

**Kingray** the future proof solution

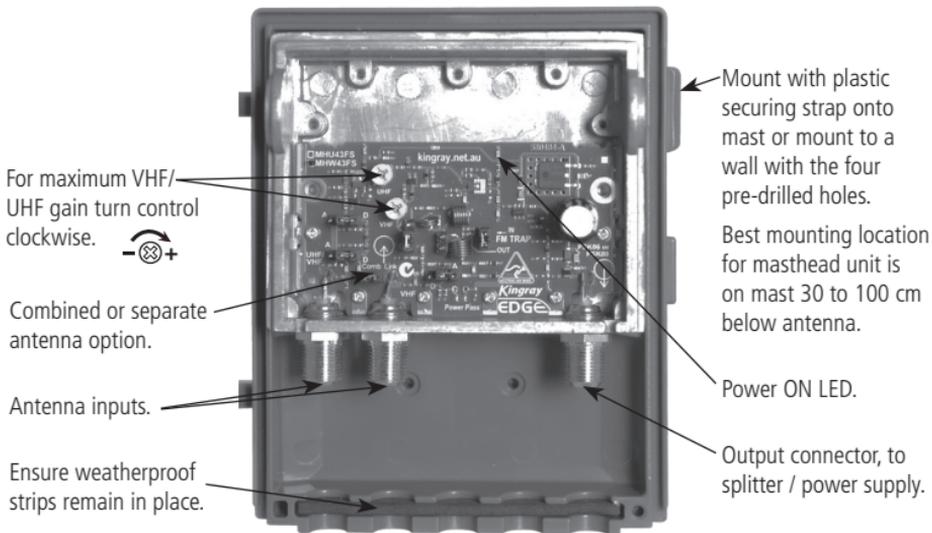
**EDGE**

## MHW43FS/MHU43FS

### FULLY SHIELDED MASTHEAD AMPLIFIERS

Thank you for selecting an Australian designed and built masthead amplifier.

This Kingray Edge series is engineered to provide a future-proof solution with switchable low band VHF and LTE/4G filtering to maximise interference rejection.



## INSTALLATION

The Kingray Edge series of amplifiers have several built-in filters for interference rejection. The inclusion of selectable low band and LTE filtering (for future 4G services) in this series provides a future-proof solution.

The TV channels removed if the LTE filter is selected are 52-69 (NZ 49-62).

In addition, the MHW version include filters for amateur radio and pager frequencies as well as a switchable FM radio filter.

### FM filter (MHW versions only)

To eliminate FM radio interference; make sure the jumper link is on the 'FM trap IN' (DEFAULT).

To amplify FM radio signals, set the jumper link to 'FM trap OUT'. As shown in Fig. 1.

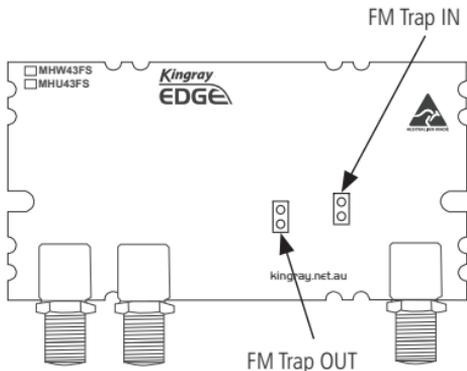
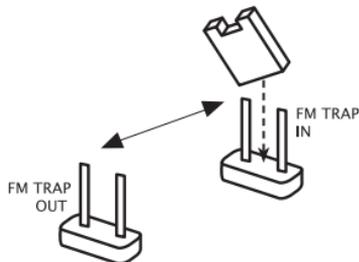


Fig 1

## Analogue mode (default)

To operate this amplifier so that it amplifies all TV bands including low band VHF (44-144MHz), place links in the 'A' position as shown in fig 2. The amplifier will now amplify 44-230 MHz and 520-820 MHz. As shown in Fig.2.

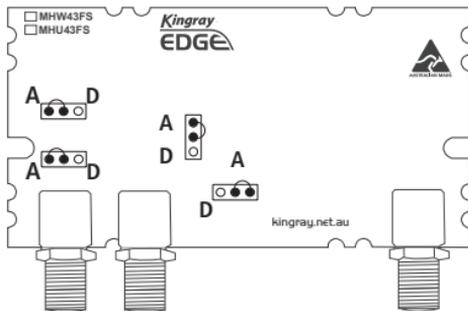


Fig 2

Position the 3 links to be seated on 'A'

## Band 1 and 2 removal (MHW version only)

To operate this amplifier excluding low band VHF, place the links in the 'D' position as shown in Fig 3. The amplifier will now amplify 174-230 MHz and 520-820 MHz. As shown in Fig.3.

### VHF Links

'A' freq 44-230 MHz

'D' freq 174-230 MHz

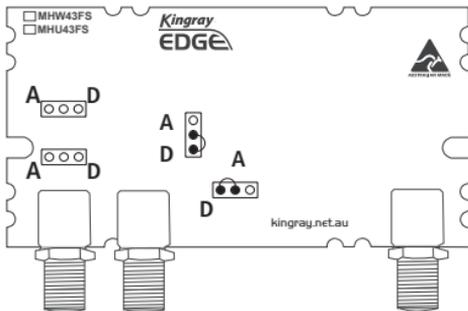


Fig 3

## LTE removal

To operate this amplifier so that the LTE band is also removed, place the link in the 'D' position as shown in Fig 4. The amplifier will now amplify 520-694 MHz in the UHF band. As shown in Fig.4.

### UHF Links

'D' freq 520-694 MHz

'A' freq 520-820 MHz

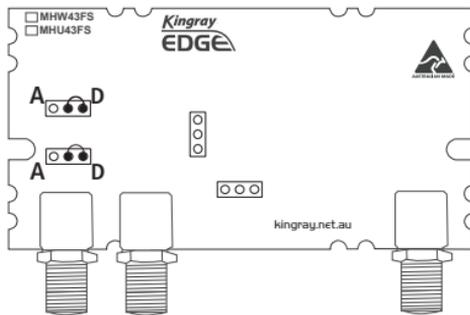
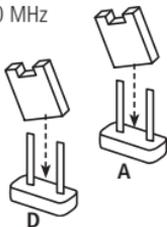


Fig 4

**NOTE:** It is recommended to remove LTE band if there are no TV services being received above 694 MHz.

### Combined or separate antenna option

When using a combination VHF/UHF antenna, make sure the link is on (DEFAULT) and the left hand input is used. For separate UHF and VHF antennas, remove link and use the left hand input for UHF, the middle input for VHF. As shown in Fig.5.

### Power through option (MHU model only)

The MHU models have the ability to pass power through to another amplifier in line. To pass power connect link to jumper labelled power/pass. As shown in Fig.5.

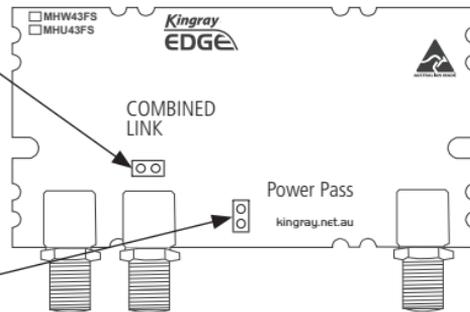
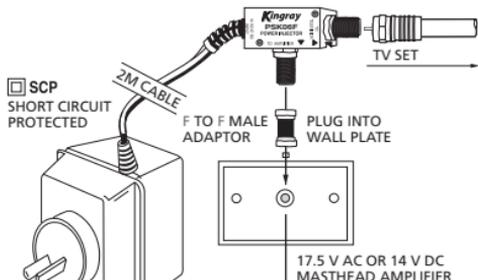


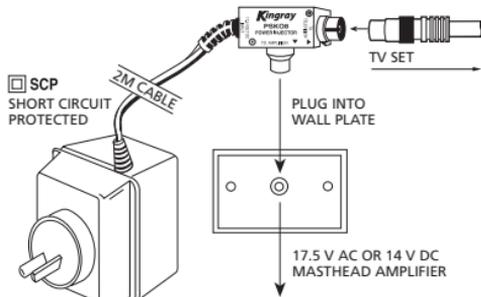
Fig 5

Separate UHF and VHF inputs  
Combination VHF/UHF input

## POWER SUPPLY OPTIONS



PSK06F/08F  
KPS06F/08F



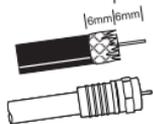
PSK06/08  
KPS06/08

## TECHNICAL ADVICE

1. **Check** there is no earth braid touching the centre conductor on the coaxial cable.
2. **Is there more than one outlet?** Check the splitter box, the power supply must be connected to the coaxial outlet that feeds the AC/DC leg of the splitter box to pass power to the head unit. (Check if LED is on in the amplifier).
3. **Is there now too much signal causing an overload effect?** Try turning down the gain controls on the masthead unit, or select a lower gain amplifier.
4. **There is a white line moving through the picture:** Try a PSK06 14 V DC power supply.

Please see diagrams below for installation tips.

Bare back cable with a cable stripper or Stanley knife.

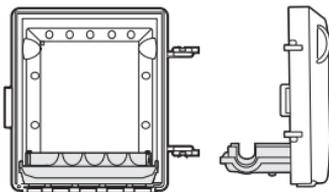


Slide on F connector and crimp or use a twist on connector.



The shielded housing can pivot to easily access connectors.

The lid can be inserted into the plastic outer cover whilst installing.



## SPECIFICATIONS

Frequency range	(A) VHF: 44–230 MHz UHF: 520–820 MHz (D) VHF: 174–230 MHz UHF: 520–694 MHz	Gain control range 35 dB models	VHF: Tilt control 16 – 12 dB UHF: 10 dB
Max gain 35 dB models	VHF: 27–35 dB (W models only) VHF: -2 dB (U models) UHF: 43 dB	Supply voltage	PSK08/F KPS08/F PSK06/F KPS06/F
Output figure	108 dB DIN45004B @ (-60 dB IMR)	MHW43FS only	
		Pager filter	-25 dB @ 148 MHz and 158 MHz
Noise figure	VHF: < 3 dB UHF: < 2.5 dB	FM filter	-25 dB @ 88–108 MHz
		Band 1 filter	-30 dB @ 44 MHz

## STANDARD COMMUNICATIONS CONTRACT WARRANTY AGAINST DEFECTS

This warranty against defects is given by Standard Communications Pty Ltd ACN 000 346 814 (We, us, our or GME). Our contact details are set out in clause 2.7. This warranty statement only applies to products purchased in Australia. Please contact your local GME distributor for products sold outside of Australia. Local distributor details at [www.gme.net.au/export](http://www.gme.net.au/export).

### 1. Consumer guarantees

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- 1.1 Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.
- 1.2 To the extent we are able, we exclude all other conditions, warranties and obligations which would otherwise be implied.

### 2. Warranty against defects

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- 2.1 This warranty is in addition to and does not limit, exclude or restrict your rights under the Competition and Consumer Act 2010 (Australia) or any other mandatory protection laws that may apply.
- 2.2 We warrant our goods to be free from defects in materials and workmanship for the warranty period (see warranty table) from the date of original sale (or another period we agree to in writing). Subject to our obligations under clause 1.2, we will at our option, either repair or replace goods which we are satisfied are defective. We warrant any replacement parts for the remainder of the period of warranty for the goods into which they are incorporated.
- 2.3 To the extent permitted by law, our sole liability for breach of a condition, warranty or other obligation implied by law is limited

- (a) in the case of goods we supply, to any one of the following as we decide -
- (i) the replacement of the goods or the supply of equivalent goods;
  - (ii) the repair of the goods;
  - (iii) the cost of repairing the goods or of acquiring equivalent goods;
- (b) in the case of services we supply, to any one of the following as we decide -
- (i) the supplying of the services again;
  - (ii) the cost of having the services supplied again.
- 2.4 For repairs outside the warranty period, we warrant our repairs to be free from defects in materials and workmanship for three months from the date of the original repair. We agree to re-repair or replace (at our option) any materials or workmanship which we are satisfied are defective.
- 2.5 We warrant that we will perform services with reasonable care and skill and agree to investigate any complaint regarding our services made in good faith. If we are satisfied that the complaint is justified, and as our sole liability to you under this warranty (to the extent permitted at law), we agree to supply those services again at no extra charge to you.
- 2.6 To make a warranty claim you must before the end of the applicable warranty period (see warranty table), at your own cost, return the goods you allege are defective, provide written details of the defect, and give us an original or copy of the sales invoice or some other evidence showing details of the transaction.
- 2.7 Send your claim to:  
Standard Communications Pty Ltd.  
PO Box 96, Winson Hills, NSW 2153.  
Tel: (02) 8867 6000, Fax: (02) 8867 6199  
Email: [servadmin@gme.net.au](mailto:servadmin@gme.net.au)

2.8 If we determine that your goods are defective, we will pay for the cost of returning the repaired or replaced goods to you, and reimburse you for your reasonable expenses of sending your warranty claim to us.

### 3. What this warranty does not cover

- 3.1 This warranty will not apply in relation to:
- (a) goods modified or altered in any way;
  - (b) defects and damage caused by use with non Standard Communications products;
  - (c) repairs performed other than by our authorised representative;
  - (d) defects or damage resulting from misuse, accident, impact or neglect;

- (e) goods improperly installed or used in a manner contrary to the relevant instruction manual; or
- (f) goods where the serial number has been removed or made illegal.

### 4. Warranty period

4.1 We provide the following warranty on GME and Kingray products. No repair or replacement during the warranty period will renew or extend the warranty period past the period from original date of purchase.

Product Type	Warranty Period
Kingray amplifiers, modulators, diplexers and filters, Kingray plug pack power supplies, Kingray Professional rack mount products.	3 years



ISO 9001:2008  
AU97/0906  
List of certified  
characteristics available  
at [www.sgs.com](http://www.sgs.com)



A division of **Standard Communications Pty Ltd.**

Head Office: PO Box 96, Winston Hills, NSW 2153. **T: (02) 8867 6000**, **F: (02) 8867 6199** [www.kingray.net.au](http://www.kingray.net.au)

Tech support: 1300 463 463

#### SYDNEY

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#### MELBOURNE

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F: (03) 9558 9088

E: [vicbranch@gme.net.au](mailto:vicbranch@gme.net.au)

#### BRISBANE

**P: (07) 3278 6444**

F: (07) 3278 6555

E: [qldbranch@gme.net.au](mailto:qldbranch@gme.net.au)

#### ADELAIDE

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#### PERTH

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#### AUCKLAND

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