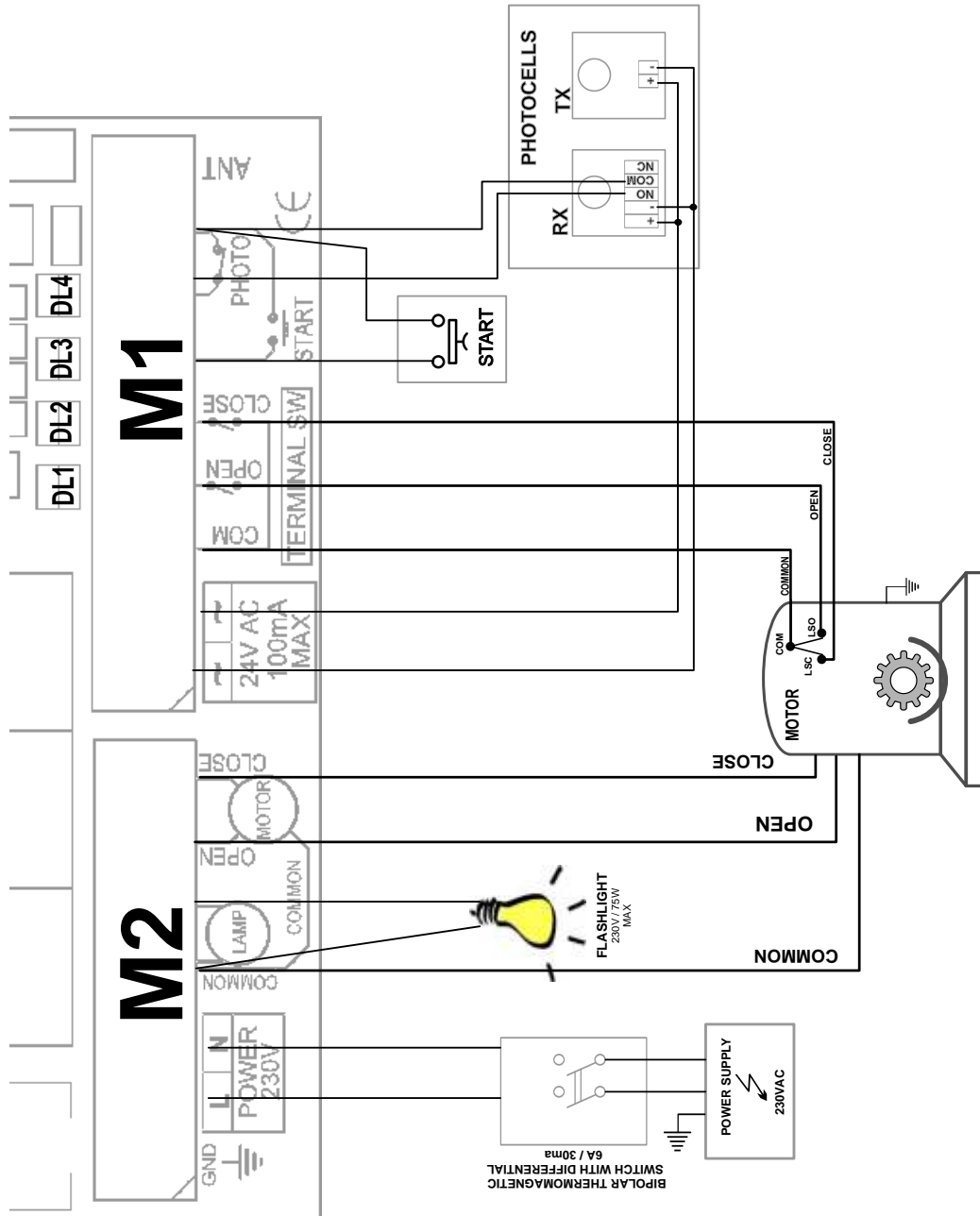# S-5070-D

SLIDING GATE WIRING CONNECTION - INSTALLATION

INSTALLATION AND PROGRAMMING MANUAL FOR S-5070-D CONTROL BOARD FOR 230 Vac SLIDING GATES

DESCRIPTION

TR1 - TR4	=	Adjustable trimmers
DSW	=	Micro Switches
DL1 – DL5	=	LEDs
F1	=	230Vac Fuse
K1 – K3	=	Relay
TF1	=	Transformer
U1	=	Micro Control Unit
M1	=	Low Voltage I/O Terminal
M2	=	230Vac I/O Terminal

INTRODUCTION
SR412 control board is suitable for 230 Vac actuators for sliding gates.
The max absorption of the device is 650 W per 230Vac 50Hz.
The setup of the parameters must be carried out after the installation of all the equipment.

ATTENTION
The Product must be installed by qualified personnel who can carry out the installation operation strictly in compliance with safety rules. The device must not be used incorrectly or for any purposes other than the ones designed for. Before proceeding with the installation it is necessary to read the instruction manual carefully in order to avoid danger to either the users or the equipment. It is necessary to power the device using a 6A bipolar thermomagnetic switch equipped with a differential with an operating current of 0.03 A. Before currying out any installation or maintenance operations turn off the power supply to the device with the bipolar switch. The equipment must not be tampered with or modified in any way. it is necessary to turn off the power supply to the equipment before installing it or opening the enclosure.

The manufacturer reserves the right to make changes to the product without prior notice. Therefore this manual may not correspond exactly to the product specifications.

INSTALLATION

Prior to the electric connection shut down the 230V 50Hz power supply and adjust motor torch to minimun
Use 0,5mm^2 to connect the buttons, photocells and 24V power supply. For connections with the motor and lights use at least 1,5mm^2 cables. For 230V 50Hz connections and motor connections use at least 2.5mm^2 cables.
- It is very important to firmly tight the signal cables of terminal K2
and power cables on terminal K1 separately to avoid errors. Use Jumpers to all N.C. inputs when not in use
- It is important to connect a capacitor to C an O contact on terminal M2.
- If one of the . . (START) is closed, or one of the N.C.inputs is open the TEST_LED blinks fast. In this case track programming is not available.

MAINTENACE

There is 5 X 20 fuse for the 230Vac line. F1: Line fuse 230Vac = 6,3 A Slow Burning

Prior to replacing the fuses the 230Vac power supply must be turned off from the main electrical supply. The value of the fuses must not be altered. There is no other element on the control board that can be repaired or replaced from installation personnel. For any other issue contact technical support.

DIP-1	On	Condominium Operation
	Off	Step By Step Operation
DIP-2	On	Auto Close Enabled (adjust with Trimmer)
	Off	Auto Close Disabled
DIP-3	On	Operation Time Programming (Normal Mode)
	Off	Operation Time Programming (Easy Mode)
DIP-4	On	Preflashing Enabled
	Off	Preflashing Disabled
DIP-5	On	Lamp
	Off	Beacon
DIP-6	On	Retrigger Enabled
	Off	Retrigger Disabled

OPERATION MODES

CONDOMINIUM - *auto close enabled*
When the door is close or closing and you press START button then the door opens.
When the door is opening , START command is ignored, while during auto close it resets time.

STEP BY STEP: OPEN - STOP - CLOSE - STOP - *auto close disabled*
When the door is closed and you press START button, the door opens. During opening movement if START button is pressed the door stops. Then with another START button pres, the door closes. If you press START button again the door stops.

TR1-DELAY adjusts auto close time (the time the door remains open before closes automatically),with range from 1 to 120 seconds.
TR2-TORQUE adjusts motor torch. For motors with clutch or hydraulic oil pressure you must set TR2 to maximum (that is one full turn to the right).
TR3-SLOW adjusts door speed at slow motion mode, which can be set according to safety parameters. By setting TR3 to maximum (that is one full turn to the right) slow speed is disabled. (see. Operation time programming without slow speed).
TR4 -BRAKE adjusts brake sensitivity (to disable brake set trimmer to minimum).

Trimmer	Operation	Operation Range
TR1 - DELAY	Auto close	2 – 120 seconds
TR2 - TORQUE	Motor torchque	20 – 100 %
TR3 - SLOW	Slow Speed	0 – 100 %
TR4 - BRAKE	Brake Power	0 – 50 % (DIP-8 -> OFF) 0 – 100 % (DIP-8 -> ON)

REMOTE CONTROL PROGRAMMING

S-5070-D control board has a built in receiver that can store up to 128 Rolling coded remote controls or one fixed coded remote control.

Remote control programming for total door open

If the door is closed, press R.C and hold it until TEST LED starts blinking. Release R.C. and within 10 seconds, press the remote control you want to program. When the procedure is completed TEST LED and the FLASHING LIGHT must turn ON ant then OFF simultaneously. For rolling coded remote controls repeat procedure for each control. For Fixed coded remote controls just copy the remote controls.

Remote control programmin for pedestrian

When the door is closed press R.C until TEST LED starts blinking. Do not relase TEST LED starts blinking faster. Realease R.C Within 10 seconds, press the button of the remote control you want to program.
When the procedure is completed TEST LED and the FLASHING LIGHT must turn ON ant then OFF simultaneously. For rolling coded remote controls repeat procedure for each control. For Fixed coded remote controls just copy the remote controls.

Erase all remote controls

When the door is closed press R.C and hold it until TEST LED starts blinking. Do not relase TEST LED until it starts blinking faster. μ   TEST LED. When all remote controls are erased from memory TEST LED and the FLASHING LIGHT must turn ON ant then OFF simultaneously.

Control Board Programming - Operation Time Programming

The user can program the control board in 2 (two) ways.

1. EASY programming with 2 Steps.
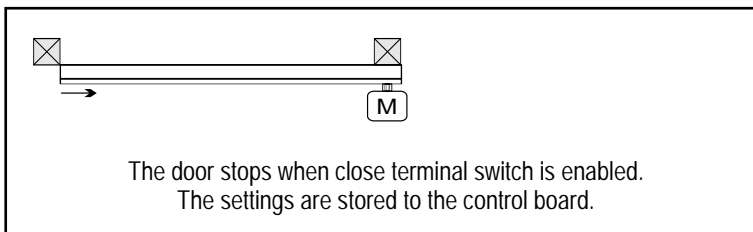In this way the operations time is set and the control board automatically sets slow speed control.
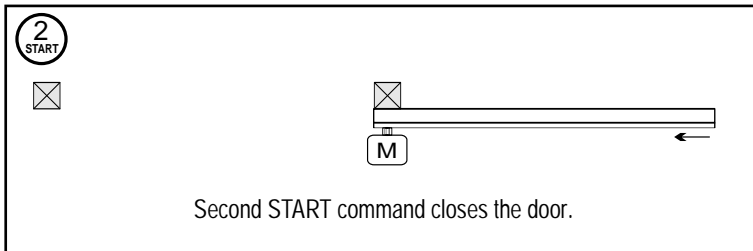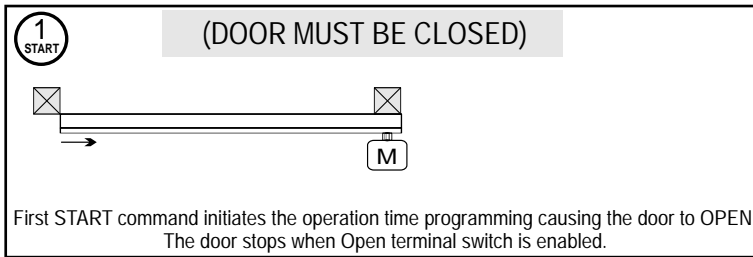
2. ADVANCED programming with 7 Steps.
In this way the user may program normal and slow speed at will.

EASY programming - 2 Steps
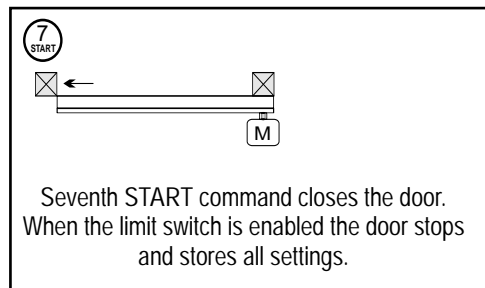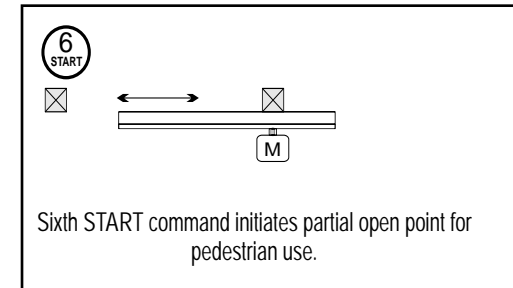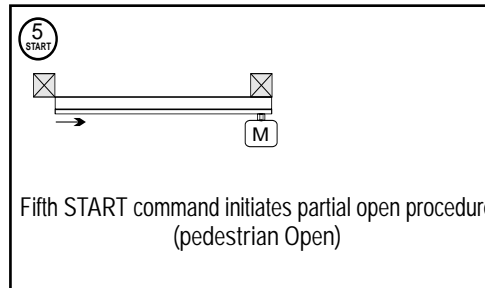
Attention!!!   The DOOR MUST BE CLOSED

- Press DOOR for at least 3 seconds until TEST LED starts blinking and follow the procedure bellow.
- Programming ends when TEST LED turns off.
- The control board automatically sets the slow speed time (3 sec).

1 START — (DOOR MUST BE CLOSED)

First START command initiates the operation time programming causing the door to OPEN.
The door stops when Open terminal switch is enabled.

2 START

Second START command closes the door.

The door stops when close terminal switch is enabled.
The settings are stored to the control board.

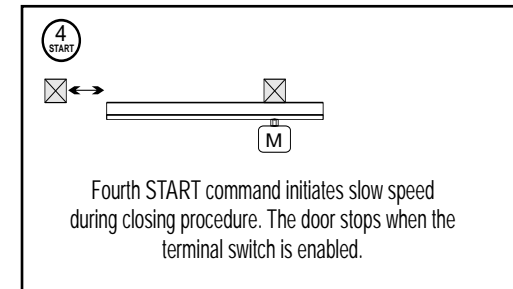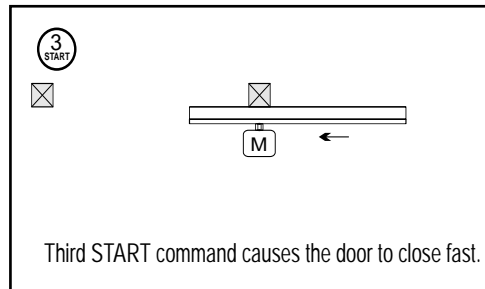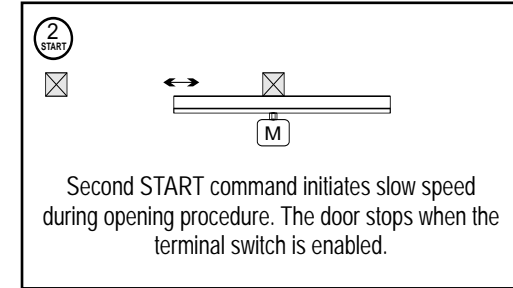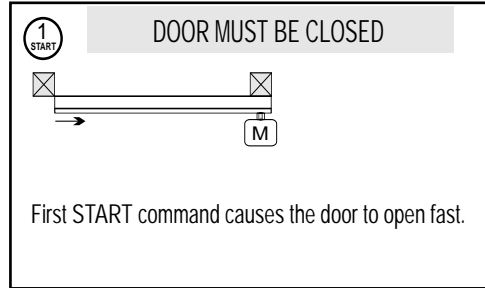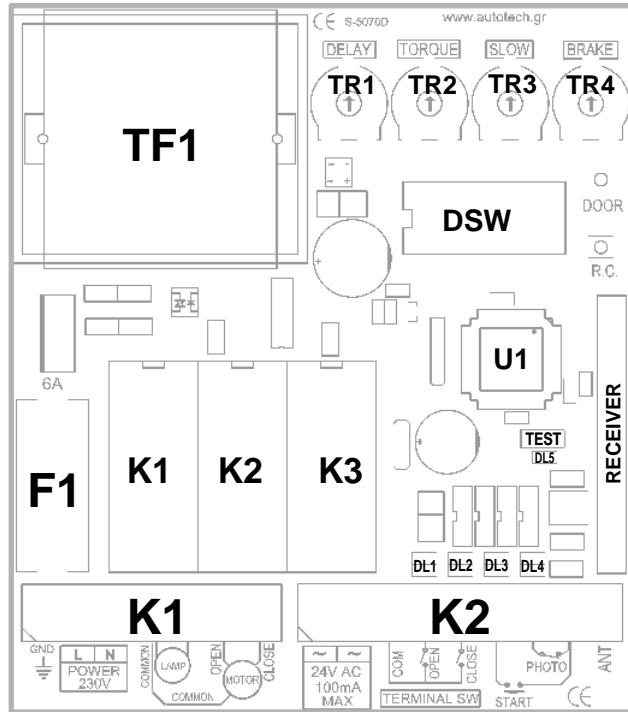## ADVANCED programming - 7 Steps

Attention!!!   The DOOR MUST BE CLOSED

- Press DOOR for at least 3 seconds until TEST LED starts blinking and follow the procedure bellow.
- Programming ends when TEST LED turns off.

1 START — DOOR MUST BE CLOSED

First START command causes the door to open fast.

2 START

Second START command initiates slow speed during opening procedure. The door stops when the terminal switch is enabled.

3 START

Third START command causes the door to close fast.

4 START

Fourth START command initiates slow speed during closing procedure. The door stops when the terminal switch is enabled.

5 START

Fifth START command initiates partial open procedure (pedestrian Open)

6 START

Sixth START command initiates partial open point for pedestrian use.

7 START

Seventh START command closes the door.
When the limit switch is enabled the door stops and stores all settings.

S-5070-D

Terminal K1

COM	=	Input Common
PHOTO	=	External Photocell Command Input N.C.
START	=	Button Input N.O. (OPEN / CLOSE)
CLOSE	=	Close Limit Switch Contact N.C.
OPEN	=	Open Limit Switch Contact N.C.
COM	=	Limit Switch Common
24V	=	24VAC Power Suuply Output For Peripherals

Teminal K2

GND	=	Ground Connection
L	=	Line Input 230V 50Hz
N	=	Neutral Input 230V 50Hz (Electric Light Common)
COM	=	Motor / Lamp Common
LAMP	=	Electric Light 230V 50Hz 75 W max.
OPEN	=	Motor Open
CLOSE	=	Motor Close

Declaration of Conformity

(No: CE-0108)

We *AutoTech Georgia Kapsali, Gionas 11, Peristeri, 12133, Athens, Greece,*

declare under our sole responsibility that the product:

Name: Control board for sliding gates motor

Model: S5070D

to which this declaration relates it is in conformity with the essential requirements of:

2014/53/EU – Radio Equipment Directive (RED)
2011/65/EU – RoHS Directive
2012/19/EU – WEEE Directive

For the evaluation of the compliance with these Directives and Regulations, the following standards were applied:

SAFETY (article 3.1.a of RED)	EN 60950-1:2006+A11:2009+A1:2010+A12:2011+A2:2013
	EN 60335-1:2012+A11:2014+A13:2017
HEALTH (article 3.1.a of RED)	EN 62479:2010
EMC (article 3.1.b of RED)	ETSI EN 303 446-1 V1.1.0 (2017-03)
SPECTRUM	ETSI EN 300 220-1 V3.1.1 (2017-02)
(article 3.2 of RED)	ETSI EN 300 220-2 V3.1.1 (2017-02)
RoHs	EN 50581:2012
WEEE	EN 50419:2006

NOTE: It is important that the product is subjected to a correct installation, use and maintenance, conforming to intended purpose, applicable regulations and standards, to supplier's instructions and user's manual.

Signed for and on behalf of: AutoTech Georgia Kapsali

Place and date of issue: Athens 01/06/2017

Name, function: Antonios Apergis   Signature: