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-ONE5B K125M

GENERAL

T-ONE5B

Motor Voltage – 18 volt
Power Absorbed – 16 watts
Speed – 14 m/min
Maximum Thrust – 980 N
Protection Level – IP44
Duty Cycle – 100%
Dimensions – 308L x 203W x 288H
Current Absorbed – .85A
Maximum Leaf Weight – 500 Kg

K125M

Motor Voltage – 18v DC
Motor Inputs - One
Battery Charger – Yes
Receiver – Built In
Limit Switches – No
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

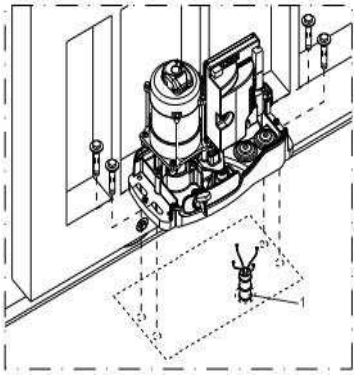
To ensure a good installation of the gear motor, we suggest the following order of installation:
1 - Open the box and take out gear motor. Inspect the contents and ensure all components are present.
2 - Make sure that the gate is rolling freely and does not bind at any point.
3 - Determine the height 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.

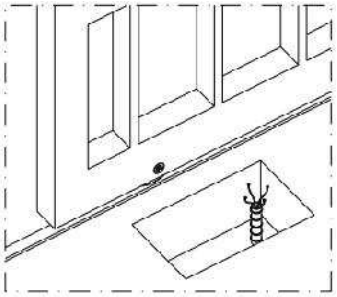
TONE SLIDING GATE MOTOR INSTALLATION

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.

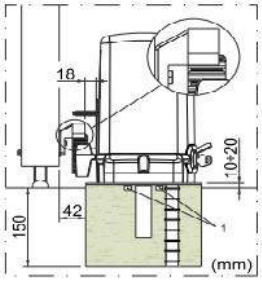
The motor will generate a large amount of force on starting and for this reason it is important that the motor base is anchored securely to the ground.



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.

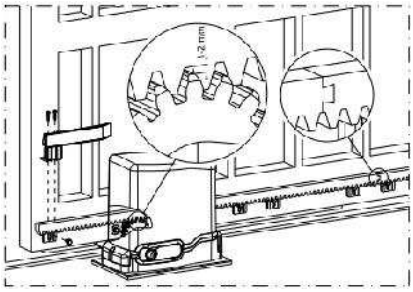
BOLT DOWN MOTOR

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

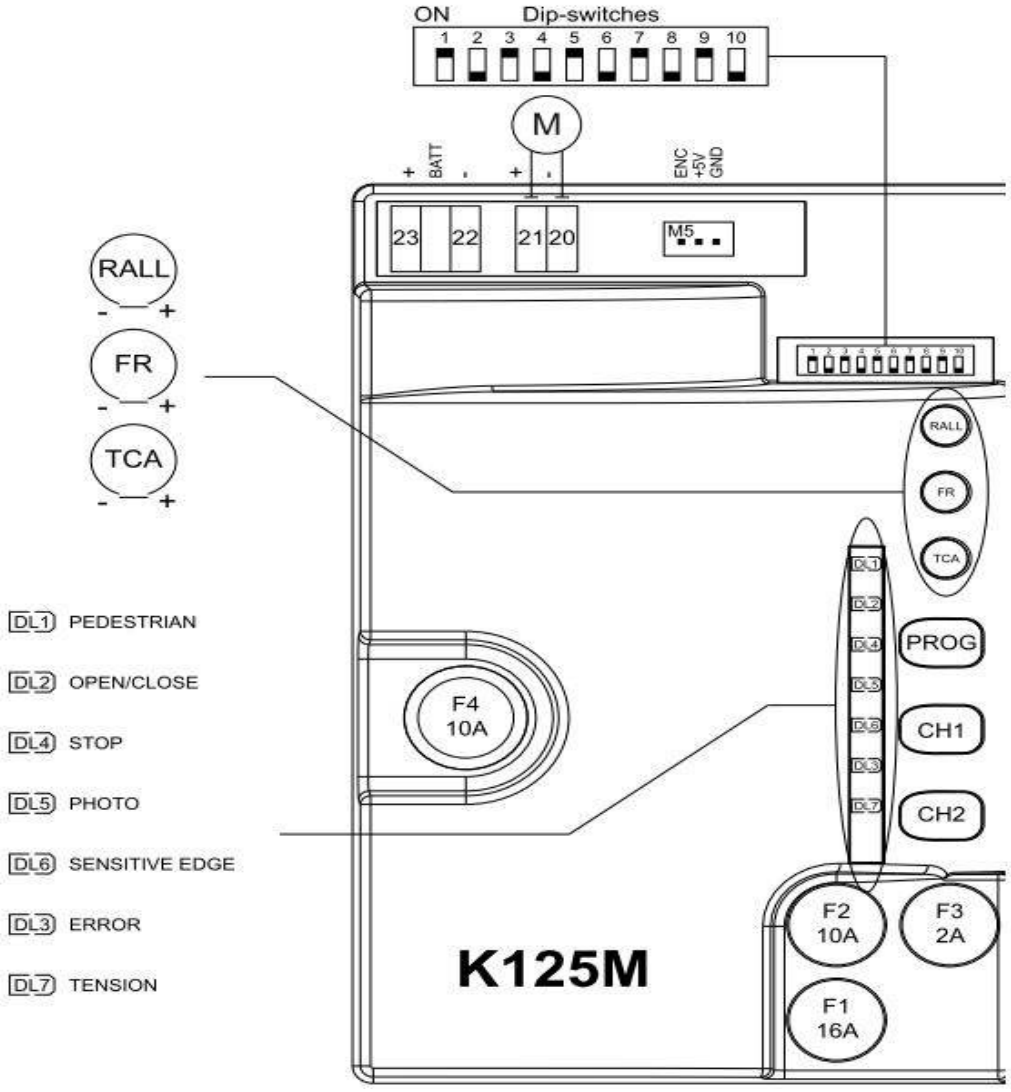
This is a critical point in ensuring long trouble free operation of your automation system, yet it is relatively simple. Each gate must have a positive and well secured opening stop and closing stop. There are a range of stops available over the counter or you can make them yourself but the critical 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.

K125M LOGIC CONTROL BOARD

BOARD INTERFACE

TERMINALS – BOTTOM TO TOP (1TO 19)

1.	Edge Strip	Normally Closed Input	Must have loop installed to terminal 3
2.	Photocell	Normally Closed Input	Must have loop installed to terminal 3
3.	Common		Common for terminals 1and 2
4.	Common		Common for terminal 5, 6 and 7
5.	Stop	Normally Closed Input	Must have loop installed to terminal 4
6.	Open/Close	Normally Open Input	
7.	Pedestrian	Normally Open Input	
8.	Negative	Photocell – output	
9.	Positive	Photocell ++ output	
10.	Negative	Photocell – output	
11.	Positive	Photocell ++ output	
12.	Flasher	Flashing light – output	
13.	Flasher	Flashing light ++ output	
14.	Gate Open	Gate Open Light – output	
15.	Gate Open	Gate Open ++ output	
16.	2nd Radio	Output determined by dip switches	
17.	2nd Radio	Output determined by dip switches	
18.	Antenna Shield		
19.	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 1&3, 2&3 and 4&5. 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.

CHECK FOR CORRECT MOTOR DIRECTION AND PROGRAM WORK TIMES

- With your gear motor in manual, position the gate about one metre from the closed position and lock into automatic mode.
- Turn on DIP Switch number 10.
- Press and release the “PROG” button. As this is the first manoeuvre your gate should start to close (see below if your gate opens first).
- When the gate reaches the fully closed position it will stop, wait two seconds and then begin to open (at slow speed).
- Once it reaches the open position and the gate stops.
- Wait for DL3 led to be fully lit and turn off DIP Switch number 10.
- You are ready to test your installation.

IF THE MOTOR DIRECTION IS INCORRECT

To correct any gate which did not close during the first manoeuvre you have to reverse the motor wires. Press PROG to stop the gate. Turn off DIP Switch number 10. Turn off the power. Reverse the motor terminals 21 and 20. Apply power and start programming again.

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.

ADDING REMOTE CONTROL TRANSMITTERS

This is as simple as press and release button “CH1” – 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 “CH1” needs to be very quick. If you are too long DL3 will flash instead of going out. Do not worry simply press and release “CH1” again to bring DL3 on. Then try again but much faster little tap.

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