blake BLATLA11 Terrestrial Launch Amplifier User Guide

Contents

Blake BLATLA11 Terrestrial Launch Amplifier

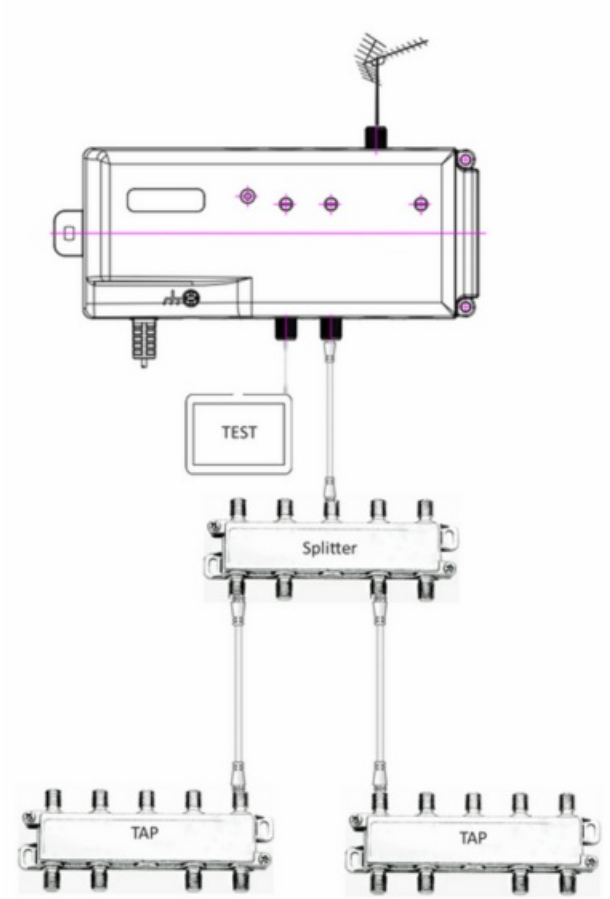
Introduction

Product Summary

- The Blake triple-filtered BLATLAll is a compact and powerful multiband launch amplifier designed for distributing terrestrial television signals in residential and commercial applications such as homes, hotels, and student accommodation environments.
- This low noise 2.5dB (Typical) DVB-T/T2 750 launch amplifier complies with the RED2104/53/EU Class l(L).
- It is an energy-efficient (4.5W) device incorporating sophisticated triple-filtering technology to significantly reduce interference from 4G, 5G, and TETRA signals.

Features 6 Benefits

- Compact design and low energy consumption: Ideal for discreet placement and energy efficiency. Optimized for minimal space, while maximizing performance.
- One single input (F-type) is provided for FM/VHF/UHF. The recommended triplexer for this launch amplifier is the 4G, 5G filtered BLACOM31T (available separately)
- Triple Filtering: Eliminates interference from 4G, 5G and TETRA for exceptional signal quality.
- Variable gain control: Optimises signal strength for various cable lengths and signal weaknesses.
- Suitable for digital and analogue signals: Supports traditional and modern digital terrestrial TV signals.
- Powers masthead amplifier: Provides up to l00mA at 12V to power compatible masthead amplifiers such as the BLAMHDllH.
- Dual colour LED indicators: Provides clear visual indication of operational status, green showing normal operation and amber indicating a short circuit or log periodic connected.
- If the LED is amber, the amplifier circuit will continue to function, but no power will be supplied to the masthead amplifier, if in use.
- Consumes low power, making it cost-effective for continuous operation.
- Safe and reliable operation: Complies with the Radio Emissions Directive 2014/53/EU (meets the harmonised standard EN 303 354 for Class l 470-694MHz so no filter is required) and features proper grounding provisions.



Applications

- Distributing terrestrial TV signals in homes, hotels, and student housing.
- Boosting weak TV signals for improved reception.
- Overcoming signal loss due to long cable runs.

Tips

- Follow our advice to fully utilize our products:
- **b)** Always use the minimum gain required to avoid signal distortion.
- **b)** Mount the amplifier in a clean, dry, and well-ventilated location as close to the TV aerial as is feasible. Avoid places prone to high humidity, elevated temperatures, or dust accumulation.
- **b)** Properly ground the amplifier using a minimum 4mm2 earth bonding cable.
- **b)** Use F-connectors designed for standard “100” type coaxial cable.
- **b)** Hand-tighten F-connectors to avoid damaging the unit
- **b)** Utilise the provided screw slots to mount the amplifier securely (screws not supplied)

Safety Instructions

Overall safety instructions

- Ensure your amplifier is safe to use by matching the plug to your local outlet, using surge protection, and regularly inspecting the power cord for damage.
- Keep it in well-ventilated areas, secure all connections, protect it from liquids, and allow for cooling after

extended use. Always consult the manual for detailed guidance.

- **Power Safety**
  - Ensure the amplifier's plug matches your local outlet type. Never force a plug into an incompatible outlet.
- **Ventilation**
  - Keep the vents free of dust buildup. Dust can impede airflow and contribute to overheating.
- **Connections**
  - Ensure all cables, including the power cord, antenna connections, and speaker wires, are securely fastened. Loose connections can cause electrical issues and potential fire hazards.
- **Liquids**
  - Keep the amplifier away from liquids and moisture. Spills or damp environments can damage the electronics and pose a shock hazard.

Technical Specification

Frequency Range	**FM and DAB** (88-l0SMHz & l70-230MHz) **DVB-T/T2** (470-694MHz)
Gain	**FM & DAB** (88-l0SMHz & l70-230MHz) 10- 30dB Variable **DVB-T/T2** (470-694MHz) l8-38dB Variable
Amplifier Intermodulation:	-2dB (typical)/ -4dB (minimum)
Safety	EN IEC62368-I:2020+AII:2020; EMC: EN 50083-2: 2012 + AI: 2015
Noise Figure	**UHF** 2.5dB (typical) **FM/VHF** 5.0dB (typical)
Return Loss (INPUT)	SdB(typical) / 5dB (minimum)
Return Loss (OUTPUT)	l0dB(typical) / SdB(minimum)
Power Supply to Masthead Amplifier	12V DC, l00mA on input
Power Consumption	4.5W
Maximum Input Level	85dBuV
Maximum Output Level	ll8dBuV (IMD3=60dB (DIN45004B)
Power Requirements	230V, 50Hz
Working Environment	-20 — +50°C
Dimensions	l85x76x47mm

Troubleshooting

- **My amplifier is not powering on**
  - First, verify that it is powered on and receiving the correct input signal level. Adjust the gain control as specified in the user manual.
  - Additionally, confirm that the amplifier is operating within its designated frequency range for best results.
- **I have distorted output**
  - Reduce or increase the gain control setting on the amplifier. Then check for excessive input signal overloading the amplifier.
- **I am experiencing overheating issues**
  - If the amplifier feels excessively hot, turn it off and let it cool down completely. Ensure proper ventilation around the amplifier.

Warranty

Warranty 6 Compliance

Lifetime Guarantee

- This guarantee covers the failiure of your product resulting from manufacturing defects within the lifetime period of this product from the date of supply to the end-user.
- This guarantee does not cover damage to the product caused by abuse, tampering, defective installation, or natural causes such as lightning discharge.
- Repair or attempted repair, other than by the manufacturer, will render this guarantee void.
- This guarantee does not affect a consumer's statutory rights.

EU Declaration of Conformity

- Blake UK hereby declares that the radio equipment type BLA TLAll is in compliance with Directive 2014/53/EU.
- The full text of the EU declaration of conformity is available at the following internet address: **www.blake-uk.com/DoC**
- **177-187 Rutland Road, Sheffield, SJ 9PT**
- **+44 (0)114 275 9729 sales@blake-uk.com**
- **www.bloke-uk.com**

Documents / Resources

	blake BLATLA11 Terrestrial Launch Amplifier [pdf] User Guide BLATLA11 Terrestrial Launch Amplifier, BLATLA11, Terrestrial Launch Amplifier, Launch Amplifier, Amplifier

References

- User Manual