



HATO 300 Silent

OPERATING MANUAL FOR GARAGE DRIVES

HATO 300 SILENT 1000N 1000N

HATO 300 SILENT 1200N 1200N



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ATTENTION !!!

Please read the manual carefully before installation and use.

The installation of a new door opener must be carried out by a technically qualified or licensed person. Attempting to install or repair a door opener without the appropriate technical qualifications may result in serious personal injury, death and / or property damage.

Declaration of conformity

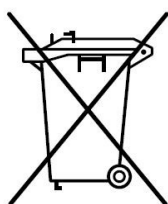
The HATO 300 SILENT drive meets the requirements of the following regulations:
Complies with the conditions of the Machinery Directive 2006/42 / EC Annex II Section B as amended. Complies with the conditions of the following EU directives:
Directive on electromagnetic compatibility EMC 2014/30 / EU, Low Voltage Directive LVD 2014/35 / EU. The following harmonized standards have been applied: EN60335-1: 2012, EN 60335-2-103: 2015-3, EN 55014-1: 2012, EN 55014-2: 2015-06, EN 61000-3-2-2014-10, EN 61000-3-3: 2013-10

The current declaration can be downloaded from the manufacturer's website www.hato.com.pl

IMPORTANT SAFETY INSTRUCTIONS

FAILURE TO OBSERVE THE FOLLOWING SAFETY PRECAUTIONS COULD RESULT IN SERIOUS PERSONAL INJURY, DEATH AND / OR DAMAGE TO YOUR PROPERTY.

1. PLEASE READ CAREFULLY AND COMPLY WITH ALL SAFETY AND INSTALLATION RECOMMENDATIONS.
2. The drive has been designed and manufactured in accordance with local regulations. The installer must be familiar with local regulations required to install the drive.
3. Unqualified personnel or persons unfamiliar with the health and safety standards applicable to automatic gates may not, under any circumstances, install or implement systems.
4. Persons who install or service equipment without complying with all applicable safety standards are responsible for any damage, injury, cost, expense, or claim for any person suffered as a result of improper installation of the system and in accordance with applicable regulations. Safety standards and assembly instructions, whether directly or indirectly.
5. For greater security, we strongly recommend installing photocells. The drive is equipped with an obstacle detection system, but the installation of photocells will significantly improve the operational safety of automatic garage doors and provide additional security.
6. Make sure the garage door is fully open and stationary before entering or exiting the garage.
7. Make sure the garage door is completely closed and stationary before leaving the property.
8. Keep your hands and loose clothing away from the drive and garage door at all times.
9. The obstacle detection system is designed to work only on STATIONARY objects. Serious personal injury, death, and / or property damage can occur when garage doors come into contact with a moving object
10. This device is not intended for use by persons (including children) with reduced physical, sensory or mental abilities, or without experience and knowledge, unless they have been given supervision or instruction regarding the use of the device by a person responsible for their safety. Children should be supervised to ensure that they do not play with the device
11. Waste electrical products should not be disposed of with household waste. Please recycle them. Contact your local authorities or dealer for recycling advice.
12. If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or a similarly qualified person in order to avoid a hazard.



WARNING: Important safety instructions. It is important that the people operating the gate follow the instructions.

Do not let children play with gate remote controls. Keep the remote controls out of the reach of children.

Be careful when the gate is moving.

Be careful when opening the door in emergency, as the open door may fall suddenly due to weak or broken springs or when it is not balanced.

Check the installation frequently, especially control cables, springs, and mountings for signs of wear, damage or imbalance. Do not use the drive when repair or adjustment is required, as an installation error or an improperly balanced door could cause injury.

- Every month, check that the drive reverses when the door touches an object 50 mm high placed on the floor. Adjust as necessary and check again as improper adjustment may be dangerous.
- Details on how to use the drive and adjust the door and drive are in the manual.
- Disconnect the power source when cleaning or performing other maintenance.
- The installation manual provides details on installing the drive and related components.

PRODUCT DESCRIPTION AND SPECIFICATION

1. Regulation of the clamping force

The contact pressure can be adjusted: Display "1" minimum force. "5" indicates maximum force.

2. Speed control

"8" shown on the display means 80% of the driving speed. "A" is displayed for full speed (160 mm / s or 200 mm / s).

3. Changing the height of the reverse

When the display shows "0" it means that the door will go back up. Indication "1 ~ 9" means the door will return to the n x 10% position of full height. One-tenth of full opening, etc.

4. Partial opening / height

The display shows "0" means the partial opening function is closed. Indication "1 ~ 9" means to set different partial open positions relative to fully open.

5. Transmitter button recognition function

The display will show "0", it means that the button recognition function is closed. The indication "1" means that the button recognition function is active.

6. Amount of code memories

When the display shows "A" it means that the maximum number of codes is used = 50. Press the UP / DOWN button to increase or decrease the number of codes. The number of codes is $5 * N$, $N = 1 \sim 9$. (the number multiplies every 5)

7. Maintenance alert

When the display shows "b" and the lamp flashes quickly 10 times, the garage door or motor needs servicing.

8. Automatic return to the encounter mode

Auto stop / auto return is controlled by software on the control board. It protects children, pets and other goods from injury or damage.

9. Start and stop slowing down

A gentle start and stop at each door cycle significantly extends the life of the door and the drive.

10. Auto-closing

The auto close feature keeps your home safe by automatically closing the door when you enter or leave your garage.

11. Automatic adjustment of the opening and closing force

The opening power for the various stages of the door movement is learned during programming and is constantly re-profiled. The force measurement of the opening mechanism is automatically regulated within the appropriate range.

12. Setting the end positions

The limit switch settings are programmed using the control panel, it is a simple and fast process for each user.

13. There is a connector for photocells, additional receivers and a wired or wireless wall button, flashing light and door safety device.

14. LED warning light

The LED lamp lights up when the device is turned on and stays on for 3 minutes, then goes off.

15. Emergency opening in the event of power failure (battery optional)

In the event of a power failure at home, the opening can be made after connecting the battery (battery) to the device.

16. The drive has an auto-lock function, which prevents accidental opening of the gate from the closed

position.

17. Manualne otwieranie awaryjne

In the event of loss of power or failure, the drive has a manual gate opening system by decoupling the gate and the rail.

18. Transmitter (REMOTE)

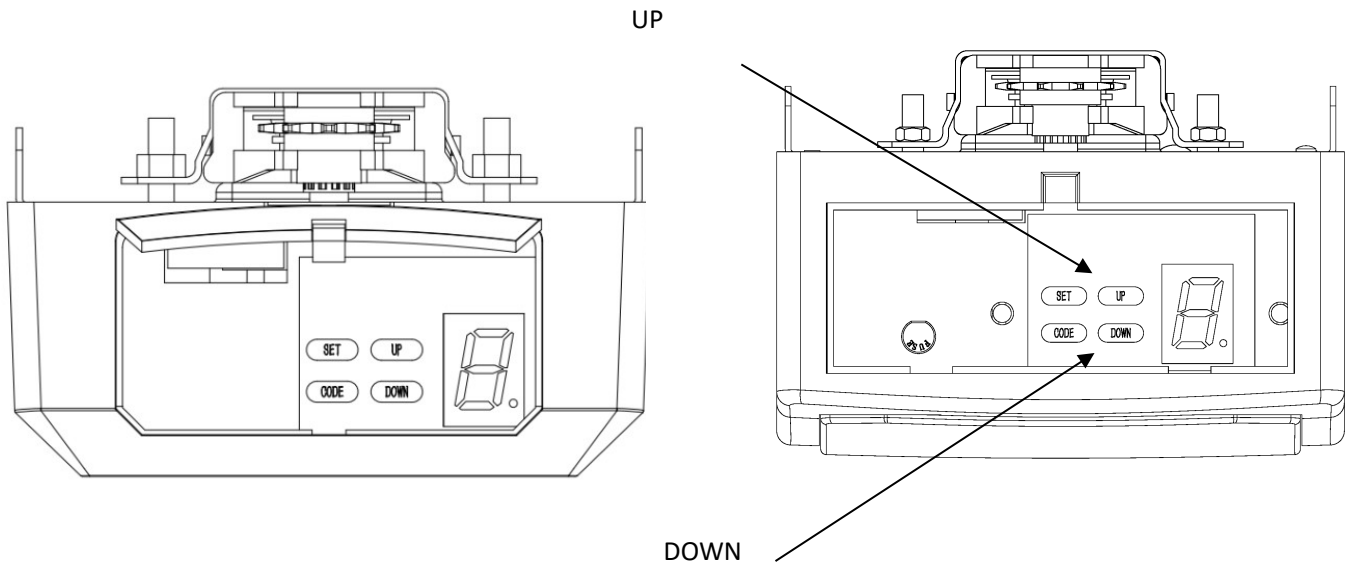
The remote control works in rolling code technology (7.38 x 10¹⁹ combinations), frequency 433.92 MHz, 4 channels are designed to provide control of up to 4 different doors with one transmitter.

19. Installation

The minimum clearance between the highest point of the door and the ceiling is 30mm.

20. Metal bottom plate, stronger and safer.

21. Up / Down movement buttons (UP / DOWN)



PREPARATION

1. The garage door must be easily lifted and closed by hand without much effort. A well-balanced and positioned door is crucial for proper installation.
2. The garage door opener cannot compensate for a poorly fitted garage door and should not be used as a solution for doors that are difficult to open.
3. If the appliance is installed over an existing door, make sure any existing interlocking devices are removed or the warranty will be void.
4. The power socket must be installed close to where the drive is installed.
5. There should be a minimum distance of 30mm between the bottom of the guide and the top of the garage door. (see Fig. 1)

Important note: As far as additional safety rules are concerned, we strongly recommend the installation of photocells in all installations.

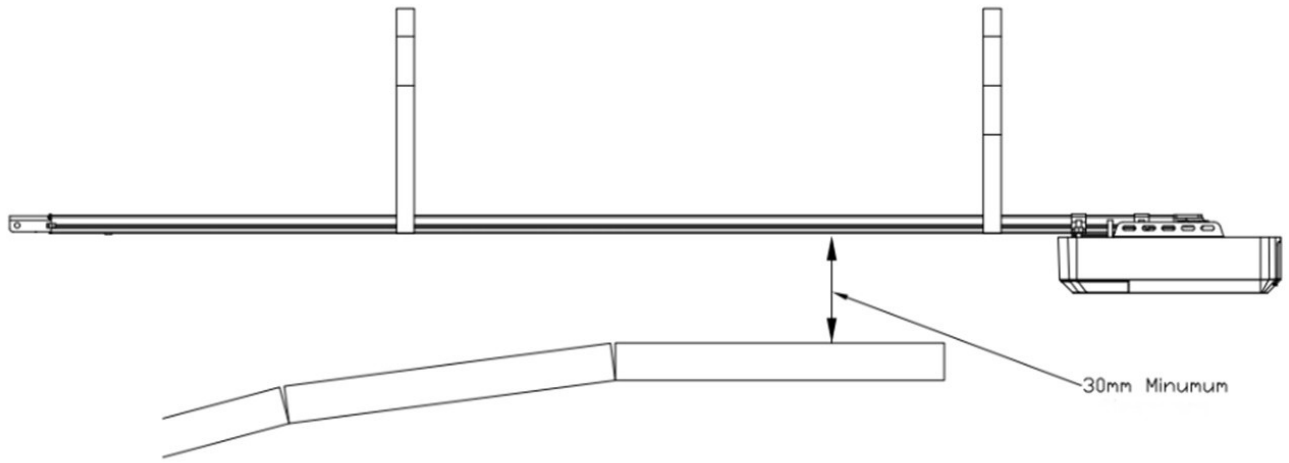
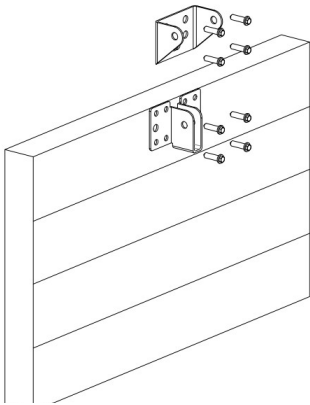


Fig. 1

ASSEMBLY

Wall mount and door bracket (Fig. 2)



Wall mount - Close the garage door and measure the width of the garage door at the top and mark the center. Install a 3cm-15cm wall mount above the door on the inside wall. (Depends on the actual installation location).

Door bracket - Attach the door bracket to the structural part of the door as close to the top edge as possible.

Fig. 2

Steel rail assembly

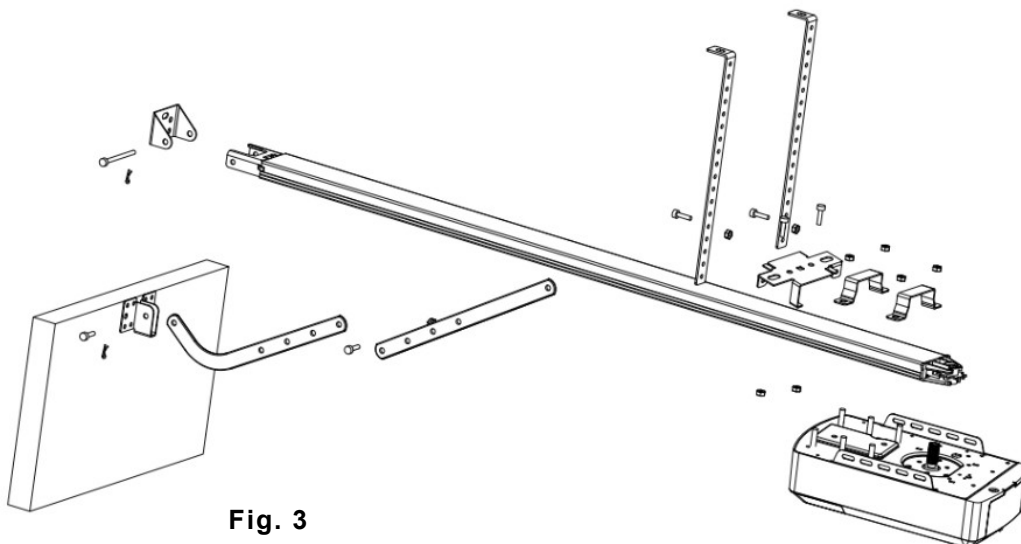


Fig. 3

STEP 1 (Fig.3)

Attach the drive head to the steel guide. Install the 2 "U" hanging brackets with the provided 6mm nuts.

STEP 2 (Fig. 3)

Place the steel track and drive centrally on the garage floor with the cardboard underneath. Lift the front of the guide up to the door support. Insert the pivot pin and secure it with the supplied split pin.

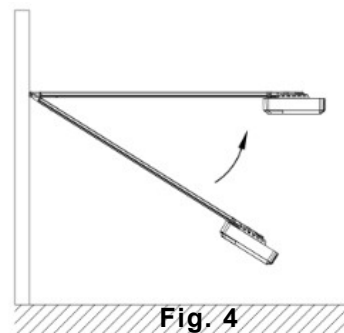
STEP 3 (Fig. 3, Fig.4)

Raise and support the motor head (ladder) so that it is centered and level. Secure the drive to the ceiling with the perforated brackets.

WARNING: Do not allow children to play at the door, drive, or access ladder as this may cause injury or damage.

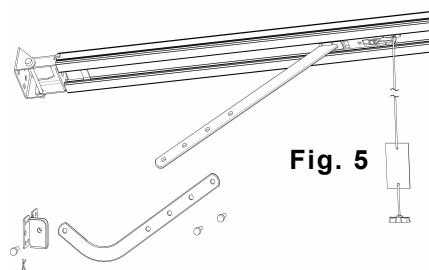
STEP 4 (Fig. 3, Fig.5)

Connect the straight arm to the bent arm with a screw. Position and screw the arms to the top edge of the door with supplied screws.

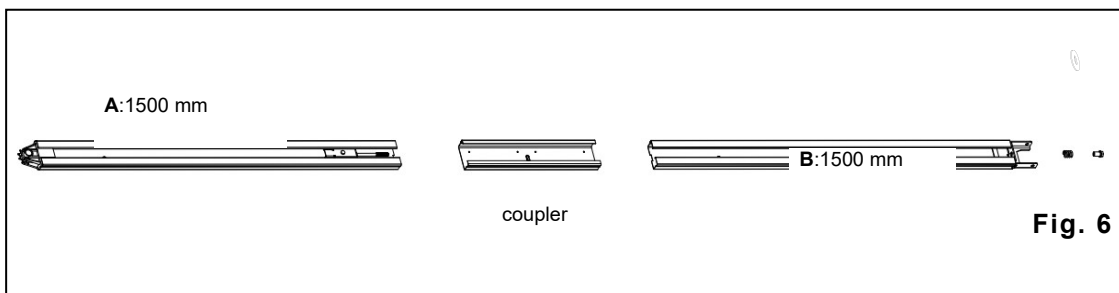


STEP 5

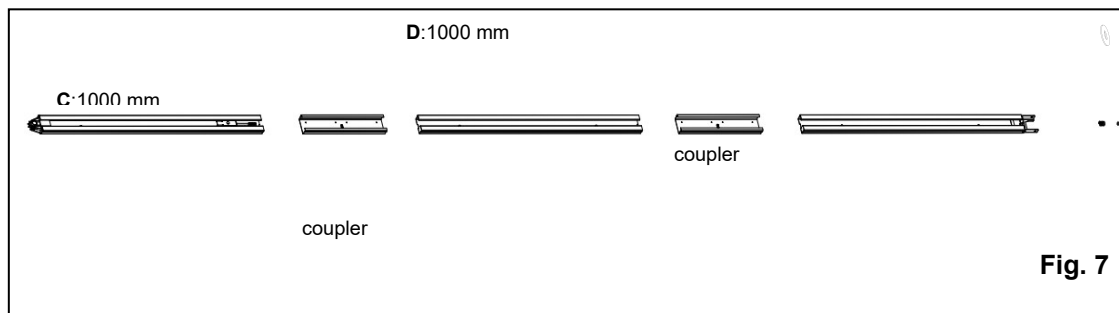
Raise the garage door until the mechanism engages. The DRIVE is now ready to be programmed.



Installation of divided guides (option)
Rail divided into two



Rail divided into three



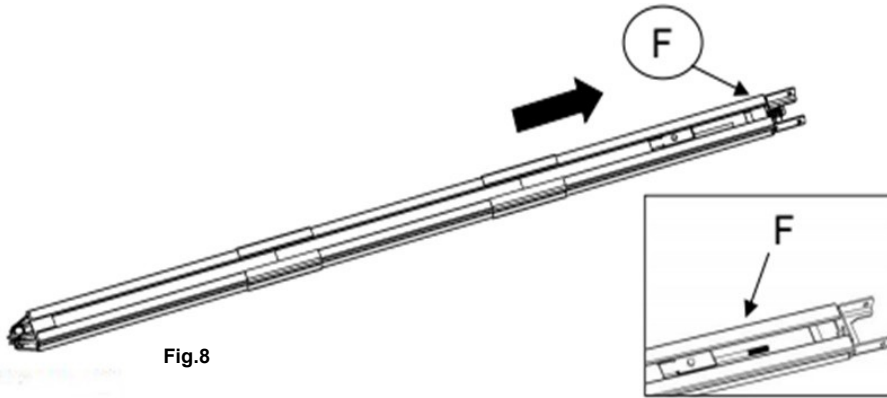
1. 2-part rail:

As shown in Fig. 6, slide the A rail into the coupler, slide the B rail into the coupler.

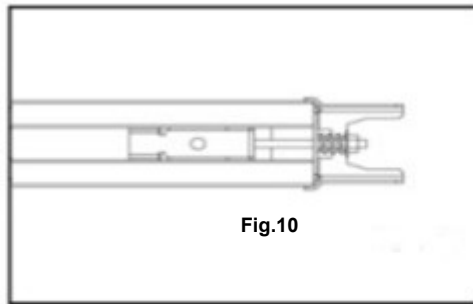
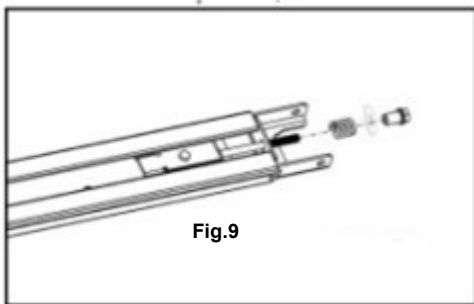
3-part rail:

As in fig. 7, insert the C rail into the coupler, slide the D rail into the coupler; slide the E rail into the coupler.

1. Pull the threaded rod together with the toothed belt to the end position of the rail.



1. As in Fig.9, install the nut and spring.
2. Tighten the nut, setting the correct belt tension Fig.10



Attention! For a split rail, use the support in the center of the rail.

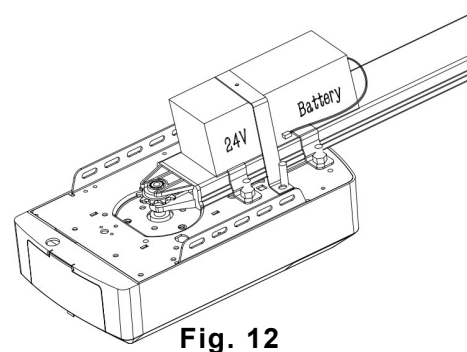
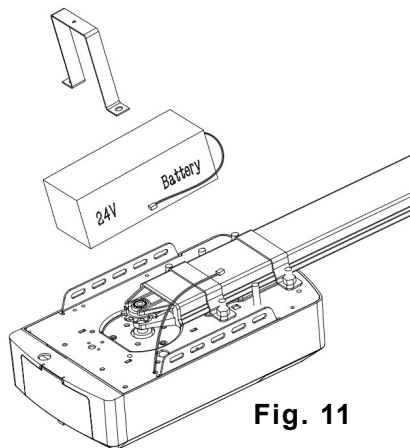
Battery backup kit (optional)

Option 1 - top mounting

STEP 1 (Fig. 11)

Install the battery and battery bracket as shown in the picture, fix with the supplied screws. STEP 2 (Fig.12)

Connect the battery with the drive Fig.12



To connect the battery, remove the drive housing and connect the wires to the BAT connector, paying attention to polarity.

Option 2 – side mounting

STEP 1 (Fig. 13)

Assemble the battery and battery bracket as shown in the picture, fix with the supplied screws.

STEP 2 (Fig. 14)

Attach the battery to the drive, see Figure 14.

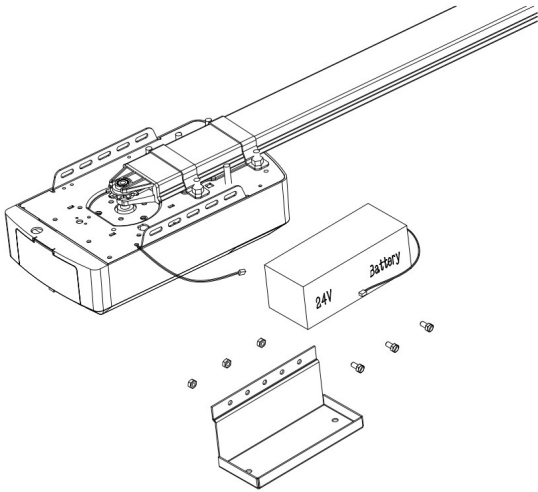


Fig. 13

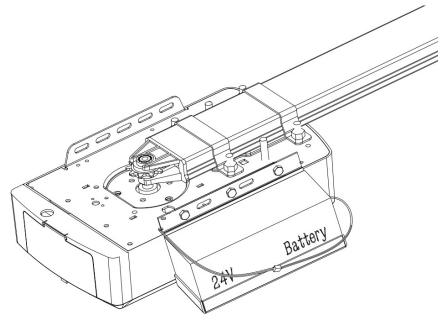
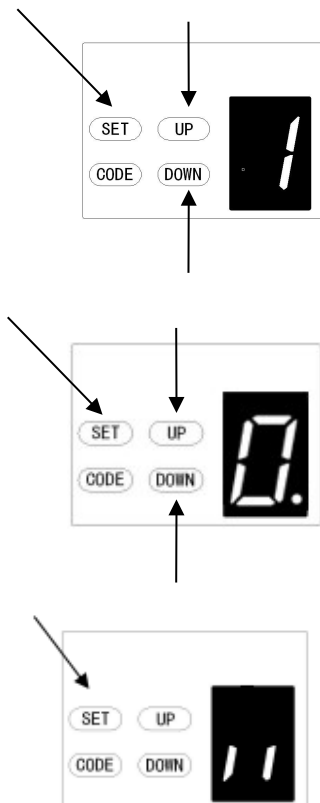


Fig. 14

CONTROL PANEL OPERATION MANUAL



SELECTING A SET PARAMETER:

- Press and hold the **SET** button until the display shows "1", then release the button.
- Press the **UP / DOWN** button, the display will show "1-E".
- Press the **SET** button to confirm the function you want to set, you enter the next menu level to set the details of the selected function.
- The selected function displays "0-A" with a flashing dot.
- Press the **UP / DOWN** button to set the correct parameter.
- Press the **SET** button to confirm the setting, the system will return to standby status automatically and display "11".

PROGRAMMING INSTRUCTIONS

Remote control programming manual.

1. Pressing the **SET** button shortly in the standby state clears the errors and enters the normal standby state.

1. Briefly press the **CODE** button:

- (In setting mode) Exit the current operation and return to the standby interface.
- After entering the standby mode, press **CODE**, a dot will appear in the corner, now you are entering the learning mode of the remote control codes.

Press the button on the remote you want to use, the dot may disappear, then press the same button on the remote again, the dot will flash, here the encoding will end.

3. Briefly press the **UP** button: the gate will open.

4. Briefly press the **DOWN** button: the gate will close.

(When the gate opens or closes, it will stop when any key is pressed.)

5. Long press **SET** button: Enter the function setting interface.

6. Long press the **CODE** button: delete all remotes. Press and hold the **CODE** button until the display shows C. All saved remotes will be deleted.

7. Long press **DOWN** button: restore default settings

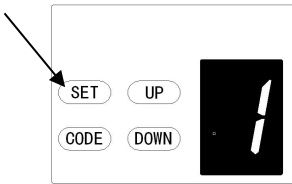
Keep **DOWN** button pressed, after 4 seconds is displayed,



The drive will be reset.

Restart means that all settings return to default settings, all learning operations must be performed again except transmitter code learning.

PROGRAMMING



1. ADJUSTMENT OF THE END POSITIONS

a) Press and hold **SET** button to enter the function, the display shows "1", then release the button

b) Briefly press the **SET** button. The door drive is now in end position programming mode. Then "n" will appear with a dot flashing on the screen

c) Press and hold the **UP** button until the door reaches the open position you want, you will see "n" no dot on the display

d) Press the **SET** button to confirm the open item, then you will see "u" with a dot on the display

e) Then press and hold the **DOWN** button until the door reaches your desired closed position, you will see a "u" without a dot in the display

NOTE: For precise settings, the **UP** and **DOWN** buttons can be toggled

f) Press the **SET** button to confirm the closed position, then you will see "ll" with a dot on the display

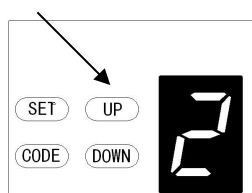
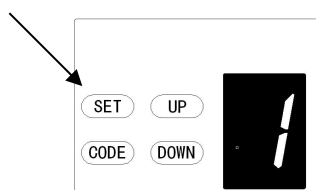
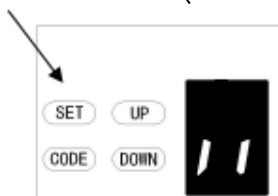
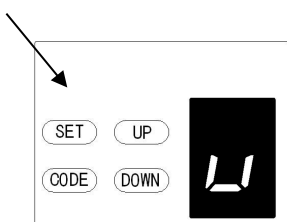
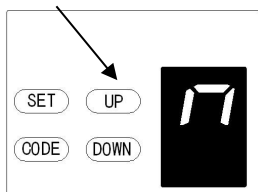
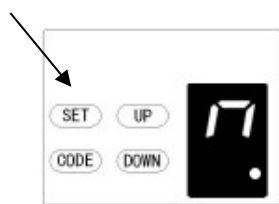
After confirming the closed position, the actuator will perform a full cycle of opening and closing in order to check the opening and closing limit and the operating force of the actuator.

After these steps, the garage door is ready for operation.

ATTENTION! After the opening and closing cycle, the display will show numbers (0 ~ 9), "0" means the door is balanced, the smaller number means the door is better balanced, strongly recommended that the number is less than the drive force.

ATTENTION!

Do not force the door in any end position. Such setting of the end position may result in the lack of reaction of the drive.



2. SETTING THE DRIVE FORCE

ATTENTION! The adjustment of the force of reaction to an obstacle is set automatically during programming. Usually, no customization is necessary.

a) Press and hold the **SET** button, the display shows "1", then press the **UP** button, the display shows "2", when the button is released.

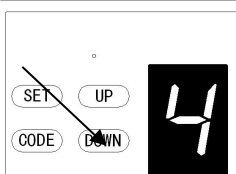
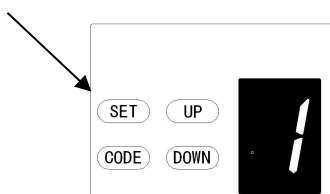
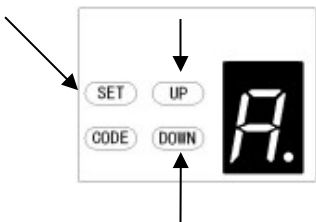
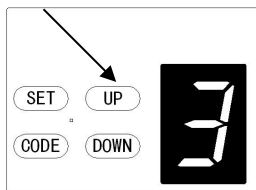
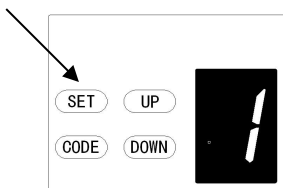
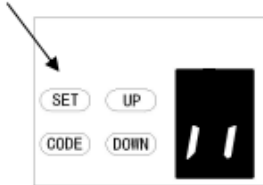
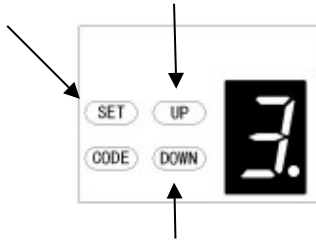
b) Press the **SET** button again, the device is now in force adjustment mode. The display will show "3" with a dot

c) Press the **UP** button to increase the force setting or **DOWN** button to decrease the force setting.

The minimum force is "1" and the maximum force is "5".

d) Press the **SET** button to confirm the settings, then the drive will return to ready state and display "11".

ATTENTION! The force default is set to "3".



3. SETTING THE TRAVEL SPEED

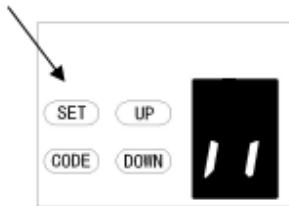
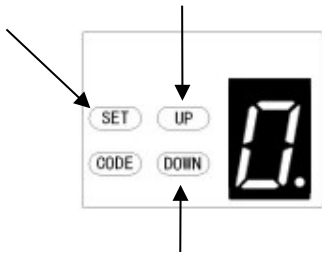
NOTE: If you change the speed, it will override the previous limit switch settings. It is necessary to readjust the end positions.

- Press and hold the **SET** button until the display shows "1", then press the **UP** button until the display shows "3".
- Press the **SET** button again. The device is now in speed regulation mode. Then the letter "A" will appear on the display with a dot which will flash on the display.
- Press **UP / DOWN** button to select speed. The number "8" represents 80% of the driving speed. The letter "A" stands for full speed.
- Press the **SET** button to confirm the setting, then it will return to standby status automatically and display "11".

ATTENTION! The travel speed is factory-set to full speed "A".

ATTENTION!

- The closing time is factory-set to "0".
- If the photocell function is turned on and there is an obstacle, the automatic closure time will be stopped and the countdown will start again when the obstacle is removed.



i. SETTING THE AUTOMATIC CLOSURE CONDITIONS

a) Press and hold **SET** button until display shows "1", then press **UP** button until display shows "5".

b) Press the **SET** button. The device is now in the auto-closing condition setting mode. The display will show the number "1" with a dot blinking.

c) Press **UP / DOWN** button once to set auto close mode. You can select "1" or "2".

The number "1" means that the door can close automatically when it is in the fully open position.

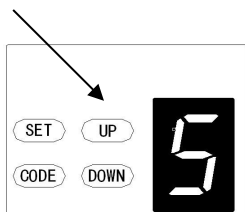
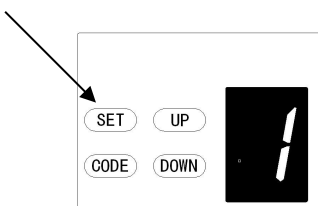
The number "2" means that the door can automatically close when the door is in any position.

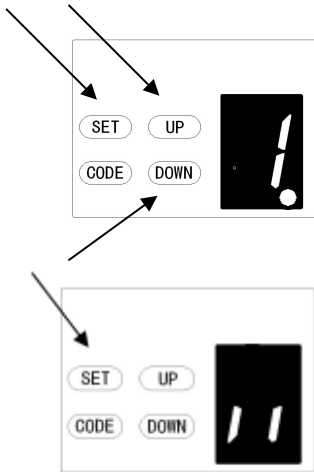
d) Press the **SET** button to confirm the setting, then the drive will return to standby automatically and display "0".

ATTENTION!

1. The condition for closing is set to "1" at the factory.

2. The door closes automatically only when opened, and shall not close automatically when stopped while closing.





6. SETTING THE LAMP OFF TIME

a) Press and hold the **SET** button until the display shows "1", then press the **UP** button until the display shows "6".

b) Press the **SET** button again. The fixture is now in **LAMP** delay time adjustment mode. The number "3" will appear on the display with a flashing dot.

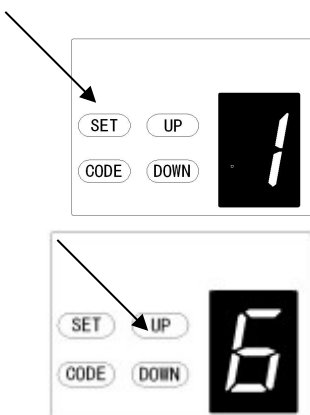
c) Press **UP / DOWN** button to set the **LAMP OFF** delay time (1 ~ 9).

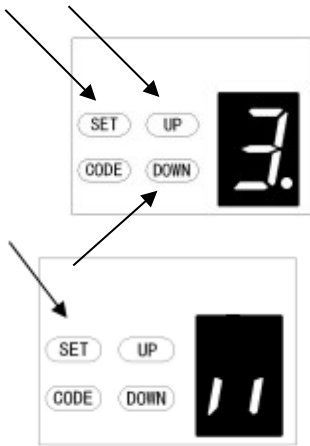
d) Press the **UP** button to increase the time or **DOWN** button to decrease the time.

The delay time is 1 minute * N, N = 1 ~ 9. The maximum delay time is 9 minutes.

e) Press the **SET** button to confirm the setting, it will automatically return to standby and display "11".

ATTENTION! The LED switch-off delay time is by default set to "3".





8. ADJUSTING THE HEIGHT OF THE PARTIAL OPENING OF THE GATE

7. GATE RETURN HEIGHT SETTINGS

a) Press and hold the **SET** button until the display shows "1", then press the UP button until the display shows "7",
 b) Press the **SET** button again. The device is now in the gate return height adjustment mode. The display will show the digit "0" and a flashing dot.

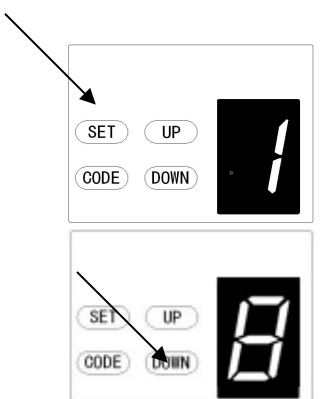
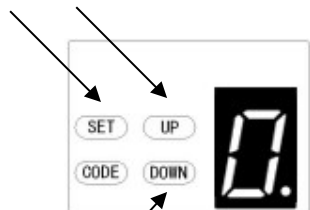
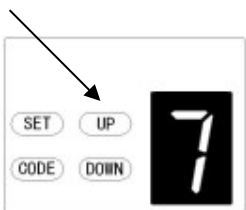
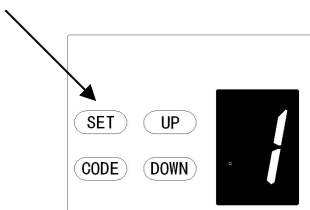
c) Press **UP / DOWN** button once to set the gate return height during closing (0 ~ 9) when obstacle is encountered.

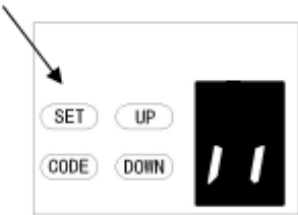
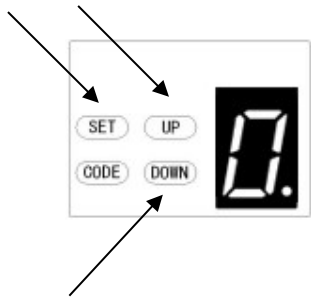
d) Press the **UP** button to increase or **DOWN** button to decrease.

The digit "0" means that the door will return to the end position OPEN. Digit "1 ~ 9" means the door will return to the gate opening percentage height. One-tenth of the entire height, etc ...

e) Press the **SET** button to confirm the settings, the drive will automatically go back to standby state and display "11".

ATTENTION! The return height is by default set to "0".





9. SETTING FUNCTION OF TRANSMITTER BUTTONS

- Press and hold the **SET** button until the display shows "1", then press the **UP** button until the display shows "9".
- Press the **SET** button again. The device is now in the button recognition function setting mode. The display will show the number "1" with a flashing dot.
- Press **UP / DOWN** button once to select whether you want all 4 buttons to control only one drive, or only one coded button can control the drive.

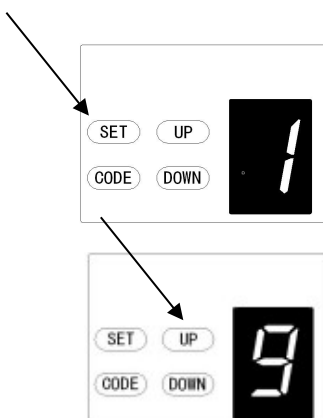
The number "0" means that the button recognition function is closed. It means that if you coded 1 button with 1 drive, then all 4 buttons on the remote control can control the drive. This solution is good for users who only have 1 home automation gateway.

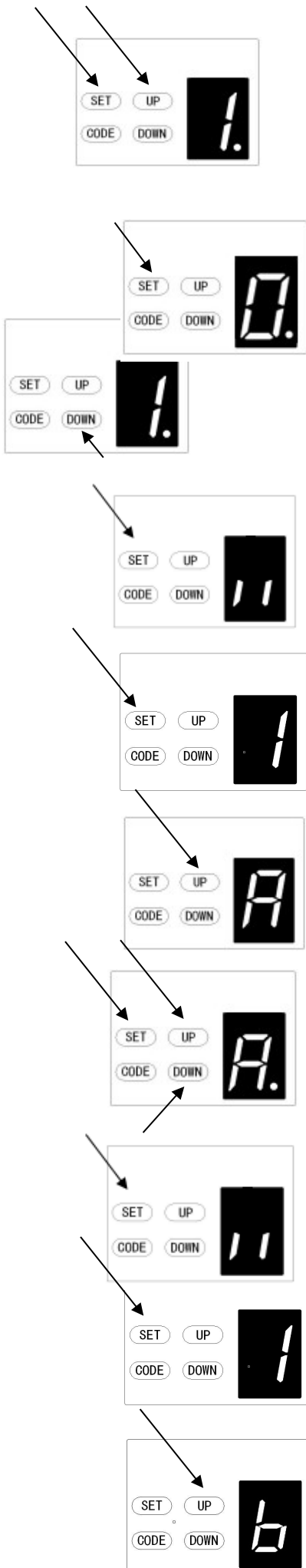
The number "1" means that the button recognition function is open. If you encoded the first button with the first drive, the first button will be the only button on the remote that can control the drive. It is suitable for users who have more than 1 automatic gate at home.

- Press the **SET** button to confirm the setting, then the drive will return to standby automatically and display "0".

ATTENTION!

- The button recognition is by default set to "1".
- After changing the button recognition settings, remember that only a hard-coded button can control the drive. The function is inoperative if the gate is set to partially open.

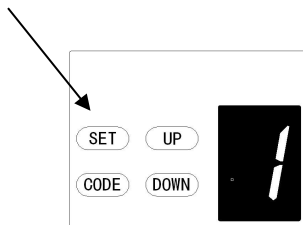
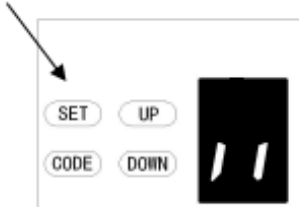
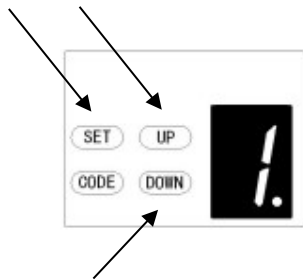




A. SETTING THE AMOUNT OF CODES MEMORY

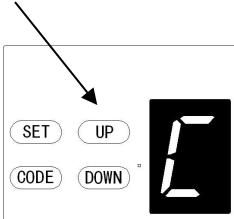
- Press and hold the **SET** button until the display shows "1", then press the **UP** button until the display shows "A".
- Press the **SET** button again, the device is now in the remotes memory setting mode. "A" will reappear but with the dot blinking
- Press **UP / DOWN** button once to set memory size. (A or 1-9).
- The letter "A" represents a maximum quantity of 50 pieces. Press **UP / DOWN** once to increase or decrease memory size. The remote quantity is set to $5\text{pcs} * N$, $N = 1 \sim 9$. (The quantity is a multiple of 5)
- Press the **SET** button to confirm the setting, the drive will automatically go back to the standby state and display "11".

ATTENTION!
The memory size is by default set to "A".



C. SETTING THE SERVICE DOOR FUNCTIONS

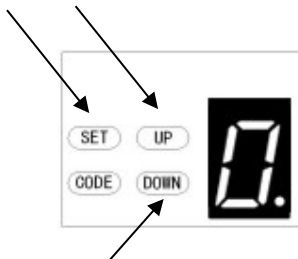
- a) Press and hold the **SET** button until the display shows "1", then press the UP button until the display shows "**C**".
- b) Press the **SET** button again. The device is now in the service door switch type selection mode. The display will show the number "**0**" with a



D. PHOTOCELL ON / OFF

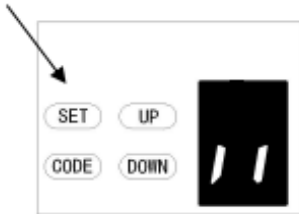
ATTENTION! Make sure that the photocell has been properly installed and is operating in normally closed contact mode.

Also note that the photocell function must be disabled if not fitted, otherwise the door cannot be closed and the **LED** display will show the letter "**r**" as an indication.



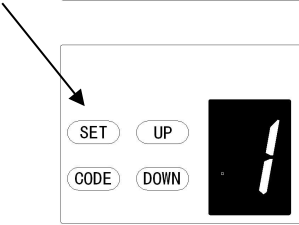
- a) Press and hold the **SET** button until the display shows "1", then press the **UP** button until the display shows "d".
- b) Press the **SET** button again. The device is now in the photocell **ON / OFF** setting mode. The display will show the number "0" with a flashing dot.
- c) Press the **UP / DOWN** button once to set the photocell **ON / OFF** switch. You can choose "0" or "1".
- d)

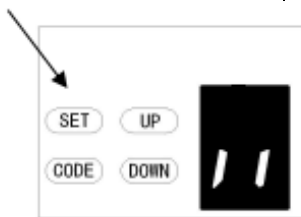
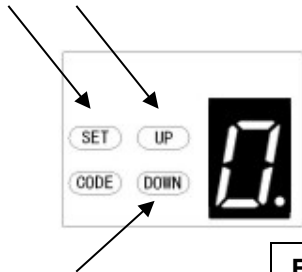
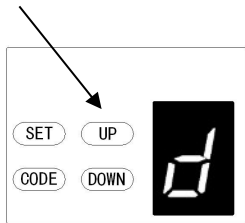
The number "0" means that the photocell function is disabled. The number "1" means that the photocell function is on.



- d) Press the **SET** button to confirm the settings and the drive will automatically go back to the ready state and display "11".

ATTENTION! The photocell function is set to "0" by default.





E. MAINTENANCE ALARM - CYCLE COUNT

) Press and hold **SET** button until display shows "1", then press **UP** button until display shows "**E**"

) Press the **SET** button again. The equipment is now in maintenance alarm adjustment mode. The display will show "0" with a flashing dot.

) Press the **UP / DOWN** button to select the appropriate number of cycles after which the alarm will occur. You can choose the option "1-5".

Number "1" means that after activating the garage door 1000 times, the LED light will flash 10 times quickly, each time the value is exceeded. At the same time you will see the figure "t" on the display. Your garage door needs maintenance.

The number "2" indicates that the maintenance alarm count cycle is set to 2,000 times.

The number "3" indicates that the maintenance alarm count cycle is set to 3,000 times.

The number "4" means that the maintenance alarm count cycle is set to 4,000 times.

The number "5" indicates that the maintenance alarm count cycle is set to 5,000 times.

The number "0" means that the maintenance alarm count cycle is set to 0 times.

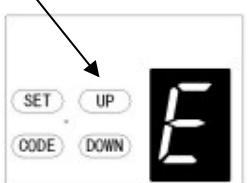
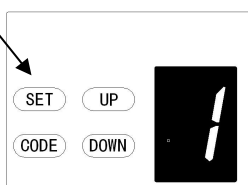
d) Press the **SET** button to confirm the settings and the drive will automatically go back to the ready state and display "11".

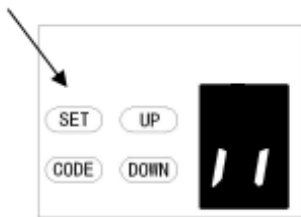
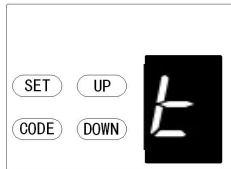
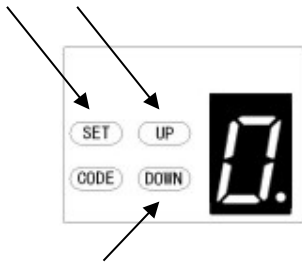
ATTENTION!

1. The operating cycle counter is by default set to "0".

2. If "b" appears on the display and the LED is blinking 10 times quickly, it means the door is out of balance, we strongly recommend that you maintain your garage door.

3. "Check" or reprogram the end positions after maintenance warnings.





CONNECTING ADDITIONAL ACCESSORIES

ADDITIONAL ACCESSORIES

1. Possibility to connect the O / S / C interface (Fig. 15)

An additional O / S / C button can be installed to open and close the door.

We connect e.g. an external radio module to the same terminals

PB (signal) / GND (ground) - bell type button (normally open contacts NO).

2. Beacon function (Fig. 15)

There is a suitable interface for this function which provides beacon voltage in the range of 24v-35v.

Connect a DC 24v-28v warning lamp, current $\leq 100\text{mA}$.

3. Service door protection (Fig. 15)

This function prevents the gate from being opened when the service door is open, preventing damage to the door. The service door contact type (NO or NC) is programmable.

4. Connecting the photocells (Fig. 16)

To avoid closing the gate when there is an obstacle in its light, install photocells. They are mounted at a height of 40-60 cm. The connection method is shown in Fig. 16.

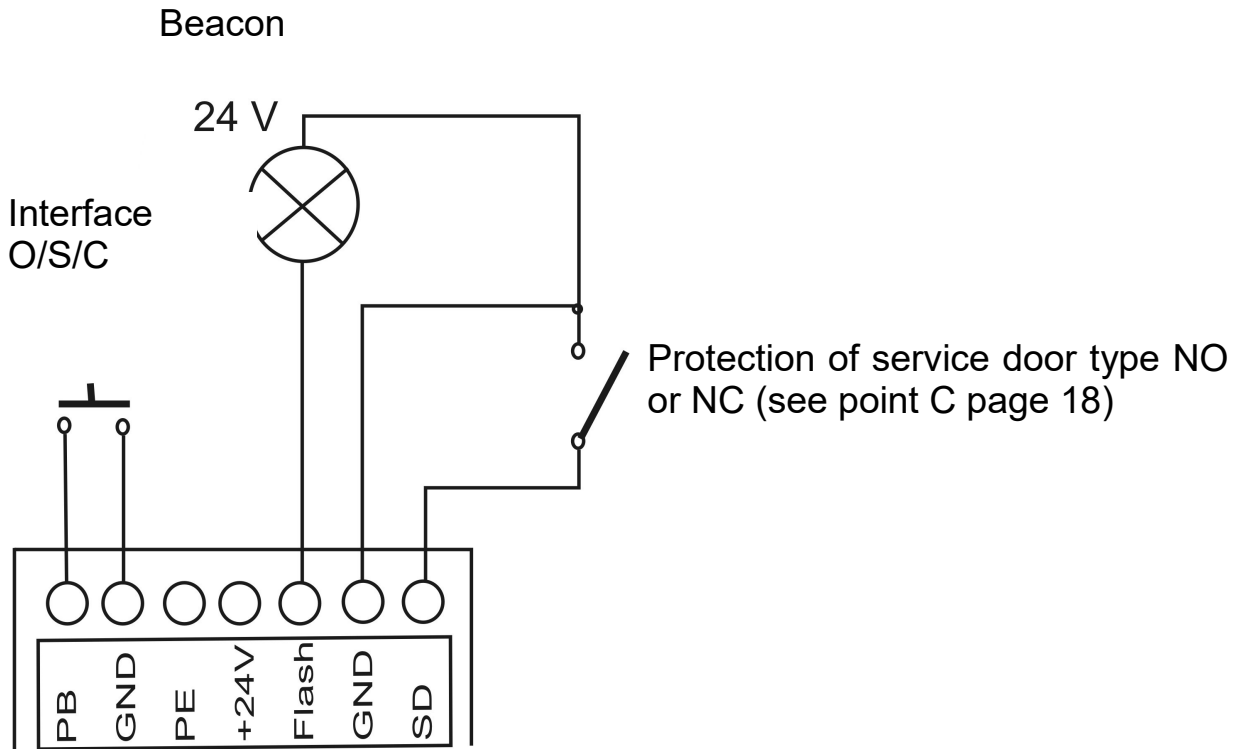


Fig.15

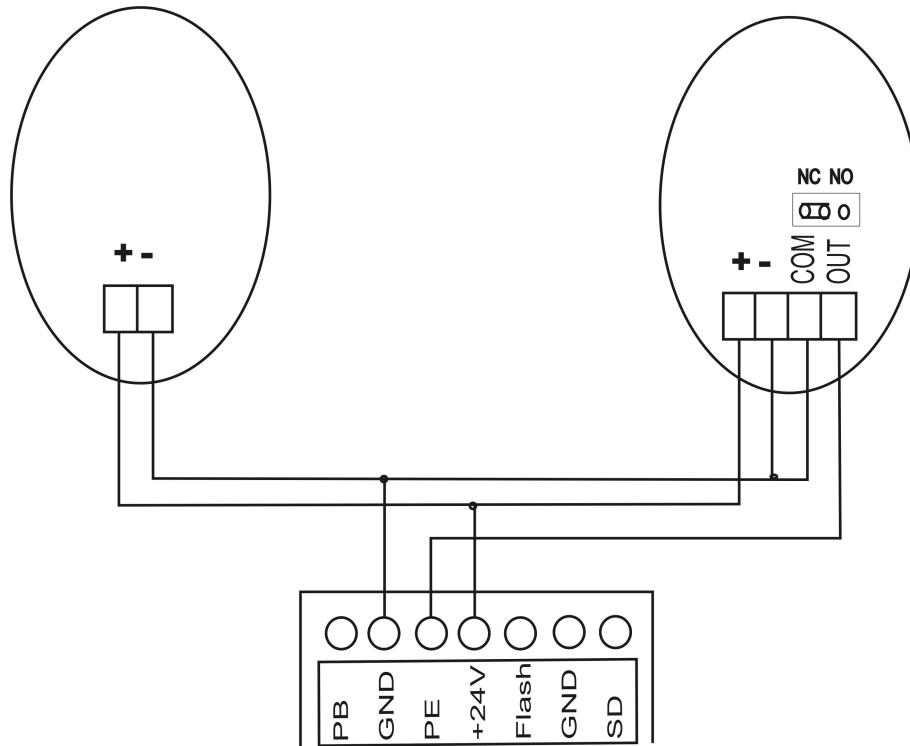


Fig.16 Connection of photocells

MANUAL OPENING

The drive rail is equipped with a clutch with a rope, thanks to which we can disconnect the drive from the rail and manually lift the gate. Pull the rope to disengage (Fig. 17). To reconnect the drive with the rail, start the drive or manually move the door until the spanner engages (connecting the trolley to the chain).

In situations where the gate is the only entrance, it is advisable to install an external disconnection device. (Fig. 18)

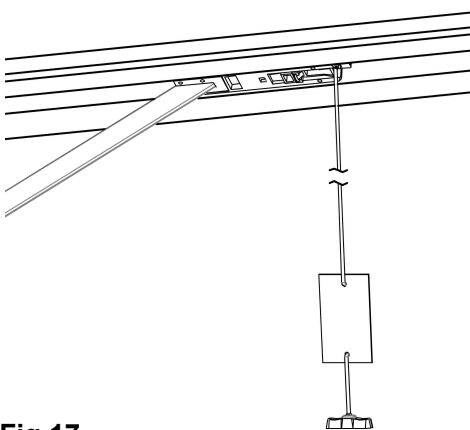


Fig.17

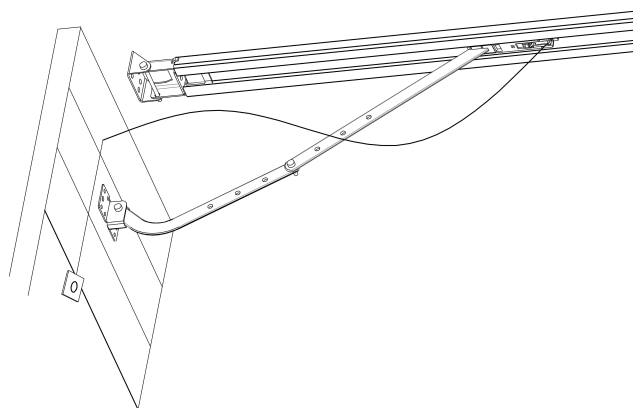


Fig.18

MAINTENANCE

Check the garage door at least twice a year that it is properly balanced and all working parts are in good working order.

Check the reverse sensitivity at least twice a year and adjust if necessary.

Make sure that safety devices are working effectively (photocells, etc.)

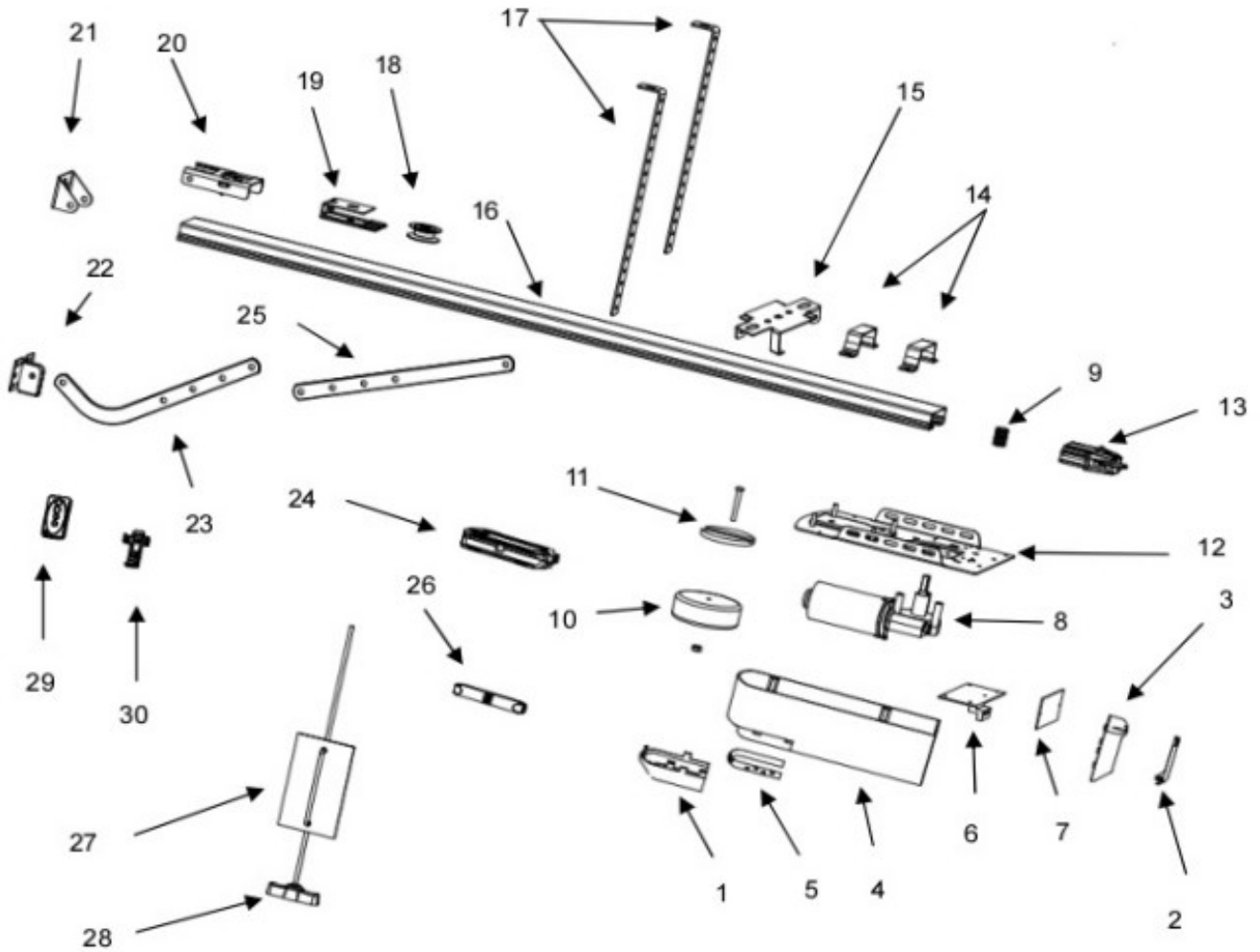
1. Electronics boards do not require any special maintenance.
2. In case of a maintenance alarm, the LEDs blink 10 times fast, it means the garage door is out of balance, maintenance / service is recommended. Then check or program the limit settings from the beginning.

Attention! A poorly adjusted garage door can affect the service life of the drive due to incorrect loads and void the warranty.

TECHNICAL SPECIFICATIONS

	SILENT 1000	SILENT 1200
Power supply	220 - 240V, 50–60 Hz	
Engine power	1000 N	1200 N
Max. gate surface	15.0m ²	18.0m ²
Max. gate weight	100 kg	130kg
Max. gate height	2400 - 3500mm	2400 - 3500mm
The mechanism for moving the gate	belt	belt
Opening / closing speed	160mm / second	140mm / second
L.E.D	24V / 15pcs od L.E.D.	
Setting the limit switches	electronic	electronic
Transformer	Overload protection technology	
Radio frequency	433.92 MHz	433.92 MHz
Encoding format	Rolling code (7.38 x 10 ¹⁹ Combinations)	
Signaling the operation of the drive on the remote control	2 X	2 X
Code memory	50 different codes	
Beacon	Built-in	Built-in
Working temperature		
Protective devices	soft start / soft stop, photocell(option), beacon	
Tightness class	IP20	IP20

LIST OF COMPONENTS















No	Qty	Description
1	1	L.E.D cover
2	1	Control panel cover 1
3	1	Control panel cover 2
4	1	Main cover

No	Qty	Description
13	1	Fixing the gear wheel
14	2	Mounting bracket U
15	1	Strengthening handle
16	1	Steel rail C

PROBLEMS AND SOLUTIONS

Problem	Cause	Solution		
The drive is not working, the display does not light up	1. No power 2. The plug is not connected	1. Make sure the outlet is live 2. Check the fuse 3. Check that the transformer's low voltage wire is connected to the		
	19	1	Gear wheel bracket	
	20	1	Rail end holder	
	21	1	Wall mount	
	22	1	Door handle	
	23	1	Arm L	
	24	1	Clutch	
	6	1	PCB-1	
	7	1	PCB-2	
	8	1	DC motor	
	9	1	Motor shaft sleeve	
	10	1	Transformer	
	11	1	Fixing the transformer	
	12	1	Steel rail fastening	

		power board 4. Check that the power cord is connected 5. Check whether the low voltage side of transformer is 26V AC, if there is 26V AC, replace PCB. If not, replace transformer
While programming the display shows	 The route is set at less than 30 cm or more than 9 m	Re-set the end positions
Display shows Drive is not running or has stopped running	 Too low voltage	Check the power supply
Display shows LED lamp will blink 10 times quickly	 The garage kit is in poor condition	The garage door and motor require maintenance
Display shows	 The drive cannot lock up	Replace drive
Drive is not working The display shows	 Error while setting the end positions Incorrect setting of the end positions	Re-program the UP / DOWN limit setting as instructed
The LED is on all the time	The control panel is damaged or the power board is damaged.	Replace the control panel or power board
When you try to open the gate remotely, The drive automatically stops after passing 10cm The display shows	 The sensor cable or the engine speed sensor itself is defective.	Open the casing and check: sensor cable reconnect it or replace the sensor.
Drive is not working You hear a 'kaka' sound from the relay The display shows	 The cable between the gear motor and the plate is broken	Open the hood and check the connection between the motor and the board.
The drive stops automatically after driving 10 cm The display shows	 The cable between the motor and the board is connected backwards	First, disconnect the power, open the cover and swap the wires between the motor and the board. Re-set the end positions.
The door opens but does not close and the display shows	 The photocells function has been activated but no photocells have been connected.	1. Disable the photocells function if they are not connected (see manual) 2. Check that the photocells are properly connected or that there is no obstacle in the light of their operation.
The drive is fully open and closes after a few seconds The LED lamp blinks 4 times	The automatic closing function is enabled	Set the shutdown time or disable the function (See manual)
The garage door stops and the LED light is on all the time	The power board is damaged	Replace the power board

The LED lamp does not light up	1. The cable for the LED lamp is not connected 2. LED is broken 3. The circuit board is damaged	1. Check the cable 2. Replace the LED 3. Replace the circuit board
The door automatically opens fully before it closes completely.	(Automatic return function) The door is not properly fitted There is an obstacle in the path of the drive	1. Check the position of the actuator lock and reset the end positions 2. Increase the strength for automatic return
The door stops automatically when opening	(Automatic protection function) Garage door is not installed correctly There is an obstruction in the path of the drive	1. Check the door locking positions and reset the end positions 2. Increase the strength for automatic return
The remote control does not work or works at very close range	1. Low battery 2. The antenna is disconnected or installed incorrectly 3. Local disturbances	1. Replace the battery 2. Extend / extend the antenna 3. Get rid of the distractions
No more remote controls can be added	The new remote control is not compatible with the drive	Use only original HATO remotes for drives
The display shows 	Maximum number of remotes assigned to the drive	Remove remotes (See manual)
Ready, display shows 	The door function in the gate is on	Check the switch in the service door.
Drive runs but door does not move	Worn motor shaft	Replace the shaft
The battery does not supply power	1. The battery is worn out 2. The cable is connected upside down 3. The cord is damaged	1. Replace the battery 2. Open the case and check the "+" "-" connection of the battery 3. Replace the cable
Other abnormal cases	The external device is not compatible with the drive	Remove external devices, if the fault persists, replace the circuit board
The display shows 	Garage kit needs servicing	Garage door and drive need servicing.

NOTES

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