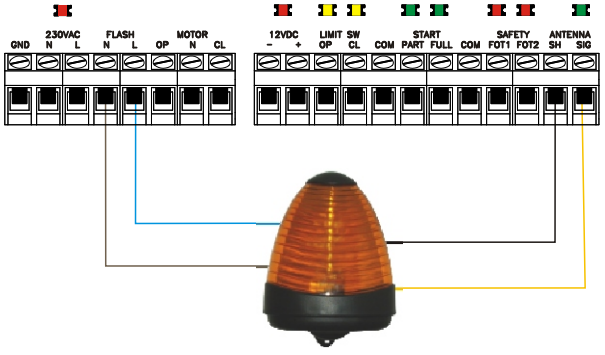
MOTOR – Connections for the operator (230V AC)
OP – 230Vac motor power supply phase (opening)
N – 230Vac motor power supply common
CL – 230Vac motor power supply phase (closure)

12VDC – Connections for photocell or external radio receiver
- – 12 Vdc power supply negative
+ – 12 Vdc power supply positive

LIMIT SW – Inputs for limit switches of sliding operators, breaking contact
OP – Switch to stop opening
CL – Switch to stop closure.
If you leave these clams free the apparatus will work as swing gate opener. It can be detected when the apparatus is placed under power.

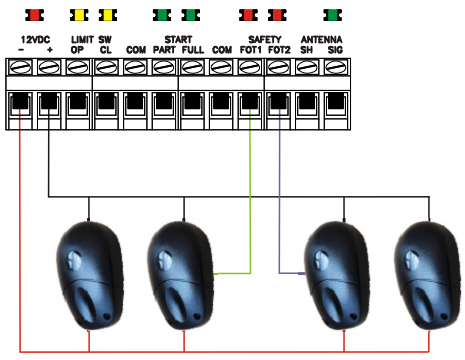
COM – Common clam of LIMIT SW, START, SAFETY inputs

START
PART – Input for pedestrian (partial) opening**,** closing contact.
For step-by-step usage, open-stop-close-stop-open...
Its function is the same as of the transmitter.
The partial opening volume is 1/3 of the set operating time as sliding function, and ½ as swing operator function.
FULL – Input for normal (full) opening, closing contact.
For step-by-step usage, open-stop-close-stop-open...
Its function is the same as of the transmitter.



SAFETY
FOT1 – Input for safety photocell, breaking contact.
The connected device is not active during opening, interruption during closing results in full opening, in standing position it blocks the gate to start and restarts the automatic closing time.
FOT2 – Input for safety photocell, breaking contact.
As sliding controller: the connected device stops the gate either in opening or closing term, in standing position it blocks the gate to start and restarts the automatic closing time. An impulse to PART or FULL input or the transmitter the gate continuous its movement in the last direction.
As swing controller: the connected device stops the gate during opening for the time of interrupting, interruption during closing term results in full opening, and in standing position blocks the gate to start, and restarts the automatic closing time.

ANTENNA
SH. – External antenna input (shield)
SIG. – External antenna input (signal) or the clam of the enclosed antenna stick



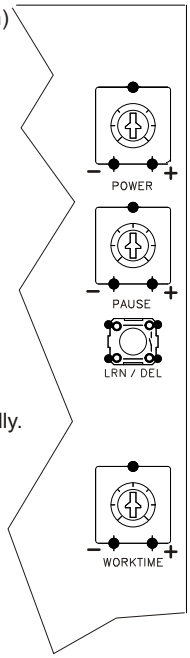
DECODER CARD
For storing remote controls.
Before removing and replacing the card check that the main power has been cut off.
The arrow on the card must point to the caption DECODER CARD on the board.

FEEDBACKS:
If the control LEDs of each input are lit it means that they are shortcircuited.
The signal LEDs belonging to breaking contact inputs have to be lit after turning on the main power. SAFETY inputs
Leds belonging to LIMIT SW, just in case of sliding operator function.
The signal LEDs belonging to closing contact inputs have to be lit only at the moment of giving command. START inputs

230VAC – red light signals that the panel is under voltage

12VDC – red light signals that the electric device is under voltage. If this led is off, but the 230Vac led is on, check the fuses, if needed change them.

ANTENNA-SIG – green light signals the built-in radio receiver's proper function (more details at LRN/DEL push-button)



OPERATORS / SETTINGS / ADJUSMENTS:

POWER – trimmer, for regulating the force of the motor between about 50-95%. It can be increased with turning to '+' and dicrease with turning to '-'.It has to be set that the force at the edges of the gate should not be more than 150N during movement. Upon opening the power is on maximum for 2 sec. If POWER trimmer is modified any time, check the worktime, and if neccessary reset.

PAUSE – If the trimmer is totally twisted to left, the gate doesn't close after it has reached full opening position, it can be closed with the remote control.If it's twisted to right from that position towards '+' 10-128sec delay time can be set, and the gate will start to close just after the time set. At partial opening the delay time is automatically the half of this period 5-64sec.

LRN/DEL – Button for programming, cancelling and setting functions of the remote controls
Programming the remote control: push LRN/DEL button for a sec, led SIG will turn on for 30sec. Push any button on the remote during this period, if the led turns off, it means that the remote has already been programmed successfully. Repeat this procedure with every remote controls. If you reach the 61st remote control the SIG led will flash 3times, it means that the memory is full. More remotes can be programmed only after deleting some.

<u>Programming the functions of the receiver:</u>
You can enter the menu by keeping the LRN/DEL button pushed continuously.
The numbers of flashes of SIG led signal each point of the menu. After which flashing you release the button, the function will be changed.
The functions adjusted this way are available on every stored remote control, and can be modified anytime.
You can find the main settings **emboldened** in the text. Modifying the settings in *italics* is not suggested as it can cause failure of operation.
At the first 4 points you can assign other push buttons for each function than the main setting.
In the pause after the required numbers of flashing, release LRN/DEL button and push the button you want on the remote.
If you don't push any buttons on the remote, it causes that the function can not be operated with a remote.

1 **A button**, normal open (FULL)
2 **B button**, pedestrian open (PART)
3 **C button**, -
4 **D button**, Pre-chosen
5 **rolling code** / *fix code*
If the remote doesn't work from a day to another, set the unit to fix mode.
It can happen if the remotes are seldom used .It is not failure but technicality of the rolling system.
6 **monostabil** / *bistabil* mode
7 **2** / *4* bistabil output, both work just in bistabil mode
8 **normal** / *pre-choosing* mode
If in this mode any button is pressed nothing happens, only after pushing PRE-CHOOSING 'D' button.
It provides protection from accidental pushing.
9 **switch just without** / *with pre-choosing* mode
It can be such an apparatus which only works if you don't push PRE-CHOOSING button.
This function can be set at this point of the menu. In this case you can operate 2x3 devices with a four buttoned remote control.
Both modes are active only in PRE-CHOOSING mode.
10 **one output to one push button**/ *more outputs to one push button*
11 Programming is **permitted** / *forbidden*
12 query for numbers of stored remotes – every flash symbolizes a piece
13 query for 5-10 functions – short flash=main setting, long flash= modified functions
14 -
15 15 reseting the main settings – 1-10 points of the menu are reset to main settings, remote controls are not deleted
16 –
17 Deleting lost remote controls - cut the power off, then use the available remote at least at once.
Keep this point of the menu active, it results that the unused remotes are deleted.
18 known remote controls deleting – after release push any button on the required remote
19 all stored remote controls memory delete, also reset the main settings
20 the led goes off, nothing happens

WORKTIME – Trimmer for regulating the operation time of the motor, max.80sec at sliding, and max.40sec at swing operator. The pedestrian opening is automatical, 1/3 as sliding and ½ as swing controller of the adjusted time. Anytime the POWER trimmer is modified, check the worktime, and if neccessary reset.

INSTALLATION
Turn on the main power supply only after when you have finished and also checked every connection.
At sliding operator: Test the limit switches by hand and check if the right leds work. Programme at least one remote control. Place the gate in half way by hand and close the clutch. Cut the power off for 30sec. For the remote's first command the gate has to start to open, if it doesn't do it you have to change the motor's working direction – with the power cut off. Pull the terminal board of the motor out, and snap it back the other way. Close the gate by hand and the clutch as well.

At swing operator:
Let the gate started by the remote, in this case the gate is being opened till the adjusted working time. If this period is longer or shorter than required, close the gate by remote than adjust the trimmer WORKTIME. After it has closed and doesn't give any sound, repeat the opening. If this period is still not suitable, keep on trying. The time has to be adjusted so that the motor still makes sound 2-3sec after the gate has totally closed.

At sliding operator:
Let the gate started by remote, in this case the gate is being opened until it reaches the limit switches but max. until the adjusted worktime. If this period is longer or shorter than required, close the gate by remote than adjust the trimmer WORKTIME. When the gate reaches the end repeat the opening.
If this period is still not suitable, keep on trying
During the operation of the gate check if you can stop it easily by hand or not. It is necessary to avoid any damage caused to person, animal or objects. If it can't be stopped,adjust the POWER trimmer.

3 months after the installation check proper work, the adjusted work-operation time of the gate.

OPERATION
The gate can be operated with pushing the right button of the remote. If you go by car, push FULL button for total openning, if you go on foot push PART button for partial opening.
With these buttons the gate also can be stopped during either opening or closing.
If the gate is stopped during opening, you can close by pushing PART button, and open totally by pushing FULL. It can not be changed from totally open to partially open.
The photocell connected to FOT1 input is inactive during opening, in open position it blocks the gate to start to close and restarts the automatic closing time, and reopen the gate during closing.
The safety device connected to FOT2 stops the movement of the gate in any case, and can be activated again only by pressing FULL or PART.
Devices connected to FOT1 and FOT2 restart the pause time.
Automatic closing- if adjusted- can be cancelled temporarily: when the gate is fully opened push FULL or PART buttons, or at opening after partial open push PART button. In this case the blinker flashes a couple and the gate stays open. For the next command the gate closes immediately.
The gate can be operated in the same way by pushing buttons or key switches connected to FULL or PART inputs.

MECHANICAL SPECIFICATIONS:

Mains power supply: 230V AC 50HZ
Power consumption: maximum 6VA
Protection level: IP56
Built in receiver: 433.92MHz, HCS KEELOQ
Mechanical size: 105x115x35 mm
Output of the operator: 230V AC, maximum 500W
Mains power supply: 12 - 18V DC, maximum 200mA output of the device
Output of the blinker: 230V AC, maximum 40W
Fuse for the motor: 250V F5A, 5x20mm
Fuse for electric: 250V T50mA, 5x20mm
Operating temperature range: -20°C - +55°C

v3.5 07.2011