# Brenta

**Sliding gate operator**

# BRT-600-24



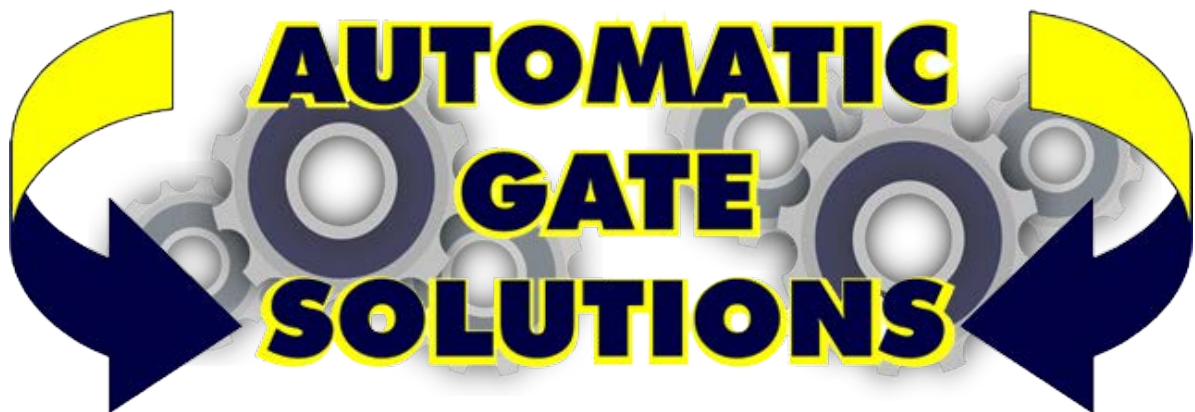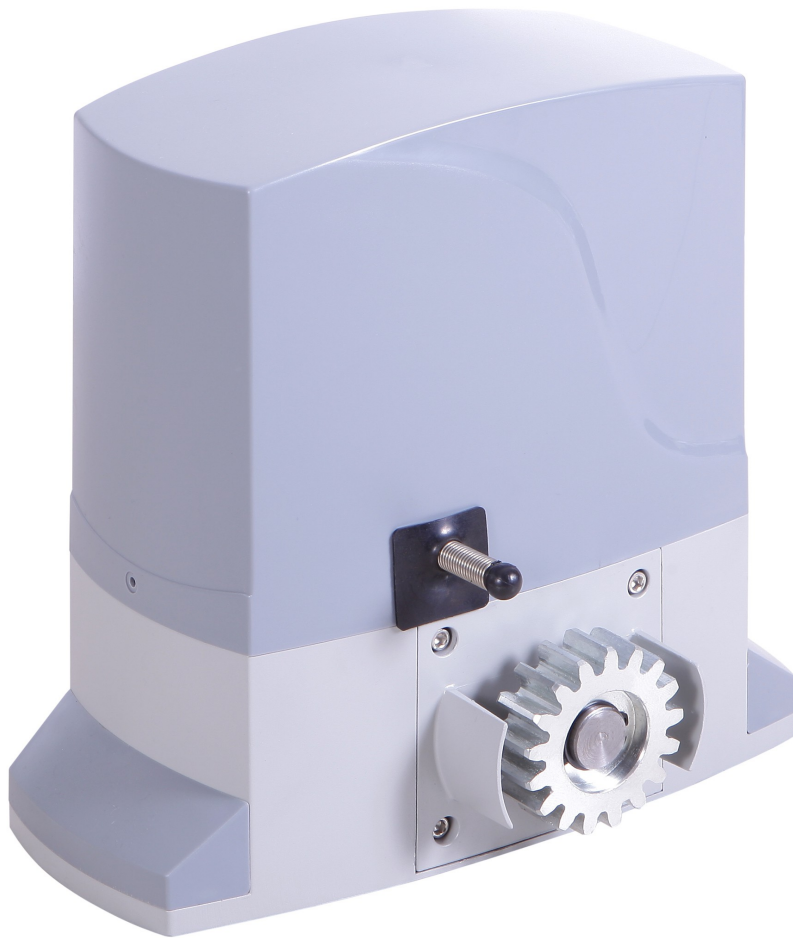AUTOMATIC GATE SOLUTIONS

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**Important:** Read carefully this manual before the installation. This manual is integral part of your product, keep it for reference.

**Warnings:** First of all verify that this product is suitable for the installation. Read carefully technical characteristic before the installation (kind of gate, max allowed wing weight and length, etc). Be sure the gate satisfies all requirements of quality, robustness and stability.
Installation of this automatism must be properly done by qualified installers, following rules and regulations of installation country.
It's mandatory do periodic maintenance each 6 month. Maintenance or repairing must be done by qualified Technicians. Turn power off before maintenance or repairing.
This device is intended for gate automation, any other applications is strongly advised.
Not respecting of rules may cause serious damage to peoples, animals, things. Manufacturer discharges all responsibility for missed respect of rules.
Don't let remotes or gate controls unattended or where children can reach

## Technical characteristics

| | |
|---|---|
| Power Supply | 24Vdc |
| Motor power | 120W |
| Current consumption | 10A |
| Max thrust | 12Nm |
| Operating temperature range | -20 +60°C |
| IP Protection | IP44 |
| Duty | 80% |
| Weight | 10kg |
| Noise | <56dBm |
| Gate speed | 14m/min |

.GB

**Before installing:** Read carefully this instruction manual and verify following points.
Pillars supporting your gate must be solid and stable. Verify your gate, must be in good state, correctly installed and balanced, it must open easily and without friction points. If gate has friction points, installer must remove it before to install the automation, otherwise installation couldn't work properly.
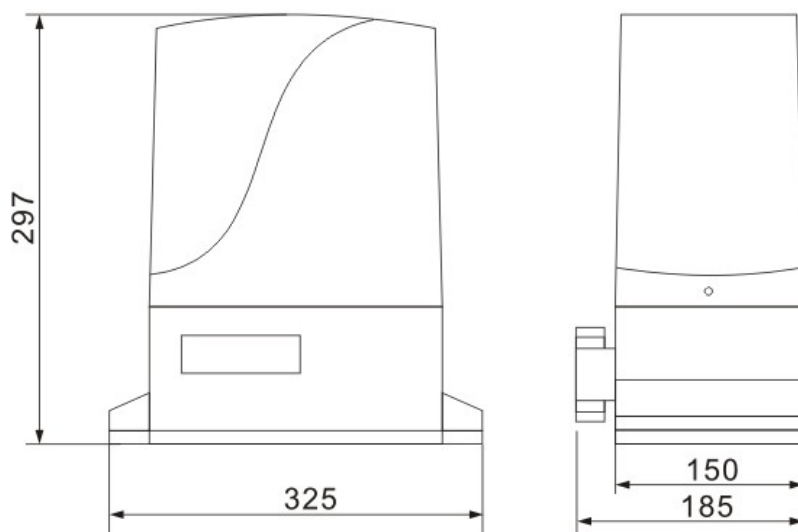Provide a free space close to the gate for maintenance and manual unlock.
Verify that wing's weight and length doesn't exceed what mentioned in the technical characteristics in this manual.
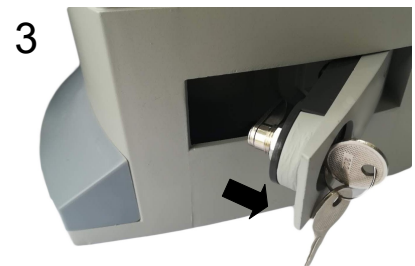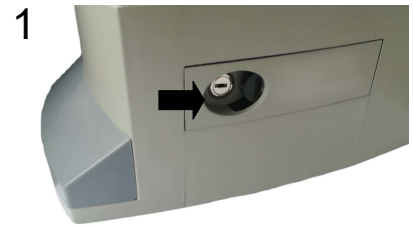
Wing length (m)

297

325

150

185
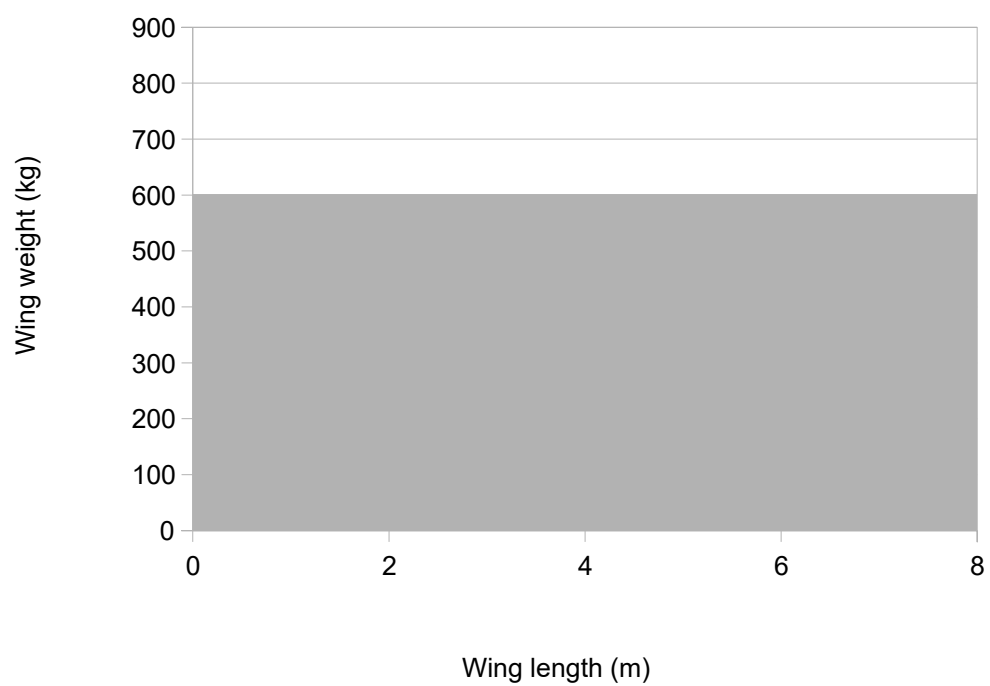
## Manual opening

In order to open the gate manually open the cover of the lock (1), put the key in and rotate clockwise to release the unlocking lever (2).
Pull the unlocking lever in 90° in relation to the gate direction (3).

1

2

3

# TIPS & TRICKS

## ID410

- **TIP** – You need solid opening and closing stops. The control board will search for these when programming. Make sure they have no movement or flex.
- **TIP** – You need to fit three small loops of wire to your safety inputs to make anything work. These can be removed later if you install safety devices to these input terminals. But for now, take three pieces of light gauge wire (speaker or telephone wire is good) about 50mm long and strip both ends 7mm and insert them as above from 6 to 9, 7 to 9 and 12 to 13.
- **TIP** - Ensure JP1 on the control board is set to the correct voltage for your system.
- **TIP** – The transformer has two voltages. Use red and black for 12 volts or red and green for 24 volts. These connect to FS3 and FS4.
- **TIP** – The manual offers both automatic programming and manual programming. Manual programming gives more control and is preferred by professional installers, but auto programming works just fine so give it a try first.
- **TIP** – If using solar power refer to the manual for correct input power connection. Also get hold of a copy of the solar power tips n tricks.
- **TIP** – This control board has a higher level of security than previous versions and will not accept older style remote controls.
- **TIP** – If using wireless keypad KEYPADP6 set it to 20Bit mode to work with this board.

# *ID410*

## CONTROL BOARD FOR 1 MOTOR 12-24V

**IMPORTANT:** READ CAREFULLY THIS MANUAL BEFORE THE INSTALLATION. THIS MANUAL IS INTEGRAL PART OF YOUR PRODUCT, KEEP IT FOR REFERENCE.

**Warnings:**

⚠️ First of all verify that this product is suitable for the installation.

⚠️ Read carefully technical characteristic before the installation.

⚠️ Installation of this control unit must be properly done by qualified installers, following rules and regulations of installation country.

⚠️ It's mandatory do periodic maintenance each 6 month.

⚠️ Maintenance or repairing must be done by qualified Technicians.

⚠️ Turn power off before maintenance or repairing.

⚠️ This device is intended for gate automation, any other applications is strongly advised.

⚠️ Not respecting of rules may cause serious damage to peoples, animals, things.

⚠️ Manufacturer discharges all responsibility for missed respect of rules.

⚠️ Don't let this control unit unattended or where children can reach

Preliminary checking: Before to install this control unit,

⚠️ Verify that all the connected devices respect the technical characteristics mentioned in the table which follows.

⚠️ Verify that a working and suitable life switch is installed upline the installation.

⚠️ Verify that cables composing the installation, are suitable for it.

This product falls within the scope of the Directive 2012/19 / EU concerning the management of waste electrical and electronic equipment (WEEE). The appliance must not be disposed of with domestic waste as it is made of different materials that can be recycled at the appropriate facilities. Inquire through the municipal authority regarding the location of the ecological platforms to receive the product for disposal and its subsequent correct recycling. Furthermore, it should be remembered that, upon purchase of an equivalent appliance, the distributor is obliged to collect the product for disposal free of charge. The product is not potentially dangerous for human health and the environment, not containing harmful substances, but if abandoned in the environment negatively impacts on the ecosystem. Read the instructions carefully before using the appliance for the first time. It is recommended that you do not use the product for any purpose other than that for which it was intended, there being a danger of electric shock if used improperly.

*The crossed-out bin symbol, on the label on the appliance, indicates the compliance of this product with the regulations regarding waste electrical and electronic equipment. Abandonment in the environment of the equipment or illegal disposal of the equipment is punishable by law.*

The manufacturer:

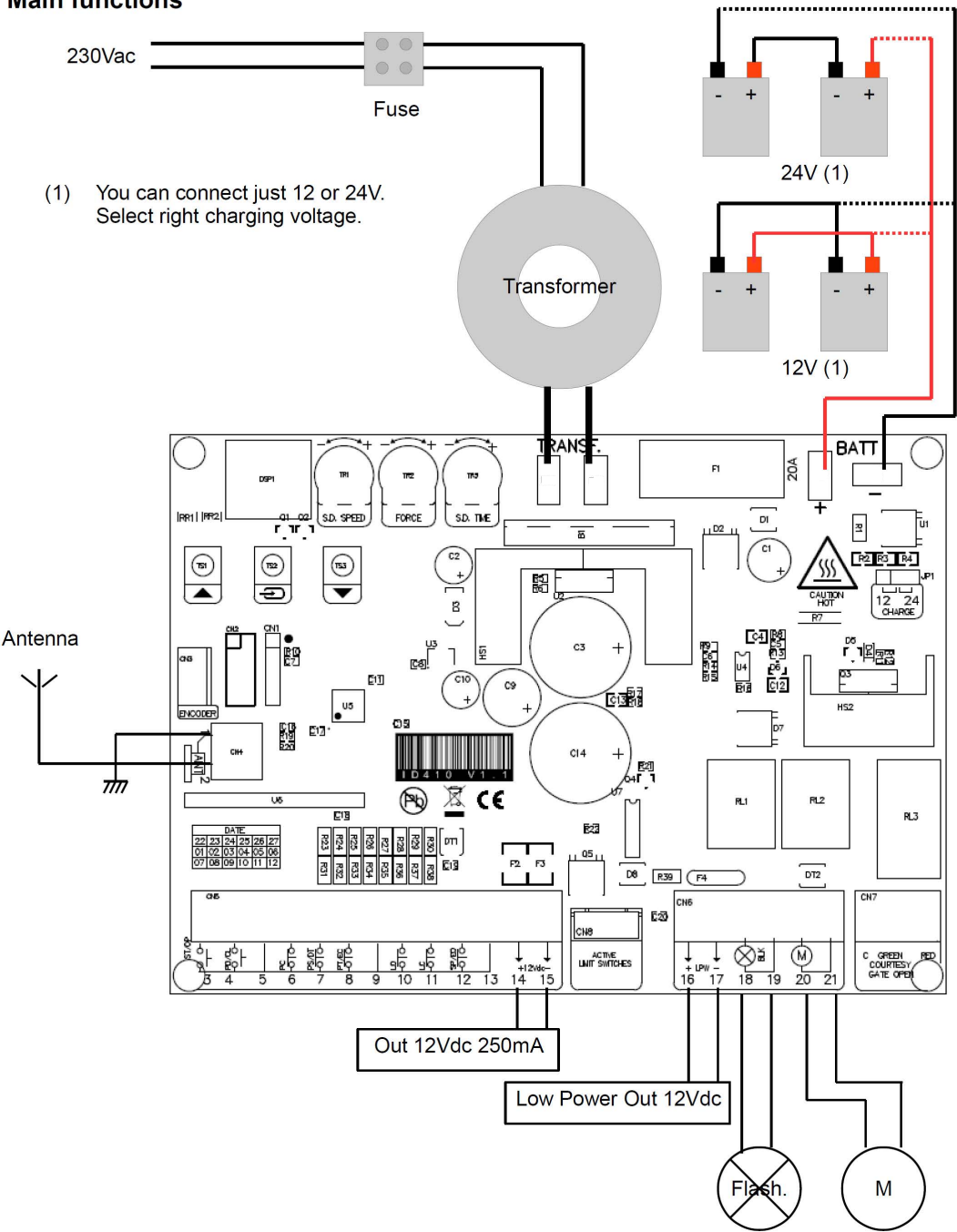Declares:

The control unit ID410 is compliant to following

directives:
- 2006/95/CE Low voltage directive.
- 2004/108/CE Electromagnetic compatibility.

Castiglione 10-01-2023

| TECHNICAL CHARACTERISTICS | |
|---|---|
| Power Supply | 12-20Vac/100-200VA |
| Max. Current out (14-15) | 250mA |
| Max. Current Low power out LPW | 250mA |
| Embedded Battery charger | 12/24V 100mA |
| Max motor current | 16A (200VA transformer) |
| Max flashing light current | 1A |
| Operating temperature range | -5 +60°C |
| Backup battery | (2x) 12V 4.5Ah / (1x) 12V 7Ah |
| Max codes | 250 |

## Wiring
## Main functions

230Vac

Fuse

(1) You can connect just 12 or 24V.
Select right charging voltage.

Transformer

24V (1)

12V (1)

Antenna

Out 12Vdc 250mA

Low Power Out 12Vdc

Flash.

M

| | | | |
|---|---|---|---|
| 1 | **Antenna** | 16-17 | Low power supply output 12Vdc 250mA (off in standby and gate closed). |
| 2 | Antenna's shield | 18-19 | Flashing light output (12/24Vdc, 1A, according to transformer output). With blinking or fix output. A very slow blinking it alerts for power failiture. |
| 3 | Start input N.O. or Open input N.O. (See menu operative logic "OL"). It completely opens the gate | 20-21 | Motor output. |
| 4 | Start Pedestrian input N.O. or Open input N.O. (See menu operative logic "OL"). It opens just 1 meter | TR1 | Slowing down speed trimmer. |
| 5 | Common | TR2 | Obstacle detection sensibility trimmer. |
| 6 | Photocells input N.C. or N.O (see advanced menu "PC"). During pause: Reloads pause During closing: Reverses motors direction | TR3 | Slow down time trimmer. |
| 7 | Photostop input N.C. or Detect input N.O. (see advanced menu "5F"). During pause: Reloads pause During closing: Reverses motors direction During opening: stops the motors and waits till contact returns close. | TS1-TS3 | Buttons up/down |
| 8 | Closing Edge input (see advanced menu "EC"). Waiting an opening command: inhibits opening During opening: reverses motor direction for 1 second. If not used left unconnected. | TS2 | Enter button |
| 9 | Common | DSP | Display |
| 10 | Limit Switch open. Letting unconnected both limit switches they are automatically disabled | FS3-FS4 | Transformer input 12-20Vac / 100-200VA |
| 11 | Limit Switch close. Letting unconnected both limit switches they are automatically disabled. | F2 | Battery fuse 10A Fast |
| 12 | Stop input NC or NO (see advanced menu 5P), or Opening edge input (see advanced menu "Eo"). | | |
| 13 | Common | FS1-FS2 | Backup battery input 12/24Vdc |
| 14-15 | Aux power supply output 12Vdc 250mA. | JP1 | Charger voltage selector for backup battery: 12/24Vdc |

**INPUT STATUS**

When the control unit is in standby, user can read inputs status on display:

| | | | |
|---|---|---|---|
| -- | No inputs active. | 5T | Start input active. |
| 5p | Stop input active. | PD | Pedestrian input active. |
| P5 | Photostop input active. | op | Open input active. |
| EO | Analog edge opening input active. | CL | Close input active. |
| EC | Analog edge closing input active. | fO | Limit switch open. |
| DT | Detect input active. | fC | Limit switch close. |
| pc | Photocells input active. | | |
| During pause, the display show the seconds countdown to closing. | | | |

## TRIMMER SETTINGS

**TR1** Slow down speed trimmer regulates the slow down speed. Do not set speed to low (less than 10cm/sec on the wing edge) to avoid that gate stops in too cold conditions.

**TR2** Obstacle sensibility trimmer fine tunes the obstacle detection level learned by the control unit during working times programming. This fine regulation must be do after working times learning.

**TR3** Regulates the slowdown time lasting.

⚠️ **_Attention:_** during first 2 seconds after start, the motor pushes at 100% of is power (Boost power).

| SLOWER | | FASTER | | PUSH LESS | | PUSH MORE | | SHORTER SLOWDOWN | | LONGER SLOWDOWN |
|---|---|---|---|---|---|---|---|---|---|---|
| **TR1** SLOWING DOWN SPEED | | | | **TR2** OBSTACLE DETECTION | | | | **TR3** SLOWDOWN TIME | | |

## USE OF DOWN MENU AND UP BUTTONS FOR PROGRAMMING

Control unit function programming is made within a special configuration menu, to which you can access and where you can shift through DOWN, MENU and UP keys placed under the display.
The configuration menu consists in a list of configurable items; the display shows the selected item.

• By pressing DOWN, you will pass to the next item
• By pressing UP, you will return to the previous item
• By pressing together UP and DOWN buttons you exit from the item
• By pressing MENU, you can view the current value of selected item and possibly change it.

There are 2 main menus:

- *BASE PROGRAMMING* (MAIN MENU): only the useful parameters for a base programming are displayed.

- *ADVANCED PROGRAMMING* (ADVANCED MENU): parameters of the advanced menu are displayed.

| ○ TS1 | ○ TS2 | ○ TS3 |
|---|---|---|
| ↑ | ↵ | ↓ |
| UP | ENTER | DOWN |

## BOARD PROGRAMMING

### Quick installation
Put the automation **_completely closed_** before starting the learning procedure, the equipment will recognize the active limit switch as a closing limit switch, and will set the direction parameter automatically (See parameter "GD" in the advanced menu)

### Quick radio code learning:
Push DOWN button, "C1" will appear on display. Transmit with the remote to be learn as Start or Open command (according to "OL" menu). Push more time DOWN to select other channels (C1 – Start/Open, C2 – Pedestrian/Close, C3 – Courtesy light on).

### *Quick radio code erasing:*
Hold down DOWN button up to on display it appears "OK" (5 seconds about), then release the button. All codes are now erased.

### Transmitters auto learning:
It's possible to learn transmitters quickly without using the base menu. To insert a new transmitter, transmit 3 times with the new remote, making at least 1 second pause between each transmission. Then transmit 3 times with a transmitter already in memory and then once with the new. When programming is done, the blinker flash once.
Attention: function must be enabled, refer to "advanced menu" - auto learning transmitters. The new code takes the same channel as the one used to insert it.
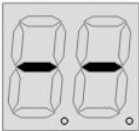
### *Mass entering mode.*
In this mode, if you push 5 times Open command (example), the control unit count 5 cars passing through the detect sensor, then it closes the barrier. This mode must be enabled in advanced menu (MM). This mode can be enabled just when pause time is 0, this means when automatic closing is disabled.

## MAIN MENU
Push Enter button shortly, on the display will appear OL. With up/down it's possible to select all items in this menu. To exit this menu select EX or push up and down together. After 20 seconds without actions, control unit exits itself from this menu.

## MAIN MENU MAP

| | | | | | |
|---|---|---|---|---|---|
|  PRESS SHORTLY | **oL** | Operating logic | ← ⇵ | **5T** | Step by step logic. |
| | | | | **At** | Step by step with automatic closing. |
| | | | | **CD** | Automatic closing for condominium function. |
| | | | | **OC** | Open / Close mode (Start and Pedestrian inputs become Open and Close inputs). |
| | | | | **oa** | Open / Close mode with automatic closing (Start and Pedestrian inputs become Open and Close inputs). |
| | | | | **EX** | EXIT or push ⇵ together |

⇵

| | | | | | |
|---|---|---|---|---|---|
| **LC** | Learning/ removing transmitters | ← ⇵ | | **C1** | Learn Start / Open command (according to OI menu). |
| | | | | **C2** | Learn Pedestrian / Close command (according to OI menu). |
| | | | | **C3** | Learn Courtesy light (see advanced menu L**X**). |
| | | | | **C4** | STOP command |
| | | | | *NOTE: Each time a code is learnt, on the display is shown the memory position for a while* | |
| | | | | **rt** | Removing a remote transmitting its own code. |
| | | | | **rN** | Removing a remote according to memory position. |
| | | | | rA | Removing all the remotes, must confirm with "Y5" |
| | | | | **EX** | EXIT or push ⇵ together |

⇵

| | | | |
|---|---|---|---|
| **LT** | Learn working times | ← ⇵ | ⚠ **Attention:** if you are not sure of the direction of the sliding/barrier, put the automation **completely closed** before starting the learning procedure, the equipment will recognize the active limit switch as a closing limit switch, and will set the direction parameter automatically (See parameter "GD" in the advanced menu)<br><br>If the gate/barrier is not fully closed, the equipment will close it in search of the closing limit switch. Subsequently, the equipment will open the gate/barrier until it is completely open and finally close it one last time.<br><br>The flashing light stays ON while learning the work times. |
| | | **EX** | EXIT or push ⇵ together |

⇵

| | | | |
|---|---|---|---|
| **5P** | Set pause time | ← | ⇵ 0 – 99 |

**5P** Set pause time: Use up/down to set the pause time between 0 and 99 seconds. Push enter to confirm. To exit without modifications push together up and down.
**Attention**, setting a pause time doesn't enables automatic closing, please refer to chapter "OL operating logic" to enable this function

⇵

| | | | |
|---|---|---|---|
| **F5** | Fast Speed | ← | Set max. speed 3 – 10 |

⇵

| | | | | |
|---|---|---|---|---|
| **DM** | Dead man mode | ← | **Op** | Open motor |
| | | | **Cl** | Close motor |

| | | ⬍⬆ | EX | EXIT or push ⬍⬆ together |
|---|---|---|---|---|

⬍⬆

| EX | Exit | ↩ |
|---|---|---|

## ADVANCED MENU

To enter advanced menu hold down enter button 4 seconds, till on display it appear TM. With up/down it's possible to select all items in this menu. To exit this menu select EX or push up and down together.
After 20 seconds without actions, control unit exits itself from this menu.

## ADVANCED MENU MAP

| ⟨88⟩ ↩ 4 SEC. | tm | Working times | ↩ ⬍⬆ | T1 | Working time in seconds | ⬍⬆ 0 – 99 ↩ |
|---|---|---|---|---|---|---|
| | | | | TP | Pedestrian time | |
| | | | | tc | Courtesy light time (x 10 sec) | |
| | | | | ex | EXIT or push ⬍⬆ together | |

⚠️ **Attention**: For the motors times you can set time longer than 2 digits. When the value is over 100 the decimal dot point of 2nd digit will be on.
Example: 15. = 115.
When the value is over 200 both the the decimal dots are on.
Example: 1.2. = 212.

⬍⬆

| gd | Gate direction | ↩ ⬍⬆ | Rh | Gate direction RIGHT |
|---|---|---|---|---|
| | | | Lf | Gate direction LEFT |
| | | | ex | EXIT or push ⬍⬆ together |

⚠️ **Attention:** if you aren't sure about the direction of the gate, set the gate fully closed before to start the working time learning(See working time programming)

⬍⬆

| PC | Photocell mode | ↩ ⬍⬆ | NC | Normally close |
|---|---|---|---|---|
| | | | No | Normally open |
| | | | ex | EXIT or push ⬍⬆ together |

⚠️ **Attention:** Rules of several countries forbit to use safety systems with N.O. Output. Please be sure of safety regulations of your country before to modify this parameter.

⬍⬆

| 5p | Stop mode | ↩ ⬍⬆ | NC | Normally close |
|---|---|---|---|---|
| | | | No | Normally open |
| | | | ex | EXIT or push ⬍⬆ together |

⚠️ **Attention:** Rules of several countries forbit to use safety systems with N.O. Output. Please be sure of safety regulations of your country before to modify this parameter.

⬍⬆

| L5 | Limit switches mode | ↩ ⬍⬆ | NC | Normally close |
|---|---|---|---|---|
| | | | No | Normally open |
| | | | ex | EXIT or push ⬍⬆ together |

⬍⬆

| 5f | Safety input mode | ↩ ⬍⬆ | P5 | Photostop mode N.C. (Photocell operating in opening mode too) |
|---|---|---|---|---|
| | | | dt | Detect mode N.O.(Photocell for rapid close after the car has passed through the gate) |
| | | | ex | EXIT or push ⬍⬆ together |

⬍⬆

| | | | | |
|---|---|---|---|---|
| **Eo** | Opening edge | ←⏎  ⇅ | **D5** | Edge input disabled, this inputs works as STOP. |
| | | | **no** | Edge input in Normally Open mode. |
| | | | **nc** | Edge input in Normally Close mode. |
| | | | **an** | Edge input in 8K2 analog mode. |
| | | | **5p** | Transform the opening edge input in STOP input |
| | | | **ex** | EXIT or push ⇵ together |
| **ec** | Closing edge | ←⏎  ⇅ | **D5** | Edge input disabled, this inputs works as STOP. |
| | | | **no** | Edge input in Normally Open mode. |
| | | | **nc** | Edge input in Normally Close mode. |
| | | | **an** | Edge input in 8K2 analog mode. |
| | | | **ex** | EXIT or push ⇵ together |
| **55** | Soft start | ←⏎  ⇅ | **Y5** | Soft start enabled. |
| | | | **nt** | Soft start disabled. |
| | | | **ex** | EXIT or push ⇵ together |
| **bl** | Blinker mode | ←⏎  ⇅ | **Y5** | Blinker light with flashing output. |
| | | | **nt** | Blinker light with fix on output. |
| | | | **ex** | EXIT or push ⇵ together |
| **lh** | Light mode | ←⏎  ⇅ | **cr** | Light output as courtesy light. |
| | | | **0g** | Light output as open gate light. |
| | | | **gr** | Light output as traffic light. |
| | | | **ex** | EXIT or push ⇵ together |
| **D2** | Reset to factory defaults | ←⏎  ⇅ | **Y5** | Selecting Y5 the factory default are restored. ⚠ **Attention:** This function doesn't delete radio codes. |
| | | | **nt** | Maintain settled parameters |
| | | | **ex** | EXIT or push ⇵ together |
| **ar** | Automatic remotes learning | ←⏎  ⇅ | **Y5** | Automatic remotes learning enabled. |
| | | | **nt** | Automatic remotes learning disabled |
| | | | **ex** | EXIT or push ⇵ together |
| **rm** | Radio mode | ←⏎  ⇅ | **1b** | Each radio button is learned separate. The installer can choose how to learn a code: (C1 Start/Open, C2 Pedestrian/close). |
| | | | **4b** | Learning a button of a remote, let all the other 3 buttons being learn automatically. |
| | | | **ex** | EXIT or push ⇵ together |
| **cn** | Cycles counter | ←⏎  ⇅ | **-** | Shows cycle counter in 3 group of 2 digits. Example: 123.456 is shown as: 1.2 - 34. - 56 |
| | | | **ex** | EXIT or push ⇵ together |

| mm | Mass mode | ← ↓↑ | Y5 | Enables the Mass entering mode |
|---|---|---|---|---|
| | | | nt | Disables Mass mode |
| | | | ex | EXIT or push ↓↑ together |

MM MASS MODE - In this menu you can enable the mass enter mode. This mode can be enabled just when pause time is 00, this means when automatic closing is disabled. In this mode, if you push 5 times Open command (example), the control unit count 5 cars passing through the detect sensor, then it closes the barrier.

↓↑

| br | Barrier mode | ← ↓↑ | Y5 | Enables Barrier mode. |
|---|---|---|---|---|
| | | | nt | Sliding gate mode. |
| | | | ex | EXIT or push ↓↑ together |

↓↑

| EX | Exit | ← |
|---|---|---|

## MAIN MENU QUIK TABLE

| DISPLAY | DESCRIPTION | DATA | DESCRIPTION | DEFAULT | DATA |
|---|---|---|---|---|---|
| oL | Operating logic | 5T | Step by step logic. | 5T | |
| | | At | Step by step with automatic closing. | | |
| | | CD | Automatic closing for condominium function. | | |
| | | OC | Open / Close mode (Start and Pedestrian inputs become Open and Close inputs). | | |
| | | oa | Open / Close mode with automatic closing (Start and Pedestrian inputs become Open and Close inputs). | | |
| | | EX | EXIT | | |
| LC | Learning/ removing transmitters | C1 | Learn Start / Open command (according to OI menu). | - | |
| | | C2 | Learn Pedestrian / Close command (according to OI menu). | | |
| | | C3 | Learn Courtesy light (see advanced menu LX). | | |
| | | C4 | STOP command | | |
| | | rt | Removing a remote transmitting its own code. | | |
| | | rN | Removing a remote according memory position. | | |
| | | rA | Removing all the remotes, must confirm with "Y5" | | |
| | | EX | EXIT | | |
| LT | Learn working times | | Working time learning procedure | - | |
| | | EX | EXIT or push ↓↑ together | | |
| 5P | Set pause time | | ↓↑ 0 – 99 | 10 | |
| F5 | Fast Speed | | Set max. speed 3 – 10 | 10 | |
| DM | Dead man mode | Op | Open motor | - | |
| | | Cl | Close motor | | |
| | | EX | EXIT | | |

# MAIN MENU QUIK TABLE

| DISPLAY | DESCRIPTION | DATA | DESCRIPTION | DEFAULT | DATA |
|---------|-------------|------|-------------|---------|------|
| **tm** | Working times | **T1** | Working time in seconds | 180 | |
| | | **TP** | Pedestrian time | 08 | |
| | | **tc** | Courtesy light time (x 10 sec) | 12 | |
| | | **ex** | EXIT | | |
| **gd** | Gate direction | **Rh** | Gate direction RIGHT | rh | |
| | | **Lf** | Gate direction LEFT | | |
| | | **ex** | EXIT | | |
| **PC** | Photocell mode | **NC** | Normally close | nc | |
| | | **No** | Normally open | | |
| | | **ex** | EXIT | | |
| **5p** | Stop mode | **NC** | Normally close | nc | |
| | | **No** | Normally open | | |
| | | **ex** | EXIT | | |
| **L5** | Limit switches mode | **NC** | Normally close | nc | |
| | | **No** | Normally open | | |
| | | **ex** | EXIT | | |
| **5f** | Safety input mode | **P5** | Photostop mode N.C. (Photocell operating in opening mode too) | | |
| | | **dt** | Detect mode N.O.(Photocell for rapid close after the car has passed through the gate) | dt | |
| | | **ex** | EXIT | | |
| **Eo** | Opening edge | **D5** | Edge input disabled, this inputs works as STOP. | D5 | |
| | | **no** | Edge input in Normally Open mode. | | |
| | | **nc** | Edge input in Normally Close mode. | | |
| | | **an** | Edge input in 8K2 analog mode. | | |
| | | **5p** | Transform the opening edge input in STOP input | | |
| | | **ex** | EXIT | | |
| **ec** | Closing edge | **D5** | Edge input disabled, this inputs works as STOP. | D5 | |
| | | **no** | Edge input in Normally Open mode. | | |
| | | **nc** | Edge input in Normally Close mode. | | |
| | | **an** | Edge input in 8K2 analog mode. | | |
| | | | | | |
| | | **ex** | EXIT | | |
| **55** | Soft start | **Y5** | Soft start enabled. | Y5 | |
| | | **nt** | Soft start disabled. | | |
| | | **ex** | EXIT | | |
| **bl** | Blinker mode | **Y5** | Blinker light with flashing output. | yh | |
| | | **nt** | Blinker light with fix on output. | | |
| | | **ex** | EXIT | | |
| **lh** | Light mode | **cr** | Light output as courtesy light. | cr | |
| | | **0g** | Light output as open gate light. | | |
| | | **gr** | Light output as traffic light. | | |
| | | **ex** | EXIT | | |

| D2 | Reset to factory defaults | Y5 | Selecting Y5 the factory default are restored. ⚠ **Attention:** This function doesn't delete radio codes. | - | |
|---|---|---|---|---|---|
| | | nt | Maintain settled parameters | | |
| | | ex | EXIT | | |
| ar | Automatic remotes learning | Y5 | Automatic remotes learning enabled. | | |
| | | nt | Automatic remotes learning disabled | nt | |
| | | ex | EXIT | | |
| rm | Radio mode | 1b | Each radio button is learned separate. The installer can choose how to learn a code: (C1 Start/Open, C2 Pedestrian/close). | 1b | |
| | | 4b | Learning a button of a remote, let all the other 3 buttons being learn automatically. | | |
| | | ex | EXIT | | |
| cn | Cycles counter | - | Shows cycle counter in 3 group of 2 digits. Example: 123.456 is shown as: 1.2 - 34. - 56 | - | |
| | | ex | EXIT | | |
| mm | Mass mode | Y5 | Enables the Mass entering mode | | |
| | | nt | Disables Mass mode | nt | |
| | | ex | EXIT | | |
| br | Barrier mode | Y5 | Enables Barrier mode. | | |
| | | nt | Sliding gate mode. | nt | |
| | | ex | EXIT | | |
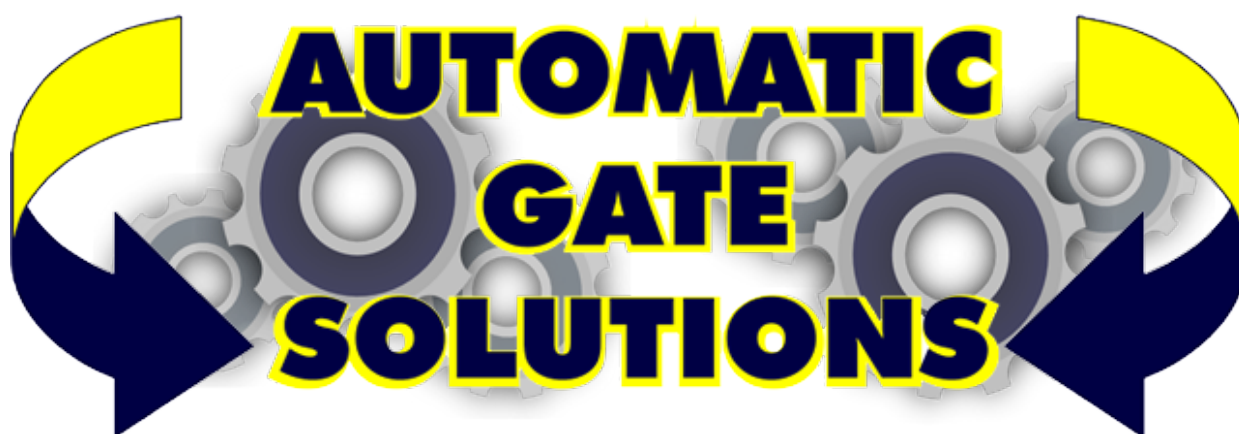
# GENERAL SOLAR NOTES

SOLAR PANEL SIZE
Generally speaking simple automatic gate installations will work perfectly in Australia using a 10 watt solar panel. The solar panel size determines the amount of energy you can collect each day. In a simple gate installation we need to collect enough energy to power our control board and run the gate and a 10 watt panel will do this. If however the installation is to include keypads, safety beams or other power hungry devices it may be necessary to increase the solar panel size. Another example where you may wish to consider upsizing your solar panel is where you may have a partially shaded area and you need to collect your energy each day in a shorter period of time. If you do decide to increase the size of your solar panel it may be necessary to install a simple regulator to protect your battery. Check with Automatic Solutions regarding this.

SOLAR PANEL DIRECTION
Your solar panel ideally should be mounted at an angle of 35 degrees and facing north (NB: In Australia).

NORTH
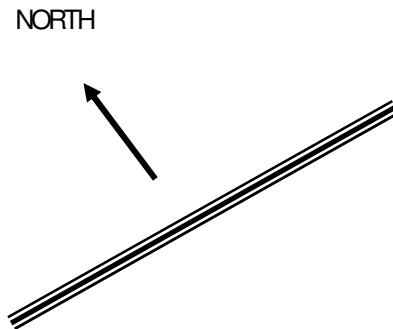
BATTERY SIZE
The battery stores the energy that you collect each day and your system draws on this battery to operate. All batteries have a limit to their storage capacity and can therefore only store enough energy to last our system a certain period of time. What happens if we have for example three days with little or no sunlight, very dark and overcast days? Our battery capacity reduces. The size of the battery will determine the number of days we can have as backup or how many days our system can survive without charging. In general terms bigger is better.
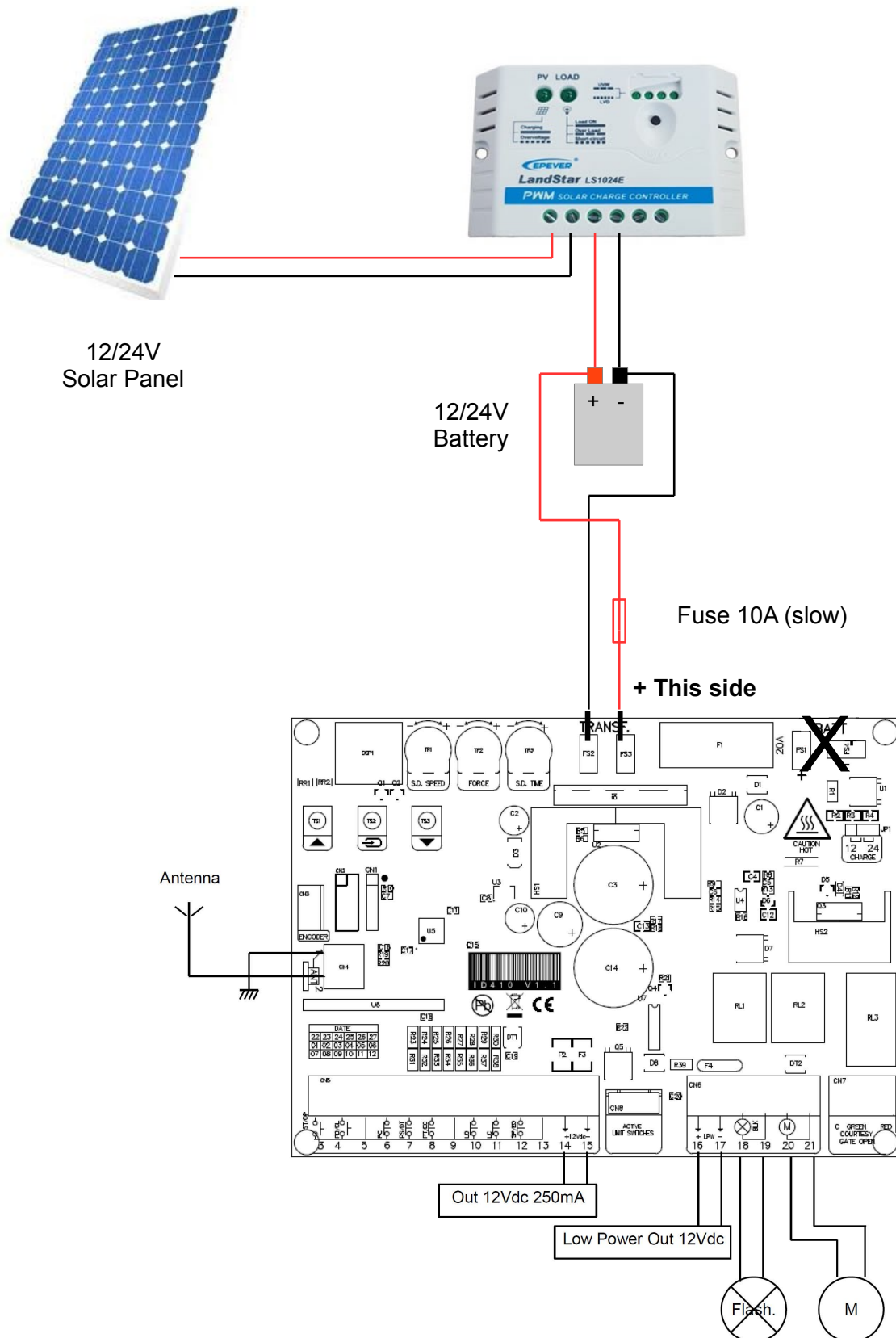
CABLES
Cables must be low voltage cables (5mm is good). Length of cables must be kept to a minimum. Ideally the solar panel will be no more than 10 metres from the battery and the battery will be no more than 5 metres from the motor. Connections must be clean and good quality.
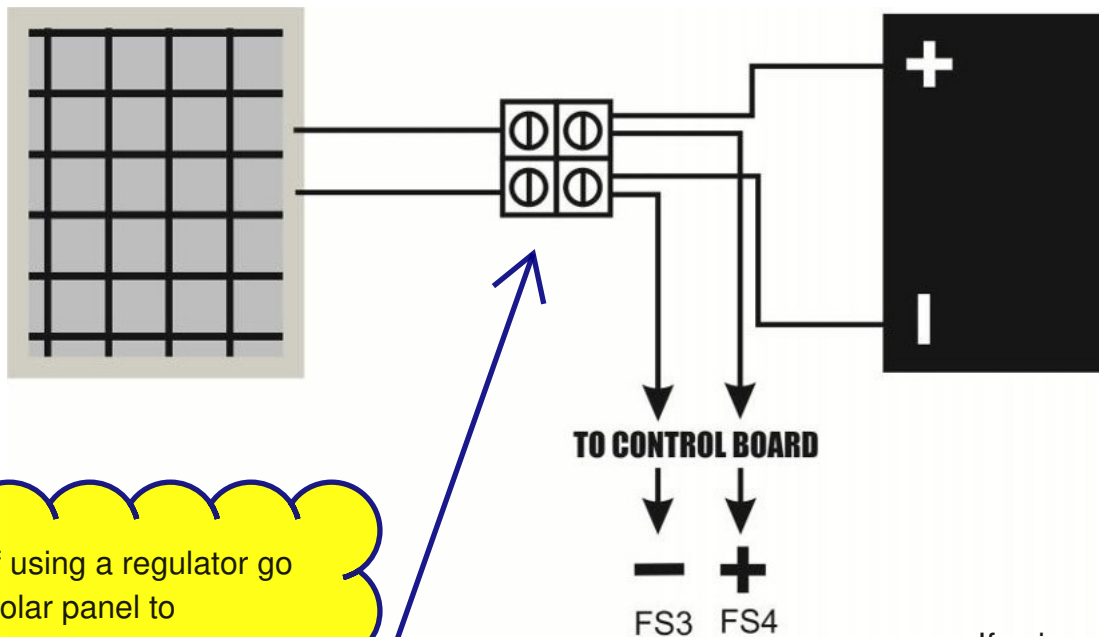
TO CONTROL BOARD

FS3     FS4

If using a regulator go solar panel to regulator, regulator to battery and then battery to control board. Do not take the

If using a regulator go solar panel to regulator, regulator to battery and then battery to control board. Do not take the board to the regulator.

# Solar Panel Connection ID410

12/24V
Solar Panel

PV LOAD

EPEVER® LandStar LS1024E
PWM SOLAR CHARGE CONTROLLER

12/24V
Battery

+  -

Fuse 10A (slow)

**+ This side**

Antenna

Out 12Vdc 250mA

Low Power Out 12Vdc

Flash.

M

Need some help or advice with your installation?
Keep this sheet handy because you might need this email address –
service@automaticsolutions.com.au
Internet and technology give us the ability to have a technician look at your install and help solve problems whether they are the initial installation or years later.
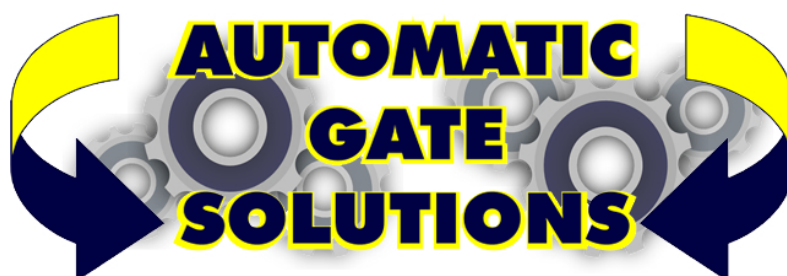
1. Don't start dismantling anything until advised.
2. Email the service department at the address above.

## SEND US YOUR PHOTOS AND GIVE US SOME EYES ON SITE

- Photo of the overall scene – we should be able to see the whole gate/s in this one photo.
- A couple of photos of the gate hinges (if swing gates).
- Photos of both opening stops and closing stops.
- Photo of the connections to any battery.
- A couple of photos of the control board wiring.
- Any other shots you think important.

NB: Please resize your photos before emailing.

Please attach photos as attachments and do not imbed them in the email.



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