



Dts Alt 600

SECTIONAL DOOR OPERATOR INSTALLATION MANUAL

DTS SECURITY PRODUCTS CC

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To the extent that they may be lawfully excluded, DTS Security Products hereby expressly excludes all conditions and warranties, statutory or otherwise, which may be implied by law as conditions or warranties of purchase of a DTS Alt 600 Garage Door Opener. DTS Security Products hereby further disclaims and rejects to the maximum extent permitted by law any liability or responsibility whatsoever for any direct, indirect, consequential, incidental or other injury, damage, cost, expense or loss whatsoever incurred or suffered by any person, company, firm or organization as a result of any failure to install the Garage Door Opener in accordance with these installation instructions.

Contents

No	Package	Part		Qty	Remark
1	Motor	No	Description		
		1	Motor	1 Set	
		2	Transmitter	2 Pcs	Transmitter
		3	Remote Wall Switch	1 Pc	Not Supplied
		4	Remote Wall Switch Bracket	1 Pc	Not Supplied
		5	Disengagement Cord	1 Pc	
		6	Clutch	1 Pc	
		7	Bracket	1 Pc	For Track
		8	Bracket	1 Pc	For Door Panel
		9	Strapping	4 Pcs	For Rail
		10	Connector	2 Pcs	For Door Panel
		11	Bolts/Nuts	1 Set	
12	Installation Manual	1 Pc			
2	Rail	1	Extrusion	1 Set	

Important Safety Warnings

The Alt 600 garage door opener described in this manual is designed for the automation of residential sectional overhead doors and one piece overhead tilting doors. Any other use is considered improper and will void the warranty.

WARNING:

You are carrying out operations on machine systems classified in the automatic gates and doors category and as such failure to comply with the relevant safety rules may result in serious personal injury and/or property damage.

Only qualified personnel should install and service the equipment. It is the responsibility of the installer to adhere to all relevant safety standards.

Description

The Alt 600 garage door opener requires a 220VAC 50Hz power input and has a 24V DC 100W motor and can provide 'Hold to Run' control and automatic modes for operation. When the door is in operation, movement can be interrupted by activation of the safety inputs (manual pull cord, transmitter, wall button (if fitted) and photo beams (if fitted).

An encoder sets open and close positions and braking during the end of the travel cycle reducing speed and noise.

Unqualified personnel or those who do not know the occupational health and safety standards applicable to automatic gates and doors category must under no circumstances carry out installations or implement systems.

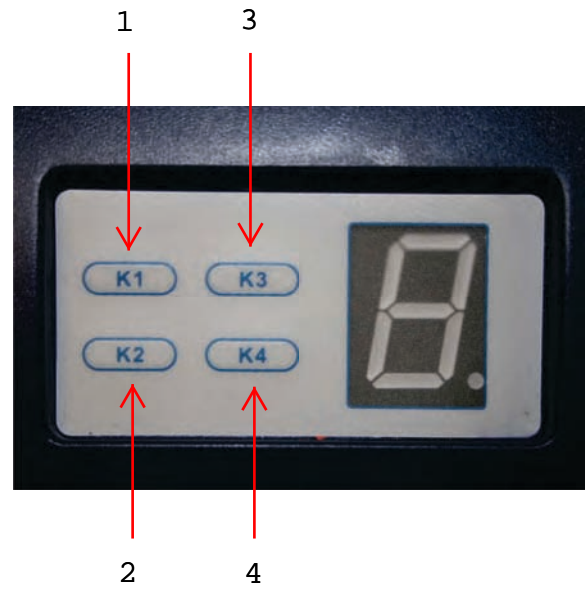
Persons who install or service the equipment without observing all the applicable safety standards will be held responsible for any damage, injury, cost, expense or claim whatsoever suffered by any person as a result whether directly or indirectly from failure to install the system correctly and in accordance with the relevant safety standards and installation manual.

A 433.92MHz radio receiver is built into the circuit board and the rolling code is memorised with the self-learning technique. As an alternative to the built-in receiver the unit will accept any of the range of stand alone radio receivers. The unit has been designed to provide maximum reliability, safety and flexibility of use.

IMPORTANT: Before starting to install the unit read all of the instructions carefully and make sure you are familiar with the safety warnings included in this manual.

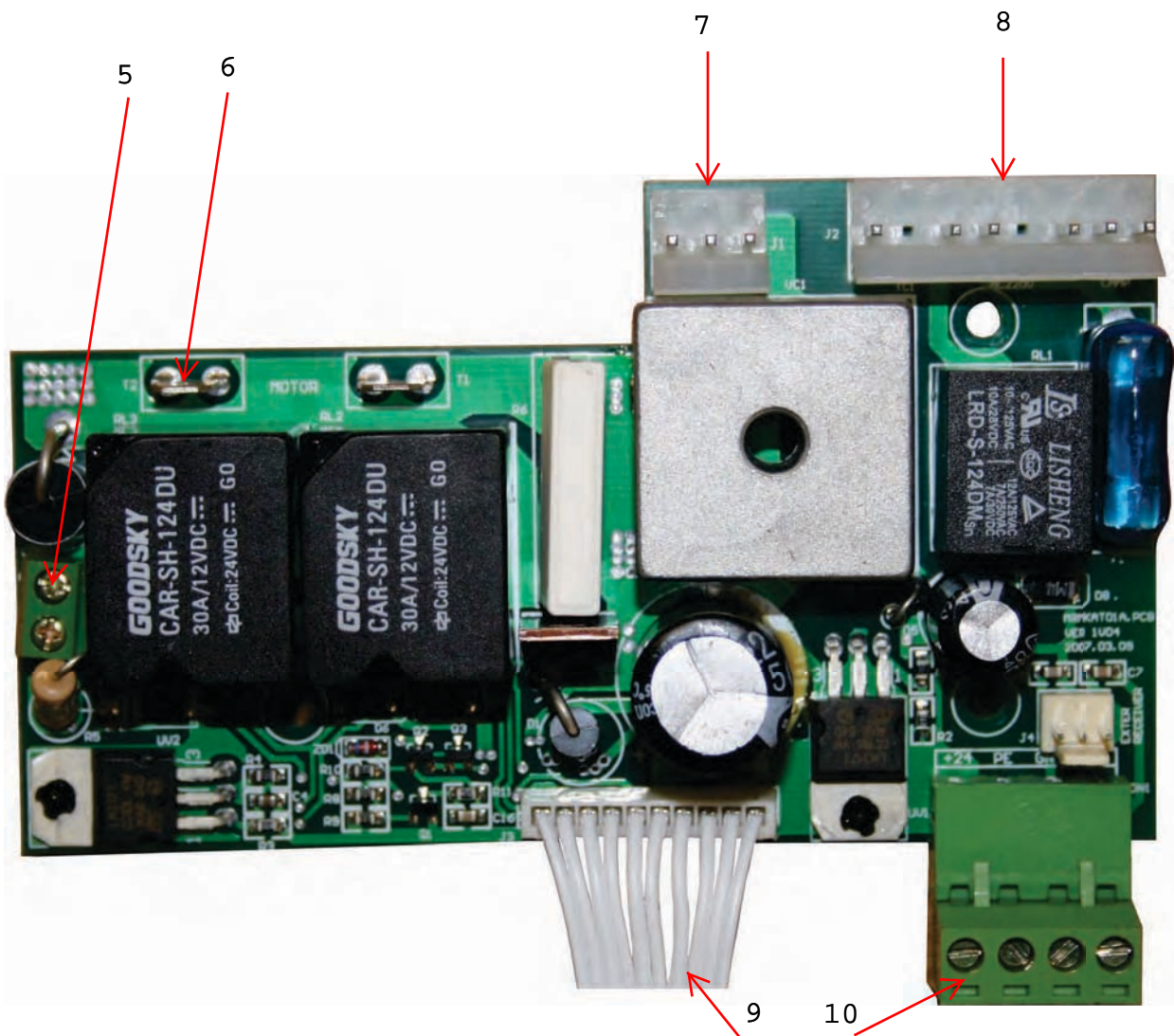
Operating Controls

- 1 SET Button (K1) Confirm set and Reversing sensitivity
- 2 CODE Button (K2) Transmitter code set
- 3 UP button (K3) Limit mode set.
- 4 DOWN button (K4) Limit mode set.



Circuit Board Connectors

- 5 Coupling for connecting the backup battery.
- 6 Coupling for connecting the motor.
- 7 Coupling for the power transformer.
- 8 Terminal for connection of power input, run lamp and transformer.
- 9 Terminal connector to the control board
- 10 Terminal connection of photo beam or push button



Installation

- 1). Read the instructions carefully.
- 2) Make sure the door structure is solid and suitable to be motor driven.
- 3) Make sure that when the door is moving there are no friction points.
- 4) The door must be properly balanced and must be easily lowered and raised by hand.
- 5) Install a 220V, adequately protected 3-pin socket near where the Alt 600 opener is going to be installed

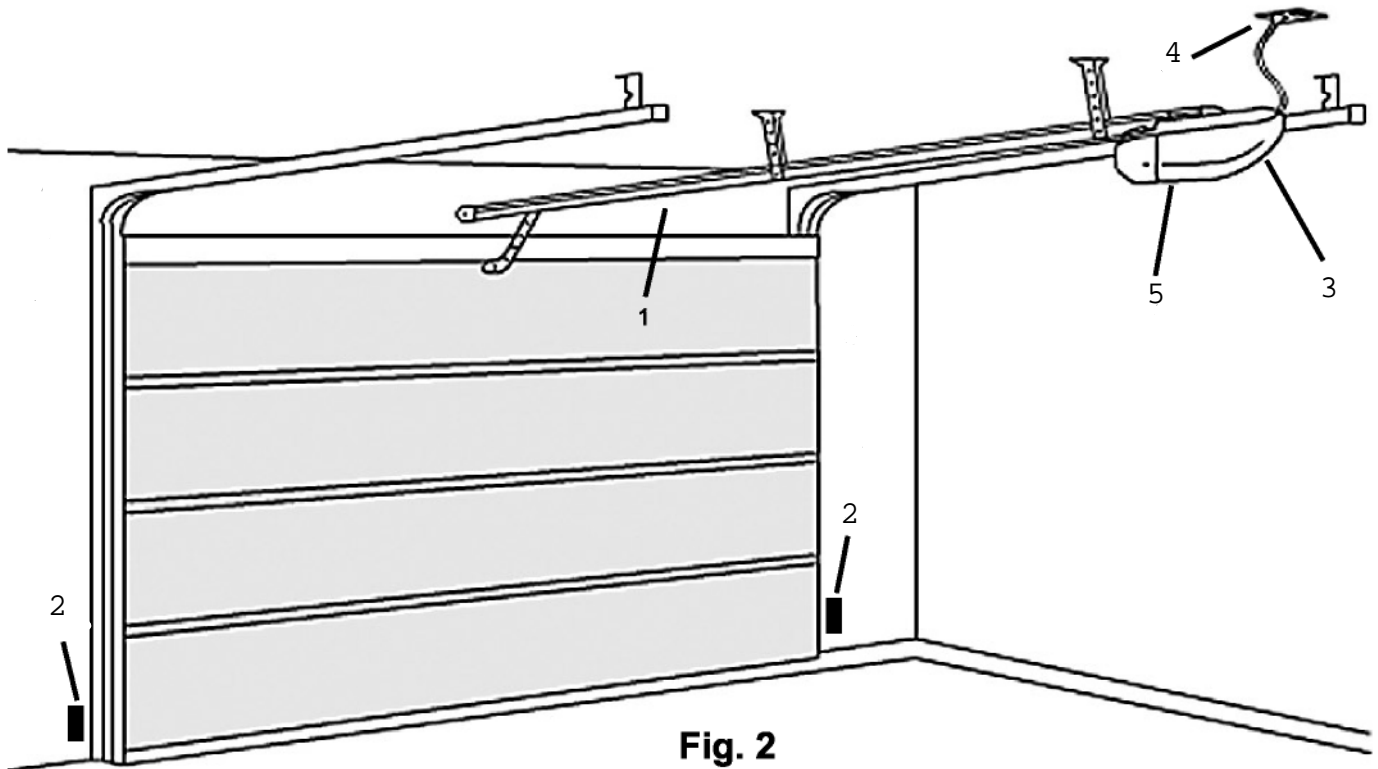
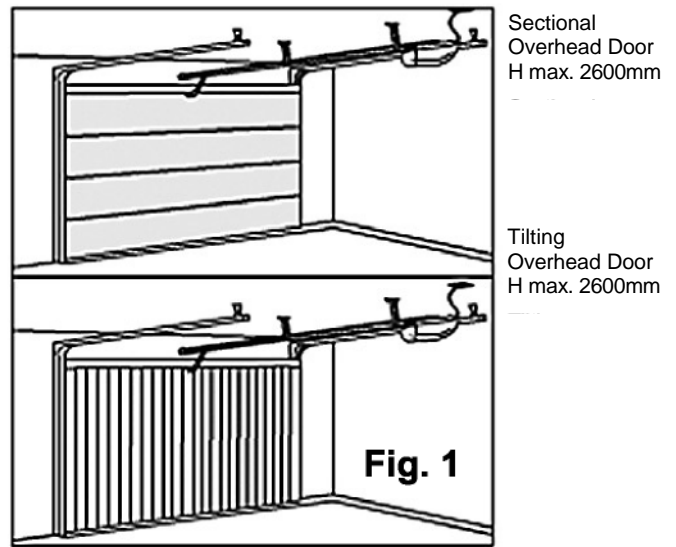


Fig. 2

Refer to Fig. 2 for recommended installation

- | | |
|----------------------------------|---------------|
| 1) Alt 600 sectional door opener | 5) Power Head |
| 2) Infra Red Beams (Optional) | |
| 3) Inside push button panel | |
| 4) Power Point (Not provided) | |

CHAIN SHUTTLE ASSEMBLY

For ease of installation the Alt 600 is delivered with the chain and chain shuttle already assembled in the track. if you need to assemble it yourself connect the chain shuttle to the chain with screw C tightened firmly. Move shuttle B to half way along the rail section, grease the chain and sprocket (Fig.3) with a lithium type grease or equivalent. Do not use oil type lubricants.

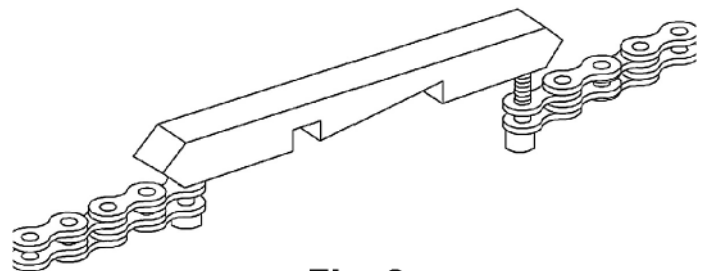


Fig. 3

Installation

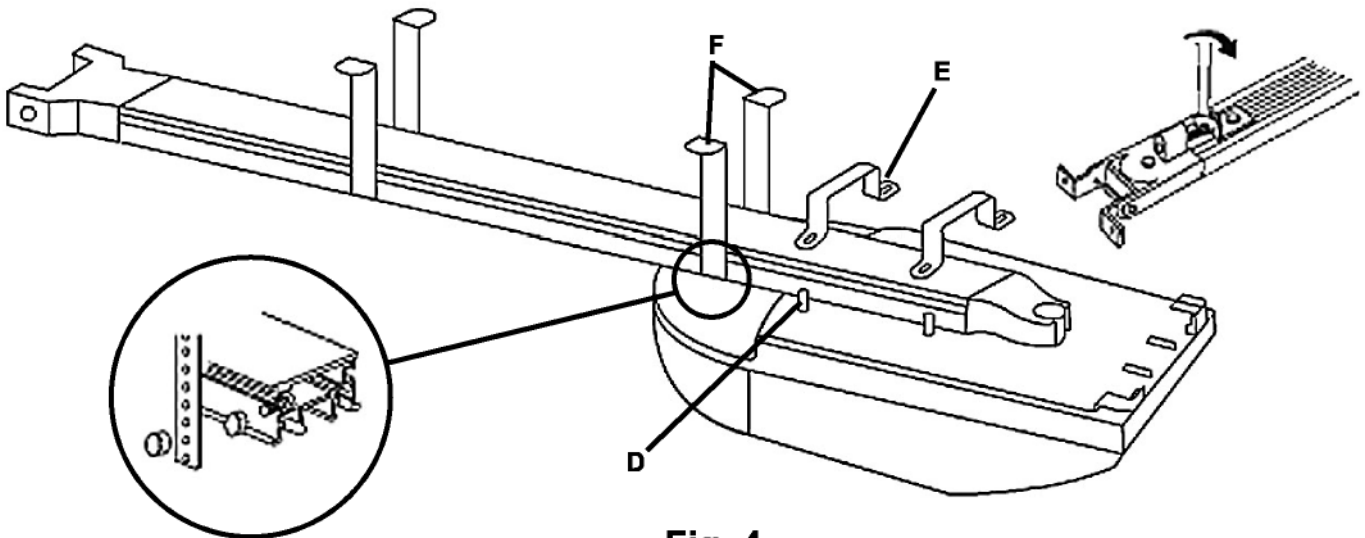


Fig. 4

Before attaching the motor brackets (E) (FIG 4) screw an inverted nut (6mm) (D) on each stud then position the brackets (E) on the studs and secure them in-place using a second 6mm-nut and then lock the brackets to the rail by tightening the inverted lock nuts (D).

Fix the Alt 600 opener to the doorframe or to the ceiling with the correct fixing (Fig.5), maintaining a minimum gap of 30mm from the top panel's maximum height (Fig. 6). Check measurements for drilling insert and lock the brackets F and fix the Smart Lifter opener to the ceiling with the correct fixings (Fig.6). Cut off any fixing strap excess.

Warning: Make sure the opener is affixed to noggins in ceiling and not just to plasterboard. Failure to have a safe and secure fixing will lead to opener falling causing serious personal and /or property damage.

Note: A set of fixing straps should be located in the centre of the aluminium rail to prevent rail flex that will result in phantom reversing.

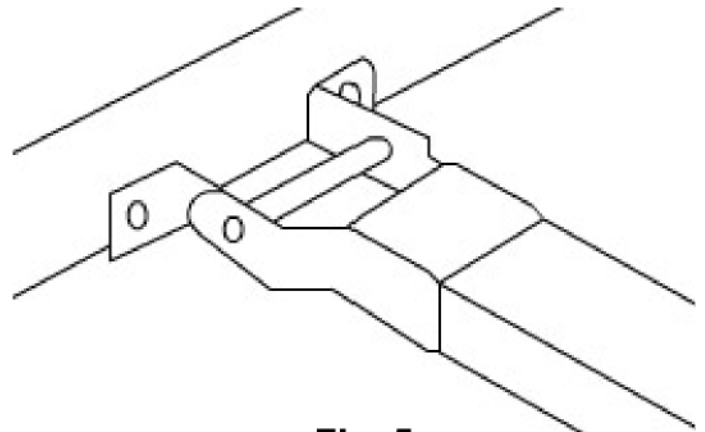


Fig. 5

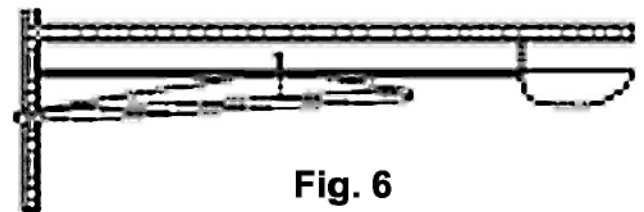


Fig. 6

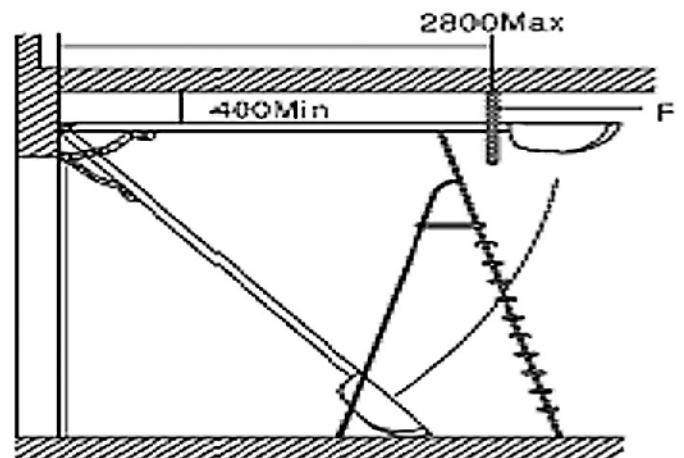


Fig. 7

Installation

Remember there are specific standards that have to be strictly followed regarding the safety of electrical installations and automatic gates and doors.

As well as the legal requirements and standards that must be adhered to, please take note of the following points to ensure maximum safety and reliability of your installation.

- 3.1) Prior to installing check the surrounding environment. Carefully evaluate any hazards there could be from physical damage (transiting vehicles, parts of trees falling etc.), possible contact with foreign bodies (insects, leaves, etc.), Flooding hazards or any others exceptional events.
- 3.2) Check that the main voltage is the same as that given on the rating plate and in this manual.
- 3.3) Check there is suitable electrical protection against short circuits/power spikes and proper earthing on the main supply.

Remember the unit has mains voltage running through it (electrocution hazard, fire hazard).

- 3.4) Take care with the control unit; parts may be subject to damage if abused.
- 3.5) Make sure you have all the necessary materials and that they are suitable for this kind of use.

- 3.6) Read all the instructions thoroughly and make sure they are understood before attempting to install the Alt 600.
- 3.7) Before starting the installation, carefully analyse all the risks relating to automating the door. Verify that the door to be automated is in a sound condition and that the mechanisms are in good working order; observe the safety margins and minimum distances.
- 3.8) Evaluate with particular care the safety devices to be installed and where to install them; always install an emergency stop device for interruption of power to the opener if required.
- 3.9) Once the risks have been analysed, install the Alt 600 opener and relative safety devices, emergency stop and/or photoelectric cells.

Important: Infra Red Beams must be fitted if autoclose is activated.

- 3.10) When installing the Alt 600 opener, strictly follow all the instructions given in the instruction manual. If some points or procedures in this manual are not very clear do not install the unit until all doubts have been cleared up with our technical department.

Terminals and Connections

1) GND & PB: Step by step command input (open stop close) same as the step by step button on the transmitter.
= **Push Button** terminal

2) GND & PE = **Photo Beam** terminal.

3) 24V & GND & PB = **Plug in receiver** terminal.

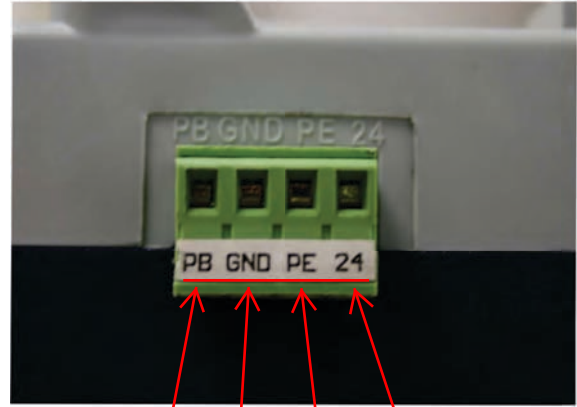
To safeguard the opener and avoid damaging components while wiring disconnect the unit from all power when working on it.

Remember that there are specific, strict standards that must be complied with in regard to both the safety of the electrical systems and automatic doors.

Only qualified, trained personnel may carry out the installation and subsequent maintenance.

Whoever installs and uses the Alt 600 sectional door opener will be held responsible for any damage caused.

NOTE: Contact DTS Security technical department for the wiring diagram for the above connections if uncertain of the correct procedure.



24V DC
Infra Red Beams (N/O)
Ground (GND)
Push Button (Trigger)

Programming the Unit

The system must be checked and tested when connections are completed.

4.1) Check that the chain support is halfway so that movement is problem free both in opening and closing.

Make sure that all the standards relative to the automatic gates and doors category have been observed.

4.2) Now carry out a test with the door disconnected from the motor and open and close the door to verify that the mechanical parts are all in good working order and the door does not bind or jamb in its tracks.

4.3) Power the unit. As soon as the unit is powered the system displays a 7-segment LED number from 0-9, and the lamp will turn on for 2 seconds.

If the LED display is upside-down, press the SET button once, then the LED will display the number in the correct direction. The system will remember the display direction. It will display correctly next time the power is turned back on.

If this is not the case, switch the power off immediately and check connections carefully.

4.4) Check that all the safety devices on the unit are working properly (emergency stop, photo beam, etc.). This is one of the most important checks and must be done with great care; in fact, the active safety of the automatic door depends on the correct functioning of the safety devices. The reversing sensitivity device is of great help in minimising damage but only the correct installation of the safety devices will make it possible to stop the door before it can cause any damage or injury to person and/or property.

4.5) It is now time to set the opening and closed position.

Setting Open and Close Positions

- 5.1) Press and hold SET(K1) until the LED displays the letter 1. It turns into opening position learn state.
- 5.2) Now press UP(K3) again and hold, the door will travel to the open position, release the button when the door has reached the desired position.
- 5.3) If the door has overrun its position, press DOWN(K4) to move the door downwards. Adjust and fine tune the position by pressing UP(K3) and DOWN(K4).
- 5.4) Press SET(K1) to set the open position the LED will display the letter 2 it is now time to set the closed position.
- 5.5) Press and hold DOWN(K4), the door will travel to the close position release DOWN(K4) when the door has reached the closed position.
- 5.6) If the door has overrun its position, press the UP(K3) to move the door upwards. Adjust and fine tune the position by pressing DOWN(K4) and UP(K3).
- 5.7) Press SET(K1) to confirm.

The door will now open and close automatically to map the open and close sensitivity force requirements.

WARNING: Keep all persons and property clear of door during the installation process.

- 5.8) The door is now set for normal operational mode.

IMPORTANT: Safety systems must be checked regularly to ensure that maximum safety is maintained at all times.

Adjustments

Normally, the force settings are automatically set and adjustment is not necessary. However, the force can be adjusted by an authorized smart opener's installer for special purposes if necessary.

- 6.1) Press SET(K1) and hold until the LED display setting number 3, release SET(K1) the force setting no. will appear 1-9, it is now in force adjustment mode.
- 6.2) Press UP(K3) to increase the force one-degree and press DOWN(K4) to decrease one degree. Maximum degree is 9 and the minimum is 1.
- 6.3) Press SET(K1) to confirm.
- 6.4) The door meets and hinders and rebounds 15 --20cm.

Function Modes

The unit has two selectable functioning modes, PHOTO BEAM , AUTO CLOSE DOOR and LOCK DOOR.

7.1) PHOTO BEAM:

Make sure the photo beam has been installed correctly before setting the PHOTO BEAM function.

- 7.1.1) Press DOWN(K4) & hold until the LED displays –
- 7.1.2) Press DOWN(K4) once, the LED displays || the photo beam is now disabled. Press DOWN(K4) again the LED displays H, the photo beam is enabled.
- 7.1.3) Press SET(K1) to confirm and quit.

7.2) TO SET AUTO-CLOSE ON / OFF :

- 7.2.1) Press UP(K3) and hold until the LED displays –
- 7.2.2) Press UP(K3) once, the auto close time increase 1 minute; Press DOWN(K4) once, decrease the auto close time 1 minute, the LED display the current set value.
- 7.2.3) The Auto Close function will be disable when the setting time is 0.
- 7.2.4) Press SET(K1) to confirm and quit when the correct time is set.
- 7.2.5) Infra Red Beams must be fitted if autoclose is on.

7.3) HOLIDAY LOCK-OUT:

- 7.3.1) Press SET(K1) and hold until the LED display setting number 4, release SET(K1), it is now in holiday lock-out program.
- 7.3.2) Press UP(K3), LED display 1 holiday lock-out is now activated or press DOWN(K4), LED display 0 holiday lock-out is now de-activated.

Self Learning Transmitter

- 8.1) Press CODE(K2), release when the LED displays .. Press a button on the transmitter then release and press again the dot will flash to confirm the code
- 8.2) Repeat step 1 to code a maximum of 20 different transmitters' and./or buttons.
- 8.3) To delete all stored codes, Press and hold CODE(K2) the LED display dot flash .,keep holding for approx 8 seconds until the LED display C all the settings is now deleted.

Maintenance

No particular maintenance is required for the logic circuit board.

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

IMPORTANT: A poorly operating door can effect the life of the automatic opener due to incorrect loads and will void the warranty.

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

Make sure that the safety devices are working effectively (photo beams, etc.)

Final Notes

This manual is only for use by technical personnel qualified to carry out the installation.

No information given in this manual can be considered of any interest to the end user.

No setting or adjustments contained in this manual can be carried out by the end user.

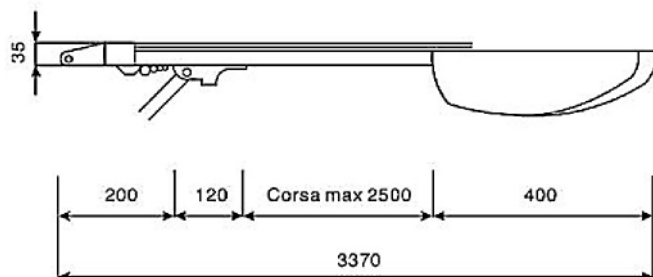
It is important for the installer to show their clients correct operational use of the Alt 600 including the use manual disengagement cord.

Inform the owner about the need for a regular and accurate maintenance, especially regarding a regular check of the safety and reversing devices.

Technical Specifications

Power Input:	220 VAC 50Hz
Motor:	24V DC 100W
Courtesy light time:	3 minutes
Working temperature:	-20° ~ 70°C
Relative Humidity:	<90%
Open and close force:	600 N
Reception frequency:	433.92MHz
Sensitivity:	>1 V for correct receiver signal (average range 50m, with an aerial)
Decoding:	Rolling code
Transmitter power:	12V Battery
Globe:	220V 25 watt screw type

NOTE: DTS Security reserves the right to modify its product and product specifications at any time without prior notice.



Typical Application

The Alt 600 (max.2500mm travel) model can automate sectional overhead doors up to a height of 2600mm and tilting overhead doors up to 2600mm.

Manual Disengagement

The Alt 600 is equipped with a manual release cord to disengage shuttle and move door by hand while holding the handle down (Fig 8). To operate pull on the handle to disengage the shuttle. To re-engage the door simply run opener in automatic mode or move door by hand until the trolley engages in the chain shuttle.

For situations where a pedestrian door is not present it is recommended that an external disengagement device is fitted. (Fig 9).

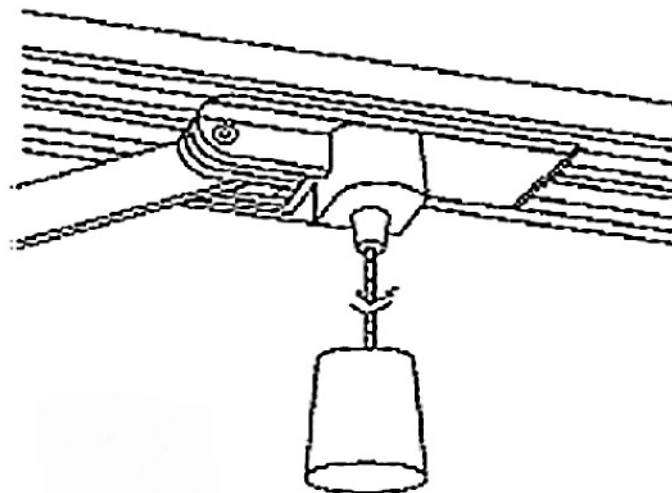


Fig. 8

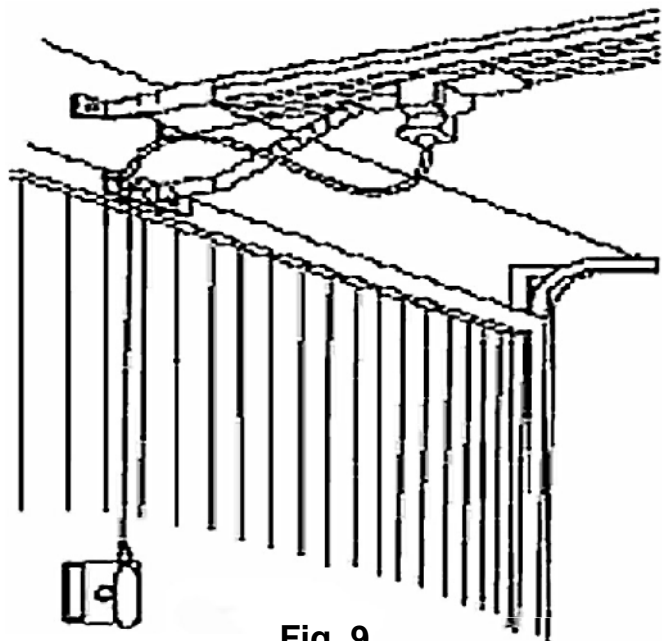


Fig. 9

Important Information for the User

Once the Alt 600 opener has been installed, the user must be informed about how it works and all the risks that can arise if it is used improperly. The user must avoid placing himself/herself in dangerous situations such as standing within the door's operating range when it is moving.

Do not let children play near the door and keep the remote controls out of their reach.

All servicing, repairs or checks must be carried out by professionally qualified personnel and noted on a maintenance register kept by the user.

IMPORTANT: In the case of a malfunction the user must call an authorized installer and should not attempt to repair it.

Manufacturers warranty.

- **All goods manufactured by DTS Security carry a 12 month factory warranty from date of invoice.**
- **All goods are warranted to be free from faulty components and manufacture.**
- **Faulty goods will be repaired or replaced at the sole discretion of DTS Security Products, free of charge.**
- **This warranty is subject to the goods being returned to the premises of DTS Security Products.**
- **This warranty excludes lightening damage, insect damage and damage caused by faulty installation.**
- **In the event of the goods being supplied by dealer, merchant, agent or duly appointed installer of DTS Security Products, the claim must be directed to that supplier.**
- **The carriage of goods is for the customer's account.**
- **This warranty is only valid if the correct installation and application of goods, as laid out in the applicable documentation accompanying said goods, is adhered to.**
- **All warranty claims must be accompanied by the original invoice.**
- **The liability of DTS Security Products and / or their distributors is limited as herein set out DTS Security Products and / or their distributors will not be liable for consequential or incident damages howsoever arising.**