



# Blake RF Range

## Mastheads & Power Supplies

blake UK



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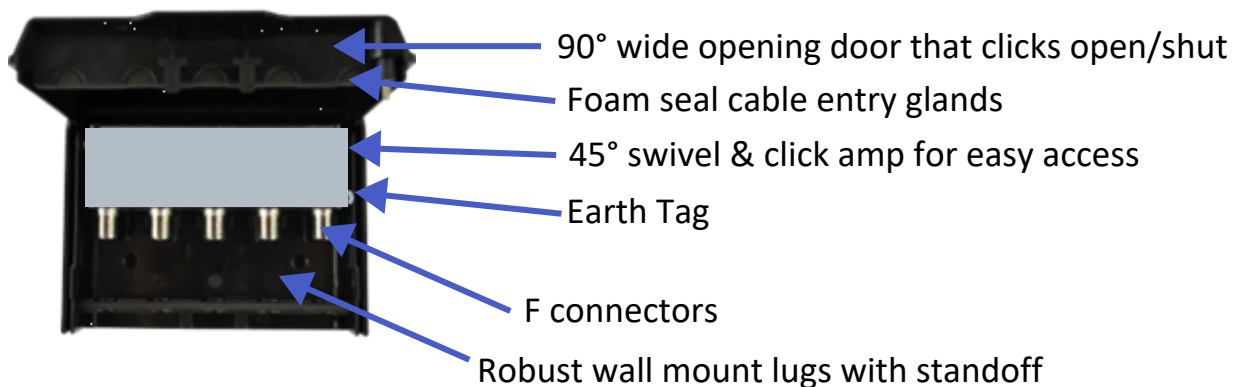
Masthead amplifiers are used to boost weak signals received by the aerial improving signal strength, reducing noise and enhancing the overall quality of the received signals.

They work by amplifying radio frequency (RF) signals captured by the aerial before any signal loss occurs as it travels down to the cable. They are particularly useful in areas with low signal quality and outdoor robust areas.

Masthead amplifiers are an essential component in receiving systems that ensure a better signal quality by amplifying weak signals captured by outdoor aerials before transmitting them to the indoor receiver.

**ALL MASTHEADS REQUIRE POWER. PLEASE SEE PRODUCTS AND FEATURES FOR MORE INFORMATION.**

Our robust housing is specifically designed with the installer in mind.



## Applications

Our masthead amplifiers have many applications that help enhance signal strength and improve the quality of received broadcasts. These can include but aren't limited to television reception, radio reception, satellite TV reception, remote location signal, multi-story buildings, outdoor antennas and digital broadcasting.



## Mastheads & Features

### 1-Way



1-Way Masthead Amplifier  
[BLAMHD11H](#)

- Fixed high gain (27dB)
- Frequency range 470-694MHz
- Power LED on amplifier
- Triple Filtered: 4G, 5G & TETRA
- RED Class 1
- Low noise figures <2.2dB

### 2-Way



2-Way Masthead Amplifier  
[BLAMHD12V](#)

- Variable gain (5-20dB)
- Frequency range 470-694MHz
- Power LED on amplifier
- Triple Filtered: 4G, 5G & TETRA
- RED Class 1
- Low noise figures <2.2dB

Also available as kit with power supply  
[BLAMHD12V-PS](#)

### 4-Way



4-Way Masthead Amplifier  
[BLAMHD14V](#)

- Variable gain
  - Standard: 1-16dB
  - High Gain: 12-27dB
- Frequency range 470-694MHz
- Power LED on amplifier
- Triple Filtered: 4G, 5G & TETRA
- RED Class 1
- Low noise figures <2.2dB

High variable gain

[BLAMHD14VH](#)

Also available as kit with power supply [BLAMHD14V-PS](#)

High Gain kit with power supply

[BLAMHD14VH-PS](#)



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**8-Way.**



- Variable gain (5-20dB)
- Frequency range 470-694MHz
- Power LED on amplifier
- Triple Filtered: 4G, 5G & TETRA
- RED Class 1
- Low noise figures <2.2dB

8-Way Masthead Amplifier  
[BLAMHD18V](#)

## Power Supplies & Features



1-Way LTE Filtered Inline Power Supply  
[BLAPSU11F](#)

- Linear power supply, low noise
- Power LED:  
\*Green = Power  
\*Red = Short
- Additional 15dB LTE protection



2-Way LTE Filtered Inline Power Supply  
[BLAPSU12F](#)

- Built-in LTE Filter: 5G & 4G
- Linear power supply, low noise
- 230V~50Hz 3W
- Output 12V, 100mA



### Masthead Specification

	BLAMHD11H	BLAMHD12V	BLAMHD14V	BLAMHD14VH	BLAMHD18V
<b>Outputs</b>	1	2	4	4	8
<b>Signal Frequency Range</b>	470-494MHz	470-494MHz	470-494MHz	470-494MHz	470-494MHz
<b>Noise Figure</b>	2.5dB / 4.0dB	2.5dB / 4.0dB	2.5dB / 4.0dB	2.5dB / 4.0dB	2.5dB / 4.0dB
<b>Gain</b>	High Gain 27dB	Variable 5-20dB	Variable 1-16dB	Variable 12-27dB	Variable 5-20dB
<b>Output Capability</b>	106dBuV	100dBuV	96dBuV	100dBuV	100dBuV
<b>Max. Recommended Input</b>	80dBuV	80dBuV	80dBuV	80dBuV	80dBuV
<b>Isolation Between Outputs</b>	>20dB	>20dB	>20dB	>20dB	>20dB
<b>DC Power Requirement</b>	12V@50mA	12V@50mA	12V@50mA	12V@50mA	12V@50mA
<b>Input Filter Characteristic</b>	TETRA: > 30dB rejection. LTE (5G/4G) > 45 dB rejection	TETRA: > 30dB rejection. LTE (5G/4G) > 45 dB rejection	TETRA: > 30dB rejection. LTE (5G/4G) > 45 dB rejection	TETRA: > 30dB rejection. LTE (5G/4G) > 45 dB rejection	TETRA: > 30dB rejection. LTE (5G/4G) > 45 dB rejection



### Masthead Specification CTD.

	<b>BLAMHD11H</b>	<b>BLAMHD12V</b>	<b>BLAMHD14V</b>	<b>BLAMHD14V H</b>	<b>BLAMHD18V</b>
<b>5G LTE Filtered</b>	Accord with EN 303 354: Class 1	Accord with EN 303 354: Class 1	Accord with EN 303 354: Class 1	Accord with EN 303 354: Class 1	Accord with EN 303 354: Class 1
<b>Op. Temp. Range</b>	-20 -- +50°C	-20 -- +50°C	-20 -- +50°C	-20 -- +50°C	-20 -- +50°C



# Blake RF Range

## Mastheads & Power Supplies



	BLAPSU11F	BLAPSU12F
<b>Outputs</b>	1	2
<b>Signal Frequency Range</b>	5-694MHz	5-694MHz
<b>Signal Insertion Loss</b>	<3dB (typ.)	<4dB
<b>Isolation Between Outputs</b>	-	>20dB
<b>Output Voltage</b>	+12V Regulated DC(±0.6V)	+12V Regulated DC(±0.6V)
<b>Output Current Rating</b>	100mA max	100mA max
<b>Output Protection</b>	Withstands Indefinite Output Short-Circuit Without Damage	Withstands Indefinite Output Short-Circuit Without Damage
<b>Power and Status Indicator</b>	Green-Normal, Red- Short	Green-Normal, Red- Short
<b>Input Filter Characteristics</b>	LTE (5G/4G) > 30 dB rejection	LTE (5G/4G) > 30 dB rejection
<b>Filter specifications</b>	BS EN 50083 (Standard 3 filter)	BS EN 50083 (Standard 3 filter)
<b>Mains Power Requirement</b>	230V 50Hz at 3A (3VA)	230V 50Hz at 3A (3VA)
<b>Operating Temperature Range</b>	-20 -- +50°C	-20 -- +50°C
<b>Standards Compliance</b>	Safety: EN IEC62368 EMC: EN 50083	Safety: EN IEC62368 EMC: EN 50083