

Merlin®

The Protector System™ is designed to increase the safety and functionality of your garage door motor.

The system uses an invisible beam across the garage door opening. If an obstruction breaks the light beam while the door is closing, the door will stop and reverse to full open position.

NOTE: The brackets must be assembled and fastened so that the Sending and Receiving Eyes face each other.

The brackets must be securely fastened to a solid surface such as the studs on either side of the door, or add a piece of wood at each location if installing in masonry construction.

The invisible light beam path must be unobstructed. Ensure no part of the door (or door tracks, springs, hinges, rollers or other hardware) interrupts the beam while the door is closing. If it does, use a piece of wood to build out each sensor mounting location to the minimum depth required for light beam clearance.

To protect small children, install The Protector System™ no higher than (100 mm) above the floor.
For Commercial door an additional beam is required at 650 mm.
Disconnect power to the door opener before installing The Protector System.™

Assembly Process:

The Protector System™ is supplied preassembled, complete with two sensors, wiring and wall brackets (fig 2 & fig 3).

Install the mounting brackets and sensors to either side of the inside of the garage door, and at a height of no greater than 100 mm off the garage floor.

The brackets are designed to be used for wall or floor fixing with a variety of hole combinations to achieve the desired results.

Drill the required holes and install the brackets with wall plugs and screws provided. Ensure they do not obstruct the door movement.

Wiring Process:

Align the sensors to face each other and tighten if necessary. The wiring should exit from the bottom of the housing to maintain the correct IP rating and continued operation.

One sensor is a Sending Eye, the other is a Receiving Eye. Try to avoid positioning these in direct sunlight as this may interfere with the operation of the beams.

Run both sets of wire back to the opener CONTROL PANEL. Ensure the wire is well supported and does not interfere or get damaged by movement of the door panels or spring hardware.

At the opener end, cut the wires to the correct length and strip each back around 15 mm.

Twist both white wires together and install into "quick release" terminal (white).

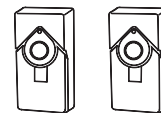
Twist both grey wires together and install into "quick release" Terminal (Grey).

For Specific Connections for each product, refer to the following pages, or to your Product Handbook.

Activation:

After The Protector System™ has been connected to the opener, the system will be automatically activated. (Note: Ensure the lights on the sensors are on).

The Protector System™ Safety Reversing Sensor Model 774ANZ



Review all safety warnings outlined in your Garage door opener owner's manual. Ensure that the door and all its fixtures and fittings are in good condition.

For Commercial applications, please refer to the appropriate Commercial Opener manual.

Figure 1

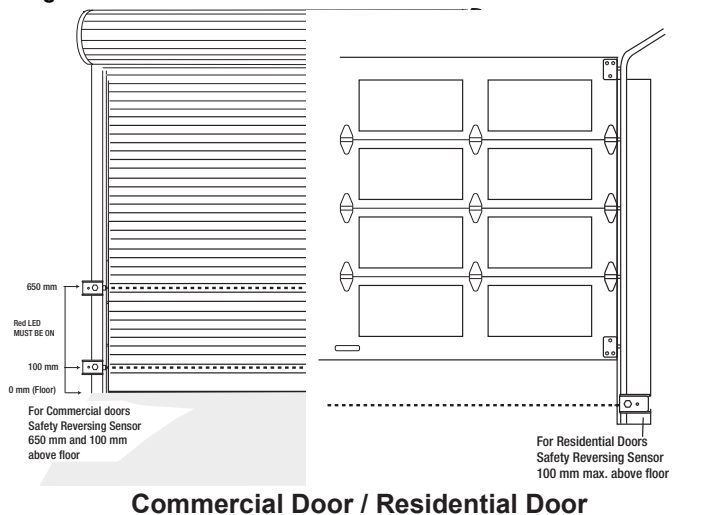


Figure 2

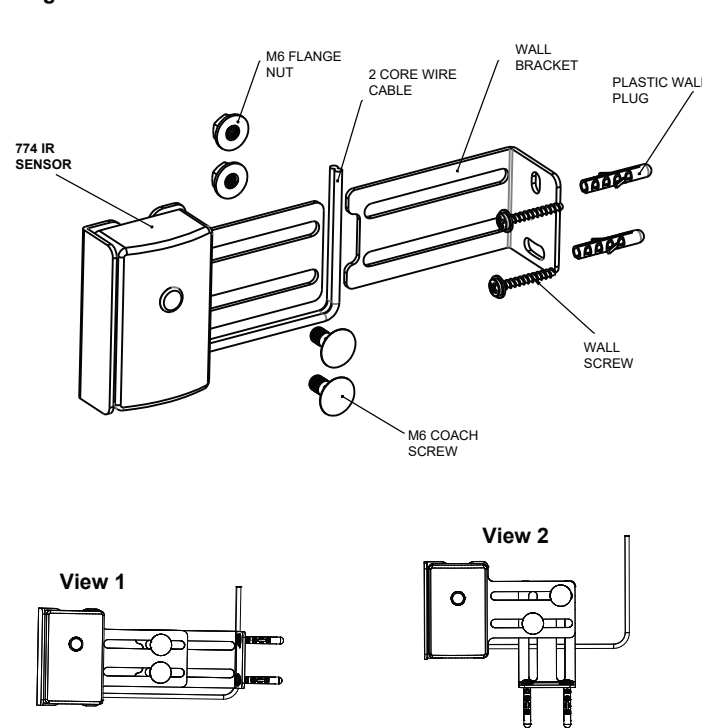
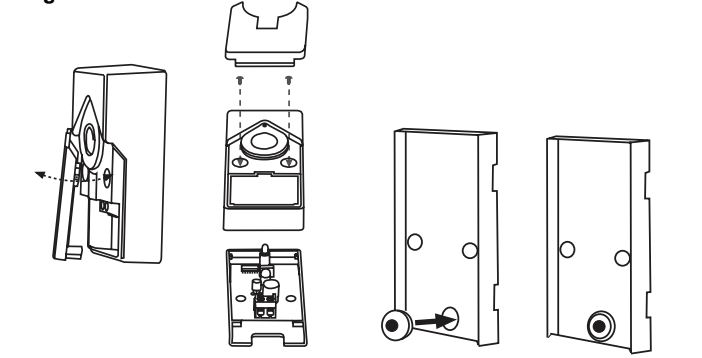
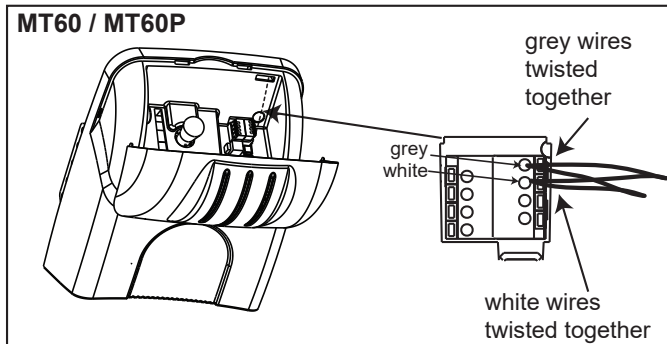


Figure 3



Wiring Connections Merlin Professional

MT60 / MT60P

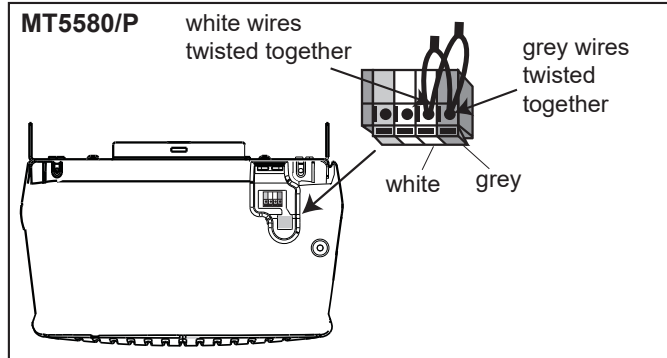


MT60/P connections

Open the lens cover on the front of the opener to access the connection terminals. Strip all wires back about 15 mm then twist the two white wires and the two grey wires together.

Use a small screwdriver or pen to hold down the spring terminals, insert the grey wires into the grey terminal, then terminate the white wires into the white terminal.

MT5580/P

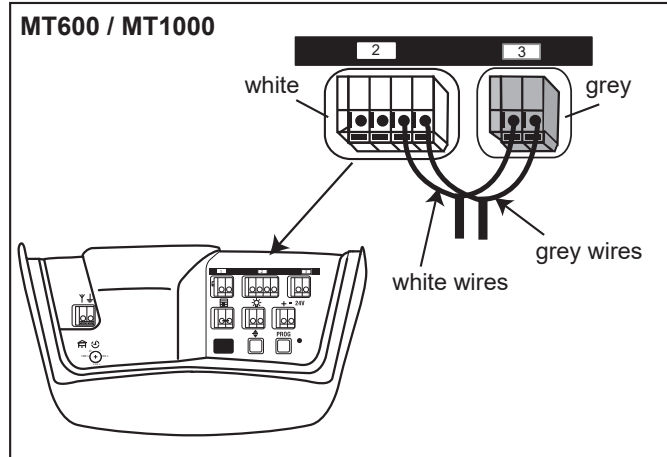


MT5580/P connection

Locate the connection terminals on the back of the opener. Strip all wires back about 15mm then twist the two white wires and the two grey wires together.

Use a small screwdriver or pen to hold down the spring terminals, insert the grey wires into the grey terminal, then terminate the white wires into the white terminal.

MT600 / MT1000



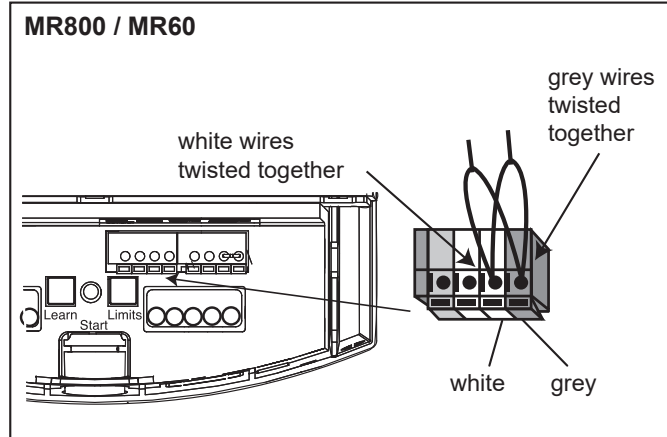
MT600 / MT1000 connections

Locate the terminals on the back of the opener. Strip all wires back about 15mm then twist the two white wires and the two grey wires together.

Use a small screwdriver or pen to hold down the spring terminals, insert the grey wires into the grey terminal (3), then terminate the white wires into the white terminal (2).

NOTE: Optional connections: Connect the white wires and black wires into separate terminal on the back of the opener as illustrated above. This may be required if larger diameter cable extensions have been used to extend wiring.

MR800 / MR60

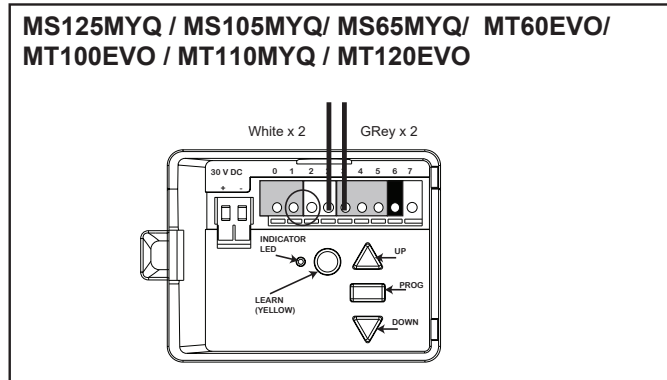


MR800 / MR60 connections

Gently lift the diffuser on the base of the opener to access the terminals. Strip all wires back about 15mm then twist the two white wires and the two grey wires together.

Use a small screwdriver or pen to hold down the spring terminals, insert the grey wires into the grey terminal, then terminate the white wires into the white terminal.

MS125MYQ / MS105MYQ/ MS65MYQ/ MT60EVO/ MT100EVO / MT110MYQ / MT120EVO



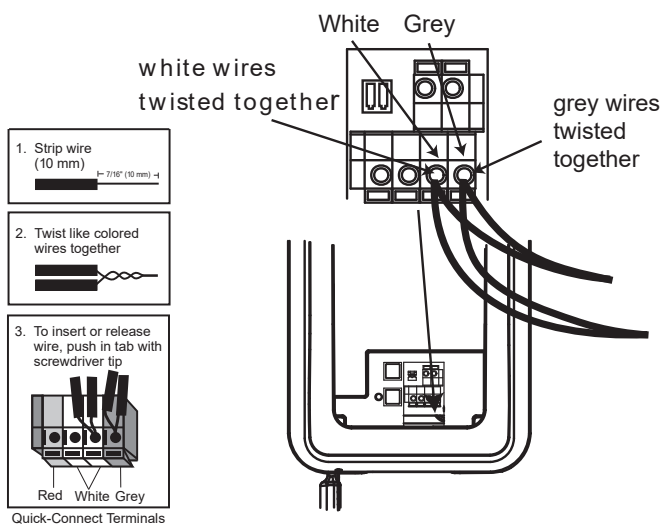
MS125MYQ / MS105MYQ/ MS65MYQ/ MT60EVO/ MT100EVO / MT110MYQ / MT120EVO

Locate the terminals on the back of the opener. Strip all wires back about 15 mm then twist the two white wires and the two grey wires together.

Use a small screwdriver or pen to hold down the spring terminals, insert the grey wires into the grey terminal (3), then terminate the white wires into the white terminal (2).

Wiring Connections Merlin Professional

MJ3800/R



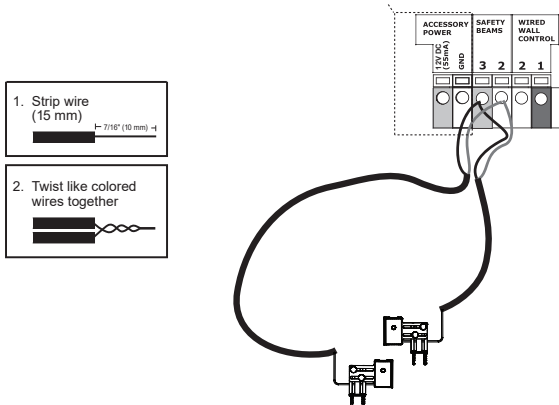
MJ3800/R connections

Gently lift the cover flap at the base of the opener to access the terminals. Strip all wires back about 15mm then twist the two white wires and the two grey wires together.

Use a small screw driver or pen to hold down the spring terminals, insert the grey wires into the grey terminal, then terminate the white wires into the white terminal.

MRC950EVO / MR850EVO / MR650EVO

OverDrive MRC950EVO & SilentDrive MR850EVO ONLY



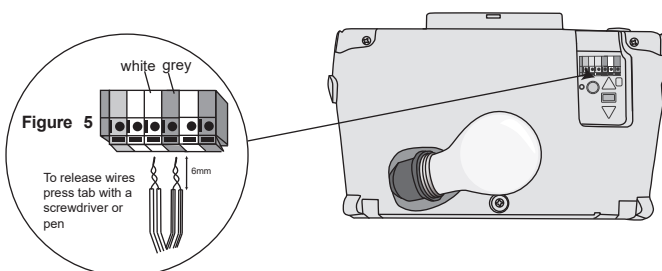
MRC950EVO / MR850EVO / MR650EVO

Gently lift the cover on the base of the opener to access the terminals. Strip all wires back about 15mm then twist the two white wires and the two grey wires together.

Use a small screwdriver or pen to hold down the spring terminals, insert the grey wires into the grey terminal, then terminate the white wires into the white terminal.

Note: This model may need to be manually initialised. Please refer to your product handbook.

MT3850EVO



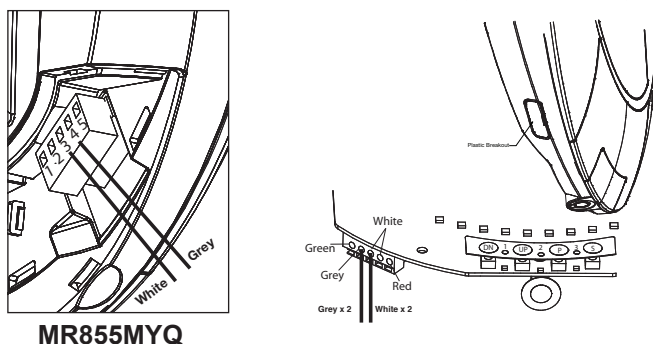
WhisperDrive MT3850EVO connection

Locate the connection terminals on the side of the opener. Strip all wires back about 15mm then twist the two white wires and the two grey wires together.

Use a small screwdriver or pen to hold down the spring terminals, insert the grey wires into the grey terminal, then terminate the white wires into the white terminal.

Note: This model may need to be manually initialised. Please refer to your product handbook.

MR855EVO/ MR655EVO/ MR655MYQ/ MR865MYQ



MR855EVO / MR655EVO / MR655MYQ / MR855MYQ / MR865MYQ

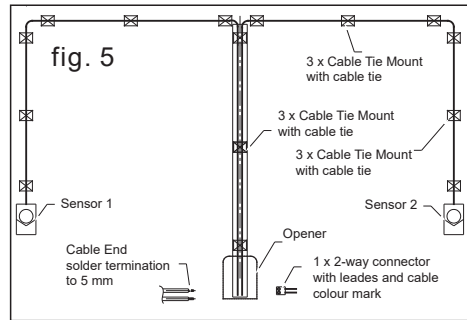
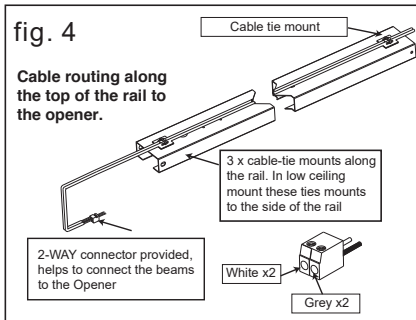
At the opener control panel remove the plastic break out to expose the "External Accessory Terminal Block". Twist both white wires together and both grey wires together. Connect the white wires to the white mark screw terminal of the 2-way connector, and the grey wires to the grey mark screw terminal. Push the 2-way connector into the control panel quick release terminals B & C (MR855MYQ terminals 3 & 4). Ensure the white wires go to B (3 for MR855MYQ) and the grey wires go to C (4 for MR855MYQ).

Cable Management Merlin Professional



Sectional Door Openers - Install Cabling:

Run both sets of sensor cables up the door tracks, across the header wall to the centre, and back to the opener (see fig 4, 5 & 7).

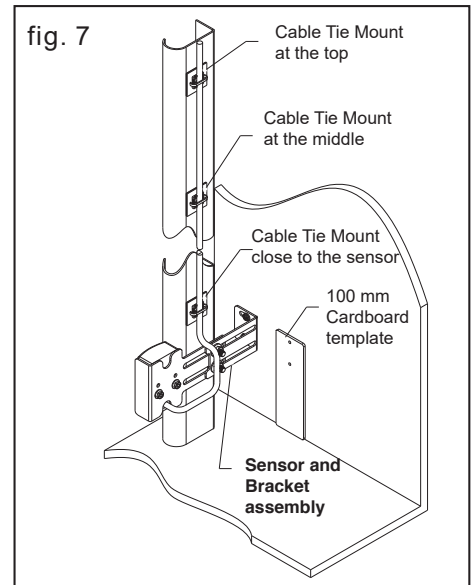
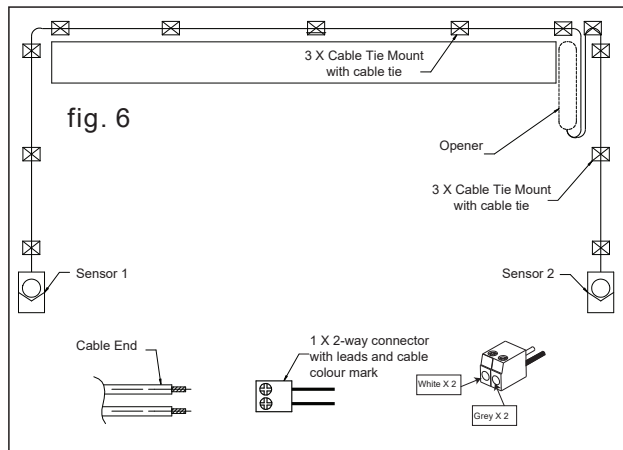


Clean the contact area with alcohol wipes (provided) and secure the self-adhesive Cable Mounts to the rails. Attach the cable with cable ties.

Ensure the cable is well supported and does not interfere or get damaged by movement of the door panels or spring hardware.

Roller Door Openers - Install Cabling:

Run both sets of sensor cables up the door tracks, across the door header and back to the opener (see fig 6 & 7).



TEST THE PROTECTOR SYSTEM™

- Press the remote control push button to open the door.
 - Place an object large enough to obstruct the sensor beam in the path of the door.
 - Press the remote control push button to close the door.
- The door will not move more than 40mm.

The door opener will not close from a remote control if the indicator light in either sensor is blinking (alerting you to the fact that the sensor is misaligned or obstructed).

Note: After the sensors are initialised they are fail safe i.e. if they are removed, the opener will not close until the sensors are re-installed.

Merlin
Chamberlain Australia Pty Ltd
PO Box 1446
Lane Cove NSW 1595
Australia
Toll Free: 1800 638 234
gomerlin.com.au

Merlin
Chamberlain New Zealand Ltd
PO Box 100-221
North Shore
Auckland 0745
New Zealand
Toll Free : 0800 653 667
gomerlin.co.nz



TROUBLE SHOOTING

1. If the *Sending Eye* or *Receiving Eye* indicator light does not glow after installation, check for:
 - Electric power to the opener.
 - A short in the grey/white wires. These can occur under staples or at screw terminal connections.
 - Incorrect wiring between sensors and opener.
 - An open wire, (wire break).
 - Lock switch on Multi-Function Door Control Panel is activated. Deactivate.
2. If both sensors are blinking, realign or remove obstruction.
3. Once a sensor has been installed the opener will only operate whilst it is installed correctly.
4. **If the sensors are damaged and cannot be repaired:**

Reset the sensor input

To reset the sensor input:

- * Remove all sensor wires from the opener
- * Turn power off for 2 seconds
- * Turn power on for 2 seconds
- * Turn power off for 2 seconds

Turn the power back on and test your opener, it should open and close using the remote control.