

Motorola BDA-S1

Motorola Signal Booster BDA-S1 Instruction Manual

1-Port Cable Modem TV HDTV Amplifier

1. PRODUCT OVERVIEW

The Motorola BDA-S1 is a bi-directional cable TV amplifier designed to enhance signal quality for various home entertainment and internet services. This device is engineered to boost signal strength by up to 32 times, effectively reducing common signal issues such as snow, graininess, and digital pixelation on your television, and improving reliability for cable modems and HDTV signals.

It is fully compatible with all standard cable TV services, cable boxes, cable modems, and HDTV systems. The BDA-S1 features a weather-sealed and protective coating, making it suitable for both indoor and outdoor installations. Furthermore, it meets all applicable IEEE surge standards, contributing to enhanced system reliability and protection.

This model is a commercial version of the Motorola Signal Booster 484095-001-00 and includes a power supply for operation.

2. SETUP AND INSTALLATION

Proper installation of the Motorola BDA-S1 is crucial for optimal performance. The amplifier should be installed at the point where the main cable or antenna line enters your home, ideally before any signal splitters.

Installation Steps:

- 1. Identify Entry Point:** Locate the main coaxial cable line that brings the signal into your home from your cable provider or antenna.
- 2. Disconnect Cable:** Carefully disconnect the existing coaxial cable from its connection point (e.g., wall plate, splitter input).
- 3. Connect Input:** Connect the incoming coaxial cable directly to the **INPUT** port of the BDA-S1 amplifier.
- 4. Connect Output:** Use an additional coaxial cable (not included) to connect the **OUTPUT** port of the BDA-S1 to your existing splitter or the first device in your signal chain (e.g., TV, cable modem).
- 5. Power Connection:** Connect the included power supply to the BDA-S1 amplifier's power input. Plug the

power supply into a standard electrical outlet.

6. **Secure Connections:** Ensure all coaxial cable connections are finger-tight to prevent signal loss.



Image of the Motorola BDA Passive Return Power Supply, model MKD-3612200. This AC/DC adaptor provides 12V DC 200mA output and is used to power the BDA-S1 amplifier.

Note: Coaxial cables are not included with the amplifier. You will need at least one additional coaxial cable for installation.

3. OPERATING INSTRUCTIONS

Once the Motorola BDA-S1 amplifier is properly installed and connected to a power source, it operates automatically. The device continuously amplifies the incoming signal to improve its quality and strength for all connected devices. No manual adjustments or user interaction are required for its operation.

The amplifier is designed for continuous operation. Ensure the power supply remains connected to maintain signal amplification.

4. MAINTENANCE

The Motorola BDA-S1 is designed for minimal maintenance. To ensure long-term performance and reliability, consider the following:

- **Connection Checks:** Periodically inspect all coaxial cable connections to ensure they remain tight and secure. Loose connections can degrade signal quality.
- **Cleanliness:** Keep the amplifier unit clean and free from dust and debris. Use a soft, dry cloth for cleaning. Do not use liquid cleaners directly on the unit.
- **Environmental Protection:** While the unit is weather-sealed for outdoor use, protecting it from direct exposure to extreme weather conditions (e.g., heavy rain, direct sunlight, extreme temperatures) can help extend its lifespan.
- **Cable Integrity:** Ensure that all coaxial cables connected to the amplifier are in good condition, without kinks, cuts, or excessive bending.

5. TROUBLESHOOTING

If you encounter issues with your signal after installing the Motorola BDA-S1, refer to the following troubleshooting guide:

- **No Signal or Poor Signal Quality (Graininess, Pixelation):**
 - **Check Power:** Ensure the power supply is securely connected to the amplifier and plugged into a

functional electrical outlet. The amplifier requires power to operate.

- **Verify Connections:** Confirm that all coaxial cables are tightly connected to the amplifier's input and output ports, as well as to your other devices (splitters, TVs, cable modems). Loose connections are a common cause of signal degradation.
- **Installation Location:** Ensure the amplifier is installed at the primary entry point of the cable into your home, before any splitters. Installing it further down the line may not provide optimal results.
- **Issues with Interactive Services (e.g., Video On Demand, Internet Uploads):**
 - **Return Path Compatibility:** If you are using the amplifier with services like Verizon FIOS or other interactive services, ensure that the amplifier supports the necessary return path bandwidth (typically 5-42 MHz) and has minimal return path loss. The single-port BDA-S1 is designed to minimize this loss, but excessive splitting after the amplifier can still impact performance.
 - **MoCA Compliance:** For FIOS services, ensure the amplifier is MoCA compliant if your setup relies on MoCA for communication between devices. The BDA-S1 is designed to be compatible.
- **Signal Over-Amplification:** In rare cases, if your incoming signal is already very strong, adding an amplifier might cause over-amplification, leading to signal distortion. If this occurs, you may need to remove the amplifier or consult with your service provider.

If these steps do not resolve your issue, contact your cable service provider or Motorola customer support for further assistance.

6. SPECIFICATIONS

Model Number	BDA-S1/EPS
Product Dimensions	5.13 x 4.75 x 3.56 inches
Item Weight	1.15 pounds
Manufacturer	Motorola
Signal Boost	Up to 32x
Bi-directional	Yes
Surge Standards	Meets IEEE standards
Application	Indoor or Outdoor
Power Supply	Included AC/DC Adaptor (Model MKD-3612200, Input: 120V AC, Output: 12V DC 200mA)

7. WARRANTY INFORMATION

Motorola provides a limited warranty for its products. For specific warranty terms, conditions, and duration, please refer to the documentation included with your original purchase. It is recommended to retain your proof of purchase (receipt or invoice) as it may be required for any warranty claims.

Warranty coverage typically addresses defects in materials and workmanship under normal use. Damage resulting from improper installation, misuse, neglect, or unauthorized modifications is generally not covered.

8. SUPPORT AND CONTACT

For technical assistance, product inquiries, or to access additional support resources, please visit the official Motorola support website. The website typically provides FAQs, troubleshooting guides, and contact information for customer service.

When contacting support, please have your product model number (BDA-S1) and any relevant purchase information readily available to expedite assistance.