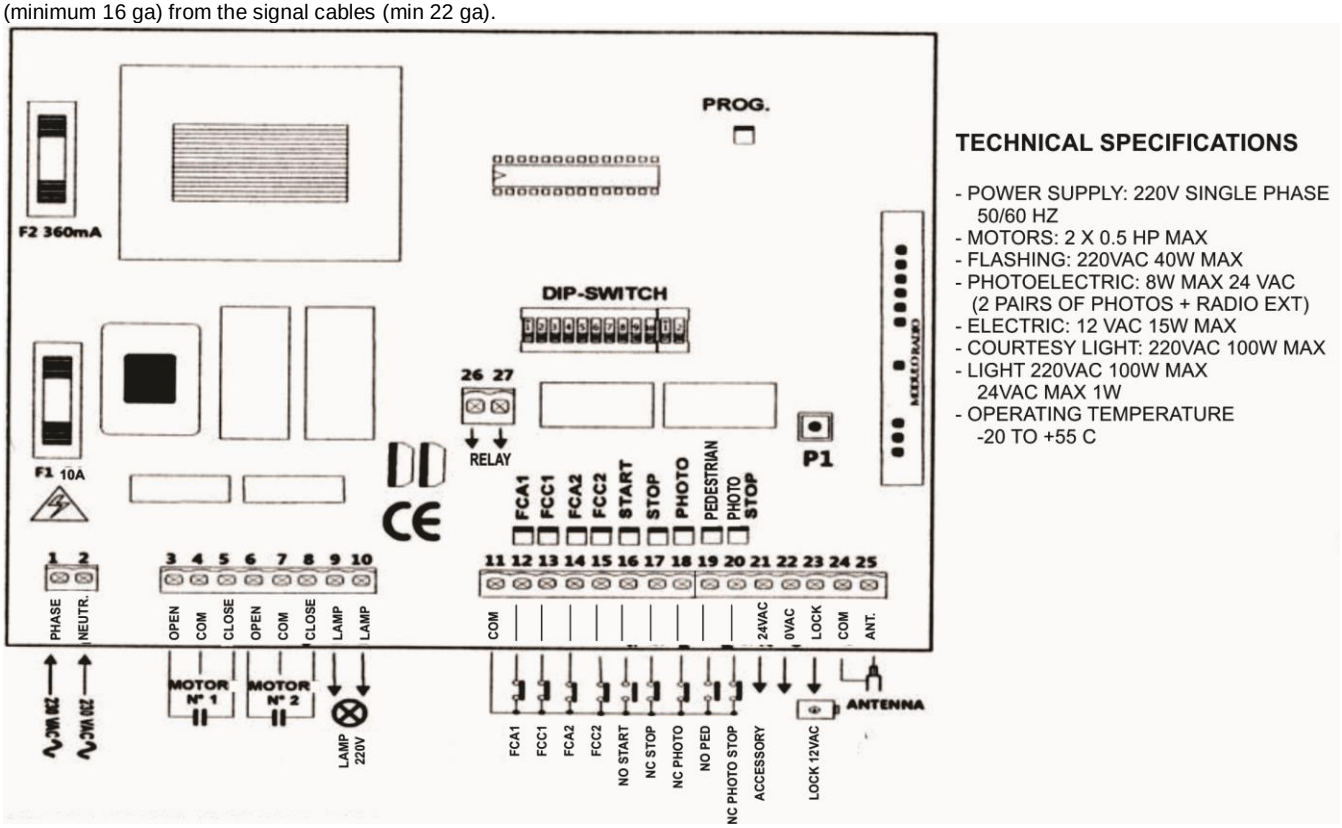
AUTUN2

CONTROL UNIT FOR 1 OR 2 MOTORS 220V UNIVERSAL

UNIVERSAL EQUIPMENT: The electronic AUTUN2 is for the automation of swing gate motors or motors for sliding gates. It features : condominium mode, step-by-step, automatic reclosing, walkway, momentary reversal for lock release, soft stop, photo switch in the opening, closing in photo (photo-stop) and rapid auto-reclosing. It allows programming for working time, pause time, delay time, gates opening and closing, pedestrian time and power to motors. Additional options are: courtesy light, four limit switches, flashing light. All functions are excludable using dip-switches. Easy to install thanks to the LEDs, the removable terminals and text printed on the circuit board indicating connections and functions.

INSTALLATION NOTES: Before proceeding with the installation, protect the unit with a magnetic switch or differential with a maximum capacity of 15A. The switch must guarantee omnipolar separation of contacts, opening distance of at least 3mm. Isolate and keep power cables separate (minimum 16 ga) from the signal cables (min 22 ga).



TECHNICAL SPECIFICATIONS

- POWER SUPPLY: 220V SINGLE PHASE 50/60 HZ
- MOTORS: 2 X 0.5 HP MAX
- FLASHING: 220VAC 40W MAX
- PHOTOELECTRIC: 8W MAX 24 VAC (2 PAIRS OF PHOTOS + RADIO EXT)
- ELECTRIC: 12 VAC 15W MAX
- COURTESY LIGHT: 220VAC 100W MAX
- LIGHT 220VAC 100W MAX 24VAC MAX 1W
- OPERATING TEMPERATURE -20 TO +55 C

CONNECTION (TERMINAL KEY)

M1

1 .. LINE INPUT 220V-PHASE-
2 .. LINE INPUT 220V-NEUTRAL-

M2

3 .. OPEN OUTPUT POWER # 1 (motor for pedestrian gate)
4 .. OUTPUT COMMON MOTOR # 1 (motor for pedestrian gate)
5 .. CLOSE OUTPUT MOTOR # 1 (motor for pedestrian gate)
6 .. OPEN OUTPUT MOTOR # 2
7 .. OUTPUT COMMON MOTOR # 2
8 .. CLOSE OUTPUT MOTOR # 2
9 .. OUTPUT FLASHING LIGHT 220Vac FIXED (neutral)
10 .. FLASHING LIGHT FIXED OUTPUT 220Vac (phase)

CONNECT THE CAPACITORS between terminals 3 – 5 and 6 – 8

M3

11 .. COMMON INPUTS STOP-START-FCC-FCA
12 .. INPUT FCA1 (NC contact) Open limit Motor 1
13 .. INPUT FCC1 (NC contact) Closed limit Motor 1
14 .. INPUT FCA2 (NC contact) Open limit Motor 2
15 .. INPUT FCC2 (NC contact) Closed limit Motor 2
16 .. START INPUT (NO contact)
17 .. INPUT STOP (NC contact)
18 .. PHOTOELECTRIC INPUT (NC) .
19 .. PEDESTRIAN START INPUT (NO)
20 .. INPUT photostop (NC)
21 .. 24Vac POWER OUTPUT FOR ACCESSORIES
22 .. 0 Vac OUTPUT POWER SUPPLY FOR ACCESSORIES
23.. OUTPUT ELECTRIC 12Vac for Lock
24 .. INPUT ANTENNA BRAID
25 .. ANTENNA INPUT

M4

26 – 27 .. RELAY CONTACT CLEAN (SEE CONNECTIONS)

CAUTION :
DO NOT CONNECT THE COMMON INPUT (terminal 11) WITH 0V OUTPUT.

ALSO : VOLTAGE MUST NEVER BE SENT TO THE NO (Normally Open) AND THE NC (Normally Closed) CONTACTS (#11 thru 20)

Gate Automation Systems
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GemGates.ca
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250-753-6125 Nanaimo BC
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MANAGEMENT DIP

Reading Dip (gate is closed)

*** NOTE:** DIP 9, 10, 11, 12, Select ON if Limit Switches are not used

DIP	ON	OFF
DIP1	Learning Times (Programming)	Normal Operation
DIP2	First start signal opens / next start signal closes. Auto close disabled.	Residential. After a pause or start automatically closes after pause time
DIP3	Condominium (after the first Start additional Start has no effect) Uninfluential.	Uninfluential
DIP2 & DIP3	Function open - stop - close - stop ..... Paused closes automatically.	Uninfluential
DIP4	Disable Input Photostop	Enable Input Photostop
DIP5	Reverses to release lock before opening / max power for 2 seconds at closed.	No momentary reversal on open signal.
DIP 6	Slowdowns 5sec. In opening and closing	Makes no slowdown.
DIP7	Disable flashing Pause. See links for courtesy light terminals 26/27	Turn on flashing + 3min. after opening and closing time work is
DIP8	Selecting Hydraulic Operators	Selecting Electromechanical Operators
DIP9 *	Excludes entrance end of the open 1	Limit switch input open 1 free
DIP10 *	Excludes closed limit switch input 1	Input limit switch closed 1 free
DIP11 *	Excludes limit switch input open 2	Limit switch input open 2 free
DIP12 *	Excludes limit switch input 2 closed	Input limit switch closed 2 free

MANAGEMENT COURTESY LIGHT 24v: (using the terminals 26-27 see connection diagram)

The control unit is designed with an output indicator with free relay (terminals 26-27) which warns the gate status:

GATE CLOSED	light off
GATE OPENING	fast flashing
GATE CLOSING	slow flashing
GATE IN PAUSE	Light off Dip 7 OFF - Light on DIP switch 7 to ON

MANAGEMENT Opening photocell

PROGRAM	OPENING PHOTO	PHOTO BREAK	PHOTO CLOSING
CONDOMINIUM start signal has no effect when opening. (closes afer pause time)	continues to open	Resets pause time	Stops and reopens
STEP-BY-STEP Dip 2 OFF or ON	Stops and after cleared continues to open	irrelevant	Stops and reopens

The control unit also provides a photo stop input.

TORQUE ADJUSTMENT (default maximum torque)

Motor torques adjusted using P1 button. During operation each press of the P1 button decreases power by approx. 10%, for a maximum of 6 levels. The 7th press returns the torque to maximum. On applying power to the unit the LED flashes 1-7 times indicating the torque level. ie: 7 flashes = maximum power.

CLOCK

Using the terminals 11 and 16 is possible to connect a TIMER to program the gate openings.
The timer contact must be of type NO (Normally Open) and must remain closed for the entire time that the gate remains open.
If you already have a connection to terminal 18, connect in parallel. IMPORTANT : NO VOLTAGE TO START CONNECTION !

TO SET PAUSE TIME WITHOUT COMPLETE REPROGRAM

By pressing the P1 button the break is increased by 5 seconds. (max 20 sec.) The 5th press of the button will to return to the original time, and the LED flashes 3 times.

AUTOMATIC CLOSING AFER POWER INTERRUPTION

If there is a power interruption during an open / close cycle, a closed cycle will be performed on return of power. (only if DIP2 OFF) Operators must be in the right cycle BEFORE PROGRAMMING. After a power interruption, and the reclosing function, a start should trigger the operators to open. If not reverse the Brown and Black wires.

BEFORE PROGRAMMING

Operators must be in correct cycle (opening/closing) and activate in correct order (Motor 1 / Motor 2) when dual operators are used.
Ie: Automatic close cycle after power interruption should activate the appropriate gate first, gate(s) travels closed.
Also – first start signal should activate an open cycle for operator(s).
NOTE: Swap black & brown wires to reverse direction
– swap Motor 1 and Motor 2 at circuit board to change which Motor activates first.

PROGRAMMING SINGLE GATE

Gate should be closed and operator engaged.

To get to programming mode, DIP 1 in the "ON" position enables auto – learning time: (use an activated transmitter to program gate). Press the START button or transmitter button to start the gate opening (otherwise reverse the wires of the terminals 3-5 and 6-8). From this moment on, the microprocessor starts to count time (the programming LED lights up)

Use P1 to send the first signal and begin the gate opening cycle

Use an activated transmitter to send the balance of the signals in the following sequence:

At gate's arrival at open send a signal - count for pause time as desired before sending a signal for the gate to begin closing - follow with signal for the gate when it arrives at fully closed. Turn dip switch one off and run a trial cycle (slow down will function if dip switch is on). If any adjustment is required - repeat the process and adjust as required.

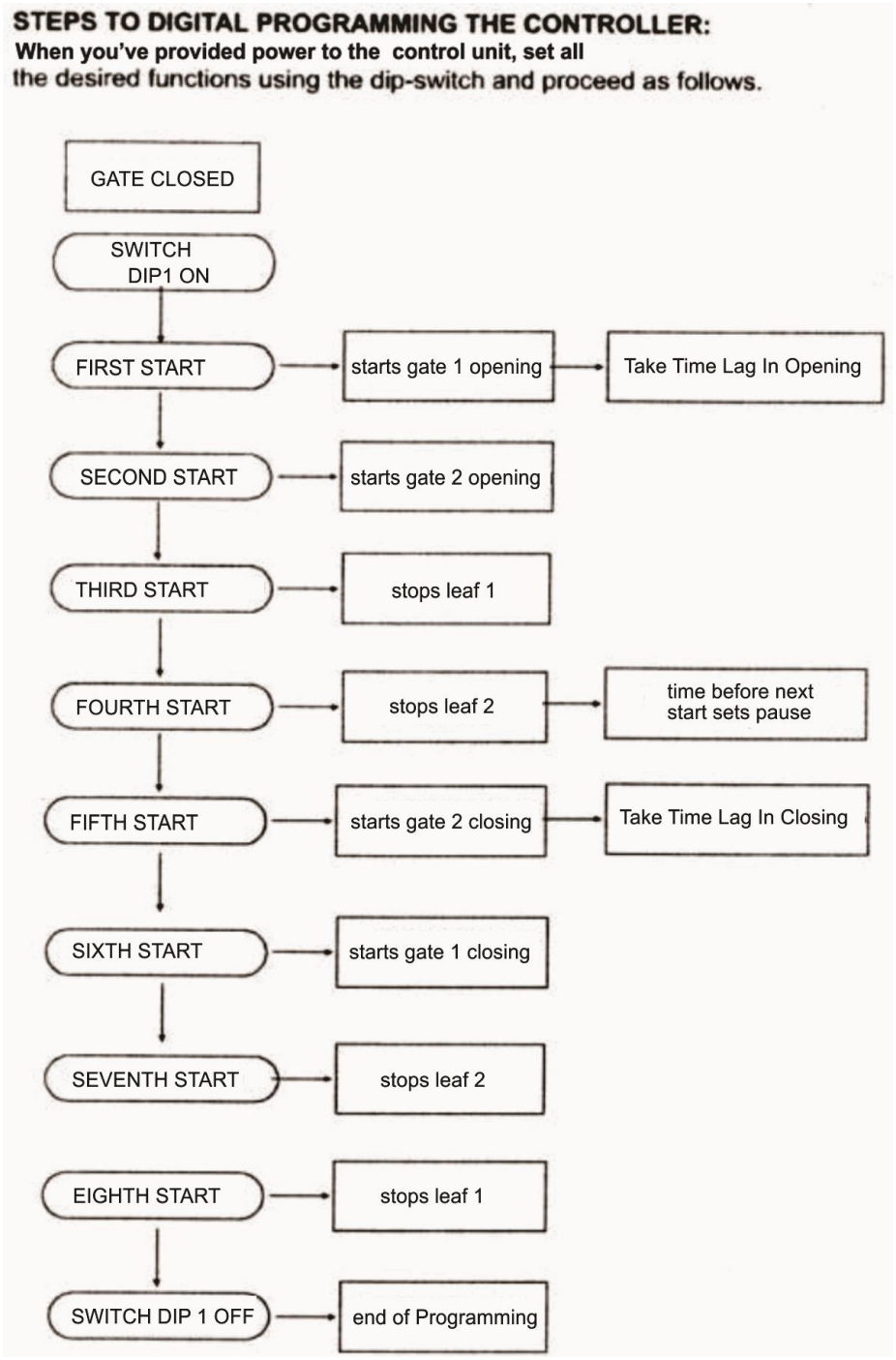
PROGRAMMING DOUBLE GATES

Gates should be closed and operator engaged.

To get to programming mode, DIP 1 in the "ON" position enables auto – learning time: (use an activated transmitter to program gates). Press the START button or transmitter button to start the gate opening (otherwise reverse the wires of the terminals 3-5 and 6-8). From this moment on, the microprocessor starts to count time (the programming LED lights up)

Use an activated transmitter to send gate programming signals in the following sequence:

Send signal and gate one begins opening - send a second signal and gate two follows - at gate ones arrival at open send a signal - follow up with a signal as gate two arrives - count for pause time as desired before sending a signal for gate two to begin closing - follow with signal for gate one to begin closing - send signals upon each of their arrivals at closed. Turn dip switch one off and run a trial cycle (slow downs will function if dip switch is on). If any adjustment is required - repeat the process and adjust as required.



PROGRAMMING PEDESTRIAN START

Gate should be closed and operator engaged.

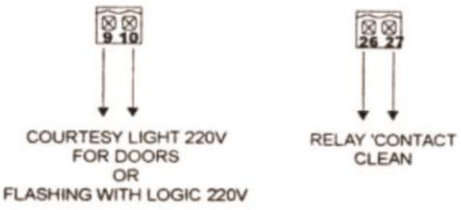
IF as you use the SLOWDOWN AND WATER HAMMER THE PROGRAM MUST BE DONE WITH THESE INCLUDED (DIP 5 ON – DIP 6 ON)
GATE CLOSED

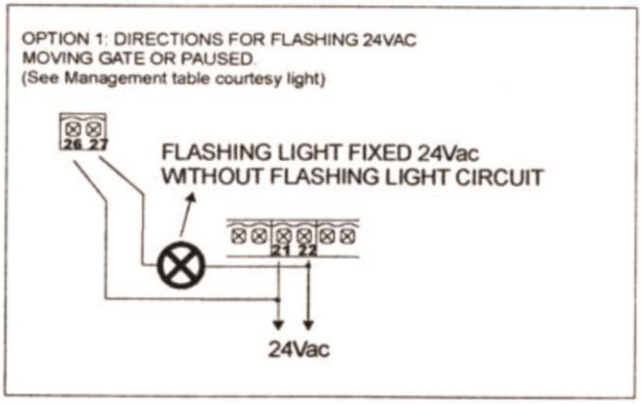
To get to programming mode, DIP 1 in the "ON" position enables programming mode. (use an activated transmitter to program gates). Press the START button or transmitter button to start the gate opening (otherwise reverse the wires of the terminals 3-5). From this moment on, the microprocessor starts to count time (the programming LED lights up)

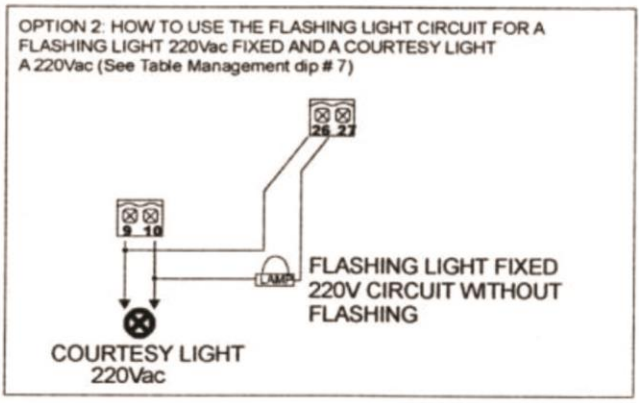
After the first gate begins to open, send a Pedestrian Start command when it reaches the desired opening. Now count desired duration for pause / open period, then send a Pedestrian Start command to initiate closing. Send a final Pedestrian Start command 5 seconds after the gate is fully closed. The programming LED flashes and DIP switch 1 must be turned off.

Run a trial Pedestrian Gate cycle and if necessary repeat the procedure modifying command signals to adjust.

CONNECTIONS: FLASHING AND COURTESY LIGHT







FINAL CHECKS AND TESTING

Before applying power to the equipment review and confirm the following:

- Check to see if you have correctly set all DIP switches.
- Check the electrical connections; incorrect connection may be detrimental to both the equipment and the operator.
- **POWER THE DEVICE.**
- Check that the LEDs of the safety devices are turned on and the Start and Start Ped LEDs are off.
- Make sure that when you operate any limit used, the corresponding LEDs are lit.
- Check that when photocell beam is interrupted the corresponding LED turns off.
- Make sure the gate is closed and that the motors are locked and ready for operation. Remove any obstacles in the range of the gate.

WARNINGS

During the wiring and the inclusion of the radio module the equipment must not be live.

The use of this equipment shall follow and adhere strictly to the technical reference standards. The installation and / or maintenance should be performed only by qualified personnel in compliance with the applicable regulations. The manufacturer can not be held responsible for any damage caused by improper use and / or unreasonable. Incorrect installation or incorrect use of the product may compromise safety. All materials contained in the package must not be left within reach of children as 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:

CE

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: