AUTUN1-110V

GENERALITY'

The A1R electronic equipment is intended for the automation of motors for sliding gates, overhead doors and rolling shutters.

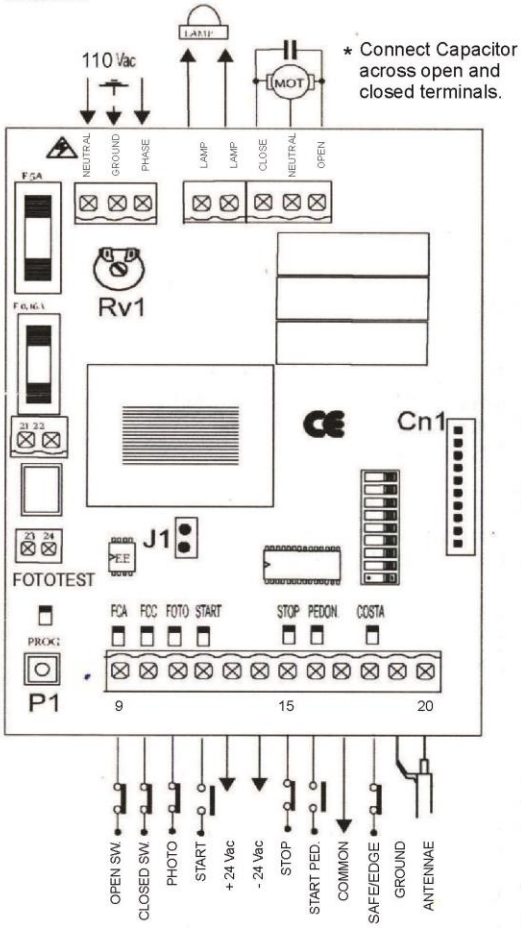
Compact and quick to install thanks to the events display, the control leds is complete with condominium function, step by step, step by step with automatic reclosing, pedestrian, slowdowns, two limit switches, coast entry and phototest for photocell control. Settings such as work time, pause time, displacement time, pedestrian time and digital and / or analog motor power via trimmer.

Easy to install thanks to the control leds, extractable terminals and screen printed circuit boards

NOTES FOR INSTALLATION

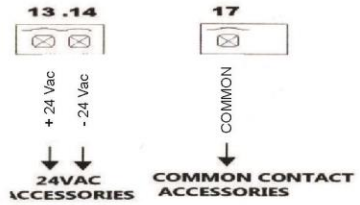
Before proceeding with the installation, install a thermal or differential magneto switch with a maximum capacity of 10A upstream of the system. The switch must guarantee an omnipolar separation of the contacts, with an opening distance of at least 3 mm.

Differentiate and keep the power cables (min. 1.5mm2 section) separate from the signal cables which must be 0.5mm2.



CAUTION:
DO NOT CONNECT THE COMMON INPUT (TERMINAL 17) WITH THE 0V OUTPUT (TERMINAL 14) TO SUPPLY THE 3 - WIRE COMMANDED ACCESSORIES.
THE POSSIBLE RETURN OF THE NEGATIVE TO COMMON CAUSES FUNCTIONAL ANOMALIES

ACCESSORY CONNECTION:



Gate Automation Systems
Online & Mobile Sales • Service • Tech Support
GemGates.ca
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TECHNICAL FEATURES

Power supply = 110 Vac single phase 50/60 Hz
Number Mot. = 1
Flashing = 110 Vac 40Wmax
Photocells = 24 Vac 8W Max (2 pairs of photocells + external radio)
Operating temperature = -20 +55 ° C

CONNECTIONS (LEGENDA TERMINAL)
Terminal block M1
1 .. 110Vac LINE INPUT (NEUTRAL)
3 ..
2 .. 110Vac LINE INPUT (PHASE)
Terminal block M2
4 .. OUTPUT OPEN ENGINE
5 .. COMMON MOTOR OUTPUT
6 .. EXIT CLOSE ENGINE
7 - 8 .. FLASHING OUTPUT 220Vac (FIXED LIGHT)
CONNECT THE MOTOR REHASATING CONDENSER BETWEEN THE TERMINALS 4 - 6
Terminal block M3
9 .. FCA INPUT (NC contact)
10 .. FCC INPUT (NC contact)
11 .. PHOTOCELL ENTRANCE (NC contact)
12 .. START INPUT (NO contact)
13 .. 24Vac OUTPUT FOR POWER SUPPLIES ACCESSORIES
14 .. 0VAC OUTPUT FOR POWER SUPPLIES ACCESSORIES
15 .. STOP INPUT (NC contact)
16 .. PEDESTRIAN START INPUT (NO contact)
17 .. COMMON ENTRIES STOP-START-FCC-FCA-COSTA
18 .. COSTA INPUT (NC contact)
19 .. ENTRANCE CALZA ANTENNA
20 .. ANIMA ANTENNA ENTRANCE
Terminal block M4
21 - 22 ..RELAY 'CLEAN (SEE CONNECTION DIAGRAM)
Terminal block M5
23 - 24 .. 24Vac OUTPUT FOR TX PHOTOCELL POWER SUPPLY

DIP MANAGEMENT Dip reading with gate closed

DIP	ON	OFF
DIP1	Learning Times	Normal operation
DIP2	Condominium (after the first Start does not accept others during opening, pause time recharge)	DISABLED
DIP3	Step - Step (open-stop-close-stop-open ....) Without self-closing.	Residential (open-stop-close-open) After stop, pause or start from tx it closes automatically after pause time
DIP2 e DIP3	Function open - stop - close - stop ..... In pause it closes automatically.	DISABLED
DIP4	Excludes entrance fee	Admission is free
DIP5	Management of slowdowns for "big" engines weighing 800 / 2,000 kg. Enable impulse for closing pressure. Two seconds every 180 minutes.	Management of slowdowns for "small" engines weighing up to 600 / 1,000 Kg
DIP 6	Excludes limit switch input closes	Limit switch input closes free
DIP7	Excludes limit switch input opens	Limit switch input opens free
DIP8	Manages the photocells on opening	It does not manage the photocells on opening

ADVANCE ADJUSTMENT DECELERATION

DIP 9	OFF	ON	OFF	ON
DIP 10	OFF	OFF	ON	ON
DECELERATION	**DISABLED**	**2 level**	**4 level**	**6 level**

SPY LIGHT MANAGEMENT:
The control unit is set up with an indicator output with free relay (terminals 21-22) that warns of the status of the gate:

CLOSED GATE	Spy off
GATE IN OPENING	Fast flashing
CLOSING GATE	Slow flashing
GATE IN PAUSE	Timed light 120 seconds

JUMPER J1 OPERATING MENU: Jumper J1 setting must be performed with the board NOT powered.

J1 CLOSED: at the end of the stroke the gate stops. The slowdowns occur before the intervention of these, referring to the settings of DIP 9 and DIP 10.

J1 OPEN: the 3-second slow-down will start at the end of stroke.

START PROGRAMMING
IF THE SLOWDOWS ARE USED THE PROGRAMMING MUST BE DONE WITH THESE INSERTS (DIP 9 & 10)
PROGRAM WITH DIP 9 & 10 OFF AND J1 OPEN AND PHOTO SWITCHES JUMPED.

CLOSED GATE

Setting DIP1 to ON enables self-learning times:
Pressing the START or the first channel of a previously learned remote control starts the opening gate (otherwise, reverse the wires of terminals 4 and 6). From now on the microprocessor starts to count the times (the programming LED lights up)
Part of the opening leaf, when it arrives in the desired position (recommended the mechanical stops) give a START command and it stops (if the limit switches are not used), the flashing light goes off and from this moment on it is counted pause time.
When the pause time duration is sufficient, press START and the leaf will start closing.
At this point don't send any command and wait for the closure either with automatic time or with the limit switch intervention.
The programming LED flashes. At this point bring DIP1 back to OFF (the LED goes out). Now everything is ready to be able to restart the gate.

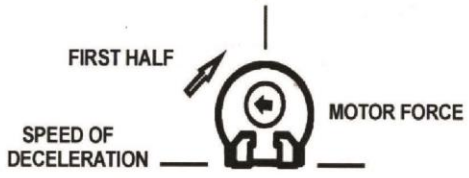
PEDESTRIAN START PROGRAMMING
IF THE SLOWDOWS ARE USED THE PROGRAMMING MUST BE DONE WITH THESE INSERTS (DIP 9 and DIP 10)
IN THE PEDESTRIAN FUNCTION THE OPENING SLOWINGS ARE EXCLUDED

CLOSED GATE

Setting DIP1 to ON enables self-learning times:
Pressing the PEDESTRIAN START or the second channel of a previously learned remote control starts the opening gate (otherwise, reverse the wires of terminals 4 and 6). From now on the microprocessor starts to count the times (the programming LED lights up)
Once the opening leaf arrives in the desired pedestrian position, give a PEDESTRIAN START command and it stops, the flashing light goes off and from this moment on the pause time is counted.
When the time elapsed is sufficient, press the PEDESTRIAN START button and the leaf will start closing.
At this point no longer give any command and wait for the closure either with automatic time or with the limit switch intervention.
The programming LED flashes. At this point it is necessary to bring the DIP1 back to OFF (the led goes out). Now everything is ready to be able to restart the gate at the opening.

DIGITAL TORQUE ADJUSTMENT (default maximum torque)
ENABLED ONLY IN CASE YOU USE SLOW-DOWN WITH ELECTROMECHANICAL OPERATORS.
HYDRAULIC OPERATORS SHOULD BE AT 100% TORQUE.
TORQUE ADJUSTMENT (default maximum torque)
Through the P1 key it is possible to regulate the torque of the motors, during operation, by pressing the P1 key, each press will decrease the torque by about 10%, for a maximum of 6 thresholds. At the seventh press, it returns to the maximum torque and the LED flashes. Presses / Voltage: 0 = 120V, 1 = 108V, 2 = 96V, 3 = 84V, 4 = 72V, 5 = 60V, 6 = 48V. RECOMMENDED-ELECTRO = 75% / HYDRAULIC = 100%.

TRIMMER REGULATION RV1
The trimmer of RV1 located on the board with two different types of operation:
When the decelerations are NOT used, the trimmer adjusts the motor force (second half of the trimmer), turning it clockwise increases the force, while decreases counterclockwise.
If you use the decelerations, the trimmer is used to adjust the slowdown speed (first half of the trimmer), turning it clockwise increases the speed, while decreases counterclockwise.
During wiring and programming it is advisable to set the trimmer adjustment to the minimum, if slowdowns are used.
After exiting programming, use RV1 to increase speed during slowdown of the motors if desired.



PHOTOCELLS CONTROL (FOTOTEST)
During the time programming phase a check is made on the presence and operation of the photocells: this is done by removing power to the TX of the photocells (which must be powered via terminal 23/24)
If during this phase the photocells are detected, before each gate movement, the control unit checks the correct functioning of the photocells. In the event that the photocells are not present at the time of programming times, but there was a closing bridge or otherwise powered, the control unit does not carry out checks before leaving.

CLOCK FUNCTION
Using the terminals 12 and 17 it is possible to connect a TIMER to program gate openings.
The timer contact must be of the NA type and must remain closed for as long as the gate remains open.
If there is already a connection on terminal 12, connect it in parallel.

QUICK REFERENCE FUNCTION
This feature allows you to reduce the pause time to 3sec. from the intervention and release of the photocells. To enable this function, proceed as follows: during the time programming, when the gate is paused, engage the photocells for at least two seconds. At the end of the programming procedure the function is enabled. To exclude it, repeat the programming procedure.

AUTOMATIC CLOSING ON RETURN OF THE POWER SUPPLY
If during the motion, both during opening and closing, during the pause there is no voltage, when the power is restored the system makes a closing so as to always guarantee the closing of the gate after it has moved away. (only if DIP3 in OFF)

RADIO MODULE
The control unit in the R version is complete with a receiver with a working frequency of 433.92MHz. It is equipped with a code decoding circuit, both for DIP (12bit) and Rolling code (max 200 codes).
Press the P1 key on the control unit once the prog programming LED on the control unit turns on steady to indicate that the control unit is ready to learn a remote control on the **START** command. Now you can press one of the keys of a transmitter, keep it pressed until the prog. gives 6 flashes to indicate the memorization (if not to do the "reset of the memory"). Without pressing the P1 key again, it is possible to learn further remote controls of the same family one after the other until the prog. it's on.
To memorize the **PEDESTRIAN START** command, press the P1 key twice on the programming prog. on the control unit first it stays on steady, then flashes to turn on steadily again. Now you can press one of the keys of a transmitter, keep it pressed until the prog. gives four flashes to indicate storage.
After learning the last remote control, wait for the LED to turn off (about 6 seconds) to indicate that the system has left the TX learning and is ready to operate normally.
ATTENTION: after having learned the first code, the system will only accept that family of codes (if the first one is Rolling all the others must be Rolling).
MEMORY RESET: (for R version only)
To cancel the codes, press and hold down the P1 button (the red prog LED lights up), until the LED goes out. When the button is released, the LED flashes (which indicates empty memory).

FINAL CHECKS AND TESTING
Before powering the equipment for programming, proceed to the following checks:
· Check if we have correctly set the DIP. (By default all DIPs in OFF)
· Check the electrical connections; an incorrect connection can be harmful for both the equipment and the operator
· FEED THE DEVICE
· Check that the LEDs of the safety devices are on and the START and STARTPED LEDs are off
· Check that the corresponding LEDs are turned on by making any required limit switches active.
· Check that the corresponding Led turns off passing through the photocell beam.
· Check that the gate is closed and that the motors are locked and ready for operation. Remove any obstacles within the range of the gate

WARNINGS
During wiring and insertion of the radio module, the appliance must not be powered.
The use of this equipment must follow and strictly comply with the reference technical standards. Installation and / or maintenance must only be carried out by qualified personnel in compliance with the laws in force. The manufacturer can not be held responsible for any damage caused by improper and / or unreasonable use. Incorrect installation or incorrect use of the product may compromise the safety of the system, all materials in the packaging must not be left within reach of children as they are sources of danger.

DISPOSAL: keep the product out of the reach of children. Do not throw the 'apparatus together with ordinary municipal waste as a symbol marked on the product. (European Directive 2002/96/EC)

And 'the responsibility of the owner dispose of electrical product collection centers according to the specifications of public bodies.

EC DECLARATION OF CONFORMITY '
Below, we declare that the product meets all the requirements for the type of product required by the regulations and directives 2004/108/EC, 2006/95/EC, through the use of standards published in the Official Journal of the European community:
SFT norm: EN 60950:2006
Norma SFT:
EMC norm: EN301489-3 V1.4.1
EMC standard:
It also declares that it is forbidden to put the above-mentioned products on the market before the machine has these rules and it is found to comply with the conditions required by Directive 89/392 EEC and national laws applies, that is, until the material, to which this declaration , does not form a whole with the final machine.
Company Responsible for placing on the market: