

Antiference MHK Fully Screened Wideband Masthead Amplifier Kit

Fully-screened for professional results

The Antiference MHK range of fully screened wideband mast head amplifiers is designed for the professional installer using the latest SMD components and technology for reliability and low noise. These models are designed for amplifying digital signals in fringe reception areas or to overcome signal splitting losses and attenuation in long cable runs from aerial to the outlet plate or receiver.

The MHK range of masthead amplifiers are fully screened for high immunity to interference and impulse noise and are fitted with F-connectors for reliable connection. Built into a weatherproof housing, they can be wall / fascia mounted using the screw holes provided in the mast mounting bracket or mounted on a mast of up to 50mm diameter.

The range consists of 1,2,4,6 and 8 outputs with single input that covers the UHF frequency range, All our MHK masthead amplifiers come complete with a power supply.

Choosing the right model

It is always better to fit a larger or more suitable aerial before considering using a masthead amplifier.

Care must be taken not to choose a masthead amplifier with too much gain, especially when amplifying digital TV signals.

Model	Input / Output	Input Freq/ Channels	Gain	Maximum Output*	Noise Figure	Current Consumption
MHK1	1 in 1 out	470-862MHZ UHF	1-20dB	102dB μ V	<3dB	12v 50mA
MHK2	1 in 2 out	470-862MHZ UHF	1-20dB	94dB μ V	<3dB	12v 50mA
MHK4	1 in 4 out	470-862MHZ UHF	1-20dB	94dB μ V	<3dB	12v 50mA
MHK6	1 in 6 out	470-862MHZ UHF	1-20dB	94dB μ V	<3dB	12v 50mA
MHK8	1 in 8 out	470-862MHZ UHF	1-20dB	94dB μ V	<3dB	12v 50mA

Fitting the masthead amplifier

Fit the screened masthead amplifier to the mast using the supplied plastic mounting strap, ideally about 1m away from the aerial or signal source. We do not recommend attaching the masthead amplifier to the aerial itself as this may change the aerial characteristics and performance. Make sure the cable entries are at the bottom to avoid water ingress.

Alternatively, mount the amplifier in a convenient position to a fascia board or wall with screws inserted through the holes provided in the mounting bracket.

Fitting F-Connectors to the cable

Fit either a professional crimped F-connector with the correct tool or a "twist-on" F-connector following the dimensions in the diagram opposite. Fold the coaxial braid back over the cable sheath neatly and evenly (fig.3). Remove any foil screening to expose the dielectric. Trim the dielectric to expose a maximum 8mm of centre conductor (fig.4). Do not allow the centre conductor to exceed 8mm as it may short inside the F-female on the amplifier. Check that there are no whiskers of braid shorting the centre conductor.

Connect the input and output cables to the correct connectors on the masthead amplifier. All models of Antiference masthead amplifiers are powered by connection of any output. We recommend terminating any unused outputs.

Powering the masthead amplifier

After connecting the input and output cables of the amplifier, fit the power supply securely to a wall or skirting board at the bottom of the aerial downlead and near a convenient mains point. Do not allow the unit to lay on a carpet or other soft furnishing.

The power supply will inject 12v onto the downlead cable and power the masthead amplifier via any output, while passing the signals to the TV receiver.

The power supply is best located in the living room behind the TV or other convenient location. It can be fitted safely in a roof space but keep clear of any insulation material and ensure proper ventilation. The power supply is intended for indoor use only and must be fitted away from any source of water or other liquid. Make sure the power supply is also located away from sources of heat such as a radiator.

Once connected correctly and securely, plug the power supply into the mains and switch on. The "power on" LED will illuminate.

Variable level control

All models have variable level ("gain") control fitted. This can be adjusted for optimum level at the outlet socket to ensure the right amount of digital signal is provided. To access the level control on these models open the door to expose the screened module. The level control is situated on the Left hand side of the front of the module. Use a small flat bladed screwdriver to carefully adjust for optimum signal by turning the level control anti-clockwise to reduce the signal and clockwise to increase the signal level.

Interference 4G

Should you encounter interference from a local 4G transmitter we recommend you install an additional 4G filter Antiference part number FILTLTE. We recommend this is installed before the masthead amplifier or distribution amplifier.

Declaration of Conformity

Hereby, Antiference declares that this amplifier for TV broadcast reception in domestic premises is in compliance with the Radio Equipment Directive 2014/53/EU.

The full Declaration of Conformity is available by contacting the following internet address: www.antiference.co.uk

