

B&D CONTROLL-A-GATE INSTALLATION & USER MANUAL







INTRODUCTION

This manual is a guide to introduce you to the B&D Controll-A-Gate Range.

It will detail features, specifications and advice on how to best utilise the B&D Controll-A-Gate System and provide the required knowledge to be able to install and operate the System in a professional manner.

The B&D Controll-A-Gate can be activated by either pressing the remote control transmitter button, turning the keyswitch or entering the code into the Entry Keypad.

When activated, the system will open or close a gate completely.

The Control Unit is capable of operating up to two Swing or Slide Drive Units and two Safety Infra Red Beams. It is also capable of controlling optional accessories including Push Buttons, Battery Backup, Keyswitches, Solar Panel and Magnetic Lock.

The system allows adjustment of motor torque, automatic closing time, wing delay and opening time of gate. The control logic of the system can also be adjusted by several dipswitches to allow automatic closing and other features.

The B&D Controll-A-Gate Safety Infra Red Beam ensures the gate will not cause damage to obstructions in the path of the gate. If the Safety Infra Red Beam is obstructed whilst the gate is closing, the gate will stop and reverse.

In the event of a power failure, the Battery Backup Kit (if fitted) will provide a limited amount of operations or the gate can be operated manually. No user adjustment is required after a power failure.



This symbol indicates a Caution – a personal safety or damage instruction that should be noted.



This symbol indicates a warning that must be adhered to for safe operation of the device.



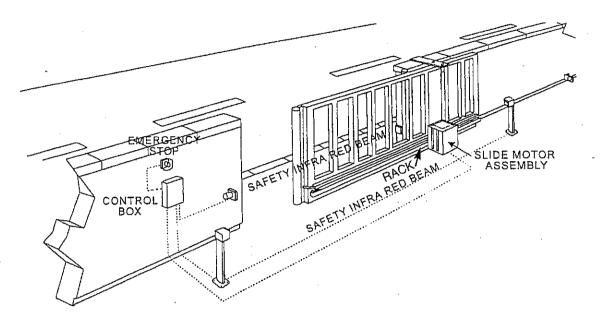
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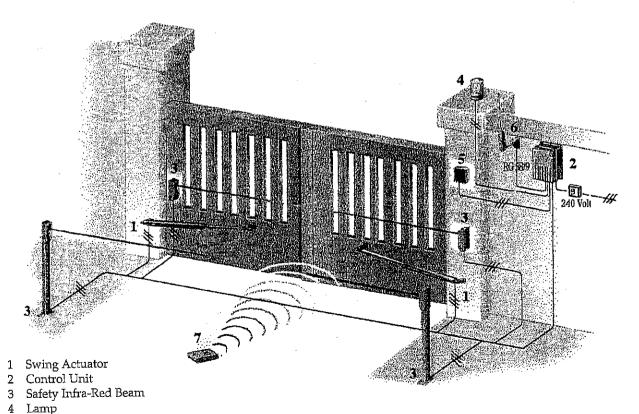


GENERAL ARRANGEMENT

SLIDING GATE GENERAL ARRANGEMENT



SWING GATE GENERAL ARRANGEMENT



- Key Switch
- 6 External Antenna
- Remote Transmitter



PRE-INSTALLATION INSPECTION

The Gate and its hardware must be inspected prior to the installation of the B&D Controll-A-Gate. The installation manual should be read fully before commencing the installation and the following ensured:

- > The gate is in good condition, i.e. not binding, is of suitable size and is structurally strong enough to be operated automatically.
- There is suitable position for the Control Unit to be mounted out of direct sunlight and where it will not be damaged. (Recommended 1.5 metres above ground level.)
- > All locks and latching mechanisms are removed or disengaged from the gate.
- > The Safety Infra Red Beam must be installed if the system is to be operated in Automatic Close mode.



A properly earthed, 3 pin, 240 volt power supply should be installed within one metre of the Control Unit by a qualified electrician in compliance with local building and electrical standards.



Handle tools and hardware carefully and do not wear rings, watches or loose clothing whilst installing or servicing a gate opener.



Ensure all electrical power is switched off or disconnected before and during installation.

FOR SWING GATES

- The gate posts are structurally strong enough to support the Swing Actuators.
- ➤ The gate posts are dimensionally suitable for the required open/close times and the maximum opening angle of the gate. (See Swing Actuator Mounting.)
- The gates have a hard-stop at either end of their travel (not supplied in kit).

FOR SLIDING GATES

- The ground is level where the Slide Motor Assembly is to be mounted.
- The running rail of the slide gate is straight and not buckled.
- The gates have a hard-stop at either end of their travel.



MOUNTING SLIDE MOTOR ASSEMBLY

All electrical cables used must be suitable for use outdoors.

All electrical wiring connections must be made in a weather-proof insulated enclosure.

The Motor Assembly 2-Core cable must have a rating of at least 10 Amps per core at 12 Volts.





The Motor Assembly should be mounted level with the gate.



The maximum size gate the Motor Assembly is suitable for is six metres wide.

- > The Motor Assembly can be mounted for either left or right-hand operation.
- The Motor Assembly is self-locking.

INSTALLATION

- 1. Mount the Motor Assembly and Mounting Plate on the ground (The dimensions are as per the installation diagrams one and two.) Do not tighten the mounting bolts at this stage.
- 2. Release the motor to manual mode.
- Using the rack as a guide, adjust distance from the motor to the gate. Tighten the motor mounting bolts.
- 4. Mount the Rack on the Gate as per the installation diagrams 1 and 2 and ensure it does not load the sprocket and runs smoothly over the length of the gate.
- 5. Attach the spring to the limit switch, put the Rubber Boot over the limit switch allowing the spring to poke through and attach the stopper to the end of the spring.
- 6. Mount the limit Brackets on the gate or rack at the required end of travel points.
- Re-engage the motor to automatic mode.

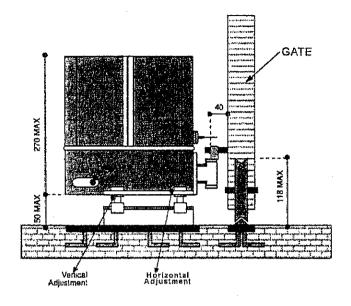




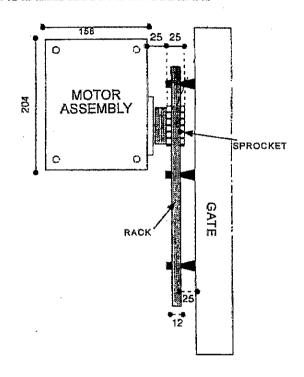
Make sure that the gate itself does not come into contact with the limit switch as it can be damaged.

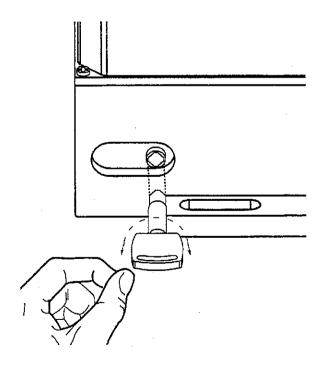


INSTALLATION DIAGRAM 1



INSTALLATION DIAGRAM 2





MANUAL MOVEMENT

The Motor Assembly can be manually opened or closed by inserting the key provided into the manual release switch and turning.

To re-engage the Motor Assembly, simply turn the key in the opposite direction.



MOUNTING SWING ACTUATOR

All electrical cables used must be suitable for use outdoors.



All electrical wiring connections must be made in weather-proof insulated enclosure. The Motor Assembly 2-Core cable must have a rating of at least 10 Amps per core at 12 Volts.

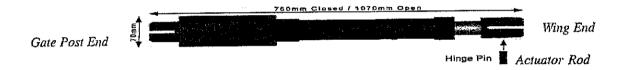


The Actuator can be mounted for either left or right hand operation.

The maximum size single gate the Actuator is suitable for is 3 metres.

The Actuator is self-locking.

The Actuator should be mounted level with the gate.

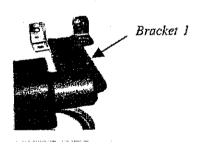


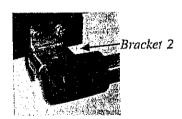
INSTALLATION

- 1. Fit hard stop to stop the gate in the closed position.
- 2. Assemble Bracket 1 and 2 as per diagrams.
- 3. Mount Bracket 1 to the gate post as per the dimensions in the dimensions table (refer to page 9).

Note: Bracket 1 can be cut to achieve the required dimensions.

- 4. Attach the Gate Post end of the Actuator to Bracket 1. Note: Ensure the wiring harness faces down.
- Fully extend the Actuator Rod by turning anti-clockwise, then turn the Actuator Rod one turn in the opposite direction (clockwise).
- 6. Attach Bracket 2 to the Actuator Rod.
- 7. Using the Actuator, align Bracket 2 with the gate and mount the bracket to the gate whilst the gate is in the fully closed position.
- 8. Ensure all bolts are sufficiently tight.
- 9. <u>Fit a mechanical stop at the open position</u>. (Make sure the actuator does not come into contact with the gate post at any point in its range of travel. The installation dimensions may have to be altered to ensure this.)







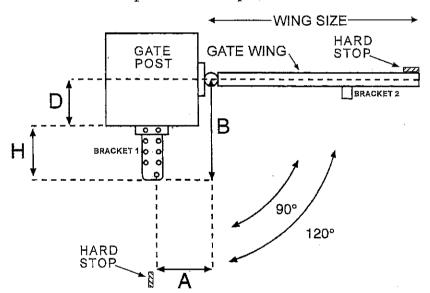
MANUAL MOVEMENT

The Gate can be manually opened or closed by loosening the Allen Key bolt on Bracket 2. This will release the Actuator Rod from the Gate. The Gate can now be moved manually. The Actuator can be rotated clockwise to shorten and anti-clockwise to extend. Take care to re-attach the rod to Bracket 2 and tighten.

DIMENSIONS

The Dimension table should be used to mount the Actuator. By varying dimensions A and B it is possible to adjust the speed and angle of operation.

- > B greater than A: Slower, smoother opening, smaller opening angle.
- ➤ A greater than B: Faster, greater opening angle, however when closing the gate makes harder and faster contact with the hard stop. (Adjustment of the Controll-A-Gate "Soft Finish" will reduce the impact on the stops.)



Wi	Wing Size = 0-1750mm		
D	50mm	75mm	100mm
A	120mm	120mm	100mm
В	150mm	150mm	175mm
Н	100mm	75mm	75:mm

Wing Size = 1760-2250mm			
D	50mm	75mm	100mm
A.	150mm	150mm	120mm
В	150mm	150mm	175mm
H	100mm	75mm	75mm

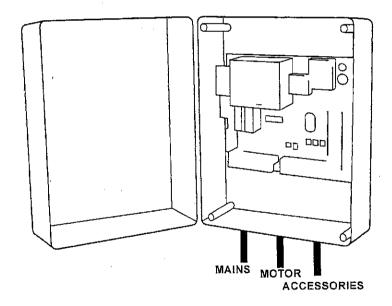
Wing Size = 2260-3000mm			
D	50mm	75mm	100mm
A	150mm	150mm	150mm
В	150mm	150mm	175mm
Н	100mm	75mm	75mm



MOUNTING CONTROL UNIT

Before fitting the Control Unit make sure the location is suitable:

- ➤ It is recommended to mount the control unit at least 1.5 metres above the ground to reduce risk of flooding and to improve radio frequency reception.
- The Control Unit should not be fitted where it will be continuously exposed to direct sunlight.
- > The Control Unit must be mounted vertically as per the instructions on the Enclosure.
- > All cable entry should be through the bottom of the enclosure.
- Suitable Sealing Glands should be used to preserve the IP rating.



- > Do not mount the control unit in rainy weather.
- > Make sure the power cord is not under tension.
- Make sure the actuator cables have sufficient length that they are not under any tension at any point in the actuator's movement.
- > A minimum of three entry points are required for the wiring as per the diagram.
- Any wiring connections should be enclosed in a suitable weatherproof junction box.

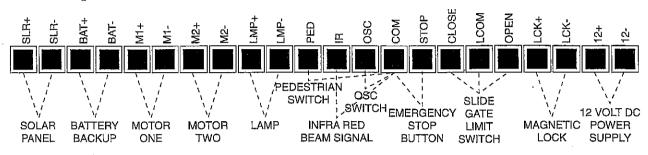
<u>B&D recommend a small "roof" be installed above the control unit to provide protection against weather extremes and to maximise the life of the product.</u>



WIRING TO CONTROL UNIT

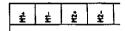


The power should remain disconnected until the pre power-up check has been completed.



ACTUATORS

The Swing Actuators or Slide Motor Assemblies should be wired into the terminals marked M1+/M1- and M2+/M2-. The polarity is confirmed during the Power-up check.



The Swing/Slide dip switch should be set according to the gate type.

e.g. double, swing gate

➤ If your B&D Controll-A-Gate is only using one setuator, wire it into M1+ and M1- and select 1 motor on the motor's dipswitch.

FOR SWING GATES

- ➤ If one gate is required to open first, the actuator that is required to open first must be wired to M1+/M1-.
- Terminals OPEN, CLOSE and LCOM should be bridged.

FOR SLIDING GATES

- Wire the limit switches into the terminals CLOSE, L COM and OPEN. Wire the Closed position limit switch to the CLOSE terminal and the Open position limit switch to the OPEN terminal. Remove any bridging wires from the terminals.
- For double slide gates, wire the two Open position limit switches in series with each other and the two Closed position limit switches in series with each other.

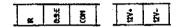




SAFETY INFRA RED BEAMS

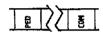
Note: The IR-COM terminals should be bridged if IR beams are not fitted.

The Safety Infra Red Beam sensing circuit should be wired to the IR and COM terminals. The Safety Infra Red Beam power circuit should be wired to the 12V DC power terminals. Remove any bridging wires from the terminals.



PEDESTRIAN OPENING

A Wired Push Button, Entry Keypad or Momentary Switch can be used to activate the pedestrian opening facility. The device should be wired to the PED and COM terminals. For swing gates, pedestrian opening opens M1. For slide gates, pedestrian opening opens the gate half-way.



OPEN/STOP/CLOSE

A Wired Push Button, Entry Keypad or Momentary Switch can be used to activate the Open/Stop/Close facility. This will fully open or close the system. The device should be wired to the OSC and COM terminals.



EMERGENCY STOP BUTTON

A latched, normally closed push button can be used to activate the "Emergency Stop" facility. This will stop the actuators and the system will not accept any requests until the Stop Button is reset. The device should be wired to the STOP and COM terminals. When the Stop Button is fitted the terminal bridge should be removed. The Stop button will not function if the bridge is not removed.



REMOTE STATUS INDICATOR

The remote status indicator is a wired push button which includes an LED that indicates the gate's status.

ON

- Open

OFF

Closed

FAST FLASH

Closing

SLOW FLASH

Opening

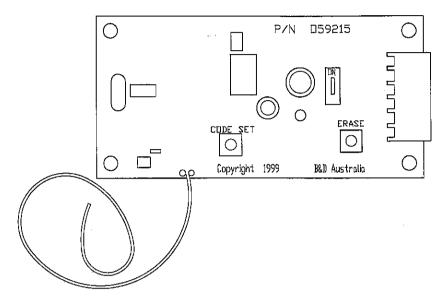
The connector on the remote status button should be plugged into the remote status socket on the Printed Circuit Board.





RECEIVER

The 433MHz Plug-In Receiver plugs directly onto the 6-Pin connector on the Control Unit. The receiver should be installed so that the buttons on the receiver face upwards.



LOCK

The Magnetic Lock protects the actuators from damage and provides extra security. The Lock should be wired to the LCK+ and LCK- terminals.

WARNING LAMP

The Warning Lamp indicates when the gates are in motion. The Lamp should be wired to the LMP+ and LMP- terminals.

BATTERY BACKUP

The Battery Kit provides backup when mains power is removed. The battery should be wired to the BAT+ and BAT- terminals.

BAT.

SOLAR PANEL

The Solar Panel can be used to keep the battery backup charged over extended periods of mains power failure. The Solar Panel should be wired to the SLR+ and SLR- terminals.

ACCESSORY POWER

The Control Unit can power 12VDC accessories up to a total maximum limit of 100mA.

12.4. 12.4.



PRE POWER-UP CHECK

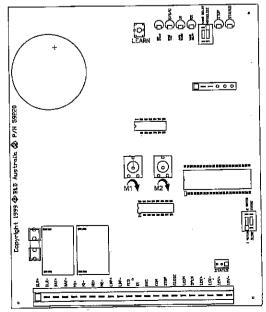
When you have completed the installation of motors and wiring of the system check the following before turning the power on:

- IS IT A SWING OR SLIDE GATE? Make sure the swing/slide motor switch corresponds to your system. The receiver must be removed to access the switch. Note: For swing gates the OPEN, CLOSE and LCOM terminals must be bridged.
- ARE THERE ONE OR TWO MOTORS? Make sure the single/double motor switch corresponds to your system. Note: If swing/slide or 1/2 motor switches are changed while the B&D Controll-A-Gate is on it will ignore all requests. The B&D Controll-A-Gate must be turned off for the change to be accepted.
- > FOR SWING GATES, DO YOU WANT "SOFT FINISH"?

 Make sure the switch status is correct, DIP switch = ON = No Soft Finish = 100% Power.

 DIP Switch = 1 = Soft Finish enabled.
- DO YOU WANT THE GATES TO AUTOCLOSE? Make sure the switch status is correct.
- IF AUTOCLOSE IS SELECTED, IS THERE AT LEAST ONE SAFETY INFRA RED BEAM KIT FITTED? A Safety Infra Red Beam is required if autoclose is selected.
- IS THE GATE AREA FREE FROM OBSTRUCTION?
 Make sure all tools, obstructions, etc. are removed from the operating area of the gate.

CONTROL UNIT ELECTRONICS





POWER-UP & SET UP PROCEDURE

If the system is being powered up for the first time it will use the factory settings to operate until you adjust them in the Learn Mode. These factory settings are as follows:

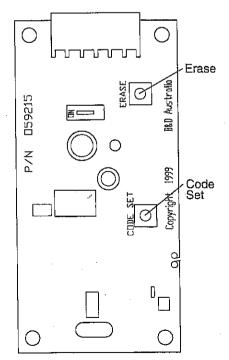
	SWING GATES	SLIDE GATES
Soft Finish	Full Power	Full Power
Opening Time	10 seconds	5 seconds
Autoclose	30 seconds	30 seconds
Wing Delay	10 seconds	N/A
-		

PROGRAMMING THE RECEIVER TO MATCH REMOTE CONTROL TRANSMITTER CODES

- 1. Press and hold the Code Set button for two seconds.
- 2. The green Code Set LED should now be lit.
- 3. Press the Remote Control Transmitter button to be set.
- 4. The green Code Set LED will extinguish and the Red Erase LED should flash momentarily to indicate the code is stored.



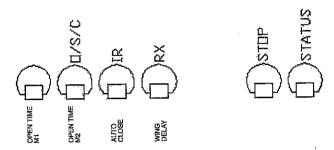
To erase <u>all</u> stored codes, press and hold the Erase Button until the red Erase LED extinguishes (approximately 15 seconds).





DIAGNOSTIC LEDs

The Control Unit has six LEDs fitted to aid in the correct operation of the system.



The most important of the LEDs is the red STATUS LED that indicates the position of the gates as follows:

On

indicates Gate(s) open

Fast Flash

indicates Gate(s) closing

Slow Flash

indicates Gate(s) opening

Off

indicates Gate(s) closed

The STOP LED indicates when illuminated that the Emergency Stop Button is pressed.

The RX LED indicates when illuminated that a signal is being received from the receiver.

The IR LED indicates when illuminated that the Safety Infra Red Beam is not aligned/obstructed.

The O/S/C LED indicates when the Open/Stop/Close button is pressed.

The LEDs also indicate the various steps of the Learn Mode as marked.

MOTOR POLARITY & FORCE ADJUSTMENT

For both Swing and Slide Gates, ensure Motors are wired with correct polarity as follows:

Manually move both gates to half open position (see actuator/motor assembly instructions).



Be prepared to stop the motors using the Open/Stop/Close Button or Remote Control Transmitter.

Press the Open/Stop/Close (O/S/C) Button or Remote Control Transmitter button once, the motors should move as per the gate status indicator, ie slow flash = opening, fast flash = closing.

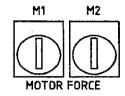


If the motors do not move in accordance with the status indicator, disconnect mains power to the system and change the polarity of the motor wiring.



For both Swing and Slide Gates, ensure the Motor Force is adjusted to suit the gates. The motor force must be adjusted to ensure the Collision Sensing operates correctly.

Each of the motors has a force adjuster. Set these fully clockwise.



- 1. Press the Open/Stop/Close or Remote Control Transmitter button to operate the gates.
- 2. While the gates are in motion turn the motor 1 (M1) adjuster anti-clockwise until the gates stop.
- 3. Turn the M1 adjuster clockwise 1/8th of a turn.
- 4. Now repeat steps 1-3 for the motor 2 (M2) adjuster.

You can now commence the Learn Mode to program your B&D Controll-A-Gate.



LEARN MODE

In order to "teach" the system how to operate in your application you must complete the Learn Mode.

There are four separate steps of the Learn Mode: M1 Opening Time, M2 Opening Time, Autoclose Delay and Wing Delay (Note: M2 Opening Time and Wing Delay is not functional on slide gates). The Diagnostic LEDs on the Control Unit will indicate which stage is being set. After each stage is complete the Control Unit will advance to the next step automatically. It is possible to adjust these settings individually by pressing the Learn Mode once to access Stage 1, twice to access Stage 2 and so on.

Each gate must have a hard-stop at either end of their travel. The gate will travel from hard-stop to hard-stop (swing gate).

- Have you programmed the receiver?
- Are gates fully closed?
- Have you checked motor wiring are they connected with correct polarity?
- > Have you checked other accessories' wiring?
- Have you adjusted motor force?

You must follow the following procedure in order to set up the Controll-A-Gate correctly.

RESET TO FACTORY DEFAULT VALUES

You can reload factory default values anytime by pressing and holding the "Learn Mode" button for eight seconds. Instructions are as follows:

Press and hold Learn Mode button for eight seconds. You will see the M1 Open Time green LED will light up after two seconds. It will go off after four seconds (this will not happen if both gates are fully or partially opened, in this case you can still reset the system). The Auto-Close green LED will light up after eight seconds. Release the Learn Mode Button NOW and all four green LEDs will light up momentarily, the system is now reset back to factory settings.

It is recommended to *Reset*, if the Controller has been set up previously and you wish to change the settings.



Refer to flow chart on page 21. (Swing Gates ONLY)

> Enter the "Learn Mode" (Press and hold Learn Mode button for two seconds. The green M1 Opening Time LED will light up – do not hold longer as you might enter Reset function).



STEP 1 - M1 OPENING TIME LEARN

The gates should be fully closed at this point. If they are not, use the Reset function. The M1 Opening Time LED will be illuminated to indicate opening Time Mode for Motor 1.

> Press the Remote Control Transmitter, motor 1 will begin to move at full speed until it reaches the open hard stop.

If 2 motor operation is selected the system will go to M2 Opening Time.



STEP 2 – M2 OPENING TIME

(Swing only) The gate two should be fully closed at this point. If not, complete this stage anyway and then repeat step two at the end of Learn Mode. The M2 Opening Time LED will be illuminated to indicate opening Time Mode for M2.

> Press the Remote Control Transmitter, motor 2 will begin to move at full speed until it reaches the open hard stop.

If Autoclose is not selected, the gate(s) will close automatically and the system will go directly to the *Learn* Wing-Delay Mode.



STEP 3 – AUTOCLOSE DELAY

If the gate(s) are required to close automatically after they have been opened, Autoclose should be selected on the Control Unit and a Safety Infra Red Beam must be fitted. The Autoclose Delay is the time the gates stay open before closing. The delay can be set from 1 to 180 seconds.

- If Autoclose is selected, the Autoclose LED will be lit (after finishing step 2).
- > Press the Remote Control Transmitter to start the Autoclose Timer (the gate will not move).
- > When the gate has been open long enough, press the Remote Control Transmitter again. The gate(s) will close. (M2 will close after M1 is closed.)
- > The Autoclose Delay is now set.



Slide Gates or Single Swing Gates do not require Wing Delay therefore the system exits Learn Mode at this point.



STEP 4 – WING DELAY

(Swing only) If your swing gates overlap you will need to set the wing delay. This is the delay required between the overlapping gate starting to open and the second gate starting to open. When the gates are closing they will close in the opposite order. The required Wing Delay will differ depending on the degree of overlapping. The delay can be set from 3-20 seconds.

If no wing delay is required (in case of two non-overlapping gates), set wing delay to 1-3 seconds, this will set the wing delay time to 0 seconds (no wing delay).

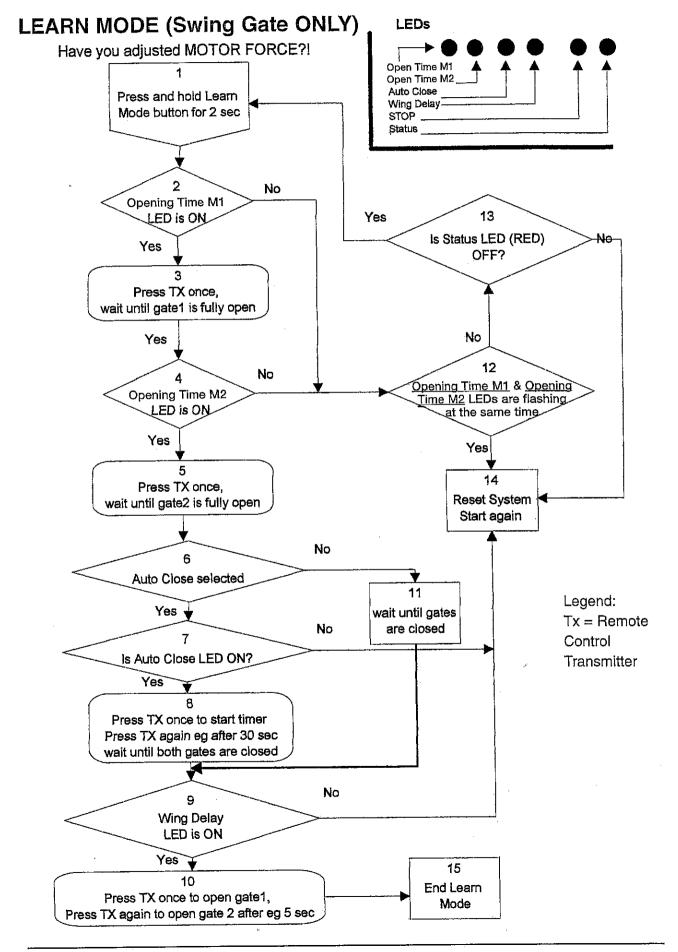
- ➤ Motor 1 will always open first.
- > Press the Remote Control Transmitter, motor 1 starts to open.
- When motor 1 has opened far enough to allow motor 2 to open, press the Remote Control Transmitter, motor 2 will start to open (We recommend minimum 5 seconds for wing delay).
- Wing Delay Time is now set and the gates will open fully.

You have now finished setting up the B&D Controll-A-Gate.

Check that both motors travel through complete range.

Before leaving the site, ensure the B&D Controll-A-Gate and all accessories are fully functional and the control unit is closed completely with the weather seal in place. Ensure the gates travel through the complete range of travel without stopping. If the gates do stop, increase motor force (M1 or M2) slightly. <u>Do not over-increase motor force</u>.







USER MANUAL

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Thank you for choosing B&D's Controll-A-Gate. This automatic gate opener has been designed and developed to suit local conditions and to be as "user friendly" as possible.

We trust you will appreciate the many features and quality materials that have been built into this product.

Some of these built-in features are:

- ➤ Two years full parts and labour warranty on motor, electronics and mechanical components of the opener.
- ➤ Your own private security code precoded with one of 3.486 billion available codes, meaning only you can open your gate.
- > B&D Technology allows you to electronically program security codes at the touch of a button.
- > Standard three channel remote control transmitter allows you to operate an additional garage door if automated, on the 433 MHz frequency.
- > Automatic safety reduces serious damage to person and property should the gate be obstructed whilst closing. For added protection B&D recommend all automated gate systems have safety infra-red beams fitted.
- > You don't have to lock the gate when closed as the B&D Controll-A-Gate positively locks when closed.
- > No need to reset after the power has been interrupted as the B&D Controll-A-Gate's memory remembers all the settings indefinitely.
- > Adjustable power settings to compensate for changes in gate condition.

B&D Controll-A-Gate has a range of additional accessories for your added convenience and security.

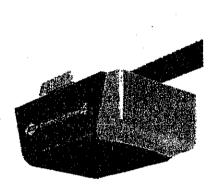
- Safety Infra Red Beams Part No. 59207 gives additional protection if the gate is closing onto your property or person. Simply breaking the beam, stops the gate! Required if the auto close feature is selected.
- > Keyring transmitter Part No. 62165. Ideal for personal use when the only entry into the property is via the gate. Easy for children to use.
- Entry Keypad Part No. 62173. Key in your own four digit PIN (personal identification number) and you can allow limited entry for tradespeople and change the code after



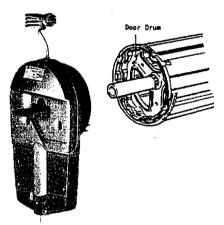
they have finished. Allows you to enter and lock without taking a key or remote control transmitter with you. Easy for children to use, no need to hide a key!

- Transmitter Wall Button Part No. 62163. Allows you to operate the opener within 10 metres of the gate. Ideal for mounting inside the front door allowing you to open and close the gate when you want.
- Remote Control Transmitter 3 Channel 433MHz Part No. 62170. Get a spare Remote Control Transmitter for your second car, mount inside your front door for an easy option to open your gate or just have one as a spare.

Also available for your convenience are the B&D Controll-A-Door 4 and B&D Controll-A-Door 5 automatic garage door openers. With models to suit roller and sectional/tilt garage doors for residential applications.



Controll-A-Door 4



Controll-A-Door 5

Most of the B&D Controll-A-Gate Accessories are also suitable for use with B&D Controll-A-Door 4 and 5.

Ask your dealer or B&D for details about automating your garage door as well. Just think of the convenience as your remote control transmitter opens your gate and your garage door with the simple push of a button.



HOW TO OPERATE THE B&D CONTROLL-A-GATE

This section sets out how to:

- ➤ Use the B&D Controll-A-Gate safely
- > Use the Remote Control Transmitter
- Use your gate if there is a power failure

It also explains some of the system's functions.

IMPORTANT SAFETY TIPS WHEN OPERATING YOUR B&D CONTROLL-A-GATE



Only use the gate when you can see it and there is nothing in the way. No-one should enter or exit the gate while it is in motion.

Do not allow children to play near an operating gate.

Make sure the gate is balanced and moving smoothly.

HOW TO USE THE REMOTE CONTROL TRANSMITTER

- ➤ Make sure you are pressing a button on the Remote Control Transmitter that has a code stored in the receiver (refer p.15).
- Press the button to open, stop or close the gate.
- If in the car aim at gate through your windscreen.
- > Do not pass through the gateway unless the gates are fully open and stationary.
- > If you press the transmitter while the gate is:
 - closing, it will stop. If you press again it will open.
 - opening, it will stop. If you press again it will close.

HOW TO USE YOUR GATE IF THERE IS A POWER FAILURE

When there is a power failure and you do not have a battery backup, the B&D Controll-A-Gate is unable to open or close your gate. To open or close, the gate will have to be moved manually. Check the manual movement instructions for the actuator or motor assembly used by your B&D Controll-A-Gate (refer pages 6-9). When finished, place the gate in the position it was prior to the power failure. (This does not have to be exact as the system will overcome any discrepancy.)

If the gate is the only means of access to your property we suggest that you install a B&D 12V Battery Backup Kit (P/N 59206) to your B&D Controll-A-Gate. This will allow you to open or close your gate in case of emergency during a power failure. The B&D Solar Panel can be used to charge the battery when mains power is not available.

If the power failure occurred whilst the gate was in motion the system has to reconfirm its limits. It does this the next time you press the Remote Control Transmitter, by closing until it touches the hard stop at the closed position. The safety collision sensing will operate during the limits reconfirmation.



HOW TO MAINTAIN THE B&D CONTROLL-A-GATE

Do not point garden hose near the Control Unit or components.

The B&D Controll-A-Gate should be checked monthly to verify correct operation.

- Operate the gate manually to check if it is unbalanced or sticking.
- > Ensure the B&D Controll-A-Gate Control Unit is closed securely and does not allow ingress of water, dust, insects or other material.
- > Operate the gate and check the automatic safety feature, ensure the gate stops when obstructed.

You should also have the gates serviced regularly.

FUNCTIONS OF THE B&D CONTROLL-A-GATE

MEMORY

The B&D Controll-A-Gate has a memory that stores the information needed to operate the gate including opening time, limits and safety. This information is retained indefinitely even during power failures.

COLLISION SENSING

The B&D Controll-A-Gate stops if a collision is sensed whilst closing or opening. This is intended as a safety backup. However, to guarantee safety, people should not pass through the gateway while the gate is in motion. The B&D Controll-A-Gate should not be operated when there is anything in its path.

AUTOMATIC LOCKING

When the gate is closed and the actuator is engaged, it is locked by B&D's self-locking actuators.

AUTOCLOSE

The B&D Controll-A-Gate has a facility to automatically close the gates after a user-set period of time. It is possible that nobody is present as the gate closes. Therefore it is recommended that if automatic closing is selected, at least one and preferably two Safety Infra Red Beams are installed and functional.

WING DELAY

For swing gates the B&D Controll-A-Gate has a facility to delay the opening of the second gate until the first gate is clear. The length of the delay is user adjustable.

SOFT START AND FINISH

In order to prolong the life of your gate, the B&D Controll-A-Gate slows the gates down at either end of their travel.

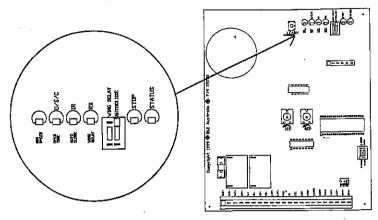
EMERGENCY STOP

In an emergency situation the B&D Controll-A-Gate can be stopped instantly by pressing the emergency stop button (if fitted). The gates will not move until the button is reset and the Remote Control Transmitter is pressed.



SOLVING PROBLEMS

The B&D Controll-A-Gate is equipped with Diagnostic LEDs to aid in solving problems.



In normal operation the system will indicate the following:

RX:

When lit, indicates receiver is operational.

IR:

When lit, indicates the Safety Infra Red Beam is either not aligned, the

terminals are not bridged or there is an obstruction.

OSC:

When lit an Open/Stop/Close request is being received.

STOP:

When lit the system is in EMERGENCY STOP mode.

STATUS:

Off

Gates Closed

On

Gates Open

Fast Flash

Gales Ope

Slow Flash

Closing

Slow Flash

Opening

The B&D Controll-A-Gate Plug-In Receiver is also equipped with diagnostic LEDs.

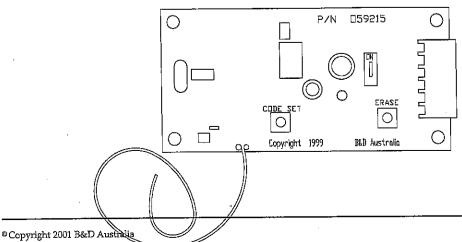
CODE SET:

Indicates, when flickering or on, a transmission at 433MHz is being

received.

MEMORY FULL:

Indicates, when on, that the memory is full.





TROUBLESHOOTING

CAG - Controll-A-Gate

OSC - Open/Stop/Close

IR – Safety Infra Red Beam

Rx - Receiver

SYMPTOM	PROBABLE CAUSE	REMEDY
The CAG does not work from either the OSC button or the Remote Control Transmitter	No power connected Power cord damaged IR Beam not aligned or obstructed Motor Force too low Stop Button pressed	Plug in a device, e.g. a lamp into the power point and check that it works Call B&D Service Agent to replace power cord Align or remove obstruction Adjust force potentiometers (p. 17) Reset Button
The CAG does not work from OSC button	Does the OSC LED 'light' when the OSC button is pressed? Faulty Wiring Using an Entry Keypad?	Possible faulty board, call B&D Service Agent Check the wiring Check you are using correct code
The CAG does not work from the Remote Control Transmitter Button	RX LED lights up when the Remote Control is pressed The Remote Control Transmitter battery is flat Remote Control Transmitter code not stored in the receiver Receiver installed incorrectly Is the CODE LED flickering constantly	Possible faulty PCB, call B&D Service Agent Replace Remote Control Transmitter battery Store Code in receiver (p.15) Buttons should face away from the main board Remote Control Transmitter button may be stuck on
Gates travel in different directions	Motor Polarity incorrect	Change Motor Polarity (p.16)
Powered Accessory not working	Faulty wiring	Check voltage requirement and wiring
Safety Infra Red Beam not working	Terminal Bridge still in place Beam out of alignment Faulty wiring	Remove Terminal Bridge Align Beam Fix wiring
Emergency Stop Button not working	Terminal Bridge still in place	Remove Terminal Bridge
Limit Switches not working	Terminal Bridge still in place Faulty wiring	Remove Terminal Bridge Check wiring



SPECIFICATIONS

GATE CONTROL UNIT

Motor Current

3A per motor 3 minutes maximum

Rated Operating Time

6 minutes/hour

Motor Supply Voltage

12 Volt DC

Battery Fuse

F10A (10 Ampere Fast Blow)

Accessory Load

100mA Maximum

Lamp Load

21 Watt

SWING ACTUATOR

Max Wing Size

3 metre

Power

80W

Voltage

12V DC

Working Temperature

-20°C to +80°C

SLIDE MOTOR

Power

80W

Voltage

12V DC

Max Force

500W

Working Temperature

-20°C to +80°C

PLUG-IN RECEIVER

Unique Codes

492

DIP Switch and/or

Keypad Codes

20

Input Voltage

9-25 Volt AC or DC

Output

Latching (Dip Switch on) or Momentary (Dip Switch off).



COMPONENTS & ACCESSORIES

The following hardware is supplied with the B&D Controll-A-Gate Control Unit:

1. Control Unit

Qty 1

2. Glands

Qty 2

3. Instruction Manual

Qty 1

The system is suitable for use with one or two B&D Swing Actuators or Slide Motor Assemblies:

B&D Controll-A-Gate Swing Actuator

P/N 59202

B&D Controll-A-Gate Slide Motor Assembly

P/N 59203

For remote operation the system requires a B&D Plug-In Receiver and a Remote Control Transmitter:

B&D 433MHz Plug-In Receiver

P/N 59215

B&D 433MHz 3 Channel Transmitter

P/N 62170

If the user requires Auto-Closing to be functional at least one B&D Safety Infra Red Beam Kit must be fitted for safety reasons:

B&D Controll-A-Gate Safety Infra Red Beams

P/N 59207

B&D also offer the following range of accessories suitable for use with the B&D Controll-A-Gate:

B&D Controll-A-Gate 433 2-Channel Remote Control Transmitter	P/N 62171
B&D Controll-A-Gate Keyring Transmitter	P/N 62165
B&D Controll-A-Gate Entry Keypad	P/N 62173
B&D Controll-A-Gate Transmitter Wall Button	P/N 62163
B&D Controll-A-Gate Emergency Stop Button	P/N 59211
B&D Controll-A-Gate Magnetic Lock	P/N 59209
B&D Controll-A-Gate 12V Battery Backup Kit	P/N 59206
B&D Controll-A-Gate Solar Panel	P/N 59212
B&D Controll-A-Gate Remote Button with LED	P/N 50279
B&D Controll-A-Gate 27MHz Radio Control Set	P/N 62156
B&D Controll-A-Gate Accessory Pole 90cm High	P/N 59218

Note: All components supplied separately



WARRANTY

1. Definitions

'B&D' means

- (a) in Australia Evans Deakin Pty Ltd (ACN 000 002 031) trading as B&D Australia of 34-36 Marigold Street Revesby New South Wales 2212, or
- (b) in New Zealand as Evans Deakin (Industries) New Zealand Limited trading as B&D Doors New Zealand of 70 Allens Road East Tamaki Auckland.

'Purchaser' means the purchaser of the Opener.
'Opener' means the 'Controll-A-Gate Automatic Gate Opener'.

'Authorised Distributor' means an authorised B&D distributor of the Opener.

'Major Components' means all components of the Opener that make up the motor actuator (including any track assembly, if any), and the control box that is used to operate the gate.

'Ancillary Components' means all components of the Opener which are not Major Components.

'Manufacturer's Written Instruction Manual' means the instruction manual provided with the Opener.

- This warranty applies to every sale of an Opener to a Purchaser by B&D or its Authorised Distributor, and is the only warranty given on behalf of B&D.
- 3 B&D warrants that it will, at its option, either repair or replace any defects:
 - in materials or workmanship in the Opener, subject to the following:
 - for Major Components of the Opener that are installed by B&D or an Authorised Distributor the warranty shall be valid for a period of twenty-four (24) months;
 - (b) for Major Components of the Opener that are not installed by B&D or an Authorised Distributor the warranty shall be valid for a period of twelve (12) months, provided that all costs of disconnection, reinstallation and freight shall be borne by the Purchaser.
 - (c) for Ancillary Components of the Opener the warranty shall be valid for a period of twelve (12) months.
 - (ii) in installation for a period of twelve (12) months from the date of installation where the Opener has been installed by B&D or its Authorised Distributor.
- 4. The warranties provided in clause 3(i) shall only apply to an Opener which is being used under normal use and service in accordance with the Manufacturer's Written Instruction Manual and are limited to the repair or replacement, at B&D's option, of any defective Opener or parts thereof.

- The warranty provided in clause 3(i) shall apply from:
 - (i) the date of delivery of the Opener by B&D; or
 - (ii) the date of installation of the Opener by B&D or one of its Authorised Installers; or
 - (iii) the date of purchase of the Opener by the Purchaser:

whichever is the later.

- 6. (i) Where the Opener has been sold to the Purchaser by B&D, the Purchaser shall make all warranty claims hereunder directly with B&D:
 - (ii) Where the Opener has been sold to the Purchaser by an Authorised Distributor, the Purchaser shall make all warranty claims hereunder directly with the Authorised Distributor.
- 7. The Purchaser will pay for any service call made by B&D or an Authorised Distributor where such a call is made for the purpose of adjustment (as described in the Manufacturer's Written Instruction Manual) and not for rectification of a defect pursuant to the warranty hereunder.
- 8. (i) The Purchaser shall be responsible for any expense incurred by B&D or an Authorised Distributor in ensuring that the Opener is readily accessible for any repair work carried out under this warranty.
 - (ii) Where an Opener is installed outside a capital city metropolitan area and a warranty claim is made pursuant to this warranty, any travelling expenses and costs of transporting the Opener, incurred by B&D or its Authorised Distributor, shall be borne by the Purchaser.

Subject to paragraph 12 hereof;

- (i) the obligations of B&D under this warranty are limited to those contained herein and such warranties are expressly in lieu of all other warranties, express or implied, including any implied warranty or merchantability or fitness for a particular purpose and notwithstanding any course of dealing between the parties or custom and usage in the trade to the contrary.
- (ii) B&D shall not be subject to nor incur and the Purchaser releases B&D from any claim or liability (including consequential loss or damage and loss or use or profit) by reason of delay, defective or faulty materials or workmanship, negligence or any act, matter or thing done, admitted or omitted by B&D.
- 10. Subject to Clause 12 hereof, this warranty does not extend to and B&D will be relieved of all obligations, responsibilities and liabilities (direct or consequential) in the event that defects in manufacture of the Opener are directly or indirectly in the opinion of B&D due to or result from:



- (i) Being fitted to any gate or other closing device which is not of the type or condition defined in the Manufacturer's Written Instruction Manual as suitable for installation of the Opener.
- (ii) Lack of proper maintenance or care of the Opener.
- (iii) Incorrect and unreasonable use.
- (iv) Faulty installation or adjustment of the Opener or gate to which the Opener is connected where such installation or adjustment is not carried out by B&D or one of its Authorised B&D Distributors.
- (v) Failure to observe any instructions or directions provided with the Opener or given to the Purchaser by B&D or an Authorised Distributor.
- (vi) Modifications or repairs made or attempted to be made by any unauthorised person.
- (vii) Faulty electrical wiring of structures to which the Opener is affixed.
- (viii) Radio (including citizen band transmissions) or other electronic interference.
- (ix) Water damage.
- The warranty contained in Clause 3 does not cover batteries or globes and B&D shall not be liable for any defect, malfunction or failure of such items.
- 12. It is expressly provided that the warranties or any terms and conditions of them or other statement contained in this document or other literature given to the Purchaser shall not be read or applied so as to purport to exclude, restrict or modify or have the effect of excluding, restricting or modifying the application in relation to the supply of the Opener of all or any of the provisions of Divisions 2 and 2A of Part V of the Trade Practices Act, 1974, or the Consumer Guarantees Act 1993 if the purchase is a

'consumer' and purchased the opener in New Zealand, ("The Act") as amended or the exercise of a right conferred by such provision or any other condition or warranty implied by any relevant State Act or Territorial Ordinance or by the general law and which by law cannot be excluded, restricted or modified provided that to the extent that the Act permits B&D to limit its liability for a breach of condition or warranty implied by the Act, B&D's liability for such breach shall be limited to the payment of the cost of replacing the Opener or acquiring an equivalent Opener or repairing the Opener.

- 13. This warranty shall be governed by and construed in accordance with Australian law if the opener was purchased in Australia, or New Zealand law if the opener was purchased in New Zealand.
- 14. Upon making a claim under this warranty the purchaser must produce proof of the date of purchase, together with the warranty certificate set out below:

Please complete these details

Purchased from:
Installed by:
Installed on (date):

The Purchaser shall complete this certificate and keep it together with a copy of the receipt of purchase in a safe place – production of such information will assist the handling of a claim made under this warranty.

CONTACTS

WE STRESS THAT YOUR B&D CONTROLL-A-GATE IS NOT A CHILD'S PLAYTHING. BE AWARE OF WHO MAY USE THE UNIT AND ENSURE THAT IT IS OPERATED WITH CARE AND AS INSTRUCTED.

Technical Enquiries:

1800 636 407

NSW Office:

B&D Australia, 34-36 Marigold Street, Revesby 2212. Ph. (02) 9722 5555

QLD Office:

B&D Australia, 34-47 Cobalt Street, Carole Park 4300. Ph: (07) 3271 2500 B&D Australia, 147-153 Canterbury Road, Kilsyth 3137. Ph: (03) 9237 7766

VIC/TAS Office: SA Office:

B&D Australia, 23 Frederick Road, Royal Park 5014. Ph: (08) 8447 4747

WA Office:

B&D Australia, 225 Balcatta Road, Balcatta 6021. Ph. (08) 9347 3299

NZ Office:

B&D New Zealand, 70 Allens Road, East Tamaki, Auckland. Ph: (09) 273 8600

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