

SINOX 12V DC BLDC Ceiling Fan 32 Watt

SINOX 12V DC BLDC Ceiling Fan 32 Watt with Remote Control

Instruction Manual

1. INTRODUCTION

Thank you for choosing the SINOX 12V DC BLDC Ceiling Fan. This energy-efficient fan is designed for optimal air circulation and features a Brushless Direct Current (BLDC) motor for reliable performance. It operates on a 12V DC power supply and comes with a convenient remote control for ease of use. Please read this manual thoroughly before installation and operation to ensure safe and efficient use of your fan.



Image 1.1: SINOX 12V DC BLDC Ceiling Fan highlighting smart remote, 2-year motor warranty, BLDC motor, and quiet operation.

Key Features:

- **12V DC BLDC Motor:** Energy-efficient 32-watt operation.
- **Wide Operating Voltage:** Functions within 10V-19V DC.
- **Remote Control:** Offers 5-speed options and On/Off functionality.
- **High Airflow:** Delivers 230 CMM (Cubic Meters per Minute) at 375 RPM.
- **Safety Features:** Includes reverse polarity protection and short circuit protection.
- **Durable Construction:** Fitted with double ball bearings and 100% copper wiring.
- **Material:** Aluminium blades and body.
- **Mounting Type:** Downrod Mount.

2. SAFETY INFORMATION

Please observe the following safety precautions to prevent injury or damage to the fan:

- Always disconnect power before installing, cleaning, or servicing the fan.
- Ensure the power source is 12V DC and within the 10V-19V operating range.
- Use a 2.5 square mm wire for DC side connections to ensure optimal performance and safety.
- Installation must be performed by a qualified electrician or service personnel.
- Mount the fan securely to a ceiling joist or structure capable of supporting its weight.
- Keep hands, clothing, and other objects away from the fan blades during operation.
- Do not operate the fan if any part is damaged or missing.
- This fan is designed for indoor use only.

3. PACKAGE CONTENTS

Verify that all components are present in the package:

- SINOX 12V DC BLDC Ceiling Fan Unit
- Remote Control
- Downrod Mount Kit
- Fan Blades (typically 3 or 4, depending on model)
- Mounting Hardware (screws, washers, etc.)
- User Manual (this document)

4. SETUP AND INSTALLATION

Follow these steps for proper installation of your SINOX BLDC Ceiling Fan:

1. **Power Disconnection:** Ensure the main power supply to the installation area is turned off at the circuit breaker.
2. **Mounting Bracket Installation:** Securely attach the mounting bracket to a ceiling joist or a suitable electrical junction box capable of supporting the fan's weight. Use appropriate hardware.
3. **Downrod Assembly:** Insert the downrod through the canopy and motor housing. Secure the downrod to the motor with the provided pin and screws.
4. **Wiring Connections:**
 - Connect the fan's DC wires to your 12V DC power source (battery or solar panel output).
 - Ensure correct polarity: connect the positive (+) wire from the fan to the positive (+) terminal of the power source, and the negative (-) wire from the fan to the negative (-) terminal.
 - Use a 2.5 square mm wire for all DC connections to prevent voltage drop and ensure efficient operation.
 - The fan includes reverse polarity protection and short circuit protection.
5. **Hanging the Fan:** Carefully lift the fan assembly and hang it from the mounting bracket using the ball joint on the downrod.
6. **Canopy Installation:** Slide the canopy up to the ceiling and secure it to the mounting bracket, covering the wiring connections.
7. **Blade Attachment:** Attach the fan blades to the motor housing using the provided screws. Ensure all screws are tightened securely.
8. **Power Reconnection:** Once installation is complete and all connections are secure, restore power to the circuit.

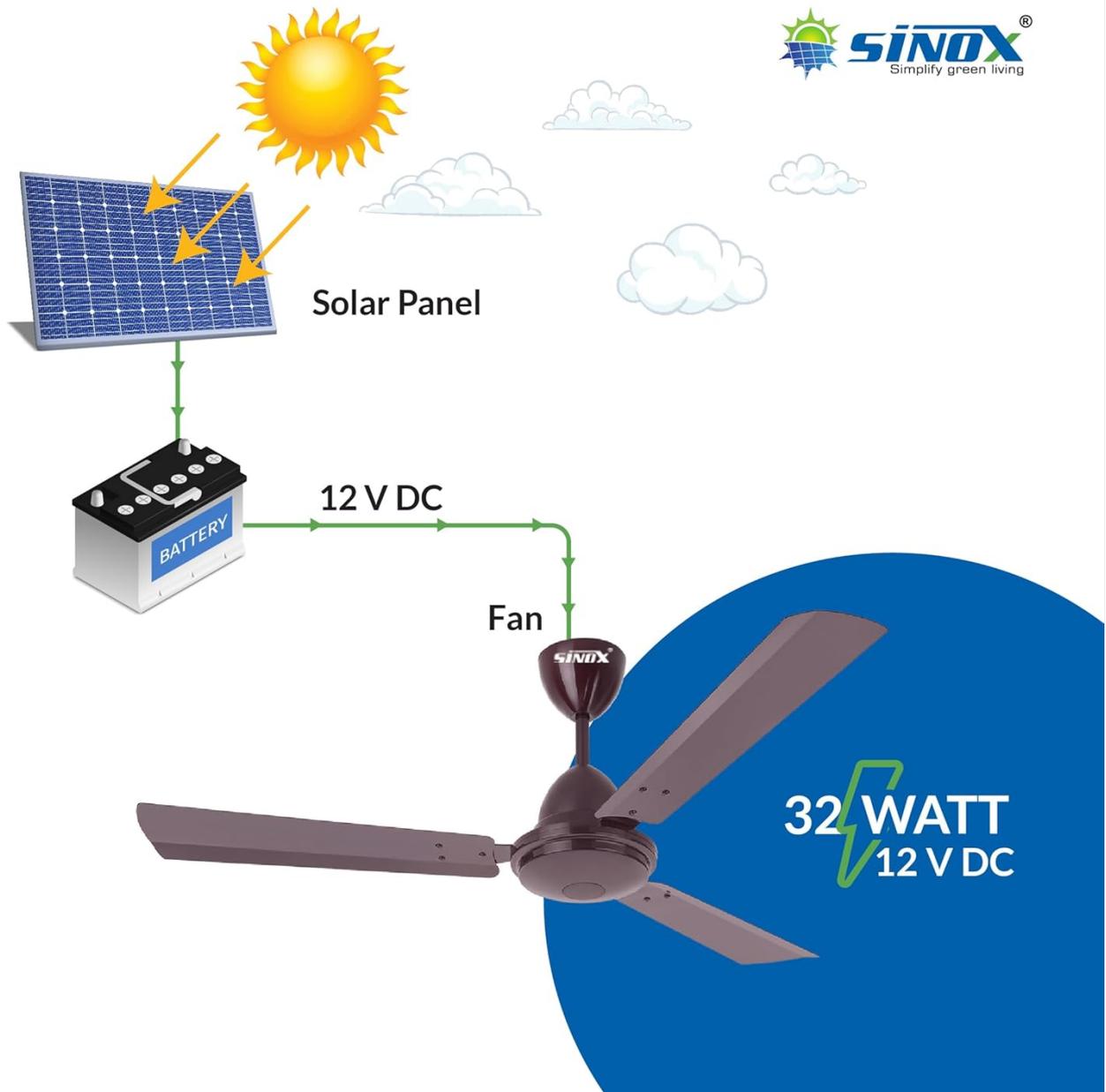


Image 4.1: Illustrative diagram of connecting the SINOX BLDC fan to a solar panel and 12V DC battery.

5. OPERATING INSTRUCTIONS

Your SINOX BLDC Ceiling Fan is operated using the included remote control. Ensure the remote has working batteries.

Features of our Remote Controlling System

1. Turn On/Off Fan
2. Turn On/Off LED Light (9 W)
3. Speed Switches 1 to 6
4. Reverse Rotation For Hot And Cold Air Circulation
5. Timer Mode, Turn Off Fan After 2, 4, 6, & 8 Hour
6. In Smart Mode Automatically Reduces Speed Off Fan Up to 12 Hour From Fast To Low



Image 5.1: Remote control for the SINOX BLDC Ceiling Fan, detailing button functions.

Remote Control Functions:

1. **Power On/Off (01):** Press to turn the fan on or off.
2. **LED Light On/Off (02):** Press to turn the integrated 0.5 Watt LED light on or off.
3. **Speed Control (03):** Buttons labeled 1 to 6 control the fan speed. Press '1' for the lowest speed and '6' for the highest speed.
4. **Reverse Rotation (04):** Activates reverse rotation for hot and cold air circulation, useful for different seasons.
5. **Timer Mode (05):** Set the fan to turn off automatically after 2, 4, 6, or 8 hours. Press the button repeatedly to cycle through timer options.
6. **Smart Mode (06):** In Smart Mode, the fan automatically reduces its speed over a period of up to 12 hours, transitioning from fast to low speed.

6. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your fan.

- **Cleaning:** Periodically wipe the fan blades and motor housing with a soft, damp cloth. Do not use abrasive cleaners or solvents. Ensure the fan is turned off and power is disconnected before cleaning.
- **Blade Inspection:** Check fan blades for any cracks or damage. Damaged blades should be replaced immediately to prevent imbalance and potential hazards.
- **Tightness Check:** Annually, check all screws and connections for tightness. Loose connections can cause noise or malfunction.
- **Motor Lubrication:** The BLDC motor is designed for maintenance-free operation and does not require lubrication.

7. TROUBLESHOOTING

If you encounter issues with your fan, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Fan does not turn on.	No power supply, incorrect wiring, remote control battery dead.	Check DC power source (12V battery/solar panel). Verify wiring polarity. Replace remote control batteries.
Fan operates slowly or with low airflow.	Insufficient power, incorrect wire gauge, dirty blades.	Ensure power source provides adequate 12V DC. Verify 2.5 sq mm wire is used. Clean fan blades.
Remote control not working.	Dead batteries, obstruction, remote out of range.	Replace remote batteries. Ensure no obstructions between remote and fan. Operate within effective range.
Fan makes unusual noise.	Loose screws, unbalanced blades, motor issue.	Check and tighten all mounting and blade screws. Ensure blades are not bent or damaged. If noise persists, contact support.

8. SPECIFICATIONS

Detailed technical specifications for the SINOX 12V DC BLDC Ceiling Fan:

- **Brand:** SINOX
- **Model:** 12V DC BLDC Ceiling Fan
- **Power Consumption:** 32 Watts
- **Operating Voltage Range:** 10V - 19V DC
- **Recommended Wire Gauge (DC side):** 2.5 square mm
- **Airflow (CMM):** 230
- **Rotational Speed (RPM):** 375
- **Motor Type:** BLDC (Brushless Direct Current)
- **Special Features:** Remote Controlled, Reverse Polarity Protection, Short Circuit Protection, 0.5 Watt LED Light
- **Bearing Type:** Double Ball Bearing
- **Wiring:** 100% Copper
- **Material:** Aluminium
- **Mounting Type:** Downrod Mount

- **Product Dimensions:** 61D x 137.2W x 58.4H Centimeters (approximate, based on 1200mm sweep)
- **Recommended Power Source:** 12V Battery or 60-100 Watt Solar Panel



BLDC TECHNOLOGY

- BLDC stands for Brushless Direct Current
- The input voltage provided is 230V AC which is converted to 24V DC by a SMPS.
- The fan runs internally at 24V and consumes just 32W at full speed.
- Consistent performance even at low Wattage and power fluctuation
- 100% High Quality Copper Winding



Image 8.1: Explanation of BLDC technology, showing the internal components and benefits.

BLDC Technology Explained:

- BLDC stands for Brushless Direct Current.
- These motors are highly energy-efficient, consuming less power than traditional AC motors.
- They offer consistent performance even at low wattage and during power fluctuations.
- BLDC motors are known for their quiet operation and longer lifespan due to the absence of brushes, which reduces wear and tear.
- The smart BLDC motor technology in this fan prevents overheating.

9. WARRANTY AND SUPPORT

SINOX is committed to providing high-quality products and customer satisfaction.

- **Warranty:** This SINOX BLDC Ceiling Fan comes with a **2-year motor warranty** covering manufacturing defects. Please retain your purchase receipt as proof of purchase.
- **Customer Support:** For any technical assistance, warranty claims, or service inquiries, please contact SINOX customer support. Refer to the product packaging or the official SINOX website for the most current contact information.