



**XTrac**™

**SECTIONAL  
AND TIP-UP  
GARAGE DOOR  
OPENER**

# Company Profile



1986



1990



1995



1999



Centurion Systems  
Today

**In-house  
R & D  
development  
team**



**Manufacture to  
international  
quality standard  
ISO 9001:2008**



**100%  
testing of  
products**



**Competent  
after-sales  
technical support**



**Sales and support throughout  
Southern Africa and over  
50 countries worldwide**



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The logo features the word "Safety" in a stylized, italicized font above the word "FIRST" in a bold, blocky font, all contained within a diamond-shaped border.

**Safety  
FIRST**

# IMPORTANT Safety Instructions

## ATTENTION

To ensure the safety of people, it is important that you read all the following instructions. Incorrect installation or incorrect use of the product could cause serious harm to people. 

The installer, being either professional or DIY, is the last person on the site who can ensure that the operator is safely installed, and that the whole system can be operated safely.

- **PLEASE READ CAREFULLY AND ADHERE TO ALL SAFETY AND INSTALLATION RECOMMENDATIONS**
- The installation of your new Automatic Garage Door Opener (herein after referred to as "**XTrac**") must be carried out by a technically qualified or licensed person. Attempting to install or repair the **XTrac** without suitable technical qualification may result in severe personal injury, death and / or property damage
- The **XTrac** must only be installed on a properly balanced well functioning garage door. An improperly balanced or malfunctioning garage door could cause serious personal injury, death and / or property damage. Have a qualified person check and if required, make repairs to your garage door before installing the **XTrac**. The garage door is deemed to be well balanced and aligned if it;
  - Requires an equivalent amount of applied force to either manually open or no more than 150N (15kg) of applied force to either manually open or close, and
  - Does not rise or fall more than 100mm when released at any point between fully open or fully closed positions
  - Does not rub on or incorrectly make contact with any supporting or surrounding structures, and
  - The horizontal tracks have been installed level, and
  - The door panels have been installed level, and
  - The vertical tracks have been installed plumb, and
  - The junction between the curved horizontal track and the vertical track does not cause the door to "jump"
- The counterbalance springs on sectional type garage doors must be properly lubricated between all of the coils with heavy automotive bearing grease.

# FIRST

- Failure to adequately lubricate the springs may result in one or more of the following symptoms:
  - Counterbalance springs may become rusty over time resulting in additional operating friction between the coils which may cause the **XTrac** to malfunction
  - Seasonal temperature changes may cause the garage door springs to expand and / or contract. The resultant increase and / or decrease in operating friction may cause the **XTrac** to malfunction. Properly lubricating the springs will help to minimize changes in operating friction due to the effects of seasonal temperature change
- Remove or render inoperative all existing locks and ropes prior to installation of the **XTrac**
- Repairs to the garage door must be carried out by technically qualified persons. Attempting to repair the garage door without suitable technical qualification may result in severe personal injury, death and / or property damage
- Where possible, install the **XTrac** at least two meters or more above the ground. Adjust the Engage / Disengage Cord so that it hangs approximately 1.8 meters from the ground
- The Header Bracket carries ALL of the opening and closing thrust of the **XTrac** and as such must be securely fastened to a rigid, structural member of the garage wall or ceiling. It is entirely up to the installer to determine the fixing method and the structural suitability of the fixing points
- The ceiling structure must be adequate to support the weight of the **XTrac**. It is entirely up to the installer to determine the structural suitability of the fixing points
- The Engage / Disengage Instruction Tag must remain attached to the Engage / Disengage Cord.
- Locate the Wall Switch;
  - within site of the garage door, and
  - at a minimum height of 1.5 meters above the ground so that it remains out of the reach of small children, and
  - away from all moving parts of the garage door
- The Entrapment Warning Label must be secured in a prominent position adjacent to the wall switch
- The **XTrac** must be connected to a properly earthed general purpose 220-240V AC power outlet which has been installed by a qualified electrical contractor.
- Do not connect the **XTrac** to the power outlet until this manual instructs you to do so



- Subsequent to installation and adjustment, the **XTrac** must stop and reverse direction when it comes into contact with a 35mm high solid object placed on the floor under the garage door
- The correct function of the Safety Obstruction Force System should be checked on a monthly basis
- Never use the **XTrac** unless the garage door is in full view and free from any object which may impede the movement of the garage door such as cars, children and or adults
- Never allow children to operate the **XTrac**
- Never operate the **XTrac** when any persons are under or near the path of the garage door. Children must be supervised at all times when near the garage door and when the **XTrac** is in use
- Never attempt to disengage the **XTrac** to manual operation when there are children / persons and or solid objects including motor vehicles under or near the path of the garage door as the garage door may fall sharply upon Manual Release from the **XTrac**
- Never attempt to open or close the garage door by pulling on the Engage / Disengage Cord
- Never attempt to make any repairs or remove covers from the **XTrac** without first disconnecting the power supply cord from the main power supply
- Removal of the **XTrac**'s protective covers must only be performed by a technically qualified person. Attempting to remove the protective covers or repair the **XTrac** without suitable technical qualification may result in severe personal injury, death and/or property damage
- For additional safety we strongly recommend the inclusion of Safety Beams. Although the **XTrac** incorporates a pressure sensitive Safety Obstruction Force system the addition of Safety Beams will greatly enhance the operating safety of an automatic garage door and provide additional peace of mind. In some countries it is a mandate of law to fit Safety Beams. It is the sole responsibility of the owner / installer to fit Safety Beams in those countries that so require
- Always ensure that the garage door is fully open & stationary before driving in or out of the garage
- Always ensure the garage door is fully closed and stationary before moving out of its view
- Adjustments to the Safety Stop / Reverse Force settings must only be carried out by a technically qualified person. Attempting to adjust the settings without suitable technical qualification may result in severe personal injury, death and / or property damage
- Keep hands and loose clothing clear of the **XTrac** and garage door at all times



# Safety FIRST

- In order for the Safety Obstruction Force system to function it must first encounter an obstruction in the form of an object / person on to which some force MUST be exerted. As a result the object / person / garage door may suffer DAMAGE AND OR INJURY
- The Safety Obstruction System is designed to work on STATIONARY objects only. Serious personal injury, death and or property damage may occur if the garage door comes into contact with a moving object during an open or close cycle

**WARNING! WARNING! WARNING! WARNING! WARNING!**



**MOVING GARAGE DOOR CAN CAUSE SERIOUS INJURY OR DEATH!  
KEEP CLEAR! DOOR MAY MOVE AT ANY TIME!  
DO NOT ALLOW CHILDREN TO PLAY IN AREA  
OR OPERATE DOOR.**



# 1. Product warranty and exclusions

All CENTURION products are manufactured with extreme care, thoroughly inspected and tested. All CENTURION products are warranted against faulty materials and workmanship for a period of 24 months from the date of invoice. However, it is expressly noted that batteries carry a six month warranty due to the nature of these products being such that they are subject to possible misuse which is beyond the control of Centurion Systems.

The warranty will cover the repair or replacement, at the discretion of Centurion Systems, of such faulty materials or parts free of charge provided that the equipment is returned to our workshop. The workmanship of the installation of the products carried out by any third party is specifically not covered under this warranty (please consult with your installer about their workmanship warranty terms and conditions). For equipment not of CENTURION's manufacture the warranty as supplied by the original manufacturer will apply.

**No claims whatsoever will be recognised under the terms of this warranty which pertain to damage, injury, cost or expense, suffered by persons and or to property, which either directly or indirectly arise out of any one of the following occurrences:**

- a. Failure to install the product in accordance with the installation instructions provided by Centurion Systems.
- b. Failure to abide by the safety instructions provided by Centurion Systems.

**This warranty will not apply to any equipment which:**

- a. Has not been installed in accordance with the installation instructions provided.
- b. Has been subject to misuse or which has been used for any purpose other than that designed for by the manufacturers.
- c. Has damage caused as a result of handling during transit, atmospheric conditions (including lightning), corrosion of metal parts, insect infestation, power surges or other forces outside of the control of Centurion Systems.
- d. Has been repaired by any workshop and or person NOT previously authorised by Centurion Systems.
- e. Has been repaired with components not previously tested, passed or authorised by Centurion Systems.

## 2. Assembly instructions

### 2.1 Identify Garage Door type

Identify the garage door type and then select the preferred installation method (Section.2.2) and assembly type (Section.2.3) that is best suited to the application.

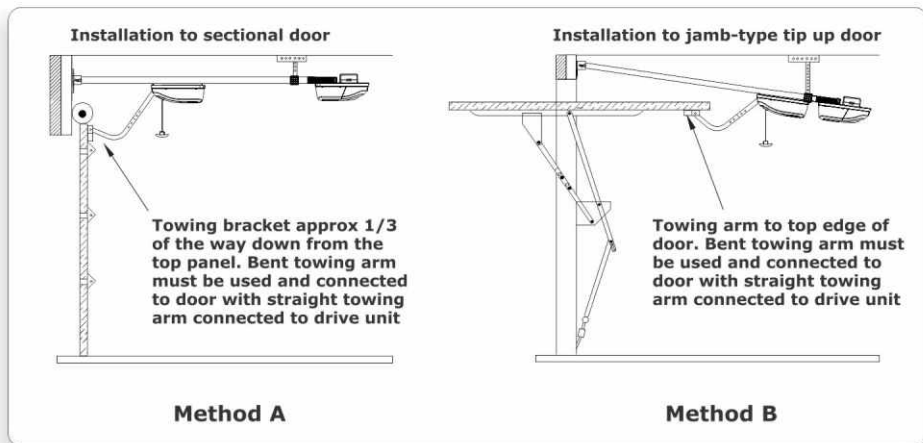


FIGURE 1.

### 2.2 Identify installation method

#### Method A -(Sectional door )

- Use 3000mm long one piece or 3000mm three piece Drive Rail
- The standard 3000mm Drive Rail will lift a door up to 2440mm high. (optional Drive Rail extension kit is available for doors over 2440mm high)
- **XTrac** is supported by the Drive Rail Hanger which is hung from the ceiling by appropriate hanging material
- Header Bracket may be mounted on front wall of garage or on ceiling adjacent to the front wall

#### Method B -(Jamb type Tip-Up door )

- Use 2000mm single piece rail or make up using two rail sections from the three piece rail kit
- **XTrac** is supported by the Drive Rail Hanger which is hung from the ceiling by appropriate hanging material
- Drive Rail must be angled as shown depicted in "Method B" so that the underside of the Drive Unit is in line with underside of the garage door when the garage doors are in the fully open (horizontal) position
- Header Bracket may be mounted on front wall of garage or on the ceiling adjacent to the front wall

## 2.3 Assembly

### 2.3.1 General assembly

- Open the packing carton and expose the **XTrac** components as depicted in Figure.2
- Orientate the Drive Rail (Figure.2-A) so that the Terminal Bracket (Figure.3-G) faces towards the garage door
- Locate the Drive Unit (Figure.2-C) and slide it into the Drive Rail and at the same time insert the Drive Chain (Figure.1-B) into the Drive Unit. Slide the Drive Unit at least 500mm in from the end of the Drive Rail
- Note: Before attempting to insert the Drive Chain into the Drive Unit ensure that the Drive Unit is disengaged (Refer Section.10)
- Locate the Close Limit Prong (Figure.2-D) and slide it into the Drive Rail
- Locate the Drive Rail Hanger (Figure.2-E) and slide it around the outside of the Drive Rail. Make sure that the M8 dome head mounting bolts have been fitted to the Drive Rail Hanger
- Insert the Control Box (Figure.3-F) into the Drive Rail
- Insert the Drive Chain into the Tensioning Block (Figure.2A-F1) and then "Twist and Lock" the Drive Chain into place (Figure.1A-F2)
- Use a 12 mm socket wrench to tighten the Drive Chain Tensioner Bolt to the point where the underside of the Bolt Head aligns with the Indicator Arrow on the Terminal Bracket.(Figure.2B-G1)

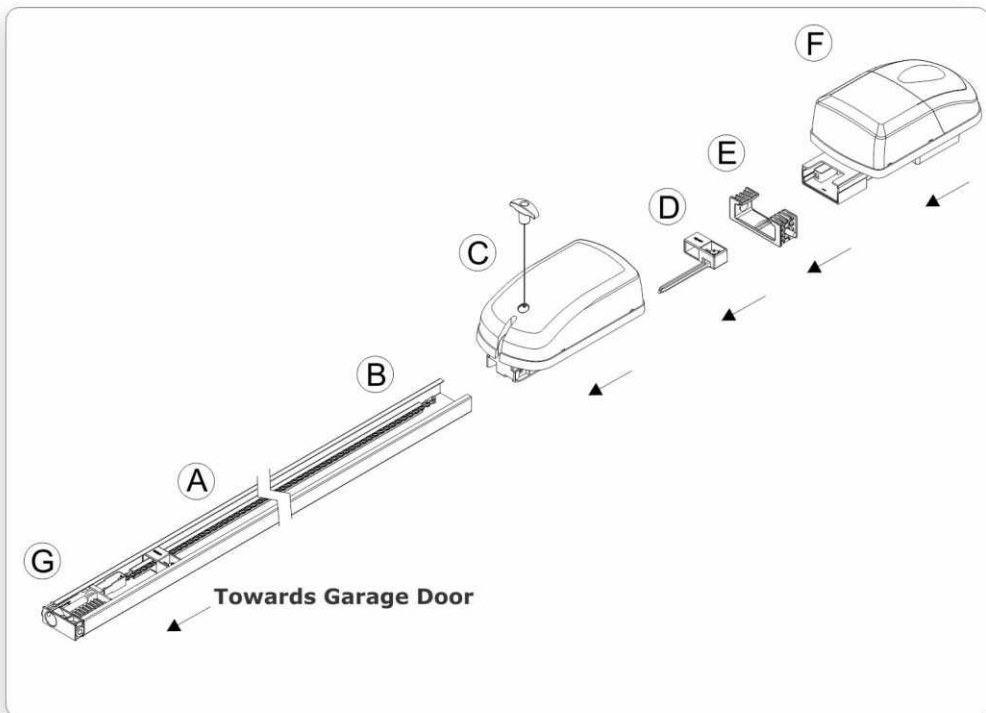
### Independent mounting of Control Box

With either of the methods A or B the Control Box may be mounted independently of the Drive Rail.

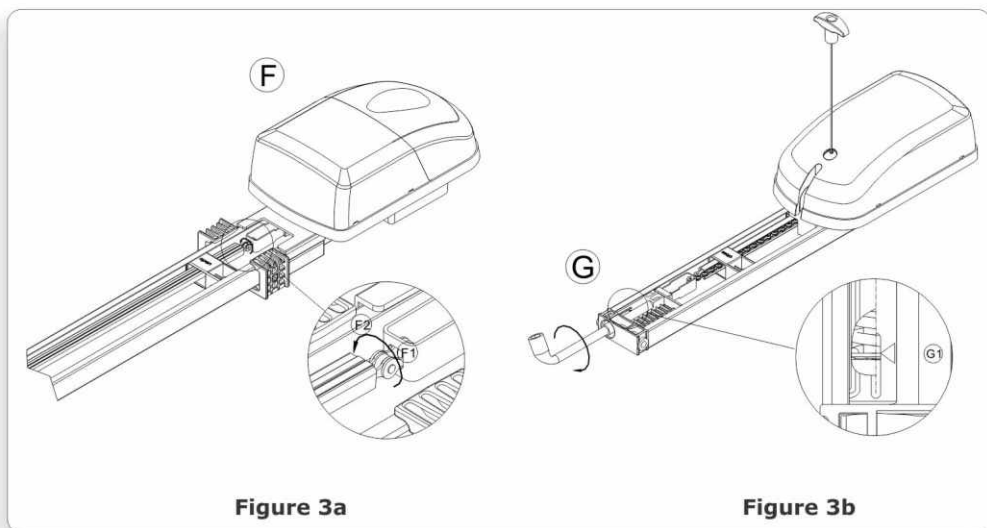
An optional instruction sheet and fitting kit;

I. "FKA" is available for mounting the Control Box on the ceiling adjacent to the Drive Rail.

II. "FKB" is available for mounting the Control Box on a side wall of the garage.



**FIGURE 2. SECTIONAL UNIT ASSEMBLY DEPICTED**



**FIGURE 3. Tensioning of the chain**

### 2.3.2 Attaching Straight Towing Arm

- Remove the Drive Unit cover (Figure.4A) by pulling outwards and upwards, on both sides, at the location marked by the arrow.
- Insert the Straight Towing Arm through the slot in the cover (Figure.4B)

**Note: use the end of the arm which has only one single hole.**

- Attach the arm to the Drive Unit using the short clevis pin and spring clip provided (Figure.4B) and then replace the cover.

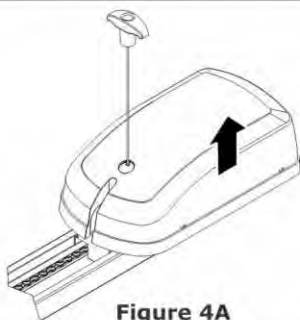


Figure 4A

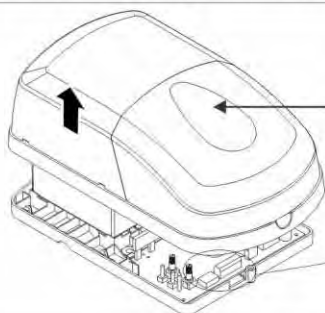


Figure 4B

FIGURE 4. ATTACHING STRAIGHT TOWING ARM

### 2.3.3 Options selection

- Refer to Section.5.7 – Dipswitches and the sub section “functionality” and select the required dipswitch functionality as required. Detailed explanation of the different functions is provided under “Options and Features” Section 5.1 – 5.19.
- Refer to Section.5.1 – Accessory Connections to determine the external accessory wiring that is required
- To access the Dipswitches and Accessory Connectors remove the Control Box cover (Figure.5) by first removing the fixing screw, located under the light cover and then pulling outwards and upwards, on both sides of the cover, at the location marked by the arrow
- Once functionality selection and wire connection has been completed replace the cover
- The XTrac is now fully assembled and ready for installation



Remove cover  
fixing screw  
under light  
cover

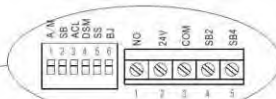


FIGURE 5. ATTACHING STRAIGHT TOWING ARM

## 3. Installation instructions

### 3.1 Header bracket mounting

**Important Note:** Before commencing the installation ensure that you have carefully read and understood the Safety Recommendations outlined in pages 1 to 4 of this manual. In particular, ensure that the installation of the garage door complies with the requirements specified in points 3, 4 and 5. Make any necessary adjustments to the garage door **BEFORE** commencing the installation!

- Determine the highest arcing point of the garage door and mark this as a horizontal line on the header above the top edge of the garage door. (Figures.6 and 7)
- Determine the Garage Door Centre Line and mark a vertical line on the header above the door. (Figure.7)
- Place the Header Bracket on the wall as depicted in Figure.7 and ensure that the bottom edge of the bracket is no more than 50mm above the Highest Arcing Point. Mark the location of the two outer most screw holes
- Drill two screw holes and use screws of at least 8mm diameter. x 50mm long to secure Header Bracket to Header

#### Important notes:

- a. The Header Bracket carries **ALL** of the opening and closing thrust of the XTrac and as such must be securely fastened to a rigid, structural member of the garage. It is entirely up to the installer to determine the fixing method and the structural suitability of the fixing points.
- b. Mounting the Drive Rail more than 50mm above the Highest Arcing Point of the garage door may cause the Drive Rail to flex excessively. Always ensure that the bottom edge of the Drive Rail is located within 50mm of the top edge of the top panel of the garage door. (Figure.8)

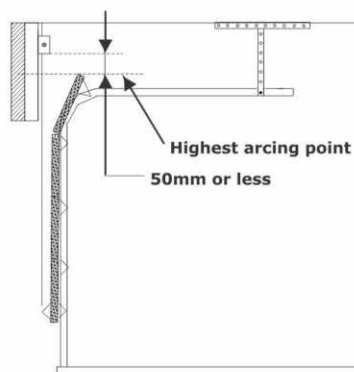


Figure 6

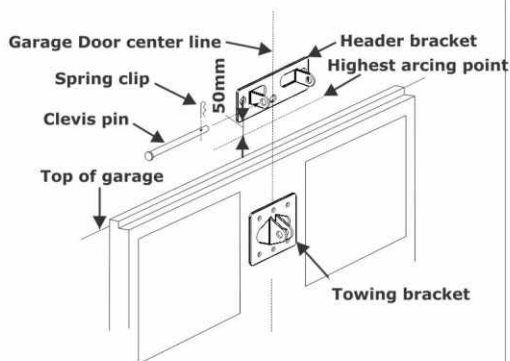


Figure 7

FIGURE 6 AND 7. HEADER BRACKET MOUNTING



## 3.2 Towing bracket mounting

- Determine the Garage Door Centreline (Figure.6) and affix the Towing Bracket to a structural member of the garage door. The Towing Bracket should be mounted with reference to the top edge of the garage door in accordance with the appropriate diagram as depicted in Section.2.1 Method A or B
- Mark the location of the holes. (four holes if using self drilling screws – two holes if using screws with nuts)
- Drill the screw holes with an appropriate drill and securely mount the Towing Bracket to the garage door using screws of at least 6mm diameter

### Important notes:

- a. It is recommended to use fixing screws and nuts rather than self drilling screws.**
- b. For a sectional type garage door the pivot point of the Towing Bracket should be located approx one third of the way down from the top edge of the top panel. For a tip-up type garage door the pivot point should be as close to the top edge of the garage door as possible.**

## 3.3 Attaching Drive Rail to Header bracket

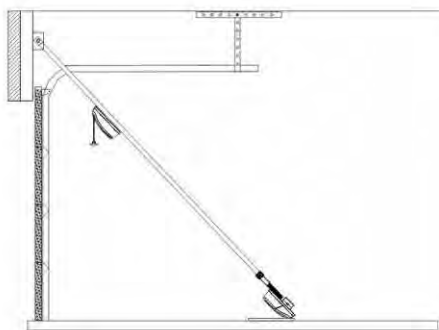
- With the garage door in the fully closed position - lay the assembled **XTrac** on the garage floor in line with the Centreline of the garage door so that the Control Box is furthest from the garage door
- Important Note: avoid scratches and potential damage to the **XTrac** plastic covers by placing the Control Box and Drive Unit on cardboard or foam
- Raise the Drive Rail up to the Header Bracket so that the Drive Rail sits in between the ears of the Header Bracket. (Figure.8)
- Align the mounting holes of the Header Bracket and Terminal Bracket and fully insert the long clevis pin and secure it with the spring clip

## 3.4 Mounting Drive Rail assembly to ceiling

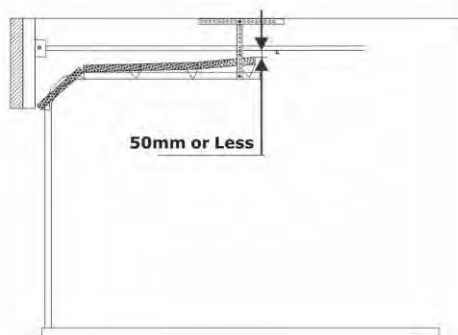
- Raise the Drive Rail assembly off the floor and rest it on a support high enough that the Drive Rail runs parallel to the ground. (Figure.8) depicts typical sectional type garage door installation)
- Important Note: Do not lift the **XTrac** by the Control Box or damage may occur. Always lift the **XTrac** via the Drive Rail
- Carefully open the garage door and ensure that no part of it comes into contact with the Drive Rail or the Control Box during its entire movement
- Align the Drive Rail with the centreline of the garage door.
- Slide the Drive Rail Hanger along the drive rail (up to max 600mm from the Control Box) in order to align it with a structural member of the garage. Securely fasten the Drive Rail Hanger to the structural member of the garage using two lengths of appropriate hanging material. (Figure.9)
- Once the Drive Rail is hung it should sit parallel to the floor along both planes. (For sectional doors only. For jamb-type tilt door refer page 7 Method B)

**Important notes:**

- a. With the garage door in the fully open position the underside of the Drive Rail should be no more than 50mm above the highest arcing point for its entire length. Mounting the Drive Rail more than 50mm above the Highest Arcing Point of the garage door may cause the Drive Rail to flex excessively. (Figure. 9)
- b. The ceiling structure must be adequate to support the weight of the XTrac. It is entirely up to the installer to determine the structural suitability of the fixing points.

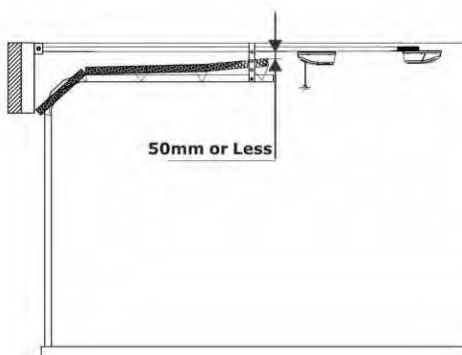


**Figure 8**

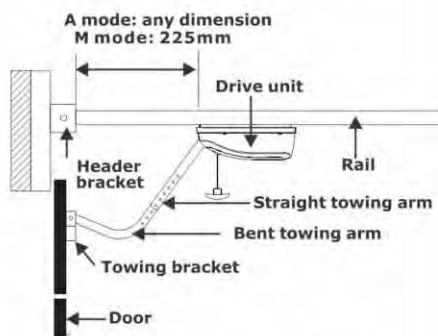


**Figure 9**

**FIGURE 8 AND 9. MOUNTING DRIVE RAIL ASSEMBLY TO CEILING**



**Figure 10**



**Figure 11**

**FIGURE 10 AND 11. MOUNTING DRIVE RAIL ASSEMBLY TO CEILING**

### 3.5 Attaching Bent Towing Arm

- Close the garage door.
- Attach the Bent Towing Arm to the Towing Bracket (use the end of the arm which has only one hole)
- With the Drive Unit disengaged (Figure.12) position the Drive Unit in either one of the following ways;
  - I. Adaptive Mode ~ any distance from the end of the Drive Rail.(Figure.11)
  - II. Manual Mode - 225mm from the end of the rail to the front of the Drive Unit. (Figure.11)

**Note: For an explanation of Adaptive and Manual Modes refer to section on Obstruction Force on page 16.**

- Bring the Straight and Bent Towing Arms together and align the two furthest apart sets of holes

**Important Note: The two arms should be connected in a way that makes them as long as possible.**

- Securely fix the arms together using two 8mm screws and nuts

### 3.6 Connecting to power supply

- Plug the **XTrac** into a properly earthed 220 to 240V AC power outlet
- Ensure that no excess power cord hangs below the Control Box

### 3.7 Engaging / Disengaging

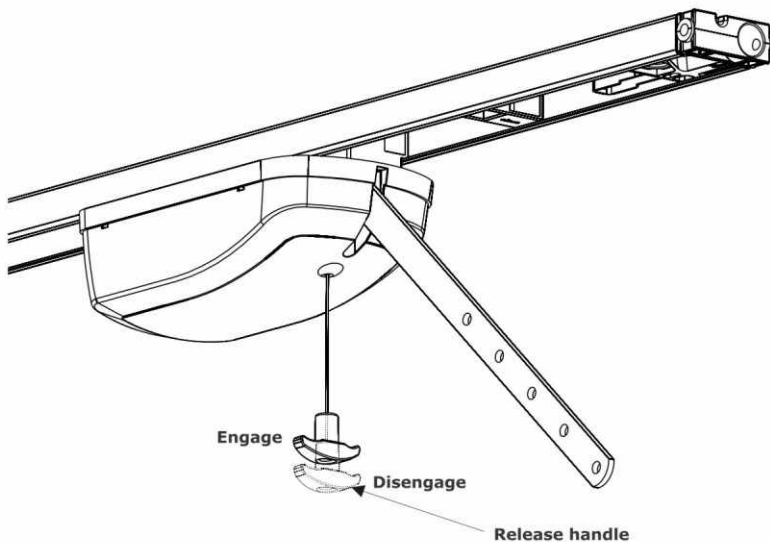
- The unique engage / disengage mechanism provides the following features:
  - a. Positive garage door locking even during power outages.
  - b. Re-engagement in any position without the need to line up chain and carriage components.

#### **Functionality**

- TO DISENGAGE - pull down on the release handle (Figure.12) until a click is "felt" and then release the handle
- TO ENGAGE - pull down on the release handle once again until a click is "felt" and then release the handle

**Important notes:**

- a. Never attempt to open or close the garage door by pulling on the release handle. Doing so may result in **SERIOUS PERSONAL INJURY** and or **PROPERTY DAMAGE**.
- b. Always disengage the XTrac with the garage door in the fully closed position.
- c. If attempting to disengage the XTrac from any position other than with the garage door fully closed ensure that there are no persons and or property near or directly under the path of the door.



**FIGURE 12. ENGAGING / DISENGAGING**

## 4. Settings and adjustments

### 4.1 Door travel adjustment

- The Drive Rail mounted Limit Prongs provide a one to one ratio between Limit Prong movement and garage door movement thereby ensuring 100% accuracy and ease of adjustment. Garage door fully open and fully closed positions can be easily adjusted by moving the Limit Prong to the desired location in order to increase or decrease garage door travel

#### Door travel adjustment – Close direction

- Locate the Close Direction Limit Prong within the Drive Rail - nearest to front wall of garage (Figure.13)
- Loosen the Limit Prong Lock Screw by half a turn and slide the Limit Prong towards the front wall of the garage to increase garage door travel and away from the front wall to decrease garage door travel
- Re-tighten the Limit Prong Lock Screw once correct adjustment has been attained
- Note: The Limit Prongs work on a one to one ratio with the garage door, meaning that if the Limit Prong is moved by 10 mm then the garage door will also move by 10 mm

#### Door travel adjustment – Open direction

- Locate the Open Direction Limit Prong within the Drive Rail – nearest to Control Box. (Figure.13)
- Loosen the Limit Prong Lock Screw by half a turn and slide the Prong towards the Control Box to increase garage door travel and away from the Control Box to decrease travel
- Re-tighten the Limit Prong Lock Screw once correct adjustment has been attained

**Note: The Limit Prongs work on a one to one ratio with the garage door - meaning that if the Limit Prong is moved by 10 mm then the garage door will also move by 10 mm.**

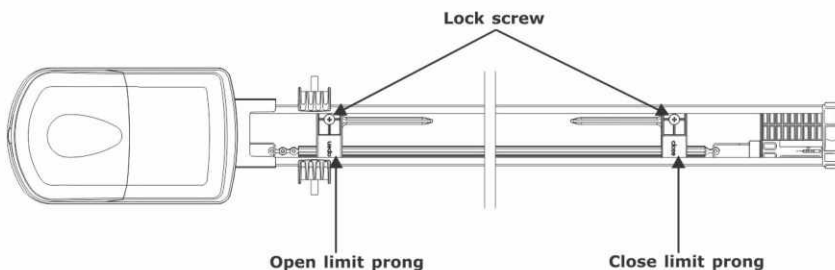


Figure 13. Engaging / Disengaging

## 4.2. Safety Obstruction Force Adjustment

- Dual Safety Obstruction Force Adjustment modes ensure that the **XTrac** can be optimized to suit virtually any sectional or tip-up type garage door
- **Adaptive Mode** – constantly monitors incremental drive force value changes that occur due to seasonal conditions and / or garage door aging. Adaptive Mode compensates for these variables by automatically adjusting Safety Obstruction Force values during every complete cycle, resulting in enhanced safety and minimized chances of garage door ghosting\*.(Refer Section.4.2.1 for set-up details)
  - \* Ghosting is defined as a Safety Stop or Safety Reverse without the garage door actually encountering an obstruction
- **Manual Mode** – features conventional one time Safety Obstruction Force value adjustment and is more suited for use on badly worn or improperly balanced garage doors. (Refer Section.4.2.2 for set-up details)

### 4.2.1 Adaptive (A) Mode

#### Enabling

- If Manual Mode is your desired selection then skip to Section.4.2.2
- If Adaptive Mode is already enabled then skip to the next section titled "Functionality"
- To enable Adaptive Mode carry out the following procedure;
  - I. switch off power at power supply.
  - II. remove the Courtesy Lamp and Control Box Covers to expose the Control Board (Refer Section.5.6 for removal and replacement details).
  - III. select Dipswitch No.1 to the "ON" position (Figure.16).
  - IV. replace the Control Box and Lamp Covers.
  - V. switch power on at power supply.

#### Functionality

- In order to learn the required run time and drive force values the **XTrac** will be required to complete five (manually activated) uninterrupted open and close cycles.(commencing from the Close Limit Point)
- During the course of the cycles the LED Indicator will quick flash and the operating parameters will be learned in the following order;
  - I. Open Stroke 1 – Alignment stroke.
  - II. Close Stroke 1 – Learn run time between Open Limit Point and Close Limit Point (during Close Cycle 1 the **XTrac** will not Slow Stop).
  - III. Open Stroke 2 – Learn run time between Close Limit Point and Open Limit Point (during Open Cycle 1 the **XTrac** will not Slow Stop)
  - IV. Close Stroke 2 – Learn Drive Force Values between Open Limit Point and Close Limit Point.
  - V. Open Stroke 3 – Learn Drive Force Values between Close Limit Point and Open Limit Point.
- Once Learning has been successfully completed, the LED Indicator will commence to slow flash



**Important note: During initial power-up learning, the Safety Obstruction Force values of the XTrac default to a maximum setting. Encountering a solid obstruction during the course of the initial learning cycles may result in garage door damage. It is recommended that initial learning cycles be carefully supervised in order to prevent the possibility of the garage door hitting an obstruction causing personal and or property damage.**

### **Safety Obstruction Force Adjustment**

- Hinge open the Courtesy Lamp Cover (Figure.19) to expose the adjustment controls
- Rotate the (green) "Offset" Adjustment Pin (Figure.19-G) in a clockwise direction to increase Safety Obstruction Offset Value and in an anti-clockwise direction to decrease the value
- The Safety Obstruction Offset Value may be adjusted within a range of 30N (3kg) to 100N (10kg)
- The selected value remains identical for both open and close direction travel

### **Testing Open Direction Safety Obstruction Force Value**

- With the garage door in the fully closed position – stand in the middle of the garage doorway and just behind the path of the garage door
- Activate the **XTrac** so that the garage door begins to open
- When the garage door has opened to approximately 450mm from the ground apply some firm downward force to one of the structural members of the garage door
- If the Safety Obstruction Force Value is correct the **XTrac** will stop (Safety Stop) the garage door upon sensing the applied force. If too little or too much force is required to make the **XTrac** stop - turn the (green) "Offset" Adjustment Pin (Figure.19-G) five degrees in the appropriate direction - clockwise to increase force - anti-clockwise to decrease force - and then repeat the previous testing steps

### **Testing Close Direction Safety Obstruction Force Value**

- With the garage door in the fully open position - stand in the middle of the garage doorway and just behind the path of the garage door
- Ensure that the Close Limit Travel Adjustment (Section.4.1) has been set so that bottom of the garage door is resting firmly against the ground
- Place a 32mm thick block of wood under the line of the garage door (approximately at the midpoint of the garage door) so that the garage door will close onto the block of wood
- Activate the **XTrac** so that the garage door begins to close
- If the Safety Obstruction Force Value is correct the **XTrac** will stop and reverse the direction of the garage door (Safety Reverse) upon encountering the block of wood.
- If too little or too much force is required to make the **XTrac** Safety Reverse - turn the (green) "Offset adjustment Pin (Figure.19-G) five degrees in the appropriate direction - clockwise to increase force - anti-clockwise to decrease force - and then repeat the previous testing steps

### **Forced learn**

- A Forced Learn may be initiated by holding down the Learn" Button (Figure.19-D) for two seconds – LED Indicator will begin to quick flash
- Cycle the **XTrac** through five complete uninterrupted strokes (commencing from the close limit point) in order for it to complete the learning process
- The LED Indicator will cease to quick flash once learning has been completed

**Important Note: During a Forced Learn the Safety Obstruction Force values default to a maximum setting. Encounter a solid obstruction during the course of the initial learning cycles may result in garage door and / or property damage. It is recommended that the learning cycles be carefully supervised during this time.**

### **Automatic Re-Learn**

- A re-learn of Drive Force and Run Time parameters will be automatically initiated immediately subsequent to either one of the following occurrences;
  - a. Run Time deviation becoming excessive
  - b. Safety Reversing on three consecutive occasions
  - c. Safety Stopping on three consecutive occasions
- During this period the LED Indicator will quick flash

## **4.2.2 Manual (M) Mode**

### **Enabling**

- If Adaptive Mode is your desired selection, then refer to Section.4.2.1 to enable Manual Mode;
  - I. switch off power at power supply
  - II. remove the Courtesy Lamp and Control Box Covers to expose the Control Board (Refer Sec.19 for removal and replacement details)
  - III. select Dipswitch No.1 to the "OFF" position (Figure.17)
  - IV. replace the Control Box and Lamp Covers
  - V. switch power on at power supply

### **Entering Safety Obstruction Force Adjustment mode**

- Hinge open the Courtesy Lamp Cover to expose the adjustment controls. (Figure.19)
- Press and hold down the "Learn" Button (Figure.19-D) for two seconds - LED Indicator will commence a paused double flash.
- Safety Obstruction Force Adjustment can be carried out while LED Indicator is "paused double flashing"
- To close out Safety Obstruction Force Adjustment Mode momentarily press "Learn" Button

**Note: Mode will close out automatically after 10 minutes if not closed out manually beforehand.**

#### **Safety Obstruction Force Adjustment – Open Direction**

- Hinge open the Lamp Cover (Figure.19-A) to expose the adjustment controls
- With the garage door in the fully closed position - press the black "Run" Button (Figure.19-G) so that the garage door begins movement in the open direction
- As the garage door is opening slowly turn the (green) Open / Offset Adjustment Pin (Figure.19-G) in an anti-clockwise direction until the garage door stops
- Now turn the same pin clockwise five degrees.

#### **Testing Safety Obstruction Force – Open direction**

- With the garage door in the fully closed position - stand inside the garage just behind the path of the garage door close to its middle position
- Press the black "Run" Button (Figure.19-G) so that the garage door begins to open
- When the garage door has opened by approximately 450mm apply some firm downward force to one of its structural members
- If the Safety Obstruction Force Adjustment is correct the **XTrac** will stop the garage door upon sensing the applied force
- If too little or too much force is required to make the **XTrac** stop - rotate the (green) Open / Offset Adjustment Pin five degrees in the appropriate direction (clockwise to increase force, anti-clockwise to decrease force) and then repeat the previous testing steps

#### **Safety Obstruction Force Adjustment – Close direction**

- With the garage door in the fully open position, press the black "Run" Button (Figure.19-F) so that the garage door begins to close
- As the garage door is closing - slowly turn the (red) Close / Speed Adjustment Pin (Figure.19-F) in an anti-clockwise direction until the garage door stops and begins to Safety Reverse
- Now turn the same pin clockwise five degrees

#### **Testing Safety Obstruction Force – Close direction**

- With the garage door in the fully open position stand inside the garage just behind the path of the garage door close to its middle position
- Ensure that the Close Limit Travel Adjustment (Section.4.1) has been set so that bottom of the garage door is resting firmly against the ground
- Press the black "Run" Button so that the garage door begins to close
- Place a 32mm thick block of wood under the line of the garage door (approx at the midpoint of the garage door) so that the garage door will close onto the block of wood.
- If the Safety Obstruction Force Adjustment is correct the **XTrac** will stop and reverse the direction of the garage door upon sensing the block of wood
- If the **XTrac** stops but does not reverse then turn the (red) Close / Speed Adjustment Pin five degrees in an anti-clockwise direction. (Figure.19-F)

## 5. Options and features

### 5.1 Accessory connections

- Six Output Terminals are provided to support the connection of the most common external accessories
- The Output Terminals can be accessed by removing the Courtesy Lamp and Control Box Covers. (Refer Section.5.6 for removal and replacement details)
- Connection Diagrams
  - a. **XTrac** two wire safety beam (Figure 14A)
  - b. CENTURION i5 or equivalent four wire Safety Beams (Figure.14B)
  - c. 24VDC universal receiver (Figure 15)
  - d. Wall switch (hard wired)(Figure 16)

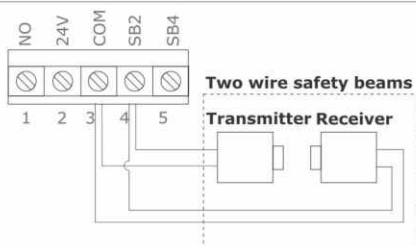


Figure 14A

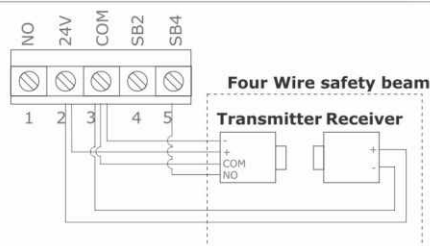


Figure 14B

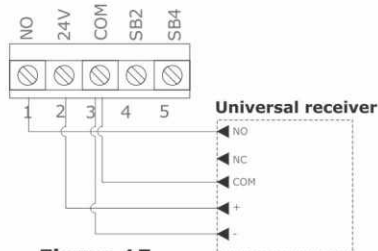


Figure 15

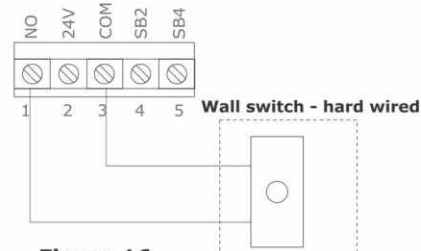


Figure 16

### 5.2 Autoclose

- Autoclose can enhance the security of your property by ensuring that your garage door is never unintentionally left open
- Autoclose will automatically close the garage door;
  - I. Three seconds after reaching the open limit point - provided that a person or object has passed through the Safety Beams during the open cycle, or
  - II. Upon expiry of the pre set 30 seconds delay time – provided that a person or car has not passed through the Safety Beams within the delay time.

**Important note: Autoclose will only function when used in conjunction with Safety Beams.**

#### **Enabling**

- I. Remove the Courtesy Lamp and Control Box Covers to expose the Control Board (Refer Section.5.6 for removal and replacement details).
- II. Select Dipswitch Nos.2 (SB) and 3 (AC) to the "ON" position. (Figure.16).
- III. Replace the Control Box and Courtesy Lamp Covers once selection has been completed.

### **5.3 Back Jump**

- Back Jump will reverse the closed garage door by an incremental amount (1 ~ 5mm) in order to reduce motor gear lock up and ensure effortless disengagement in the event of power outage
- **Enabling**
- Remove the Courtesy Lamp and Control Box Covers to expose the Control Board (Refer Section.5.6 for removal and replacement details)
- Select Dipswitch No.6 (BJ) to the "ON" position. (Figure.17)
- Replace the Control Box and Courtesy Lamp Covers

### **5.4 Dual powered XTrac**

- The Dual Powered **XTrac** has built-in batteries which provide back-up power in the event of a power outage
- The batteries can provide up to 30 complete cycles of operation while the power supply is not active

**Important Note: Batteries will suffer permanent damage if not charged within a three month period while remaining connected to the controller.**

#### **5.4.1 LED indicator**

- Will display green when power supply is active (Figure.19-C)
- Will display red when power supply is not active
- Will extinguish when **XTrac** enters Shut-Down Mode

#### **5.4.2 Shut-Down Mode**

- In the event of prolonged power outage the **XTrac** will automatically shut down (when battery voltage drops below 23 volts) in order to conserve remaining voltage - LED Indicator (Figure.18-C) will extinguish and the **XTrac** will cease to function

#### **Automatic Shut-Down**

- Shut-down will occur when the power is not active and once battery voltage falls below 23.5V
- Prior to shutting down a warning buzzer will;
  - a. Single "beep" every 30 seconds to indicate that power supply is not active.
  - b. Double "beep" every 30 seconds to indicate that the power supply is not active and that remaining battery voltage is low therefore Shut-Down is imminent.
  - c. Once the power supply becomes active the green LED Indicator will illuminate.

### Manual Shut-Down

- To manually shut down the **XTrac** perform the procedure as follows;
  - press and hold Learn Button.
  - whilst continuing to hold down the Learn Button, press and hold Run Button.
  - XTrac** will have entered Shut-Down Mode once the LED extinguishes.

### 5.4.3 Solar power

- An optional Solar Power kit is available. Contact Centurion Systems for further information

### 5.4.4 Warning buzzer

- An audible buzzer will;
  - Single "beep" every 30 seconds to indicate that the power supply is not active.
  - Double "beep" every 30 seconds to indicate that the power supply is not active and that remaining battery voltage is low therefore Shut-Down is imminent.

## 5.5 Control box

- The Control Box houses most of the controls from which the **XTrac** may be adjusted and functionality customized to suit individual requirements
- Most commonly used functionality controls are accessible from within the Courtesy Lamp Cover
- Less commonly used controls are accessible by removing both the Courtesy Lamp and Control Box Covers to expose the Control Board

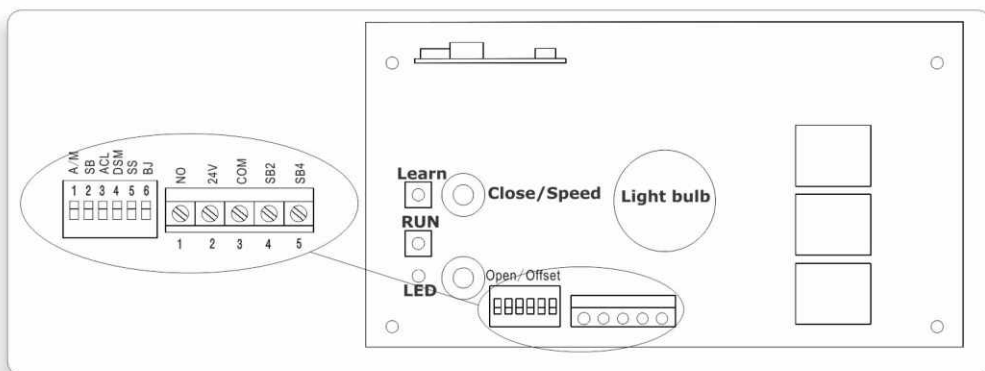


Figure 17

### Removal and Replacement of Courtesy Lamp and Control Box Covers

**Important Note:** The control board and power supply contain high voltage components. Coming into contact with these components may cause severe injury or death. Always switch off the XTrac and unplug the power cord **BEFORE** removing the main Control Box cover. The Control Box cover should only be removed by a suitably qualified technician

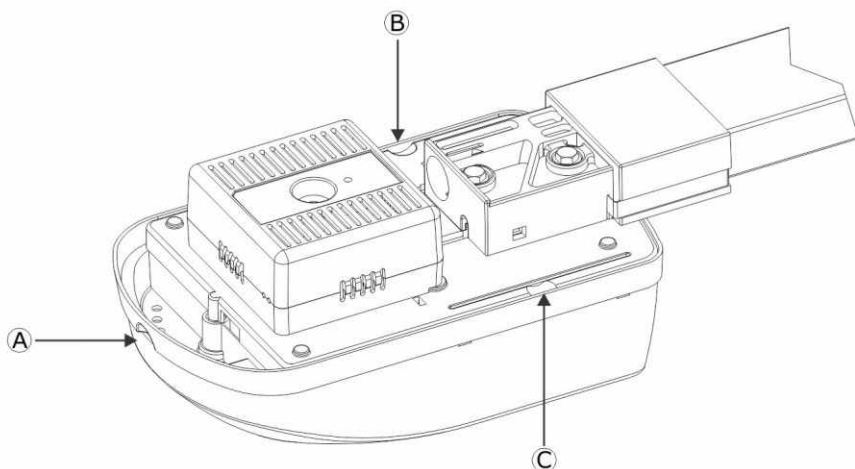
- Remove Courtesy Lamp and Control Box covers as follows;
  - Switch off **XTrac** at power point and unplug the power cord.
  - open the Courtesy Lamp cover by pulling it down at the finger recess point (Figure.18-A).



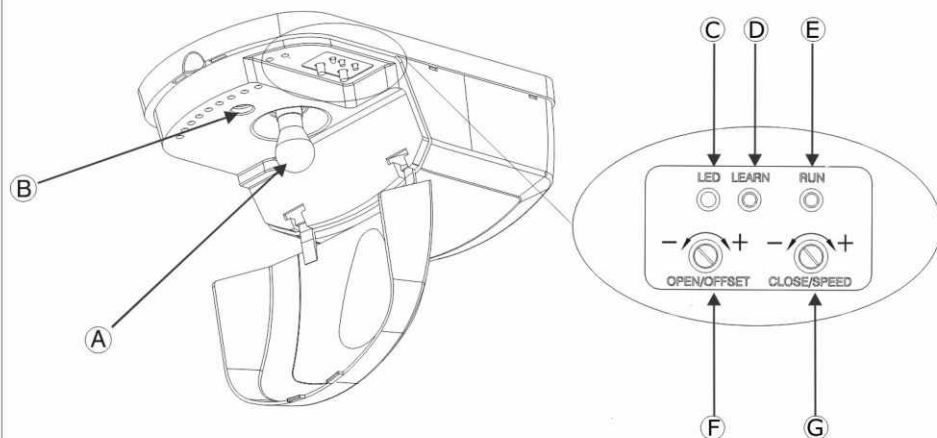
III. remove the Control Box cover Lock Screw point (Figure.19-B) Note: the Control Box Cover can be removed once the head of the screw is protruding by approximately 5mm.

IV. remove the Control Box cover by pulling first outwards and then downwards at the finger recess points (Figure.18-B and C).

- Replacement of all components is the reversal of removal



**FIGURE 18. XTRAC CONTROL BOX**



**FIGURE 19. XTRAC CONTROL BOX**

## 5.6 Courtesy lamp

- The in-built Courtesy Lamp will switch on each time the **XTrac** is activated and then switch off automatically 90 seconds after receiving the last Hand Transmitter or run signal.
- In order to conserve remaining battery power the Courtesy Light will not function once battery voltage falls below 24V DC.

### Bulb replacement

- Hinge open the Courtesy Lamp Cover to expose the bulb (Figure.19-A)
- Remove the bulb by first pushing-in and then turning anti clockwise (same as removing and replacing a household light bulb)
- Replace bulb with identical 24V 21W Incandescent
- Close the Courtesy Lamp cover



Replacing the bulb with 12V version will cause the transformer to overheat and may permanently damage the transformer and Control Board. Always ensure that replacement bulb is rated at 24V and no more than 2W.

## 5.7 Dipswitches

- The Dipswitches located on the Control Board (Figure.18) enable or disable specific functionality
- The Dipswitches can be accessed by removing the Courtesy Lamp and Control Box Covers (Refer Section.5.6 for removal and replacement details)
- Read through the following table and select the specific functionality best suited your specific personal or garage door requirements.

**Functionality table**

Function	Dip No.	Dip Position	Details
Adaptive Mode (A/M) – Enable	1	ON	Section.4.2.1
Manual Mode (A/M) – Enable	1	OFF	Section.4.2.2
Safety Beams (SB) - Enable	2	ON	Section.5.14
Safety Beams (SB) – Disable	2	OFF	Section.5.14
Autoclose (AC) – Enable	2 & 3	ON	Section.5.2
Autoclose (AC) – Disable	3	OFF	Section.5.2
Door Service Monitor (DSM) – Enable	4	ON	Section.5.8
Door Service Monitor (DSM) – Disable	4	OFF	Section.5.8
For future functionality	5	ON	N/A
For future functionality	5	OFF	N/A
Back Jump (BJ) – Enable	6	ON	Section.5.3
Back Jump (BJ) – Disable	6	OFF	Section.5.3

### Enabling

- Remove the Courtesy Lamp and Control Box Covers to expose the Control Board (Refer Section.5.6 for removal and replacement details)
- Select the Dipswitches as required to enable the desired functionality (Figure.17)
- Replace the Control Box and Courtesy Lamp Covers

## 5.8 Door Service Monitor (DSM)

- Door Service Monitor will monitor the spring balance of the garage door by logging the run time differential between open and close cycles.
- The Courtesy Lamp will triple flash once every 15 seconds once the run time differential exceeds three seconds. At this point the garage door should be serviced by a suitably qualified technician.



Door Service Monitor function is available only when Adaptive Mode has been selected.

### Enabling

- Remove the Courtesy Lamp and Control Box Covers to expose the Control Board (Refer Sec.5.6 for removal and replacement details)
- Select Dip 4 (DSM) to the "ON" position. (Figure.17)
- Replace Control Box and Courtesy Lamp Covers

## 5.9 Remote controls

The XTrac offers four menu levels pertaining to four different functions that can be activated either via a handheld remote transmitter or via the four-button wall pendant. Each menu level and function has a different effect upon the controller and the load which it controls. In addition, a fifth menu can be accessed which will learn the buttons of a four-button transmitter or wall pendant in the order described below.

To enter Learn Mode, momentarily press the Learn button. The number of flashes on the LED will indicate the level of the menu the controller is currently in. The operator will stay in Learn Mode for 10 seconds after the last button press of a remote control or wall pendant being learned into the system. The onboard buzzer will emit a long beep, indicating that the controller is exiting Learn mode. A button will have to be pressed and held for at least three seconds in order to be learned into the controller's memory.



It is of the utmost importance that the Forced Learn procedure which calibrates the operator to suit the opening and closing requirements of the door, has been completed BEFORE attempting to learn remotes or wall pendants. Forced Learn is initiated by pressing and holding the Learn button for two seconds, after which the LED will begin to rapidly flash to indicate that the unit is in Learn mode. After invoking the Forced Learn procedure, the user can start to open and close the unit as per the standard limit learning procedure.

### Function One – Open/Close

This function is associated with opening and closing the door only.

#### Operation

Momentarily press the associated transmitter button to open, stop or close the door.

If the door is busy closing, pressing the transmitter button will cause the door to immediately reverse its direction of travel and start opening.

If, on the other hand, the door is busy opening, pressing the transmitter button will cause the door to stop. Pressing the transmitter button a second time will cause the door to reverse its direction of travel and start closing.

#### Learning procedure

Press the Learn button ONCE. The LED indicator will now flash once every two seconds, indicating that Function One Learn has been selected. Take the remote control or wall pendant that must be learned into the system, press and hold the desired button for three seconds. The onboard buzzer will emit one long beep followed by one short beep if the transmitter has been successfully learned.

Proceed this way to learn any other transmitter in the system to operate Function One only. The system will remain in this learn mode for 10 seconds after the last remote or wall pendant is learned and automatically exit after this time. The function can be learned to any button, provided that the button has not yet been learned to another function.

## **Function Two – Light**

Learning a button to Function Two will enable that button to switch the Courtesy Light on and off.

### **Operation**

Momentarily press the associated transmitter button to either switch the courtesy light on or off. If the light has been switched on, it will time out as per the maximum current timer of 2 minutes.

### **Learning procedure**

Press the Learn button TWICE to select Function Two Learn, if the operator is still in Learn Mode, the Learn button need only be pressed once. the LED indicator will flash twice every two seconds to confirm that Function Two Learn has been selected. Take the remote control or wall pendant that must be learned into the system, press and hold the desired button for three seconds. One long beep followed by two short beeps will indicate that the button has been successfully learned into Function Two and will activate the courtesy light upon being pressed. The system will remain in this learn mode for 10 seconds after the last remote or wall pendant is learned and automatically exit after this time. The function can be learned to any button, provided that the button has not yet been learned to another function.

## **Function Three – Holiday Lockout**

Learning a button to Function Three will enable that button to electronically lock the controller for use. In other words, no transmitters or inputs will be able to trigger the operator.

### **Operation**

To engage Holiday Lockout Mode, the button learned to engage this function must be pressed for three seconds before Holiday Lockout Mode will engage. The courtesy light will emit a single flash and the onboard buzzer a single beep. When disengaging Holiday Lockout Mode, a double flash and beep will indicate likewise. When the door reaches the closed position, the courtesy light will remain in the ON state and time out as per normal. Should a button which operates Function One other than any of those associated with Holiday Lockout Mode be pressed whilst the operator is locked, the onboard buzzer will emit a single beep.



The associated transmitter/wall pendant button must be pressed for three seconds before the Holiday Lockout Mode will engage/disengage.

If the door is in the closed position, the lock will engage immediately.

However, if the door is in the open or partially open position, the door will first close before engaging Holiday Lockout.

### **Learning procedure**

Press the Learn button THREE times to select Function Three Learn. If the operator is still in Learn Mode, the Learn button need only be pressed once. The LED indicator will flash three times every two seconds to indicate that Function Three learn has been selected. Take the remote control or wall pendant that must be learned into the system and press and hold the desired button for three seconds. One long beep followed by three short beeps will confirm that the button has been successfully learned into Function Three, allowing activation of Holiday Lockout Mode as described below. The system will remain in this learn mode for 10 seconds after the last remote or wall pendant is learned and automatically exit after this time. The function can be learned to any button, provided that the button has not yet been learned to another function.

## **Function Four – Autoclose Override**

This function will allow the associated button to override the Autoclose function if it has been selected, resulting in the door staying open.

### **Operation**

The operation of this function is described as follows:

- With the door in the closed position, the Autoclose Override button must be pressed and held for at least three seconds to engage/activate this function
- The light will flash quickly a number of times and simultaneously the buzzer will emit multiple beeps to confirm the operation of this function
- The door will also operate to open and stay open without Autoclosing
- Pressing the open/close button will trigger the door to close

### **Learning procedure**

Press the Learn button FOUR times to select Function Four Learn. If the operator is still in Learn Mode, the Learn button need only be pressed once. The LED indicator will flash four times every two seconds, indicating that Function Four learn has been selected. To learn a button to this function, press and hold the desired button for three seconds, after which one long beep followed by four short beeps will sound. The system will remain in this learn mode for 10 seconds after the last remote or wall pendant is learned and automatically exit after this time. The button can be learned to any function, provided that the button has not yet been learned to another function.

## **Function Five – All buttons**

If Function Five is selected, all the buttons of a hand transmitter or wall pendant will be learned in the following configuration:

**Button 1 – Open/Close**

**Button 2 – Light**

**Button 3 – Lock**

**Button 4 – Autoclose override**

### **Operation**

The operation of Function Five will be according to the four different functions described previously.

### **Learning procedure**

Press the Learn button FIVE times to select Function Five Learn. The LED indicator will flash rapidly and, after pressing a BUTTON THAT HAS NOT YET BEEN ASSOCIATED WITH A FUNCTION, and keeping it pressed for three seconds, five short beeps will sound. The system will remain in this learn mode for 10 seconds after the last remote or wall pendant is learned and automatically exit after this time. In the case of Function Five, the button number pressed will equal the associated function number.

## 5.10 Wireless wall switch

- The wireless wall switch provided with the **XTrac** kit provides ease of installation without the need for running hard wires to the switch. It can be mounted in a convenient location such as adjacent to a side entry door into the garage. The four buttons provided on the wall switch are for independently operating from one wall switch, the two openers of a double garage door installation. The buttons can be used for activating the various function provided by the system. Each individual button of the wall switch has been marked with a number, from one to four, to help the user identify which function each button operates. For example, it is easier to remember that Button One opens and closes the door, Button Two activates the Courtesy Light, etc. The buttons can be learned in any configuration.

### Mounting

- The switch can be permanently screwed to the wall through the mounting holes provided or alternatively "hooked" on the wall, providing the convenience of easy demount ability, through the "hook" holes provided on the base plate
- Use the mounting template and mounting instructions provided with the switch
- The Wireless Wall Switch may be learned into be **XTrac** as per the procedure outlined on Section 5.9 "Remote controls"

**Important note: The wireless Wall Switch must be mounted within sight of the garage door and a reasonable distance away from moving parts. It should be mounted at least 1500mm above the ground and the Entrapment Warning Label provided, must be attached adjacent to the switch.**

## 5.11 Learn Button

- The "Learn Button" (Figure. 19-D) is located within the Lamp Cover adjacent to the "Learn LED" and serves to initiate the functions as described in the following table:

Function	Action
Learn remote control code	Momentary press
Formal Force Learning	Press and hold for two seconds
Sleep Mode	Press and hold in conjunction with "Run" Button

## 5.12 LED Indicator

- The LED Indicator (Figure.19-C) is located under the Courtesy Lamp Cover and serves to indicate the functions as described in the following tables;

### LED Display

- Provides visual indication of functionality sequences as described in the following table;

Display	Indicator
Glow Solid	Reached close limit position.
Slow Flash	Reached open limit position.
Medium Flash	Learning or deleting remote control codes
Quick Flash (A Mode)	Learning new drive force parameters
Quick Flash (M Mode)	Force adjust mode activated
Sleep Mode	Intermittent Flash



## LED Colour

•Provides visual indication of whether power supply is active or not;

Colour	Indicator
Green	Power supply active
Red	Power supply inactive

## 5.13 Run Button

The black "Run" Button (Figure.19-E) is located under the Lamp cover and serves to initiate the functions as described in the following table;

Function	Action
Activate <b>XTrac</b>	Momentary press
Safety Beam override	Press and hold until garage door is fully closed
Sleep Mode	Press and hold in conjunction with "Learn" Button

## 5.14 Safety Beams

- The CENTURION i5 or other four wire Safety Beams may be connected to the **XTrac**.
- The installation of Safety Beams greatly enhances safety by constantly monitoring for persons or objects which may pass within the path of the moving garage door.
- The **XTrac** will commence to Safety Reverse if the Safety Beams become momentarily or permanently interrupted during a Close Cycle

### Mounting

- Mark the inside garage door framing so that the bottom edge of the i5 beam sits 125mm off the floor
- Using a small angle bracket fasten each beam to the wall so that they face each other across the garage door

### Connection

- Follow Safety Beam instructions and connect to the Output Terminals depicted in Figure.14A/B. Use the normally-open contacts of the beam to connect to input SB4 on the **XTrac** (Figure 14A/B)

**Important note: XTrac provides 24VDC output and Normally-Open input.**

### Alignment

- Adjust the Safety Beam module marked "Transmitter" (by turning the mounting bracket) so that it is aimed directly at the lens of the Safety Beam module marked "Receiver". A GREEN indicator lamp located on the "Receiver" will glow once the correct alignment has been achieved
- Test the Safety Beam alignment several times each time ensuring that when the Safety Beams are obstructed the green indicator lamp extinguishes and when unobstructed the indicator lamp glows solid
- Firmly tighten the Safety Beam mounting bracket fixing screws
- Installation of the Safety Beams is now complete

### Enabling

- Remove the Courtesy Lamp and Control Box Covers to expose the Control Board (Refer Section.5.6 for removal and replacement details)
- Select dipswitch 2 (SB) to the "ON" position (Figure.17)
- Replace the Control Box and Courtesy Lamp Cover

### Testing

- Initiate a close cycle. As the garage door is closing interrupt the Safety Beams by passing an object through the line of the Safety Beams. If the Safety Beams are functioning correctly the **XTrac** should stop and then immediately reverse direction
- If the garage door commences a close cycle but within one cycle reverses, check that the Safety Beams are aligned correctly as outlined in "Alignment"

### Override

- In the event of a Safety Beam malfunction the garage door can be closed by pressing and holding the black "Run" Button (Figure.19-E) until such time as the garage door is fully closed and has stopped
- Note: If the black "Run" Button is released prior to the garage door reaching the fully closed position the **XTrac** will Safety Reverse

## 5.15 Safety reverse

- Partial Safety Reverse ensures that the garage door does not open fully and thereby present an unwanted security risk
- In the event that the garage door encounters a sufficient obstruction during a close cycle the **XTrac** will immediately stop and then begin to reverse direction and then stop after three seconds. Upon receiving a Signal immediately subsequent to partial Safety Reverse, the **XTrac** will recommence movement in the open direction

## 5.16 Soft start

- When commencing movement from any stationary position, the **XTrac** will slowly ramp up to full speed. This is in order to minimize start-up load on the **XTrac** and garage door and provide smooth and quiet operation

## 5.17 Soft stop

- By intelligently reducing the speed of the garage door as it approaches a limit point, the **XTrac** ensures quieter garage door closing and enhanced **XTrac** and garage door life. (Standard function within Adaptive Mode only)
- Adaptive Mode is factory configured to provide soft stopping prior to reaching a limit point. However, for garage doors that are improperly balanced it may be necessary to disable the soft stop function in order for the garage door to fully close or fully open
- Soft Stop is available only when Adaptive Mode has been selected

### Enabling / Disabling

This feature is enabled by default

## 5.18 Speed control

- Running speed may be adjusted within the range of 70 ~ 100% of maximum speed
- Note: Available only when Adaptive Mode has been selected

### Adjustment

- To enter Speed Control adjustment mode;
  - I. Move the Drive Unit so that it is positioned mid way between the two Limit Adjust Prongs (Figure.13)
  - II. Hinge open the Courtesy Lamp Cover to expose the adjustment controls (Figure.19)

III. Press and hold the "Learn" Button (Figure. 19-D) for two seconds in order to initiate Forced Learn – LED Indicator will begin to quick flash

IV. Rotate the (red) "Speed" Adjustment Pin (Figure.19-F) in a clockwise direction to increase running speed and anti-clockwise to decrease running speed

V. Close the Courtesy Lamp cover once adjustment has been completed

- Running speed may only be adjusted while the Drive Unit is travelling between Limit Points.
- Speed Control adjustment will close out automatically once the Drive Unit reaches either one of the Limit Adjust Prongs.

## 5.19 Maintenance

- Once every six months;
  - I. spray the inside vertical faces of the Drive Rail along the entire length with a light coating of Ballistol lubricant only (CENTURION part number OIL1302X30ML).

**Important Note: Using any other type of lubricant may cause the XTrac to malfunction!**

II. disengage the **XTrac** from the door (Figure.11) and then test the door to ensure that it meets with the requirements detailed on page 1, Items 3 and 4.

## 6. Technical specifications

### XTrac garage door operator (for sectional and tip-up doors)

Input voltage	180 – 270V AC @ 50/60Hz*
Motor voltage	24V DC
Motor power - rated	120W DC
Motor supply	Dual power – 250VA max. mains power supply, with 2 x 1.5Ah 24V battery backup supply
Max door width	6500mm
Max door area	12m <sup>2</sup>
Max lifting capacity	1200N
Operations in standby mode	12 to 30 depending on the door size / weight / height / duration of power failure
Operator travel speed	Adjustable – between 90 – 125mm/sec
Door travel adjustment	Manually adjustable limits with 1 to 1 adjustment ratio
Safety obstruction force system	Selectable Manual / Adaptive
Light	Bayonet 24V 21W
Autoclose◊	Dip switch selectable
Infrared safety beams	Optional, but recommended
Radio receiver	CENTURION code-hopping 433MHz
Receiver code storage capacity	22 transmitter buttons

\* Can operate off a solar supply, consult **Centurion Systems** for assistance

◊ Requires infrared safety beams to be fitted

Specifications subject to change without prior notice

## 7. Trouble shooting guide

Symptom	Suggested Remedies/Reasons	Reference	
		Page	Sec.
• <b>XTrac</b> will not function at all	<ul style="list-style-type: none"> <li>• Check that power cord is plugged-in and turned on</li> <li>• Check power point by plugging-in an alternate appliance</li> <li>• Check that <b>XTrac</b> is engaged to door</li> <li>• No LED display indicates that <b>XTrac</b> has entered Shut-down Mode due to low battery voltage - check power supply (battery version only)</li> <li>• Opener may have entered Holiday Lockout Mode</li> </ul>	~	~
		10	3.1
• <b>Xtrac</b> runs very slowly	<ul style="list-style-type: none"> <li>• Speed Control setting may be too low - increase speed setting</li> <li>• Batteries are running low - check that charger is charging</li> <li>• Garage door may be binding or out of balance</li> </ul>	21	5.4
		29	5.19
• Door stops before reaching fully open position	<ul style="list-style-type: none"> <li>• Disengage <b>XTrac</b> from door and check for obstructions</li> <li>• Disengage <b>XTrac</b> from door and check for correct spring balance</li> <li>• Check for correct Safety Obstruction Force adjustment settings</li> <li>• Check for correct Open Limit adjustment</li> <li>• Door may be incorrectly balanced</li> </ul>	28	5.18
		21	5.4
• Door stops & reverses before reaching fully closed position	<ul style="list-style-type: none"> <li>• Disengage <b>XTrac</b> from door and check for obstructions</li> <li>• Disengage <b>XTrac</b> from door and check for correct spring balance</li> <li>• Check for correct Safety Obstruction Force adjustment settings</li> <li>• Check for correct Open Limit adjustment</li> <li>• Door may be incorrectly balanced</li> </ul>	1	1.3
		16	4.2
• Door stops before reaching fully closed position	<ul style="list-style-type: none"> <li>• Check for correct Close Limit adjustment</li> </ul>	15	4.1
		28	5.17
• Door will not Safety Reverse	<ul style="list-style-type: none"> <li>• Check for correct Safety Obstruction Force adjustment settings</li> <li>• Battery voltage may be low - check that battery charger is active</li> </ul>	10	1.3
		1	1.3
• Door requires excessive force to Safety Reverse	<ul style="list-style-type: none"> <li>• Check for correct Safety Obstruction Force adjustment settings</li> </ul>	16	4.2
		21	5.4
• Door requires excessive force to Safety Stop	<ul style="list-style-type: none"> <li>• Check for correct Safety Obstruction Force adjustment settings</li> </ul>	15	4.1
		15	4.1
• <b>Xtrac</b> will not function from Hand Transmitter	<ul style="list-style-type: none"> <li>• Check function of <b>XTrac</b> by operating from "Run" button</li> <li>• Check function of <b>XTrac</b> with substitute remote control</li> <li>• Re-learn remote control code into <b>Xtrac</b></li> <li>• Replace remote control battery</li> </ul>	27	5.13
		25	5.9
• Hand Transmitter operating range is poor	<ul style="list-style-type: none"> <li>• Replace Hand Transmitter battery</li> </ul>	25	5.9
		25	5.9
• Courtesy Lamp will not function	<ul style="list-style-type: none"> <li>• Replace Courtesy Lamp bulb</li> <li>• Battery voltage has dropped below 24V</li> </ul>	24	5.6
		24	5.6
• Courtesy Lamp triple flashes every 15 sec	<ul style="list-style-type: none"> <li>• Door balance is incorrect</li> <li>• Lubricate garage door springs and hinges</li> <li>• Call serviceman if lubricating springs does not correct problem</li> </ul>	1	1.3
		1	1.4
• LED Indicator glows solid	<ul style="list-style-type: none"> <li>• <b>XTrac</b> has reached fully closed position</li> </ul>	1	1.6
		26	5.12
• LED Indicator slow flashes	<ul style="list-style-type: none"> <li>• <b>XTrac</b> has reached fully open position</li> </ul>	26	5.12
		18	4.21
• LED Indicator quick flashes	<ul style="list-style-type: none"> <li>• <b>XTrac</b> is learning new Safety Obstruction Force values</li> </ul>	21	5.4,1
		21	5.4,1
• LED Indicator glows red	<ul style="list-style-type: none"> <li>• Battery charger is not charging - check battery charger</li> </ul>	21	5.4,1
		21	5.4,1
• Buzzer single beeps every 30 sec	<ul style="list-style-type: none"> <li>• Battery charger is not charging - check battery charger</li> </ul>	21	5.4,2
		21	5.4,2
• Buzzer single beeps every 30 sec	<ul style="list-style-type: none"> <li>• Battery is nearing fully depleted state - check battery charger</li> </ul>	21	5.4,2
		21	5.4,2
• Door will not Autoclose	<ul style="list-style-type: none"> <li>• Check for Safety Beam damage</li> <li>• Check for correct Safety Beam alignment</li> <li>• Check that Dips 2 &amp; 3 have been set to the "ON" position</li> </ul>	27	5.14
		27	5.14
• Will not Safety Reverse when Safety Beams are interrupted	<ul style="list-style-type: none"> <li>• Check that Dip 2 has been set to the "ON" position</li> </ul>	21	5.2
		21	5.2
• <b>XTrac</b> makes "squeaking" sound	<ul style="list-style-type: none"> <li>• Lubricate inside of Drive Rail with Silicone spray lubricant</li> </ul>	30	5.20

## Installation Details

Installation Date: .....

Installer's Name:.....

Installer's Address:.....

Installer's Telephone Number:..... Installation Checked By:.....

### Notes

## Notes





**Sharecall 0860-CENTURION (0860 236 887)**  
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(Sharecall numbers applicable when dialed from within South Africa only)



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