AUTOMATIC TECHNOLOGY AUSTRALIA PTY LTD

EASY SLIDER

SLIDING GATE OPENER V24

OWNERS COPY

Installation Instructions

Warning: 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.

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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 Sliding Gate Opener and 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 Sliding Gate Opener in accordance with these installation instructions.

PLEASE READ THESE IMPORTANT SAFETY RULES

IMPORTANT SAFETY INSTRUCTIONS
WARNING - IT IS VITAL FOR THE SAFETY OF PERSONS TO FOLLOW ALL INSTRUCTIONS. SAVE THESE INSTRUCTIONS.

For **ADDITIONAL SAFETY** protection we **STRONGLY** recommend the fitting of a Photo Electric Beam. In most countries Photo Electric Beams are mandatory on all garage doors fitted with automatic openers. For a small additional outlay ATA recommends that Photo Electric Beams be installed with the automatic opener insuring additional safety and peace of mind.

DO NOT operate the sliding gate opener unless the gateway is in full view and free from objects such as cars and children/people. **SERIOUS PERSONAL INJURY** and/or property damage can result from failure to follow this warning.

DO NOT operate the sliding gate opener when children/persons are near the gateway. Children must be supervised near the gateway at all times when the sliding gate 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 sliding gate opener. Keep the remote control away from children . SERIOUS PERSONAL INJURY OR DAMAGE can result from failure to follow the instructions.

Make sure that the **SAFETY OBSTRUCTION DETECTION** system is working correctly, and is **TESTED** every month. Test as per the Installation Instructions Manual. Adjust if necessary and recheck. Failure to follow this rule could result in **SERIOUS PERSONAL INJURY** and/or property damage.

DO NOT disengage the sliding gate opener to manual operation with children/persons or any other objects including motor vehicle within the gateway.

If using a key switch or keypad or any device that can operate the sliding gate opener, make sure it is out of reach of children and that the gateway is in full view **at all times.**

The gate(s) must be in good working order and free to move. Faulty gates must be repaired by a qualified installer prior to opener installation.

REMOVE OR DISENGAGE all gate locks and mechanisms prior to installation of the opener.

Connect the gate opener to a properly **EARTHED** general purpose 240V mains power outlet installed by a qualified electrical contractor.

DISCONNECT THE POWER CORD from mains power before making any repairs or removing covers. Only **EXPERIENCED** service personnel should remove covers from the gate opener.

Keep hands and loose clothing **CLEAR** of the gate and door 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 RULES** above must be followed.

In order for the garage door opener to **SENSE** an object obstructing the door way, some **FORCE** must be exerted on the 65object. As a result the object, door and/or person may suffer **DAMAGE or INJURY**.

Make sure that the gate is fully open before driving into or out of the garage.

Make sure the gate is fully closed before leaving the driveway.

PLEASE READ THIS INSTRUCTION MANUAL BEFORE ATTEMPTING TO INSTALL OR USE THE OPENER. FAILURE TO COMPLY WITH THE INSTALLATION INSTRUCTIONS MAY RESULT IN SERIOUS INJURY AND/OR PROPERTY DAMAGE.

FEATURES

Your Easy Slider Automatic Sliding Gate Opener has many features which you will appreciate. The components and materials used in this Automatic Opener are of the latest technology and highest quality. Listed below are some of the many features.

DUAL GATE INSTALLATIONS
The integrated controller is able to control two sliding gates with the addition of a slave sliding gate opener. Interconnection is via 5 wire with mains power only required for the master drive unit.

OPERATION
To operate the gate opener simply activate one the integrated controller's control inputs using a remote control transmitter, keypad or many other devices such as key switches, loop detectors etc. In response the gate will then open, stop or close as requested. Optionally, the controller can be configured to automatically close after operation using one of several auto-close modes.

OPERATOR CONSOLE
Incorporated into the integrated controller is a simple to use operator console which consists of several buttons and a display. The console greatly simplifies installation, adjustments and status indication. With the addition of the console, facilities were only available on previous controller using an additional hand held programmer are now available as standard via a simple menu system. Features include editing transmitter storage and names, setting various parameters, selecting specialized operating modes and preforming system diagnostics.

HOPPING CODE TRANSMITTERS
The integrated controller incorporates a Hopping code remote control receiver. Hopping code systems work by the transmitters generating a new encrypted access code each time they are activated. As the receiver is able to follow the encryption sequence and also rejects any access code it has already received it is able to foil code breaking techniques used by thieves to gain unauthorised access. In addition to this, each Hopping code transmitter has a unique serial number - so no two transmitters are alike. Further, with a huge error rejection rate which allows less than 1 error in 10^{19} the security of the remote control system is greatly enhanced.

SECURITY CODE STORE
The Easy Slider Gate Opener uses state of the art technology in storing your selected transmitter security codes. Up to 575 different transmitters can be stored in the opener's memory with the facility to assign a 11 character name to each transmitter.

ALPS (AUTOMATIC LIMITS POSITIONING SYSTEM)
We have developed a revolutionary gate travel limit setting system. The ALPS technology does away with manual adjustment of the gates limits position using mechanical parts such as micro switches and cams. In addition the installer is guided through the steps of installation by the incorporated console's display.

The ALPS technology records the gates travel limit positions and stores it in memory. If the gate is moved manually during power failure, the ALPS will re-align the gate limits transparently during the first operations after power is restored and stop at the correct limit position.

In addition, during installation, a hand held transmitter can be used when setting the gate travel limits. This allows the installer to closely observe and control the gates movement from any position rather than having to be within arms reach of the console.

ISS (INTELLIGENT SAFETY OBSTRUCTION SYSTEM)
During installation, the "normal" motor load is recorded for each section of gate travel. During normal operation this recorded "profile" is used as reference to determine if the gate has encountered an obstruction. If an obstruction is encountered during a close cycle, the gate will reverse to the open position. If the gate encounters an obstruction during an open cycle, the gate will stop. As the "normal" profile of the gate changes with age, the system continuously keeps the recorded profile current. As this is a safety feature the Obstruction System should be checked at least once a month.

STATUS INDICATION
The status of the gate opener can be determined at anytime by observing the console's screen. When the MAIN SCREEN is displayed, the current position of the gate 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, battery backup operation and vacation mode.

CONTROL OF LOCK AND LIGHTS
The incorporated controller has dedicated outputs for operating a electric lock and warning or courtesy lights. The timing of these outputs can be adjusted to suit your needs. In addition a button on a remote control can be coded to operate the Light output

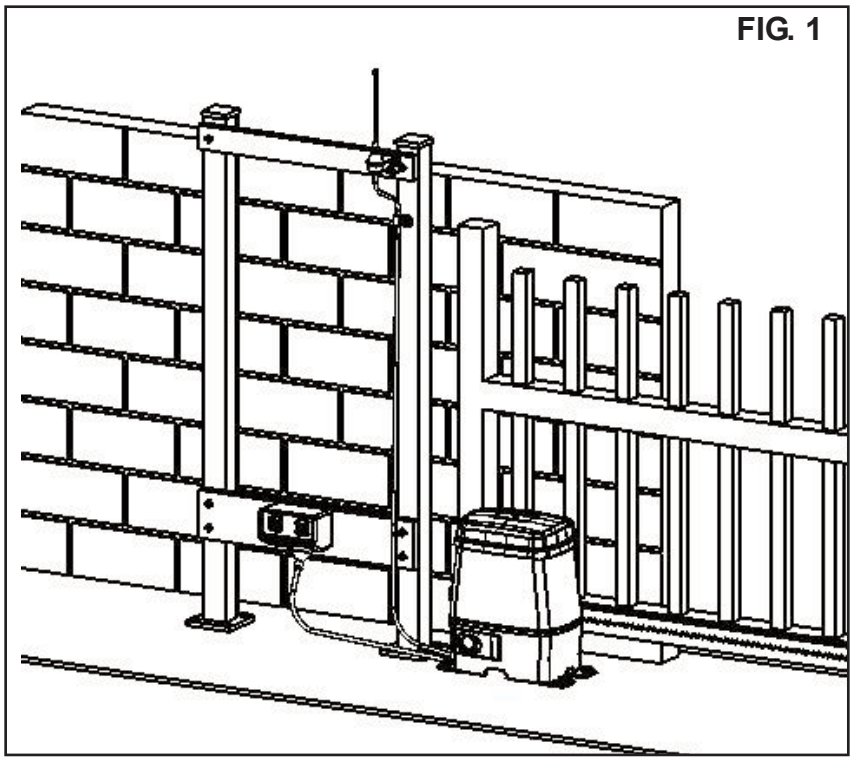
EXTENSIVE OPERATING MODES VIA CONTROL INPUTS AND REMOTE CONTROL
The integrated controller can be configured to operate in many different ways via its 7 control and safety inputs which include P.E, OPEN, STOP, CLOSE, OSC, SWIPE and PEDESTRIAN. Remote control operation is provided with each transmitter's 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 two pedestrian response modes. For details refer to relevant instruction manual sections.

BATTERY BACKUP AND SOLAR OPERATION
The sliding gate opener can be fitted with optional battery backup or solar chargers to provide operation during power outages or at unpowered sites respectively.

MANUAL OPERATION
The opener is equipped with a unique manual disengaging device. If the power to the opener is disrupted for any reason the gate can disengaged via a key lock located on the operator. This will allow you to manually open or close the gate.

PRODUCT DESCRIPTION

The ATA EasySlider Gate Opener consists of one sliding gate drive unit with integrated controller, two hand held transmitters and an antenna.



INTEGRATED CONTROLLER

The integrated controller is able to control one or two sliding gates. The supplied pre-wired antenna is ready to be mounted An outdoor type 240VAC power outlet is required to power the system. When two sliding gates are to be controlled the second drive unit (SLAVE) is connected to the first (MASTER) via a 5 wire low voltage cables. No 240VAC power is required by the SLAVE drive unit. When used with suitable glands the enclosure meets the IP33 standard for ingress of dust and water.

MECHANICAL DRIVE UNIT

The Drive unit consists of a powerful 24VDC motor, rugged gear assembly and position encoder. It also provides an key lockable disengaging lever.

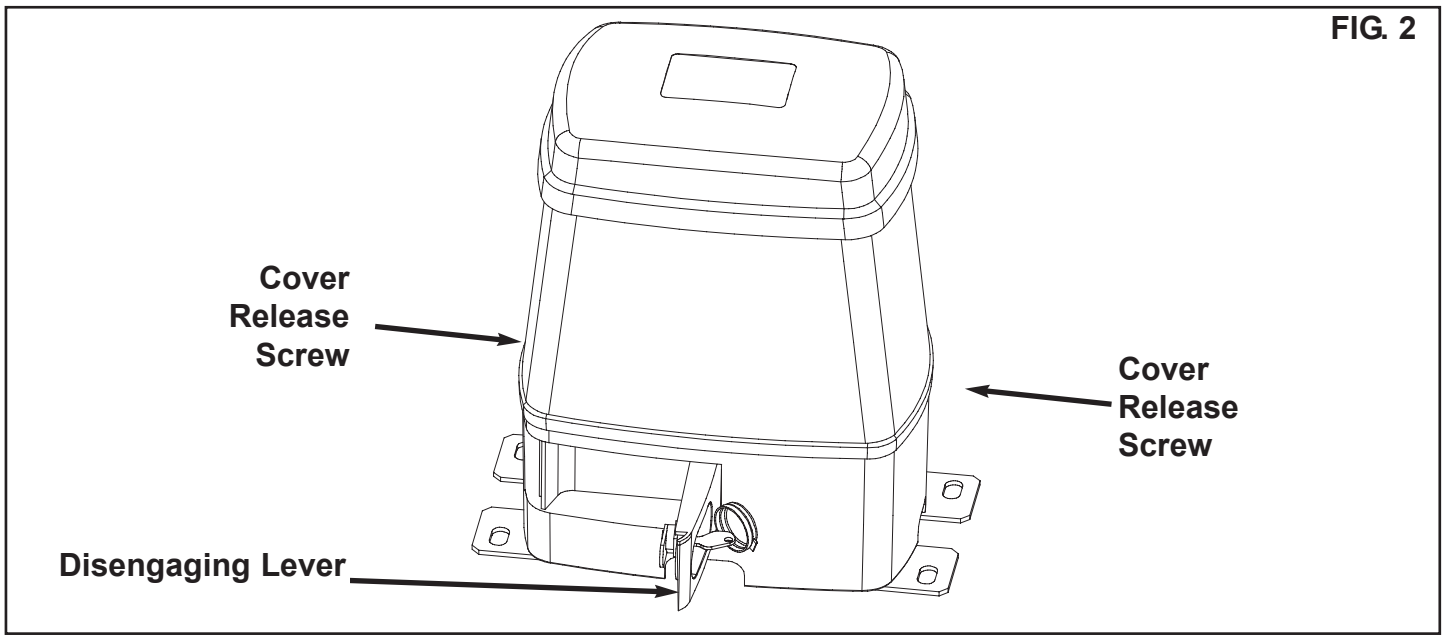
INSTALLATION OF DRIVE UNIT

The **ATA EasySlider Gate Opener** is designed to operate most domestic sliding gates including solid gates. The gates must be in good working condition and should operate freely by hand.

STEP 1.INITIAL CHECKING

Before commencing installation of the Easy Slider Gate Opener, check the following:

1. The gate will move freely by hand for the full opening and closing travel.
2. The mounting must be solid construction (concrete, brick or steel. It must be able to withstand the full force applied to the gate.
3. There is a weather proof 240V 10Amp power point is located within 1 metre.
4. Select a suitable location for mounting the drive unit. This position is usually established by opening the gate fully and mounting the drive unit within a suitable distance of the gate edge.
5. If dual gate openers are required provision for underground cabling should be made from one side of the gateway to the other. This may also be required for wiring of Photoelectric Beams or other accessories.



INSTALLATION OF DRIVE UNIT

FIG. 3

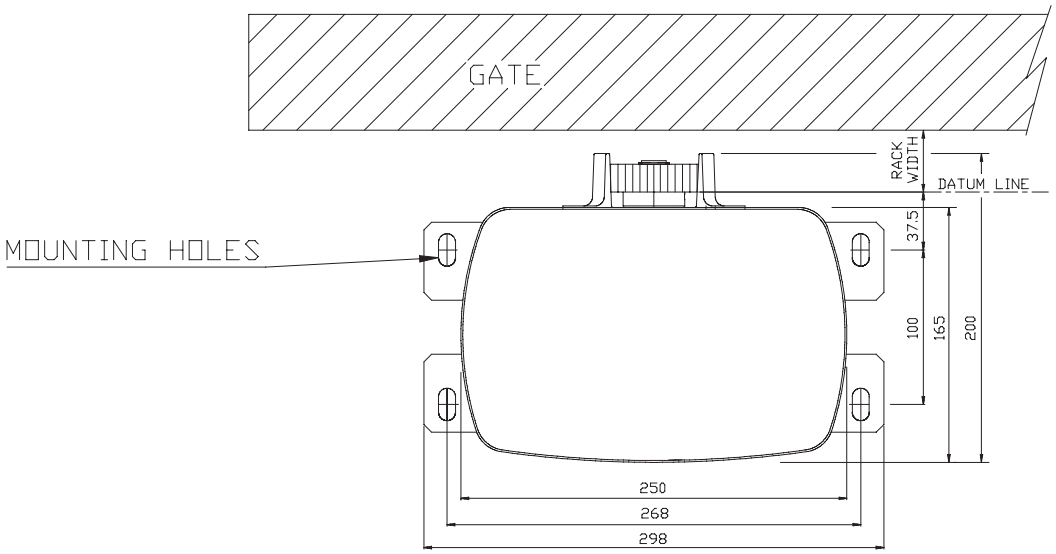
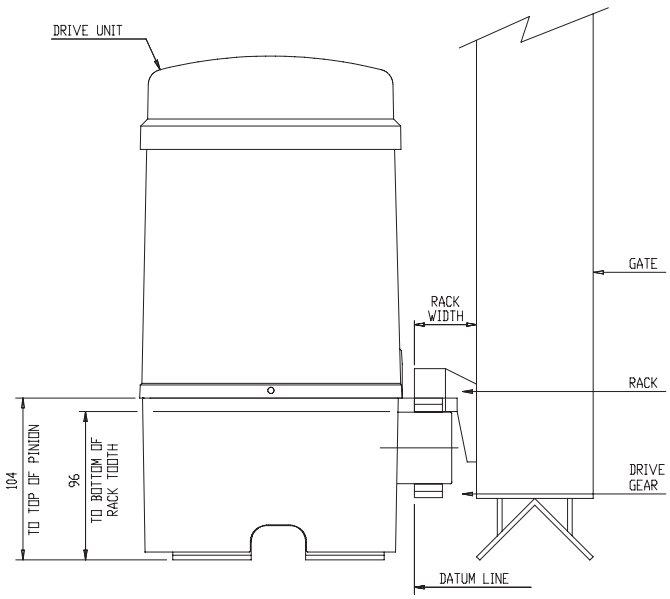


FIG. 4



MOUNTING OF THE DRIVE UNIT

STEP 1

The Drive Unit mounting holes are slotted for fine adjustment of the output gear and rack positions. Follow the procedure below to ensure final adjustments can be made later.

We recommend that 8mm (5/16”) or 10mm (3/8”) X 4 loxins and bolts are used to secure the Drive Unit into position. These loxins usually require a xxx 16mm (5/8”) masonary drill bit (if drilling concrete).

1. Prior to mounting of the driver unit you must determine the distance from the gate to the outer edge of the rack (ie the rack width) to the datum line (see Fig. 3 and Fig. 4). For the ATA plastic racks the width is 40mm. The rack distance may vary depending on the type of rack used. If you must use a different rack, make sure that it is Module 4.

2. Mark a line 78mm parallel to the face of the gate for the mounting holes when using the ATA plastic rack. When using a non ATA rack, add your rack width (and spacers if required) and 38mm and mark a line this distance from the face of the rack (see Fig. 3).

3. Then mark another line 100mm from the first line (see Fig. 3).

4. Open the gate to the desired open position. Mark a line at right angle to the gate 120-150mm from the open edge of the gate for the mounting holes.

5. Then mark another line 268mm parallel to this line (see Fig.3).

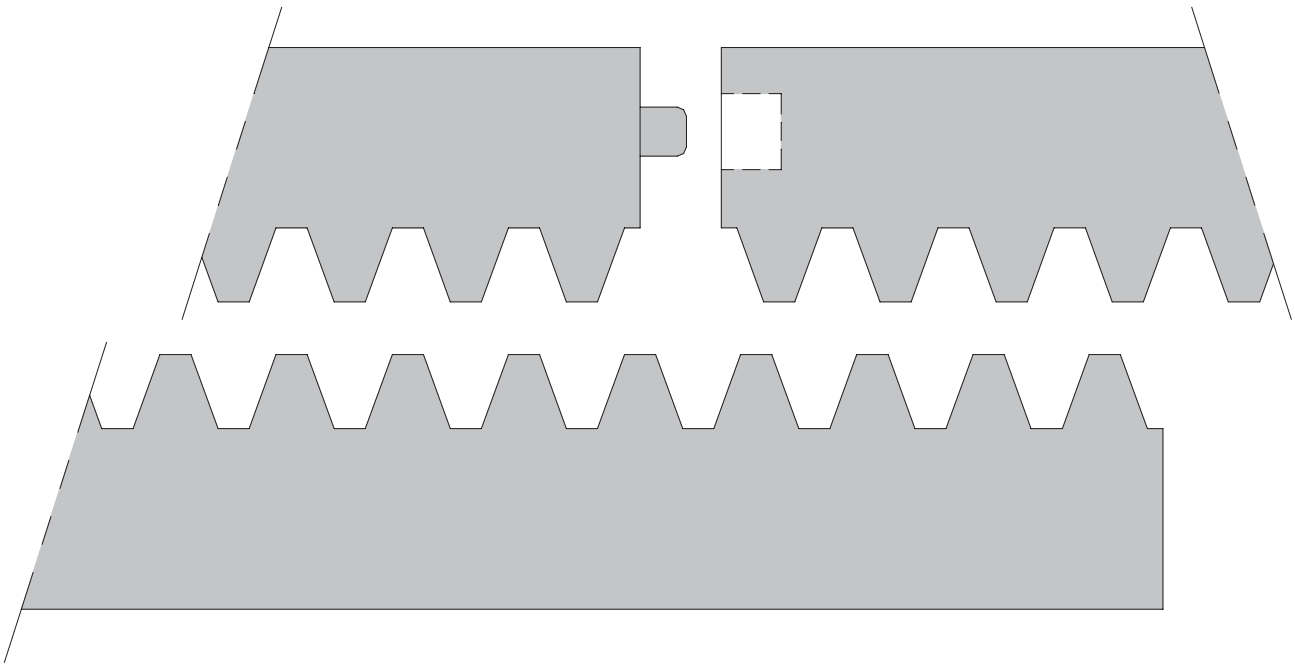
6. Place the Drive Unit in position where the lines intersect to check the mounting position. If satisfied with the position remove the Drive Unit.

7. Drill the four mounting holes where the lines intersect.

8. Hammer the loxins into position. Place the Drive Unit into position and fix with the four bolts so that you are still able to move the Drive Unit.

INSTALLATION OF THE RACKS

FIG. 5

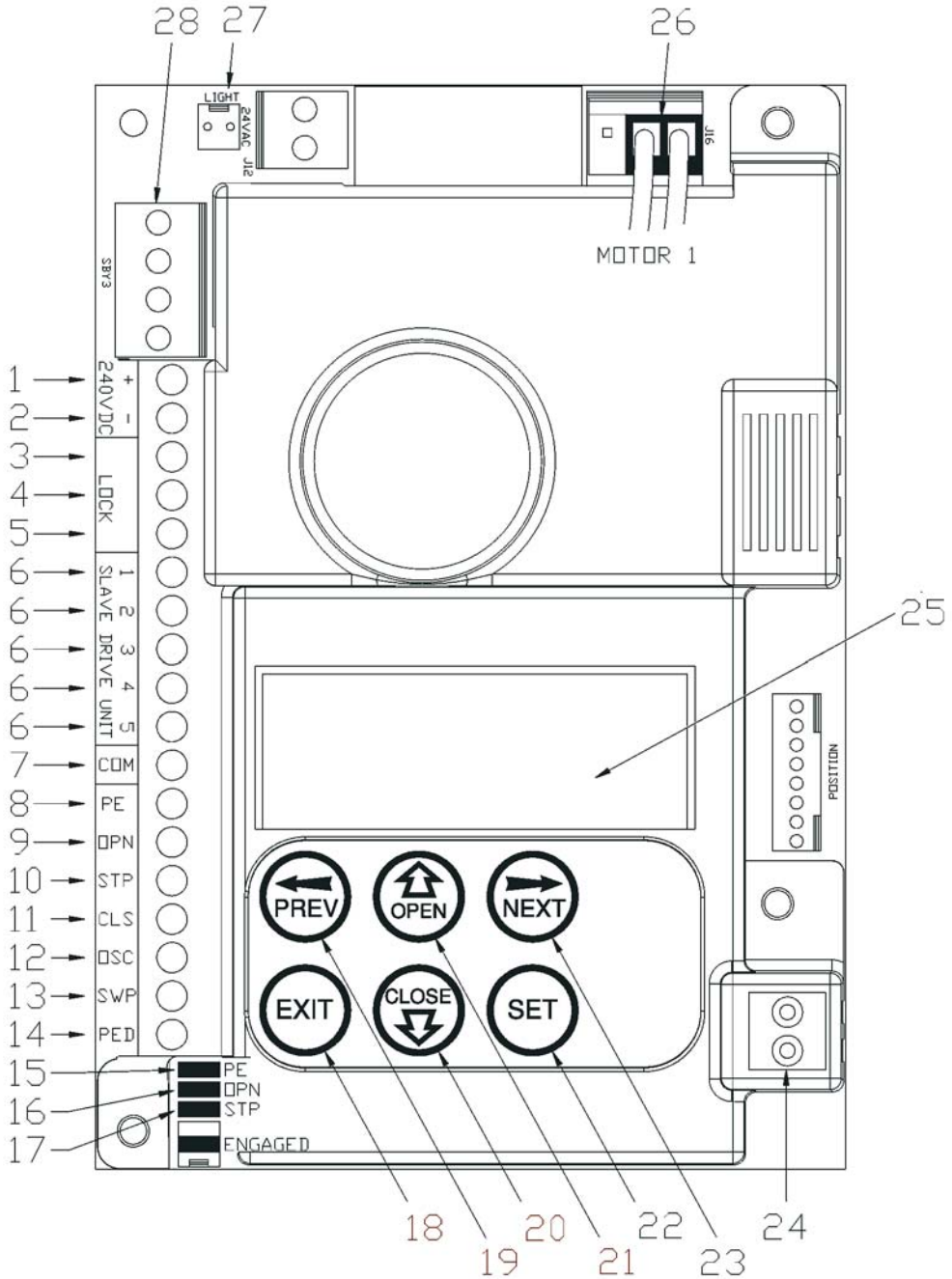


MOUNTING RACK TO GATE

A strong base on the gate is required for the mounting of the rack.

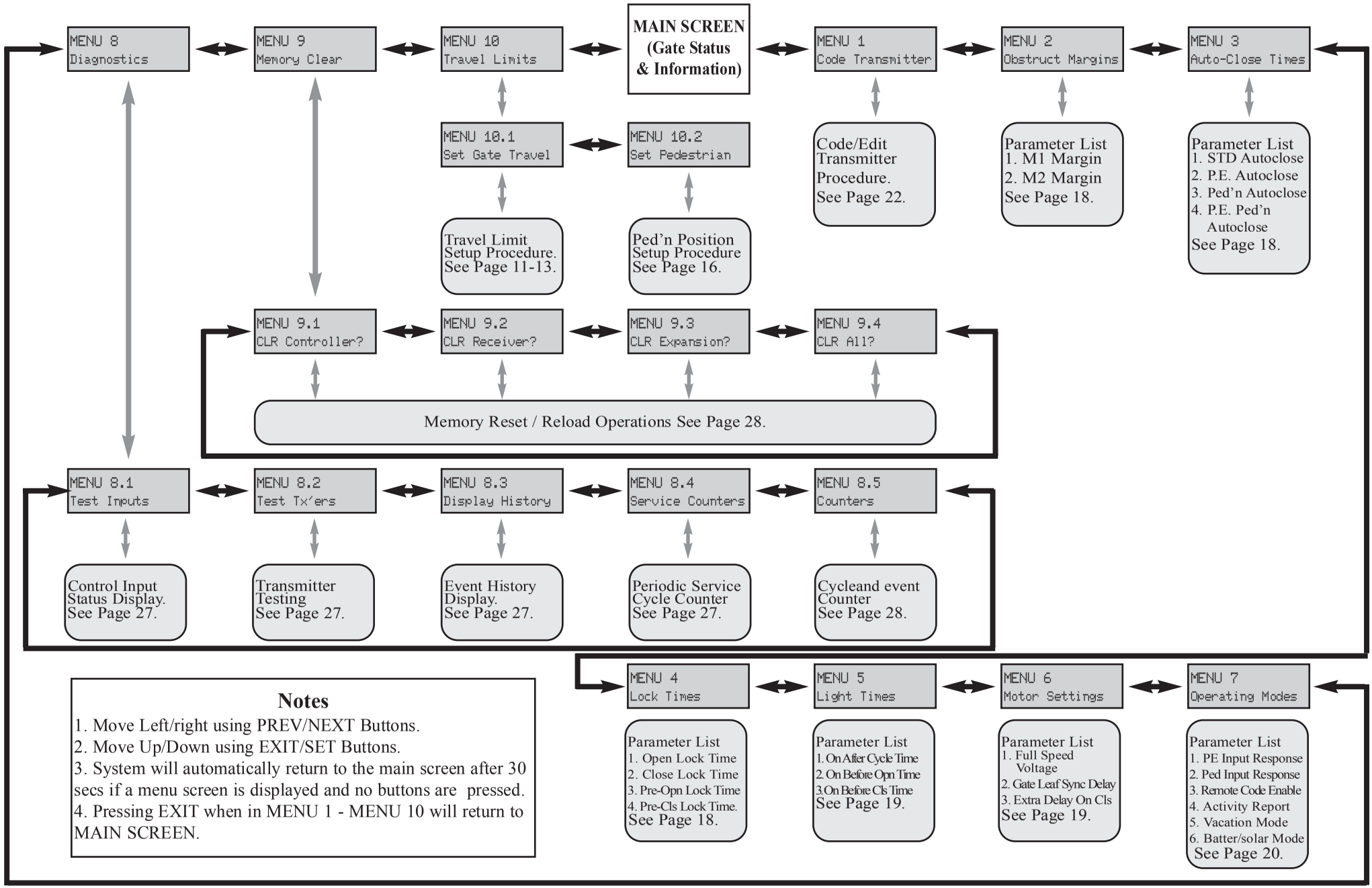
1. Manually open the gate and place a rack section to mesh with the pinion (gear) on the Drive Unit. Mark the top of the rack where it is in contact with the gate. Manually close the gate and continue to mark the top of the rack with a marker until the gate is fully closed.
2. Once the line is established, place the top edge of the rack on it and mark the centers of the rack slots. The first rack should start 20mm from the edge of the gate. Once the line is established, place the top edge of the rack on it and mark the centres of the slots in the rack on the gate. Drill and tap for 6mm (1/4") screws.
3. Once the first section of the rack is mounted on the gate, check that it meshes with the pinion gear on the drive unit.
4. When joining the remaining racks check the mesh by placing a spare rack upside down (teeth facing upwards) and putting it into mesh with the racks being joined (see Fig. 5). Do this before tightening the racks. This will ensure that the drive unit pinion can run along the racks without obstruction.

CONTROL BOARD LAYOUT



*1& 2	24VDC output for powering accessories 3A(max)	*16.	OPN input jumper (remove when 9 is used)
*3.	Lock relay output N/C contact	*17.	STP input jumper (remove when 10 is used)
*4.	Lock relay output COM contact	*18.	Console Exit button
*5.	Lock relay output N/O contact	*19.	Console Previous button
6.	Slave / Master connections	*20.	Console Down / Close button
*7.	COM terminal for inputs terminals 8..14	*21.	Console Up / Open button
*8.	P.E N/C input terminal	*22.	Console SET button
*9.	OPN N/C input terminal	*23.	Console Next button
*10.	STP N/C input terminal	*24.	Antenna connector
*11.	CLS N/O input terminal	*25.	Console Display
*12.	OSC N/O input terminal	26.	Motor installation side selector
*13.	SWP N/O input terminal	*27.	Optional light module interface connector
*14.	PED N/O input terminal	*28.	Standby battery charger / solar connector
*15.	PE input jumper (remove when 8 is used)	* Not present on slave version	

MENU STRUCTURE



Notes

1. Move Left/right using PREV/NEXT Buttons.
2. Move Up/Down using EXIT/SET Buttons.
3. System will automatically return to the main screen after 30 secs if a menu screen is displayed and no buttons are pressed.
4. Pressing EXIT when in MENU 1 - MENU 10 will return to MAIN SCREEN.

INITIAL ELECTRICAL INSTALLATION

CAUTION:
CABLES WHICH HAVE A GREEN / YELLOW COLOURED INSULATION ARE FOR EARTHING PURPOSES ONLY. NEVER USE THESE CABLES FOR ANY OTHER PURPOSE.

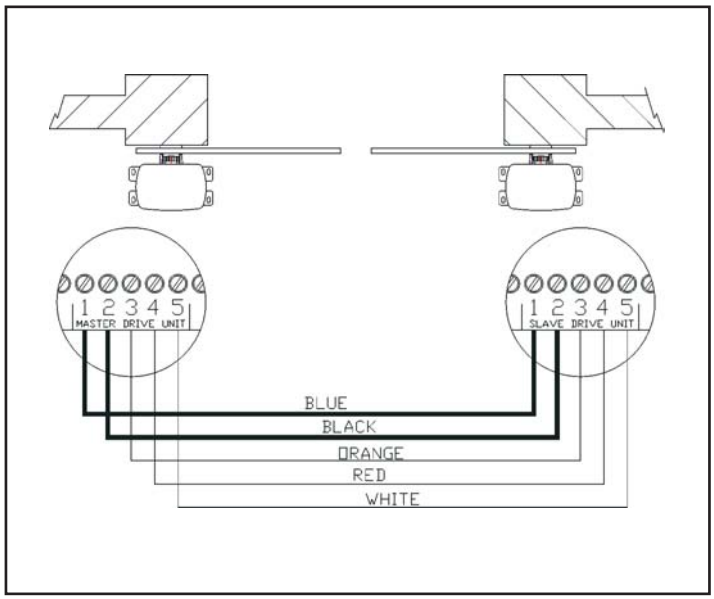
STEP 1. INSTALLING ANTENNA

Mount the antenna at or above the height of the gate or fence (whichever is higher) for optimal reception. Do not cut the coaxial cable.

STEP 2. CONNECTING MOTOR1 (Master) AND MOTOR2 (Slave) DRIVE UNITS

When dual gates are to be used the Master and Slave Sliding Gate Openers are connected together using a 5 wire cable (ATA ORDER CODE 05713 or 05711) as shown below. Ensure that each end of the cable passes through a suitable cable gland which in turn is securely tightened to prevent ingress of dust, pests and water.

STEP 2. Connecting Dual Drive Units



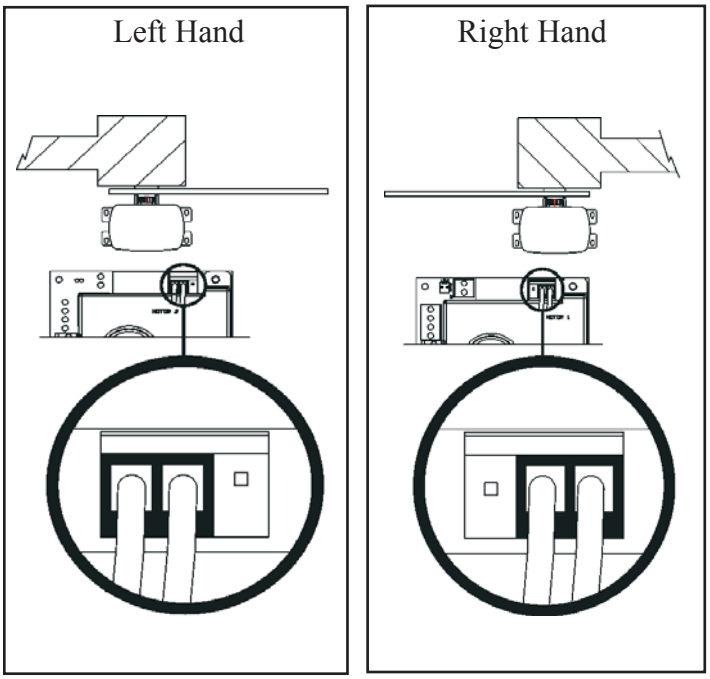
NOTE

The integrated controller permits either Motor 1 or Motor 2 to be selected to open first, therefore, the side that each drive unit is mounted on is not fixed to which gate opens first.

STEP 3. SELECTING LEFT OR RIGHT HAND INSTALLATION.

Using the figure below, place the motor connector for each drive unit so as to reflect the side of the gateway that it is installed.

STEP 3 - Selecting Left / Right Hand installation

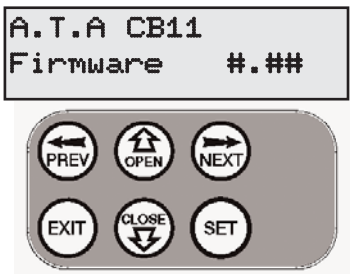


POWERING UP THE DRIVE UNIT

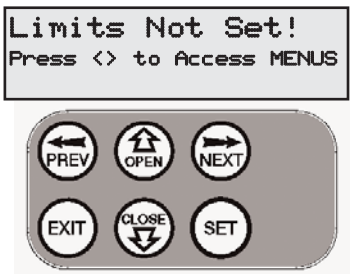
After checking for damage to the power lead and ensuring that it will not entangle with the drive mechanism, apply power to the Opener.The controller will go through a startup sequence displaying the STARTUP SCREEN which indicates the controller type and firmware version.

After a short delay the MAIN SCREEN will be displayed. If this is the first time the controller has been used the MAIN SCREEN should indicate that the limits are not set If the display shows that the gate is disengaged or some input is active then rectify the situation before continuing with the procedure for setting the travel limits for single or dual gates.

STARTUP SCREEN



MAIN SCREEN

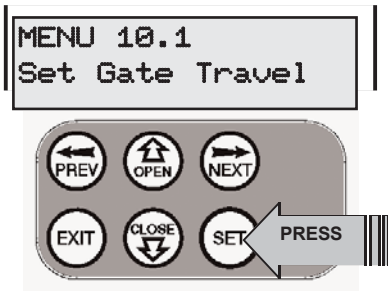


SETTING TRAVEL LIMITS FOR SINGLE GATE

This section shows how to set the travel limits for a single gate installation. The procedure can be partly completed using a remote control transmitter as a remote console. In order to use a remote control transmitter it must first have at least one of its buttons coded to the controller's receiver. The function assigned to the transmitter's buttons is of no concern here as the buttons are temporally assigned to OPEN, CLOSE and SET. Refer to TRANSMITTER OVERVIEW.
Note The limit setting procedure can be aborted at anytime by pressing EXIT.

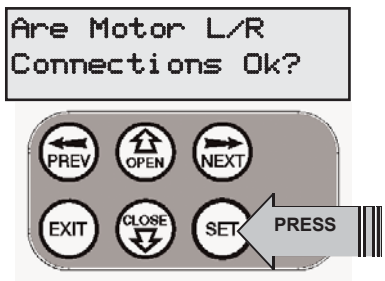
STEP 1. NAVIGATING TO "SET GATE TRAVELMENU"
To navigate to the Menu 10.1 from the MAIN SCREEN simply press PREV to display MENU 10, followed by SET to display MENU 10.1. Press SET again to start the limit setting procedure

Selecting Travel Limit Setup



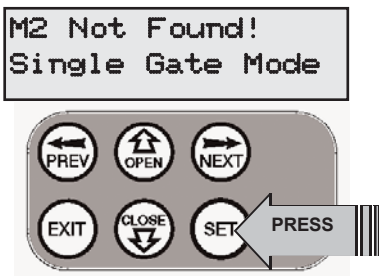
STEP 2. SETTING THE LEFT / RIGHT CONNECTOR.
Make sure that the motor connections has been set correctly for the installation side of the gateway, refer to INITIAL ELECTRICAL INSTALLATION. Press SET to confirm.

Confirm Motor Connections



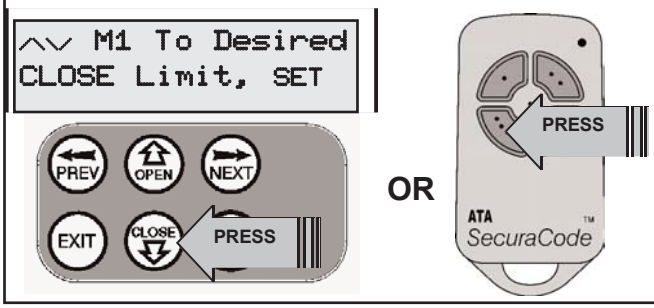
STEP 3. CONFIRMING SINGLE GATE MODE
The controller will now determine whether a single or dual gate installation is required by trying to detect the presence of a second drive unit. As this is a single gate installation, the screen below will be shown. Press SET to continue.

Confirm Single Gate Mode



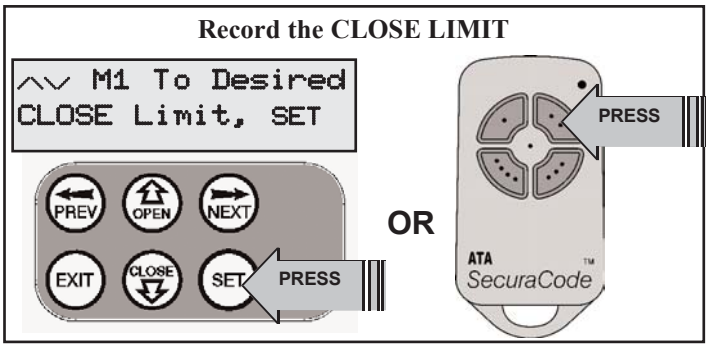
STEP 4. SETTING CLOSE TRAVEL LIMIT
The controller will now prompt for the gate to be driven to the desired CLOSE LIMIT. Use CLOSE to drive the gate to the desired close limit.

Drive to the desired CLOSE LIMIT



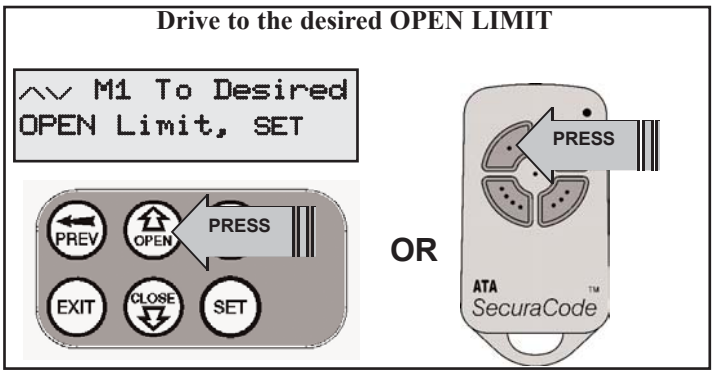
STEP 5. RECORD CLOSE LIMIT
Press SET to record the CLOSE LIMIT. Note the limit will not be accepted unless the gate is driven in the close direction.

Record the CLOSE LIMIT



STEP 6. SETTING OPEN TRAVEL LIMIT
The controller will now prompt for the gate to be driven to the desired OPEN LIMIT. Use OPEN to drive the gate to the desired open limit.

Drive to the desired OPEN LIMIT

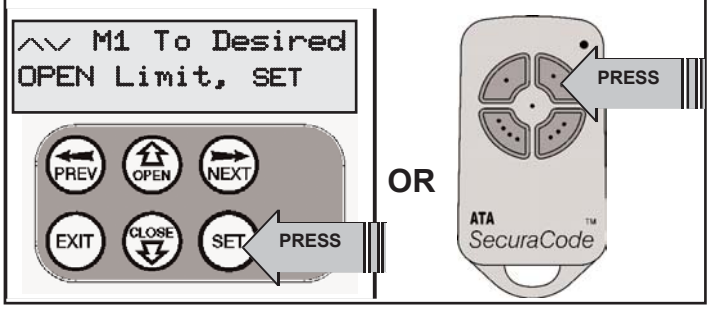


CONTINUED...

SETTING TRAVEL LIMITS FOR SINGLE GATE (cont)

STEP 7. RECORD OPEN LIMIT
Press SET to record the OPEN LIMIT.

Record the OPEN LIMIT



STEP 8. AUTOMATIC LIMIT ADJUSTMENT AND LOAD PROFILING
After a brief pause the controller will now automatically close and open gate several times to adjust the speed at which the limits are approached and also to learn the normal load profile of the gate. When the setup is complete the MAIN SCREEN will be displayed with the gate shown to be Closed. The Gate can now be used.

PEDESTRIAN ACCESS POSITION
After completing the above procedure the Pedestrian access position is automatically set to a position which is in the middle of the gate travel. The position can be manually set by following the SETTING PEDESTRIAN POSITION procedure.

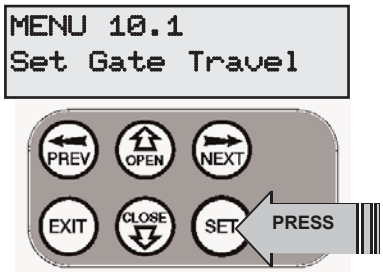
ERRORS DURING SETTING OF TRAVEL LIMIT
During the above procedure many error checks are preformed. If an error is detected a message will be displayed indicating the error.

SETTING TRAVEL LIMITS FOR DUAL GATES

This section shows how to set the travel limits for a dual gate installation. The procedure can be partly completed using a remote control transmitter as a remote console. In order to use a remote control transmitter it must first have at least one of its buttons coded to the controller's receiver. The function assigned to the transmitter's buttons during coding is of no concern here as the buttons are temporally assigned to OPEN, CLOSE and SET. Refer to TRANSMITTER MANAGEMENT
Note: The limit setting procedure can be aborted at anytime by pressing EXIT.

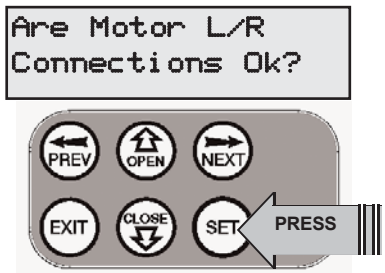
STEP1, NAVIGATING TO "SET GATE TRAVEL MENU"
To navigate to the Menu 10.1 from the main screen simply press PREV to display MENU 10, followed by SET to display MENU 10.1. Press SET again to start the limit setting procedure

Selecting Travel Limit Setup



STEP2. SETTING THE LEFT/RIGHT CONNECTOR.
Make sure that the motor connections have been set correctly for each drive unit, refer to INITIAL ELECTRICAL INSTALLATION. Press SET to confirm the settings are correct..

Confirm Motor Connections



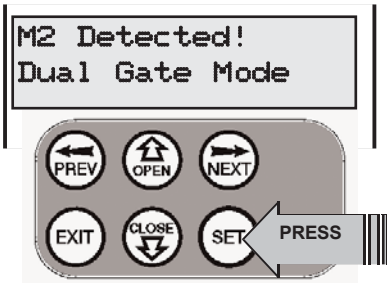
CONTINUED...

SETTING TRAVEL LIMITS FOR DUAL GATES (cont)

STEP 3. CONFIRMING DUAL GATE MODE

The controller will now determine whether a single or dual gate installation is required by trying to detect the presence of a second drive unit. As this is a dual gate installation, the screen below should be shown. Press SET to continue. If Single Gate Mode is displayed then check the connections between the two drive units and press EXIT to restart from step 2.

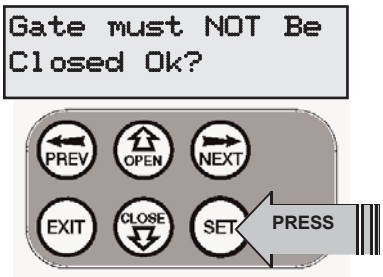
Confirm Dual Gate Mode



STEP 4. CONFIRMING GATES ARE NOT CLOSED

Before proceeding, the gates must not be in the closed position. This is so that each leaf can be moved freely without interfering with the other. If the gates are closed, simply partially open them manually, then re-engage them. Press SET to continue.

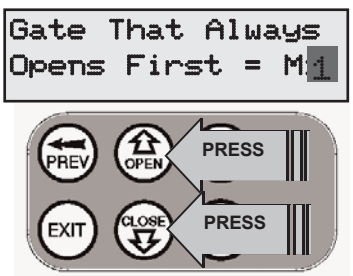
Confirm Gate is not closed



STEP 5. SELECTING WHICH MOTOR OPENS FIRST DURING NORMAL OPERATION

The controller prompts for the motor which is to be opened first during normal operation to be selected. The selected motor is also used for providing pedestrian access. Use OPEN or CLOSE to change the displayed motor. **NOTE The motor selected will determine the order in which each motor will be processed in the following steps. The documented procedure here shows the steps for when Motor 1 is selected. If in practice Motor 2 is selected to open first, then the actually displayed motor numbers will be the opposite to those shown here.**

Select Motor That Opens First



STEP 6. SAVE SELECTION

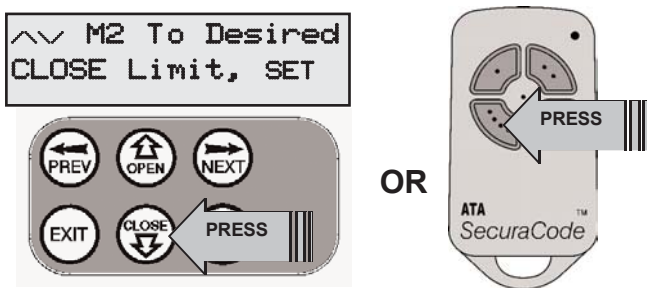
Press SET to save the selection (Motor 1 is selected for documentation purposes).

Press SET To Save The Selection

STEP 7. SETTING CLOSE TRAVEL LIMIT FOR GATE 2

The controller will now prompt for gate 2 to be driven to the desired CLOSE LIMIT. Use CLOSE to drive the gate to the desired close limit.

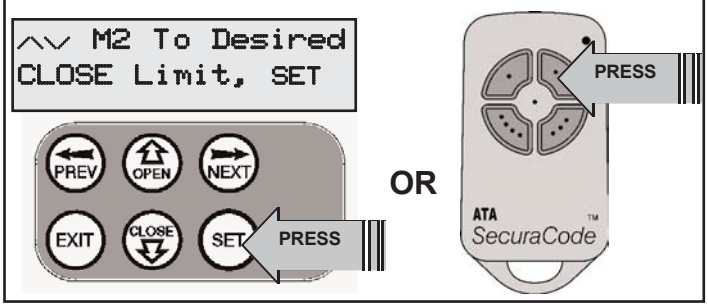
Drive Gate 2 to the desired CLOSE LIMIT



STEP 8. RECORD GATE 2 CLOSE LIMIT

Press SET to record the CLOSE LIMIT for Gate 2.

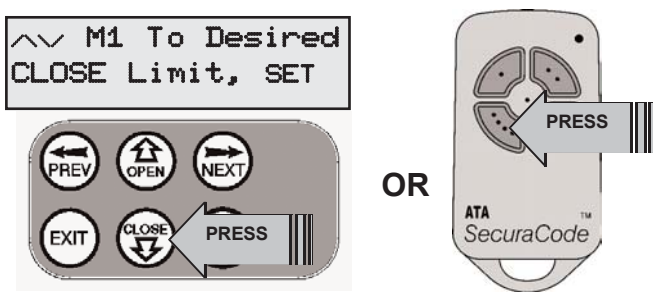
Record the CLOSE LIMIT for Gate 2



STEP 9. SETTING CLOSE TRAVEL LIMIT FOR GATE 1

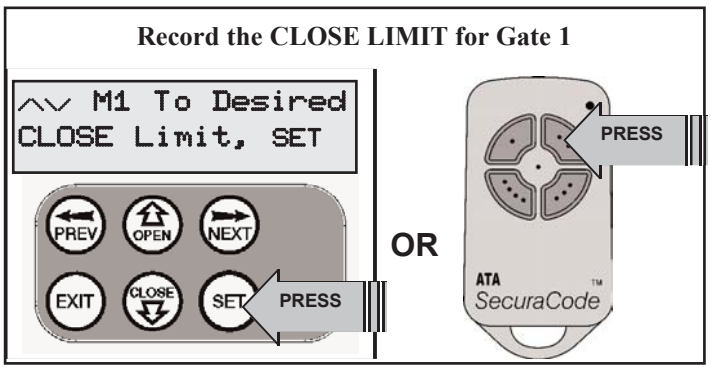
The controller will now prompt for gate 1 to be driven to the desired CLOSE LIMIT. Use CLOSE to drive the gate to the desired close limit.

Drive Gate 1 to the desired CLOSE LIMIT

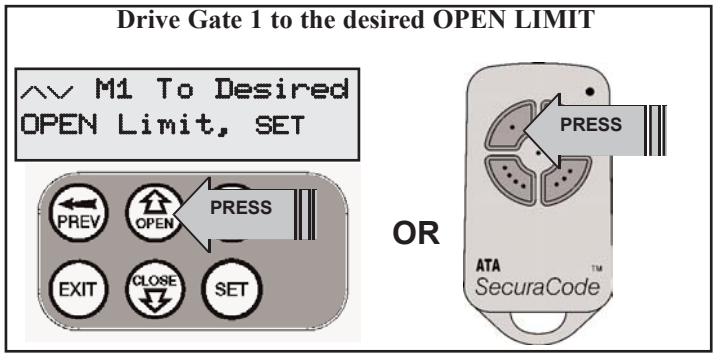


SETTING TRAVEL LIMITS FOR DUAL GATES (cont)

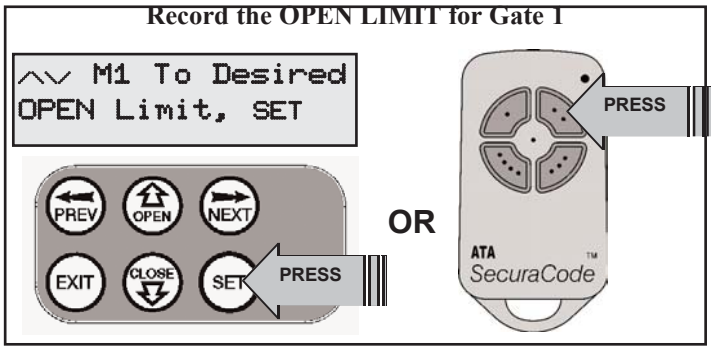
STEP 10. RECORD GATE 1 CLOSE LIMIT
Press SET to record the CLOSE LIMIT.



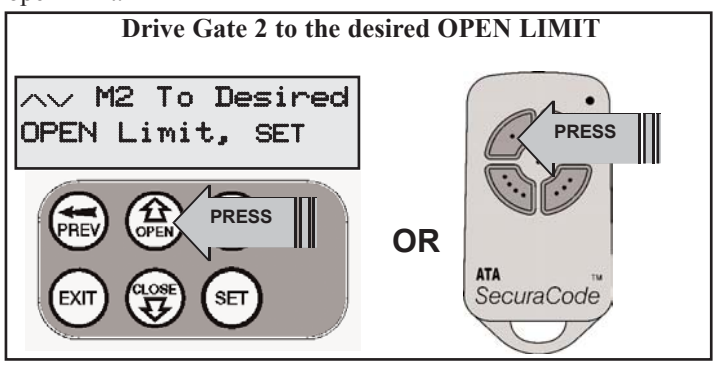
STEP 11. SETTING OPEN TRAVEL LIMIT FOR GATE 1
The controller will now prompt for gate 1 to be driven to the desired OPEN LIMIT. Use OPEN to drive the gate to the desired open limit.



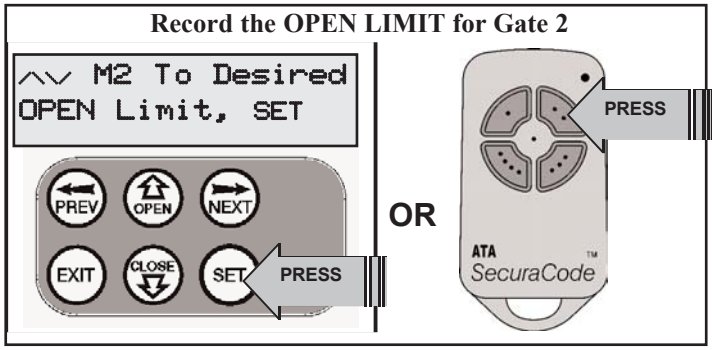
STEP 12. RECORD GATE 1 OPEN LIMIT
Press SET to record the OPEN LIMIT for Gate 1.



STEP 13. SETTING OPEN TRAVEL LIMIT FOR GATE 2
The controller will now prompt for the gate to be driven to the desired OPEN LIMIT. Use OPEN to drive the gate to the desired open limit.



STEP 14. RECORD GATE 2 OPEN LIMIT
Press SET to record the OPEN LIMIT.



STEP 15. AUTOMATIC LIMIT ADJUSTMENT AND LOAD PROFILING
After a brief pause the controller will now auto-automatically close and open gates several times to adjust the speed at which the limits are approached and also to learn the normal load profile of the gates.
When the setup is complete the MAIN SCREEN will be displayed with the gate shown to be Closed. The Gate can now be used.

PEDESTRIAN ACCESS POSITION
After completing the above procedure the Pedestrian access position is automatically set to a position which is in the middle of the gate travel. The position can be manually set by following the SETTING PEDESTRIAN POSITION procedure.

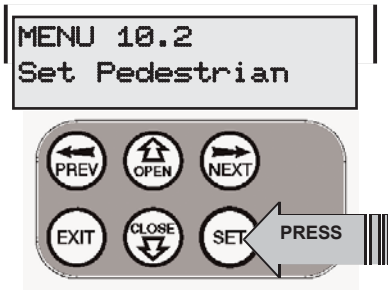
ERRORS DURING SETTING OF TRAVEL LIMIT
During the above procedure many error checks are preformed. If an error is detected a message will be displayed indicating the error.

SETTING PEDESTRIAN POSITION

Note Before setting the pedestrian access position the gate must be in the closed position. As with the Setting Travel Limit procedure, a transmitter can be used to complete the pedestrian position setting procedure.

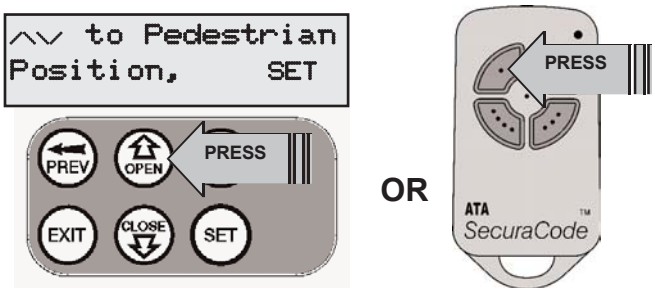
STEP 1. NAVIGATING TO "SET PEDESTRIAN MENU"
To navigate to the Menu 10.2 from the main screen simply press PREV to display MENU 10, followed by SET to display MENU 10.1,followed by NEXT to display MENU 10.2. Press SET again to start the setting procedure

Selecting Pedestrian Position Setup



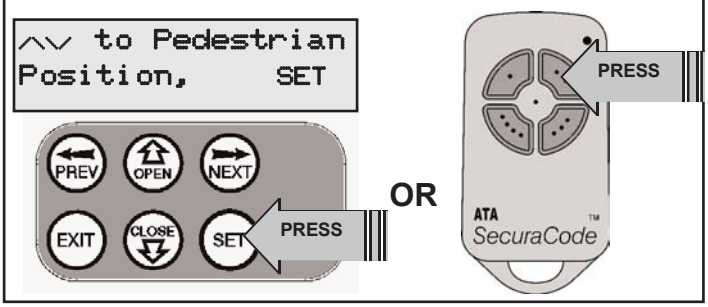
STEP 2. SETTING PEDESTRIAN POSITION
The controller will prompt for the gate to be driven to the desired pedestrian position. Use OPEN to drive the gate to the desired pedestrian access position.

Drive To The Desired Pedestrian Access Position



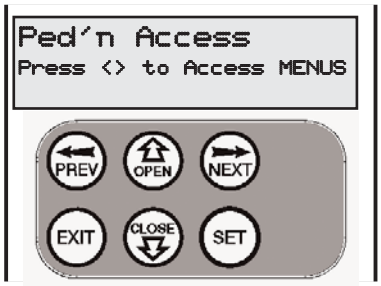
STEP 3. RECORD POSITION
Press SET to record the position.

Record the Pedestrian Access Position



STEP 4. PEDESTRIAN POSITION SET
The controller will now return to the MAIN SCREEN with the gate status shown as being in pedestrian access mode.

Pedestrian Position Setup Complete



DESCRIPTION OF STANDARD OPERATION

This section describes the standard operation of the control board with the factory set default values. Note a dual gate installation is used to help explain operation. Ignore the second motor descriptions for single gate installations

MOTOR CONTROL.
The controller drives the motors in the appropriate direction as instructed by the control inputs. When a dual gate installation is used, the motor selected to open first leaves the closed position first when opening and reaches the close position last when closing. Once a cycle is started the motors will continue to travel until:

1.The controller is instructed to stop by a control input.
2.The motor's travel limit is reached.
3.A motor is obstructed, overloaded or stalls

When the control inputs instruct the control board to change the motor direction, the controller turns brakes the motors, waits for the motors to stop and then starts the motors in the other direction.

MOTOR OBSTRUCTION DETECTION
If a motor is obstructed while opening, both motors are stopped. If a motor is obstructed while closing, both motors are stopped and then reversed to the open position. Obstruction detection is achieved by monitoring each motor's speed and comparing it to the “normal” speed profile for the motor. If the speed of a motor falls below the “normal” by the MARGIN RPM setting, then the motor is said to be obstructed. In addition to the normal motor obstruction detection, motor overload and stall detection is provided to protect the gate opener.

MOTOR SPEED CONTROL
Each motor's speed is controlled independently using PWM of the motor supply voltage. When a motor is started its voltage in ramped up to the voltage set by the FULL SPEED volts parameter and then ramped down as the travel limit is approached so as to come to a gentle stop.

LOCK RELEASE OUTPUT
The lock release output is configured to pulse for 0.5 seconds at the start of each cycle. The output is turned on at the same time the motors are started.

COURTESY LIGHT
With the addition of a module which plugs into the control board, the control board will control a courtesy light. The light is normally used to illuminate the driveway etc. The light will be turned on each time the gate is activated (day or night) and automatically turned off 1 minute after the drive cycle has finished.
The light can also be activated and deactivated by pressing a transmitter button assigned the LGT function.

OPEN / STOP / CLOSE (OSC) INPUT
(Activated by OSC terminal with N/O switch or by transmitter button with OSC function assigned)
If the gate is stopped the OSC input will cause the gate to move in the opposite direction to that last travelled. If the gate is moving the OSC input will cause the gate to stop.

PEDESTRIAN ACCESS (PED) FUNCTION
(Activated by PED terminal with N/O switch or by transmitter button with PED Function assigned)
The pedestrian access operation partly opens the gate selected to open first to allow pedestrian access but prevent vehicle access. The position the gate leaf is driven to is automatically set to halfway during setting of the travel limits, but can be manually selected. Pedestrian access mode is entered when the input is activated and the gate is in the closed position. If the gate is not in the pedestrian access mode, the PED input will stop the gates if moving, or close the gates, if stopped. While in pedestrian access mode, the pedestrian access position temporally becomes the open limit for the gate leaf. The PED input then acts with an OSC type function. The pedestrian access mode is exited when the gate is closed or when another input is activated.

CLOSE (CLS) INPUT
(Activated by CLS terminal with N/O switch, by transmitter button with CLS function assigned or by console’s CLOSE button)
Activating the CLS input will cause the gate to close. Holding the input active will prevent opening.

SWIPE (SWP) INPUT
(Activated by SWP terminal with N/O switch or by transmitter button with SWP function assigned)
Activating the the SWP input will cause the gate to be opened. If the terminal input is held it will prevent the gate being closed. The swipe input also effects P.E TRIGGERED AUTO CLOSE.

OPEN (OPN) INPUT
(Activated by OPN terminal with N/C switch, by transmitter button with OPN function assigned or by console’s OPEN button)
Activating the OPN input will cause the gate to open. Holding the input will prevent closing.

STOP (STP) INPUT
(Activated by STP terminal with N/C switch, by transmitter button with STP function assigned or by console’s EXIT button)
Activating the STP input while the gate is moving will cause the gate to be stopped. If the STP terminal is held it will prevent the gate from being moved.

PHOTOELECTRIC SAFETY BEAM (P.E) INPUT
(Activated by PE terminal with N/C switch)
When the P.E input is active, the gate is prevented from being closed. If the P.E input is triggered while the gate is closing, the controller will stop the motors and then open the gate. The P.E input has no effect while the gate is opening.

VACATION MODE
The controller supports a vacation mode where remote control access is disabled. 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 seconds). When activated any transmitter button which is assigned VAC will be ignored. To turn the Vacation mode off simple press a transmitter button with the VAC function assigned (Only requires a brief activation.) Vacation mode can also be turned on or off manually by editing the VACATION MODE parameter.

CONTROL BOARD ADJUSTMENTS

The control board's standard operation is altered by editing various control parameters. This section describes the parameters and the effect they have. Use the PARAMETER VIEWING AND EDITING PROCEDURE to access the parameters.

MENU 2 OBSTRUCTION MARGINS

MARGINS

The obstruction margins are used to alter the sensitivity of the controller to obstructions. Increasing the value increases the allowable variation between the "normal" speed profile and the actual running speed.

PARAMETER	MIN	MAX	DEFAULT	STEP	UNITS	MENU #
M1 MARGIN Sets the obstruction detection margin for M1	0.0	20.0	6.0	0.5	RPM	2
M2 MARGIN Sets the obstruction detection margin for M2	0.0	20.0	6.0	0.5	RPM	2

MENU 3 AUTO-CLOSE TIMES

The auto-close modes automatically close the gate after it has been operated. To implement this, the controller starts a timer once the gate has reached its desired open position. The timer then counts down and when it expires the controller starts to close the gate. Details about the four auto-close modes follow.

STANDARD AUTO-CLOSE

This mode is selected by entering a non-zero time for the **STD Autoclose** parameter. When selected the gate will auto-close after being fully opened (except when the gate 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 gate 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 Autoclose**" parameter. This mode is used to auto-close the gate but only after a vehicle have passed through the gateway and triggered the P.E input. If the P.E input is selected to stop the gate on activation then when the vehicle breaks the beam, the gate will stop. When the beam is cleared the auto-close countdown will start. 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 count-down if the gate 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 gate will auto-close after being opened for pedestrian access unless it was following a reverse from an obstruction. The countdown is suspended if the P.E input is active or if the PED input is active. The countdown is aborted if the STP input is activated. If the gate is open for pedestrian access and the "**PED I/P = PED SWIPE MODE**" parameter is **ON**, then the count down will start.

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.**

PARAMETER	MIN	MAX	DEFAULT	STEP	UNITS	MENU #
STD AUTOCLOSE TIME Sets and enables the standard auto-close time.	0.0	300.0	0.0	1.0	SEC	3
P.E AUTOCLOSE TIME Sets and enables the P.E triggered auto-close time.	0.0	300.0	0.0	1.0	SEC	3
PEDESTRIAN AUTOCLOSE TIME Sets and enables the Pedestrian auto-close time.	0.0	300.0	0.0	1.0	SEC	3
P.E PEDESTRIAN AUTOCLOSE TIME Sets and enables the PE Pedestrian auto-close time.	0.0	300.0	0.0	1.0	SEC	3

CONTROL BOARD ADJUSTMENTS (cont)

MENU 4 LOCK TIMES

The control board's lock output can be programmed for both hold and pulse operation. In addition to this the lock output can be programmed to activate prior to the gate motor starting. The operation of the lock can be programmed to behave differently on open cycle to that on close cycles. The parameters for adjustment are shown below.

PARAMETER	MIN	MAX	DEFAULT	STEP	UNITS	MENU #
OPEN LOCK TIME Set the time the lock is activated for on open cycles	0.0	HOLD	0.5	0.1	SEC	4
CLOSE LOCK TIME Set the time the lock is activated for on close cycles	0.0	HOLD	0.5	0.1	SEC	4
PRE-OPEN LOCK TIME Time the lock is activated for prior to opening.	0.0	25.5	0.0	0.1	SEC	4
PRE-CLOSE LOCK TIME Time the lock is activated for prior to closing	0.0	25.5	0.0	0.1	SEC	4

MENU 5 LIGHT TIMES

With the addition of a module which plugs into the control board, the control board will control a light. The time the light stays on for is controlled by two timers The first times the period the light is activated for prior to a drive cycle. This is used to warn that gate movement is pending. The second timer time how long the light remains on after a cycle. The parameters are shown below.

PARAMETER	MIN	MAX	DEFAULT	STEP	UNITS	MENU #
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	255	0	1	SEC	5
ON BEFORE CLOSE CYCLE LIGHT TIME Minimum time light is activated for prior to closing	0	255	0	1	SEC	5

MENU 6 MOTOR SETTINGS

MOTOR SPEED

The maximum speed the motors run at is controlled by the MOTOR FULL SPEED VOLTAGE.parameter. The default value is the maximum recommended for normal operation. If however the gates move too quickly for a particular installation the voltage can be reduced to cause the motors to run slower.

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

GATE LEAF SYNCHRONIZING DELAYS

These parameters determine the minimum distance that is maintained between the gates leaves when leaving or approaching the closed position. If the speed of the gates differs considerable then an extra delay can be introduced on closing to ensure that the gates don't overlap (not relevant with sliding gates). The units used are revolutions of the rack drive gear.

Note altering these parameters will cause the travels limits to be cleared.

PARAMETER	MIN	MAX	DEFAULT	STEP	UNITS	MENU #
MOTOR FULL SPEED VOLTAGE Sets the full speed motor voltage	~12.1	~22	~20	~1	Volts	6
GATE LEAF SYNCHRONIZING DELAY Set the # of turns delay between gates opening	1	5	2	1	REVs	6
EXTRA SYNCHRONIZING DELAY FOR CLOSE Additional # turns delay between gates closing	0	5	1	1	REVs	6

CONTROL BOARD ADJUSTMENTS (cont)

MENU 7 OPERATING MODES

P.E INPUT RESPONSE MODE
The P.E input can be configured to respond in one of three modes.

OPEN AND CLOSE CYCLES STOP
In this mode all cycles are prevented from being completed or initiated when the P.E input is active.

CLOSE CYCLES STOP
In this mode the P.E input has no effect when opening but will stop the gate when closing.

REVERSES CLOSE CYCLES
In this mode the P.E input has no effect when opening but will cause the gate to reverse if activated when closing.

PED INPUT FUNCTION
The PED input can be configured to a SWIPE type input for pedestrian access. This provides full functionality with the P.E Triggered Pedestrian auto-close function.

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

TRANSMITTER ACTIVITY REPORTS
This parameter enable transmitter activity report outputs for logging access to the gate opener. Contact ATA for more details.

VACATION MODE
Vacation mode can be turned on or off using this parameter.

BATTERY / SOLAR MODE
The controller can be instructed to turn off the battery backup facilities so that the control board can be shut down without having to disconnect the battery backup system.

PARAMETER	MIN	MAX	DEFAULT	STEP	UNITS	MENU #
P.E 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			7
PED INPUT = SWIPE MODE Selects the PED input functions as pedestrian access swipe input.	OFF	ON	OFF			7
REMOTE CODE ENABLED Selects remote transmitter coding function	OFF	ON	ON			7
TRANSMITTER ACTIVITY REPORTS Select serial output of transmitter activity	OFF	ON	OFF			7
VACATION MODE Selects vacation mode - disables remote control.	OFF	ON	OFF			7
BATTERY / SOLAR MODE Selects Battery Backup / Solar operation	OFF	ON	ON			7

PARAMETER VIEWING AND EDITING

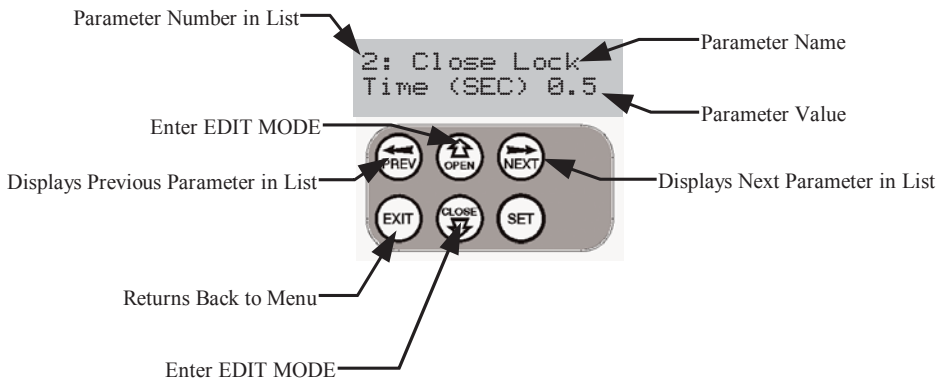
The control board has many parameters which modify its operation. This section illustrates how the parameters are located , viewed and adjusted.

STEP 1. LOCATING PARAMETERS
Using the MENU STRUCTURE figure or the relevant section within CONTROL BOARD ADJUSTMENTS, locate the parameter of concern and obtain the MENU number which contains it. For illustration purposes "CLOSE LOCK TIME" will be used as an example. From the table it can be seen that CLOSE LOCK TIME is located in MENU 4.

STEP 2. NAVIGATE TO MENU
From the MAIN SCREEN, Use NEXT / PREV to navigate to the required menu (MENU 4), press SET to show the parameter list.

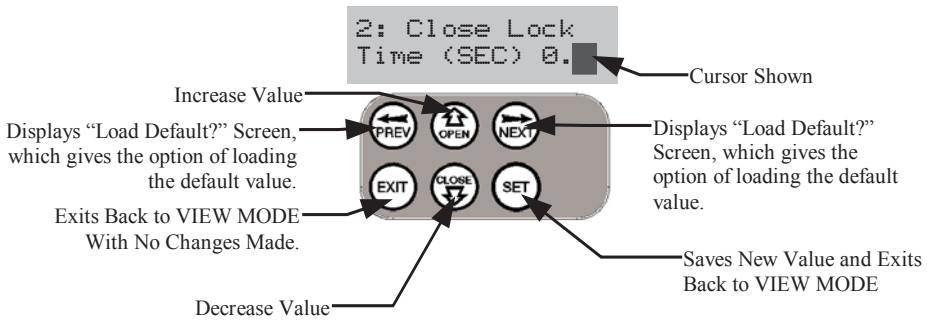
STEP 3. VIEW PARAMETER
The controller is now in VIEW MODE and the first parameter in the list will be displayed. Using the NEXT / PREV buttons step through the list of parameters until the required parameter is displayed.
If the parameter's value is not to be changed then skip to step 7 when finished viewing the parameters.

VIEW MODE (No Cursor)



STEP 4. EDIT PARAMETER
Press the UP or DOWN button to display a cursor on the parameter's value. The controller is now in EDIT MODE. With each press of the UP or DOWN button the parameter value will change. Holding the button down causes the parameter's value to change rapidly. The longer the button is held the faster the value changes.

EDIT MODE (Cursor shown)



STEP 5. RELOADING DEFAULT
To load the parameter's default setting, press the NEXT or PREV buttons to display the LOAD DEFAULT screen, press SET to load the default value.

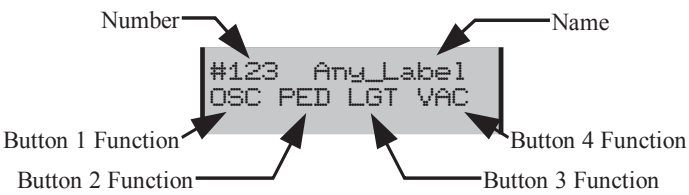
STEP 6. SAVING CHANGES
To save the new value press SET. To leave without saving changes, press EXIT. In both cases EDIT MODE will exit and VIEW MODE will be re-entered

STEP 7. FINISHING UP
Press EXIT to return to the MENUS and then press EXIT again to return to the MAIN SCREEN.

TRANSMITTER OVERVIEW

The controller is able to store up to 64 transmitters within its memory (575 with expansion memory). Each transmitter can be allocated a name to identify its owner and each button can be assigned one of several control functions. The settings for a transmitter are represented using the screen shown to the right. This screen clearly shows the Transmitter's number, name and the functions assigned to each of its four buttons. The procedures below are used to code, delete, replace and edit transmitter records.

Transmitter Record Display



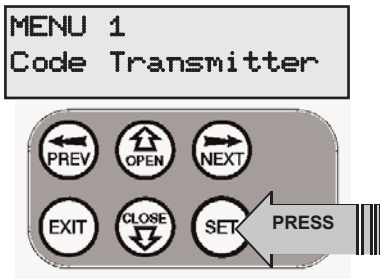
BASIC CODE TRANSMITTER PROCEDURE

THE PROCEDURE BELOW IS USED TO ADD A TRANSMITTER BUTTON TO THE CONTROLLER'S MEMORY.

STEP1, NAVIGATING TO "Code Transmitter" MENU

To navigate to the Menu 1 from the main screen simply press NEXT. Press SET to start the Transmitter Code procedure.

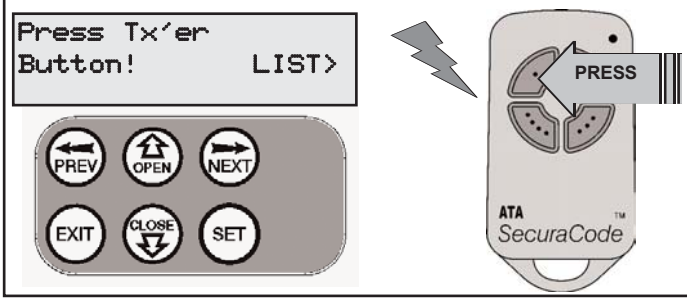
Starting Code Transmitter Procedure



STEP 2. RECORDING THE TRANSMITTERS CODE

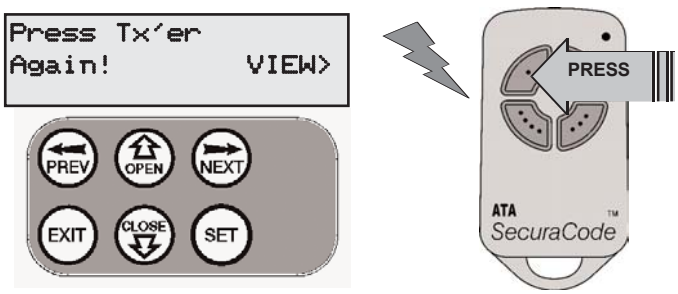
The controller will prompt for you to press one of the transmitter's buttons. Simply press the transmitter button you wish to use to operate the Gate Opener Button 1 is used for example.

Press Transmitter Button



The controller will respond by prompting for the button to be pressed again for verification. Press the transmitter button again.

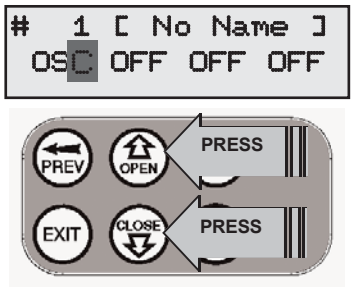
Press Transmitter Button Again



STEP 3. SELECTING FUNCTION OF THE BUTTON

The controller will now show the transmitter's record, with a cursor on the field for the button being coded. Use UP/ DOWN to select the function for the button.

Selecting Button Function



AVAILABLE FUNCTIONS

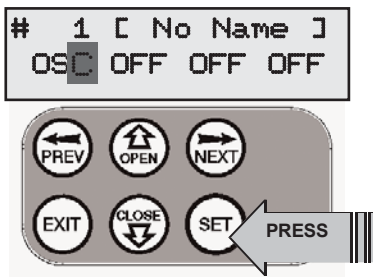
VAC	(Vacation Mode)
LGT	(Courtesy Light)
STP	(Stop)
OPN	(Open)
CLS	(Close)
SWP	(Swipe)
PED	(Pedestrian access)
OSC	(Open/Stop/Close)
OFF	(No action)

If desired, you can continue and edit the other settings, for details see **TRANSMITTER EDIT PROCEDURE.**

STEP 4. SAVING THE CHANGES

Press SET to save the settings or EXIT to abort without saving.

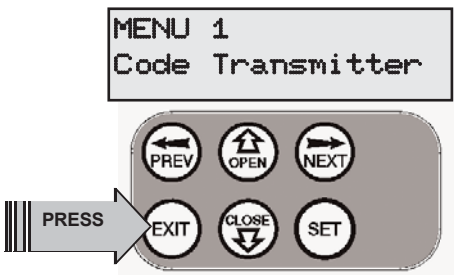
Saving Settings



STEP 5. RETURNING TO MAIN SCREEN

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

Return to MAIN SCREEN



TRANSMITTER EDIT PROCEDURE

THE PROCEDURE BELOW IS USED TO EDIT THE DISPLAYED TRANSMITTER'S SETTINGS.

STEP 1. DISPLAY TRANSMITTER RECORD

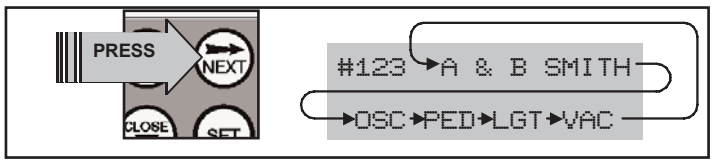
Using one of the methods below, display the required transmitters details.

1. Follow the BASIC CODE TRANSMITTER PROCEDURE to STEP 3 for a new or existing transmitter.
2. Select EDIT when LISTING TRANSMITTERS

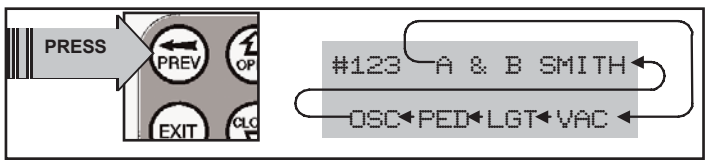
STEP 2. SELECTING THE SETTING TO EDIT

Select the desired field by using NEXT or PREV to move the cursor to the left or right. The cursors movement using NEXT and PREV is shown below

Moving Cursor Using NEXT



Moving Cursor Using PREV



STEP 3. EDITING THE BUTTON FUNCTION FIELDS

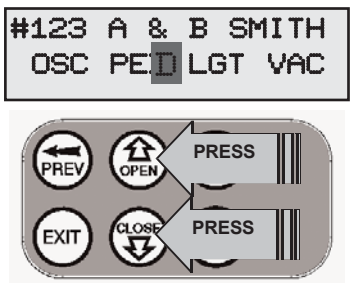
Preform this step if one of the button function fields is selected. Use UP and DOWN to change the displayed value. The available functions are shown below. Selecting OFF will prevent the controller responding to the button at all. When the correct setting has been made repeat STEP 2 to select the next field to edit or continue with STEP 5.

The example below shows editing the function assigned to the transmitter button 2.

The transmitter in the example is transmitter number 123 which has a label of A & B Smith.

AVAILABLE FUNCTIONS

Selecting Button Function



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

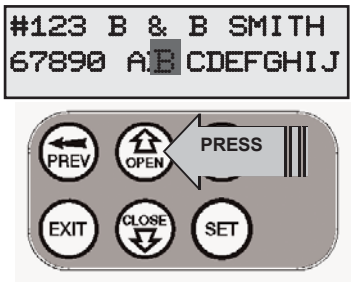
STEP 4. EDITING A CHARACTER FIELD

Preform this step if one of the character fields of the transmitter name is selected.

Character For Name Selected

Press UP or DOWN to change the selected character. When a change is made the bottom line of the display will show a list of available characters to choose from with the current value indicated at the cursor position. When the correct character has been selected repeat STEP 2 to select the next field to edit or continue with STEP 5.

Character For Name Edited

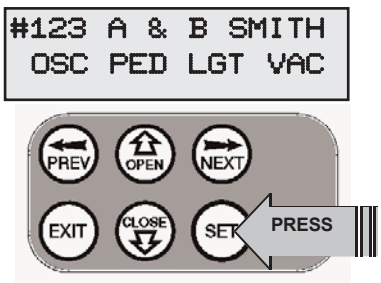


STEP 5. SAVING THE CHANGES

Press SET to save the settings or EXIT to abort without saving.

NOTE If all button functions are set to OFF then when SET is pressed, the controller will prompt you to confirm the transmitter.is to be deleted. Press SET to delete or EXIT to continue editing.

Saving Changes



TRANSMITTERS LIST MANAGEMENT

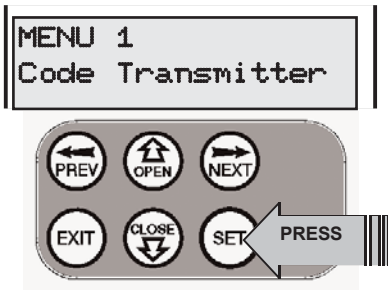
THE CONTROLLER PROVIDES A TRANSMITTER LISTING FACILITY WHICH ENABLES THE USER TO FIND A TRANSMITTER LOCATION WITHIN ITS MEMORY. ONCE LOCATED, A STORED TRANSMITTER CAN BE REPLACED, DELETED, EDITED OR, IF THE LOCATION IS EMPTY, A TRANSMITTER CAN CODED INTO IT.

STEP 1 ACCESSING THE LIST

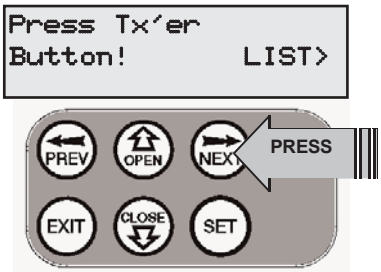
METHOD 1. GO TO START OF LIST

The list be be accessed by selecting the **"Code Transmitter"** MENU (as in STEP 1 of the BASIC CODE TRANSMITTER PROCEDURE), followed by pressing NEXT. This will display the list with transmitter number 1 shown.

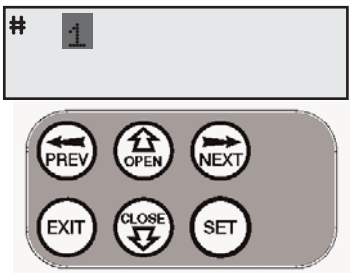
Access The Code Transmitter MENU



Displaying The List starting at Transmitter #1



List with Transmitter #1 shown



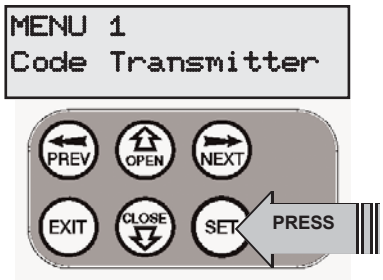
Location
Not used!

METHOD 2. GO TO A TRASMITTER'S LOCATION WITHIN LIST

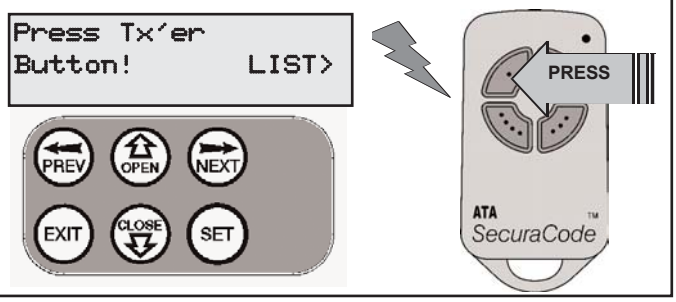
A particular transmitter's location within the list can be displayed by selecting the **"Code Transmitter"** MENU (as in STEP 1 of the BASIC CODE TRANSMITTER PROCEDURE), followed by pressing anyone of the transmitter's buttons.

When the "Press Tx'er Again" message is displayed press NEXT to display the transmitter's location within the list. NOTE "VIEW>" will not be shown if the transmitter is not stored.

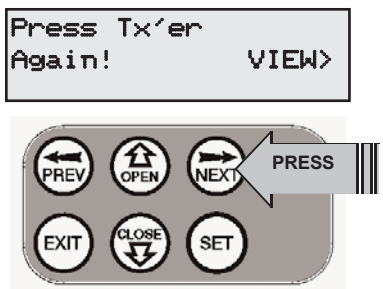
Access The Code Transmitter MENU



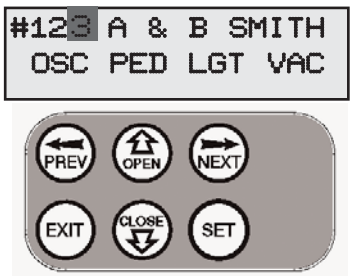
Press Transmitter Button



Display Transmitter's Location In List



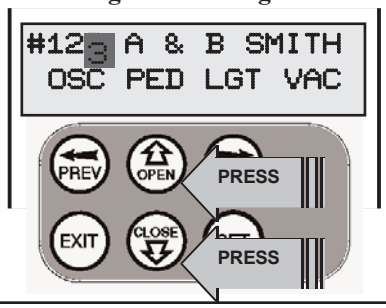
List with Transmitter's location shown



STEP 2. NAVIGATING THE LIST

The UP and DOWN buttons can be used to navigate through the list by altering the transmitter number displayed. Note holding a button down will step through the list faster. The longer the button is held the faster. Only locations which have a transmitter stored will show the name and function fields.

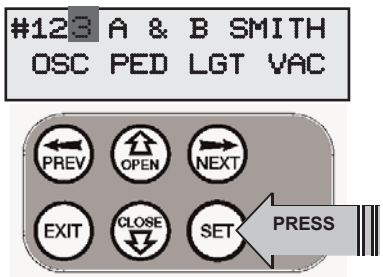
Navigation Through List



STEP 3. SELECTING LOCATION TO MODIFY.

When the desired location is displayed press the SET button to display a menu of available functions that can be performed on the location. The example uses transmitter number 123.

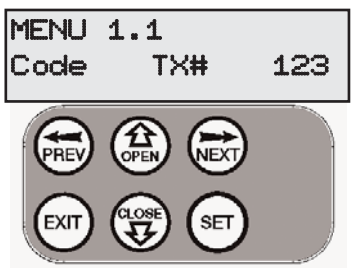
Selecting The Location



STEP 4. SELECTING AN OPERATION

The three menus below are displayed by repeated presses of the NEXT or PREV buttons. Pressing EXIT will return back to the list (STEP 2). Pressing SET will execute the menu's operation.

Code / Replace Menu



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 its is desired to associate the transmitter location number with some aspect of the site at which the gate opener is located. For example, the transmitter number could be set to match the owner's apartment or unit number.

CODE OPERATION (LOCATION USED)

If the code operation is selected for a location that already contains a transmitter, then the BASIC CODE TRANSMITTER PROCEDURE will be initiated and the new transmitter will replace the existing one. Note that the button functions and name of the existing transmitter will be transferred to the new transmitter. This procedure is of great convenience when a transmitter is lost and needs to be removed from the system for security purposes, but at the same time a replacement needs to be issued to the owner.

DELETE OPERATION

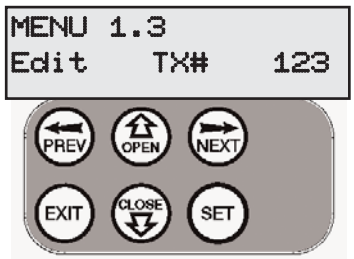
The delete operation is used to remove a transmitter from memory along with the name and button function settings.

Delete Transmitter Menu

EDIT OPERATION

The edit operation displays the transmitter record for editing purposes. See TRANSMITTER EDIT PROCEDURE for details.
This operation is not available for transmitter locations which are empty. The edit operation can be used to alter button functions assigned to each button. It can also be used to alter the "NAME" of the transmitter

Edit Transmitter Menu



STEP 6. EXITING THE LIST

To exit the transmitter list simple press EXIT to return to the Code Transmitter Menu and then press EXIT again to return to the MAIN SCREEN.

REMOTE CODE SET PROCEDURE

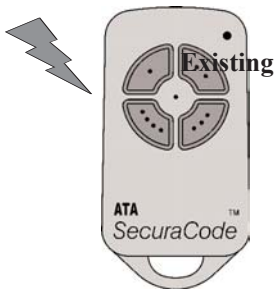
THE CONTROLLER PROVIDES A REMOTE CODE SET FEATURE WHERE BY AN EXISTING TRANSMITTER BUTTON CAN BE USED TO CODE A NEW TRANSMITTER BUTTON INTO THE CONTROLLER MEMORY.

NOTE ONLY THE FUNCTION OF THE EXISTING TRANSMITTER BUTTON CAN BE ASSIGNED TO THE NEW TRANSMITTER. PLEASE READ THE INSTRUCTION PRIOR TO CARRYING OUT THE STEPS AS THE PROCEDURE HAS A TIMEOUT FACILITY FOR SECURITY REASONS.

STEP 1 SELECTING THE FUNCTION TO BE CODED

Using the existing transmitter, operate the gate with the transmitter button which has the function to be coded.
As an example the existing transmitters Button 1 has been coded with the OSC function assigned to it.

Operate Gate Using Existing Transmitter Button



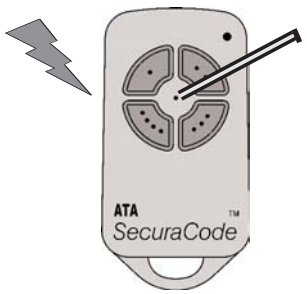
STEP 2. WAIT FOR GATE TO COMPLETE CYCLE

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

STEP 3. ACTIVATE REMOTE CODE SET MODE

Using a small needle press and hold firmly for two seconds through the Coding Hole of the existing transmitter.

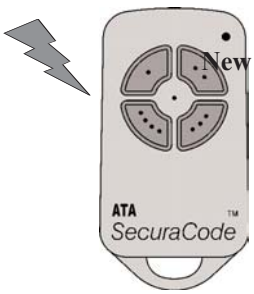
Activate Remote Code Set Mode



STEP 4.. CODE NEW TRANSMITTER BUTTON

Within 10 seconds, activate the new transmitters button you wish to code for 2 seconds. The example shows Button 1 being used but it could be any button. It can even be an unused button on the existing transmitter

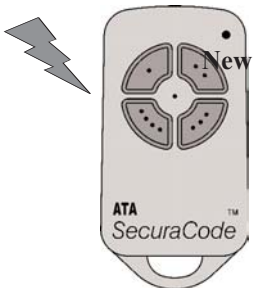
Operate New Transmitter Button To Be Coded



STEP 5.. CONFIRM TRANSMITTER BUTTON TO BE CODED

Within 10 seconds, activate the new transmitters button again for 2 seconds for confirmation

Confirm New Transmitter Button To Be Coded



STEP 6.. TEST OPERATION

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

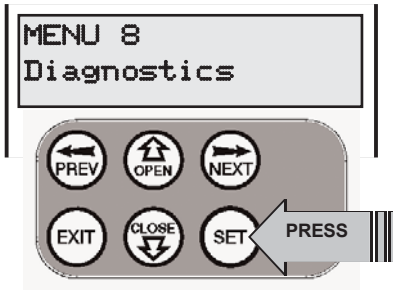
DIAGNOSTIC TOOLS

THE CONTROLLER PROVIDES SEVERAL DIAGNOSTIC TOOLS FROM WITHIN THE DIAGNOSTICS MENU (MENU 8) THIS SECTION DETAILS THE FUNCTION OF EACH TOOL AND ITS USE.

NAVIGATING TO THE DIAGNOSTICS MENUS

The Diagnostic tools are accessed by selecting the Diagnostics menu (MENU 8). Use PREV or NEXT to display each of the diagnostic tool menus in turn.. When the required tool's menu is displayed simple press SET to access it.

Selecting Diagnostics



THE SECTIONS BELOW DETAIL THE FUNCTION OF EACH TOOL.

MENU 8.1 TEST INPUTS

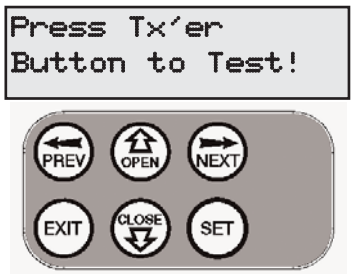
This tool is used to view the state of the control inputs. When selected, a screen is displayed (see below) which indicates the state of each input. If the name of the input is in uppercase then the input is active, conversely is the input is in lower case then the input is inactive. For normal operation all inputs should be inactive. When finished press EXIT. The example below shows the status shown when the OSC input is active.

Input Status Screen

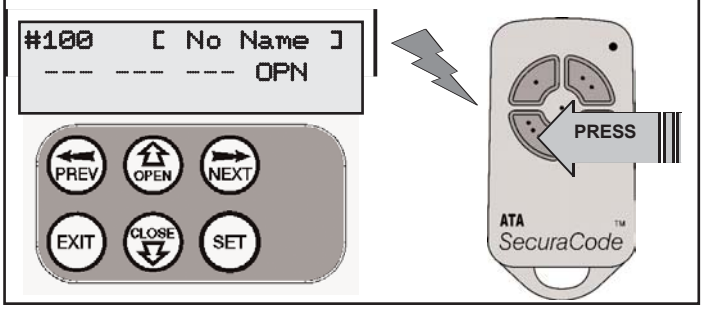
MENU 8.2 TEST TX'ERS

This tool is used to test receiver / transmitter functionality. When selected, a screen is displayed which prompts for a transmitter button to be tested. The controller 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 that shows the transmitter number and name along with the function assigned to the transmitter button. The example below shows the case when transmitter number 100 is activated by button 4. It can be seen that transmitter 100 has no name assigned and and button 4 is assigned the OPN function. When testing is complete, press EXIT .

Prompt To Test Transmitter Button



Press Transmitter Button



MENU 8.3 DISPLAY HISTORY

The controller 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 a screen is displayed (see below) which displays the last event that occurred. The NEXT and PREV buttons can be used 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 below shows that the last event was a close cycle which succeeded in closing the gate. When finished viewing the events, simply press EXIT

Viewing Events

MENU 8.4 SERVICE COUNTER

The controller provides a periodic service counter which can be set to expire after a number of drive cycles. When expired, the controller will beep at the beginning of each drive cycle and a message will be displayed on the MAIN SCREEN. The tools displays the current value of the service counter and allows the user to set its value using the normal parameter editing techniques (See PARAMETER VIEWING AND EDITING). If the service counter is not to be used it can be set to the maximum number which requires 60,000 cycle before service will be due. The example below shows the service counter with a value of 60000.

DIAGNOSTIC TOOLS (cont)

MENU 8.4 SERVICE COUNTER (cont)

Viewing Service Counter

MENU 8.5 COUNTERS

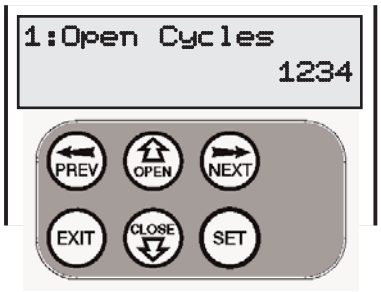
The controller keeps a count of number of times a particular event occurs. The list of event counters kepT is shown below.

1: Open Cycles	15: M2 Close Obstructions
2:Close Cycles	16: M1 Open Overloads
3:Ped Cycles	17: M2 Open Overloads
4:Setup Limits	18: M1 Close Overloads
5:Comm's Loss	19: M2 Close Overloads
6:Sync Faults	20: M1 PWM Sync Faults
7:Overlaps	21: M2 PWM Sync Faults
8:M1 Open Stall	22: M1 PWM Drive Faults
9:M2 Open Stall	23: M2 PWM Drive Faults
10: M1 Close Stall	24: M1 Direction Faults
11: M2 Close Stall	25: M2 Direction Faults
12: M1 Open Obstructions	26: M1 Sensor Faults
13: M2 Open Obstructions	27: M2 Sensor Faults
14: M1 Close Obstructions	

MENU 8.5 COUNTERS (cont)

When this tool is selected the first event counter is shown. The NEXT and PREV buttons are used to step through the list. The example below shows the OPEN CYCLE event counter with a value of 1234. When finished viewing simply press EXIT.

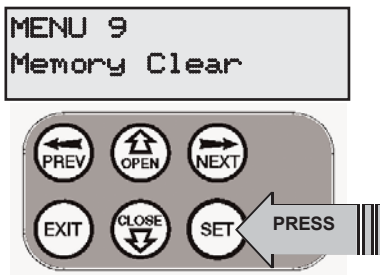
Viewing Events



CLEARING MEMORY

From time to time it may be necessary to return the controller memory back to the factory default settings or to remove all transmitters from the system. The Memory Clear tools enable you to preform these tasks. The Memory Clear tools are accessed from within MENU 9.

Showing Memory Clear Tools



Once Menu 9 is selected the PREV or NEXT buttons can be used to view the Memory Clear options. To Execute the displayed option simply press SET.

Note if a slave drive unit is attached, its memory will also be effected.

Also note the diagnostic EVENTS LIST and COUNTERS can not be cleared

MENU 9.1 CLR CONTROLLER

This option will clear the gate controller 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 current programmed gate travel limits and obstruction profile.

MENU 9.2 CLR RECEIVER

This option will clear all the transmitters from the receiver's memory (including expansion memory, if fitted). It will also set the REMOTE CODE SET and TRANSMITTER REPORT parameters to the factory defaults.

MENU 9.3 CLR EXPANSION

This option is only available if expansion memory is fitted. The option will clear the expansion receiver memory ie transmitter numbers 65 to 575 will be deleted.

MENU 9.4 CLR ALL

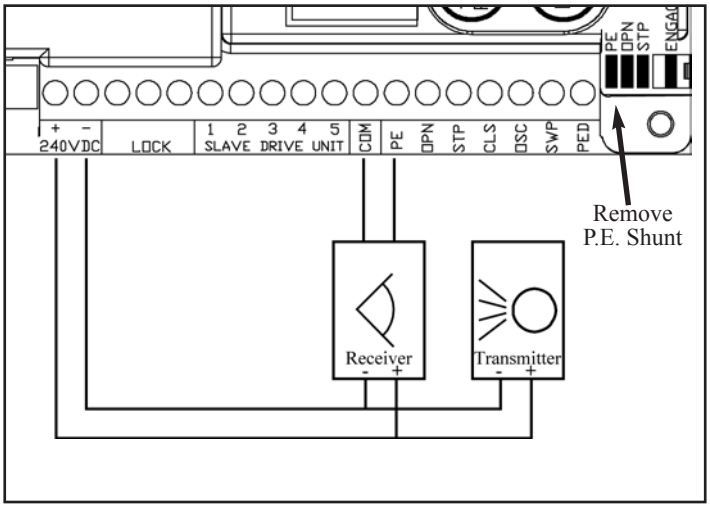
This option will clear all the controller's memory.

ACCESSORIES INSTALLATION

Fitting Photo Electric Beam

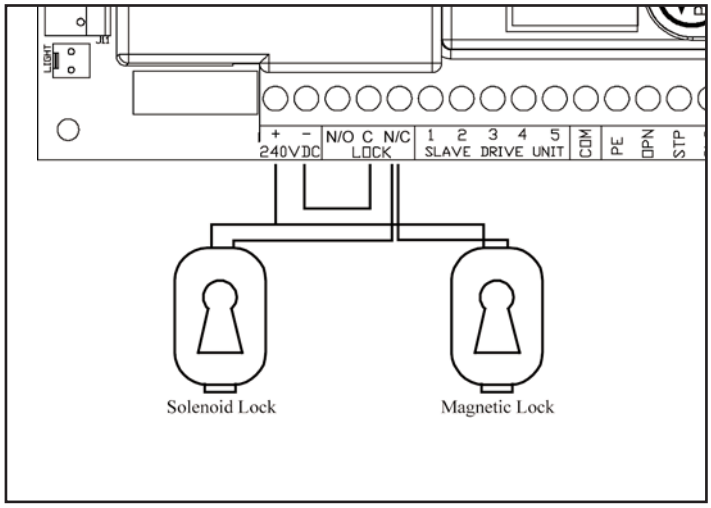
Locate the Photo Electric Beam (P.E.) in a strategic location in the gateway. We recommend that the sensor is placed 150mm above the floor level and as close as possible to the gate opening. Remove the shunt from the P.E. input and connect as per the wiring diagram at right. make sure that the sensors are correctly aligned as per the instruction manual. supplied with the P.E. Beam kit. See Page 17 for set up of Auto-Close times.

Warning: When using Auto-Close mode and P.E. Beams the gateway must be clear of all obstructions and persons at all times. The location of the P.E. Beam and the manner in which it is installed might not give safety protection at all times. Check to make sure that the height of the sensor and type used offers maximum protection possible.



Fitting Solenoid or Magnetic Locks

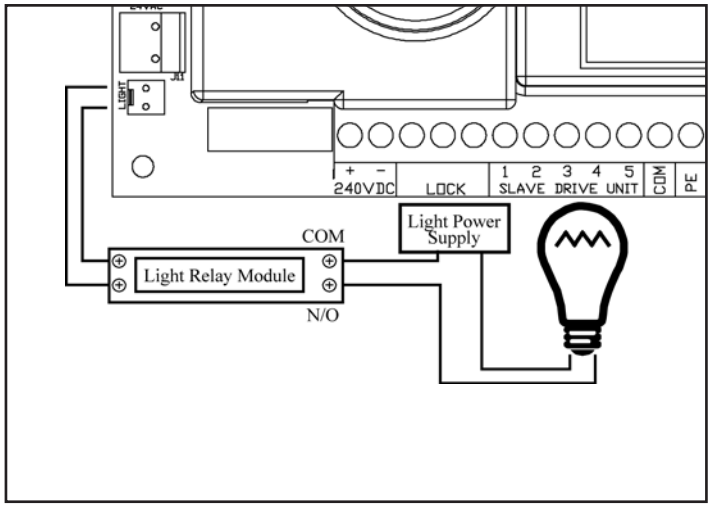
Install the lock mechanism on the gate as per the manufacturers instructions. The wiring diagram at right is a representation of a typical lock with a bias for normally closed contact.
See Page 18 for Lock Times set up.



Fitting Courtesy Lights

An AC or DC courtesy light can be switched on and off via an output on the gate opener control board. Connect the light as per the diagram at right. See Page 18 for Light Times set up.

Warning: A qualified electrician must perform the installation where AC power is used.



TROUBLE SHOOTING GUIDE

SYMPTOM	POSSIBLE CAUSE	REMEDY
Gate will not operate.	Mains power not switched on. Gate is obstructed. Gate is locked or motor jammed. Gate tracks/hardware damaged.	Switch on mains power. Remove obstruction. Unlock door or remove jam. Gate requires service/repair by qualified technician.
Gate starts to close but automatically reverses to open position.	Adverse weather conditions (wind or cold) causing gate to stiffen and become tight in the tracks. Possible obstruction in the gateway.	Increase force margin setting and/or re-initialise the door. See page 17. Remove obstruction.
Gate does not operate from transmitter. *See note.	Transmitter code not stored in memory. Flat Battery. Broken battery lead inside transmitter.	Code transmitter in to openers memory. Refer page 21. Replace battery - A23 Alkaline 12V. Send transmitter to installer or ATA for repair.
Gate will not close fully.	Gate limits positions need to be reset.	Reset limits positions. Page 11.
Gate will not open fully.	Gate limits positions need to be reset.	Reset limits positions. Page 11.
Auto close not working.	PE Beam or wiring faulty PE Beam not aligned correctly. PE Beam is obstructed. Gate obstructed when closing. Auto close time not set. Auto close mode not set.	Repair PE Beam or replace wiring. Re-align optics. Remove obstruction from the path of PE. Remove obstruction. See page 17. See page 17.

***Please Note:** Some areas may be prone to excessive radio interference brought on by devices such as cordless telephones, wireless stereo headphones and baby monitors. It is possible that these devices could cause a degree of interference such as to greatly reduce the range of the transmitter. In such an instance please contact your ATA dealer for an alternative frequency replacement kit. As this is not a warrantable situation but an environmental issue charges may apply for the changeover.

SPECIFICATIONS

TECHNICAL SPECIFICATIONS

INPUT VOLTAGE:	230V- 240V AC 50Hz (Other voltages available upon request e.g. 110V AC 60Hz)
TRANSFORMER PRIMARY VOLTAGE:	230V / 240VAC
SECONDARY VOLTAGE:	24V AC 100 VA
CONTROLLER VOLTAGE:	24V DC
MOTOR TYPE:	Permanent Magnet Direct Current
MOTOR VOLTAGE:	24V DC
MAXIMUM PULLING FORCE:	200N
MAXIMUM GATE OPENING:[1,2] WIDTH:	5700mm
WEIGHT:	250Kg
OPENER MAXIMUM OPENING/CLOSING RUN TIME:	30 Secs.
RECEIVER TYPE:	UHF 433.92 MHz. AM Receiver
RECEIVER CODE STORAGE CAPACITY:	575 x 4 Button Transmitter Codes
TRANSMITTER FREQUENCY:	433.92 MHz
CODING TYPE:	Hopping Code
No. of CODE COMBINATIONS:	Over 4.29 Billion Random Codes
CODE GENERATION:	Non-linear Encryption Algorithm
TRANSMITTER BATTERY:	A23 Alkaline 12 Volts

Note:

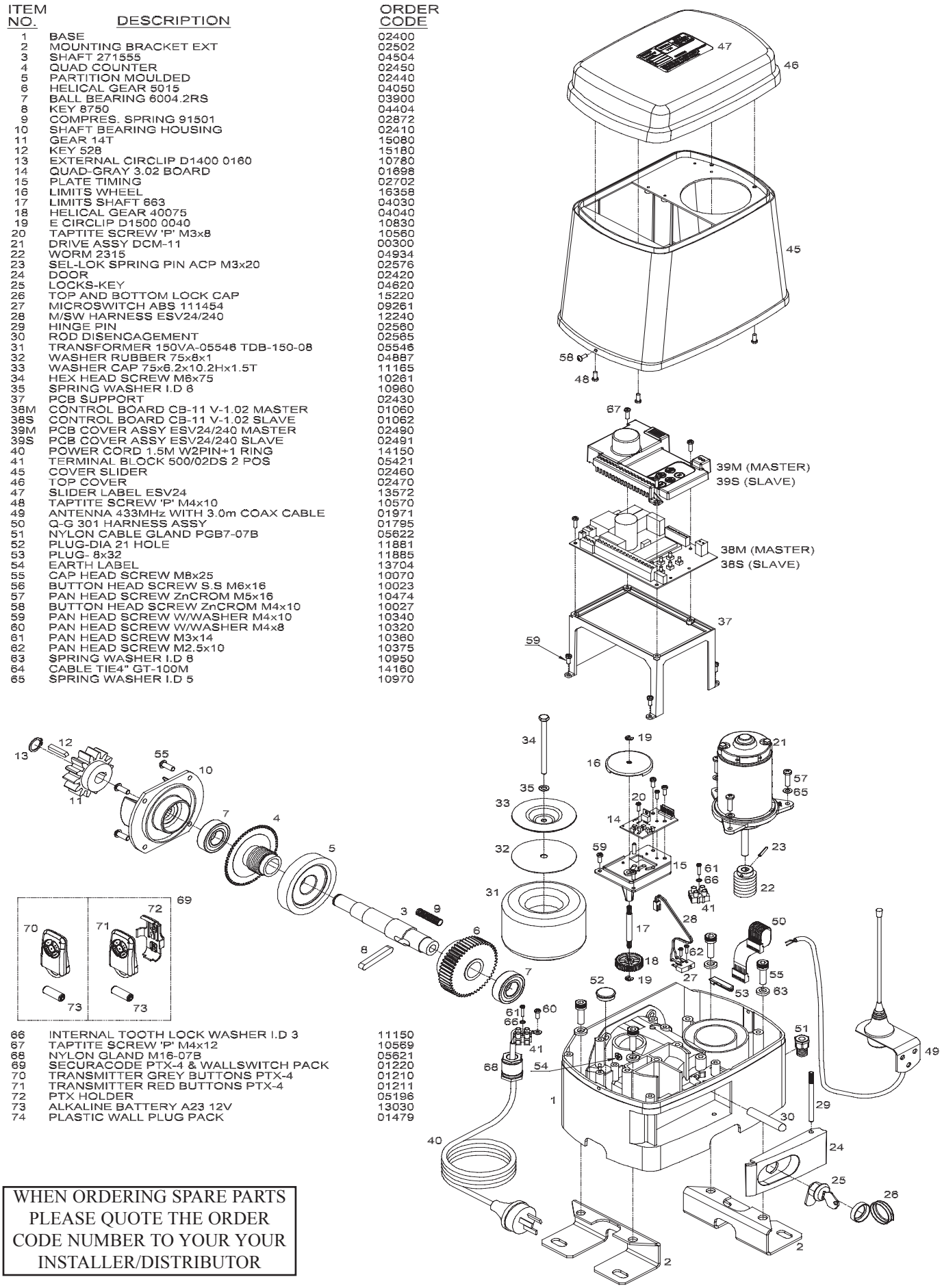
1. The maximum opening that the EasySlider can be installed on is 5700mm wide and 250Kg. The gate must be well balanced. A person should be able to move the gate manually with very little effort (15Kg force max.) in case of an emergency.

2. Intermittent operations may occur in areas which experience very strong wind gusts. A strong wind puts extra pressure on the gate and tracks which may in turn trigger the safety obstruction detection system intermittently.

Please Note: Specifications are subject to change without notice.

PARTS LIST

ITEM NO.	DESCRIPTION	ORDER CODE
1	BASE	02400
2	MOUNTING BRACKET EXT	02502
3	SHAFT 271555	04504
4	QUAD COUNTER	02450
5	PARTITION MOULDED	02440
6	HELICAL GEAR 5015	04050
7	BALL BEARING 6004.2RS	03900
8	KEY 8750	04404
9	COMPRES. SPRING 91501	02872
10	SHAFT BEARING HOUSING	02410
11	GEAR 14T	15080
12	KEY 528	15180
13	EXTERNAL CIRCLIP D1400 0160	10780
14	QUAD-GRAY 3.02 BOARD	01698
15	PLATE TIMING	02702
16	LIMITS WHEEL	16358
17	LIMITS SHAFT 663	04030
18	HELICAL GEAR 40075	04040
19	E CIRCLIP D1500 0040	10830
20	TAPTITE SCREW 'P' M3x8	10560
21	DRIVE ASSY DCM-11	00300
22	WORM 2315	04934
23	SEL-LOK SPRING PIN ACP M3x20	02576
24	DOOR	02420
25	LOCKS-KEY	04620
26	TOP AND BOTTOM LOCK CAP	15220
27	MICROSWITCH ABS 111454	09261
28	M/SW HARNESS ESV24/240	12240
29	HINGE PIN	02560
30	ROD DISENGAGEMENT	02565
31	TRANSFORMER 150VA-05546 TDB-150-08	05546
32	WASHER RUBBER 75x8x1	04887
33	WASHER CAP 75x6.2x10.2Hx1.5T	11165
34	HEX HEAD SCREW M6x75	10261
35	SPRING WASHER I.D 6	10960
37	PCB SUPPORT	02430
38M	CONTROL BOARD CB-11 V-1.02 MASTER	01060
38S	CONTROL BOARD CB-11 V-1.02 SLAVE	01062
39M	PCB COVER ASSY ESV24/240 MASTER	02490
39S	PCB COVER ASSY ESV24/240 SLAVE	02491
40	POWER CORD 1.5M W2PIN+1 RING	14150
41	TERMINAL BLOCK 500/02DS 2 POS	05421
45	COVER SLIDER	02460
46	TOP COVER	02470
47	SLIDER LABEL ESV24	13572
48	TAPTITE SCREW 'P' M4x10	10570
49	ANTENNA 433MHz WITH 3.0m COAX CABLE	01971
50	Q-G 301 HARNESS ASSY	01795
51	NYLON CABLE GLAND PGB7-07B	05622
52	PLUG-DIA 21 HOLE	11881
53	PLUG- 8x32	11885
54	EARTH LABEL	13704
55	CAP HEAD SCREW M8x25	10070
56	BUTTON HEAD SCREW S.S M6x16	10023
57	PAN HEAD SCREW ZnCROM M5x16	10474
58	BUTTON HEAD SCREW ZnCROM M4x10	10027
59	PAN HEAD SCREW W/WASHER M4x10	10340
60	PAN HEAD SCREW W/WASHER M4x8	10320
61	PAN HEAD SCREW M3x14	10360
62	PAN HEAD SCREW M2.5x10	10375
63	SPRING WASHER I.D 8	10950
64	CABLE TIE4" GT-100M	14160
65	SPRING WASHER I.D 5	10970
66	INTERNAL TOOTH LOCK WASHER I.D 3	11150
67	TAPTITE SCREW 'P' M4x12	10569
68	NYLON GLAND M16-07B	05621
69	SECURACODE PTX-4 & WALLSWITCH PACK	01220
70	TRANSMITTER GREY BUTTONS PTX-4	01210
71	TRANSMITTER RED BUTTONS PTX-4	01211
72	PTX HOLDER	05196
73	ALKALINE BATTERY A23 12V	13030
74	PLASTIC WALL PLUG PACK	01479



WHEN ORDERING SPARE PARTS PLEASE QUOTE THE ORDER CODE NUMBER TO YOUR YOUR INSTALLER/DISTRIBUTOR

WARRANTY AND EXCLUSION OF LIABILITY

Subject to all of the matter set out below, Automatic Technology Australia Pty Ltd ("ATA") warrants for twelve (12) months from the date of purchase (specified in the receipt sales docket) that the EasySlider Sliding Gate Opener System contained in the accompanying packaging (the "Product") is free of any defects in material and workmanship rendering it unmerchantable.

This warranty referred to above applied only where:

a) the consumer seeking to rely on the said warranty;

1) returns the Product which it claims to be defective; and

2) presents the relevant sales docket and this warranty document,

To the retailer from whom the Product was purchased to confirm that date of purchase; and

b) the purchaser notified ATA or the retailer from whom the Product was purchased of the alleged defect in the Product immediately upon experience or learning of the alleged defect.

Except for the warranty against defects in material and workmanship set out above, ATA gives no warranties of any kind whatsoever, whether express or implied or whether statutory or at common law, in relation to the Product, and all warranties of fitness for particular purpose and other warranties of whatsoever kind relating to the Product are hereby declaimed. Without limiting the generality of the foregoing, ATA disclaims any liability of whatsoever nature in respect of any claim or demand loss or damage which arise out of;

a) accidental damage to or normal wear and tear to the Product or to the Product's components;

b) flood, rain, water, fire or lightning;

c) incorrect, improper or unreasonable maintenance and/or use;

d) installation, adjustment or use other than ATA which is not in accordance with the instructions set out in installation instructions incorporated in the document;

e) attempted or complete modification or repairs to the Product carried out by a person who is not authorised by ATA to carry out such modification or repairs;

f) faulty or unsuitable wiring of structure to which the Product is fixed or connected; and

g) radio (including citizen band transmission) or any electronic interference.

h) blown fuses or damage caused by electrical surges.

i) damage caused by insects.

ATA's liability under the warranty set out above is limited, at ATA's absolute option, to replacing or repairing the Product which ATA, in its unfettered opinion, considers to the defective either in material and/or workmanship or to credit the consumer with the price at which the Product was purchased by the consumer.

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.

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