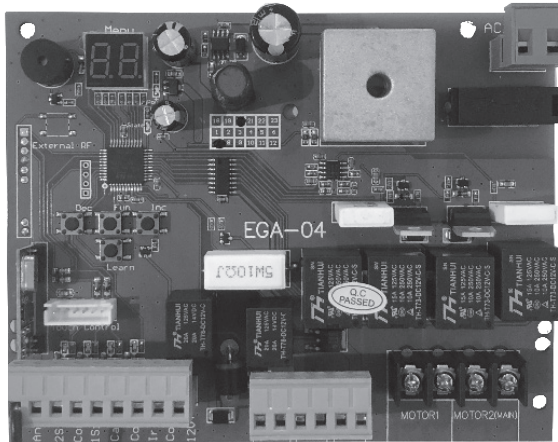


Installation & User Manual

EGA-04 Controller



Scan the QR Codes below for further assistance



Converting from
D1 to EGA



Website
support page



Auto Travel
Function video

IMPORTANT

If you are converting your D1 control board to the EGA control board
Please visit the link below for wiring instructions or scan the QR code above

<https://bmgj.com.au/converting-d1-board-to-ega-board>

Setting Up Your Control Board

After installing the actuator arm/s and completing the wiring, have the gate/s in the open position.

If your unit is an ELECTRIC kit with a TRANSFORMER, turn your transformer on now. The control board will make a “BEEP” sound and then run through a start-up sequence which you will see on the digital display labelled MENU. Wait 10 seconds for the control board to finalise this step.

If your unit is a SOLAR POWERED kit, connect the SOLAR PANEL to your regulator and connect the battery up to the power cables. The control board will make a “BEEP” sound and then run through a start-up sequence which you will see on the digital display labelled MENU. Wait 10 seconds for the control board to finalise this step.

If your control board came to you with compatible remotes, then they will already be tuned in.

If converting from the D1 board to the EGA then you will have wired in your existing receiver with the black remote and red/green buttons. Below will not relate to you.

Compatible remotes for the EGA control board

For a dual swing gate, your remote buttons will be:

Button A	Controls Dual gate open / close
Button B	Spare button, not in use.
Button C	Party mode, this feature overrides auto close. *Auto close is turned off, you will need to turn this on yourself if you would like this feature. Refer to Menu settings to set this up.
Button D	Spare button, not in use.

For a single swing gate, your remote buttons will be:

Button A	Controls Single gate open / close
Button B	Spare button, not in use.
Button C	Party mode, this feature overrides auto close. *Auto close is turned off, you will need to turn this on yourself if you would like this feature. Refer to Menu settings to set this up.
Button D	Spare button, not in use.

Auto Travel Function

IMPORTANT - Dual swing AUTO TRAVEL procedure:

ENSURE THE GATE WAY ENTRANCE IS CLEAR OR ANY OBSTRUCTIONS.



SCAN ME

To perform the 'AUTO TRAVEL' function, you will need to activate your gate opener with a remote. Press Remote Button (or the remote you are using for this system) for 2 seconds or until the small LED light on the remote flickers, now release your remote button. You should observe "OP" appearing on the Digital Display "MENU".

For a dual swing gate, the display "MENU" will show OP to say the control board has put Motor 1 gate into an OPEN position, the "MENU" will then show SP to say the control board has turned Motor 1 off. The display "MENU" will repeat this sequence for Motor 2.

With the control board now knowing your gates are in the open position, you will need to press the DEC and INC buttons at the same time for 5 seconds or until one gate starts to close, now release INC and DEC buttons (you must press and hold in both buttons at the same time for this to work, pressing the buttons individually first will not allow the control board to run its 'AUTO TRAVEL' function).

The gate connected to Motor 1 will close first, the "MENU" will display CL (Close), after Motor 1 has closed the gate, the "MENU" will display SP (Stop). Motor 2 will now close with the "MENU" displaying CL (Close), after Motor 2 has closed the gate, the "MENU" will display SP (Stop).

1 second after Motor 2 has closed the gate it will activate again with the "MENU" displaying OP (Open), after Motor 2 has opened the gate, the "MENU" will display SP (Stop). Motor 1 will now open the gate with the "MENU" displaying OP (Open), once the gate is open the "MENU" will display SP (Stop). Wait 10 seconds before operating the gate opener. Travel function completed.

Press the remote trigger button on your remote for 2 seconds or until the LED light starts to flicker and then release the button.

Check that your gates operate correctly. Check if your force settings need to be adjusted. If they require adjusting, please refer to the MENU settings to adjust P1 through to P4 as well as P5 and P6.

Auto Travel Function

IMPORTANT - Single swing **AUTO TRAVEL** procedure:



SCAN ME

ENSURE THE GATE WAY ENTRANCE IS CLEAR OR ANY OBSTRUCTIONS.

To perform the 'AUTO TRAVEL' function, you will need to activate your gate opener with a remote. Press Remote Button (or the remote you are using for this system) for 2 seconds or until the small LED light on the remote flickers, now release your remote button. You should observe "OP" appearing on the Digital Display "MENU".

For a Single swing gate, the display "MENU" will show OP to say the control board has put Motor 2 gate into an OPEN position, the "MENU" will then show SP to say the control board has turned Motor 2 off.

With the control board now knowing your gate is in the open position, you will need to press the DEC and INC buttons at the same time for 5 seconds or until one gate starts to close, now release INC and DEC buttons (you must press and hold in both buttons at the same time for this to work, pressing the buttons individually first will not allow the control board to run its 'AUTO TRAVEL' function).

The gate Motor 2 will now close with the display "MENU" displaying CL (Close), after Motor 2 has closed the gate, the "MENU" will display SP (Stop). 1 second after Motor 2 has closed the gate it will activate again with the "MENU" displaying OP (Open), after Motor 2 has opened the gate, the "MENU" will display SP (Stop). Wait 10 seconds before operating the gate opener. Travel function now completed.

Press remote trigger button on your remote for 2 seconds or until the LED light starts to flicker, then release the button.

Check that your gate operates correctly. Check if your force settings need to be adjusted.

If they require adjusting, please refer to the MENU settings to adjust P3, P4 and P6.

Majority of gates won't require any adjustments.

Remotes

Remote Learning - compatible remotes with A, B, C, D buttons with the Orange LED light - similar remotes with different colour light may not work.

To learn new remotes to your control board.

Press the Learn button for 1 seconds and then release. The STATE red LED light will go out. Now press button A on your remote once for 2 seconds or until LED light begins to flash, the control board will “BEEP” once and display the remote number you just learnt.

Remote 1 will show 01, remote 5 will show 05 etc.

The STATE red LED light will come back on solid.

Your remote is now tuned in.

Button A and C will automatically be assigned functions.

These functions cannot be altered or removed.

Button A	Full open / close for Dual swing gates and Single swing gates
Button B	Empty
Button C	Party mode function. Party mode is used to override auto close. It will override P9 auto close functions. You must be within 1 metre of the gate to ensure you are within working range for the remote.
Button D	Empty

Button C Party mode, this feature overrides auto close.

Auto close is turned off when you receive the kit, you will need to turn this on yourself if you would like this feature. Refer to Menu settings to set this up.

To disable auto close, press button A on your remote to open your gate, once the gate has reached the full open position, wait 2 seconds, now press button C on your remote for 2 seconds or until the orange LED light comes on for your remote.

You should be within 1 metre of the control box when activating this function to ensure the signal has been picked up by the control board.

Now wait for the auto close time to pass to ensure you have successfully bypassed the auto close function.

When you are ready to close the gate, press Button A on you remote or any triggering devices you might have e.g. push button or keypad. Your auto close function will be reactivated for the next time the gate is opened.

Remotes

Full open and close for dual swing or single swing gates

Remote light must be orange - any other colour will unlikely tune to this board due to the custom code

Party Mode
Overrides auto close
if set

Empty

Empty

Compatible Remote

Empty buttons can be used if you have a second gate on your property or if you add a long range receiver to the kit

Erasing Remotes

Press and hold the Learn button for 8 seconds, the buzzer will beep and the digital display will read 00. At this time, all the information stored in the on board receiver has been deleted, release the Learn button.

Remote distance – up to 30 metres. This distance will vary greatly due to site interference that may not be visible to the eye. Some sites will allow for greater range than 30 metres, some sites might only achieve 5 metres.

Remote frequency – Rolling code 433mhz

*Only genuine remotes will operate with the on board receiver. To ensure your remote is a genuine remote, you will notice the small LED light will flicker an ORANGE colour when you press one of the 4 buttons on your remote for 2 seconds or until the light starts to flicker.

Remote Storage – The on board receiver can store up to 120 remotes.

Menu Settings

To enter the Menu settings, the gate/s must be in either the full Open or full Close position, the control board will not allow you to enter the Menu settings while the gate opener is operating.

Press and hold “FUN” button for 2 seconds or until the Digital Display shows P0. From here use “DEC” or “INC” buttons to go down or up the menu list, once you are on the menu setting you need, press “FUN” button once to enter the setting. Now use “DEC” or “INC” to decrease or increase the parameter number, once you have selected the parameter number you require, press the “FUN” button to confirm the new setting.

To exit the menu setting, press the “Learn” button once.

Now test your adjusted settings.

Menu	Main Feature	Parameter	Parameter Feature	Detailed Description	
P0	Activates Single swing or Dual Swing mode	0	Double Swing gate	BMG will have the system set to match your unit when purchased with a gate opener kit.	
		1	Single Swing gate (Default setting)		
P1	Motor 1 open gate obstacle sensitivity	1	1 (Most Sensitive)	Adjust from 1 to 12, the higher the number, the greater force required to stop the gate. For heavy gates or long gates, you may need to adjust this setting to a higher number. The lower the number the easier it is to stop the gate. For light weight gates or short gates, you may need to adjust this setting to a lower number.	
		...	Factory set 7		
		12	12 (Less Sensitive)		
P2	Motor 1 close gate obstacle sensitivity	1	1 (Most Sensitive)		
		...	Factory set 7		
		12	12 (Less Sensitive)		
P3	Motor 2 open gate obstacle sensitivity	1	1 (Most Sensitive)		The current of the motor running in the 12V system is relatively large, it is recommended to set the value between 5-12 levels.
		...	Factory set 7		
		12	12 (Less Sensitive)		
P4	Motor 2 close gate obstacle sensitivity	1	1 (Most Sensitive)		
		...	Factory set 7		
		12	12 (Less Sensitive)		

Menu	Main Feature	Parameter	Parameter Feature	Detailed Description
P5	Motor 1 low speed obstruction sensitivity	1	1 (Most Sensitive)	Soft stop force adjustment
		...	Factory set 8	
		12	12 (slowest)	
P6	Motor 2 low speed obstruction sensitivity	1	1 (Most Sensitive)	Soft stop force adjustment
		...	Factory set 8	
		12	12 (slowest)	
P7	Slow speed running time	0	No slow speed	This adjusts the ramp down of the gate. The slow speed can be adjusted (0 not recommended as this puts extra stress on moving parts). For long gates we recommend the standard setting of 2.
		1	Shortest	
		...		
		5	Longest	
P8	Closing delay time	0	No delay	This setting is for Dual Swing gates. You can adjust the closing delay between the two motors. This is required if you have an electric gate lock connected to the control board or if you require Motor 1 to close first. You can set this from 0 seconds (open and close at the same time) up to 8 seconds. Factory setting is 2 seconds and is recommended even if a gate lock is not installed.
		1	1s	
		2	Factory Set 2s	
		...		
		8	8s	
P9	Main Auto Closing	0	Factory Set	Auto close setting can be set from 0 seconds (factory setting) up to 99 seconds.
		1	1s	
		
		99	99s	
PA	Electric lock output mode	0	Not output (factory set)	This setting allows you to adjust the output to your optional electric gate lock. Factory setting is 0 which is set for NO GATE LOCK. If you install a gate lock, it is recommended you set PA to level 3 (3 seconds). This may need to be adjusted depending on your gate setup. If lock output is set 1 to 6, the lock will activate first for 1 second before the gate starts, this is to allow time for the lock to activate.
		1	1s	
		
		6	6s	

Menu	Main Feature	Parameter	Parameter Feature	Detailed Description
PB	Lamp output mode	1	Mode 1 (factory set)	Set lamp work mode by menu PB , factory set mode 1 1: Lamp output on when motor operating, when motor stops lamp turns off 2: Lamp output flash when motor operating, when motor stops lamp turns off 3: Lamp output on when motor operating, after motor turns off 30 seconds later the lamp output turns off 4: Lamp output flashing when motor operating, after motor turns off 30 seconds later the lamp output turns off
		2	Mode 2	
		3	Mode 3	
		4	Mode 4	
PC	Electric lock auxiliary function	0	Open (factory set)	Factory setting Motor 2 will activate after 1 second to allow gate lock to release. Setting PC to 1 will make Motor 2 reverse (Close) for 0.5 seconds to help release pressure off the lock before allowing Motor 2 to activate.
		1	Close Reverse first	
PD	Infrared terminal set	0	NO mode (factory set)	If you run safety beams, you will need to set PD to 1. Factory setting allows you to operate without safety beams.
		1	NC mode	
PE	Soft start time	1	1s (factory set)	You can adjust the soft start time of your gate. This may need to be adjusted for longer gates and heavy gates
		2	2s	
		3	3s	
PF	Remote control mode	0	One Gate Mode	If you have 2 gate opener kits on the one property and are within 100 metres of each other, your control board will be set to 01. This will have your remote set to: Gate 1 Button A – Full open/close Button C – Party mode Gate 2 Button B – Full open/close Button D – Party mode Factory set mode 01
		1	Two Gates Mode (factory set)	
PP	System set	00	Nothing	This setting will put your control board back to factory settings and put your unit to Single swing gate. This would then need to be adjusted to suit a double swing gate.
		
		05	Factory reset	
		
		09	Nothing	

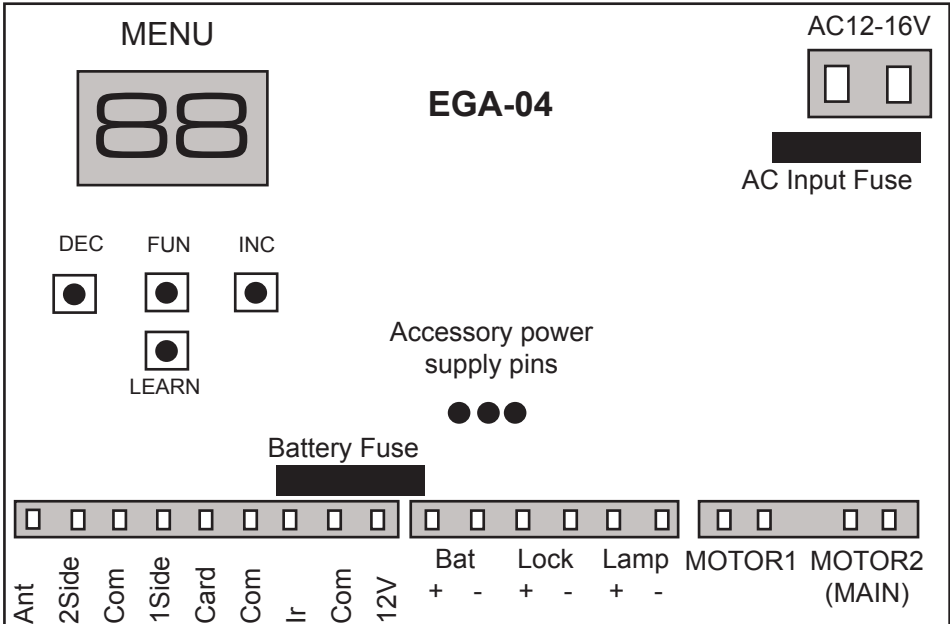
Control Board Specifications and Details

Power Supply

Power Supply	AC12 V – AC16 V
Fuse	10A
External Accessory Power Supply	No more than 300mA
Alarm Light Power Supply	No more than 500mA
Electric Lock Power Supply	No more than 2.5A

The EGA control board has been specifically designed for this kit and SHOULD NOT be used for any other setup

CONTROL BOARD



Tip: Green connector blocks on the main control board can be removed to help with wiring in cables

Control Board Specifications and Details

Control Board

Ant	Antenna for control board
2Side	Terminal for external device of controlling double gates
Com	Common for external device
1Side	Terminal for external device of controlling single gate (Motor2)
Card	Terminal for external device for double gates OPEN ONLY
Com	Common for external device
IR	Terminal for Photo beam sensor
Com	Common for Photo beam sensor
12V+	Power supply for external device
Bat	Terminal for 12V Battery
Lamp	Terminal for lamp
Lock	Terminal for lock
Accessory pins	Allows power through to the accessory terminals * Placing the jumper on the left 2 pins provides power from the transformer * Placing the jumper on the right 2 pins provides power from the battery

Instructions for Indicator

State Indicator	Steady on: Indicating that the system is working normally Blinking at 1Hz: indicating that the system is in the mode of auto close or travel learning. Fast blinking: The system is error.
Terminal Indicator	On: The terminal is ON. Off: The terminal is OFF

Instructions for button

DEC	used for lowering values
FUNC	used for entering the menu and storing the settings
INC	used for increasing values
RF Learn	used for learning or removing remotes

Installer & Owner Notes