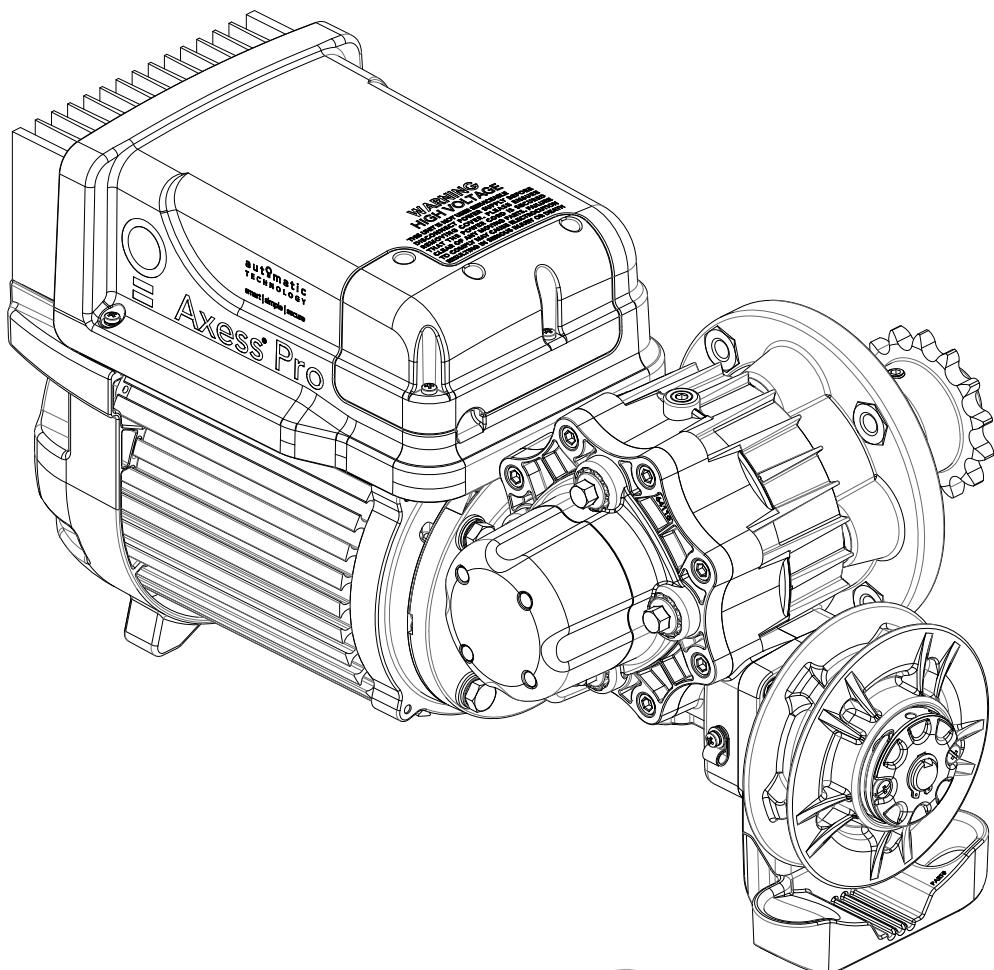




# Axess® Pro Series 3100

Industrial Roller Shutter Opener



## Featuring **TrioCode™** Technology

auto matic  
TECHNOLOGY

smart | simple | secure

Technical Document
Installation Manual
v 1.11
14 Dec 2011
English
Part # 13296 (Manual)



**WARNING:** Electrical wiring must be in compliance with your local building and electrical codes.

**WARNING:** It is vital for the safety of persons to follow all instructions. Failure to comply with the installation instructions and the safety warnings may result in serious personal injury and/or property and remote control opener damage. Please save these instructions for future reference.

**NOTE:** For full automatic operation a Photo Electric Beam Sensor must be fitted to the logic console with this opener. Failure to comply will void the warranty and may cause serious personal injury and/or property damage.

Automatic Technology (Australia) Pty Ltd to the extent that such may be lawfully excluded hereby expressly disclaims all conditions or warranties, statutory or otherwise which may be implied by laws as conditions or warranties of purchase of an Automatic Technology (Australia) Pty Ltd industrial roller shutter opener. Automatic Technology (Australia) Pty Ltd hereby further expressly excludes all or any liability for any injury, damage, cost, expense or claim whatsoever suffered by any person as a result whether directly or indirectly from failure to install the Automatic Technology (Australia) industrial roller shutter opener in accordance with these installation instructions.





# Axess® Pro Series 3100

## 1-Phase 240Vac Industrial Roller Shutter Opener

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# Features

Thank you for purchasing the Axess® Pro Series 3100 Industrial Roller Shutter Opener. This opener is designed to suit heavy duty rolling shutters. The components and materials used in this opener are of the latest technology and highest quality. Listed below are some of the many features.

## Operation

To operate the opener, simply activate one of the integrated controller's inputs by using a TrioCode™ handheld transmitter, keypad or other device including key switches, swipe cards, and loop detectors. In response, the shutter will then open, stop or close as requested. The opener can also be configured to close automatically using one of several Auto-Close modes.

## Logic Console

Incorporated into the integrated controller is a simple to use operator console which consists of several buttons and a display. The console offers a user friendly menu system that greatly simplifies installation, adjustment and status indication. Features include editing transmitter storage and names, setting various parameters, selecting specialised operating modes and performing system diagnostics.

## Status Indication

The status of the opener can be determined at anytime by observing the console's LCD screen. When the MAIN SCREEN is displayed, the current position of the shutter or the result of the last movement can be found. The display will also show the count down progress of the Auto-Close timers. Any active input will also be displayed along with the state of various features such as periodic service.

## Manual Console

Manual console is simple to use. The status of the door is shown by the LEDs on the manual console.

**NOTE:** P.E. Beams, transmitters or any other device can not be used with manual console.

## TrioCode™ Code Hopping Technology

Every time a TrioCode™ transmitter is used, a new security code is randomly generated from over 4.29 billion possibilities. This greatly enhances the security of the system and makes "code grabbing" a thing of the past. These transmitters also overcome interference issues by simultaneously sending a signal over three slightly different frequencies. Even if two of the three signals are jammed, the system will still work.





#### **Soft-Start Soft-Stop**

The opener accelerates slowly at the start of the cycle and deaccelerates just before reaching the limit. This feature reduces the wear and tear on the shutter.

#### **Security Code Store**

The opener uses state of the art technology to store your selected transmitter codes. Up to 511 different transmitters can be stored in the opener's memory with the facility to assign an 11 character name to each transmitter.

#### **Remote Limits Positioning**

During installation a hand held transmitter can be used with logic console when setting the travel limits. This allows the installer to closely observe and control the movement of the shutter from any position rather than having to be within arms reach of the console.

#### **Controlling Lights**

The Auxiliary output can be programmed to operate a light relay module. The light relay module can control the warning or courtesy light. The timing of these outputs can be adjusted to suit your needs.

#### **Extensive Operating Modes Via Control Inputs And Remote Control**

The integrated controller can be configured to operate in many different ways via its 7 control and safety inputs. These include P.E, FIRE, GPI, OPEN, STOP, CLOSE, and SWIPE. Remote control operation is provided with each transmitter button being able to be configured to operate one of OSC, PEDESTRIAN, SWIPE, CLOSE, OPEN, STOP, LIGHT or VACATION functions. The controllers functionality is further enhanced by 4 Auto-Close modes, 3 P.E. response modes and 2 pedestrian response modes. For details refer to relevant sections of this manual.

#### **Automatic Manual Operation Clutch**

The opener is equipped with an automatic clutch. If power to the opener is disrupted for any reason the User can open or close the shutter manually by using the hand chain. When power is restored simply press the button on the console or the transmitter to open or close the shutter.





# Important Safety Instructions

**WARNING: It is vital for the safety of those who install, maintain or operate the opener to follow all instructions. Failure to comply with the instructions may result in serious personal injury and/or property damage. Please read this installation instruction manual before attempting to install, maintain or use the opener.**

For **Safety** protection, a Photo Electric Beam **must** be fitted with logic console. Failure to comply will void the warranty and may result in serious personal injury and/or property damage.

**DO NOT** operate the opener unless the shutter is in full view and free from objects such as cars and children/people. Make sure that the shutter has finished moving before entering or leaving the driveway.

**DO NOT** operate the opener when children/people are near the shutter. Children must be supervised near the shutter at all times when the opener is in use. **Serious personal injury** and/or property damage can result from failure to follow this warning.

**DO NOT** allow children to operate the opener. Any device that can operate the opener, make sure it is out of reach of children and that the doorway is in full view at all times. **Serious personal injury and/or property damage** can result from failure to follow this warning.

**DO NOT** wear rings, watches, or loose clothing while installing or servicing Axess® Pro Series 3100.

The opener is not intended for use by young children or infirm persons without adequate supervision. Children should be supervised to ensure that they do not play with the transmitters or the opener.

The opener is not showerproof - it should not be immersed in water or sprayed directly by a hose or other water carrying device.

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

The shutter must be **well balanced** and in good working order. Shutter springs, brackets and their hardware are under extreme tension and can cause serious personal injury. Do not attempt to adjust them. A faulty shutter must be repaired by a industrial roller shutter professional prior to opener installation.

**Remove or disengage** all locks and mechanisms prior to installation of the opener.

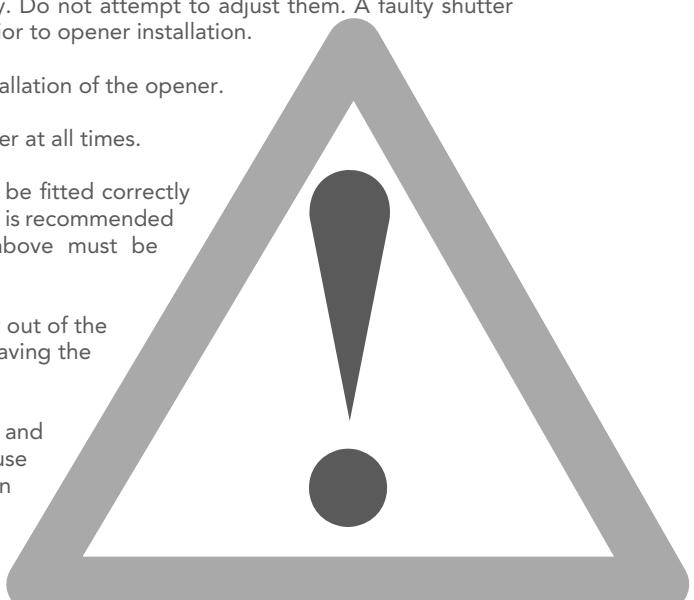
Keep hands and loose clothing **clear** of the shutter and opener at all times.

When using Auto-Close mode, a **photo electric beam** must be fitted correctly and tested for operation at regular intervals. **Extreme caution** is recommended when using Auto-Close mode. **All Safety Instructions** above must be followed.

Make sure that the shutter is fully open before driving into or out of the driveway. And make sure the shutter is fully closed before leaving the driveway.

Frequently examine the installation, in particular guides and mountings for signs of wear, damage or imbalance. **DO NOT** use if repair or adjustment is needed since a fault in the installation or an incorrectly balanced shutter may cause injury.

**After installation a full function test of the system and safety devices must be done.**

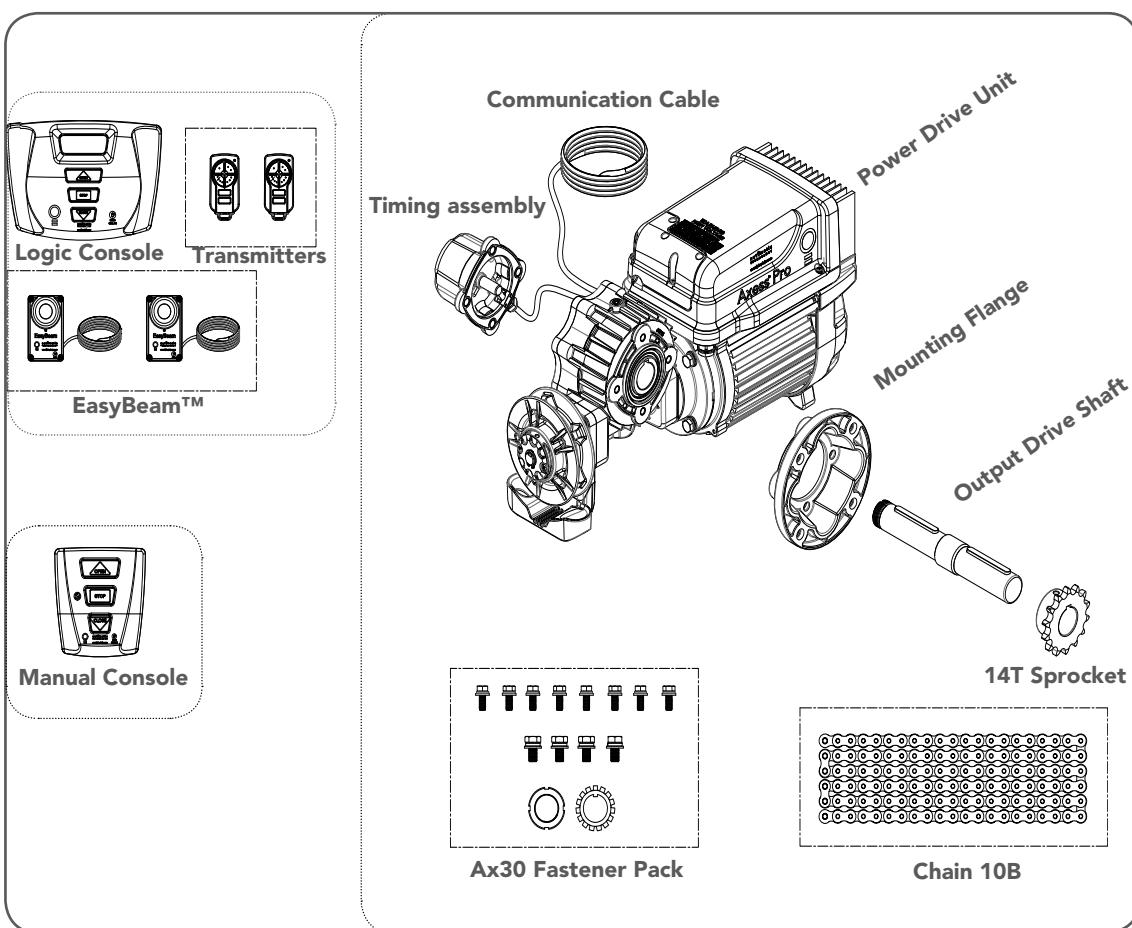




# Package Contents

Description	Qty
Axess 3100 Power Drive Unit	1
Timing Assembly	1
Logic Console*	1
Manual Console*	1
Communication Cable	1
Output Drive Shaft Assembly	1
Chain 10B (0.625")	1
Sprocket 14T (0.625")	1
Mounting Flange	1
Ax30 Fastener Pack	1
TrioCode™ Keyring Transmitters*	2
EasyBeam™ with wires and brackets*	1
Installation Manual	1

fig 01

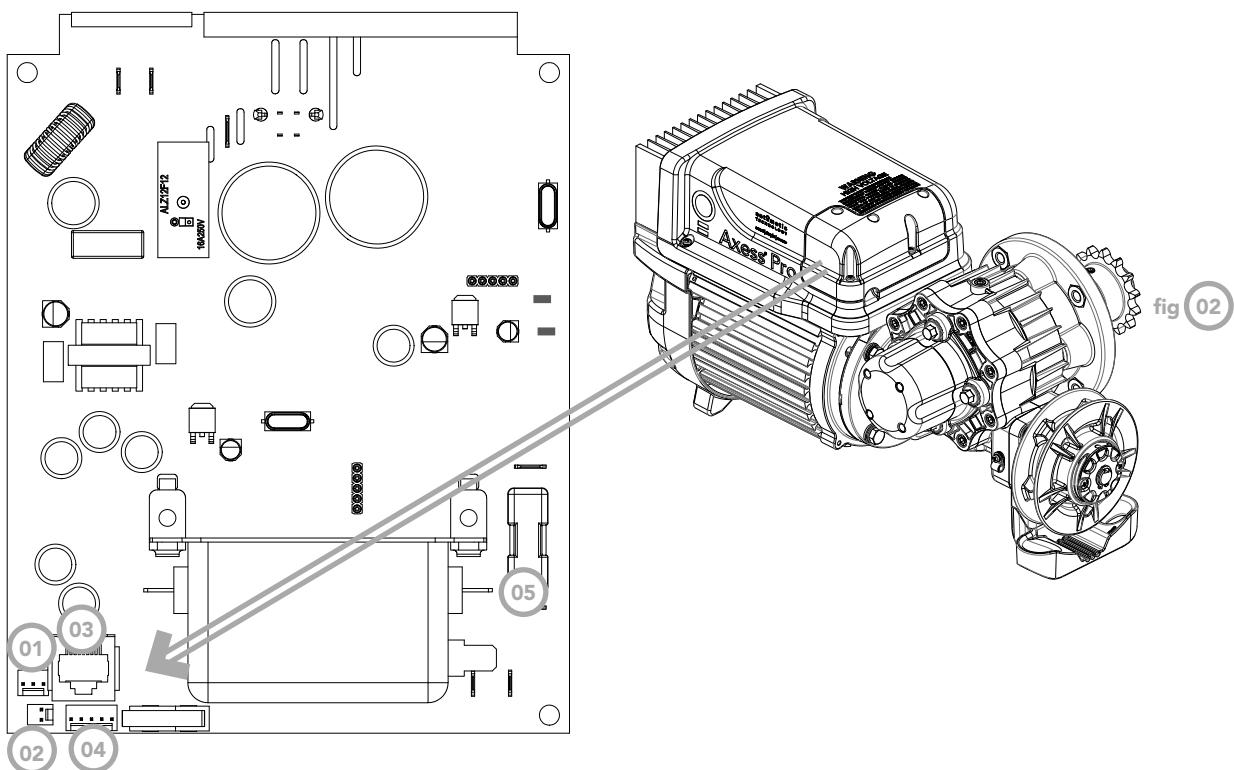


\* Not available with some models





# Controller Input And Outputs



- 01 Motor identification harness connector
- 02 Clutch interlock microswitch connector
- 03 Serial interface connector
- 04 Position sensor connector
- 05 10 Amps slow blow mains fuse



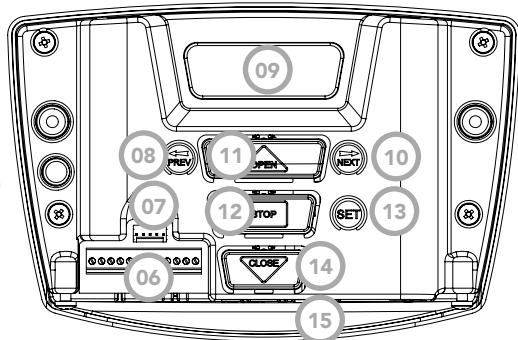
**WARNING! HIGH VOLTAGE!**  
This unit is not user serviceable.  
Disconnect power supply before removing  
cover. Please ensure all electrical cables  
are secured clear of any moving parts.  
Failure to comply may cause electrocution  
resulting in serious injury or death.



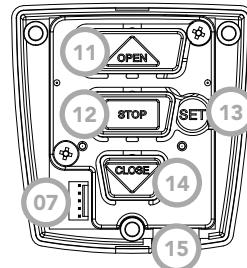


# Operating Controls

fig 03



Logic Console



Manual Console

06 Terminal Block ( From Left To Right )

- V+ Three Wire P.E. Beams " + " Supply
- IN3 Three Wire P.E. Beams Trigger Input
- V- Common For Two Wire EasyBeam™ and Three Wire P.E. Beams
- IN2 Two Wire EasyBeam™ Input
- AUX OUT Receiver's Auxiliary Output
- FIRE Input Terminal (N/O or N/C)
- GPI N/O Input Terminal (N/O)
- OPN Input Terminal (N/O or N/C)
- STP Input Terminal (N/O or N/C)
- CLS Input Terminal (N/O)
- SWP Input Terminal (N/O)
- COM Terminal For Inputs

07 Programmer PG-3 Input

- 08 Console Previous Button
- 09 Liquid Crystal Display
- 10 Console Next Button
- 11 Console Open Button
- 12 Console Stop Button
- 13 Console Set Button
- 14 Console Close Button
- 15 RJ45 Connector





# Before Drive Unit Installation

The Axess® Pro Series 3100 is designed to operate most industrial heavy duty roller shutters. The shutter must be in good working condition and travel freely in the guides.

## Step 1 - Initial Check

Before commencing installation, check the following:

1. The shutter moves freely for the full travel in both directions.
2. The mounting must be a solid construction (concrete, brick or steel) and must be able to withstand the full driving force applied to the shutter.
3. There is a 240V 10 Amp power point located within one metre of the drive unit.
4. For full automatic operation an EasyBeam™ must be fitted to the logic console. The EasyBeam™ should be positioned as close to the shutter as practicable.

## Selecting the installation location

Overall dimensions of the opener are shown in **Fig. 04-06**. When selecting the installation location, consider the following:

- Minimum distance between the shutter drum and mounting plate needs to be more than 15mm and less than 100mm.
- Minimum distance between the drive unit and the imposing structure is 10mm.
- The overhead clearance needs to be at least 150mm.

## Step 2 - Drive Unit Pre-assembly

The opener can be installed on either the right- or left hand side of the shutter (when viewed from inside the building). The timing assembly, mounting flange and drive shaft needs to be assembled according to the installation side. Assembling the opener for RIGHT- HAND installation is explained below. For LEFT-HAND side installation, assemble the parts from the other end.

1. Assemble the mounting flange with four M8x20 bolts and washers to the opener (**Fig. 07**)
2. Insert the output drive shaft into the gearbox, thread side first as shown in **Fig. 07**.
3. Secure the output drive shaft with the lock washer and lock nut.
4. Finger tighten the lock nut\* then lock it by securing the position of the lock nut by bending one tooth of the lock washer into the slot on the lock nut (**Fig. 07**).
5. Line up the shaft of the timing assembly with the keyway on the back of the drive shaft. Push and secure the timing assembly with bolts ensuring the cable gland is facing the motor.

**NOTE:** The drive unit is not designed to be mounted upside down. Gearbox damage will result.

\* Finger tighten to lock nut, this will remove any movement in the output shaft. Excessive tightening to lock nut may cause damage to output shaft bearing.

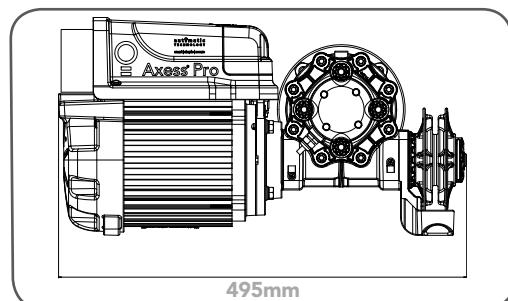


fig 04

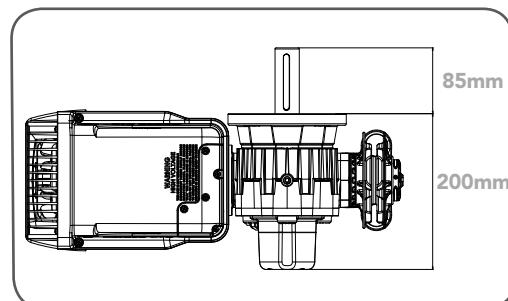


fig 05

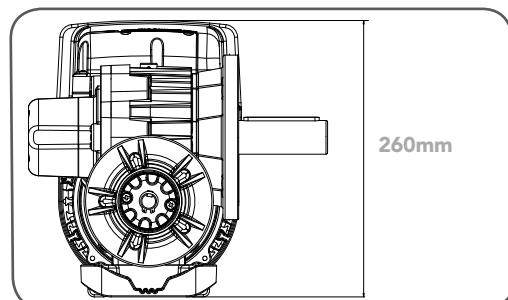


fig 06

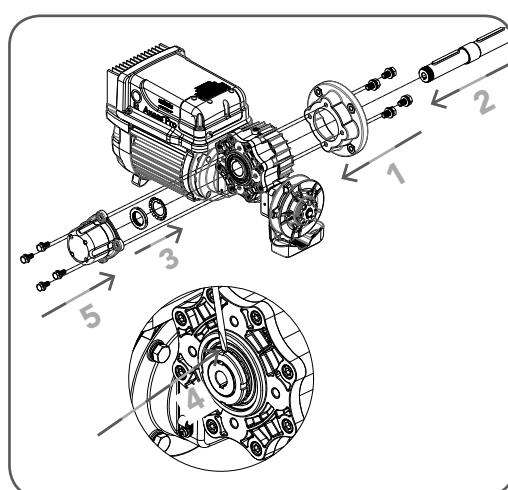


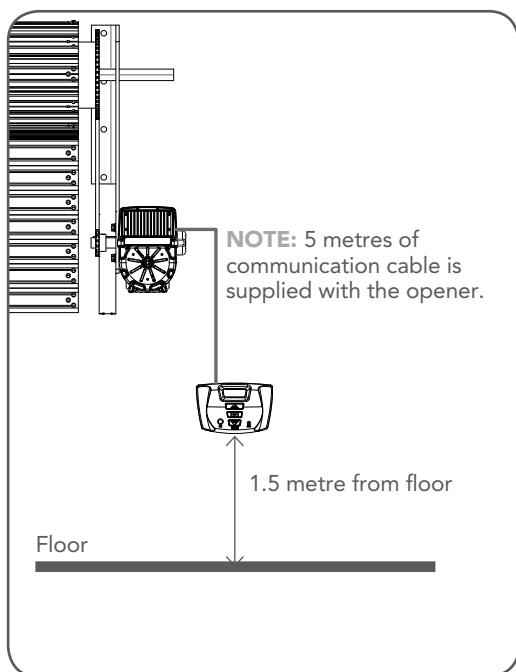
fig 07





# Installation

fig 08



**WARNING!** Do not turn the power on to the opener before connecting either console.

## Step 3 - Mounting The Drive Unit

Open the shutter about one metre from the floor. Raise the drive unit to the required height by using a suitable lifter or use chain block connected to a secure beam above the shutter axle.

1. Position opener and secure with four M12x30 screws.
2. Mount drive sprocket on shaft in line with shutter drive gear. Tighten the grub screw on the sprocket with M4 hex key.
3. Shorten drive chain as required and fit around drive gears.
4. Feed manual chain through guide and over the clutch pulley.
5. Shorten the manual chain as required and fix ends to make a loop.

**NOTE:** Ensure that hand chain is not twisted when making a loop.



**WARNING!** Do not turn the power on to the opener before connecting either console.

## Step 4 - Installing The Logic Or Manual Console

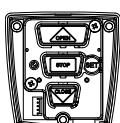
1. Remove the main cover.
2. Affix the logic or manual console at a height of 1.5 metres within sight of the shutter. Make sure that the position of the logic or manual console is out of reach of children and convenient to the customer (Fig. 08).
3. Connect the network cable from the opener to the logic or manual console unit.



**WARNING!** For full automatic operation a Photo Electric Beam Sensor must be fitted with logic console. Failure to comply will void the warranty and may cause serious personal injury and/or property damage.



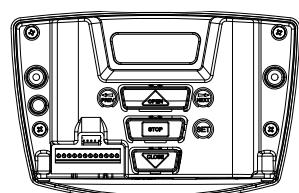
**WARNING!** Ensure that network cable is affixed properly and away from the moving parts of the shutter and opener.



**For setup with Manual Console, continue to page 12**

-OR-

**For setup with Logic Console, skip to page 13  
to install PE Beams**





# Manual Console

The manual console has open, close, stop and set push buttons. The status of the door is indicated by the LED lights. The manual console only supports Safety Close mode. In this mode, the user must press and hold the close button to close the door. The door can be opened by pressing the open button once.

**NOTE:** PE Beams, transmitters or any other device to control the operation of the shutter is not supported by the manual console.

## Step 5.1 - Setting Travel Limits With Manual Console

1. Turn on the power to the opener. After a short delay blue close LED will start to flash.
2. Press and hold the CLOSE button (Fig. 09)- the shutter should start closing.
  - If the shutter opens, release the CLOSE button and press the STOP button once to change the motor's direction. Press and hold the CLOSE button until close position of the shutter is reached.
  - If the shutter overshoots, press the OPEN button to move the shutter in the open direction.
3. When the shutter is at the desired close position, press the SET button to record the close limit position. The green open LED will start to flash.
4. Press and hold the OPEN button (Fig. 10) to open the shutter. When the shutter is at the desired open position, release the OPEN button
  - If the shutter overshoots, press the CLOSE button to move the shutter in the CLOSE direction.



**WARNING!** Once the next step is performed, the shutter will automatically close and open to calculate travel time settings. Keep persons and objects clear of the shutter.

5. Press the SET button to store the open limit. The shutter will now automatically close and open to calculate the travel time settings.
6. Replace the main cover. The opener can now be operated with the OPEN or CLOSE buttons on the manual console.

## Step 5.2 - Clearing Travel Limits With Manual Console

1. Turn power to the opener off.
2. Press and hold the SET Button.
3. Turn power on while holding the SET button. Continue to hold until all LED's are off.
4. Repeat Steps 5.1 to set travel limit positions.

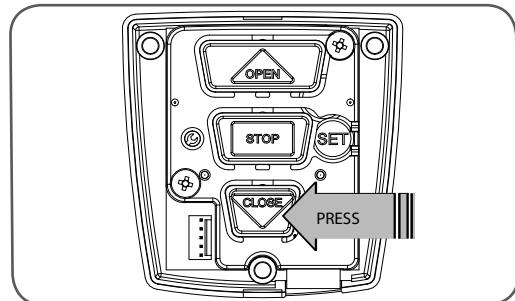


fig 09

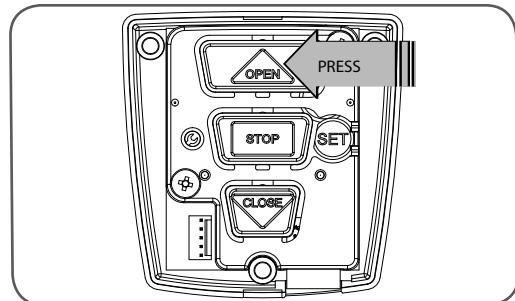


fig 10



# EasyBeam™ Installation

fig 11

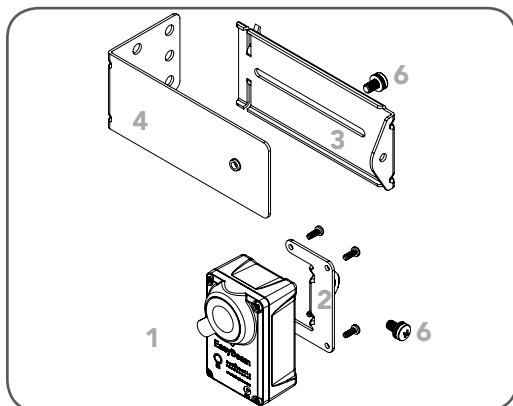
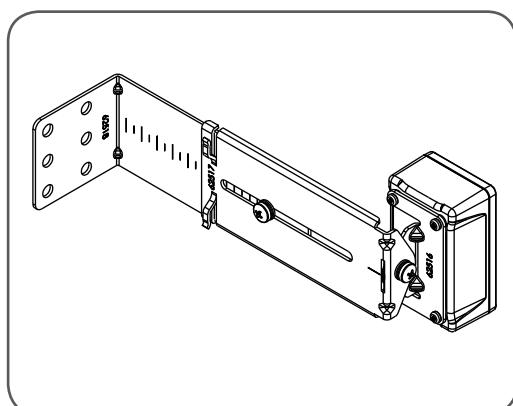


fig 12



**NOTE:** Photo Electric (PE) Beams can not be used with manual console.

## Step 6.1 - Fitting the EasyBeam™

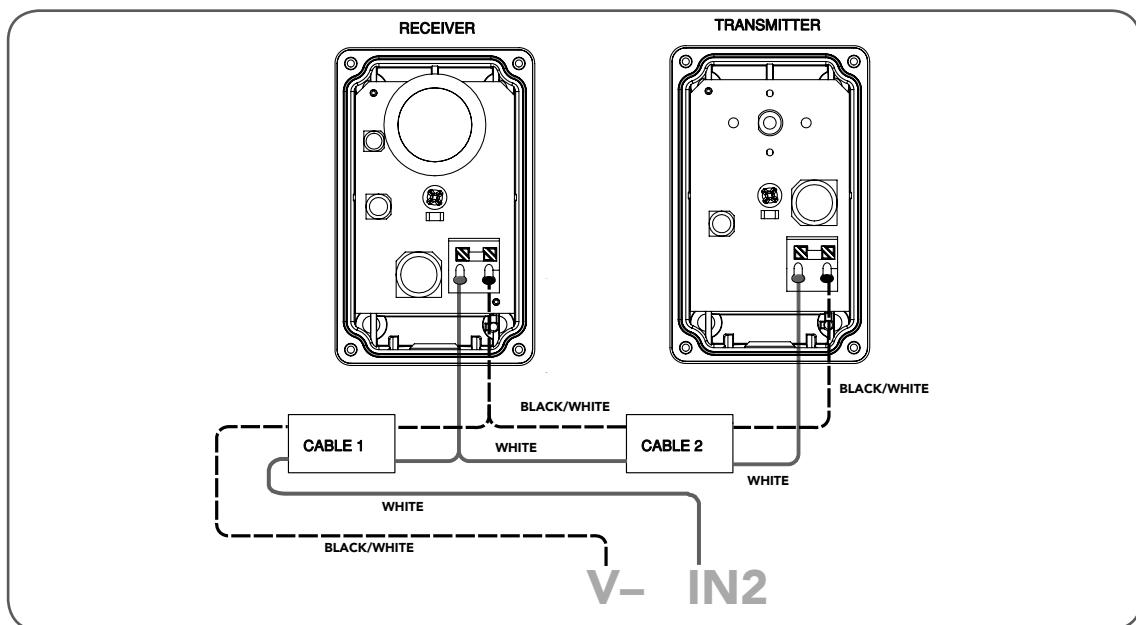
1. Attach the mounting bracket (4) to the adjustment bracket (3) with the pan head screw (6) (supplied). **(Fig. 11)**
2. Attach the bracket (2) to the EasyBeam™ transmitter with four taptite screws (m3x5) and attach the other side to the adjustment bracket (3) with the pan head screw (6) . **(Fig. 12)**
3. Repeat steps a and b to assemble the EasyBeam™ receiver.

Locate the EasyBeam™ in a strategic location in the doorway. Automatic Technology recommends that the sensor is placed 100mm above the floor level and as close as possible to the shutter opening. Connect as per the wiring diagram **(Fig. 13)**.

## Step 6.2 - Alignment

1. Power up the Axess® Pro Series 3300 with the EasyBeam™ connected. The green LED on the transmitter should turn ON to indicate power is present.
2. If the receiver is connected to power and the red LED is flashing while the green LED on the transmitter is on, the transmitter and receiver are not aligned.
3. Make horizontal and/or vertical adjustment on the transmitter and/or receiver until the red LED on the receiver turns on, indicating alignment. Approaching to the alignment is indicated by fast flashes on the red receiver LED.

fig 13





# Viewing & Editing Logic Console

This section illustrates how to locate, view and adjust parameters in the logic console unit.

## Locating parameters

Refer to MENU STRUCTURE on Page 15 or the preceding section for CONTROL BOARD ADJUSTMENTS. Locate the required parameter and note the MENU number. The example used in (Fig. 14) displays Menu 2.2 "100% O/L Time" "Time"

## Changing Settings

1. Press NEXT/PREV to navigate to the required menu.
2. Press SET to show the sub-menu.
3. Press NEXT/PREV to go to the required sub-menu.
4. Press OPEN/CLOSE to change the parameter setting.
  - Holding the button down causes the parameter's value to change rapidly.
  - The longer the button is held, the faster the value changes.
5. Press SET to SAVE the setting.

## Reload Default Setting

1. Press NEXT/PREV buttons to display the LOAD DEFAULT screen.
2. Press SET to load the default value.

## Return To Menu

If the parameter's value is not to be changed, press STOP to return to the sub menu. Press STOP again to return to the MAIN SCREEN.

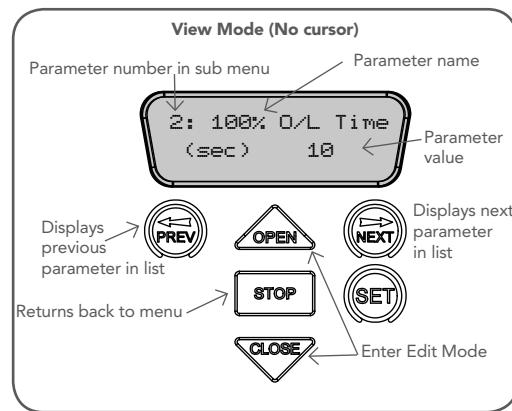


fig 14

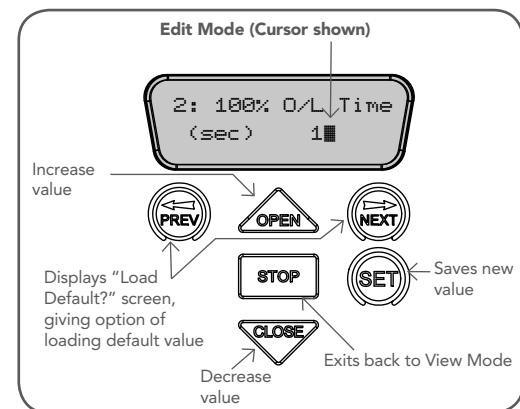


fig 15





# Setting Limits via Logic Console

fig 16

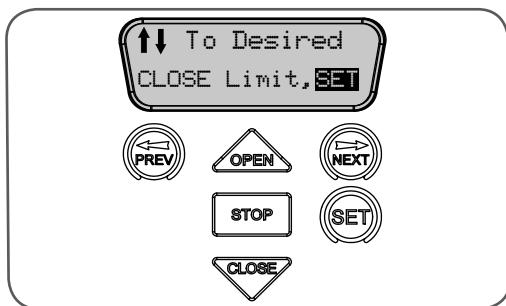
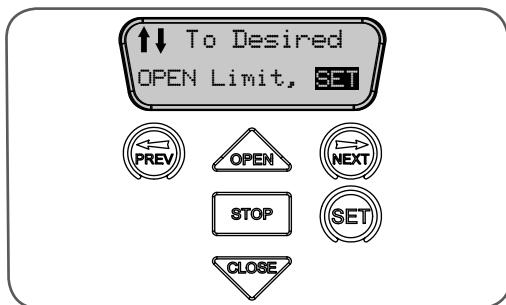


fig 17



## Step 7 - Setting Travel Limits

1. Turn on the power to the opener. The controller will go through a start up sequence.
2. After a short delay the MAIN SCREEN (Fig. 16) will be displayed. If this is the first time the Axess® Pro Series 3300 is being used, the MAIN SCREEN should enter into limit set mode and the blue close LED will be flashing. If the display shows that an input is active, then rectify the situation before continuing with the procedure for setting the travel limits. Press and hold the CLOSE button - the shutter should start closing.
  - » If the shutter opens, release the CLOSE button and press the STOP button once to change the motor's direction. Press and hold the CLOSE button until close position of the shutter is reached.
  - » If the shutter overshoots, press the OPEN button to move the shutter in the open direction.
3. When the shutter is at the desired close position, press the SET button to record the close limit position. The display will change and the green open LED will start to flash (Fig. 17).
4. Press and hold the OPEN button to open the shutter. When the shutter is at the desired open position, release the OPEN button.
  - » If the shutter overshoots, press the CLOSE button to move the shutter in the CLOSE direction.



**WARNING!** Once the next step is performed, the shutter will automatically close and open to calculate travel time settings. Keep persons and objects clear of the shutter.

5. Press the SET button to store the open limit. The shutter will now automatically close and open to calculate the travel time settings. After this, if PE Beams are installed, the opener can be operated with the OPEN or CLOSE button on the logic console or from the transmitter. Otherwise, the controller will be loaded with "Safety Close Mode." (Page 28)





# Setting Limits via Transmitter

In order to use a transmitter to set the limits, it must first have at least one of its buttons coded to the logic console. The function assigned to the transmitter's buttons is of no concern here as the buttons are temporally assigned to OPEN, CLOSE and SET (Fig. 19).

## Step 8.1 - Code A Transmitter For Limit Setting

1. Press NEXT to navigate to Menu 1.
2. Press SET to enter the code set procedure (Fig. 18).

## Step 8.2 - Storing Transmitter Code

1. The logic console will prompt to press one of the transmitter's button.
2. Press the transmitter button you wish to use to operate the opener (e.g. button 1).
3. Press the same transmitter button again as prompted by the display.
4. Press the SET button to store the transmitter.

## Step 8.3 - Navigating To "Set Door Travel Menu"

1. Press PREV to navigate to Menu 10.
2. Press SET to display MENU 10.1.
3. Press SET two times to enter the limit setting procedure. The close blue LED will start to flash.

## Step 8.4 - Setting Limits Via Transmitter

1. Press and hold Button 4 on the transmitter to close the shutter.
  - If the shutter opens, release button 4 and press the STOP button once on the logic console to change the direction of the motor. Then press and hold Button 4 on the transmitter to close the shutter.
  - If the shutter is closed too far, press Button 1 to "inch" the shutter towards open.
2. When happy with the close limit position, press Button 2 to store this in the memory. The open green LED will start to flash. Press Button 1 to open the shutter.
  - If the shutter is opened too far, press Button 4 to "inch" the shutter closed.



**WARNING:** The shutter will automatically close and open once the next step is performed. Ensure that no persons or objects are in the path of the shutter.

3. When you are happy with the open limit position, press Button 2 on the transmitter to store into memory. The shutter will now automatically close and open to calculate the travel times and other settings.
4. After this, if PE Beams are installed, then the opener can be operated with the OPEN or CLOSE button on the logic console or from the transmitter. Otherwise, the controller will be loaded with "Safety Close Mode". (Page 28)

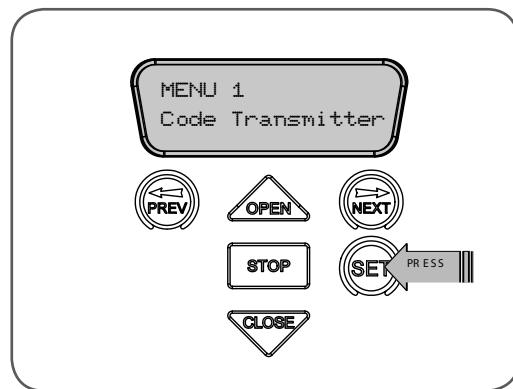


fig 18

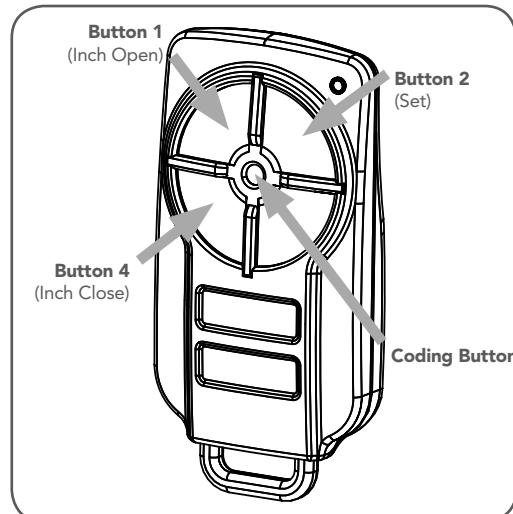


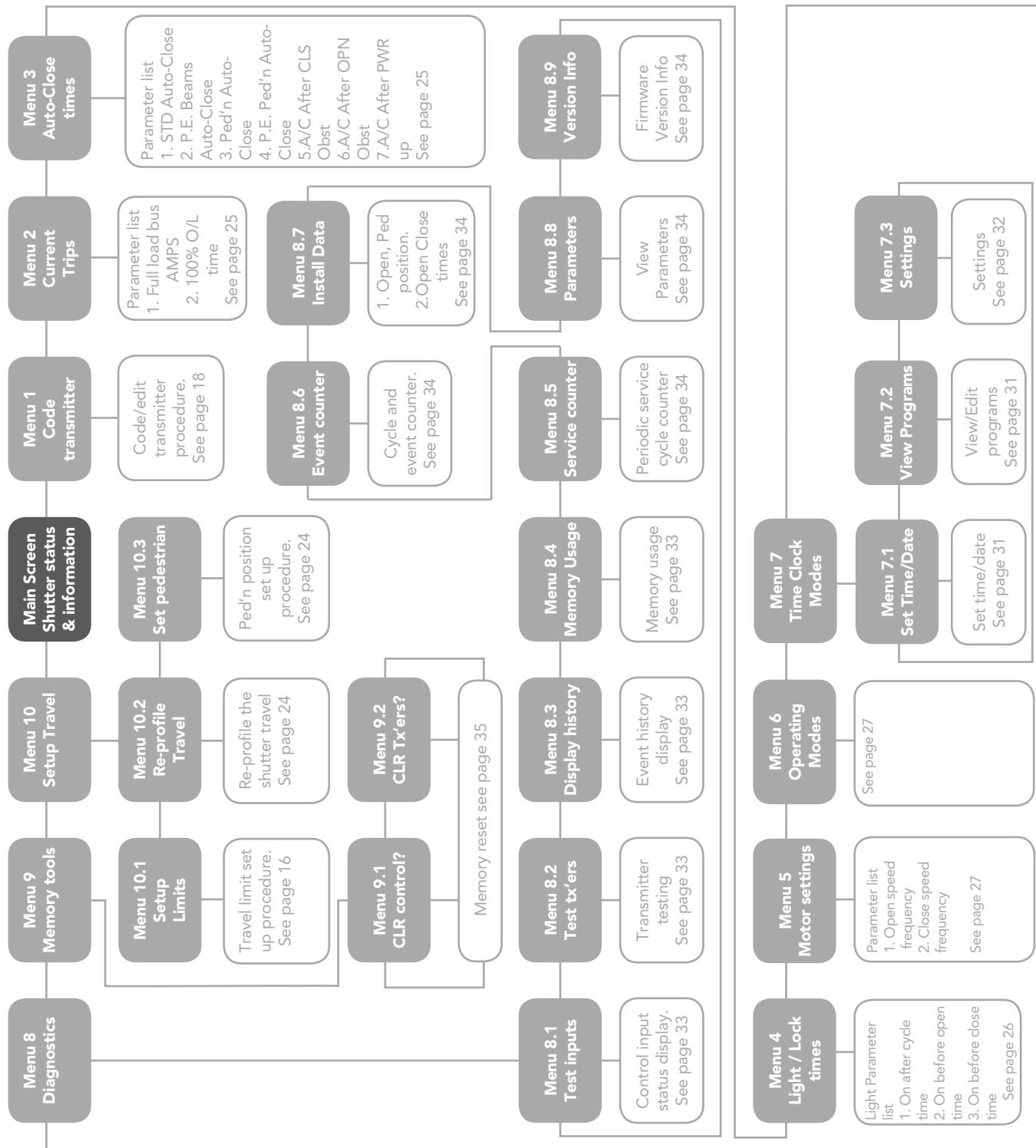
fig 19





# Logic Console Menu Structure

## Menu structure



## NOTES

1. Press PREV/NEXT buttons move to Left/Right. 2. Press OPEN/CLOSE buttons to change setting. 3. Press SET button to save changes. 4. Press STOP to return to MENU without saving changes. 5. System will automatically return to the main screen after 30 secs if a menu screen is displayed and no buttons are pressed.





# Coding Transmitter

The Axess® Pro Series 3100 can store 511 transmitters in its memory. Each transmitter can be allocated an alphanumeric ID label up to eleven characters in length and each button can be assigned to one of several control functions. The settings for a transmitter are represented in **Fig. 20**. It shows the transmitter's store number, ID label or serial number and the functions assigned to each of the four buttons. To toggle between ID/SN display, press UP/DOWN with the cursor on the ID/SN indicator. The procedures below code, delete, replace, edit and copy transmitter records.

## Step 9 - Coding Transmitter Button

### Navigating To Menu 1 "Code Transmitter"

1. Press NEXT to navigate to Menu 1 (**Fig. 21**).
2. Press SET to enter the code set procedure.

### Storing Transmitter Code

1. The logic console will prompt to press one of the transmitter's buttons.
2. Press the transmitter button you wish to use to operate the opener (e.g. button 1) (**Fig. 22**).
3. Press the same transmitter button again as prompted by the display (**Fig. 23**).

### Selecting Function Of The Button

The logic console will now show the transmitter's record, with a cursor on the field for the button being coded (**Fig. 24**). Use OPEN/CLOSE to select the function for the button.

#### Available functions:

- OSC (Open/Stop/Close)
- PED (Pedestrian access)
- SWP (Swipe)
- CLS (Close)
- OPN (Open)
- STP (Stop)
- LGT (Courtesy Light)
- VAC (Vacation Mode)
- AUX (Auxiliary )
- OFF (No action)

**NOTE:** OSC will change to OS and CLS (Close) function is not available in the case where PE Beams are not installed.

Press SET to save the settings or STOP to abort without saving (**Fig. 25**).

### Returning To Main Screen

The "Code Transmitter" menu will now be shown. Press STOP to return to the MAIN SCREEN and test the transmitter.

**NOTE:** To edit the other settings, refer to transmitter edit procedure.

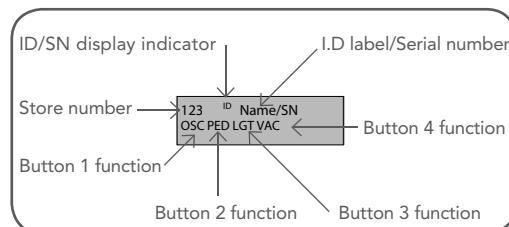


fig 20

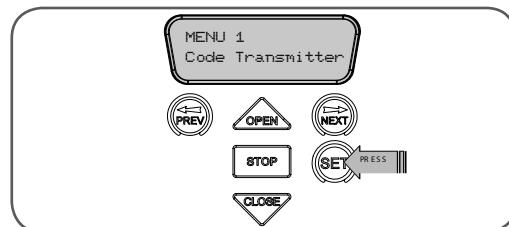


fig 21

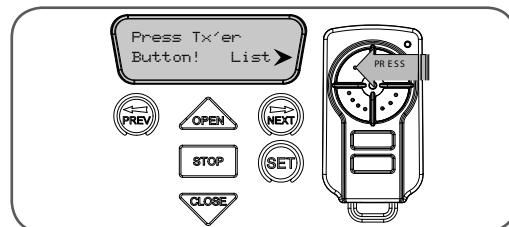


fig 22

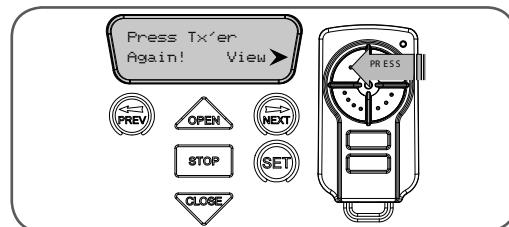


fig 23

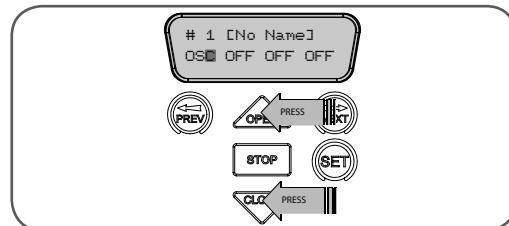


fig 24

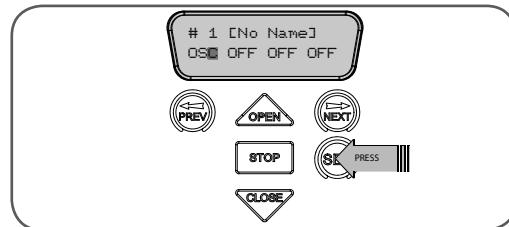


fig 25





# Transmitter Editing

fig 26

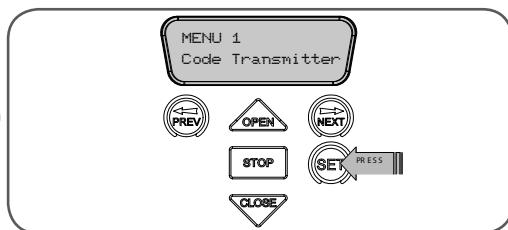


fig 27

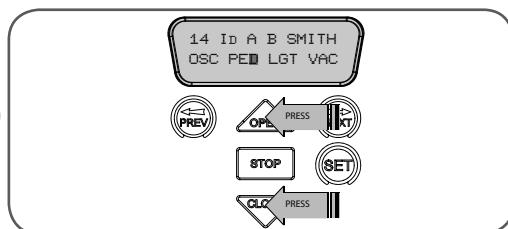
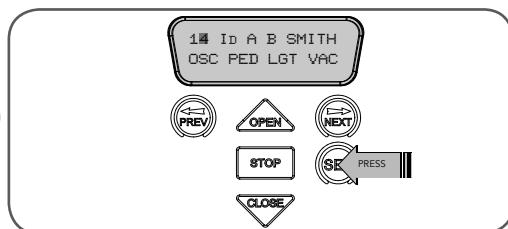


fig 28



## Display Transmitter Record

Using one of the methods below, you can display the required transmitters details.

### Navigating To "Edit Transmitter" Menu

1. Press NEXT to navigate to Menu 1 (Fig. 26).
2. Press SET to enter the transmitter edit procedure.
3. Press NEXT to enter transmitter list and edit mode.

### Editing Button Function Field

1. Press NEXT or PREV to move the cursor to the left or right and between the top and bottom lines to select the desired field.
2. Press OPEN or CLOSE to change the displayed value (Fig. 27). The available functions are shown below. Selecting OFF will prevent the opener responding to that button.

#### Available functions

OSC (Open/Stop/Close)  
PED (Pedestrian access)  
SWP (Swipe)  
CLS (Close)  
OPN (Open)  
STP (Stop)  
LGT (Courtesy Light)  
VAC (Vacation Mode)  
AUX (Auxiliary )  
OFF (No action)

**NOTE:** OSC will change to OS and CLS (Close) function is not available in the case where PE Beams are not installed.

3. Press SET to save changes or press NEXT or PREV to move to the next field.
  - The example in (Fig. 28) shows that PED is assigned to the transmitter button two.
  - The transmitter in the example is transmitter number 14 which has the ID label AB Smith.

**NOTE:** If all button functions are set to OFF, when SET is pressed, the opener will prompt to confirm if the transmitter is to be deleted. Press SET to delete or STOP to continue editing.





# Transmitter Editing

## Editing The Store Location

This feature is only available when coding the first button of a new transmitter.

1. Press NEXT or PREV to move the cursor over Store No. (Fig. 29)
2. Press UP or DOWN to select new Store No.
3. Press SET to confirm or NEXT/PREV to move to the next field.

This is useful when managing transmitters using a scheme which ties the store location to the transmitter's owner.

## Selection Of ID or Serial Number Display

1. Press NEXT to navigate to Menu 1 "Code Transmitter" (Fig. 30).
2. Press SET to enter the transmitter edit procedure.
3. Press NEXT to enter transmitter list and edit mode.
4. Press NEXT/PREV to move the cursor over the ID field.
5. Press NEXT to reveal the Serial Number (Fig. 31).

The serial number display is provided for additional means of identification. The transmitter in this example has serial number 12345.

## Editing A Character Field

1. Press NEXT or PREV to move the cursor. (Fig. 32)
2. Press UP or DOWN to scroll through and select a new character.
3. Press NEXT or PREV to move the cursor to the next character.
4. Repeat step 2.
5. Press SET to record changes.

The second line of the display shows a list of available characters with the current value indicated at the cursor position (Fig. 33).

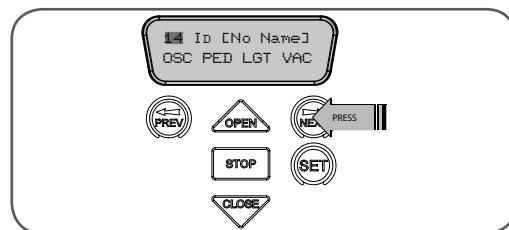


fig 29

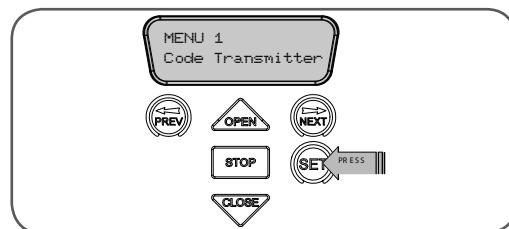


fig 30

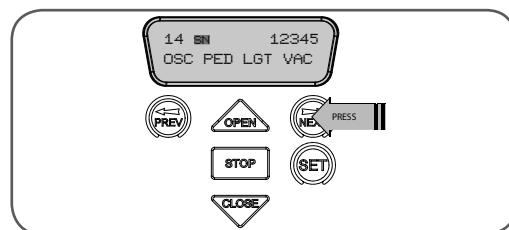


fig 31

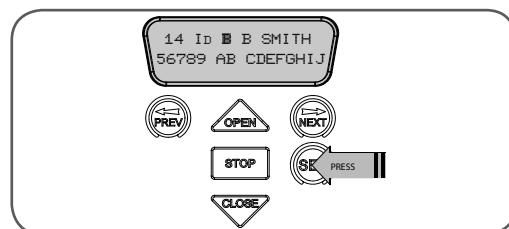


fig 32

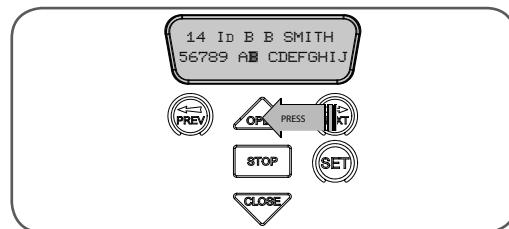


fig 33





# Transmitter Management

fig 34

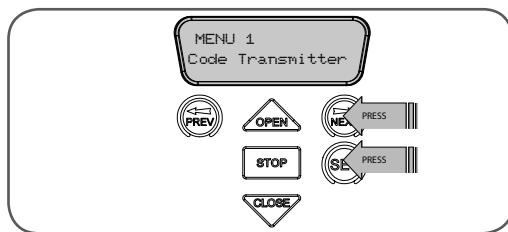


fig 35

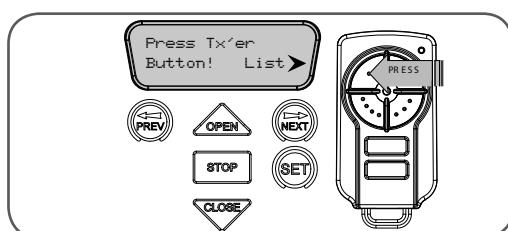


fig 36

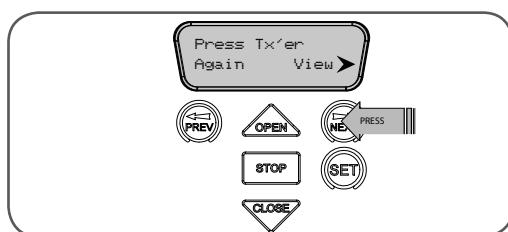


fig 37

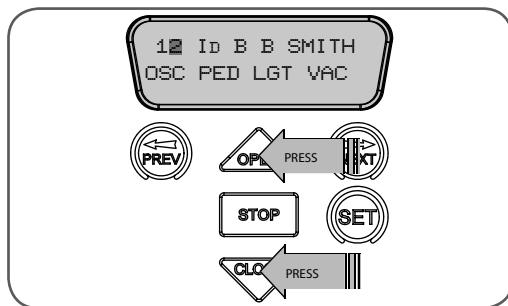
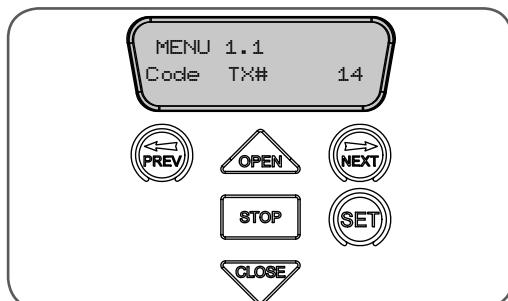


fig 38



The Axess® Pro Series 3300 provides a transmitter listing facility which enables the User to find a transmitter location within the memory. Once located a stored transmitter can be replaced, deleted, edited, copied or, if the location is empty, a new transmitter can be coded.

## Method A - Go To The Start Of The List

1. Press NEXT to navigate to Menu 1 (Fig. 34).
2. Press SET to enter the transmitter edit procedure.
3. Press NEXT to enter the transmitter list and edit mode.

## Method B - Use The Transmitter To Go Direct To The List

1. Press NEXT to navigate to Menu 1 (Fig. 34).
2. Press SET to enter the transmitter edit procedure.
3. Press the transmitter once (Fig. 35).
4. Press NEXT to view the transmitter parameters (Fig. 36). This method is used for quick navigation if the transmitter is available.

**NOTE:** "VIEW" will not be shown if the transmitter is not stored. Once the list is displayed, it can be sorted by stored number, ID Label or Serial Number. Use the NEXT or PREV buttons to select the sorting method.

**NOTE:** When sorting by ID label or S/N, only stored transmitters locations are displayed.

## Navigating The List

1. Press the OPEN or CLOSE buttons to navigate through the list (Fig. 37).
  - Holding a button down will step through the list faster.
2. Press SET to display the menu of available functions.

## Selecting An Operation

Press NEXT or PREV to cycle through the four menu options (Fig. 38-41). Press STOP to return to the list. Press SET to execute the menu's operation.

## Code Operation (location empty)

If the code operation is selected on an empty transmitter location, the BASIC CODE TRANSMITTER PROCEDURE will be initiated with the transmitter being saved in the selected location. This is useful when managing transmitters using a scheme which ties the store location to the transmitter's owner.





# Transmitter Management

## Code Operation (location used)

If the code operation is selected for a location that already contains a transmitter, then the storing transmitter code procedure (page 19) will be initiated and the new transmitter will replace the existing one. Note the button functions and name of the existing transmitter will be transferred to the new transmitter. This procedure is of great convenience when replacing a lost transmitter.

## Delete Operation

The delete operation is used to remove a transmitter from memory along with the name and button function settings.

## Edit Operation

The edit operation displays the transmitter record for editing purposes. See Transmitter Editing (page 20).

## Copy Operation

The copy operation is used to code multiple transmitters with the same button function as that of the selected transmitter. Once selected an abbreviated code set routine is initiated which repeats steps 1 to 3 of the Storing Transmitter Code procedure (page 19) for each transmitter to be coded. Coding is terminated by pressing the STOP button.

## Exiting The List

To exit the transmitter list, simply press STOP to return to the Code menu.

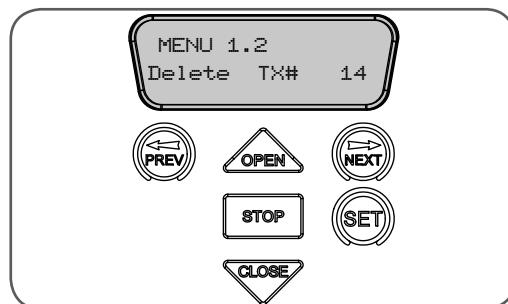


fig 39

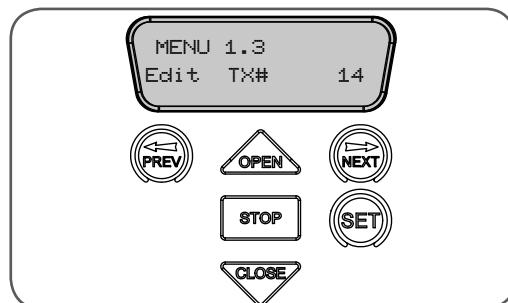


fig 40

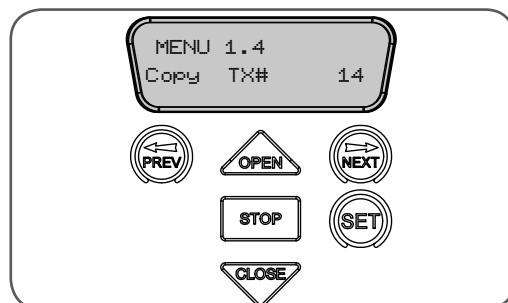


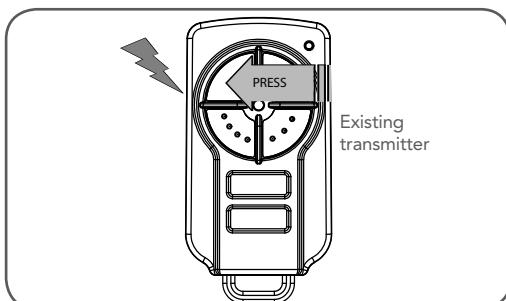
fig 41





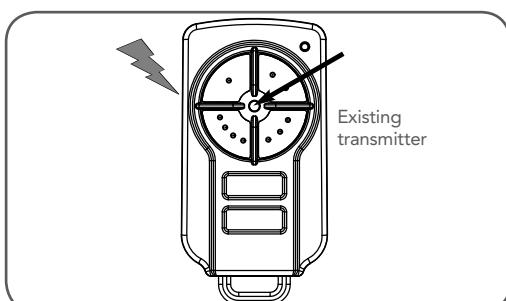
# Remotely Coding Transmitters

fig 42



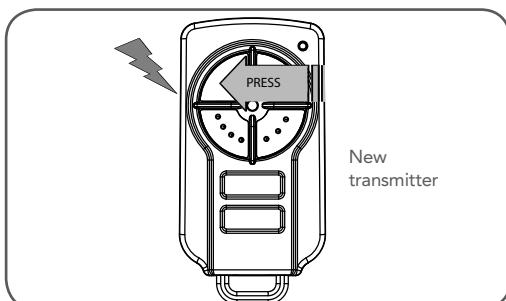
Existing transmitter

fig 43



Existing transmitter

fig 44



New transmitter

If a transmitter is already coded into the opener, additional transmitters can be coded without being in direct contact with the opener's control panel.

**NOTE:** Only the function of the existing transmitter button can be assigned to new transmitter. Please read all instructions prior to proceeding as there is a time-out facility for security reasons.

## Step 11.1 - Selecting The Function To Be Coded

Using the existing transmitter operate the shutter with the transmitter button which has the function to be coded (Fig. 42) (e.g. Button 1 has been coded with the OSC function assigned).

## Step 11.2 - Wait For the Shutter To Complete Cycle

If the button's function activates the shutter (PED, SWP, OSC, CLS, STP or OPN) wait for the shutter to complete its cycle.

## Step 11.3 - Activate Remote Code Set Mode

Use a small pin to press and hold through the Coding button Hole of the existing transmitter for 2 seconds (Fig. 43).

## Step 11.4 - Code New Transmitter Button

Within 10 seconds, press the button on the new transmitter you wish to code for 2 seconds (Fig. 44).

## Step 11.5 - Confirm The Transmitter Button To Be Coded

Press the same button again (within 10 seconds) for confirmation.

## Step 11.6 - Test Operation

The new transmitter button should now function as the existing transmitter.

**NOTE:** When a transmitter is remotely coded, its ID label is set to that of the existing transmitter. If the existing transmitter does not have an ID label assigned, then the ID label of the new transmitter is set to: R/C Tx ###, where ### is the existing transmitters store number. This ensures that the originator of any remotely coded transmitter can be identified.





# Setting Pedestrian Position

## Pedestrian Access Position

After completing the limit setup procedure the Pedestrian Access position is automatically set to a position which is approximately in the middle of the shutter travel. The position can be manually set by following the SETTING PEDESTRIAN POSITION procedure.

### Step 12.1 - Setting Pedestrian Position

1. Drive and stop the shutter at the desired Pedestrian Access position by using a transmitter or from the logic console.
2. Press PREV to navigate to Menu 10.
3. Press SET. MENU 10.1 will be displayed.
4. Press NEXT to go to MENU 10.3
5. Press SET on the logic console to save the Pedestrian Access position (**Fig. 45**).
6. Press the STOP button to exit to the main screen.

### Step 12.2 - Checking Pedestrian Position

When activated by a transmitter button which is coded as PED mode, the opener drives the shutter to the preset position from either above or below. PED Mode's active status is indicated on the display (**Fig. 46**). If a PED Mode button is pressed while the shutter is moving, the shutter will stop. If a PED Mode button is pressed when the shutter is in the PED position, then the shutter will close.

### Errors During Setting Of Travel Limits And Pedestrian Position

During the above procedure, many error checks are performed. If an error is detected, a message will be displayed indicating the error.

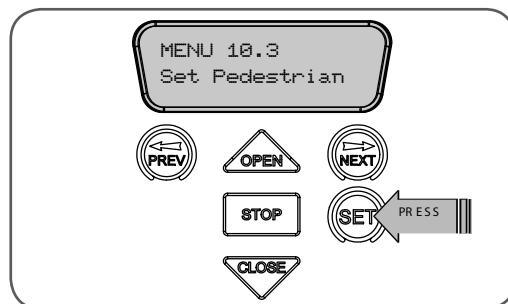


fig 45

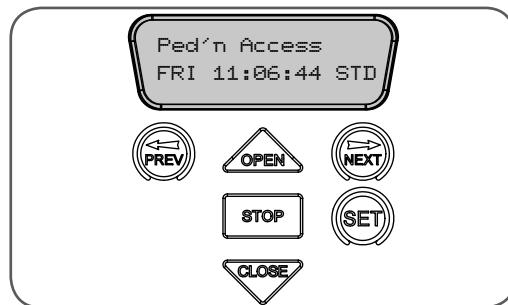


fig 46





# Re-profile The Shutter Travel

## To Recalculate Travel Times

Reprofiling is a simplified way of re-learning the travel characteristic of a previously setup Limit Switch travel installation. Re-profiling can be used when the travel characteristics of the shutter change due to mechanical adjustments etc.

1. To initiate a re-profile, locate "MENU 10.2 Reprofile Travel"
2. Press SET and follow the prompts.

The shutter will start to move and re-calculate force margins. The shutter can move between the open and close limit positions up to two (2) times (depending on the position of the shutter and the power up condition). A single beep will be heard once the process is complete.





# Control Board Adjustments

The standard operation of the opener can be altered by editing various parameters. This section describes the parameters and the effect they have. Use the **VIEWING AND EDITING PARAMETERS PROCEDURE** on Page 15 to make changes.

## Menu 2 Current Trips

Motor overload detection is provided to protect the shutter and the opener. The motor is designed to run with full load current. For one horse power motor with the default values the opener will run with 7.4 Amps for 10 seconds before going into overload.

Parameter	Min	Max	Default	Step	Unit	Menu No.
Full Load Amps 0.5 HP model AX3105	0.0	1.6	1.6	1	Amps	2.1
Full Load Amps 1.0 HP model AX3110	0.0	2.9	3.7	1	Amps	2.1
100% Overload Time	0	30	10	1	Sec	2.2

## Menu 3. Auto-Close Times

The Auto-Close modes automatically close the shutter after it has been operated. To implement this the controller starts a timer once the shutter has reached its desired open position. The timer then counts down and when it expires the controller starts to close the shutter. Details about the four Auto-Close modes follow. Automatic Technology strongly recommend using a P.E. Beam for added safety.

### Standard Auto-Close

This mode is selected by entering a non-zero time for the "**STD Auto-Close**" parameter. When selected the shutter will Auto-Close after being fully opened (except when the shutter has reversed to the open position after a motor obstruction or overload). Countdown is suspended by the P.E., OPN or SWP input being active. The countdown is aborted if the STP input is activated. If the shutter is already open and the OPN or the SWP input is activated, then the countdown will start.

### P.E. triggered Auto-Close

This mode is selected by entering a non-zero time for the "**P.E. Auto-Close**" parameter. This mode is used to Auto-Close the shutter but only after a vehicle has passed through the doorway and triggered the P.E. input. The swipe input can be used to clear the P.E. triggered status so that the P.E. input must be activated again before the countdown will start. As with the other P.E. modes, the STP input will abort countdown and the OPN and SWP inputs will restart the countdown if the shutter is OPEN.

### Pedestrian access Auto-Close

This mode is selected by entering a non-zero time for the "**"Ped'n A/C"**" parameter. When selected the shutter will Auto-Close after being opened for pedestrian access unless it was following a reverse from an obstruction.

### P.E. triggered pedestrian Auto-Close

This mode is selected by entering a non-zero time for the "**"P.E. Ped'n A/C"**" parameter. This mode is the same as the P.E. triggered Auto-Close mode but it only operates during pedestrian access. As the SWP input is not available during pedestrian access, the PED input can be configured to act in a SWP mode by setting the "**"PED I/P = PED SWIPE MODE"** parameter to **ON**.

### Auto-Close after obstruction

Three parameters are provided to enable the Auto-Close feature to be activated after obstructions. Normally the Auto-Close feature is not enabled after obstructions for safety reasons. A P.E. Beam must be used for these features to be activated. Three parameters are:

1. Auto-Close after close overload
2. Auto-Close after open overload
3. Auto-Close after power up





# Control Board Adjustments

Parameter	Min	Max	Default	Step	Unit	Menu No.
STD AUTO-CLOSE TIME Sets and enables the standard Auto-Close time.	0.0	300.0	0.0	1.0	Sec	3.1
P.E. AUTO-CLOSE TIME Sets and enables the P.E. triggered Auto-Close time.	0.0	60.0	0.0	1.0	Sec	3.2
PEDESTRIAN AUTO-CLOSE TIME Sets and enables the Pedestrian Auto-Close time.	0.0	60.0	0.0	1.0	Sec	3.3
P.E. PEDESTRIAN AUTO-CLOSE TIME Sets and enables the P.E. Pedestrian Auto-Close time.	0.0	60.0	0.0	1.0	Sec	3.4
AUTO-CLOSE AFTER CLOSE OVERLOAD Enables Auto-Close feature after close overload	Off	On	Off			3.5
AUTO-CLOSE AFTER OPEN OVERLOAD Enables Auto-Close feature after open overload	Off	On	Off			3.6
AUTO-CLOSE AFTER POWER - UP Enables Auto-Close feature after power - up	Off	On	Off			3.7

## P.E. Beams Triggered, Directional Auto-Close

This mode is selected by entering a non-zero time for the “**P.E. Auto-Close**” parameter. A second P.E. Beam must be installed and connected to OPN input. Sub menu 5 : OPN I/P 2nd P.E. in Menu 7 Operating Modes must be selected “ON” and also sub menu 4: OPN I/P N/C operation in Menu 7 Operating Modes must be selected “ON”.

This mode is used to Auto-Close the shutter only after a vehicle has passed through the doorway to exit the premises. The 2nd P.E. (OPN) input must be active when the P.E. input is activated in order for a P.E. triggered Auto-Close to be activated. 3 wire P.E. BEAM recommended only. This mode is useful for fire and ambulance stations etc.

## Menu 4. Light Times

A light can be controlled with the addition of a relay module connected between the AUX OUT and V+ terminals on the logic console. It will automatically turn off one (1) minute after the cycle has finished. The light timer is adjustable. The light also can be activated and deactivated by pressing a transmitter button assigned to the LGT function.

Parameter	Min	Max	Default	Step	Unit	Menu No.
ON AFTER CYCLE LIGHT TIME Time light remains on for after a cycle	0	255	60	1	Sec	5
ON BEFORE OPEN CYCLE LIGHT TIME Minimum time light is activated for prior to opening	0	25.5	0	0.1	Sec	5
ON BEFORE CLOSE CYCLE LIGHT TIME Minimum time light is activated for prior to closing	0	25.5	0	0.1	Sec	5





# Control Board Adjustments

## Menu 5. Motor Settings

### **Motor Speed**

The motor speed is controlled by the OPEN AND CLOSE SPEED FREQUENCY parameter. The default value is the maximum recommended for normal operation. If, however, the shutter moves too quickly or too slowly for a particular installation, the frequency can be reduced or increased to make the motor run slower or faster.

**NOTE: Altering these parameters will cause the travel limits to be cleared.**

Parameter	Min	Max	Default	Step	Unit	Menu No.
OPEN SPEED FREQUENCY Sets the speed of the motor	15	75	50	1	Hz	5.1
CLOSE SPEED FREQUENCY Sets the speed of the motor	15	75	50	1	Hz	5.2

### **Motor Speed Control - SOFT START/SOFT STOP**

The speed of the motor is controlled by a microprocessor which ramp up the speed as the shutter starts to move, and ramp down the speed as it approaches the travel limits to provide a gentle stop. This provides a gentle start and stop.

## Menu 6. Operating Modes

### **Menu 6.1 Safety Close Mode**

By enabling this parameter, the User can close the shutter only by holding the close button on the logic console or by holding the CLS input active. The shutter cannot be closed by Auto-Close or by transmitters. If the P.E. Beams are not installed, the controller will be loaded with Safety Close Mode and the following message will be displayed:

**ATTENTION! "SAFETY CLOSE MODE has been enabled as no P.E. Beam has been installed!  
This means that the shutter can only be closed by HOLDING the 'CLS input' or 'CLOSE button'. All other means of closing the door are disabled. Press SET to continue."**

### **Menu 6.2 P.E. Beams Input Response Mode**

The P.E. Beam's input can be configured to respond in one of three modes.

#### **Reverses Close Cycles**

In this mode the P.E. Beams input has no effect when opening but will cause the shutter to reverse if activated when closing.

#### **Close Cycles Stop**

In this mode the P.E. Beams input has no effect when opening but will stop the shutter when closing.

#### **Open and Close Cycles Stop**

In this mode all cycles are prevented from being completed or initiated when the P.E. Beams input is activated.

### **Menu 6.3 P.E. Beams Obstruction Reverse Time Mode**

Normally after a P.E. Beams obstruction the shutter will fully open. After a P.E. Beam Close obstruction the shutter open cycle can be reduced from 5 sec to its full open position.

### **Menu 6.4 P.E. Beams Type**

Axess® Pro Series 3100 supports EasyBeam™ or three wire beams.

### **Menu 6.5 GPI Input**

GPI input can be configured as OSC, PED or DST setup. The GPI input terminal is activated by the N/O switch.





# Control Board Adjustments

## **When GPI Selected As OSC:**

If the shutter is moving the activation of the GPI input or by a transmitter button with the OSC function assigned will cause the shutter to stop. The next trigger will move the shutter in the opposite direction to the last direction travelled.

## **When GPI Input Is Configured As PED:**

The activation of the GPI input or by a transmitter button with PED function assigned will open the shutter partially to allow pedestrian access but prevent vehicle access. The position the shutter is driven to is automatically set to halfway during setting of the travel limits but can be adjusted to suit.

## **When GPI Input Is Configured As DST:**

The GPI input can be used to switch between STD time and DST (daylight savings time). The time selected is the amount of time added to STD time when DST is selected. The Options are OFF, 30, 60, 90 or 120 minutes. The GPI input needs to be constantly active to show daylight saving time.

## **Menu 6.6 PED Input Function**

If GPI or Fire Input is selected as PED then these inputs can be configured to a SWIPE type input for pedestrian access. This provides full functionality with the P.E. Beams Triggered Pedestrian Auto-Close function.

## **Menu 6.7 Open Input Polarity**

The OPN input is normally configured for N/O operation. This parameter allows its operation to be changed to N/C.

## **Menu 6.8 Open Input As A Second P.E. Beams Input**

Selecting this parameter will allow the OPN input to be used as a second P.E. Beams input. When the OPN input is active the shutter is prevented from being closed. If the OPN input is triggered while the shutter is closing, the logic console will stop the motor and then open the shutter. The OPN input has no effect while the shutter is opening.

The second P.E. Beam (OPN) input must be active when the P.E. Beam input is activated in order for P.E. Beam Triggered Auto-Close to be activated.

## **Menu 6.9 STP Input Polarity**

The STP input is normally configured for N/O operation. This parameter allows its operation to be changed to N/C.

## **Menu 6.10 FIRE Input Polarity**

The FIRE input is normally configured for N/O operation. This parameter allows its operation to be changed to N/C.

## **Menu 6.11 FIRE Input Configuration**

Fire input can be configured as OPN ,CLS (available only if P.E. Beams are installed) or PED function. This is activated by FIRE input terminal with N/O or N/C (if selected) switch.

### **When Fire Input Is Configured As CLS :**

Activating the fire input will cause the shutter to close only if P.E. Beams are installed. Holding the input active will prevent the shutter from opening.

### **When Fire Input Is Configured As PED:**

The activation of the fire input will open the shutter partially to allow pedestrian access but prevent vehicle access. The position the shutter is driven to is automatically set to halfway during setting of the travel limits but can be adjusted to suit.

### **When Fire Input Is Configured As OPN :**

Activating the fire input will cause the shutter to open. Holding the input will prevent the shutter from closing.





# Control Board Adjustments

## Menu 6.12 Remote Code

The logic console supports the Remote Code Set feature. This parameter can be used to disable the feature for security or transmitter management reasons.

## Menu 6.13 Activity Reports

This parameter enables activity report outputs. Contact Automatic Technology for more details.

## Menu 6.14 Activity Report ID

This parameter sets the ID of the logic console that is sent with the activity report. Contact Automatic Technology for more details.

## Menu 6.15 Vacation Mode

Vacation Mode blocks all but one designated remote control transmitter from activating the Axess® Pro Series 3100. The mode is activated by pressing a transmitter button with the VAC function assigned until the console displays that Vacation Mode is enabled (approx. 5 secs). When activated all the transmitter buttons will be ignored. To turn Vacation Mode off, press a transmitter button with the VAC function assigned. Vacation Mode can also be turned on or off manually by editing the Vacation Mode parameter. Vacation Mode can be turned on or off using this parameter.

## Menu 6.16 Password Protection

The password feature enables all parameters and configuration settings to be protected unless a password is entered. When this feature is turned on the User is requested to enter the desired password to be used. The password protection feature has a time-out that expires after 60 seconds of inactivity. Alternatively, the User may log out manually by pressing exit when the main screen is displayed. PG3 can disable the password.

## Menu 6.17 Transmitter Grouping

The transmitter store number display format can be changed to show a grouped format. When grouping is selected, instead of displaying the store location as a number between 1 and 511, it will display as ##\$ where ## is the group number and \$ is a character a,b,c,d,e,f,g or h which indicates the group member.

## Menu 6.18 Fault, Auto Reset

When selected, the controller will reset any fault automatically.

## Menu 6.19 LED Low Power Mode

When LED low power mode is selected the controller will turn the LED power off to save power.

## Menu 6.20 Console OSC Buttons

Console can be locked out by selecting console OSC buttons OFF.

## Menu 6.21 AUX Output Operation

AUX output can be selected to be driven by:

### Light Drive

A light relay module can be connected on the console between V+ and AUX OUT terminal which will turn the courtesy light on and off.

### Clock/Transmitter

By selecting this option AUX output can be triggered by programming the clock timer or by the transmitter.

### Open Status

Selecting this option will cause the AUX output to stay active as long as the shutter stays open.

### Close Status

Selecting this option will cause the AUX output to stay active as long as the shutter stays closed.





# Control Board Adjustments

Parameter	Min	Max	Default	Step	Unit	Menu No.
Safety Close Mode	OFF	On	On			6.1
P.E. Beams INPUT RESPONSE MODE Sets the P.E. response mode. Options are OPEN and CLOSE cycles stop, Close cycles stop or Close cycle reverse	OPN & CLS stop CLS to stop CLS to reverse		CLS to reverse			6.2
PE REVERSE TIME	5	FULL	FULL	1	Sec	6.3
PE TYPE EasyBeam™ or three wire supported	EasyBeam™	3 WIRE	EasyBeam™			6.4
GPI INPUT MODE configure the GPI input. Options are OSC, PED and DAY LIGHT SAVING	OSC, PED, DST		OSC			6.5
PED INPUT = SWIPE MODE Selects PED input functions as pedestrian access swipe input	Off	On	Off			6.6
OPN INPUT N/C OPERATION Selects operating polarity of OPN input	Off	On	Off			6.7
OPN I/P = 2ND P.E. BEAMS OPERATION Configure OPN input to take 2ND P.E. BEAMS	Off	On	Off			6.8
STP INPUT N/C OPERATION Selects operating polarity of STP input	Off	On	Off			6.9
FIRE INPUT N/C OPERATION Selects operating polarity of FIRE input	Off	On	Off			6.10
FIRE INPUT MODE configure the fire input. Options are OPN, CLS and PED	OPN, CLS, PED		OPN			6.11
REMOTE CODE ENABLED Selects remote transmitter coding function	Off	On	On			6.12
ACTIVITY REPORTS Select report to be output	Off	255	Off	1		6.13
ACTIVITY REPORT ID Selects ID for controller, sent with activity report	0	65535	0	1		6.14
VACATION MODE Selects Vacation Mode - disables remote control	Off	On	Off			6.15
PASSWORD Selects password protection for all changes	Off	On	Off			6.16
Transmitter Grouping	Off	On	Off			6.17
Fault Auto Reset Selects Fault Auto Reset	Off	On	Off			6.18
LED Low Power Mode Selects saving the power by turning LEDs Off	Off	On	Off			6.19
Console OSC Buttons Selects to lock out the console buttons	Off	On	On			6.20
AUX OUT O/P can be activated by either LIGHT DRIVE ,CLOCK/TXER ,OPEN or CLOSE status			LIGHT DRIVE			6.21





# Time Clock

fig 47

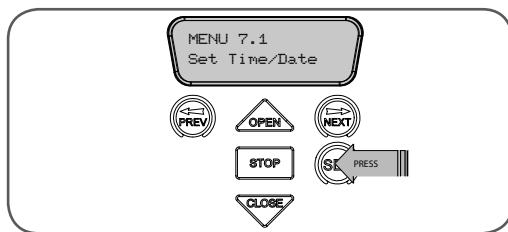


fig 48

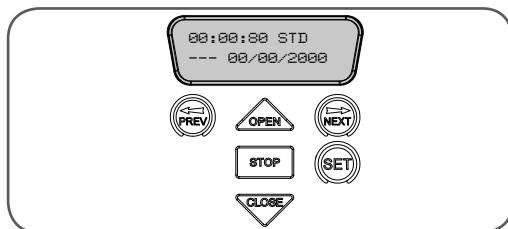


fig 49

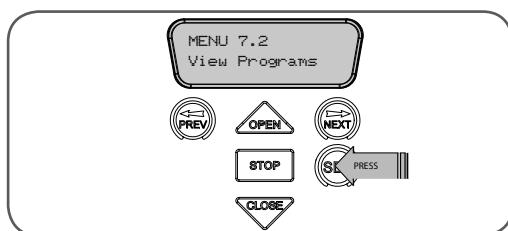
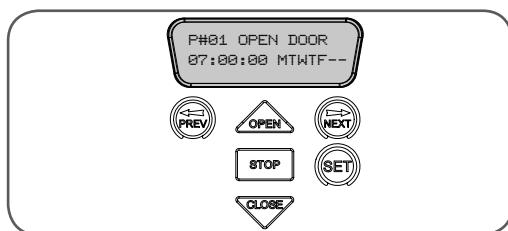


fig 50



The opener provides a programmable time clock which can be used to control the Axess® Pro Series 3100 on a timed basis at various times of the week. This section details the time clock operation and configuration.

## Time Clock Operation

The time clock consists of a 7 day clock and storage for 32 programs. The clock is powered by its own battery and therefore does not lose time when the Axess® Pro Series 3100 is turned off. Each time clock program defines the time of day and the days of the week it is to run and the output function to be executed. Any combination of the days of the week can be selected.

### Step 13 - Time Clock Settings

The Time Clock settings are accessed by selecting the Time Clock menu (MENU 7). Press SET (Fig. 47) to enter the menu and then PREV or NEXT to navigate through the options.

#### Menu 7.1 Set Time/date

This is where the current time, date and day are displayed and set (Fig. 48).

**NOTE:** The time is in a 24 hour format and the Day of the week is not automatically set with the date. To change the settings, simply press UP or DOWN to display the cursor and then move to the field to be changed using the NEXT / PREV buttons. Then press OPEN/CLOSE to change the setting and then the SET or STOP buttons to save.

#### Menu 7.2 View Programs

Select this menu to display or edit the Time Clock programs (Fig. 49). When selected, program number 1 is displayed and the cursor is shown on the program number field. The other fields shown include the function, time and days of operation. The example Fig. 50 shows that Shutter will OPEN at 7 am on Mondays, Tuesdays, Wednesdays, Thursdays and Fridays. Use the OPEN /CLOSE buttons to scroll through the other programs.

To edit a program simply press the NEXT / PREV buttons to move the cursor to the required field and press the OPEN/CLOSE button to change the value. To save the program settings press SET or to exit without saving press STOP.





# Time Clock

The selectable functions available are:

## RX = Off

From the time when the program with RX = OFF is activated, all the transmitters will be disabled. i.e. stop transmitters from operating the shutter.

## RX = On

From the time when program with RX = ON is activated all the transmitters will be enabled.

## Open Door

From the time when the program with OPEN DOOR is activated the shutter will open and stay open.

## Stop Door

This feature will let the User activate the stop function until the next program starts. The shutter will not open or close while stop is activated.

## Free Door

Release the controls from the timer.

## Off

This will temporarily disable the program.

**NOTE: The most recent program that applies to an output remains active until a new program takes effect.**

**NOTE: If a Time Clock program does not have a day selected then it can not be executed. If a Time Clock program is taking control of the opener, then this status is displayed on the LCD. The MAIN SCREEN and clock status screen flashes alternatively.**

## Menu 7.3 Settings

Under this menu, three sub menus are available:

### 1. Run Programs

The programs of the timer can be interrupted by selecting RUN PROGRAM off.

### 2. Configuration Of GPI Input

General Purpose Input can be configured as OSC, PED or DST setup. This is activated by the GPI input terminal with the N/O switch.

#### When GPI Selected As OSC:

If the shutter is moving the activation of the GPI input or pressing a transmitter button with the OSC function assigned will cause the shutter to stop. The next trigger will move the shutter in the opposite direction to the direction last travelled.

#### When GPI Input Is Configured As PED:

The activation of the GPI input or by pressing a transmitter button with PED function assigned will open the shutter partially to allow pedestrian access but prevent vehicle access. The position the shutter is driven to is automatically set to halfway during setting of the travel limits but can be adjusted to suit.

#### When GPI Input Is Configured As DST:

GPI input can be used to switch between STD time and DST (daylight savings time). The AUX input needs to be constantly active to show day light saving time.

### 3. Day Light Saving Time Adjustment

The time selected is the amount of time added to STD time when DST is selected by AUX input. Options are OFF, 30, 60, 90 or 120 minutes.





# Diagnostic Tools

fig 51

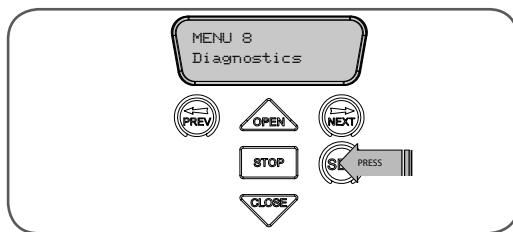


fig 52

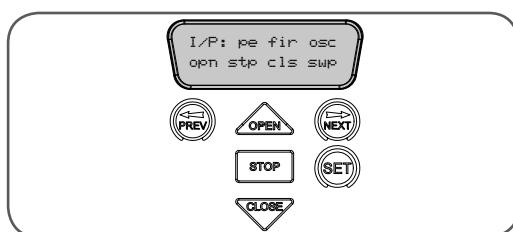


fig 53

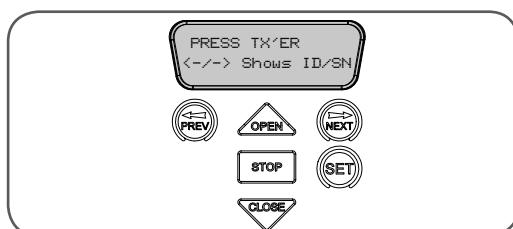


fig 54

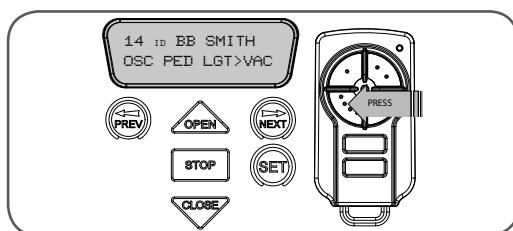


fig 55

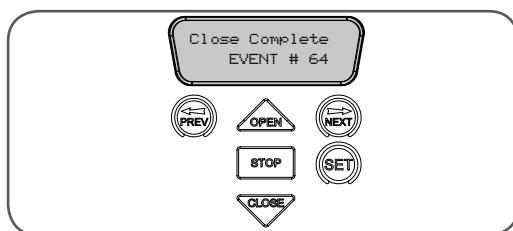
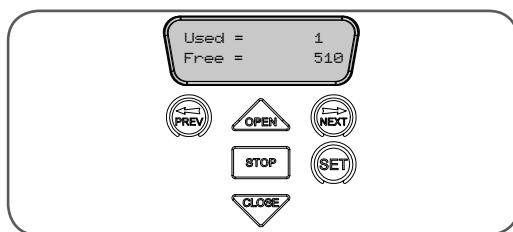


fig 56



The logic console provides several diagnostic tools from within the Diagnostics Menu (Menu 8). This section details the function of each tool and its use.

## Navigating To Diagnostics Menu

1. Press PREV to navigate to Menu 8 (Fig. 51).
2. Press SET to display the menu of available functions.
3. Press PREV or NEXT to cycle through diagnostic tools.
4. Press SET to select.

## Menu 8.1 Test Inputs

This tool is used to view the state of the control inputs. When selected a screen is displayed (Fig. 52) which indicates the state of each input. If the name of the input is in upper case then the input is active. Conversely if the input is in lower case then the input is inactive. For normal operation all inputs should be inactive. When finished press STOP.

## Menu 8.2 Test Tx'ers

This tool is used to test receiver/transmitter functionality. When selected a screen is displayed which prompts for a transmitter button to be pressed (Fig. 53) and whether ID or serial numbers are to be displayed.

The opener will then beep each time a transmission is received. If the transmitter button is stored in the controller memory and has a function assigned to it a second screen will be displayed showing the transmitter details along with the button pressed (Fig. 54). The example shows the case where transmitter number 14 is activated by button 4. Note ID is selected for display.

## Menu 8.3 Display History

The opener keeps a record of the last 64 events that have taken place. The events include the type of drive cycles executed, obstruction detection, various faults, power failures etc. When this tool is selected the screen displays the last event that occurred (Fig. 55). Press NEXT or PREV to view each event. The "EVENT#" field shows the sequence of the events, with (1) being the first and (64) being the last. The example shows that the last event was a close cycle which succeeded in closing the shutter. When finished viewing the events, press STOP to exit.

## Menu 8.4 Memory Usage

This tool displays the number of transmitter store locations used and the number free (Fig. 56).





# Diagnostic Tools

## Menu 8.5 Service Counter

The opener provides a periodic service counter which can be set to expire after a number of drive cycles. When expired the opener will beep three times at the beginning of each drive cycle and a message will be displayed on the MAIN SCREEN (Fig. 57). This tool displays the current value of the service counter and allows the User to set its value using the normal parameter editing techniques (See viewing and editing parameters page 15 ). If the service counter is not to be used it can be set to the maximum number (60,000).

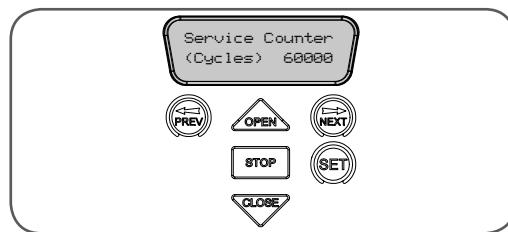


fig 57

## Menu 8.6 Event Counters

The opener keeps a count of number of times a particular event occurs. The list of event counters kept is shown below. When this tool is selected, the first event counter is shown (Fig. 58). Press NEXT or PREV to step through the list. The example shows the OPEN CYCLE event counter with a value of 500. When finished viewing press STOP.

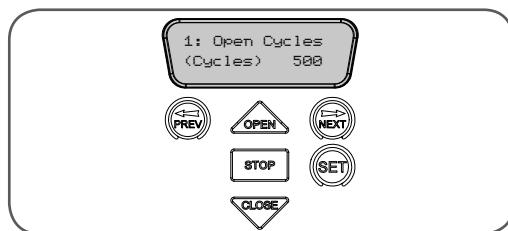


fig 58

- |                            |                            |
|----------------------------|----------------------------|
| 1: Open Cycles             | 2: Close Cycles            |
| 3: PED Cycles              | 4: Setup Limits            |
| 5: Warranty Cycles         | 6: Open O/LS               |
| 7: Close O/LS              | 8: Open Stalls             |
| 9: Close Stalls            | 10: Direction Faults       |
| 11: Position Sensor faults | 12: Drive Memory Faults    |
| 13: Position Wrap Faults   | 14: Console Volt Faults    |
| 15: PCB Temp Fault         | 16: Comms Compat Faults    |
| 17: INV logic faults       | 18: Low DC Bus Volt Faults |

## Menu 8.7 Install Data

### Open Position

Shows the fully open position shutter counter.

### PED Position

Shows the pedestrian position counter.

### Open Time

Time taken for the opener to drive the shutter to the open position.

### Close Time

Time taken for the opener to drive the shutter to the close position.

## Menu 8.8 Parameters

Position of the limit counter, frequency, current used by the motor, overload graph, PCB temperature and DC bus voltage are displayed under this menu.

All the parameters mentioned above can also be viewed while the opener is running. By default, the current used by the motor will be displayed on the LCD screen. This can be useful to check the condition of the shutter. Scroll through other parameters by pressing NEXT or PREV buttons while the shutter is running

## Menu 8.9 Version Info

Firmware information for the Axess® Pro Series 3100's drive and console are shown here.





# Memory Tools

## **Menu 9.0 Memory Tools**

The Memory Tools accessed from within Menu 9 are used to clear the transmitter codes from the openers memory and clear the controller's memory. Once selected the PREV or NEXT buttons can be used to view the Memory Tool options. To execute the displayed option simply press SET.

### **Menu 9.1 Clear Control**

This option will clear the shutter control memory and reload the factory set defaults for parameters such as the lock time, light time, Auto-Close times etc. It will also clear the travel limits.

### **Menu 9.2 Clear Tx'ers**

This option will clear the transmitter storage memory.





# Specifications

## Technical Specifications

Power supply	230V - 240V a.c. 50Hz
Motor type	Three Phase 240 Volts (Delta Connection)
Model	AX3105
Motor power	0.5 HP
Maximum shutter opening:	18 m <sup>2</sup>
Model	AX3110
Motor power	1.0 HP
Maximum shutter opening:	36 m <sup>2</sup>
Opener Limits Travel	21 turns of output shaft
Duty Cycle	60%
Receiver type	UHF Multi-frequency FM Receiver
Receiver code storage capacity	511 X 4 button Transmitter Codes
Receiver Sensitivity	-103 dB
Transmitter frequency	UHF Multi-frequency FM Transmitter
Coding type	Code hopping
Number of code combinations	Over 4.29 billion random codes
Code generation	Non-linear encryption algorithm
Courtesy light	Common Collector Transistor output
Controller fuse	10A slow blow
Transmitter Battery	CR - 2032 (3 Volts)
Real Time Clock Battery	CR -1220 (1.5 Volts)

**NOTE:**

1. The shutter must be well balanced.
2. If the P.E. Beams are not installed then the controller will automatically go into "Safety Close" mode. A limited number of features are available in this mode, please refer to menu 6.1 page 28.





# Troubleshooting

Symptom	Possible cause	Remedy
Blank display screen.	Mains power not switched on.	Switch on mains power.
	Communication cable not connected.	Connect the communication cable.
	Controls cover is lose or missing.	Install the controls cover.
Logic console displays "Drive Disengaged".	Hand chain is not freely hanging.	Free the hand chain.
During limit setting, pressing the close button causing the shutter to open.	Motor running in wrong direction.	Change the motor direction by pressing stop button on the logic console once.
Opener Overloads.	Shutter is locked.	Unlock the shutter.
	Shutter tracks/hardware damaged.	Shutter requires service/repair by qualified technician.
	Full load current settings are too low.	Adjust the full Load current in menu 2.1.
Shutter operates from logic console (OPEN/CLOSE) button but not from transmitter.	Transmitter code not stored in memory.	Code transmitter into opener's memory.
	Transmitters operation disabled from the time clock.	Enable the transmitter operation in the time clock menu.
	The opener is in "Vacation Mode".	Turn off "Vacation Mode".
	Flat battery.	Replace battery.
Shutter does not close with transmitter.	Safety Close Mode is on.	Turn the Safety Close Mode off.
	P.E. Beams not installed or not working properly.	Make sure P.E. Beams are operational.
Shutter will not close fully.	Shutter limit positions need to be reset.	Reset limit positions.
Shutter will not open fully.	Shutter limit positions need to be reset.	Reset limit positions.
Auto-Close not working.	P.E. Beam not installed.	Install P.E. Beam.
	P.E. Beam or wiring faulty.	Repair P.E. Beam or replace wiring.
	P.E. Beam not aligned correctly.	Re-align optics.
	P.E. Beam is obstructed.	Remove obstruction from path of P.E..
	Shutter obstructed when closing.	Remove obstruction.
	Auto-Close time not set.	Set Auto-Close times.





# Maintenance

## Maintenance

The shutter should be tested manually regularly to ensure it is in good condition. A poorly maintained shutter could cause fatal or serious injuries or serious damage to property.

To ensure a long and trouble free life for your opener the following is recommended:

## Monthly

- Check the tension, condition and alignment of the drive chain. Adjust/ replace if required.
  - Check the operation of P.E. Beams

Quarterly

- Check manual operation by using the hand chain.
  - Lubricate the drive chain.
  - Check tightness of the fixing bolts and grub screw of the sprocket.

**NOTE:** If the shutter does not operate smoothly call your industrial roller shutter professional.

## Yearly

Automatic Technology suggests you contact your industrial roller shutter professional to perform an annual shutter service.



**CAUTION:** Frequently examine the shutter, particularly springs and mountings for signs of wear, damage or imbalance. Do not use if repair or adjustment is needed since a fault in the installation or an incorrectly balanced shutter may cause injury.



Adjustments should only be carried out by experienced persons, as this function can be dangerous if not performed under strict safety procedures.



**Warning! Failure to maintain your shutter may void the warranty on your shutter opener.**

## Service Record

Record any maintenance in the following table to assist in any warranty service.





# Spare Parts





# Warranty and Exclusion of Liability

1. This Warranty is given by Automatic Technology (Australia) Pty Ltd (ABN 11 007 125 368) (ATA). 6-8 Fiveways Boulevard, Keysborough 3173, 1300 133 944, sales@ata-aust.com.au
  2. The Competition and Consumer Act 2010 (including the Australian Consumer Law) and other relevant statutes provide a set of statutory consumer guarantees and other legal rights that cannot be excluded, restricted or modified by contract. This Warranty is in addition to and does not affect any of your rights under the Australian Consumer Law and other relevant statutes.
  3. Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation of any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.
  4. Subject to your non-excludable rights under the Australian Consumer Law, ATA expressly excludes any liability for consequential loss, incidental or indirect damages (including but not limited to damages for loss of business profits, business interruption and loss of business information) due to a defect of the Axess® Pro 3000 Series Opener (Product). In particular any loss or damage caused to other equipment or accessories used with the product or any loss resulting from a delay in repair is excluded to extent permitted by law.
  5. Subject to all of the matters set out below, ATA warrants that:
    - (a) the Product will be free of any defects in material and workmanship for at least (12) months after the date of purchase (as evidenced by the sales docket receipt), or 5000 cycles, which ever occurs first; and
    - (b) where the Product is installed in combination with a newly manufactured roller shutter door by the door's manufacturer, the Product will be free of any defects in material and workmanship for at least a twenty four (24) months (as evidenced by the sales docket receipt) or 20,000 cycles, which ever occurs first.
  6. No additional warranty will apply for Products repaired during the relevant warranty period.
  7. For all Products repaired outside the warranty period, a six (6) month warranty that the Product will be free of any defects in material and workmanship will apply from the date of dispatch of the Product to you. ATA may charge you for any repairs undertaken outside the warranty period, and will provide you with a quotation in relation to any such costs for your approval before proceeding with any repairs.
  8. This Warranty applies only where you:
    - (a) immediately notify ATA at the contact details provided in paragraph 1 above or notify the retailer that you purchased the Product from of the alleged defect;
    - (b) return the product to the retailer that you purchased the Product from; and
    - (c) present the relevant sales docket and this Warranty document to the retailer to confirm the date of purchase.
  9. Except for this Warranty, ATA gives no warranties of any kind whatsoever (whether express or implied), in relation to the product, and, subject to paragraph 1 above, all warranties of whatsoever kind relating to the product are hereby excluded.
  10. This Warranty excludes damage resulting from:
    - (a) normal wear and tear;
    - (b) accidental damage;
    - (c) incorrect installation of the Product;
    - (d) blown fuses, electrical surges, power surges or power spikes;
  - (e) theft, fire, flood, rain, water, lightning, storms or any other acts of God;
  - (f) any installation, configuration or use of the Product contrary to the instructions supplied with the Product;
  - (g) the surface area or weight of the door used with the Product exceeding the technical specifications supplied with the Product;
  - (h) the door used with the Product not being in safe working order and condition;
  - (i) repairs which are not authorised by ATA;
  - (j) any failure to maintain the Product in accordance with the instructions supplied with the Product;
  - (k) deliberate or negligent damage to the Product;
  - (l) any unauthorised modification to the Product;
  - (m) radio interference; or
  - (n) acts or omissions of any person other than ATA.
11. ATA's liability under this Warranty is limited, at ATA's absolute option, to replacing or repairing the product which ATA, in its unfettered opinion, considers to be defective either in material and/or workmanship or to credit the dealer with the price at which the product was purchased by the dealer.
12. This Warranty does not extend to cover labour for installation of the Product following repairs, the cost of which must be borne by you.
13. This Warranty is limited to Return-to-Base (RTB) repair and does not cover labour for on-site attendance, the cost of which must be borne by you.
14. Except as specified in this Warranty, ATA will not charge you for any repairs or replacements conducted under the Warranty. However, ATA will charge you for any repairs which are not within the scope of this Warranty (or which are not required to be undertaken free of charge pursuant to the Australian Consumer Law).
15. This Warranty is void if the Product is not returned to the manufacturer in original or suitably secure packaging.
16. This Warranty is only applicable for repairs to the product carried out within Australia.
17. This Warranty does not cover consumable items including, without limitation, globes, batteries and fuses.
18. This Warranty is not transferable.
19. This Warranty is void if a Photo Electric Beam Sensor is not fitted to the door opening.
20. Where the Product is retailed by any person other than ATA, except for the warranty set out above, such person has no authority from ATA to give any warranty or guarantee on ATA's behalf in addition to the warranty set out above.
21. Any provision of this Warranty that is prohibited or unenforceable in any jurisdiction is ineffective as to that jurisdiction to the extent of the prohibition or unenforceability. That does not invalidate the remaining provisions of this Warranty nor affect the validity or enforceability of that provision in any other jurisdiction.
22. Products presented for repair may be replaced by refurbished goods of the same type rather than being repaired. Refurbished parts may be used to repair the Product.

## NOTES:

1. One (1) cycle = one (1) open and one (1) close action of the door.
2. This Warranty is to be read in conjunction with the owner's copy of the installation instruction manual.





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E&OE.

automatic  
TECHNOLOGY  
smart | simple | secure

an  alesco company

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