

Ghost Controls AXDP

Ghost Controls AXDP 10W Monocrystalline Solar Panel Instruction Manual

For Automatic Gate Opener Systems

1. INTRODUCTION

This manual provides essential information for the proper installation, operation, and maintenance of your Ghost Controls AXDP 10W Monocrystalline Solar Panel. This solar panel is designed to provide a reliable power source for Ghost Controls automatic gate opener systems, particularly in locations without direct access to AC power. Adhering to these instructions will ensure optimal performance and longevity of your system.



Image 1.1: The Ghost Controls AXDP 10W Monocrystalline Solar Panel.

2. SETUP AND INSTALLATION

2.1. Package Contents

- 10W Monocrystalline Solar Panel

- Mounting Arm
- Mounting Brackets
- Fasteners for fence post mounting
- 12' of pre-attached wire for connection to the system control board

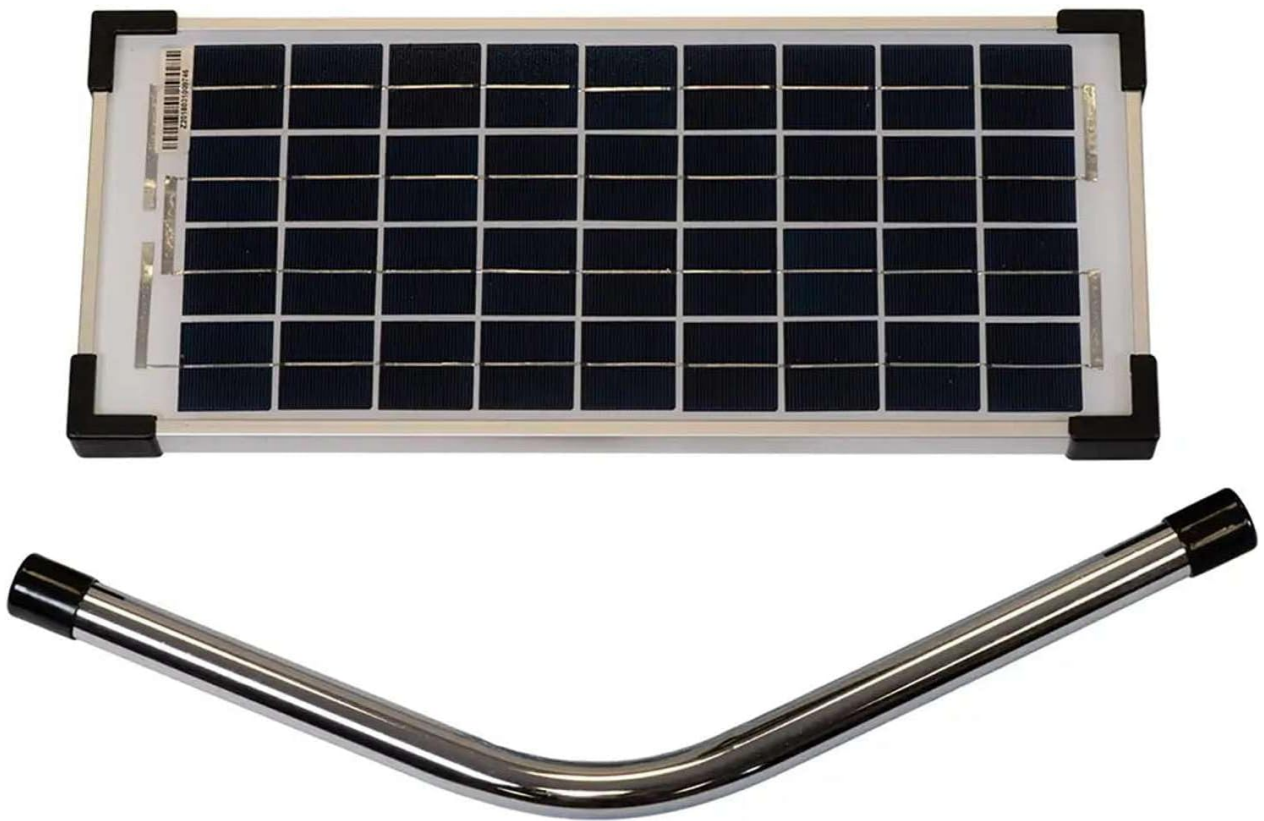


Image 2.1: Included components: solar panel and mounting arm.

2.2. Choosing a Location

The solar panel must be installed in a location that receives maximum direct sunlight throughout the day, free from obstructions like trees or buildings. Optimal sunlight exposure is crucial for efficient battery charging. Refer to the solar panel usage map to determine the recommended number of panels for your region and usage frequency.



Image 2.2: Solar panel usage map indicating recommended panel configurations based on geographical location and gate cycle frequency.

2.3. Mounting the Solar Panel

1. Attach the mounting arm to the solar panel using the provided fasteners.
2. Secure the mounting brackets to a sturdy fence post or other suitable structure in your chosen location. Ensure the post is stable and can support the panel.
3. Mount the solar panel assembly to the brackets. Adjust the angle of the panel to face south (in the Northern Hemisphere) for maximum sun exposure.



Image 2.3: Example of a solar panel mounted on a wooden fence post.

2.4. Wiring to the Control Board

The solar panel includes 12 feet of pre-attached wire. This wire connects directly to the 'SOLAR' terminals on your Ghost Controls gate opener control board. Ensure correct polarity: the red wire connects to the positive (+) terminal, and the black wire connects to the negative (-) terminal. Improper wiring can damage the system.

Video 2.4: This video demonstrates the connection of the Ghost Controls solar panel to the battery box and control board. It shows the internal wiring of the battery box and the connection points on the gate opener's control board, highlighting the 'SOLAR' input terminals.



Image 2.5: Rear view of the solar panel showing the pre-attached wiring for connection.

2.5. Battery Selection

All Ghost Controls gate openers require a 12V deep cycle battery for operation. For solar installations, a deep cycle battery is recommended to ensure consistent power delivery. The solar panel charges the battery, which then powers the gate opener.

The right battery for your installation



ABBT2 BATTERY BOX KIT

BEST FOR

- Charging with an AC Transformer
- Light solar usage in areas with full sun



All Ghost Controls openers require a battery to operate. Choose the right one for your installation



*deep cycle battery not sold by Ghost Controls

12 VOLT DEEP CYCLE BATTERY
with ABBL LARGE BATTERY BOX

BEST FOR

- ALL Solar installations
- Required for Solar installations using AXMC-R MultiConnect

Image 2.6: Guide illustrating battery options for Ghost Controls gate openers, emphasizing deep cycle batteries for solar setups.

3. OPERATING THE SOLAR PANEL

The Ghost Controls 10W Monocrystalline Solar Panel continuously converts sunlight into electrical energy, which is then used to charge and maintain the 12V deep cycle battery connected to your gate opener system. This ensures that your gate opener has sufficient power for daily operation, even in remote locations. Monocrystalline panels offer superior power output over time compared to polycrystalline options, making them efficient even in less-than-ideal sunlight conditions. The system is designed to manage battery charging automatically, preventing overcharge.

4. MAINTENANCE

- **Cleaning:** Periodically clean the surface of the solar panel with a soft, damp cloth to remove dust, dirt, pollen, or debris that may accumulate and reduce efficiency. Avoid abrasive cleaners or tools.
- **Obstruction Check:** Regularly inspect the area around the solar panel to ensure no new obstructions (e.g., growing tree branches, new structures) are blocking sunlight.
- **Connection Check:** Annually, or if issues arise, inspect all wiring connections to the solar panel and the control board to ensure they are secure and free from corrosion.

5. TROUBLESHOOTING

- **Battery Not Charging:**
 - Verify the solar panel is receiving adequate direct sunlight.
 - Check all wiring connections for proper polarity and secure attachment.
 - Ensure the solar panel surface is clean and free of obstructions.
 - Confirm the battery is a 12V deep cycle type and is in good working condition.
- **Gate Opener Malfunction:** If the gate opener is not functioning, first check the battery charge level. If the battery is low, follow the steps above to troubleshoot charging. If the battery is charged, consult your gate opener's specific manual for further troubleshooting.
- **Incorrect Wire Labeling:** In rare instances, wire labels from the solar panel may be reversed. Always confirm polarity with a multimeter if unsure (red for positive, black for negative) before connecting to the control board.

6. SPECIFICATIONS

Specification	Value
Brand	Ghost Controls
Model Number	AXDP
Material	Monocrystalline Silicon
Product Dimensions	17.5"L x 7.5"W x 1"H
Item Weight	3.3 Pounds
Efficiency	High Efficiency
Included Components	1 10W Solar Panel
Maximum Power	10 Watts
Voltage	18 Volts
Installation Method	Screw-In
UPC	855615006097

7. WARRANTY INFORMATION

The Ghost Controls AXDP 10W Monocrystalline Solar Panel comes with an 18-month warranty. Please retain your proof of purchase for warranty claims. For detailed terms and conditions, refer to the official Ghost

Controls warranty documentation or contact customer support.

8. SUPPORT

For technical assistance, installation questions, or troubleshooting not covered in this manual, please contact Ghost Controls customer support. Visit the official Ghost Controls website for contact information and additional resources.



Image 8.1: Technical Support is available for assistance.