AUTOMATIC TECHNOLOGY AUSTRALIA PTY LTD



OWNERS COPY

Installation Instructions And Owners Manual Warning: Failure to comply with the Installation instructions and the Safety Warnings may result in Serious Personal Injury and/or Property Damage.

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PLEASE READ THESE IMPORTANT SAFETY RULES

Failure to comply with the following Safety Rules may result in Serious Personal injury and/or Property Damage.

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DO NOT operate the Gate Opener unless the Gates are 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 Gate Opener when children/persons are near the Gate(s). Children must be supervised near the Gate (s) at all time and when the Gate Opener is in use. **SERIOUS PERSONAL INJURY** and/or property damage can result from failure to follow this warning.

Make sure the **CLOSING OBSTRUCTION FORCE** is adjusted correctly on installation so that the gate(s) reverse to the open position when obstruct with **MINIMUM PRESSURE. OPEN OBSTRUCTION FORCE** should also be adjusted correctly so that the gate(s) stop on opening when obstructed with **MINIMUM PRESSURE.** This test must be **Repeated** regular interval and the necessary adjustments made if required.

DO NOT disengage the Gate Opener to manual operation with children /personals or any other objects including motor vehicles within the gateway.

If using a key switch or keypad or any device that operate the Gate Opener, make sure it is out of reach of children and that the Gate(s) are in full view **AT ALL TIMES**.

The Gate(s) must be **WELL BALANCED**. Sticking or binding Gate(s) must be repaired by an experienced service gate installer prior to Opener installation. **DO NOT** attempt to repair the Gate(s) yourself as the hardware is under extreme weight and tension and could cause **SERIOUS PERSONAL INJURY** and/or property damage.

Connect the Opener to properly **EARTHED** weatherproof general purpose 240V outlet installed by a qualified Electrician.

DISCONNECT the power cord from the **MAINS before making any repairs** (eg welding) or removing the covers! Only experienced service personal can remove the cover of the control system.

Keep hand and any loose clothing well CLEAR of the Gate(s) and Gate opener at all times.

When using the Auto close mode a **PHOTO ELECTRIC BEAM** must be correctly fitted and correctly tested for operation at regular intervals. **EXTREME CAUTION** is recommended when using the Auto close mode. All the safety rules must be followed.

In order for the Gate Opener to sense an object obstructing the gate, some **FORCE** must be exerted on the object. As a result the object **MAY SUFFER** some **DAMAGE**, the extent of which is dependent on the force/sensitivity adjustments set.

For ADDITIONAL SAFETY we strongly recommended the use of PHOTO ELECTRIC BEAM to provide additional safety PROTECTION.

PRODUCT DESCRIPTION

The ATA Elite Swing Gate Opener consists of one electronic control box, two hand held transmitters and gate operator drive unit (one drive unit for single gate installation and two drive units for dual gate installations), with the accessories listed below.

CONTROL BOX

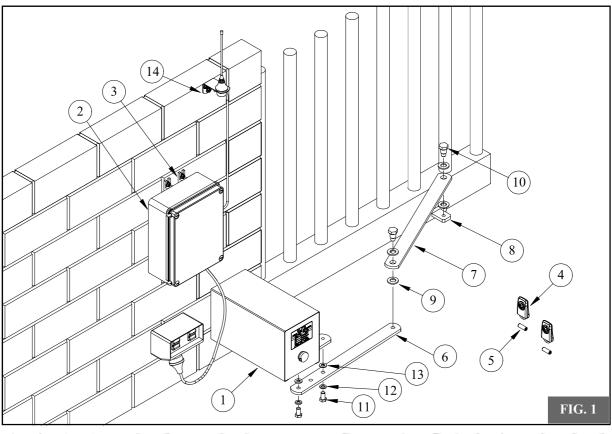
The control box contains the Control Board, (capable of driving 1 or 2 swing gates), a remote control receiver and transformer. When used with suitable glands, it is designed to meet the IP56 weather proof rating. **DRIVE UNIT**

The Drive Unit consists of ATA's own powerful 24VDC motor, a rugged gear box and a cam activated limit switch assembly. Each Drive Unit is supplied with a pair of arms, arm bracket plus arm assembly hardware.

ITEM

QUANTITY

1.	DRIVE UNIT	1
2.	CONTROL BOX	1
3.	MOUNTING BRACKET (CONTROL BOX)	4
4.	REMOTE CONTROL TRANSMITTER	2
5.	BATTERY (9 VOLTS)	2
6.	DRIVE ARM EXTENSION	1
7.	SLAVE ARM	1
8.	GATE MOUNTING BRACKET	1
9.	WASHER PLASTIC	4
10.	SHOULDER SCREW	2
11.	HEX. HEAD SCREW	2
12.	SPRING WASHER	2
13.	FLAT WASHER	2
14.	ANTENNA WITH CABLE & MOUNTING BRACKET	1



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GENERAL DESCRIPTION AND FEATURES

The ATA Control board is packed with many new and exciting features using the latest technology in electronics, board design, and surface mounting components.

The CB-9 control board is designed to automate one or two 24V DC swing or sliding gate drive units with or without limit switches. The CB-9 3.03 supersedes earlier CB-9 versions. A list of some of the features of the control board follows.

- Control board constructed using state of art assembly techniques such as SMT and industrial quality materials and components.
- Each control board is visually and electronically tested after production.
- Controlled by a powerful custom programmed microcontroller.
- All control and limit switch inputs accept <u>dry</u> switch contacts and have a high noise immunity.
- The limit switch inputs are electrically interlocked to the motor drive relays. This means that in the unlikely event of the micro-controller malfunctioning, the motors will be prevented from being driven beyond the positions set by the limit switches (if used).
- A motor drive timer prevents the motors being driven indefinitely, should a limit switch fail.
- Mains transient protection provided on board. Terminal block and mode selection labeling is clear and informative.
- A small size of 130mm x 140mm x 45mm.
- Control inputs for open, close, stop, open/close/stop (swipe), pedestrian access and photoelectric safety beams are provided.
- Remote controlled pedestrian access is a standard feature, with the new two channel code hopping receiver and a standard four button transmitter.
- The Pedestrian access input is provided to partially open one gate leaf for pedestrian access by a wired switch or remote control transmitter or keypad transmitters. The distance the gate is opened is adjustable.
- The photoelectric safety beam input can be programmed to either stop or reverse the motors if tripped while being driven closed.
- The photoelectric safety beam input can be programmed to prevent the motors being driven in the open or close directions.

- The controller can be programmed to automatically close the gate after it has been opened, partly opened for pedestrian access or after the photoelectric safety input has been triggered and then released. The time the gate stays open is adjustable and independent for each of the three auto-close types.
- On board status L.E.Ds show status of the gate/door and backup battery charger.
- A light control output can be selected to turn on courtesy lighting each time the gates are operated. The lights are then automatically turned off after a pre-set time.
- The light control output can control a warning or courtesy light which is illuminated while the gates are in motion and remain on for 1 minute. The time is adjustable via the technicians hand held programmer.
- A lock control output is provided which can be used to deactivate a locking mechanism at the start of each cycle. An adjustable pulse or hold action can be selected to release the lock.
- The time from when the lock is activated to when the motors are started can also be adjusted.
- When over lapping gate leaves are used, a delay can be introduced so that the overlapping leaf reaches/leaves the closed position before the other leaf.
- An integrated back-up battery charger is included on the control board.
- Automatic setting of motor overload levels.
- Motor speed is adjustable via a 10 position dial.
- Mechanical wear and tear reduced by slowing motor as the end of a drive cycles is approached. (Soft Stop)
- The ATA designed receiver and transmitter are the only high security remote control gate system on the market which includes ATA's unique remote coding feature and has over 4.29 billion codes which hop on every press of the button.

INSTALLATION OF MECHANICAL DRIVE UNIT

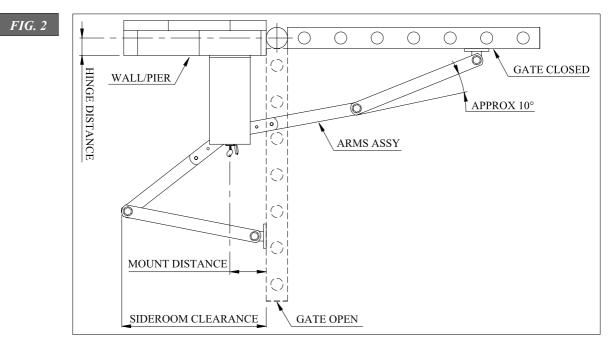
The ATA ELITE SWING GATE OPENER is designed to operate most domestic swing gates. The gates must be in good working condition and should operate by hand relatively freely. Wind loading may affect the operation of the opener in high wind areas, correct obstruction and reversing settings should be chosen for trouble free operations.

INITIAL CHECKING

STEP 1

Before commencing installation of the Elite Swing Gate Opener, check the following:

- 1. The gate will move freely by hand for it's full opening and closing travel.
- 2. The pier or post for mounting must be of solid construction (Brick, solid timber or steel). It must anchor most of the force applied by the drive unit.
- 3.A weatherproof 240V 10A general purpose Power Point should be available on or near the pier/post.
- 4.If dual gate operators are required, provision for underground cabling should be made from one post to the other.
- 5.Side Room Clearance. Using table 1 and referring to Fig. 2 check that there is enough room available to mount the Drive Unit. If there is not, the Minimum Side Room Kit (Page 8) will need to be purchased by your distributor from ATA.
- 6. The mount distance of the Drive Unit should be recorded. This value will be used later.



E	HINGE DISTANCE							
MOUNT DISTANCE (MM)	0	50	100	125	150	180	200	220
[–] a		S	IDE R	OOM (CLEAI	RANCI	E	
90	470	470	470	470	470	470	465	460
120	450	470	480	470	465	460	435	425
140	470	465	470	465	460	440	420	390
200	470	465	445	430	400	350	390	250

TABLE 1

The mount Distance of the Drive Unit and the Hinge Distance of the gates can be selected to optimise the side room clearance.

NOTE: If the gates are already installed then measure the Hinge Distance and use this to optimise the Mount Distance.

INSTALLATION OF MECHANICAL DRIVE UNIT

MOUNTING OF DRIVE UNIT STEP 2

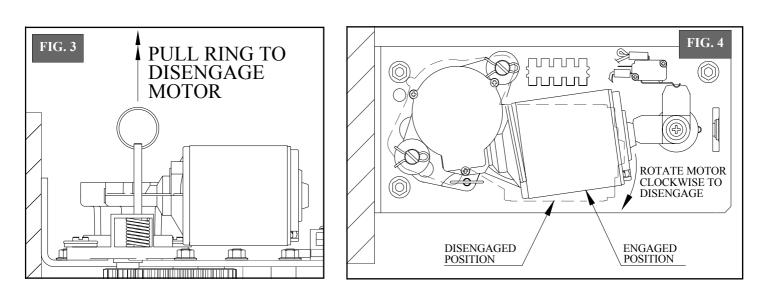
- 1. Mount Drive Unit using four (4) 10mm loxins or dynabolts.
- Make sure that the Drive Unit is mounted at an appropriate distance from the ground (Minimum 35mm to allow clearance for drive arm extension). (Fig 1)

NOTE: If the gateway slopes away from pier/post make sure an allowance is made for clearance of the Drive Arm Extension and Slave Arm to not touch the ground.

CHANGING TO/FROM MANUAL OPERATION

DISENGAGE DRIVE MOTOR, by pulling manual engage/disengage pin up using the release ring fit-ted, and while holding, rotate motor assembly in a clockwise direction.

(Fig. 3 & 4) (*Later RE-ENGAGE DRIVE MOTOR* rotate motor assembly in a anti-clockwise direction.)

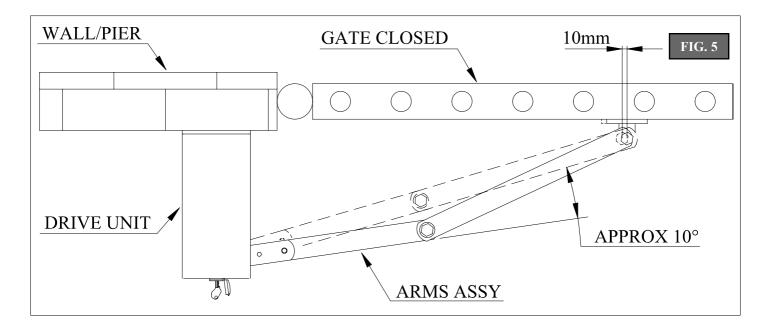


AFFIXING ARMS AND BRACKETS TO GATE STEP 3

- 1. Position gate in close position.
- 2. Assemble Drive Arm Extension to Drive Arm (fixed to the drive unit) (Fig. 1), using two Hex. Head screws and spring and flat washers supplied.
- 3. Assemble Slave Arm to Drive Arm Extension (Fig. 1). Using plastic washers and shoulder screw supplied.
- 4. Assemble Gate Mounting Bracket and Slave Arm using shoulder screw and plastic washers (Fig 1), don't tighten yet.

- 5.Extend arms out straight and mark position where the Gate Mounting Bracket touches gate (Fig 5).
- 6. From this mark, measure 10mm toward Drive Unit and mark again. This is where Gate Mounting Bracket will be mounted (Fig. 5).
- 7.Remove the Gate Mounting Bracket from the Slave Arm and secure the Gate Mounting Bracket to the gate at second mark.
- 8.Reassemble Slave Arm to Gate Mounting Bracket using shoulder screw and plastic washers. Secure well.

INSTALLATION OF MECHANICAL DRIVE UNIT

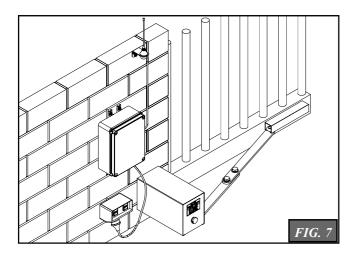


INSTALLATION OF MINIMUM SIDE ROOM KIT

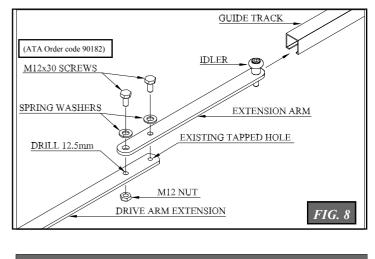
If you have limited Side Room, a special kit allows you to modify the Elite Swing Gate Opener so that the space required is reduced to the width of the Drive Unit (135mm). (ATA Order code 90182).

FITTING MINIMUM SIDE ROOM KIT STEP 3A

- Secure the Extension Arm from the minimum side room kit onto Drive Arm Extension with supplied M12 screws. Drill Ø12 hole in Drive Arm Extension (use hole in extension arm as a guide). Insert other M12 screw and secure with spring washer and nut. Check that screws are tight (Fig 8).
- 2. Check the Drive Unit is **DISENGAGED** AND THE GATE IS CLOSED (Fig 4). Slide the Guide Track over idler. Locate Track on gate and check travel of the Arm. The idler should always be inside the Guide Track in the closed and open positions. Secure (weld) track to gate (Fig 7 & 8).



NOTE: If a shorter Arm is required, drill the Drive Arm Extension and Extension Arm where appropriate, you should not have to cut the arms and should still be able to use pre-threaded hole in Drive Arm Extension.



WARNING KEEP HANDS AND ANY LOOSE CLOTHING WELL CLEAR OF THE GATE(S) AND GATE OPERATOR AT ALL TIMES. SERIOUS PERSONAL INJURY AND/OR PROPERTY DAMAGE CAN RESULT FROM FAILURE TO FOLLOW THIS WARNING

INSTALLATION OF ELECTRONIC CONTROL BOX

MOUNTING CONTROL BOX STEP 4

The Control Box is to be mounted nearby the Drive Unit using (4) 6mm screws. The mounting coordinates is 55mm x 275mm. When locating the Control Box allow ample space around the unit for easy access and wiring connections. Remove cover from control box.

Determine which leaf you would like to open first and close last. This gate leaf must be connected to Motor 1 (M1) terminals on the control board. Connect the Control Board with Drive Unit(s) using 5 core cable. For detail of electrical installation see pages 10 & 11.

Note: The installation hand is determined from inside the gate looking out to the street.

CAUTION: DO NOT USE ANY CABLE WHICH CARRIES GREEN/YELLOW WIRES AS THIS SIGN-IFIES EARTH, AND DOES NOT COMPLY WITH ELECTRICAL AUTHORITY REGULATIONS.

LIMITS AND CAMS SET-UP

STEP 5

Setting of limits for open and closed position is performed with opener in manual position (Fig 3 & 4).

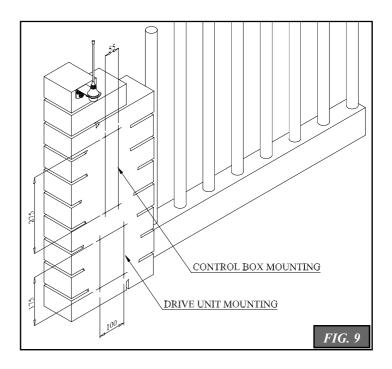
DO NOT SWITCH ON POWER OR ENGAGE MOTOR DRIVE YET.

For Right Hand Side installation:

When gate is closed turn lower cam in a clockwise direction (Fig 10) until an audible click can be heard from the lower micro-switch. Open the gate to the required opening position and turn top cam in an anticlockwise direction until a click can be heard from top micro switch.

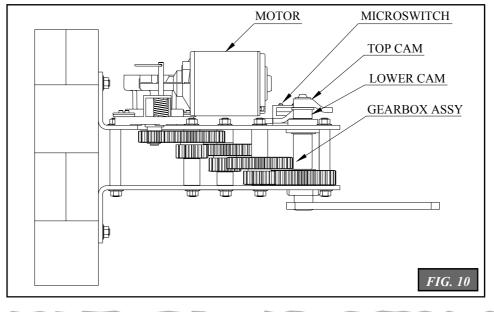
For Left Hand Side installation:

When gate is closed turn top cam in a clockwise direction (Fig 10) until an audible click can be heard from the top microswitch. Open the gate to the required opening position and turn lower cam in an anticlockwise direction until a click can be heard from lower microswitch.



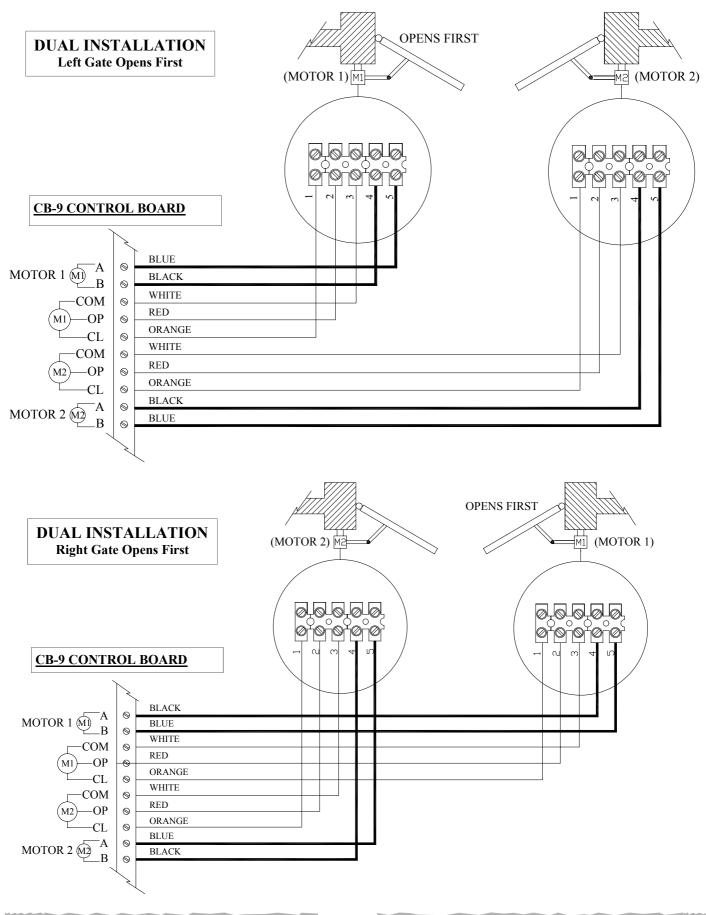
ANTENNA

Mount the antenna at or above the height of the gate or fence for optimal reception, which ever is higher. (Fig 9). Do not cut antenna or coaxial cable.

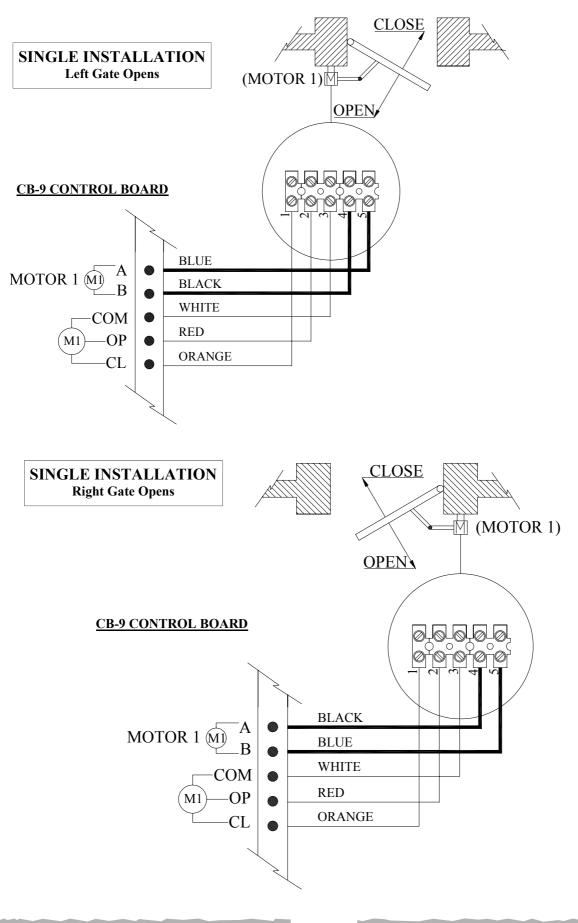


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INSTALLATION OF ELECTRONIC CONTROL BOX



CONT.. INSTALLATION OF ELECTRONIC CONTROL BOX



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SETTING OPENING & CLOSING OBSTRUCTION FORCE

STEP 6

Engage the motor assembly (Fig 3 & 4), switch power on at power point. Slide back Drive Unit cover and lock it by key.

IMPORTANT NOTICE: THE INITIALISING STEP 7 BELOW MUST BE PREFORMED FOR THE GATES OBSTRUCTION SENSORS TO BE CORRECTLY CALCULATED AND TO SET THE SOFT STOP FEATURE.

STEP 7

INITIALISING OBSTRUCTION FORCE

WARNING: MAKE SURE THE OBSTRUCTION SENSITIVITY IS ADJUSTED CORRECTLY ON INSTALLATION SO THAT THE GATE(S) REVERSE TO THE OPEN POSITION WHEN OBSTRUCTED WITH MINIMUM PRESSURE AND STOPS ON OPENING CYCLE WHEN OBSTRUCTED WITH MINIMUM PRESSURE. FAILURE TO COMPLY WITH THE SET UP PRO-CEDURE MAY RESULT IN SERIOUS PERSONAL INJURY AND/OR PROPERTY DAMAGE.

ALL REFERENCES TO NUMBERS (eg [35]) REFERS TO FIG 11 ON PAGE 13 .

In order for the control board to slow the motors down at the correct position and to automatically detect motor overloads, it needs to record the normal cycle time of each motor in each direction and also sample each motors normal running time. This is automatically preformed, by following the steps below. If the gate(s) is stopped for some reason during step 2 below, then simply restart from step 1 below. While the open and close cycles are underway in step 2 below, the control board will not slow the motors and the overload detection is partly disabled during this procedure.

INITIALISATION

- Close the gate(s) if it is not already closed, by holding down the OSC button [35]. Once the gate(s) is in the fully closed position release the OSC button. IMPORTANT The Red LED[27] should be steady ON.
- Press the Reset button [29] on the control board for about two seconds then release. The gate(s) should start opening. As soon as the gate(s) reaches the fully open position it will pause and start to close. When the gate (s) reaches the fully closed position the initialisation is complete. The controller is now ready for normal use.

NOTE The OSC button is the only input which will function prior to the controller being initialised using the above procedure .

SETTING OVERLOAD SENSITIVITY

- 1. The overload sensitivity is adjustable using the OVERLOAD dial [25], with dial position 0 making it easy to overload a motor, increasing through positions 1 to 8, with position 9 being the hardest to overload a motor.
- 2.Simply turn the dial to the desired number to manually increase/ decrease the overload sensitivity.

NOTE The gate will exert some force before obstruction sensing activates. Too light a setting will cause nuisance stopping when gate starts to age or resistance occurs in gate track rollers or hinges. Too heavy a setting may cause serious personal injury and/or property damage.

WARNING: ALL FORCE ADJUSTMENT MUST BE SET CORRECTLY AND TESTED BEFORE LEAVING THE INSTALLATION AND MUST BE CHECKED PERIODI-CALLY. THE OPENER MUST NOT BE LEFT IN AN OPERABLE SITUATION IF THE FORCES ARE NOT SET CORRECTLY OR ARE INOPERATIVE.

IMPORTANT NOTE: WHENEVER THE LIMIT CAMS ARE ADJUSTED THE SAFETY OBSTRUCTION FORCE MUST BE RE-INITIALISED, BECAUSE THE TRAVEL DISTANCE MAY HAVE CHANGED AND THE SAFETY SETTINGS WILL BE WRONG. TO RE-INITIALISE PLEASE FOLLOW STEPS 7.1 AND 7.2 ABOVE.

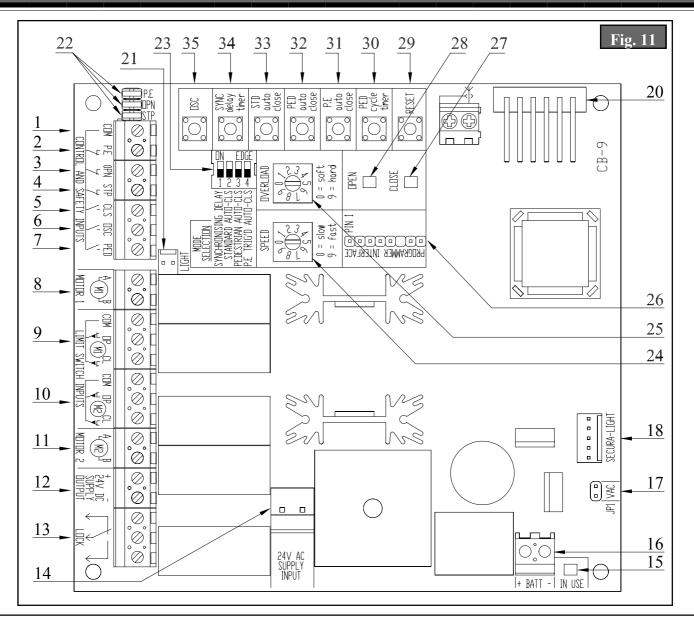
STEP 8 MOTOR SPEED CONTROL

When a motor is started it is turned on at the speed selected using the SPEED dial [24] with 0 being the slowest and 9 being the fastest. The motor will be driven at this speed until it nears the end of the travel, at which time it will be slowed down. The motor slows down to the speed represented by '3' on the speed dial.

In order for the controller to determine when to slow the motors down towards the end of its cycle, a complete open and a complete close cycle must be performed and the travel times of each motor in each direction established (i.e. STEP 7 above).

To adjust the slow motor speed refer to page 15.

CONTROL BOARD LAYOUT



- 1. COMMON TERMINAL FOR (2) TO (7) BELOW.
- 2. <u>PHOTO-ELECTRIC SAFETY BEAM INPUT.</u>
- 3. <u>OPEN</u> CONTROL INPUT.
- 4. <u>STOP</u> CONTROL INPUT.
- 5. <u>CLOS</u>E CONTROL INPUT.
- 6. <u>OPEN/STOP/CLOSE CONTROL INPUT.</u>
- 7. PEDESTRIAN ACCESS CONTROL INPUT.
- 8. MOTOR 1 TERMINALS.
- 9. MOTOR 1 LIMIT SWITCH INPUTS.
- 10. MOTOR 2 LIMIT SWITCH INPUTS.
- 11. MOTOR 2 TERMINALS.
- 12. TERMINALS FOR <u>24V DC SUPPLY OUTPUT</u> (TO ACCESSORIES).
- 13. ELECTRIC <u>LOCK</u> CONTROL TERMINALS.
- 14. <u>24V AC SUPPLY INPUT</u> (FROM TRANSFORMER).
- 15. BACKUP BATTERY SUPPLY IN USE L.E.D.
- 16. BACKUP BATTERY TERMINALS.
- 17. <u>VAC</u>ATION SHUNT & PINS

- 18. <u>SECURA-LIGHT</u> INTERFACE CONNECTOR.
- 20. PLUG-IN REMOTE CONTROL RECEIVER CONNECTOR
- 21. LIGHT CONTROL RELAY INTERFACE CONNECTOR.
- 22. P.E., OPN, STP SHUNTS
- 23. MODE SELECTION DIP SWITCHES.
- 24. SPEED SELECTION DIAL.
- 25. MOTOR OVERLOAD SENSITIVITY DIAL.
- 26. PROGRAMMER INTERFACE CONNECTOR.
- 27. <u>CLOSE</u> STATUS LED.
- 28. OPEN STATUS LED.
- 29. <u>RESET</u> BUTTON.
- 30. <u>PED</u>ESTRIAN ACCESS <u>CYCLE TIMER</u> SET BUTTON.
- 31. <u>P.E. AUTO-CLOSE</u> TIME SET BUTTON.
- 32. <u>PED</u>ESTRIAN <u>AUTO-CLOSE</u> TIME SET BUTTON.
- 33. <u>STANDARD AUTO-CLOSE TIME SET BUTTON.</u>
- 34. <u>SYNC</u>HRONISING <u>DELAY TIME</u> SET BUTTON.
- 35. <u>OPEN/STOP/CLOSE BUTTON.</u>

CONTROLLERS MODE SELECTION SWITCHES

This section describes the operating modes which can be selected by the user using the control board's mode selection switches [23] Fig 11.

SYNCHRONISED OVERLAPPING GATE LEAFES.

1. When dual swing gates are used it is common for a back stop to be mounted on one of the gate leaves so that the gate leaves are aligned when closed. To prevent the gate leaves from interfering with each other, the gate leaf with the back stop must reach the close position first when closing and open last. The controller can be made to do this by placing the mode selection dip-switch labeled "SYNCHRONISING DELAY" into the "ON" position. This will result in the gate leaf driven by motor 1 start to open 2 seconds before the gate leaf driven by motor 2 and the gate leaf driven by motor 2 start to close 2 seconds before that of motor 1. Note, if a lock is to be mounted on a gate leaf, it should be mounted on the leaf driven by motor 1. If the delay of 2 seconds is not suitable it can be altered, see sections **SYNCHRONISING DELAY TIME.** on page 15.

AUTO-CLOSE MODES

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. The timer's count down can be suspended by activating a suspending input (which inputs 'suspend' depends on which auto-close mode is selected). When the input is deactivated the auto-close timer is reloaded and the count down recommenced. The auto-close functions are temporarily disabled by certain actions. When this happens the controller will not auto-close the gate again until the user performs some action to re-enable the function. Details about the three auto-close modes follow.

2. STANDARD AUTO-CLOSE

This mode is selected by placing the mode selection switch labeled "STANDARD AUTO-CLS" into the "ON" position. When selected the gate will auto-close 30 seconds after being fully opened. The following gives details about this auto-close mode.

Auto-closes after being:

• Fully opened. (except when the gate is reversed to the open position after a motor overload is detected while closing)

Countdown suspended by:

- The P.E. input being active.
- The OPN input being active.

Function temporarily disabled by:

- Activating the STP input while the gate is open.
- A motor overload causing the gate to reverse open.

Function re-enabled by:

• Activating the OPN input while the gate is open.

• Activating the OSC input, in SWIPE mode, while the gate is open.

•. By activating any input which cases the gate leaf to start to close. The auto-close function will then be enabled once the gate is re-opened.

The standard delay time of 30 seconds can be altered, see **STANDARD AUTO-CLOSE DELAY TIME**, on page 15.

3. PEDESTRIAN ACCESS AUTO-CLOSE.

This mode is selected by placing the mode selection dip-switch labelled "PEDESTRIAN AUTO-CLS" into the "ON" position. When selected, the gate leaf will auto-close 15 seconds after being opened for pedestrian access.

Auto-closes after being:

• Driven to the programmed pedestrian access position. (Except when the gate leaf is reversed after a motor overload is detected.) Reversing during pedestrian access is only implemented when special PED modes are selected.

• Stopped by the P.E. input when closing after pedestrian access (standard PED mode only).

Countdown suspended by:

- The P.E. input being active.
- The PED input being active.

Function temporarily disabled by:

• Activating the STP input while the gate leaf is in the programmed pedestrian access position.

• Activating the STP input in condition 2 of 'Auto-closes after being above.

• A motor overload causing the gate to reverse back to the programmed pedestrian access position. (Reversing during pedestrian access is only implemented when special PED modes are selected.)

Function re-enabled by:

Activating the PED input, in SWIPE mode, while the gate is in the programmed pedestrian access position. Activating the PED input and causing the gate leaf to start to close.

The standard delay time of 15 seconds can be altered, see section **PEDESTRIAN ACCESS AUTO-CLOSE DELAY TIME** on page 15.

4. P.E TRIGGERED AUTO-CLOSE

This mode is selected by placing the mode selection dip-switch labeled "P.E. TRIGGERED AUTO CLS" into the "ON" position. When this auto-close mode is selected, the gate will auto-close after the P.E. input has been activated and released since: 1. The gate was last closed

1. The gale was last closed The P.F. triggered auto-close fu

2. The P.E. triggered auto-close function was re-enabled after being disabled.

3. The SWIPE input was activated.

Auto-closes after the P.E. input has been activated and then released and the gate:

• Is fully opened. (except when the gate is reversed to the open position after a motor overload is detected while closing)

• The gate has been stopped by the P.E. input.

Countdown suspended by:

- The P.E. input being active.
- The OPN input being active.

Function temporarily disabled by:

- Activating the STP input.
- A motor overload causing the gate to stop or reverse open.

Function re-enabled by:

- Activating the OPN input while the gate is open.
- Activating the SWIPE input.

• By activating any input which cases the gate to start to open or close. The auto-close function will then be enabled once the gate is re-opened or the P.E. input causes the gate to stop.

CONTROLLERS MODE SELECTION SWITCHES

If the P.E. input is configured to stop the gate during opening or closing, then the gate can auto-close from a midway position. This feature is implemented so that once a vehicle has entered the gateway and broken the P.E. beam, the gate will stop. When the P.E. beam is cleared the gate will auto-close from the stopped position. This results in the gate not having to fully open and thus reducing the time unwarranted access through the gate is possible. The factory set delay time of 1 second is adjustable, see section "P.E. TRIGGERED AUTO-CLOSE DELAY TIME" below.

MIXING AUTO-CLOSE MODES.

The PEDESTRIAN AUTO-CLS mode and the STANDARD AUTO-CLS mode do not affect each other as one operates during standard operation and the other during pedestrian access. However it is possible to have P.E. triggered pedestrian autoclose by selecting both the PEDESTRIAN AUTO-CLS and P.E. TRIGGERED AUTO-CLS modes. In this case the gate would partly open for pedestrian access and then either the P.E. TRIGGERED AUTO-CLS would cause the gate to auto-close when a pedestrian walks through and activates the P.E beam or, if no one walked through the PEDESTRIAN AUTO-CLS would close the gate. This way the gate is only kept open long enough for a person to walk through, but with the backup that if no one walks through the gate will still close. The same concept can be used with standard operation by selecting both the STANDARD AUTO-CLS and the P.E. TRIGGERED AUTO-CLS modes. That is, the gate would only stay open long enough for the vehicle to pass through but would still autoclose if no vehicle enters.

Note P.E. TRIGGERED AUTO-CLS will not operate during pedestrian access unless the PEDESTRIAN AUTO-CLS mode is also selected.

CONTROL BOARD ADJUSTMENTS

This section covers details on how to adjust several parameters via the control boards buttons and dials (Fig 11). Other adjustments can be performed by use of the advanced technicians CB-9 V3.03 Control Board Instruction Manual and Programmer. Contact your local ATA distributor for service.

SYNCHRONISING DELAY TIME.

The synchronising delay time is adjusted using the 'SYNC delay timer' button [34]. The synchronising delay time is adjustable in 0.1 second steps. The factory set default is 2 seconds.

STANDARD AUTO-CLOSE DELAY TIME.

The standard auto-close delay time is adjusted using the 'STD auto-close' button [33]. The standard auto-close delay time is adjustable in 1 second steps. The factory set default is 30 sec.

PEDESTRIAN ACCESS AUTO-CLOSE DELAY TIME.

The pedestrian auto-close delay time is adjusted using the 'PED auto-close' button [32]. The pedestrian auto-close delay time is adjustable in 1 second steps. The factory set default is 15 sec.

P.E. TRIGGERED AUTO-CLOSE DELAY TIME.

The P.E. triggered auto-close delay time is adjusted using the 'P.E. auto-close' button [31]. The P.E. triggered auto-close delay time is adjustable in 1 second steps. The factory set default is "off".

PEDESTRIAN ACCESS CYCLE TIME.

The pedestrian access cycle time sets how far gate leaf 1 opens for pedestrian access.

- 1.Drive the gate to the closed position using the OSC button [35] or another control input.
- 2.Press and hold the 'PED cycle timer' button [30]. The gate leaf driven by motor 1 will start to open.

- 3. When the gate leaf has reached a position suitable for pedestrian access, release the button.
- 4. The pedestrian access drive timer has now been set. Either press the OSC button [35] and exit the time set mode or continue setting one of the synchronising delay or auto-close times.

SLOW MOTOR SPEED.

IMPORTANT NOTICE: Please make sure that the gate(s) are in the open position before proceeding with steps 1 to 5 below.

The speed the motor slows down towards the end of a cycle can be adjusted using the following procedure. The factory set default slow speed is set to " 3"

- 1.Note the current maximum speed selected by the speed selection dial [24].
- 2.Using the speed selection dial [24] select the desired slow speed.
- 3.Press and hold the 'RESET' button [29] and count **five (5)** flashes of the OPEN status led [28].
- 4. Release the button.
- 5.Place the speed selection dial [24] back to the desired maximum speed .

Adjustment method for auto-close and Synchronising delay times.

- 1. Press and hold the required button for the desired time.
- 2.Release the button.
- 3.Press the OSC button [35] to exit the time setting mode or restart from step 1 to set another time.

Notes

- a) The time setting mode is indicated by both the OPEN and CLOSE status LED's being off.
- b) Each flash of the OPN led represents 1 second.
- c) When a button is first pressed, the CLOSE status led [27] turns on. The time delay is set to zero when the CLOSE led turns off and then increases for as long as the button is held.

CODING OF RECEIVER/ TRANSMITTER

SETTING TRANSMITTERS CODES TO RECEIVER

The Remote Transmitters can be programmed into the gates receiver to do two functions. Firstly the full <u>Open/Stop/Close</u>, and secondly the partly open gate for <u>PED</u>estrian only access. The memory in the receiver can store up to 111 different remote control transmitters.

• Make sure to connect the battery to the Transmitters.

STORING THE TRANSMITTERS CODE FOR O/S/C

- 1. **Press and hold** the Code O/S/C button on the receiver (Fig 13).
- 2. Press the button (one of four) on the Transmitter you would like to use to control the gate for approximately two seconds. Pause for two seconds. Press the same button again on the Transmitter for approximately two second (Fig 12).
- 3. Release the Code O/S/C button (Fig 13).
- 4. Press the Transmitter button to see if it operates the gate. If you wish you can code in all four buttons on the Transmitter so all four can operate the same gate.

STORING THE TRANSMITTERS CODE FOR PEDESTRIAN ONLY ACCESS

- 1. Press and hold the Code PED button on the receiver Fig 13.
- 2. Press the button (one of four) on the Transmitter you would like to use to control the pedestrian access for approximately two seconds. Pause for two seconds. Press the same button again on the Transmitter for approximately two seconds.
- 3. Release the Code PED button (Fig 13).
- 4. Press the Transmitter button to see if it operates the gate.

IMPORTANT NOTE The Pedestrian Access Cycle Time Page 13 button [30], must be set to complete setting this feature.

STORING ADDITIONAL TRANSMITTER (S) FROM A REMOTE LOCATION

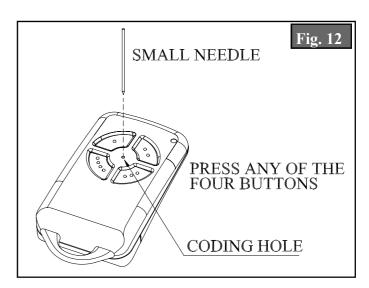
Using this method you don't need to have access to the control box or receiver. However, you do need a transmitter that is pre coded to the controller's receiver.

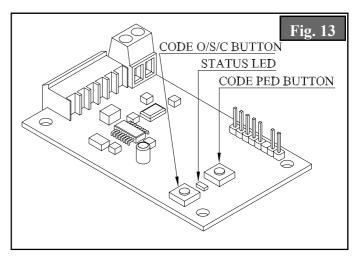
IMPORTANT NOTE: The gate must be activated when the step below is preformed. The moving gate is to confirm from a remote location that the correct button was pressed and the transmitter is in range of the opener of a pre coded Transmitter.

- 1. Take any pre coded Transmitter. Press the button for the function you require until the gate is activated and release.
- 2. Then using a small needle press and hold firmly for 2 seconds through the **Coding Hole** (Fig 12).
- 3. Within 10 seconds take the additional transmitter you wish to code and Press the button (one of four) on the Transmitter you would like to use to control the gate for approximately two seconds. Pause for two seconds. Press the same button again on the Transmitter for approximately two seconds.

DELETING TRANSMITTER CODES

- TO DELETE ONE TRANSMITTER
- 1. **Press and hold** the Code O/S/C button (pressing the PED code button will only delete the PED function for that transmitter) on the receiver [20]
- 2. Press the button (one of four) on the Transmitter you would like to delete from the receiver for approximately two seconds. Pause for two seconds. Press the same button again on the Transmitter for approximately two second.
- 3. Release the Code O/S/C button.
- 4. Press the Transmitter button to see if it operates the gate.
- TO DELETE ALL TRANSMITTERS
- 1. Turn off mains power at the switch (and if the battery backup is connected, remove the VAC shunt [17] and replace after step 2).
- 2. **Press and hold** the Code O/S/C button on the receiver Fig 13 while turning on the mains power, continue to hold the Code O/S/C button for a further ten seconds.
- 3. Press the Transmitter button to see if it operates the gate. No transmitter should operate the gate.





WIRING TERMINALS & CONNECTORS

CONTROL AND SAFETY INPUT TERMINALS.

Figure 14 shows how to wire the control and safety input terminals to switches, such as a Photo Electric Beam. Note that the P.E., OPN and STP inputs require a normally closed contact, which is provided by the shunts (see Fig 11 and Fig 14). **The appropriate shunt must be removed when the P E, OPN or STP inputs are used.** The CLS, OSC and PED inputs require a normally open contact.

ATA Photo Electric Beams are available:-Order code 90214 for receiver/transmitter type. Order code 91315 for reflective type.

LOCK RELEASE OUTPUT FOR SOLENOID LOCKS.

Figure 15 shows how to connect an electric solenoid lock to the control board's lock release output. Note the lock release output only switches the applied voltage to the lock and must be "wetted" with the appropriate voltage.

ATA Electric impulse lock Order code 90101.

LOCK RELEASE OUTPUT FOR MAGNETIC LOCKS.

Figure 16 shows how to connect an electromagnetic lock to the control board's lock release output. Note the lock release output only switches the applied voltage to the lock and must be wetted with the appropriate voltage (24VDC in the example shown). Note that the lock is connected to the normally closed contact of the lock release output as the lock is energised when the controller is idle and not driving the motors. Note the lock output's action will need to be programmed for a hold action when this type of lock is used.

LIGHT CONTROL RELAY MODULE.

Figure 17 shows how to connect the optional relay module to the

control board's connector [21]. It also shows how to wire a light to the relay module. ATA supply this with a 240VAC to 24VDC relay. Any voltage relay can be used provided the relay module is able to switch the required voltage and current. Make sure any mains voltage lighting is properly earthed.

E.g., Use this to control lights on a gate pillar, garden lights or security lights.

ATA order code 90111.

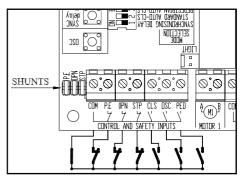


Figure 14: Wiring control and safety inputs.

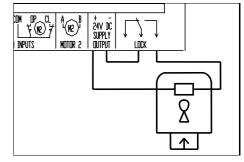


Figure 15: Wiring solenoid locks

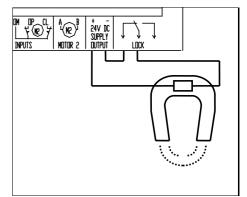


Figure 16: Wiring magnetic locks

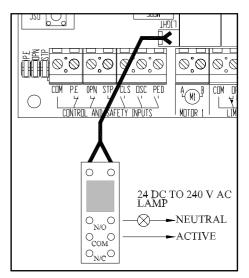


Figure 17: Wiring light control relay module.

INSTALLATION OF BATTERY BACK-UP

A battery backup system is provided so that the gate can be controlled (for a limited time) in the event of mains power failure. When the backup system is utilised, the control board detects the presence of mains voltage from the domestic power grid. When the mains power fails the control board switches to the backup supply provided by a 24V DC battery. When mains power is reinstated the control boards switches back to mains supply.

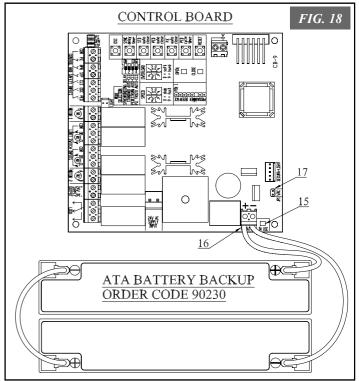
The following items are required to use the battery backup system: 1. A 24VDC battery connected to the control board connector [16] (Fig 18).

2. Ensure a shunt is placed on the VAC pins [17] (Fig 18).

The control board has a built in charger which maintains the battery charge when mains power is present. The control board monitors the battery voltage during use and prevents over discharging, which damages the battery, by shutting down the control board if the battery voltage gets too low.

The 'IN USE' indicator [15] (Fig 18) illuminates when mains is not present and the battery is being used.

The 'VAC' shunt can be removed to prevent the battery system being used when mains power fails. Note the battery charge is still maintained provided mains is present. This link is provided so that the controller can be turned off when a backup battery is connected. It is removed when complete absence of power is required. For example when clearing the receivers memory of all codes.



OPERATING INSTRUCTIONS FOR THE OWNER

OPERATING THE GATE OPERATOR

- Press the Button on the Transmitter programmed for full gate opening for two seconds to open or close the gate.
- Pressing the Transmitter Button again during operation will cause the gate to stop.
- Pressing the button again will cause the gate to move in the opposite direction.
- This is the Open Stop Close function of the remote control.
- Press the button on the transmitter programmed for pedestrian access and the gate will partly open. Press the button again and the gate will close.
- When a Auto Close mode selection switch is "ON" the gate will auto close after 15 30 seconds or as triggered by breaking the P E Beam and commencing the timer. Refer to Page 14 & 15 for details or call your installer to adjust.
- Read the Mode Selection Switches section and Control Board Adjustments section for details on various other settings and options.
- Disengage to manual operation refer to Page 7, Fig 3 & 4.
- The built in **safety feature** will sense an obstruction. When obstructed during closing it will reverse to the open position and when the gate is opening the gate will stop. Refer to page 12 step 7 for adjustment details.

CARE OF TRANSMITTER

- Do not leave transmitter in direct sunlight (i.e.; on top of the car dashboard).
- Do not expose transmitter to excessive heat and/or water.
- Do not subject transmitter to shock or vibration (i.e.; dropping of transmitter on ground).
- Keep transmitter out of reach of children at all times.
- Batteries will loose their power over time and will need replacing periodically.

ROUTINE MAINTENANCE

- Your Opener is design for **trouble free operation**, however we recommend to re-grease all internal drive gears with a high pressure **lubricant at 12 monthly intervals**. Failure to provide routine maintenance will shorten the openers life.
- Closing and opening obstruction forces should be checked regularly and any necessary adjustments made. Refer to Page 12, Step 7 for instructions on correct setting of overload sensitivity settings and initialisation.

SERVICE

- For on site service and assistance contact your gate/opener installer or local ATA distributor. They will be able to inspect and service both your gate and opener.
- Write the details of your installer here for future reference.

Installers Name

Ph.

FAULTS AND REMEDIES

Gate does not open and/or close	Check that Control Box is plugged into mains power. Check that motor is engaged for automatic operation. Check all wiring from motor and microswitches to the control board are sound.
Gate re-opens when closing or stops when opening	Check obstruction overload sensitivity adjustment (See Page 12, step 7) Check for obstructions. Disengage the drive unit to manual (see page 7) and check the gate is in good working order (see page 6 step 1.1 & 1.2). If a P.E. beam is fitted ensure it is clear of obstructions or dirt on the lense
Remote transmitter not functioning	New transmitters must be coded to the receiver (refer to page 16). Check/change the battery in the transmitter. Having the antenna behind a structure (gate or fence) or out of sight may reduce optimal range/reception. Interference from external/outside sources such as baby monitors, or radio transmitter etc. The best solution is to remove the source causing the in- terference.
Gate or opener requires a service	Contact the installer of the opener or local ATA distributor for service. They will be able to inspect, reset, service, adjust or repair the gate and opener as necessary.

SPECIFICATIONS

DIVE UNIT

Motor:	24 volts DC
Speed:	Drive arm/motor speed is adjustable in the control box
Size:	135mm wide, 290mm high and 230mm deep
Weight:	13kgs including arms

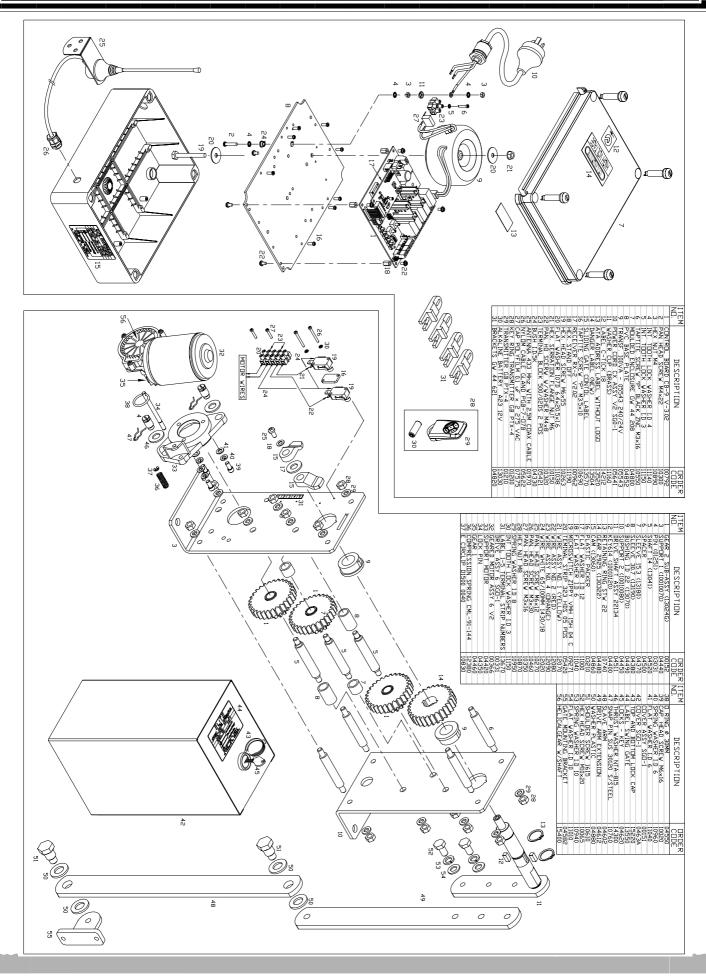
ELECTRONIC CONTROL BOX

Input Voltage:	240 volts/50Hz AC
Output Voltage:	24 volts DC from control board
Transformer Rating	24 volts AC, 100VA
Control System	Microprocessor control unit
-	Surface mount technology circuit board
Wiring System	Via on board terminal blocks
External Box	Weatherproof box when used with mounting kit and cable gland, IP56 rated
Transmitter/Receiver	ATA model hand held transmitter 4 buttons, code hopping type, 9 VDC batteries included
	ATA model receiver two channel code hopping type with over 4.29 billion codes
	and 27 transmitter code store capacity. The transmitter frequency is 433.92 MHz.
Size	190mm wide, 240mm high and 100mm deep
Weight	4Kgs

The specifications above are approximate only.

ATA reserve the right to alter specifications at any time without notice in accordance with the Company's policy of continuous product development.

SPARE PARTS LIST



****WARRANTY AND EXCLUSION OF LIABILITY****

Subject to all of the matter set out below, Automatic Technology Australia Pty Ltd ("ATA") WARRANTS for twelve months from the date of purchase (specified in the receipt sales docket) that the Elite Swing Gate Opener contained in the accompanying (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, fire or lightening;

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

D) installation, adjustment or use other than by ATA which is not in accordance with the instructions set out in installation instruction 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) water damage and/ or moisture damage.

J) failure to provide adequate cable glanding and adequate sealing of the operator control box.

K) 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 be 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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