AUTOMATIC SOLUTIONS

QUICK START INSTRUCTIONS

IMPORTANT - READ THIS FIRST

These instructions are intended as a quick start guide and should be used in conjunction with the manufacturer supplied instructions. These instructions provide you with a basic setup and are based on common installations in Australia. All electrical work in this country is to be performed by licensed electrical contractors. Electricity can kill.

BETA – USER2-24V LOGIC

GENERAL

BETA

Motor Voltage – 24 volt
Power Absorbed – 48 watts
Current Absorbed – 1.8A
Maximum Thrust – 1550 N
Protection Level – IP54
Duty Cycle – 15 Cycles / Hour
Dimensions – 840L x 66W x 72H
Opening Time – 16 Seconds
Maximum Leaf – 2.0 metres
Maximum Leaf Weight – 200 Kg

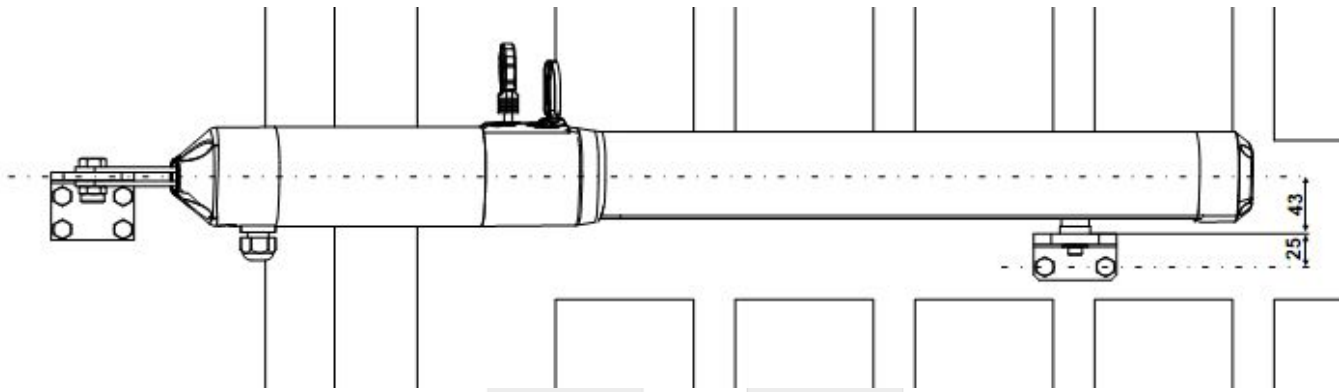
USER2 24

Motor Voltage - 24 DC
Motor Inputs - Two
Battery Charger – Optional
Receiver – External
Limit Switches – Yes / No
Pedestrian Input – Yes (NO)
Start Input - Yes (NO)
Stop Input – Yes (NC)
Photocell Input – Yes (NC)
Electric Lock – Yes 12Vdc 1A
Slow Speed – Yes

PRELIMINARY CHECKS

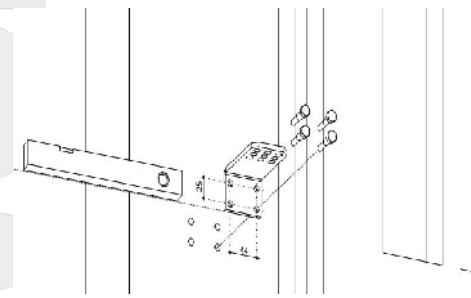
In order to make the automation work efficiently, the gate to automate must have the following characteristics:
- It must be balanced.
- It must oscillate fluently.
- You must be able to carry out manual closing and opening of the gate without any effort.
- Make sure that the gate has a solid structure and that there is no friction points in its movement.

BETA GEAR MOTOR INSTALLATION



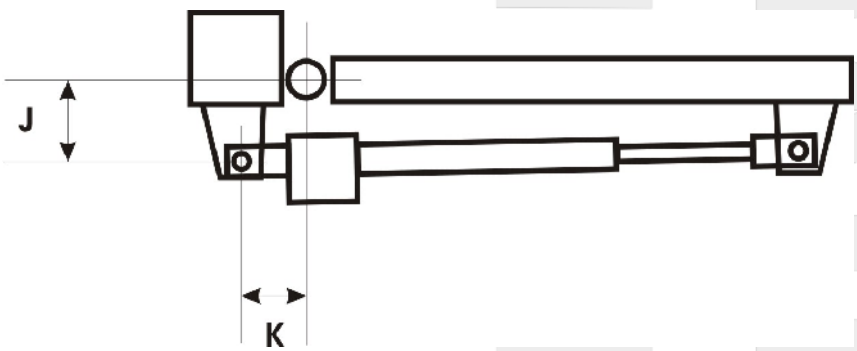
1. INSTALL POST BRACKET

The position of the post bracket is critical to the success of your installation and attention needs to be paid to both its correct height and also its position on the post in respect to the relationship between your gate hinge pivot point and the motor pivot point on the bracket.



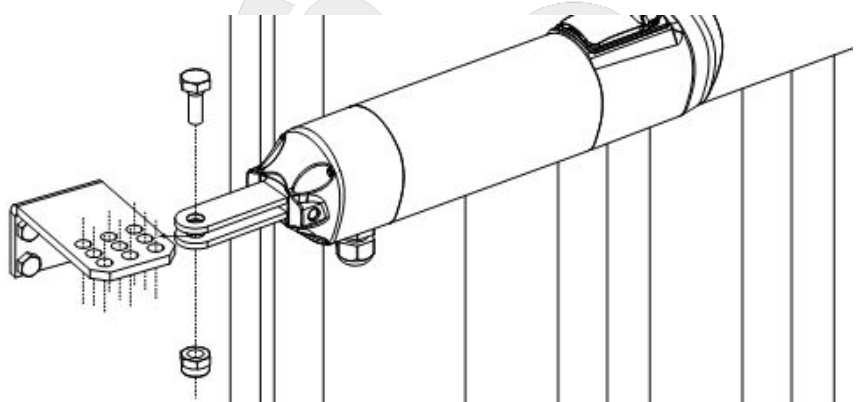
Once you have determined the general desired height of your motor, position the bracket and take note of dimensions "J" and "K". In a standard installation the basic aim is to get dimensions "J" and "K" to be as close as possible to equal.

The other consideration before fixing the post bracket is that the pivot point of the post bracket should be 43mm higher than the pivot point of the gate bracket making the gear motor perfectly horizontal.

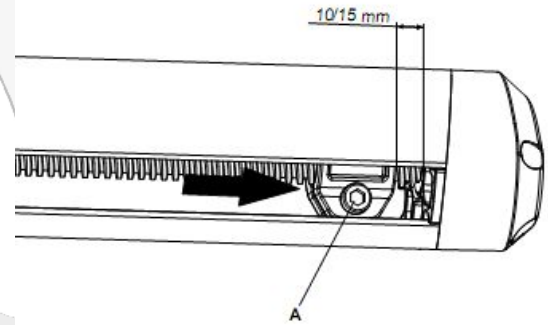


2. ATTACH YOUR MOTOR TO THE POST BRACKET

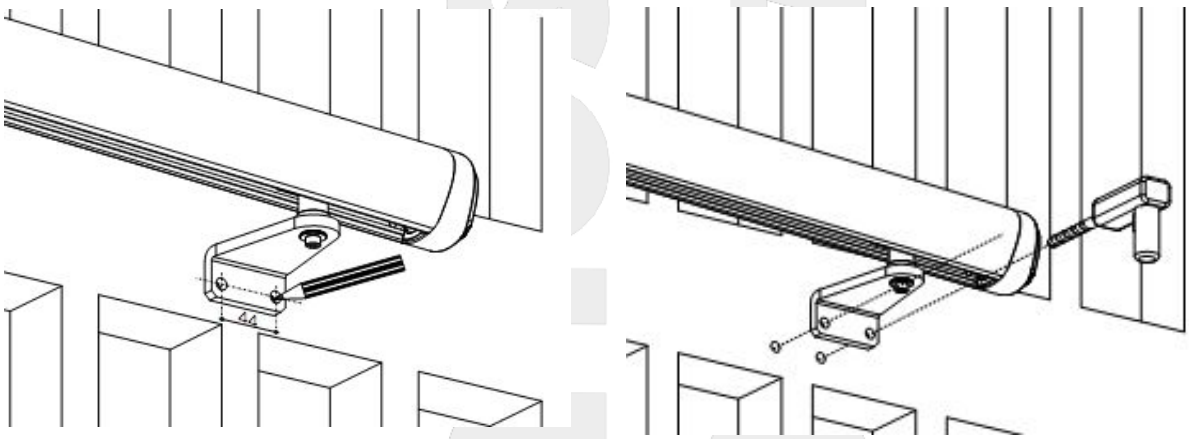
With your post bracket securely fastened, attach your gear motor to the post bracket with the bolts provided. Take care to support the weight of the gear motor at this point and throughout this stage.



2. INSTALL THE GATE BRACKET AND TEST



- Ensure the mechanical motor stop is 10 to 15 mm from the end.
- Attach the gate fixing bracket to the motor.
- Release the gate with the override key.
- Pull the gate bracket down to meet the closing stop
- Close the gate.
- Put the gate bracket to the gate and mark the fixing point.
- Fit the gate bracket to the gate and attach the motor.
- While in manual mode carefully run the gate through its entire 90 degrees to ensure there are no sticking points.



3. INSTALL GATE STOPS

This is a critical point in ensuring long trouble free operation of your automation system, yet it is relatively simple. Each gate should have a positive and well secured opening stop and closing stop. There are a range of stops available over the counter or you can make them yourself but the main point is that the stops should be well secured. The Beta does use mechanical motor stops which makes it possible to perform an installation without physical stops however to protect the installation from possible damage stops should be installed if possible.

4. LOGIC CONTROL MOUNTING AND CABLING

Mount the logic control box at a point as close as possible to a motor giving consideration to the position of your power source. Ideally you would place the logic control directly next to your power point however no single motor cable run should exceed 10 metres. Bring the power source to the logic control!

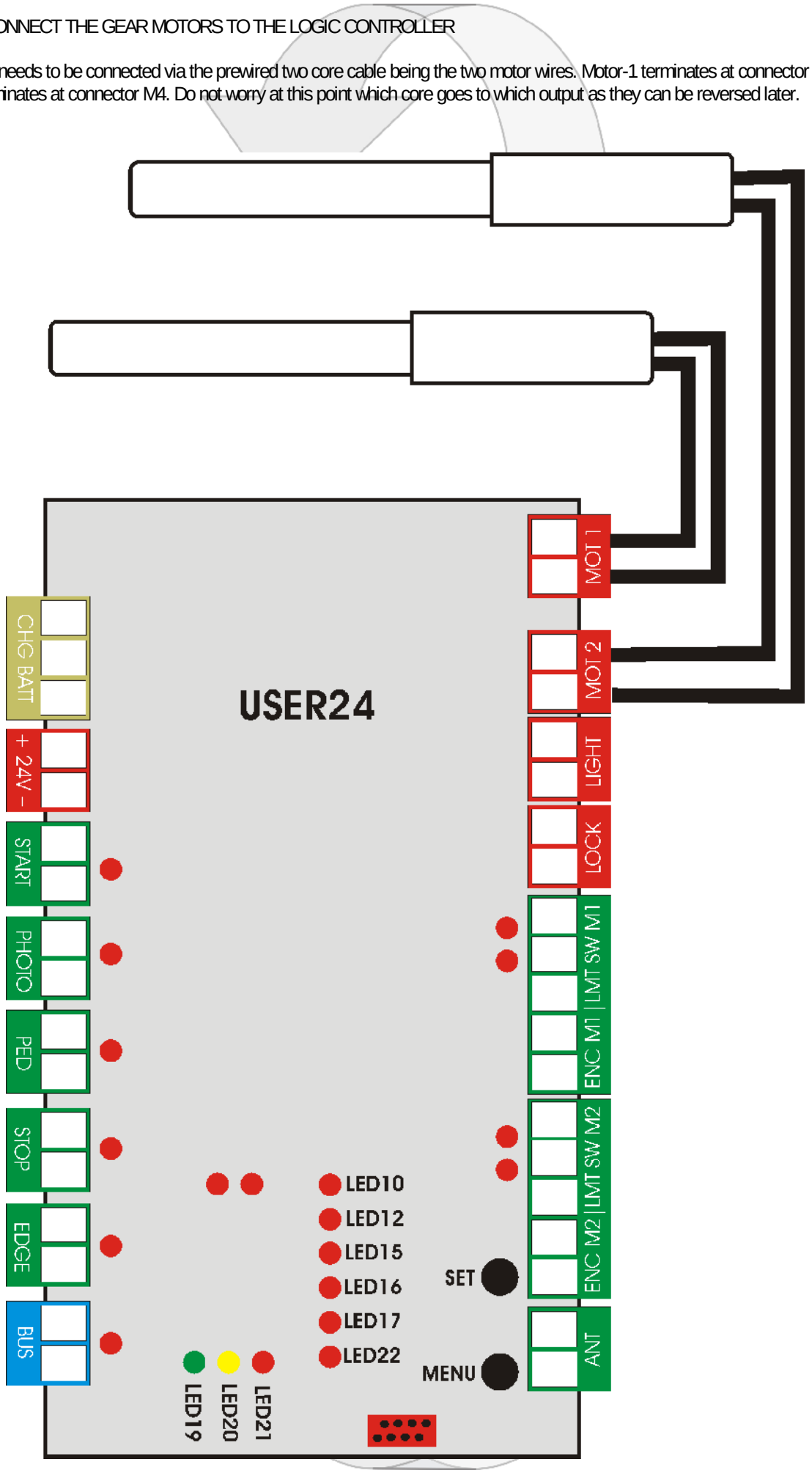
Using suitable electrical conduits (20mm) underground and in exposed areas plan and install cabling from motors and accessories to the logic control board. Use electrical junction boxes and/or suitable weather resistant glands to terminate connections. Do not connect anything in the logic control board at this point.

IMPORTANT:

- USE LOW VOLTAGE MULTI STRAND CABLE – 3MM FOR MOTOR CONNECTIONS
- NEVER RUN MAINS VOLTAGE CABLE IN THE SAME CONDUIT AS LOW VOLTAGE

5. CONNECT THE GEAR MOTORS TO THE LOGIC CONTROLLER

Each motor needs to be connected via the prewired two core cable being the two motor wires. Motor-1 terminates at connector M1 and Motor-2 terminates at connector M4. Do not worry at this point which core goes to which output as they can be reversed later.



6. INSTALL YOUR INPUT LOOPS

The USER2 24 logic control does not require loops to be inserted into normally closed circuits or limit switch inputs. These may be left empty. Note: If you have them in and proceed through programming they must stay in.

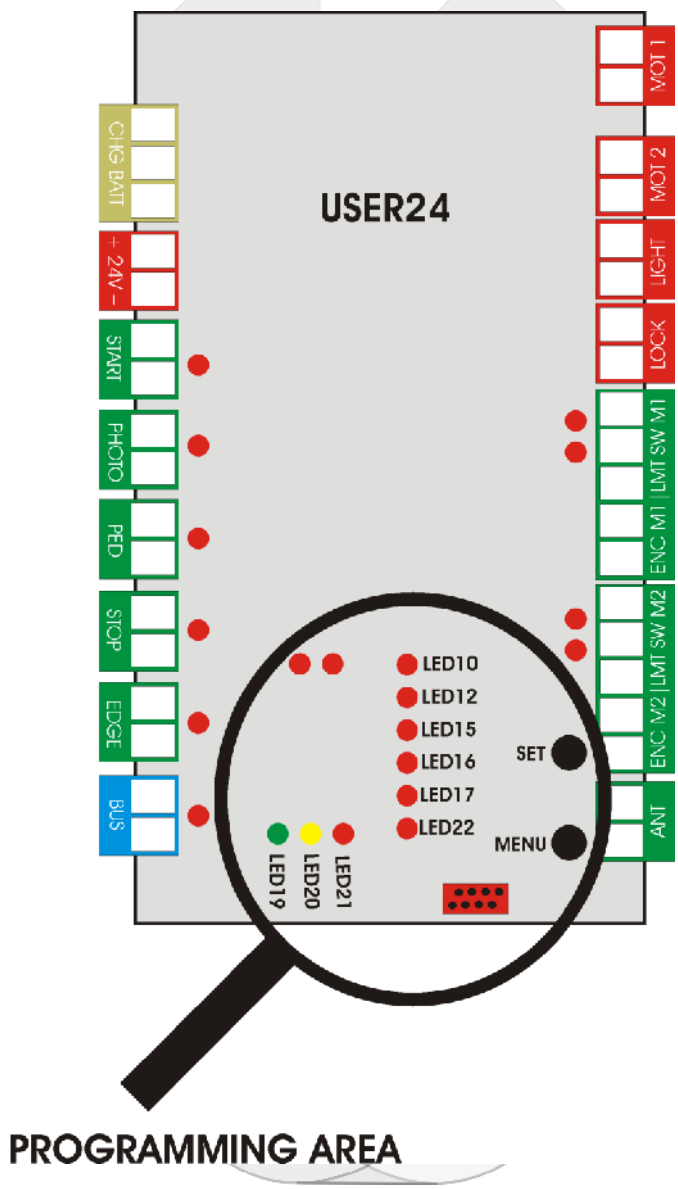
7. CONNECT POWER

You can now plug your logic control board into the 240 volt power outlet or have your electrician connect your power via a suitably installed isolation switch and turn your power on.

8. PROGRAM THE SETTINGS

- Press MENU once – LED10 (Gate Type) illuminates. Press SET repeatedly to choose setup type >>
  LED20 YELLOW = DOUBLE LEAF, LED21 RED = SINGLE LEAF
- Press MENU once – LED12 (Pause) illuminates. Press SET repeatedly to choose pause time in automatic closing if used >>
  LED19 GREEN = LESS THAN 15 SECS, LED20 YELLOW = LESS THAN 45 SECS, LED21 RED = LESS THAN 180 SECS
- Press MENU twice – LED16 (Del Time) illuminates. Press SET repeatedly to set delay between motor1 and motor2 >>
  LED19 GREEN = NO DELAY, LED20 YELLOW = LESS THAN 4 SECS, LED21 RED = LESS THAN 7 SECS
- Press MENU once – LED17 (Logic) illuminates. Press SET repeatedly to choose and mode of operation >>
- ***LED19 & 20 GREEN & YELLOW = NORMAL OPEN STOP CLOSE, LED 20 YELLOW = AUTOMATIC CLOSE***
- Press MENU once – LED22 (Speed) illuminates. Press SET repeatedly until LED20 YELLOW is lit.
- Press MENU once – LED10 and LED12 (Mot Power) Flash alternately. Press set repeatedly until LED20 YELLOW is lit.
- Wait 30 seconds until all LED's go out and the logic exits programming.

NB: If you do not press a button during programming the control will exit this mode. Simply start again.



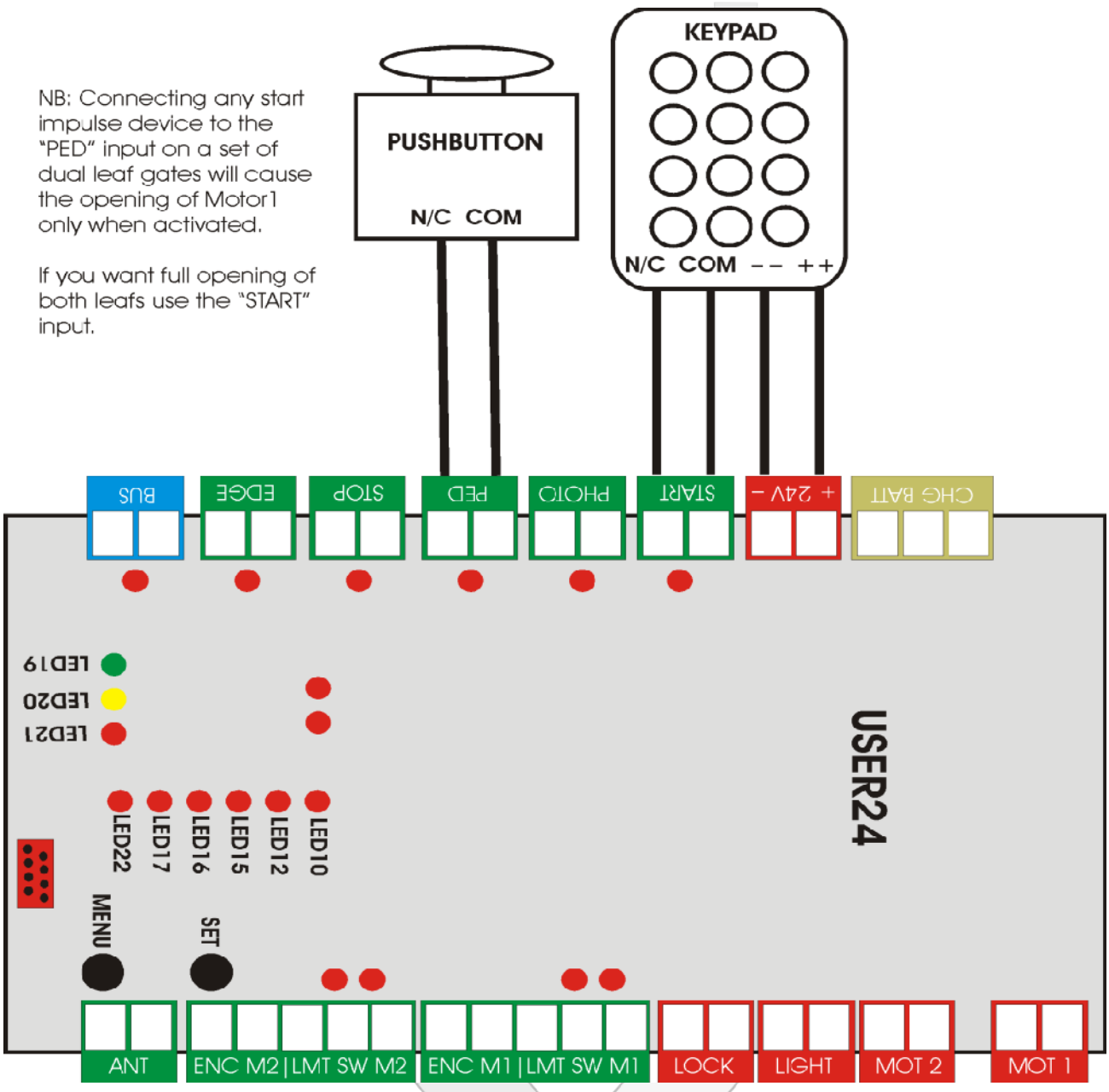
PROGRAMMING AREA

9. PROGRAM LEARN MODE

- Turn off the mains power
- Put the gates into manual using the override key and close to within 300mm of the closing stop.
- Lock the motors using the override key.
- Turn on the power.
- Press the MENU button once – LED10 will illuminate.
- Press SET and hold until both motors start closing and release.
  (NB: If one or both motors open instead of closing – turn off the power – reverse your motor wires as required and terminal blocks M1 and/or M4 and then return to the top of this section.)
- Once the motors reach the stops they will automatically perform an opening cycle.
- After reaching the opening stops they will automatically perform a closing cycle.
- Once the closing cycle is complete the work time programming phase is complete.

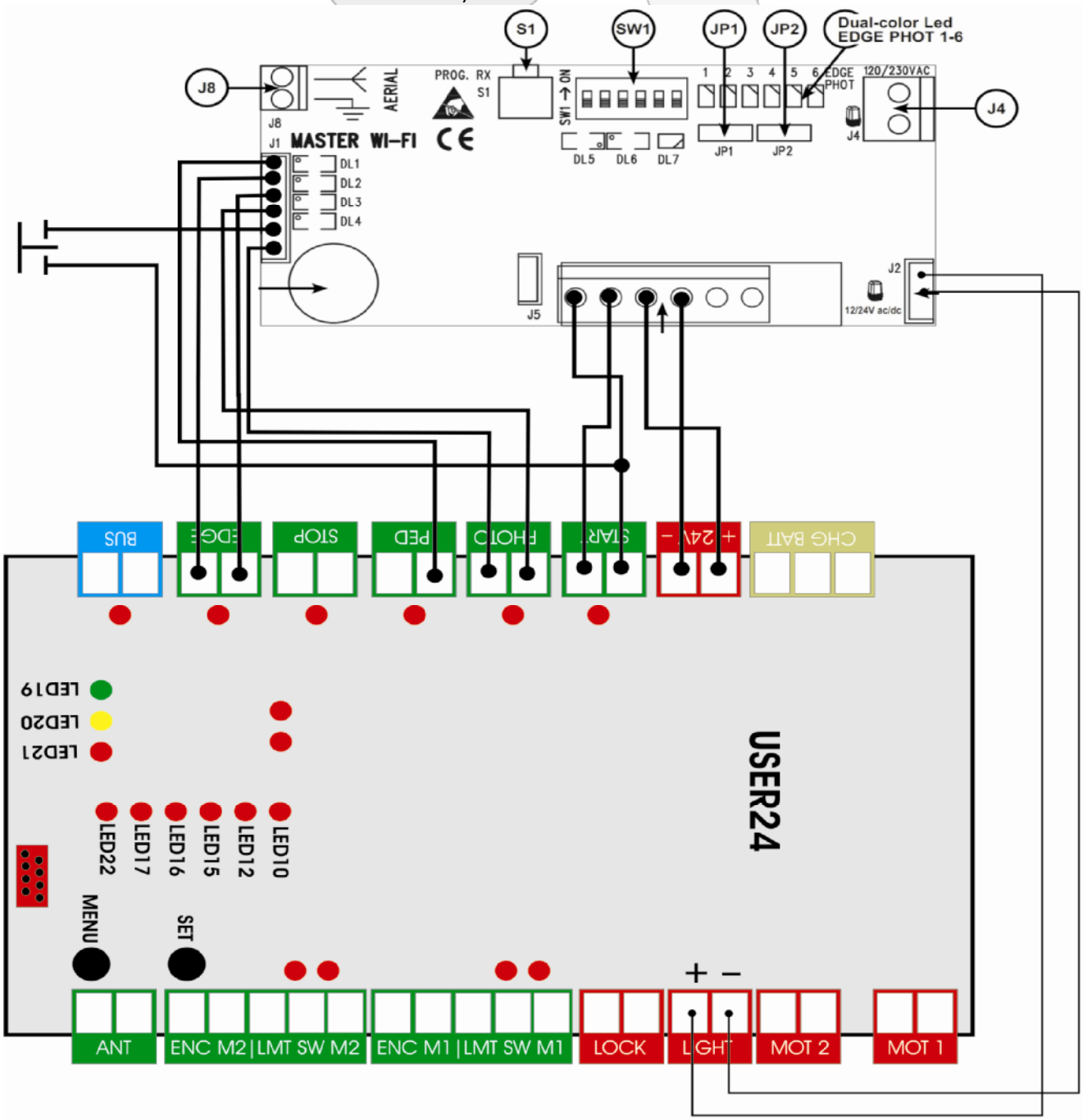
10. CONNECT OPENING DEVICES

You can now attach any opening devices you have including keypads and pushbuttons etc. Connect these one at a time and test the installation after each addition. Opening devices are to be ***normally open dry contacts*** and may be connected at the terminal blocks marked START and/or PEDESTRIAN (NB: any opening command is momentary).



RIB WIFI MASTER AND NOVA PHOTOCELLS

1. CONNECTING THE MASTER RECEIVER TO THE LOGIC CONTROL BOARD (POWER DOWN THE CONTROL BOARD BEFORE MAKING CONNECTIONS) –



TERMINATION OF RIB WIFI RECEIVER TO USER2 24V LOGIC

1.Pay attention to polarity from the "light" on the logic board to the 24 volt connector on the WiFi receiver.

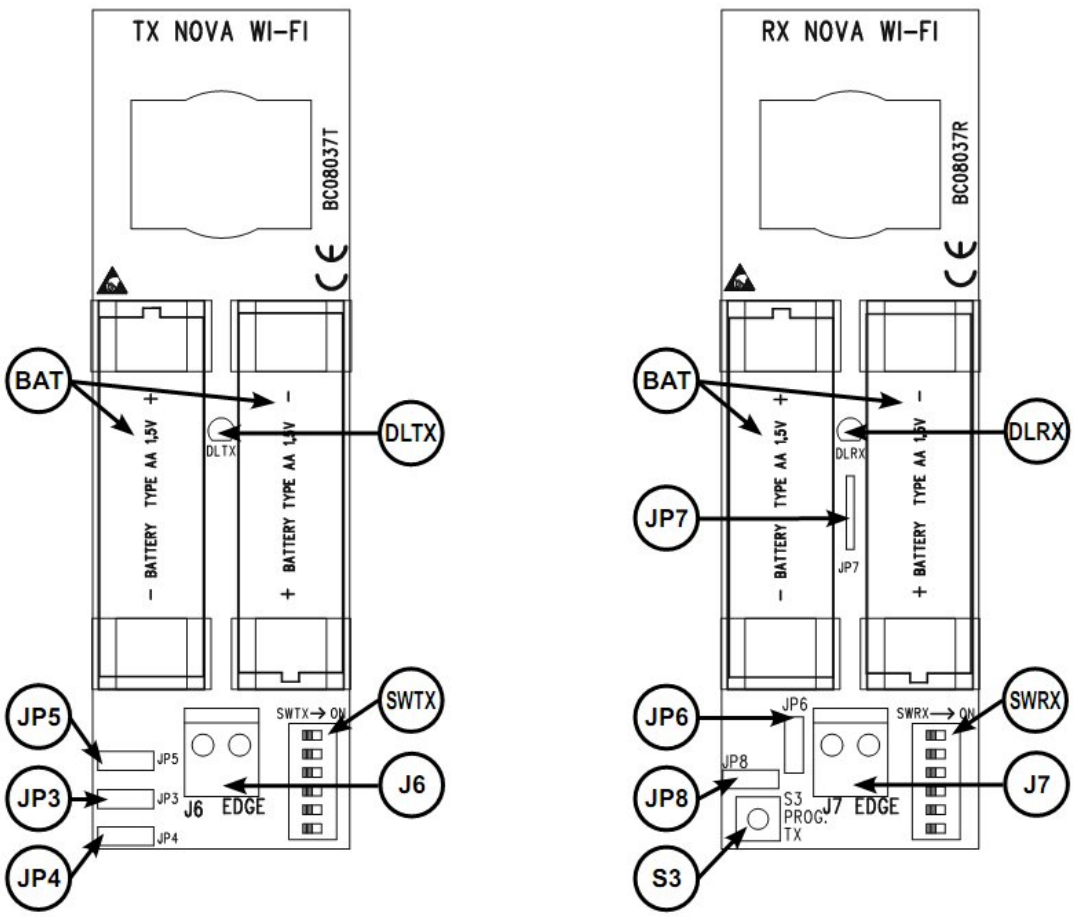
2. Cables from the receiver if the plug is inserted correctly are from top to bottom -

Green
Grey
Yellow
Black
White
Brown

2. SETUP AND POWER NOVA PHOTOCELLS – RECEIVER (RX) AND TRANSMITTER (TX)

Up to six sets of photocells or combination of WiFi devices may be installed to one WiFi Master. Each set of photocells need to be given a number (channel) from one to six. After mounting your photocells paying attention to alignment set the receiver (RX) and transmitter (TX) to the same chosen channel (example: turn on dip switch number 1 on both the RX and TX).
On the TX make sure Jumpers 5, 3 and 4 are as follows – JP5 to cover the left two pins – JP3 to cover the right two pins and JP4 to cover the left two pins.
On the RX make sure that jumper 6 is as follows – JP6 to cover the top two pins.

3. INSERT BATTERIES - Insert the batteries into the TX and RX. Upon inserting the batteries the TX led should flash green for ten seconds. Upon inserting the batteries in the RX the red led will flash for 3 seconds. If the red led then stays on your alignment is good. If the red led goes out then you need to adjust your alignment.
NB: The red led will stay on for three minutes during alignment check – if it goes out simply press the S3 program button in the bottom left corner to start the three minutes again.

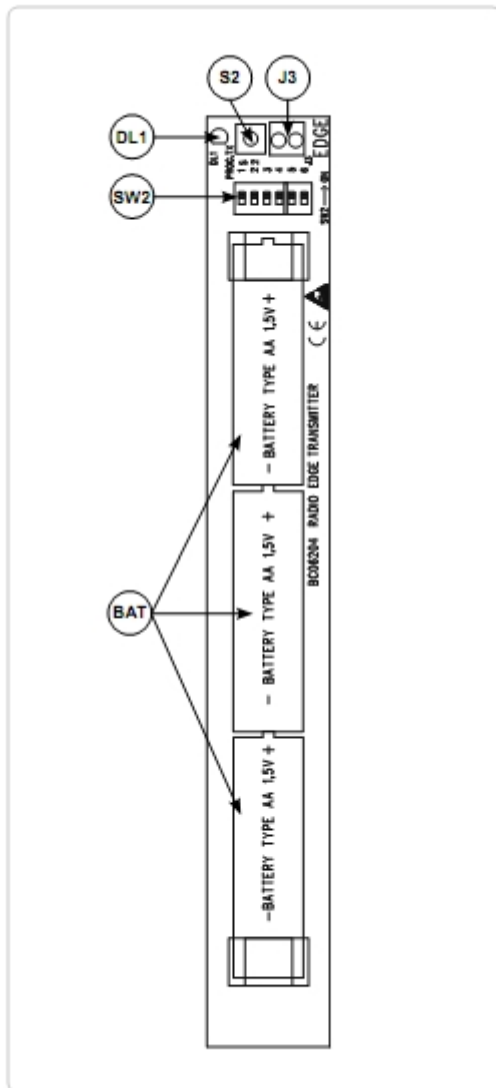


4. POWER THE RECEIVER – Before applying power to the receiver you need to enable any channels you intend to use. In our example we are using channel one so on the receiver we need to turn on dip switch (channel) one.
You can now turn on power to the gate logic control board which in turn will provide power to the receiver. You should hear a single beep and yellow led DL6 will light. At this point no remote control transmitters have been memorized so led DL7 will flash red and green.

5. PROGRAM ANY REMOTE CONTROL TRANSMITTERS YOU WISH TO USE – Press and hold for at least three seconds the program button on the receiver – DL7 led will go solid red for the next ten seconds. In the next ten seconds press and release any button on your remote control transmitter that you intend to use. You can then add any further remote control transmitters by simply pressing them in turn but within the next ten seconds. Every time the receiver learns a new remote control transmitter it resets the ten seconds. If no new codes are received after ten seconds the receiver will exit this mode and led DL7 will go out.
6. PROGRAM THE PHOTOCELLS TO THE RECEIVER – Press and release the program button on the Master receiver – channel selection led number one should flash red – in the next minute press and release the program button on the photocell RX marked S3 – at the Master receiver the led for channel one should turn green, a buzzer sounds to indicate that the photocells have been learnt and the led for channel two will start flashing red in readiness for you to learn further devices if available. Wait one minute and the Master receiver will exit program mode and all the channel leds will be off. At the Master receiver leds DL2 and DL3 should be lit red.
7. PROGRAM THE LOGIC CONTROL TO LEARN THAT THE RECEIVER IS THERE – Set your logic control into program mode and exit this mode. Then run “PROGRAM LEARN MODE” as described on page . After the system exits learn mode it should now see the WiFI Master receiver and respond to all programmed devices.
8. TEST YOUR INSTALLATION

RIB WIFI MASTER AND WIFI EDGE STRIP

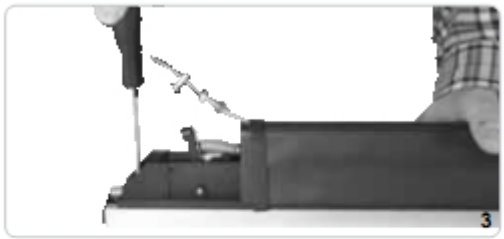
1. SETUP AND POWER WIFI EDGE STRIP
   Up to six edge strips or combination of WiFi devices may be installed to one WiFi Master. Each edge strip needs to be given a number (channel) from one to six. Install the batteries in the edge strip and set the edge strip dip switch to the same chosen channel as the WiFi Master (example: turn on dip switch number 1 on both the Master and the edge strip). Re assemble the edge strip paying attention to the calibration and that the roller is over the second micro switch pin (Fig16).



2. POWER THE RECEIVER – Before applying power to the receiver you need to enable any channels you intend to use. In our example we are using channel one so on the receiver we need to turn on dip switch (channel) one.
   You can now turn on power to the gate logic control board which in turn will provide power to the receiver. You should hear a single beep and yellow led DL6 will light. At this point no remote control transmitters have been memorized so led DL7 will flash red and green.
3. PROGRAM ANY REMOTE CONTROL TRANSMITTERS YOU WISH TO USE – Press and hold for at least three seconds the program button on the receiver – DL7 led will go solid red for the next ten seconds. In the next ten seconds press and release any button on your remote control transmitter that you intend to use. You can then add any further remote control transmitters by simply pressing them in turn but within the next ten seconds. Every time the receiver learns a new remote control transmitter it resets

the ten seconds. If no new codes are received after ten seconds the receiver will exit this mode and led DL7 will go out.

4. PROGRAM THE EDGE STRIP TO THE RECEIVER – Press and release the program button on the Master receiver – channel selection led number one should flash red – in the next minute press and release the program button on the edge strip marked S2 – at the Master receiver the led for channel one should turn green, a buzzer sounds to indicate that the photocells have been learnt and the led for channel two will start flashing red in readiness for you to learn further devices if available. Wait one minute and the Master receiver will exit program mode and all the channel leds will be off. At the Master receiver leds DL2 and DL3 should be lit red.
5. TEST YOUR INSTALLATION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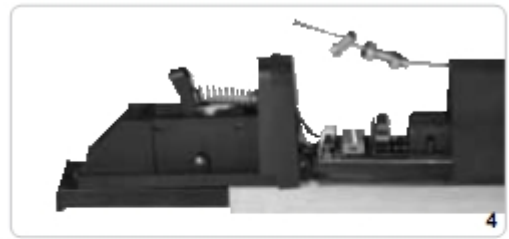
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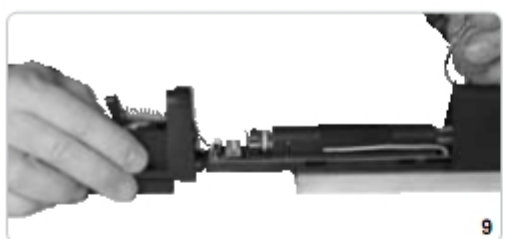
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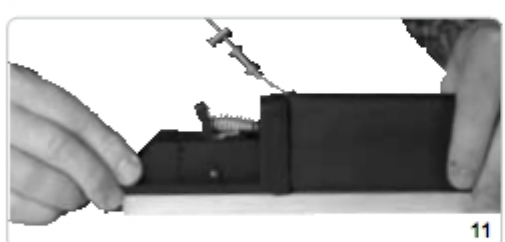
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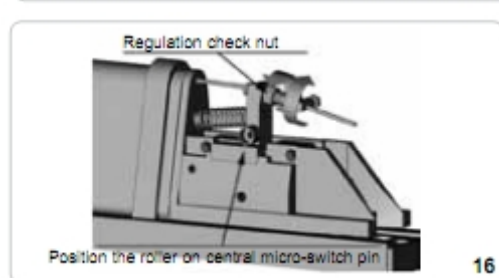

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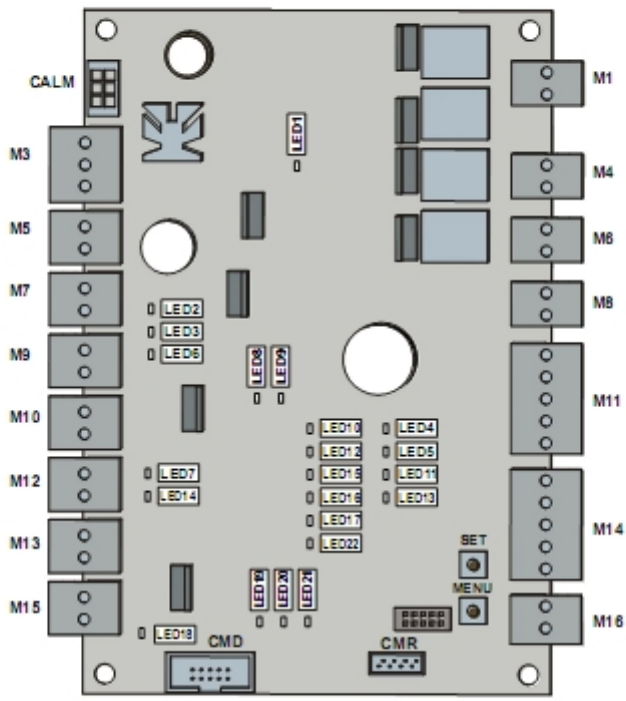
DESCRIPTION OF THE COMPONENTS



LED1 = Fuse breaking signal
LED2 = Start
LED3 = Photocell
LED4 = Limit switch opening M1
LED5 = Limit switch closing M1
LED6 = Pedestrian Start
LED7 = Stop
LED8 = Battery
LED9 = 24Vdc Power supply
LED10 = Using modality
LED11 = Limit switch opening M2
LED12 = Time of pause
LED13 = Limit switch closing M2
LED14 = Safety edge
LED15 = TX Programming
LED16 = Leaf delay adjustment
LED17 = Functioning logics
LED18 = BUS Indicator
LED19 = Function indicator
LED20 = Function indicator
LED21 = Function indicator
LED22 = Motors' speed adjustment
SET = Setting
MENU = Selection

M1 = Motor 1 power supply
M3 = Battery card connection
M4 = Motor 2 power supply
M5 = 24Vdc exit
M6 = 24V 15W Warning lamp
M7 = Start
M8 = Electric lock exit
M9 = Photocell connection
M10 = Pedestrian start
M11 = Encoder / Limit switch M1
M12 = Stop
M13 = Security edge
M14 = Encoder / Limit switch M2
M15 = BUS accessories connection
M16 = Antenna
CMD = Display module connection
CMR = Receiver module connection
CALM = 24Vdc power supply connection

AUTOMATIC SOLUTIONS AUSTRALIA PTY LTD
PO BOX 1034 CANNING VALE WESTERN AUSTRALIA 6970
TECHNICAL HELP – service@automaticsolutions.com.au

SELF INSTALL - NEED TECHNICAL ASSISTANCE?

OPTION 1: DIRECT WITH THE SERVICE DESK – QUICKEST AND MOST EFFECTIVE METHOD

Submit your enquiry direct with the service desk at – service@automaticsolutions.com.au
The service desk has the most experienced staff in Australia to help with your problem but they need your help.

- **Describe your problem in detail and as clearly as possible. Don't forget to include a telephone number.**
- **Be certain to detail which model or models of you are working with.**
- **Send photos of the installation – they love photos. The people at the service desk are good but they are even better when they can see the installation. Send photos of the overall scene so they can see the entire installation. Also send photos of the wiring to the control board and any other part of the installation you think is relevant.**
- **Send video if appropriate. Smartphone's these days take remarkably good video in small file sizes which can be emailed in a moment. If your problem needs a video to show the issue please feel free to send it.**

NOTE: THIS IS BY FAR THE FASTEST AND MOST SUCCESFUL WAY TO SOLVE YOUR PROBLEM
PHOTOS AND VIDEOS ARE THE NEXT BEST THING TO BEING THERE

OPTION 2: LODGE YOUR ENQUIRY LOCALLY - SLOWER BUT CAN STILL BE EFFECTIVE

Make contact with the store of purchase. Branch staffs are typically not technicians and dependent on their length of service will have varying degrees of technical knowledge. If they cannot help however they will certainly either source help locally from their technicians or make contact with the service technicians on your behalf.

OPTION 3: SERVICE CALL WITH AUTOMATIC SOLUTIONS TECHNICIAN – SLOWEST METHOD

If you fall within the local branch service area it may be possible to book a local technician to look at your installation. Wait times will vary dependent on local workloads. The cost is a service fee which includes the first half hour and the hourly rate thereafter. If any Automatic Solutions provided parts are found to be defective and within warranty these will be provided free of charge.
(NOTE: If you suspect that any parts are defective and within warranty you may wish to consider option 4)

A note on this option: If you decide on this option you will be asked to sign an "authorisation to proceed" which will provide legal authority and payment security. This form has three options available of which only the first two are available to you. The third option is for warranty repairs only for full install customers. Self install customers requiring warranty only service need to refer to option four below.

IMPORTANT: IN SHORT THIS OPTION WILL INCUR CHARGES

OPTION 4: RETURN THE PRODUCT IF BELIEVED TO BE FAULTY

As a self install customer who has purchased product if you believe the product to be faulty rather than an installation or site problem you have the option of returning the product for evaluation and to exercise your right to a replacement, repair or refund as applicable. All returned product is forwarded immediately to the service technicians for evaluation and response. There are two main methods available to return product –

- **Direct to the service centre – this is the quickest method as it cuts out the branch delay**
- **Via the branch of purchase – slower because of the delay at the branch**

When choosing this option you need to complete a product return form. This form gives you all the information on procedure involved and where to send to. These are available at the branch of purchase, can be emailed to you (contact your branch), or available here - http://automaticsolutions.com.au/page/warranty.php