# AC MOTOR CONTROL MODULE GC274B

## INSTALLATION and PAIRING INSTRUCTIONS REV.07242015





# **RV AWNING PRODUCTS**

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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.



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# 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.

# **PRODUCT DESCRIPTION**



AC Motor Controller with LED (12V DC) control plus Ignition retract and lockout.



- This module is designed to control a single Standard 110v AC Motor up to 8 Amps and can be remotely operated with any paired G-Link handset or wall switch.
- The controller will receive signals from a distance of more than 500ft in open air and more than 100ft in the presence of obstructions. The RF transmission frequency is 433.92MHZ.
- The GC274B may be programmed with up to 20 compatible remote modules. If an additional module is programmed it will replace the most recently programmed module. The previous 19 modules will remain unchanged.
- The command to retract the awning can be initiated by turning on the ignition switch or by releasing the parking brake depending upon how it is installed.
- This module will cause the awning to retract when the vehicle prepares to move and then remove power to the awning so that it cannot be redeployed while the vehicle is in motion.



Fig.2

- 1) 110v AC Power supply from vehicle power distribution board.
- 2) Output to awning motor control.
- 3) Initiate retract signal from vehicle ignition or parking brake.
- 4) 12v DC to LED lighting.

## **Specifications**

Power: 110VAC / 60Hz

AC Input: White = Neutral / Black = Live / Green = Earth

To the Motor: White = Neutral / Red = Direction 1 / Black = Direction 2 / Green = Earth Ambient T:  $0 - 130^{\circ}F$ 

## **Installation**

A circuit breaker protected 15A/115v AC power outlet is required form the Vehicles power distribution panel as shown in the diagram below.

- 1. Install a UL approved 110VAC junction box in which to make the electrical connections.
- 2. Route the Awning's Motor cable to this location and make the connections to the GC274B in accordance with NEC requirements.

Mount the GC274B on the wall using the screws and tape provided.



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# **SETUP AND PROGRAMMING**

#### 1. Change motor direction

- a. Supply power to **GC274B**
- b. Simultaneously press the **LEFT** and **RIGHT** buttons of the **GC274B** for at least 6 seconds. The Green LED will illuminate and then blink a few times. When the Green LED extinguishes, the operation is complete.



Fig.3

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.

#### 2. Programming the GC274B to a Remote handset or Wall switch

- a. Supply power to the GC274B
- b. Press and hold the **MIDDLE** and **RIGHT** buttons on the GC274 (Fig 3) for about 5 seconds until the Green LED starts to flash.
- c. Press STOP (Fig. 1): The Green LED will stop blinking and remain illuminated.
- d. Press the **UP** button on the REMOTE DEVICE being programmed. The Green LED on the motor controller will extinguish.



#### 3. Cancel one Remote from the GC274B

- a. Supply power to the GC274B
- b. Press and hold the **MIDDLE** and **RIGHT** buttons on the GC274 (Fig 3) for about 3 seconds until the Green LED starts to flash.
- c. Press STOP (Fig. 1): The Green LED will stop blinking and remain illuminated.
- d. Press the **DOWN** button on the REMOTE DEVICE being cancelled. The Green LED will extinguish.

### 4. Cancel all of the Remotes from the GC274B

- a. Supply power to GC274B
- b. Simultaneously press the STOP and LEFT button of the GC274 for at least 6 seconds: The Green LED will first illuminate and then blink a few times. When the Green LED extinguishes the operation has been completed.

#### 5. Programming the GC274B to an Anemometer (98GC116I)



- a. Supply power to the GC274B and the GC116I(Leave them on if already on)
- b. Press and hold the **MIDDLE** and **RIGHT** buttons on the GC274 (Fig 3) for about 3 seconds until the Green LED starts to flash.
- c. Press the STOP button on the GC274B (The Green LED will remain illuminated)
- d. Press the UP button on the GC116I.
- e. Extend awing using a Remote Control and press the UP button again on the GC116I to verify that the unit is working properly (the awning should Retract)
- f. Set the wind speed adjustment dial of the anemometer to in between 1-2.



### 6. Programming the GC274B to a Motion Sensor (98GC779G)

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

a. Remove the 2 small cross head screws which secure the motion sensor to the mounting bracket. See Fig.1.





b. Detach the motion sensor from the bracket, the base plate is magnetized so will need to be gently lifted off. Then turn it over. See Fig.2.



Fig.2



c. Remove the 4 cross head screws holding the module together. Remove the back plate and silicone insert. See Fig.3.



Fig.3

d. 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. See fig.4. <u>If this is not done the</u> <u>default program cannot be changed.</u>





## 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 Fig.4)
- b. To initiate the programming sequence, power to the motor controller must be disconnected for at least 10 seconds then reconnected.
- c. <u>Connect the GC779G Motion sensor to a 12volt DC circuit</u>. 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. <u>Press and hold the **MIDDLE** and **RIGHT** buttons on the GC274 (Fig 2) for about 3 seconds until the Green LED starts to flash.</u>
- e. <u>Press the Stop button on the Motor controller (see fig.4)</u>. The green LED will illuminate continuously.
- f. <u>Press the programming button on the GC779G Motion sensor (See Fig.4)</u>. 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.
- Set the Adjustment Dial to the desired sensitivity level 1 to 5. <u>Never set higher</u> <u>than 5.</u> (The factory setting is 3).

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

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.