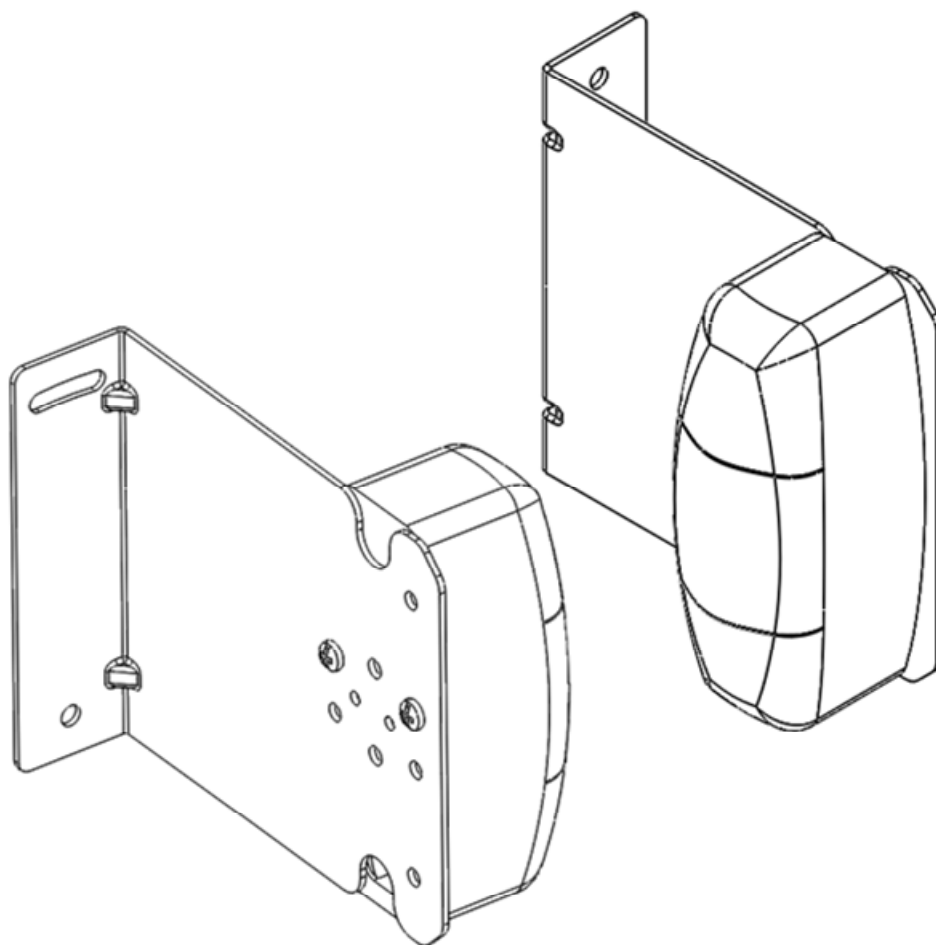


# GRIFCO®

## GPS772 Send/Receive IR Beams



installation and users manual for  
GPS772 Monitored Send / Receive  
IR Beams

[www.grifco.com.au](http://www.grifco.com.au)  
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North Shore 0745, New Zealand  
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## Safety Symbol and Signal Word review

This Monitored IR Beam system has been designed and tested to offer safe service provided it is installed, operated, maintained and tested in strict accordance with the instructions and warnings contained in this manual.



**WARNING**

Mechanical



**WARNING**

Electrical

**CAUTION**

When you see these Safety Symbols and Signal Words on the following pages, they will alert you to the possibility of serious injury or death if you do not comply with the warnings that accompany them. The hazard may come from something mechanical or from electric shock.

When you see this Signal Word on the following pages, it will alert you to the possibility of damage to your commercial door and/or the commercial door opener if you do not comply with the cautionary statements that accompany it.

**THESE ARE IMPORTANT SAFETY INSTRUCTIONS. FOLLOW ALL INSTRUCTIONS AS INCORRECT INSTALLATION CAN LEAD TO SEVERE INJURY OR DEATH**

**THE FOLLOWING WARNINGS RELATE TO DOOR AUTOMATION GENERALLY, AND WILL APPLY IN PART OR FULL TO YOUR INSTALLATION. READ THEM CAREFULLY!**



**Keep commercial door balanced.** Sticking or binding doors must be repaired. Commercial doors, door springs, pulleys, brackets and their hardware are under extreme tension and can cause serious personal injury. **Do not attempt to loosen, move or adjust them.** Call for commercial door service.



**Do not wear rings, watches or loose clothing** while installing or servicing a commercial door opener.



To avoid serious personal injury from entanglement, **remove all ropes connected to the commercial door** before installing the door control.



Installation and wiring must be in compliance with your local building and electrical codes. **Connect the power supply cord only to properly earthed mains if applicable.**



Moisture and water can destroy the electronic components. Make sure under all circumstances that water moisture or storage moisture cannot penetrate the electronics. The same applies for openings and cable entries.



**After the installation a final test of the full function of the system and the full function of the safety devices must be done.**



When operating a biased-off switch, make sure that other persons are kept away.



Where applicable, permanently fasten all supplied **labels** adjacent to the wall control as a convenient reference and reminder of safe operating procedures.



**Disengage all existing commercial door locks** to avoid damage to commercial door. Install the control (or any additional push buttons) **in a location where the commercial door is visible during operation**. **Do not allow children to operate push button(s) or remote control(s).** Serious personal injury from a closing commercial door may result from misuse of the opener.



**Activate opener only when the door is in full view, free of obstructions and opener is properly adjusted. No one should enter or leave the building while the door is in motion.**



**An electrician must disconnect electric power to the commercial door opener and control before making repairs or removing covers.**



The actuating member of a biased-off switch is to be located **within direct sight of the door** but away from moving parts. **Unless it is key operated**, it is to be installed at a minimum height of 1500mm and **not accessible to the public.**



**Make sure that people who install, maintain or operate the door follow these instructions.** Keep these instructions in a safe place so that you can refer to them quickly when you need to.



This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.



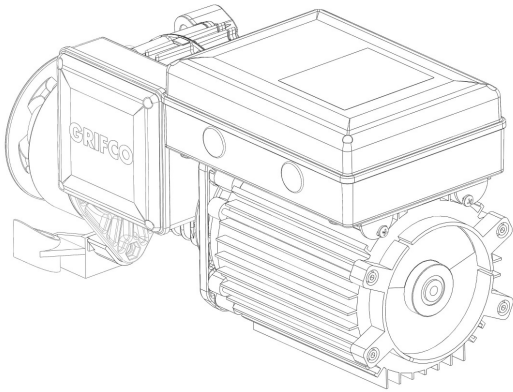
**WARNING: Important safety instructions. It is important for the safety of persons to follow all instructions. SAVE these instructions.**

**INTRODUCTION**

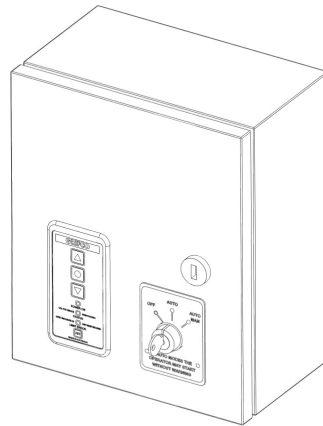
Congratulations on your purchase of the Grifco® GPS772 Monitored Send / Receive IR Beam. This accessory will provide a failsafe detection system to signal the door to reverse upon an obstruction.

**PLANNING**

The Grifco® GPS772 Monitored Send / Receive IR Beam is compatible with all eDrive models, and any Grifco electronics featuring Security +2.0 radio on board. Refer below for further compatibility detail:

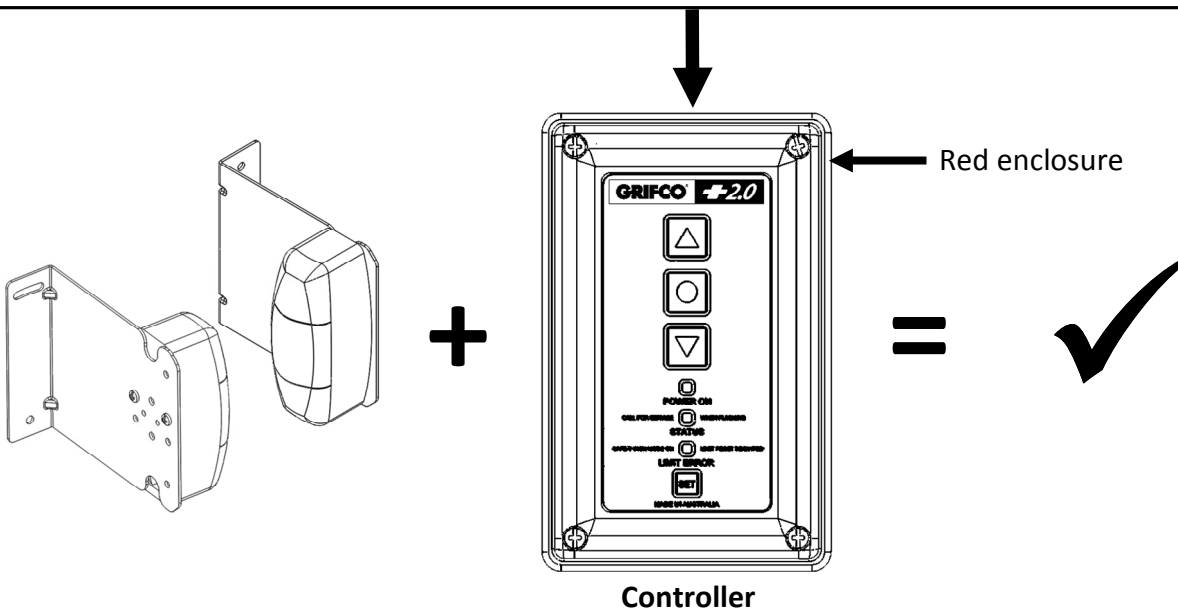


All **eDrive** models  
(MCB4 and MCB5)

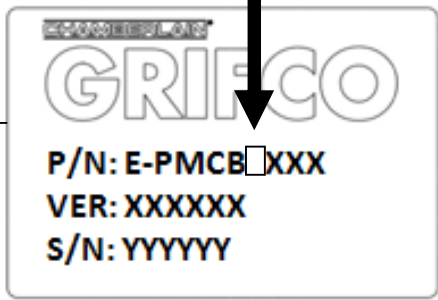
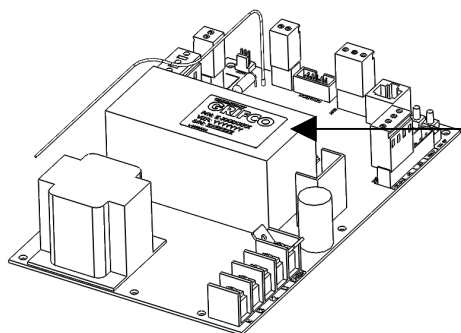


GLMe2 & GLMe2N Mechanical Limit Logic Controls  
(used with mDrive and other Grifco Mechanical Limit Openers)

Compatible models (as shown above) must include a red Controller and/or Grifco® +2.0 on the Controller panel shown below



Compatible models will contain a main control board P/N: MCB4XXX or MCB5XXX



# **WARNING**

## **Entrapment Protection**

The Entrapment Protection System for your installation will be determined by the functional requirements of the door. To ensure the installation meets these requirements refer to AS/NZS 60335-2-103.

When using the Grifco® Protector System as part of the Entrapment Protection System, ensure it is installed to detect a 100mm high obstacle, ie; approx 80mm from the floor, and in accordance with installation directions supplied.

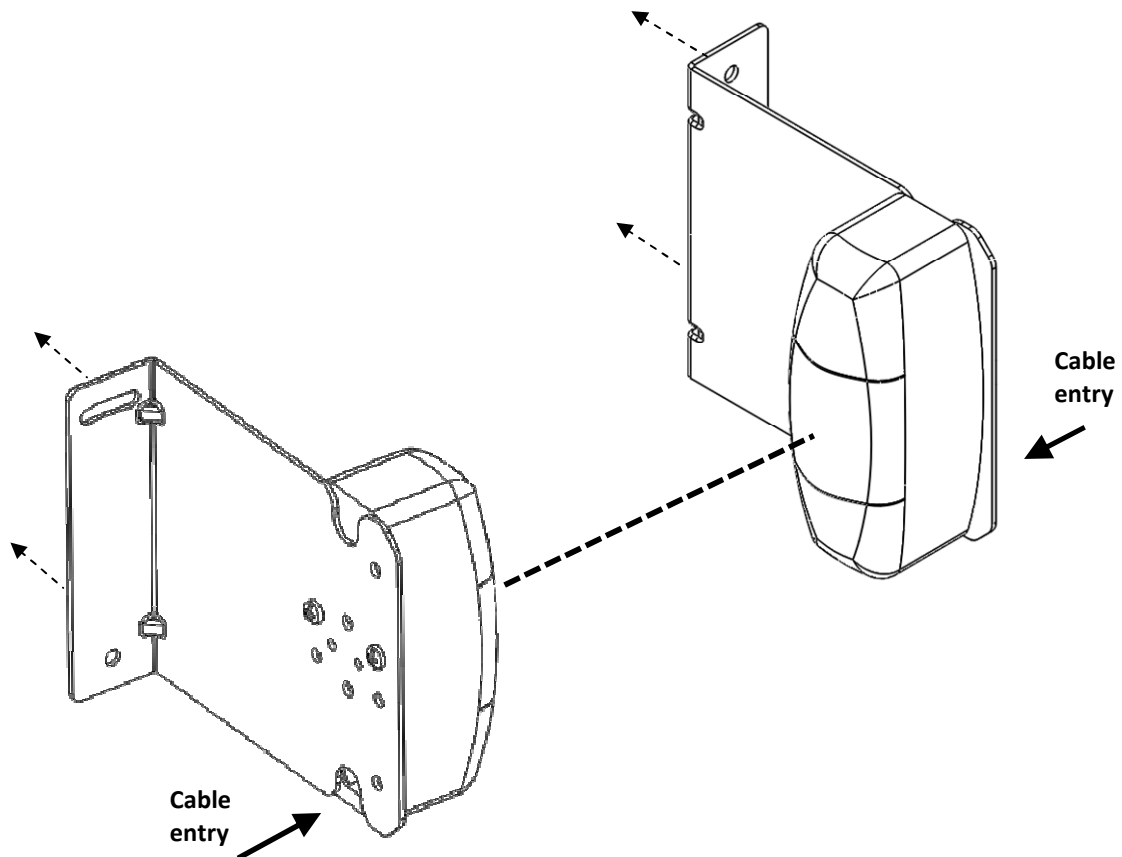
Consideration should be given to the detection of vehicles or other similar equipment. To provide adequate Entrapment Protection an additional Grifco® Protector System may be required to be installed in a higher suitable position, for example, approx 600mm from the ground.

## **MOUNTING**



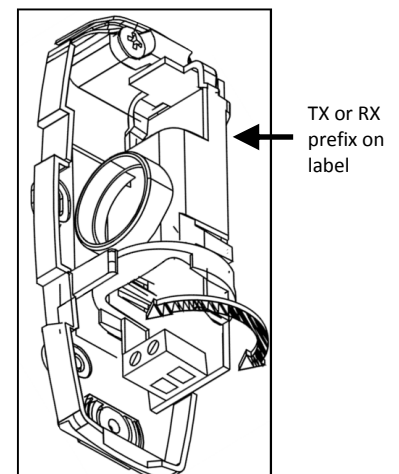
*An electrician must disconnect electric power to the commercial door opener and control before removing or opening covers.*

Mount the Grifco® GPS772 Monitored Send / Receive IR Beams to the wall in the orientation as shown below using the fasteners provided. The kit includes 20 metres of double insulated flex cable to allow connection for most door sizes. If needed, extend the cable or wire new cable as required to meet the installation needs.



**CAUTION:** When using two sets of GPS772 in close proximity to each other (e.g above and below, or indoor/outdoor), ensure the Sender (TX) and Receiver (RX) mounting locations are alternated with regard to the side of the door. If two Senders (TX) are mounted to one side, and two Receivers (RX) are on the other, interference or conflict may occur between alternate beams.

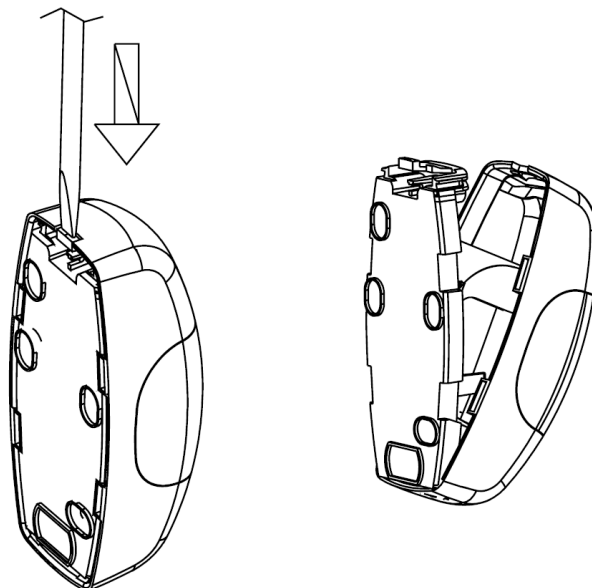
Refer to the image (right) to see how to identify each side. Furthermore, you will see also that the internal lense assembly can be indexed 180 degrees to allow different wall surface mounting.



**CONNECTION**

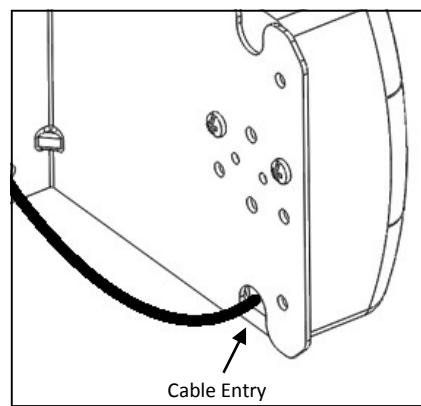
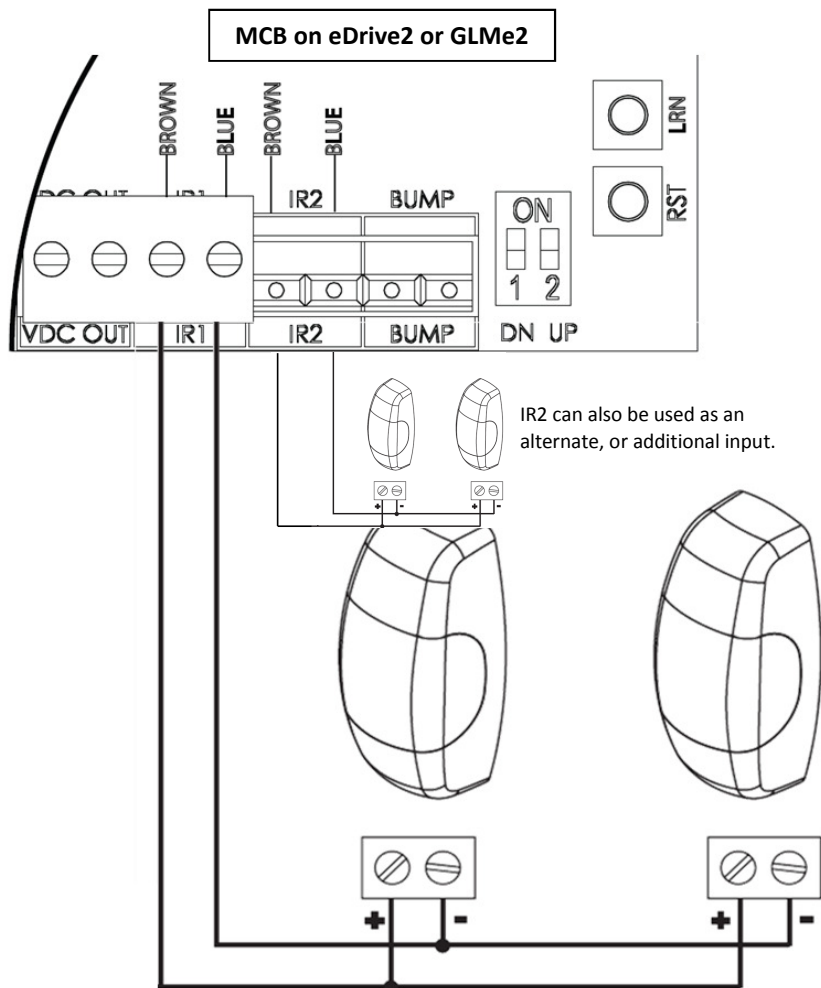
**CAUTION: Power must be OFF at the Main Control Board before proceeding with connection!**

After mounting, you are ready to connect the Grifco® GPS772 Monitored Send / Receive IR Beam. Remove the covers by gently using a flat bladed screw driver to release the clip from the top of the assembly as shown below.



(Illustration purpose only. Do not remove from bracket)

Use the cable provided to connect the Sender and Receiver as shown below. Carefully drill a 1/4" or 6.5mm diameter hole through the cable entry provided in back face of each beam assembly to match the outer sheath of the cable provided. For installations where water splashing may be present, add a sealant around the cable entry at the conclusion of the installation.



**Caution:** The connection cable must be laid in accordance with local building and electrical regulations. Avoid laying together with high voltage cable as it may lead to malfunction.

## ALIGNMENT AND SET UP

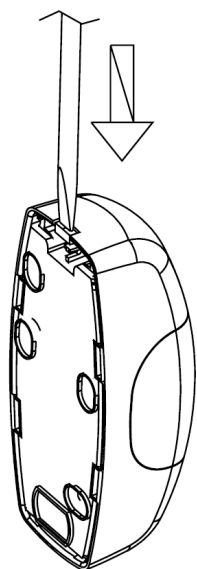
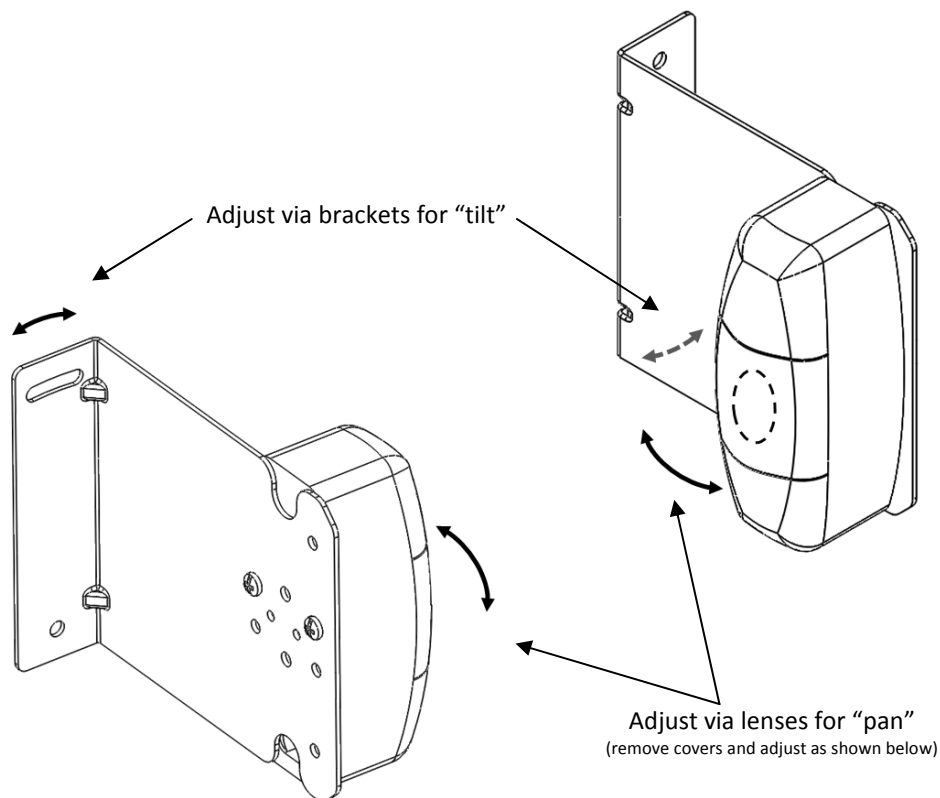


Fig. 1

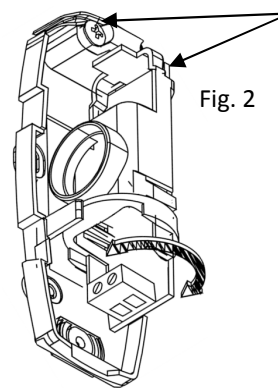
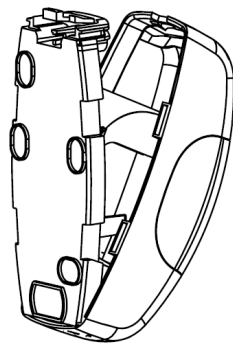


Fig. 2

Ensure these two screws are tight after alignment

Note: The lense assembly can be indexed to align or allow mounting to side walls where necessary.

(Illustration purpose only. Do not remove from bracket)

1. Press in the latch with a suitable screwdriver and open the housing (Fig. 1). This snap mechanism enables quick installation. Keep the housing open during the installation so that the diagnosis of the LED can be seen.
2. Align Sender and Receiver accordingly. Align the IR Beams in such a way that the lenses precisely face each other parallel to the door. After alignment, tighten the two screws (Fig. 2).
3. With connection, and alignment complete, switch on the power to the system.
  - LED on both Sender and Receiver lights up, if the connection and alignment were executed properly.
  - LED flashes on Sender and Receiver, if the IR beam is obstructed, or if alignment is not correct. Remove any possible obstruction and/or re-align until the LEDs stop flashing.
4. Close the housing of each IR Beam.

## OPERATION

When aligned and connected correctly to a compatible Grifco Main Control Board, the GPS772 will allow the Opener to latch closed, whereby obstruction of the IR beam will cause the door to stop and reverse to the open position.

Test correct operation with the following procedure:

- Open the door via a push button or transmitter
- Place an obstacle between the Sender and Receiver to obstruct the IR beam
- Try to close the door via a push button or transmitter (or allow Auto Close to time out if set)
  - The door must not close, as the IR beam is obstructed
  - There is a red LED within the housing of the IR Beam (which is not visible with closed housing), which flashes when the IR beam is obstructed, indicating that there is an obstacle between the Sender and Receiver, or that the lenses are not aligned correctly.
- With the obstruction removed, operate the door to close, and **TEST** that an obstruction of the IR beam will cause the door to stop and open.

**If the door closes with the IR beam obstructed by an obstacle or if the Sender and Receiver are not aligned correctly, the system must be checked immediately by an authorised technician.**

## TROUBLESHOOTING

If the LED indicator on Sender and/or Receiver does not light up after installation. check the following:

- Incorrect cable connection between IR Beam and Main Control Board
- Broken or disconnected cable
- Polarity of the cables are incorrect (refer Page 5)

## MAINTENANCE

To ensure trouble free operation of the GPS772, ensure the lense cover is wiped down with a clean cloth each month or as required in certain environments. Dust, insect webs and other foreign material can interfere with the correct operation of the GPS772 if the above is not followed.

## SPECIFICATION

- Protection class: IP44
- Temperature range: - 20°C + 70°C
- Range: 15 m

Depending on your application requirements, some of the following accessories may be included with your equipment. Review the following to determine if any of these items may be required to satisfy the customer needs if not already included.

# GRIFCO® Security +2.0 Accessories



### Forklift/Wall Remote

Experience the convenience of a versatile spare remote. Operate up to three doors or gates with one remote that can be fitted to a car, forklift or in the warehouse or factory.

**Model:** E943G (3 Button)



### 3 Button Key Ring Remote

Key ring remote transmitters are small and convenient with the ability to operate up to three doors or gates from the one unit. A must have for every set of keys for warehouse workers on site.

**Model:** E945G



### Wireless Wall Control

The wireless wall control can be placed in a suitable location in your warehouse. There is no wiring and it can operate up to two doors and has a unique hold to close feature that is available without IR beams installed.

**Model:** E138G



### Wireless Keypad

Secure Keyless entry via a four digit PIN code. The wireless keypad can be programmed with up to twelve user codes and has the option for temporary codes that last for as many hours or door openings as you select. Now you can have secure keyless entry and a unique hold to close feature that is available without IR beams installed.

**Model:** E840G



### Infrared (IR) Reflective Beam

The new Grifco Protector System is a market leading pre-wired "plug-in" monitored reflective IR beam. The Protector System reduces installation time and features an adjustable IR beam assembly that increases alignment flexibility.

**Model:**

*GPS15 - Reflective beam kit*

*GPS15RK - Above including 2 x E945G transmitters*

**Send / Receive type also available:**

*GPS772 - Send/Receive beam kit*

*GPS772RK - Above including 2 x E945G transmitters*



### STAR1000EVO

The STAR1000EVO is a high capacity transmitter management system for commercial door openers, and dry contact triggered devices. The STAR1000EVO is compatible with Security +2.0 remote controls and wireless keypads. The receiver capacity is 1,000 wireless accessories and can be any combination of remote controls and wireless entry devices.

**Model:**

*STAR1000EVO*

- Call 1800 GRIFCO for assistance with any of the above accessories, or other enquiries -



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## CHAMBERLAIN LIMITED WARRANTY

### Grifco Products

Chamberlain Australia Pty Limited / Chamberlain New Zealand Limited (**Chamberlain**) is committed to manufacturing and supplying high quality goods. As part of this commitment, we seek to provide reliable service and support for our goods and are pleased to provide you, the original purchaser, with this Chamberlain Limited Warranty.

We also provide the following statement as required by the Australian Consumer Law: In Australia, in addition to your rights under this Chamberlain Limited Warranty, our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

#### Chamberlain's warranty

Chamberlain warrants to the original purchaser of the Grifco product (**Unit**) that:

- 1 The Unit (excluding the electric motor) is free from defects in materials and workmanship for a period of 24 months from the date of purchase.
- 2 The electric motor is free from defects in materials and workmanship for a period of 12 months from the date of purchase.

During the applicable Chamberlain Warranty period, if you are concerned that the Unit or electric motor may be defective, call our service centre on the toll free number below before removing the Unit and a Chamberlain technician will diagnose the problem. Once the problem has been diagnosed, subject to your rights under the Australian Consumer Law with respect to major failures, Chamberlain will provide you with:

- 1 parts for "do-it-yourself" repairs; or
- 2 shipping instructions for a factory repair or replacement.

If a factory repair or replacement is required, provided the defective part or Unit is returned to Chamberlain well-packaged and in accordance with Chamberlain's shipping instructions, Chamberlain will, subject to your rights under the Australian Consumer Law with respect to major failures:

- 1 in relation to the Unit (excluding the electric motor), repair or, at its option where permissible, replace any defective part or Unit (excluding the electric motor) and return it to you at no cost; and
- 2 in relation to the electric motor, replace the electric motor and return it to you at no cost.

Where the Unit has been installed by an authorised installer, you must call them for prompt on-site service. Chamberlain will furnish replacement parts free of charge through the authorised installer. A service fee for on-site service may apply.

Repairs and replacement parts provided under this Chamberlain Limited Warranty are provided free of charge and are warranted for the remaining portion of the original warranty period.

This Chamberlain Limited Warranty provides benefits which are in addition to your other rights and remedies as a consumer.

#### Exclusions

If our service centre determines that a warranty claim has been made in respect of a failure or defect arising under or out of any exclusion detailed below such that the claim is not covered under this Chamberlain Limited Warranty, we may, subject to your other rights and remedies as a consumer, charge you a fee to repair, replace and/or return the Unit to you.

This Chamberlain Limited Warranty does not cover any failure of, or defect in, the Unit due to:

- 1 non-compliance with the instructions regarding installation, operation, maintenance and testing of the Unit or of any product with which the Unit is used;
- 2 any attempt by a person other than an authorised installer to change settings, repair, dismantle, reinstall or move the Unit to another location once it has been installed;
- 3 tampering, neglect, abuse, wear and tear, accident, electrical storm, excessive use or conditions other than normal commercial use;
- 4 use of the Unit in conjunction with controls which have not been supplied, or pre-approved, by Chamberlain;
- 5 problems with, or relating to, the commercial door or commercial door hardware, including but not limited to the door springs, door rollers, door alignment, hinges, guides, slats and drums; or
- 6 problems caused by electrical faults.

If this Chamberlain Limited Warranty does not apply, you may have rights available to you under the Australian Consumer Law.

#### Liability – Australia only

Except as set out in the Australian Consumer Law (being Schedule 2 of the *Competition and Consumer Act 2010*) (as amended, consolidated or replaced):

- 1 all other guarantees, warranties and representations in relation to the Unit or its supply are excluded to the extent that Chamberlain can lawfully exclude them; and
- 2 under no circumstances will Chamberlain be liable for consequential, incidental or special damages arising in connection with the use, or inability to use, the Unit, other than those which were reasonably foreseeable as liable to result from the failure.

#### Liability – New Zealand only

Except as set out in the *Fair Trading Act 1986* and the *Consumer Guarantees Act 1993* (as amended, consolidated or replaced):

- 1 all other guarantees, warranties and representations in relation to the Unit or its supply are excluded to the extent that Chamberlain can lawfully exclude them; and
- 2 under no circumstances will Chamberlain be liable for consequential, incidental or special damages arising in connection with the use, or inability to use, the Unit, other than those which were reasonably foreseeable as liable to result from the failure.

#### Note

We request that you retain your sales docket or invoice as proof-of-purchase and attach it to this manual to enable you to establish the date of purchase in the unlikely event of a warranty service being required. Chamberlain reserves the right to change the design and specifications of the Unit without prior notification. Some features or accessories of the Unit may not be available in certain markets or areas. Please check with your distributor.

#### Chamberlain service centre contact details

##### Australia

Phone toll free 1800 474 326  
Fax toll free 1800 888 121  
Unit 1, 75 Epping Road  
North Ryde, NSW 2113

##### New Zealand

Auckland phone 09 477 2823  
Phone toll free 0800 653 667  
Fax toll free 0800 653 663

##### Email

customerservice@chamberlainanz.com

##### Websites

www.grifco.com.au or www.grifco.co.nz