

QUICK REFERENCE GUIDE

Merlin®



Swing L 300

MGLSK / MGLDK / MGLSK-LV / MGLDK-LV

Complete Instruction Manual for the Swing L 300 MGLSK, MGLDK, MGLSK-LV & MGLDK-LV can be accessed through these QR Codes. **NOTE: The complete Instruction Manual needs to be referred to for the complete correct installation and setup process.**



MGLSK
(MAINS VOLTAGE)



MGLSK-LV
(LOW VOLTAGE)



MGLDK
(MAINS VOLTAGE)



MGLDK-LV
(LOW VOLTAGE)

SAFETY INSTRUCTIONS - WARNING!

START BY READING THESE IMPORTANT SAFETY INSTRUCTIONS

- Failure to comply with the following instructions may result in serious personal injury or property damage.
- Read and follow all instructions carefully (**The complete Instruction Manual needs to be referred to for the complete correct installation and setup process.**)
- The gate opener is designed and tested to offer safe service, provided it is installed and operated in strict accordance with the instructions in this quick reference guide.

Before you begin the installation (The complete Instruction Manual needs to be referred to for the complete correct installation and setup process):

This product must be installed by a professional installer.

The installer must understand the following:

- The operation of the drive and potential hazards
- The operation of the manual emergency release mechanism
- The regular maintenance, inspection and care according to the standards
- The installer must instruct other users on the safe operation of the gate opener

Please read the operating instructions and especially the precautions. The following symbols are placed in front of instructions to avoid personal injury or damage to property. Read these instructions carefully.

Warning Symbols

The general warning symbol indicates a danger that can lead to injuries or death. In the text section, the general warning symbols are used as described below.

DANGER Symbol	WARNING Symbol	CAUTION Symbol	ATTENTION Symbol
Indicates an imminent hazardous situation which, if not avoided, will result in death or serious injury.	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.	Indicates a potentially hazardous situation which, if not avoided, could result in minor or moderate injury.	Indicates practices not related to personal injury.

Intended Use

The gate opener is exclusively designed and tested for the operation of smooth-running residential gates.

The maximum permissible gate size and the maximum weight must not be exceeded. The gate must open and close smoothly by hand. Use the opener on gates which comply with the applicable standards and guidelines. Regional conditions of wind loads must be taken into account when using door or gate panels. Observe the manufacturer's specifications regarding the combination of gate and opener. Possible hazards within the meaning of AS/NZS 60335.1 in conjunction with AS/NZS 60335.2.103 are to be avoided by designing and installing the gate according to the relevant instructions. This gate mechanism must be installed and operated in accordance with the appropriate safety rules.

Improper Use

The construction of the gate opener is not designed for the operation of heavy-duty gates. It is not permitted on gates that travel with incline/decline.

Any improper use of the gate opener could increase the risk of accidents. The manufacturer assumes no liability for such usage. With this gate opener, automated gates must comply with the current, valid local standards, guidelines and regulations, AS/NZS 60335.1 in conjunction with AS/NZS 60335.2.103.

Only Merlin genuine and approved accessories may be connected to the gate opener. Incorrect installation and/or failure to comply with the following instructions may result in serious personal injury or damage to property.

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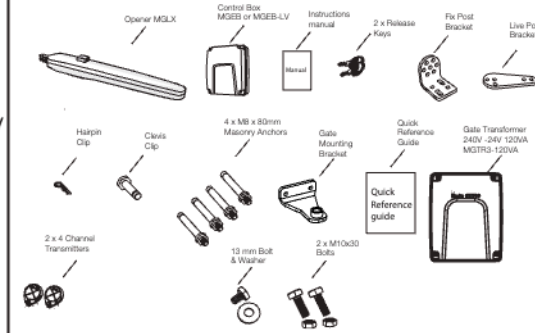
STEPS 1-6 INSTALLATION

1

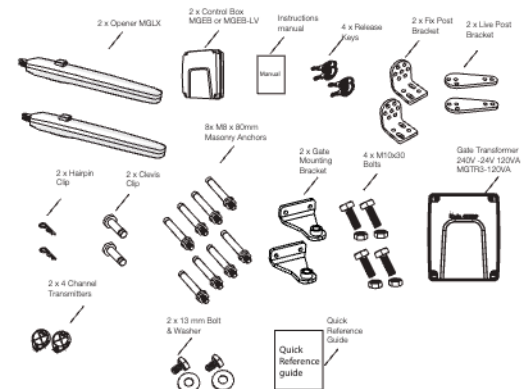
Take out each of the items included in the sales kit.

Note that low voltage sales kits MGLSK-LV & MGLDK-LV includes gate transformer (MGTR3-120VA).

SINGLE KITS

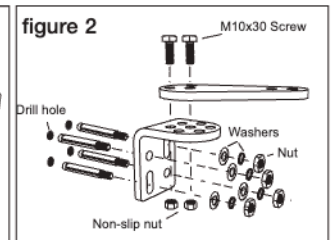
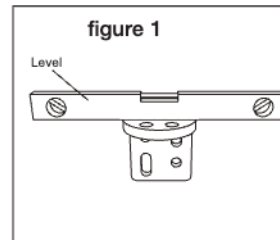


DUAL KITS



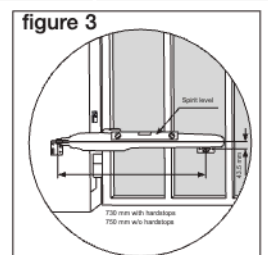
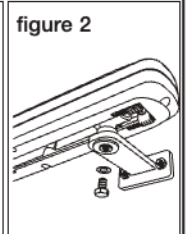
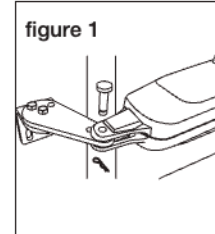
2 POST BRACKET INSTALLATION

1. Using the fixed post bracket as a reference, mark and drill the holes for the post bracket.
2. Attach the post bracket to the post using appropriate fixings. Masonry fixings are supplied, if required. The correct fastening material must be used based on existing installation (building / material substance). Please consult the gate manufacturer.
3. The slots on the post bracket allow for alignment. When the post bracket is level (see figure 1), tighten the nuts.
4. Attach the live post bracket to the fixed post bracket as per figure 2.



3 GATE BRACKET INSTALLATION

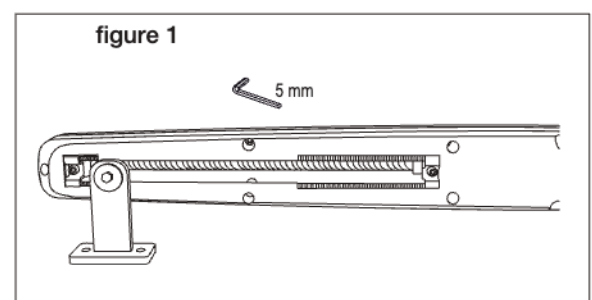
1. Bring gate to the "closed" position.
2. Attach the opener to the assembled post bracket using the clevis pin and secure with a hairpin clip (figure 1).
3. Assemble the assembled gate mounting bracket onto the arm using the fasteners & washers provided (figure 2).
4. Release the opener manual release with the release key. See section 5.
5. Position the gate mounting bracket as shown (figure 3).
6. Temporarily secure the gate bracket to the gate with a clamp.
7. Manually open and close the gate to the required positions. Ensure the opener does not bind. If the opening and closing positions are OK, proceed to Step 8. If there is an issue with the desired opening position, change the gate bracket position or check if the A and B dimensions of the post bracket were chosen correctly.
NOTE: Be sure that during the manual movement from close to open and vice versa, there is no obstruction or impact of the arm against the leaf or pillar.
8. Close the gate and re-engage the release mechanism.
9. Connect the gate bracket securely to the gate in the chosen position with appropriate fasteners (not provided).



4 HARD STOPS INSTALLATION

1. Release the opener manual release with the release key. See section 5.
2. Using the internal opener hardstops to adjust the gate's travelling distance, loosen each of the adjustment screws with a 5mm Allen key.
3. Move the gate to the desired close position and reposition the hardstop to suit and secure the hardstop with a 5mm Allen key (not supplied).
4. Move the gate to the open position and secure the hardstop in the desired position using the Allen key. Re-engage the release mechanism.
5. If the internal opener hardstops are not used, it is mandatory to install external hardstops in the open and close positions.

NOTE: Combination of internal and external hardstops can be used.

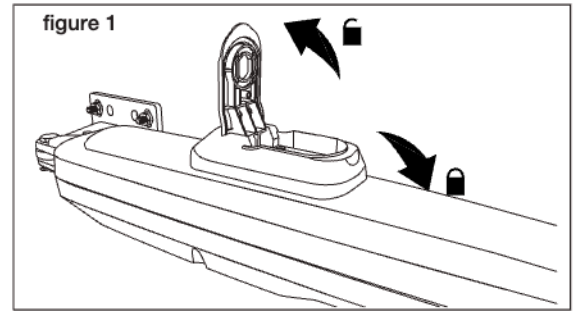


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5 DISENGAGEMENT OF THE MANUAL RELEASE

1. Remove the small front plastic cover from the opener.
 2. Put the key into the keyhole and turn right.
- Pull the lever down.

NOTE: To re-engage the opener, follow the procedure in reverse..

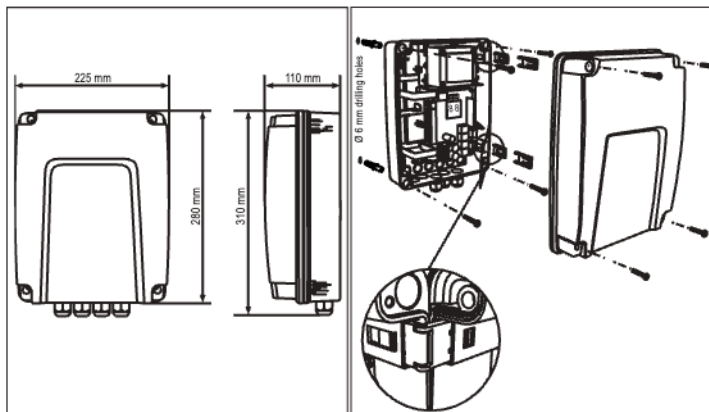


6 INSTALL THE CONTROL BOX

The control box must be installed at a safe location that enables the installer to have access at all times to the logic board without the risk of the gates crushing or trapping.

It is advised that you must have full view of the gates when programming the logic board.

Install the control box in an appropriate and accessible position. The installation has to be done in accordance with local electrical regulation.



Motor1 Connection

NOTE: The opener wired to the MOTOR 1 terminal will always open first and close last.

1. Feed the motor1 cable through the selected cable gland.
2. Connect motor cables to the MOTOR1 terminals as follows: red cable to RED terminal, green cable to GRN terminal , white cable to WHT terminal on control board.

Motor 2 Connection

NOTE: The opener wired to the MOTOR 2 terminal will always open last and close first.

1. Feed the motor 2 cable through the selected cable gland.
2. Connect motor cables to the MOTOR2 terminals as follows: red cable to RED terminal, green cable to GRN terminal , white cable to WHT terminal on control board.

POWER WIRING

1. Isolate the power by turning power off at the isolation switch and/or circuit breaker.
2. Select a hole in bottom of the control box to be used for the incoming AC power.
3. Insert an IP rated gland into the bottom of the control box and tighten with nut.
4. Insert the 240V mains supply cables through the IP rated gland.
5. Connect the mains supply to the PCB.
6. Tighten the IP rated gland.

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COMMISSIONING AND PROGRAMMING

1 PROGRAMMING - INITIAL SETUP

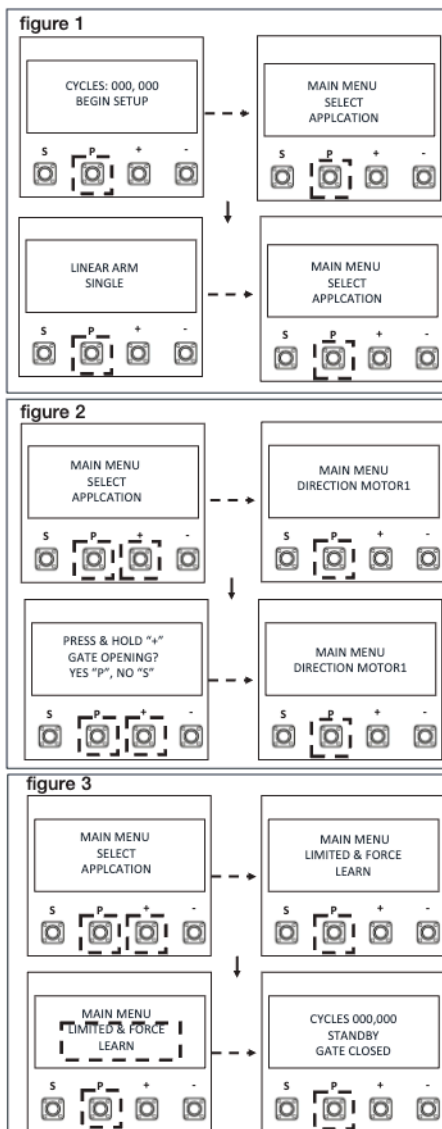
Energise the opener. Release the opener manual release with the key, and move the gate(s) to a mid open position. Re-engage the manual release.

The LCD screen will display the Cycle count.

1. Press and hold the "P" button for approximately 5 seconds to enter into the Main Menu. MAIN MENU SELECT APPLICATION will be displayed on the LCD.
2. Press the "P" button once to enter this Menu option.
3. Use the "+" or "-" to scroll through the motor application options. When "LINEAR ARM SINGLE OR LINEAR ARM DUAL" is shown, press the "P" button to select. The screen will change to show MAIN MENU SELECT APPLICATION.
4. Press the "+" button once to scroll to the next menu option. "MAIN MENU DIRECTION MOTOR1" will be displayed on the LCD.
5. Press the "P" button to select. The screen will change to show PRESS & HOLD "+" GATE OPENING? YES "P", NO "S".
6. Press and hold "+". The gate will start to move.
 - a) If it moves in the OPEN direction, press "P" to confirm". The screen will change to show MAIN MENU DIRECTION MOTOR1
 - b) If the gate moves in the CLOSE direction, press "S" to confirm. The screen will change to **EXECUTE MOTOR DIRECTION CHANGE**. Press "P" to confirm. Once the direction has been confirmed, the screen will change to MAIN MENU DIRECTION MOTOR. If there is a second slide gate opener to be setup, press the "+" button to scroll to the next menu option "MAIN MENU DIRECTION MOTOR2 and follow the steps 5 and 6.
7. Press the "+" button once to scroll to the next menu option. "MAIN MENU LIMIT&FORCE LEARN" will be displayed on the LCD.
8. Press the "P" button to select. **The gate will start to move.** The screen will change and LIMIT&FORCE LEARN will flash on the screen.
9. Once complete, the gate will stop moving and the screen will change to CYCLES: 000,000 STANDBY GATE CLOSED.

Initial setup is now complete. The opener will now operate using default Basic Settings.

NOTE: If the LIMIT&FORCE LEARN setup needs to be stopped, press the "S" button. The Screen will display LIMIT&FORCE LEARN INTERRUPTED. After 5 seconds, the screen will display LIMIT&FORCE LEARN. Repeat step 8 to complete basic setup.



INSTALL ENTRAPMENT DEVICES

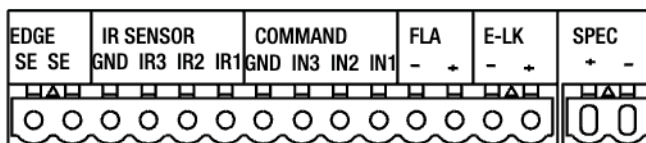
THE PROTECTOR SYSTEM™ (IR BEAMS) (OPTIONAL)

NOTE: Merlin strongly recommends that The Protector System™ (IR Beams) be installed on all gate openers.

Compatible Protector System™ (IR Beams) are 772ANZ and GPS15 Monitored Safety Beams.

The Protector System™ (IR Beams) can be configured to function differently when connected to IR1, IR2 or IR3 inputs.

1. Connect the Protector System™ (IR Beams) to IR1/GND or IR2/GND and or IR3/GND.
2. The IR Beams can be configured to monitor in the open or close direction or both (see section 23 IR Behaviour).
3. The IR Beams will automatically learn to the opener after they have been connected and are default to monitor the close direction.
4. If you need to remove the IRs, you will need to unlearn them from the opener. This is done by switching off the mains power off and on again twice.



EDGE SENSOR

The Edge sensor can only be connected to the Edge inputs.

1. Remove the 8.2k resistor from the Edge inputs.
2. Connect the 8.2k compatible edge sensor to the Edge inputs.

