

# 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.

## TAU T-ONE8 K580M



### GENERAL

#### T-ONE8

Motor Voltage – 240 volt  
Power Absorbed – 240 watts  
Speed – 10.5 m/min  
Maximum Thrust – 1160 N  
Protection Level – IP44  
Duty Cycle – 40%  
Dimensions – 308L x 203W x 288H  
Current Absorbed – 1.3A  
Maximum Leaf Weight – 800 Kg

#### K580M

Motor Voltage – 240 AC  
Motor Inputs - One  
Battery Charger – No  
Receiver – Built In  
Limit Switches – Yes  
Pedestrian Input – Yes (NO)  
Start Input - Yes (NO)  
Stop Input – Yes (NC)  
Photocell Input – One (NC)  
Slow Speed Regulator – Yes

## SAFETY

This booklet will offer you information you may need to install your gear motor and to safeguard your safety. **However, caution is unquestionably indispensable and nothing is better than preventing accidents.**

**WARNING:** any repair or adjustment of working machinery is strictly prohibited unless all the necessary precautions (electrical supply disconnected and motor off) have been taken in order to avoid possible accidents.

**WARNING:** any repair must be carried out by qualified people.

**WARNING:** All moving mechanisms must be provided with suitable protections.

**WARNING:** Keep the automatic controls out of the reach of children.

**WARNING:** Command pulses must be given from positions where the gate is visible.

**WARNING:** Use transmitters only if you can see the gate.

Read carefully the instructions enclosed in this manual.

Keep this booklet in a suitable place well known to all interested people.

## 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 slide 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.
- Make sure that the gate has both solid opening stops and solid closing stops.

## GENERAL ORDER OF INSTALLATION

To ensure a good installation of the gear motor, we suggest the following order of installation:

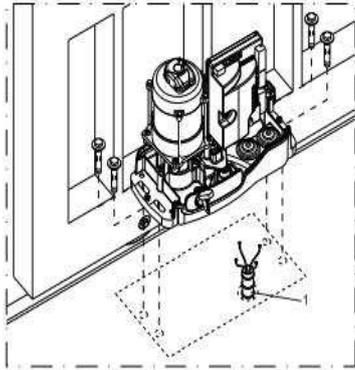
- 1 - Open the box and take out gear motor. Inspect the contents and ensure all components are present.
- 2 - Make sure that the gate is rolling freely and does not bind at any point.
- 3 - Determine the height and position of your motor and mark the mounting base position.
- 4 - Install all conduits for mains power supply and other devices.
- 5 - Install your base ensuring a strong, solid fixing. The motor will generate large amounts of torque at start up.
- 6 - Attach the gear motor to the base.
- 7 - Fix your rack to the gate ensuring that you maintain approximately 1mm gap between the rack and the motor pinion.
- 8 - Attach the limit actuators to the rack at the desired open and close positions.
- 9 - Connect power to the motors control board.
- 10 - Program remote control transmitters.
- 11 - Check motor direction.
- 12 - Program work times.
- 13 - Test your installation.
- 14 - Attach your safety devices and access devices one by one testing for correct operation at each point.

## MAINTENANCE

Periodically check your installation for loose or worn fastenings, correct alignment and operation of your gate and correct operation of your manual override operation. Clean and keep clean all areas of the installation. Remember that the motorisation has been planned in order to help you use the gate. This means that it does not resolve the problems caused by an inadequate installation or by a poor upkeep of the gate.

# STONE SLIDING GATE MOTOR INSTALLATION

## INSTALL MOTOR BASE



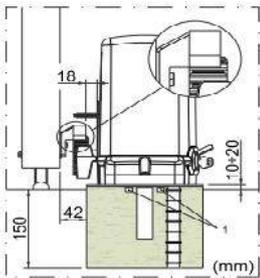
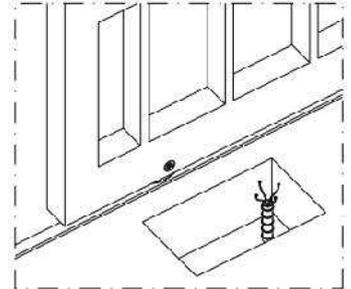
The position of the motor base plate will vary with each installation but in general the base plate needs to be 40mm TO 50mm from the side face of your gate. The height will be determined by your site conditions and gate structure.

The motor will generate a large amount of force on starting and for this reason it is important that the motor base is anchored securely to the ground.

**IMPORTANT:** In all cases install all conduits before securing your motor base. Once the base is installed it is much more difficult to install conduits.

### BOLT DOWN MOTOR

Once your motor base is prepared and due time has been given for foundations to dry or settle you can attach your motor to the foundations securely.

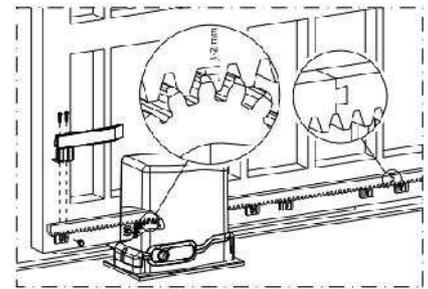


## INSTALL RACK

If you have carefully planned your motor base position then it should be possible to sit a length of rack onto the motor pinion and the rack fixing tabs should be in good position against the back face of the gate. Yes? Good. Put the motor in manual mode using your manual override key – insert the key in the keyway and turn – pull the manual override lever out to 90 degrees. You are now in manual mode and the pinion will rotate freely.

Open the gate fully – position your first length of rack on the pinion and against the gate – get this first length roughly level and attach this length at two end points – adjust the height of this length so that

there is approximately a 1mm gap between the rack and the pinion – move the gate backwards and forwards along this length and check for no tight spots or binding – now install the next length in the same way (if the rack has location lugs this helps to position one end and you only need to position the other end and fix, if not you can use another length upside down and a clamp to hold the new length at the correct height and position) - when all lengths are attached and you are happy that you have no tight spots you can set the remaining fasteners on the rack.

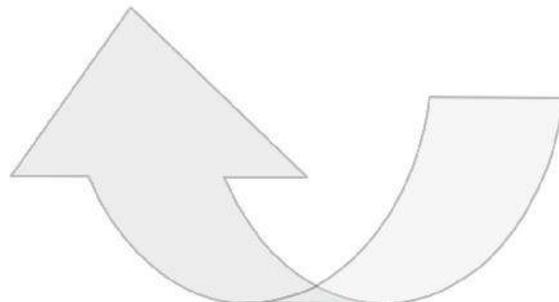


## INSTALL GATE STOPS

This is a critical point in ensuring long trouble free operation of your automation system, yet it is relatively simple. Each gate must 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 critical point is that the stops must be well secured as the gear motors will exert quite a deal of force on them during programming. In summary when your gate opens it must hit a positive stop point that stops the gate from opening any further and the same at the closed point. Make the open and closed stop about 10mm from where you actually want the gate to stop.

## ATTACH LIMIT ACTUATORS

Now attach your limit actuators to the rack in the desired opening and closing position. The actuators should be positioned to hit the limit spring and activate the switch before hitting the opening and closing stops. If after programming the gate drives hard to either stop adjust the actuators and re program so that the gate does not hit the stops.

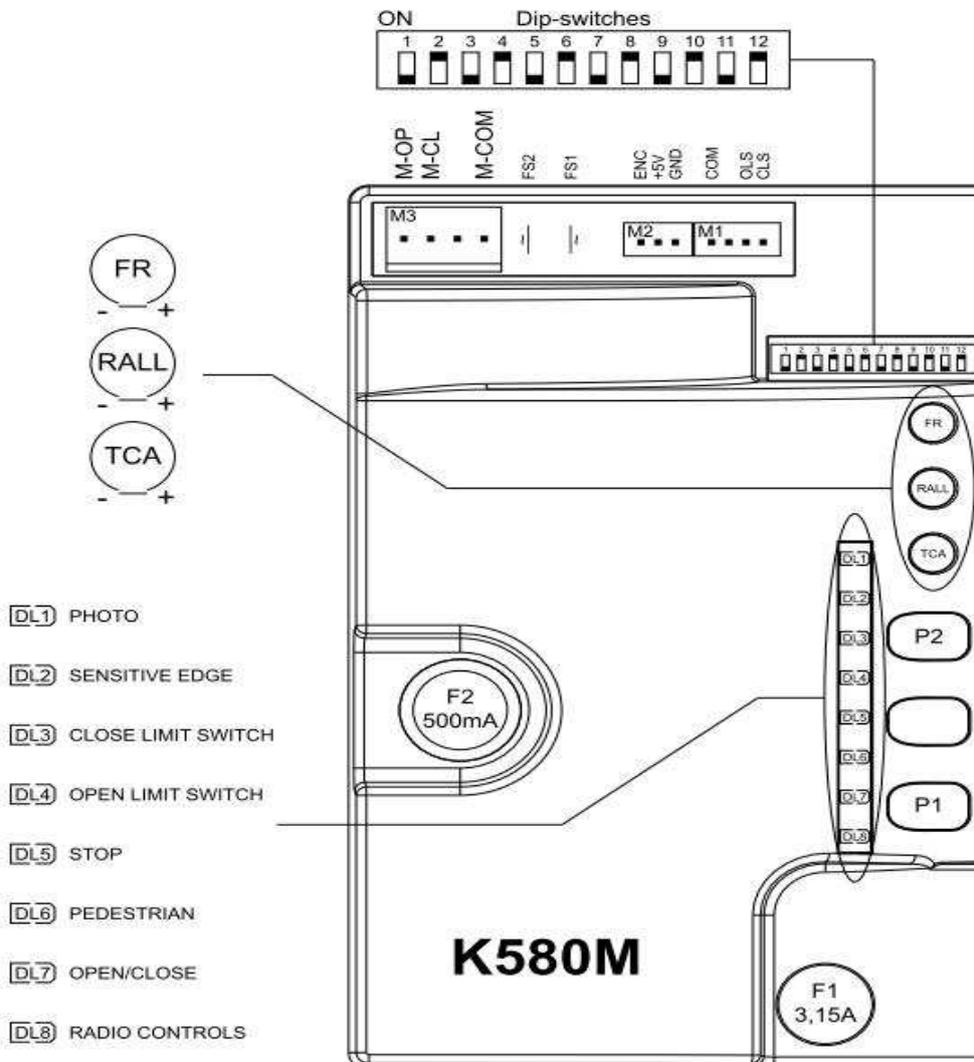


# K580M LOGIC CONTROL BOARD

## BOARD INTERFACE

### TERMINALS – BOTTOM TO TOP (1TO 19)

- |                           |                                   |   |  |
|---------------------------|-----------------------------------|---|--|
| 1. 240V Neutral           |                                   |   |  |
| 2. Earth                  |                                   |   |  |
| 3. 240V Active            |                                   |   |  |
| 4. 240V Flasher           | 240Volt Flashing light output     |   |  |
| 5. 240V Flasher           |                                   |   |  |
| 6. Open/Close             | Normally Open Input               |   |  |
| 7. Pedestrian             | Normally Open Input               |   |  |
| 8. Stop                   | Normally Closed Input             | Must have loop installed to terminal 9  |  |
| 9. Common                 |                                   | Common for terminal 6, 7 and 8          |  |
| 10. Common                |                                   | Common for terminals 11 and 12          |  |
| 11. Edge Strip            | Normally Closed Input             | Must have loop installed to terminal 10 |  |
| 12. Photocell             | Normally Closed Input             | Must have loop installed to terminal 10 |  |
| 13. 0v AC                 | Photocell AC output               |   |  |
| 14. 24v AC                | Photocell AC output               |   |  |
| 15. 24v AC                | Photocell AC output               |   |  |
| 16. Gate Open             | Gate Open Light 0v AC output      |   |  |
| 17. Gate Open             | Gate Open 24v AC output           |   |  |
| 18. 2 <sup>nd</sup> Radio | Output determined by dip switches |   |  |
| 19. 2 <sup>nd</sup> Radio | Output determined by dip switches |   |  |
| 20. Antenna Shield        |                                   |   |  |
| 21. Antenna Core          |                                   |   |  |



#### INSTALL YOUR INPUT LOOPS

The only wiring needed before testing your installation is to install three loops into the “NC” or normally closed inputs. Cut three short lengths (50mm) of single core cable and strip the two ends. Connect one end to the terminals 10&11, 10&12 and 8&9. These will need to be removed later if you add safety beams (photocells) or a stop button to your installation but for now will close the inputs and make the board operational. *NOTE: If you are lucky the manufacturer may already have done this for you!*

#### FIT AN ANTENNA WIRE

If you intend using a full antenna, install this now into the antenna terminals taking care not to allow the shield to make any contact with the core of your coaxial. Otherwise cut a small length (150mm) of light cable and strip one end. Place the stripped end into the core antenna terminal and secure.

#### SET YOUR DIP SWITCHES

Set all dip switches to off.

#### 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.

#### ADDING REMOTE CONTROL TRANSMITTERS

This is as simple as press and release button “P1” – DL3 goes out – press and release the top button on your remote control – DL3 comes back on. Repeat for other transmitters.

*NOTE – The press and release of “P1” needs to be very quick. If you are too long DL3 will flash instead of going out. Do not worry simply press and release “P1” again to bring DL3 on. Then try again but much faster little tap.*

#### END OF SIMPLE SETUP

If all went well you have finished simple setup. Test your system with your remote control. You may now add push buttons, keypads and other accessories. For more detailed description please refer to the main expanded manual. You can also activate the slow down function at the end of the open and close cycle via DIP Switch number 9. For a more detailed explanation refer to the main manual.

#### IF THE MOTOR DIRECTION IS INCORRECT

To correct any gate which is not correct simply use DIP Switch 10. Stop any gate movement – turn off the power – change the position of DIP Switch number 10 – re apply power and test.

#### END OF SIMPLE SETUP

If all went well you have finished simple setup. You may now add radio transmitters, push buttons, keypads and other accessories. For more detailed description please refer to the main expanded manual.

**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](mailto: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 SUCCESSFUL 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>