

Matchmaster 10MM-MA30PDF

Matchmaster 10MM-MA30PDF Masthead Amplifier User Manual

VHF/UHF 30dB Gain Masthead Amplifier with 4G/5G Filter & Power Supply

Model: 10MM-MA30PDF | Brand: Matchmaster

1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your Matchmaster 10MM-MA30PDF Masthead Amplifier. This amplifier is designed to boost VHF and UHF television signals, featuring an integrated 4G/5G filter to minimize interference from mobile broadband signals. Please read this manual thoroughly before installation to ensure correct setup and optimal performance.

2. PRODUCT FEATURES

- Integrated 4G/5G LTE filter from 694MHz, providing over 40dB filtering at 750MHz.
- Maximum gain of 25dB for VHF and 30dB for UHF.
- 20dB of independent adjustment for both VHF and UHF gain.
- New and improved water-resistant and UV-stable heavy-duty housing for outdoor durability.
- Includes a 14V DC power supply and UV stable heavy-duty cable ties for mounting.
- VHF and UHF input return loss: greater than 14dB.
- Compatible with combination antennas or separate VHF and UHF antennas via an in-built switch.
- Wide range powering ability (5-24V DC and 5-22V AC) with built-in voltage rectifier and regulator.

3. PACKAGE CONTENTS

- 1 x Matchmaster 10MM-MA30PDF Masthead Amplifier
- 1 x 14V DC Power Supply Unit
- UV Stable Heavy-Duty Cable Ties (for mounting)

4. SETUP AND INSTALLATION

Before beginning installation, ensure all power is disconnected from your antenna system. This amplifier is designed

for masthead installation, close to the antenna, to maximize signal quality.



Figure 1: Matchmaster 10MM-MA30PDF Masthead Amplifier. The image displays the amplifier unit with its protective cover open, revealing the input/output ports, gain adjustment dials, and the 4G/5G LTE indicators. To the left, the included 14V DC power supply unit and a coiled cable are visible. The amplifier features three coaxial ports labeled 'Output', 'VHF In', and 'UHF/V+U In', along with two blue gain adjustment dials for VHF and UHF, and a small switch for input configuration.

4.1 Mounting the Amplifier

1. Select a suitable location on the antenna mast, ensuring it is as close as possible to the antenna for optimal signal reception.
2. Use the provided UV stable heavy-duty cable ties to securely fasten the amplifier to the mast. Ensure the unit is oriented to prevent water ingress.

4.2 Connecting Antennas and Power

The amplifier supports two input configurations, selectable via the small switch located between the 'VHF In' and 'UHF/V+U In' ports:

- **Switch Position 1 (No Signal / V+U):** For use with a single combination antenna that outputs both VHF and UHF signals on one cable. Connect this cable to the 'UHF/V+U In' port. The 'VHF In' port should be left unconnected.
 - **Switch Position 2 (VHF / UHF):** For use with separate VHF and UHF antennas. Connect your dedicated VHF antenna cable to the 'VHF In' port and your dedicated UHF antenna cable to the 'UHF/V+U In' port.
1. Connect the appropriate antenna cable(s) to the 'VHF In' and/or 'UHF/V+U In' ports on the amplifier, based on your antenna setup and the switch position.
 2. Connect a coaxial cable from the 'Output' port of the amplifier to the input of the included 14V DC power supply unit (often referred to as a power inserter).
 3. Connect the output of the power supply unit to your television or distribution system.
 4. Plug the 14V DC power supply unit into a standard electrical outlet. The 'PWR' indicator on the amplifier should illuminate, indicating power is being supplied.

4.3 Gain Adjustment

The amplifier features independent gain adjustment dials for VHF and UHF signals, allowing you to fine-tune the signal strength for optimal reception. The dials provide up to 20dB of adjustment.

- Rotate the 'VHF' dial to adjust the gain for VHF channels.
- Rotate the 'UHF' dial to adjust the gain for UHF channels.

Adjust the gain settings while monitoring your television's signal strength meter (if available) or picture quality. Aim for a strong, stable signal without over-amplification, which can lead to distortion.

5. OPERATION

Once installed and powered, the Matchmaster 10MM-MA30PDF amplifier operates continuously to boost incoming television signals. The integrated 4G/5G filter automatically mitigates interference from cellular signals, ensuring a cleaner television signal.

No further user interaction is typically required after initial setup and gain adjustment, unless changes to your antenna setup or local signal conditions necessitate re-adjustment.

6. MAINTENANCE

The Matchmaster 10MM-MA30PDF amplifier is designed for long-term, maintenance-free operation. Its robust, UV-stable, and water-resistant housing protects internal components from environmental elements.

- Periodically inspect the coaxial cable connections to ensure they remain tight and free from corrosion.
- Check the amplifier's mounting to the mast to ensure it remains secure, especially after strong winds.
- Keep the amplifier's housing clean from excessive dirt or debris, though this is rarely necessary due to its design.

Do not attempt to open the amplifier unit, as this may void the warranty and expose internal components to damage.

7. TROUBLESHOOTING

Problem	Possible Cause	Solution
No signal or poor picture quality after installation.	<ul style="list-style-type: none"> No power to amplifier. Incorrect antenna connection. Gain set too low or too high. Faulty cables or connectors. Incorrect switch position. 	<ul style="list-style-type: none"> Check if the power supply is plugged in and the 'PWR' light on the amplifier is on. Verify antenna cables are securely connected to the correct input ports ('VHF In', 'UHF/V+U In'). Adjust VHF and UHF gain dials. Over-amplification can be as detrimental as under-amplification. Inspect all coaxial cables and F-connectors for damage or loose connections. Ensure the input switch (1 or 2) matches your antenna setup (combination or separate).
Interference from mobile signals (e.g., 4G/5G).	<ul style="list-style-type: none"> Extremely strong local mobile signal. Amplifier not functioning correctly. 	<ul style="list-style-type: none"> The amplifier has a built-in 4G/5G filter. If interference persists, ensure the amplifier is correctly installed and powered. In rare cases of extremely strong local signals, additional filtering may be required. Contact Matchmaster support if the issue persists.
Amplifier 'PWR' light is off.	<ul style="list-style-type: none"> No power to the power supply unit. Faulty power supply unit. Short circuit in the coaxial cable. 	<ul style="list-style-type: none"> Check the power outlet and ensure the power supply unit is plugged in. Test the power supply unit if possible. Inspect the coaxial cable running from the amplifier's output to the power supply for any damage or short circuits.

8. SPECIFICATIONS




Attribute	Specification
Model Number	10MM-MA30PDF
Frequency Range	VHF: 174-230MHz, UHF: 526-694MHz



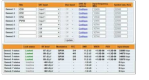

Attribute	Specification
VHF Gain	25dB (Max)
UHF Gain	30dB (Max)
Gain Adjustment	20dB (Independent VHF/UHF)
4G/5G LTE Filter	Built-in, >40dB filtering @ 750MHz
Input Return Loss	>14dB (VHF & UHF)
Power Supply	14V DC (Included)
Powering Ability	5-24V DC and 5-22V AC
Product Dimensions	6 x 5 x 2 cm
Item Weight	100 g

9. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the documentation provided with your purchase or visit the official Matchmaster website. Keep your proof of purchase for warranty claims.

Related Documents - 10MM-MA30PDF

	<p>Matchmaster Profinesse 14MM-PR08-MH User Manual</p> <p>Comprehensive user manual for the Matchmaster Profinesse 14MM-PR08-MH smart masthead processor, detailing installation, configuration, technical specifications, safety instructions, and warranty information.</p>
	<p>Matchmaster 14MM-SM90-5G Smart Masthead Amplifier Instruction Manual</p> <p>Comprehensive instruction manual for the Matchmaster 14MM-SM90-5G Smart Masthead Amplifier, detailing its features, installation, operation, safety guidelines, and warranty information.</p>
	<p>Matchmaster 02MM-MDU18, MDU36 & MDU50B Instruction Manual</p> <p>Instruction manual for Matchmaster 02MM-MDU18, MDU36, and MDU50B digital TV antennas, detailing horizontal and vertical mounting procedures and coaxial cable connection.</p>

<div><div>14MM-IP-DVBT IP COFDM MODULATOR</div><div></div><div>User Manual</div></div>	<p>14MM-IP-DVBT Series IP COFDM Modulator User Manual</p> <p>User manual for the Matchmaster 14MM-IP-DVBT Series IP COFDM Modulator, detailing installation, configuration, operation, and technical specifications.</p>
<div><div></div><div></div></div>	<p>Matchmaster FreeView HD Satellite Configuration Guide</p> <p>A guide to configuring Matchmaster FreeView HD Satellite for TDX Headends, focusing on spreading the load and optimizing bandwidth usage for HD content. Details steps for setting up demodulators and managing transport streams.</p>
<div><div>HDMI™ eARC Audio Extender (50m)</div><div></div><div>User Manual</div><div>VER 1.0</div></div>	<p>HDMI™ eARC Audio Extender (50m) User Manual - Extend Audio Signals</p> <p>User manual for the 50m HDMI eARC Audio Extender. Learn how to extend eARC/ARC audio signals up to 164ft over CAT5e/6 cable, supporting CEC and IR pass-through. Includes specifications and setup guide.</p>