

QUICK REFERENCE GUIDE

Merlin®



Swing A 200

MGASK / MGADK / MGASK-LV / MGADK-LV

Complete Instruction Manual for the Swing A 200 MGASK, MGADK, MGASK-LV & MGADK-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.**



MGASK
(MAINS VOLTAGE)



MGASK-LV
(LOW VOLTAGE)



MGADK
(MAINS VOLTAGE)



MGADK-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.

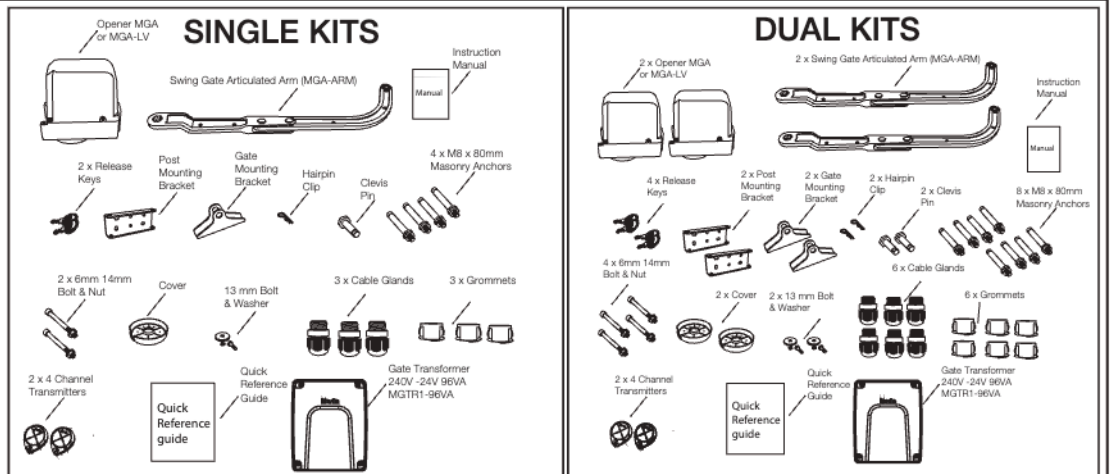
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STEPS 1-8 INSTALLATION

1

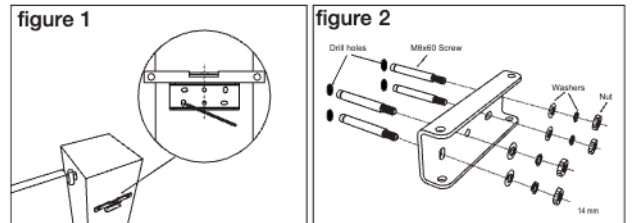
Take out each of the items included in the sales kit.

Note that low voltage sales kits MGASK-LV & MGADK-LV includes gate transformer (MGTR1-96VA).



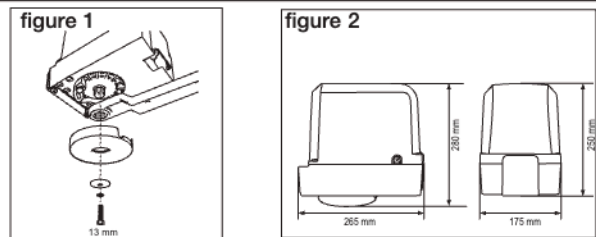
2 INSTALLING THE POST BRACKET

- Using the post bracket as a reference, mark and drill the holes for the post bracket (figure 1).
- 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).
- The slots on the post bracket allow for alignment. When the post bracket is level, tighten the nuts (figure 2).



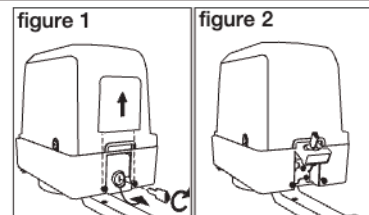
3 OPENER ARM MOUNTING

- Attach the opener arm to the center of the opener from the underside.
- Secure the caps with the screw and washer.



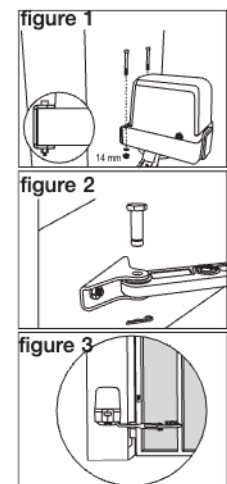
4 DISENGAGEMENT OF THE MANUAL RELEASE

- Remove the small front plastic cover from the opener (figure 1).
 - Put the key into the keyhole and turn right (figure 1).
 - Pull the lever down (figure 2).
- NOTE: To re-engage the opener, follow the procedure in reverse.**



5 ATTACH THE OPENER AND DETERMINE THE POSITION OF THE GATE BRACKET

- Bring the gate to the closed position.
- Align the holes on the opener to the post bracket holes. Attach the opener to the post bracket using the bolts and nuts in figure 1.
- Attach the gate bracket to the articulated arm using the clevis pin & hairpin clip in figure 2.
- Release the opener manual release with the release key, see section 9.
- Position the gate bracket as shown in figure 3.
- Temporarily secure the gate bracket to the gate leaf and opener to the gate bracket.
- Manually open and close the gate to the required positions. Ensure the opener arm does not bind. When opening and closing position are OK proceed with Step 8. If there is an issue with the desired opening position, change the gate bracket position or check if the A, B and C 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.**
- Close the gate and re-engage the release mechanism.
- Fasten the gate bracket to the gate in the correct position chosen.

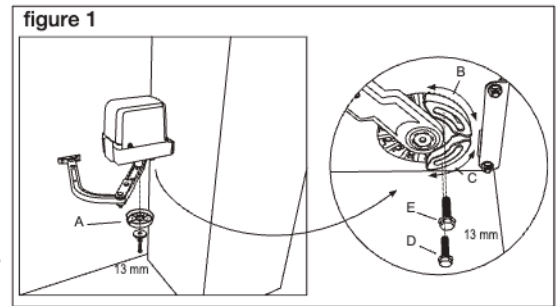


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6 ADJUST THE TRAVEL DISTANCE

1. Release the opener manual release with the release key, see section 9.
2. From a complete closed position, remove the cover (A in figure 1).
3. For right hand installation release screw D and adjust the position of the hardstop C to touch the arm. Tighten the screw when required position of the hardstop is reached.
4. Manually move the gate to the required complete open position.
5. Release screw E and move the hardstop B to the position where the arm is touched. Tighten the screw when the required hardstop position is reached.
6. Put the cover in its original position and secure with the screw.
7. Re-engage the manual release mechanism.

The internal hardstops can be replaced the external hardstops of the gate or a combination of both can be used depending on installation situation and requirements.



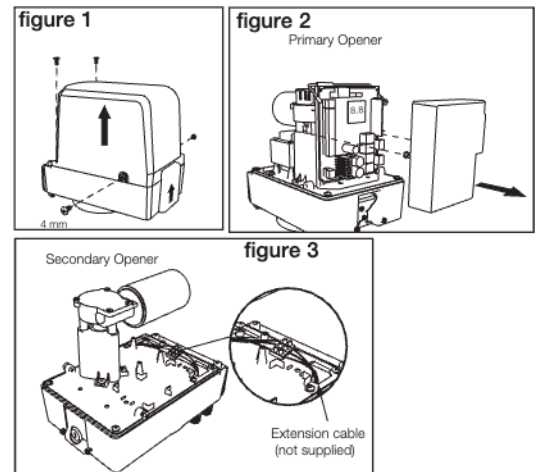
7 CONTROL BOARD AND OPENER CONNECTION

The control board is already pre-installed in the Primary opener and pre-wired to the MOTOR1 terminals.

To gain access to the control board in the Primary opener, remove the 2 screws to the back of the cover and then remove the 2 screws on the sides (figure 1). The terminals for wiring accessories are directly accessible. To get access to the programming buttons remove the transparent plastic cover (figure 2) and place it back once programming is finished. Remove the cover of the Secondary opener, same way as with the Primary opener to gain access to the opener wiring terminal (figure 3).

NOTE: As per the default settings, the Primary opener is considered installed on the left (when looking from inside out), and the Secondary opener on the right.

In case the Primary is installed on the right, and the Secondary opener on the left, change the motor directions for both units in the Motor Direction Programming section.

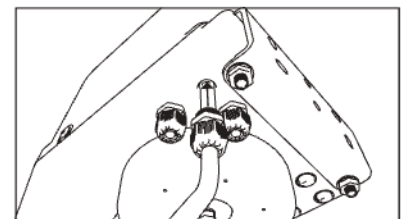


8 OPENER CONNECTION

NOTE: The opener wired to the MOTOR1 terminal, will always open first and close last.
The Primary opener is already pre-wired to MOTOR1 terminals. No extra steps required for MOTOR1 wiring.

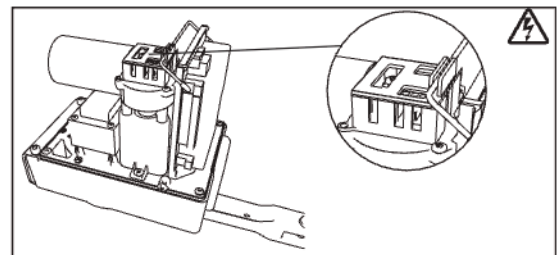
NOTE: The opener wired to MOTOR2 terminal, will always open last and close first.
Connect the extension cable (not provided) to the wiring terminals of the Secondary opener. The cable colours of the Secondary opener should match the control board wiring terminal for MOTOR2.

1. Feed the Secondary opener extension cable through one of the cable glands at the bottom of the Primary opener. Ensure that the cables will not be cut by the opener of the arm during operation.
2. Connect the Secondary opener cables to the MOTOR2 terminals as follows:
 - Red cable to RED terminal
 - Green cable to GRN terminal
 - White cable to WHT terminal.



Power Wiring

3. Connect the pre-assembled mains power plug to the nearby general purpose power outlet.
4. Tighten the IP rated gland.



Power Wiring

Mains power wiring must be done by a certified electrician.

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COMMISSIONING AND PROGRAMMING

1 PROGRAMMING - INITIAL SETUP

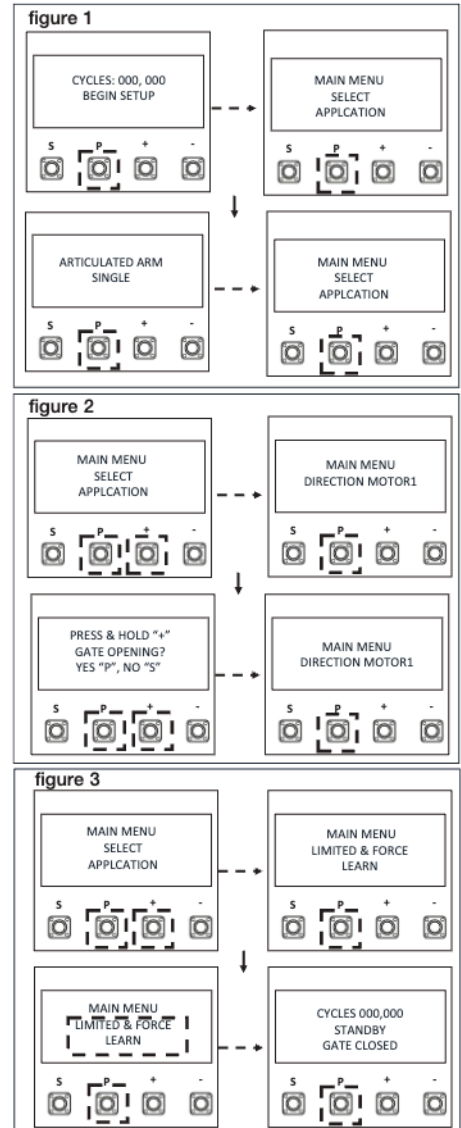
Energise the opener. Release the opener manual release with the key, and move the gate(s) to a mid open position. Re-engage the manual release.

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 "ARTICULATED ARM SINGLE OR ARTICULATED 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	IR SENSOR			COMMAND			FLA	E-LK		SPEC		
SE SE	GND	IR3	IR2	IR1	GND	IN3	IN2	IN1	-	+	-	+

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.