

# *Kingray*

**BY ZINWELL**

Model No: KMS-F1

## **Multistacker**

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Input Frequency:

Range 950~2350 MHz

Output Frequency:

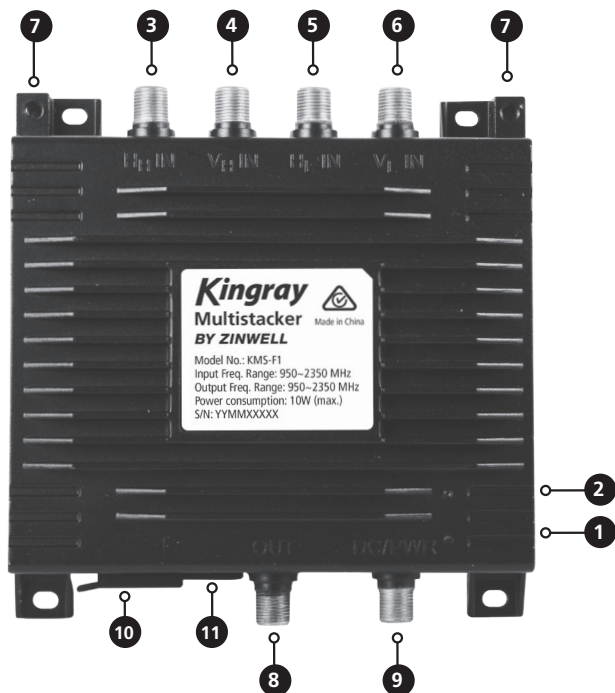
Range 950~2350 MHz

INSTRUCTION MANUAL

## INTRODUCTION

Thank you for purchasing the Kingray KMS-F1 Multistacker. Please read this manual carefully prior to installation as it contains information which will ensure you achieve the best performance from your KMS-F1.

The satellite multistacker is a standalone device that can be installed directly after a twin or quad universal vertical - horizontal LNBF. It is typically installed before the first distribution point in the SMATV system.



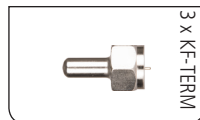
## MAIN FEATURES

- |                       |                                     |                      |
|-----------------------|-------------------------------------|----------------------|
| 1. Power Led          | 6. V <sub>L</sub> IN                | 10. 5 Way Dip Switch |
| 2. Status Led         | 7. Ground                           | 11. Waterproof Cap   |
| 3. H <sub>Hi</sub> IN |                                     |                      |
| 4. V <sub>H</sub> IN  |                                     |                      |
| 5. H <sub>L</sub> IN  | 8. RF Out<br>(12V DC Line Powering) |                      |
|                       | 9. 12V DC Power In<br>(F Connector) |                      |

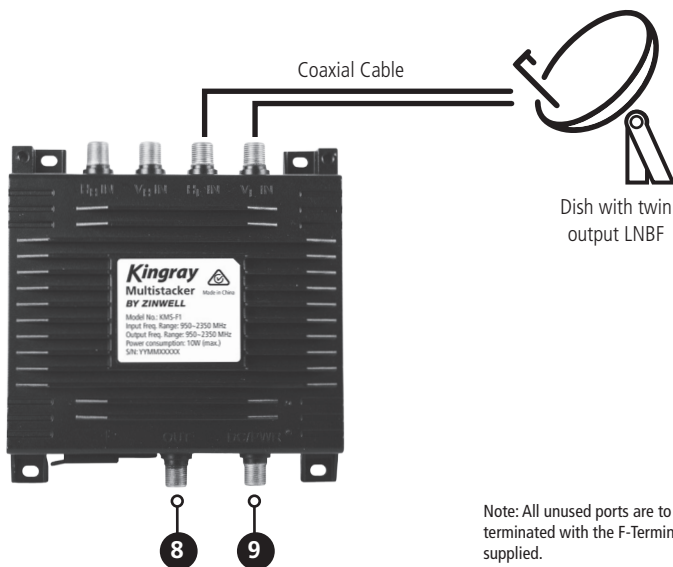
## IN THE BOX



\*Note: for indoor use only



## INSTALLATION REFERENCE GUIDE



Note: All unused ports are to be terminated with the F-Terminators supplied.

## SPECIFICATIONS

Input Port		Output Port		System	
Input Frequency Range	950-2350 MHz	Output Frequency Range	950-2350 MHz	Power Supply	From External Power Inserter (F Connector)
Input Ports	4 each	Output Port	1 each	Input Voltage Range from DC Jack	12 ~19
Typical Input Power Range	65-85dBμV	Typical Output Power Range	80-85dBμV	DC Current Consumption (Excluding LNBFs)	0.75A @12V Max, (10W)
Input Return Loss	> 10dB	Output Return Loss	> 10dB	Operating Temperature	-20 °C ~ 60°C
Input Connectors	75 Ω F Type (Female) each	Output Connectors	75 Ω F Type (Female) each		

## SATELLITE PLANS LIST OF OPTUS D3 & C1 NON STACKED & STACKED I.F.

Transponder	Non Stacked	NAT 01	NSW 02	VIC 03	QLD 04	SA 05	WA 06	TAS 07	NT 08
D3T4	1145.0	2153.5	2070.5	2029.0	1618.0	979.0	1527.5	2070.5	2070.5
D3T8	1311.0	2195.0	2029.0	1618.0	1527.5	2070.5	979.0	2029.0	2029.0
D3T10	1394.0	2236.5	979.0	2070.5	2029.0	1527.5	1618.0	1527.5	1527.5
D3T11	1435.5	2278.0	1527.5	979.0	2070.5	1618.0	2029.0	979.0	1618.0
D3T12	1477.0	2319.5	1618.0	1527.5	979.0	2029.0	2070.5	1618.0	979.0
D3T13	1020.5	1020.5	1020.5	1020.5	1020.5	1020.5	1020.5	1020.5	1020.5
D3T14	1062.0	1062.0	1062.0	1062.0	1062.0	1062.0	1062.0	1062.0	1062.0
D3T15	1103.5	1103.5	1103.5	1103.5	1103.5	1103.5	1103.5	1103.5	1103.5
D3T16	1145.0	1145.0	1145.0	1145.0	1145.0	1145.0	1145.0	1145.0	1145.0
D3T17	1186.5	1186.5	1186.5	1186.5	1186.5	1186.5	1186.5	1186.5	1186.5
D3T18	1228.0	1228.0	1228.0	1228.0	1228.0	1228.0	1228.0	1228.0	1228.0
D3T19	1269.5	1269.5	1269.5	1269.5	1269.5	1269.5	1269.5	1269.5	1269.5
D3T20	1311.0	1311.0	1311.0	1311.0	1311.0	1311.0	1311.0	1311.0	1311.0
D3T21	1352.5	1352.5	1352.5	1352.5	1352.5	1352.5	1352.5	1352.5	1352.5
D3T22	1394.0	1394.0	1394.0	1394.0	1394.0	1394.0	1394.0	1394.0	1394.0
D3T23	1435.5	1435.5	1435.5	1435.5	1435.5	1435.5	1435.5	1435.5	1435.5
D3T24	1477.0	1477.0	1477.0	1477.0	1477.0	1477.0	1477.0	1477.0	1477.0
C1T11	1578.0	1578.0	1578.0	1578.0	1578.0	1578.0	1578.0	1578.0	1578.0
C1T12	1658.0	1658.0	1658.0	1658.0	1658.0	1658.0	1658.0	1658.0	1658.0
C1T13	1698.0	1698.0	1698.0	1698.0	1698.0	1698.0	1698.0	1698.0	1698.0
C1T14	1738.0	1738.0	1738.0	1738.0	1738.0	1738.0	1738.0	1738.0	1738.0
C1T15	1778.0	1778.0	1778.0	1778.0	1778.0	1778.0	1778.0	1778.0	1778.0
C1T16	1818.0	1818.0	1818.0	1818.0	1818.0	1818.0	1818.0	1818.0	1818.0
C1T17	1858.0	1858.0	1858.0	1858.0	1858.0	1858.0	1858.0	1858.0	1858.0
C1T18	1898.0	1898.0	1898.0	1898.0	1898.0	1898.0	1898.0	1898.0	1898.0
C1T19	1938.0	1938.0	1938.0	1938.0	1938.0	1938.0	1938.0	1938.0	1938.0
C1T20	1989.0	1989.0	1989.0	1989.0	1989.0	1989.0	1989.0	1989.0	1989.0

## STACKER SWITCH POSITION - TABLE 1

Switch Number	1	2	3	4	5	STB Setting
NAT	OFF	OFF	OFF	OFF	OFF	NAT 01
NSW + ACT	<b>ON</b>	OFF	OFF	OFF	OFF	NSW 02
VIC	OFF	<b>ON</b>	OFF	OFF	OFF	VIC 03
QLD	<b>ON</b>	<b>ON</b>	OFF	OFF	OFF	QLD 04
SA	OFF	OFF	<b>ON</b>	OFF	OFF	SA 05
WA	<b>ON</b>	OFF	<b>ON</b>	OFF	OFF	WA 06
TAS	OFF	<b>ON</b>	<b>ON</b>	OFF	OFF	TAS 07
NT	<b>ON</b>	<b>ON</b>	<b>ON</b>	OFF	OFF	NT 08

Table 1: Shows Multistacker Dip Switch settings and STB State Settings

The following tables shows the vertical stacked transponders for each state throughout Australia. The multistacker is shipped with all dip switched set to the off position which is set for the national plan. This plan has higher frequencies which are used to commission an MDU – Commercial backbone before the correct state is selected. The new state is retuned within 30 to 60 seconds of selecting the required plan. Meter plans have been listed on the left from 01 to 08.

## MULTISTACKER METER PLANS - TABLE 2

METER PLAN	12853.5	12895	12936.5	12978	13019.5
S NAT 01	G35 T4	G34 T8	G31 T10	G32 T11	G33 T12
	11679	12227.5	12318	12729	12770.5
S NSW 02	G31 T10	G32 T11	G33 T12	G34 T8	G35 T4
S VIC 03	G32 T11	G33 T12	G34 T8	G35 T4	G31 T10
S QLD 04	G33 T12	G34 T8	G35 T4	G31 T10	G32 T11
S SA 05	G35 T4	G31 T10	G32 T11	G33 T12	G34 T8
S WA 06	G34 T8	G35 T4	G31 T10	G32 T11	G33 T12
S TAS 07	G32 T11	G31 T10	G33 T12	G34 T8	G35 T4
S NT 08	G33 T12	G31 T10	G32 T11	G34 T8	G35 T4

Table 2: Shows vertical transponder groups stacked to the new H polarity transponder Frequency

Important Note: It is crucial that the correct plan is selected for the required state, if this is not carried out the subscriber will be missing some if not all vertical channel groups. Resulting in a “No Signal” status.

The stacker has been fitted with a 5 position dip switch which is switched to match the State installed. This allows Foxtel to make better use of Transponder space in the event that the total 32 transponders are used.



Dip Switches on the multistacker are switched to match up to the state/territory it is installed in.

## SAFETY WARNING

### 1. Indoor Use Only

To avoid the risk of fire or electric shock, do not expose the receiver to rain or moisture.

Operating temperature : -20 °C ~ 60°C

### 2. Overheating avoid

To prevent the multistacker from overheating, do not operate it in an area that exceeds the maximum recommended temperature of 60 C. To prevent airflow restriction, allow adequate clearance around the multistacker.

### 3. Grounding

This equipment is intended to be grounded in a commercial application. For further information on when to ground the installation refer to Section 7.2.5 Earthing & Equipotential Bonding of the Foxtel's MDU MRE and Commercial Satellite

Installation Manual FD/T/E/2207.

### 4. Installation

Only trained and qualified personnel should be allowed to install, replace or service this equipment. The installation of the equipment must comply with FOXTEL's installation guidelines.

Note: All statements, information and recommendations in this manual are believed to be accurate at the time of print.

## OTHER APPROVED FOXTEL MULTISTACKER PRODUCTS FROM KINGRAY

Description	Part No.	IPL
2 Way Splitter	KSP2F	F30950
3 Way Splitter	KSP3F	F30951
4 Way Splitter	KSP4F	F30952
FTA/SAT Diplexer	KDPTSF	F30953
4 Way 12dB Tap	KT412F	F30954
4 Way 15dB Tap	KT415F	F30955
4 Way 20dB Tap	KT420F	F30956
F Type Wall Plate	KWP11F	F30923
Single Input 25dB Amplifier	SAT25S	F30948
Single Input 40dB Amplifier	SAT40S	F30949

## STANDARD COMMUNICATIONS 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.

### 1. Consumer guarantees

- 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

- 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 Winston Hills, NSW 2153, Australia.  
Tel: (02) 8867 6000 Fax: (02) 8867 6199  
Email: 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 illegible.

### 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
Satellite Multistacker & Power supply provided	2 years

 **1300 463 463**  **kingray.net.au**

A division of Standard Communications Pty Ltd.

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