



DTS-12RE

ROLLER DOOR OPERATOR

Comply to: SANS IEC 60 335-2-103
NRCS Cert. no. 88934/002



DTS SECURITY
P.O.BOX 3399
EDENVALE 1610

7 Belgrade Ave, Spartan.

+27 11 392 5540

www.dtssecurity.co.za

1. SAFETY WARNINGS

IMPORTANT! PLEASE READ THESE INSTRUCTIONS CAREFULLY PRIOR TO THE INSTALLATION OF THE ROLLER DOOR OPERATOR.

This automatic opener has been designed to provide years of trouble-free use. The opener will perform efficiently only if it is installed and operated correctly.

READ THESE IMPORTANT SAFETY RULES FIRST.

Keep garage door balanced. Sticking or binding doors must be repaired. Garage doors, door springs, brackets and their hardware are under extreme tension and can cause serious personal injury. **Do not attempt adjustment.** Call professional garage door installers.

Do not wear rings, watches or loose clothing while installing or servicing a garage door operator.

Installation and wiring must be in compliance with your local building and electrical codes.

The safety reverse system test is very important. Your garage door must reverse on contact with a 5cm to 10cm high object on the floor. Failure to properly adjust the operator may result in serious personal injury from a closing garage door. Repeat the test once a month and make any needed adjustments. (See Sensitivity adjustment).

DTS-12RE operator has an electronic obstruction system that provides safe and reliable operation. It is however a legal requirement in some countries to also install Photo beams across the doorway. Please check this requirement with your local distributor.

Do not use force adjustments to compensate for binding or sticking garage doors. Excessive force will interfere with the proper operation of the Safety Reverse System or damage the garage door.

This unit should not be installed in a damp or wet space.

Disengage all existing garage door locks to avoid damage to garage door.

Install the lighted door Control Box (or any additional Push Buttons) in a location where the door is visible, but out of the reach of children. Do not allow children to operate push button(s) or remote control(s). Serious personal injury from a closing garage door may result from misuse.

CAUTION:

Activate operator only when the door is in full view, free of obstructions and operator is properly adjusted. No one should enter or leave the garage while the door is in motion.

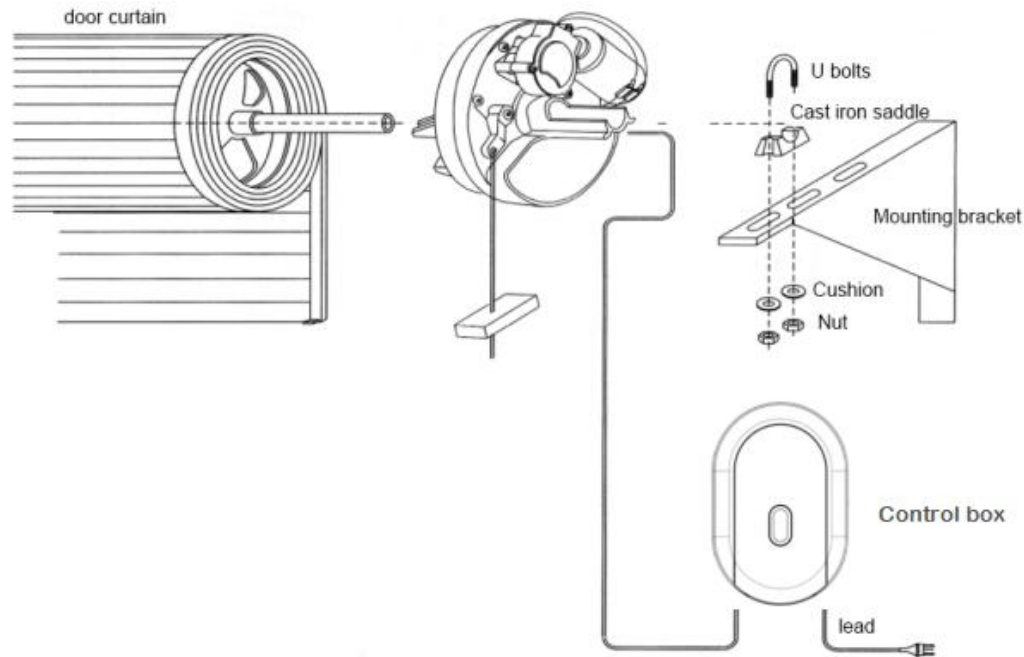
Do not allow children to play near the door.

Disconnect electric power to the garage door operator before making repairs or removing covers.

IMPORTANT:

Fix the caution label to the rear of the garage door as a reminder of safe operating procedures.

2. Pre-installation Notes



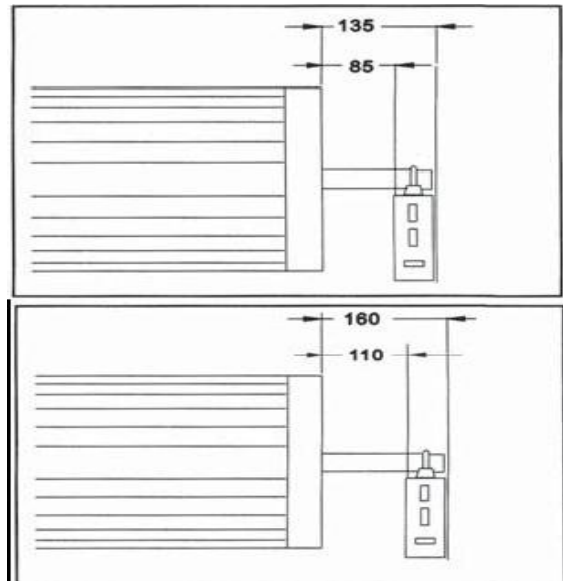
Right hand installation shown (inside garage looking out) Fig 1

Check that there is sufficient side clearance to fit the operator unit. It may be fitted to either the right- or left-hand side.

(1) Minimum side clearance:

The minimum side clearance between the door curtain and the inside edge of mounting bracket is 85mm. The minimum side clearance between the door curtain and the outside edge of mounting bracket is 135mm.

(2) Recommended side clearance the recommended side clearance between door curtain and the inside edge of mounting bracket is 110mm. The recommended side clearance between door curtain and the outside edge of mounting bracket is 160mm.



If the operator is being fitted at the same time as the new door installation, read these instructions in conjunction with the roller door installation instructions.

If the operator is being retrofitted, make sure the door operates smoothly and is properly balanced.

N.B: SPECIAL CARE SHOULD BE TAKEN IF RE-TENSIONING OF THE DOOR IS REQUIRED.

At no stage should you loosen both “U” bolts if door is under tension.

IF THERE ARE ANY PROBLEMS, PLEASE CONTACT YOUR LOCAL SUPPLIER OF THIS OPERATOR.

3. Installation Instructions

Installation on the Krazi door and others where the door drum is more than 135mm from the centre shaft support bracket.

1. Release the engage/disengage lever on the motor so that the motor runs free.
2. On the door support bracket carefully remove the door support hook
3. Carefully lift the door and slide the motor over the centre shaft of the door. (Fig.3)
4. Put the door back and refit the door support hook.
5. Close the door so that the motor is visible.
6. Move the motor over the centre shaft and hook securely on the drum wheel of the door.
7. Fit and secure the u-bolt, make sure it is fully tightened. The motor must not move on the shaft.
8. Use Tek screws to secure u-bolt bracket to centre shaft of garage door and make sure the motor does not move.

Installation on Wispeco and others where the drum wheel door is less than 135mm from the centre shaft support bracket.

1. Release the engage/disengage lever on the motor so that it runs free.
2. Make sure that there is enough space for installing the opener. It is required that the minimum distance from the shaft end to the wall is 135mm.
3. Please check carefully if the u-bolt on the other side of the door locks the centre shaft tightly. If not, carefully tighten it.
4. Move the door up and use a rope to bind the door in the middle. (Fig 2)
5. Use a prop or ladder to hold up the door at the motor end. Be careful not to scratch the surface of the door (ref to fig.3).
6. Remove the u-bolt carefully.
7. Move the bracket away from the wall. Make sure that the prop can hold the door up safely and securely.
8. Take the motor out of the box and put the motor along the centre shaft into the wheel of the door.
Make sure that the motor hooks securely onto the drum wheel of the door.
9. Re install the bracket, if necessary, check position.

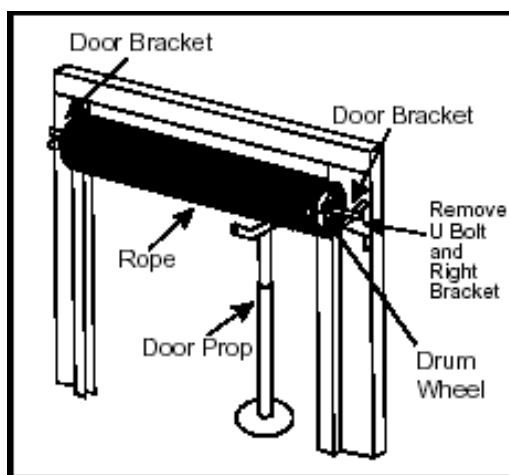


Fig 2

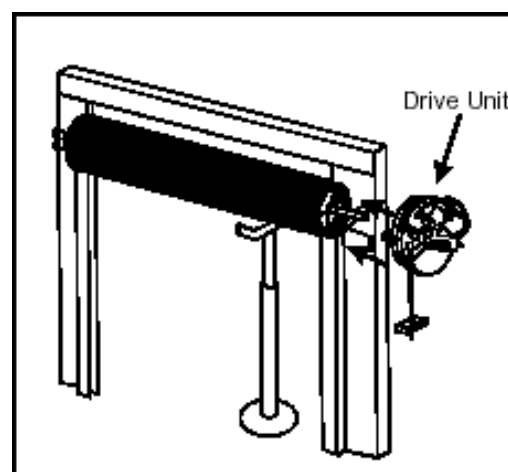


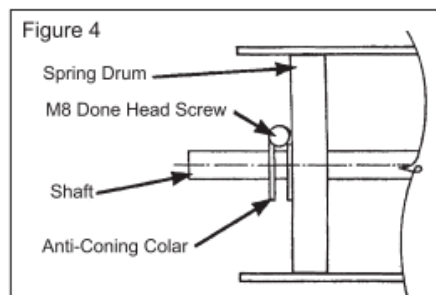
Fig 3

4. Installation Instruction

STEP 1

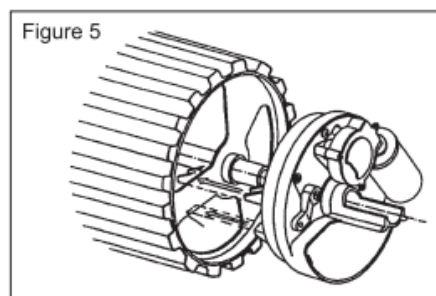
Whilst the door roll is on the floor, rotate shaft backwards and forwards by hand and then release. This action will allow the roll to centralize itself on the shaft.

(New installation only).



STEP 2

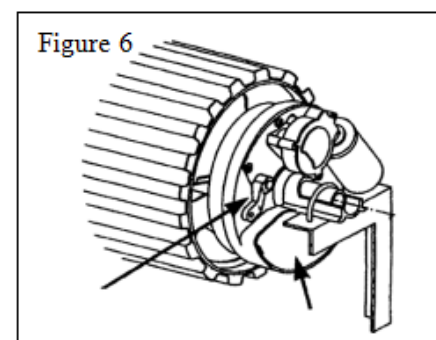
Fit anti-coning collar TIGHT TO DRUM at opposite end of curtain to the motor using M8 Dome Head Screw and M8 Nyloc Nut as required. (Figure 4)



STEP 3

Slide drive unit onto shaft as shown (Figure 5)

Ensuring drive lugs engage fully with the narrowest spoke on drum wheel.



N.B: Right-hand installation shown (inside looking out)

Lift door onto mounting brackets (ensuring curtain roll is correct way round) centralize curtain roll with opening. Refer to door installation instructions. (New installations only).

Ensure motor assembly is fully engaged with drum wheel spokes. Clamp shaft to mounting brackets using “U” Bolts supplied. (Use “U” bolt in opener pack for MOTOR end). See (Figure 6)

Disengage the motor drive by pulling the manual release lever downwards. See (Figure 6)

Tension door and complete door installation as per Door Installation Instructions. Ensure the door is correctly balanced and is not binding or sticking within vertical tracks.

Ensure locking bars (if fitted) are moved to the retracted (unlocked) position and keys removed from the lock.

Mount control Unit approximately 1.6m from the floor out of the reach of children. Use No. 4x1” self-tapping screws and rawl plugs. Ensure aerial is clear of all steel supports and coiled electrical leads. Fit plug from motor unit into bottom of Control Box.

Connect the control unit power cord to an adjacent socket. Ensure that the socket is properly earthed.

5. Control box set up

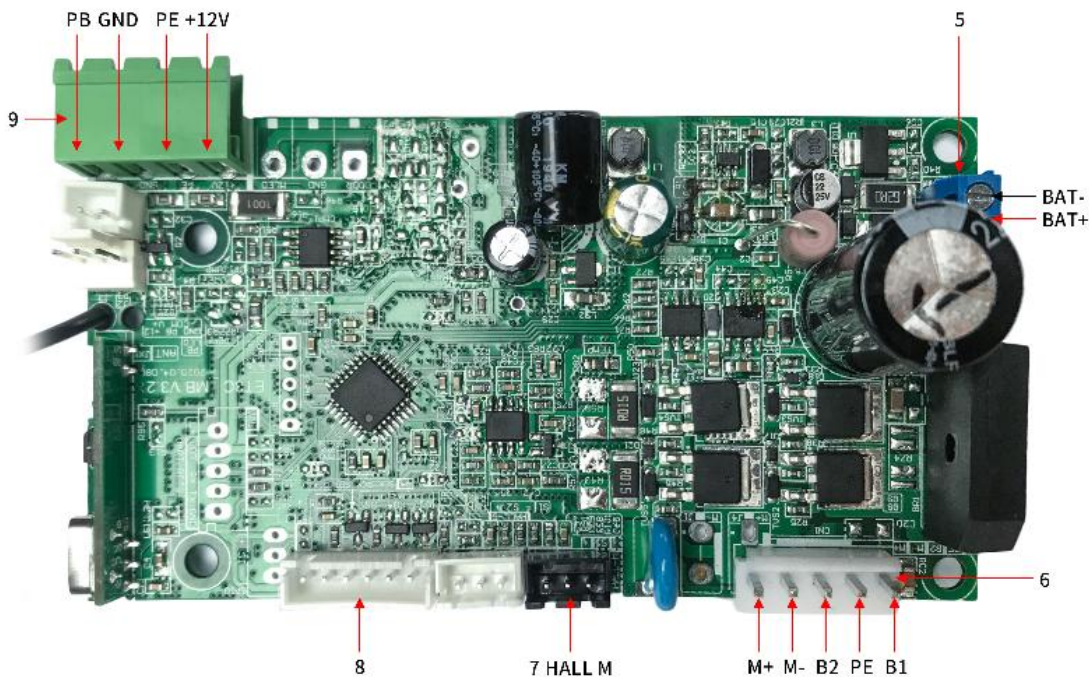


Operation Controls:

1. SET Button - Confirm set and reversing sensitivity
2. PAIR Button - Transmitter pairing
3. UP Button - Limit mode set.
4. DOWN Button - Limit mode set

Circuit Board Connections.

5. Coupling for connecting the backup battery.
6. Coupling for connecting the motor and transformer.
7. Hall sensor terminal
8. Terminal connector to the control board.
9. Terminal connections for photo beam and push button.



Terminals and Connections.



- 1) GND & PB = **Push Button** terminals. Step by step command input (open, stop, close) same as the step-by-step button on the transmitter.
- 2) 12V & GND & PE = **Photo beam** terminals.
- 3) 12V & GND & PB = **Plug in receiver** terminals.

To safeguard the operator 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 the automatic doors. Only qualified, trained personnel may conduct the installation and subsequent maintenance. Whoever installs and uses the DTS12RE roller door opener will be held responsible for any damage caused.

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

Right hand and left hand installation

Please note: The operator is designed to operate on the right side of the door by default. To reverse the drive for left hand side installation, press and hold the **SET** button until the LED displays **5**. Using the **UP** or **DOWN** buttons select **1** for left installation or **0** for right side installation. Press **SET** to confirm the setting.

WARNING: This step must be completed prior to setting Open and Close limits and safety reverse force adjustment if utilizing a left side installation. If utilizing the standard right sided installation, this step can be ignored.

6. Setting Open and Close Limits.

- 6.1) Press and hold **SET** button until the **LED** displays the number **1**. It turns into opening learn state.
- 6.2) Now press and hold **UP** button, the door must travel to the open position, release the button when the door has reached the desired open position.
- 6.3) If the door has overrun its open position, press the **DOWN** button to move the door downwards. Adjust and fine tune the open position by pressing **UP** and **DOWN**.
- 6.4) Press **SET** to store the open position, the LED will display the number **2**, it is now ready to set the close position
- 6.5) Press and hold **DOWN**, the door must travel to the closed position, release the button when the door has reached the desired closed position.
- 6.6) If the door has overrun its closed position, press the **UP** button to move the door upwards. Adjust and fine tune the close position by pressing **DOWN** and **UP**.
- 6.7) Press **SET** to store the closed position. The door will then open and close automatically to map the and close sensitivity force requirements.
- 6.8) 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.

7. Safety Reverse Force Adjustments.

The force settings must now be set. (Set force between 1 - 9)

- 7.1) Press and hold **SET** until the LED displays setting number **3**, release **SET**, the force setting number will appear from **1 – 9**. It is now in force adjustment mode.
- 7.2) Press **UP** to increase the force by one degree and **DOWN** to decrease the force by one degree. Maximum degree is **9** and the minimum degree is **1**.
- 7.3) Press **SET** to store your setting.
- 7.4) If the door meets an obstruction, it will stop and rebound to the top.

8. Photo beam setting (OPTIONAL).

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

- 8.1) Press and hold **DOWN** until the LED displays “**II**.”
- 8.2) Press **UP** once, the LED displays “**H**”, the photo beam is activated, Press **DOWN**, the LED displays “**II**” to cancel this function.
- 8.3) Press **SET** to store your setting.

Notice: Close the photo beam function when you do not use photo beam. If the photo beam is activated and no photo beams are fitted, the door will not close.

9. Set Auto close setting.

- 9.1) Press and hold **UP** until the LED displays **0**
- 9.2) Press **UP** once, the auto close time will increase by **1** minute, the maximum time is **9** minutes. Press **DOWN** once, the auto close time will decrease by **1** minute. The LED will display the current set value.
- 9.3) The Auto Close function will be disabled when the setting is **0**.
- 9.4) Press **SET** to store your setting.

Notice: The auto close is only available when the door is at its full open position. When using auto close mode, photo beams must be fitted correctly and tested for operation at regular intervals.

10. Holiday lock out ON/OFF.

- 10.1) Press and hold **SET** until the LED display setting number **4**, release **SET**. It is now in holiday lock out program.
- 10.2) Press **UP**, LED display **1**, holiday lock out is now activated or press **DOWN**, LED displays **0**, holiday lock out is now de-activated.
- 10.3) Press **SET** to store your settings.
- 10.4) The GDO will allow one opening and closing. After closing, allow 2 seconds for lock out to activate. Press button **3** on the DTS TX5 Octo remote, then programmed button to operate/

11. Self Learning Transmitter. (Maximum 20)

- 11.1) Press **CODE**, the red dot will light up. Press and release a button on the transmitter, the red dot will disappear, press the same button again, the red dot will flash and then be replaced by a **U** on the LED display. Transmitter is programmed successfully.
- 11.2) Repeat step 1 to code a maximum of 20 transmitters onto the DTS12RE operator.
- 11.3) To master erase the DTS12RE receiver, press and hold **CODE**, the LED display dot will flash, keep holding for approximately 8 seconds until the LED display flashes a **C**. Release button. All transmitters are now deleted.

Manual disengagement

Pull manual release lever downwards. (Refer fig 10 below)

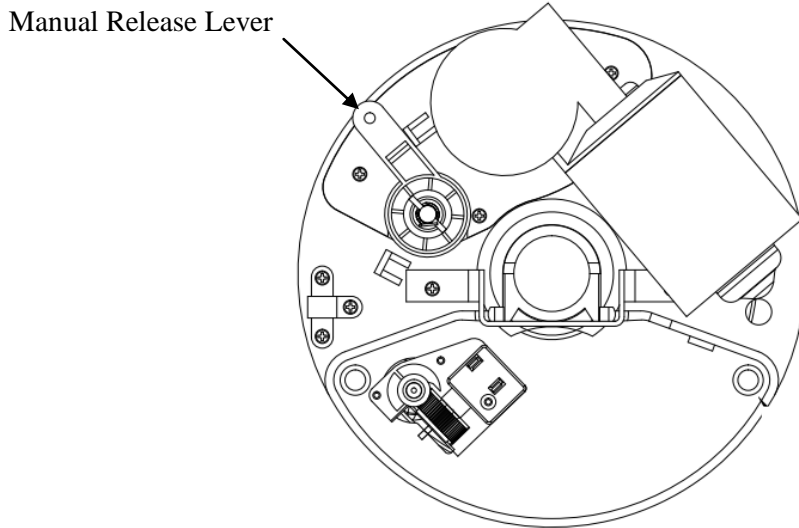


Figure 10

Technical Specifications

| Model | DTS12RE |
|-------------------------|--------------------------------|
| Power Input: | 220-240 VAC 50/60 Hz |
| Motor: | 18 VAC |
| Courtesy light time: | 3 minutes |
| Relative humidity: | <90 % |
| Reception frequency: | 433.92 MHz |
| Transmitter power: | 12V Battery |
| Working temperature: | -20 C – +40 C |
| Open and close force: | 600 N |
| Decoding: | Rolling code |
| Lamp: | LED, 12V DC |
| Operator limits travel: | 6.5 circles of door drum wheel |

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

COMMON TROUBLE SHOOTING

| Symptom | Possible reason | Solution |
|--|---|---|
| The door will not operate from control box | Power not switched on | Check power is on to control unit (Red LED illuminated) |
| | Mains plug problem | Plug fully engaged on the control box and motor wiring connections properly engaged |
| "beep, beep....." from buzzer, and LED displays "E2" error code | Motor fault | Pull the manual release lever |
| | | Replace with a new motor |
| | | Replace with a new rotary encoder |
| "beep, beep....." from buzzer, and LED displays "E6" error code | Door twisted | Fix the door |
| The door does not move, and LED displays "8" error code | Motor is too hot | Wait for 15 minutes, then restart |
| The door does not move and LED displays "9" when self-learning after setting UP and DOWN limit | Door is too heavy | Improve the weight balance of the door |
| The door will not reverse when obstructed | The moving force of the motor is set too high | Decrease the safety reverse force |
| The door reverses automatically when closing | The moving force of the motor is set too low | Increase the safety reverse force |

| | | |
|---|--|--|
| | There could be an obstruction under the door | Remove obstruction |
| The door stops automatically when opening | The moving force of the motor is set too low | Increase the safety reverse force |
| The operator can be controlled by O/S/C button but not the remote | The remote light flashes when holding button | The battery is loose. Open rear cover and ensure battery is connected. |
| | The receiving antenna is not pulled out | Pull out the receiving antenna |
| | Low battery in remote | Change remote battery |
| The door can only open, cannot close | The photo beam function was activated | Disable the photo beam function |
| The motor rotates but the door does not move | Motor put into manual mode | Pull the manual release lever to engage |
| The door closes when pressing 'UP' during limit setting | Left / right installation error | Change the installation direction according to left/right installation setting in the instruction manual |

Manufacturers Warranty.

- **All goods manufactured by DTS Security carry a 12-month factory warranty from the 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 lightning 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.**