CARRO

INSTALLATION INSTRUCTIONS

MANUFACTURING QUALITY
CEILING FANS SINCE FOREVER.

Important: Please read and save these instructions before installation

Basic Product Specifications

Model	48W-563FL	Voltage	48V
Fan Blade Span	56"	Rated Wattage	52W (Fan 30W / Lamp 22W)
Gross Weight	18 lbs.	Motor RPM	50-200 RPM
Maximum Airflow	6870 CFM	Maximum Noise	58 dB(A)

U.S. Patent Nos.: D929,633 and 10,511,206 and 11,296,561 and 11,268,568 and 11,668,326 and 11,808,446 and 11,781,746. Other Patent(s) Pending.

Questions

Have questions about our products? Contact us and talk to our helpful tech support team.

Technical Support

Business Hours:
Monday – Friday (Holidays observed).
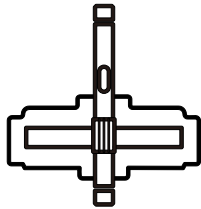**9:00 am to 5:30 pm PST.**
Tel: (888) 253-2374

The product images shown in the manual are for reference purposes only.
Actual product may differ slightly.

This Carro Ceiling Fan has :

Forward / Reverse
Fan Direction

DC Motor, stable & silent,
suitable for indoor use

Built with premium materials
for durability & power

SAFETY PRECAUTIONS

READ AND SAVE THESE INSTRUCTIONS

- Before you begin installing the fan, shut power off at the circuit breaker of the fuse box.

- Make sure that all electrical connections are in accordance with National Electrical Code, ANSI/NFPA 70 and local codes. Hire a licensed electrician if you are unfamiliar with installing electrical wiring.

- Make sure the installation site you choose allows the fan blades to rotate without any obstructions. Allow a minimum clearance of 2.1m (7 feet) from the floor and 18 inches from the tip of the blades to the wall.

- The outlet box and support structure must be securely mounted and capable of reliably supporting a minimum of 35 pounds. Use only U.L. listed outlet boxes marked "Acceptable for Fan Support of 15.9 kg (35 lbs) or less".

- Before and after you install the fan, make sure that all mounting components are secured to prevent the fan from falling.

- Do not insert anything into the fan blades while the fan is operating.

- To change the direction of the rotation of the blades, the fan must be in operation mode.

- All screws must be checked and retightened where necessary before installation.

- After making the wire connections, the wires should be spread apart with the grounded conductor and the equipment-grounding conductor on one side of the outlet box and the ungrounded conductor on the other side of the outlet box.

- The splices after being made should be turned upward and pushed carefully up into the outlet box. Conductor wiring identified as grounded is to be connected to a grounded conductor of power supply. Conductor wiring identified as ungrounded conductor is to be connected to an ungrounded conductor. Conductor wiring identified for equipment grounding is to be connected to an equipment- grounding conductor.

- **CAUTION:** Read all instructions and safety information before installing your new fan. Review accompanying assembly diagrams.

- **WARNING:** Mount only to an outlet box marked acceptable for fan support.

  AVERTISSEMENT: Assembler uniquement à une boîte de sortie jugée acceptable pour retenir un ventilateur.

- **WARNING:** To reduce the risk of fire, electric shock, or personal injury, mount to a structural framing member or to an outlet box marked acceptable for fan support of 15.9 kg (35 lbs) or less. For outlet box mounting, use mounting screws provided with the outlet box.

  AVERTISSEMENT: Afin de réduire les risques d'incendie, de choc électrique ou de blessures corporelles, ils doivent être montés sur des éléments de charpente structurale ou sur des boîtes de sortie marquées d'un support de ventilateur acceptable de 15,9 kg (35 LB) ou moins. Pour l'installation de la boîte de sortie, utilisez les vis de montage fournies avec la boîte de sortie"

- **CAUTION:** To reduce the risk of injury, use only the screws provided with the outlet box in conjunction with the lock washers.

- **WARNING:** To reduce the risk of personal injury, do not bend the blade bracket when installing the brackets, balancing the blades, or cleaning the fan. Do not insert foreign objects in between rotating fan blades.

- **CAUTION:** To reduce the risk of electric shock, disconnect the electrical supply circuit to the fan before installing the light kit.

- **WARNING:** To reduce the risk of fire or electric shock, this fan must be installed with a general use, non-dimmable, single gang, isolating wall control/switch.

- **WARNING:** To reduce the risk of fire or electric shock, do not use this fan with any solid-state speed control device.

  AVERTISSEMENT: Ne convient pas à des régulateurs de vitesse à semi-conducteurs.

- **NOTE:** The important safeguards and instructions appearing in this manual are not meant to cover all possible conditions and situations that may occur. It must be understood that common sense, caution and care are factors which cannot be built into this product. These factors must be supplied by the person (s) installing, caring for and operating the unit.

- **CAUTION:** The light source is designed for this specific application and can overheat if serviced by untrained personnel. If any servicing is required, the product should be returned to an authorized service facility for examination or repair.

- **WARNING:** Do not use corrosive detergents for cleaning.

- **WARNING:** To reduce the risk of fire, electric shock, or injury to persons, do not use replacement parts that have not been recommended by the manufacturer. (e.g. Parts made at home using a 3D printer).

- **CAUTION:** 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.

- **CAUTION:** Children should be supervised to ensure that they do not play with the appliance.

- **WARNING:** If unusual oscillating movement is observed, immediately stop using the ceiling fan and contact the manufacturer, its service agent or suitably qualified persons.

- **CAUTION:** The replacement of parts of the safety suspension system device shall be performed by the manufacturer, its service agent or suitably qualified persons.

- **WARNING:** Attachments to the ceiling such as hooks or other devices shall be secured with sufficient strength to withstand 4 times the weight of the ceiling fan.

- **CAUTION:** The mounting of the suspension system shall be performed by the manufacturer, its service agent or suitably qualified persons.

- **NOTE:** Before installing the fan, please check and inspect all of the fan components and make sure they have all been received in good condition. Contact the manufacturer if there are any missing, damaged, or broken parts.

- The total weight of the appliance is 8.16 kg (18 lbs).

Care & Cleaning   CARRO

1. Check the support connections, brackets, and blade attachments twice a year. Make sure they are secure. Because of the fan's natural movement, some connections may become loose over time. It is not necessary to remove the fan from the ceiling.

2. Clean your fan periodically. Use only a soft brush or lint-free cloth to avoid scratching the finish. The plating is sealed with a lacquer to minimize discoloration or tarnishing.

3. (Optional) Apply a light coat of furniture polish to the wood blades.

4. (Optional) Cover small scratches with a light application of shoe polish.

   DO NOT:

1. Use water when cleaning. Water could damage the motor, or the wood, or possibly cause an electrical shock.

2. Apply oil to your fan or motor. The motor has permanently lubricated sealed ball bearings.

   WARNING: Power off the fan before performing maintenance or cleaning the fan.

Table of Contents

Fan Diagram

Before installing, please check to make sure you have received all the necessary components for installation. Some extra hardware may also have been included.

Mounting Bracket

X4 ST5X24mm Wood Screw

For installing the mounting bracket and wiring the fan

Downrod

Canopy

X4 M6X12mm Rod Screw

Wiring Cover

Extended Downrod (For installation on angled ceilings)

Top Collar

M4X12mm Safety Cable Screw
X1 (Pre-installed)

Motor

Blade **X3**

X6 M6X16mm Blade Screw

For installing the blades

Lampshade

X1

ST4X10mm Light Kit Screw

Lower Cover

⚠️ **OFF**

WARNING: To avoid serious injury or death, turn off the power at the circuit breaker before installing the fan.

Tools you'll need

Phillips screwdriver

Step ladder

1. Install the Fan Blades

Remove the motor hub and fan blades from the packaging box.

Locate the 6 blade attachment screws from the hardware pack.

Align each blade with its corresponding place on the motor hub.

Using the blade screws, secure each blade in place by tightening the screws. Ensure that the screws are securely tightened but avoid over-tightening.
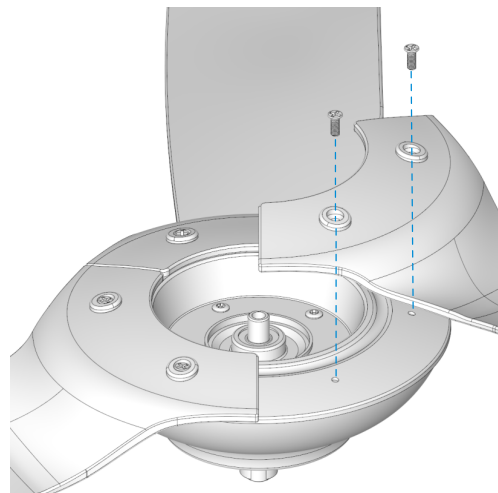
X6 M6X16mm Blade Screw

Fig. 1.1

2. Assemble the Lampshade

2.1 Position the lampshade onto the motor hub. Feed the four wire plugs through the center hole of the lampshade. Rotate the lampshade clockwise until the slot inside the center hole aligns with the slot on the motor shaft (usually marked in black), forming a screw hole for the light kit screw, as demonstrated in Fig. 2.1.
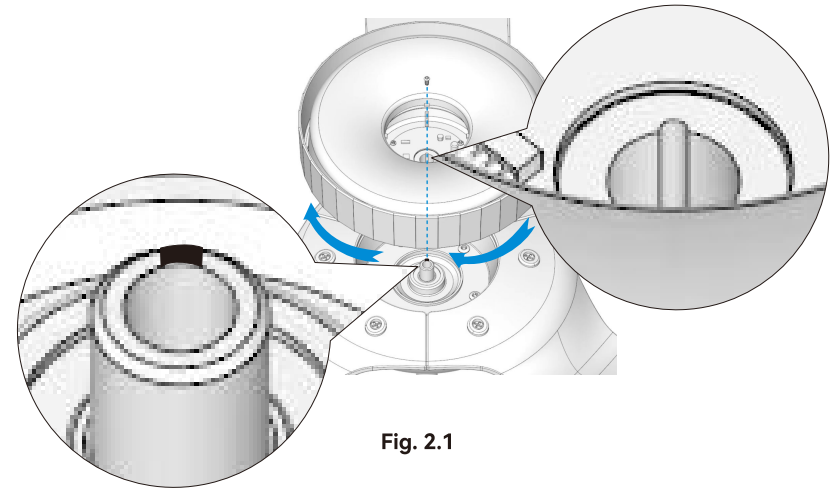

Fig. 2.1

2.2 Secure the light kit screw from the hardware pack into the designated screw hole, making sure it is firmly tightened to safely connect the motor and lampshade, as demonstrated in Fig. 2.2.
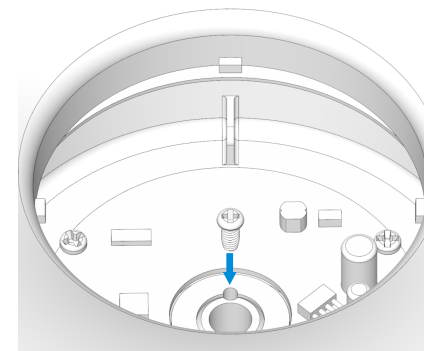

Fig. 2.2

X1 ST4X10mm Light Kit Screw

⚠️**WARNING**

To prevent SERIOUS INJURY or DEATH, ensure that the screw is properly secured and tightened. Otherwise, the lampshade shall be at risk of detachment and subsequent fall.

2.3 Plug the 2-pin connector into the matching 2-pin terminal block on the lampshade. Insert the 3-pin white plug into the corresponding 3-pin white terminal block. Connect the 3-pin blue plug to the corresponding 3-pin blue terminal block. Connet the 4-pin plug to the appropriate 4-pin flying socker, as illustrated in Fig. 2.3.
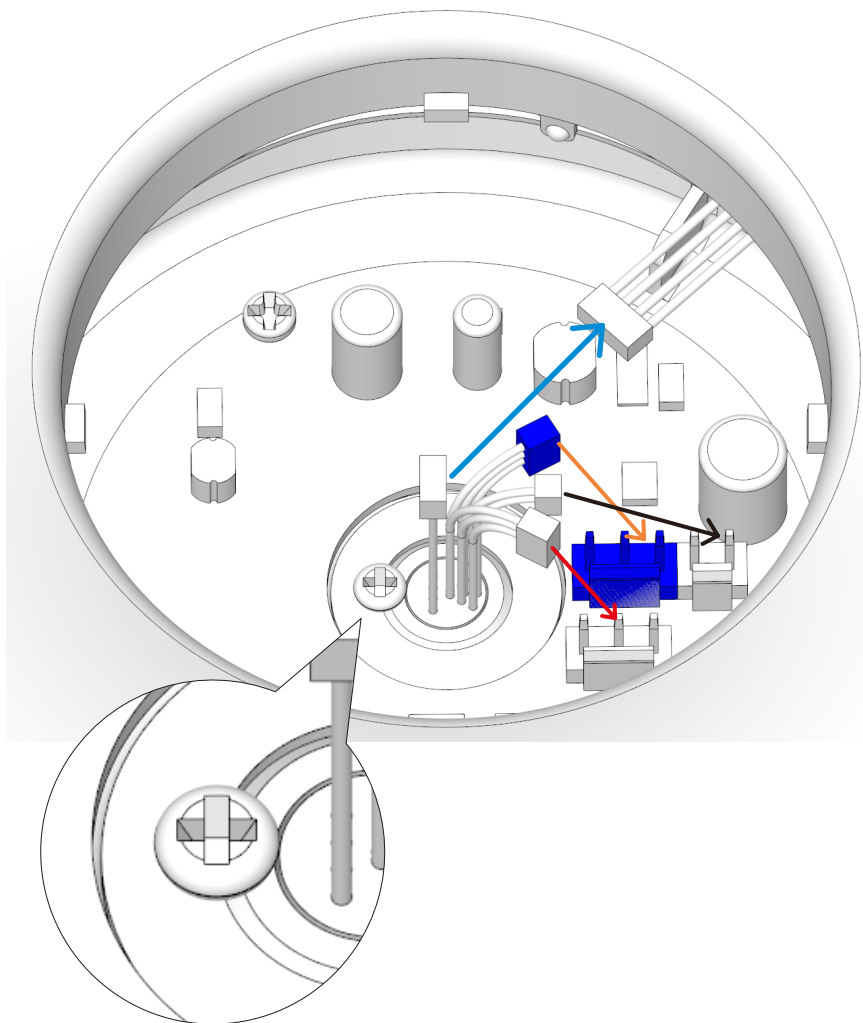

Fig. 2.3

3. Attach the Downrod

Safety Cable

3.1 Assemble the downrod as shown in Fig. 3.1. Insert the downrod through the canopy and wiring cover.

Note: If you choose to install a safety cable onto your ceiling fan, you will also need to run it through the downrod.

Note: Your fan comes with a shorter downrod attached to the hanger ball. If your ceiling height requires a longer downrod, a Carro brand extended downrod is necessary for proper installation. Based on the fan diameter and ceiling angle, a longer downrod that what we have provided may need to be purchased.

Please follow the steps below to replace the downrod:
A. Remove the hanger ball from the shorter downrod.
B. Slide the hanger ball up onto the longer downrod.

Fig. 3.1

By following these steps, you can ensure that your fan is correctly installed with the appropriate downrod length for optimal performance.

3.2 Thread the motor wires through the downrod, pull out the slack from the motor wires and safety cable upward, and insert the downrod into the collar on top of the motor assembly. Align the holes at the bottom of the downrod with the holes in the collar on top of the motor housing.

Remove the pre-installed safety cable screw. Install the safety cable and re-insert the previously removed screw back through the hole, but do not tighten yet. Check the top collar to make sure the holes are aligned to install the four rod screws (included in the package), and securely tighten down all the screws to ensure a proper connection as shown in Fig. 3.2.

Slide the wiring cover down until it rests on top of the motor assembly as shown in Fig. 3.3.

Note: Before sliding the downrod over the collar on top of the motor assembly, make sure to remove the end of the safety cable from the downrod.

X4
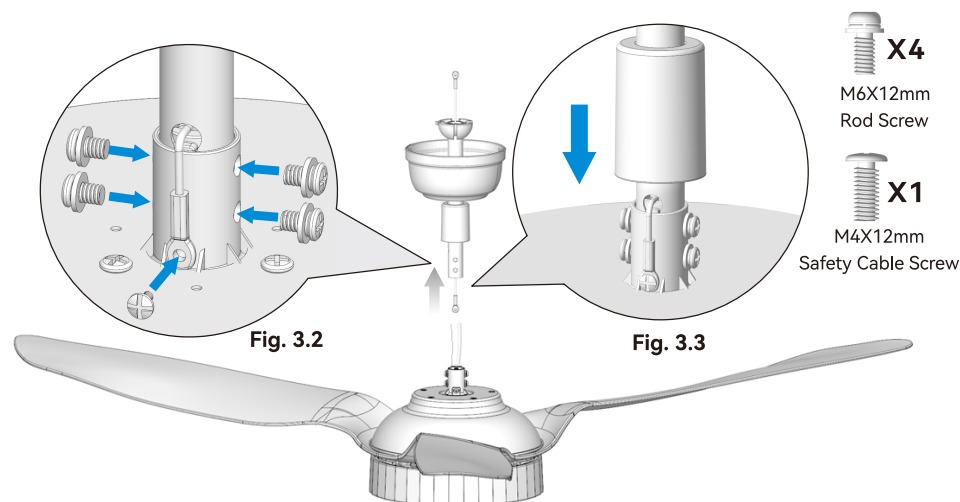M6X12mm
Rod Screw

X1
M4X12mm
Safety Cable Screw

Fig. 3.2

Fig. 3.3

4. Install the Mounting Bracket

Install the mounting bracket to the ceiling box, as shown in Fig. 4.1 below. Rotate the mounting bracket in different directions so that the bracket mounting holes match the screw holes of the ceiling box.

Note: This mounting bracket is a standard cable box. If the mounting bracket is installed at the outlet box, it should be installed on the outlet box with two screws matching the outlet box itself, as shown in Fig. 4.1.

WARNING: DO NOT use plastic outlet box. Use only U.L. listed outlet boxes marked "Acceptable for Fan Support of 15.9 kg (35 lbs) or less".

This bracket can also be mounted to a wooden ceiling beam. In that case, use the four ST5x24mm wood screws to lock the corresponding holes on the left and right sides of the bracket as shown in Fig. 4.2.

Note: The wooden ceiling beam must meet the tensile test of 30kg for installation.

It is also possible to install the mounting bracket directly to a concrete ceiling and use four anchors (not included) to lock the left and right corresponding holes of the bracket to the ceiling.
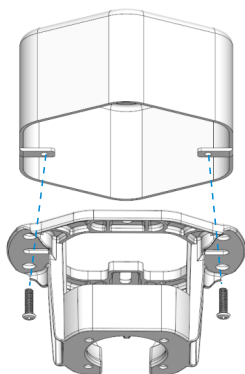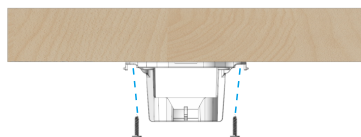
Fig. 4.2

Fig. 4.1

If you have an angled or vaulted ceiling (see Fig. 4.3)
1. When installing the mounting bracket, the bracket groove should be facing upward, as shown in Fig. 4.4. Do not install the bracket with the groove facing downward, as shown in Fig. 4.5.
2. You will need a longer downrod.
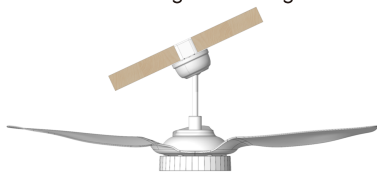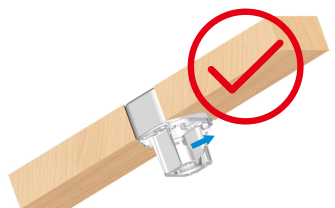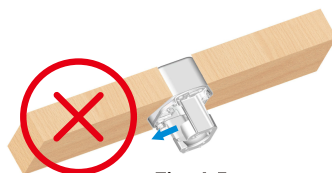3. The maximum angle is 27 degrees.

Fig. 4.4

Fig. 4.5

Fig. 4.3

5. Hang the Fan

WARNING: To reduce the risk of fire, electric shock, or other personal injury, mount the fan only to an outlet box or supporting system marked acceptable for fan support and use the mounting screws provided with the outlet box.

WARNING: Check to see that all connections are tight, including ground, and there are no visible bare wires at the wire nuts (except for the ground wire).

WARNING: To reduce the risk of fire or electric shock, do not use this fan with any solid-state speed control device.

WARNING: To avoid any electrical shock, be sure electricity is turned off at the main fuse box before wiring.

5.1 Install the ball end of the downrod into the opening of the mounting bracket. Rotate the downrod until the tab on the mounting bracket is securely seated in the slot in the downrod ball, as shown in the enlarged image in Fig. 5.1.

⚠WARNING

The fan and/or downrod should not rotate in the mounting bracket when installed correctly. Failure to properly align the slot in the downrod ball with the tab on the mounting bracket may result in the fan falling,causing serious injury or death.
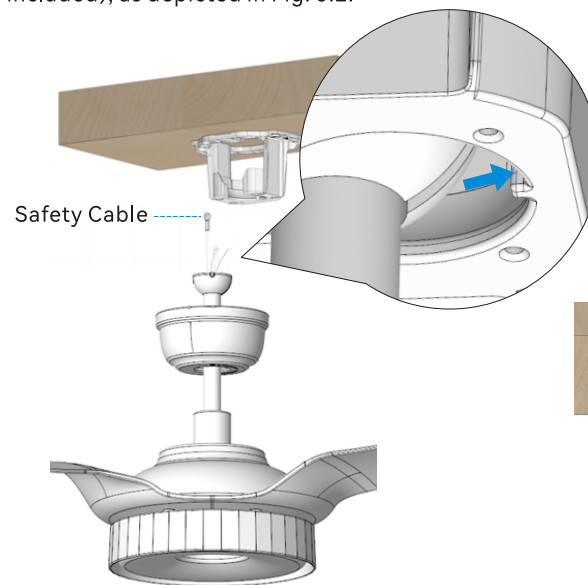
5.2 Attach the other end of the safety cable to a secure location. Fasten the safety cable to the ceiling using a screw and washer (not included), as depicted in Fig. 5.2.
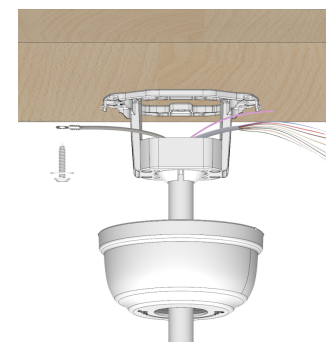
Note: Installing the ceiling fan with a safety cable is an extra safety feature. It secures the fan to the ceiling hook or other attachment point and prevents the fan from falling even in the case of material failure.

Safety Cable

Fig. 5.1

Fig. 5.2

6. Connect the Wiring

Ground wire, Green wire — Ground

0-10V , Black motor wire, for fan direction — Direction

0-10V , Orange motor wire, for fan speed — Speed

Ground wire on the mounting bracket,
Green / Yellow wire (to the supply ground wire)

48- , Blue wire, neutral wire

48+ , Pink wire, live wire

48V- , Black wire

48W DC power

48V+, Red wire

+ − 48V 48V
+ −

Warm LED + , Red wire, for warm light L

Warm LED − , Brown wire, for warm light N

Cool LED + , Yellow wire, for cool light L

Cool LED − , White wire, for cool light N

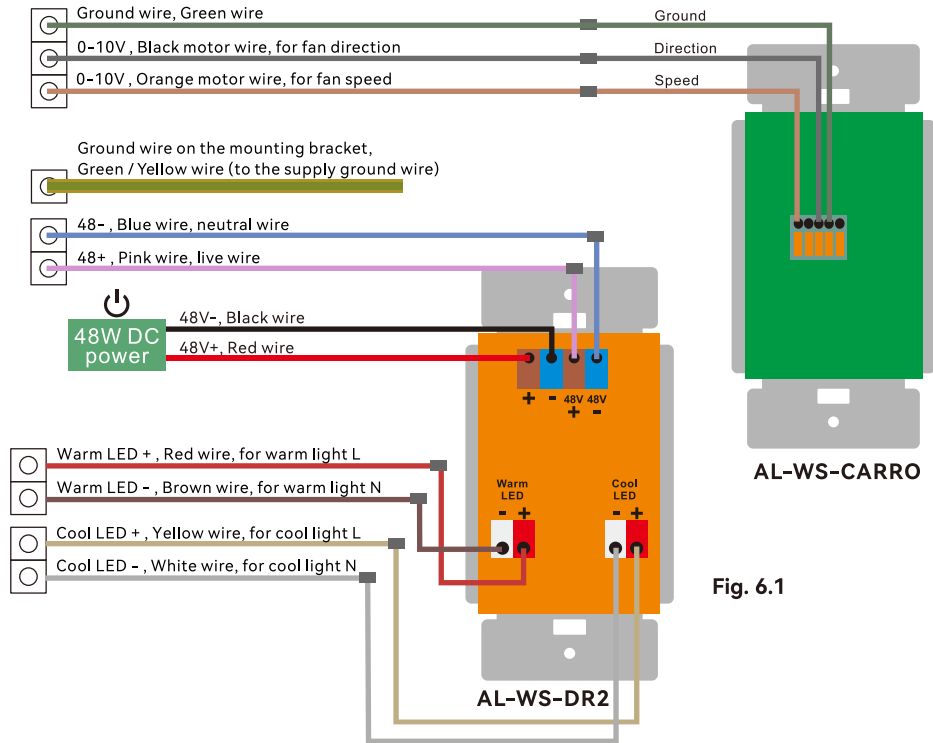Warm LED − +   Cool LED − +

AL-WS-CARRO

Fig. 6.1

AL-WS-DR2

Consult Fig. 6.1 to identify the different colored motor wires running through the downrod. Connect the wires based on their color coordination. Pair the respective colors and ensure the connections are properly secured.

7. Install the Canopy

There are two types of canopies and two ways to install them. Please follow the instructions below before installation.

**A: The screws of the mounting bracket are exposed.**

Make sure all wires are tucked into the canopy. Raise the canopy to the mounting bracket and align the holes in the canopy with the two mounting bracket screws. Then, turn the canopy in the direction of the arrow shown in Fig. A until the mounting bracket screws engage from the larger slots of the canopy to the smaller ones. Tighten the screws securely to fix the canopy onto the mounting bracket.

(A)

B: There are no screws on the mounting bracket.

Make sure all wires are tucked in the canopy. Raise the canopy to the mounting bracket and align the two notches inside the top of the canopy with the two tabs on the top of the mounting bracket. Attach the canopy by lifting and twisting it until it stops.

Tab

Notch

(B)
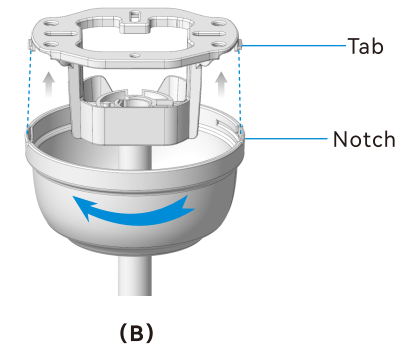
8. Install the Lower Cover

Snap the lower cover into the central hole of the lampshade and rotate it clockwise, as shown in Fig. 8.1, until it is securely tightened.
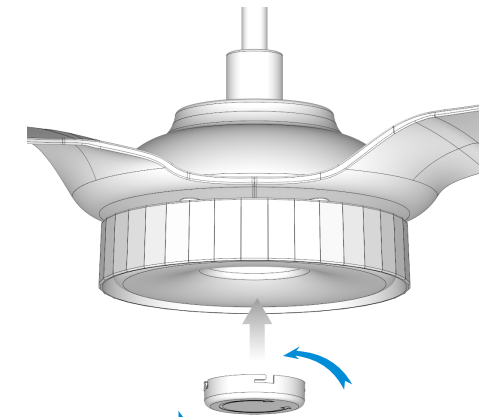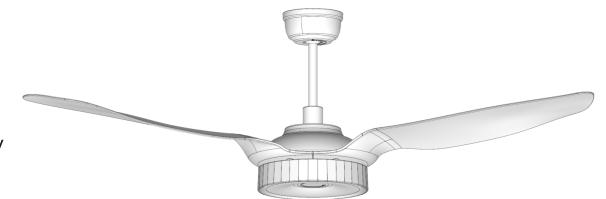
Fig. 8.1

9. Power On

At this time, the ceiling fan has been installed. Turn on the power supply from the circuit breaker of the main switch or the room where the ceiling fan is installed. Once the power is on, verify that all the functions of the fan are working correctly.

Note: Please be aware that this ceiling fan may produce noticeable operating sounds at specific wind speeds. This is a normal operating characteristic and does not indicate any issues with its functionality.

Troubleshooting

Try these troubleshooting steps before contacting Customer Service. For additional operation, maintenance, and troubleshooting information, please contact our customer service center.

SYMPTOM	POSSIBLE SOLUTION
Fan not spinning	① Make sure the fan is getting power. ② Check your circuit breaker or fuse panel and wall switch for functionality. ③ Check to make sure the fan wires are correctly connected to the house wires. ④ Use a multi-meter and test the wiring harness to see if there is any electrical output. ⑤ All the pin wiring on the circuit board must be inserted tight and in the correct position. ⑥ Make sure the fan blades spin freely. ⑦ If you're using a wall control, check the power to the breaker from your control and try working your ceiling fan manually. (Normal switch only for the fan power on/off)
Fan light not working	① Make sure LED wires are connected to the circuit board. ② Make sure the whole fan is powered.
The fan is noisy and wobbling	① Check if the blade screws are NOT rubbing against any part of the motor housing. ② Check the pin wires are NOT connected against any moving parts. ③ Check the down fan cup is NOT hitting the motor. ④ Confirm the canopy is NOT touching the ceiling while the fan is in operation. ⑤ Check the down rod is NOT slanted. ⑥ Tighten any loose screws on the light kit, fan blades, motor coupling, down rod, brackets and mounting hardware. ⑦ Confirm the hanger ball is firmly seated in the mounting bracket. ⑧ The ceiling beam must meet the minimum tensile test strength of 30kg for installation. ⑨ Make sure the blades and brackets are NOT bent or deformed. ⑩ Verify the wire connections are not rattling against each other. ⑪Verify the fan blades are not cracked. If the fan blades are cracked, replace the damaged blades with a new blade set from the same brand as your ceiling fan to ensure compatibility. ⑫ Confirm the light kit is NOT slanting and hitting the motor.
Fan or light turning on or off by themselves	① Confirm the circuit breaker is not malfunctioning. ② Verify the wire connections are not frayed. ③ Cut the fan power for 10 minutes then power on again. ④ All the pin wiring on the circuit board must be inserted tight and in the correct position.