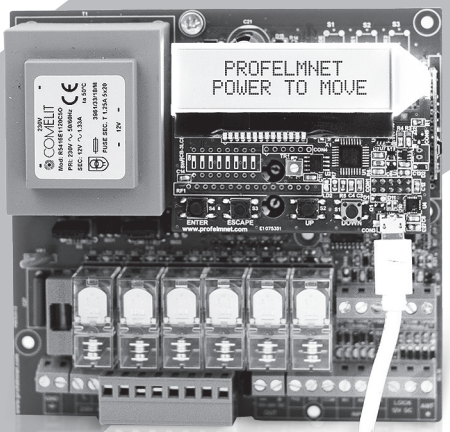
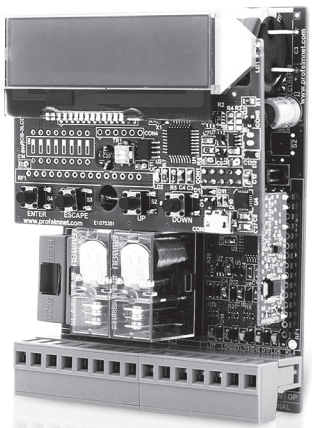
Profelmnet

THE POWER TO MOVE

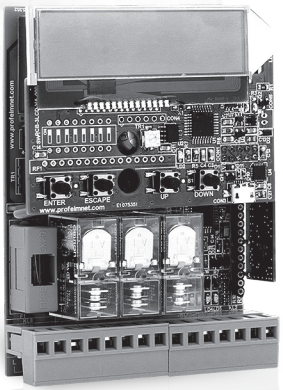
SERIES 40



4114



4050



4033

THE POWER TO MOVE

INDEX

Index	3
Introduction series 40, CE Declaration of Conformity	4
Warnings for the installer, Waste of electrical and electronic devices (WEEE)	5
4033 Wiring diagram, Technical characteristics	6 - 7
4050 Wiring diagram, Technical characteristics	8 - 9
4114 Wiring diagram, Technical characteristics	10 - 11
LCD DISPLAY Configuration menu	12 -13
Settings - Configuration	14 -19
MOTOR TYPE (model 4033)	14
TERMINAL SWITCHES	14
PHOTOCELL	14
PHOTOCELL 1 (model 4114)	14
PHOTOCELL 2 (model 4114)	14
BUTTON	14
BLINKER	14
LOCK (model 4114)	14
DELAY TIME (model 4114)	14
SAFETY EDGE	14
MOTOR BRAKE (model 4033)	14
DECELERATION	14
OPERATING TIME	15
CODIFICATION	16
REMOTES	16 -17
MOTOR DIRECTION	18
AUTO - CLOSING	18
INITIAL FORCE	18
PEDESTRIAN TIME	18
PIN	19
LANGUAGE	19
TROUBLE-SHOOTING	19

SERIES 40

Series 40 is a state of the art LCD integrated automation product line. A combination of technology, innovation and upgraded features. With series 40, Profelmnet presents a totally sophisticated product line in terms of capabilities and functions, maintaining the universal size of the board. User friendly menu, quick installation, one type of board for all types of installations, durability in hardware, security for the installer.

Series 40 models are:

4033 automation for rolling shutters, sliding gates, one-leaf swing gates, barriers, garage doors 230VAC

4050 automation for sliding gates, one-leaf swing gates, barriers, garage doors 24VDC

4114 automation for double motors 230VAC

CE DECLARATION OF CONFORMITY

The manufacturer L.PSARROS & SIA OE declares that the products 4050, 4033, 4114 are according to European Directives requirements of **RADIO EQUIPMENT DIRECTIVE (RED) 2014/53/EU and ELECTROMAGNETIC COMPATIBILITY EMC 2004/108/EC**

and satisfies all the applicable standards to the product within these directives as follows:

EN 62311:2008
EN 62368-1: 2014
EN 61000-6-1 : 2007
EN 61000-6-3: 2007 + A1: 2011
EN ETSI 301 489-1
EN ETSI 301 489-3
EN ETSI 300 220-2
EN ETSI 300 220 -3-1
EN ETSI 300 220 -3-2

Profelmnet
L. PSARROS AND SIA OE
ELECTRONIC AUTOMATION
LEOF. AGIOU DIMITRIOU 286A
17342 ATHENS GREECE
VAT NUMBER EL800845047
TEL. 0030 210 9850244

LABROS PSARROS

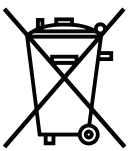
Electronics Engineer
Technical Director

WARNING FOR THE INSTALLER

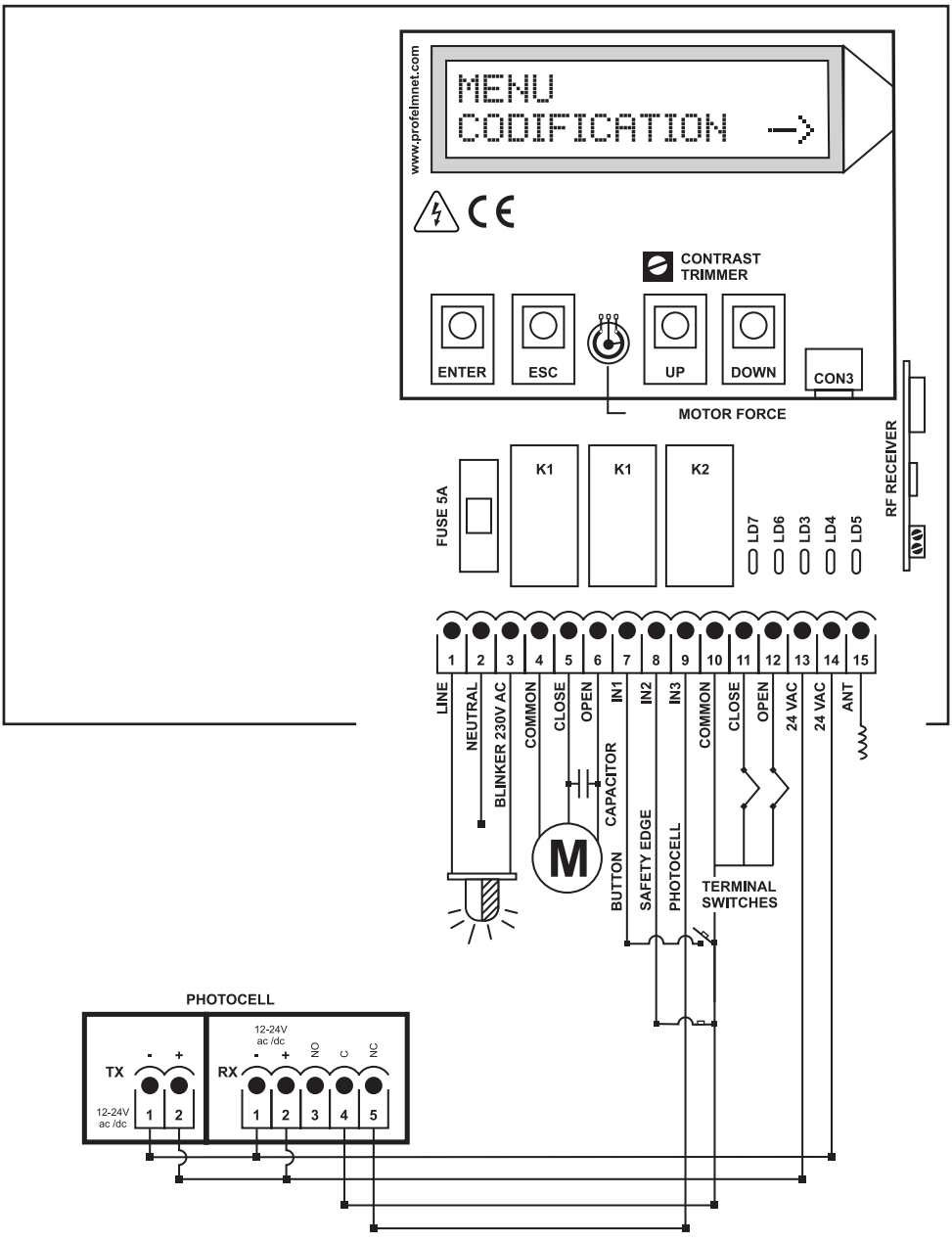
1. ATTENTION! To ensure the safety of people, it is important that you read all the following instructions. Incorrect installation or incorrect use of the product could cause serious harm to people
2. Carefully read the instructions before beginning to install the product
3. This product was designed and built strictly for the use indicated in this documentation Any other use, not expressly indicated here, could compromise the good condition/ operation of the product and/or be a source of danger
4. Store these instructions for future reference
5. Before attempting any job on the system, cut out electrical power
6. Make sure that a differential switch with threshold of 0.03 A is fitted upstream of the system
7. Do not in any way modify the components of the automated system
8. Do not allow children or adults to stay near the product while it is operating
9. Keep remote controls or other pulse generators away from children, to prevent the automated system from being activated involuntarily
10. The user must not attempt any kind of repair or direct action whatever and contact qualified personnel only
11. Profelmnet as a manufacturer reserves the right to make changes to the product without notice
12. Anything not expressly specified in these instructions is not permitted

WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT (WEEE)

In accordance with the European Directive 2002/96 / EC about waste electrical and electronic equipment (WEEE), the presence of this symbol (figure 1) on the product(s) or accompanying documents means that used electrical and electronic equipment (WEEE) should not be mixed with general household waste. For proper treatment, recovery and recycling, please take this product(s) to designated collection points where it will be accepted free of charge. Alternatively, in some countries, you may be able to return your products to your local retailer upon purchase of an equivalent new product.



4033 Wiring diagram for automation of rolling shutters, sliding gates, one-leaf swing gates, barriers, garage doors 230VAC



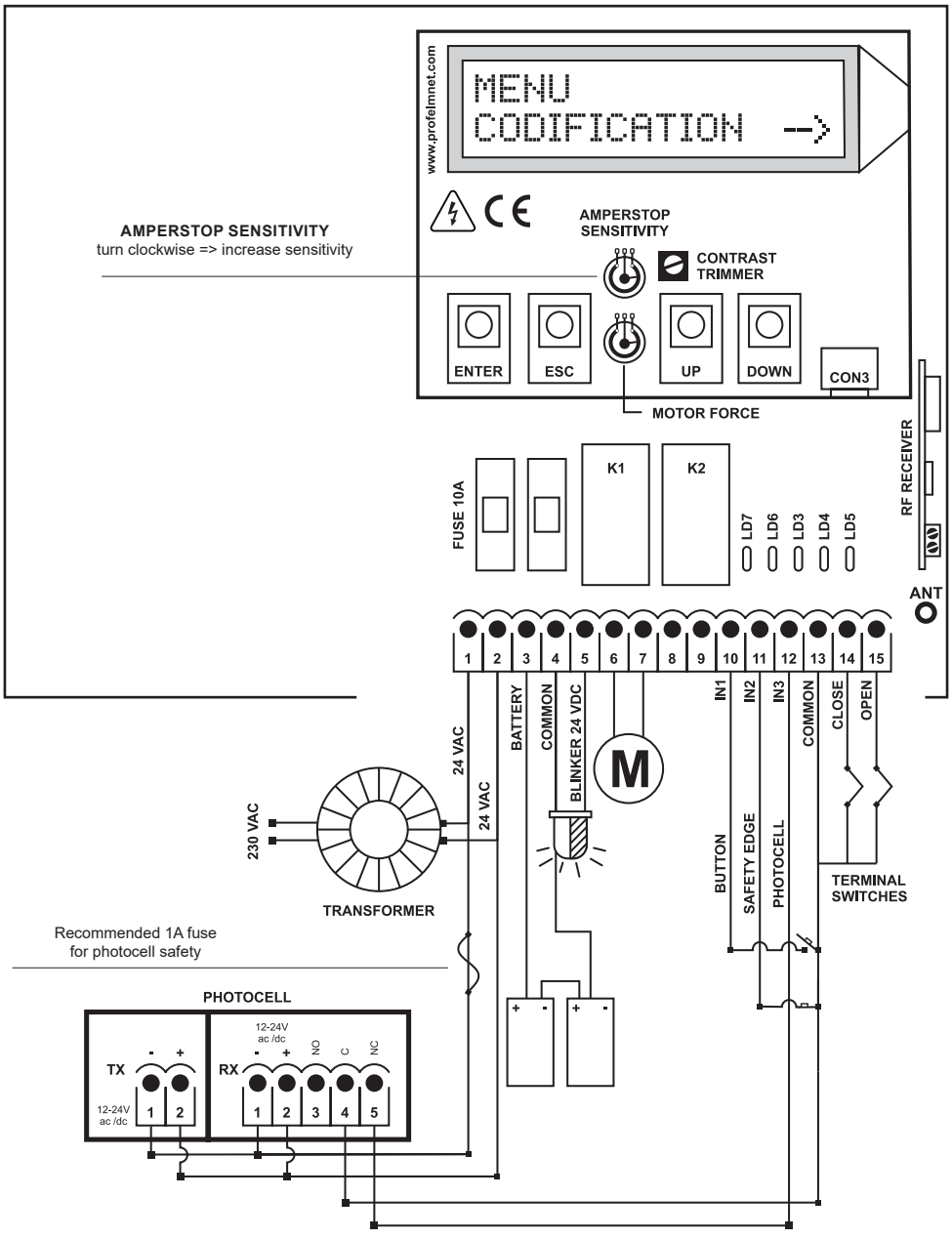
4033 Technical characteristics

Power supply	230VAC /50 Hz
Max. Motor power	1200W
Box dimensions	9.5cm X 4.5cm X 13cm
Control board dimensions	7.5cm X 3cm X 10.5cm
Fuse 230VAC	5A
Fuse 24VAC	150mA
Blinker light power supply	230VAC
Photocell power supply	24VAC/100 mA
Remotes memory	removable memory up to 300 remotes
Temperature	-20° C + 60° C

Electrical connections

1	Line
2	Neutral
1+3	Blinker 230VAC
4	Motor common
5	Motor close
6	Motor open
7+10	Button - NO
8+10	Safety edge - N.C
9+10	Photocell - N.C
10	Terminal switches & accessories common
11+10	Close terminal switch - N.C
12+10	Open terminal switch - N.C
13+14	Accessories power supply 24VAC
15	Antenna

4050 Wiring diagram for automation for automation of sliding gates, one-leaf swing gates, barriers, garage doors 24VDC



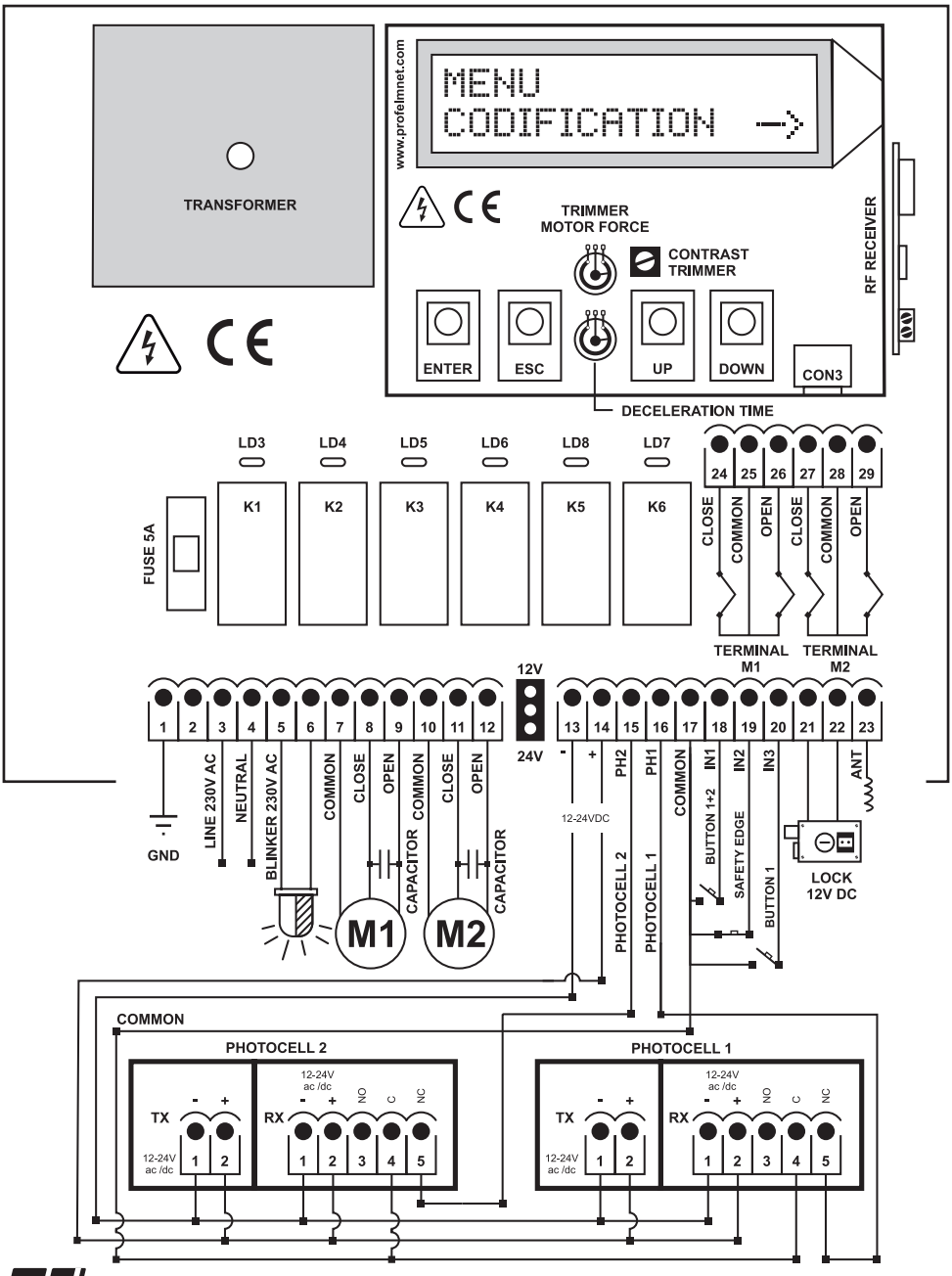
4050 Technical characteristics

Power supply	24VAC
Max. Motor power	200W
Box dimensions	9.5cm X 4.5cm X 13cm
Control board dimensions	7.5cm X 3cm X 10.5cm
Fuse 24VAC	10A
Battery fuse	10A
Blinker power supply	24VDC /500mA
Photocell power supply	24VAC
Battery type	2 X12V /6Ah in
Type of transformer	Toroidal 20-24VAC /130VA
Remotes memory	Removable memory up to 300 remotes
Temperature	-20°C + 60°C

Electrical connections

1	+ 20VAC
2	-20VAC
3-4	Battery
4	Common Battery & Blinker Light
5-4	Blinker light
6	Motor close
7	Motor open
8	Not used
9	Not used
10+13	Button - N.O
11+13	Safety edge - N.C
12+13	Photocell - N.C
13	Common accessories & terminal switches
14 +13	Close terminal switches - N.C
15 +13	Open terminal switches - N.C

4114 Wiring diagram for automation of double motors 230VAC



4114 Technical characteristics

Power supply	230VAC /50 Hz
Max. Motor power	2400W in total
Box dimensions	25cm X19.5cm X10cm
Control board dimensions	13cm X13.5cm X 4.5cm
Fuse 230VAC	5A
Fuse 12-24VDC	500mA
Blinker light power supply	230VAC
Photocell power supply	12 or 24VDC (jumper)
Lock power supply	12VDC
Remotes memory	Removable memory up to 300 remotes
Temperature	-20ºC + 60ºC

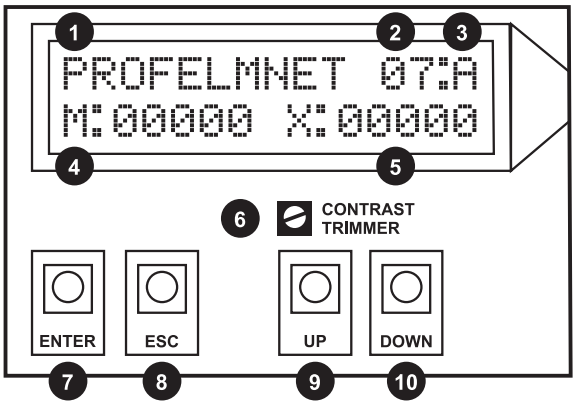
Electrical connections

1	Ground	16+17	Photocell 1
2	Not used	17	Common accessories
3	Line	18+17	Button 1+2 - N.O
4	Neutral	19+17	Safety edge - N.C
5-6	Blinker light	20+17	Button motor 1- N.O
7	Common motor 1	21+22	Lock 12VDC 5Watt
8	Close motor 1	23	Antenna
9	Open motor 1	24+25	Close terminal switch motor 1-N.C
10	Common motor 2	25	Common terminal switch motor 1
11	Close motor 2	26+25	Open terminal switch motor 1-N.C
12	Open motor 2	27+28	Close terminal switch motor 2-N.C
13-14	Power supply 12-24VDC	28	Common terminal switch motor 2
15+17	Photocell 2	29+28	Open terminal switch motor 2-N.C

CONFIGURATION MENU

Series 40 has an advanced menu system using integrated keyboard and backlight LCD display on the board to make configuration and maintenance easy and fast . The logic of the programming is the same among the various models of series. The user follows the same steps and philosophy.

MAIN LCD DISPLAY



1. Customer name
2. Customer code
3. Codification

   A = Rolling keeloq (PSR)
   B = Open rolling
   C = Fixed
   D = Profelmnet-PN rolling

4. Number of control board's activation
5. Minutes of motor's operation
6. Trimmer of contrast adjustment

The user is able to adjust the level of LCD DISPLAY contrast

7. Key ENTER:

Enter the main menu and select /save configuration

8. Key ESC:

Exit from the main menu or the sub-menus

9 10. Keys UP and DOWN:

Navigation through the sub-menus and settings. The various settings alternate cyclically as the following table shows (table page 13)

NOTE: Before installation, the familiarization with the keyboard of LCD screen and configuration menu is suggested

CONFIGURATION MENU

4033	4033	4050	4114
MOTOR TYPE	**MOTOR TYPE**		
→ SHUTTER	→ SHUTTER		
→ SHUTTER DEAD-MAN	→ SHUTTER DEAD-MAN		
→ SHUTTER 2-CHANNELS	→ SHUTTER 2-CHANNELS		
→ SLIDING	→ SLIDING		
→ SWING	→ SWING		
→ BARRIER	→ BARRIER		
CODIFICATION	**CODIFICATION**	**CODIFICATION**	**CODIFICATION**
→ KEELOQ ROLLING	→ KEELOQ ROLLING	→ KEELOQ ROLLING	→ KEELOQ ROLLING
→ OPEN ROLLING	→ OPEN ROLLING	→ OPEN ROLLING	→ OPEN ROLLING
→ FIXED	→ FIXED	→ FIXED	→ FIXED
→ PROFELMNET	→ PROFELMNET	→ PROFELMNET	→ PROFELMNET
REMOTES	**REMOTES**	**REMOTES**	**REMOTES**
→ SAVE / SAVE CHANNEL ↑	→ SAVE	→ SAVE	→ SAVE
→ PEDESTRIAN SAVE/ SAVE CHANNEL ↓	→ PEDESTRIAN SAVE	→ PEDESTRIAN SAVE	→ PEDESTRIAN SAVE
→ TOTAL DELETION	→ TOTAL DELETION	→ TOTAL DELETION	→ TOTAL DELETION
→ USER DELETION	→ USER DELETION	→ USER DELETION	→ USER DELETION
	TERMINAL SWITCHES	**TERMINAL SWITCHES**	**TERMINAL SWITCHES**
PHOTOCELL	**PHOTOCELL**	**PHOTOCELL**	**PHOTOCELL 1**
	BRAKE		**PHOTOCELL 2**
MOTOR DIRECTION	**MOTOR DIRECTION**	**MOTOR DIRECTION**	
BUTTON	**BUTTON**	**BUTTON**	**BUTTON**
SAFETY EDGE	**SAFETY EDGE**	**SAFETY EDGE**	**SAFETY EDGE**
BLINKER	**BLINKER**	**BLINKER**	**BLINKER**
			LOCK
OPERATING TIME	**OPERATING TIME**	**OPERATING TIME**	**OPERATING TIME**
AUTO-CLOSING	**AUTO-CLOSING**	**AUTO-CLOSING**	**AUTO-CLOSING**
PEDESTRIAN TIME	**PEDESTRIAN TIME**	**PEDESTRIAN TIME**	**DELAY TIME**
	DECELERATION	**DECELERATION**	
	INITIAL FORCE	**INITIAL FORCE**	
PIN	**PIN**	**PIN**	**PIN**
LANGUAGE	**LANGUAGE**	**LANGUAGE**	**LANGUAGE**

SETTINGS - CONFIGURATION

Based on the settings needed, the user follows the instructions below

To navigate through sub-menu → keys UP ↑ and DOWN ↓

To enter the menu category → keys ENTER

4033 MOTOR TYPE	ENTER → access the menu Use UP ↑ and DOWN ↓ keys for navigation in the submenu SLIDING, SWING, BARRIER, SHUTTER, SHUTTER DEAD-MAN, SHUTTER 2- CHANNELS ENTER → validate the selection			
NOTE: Shutter DEAD-MAN	→ Motor works clockwise while pressing remote button UP ↑ → Motor works anticlockwise while pressing remote button DOWN ↓			
Shutter 2-channels	→ 1st channel ↑ and STOP → 2nd channel ↓ and STOP			
TERMINAL SWITCHES	ENTER →	ON	ENTER →	OFF
PHOTOCELL	ENTER →	ON	ENTER →	OFF
4114 PHOTOCELL 1	ENTER →	ON	ENTER →	OFF
4114 PHOTOCELL 2	ENTER →	ON	ENTER →	OFF
BUTTON	ENTER →	NORMAL (start - stop - down)		
	ENTER →	ONLY OPEN (In case of barrier)		
	ENTER →	INACTIVE		
BLINKER	ENTER →	FLASH (blinks while motor is moving)		
	ENTER →	STABLE (steady light for 2 minutes)		
4114 LOCK	ENTER →	ON	ENTER →	OFF
4114 DELAY TIME (1+2)	ENTER →	ON	ENTER →	OFF
SAFETY EDGE	ENTER →	ON	ENTER →	OFF
4033 BRAKE	ENTER →	ON	ENTER →	OFF
DECELARATION	ENTER →	OFF		
	ENTER →	50% (DEFAULT value of deceleration)		
	ENTER →	10%-50% (use trimmer of control board to REDUSE deceleration power)		
Model 4114:	DEFAULT deceleration time, 2 seconds before end of route. Use trimmer of control board to adjust time of deceleration.			

SETTINGS - CONFIGURATION

Based on the settings needed, the user follows the instructions below:

OPERATING TIME	Gate / Gates are in fully closed position ENTER → access the menu
In case of motor with terminal switches:	ENTER → the time counter of control board starts • The LCD screen indicates the seconds of operating time • The motor starts moving as indicator • The operating time is saved automatically, when the motor reaches the terminal switch
In case of motors without terminal switches – physical stops	ENTER → the time counter of control board starts • The LCD screen indicates the seconds of operating time • The motor starts moving as indicator ENTER → at the end of the route to SAVE the operating time
In case of model 4114 (2 motors installed):	ENTER → the time counter of control board starts for MOTOR 1 • The LCD screen indicates the seconds of operating time for MOTOR 1 • The motor 1 starts moving as indicator ENTER → at the end of the route to SAVE the operating time for MOTOR 1

After 1 second, the time counter of MOTOR 2 starts automatically

• The motor 2 starts moving as indicator

ENTER → at the end of the route to SAVE the operating time for MOTOR 2

SETTINGS - CONFIGURATION

CODIFICATION

ENTER → access the menu

Use UP ↑ and DOWN ↓ keys to navigate the sub-menu

→ ROLLING (KEELOQ) → ENTER to validate the selection

→ OPEN ROLLING (KEELOQ) → ENTER to validate the selection

The open rolling codification accepts various rolling code remotes from different producers

→ FIXED → ENTER to validate the selection

→ PROFELMNET → ENTER to validate the selection

PROFELMNET is PN rolling codification

NOTE: The automation is able to work with just ONE codification. Two different codification are not supported simultaneously. Total deletion of previous memory is required.

REMOTES

ENTER → access the menu

→ SAVE REMOTES → ENTER

The user starts pressing the remotes that he wants to save sequentially. The motor starts moving as indicator of remotes saving.

Model 4033 - in case of shutter DEAD-MAN or 2- CHANNELS

→ SAVE CHANNEL UP ↑ → ENTER

The user starts pressing the remotes that he wants to save sequentially for shutter command ONLY OPEN

→ SAVE CHANNEL DOWN ↓ → ENTER

The user starts pressing the remotes that he wants to save sequentially for shutter command ONLY CLOSE

SETTINGS - CONFIGURATION

REMOTES navigate the rest sub-menu with keys UP ↑ and DOWN ↓

→ PEDESTRIAN REMOTE: → ENTER

The user starts pressing the remotes that he wants to save as PEDESTRIAN. The motor starts moving as indicator of remotes saving.

by this remote button, the motor moves for the time → PEDESTRIAN TIME

Save and validate the selection → press any key of the keyboard

→ TOTAL DELETION → ENTER → YES
→ ESC → NO

Before the total memory deletion, the LCD screen confirms the deletion

QUESTION: Are u sure → ENTER → YES
→ ESC → NO

ENTER → access the menu

→ USER DELETION: choose the NUMBER of USER with keys UP ↑ and DOWN ↓
→ ENTER → YES
→ ESC → NO

User deletion is the ability to delete only one remote of the control board memory

QUESTION: Are u sure → ENTER → YES
→ ESC → NO

NUMBER USER: when you press a remote, the NUMBER of USER is indicated in the main LCD screen

ADD REMOTE CONTROL REMOTELY

Reach the motor of the gate (near position with the motor). Press an operating remote button (already in memory) to start the motor mooving and hold it pressed until the motor stops. When it stops, release it and press the new remote button immediately. The new remote is saved. Repeat steps to program more remote controls remotely. When the memory is full, you cannot add more new remotes.

SETTINGS - CONFIGURATION

MOTOR DIRECTION		→ ENTER →	Right
		→ ENTER →	Left
AUTO-CLOSING	ENTER	→	Access the menu
		ENTER →	ON
		ENTER →	OFF
	Use UP ↑ and DOWN ↓ keys for AUTO – CLOSING stand-by or AUTO-CLOSING passage		
	AUTO-CLOSING passage →	ENTER →	the time counter for A/C starts
	ENTER	→	SAVE the time
	AUTO-CLOSING stand-by →	ENTER →	the time counter for A/C starts
A/C stand-by > A/C passage	ENTER	→	SAVE the time
	ESC	→	EXIT
INITIAL FORCE	ENTER	→	Soft start
	ENTER	→	Normal – based on the trimmer of the control board
	ENTER	→	Full motor power
PEDESTRIAN TIME	ENTER	→	the time counter starts, the LCD screen indicates the seconds of PEDESTRIAN TIME
	ENTER	→	save the time
The user needs to define:	REMOTES	→	PEDESTRIAN REMOTE (PAGE 17)

NOTE: In case of **4114:** PEDESTRIAN TIME → is the OPEN of motor 1. When the user defines and saves PEDESTRIAN REMOTE, the motor 1 is only activated

SETTINGS - CONFIGURATION

PIN	ENTER	→	ON
	ENTER	→	OFF

The PIN is a combination of 4 digit password that locks the automation. Without this PIN, the user is not able to make any adjustment or configuration in the control board.

The user chooses the 4 – digit password with keys UP ↑ and DOWN ↓

	ENTER	→	validate the selection
LANGUAGE	ENTER	→	the user can choose the language of the control board

TROUBLESHOOTING – INDICATING MESSAGES MAIN LCD SCREEN

BUTTON
→ main LCD screen shows BUTTON, when the user activates it

SAFETY EDGE
→ main LCD screen shows SAFETY EDGE, when the user activates it

PHOTOCELL
→ main LCD screen shows PHOTOCELL, when the user activates it

PHOTOCELL 2
→ main LCD screen shows PHOTOCELL 2, when the user activates it

CLOSE TERMINAL SWITCH
→ check terminal switch

OPEN TERMINAL SWITCH
→ check terminal switch

NOT COMPATIBLE REMOTE
→ wrong remote code – check customer code

NOT SAVED REMOTE
→ the remote is not in the control board memory

USER: 000
→ number of the saved remote

OPEN: 5s
→ the motor will open for 5 seconds

OPEN?
→ the motor is stopped, the next move is OPEN

CLOSE: 7s
→ the motor will close for 7 seconds

CLOSE?
→ the motor is stopped, the next move is CLOSE

A/C: 14s
→ the time counter of auto-closing

OPM1: 1s
→ the motor 1 will open for 1 second

OPM2: 1s
→ the motor 2 will open for 1 second

OPM1: ?
→ the motor 1 is stopped, the next move is OPEN

OPM2: ?
→ the motor 2 is stopped, the next move is OPEN

CLM1: 1 s
→ the motor 1 will close for 1 second

CLM2: 1 s
→ the motor 2 will close for 1 second

CLM1: ?
→ the motor 1 is stopped, the next move is CLOSE

CLM2: ?
→ the motor 2 is stopped, the next move is CLOSE

Profelmnet

THE POWER TO MOVE

www.profelmnet.com