

LUVI AUTOMATIC DOOR OPERATING MANUAL



1. TECHNICAL SPECIFICATIONS

Operating Voltage	230 V Ac
Motor Voltage	24 V Dc
Current	2A - max.6A
Motor Power	100 W
Operating Temperature	-15° / +50°
Working Cycle	%100
Protection	IP 23
Maximum Leaf Weight	1 x 150 kg
	2 x 120 kg
Opening Speed	90 cm/s for 1 leaf
	180 cm/s for 2 leaf
Closing Speed	%70 of the opening speed
Dimensions (Without accessories)	H=118 mm / W=180 mm / L= Max. 6000 mm

2. OPERATING PRINCIPLE OF THE AUTOMATIC MACHINE

2.1. Description of the Operating Principle

It opens by radar or button control (password button, card system, etc.) and closes automatically. It closes at the end of automatic losing time, adjustable between 1 and 60 seconds, after it is opened.

When opening and closing, it operates on basis of soft start- soft stop principle to protect the system against unusual movements.

When it is about the close, if the safety photocell sensors are blocked to see each other, door stops and moves to opening. And it waits until the obstruction between the safety photocell sensors disappears.

When it senses any obstacle when closing, door stops and moves to opening. After it opens, it starts to close slowly. If it senses obstacle second time, it stops for safety. After the cause of obstacle is controlled, it needs to reset and operates again. If no obstacle has been detected, it closes slowly and continues its normal operation.

It stops if it senses obstacle when in the process of opening. After the cause of obstacle is controlled, then it resets and operates again.

In case of electric failure, the door leaves may be manually opened and closed in an easy way. 24Volt battery may be connected in order that it is not affected by power failure.

Opening and closing speeds and slow - down distances may be adjusted.

Automatic operation can be cancelled and it may be operated by means of a button through the commands of open and stop - close and stop.

any failure with the mechanism. In order to block the air circulation, it ensures synchronized operation between two doors installed one after the other.

Fire alarm system can be connected; when it receives fire alarm, it opens and keeps the door open. (Battery back-up)

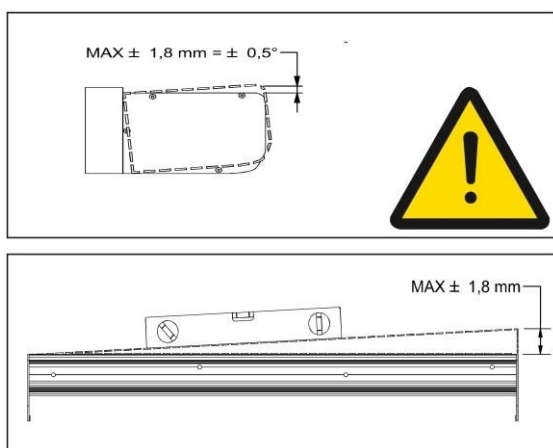
It shows any failure with the mechanism or accessories on the display of the display of the control unit and in the failure identification panel of the digital selector.

5 different operating modes may be selected by the digital selector of the user panel.

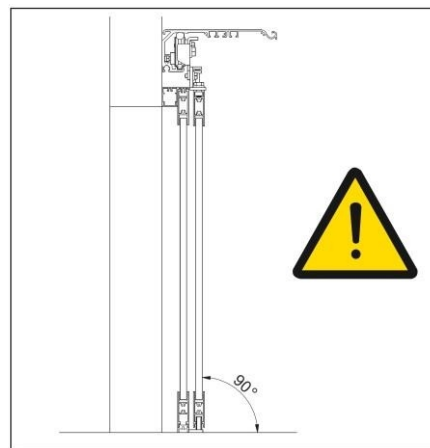
2.1. 1. Mechanical System

Things to be considered during installation of the mechanism in place;

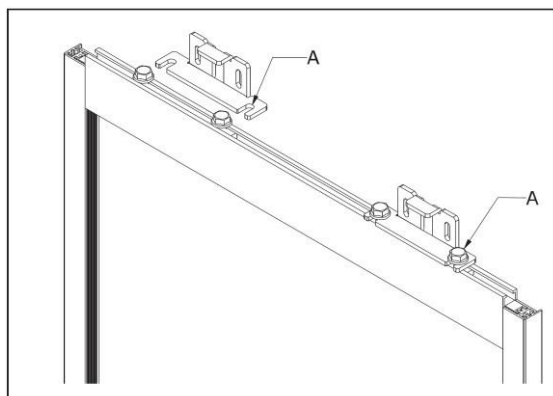
Mechanism should be made fixed to the level horizontally.
Level tolerance is maximum 1,8 mm.



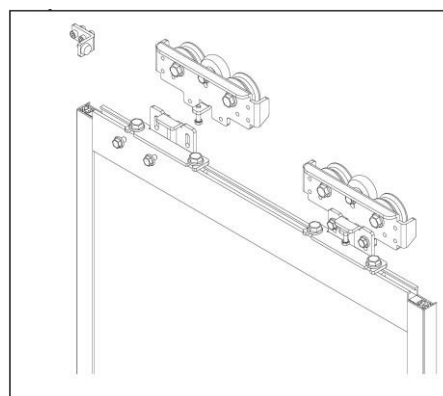
Door leaves fixed to the mechanism should remain perpendicular to the door.



First fix the wheel suspensions to the leaf of the door to be installed.

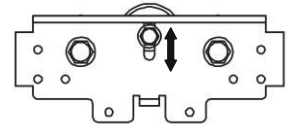


And then connect the wheel

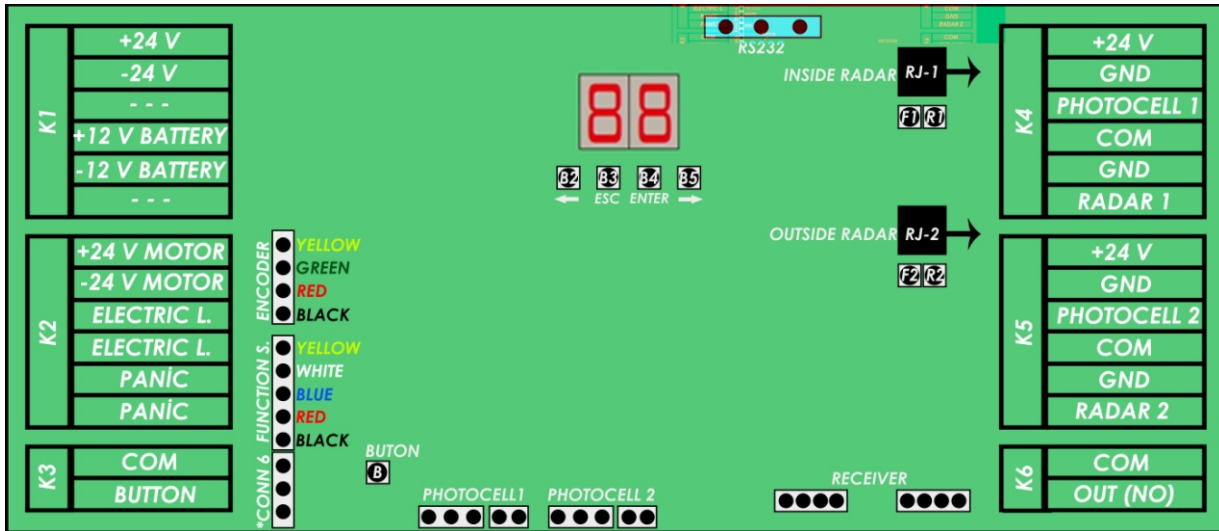


After completion of the mechanical installation, make sure the guide fixed under the door leaf has been correctly installed and that the door leaf do not make any pressure on the guide.

Control the idler wheel at the center of the group of wheels for pressure. First release it then lift to contact with the upper part and tighten the screw.



2.1. 2. Electrical System



K1	K2	K3	K4	K5
1 - +24V Power	1 - Motor (red)	1 - Button	1 - 24 V +	1 - 24 V +
2 - -24V Power	2 - Motor (black)	2 - Common (Com)	2 - 24 V -	2 - 24 V -
3 - GND	3 - E. Lock	-----	3 - Photocell 1	3 - Photocell 2
4 - Battery +	4 - E. Lock	-----	4 - Common (Com)	4 - Ortak (Com)
5 - Battery -	5 - -----	-----	5 - GND	5 - GND
6 - -----	6 - -----	-----	6 - Radar 1/Outside	6 - Radar 2/Outside

RJ-1/Inside Radar	RJ-2 / Outside Radar	RJ-3 /IR20S.Photocell
1 - 24 V +	1 - 24 V +	1 - 24 V +
2 - 24 V -	2 - 24 V -	2 - 24 V -
3 - Photocell 1	3 - Photocell 2	3 - Photocell 3
4 - Common (Com)	4 - Common (Com)	4 - Common (Com)
5 - GND	5 - GND	5 - -----
6 - Inside Radar	6 - Outside Radar	6 - -----
7 - -----	7 - -----	7 - -----
8 - -----	8 - -----	8 - -----

TEST BUTTONS

B = Button test

R1 = Insideradar test

R2 = Outside radar test

F1 = Photocell 1 test

F2 = Photocell 2 test

* The input CONN6 is the mode change input in the position switch with remote control.

The function selector must be compatible before you can change the mode.

3. OPERATION OF THE AUTOMATIC DOOR

3.1. Setting of the Automatic Door

After completion of the mechanical installation,

1) The door leaves should be brought to the semi-open position.

2) Press the power button to supply power to the system.

3) seconds after the system is energized, the door automatically opens and closes one time slowly. (The numbers 1-2-3 appear on the display of the control unit).

The door is ready in normal operation mode.



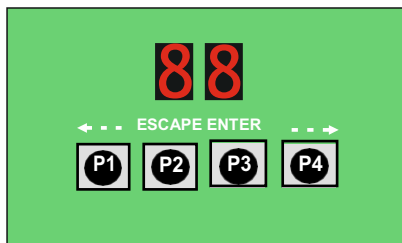
NOTE : Automatic door operating parameters have been adjusted to operate the double-leaf, single-leaf and telescopic leaf door produced in the range of standard sizes.

When the door leaves produced bigger and heavier than normal, their operating parameters should be adjusted in accordance with the door leaf



When you change the parameter levels, the crushing sensitivity (prmt.o4-C4) should be adjusted as not to give any damage to the people.

3.2. Parameters



P1	← ...	Program entry / level -
P2	ESCAPE	Exit
P3	ENTER	Confirmation
P4	... →	Program entry / level +

In order to have access to the parameter settings, press and hold pressed the button P1 or P4 for 3 seconds.

Press and release the button P1 or P4 to display the parameter you desire to change.

Press and release the button P3 (Enter) one time to have access to the parameter.

Press and release the button P1 or P4 to change the level of the parameter.

Press and release the button P3 (Enter) one time to store the selected level.

Press and hold pressed the button P4 (Escape) for 3 seconds to exit.

r-tec control unit parameters				Min.	Max.	Default
o1	Acceleration distance when opening			10	99	35
o2	Opening speed			10	80	60
o3	Decleration distance when opening			10	99	28
o4	Pushing power when opening			10	99	45
o5	Partial Opening	01 : %25		01	03	03
		02 : %50				
		03 : %75				
o6	Airlock	RS232 Connector	00 : Passive	00	01	00
			01 : Active			
C1	Acceleration speed when closing			10	99	35
C2	Closing Speed			10	60	35
C3	Decleration distance when closing			10	99	50
C4	Pushing power when closing			10	99	45
C5	Motor pressure after it closes			10	80	10
b1	Battery	00 : Open and wait		00	01	00
		01 : Continue to operate				
t1	Waiting time after opening (sec.)			00	60	01
r1	Motor Direction	00 : Standard direction		00	01	00
		01 : Reverse direction				
L1	E. Lock	00: Lock when the position switch is in the OFF position.		00	01	00
		01 : Lock in each case of closing				
L2	E.Lock Working Time	00 : Electromechanical lock is passive		00	02	01
		01 : The door opens after 1 second from lock				
		02 : The door opens after 2 seconds from lock				
F1	Photocell 1	00 : Passive		01	01	01
		01 : Active				
F2	Photocell 2	00 : Passive		00	01	00
		01 : Active				
FT	External Photocell	00 : Passive		00	01	01
		01 : Active				
Rf	Receiver Control	00: Switch on / off with the remote control		00	01	00
		01: Position switch control with remote control		01	01	01
St	Service Time	01 : 5000		00	05	00
		02 : 25.000				
		03: 50.000				
		04 : 100.000				
		05 : 200.000				
P1	PANIC EXIT	00: Passive (NO)		00	02	00
		01 : Active (NC)				
		02: Active (NO) Button mode: OPEN-CLOSE				

3.3 Digital Selector :

The control unit is connected by the connector and it does not require any cable connection.



Led lights to the right of the display notify the failure center in case of failure. To put the failure led off, keep pressed the button Up and Down simultaneously. The panel to the left side of the display allows change of five different operating modes according to the purpose of use. The operating modes are as follows :

Wait while it is open - Partial opening - Single way - Operate automatically - Wait while it is closed



Reset : System may be reset by the function selector without opening the over of the mehanism. Keep the button R pressed and release it when yellow led is on. Press the buttons UP and DOWN simultaneuslyand release when yellow led is off. Keep the button R and UP pressed simultaneously and release when all leds are on. The system will reset it self after 3 seconds.

Key Lock : It ativates when the buttons R and Up are pressed simultaneously. It becomes passive when the buttons R and Down are pressed simultaneously.

4. FAILURE WARNING CODES

It notifies by means of warning codes any failure cases with respect to the operating system of the automatic door and accessory failures. These warnings are shown by number on the display and by led on the failure identification panel to the right of the digital selector. Next to the leds on the digital selector, the failure area is identified in writing. And the failure is identified by the codes on the display of the control unit.

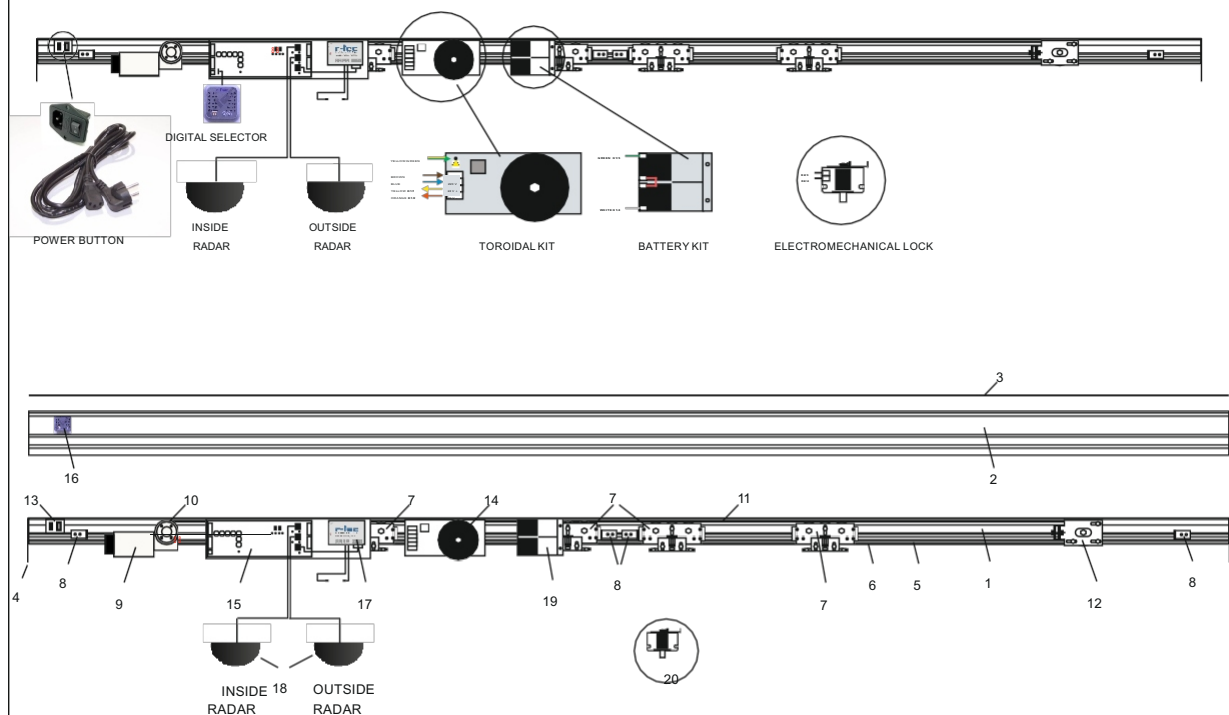
NOTE : To delete the code on the display, keep pressed the button P2 (ESCAPE) for 10 seconds.

01	Door blocked when opening
02	Door blocked when closing
03	High current protection
04	Button failure
05	Radar failure
06	Mechanical blockage
07	Battery voltage low
08	Photocell failure
09	Mains voltage low
10	Encoder error
11	If the system draws more current than 5 seconds, it automatically protects the system.
St	Service Time

5. FREQUENTLY ASKED QUESTIONS

QUESTION	ANSWER
When power is supplied, the door does not operate and the numbers 1-2-3 flash on the display, respectively. What is the reason?	Make sure the door leaf does not settle on the guide. Control the installation of the guide. Control the idler wheel at the center of the group of wheels for pressure. First release and then lift so as to touch the upper part and tighten the screw.
When power is supplied, the door does not operate and the number 1 flashes on the display. What is the reason?	The cable of the function selector is not plugged. It will start to operate normally after the cable is connected.
On the display, the number 08 is on. What is the reason?	Photocell sensors do not see each other or one of the cables got damaged at time of installation. You may find out the source of the problem by the photocell test button on the control unit.
On the display, the number 05 is on. What is the reason?	Radar gives command continuously. The perception sensitivity setting in the radar have been opened. Perception sensitivity and radar point of view should be controlled.
On the display, the number 10 is on. What is the reason?	Encoder failure warning. While it may stem from the encoder or its cable, the same warning is given when the motor does not move as a result of mechanical jamming at time of reset. Control whether the mechanical installation has been performed correctly.

5. EXPLODED VIEW



1. BASE PROFILE
2. COVER
3. SEAL FOR COVER
4. SIDE COVERS LEFT - RIGHT
5. WHEEL RAIL
6. SEAL FOR WHEEL RAIL
7. CARRIAGE
8. MECHANICAL STOPPER
9. MOTOR
10. MOTOR GEAR PULLEY
11. DRIVING BELT
12. BELT RETURN PULLEY
13. POWER BUTTON
14. TOROIDAL TRANSFORMER
15. CONTROL UNIT
16. DIGITAL SELECTOR
17. SAFETY PHOTOCELL
18. RADAR INSIDE - OUTSIDE
19. BATTERY KIT
20. ELECTROMECHANICAL LOCK