

# **12V MOTION SENSOR 98GC779G**

**INSTALLATION & PROGRAMMING GUIDE  
REV.07242015**



  
**GIRARD SYSTEMS®**

**RV AWNING PRODUCTS**

1361 CALLE AVANZADO, SAN CLEMENTE, CA 92673 (800) 382-8442 FAX (949)276-5500

[www.girardrv.com](http://www.girardrv.com)



Girard Systems awnings may be operated in light wind and rain conditions. When periods of heavy rain and or high wind are expected the awning must be closed. Never leave the awning open and unattended.

**Damage caused by wind and rain is not covered by warranty.**

All awnings must be closed prior to moving the vehicle for any reason. As an extra safety precaution a visual check that every awning is fully closed is required.

**Damage caused by failure to comply with these instructions is not covered by warranty.**

Before using your awning, ensure that the area into which the awning will be deployed is free of obstructions (Trees, walls, pillars, posts, other vehicles etc.)

**Damage caused by collisions with any of the above or similar is not covered by warranty.**

Before using your awning make sure that all of your electrical circuits are operating correctly. Recreational Vehicles can generate AC power from three separate sources. The electrical system transfer switch in your vehicle will select power for the awning as follows:

**Shore Power** – if connected;

**Generator Power** – if the generator is running;

**Inverter Power** – batteries must be charged for inverter operation.

Girard Systems awnings are supplied with an electric motor appropriate to the product.



## **CONTENTS**

|   |    |
|---|----|
| Installation Guidelines .....                     | 4  |
| Motion Sensor and LED Connections .....           | 7  |
| Preparation for pairing .....                     | 8  |
| Pair With GC274A or GC274B Motor Controller ..... | 10 |
| Pair With GC136 Motor Controller .....            | 12 |
| Pair With DC Motor Controller GC732G .....        | 14 |
| Pair With DC Motor Controller GC1146C .....       | 16 |
| Pair With 98GC74 Motor Controller .....           | 18 |
| Pair with a Remote motor .....                    | 20 |

## **THE G-LINK SYSTEM**

The G-Link motors and control modules provided by Girard Systems communicate by use of RF signals on a frequency of 433.92 MHZ. This eliminates the need for wiring and the drilling of holes in the vehicle. These components must be electronically matched, programmed or paired before use. This is usually done at the Girard Systems factory. Should the need arise for the user to pair a device with the motor controller they must refer to the appropriate manual for the devices applicable to their particular installation.



## **INSTALLATION GUIDELINES**

The purpose of this device is to automatically send a signal to the motor controller of the fitted awning to fully retract the awning in windy weather conditions.

In new installations the 98GC779 Motion sensor is preprogrammed at the factory. Replacement Motion sensors will need to be programmed. This guide contains the instructions of how to do so.

The photograph below illustrates the recommended position for the Motion sensor as fitted to a Nova or Nova II Awning with a Right mounted motor.



Note that the bracket is mounted on the inside of the lead rail. The screws for this purpose are supplied with the device and on new installations the holes will be pre drilled. The location of the motion sensor will vary depending upon the arm placement of each installation.

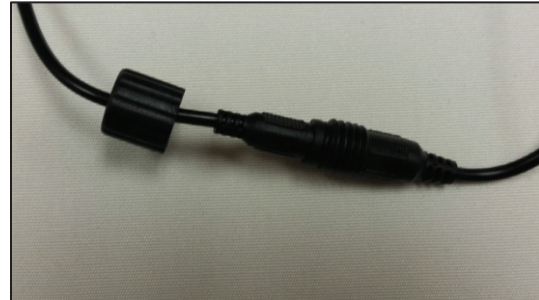
**Extreme care should be taken when placing the device to ensure that when the Awning is closed, the motion sensor or associated wiring will not be damaged.**



The cable of the Motion sensor points in toward the middle of the awning, and is connected by means of a water resistant connection as shown in the photographs below.



A.

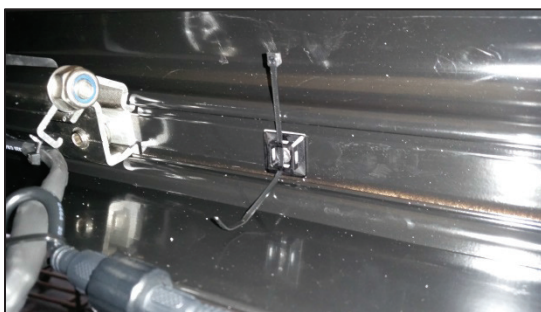


B.



C.

Once connected the cable should be tied and secured neatly to the awning lead rail.



D.



E.

If the Awning has a Left mounted motor and the cable position of the Motion sensor needs to be changed, this can be done very easily by simply removing the 2 small Phillips screws securing the module to the mounting bracket and turning the module so that the cable is now to the left and the Girard Systems Logo is facing upward, and then replace the screws. So that this ....

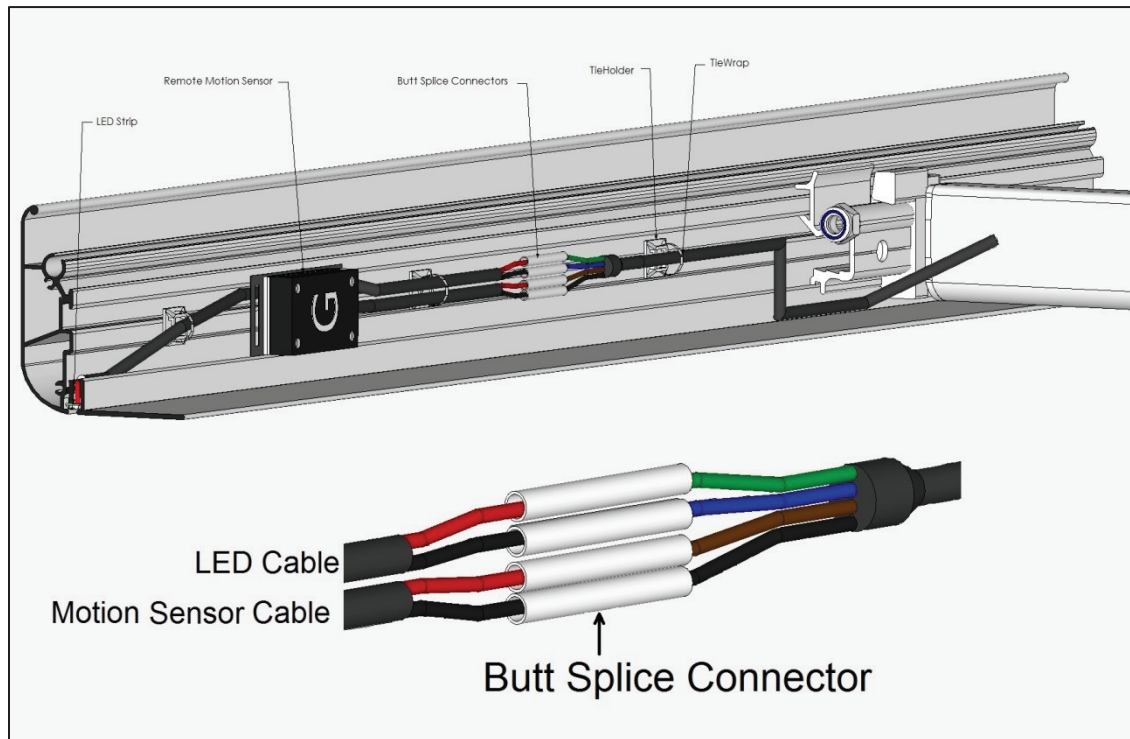


Becomes this.

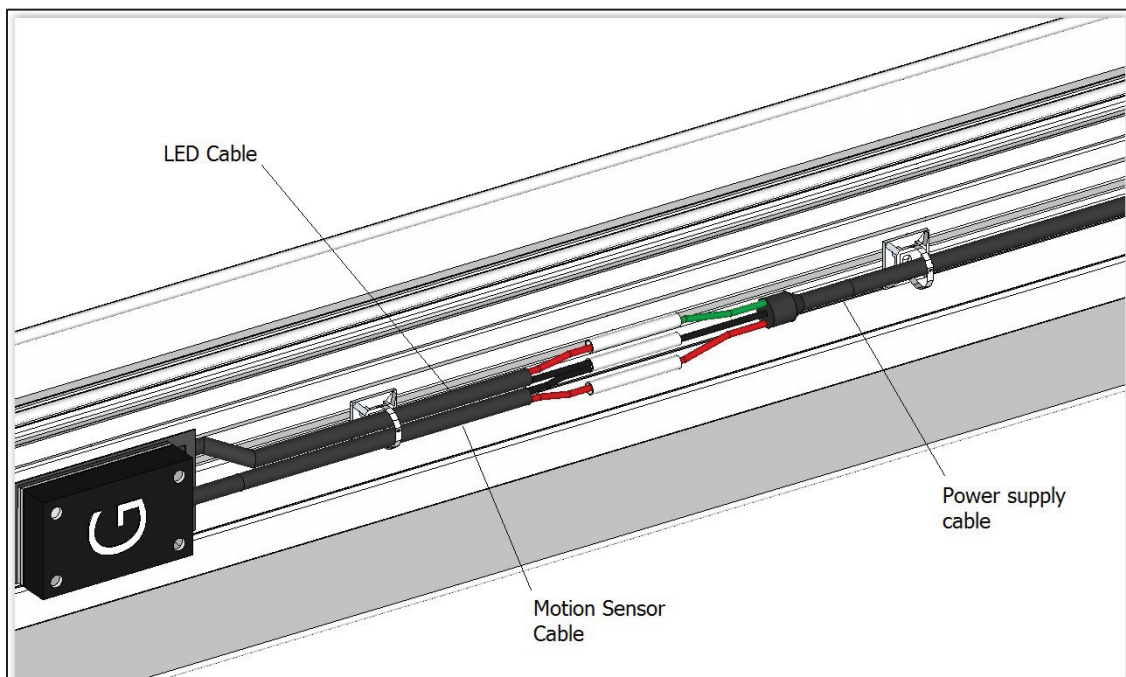




# Motion Sensor and LED Connections



4 conductor power supply



3 conductor power supply





# Programming the Motion Sensor (98GC779G)

## Preparation for Pairing

Remove the 2 small Phillips screws which secure the motion sensor to the mounting bracket. The base of the module is magnetized so will need to be gently lifted off.



Fig.1

Then turn it over.



Fig.2



Remove the 4 Phillips screws holding the module together. Remove the base plate and silicone insert.

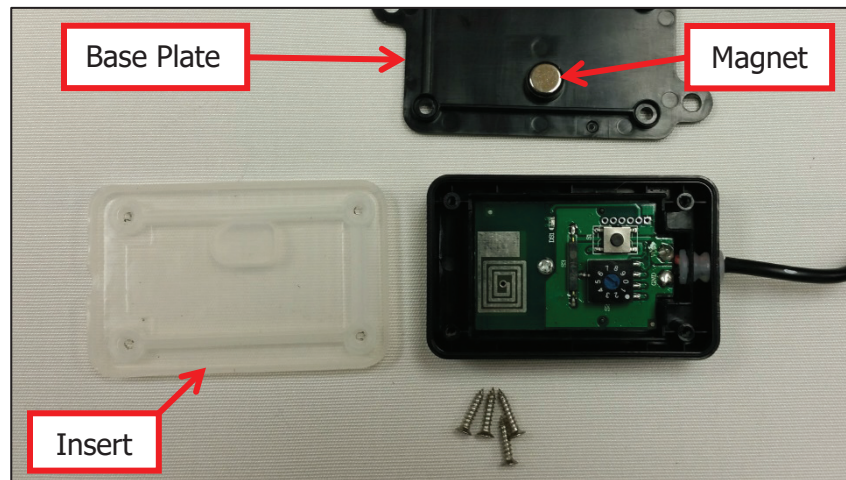


Fig.3

Turn the base plate over (Magnet down). Then place the motion sensor on top of it so that the magnet is aligned with the reed switch. **If this is not done the default program cannot be changed.**

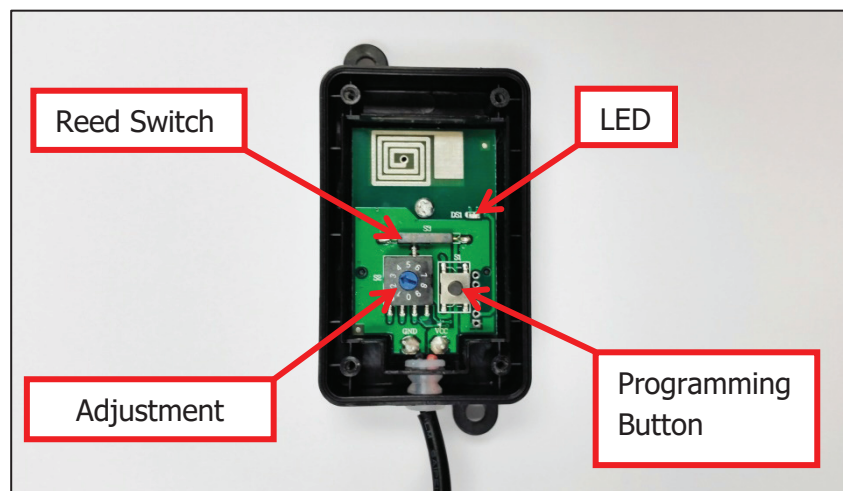


Fig.4

## **Pair with GC274A or GC274B Motor controller.**

First identify which GC274 Motor Controller must be paired with the motion sensor, there may be more than one installed on the vehicle. This can be achieved by pushing the FWD / REV buttons on the side of the controller and observing which awning responds.

This procedure will require opening up the motion sensor module and the Motor Control module by following the directions below;

Remove the lid of the Motor control module by pushing in the Lid release catch on both sides of the box as illustrated in Fig.5, and then lift the lid.

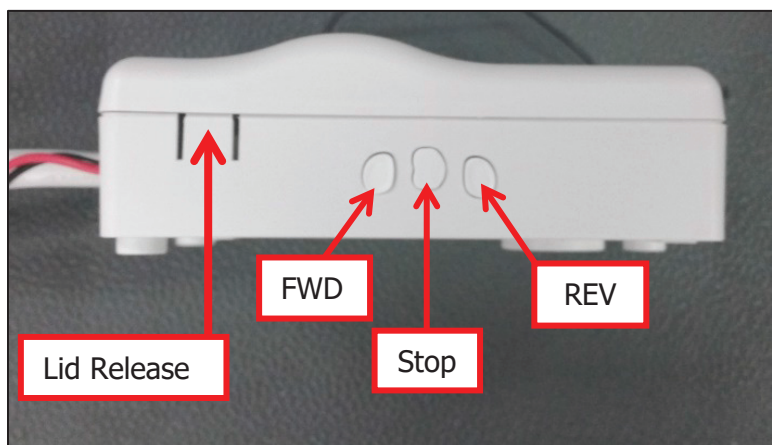


Fig.5

Locate the programming button as illustrated in Fig.6.

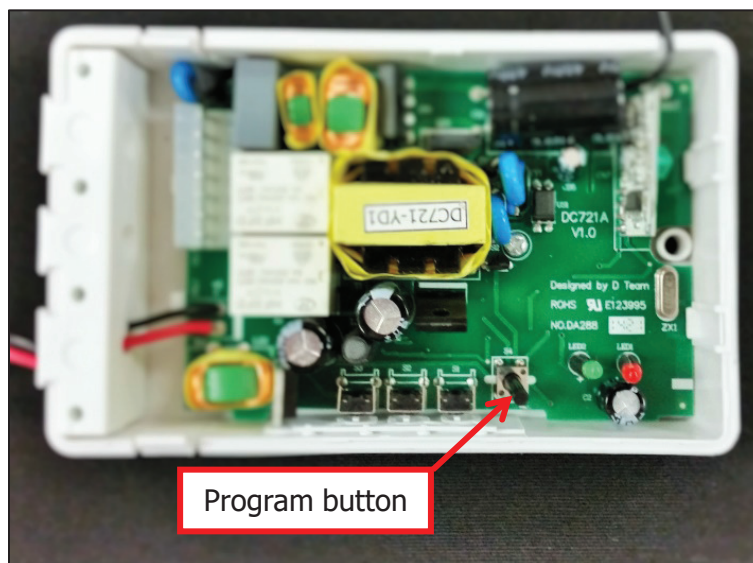


Fig.6



Next Prepare the motion sensor for pairing as described on pages 8 & 9.

**Note; When carrying out this part of the procedure each step must be executed within 10 seconds of the previous one or the module will revert to factory settings. It is highly recommended that you read and understand the following sequence before attempting to execute it.**

- a. Set the Motion sensor Adjustment Dial to level 5. (See page 9 Fig.4)
- b. To initiate the programming sequence, power to the motor controller must be disconnected for at least 10 seconds then reconnected.
- c. Connect the GC779G Motion sensor to a 12volt DC circuit. At this point the Purple LED will illuminate and then begin to blink. If it does not, the module is not receiving the correct power. Ensure that the magnet and reed switch are aligned and verify the electrical connection before proceeding.
- d. Press the program button on the Motor controller (see fig.6). The green LED will start blinking.
- e. Press the Stop button on the Motor controller (see fig.4). The green LED will illuminate continuously.
- f. Press the programming button on the GC779G Motion sensor (See Fig.4). Both the Purple LED on the Motion sensor and the green LED on the Motor controller will flash once and extinguish. This completes the programming sequence.
- g. Ensure that the code was accepted by pressing the Program button on the GC779G Motion sensor again. The Awning should retract.
- h. If the Awning does not retract, repeat steps a. to f.
- i. Set the Adjustment Dial to the desired sensitivity level 1 to 5. **Never set higher than 5.** (The factory setting is 3).

Once programming is complete, reassemble the motion sensor module and mount on the awning lead rail as previously instructed.

## Pair with GC136 Motor Controller



Fig.7

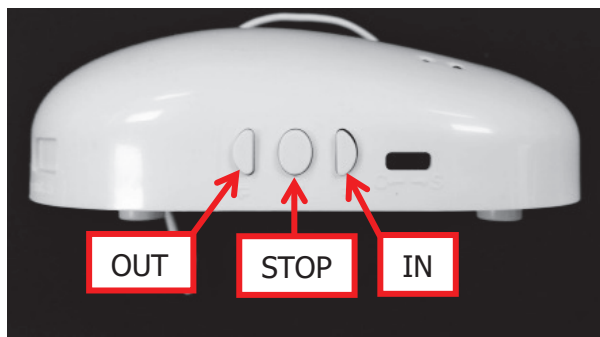


Fig.8

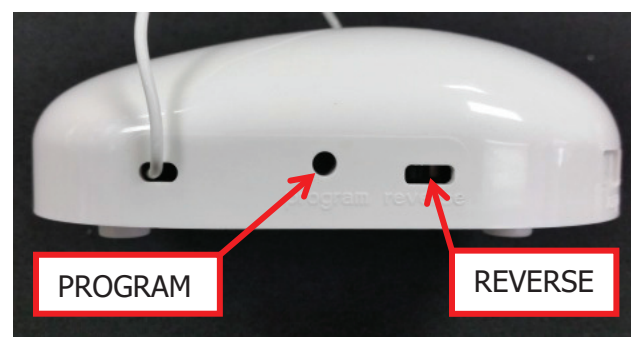


Fig.9

First identify which GC136 Motor Controller must be paired with the motion sensor, there may be more than one installed on the vehicle. This can be achieved by pushing the IN/OUT buttons on the side of the controller and observing which awning responds. See Fig.8.

Familiarize yourself with the buttons and switches indicated in these illustrations.

Next prepare the motion sensor for pairing as described on pages 8 & 9.





**Note; When carrying out this part of the procedure each step must be executed within 10 seconds of the previous one or the module will revert to factory settings. It is highly recommended that you read and understand the following sequence before attempting to execute it.**

- a. Set the Adjustment Dial to level 5. (See page 9 Fig.4).
- b. To initiate the programming sequence, power to the motor controller must be disconnected for at least 10 seconds then reconnected.
- c. Connect the GC779G Motion sensor to a 12volt DC circuit. At this point the Purple LED will illuminate and then begin to blink. If it does not, the unit is not receiving the correct power. Ensure that the magnet and reed switch are aligned and verify the electrical connection before proceeding.
- d. Using a small screwdriver, or the end of a paper clip press the Program Button on the GC136 Motor Controller.(see fig 9) The Green LED on the Motor Controller will begin to flash.
- e. Press the Stop Button on the Motor Controller. The Green LED on the Motor Controller will illuminate continuously.
- f. Press the programming button on the GC779G Motion sensor (See Fig.4). Both the Purple LED on the Motion sensor and the green LED on the Motor controller will flash once and extinguish. This completes the programming sequence.
- g. Ensure that the code was accepted by pressing the Program button on the GC779G Motion sensor again. The Awning should retract.
- h. If the Awning does not retract, repeat steps a. to f.
- i. Set the Adjustment Dial to the desired sensitivity level 1 to 5. **Never set higher than 5.** (The factory setting is 3).

Once programming is complete, reassemble the Motion sensor module and mount on the awning lead rail as previously instructed.

## Pair with DC Motor Controller GC732G



Fig.10

First identify which GC732G Motor Controller must be paired with the motion sensor, there may be more than one installed on the vehicle. This can be achieved by pushing the IN/OUT buttons on the face of the controller and observing which awning responds.

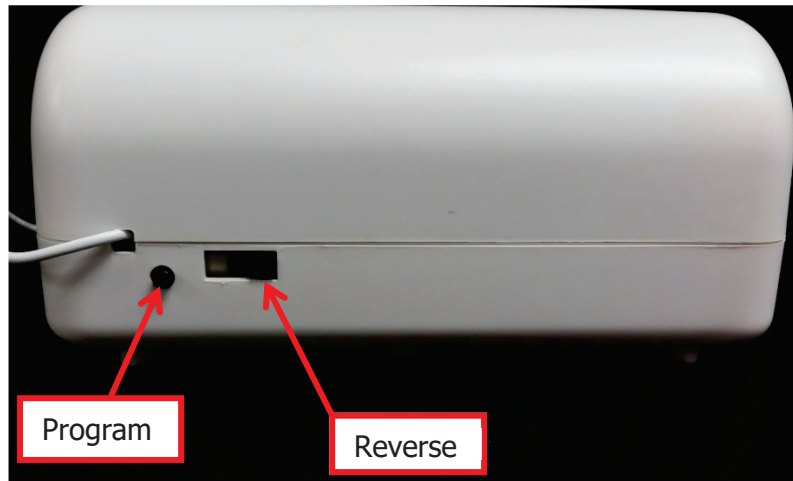


Fig.11

Familiarize yourself with the buttons and switches indicated in these illustrations. Next prepare the motion sensor for pairing as described on pages 8 & 9.



**Note; When carrying out this part of the procedure each step must be executed within 10 seconds of the previous one or the module will revert to factory settings. It is highly recommended that you read and understand the following sequence before attempting to execute it.**

- a. Set the Adjustment Dial to level 5. (See page 9 Fig.4).
- b. To initiate the programming sequence, power to the motor controller must be disconnected for at least 10 seconds then reconnected.
- c. Connect the GC779G Motion sensor to a 12volt DC circuit. At this point the Purple LED will illuminate and then begin to blink. If it does not, the unit is not receiving the correct power. Ensure that the magnet and reed switch are aligned and verify the electrical connection before proceeding.
- d. Press and hold the Program Button on the side of the GC732G Controller for about 3 seconds. (See fig11).The Red LED on the Motor Controller will illuminate.
- e. Press the programming button on the GC779G Motion sensor (See Fig.4). Both the Purple LED on the Motion sensor and the Red LED on the Motor controller will flash once and extinguish. This completes the programming sequence.
- f. Ensure that the code was accepted by pressing the Program button on the GC779G Motion sensor again. The Awning should retract.
- g. If the Awning does not retract, repeat steps a. to e.
- h. Set the Adjustment Dial to the desired sensitivity level 1 to 5. **Never set higher than 5.** (The factory setting is 3).

Once programming is complete, reassemble the Motion sensor module and mount on the awning lead rail as previously instructed.



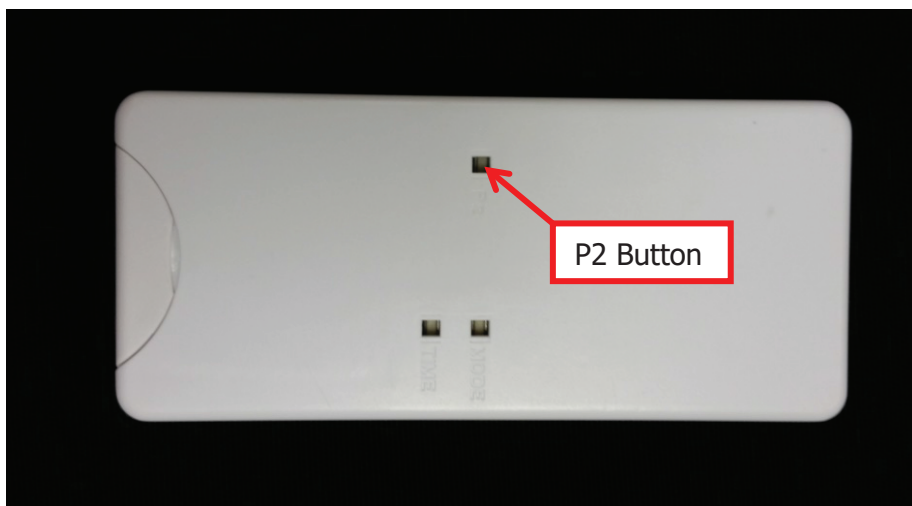
## **Pair with 12vDC Motor Controller GC1146C**



Identify the hand held remote Handset which operates the DC Motor controller for the awning on which the motion sensor is to be mounted. This is likely to be either a 98GC1063 Single channel, or a 98GC1029 Multi channel handset.

Fully extend the awning to ensure smooth operation, and then retract the awning leaving it partially open (about 3 feet).

Locate the P2 Button on the back of the handset.



Familiarize yourself with the buttons and switches indicated in these illustrations. Next, prepare the motion sensor for pairing as described on pages 8 & 9.





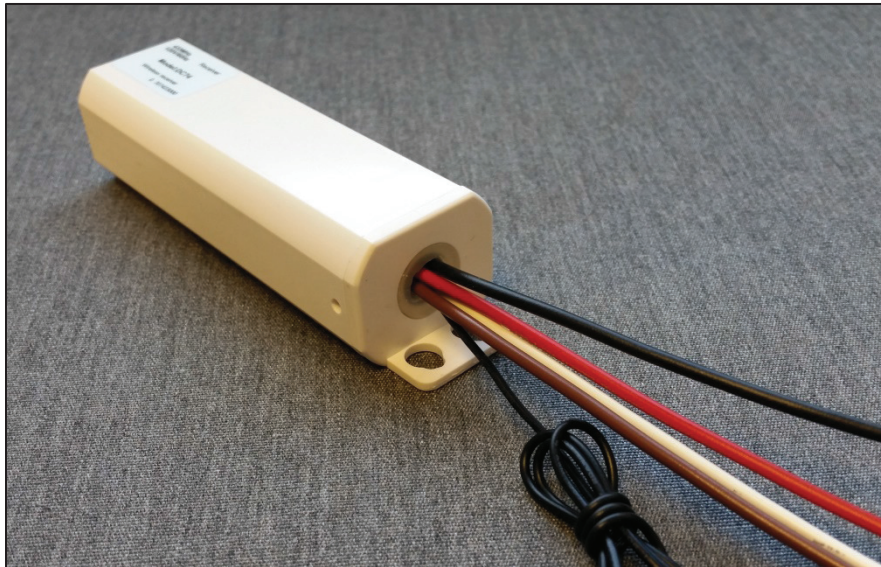
**Note; When carrying out this part of the procedure each step must be executed within 10 seconds of the previous one or the module will revert to factory settings. It is highly recommended that you read and understand the following sequence before attempting to execute it.**

- a. Set the Motion sensor Adjustment Dial to 0. (See page 9 Fig.4).
- b. Connect the GC779G Motion sensor to a 12volt DC circuit. At this point the Purple LED will illuminate and then begin to blink. If it does not, the unit is not receiving the correct power. Ensure that the magnet and reed switch are aligned and verify the electrical connection before proceeding.
- c. Using an appropriate tool, press the P2 Button on the back of the Remote Controller TWICE. The GC1146C will bleep ONCE with each press.
- d. Press the programming button on the GC779G Motion sensor ONCE (See Fig.4). The GC1146C will bleep FIVE times to indicate that the program has been accepted.
- e. Ensure that the code was accepted by pressing the Program button on the GC779G Motion sensor again. The Awning should make a small step IN or OUT. Or shake the motion sensor and the Awning will fully retract.
- f. If the Awning does not retract, repeat steps a. to d.
- g. Set the Adjustment Dial to the desired sensitivity level 1 to 5. **Never set higher than 5.** (The factory setting is 3).

Once programming is complete, reassemble the Motion sensor module and mount on the awning lead rail as previously instructed.

When the Motion sensor has been correctly mounted on the awning it can be tested by extending the awning about 3' and then lift and drop the lead rail about 12", the awning should retract.

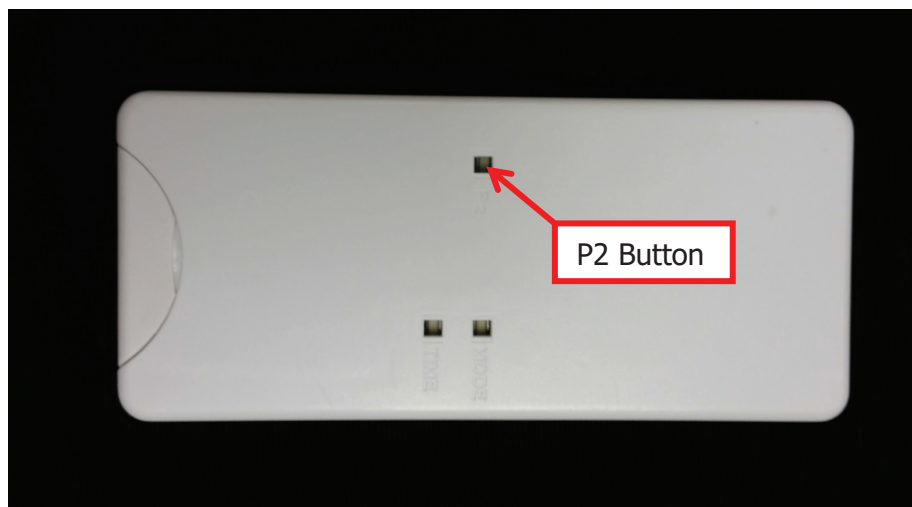
## Pair with 98GC74 AC Motor Controller



Identify the hand held remote Handset which operates the Motor controller for the awning on which the motion sensor is to be mounted. This is likely to be either a GC104 Single channel, or a GC105A/106/107 Multi-channel handset.

Fully extend the awning to ensure smooth operation, and then retract the awning leaving it partially open (about 3 feet).

Locate the P2 Button on the back of the handset.



Familiarize yourself with the buttons and switches indicated in these illustrations. Next, prepare the motion sensor for pairing as described on pages 8 & 9.



**Note; When carrying out this part of the procedure each step must be executed within 6 seconds of the previous one or the module will revert to factory settings. It is highly recommended that you read and understand the following sequence before attempting to execute it.**

- a. Set the Motion sensor Adjustment Dial to 0.( See page 9 Fig 4)
- b. Connect the GC779G Motion sensor to a 12volt DC circuit. At this point the Purple LED will illuminate and then begin to blink. If it does not, the unit is not receiving the correct power. Ensure that the magnet and reed switch are aligned and verify the electrical connection before proceeding.
- c. Using an appropriate tool, press the P2 Button on the back of the Remote Controller TWICE. The 98GC74 will bleep ONCE with each press.
- d. Press the programming button on the GC779G Motion sensor ONCE (See Fig.4). The 98GC74 will bleep several times to indicate that the program has been accepted.
- e. Ensure that the code was accepted by pressing the Program button on the GC779G Motion sensor again. The Awning should make a small step IN or OUT. Or shake the motion sensor and the Awning will fully retract.
- f. If the Awning does not retract, repeat steps a. to d.
- g. Set the Adjustment Dial to the desired sensitivity level 1 to 5. **Never set higher than 5.** (The factory setting is 3).

Once programming is complete, reassemble the Motion sensor module and mount it on the awning lead rail.



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# **Programming to a Remote Motor**

## **NOTE:**

- **Before starting this procedure the Receiver must be without power (OFF) for at least 10 seconds.**
- **During the programming function the interval between each step required must be less than 10 seconds**

### **1. Programming the REMOTE MOTOR to a Remote Module. ( Handset or Switch)**

- a. Supply power to the **REMOTE MOTOR**: a soft beep will be emitted by the RF receiver in the unit.
- b. Press the P2 button on the back of the Remote twice (A beep will be emitted by the RF receiver with each press)
- c. Press the **DOWN** button on the Remote and verify that the motor is responding correctly. If the motor turns in the opposite direction (up), repeat a. and b. and finish the process by pressing the **UP** button.

### **2. Programming the REMOTE MOTOR to an additional Remote module**

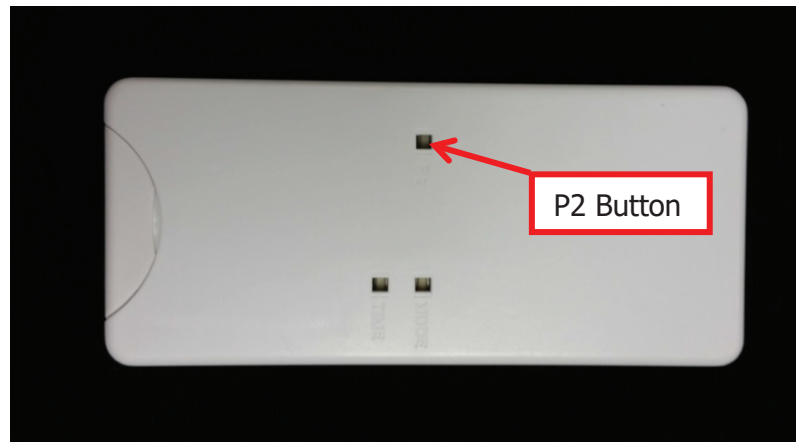
- a. Do not turn off the power to the **REMOTE MOTOR (If you do you will delete the previous remote!)**
- b. Press the P2 button on the back of the first Remote **twice** (A beep will be emitted by the RF receiver with each press)
- c. Press the P2 button on the back of the additional Remote **once** (A beep will be emitted by the RF receiver)
- d. Press the **UP** or **DOWN** button on the Remote to verify that the unit is programmed.

### **3. Programming the Remote motor to a Motion sensor**

- a. Identify the hand held remote Handset which operates the Remote Motor for the awning on which the motion sensor is to be mounted.
- b. Fully extend the awning to ensure smooth operation, and then retract the awning leaving it partially open (about 3 feet).



- c. Locate the P2 Button on the back of the handset.



- d. Familiarize yourself with the buttons and switches indicated in these illustrations.
- e. Next, prepare the motion sensor for pairing as described on pages 8 & 9.

**Note; when carrying out this part of the procedure each step must be executed within 10 seconds of the previous one or the module will revert to factory settings. It is highly recommended that you read and understand the following sequence before attempting to execute it.**

- h. Set the Motion sensor Adjustment Dial to 0. (See page 9 Fig.4).
- i. Connect the GC779G Motion sensor to a 12volt DC circuit. At this point the Purple LED will illuminate and then begin to blink. If it does not, the unit is not receiving the correct power. Ensure that the magnet and reed switch are aligned and verify the electrical connection before proceeding.
- j. Using an appropriate tool, press the P2 Button on the back of the Remote Controller TWICE. The Remote motor will bleep ONCE with each press.
- k. Press the programming button on the GC779G Motion sensor ONCE (See Fig.4). The Remote motor will bleep FIVE times to indicate that the program has been accepted.
- l. Ensure that the code was accepted by pressing the Program button on the GC779G Motion sensor again. The Awning should make a small step IN or OUT. Or shake the motion sensor and the Awning will fully retract.
- m. If the Awning does not retract, repeat steps a. to d.
- n. Set the Adjustment Dial to the desired sensitivity level 1 to 5. **Never set higher than 5.** (The factory setting is 3).



Once programming is complete, reassemble the Motion sensor module and mount on the awning lead rail as previously instructed.

When the Motion sensor has been correctly mounted on the awning it can be tested by extending the awning about 3' and then lift and drop the lead rail about 12", the awning should retract.

#### **4. Cancel a Remote**

- a. Supply power to the **REMOTE MOTOR**: a soft beep will be emitted by the RF receiver in the unit.
- b. Press the P2 button on the back of the Remote **twice** (A beep will be emitted by the RF receiver with each press)
- c. Press the **STOP** button of the Remote once.
- d. Press the P2 button of the Remote. Three beeps will be emitted by the RF receiver.

#### **5. Program "Continuous" or "Step" mode of operation**

- a. Supply power to the **REMOTE MOTOR**
- b. Press the P2 button on the Remote
- c. Press the **UP** button of the **REMOTE MOTOR**.
- d. Press the P2 button on the Remote.

For queries or assistance with programming any of your G-Link devices please call Girard Systems TOLL FREE on 800-382-8442 between 7:30am and 3:30pm P.S.T.