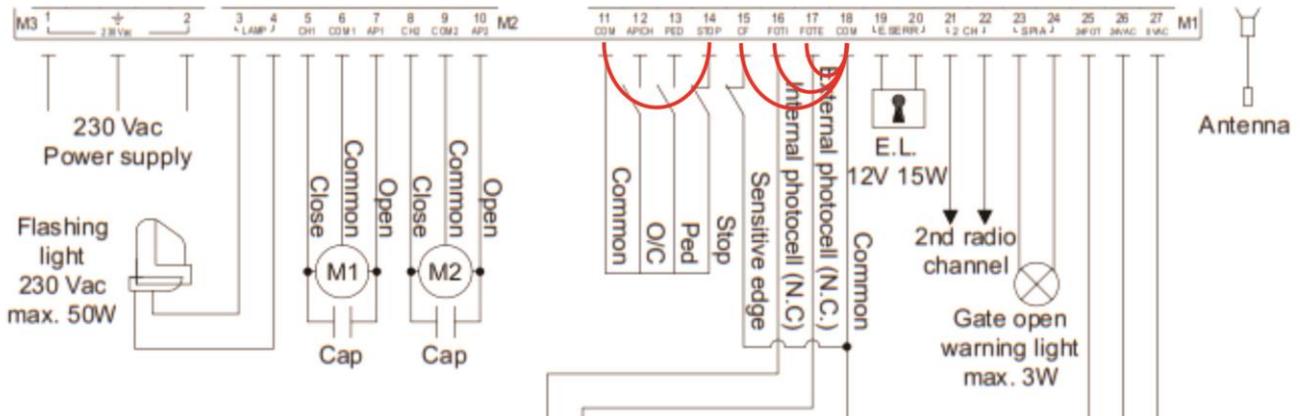


TIPS & TRICKS

LOGICTAUD760



- **TIP** – You must have good physical stops in both opening and closing. The D760 uses these stops during programming and operation.
- **TIP** – You need to fit four small loops of wire to your safety inputs to make anything work. These can be removed later if you install safety devices to these input terminals. But for now take four pieces of light gauge wire (speaker or telephone wire is good) about 50mm long and strip both ends 7mm and insert them as above from 11 to 14, 15, 16 and 17 to 18.
- **TIP** – Always concentrate on connecting your motor/s and programming these first before adding any accessories. Accessories like keypads and photocells should be added one at a time after you have your gates setup and operating correctly.
- **TIP** – If you have performed the previous step correctly when the board is powered you will have four green LED's lit. DL3, DL4, DL5 and DL6.
 - **TIP** – A good starting setup for your dip switches is 4 on – all others off.
- **TIP** – During programming if either or both gates do not open as the first movement simply stop the programming and at the control board reverse the motor wires of the motor/s going the wrong way. Invert the motor connections on the terminal block (terminals 5 and 7 for motor 1; terminals 8 and 10 for motor 2). Then power back up and restart programming.

GUIDA ALL'INSTALLAZIONE

INSTALLATION GUIDE

INSTALLATIONSANLEITUNG

NOTICE D'INSTALLATION

GUÍA PARA LA INSTALACIÓN

GUIA DE INSTALAÇÃO

D760M

Quadro di comando per due motori monofase 230V AC

Control panel for two single-phase motors 230V AC

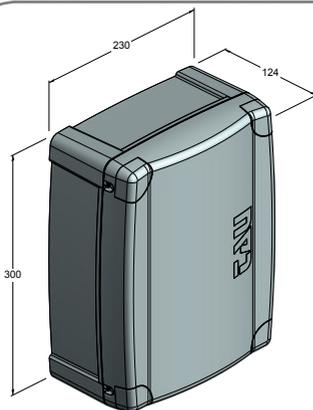
Steuerplatine für zwei einphasige 230V AC Motoren

Logique de commande pour deux moteurs monophasés 230V AC

Panel de mandos para dos motores monofásicos 230V AC

Placa electrónica para dois motores monofásicos 230V AC

D-MNLOD760M 14-02-2018 - Rev.11



IT - Istruzioni originali



MADE IN ITALY



Via Enrico Fermi, 43 - 36066 Sandrigo (VI) Italia
Tel +39 0444 750190 - Fax +39 0444 750376
info@tautilia.com - www.tautilia.com

SCHEMA CABLAGGIO D760M / D760M WIRING DIAGRAM / SCHALTPLAN DER D760M

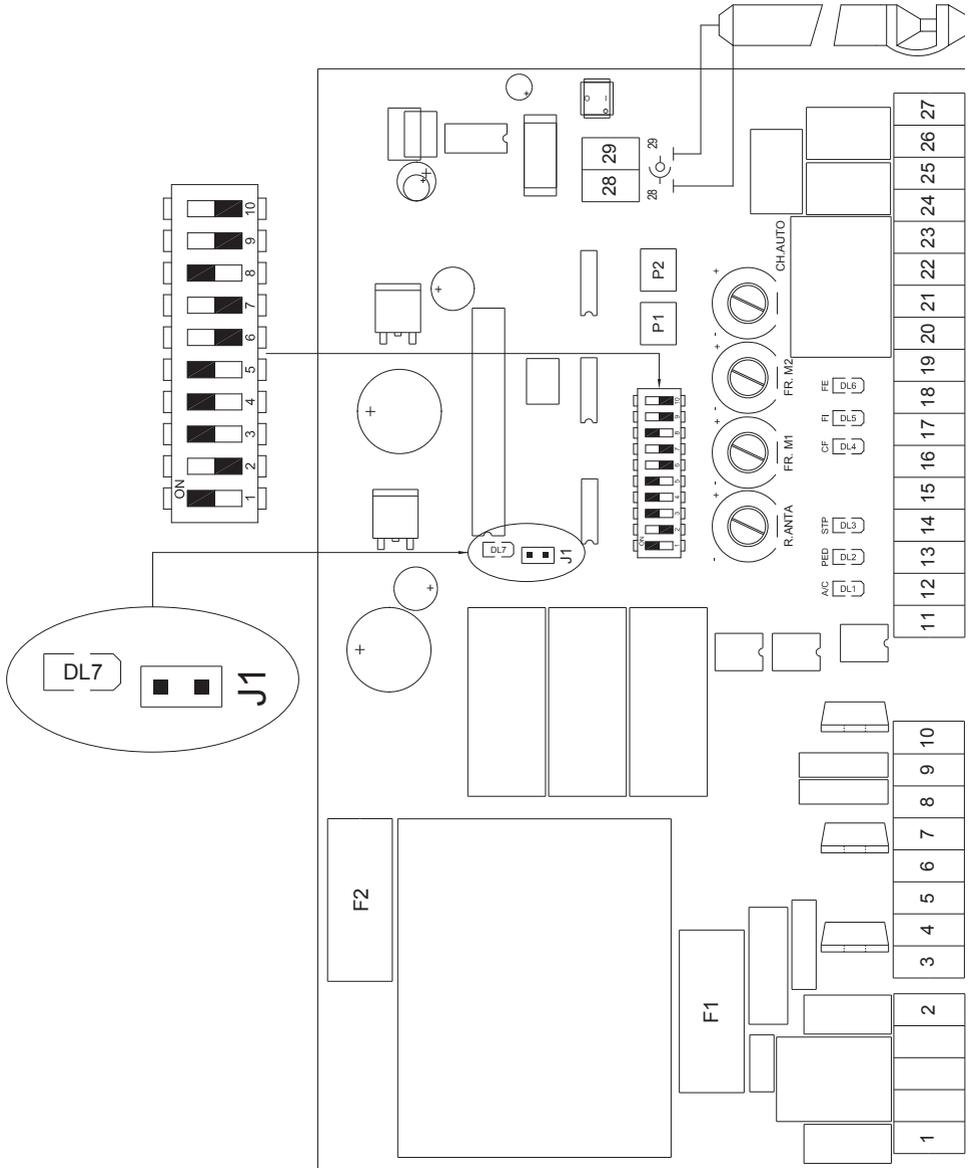
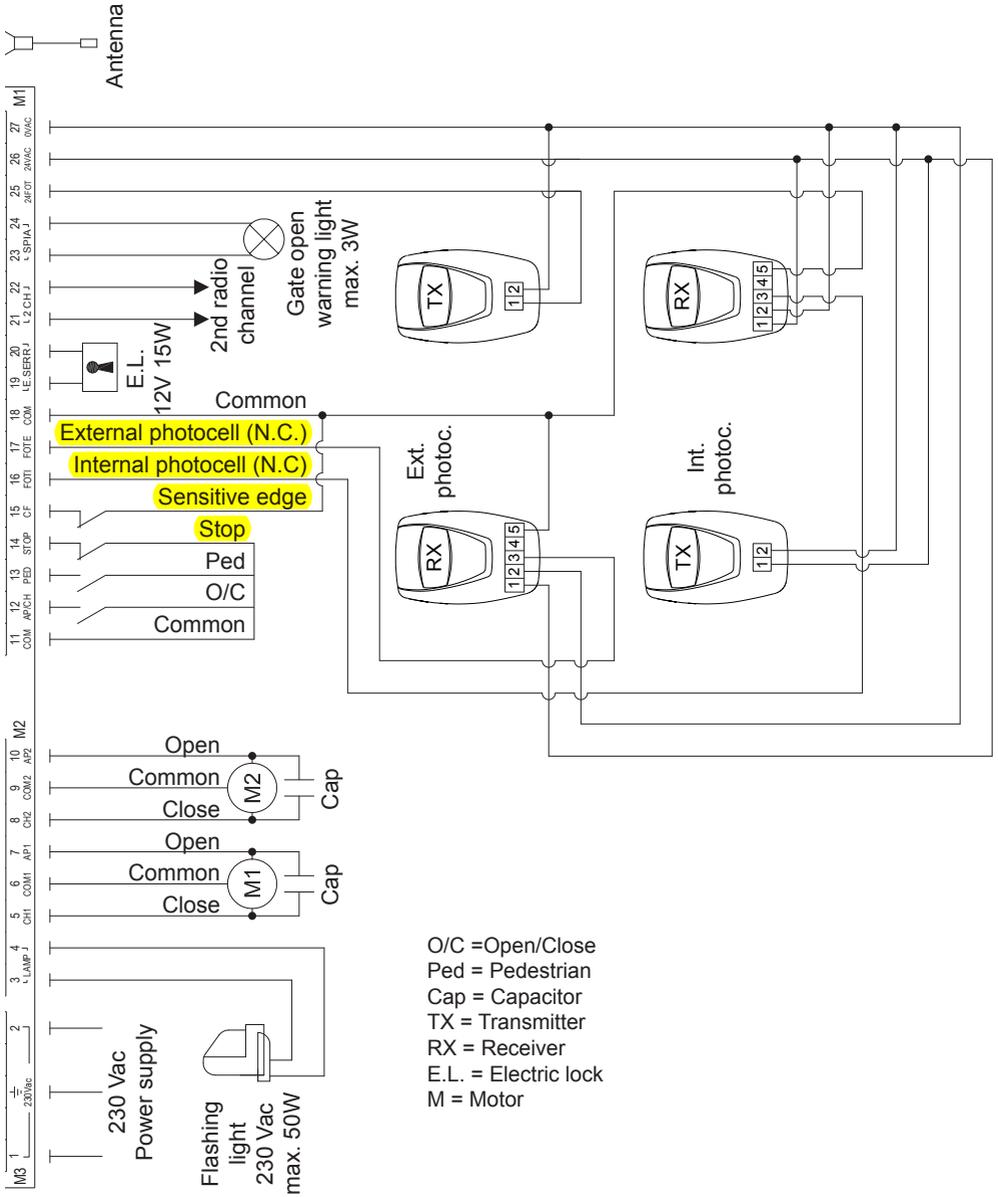


SCHÉMA CÂBLAGE D760M / ESQUEMA DEL CABLEADO D760M / ESQUEMA ELÉCTRICO D760M



MANUFACTURER'S DECLARATION OF INCORPORATION
(in accordance with European Directive 2006/42/EC App. II.B)

Manufacturer:

TAU S.r.l.

Address:

Via E. Fermi, 43
36066 Sandrigo (Vi)
ITALY

ENGLISH

Declares under its sole responsibility, that the product:
designed for automatic movement of:
for use in a:
complete with:

Electronic control unit
Swing Gates
Residential / Communities
Radioreceiver

Model:
Type:
Serial number:
Commercial name:

D760M
D760M
see silver label
Control panel for two single-phase motors
230V AC

Has been produced for incorporation on an access point (*swing gate*) of for assembly with other devices used to move such an access point, to constitute a machine in accordance with the Machinery Directive 2006/42/EC.

Also declares that this product complies with the essential safety requirements of the following EEC directives:

- **2014/35/EU Low Voltage Directive**
- **2014/30/EU Electromagnetic Compatibility Directive**

and, where required, with the Directive:

- **2014/53/EU Radio equipment and telecommunications terminal equipment**

Also declares that **it is not permitted to start up the machine** until the machine in which it is incorporated or of which it will be a component has been identified with the relative declaration of conformity with the provisions of Directive 2006/42/EC.

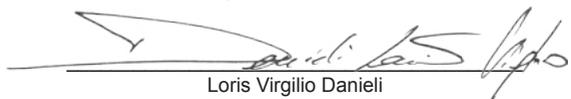
The following standards and technical specifications are applied:

EN 61000-6-2; EN 61000-6-3; EN 60335-1; ETSI EN 301 489-1 V1.9.2; ETSI EN 301 489-3 V1.6.1;
EN 300 220-2 V2.4.1; EN 12453:2000; EN 12445:2000; EN 60335-2-103.

The manufacturer undertakes to provide, on sufficiently motivated request by national authorities, all information pertinent to the quasi-machinery.

Sandrigo, 18/02/2018

Legal Representative


Loris Virgilio Danieli

Name and address of person authorised to draw up all pertinent technical documentation:

Loris Virgilio Danieli - via E. Fermi, 43 - 36066 Sandrigo (Vi) Italy

WARNINGS

This manual has been especially written for use by qualified fitters. No information given in this manual can be considered as being of interest to end users. This manual is enclosed with control unit D760M and may therefore not be used for different products!

Important information:

Disconnect the panel from the power supply before opening it.

The D760M control unit has been designed to control an electromechanical gear motor for automating gates and doors of all kinds.

Any other use is considered improper and is consequently forbidden by current laws.

Please note that the automation system you are going to install is classified as “machine construction” and therefore is included in the application of European directive 2006/42/EC (Machinery Directive).

This directive includes the following prescriptions:

- Only trained and qualified personnel should install the equipment;
- the installer must first make a “risk analysis” of the machine;
- the equipment must be installed in a correct and workmanlike manner in compliance with all the standards concerned;
- after installation, the machine owner must be given the “declaration of conformity”.

This product may only be installed and serviced by qualified personnel in compliance with current laws, regulations and directives.

When designing its products, TAU observes all applicable standards (please see the attached declaration of conformity) but it is of paramount importance that installers strictly observe the same standards when installing the system.

Unqualified personnel or those who are unaware of the standards applicable to the “automatic gates and doors” category may not install systems under any circumstances.

Whoever ignores such standards shall be held responsible for any damage caused by the system!

Do not install the unit before you have read all the instructions.

INSTALLATION

Before proceeding, make sure the mechanical components work correctly. Also check that the gear motor assembly has been installed according to the instructions. Then make sure that the power consumption of the gear motor is not greater than 3A (otherwise the control panel may not work properly).

THE EQUIPMENT MUST BE INSTALLED “EXPERTLY” BY QUALIFIED PERSONNEL AS REQUIRED BY LAW.

Note: it is compulsory to earth the system and to observe the safety regulations that are in force in each country.

IF THESE ABOVE INSTRUCTIONS ARE NOT FOLLOWED IT COULD PREJUDICE THE PROPER WORKING ORDER OF THE EQUIPMENT AND CREATE HAZARDOUS SITUATIONS FOR PEOPLE. FOR THIS REASON THE “MANUFACTURER” DECLINES ALL RESPONSIBILITY FOR ANY MALFUNCTIONING AND DAMAGES THUS RESULTING.

CONTROL CARD FOR TWO SINGLE-PHASE MOTORS 230V AC

The D760M panel features an electronic photocell control system which switches the external photocell transmitter on and off thereby causing the control unit microprocessor to check whether the relay switches correctly. If this does not happen, the control unit is automatically blocked.

- MICROPROCESSOR-CONTROLLED LOGIC
- SELF-DIAGNOSIS LED's
- LINE INPUT FUSE
- BUILT-IN TORQUE LIMITING DEVICE
- ELECTRONIC CONTROL OF SAFETY DEVICES
- PEDESTRIAN ENTRY FUNCTION
- BUILT-IN FLASHING LIGHT CIRCUIT
- 433.92 MHz 2 CHANNEL BUILT-IN RADIO RECEIVER (CH)
- "SLOW-DOWN" FUNCTION IN OPENING AND IN CLOSING PHASE

ATTENTION:

- do not use single cables (with one single wire), ex. telephone cables, in order to avoid breakdowns of the line and false contacts;
- do not re-use old pre-existing cables.

TESTING

When all connections have been made:

- All the green LED's must be on (each corresponds to a Normally Closed input).
- They only turn off when the safeties they are associated with are active.
- All the red LED's must be off (each corresponds to a Normally Open input) they only turn on when the commands they are associated with are active.
- The red Led DL7 must be always on (indicates the logic state of the control unit, see sect. "Diagnostics Led")

TECHNICAL CHARACTERISTICS

| | |
|---|-----------------|
| Power input to board | 230V AC - 50Hz |
| Max motors nominal power | 600 W ca. |
| Primary input line rapid fuse (F1 - 5x20) | F 3,15 A |
| Input voltage of motor circuits | 230V AC |
| Input voltage of auxiliary circuits | 24V AC |
| 24Vac line rapid fuse (F2 - 5x20) | F 500 mA |
| Logic circuit input voltage | 5V DC |
| Working temperature | -20°C ÷ + 55 °C |
| Box protected to | IP43 |

TERMINAL BOARD CONNECTIONS

Key:

N.C. = Normally Closed - N.O. = Normally Open

| Terminals | Function | Description |
|-----------|----------------|--|
| 1 - 2 | POWER SUPPLY | POWER input 230Vac, 50Hz, single-phase; 1= PHASE, ≠ EARTH, 2= NEUTRAL. |
| 3 - 4 | FLASHING LIGHT | FLASHING LIGHT output 230Vac, 20W max. The signal is already modulated for direct use. Flashing frequency is double during closing; |
| 5 - 6 - 7 | MOTOR M1 | MOTOR M1 power output (opens the leaf fitted with the electric lock), 230 Vac, max. 300 W. 5=CLOSE, 6=COMMON, 7=OPEN. Notice: connect the capacitor between terminals 5 and 7; |

| | | |
|--|---|---|
| 8 - 9 - 10 | MOTOR M2 | MOTOR M2 power output, 230 Vac, max. 300 W. 8=CLOSE, 9=COMMON., 10=OPEN. Notice: connect the capacitor between terminals 8 and 10; |
| 11 - 12 | OPEN/CLOSE | OPEN/CLOSE button input (contact normally open); for operating information see dip-switches 2 and 3 functions. (COMMON=11); |
|  | WARNING: with dip 7 to ON the input switches OPEN: automation open as long as the button is held down. On his release, the automation stops. | |
| 11 - 13 | PEDESTRIAN | N.O. PEDESTRIAN button contact input – commands total opening and closing of motor 1 – governed by dip-switches 2 and 3. (COMMON=11); |
|  | WARNING: with dip 7 to ON the input switches CLOSE: automation close as long as the button is held down. On his release, the automation stops. | |
| 11 - 14 | STOP | STOP button input (normally closed contact); this stops the automatic system. At the next command, the opposite operation to the previous one is performed (COMMON=9). Bridge the connectors if not used; |
| 15 - 18 | SENSITIVE EDGE | SENSITIVE EDGE input (potential free contact N.C., dip 10 OFF) or 8,2 KΩ RESISTIVE SENSITIVE EDGE (dip 10 ON); It works during both the opening and closing phases, causing the temporary stop of the automation and its partial movement reversal for 20cm, therefore freeing any obstacle (18=COMMON) Note: short-circuit if not used. |
| 16 - 18 | INTERNAL PHOTOCELLS | PHOTOCELL OR SAFETY DEVICE input INSIDE the automation (Normally Closed contact); COMMON=18. When these devices trigger during the opening phase, they temporarily stop the automation until the obstacle has been removed; during the closing phase they stop the automation and then totally open it again. Bridge the connectors if not used. |
| 17 - 18 | EXTERNAL PHOTOCELLS | PHOTOCELL OR SAFETY DEVICE input OUTSIDE the automation (Normally Closed contact); COMMON=18. Then these devices trigger during the closing phase, they stop the automation and then totally open it again. Bridge the connectors if not used. Notice: Because the control of the safety system (FOTOTEST) is performed on the photocell's transmitter, this must always be powered by terminals 25 – 27, therefore if this connection is broken the control unit will not accept any opening command. To eliminate the safety system control, position dip-switch 6 to OFF. |
| 19 - 20 | ELECTRIC LOCK | ELECTRIC LOCK power output 12 Vac max. 15 W; |
| 21 - 22 | 2 nd RADIO CH | 2nd RADIO CHANNEL output; the output mode can be selected through Dip Switches 7 - 8; Warning: to connect other devices to the 2nd Radio Channel (area lighting, pumps, etc.), use an additional auxiliary relay. |
| 23 - 24 | GATE OPEN WARNING LIGHT | GATE OPEN WARNING LIGHT output; 24 V ac, max 3W; the light lights with the same frequency as that of the flashing light for the entire opening and closing manoeuvre and remains on if the gate is open and off when the gate has closed; |
| 25 - 27 | PHOTOCELL TX | 24 Vac external transmitting photocell power supply output for safety device control (connect the external TX photocell only) max. of 2 photocell transmitters; |
| 26 - 27 | AUX | 24Vac output, 10W for the power supply of photocells, external receivers, etc. |
| 28 - 29 | AERIAL | AERIAL input (EARTH=28, SIGNAL=29); |

LOGIC ADJUSTMENTS

TRIMMER

| | |
|----------------|--|
| R. ANTA | second motor delay adjustment: during closing cycle from approx. 0 to 30 sec. (on top of the time that the card calculates automatically during the SETUP procedure); during opening from approx. 0 to 6 sec (on top of the time that the card calculates automatically during the SETUP procedure). |
| FR. M1 | Motor 1 torque adjustment (swing 1). The trimmer is set to provide sufficient thrust to work the gate without exceeding the limits established by current standards (EN 12453). Turning the trimmer clockwise (+) increases the motor torque, turning it anticlockwise (-) reduces it. |
| FR. M2 | Motor 2 torque adjustment (swing 2). The trimmer is set to provide sufficient thrust to work the gate without exceeding the limits established by current standards (EN 12453). Turning the trimmer clockwise (+) increases the motor torque, turning it anticlockwise (-) reduces it. |
| CH.AUTO | Automatic closing time adjustment from 2 to 120 seconds. |
| Notice: | turn the TRIMMER clockwise to increase adjustments; turn it anticlockwise to decrease. |

PROGRAMMING INSTRUCTIONS (SETUP)

If a transmitter has been previously programmed, it can be used to perform the following procedure. Otherwise, connect a Key Switch or a NO Pushbutton to the AP/CH wire terminals on the controller.

DOUBLE SWING GATE - DIP SWITCH # 4 in ON (Soft-Stop function enabled):

- 1 press and hold down for at least 5 seconds P1 and P2 buttons to activate the programming mode;
- 2 the DL7 LED will begin blinking fast to confirm that programming mode is active;
- 3 press AP/CH button or the remote control: both leaves will open;
- 4 once opening is complete, press AP/CH button or the remote control: both leaves will stop;
- 5 press AP/CH button or the remote control: the leaf #2 will close at standard speed;
- 6 press AP/CH button or the remote control when the leaf should start to decelerate;
- 7 when the leaf is completely closed press AP/CH button or the remote control (leaf #2 programming completed);
- 8 press AP/CH button or the remote control: the leaf #1 will close at standard speed;
- 9 press AP/CH button or the remote control when the leaf should start to decelerate;
- 10 when the leaf is completely closed press AP/CH button or the remote control (leaf #1 programming completed);
- 11 the DL7 LED will stop blinking and remain steady ON (programming completed and saved).

SINGLE SWING GATE - DIP SWITCH # 4 in ON (Soft-Stop function enabled):

- 1 press and hold down for at least 5 seconds P1 and P2 buttons to activate the programming mode;
- 2 the DL7 LED will begin blinking fast to confirm that programming mode is active;
- 3 press AP/CH button or the remote control: the leaf will open;
- 4 once opening is complete, press AP/CH button or the remote control: the leaf will stop;
- 5 press 4 times AP/CH button or the remote control: the leaf will close at standard speed;
- 6 press AP/CH button or the remote control when the leaf should start to decelerate;
- 7 when the leaf is completely closed press AP/CH button or the remote control (leaf programming completed);
- 8 the DL7 LED will stop blinking and remain steady ON (programming completed and saved).

GATE 2 WINGS - DIP SWITCH # 4 in OFF (Soft-Stop function disabled):

- 1 press and hold down for at least 5 seconds P1 and P2 buttons to activate the programming mode;
- 2 the DL7 LED will begin blinking fast to confirm that programming mode is active;

- 3 press AP/CH button or the remote control: both leaves will open;
- 4 once opening is complete, press AP/CH button or the remote control: both leaves will stop;
- 5 press AP/CH button or the remote control: the leaf #2 will close at standard speed;
- 6 when the leaf is completely closed press AP/CH button or the remote control (leaf #2 programming completed);
- 7 press AP/CH button or the remote control: the leaf #1 will close at standard speed;
- 8 when the leaf is completely closed press AP/CH button or the remote control (leaf #1 programming completed);
- 9 the DL7 LED will stop blinking and remain steady ON (programming completed and saved).

GATE 1 WINGS - DIP SWITCH # 4 in OFF (Soft-Stop function disabled):

- 1 press and hold down for at least 5 seconds P1 and P2 buttons to activate the programming mode;
- 2 the DL7 LED will begin blinking fast to confirm that programming mode is active;
- 3 press AP/CH button or the remote control: the leaf will open;
- 4 once opening is complete, press AP/CH button or the remote control: the leaf will stop;
- 5 press 3 times AP/CH button or the remote control: the leaf will close at standard speed;
- 6 when the leaf is completely closed press AP/CH button or the remote control (leaf programming completed);
- 7 the DL7 LED will stop blinking and remain steady ON (programming completed and saved).

Notice:

- **during the SETUP procedure the safety devices are disabled.**
- **STOP input will stop the programming at any time. The programming mode remains active and can be re-started from point 1**
- **while DL7 blinks, press and hold down for at least 5 seconds P1 and P2 buttons to kill exit programming mode**
- **set a working time slightly longer than necessary (a couple of seconds) to allow complete opening/closing of the leaves.**

DIP SWITCH

| | | | |
|---|--------------------------|------------|--|
| 1 | <i>AUTOMATIC CLOSING</i> | On | after opening, the gate automatically closes when the delay set on the T.C.A. trimmer expires; |
| | | Off | automatic closing disabled; |
| 2 | <i>2 / 4 STROKE</i> | On | with automatic closing enabled, a sequence of open/close commands causes the gate to OPENCLOSE-OPEN-CLOSE etc (see also dip switch 3); |
| | | Off | in the same conditions, the same command sequence causes the gate to OPEN-STOP-CLOSE-STOP-OPEN-STOP (step-by-step); |
| 3 | <i>NO REVERSE</i> | On | the gate ignores the close command while it is opening (NO REVERSE); |
| | | Off | the gate behaves according to the position of dip-switch n° 2; |
| 4 | <i>DECELERATION</i> | On | the deceleration function is on (see "PROGRAMMING INSTRUCTIONS"); |
| | | Off | the deceleration function is off; |
| 5 | <i>PRE-FLASHING</i> | On | the pre-flashing function enabled; |
| | | Off | the pre-flashing function disabled; |
| 6 | <i>FOTOTEST</i> | On | the "photocell test" function is enabled; |
| | | Off | the "photocell test" function is disabled. N.B.: to be used when the photocells are not used; |

| | | | |
|---|-----------------|------------|--|
| 7 | <i>MAN MODE</i> | On | enables the MAN mode: the OPEN / CLOSE input switches OPEN, the PEDESTRIAN input switches CLOSE; |
| | | Off | Normal function |



WARNING: with dip 7 ON the input OPEN / CLOSE (terminals 11-12) switches OPEN, the PEDESTRIAN input (terminals 11-13) switches CLOSE.

In MAN mode, it is not necessary to run the race setup, and the dip-switches 1, 2, 3 and 4 are not used.

| | | | |
|----|---------------------------------|------------|---|
| 8 | <i>2nd RADIO CH</i> | On | Bistable function active: To the impulse of transmitter the contact is activated and remains activated until the next pressure. |
| | | Off | Monostable function 2 sec active: To the impulse of transmitter the contact is activated and remains activated for 2 sec. |
| 9 | <i>OPENING RAM BLOW</i> | On | the "opening ram blow" function is on. This permits the release of the electric lock (to be used only in the presence of an electric lock); |
| | | Off | the "opening ram blow" function is off; |
| 10 | <i>SENSITIVE EDGE SELECTION</i> | On | RESISTIVE SENSITIVE EDGE (terminal no. 15) |
| | | Off | RESISTIVE EDGE - potential free contact N.C. (terminal no. 15) Note: if not used, keep the DIP in the OFF position. |

JUMPER J1

Bridged= following the connection of the external photocell contact (input 17 - 18), the gate closes automatically after 5 seconds.

Not bridged= function disconnected.

IMPORTANT:

Each pair of terminals attached to an NC contact that is not in use must be short-circuited in order to ensure the proper operation of the board.

The door's earthing system must comply with current standards. The manufacturer will accept no liability for any damage deriving from failure to comply with this requirement.

433.92 MHz BUILT-IN RADIO RECEIVER

The radio receiver can learn up to a maximum of 30 rolling codes (BUG2R, BUG4R, K-SLIM-RP, T-4RP) which can be set on the two channels as required.

The first channel directly commands the control board for opening the automatic device; the second channel commands a relay for a N.O. no-voltage output contact (terminals 21 and 22, max. 24 Vac, 1 A).

LEARNING SYSTEM FOR RADIO CONTROL DEVICES

P1 = OPEN/CLOSE

P2 = 2nd channel

- 1_ press button P1 briefly to associate a radio control device with the OPEN/CLOSE function;
- 2_ LED DL7 turns off to indicate that the code learning mode has been activated (if no code is entered within 10 seconds, the board exits the programming mode);
- 3_ press the button of the relative radio control device;
- 4_ LED DL7 turns on again to indicate that the code has been memorised (if this does not happen, wait 10 seconds and start again from point 1);
- 5_ to memorise codes to other radio control devices, repeat the procedure from point 1 up to a maximum of 30 transmitters;
- 6_ to memorise codes on the 2nd channel, repeat the procedure from point 1 using button P2 instead of P1;
- 7_ to exit the learning mode without memorising a code, press button P1 or P2 briefly.

Notice: if the maximum number of radio control devices (30) is exceeded, LED DL7 flashes rapidly for about 3 seconds without memorising the code.

REMOTE PROGRAMMING BY MEANS OF T-4RP and K-SLIM-RP (V 4.X)

With the new version of software V 4.X it is possible to carry out the remote self-learning of the new

version of transmitters T-4RP and K-SLIM-RP (V 4.X), that is without pressing the receiver's programming buttons.

It will be sufficient to have an already programmed transmitter in the receiver in order to start the procedure of remote programming of the new transmitters. Follow the procedure written on the instructions of the transmitter T-4RP and K-SLIM-RP (V 4.X).

CANCELLING CODES FROM RADIO CONTROL DEVICES

- 1_ keep button P1 pressed for 3 seconds in order to cancel all the associated radio control devices;
- 2_ LED DL7 flashes slowly to indicate that the cancellation mode has been activated;
- 3_ press button P1 again for 3 seconds;
- 4_ LED DL7 turns off for approx. 3 seconds and then remains steady to indicate that the code has been cancelled;
- 5_ repeat the procedure from point 1 using button P2 to cancel all the associated radio control devices;
- 6_ to exit the learning mode without memorising a code, press button P1 or P2 briefly.

DIAGNOSTICS LED

| | |
|--------------------|--|
| DL1 - Red | OPEN/CLOSE button red LED signal |
| DL2 - Red | PEDESTRIAN button red LED signal |
| DL3 - Green | STOP button green LED signal |
| DL4 - Green | SENSITIVE EDGE green LED signal |
| DL5 - Green | INTERNAL PHOTOCELL green LED signal |
| DL6 - Green | EXTERNAL PHOTOCELL green LED signal |
| DL7 - Red | RADIO CONTROLS programming and ERRORS red LED signal |

DL7 LED STATUS AND ERROR CODES

| | |
|----------------------------------|---------------------------|
| <i>Always on</i> = | Regular operation |
| <i>2 flashes</i> = | Photo-cell Test Error |
| <i>7 flashes</i> = | Missing Programming Error |
| <i>Continuous fast flashes</i> = | Programming Mode Active |

MALFUNCTIONS: POSSIBLE CAUSES AND SOLUTION

The automation does not start

- a- Check there is 230Vac power supply with the multimeter;
- b- Check that the NC contacts of the card are actually normally closed (4 green LEDs on);
- c- Set dip 6 (phototest) to OFF;
- d- Check that the fuses are intact with the multimeter.

The radio control has very little range

- a- Check that the ground and the aerial signal connections have not been inverted;
- b- Do not make joints to increase the length of the aerial wire;
- c- Do not install the aerial in a low position or behind walls or pillars;
- d- Check the state of the radio control batteries.

The gate opens the wrong way

Invert the motor connections on the terminal block (terminals 5 and 7 for motor 1; terminals 8 and 10 for motor 2);

GUARANTEE: GENERAL CONDITIONS

TAU guarantees this product for a period of 24 months from the date of purchase (as proved by the sales document, receipt or invoice).

This guarantee covers the repair or replacement at TAU's expense (ex-works TAU: packing and transport at the customer's expense) of parts that TAU recognises as being faulty as regards work-

manship or materials.

For visits to the customer's facilities, also during the guarantee period, a "Call-out fee" will be charged for travelling expenses and labour costs.

The guarantee does not cover the following cases:

- If the fault was caused by an installation that was not performed according to the instructions provided by the company inside the product pack.
- If original TAU spare parts were not used to install the product.
- If the damage was caused by an Act of God, tampering, overvoltage, incorrect power supply, improper repairs, incorrect installation, or other reasons that do not depend on TAU.
- If a specialised maintenance man does not carry out routine maintenance operations according to the instructions provided by the company inside the product pack.
- Wear of components.

The repair or replacement of pieces under guarantee does not extend the guarantee period.

In case of industrial, professional or similar use, this warranty is valid for 12 months.