

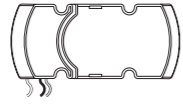
Abella™ MAESTRO® Fan Speed Control

English
P/N 033-106

Quiet Fan Speed Control Multi-Location System

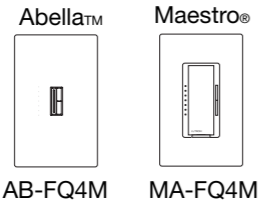
Canopy Module

CM-FQ1
120 V~ 60 Hz 1.0 A



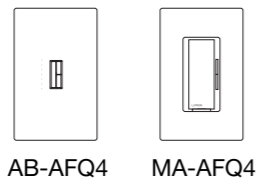
Wall Controls

AB-FQ4M
MA-FQ4M
120 V~ 60 Hz 4.0 A



Accessory Controls

AB-AFQ4
MA-AFQ4
120 V~ 60 Hz 4.0 A



For use with one to four ceiling paddle fans only.

No exhaust fans.

Important Notes

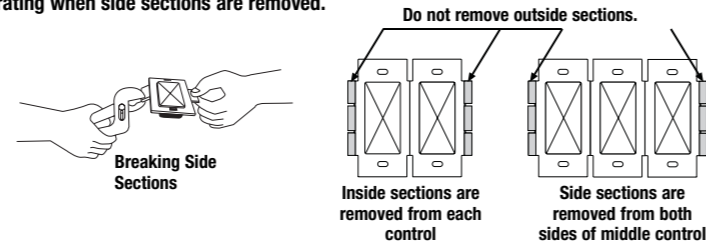
Please read before installing.

- To avoid overheating and possible damage to other equipment, do not use to control receptacles, lighting fixtures, transformer-supplied appliances, solid state fan motors, or exhaust fans. For exhaust fans, use fully variable fan speed controls by Lutron®.
- Install in accordance with all national and local electrical codes.
- When no "grounding means" exist within the wallbox, then the NEC® 2008, Article 404.9 allows a Wall Control without a grounding connection to be installed as a replacement, as long as a plastic, noncombustible wallplate is used. For this type of installation, cap or remove the green ground wire on the Wall Control, and use an appropriate wallplate such as Claro®, Fassada®, or Satin Colors® series wallplates by Lutron.
- Recommended wallbox depth is 2.5 in. (64 mm) minimum.
- The *Abella* and *Maestro* fan speed control systems consist of a Wall Control, one to four Canopy Modules, and up to two Accessory Controls. All must be installed correctly before attempting to control the fans. Do not attempt to mix Lutron controls with those from other manufacturers, or mix Lutron controls, not labeled for use, together.
- Installation has a recommended limit of 15 Master Fan-Speed Wall Controls per building. Accessory wall controls do not count towards this limit.
- All products on the fan circuit must be compliant with Part 15 of the FCC Rules. Using devices compliant with Part 18 of the FCC Rules may cause intermittent behavior.
- Abella* and *Maestro* Controls are not compatible with standard 3-way / 4-way switches.
- Accessory Controls (AB-AFQ4 or MA-AFQ4) cannot be used individually and must be used in conjunction with an *Abella* Wall Control (for AB-AFQ4) or a *Maestro* Wall Control (for MA-AFQ4) in a 3-way / 4-way application.
- In any 3-way / 4-way circuit, use only one Wall Control (AB-FQ4M or MA-FQ4M) with up to two Accessory Controls (AB-AFQ4 for AB-FQ4M or MA-AFQ4 for MA-FQ4M).
- This system is not compatible with fans having a control system built-into the motor.
- This system cannot be used to change the direction of the fan. To change the fan direction, stop the fan and then change the position of the switch located on the body of the fan.
- Each Canopy Module must be installed within a Fan Canopy Enclosure.
- Do not use pull chains to operate fan(s) after installing this system.
- Operate between 32 °F and 104 °F (0 °C and 40 °C). For indoor use only.
- Wall Controls and Accessory Controls may feel warm to the touch during normal operation.
- Clean controls with a *soft damp cloth only*. **DO NOT** use any chemical cleaners.
- Do not paint Wall Control, Canopy Module, or Accessory Control.

Lutron Technical Support Center 1-800-523-9466 24 hrs / 7 days www.lutron.com

Multigang Installations

When installing more than one Control in the same wallbox, it may be necessary to remove all inner side sections prior to wiring (see below). Using pliers, bend side sections up and down until they break off. Repeat for each side section to be removed. **Note: Product does not require derating when side sections are removed.**



Install the Canopy Module

1 Turn the Power OFF and Install the Fan

- Install the fan(s) according to the manufacturer's instructions and check for proper operation.

Note: Up to four ceiling fans can be controlled on one circuit. Follow steps 1—7 for each fan.

2 Turn the Power ON and Set the Fan Speed

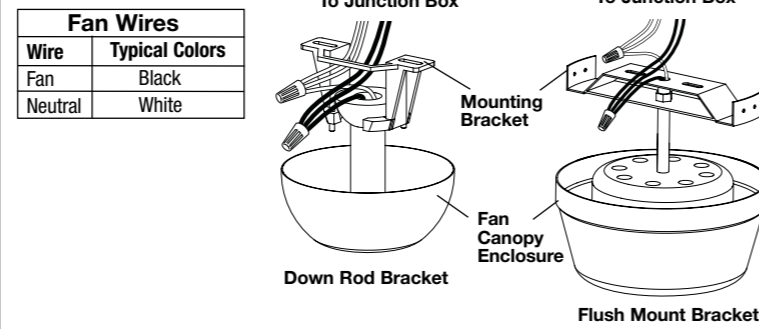
- After the fan has been installed, set the fan to the highest speed using the pull chain or the switch.

3 Turn the Power OFF at the Circuit Breaker

While the fan is running at the highest speed, shut the breaker OFF.
Note: Do not turn the power OFF at the fan!

4 Disconnect Fan Wires

- Remove the Fan Canopy Enclosure from the ceiling fan mounting bracket.
- Leave any green ground wires connected as directed in the fan manufacturer's instructions.
- Disconnect the remaining wiring from the fan.



5 Connect Canopy Module Wires

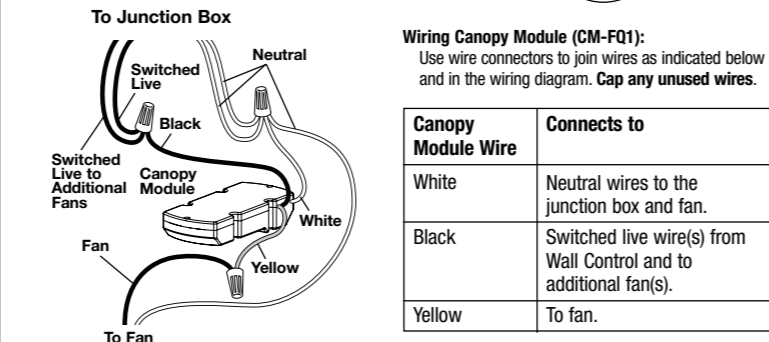
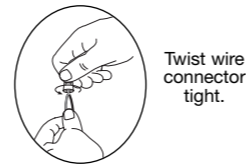
For questions about wiring, call the **Lutron Technical Support Center** at 1-800-523-9466.

Important Wiring Information

When making wire connections, follow the recommended strip lengths and combinations for the supplied wire connectors (see wire connector bag). **Note:** All wire connectors provided are suitable for **copper wire only**. For aluminum wire, consult an electrician.

Wire Connectors:

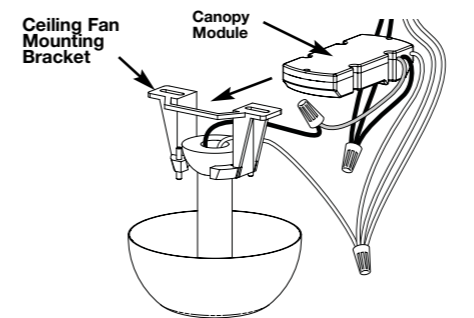
Use to join #14 AWG or #12 AWG ground wire to #18 AWG Wall Control ground wire, and to join #18 AWG Canopy Module wire to #12 AWG, #14 AWG, #16 AWG or #18 AWG wires.



6 Mount Canopy Module

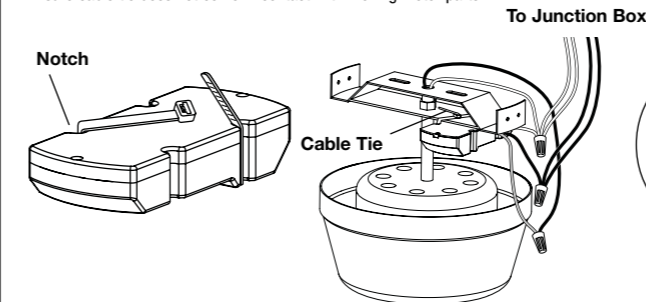
6a - Down Rod Bracket

- Do not install Canopy Module in ceiling.
- Slide Canopy Module into the ceiling fan mounting bracket.



6b - Flush Mount Bracket

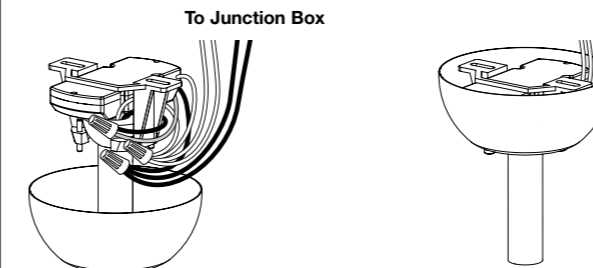
- Do not install Canopy Module in ceiling.
- Attach Canopy Module to bracket with a cable tie.
- Install cable tie through notches on Canopy Module. Pull tight and clip excess.
- Ensure cable tie does not come in contact with moving motor parts.



7 Attach Canopy

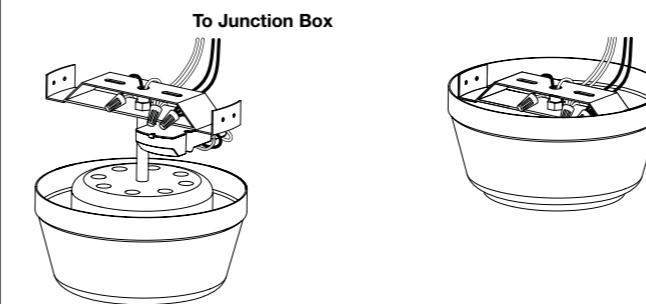
7a - Down Rod Bracket

- Check all wire connections.
- Tuck the wires into the junction box and / or Fan Canopy Enclosure.
- Attach the canopy enclosure to the fan mounting bracket, taking care not to pinch any wires.



7b - Flush Mount Bracket

- Check all wire connections.
- Tuck the wires into the junction box and / or bracket.
- Ensure wires and / or wire connectors do not come in contact with moving motor parts.
- Attach the Fan Canopy Enclosure to the fan mounting bracket, taking care not to pinch any wires.



Install the Wall Control

8 Remove Original Wallplate and Switch

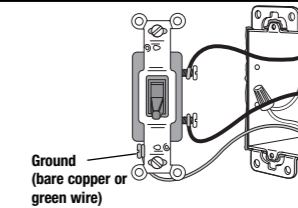
Note: Verify that the power is OFF to each switch before proceeding.

- Remove the wallplate and switch mounting screws.
- Carefully remove switches from wall (**do not** remove wires).



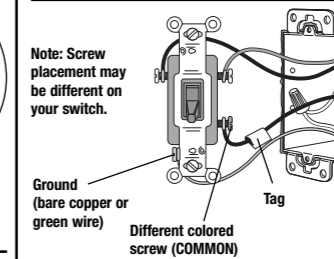
9 Identify the Circuit Type

9a - Single-Location Control



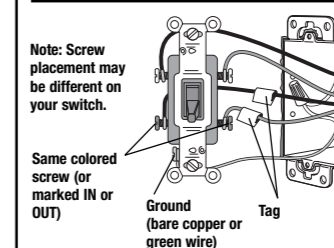
One switch controlling the fan(s).
This will be a single-pole switch. The switch will have insulated wires connected to two screws of the same color plus a green or bare copper wire to a green ground screw.

9b - Two-Location Control



Two switches controlling the fan(s).
Both switches will be 3-way. Each switch will have insulated wires connected to three screws plus a green or bare copper wire to a green ground screw. One of these wires is connected to a screw of a different color (not green) or labeled COMMON. Tag this wire on both switches to identify when rewiring.

9c - Three-Location Control

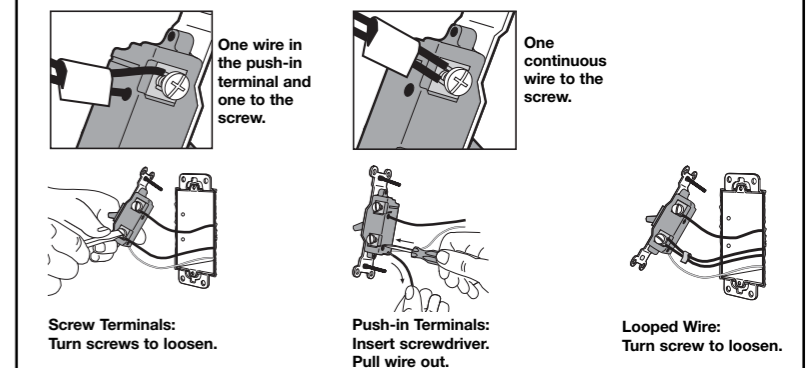


Three switches controlling the fan(s).
Two switches will be 3-way and one will be 4-way. Tag the two 3-way switches as in the Two-Location instruction above. The 4-way switch will have insulated wires connected to four screws plus a green or bare copper wire to a green ground screw. Tag two insulated wires that are connected to same colored screws.

10 Disconnect Existing Switch Wires

Important Note:

Your wall switch may have two wires attached to the same screw (see illustrations below for examples). Tape these two wires together before disconnecting. When rewiring, connect wires to the Wall Control the same way they were connected to the removed switch.



LUTRON®

Lutron Electronics Co., Inc.
7200 Suter Road
Coopersburg, PA 18036-1299, U.S.A.
Made and printed in the U.S.A. 2/08 P/N 033-106 Rev. A

11 Wire the Wall Control

- For installations involving more than one Control in a wallbox, refer to Multigang Installations before beginning.
- Only one Wall Control (AB-FQ4M or MA-FQ4M) can be used with up to two Accessory Controls (AB-AFQ4 or MA-AFQ4).

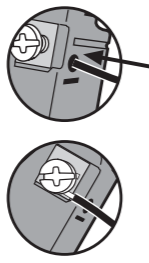
Important Wiring Information

Trim or strip wallbox wires to the length indicated by the strip gauge on the back of the Wall Control.

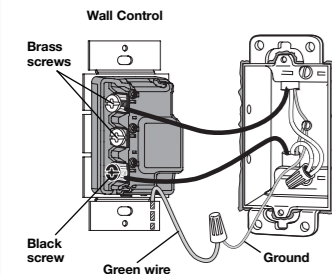
Push-In Terminals: Insert wires fully. Push-in terminals are for use with #14 AWG solid copper wire only. DO NOT use stranded or twisted wire.

OR

Screw Terminals: Tighten securely. Screw terminals are for use with #12 AWG or #14 AWG solid copper wire only. DO NOT use stranded or twisted wire.



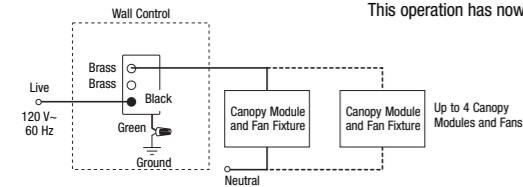
11a - Single-Location Control



Wiring Wall Control (AB-FQ4M or MA-FQ4M):

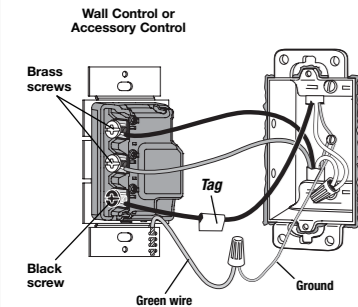
- Use wire connectors to connect the green ground wire on the Wall Control to the bare copper or green ground wire in the wallbox (see Important Note 3). Cap any unused wires.
 - Connect either of the wires, disconnected from the removed switch, to the black screw terminal on the Wall Control.
 - Connect the remaining wire, disconnected from the removed switch, to one of the brass screw terminals on the Wall Control.
 - Tighten the other brass screw terminal on the Wall Control. It is not used in a single-pole circuit.
 - The brass screw terminals are the same electrically.
- This operation has now been completed.

Reference Wiring Diagram



11b - Two-Location Control

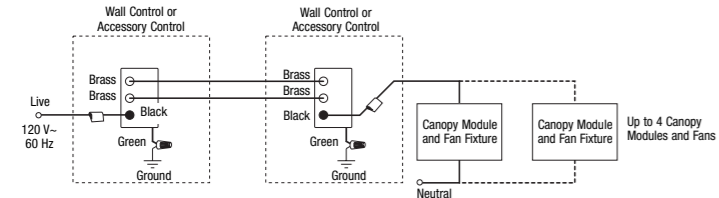
One location will be replaced with a Wall Control (AB-FQ4M or MA-FQ4M) and the other with an Accessory Control (AB-AFQ4 or MA-AFQ4).



Wiring the Wall Control and Accessory Control:

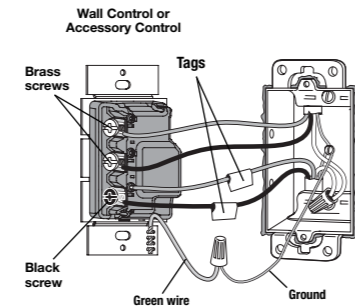
- Use wire connectors to connect the green ground wire on the Wall Control/Accessory Control to the bare copper or green ground wire in the wallbox (see Important Note 3). Cap any unused wires.
 - Connect the tagged wire, disconnected from the removed switch, to the black screw terminal on the Wall Control/Accessory Control.
 - Connect one of the remaining wires, disconnected from the removed switch, to one of the brass screw terminals on the Wall Control/Accessory Control.
 - Connect the other remaining wire, disconnected from the removed switch, to the other brass screw terminal on the Wall Control/Accessory Control.
 - The brass screw terminals are the same electrically.
- This operation has now been completed.

Reference Wiring Diagram



11c - Three-Location Control

One location will be replaced with a Wall Control (AB-FQ4M or MA-FQ4M) and the other two with Accessory Controls (AB-AFQ4 or MA-AFQ4).



Replace the 4-way switch.

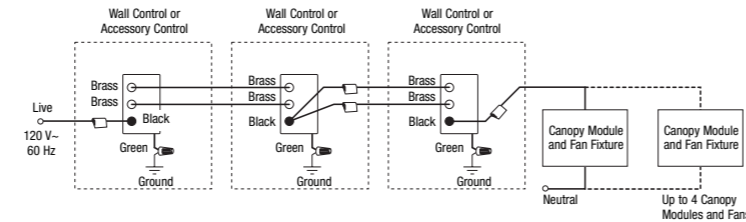
Note: The 4-way switch may be replaced with either a Wall Control or an Accessory Control.

- Use wire connectors to connect the green ground wire on the Wall Control/Accessory Control to the bare copper or green ground wire in the wallbox (see Important Note 3). Cap any unused wires.
 - Connect both of the tagged wires, removed from the 4-way switch, to the black screw terminal on the Wall Control/Accessory Control (one wire to the screw and the other to the push-in terminal).
 - Connect one of the remaining wires, disconnected from the removed switch, to one of the brass screw terminals on the Wall Control/Accessory Control.
 - Connect the other remaining wire, disconnected from the removed switch, to the other brass screw terminal on the Wall Control/Accessory Control.
 - The brass screw terminals are the same electrically.
- This operation has now been completed.

Replace the two 3-way switches.

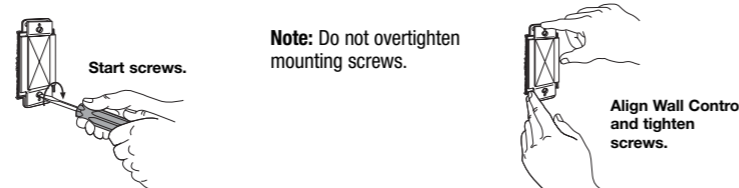
- Follow the steps outlined in 11b - Two-Location Control.

Reference Wiring Diagram



12 Mount Control(s) to the Wallbox

- Form wires carefully into the wallbox, mount and align the Wall Control(s).
- Install wallplate(s).



13 Unhook the Pull Chain(s) Extension(s)

- After the installation has been completed, it is recommended to unhook the pull chain extension(s) on the fan so that only the short chain remains. Doing this will make it harder to change the fan speed. Changing the fan speed (using the pull chain) while power to the Wall Control is ON, may damage the Wall Control.

14 Turn the Power ON

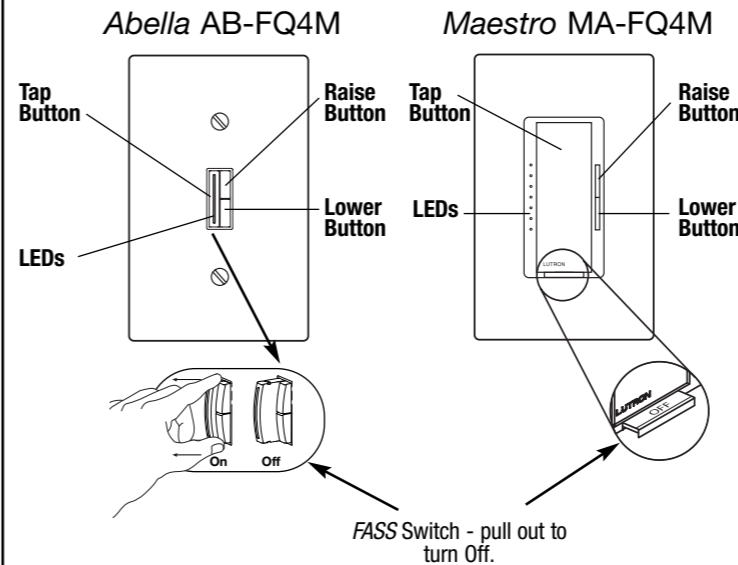
- Do not turn the power on until the Wall Control, the Accessory Control(s), and the Canopy Module(s) have been installed and wired.
- Turn the power ON at the circuit breaker (or replace the fuse).

Caution: The fan(s) will return to full speed when the power is restored. Clean up any objects near the fan(s) first to prevent minor personal injuries.

Operation

System Activation

- Pull out the FASS™ Switch (Front Accessible Service Switch), located on the Wall Control, wait 10 seconds, then push it back in.
- The LEDs will cycle for up to 30 seconds.
- If installing more than one Wall Control / Canopy Module system, activate one at a time with the FASS switch pushed in on all other controls.
- Accessory Controls do not require activation.



Tap Button: Tap once when fan is off. Fan speed increases to preset level.

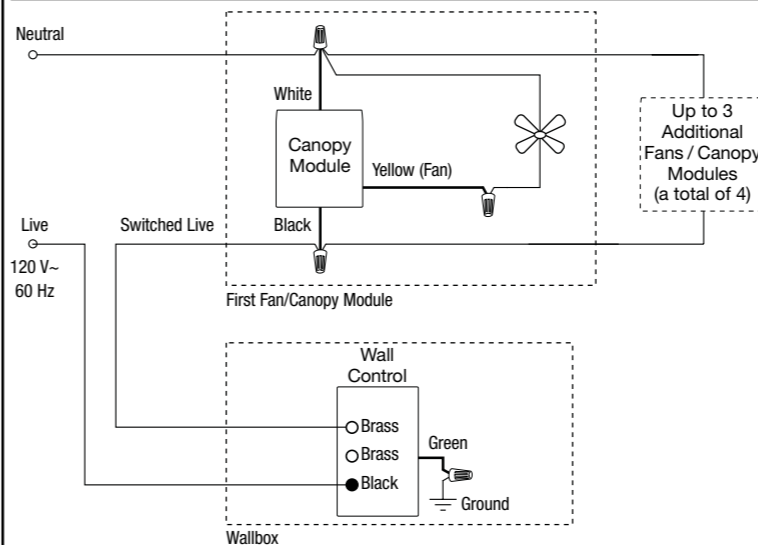
Tap once when fan is on. Fan speed slows to off. Tap twice quickly. Fan speed increases to full speed.

Raise Button: Press to increase fan speed.

Lower Button: Press to decrease fan speed.

LEDs: LEDs indicate the fan speed. LEDs will change with each press. (LEDs are not available on Accessory Controls).

Reference Wiring Diagram



Note: See steps 11b and 11c for two- and three-location control wiring.

Troubleshooting

Symptom	Possible Cause
The fan does not turn ON, and the Wall Control LEDs do not turn ON.	<ul style="list-style-type: none"> The FASS switch on the Wall Control is pulled out to the OFF position. The manual switch (or pull chain) on the fan is in the OFF position. The circuit breaker is OFF or tripped (or the fuse is blown). The fan direction switch is between forward and reverse. Wiring error, call Lutron at 1-800-523-9466.
The LEDs on the Wall Control cycle rapidly, and the bottom LED is ON.	<ul style="list-style-type: none"> The unit is not activated properly. Activate system as described under Operation. Wiring error, call Lutron at 1-800-523-9466.
The LEDs on the Wall Control cycle rapidly, and the second lowest LED is ON.	<ul style="list-style-type: none"> Communications error. Check wiring; if error continues, call Lutron at 1-800-523-9466.
The fan vibrates or wobbles.	<ul style="list-style-type: none"> The fan blades are not properly balanced. See fan manufacturer's instructions.
The fan speed is too slow.	<ul style="list-style-type: none"> The fan is not set to the highest speed; check the pull chain or the fan switch.
The Wall Control LEDs respond as expected but the fan does not respond properly.	<ul style="list-style-type: none"> The fan is not set to the highest speed; check the pull chain or the fan switch. Wiring error, call Lutron at 1-800-523-9466.
The fan installation causes interference with TV or radio reception.	<ul style="list-style-type: none"> Communications error. Call Lutron at 1-800-523-9466.

Technical Assistance

For questions concerning the installation or operation of this product, call **Lutron**. Please provide exact model number when calling.

U.S.A. and Canada (24 hrs / 7 days):
1-800-523-9466

Fax +1-610-282-6311

Other countries 8am—8pm ET:
+1-610-282-3800

<http://www.lutron.com>

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio / TV technician.

Limited Warranty

(Valid only in U.S.A., Canada, Puerto Rico, and the Caribbean.) Lutron will, at its option, repair or replace any unit that is defective in materials or manufacture within one year after purchase. For warranty service, return unit to place of purchase or mail to Lutron at 7200 Suter Rd., Coopersburg, PA 18036-1299, postage pre-paid.

THIS WARRANTY IS IN LIEU OF ALL OTHER EXPRESS WARRANTIES, AND THE IMPLIED WARRANTY OF MERCHANTABILITY IS LIMITED TO ONE YEAR FROM PURCHASE. THIS WARRANTY DOES NOT COVER THE COST OF INSTALLATION, REMOVAL OR REINSTALLATION, OR DAMAGE RESULTING FROM MISUSE, ABUSE, OR DAMAGE FROM IMPROPER WIRING OR INSTALLATION. THIS WARRANTY DOES NOT COVER INCIDENTAL OR CONSEQUENTIAL DAMAGES. LUTRON'S LIABILITY ON ANY CLAIM FOR DAMAGES ARISING OUT OF OR IN CONNECTION WITH THE MANUFACTURE, SALE, INSTALLATION, DELIVERY, OR USE OF THE UNIT SHALL NEVER EXCEED THE PURCHASE PRICE OF THE UNIT.

This warranty gives you specific legal rights, and you may have other rights which vary from state to state. Some states do not allow the exclusion or limitation of incidental or consequential damages, or limitation on how long an implied warranty may last, so the above limitations may not apply to you.

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