Matchmaster
For the Best

14MM-JA08, 14MM-JA16 & 14MM-JA32
INSTRUCTION MANUAL

GENERAL SAFETY INSTRUCTIONS
Read these instructions carefully before connecting the device

To prevent fire, short circuit or electric shock hazard:
- Do not expose the device to rain or moisture of any kind.
- Install the device in a dry location without infiltration or condensation of water.
- Do not place objects filled with liquids on the device.
- If any liquid should accidentally spill into the cabinet or onto the device, disconnect the power plug.

To avoid any risk of overheating:
- Install the device in a well aired location and keep a minimum distance of 15 cm around the device for sufficient ventilation
- Do not place any items on the device that might cover the ventilation holes.
- Do not place any naked flame sources on or near the device
- Do not install the device in a dusty location.
- Follow the minimum and maximum temperature specifications

To avoid any risk of electrical shocks:
- Connect devices only to power outlets with protective earth connection.
- The mains plug shall remain readily operable
- Disconnect power plug to connect or disconnect any RF cables.
- To avoid electrical shock, do not open the housing of the device.

Maintenance:
- Only use a dry soft cloth to clean the outside of the device
- Do not use solvent
- For repairing and servicing refer to qualified personnel

Dispose of in a responsible manner and recycle where possible.

CONDITIONS OF WARRANTY

Matchmaster warrants the product as being free from defects in material and workmanship for a period of 24 months starting from the date of sale. See note below.

If during this period of warranty the product proves defective, under normal use, due to defective materials or manufacturing, Matchmaster, at its sole discretion, will repair or replace the product. Return the product to your local dealer for reparation. The warranty is applied only for defects in material and manufacturing and does not cover damage resulting from:
- Misuse or use of the product out of its specifications
- Installation or use in a manner inconsistent with the technical or safety standards in force in the country where the product is used
- Use of non-suitable accessories (power supply, adapters, etc)
- Installation in a defect system
- External use beyond the control of Matchmaster such as Accidental dropping, Lightning Strikes, Water damage, Improper Installation or Ventilation, Storm or Tempest etc.

The warranty is not applied if:
- Production date or serial number on the product is illegible, altered, deleted or removed.
- The product has been opened or repaired by a non-authorized person.

Note: Date of production can be found in the product's serial number code. The format will either be "YEAR W WEEK" (e.g., 2017W32 = year 2017 week 32) or "YYWW" (e.g., 1732 = year 2017 week 32).

PRODUCT DESCRIPTION

- Active tap developed for single cable (Foxtel) SMS systems
- TERR + SAT input are filtered before amplification, slope control and attenuation is applied then is split out to 8, 16 or 32 ways
- Output level will be greater than input level
- Can be DC powered via 3 ways: DC in, RF in and 1 RF out port indicated on label

IMPORTANT

- Please read this instruction carefully for correct use of the product and store it for future reference purposes.
- All the examples and pictures used here are for reference only.
- The contents of this manual are subject to change without notice.

INSTALLATION

The JA08, JA16 & JA32 are intended for indoor use.
Install the active taps so there is free circulation of air (minimum of 15cm free space around the device) around the tap and sufficient space for the cable connections.

POWERING OPTIONS

1. **Local Powering:** Connect to the DC input F port.
2. **Remote Powering:** Integrated power via the input F port.
3. **Line Powering:** Can be line powered via an output port (see diagram 1.0)

ADJUSTMENTS

Attenuation: Set the Attenuation pots for both Satellite and Terrestrial according to network design or requirements.
Equalisation (Slope): Set the equalisation pot for Satellite to network design or requirements, Terrestrial slope is fixed.

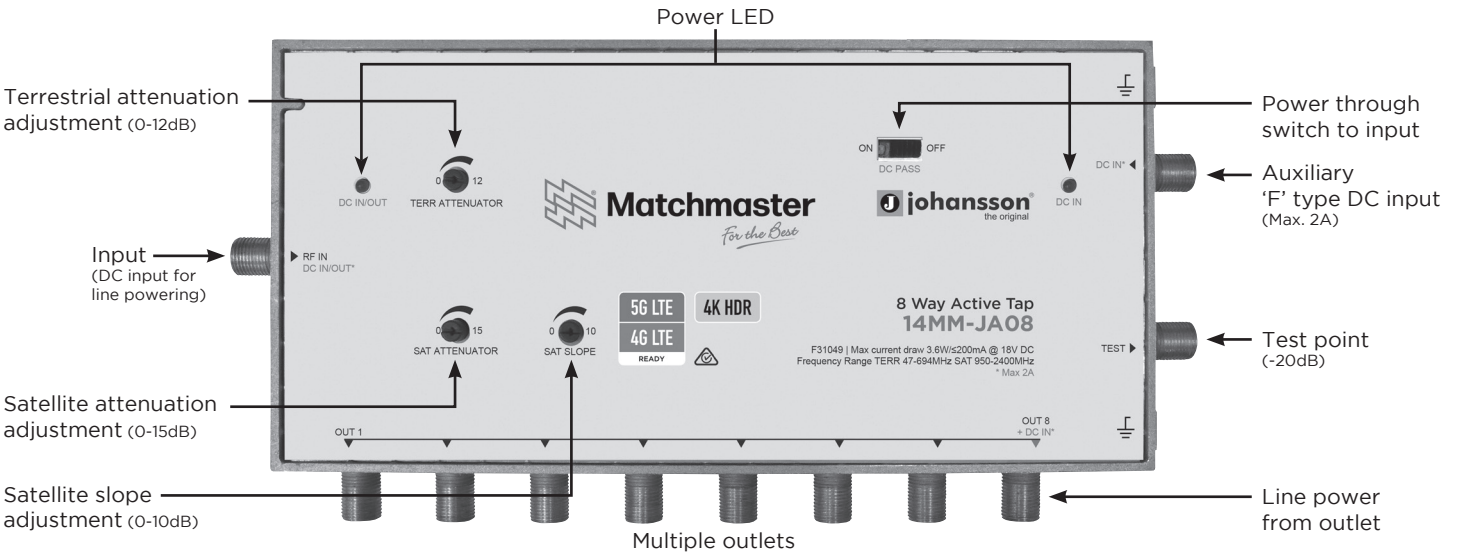
CABLE CONNECTIONS

See diagrams 1.0.

CABLE CONNECTIONS

Power up via the RF input: DC Switch needs to be in the OFF position.
Power up via the RF output port: DC Switch needs to be in the "OFF" position
Powering via the Auxiliary DC input and Line Powering to additional Active Taps: DC Switch in "OFF" position, only select the switch to the "ON" position to send power out via the RF input to line power additional devices (Maximum 4 Active taps per power supply)

DIAGRAM 1.0



TECHNICAL SPECIFICATIONS

Parameters	Unit	14MM-JA08	14MM-JA16	14MM-JA32
Terrestrial frequency Satellite frequency	MHz MHz	47 – 694 950 - 2400		
Return Loss (47-694MHz + 950-2400MHz)	dB dB	12 (Typically) >10 (Minimum)		
Port to Port Isolation (47-694MHz + 950-2400MHz)	dB dB	30 (Typically) >27 (Minimum)		
Screening effectiveness IEC 60996-1	dB dB	≥ 75dB (30MHz to 1000MHz) ≥ 65dB (1000MHz to 2400MHz)		
Input Port	-	Single F female connector		
Output Port	-	F female connectors		
Test Port	dB	-20		
FTA Gain	dB	12		
Sat Gain	dB	15		
Upper Limit Gain FTA & SAT TER & SAT	 dB dBµV	 90 90		
FTA Fixed Slope Control	dB	4		
Sat Slope Control 950-2400MHz	dB	0-10 (adjustable)		
Isolation at any output FTA - SAT	dB	≥35 (via internal diplexer)		
Powering Options	-	Via external power supply Via input port Via output port		
Input Voltage	V	12–20 (for all DC power ports)		
Max current @ RF input port @ RF output port @ DC input port	 A A A	 2.0 2.0 2.0		
Consumption	mA (@18V) W	200 3.6	250 4.5	350 6.3
Voltage present at the input port		Switchable on/off power at the RF input 18 volts with the option of passing 2amp load		
Output Port to be active		With no voltage from the STB OK		

AU Technical Support	1800 AERIAL [237 425]	www.matchmaster.com.au
NZ Technical Support	0800 AERIAL [237 425]	www.matchmaster.co.nz