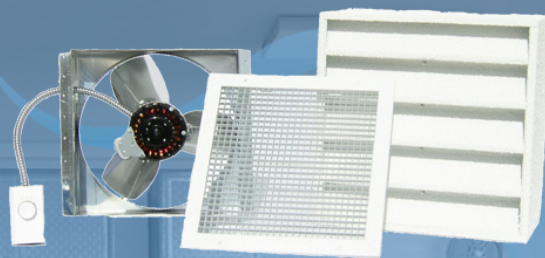# OWNER'S GUIDE
## GARAGE FANS

GA ES-1500

GX ES-1100

**! DO NOT THROW AWAY!**
SERIAL NUMBER FOR FAN IS LOCATED ON THE BACK COVER OF THE OWNER'S GUIDE.
**LEAVE WITH HOMEOWNER**

# CONTENTS

# WARNINGS

ⓘ **CAUTION:** This unit has an unguarded impeller. Do not use in locations readily accessible to people or animals.

ⓘ **CAUTION:** Do not operate any fan with a damaged cord or plug. Discard fan or return to an authorized service facility for examination and/or repair.

ⓘ **CAUTION:** Do not run cord under carpeting. Do not cover cord with throw rugs, runners, or similar coverings. Do not route cord under furniture or appliances. Arrange cord away from traffic area and where it will not be tripped over.

**QC MANUFACTURING, INC.**
26040 YNEZ ROAD
TEMECULA, CA 92591

**PHONE** 1-888-QUIETCOOL
**WEBSITE** WWW.QUIETCOOLSYSTEMS.COM

FULL **15 YEAR** WARRANTY

BUILT IN **USA**
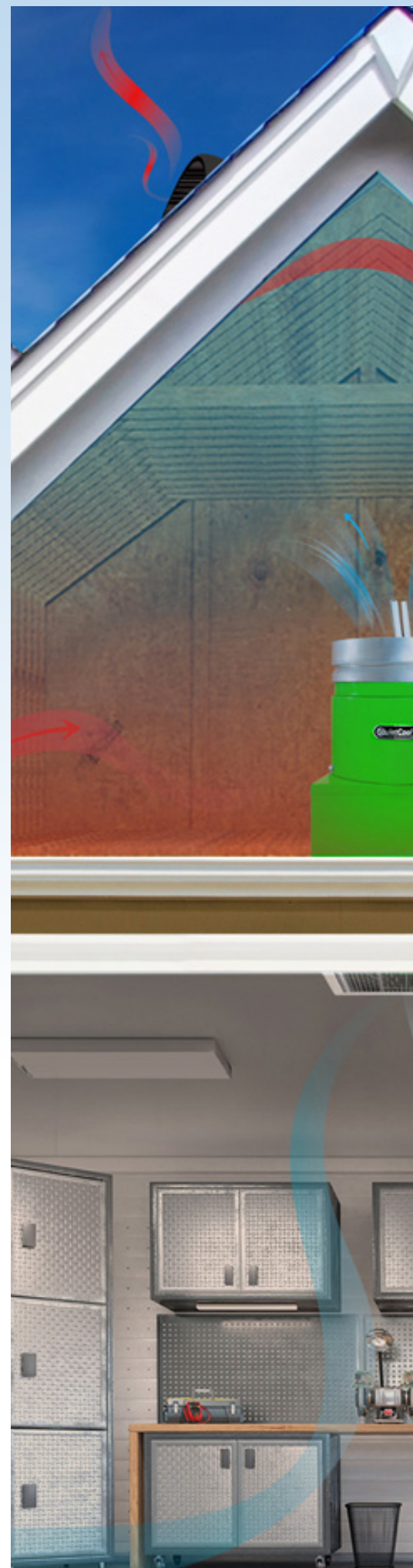
# 1. SYSTEM OVERVIEW

## 1.1 INTRODUCTION

## CONGRATULATIONS
### on the purchase of your new QuietCool Garage Fan!

The QuietCool Garage Fans offer great ventilation options for your garage, man cave, or workshop.

We offer the GA ES-1500 Garage Whole House Fan to ventilate both your garage and attic

We also offer the GX ES-1100 to ventilate your garage only, with a wall mount design.



## 1.2 FEATURES

+ Ultra-Energy Efficient Electronically Commutated Motor (ECM)
+ Built in USA
+ 15-Year Warranty
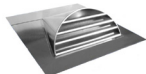+ Included RF WIreless Control Kit (GA)
+ Included Adjustable Thermostat (GX)

## 1.3 SYSTEM VENTING REQUIREMENTS

ⓘ **VERY IMPORTANT:** 1 SQUARE FOOT OF NET FREE VENT AREA PER 750 CFM

ⓘ **RECOMMENDED:** 2 TO 4 SQUARE FEET OF INLET VENTS PER FAN

Venting plays a very significant role in the performace of QuietCool fans. QuietCool recommends a minimum of 1 SQ. FT. of venting for every 750 CFM in the QuietCool system. If an attic has at least 1:750 attic venting, the QuietCool system will operate efficiently and effectively. If an attic has less than 1:750 attic venting, the system may not operate as efficiently, or effectively, as it could with 1:750 attic venting. But don't worry, the system will still operate if there is not enough venting.

Insufficient venting is a very simple problem to fix. Roofing contractors can add extra venting to most homes simply and easily. The most common types of venting is shown in the chart below.

| Vent Type | Model Type | Average Size | Venting Sq. Ft. |
|---|---|---|---|
| Gable vent |  | 12" x 19.5" | 1.20 |
| Dormer Vent |  | 14" x 8" | 0.70 |
| Eave Vent |  | 4"<br>5"<br>6" | 0.03<br>0.04<br>0.07 |
| Ridge Vent |  | 4' - 12' | 0.125 per ft |
| Soffit Vent |  | 16" x 4"<br>16" x 6"<br>16" x 8" | 0.19<br>0.29<br>0.39 |
| O'Hagin Vent |  | Low/Medium Profile<br>Tapered Low Profile<br>Low Profile Flat<br>High Profile | 0.5<br>0.6<br>0.68<br>0.68 |
| Turbine Vent |  | 8"<br>12"<br>14" | .35<br>.79<br>1.1 |

*Note: This table is only a guideline and is not a guarantee of venting capacity.

# 2. INSTALLATION

## 2.1 INSTALLING THE GA ES-1500

Ⓘ **VERY IMPORTANT: MINIMUM OF 26" CLEARANCE REQUIRED ABOVE CEILING FOR INSTALLATION OF GA MODEL FANS. ALWAYS FOLLOW LOCAL BUILDING CODES.**

1. Determine in which area you would like to install your QuietCool Garage Attic Fan.

2. Now it's time to find the exact location using a stud finder or by going up into the attic and finding the location. Locate the ceiling studs and mark the location for the fan to be installed.

3. One side of the cut out should be directly next to a wood member for proper fan mounting and support.

   Ⓘ **NOTE: The QuietCool Damper Box includes removable flanges in the case that you are installing the damper box between studs that are exactly 16" on center. To remove the flanges, simply take a screwdriver and pry between the flange surface and the damper box. Do this along the entire edge of the flange and it will pop off.**

4. When you find the location, from down below mark a square using the template. Make sure you have 2" of clearance all the way around it so the grille fits with no obstructions. **(see Figure 2.1A)**

5. Starting at one corner of the square using a drywall saw, cut out the opening. Remove the drywall cutout and clear away insulation (if applicable). **(see Figure 2.1B)**

6. Take the GA fan model into the attic and place it over the ceiling cut out. **(see Figure 2.1C).** If needed, you can remove the ceiling flanges and pass the fan directly through the ceiling cut-out.

7. Attach the fan using screws into the ceiling joists. **(see Figure 2.1D)**.

8. Install the ceiling grille. **(see Figure 2.1E)**

   Ⓘ **VERY IMPORTANT: Check to make sure fan blade spins freely and the fire damper closes easily. Make sure to secure the clip in the open position.**
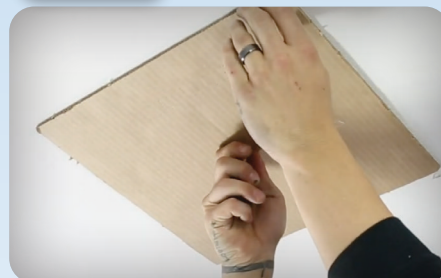
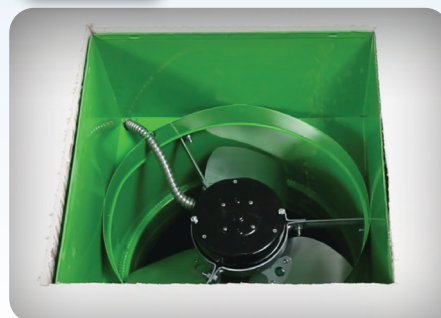Figure 2.1A



Figure 2.1B



Figure 2.1C



Figure 2.1D



Figure 2.1E

## 2.2    INSTALLING THE GX ES-1100

1.      Determine in which area you would like to install your QuietCool Garage Exterior Mount Fan.

2.      Now it's time to find the exact location using a stud finder. Locate the wall studs and mark the location for the fan to be installed **(see Figure 2.2A)**. One side of the cut out should be directly next to a wood member for proper fan mounting and support.

3.      When you find the location, mark a 14 1/4" square using a framing square or template. Make sure you have 2" of clearance all the way around it. The grille that will be installed later is a 16" square **(see Figure 2.2B)**.

4.      Starting at one corner of the square using a drywall saw, cut out the opening. Remove the drywall cutout and clear away insulation (if applicable).

5.      From the interior, drill a hole through the exterior at the four corners of the cut out **(see Figure 2.2C)**.

6.      Go to the exterior and place the square wall mounting bracket aligned to the 4 drilled holes.

7.      Using a level, mark the inside of the bracket with a pencil **(see Figure 2.2D)**.

8.      Using a saw or angle grinder, cut out the marked area of stucco or siding **(see Figure 2.2E)**.

9.      Remove cut out of exterior stucco or siding. Then cut out any applicable sheathing.

10.     Now install the exterior cover frame. Make sure the frame is level and then attach the four corners with long enough screws to penetrate the wood studs. Note: Predrilling may be required **(see Figure 2.2F)**.

11.     Place fan into the cut out area. Fasten the fan in each 4 corners to the vertical wood studs **(see Figure 2.2G)**.

12.     Caulk exterior around frame **(see Figure 2.2H)**.

13.     Attach the exterior cover to mounting frame using 4 sheet metal screws **(see Figure 2.2I)**.

14.     Mount inside wall grille **(see Figure 2.2J).**

**Figure 2.2A**

**Figure 2.2B**

**Figure 2.2C**

**Figure 2.2D**

**Figure 2.2E**

**Figure 2.2F**
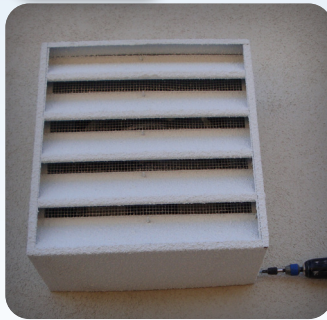
**Figure 2.2G**

**Figure 2.2H**

**Figure 2.2I**

**Figure 2.2J**

# 3. WIRING

⊘**NOTE:** Wiring Diagrams are for examples ONLY. Wiring should be done by an experienced electrician.

⊘**NOTE:** Your fan may have come with the RF Hub or Thermostat pre-wired to a power cord for testing purposes before installation. The power cord can be used when installed inside of an attic. DO NOT USE THE POWER CORD OUTDOORS. If you would like to hard-wire the fan, or it is required by your local building codes, please follow the wiring instructions below.

## 3.1 GX ES-1100 WIRING WITH THERMOSTAT

1. Mount a junction box for your thermostat in the best location for thermostat readings which is usually on the wall next to the light switch or garage door opener in the garage. Begin wiring the thermostat.

2. With a 3 wire Romex, tie the black wire to the black wire from the thermostat.

3. Tape the white common wire on both sides of the 3 wire Romex because we will be using this as our switch leg.

4. Tie the red wire and the taped white wire together.

5. Attach the ground wire to the ground screw on the timer.

6. In the fan's junction box, tie the black wire from the fan to the taped white wire.

7. Tie the two remaining black wires together. Then, tie the remaining copper wires together.
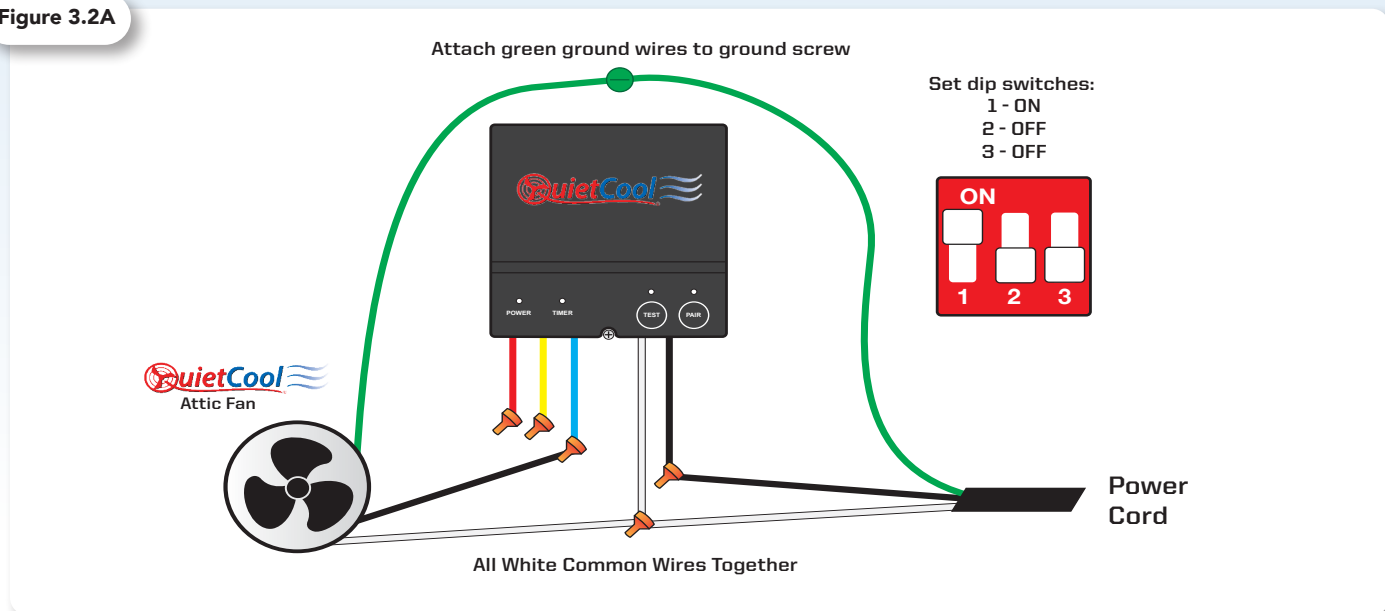
**Figure 3.1A**



Ground the fan to the junction box using the green ground screw

QuietCool

Junction Box

14-2 Wire

14-2 Wire
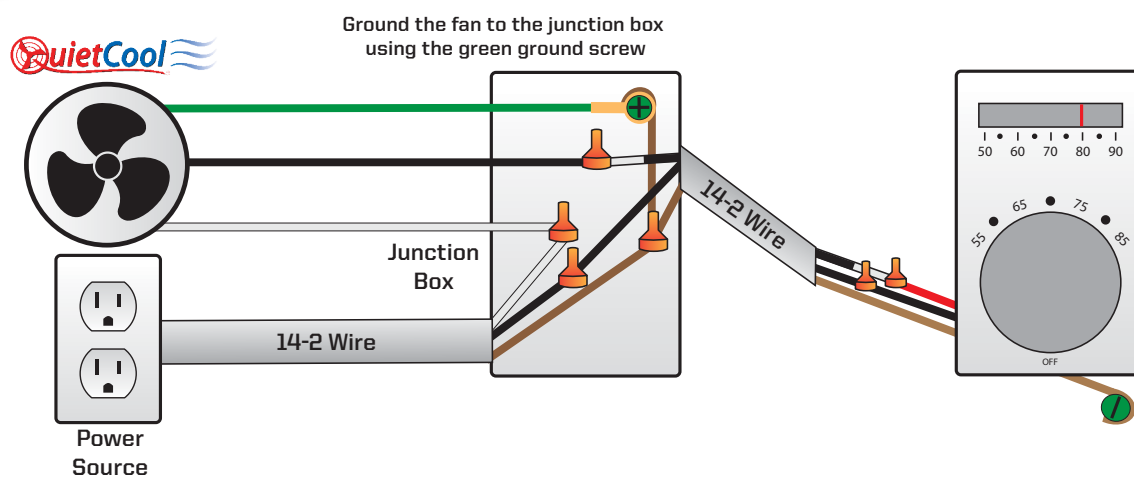
Power Source

## 3.2 GA ES-1500 WIRING WITH RF CONTROL

1. Using a wire nut, connect the black wire from the power source to the black wire from the Hub.

2. Connect the white wire from the power source and the white wire on the fan to the white wire from the Hub.

3. Cap the red wire on the Hub

4. Cap the yellow wire on the Hub

5. Connect the black wire from the fan to the blue wire on the Hub

6. Ground the green wire from the fan and the ground wire from the power source to the ground screw in the Hub.

7. Set the dip switch positions inside the Hub as shown in the diagram.

**Figure 3.2A**



Attach green ground wires to ground screw

Set dip switches:
1 - ON
2 - OFF
3 - OFF

Attic Fan

Power Cord

All White Common Wires Together

8. Power-on the Hub. The Power LED indicator will be lit.

9. Press the Test button to make sure the fan works. The Test LED indicator will blink three times every two seconds indicating 1-speed and the fan will be on. Press the Test button again and the fan should shut off and the LED will be off.

10. If the fan doesn't operate as described in step 9, please check the dip switch postion.

11. You can connect up to 20 switches to a single hub.

## 3.2    FAN HUB LED INDICATORS

**POWER INDICATOR**
- The Power LED indicator will always be lit when the Hub is connected to Power.
- If this LED is not lit, check the power source



**TEST INDICATOR**
- The Test LED indicator will light up as shown below when the Test button is pressed and when the fan is turned on via the Wall Switch:
- High Speed: LED indicator will blink three times every two seconds

**TIMER INDICATOR**
- The Timer LED indicator will light up as shown below:
  - 1 Hour: 1 Blink
  - 2 Hours: 2 Blinks
  - 4 Hours: 4 Blinks
  - 8 Hours:  8 Blinks
  - 12 Hours: 12 Blinks
  - Continuous On: Off

**PAIR INDICATOR**
- The Pair LED indicator will light up when making pair operations. Please see below for details on pairing.

**NOTES ON OPERATION**
- If the Dip Switch is not configured correctly, all the indicators on the Hub will stay solid when the Hub is powered on. Please switch off power and re-configure the Dip Switch as shown in Figure 3.2A on pg. 9.

## 3.3    PAIRING THE WALL SWITCH

1.  Using a flat-head screwdriver, remove the front cover off the wall switch.

2.  Install the included AAA batteries into the switch. All the LED indicators will light up indicating that the switch has power. Replace the front cover.

3.  Press and hold the Pair button on the Hub. The Pair LED indicator will be on for three seconds then turn off. This clears all previous pairings out of the Hub,

4.  Press the Pair button on the Hub twice. The Pair LED indicator will blink once every second indicating the Hub is in pairing mode.

5.  Press either one of the buttons on the Wall Switch to wake it up. Now hold one of the buttons on the switch. The Pair LED indicator on the Hub will go out and the Wall Switch speed indicators will be blinking indicating successful pairing. Press the Wall Switch button again, the speed indicators will go out, and it will display the current fan status.

    Press the Timer button to test the Wall Switch to make sure it is communicating with the Hub.

    ⓘ **NOTE:** **If a button on the Wall Switch is not pressed within three minutes of pressing the Pair button on the Hub, the LED indicator on the Hub will go out, indicating unsuccessful pairing. You will need to go back and repeat steps 4 and 5.**

## 3.4    FINDING A LOCATION FOR THE WALL SWITCH

1.  It is very important to find the correct location to install the Wall Switch that will allow the Wall Switch to communicate with the Hub.

2.  Find the location you would like to install the Wall Switch and test that it properly communicates with the fan to turn the fan on and off.

3.  If the fan comes on, this is a good location.

4.  If all the LED indicators turn on, the Wall Switch is not communicating with the Hub and you will need to find a location closer to the fan.

## 3.5    INSTALLING THE WALL SWITCH

1.  Using your hands, slide the Wall Switch off the mounting plate.

2.  If you have an existing Wall Switch with a junction box installed, install the mounting plate over the junction box using the oblong holes on the mounting plate. Make sure you install the mounting plate with the arrow facing upwards.

3.  If you do not have an existing junction box, simply install the mounting plate to the drywall. Using the included drywall anchors and screws, mount the plate onto the drywall through the four mounting holes.
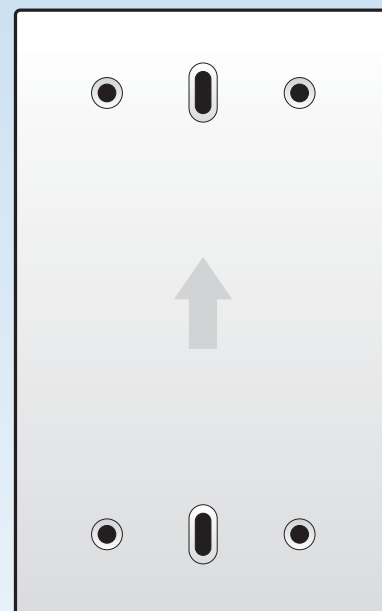
# 4.    SYSTEM OPERATING INSTRUCTIONS

## 4.1    OPERATING THE WALL SWITCH

### TIMER BUTTON
*   The top button on the switch controls the Timer functionality of the fan.
*   This button must be pressed for the fan to turn on.
*   To turn the fan off, you must cycle through the time settings until the lights turn off.

### SPEED BUTTON
*   The bottom button on the switch controls the speed functionality of the fan.

### WALL SWITCH SLEEP MODE
*   If no button press is detected for 10 seconds, the Wall Switch will enter sleep mode. Pressing either button will wake the switch and display the current status.
*   In Sleep Mode, all LED indicators will be off.
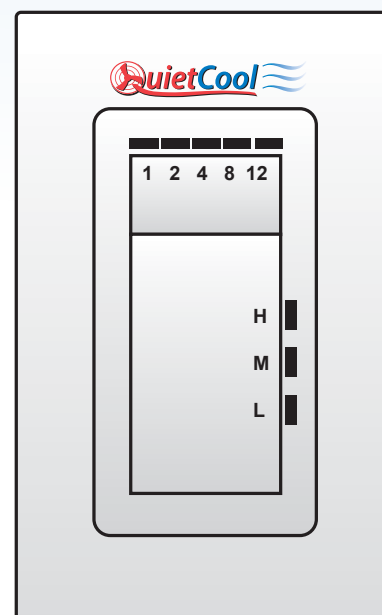
## LED STATUS INDICATORS OF WALL SWITCH

- If all LED indicators on the Wall Switch come on after three seconds of pressing one of the buttons, this means the Wall Switch is failing to connect to the Hub. You will need to move the switch closer to the Hub to ensure proper communication.
- If all the Timer LED indicators are off and one of the Speed LED indicators are on, this means you have not set the time for the fan to run and the fan will not operate. Simply press the Timer button to turn the fan on and set the fan runtime.
- If only one of the Timer LED indicators is on and only one of the Speed LED indicators is on, the fan is running at the indicated speed and timer level.
- If all the Timer LED indicators are on and only one of the Speed LED indicators are on, the fan is running in Continuous On mode at the indicated speed level. The fan will continue to run until you press the Timer button to turn it off.

## NOTE ON OPERATION

- In order for the fan to run, a Timer selection MUST be made. When the Timer status is off (no LED indicators lit), you can still change the Speed setting. The Speed setting will take effect once the Timer selection is made.

## 4.2    FREQUENTLY ASKED QUESTIONS

## WHAT DOES RF MEAN?
"RF" Stands for Radio Frequency.

## HOW DOES RF WORK?
A small electronic device is used to transmit and/or receive radio signals between two devices. In an embedded system, it often communicates with another device wirelessly. This wireless communication may be accomplished through optical communication or through radio frequency (RF) communication.

## WILL RF INTERFERE WITH OTHER DEVICES IN MY HOME?
The RF will not interfere with other wireless or RF devices in your house. It produces its own unique RF signal that can only communicate with our RF Switch.

## HOW MANY SWITCHES CAN YOU CONNECT TO A SINGLE HUB?
You can connect up to 20 switches to a single hub.

## WILL MY NEIGHBOR BE ABLE TO CONTROL MY FAN IF THEY HAVE THE SAME SET UP AS ME?
They will not because you need to physically activate the pairing process between the RF Switch and the RF Hub.

## WHAT IS THE RANGE?
The RF Switch and RF Hub have a range restriction of 100ft.

## WHAT HAPPENS IF I LOSE THE RF SWITCH?
If you lose or damage an RF Switch you will need to purchase another and re-pair the new one to the RF Hub.

## CAN YOU CONTROL MULTIPLE FANS WITH A SINGLE SWITCH?
No. You can only control one RF Hub per switch.

## HOW LONG DO THE BATTERIES LAST?
Up-to one year.

## WHY ARE ALL MY LIGHTS SOLID ON THE HUB AND NOTHING IS WORKING?
If you're experiencing solid lights on the hub then it is an indication that your DIP switches are not in the correct position. Disconnect power, adjust your DIP switches, and the only light that should be lit is your RED power light.

## HOW DO I CHANGE THE DIP SWITCH TO THE CORRECT SPEED OF MY FAN?
You will need to disconnect power, make your adjustment inside the hub, and then reconnect power. Refer to page 9 for more information.

## CAN YOU CONNECT THE RF CONTROL TO A SMART HOME SYSTEM LIKE ALEXA, GOOGLE HOME, OR APPLE HOMEKIT?
No, in the current configuration the RF Control cannot connect to a smart home system. There are systems on the market that take RF signal and translate them to a smart home system, but they have not been tested and may not work reliably.

**QC** Manufacturing Inc.

MAKERS OF THE QUIETCOOL ADVANCED WHOLE HOUSE FAN

FULL **15** YEAR WARRANTY

## GARAGE FAN LIMITED WARRANTY

QC Manufacturing Inc. extends this warranty to the original purchaser of the following QuietCool Specialty Series Fans - GA ES-1500 and GX ES-1100 - installed and used in a residence under normal conditions within the United States:

A. Fifteen year coverage applies to the QuietCool motor fan assembly. At our option we will repair or replace any part of the assembly should it fail to operate during the first fifteen years from the date of original purchase.

B. One year coverage for all other components including grilles, housings, controls and accessories furnished by QC Manufacturing, Inc. At our option we will repair or replace any part which fails as a result of defective material or workmanship during the first year from the original date of purchase.

C. This warranty does not cover any of the following:

1. Accidental or consequential damage resulting from the operation of our equipment or any malfunction thereof.
2. Cost of service calls to diagnose the cause of problems or the labor charge to un-install any components.
3. Product failure or damage due to faulty installation, abuse, misuse, unauthorized alteration to factory specs, lack of maintenance, or transportation damage.
4. Shipping or postage for warranty claims.

D. To obtain service under this warranty, first contact the dealer where you purchased the equipment. If you are unable to find or reach your dealer, contact Customer Service at QC Manufacturing, Inc. at the number below.

E. Registration is no longer required for QuietCool fans. If service is required under this warranty, you must retain your proof or purchase.

This warranty is the only warranty extended by QC Manufacturing, Inc. to purchasers or suppliers of our equipment. QC Manufacturing Inc. disclaims all other warranties, express or implied, that arise by operation of the law. Where consumer may have additional warranty rights in accordance with federal and state law, such rights shall supersede those stated herein.
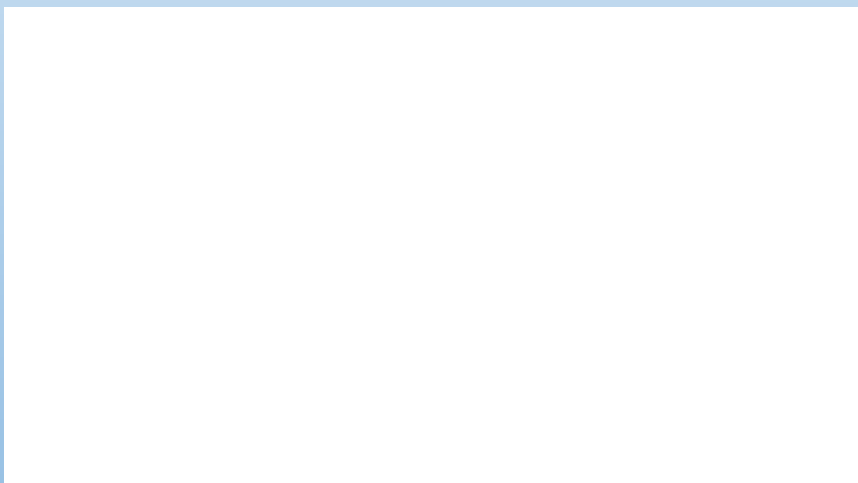
QC Manufacturing, Inc. Customer Service

26040 Ynez Rd.
Temecula, CA 92591
www.QuietCoolSystems.com
951-325-6340

WELCOME · INSTALLATION · WIRING · OPERATION · WARRANTY

QUIETCOOLSYSTEMS.COM                    15

**QC Manufacturing Inc.**

MAKERS OF THE QUIETCOOL ADVANCED WHOLE HOUSE FAN

## FAN SERIAL NUMBER INFORMATION

### RETAIN FOR YOUR RECORDS.
SERIAL NUMBER IS REQUIRED FOR WARRANTY PURPOSES.