

RMC-1

VHF FM RECEIVER MULTI-COUPLER

The RMC-1 Receiver Multi-Coupler is a compact unit requiring only 1U Rack space. Three options are available. 1. 12 way multi-coupler and 6 way multi-coupler and 6 way splitter with individual tuneable filters.

The RMC-1 (12 way) consists of an Antenna input which is routed via a wide VHF FM Band-pass filter to a High Level amplification stage (+24db gain) followed by a double conversion Wilkinson 12 way splitter to 12 x BNC outputs.

The RMC-1 (6 way) consists of an Antenna input which is routed via a wide VHF FM Band-pass filter to a High Level amplification stage (+24db gain) followed by a double conversion Wilkinson 6 way splitter. The Splitter outputs are then routed to 6 x BNC outputs and (option 1), with 6 x tunable bandpass filters on outputs.



Features

19" Rack mounted unit (1U)

Splitting of a single receive antenna feed to 6 or 12 separate outputs

Optional input RF amplifier stage (unity or +24dB gain)

Optional Tunable filter for each output stage.

TECHNICAL SPECIFICATIONS

PARAMETER

SPECIFICATION

Antenna input connector:	50 Ohm N Type (Female).
Output connectors:	6 or 12 x BNC (Female).
Antenna input Return Loss	≥15dB 87.5 to 108MHz
Output 1dB Compression point	19dBm
Noise figure	≤4dB
Overall Conversion gain 6 way	≥1dB +/-1dB
Overall Conversion gain 12 way	≥4dB +/-2dB
Output to Output isolation	≥25dB
Band-pass filter bandwidth (-3db)	3MHz (Option 1)
Bandpass filter loss	approximately 2dB.
Amplifier gain	+24dB +/-1dB
Input BPF	≤-35dB @70MHz

POWER SUPPLY

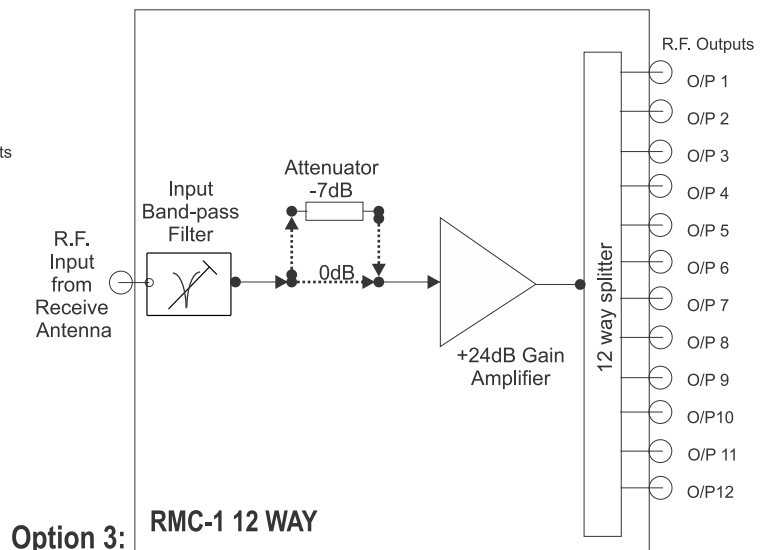
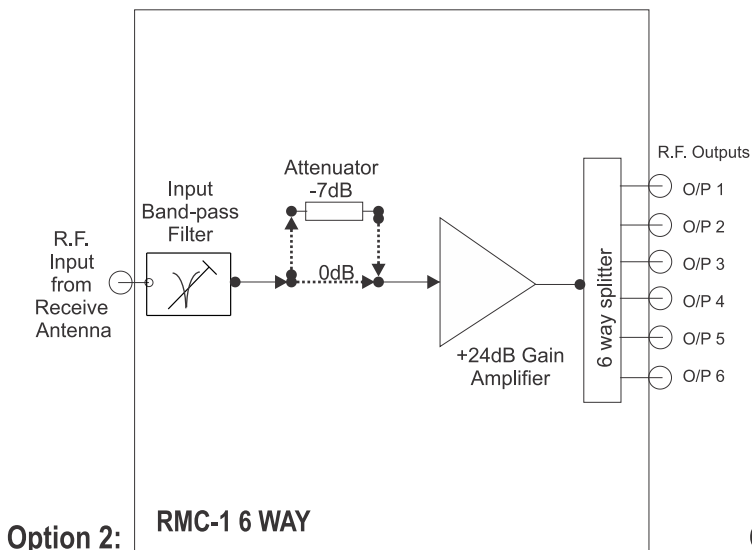
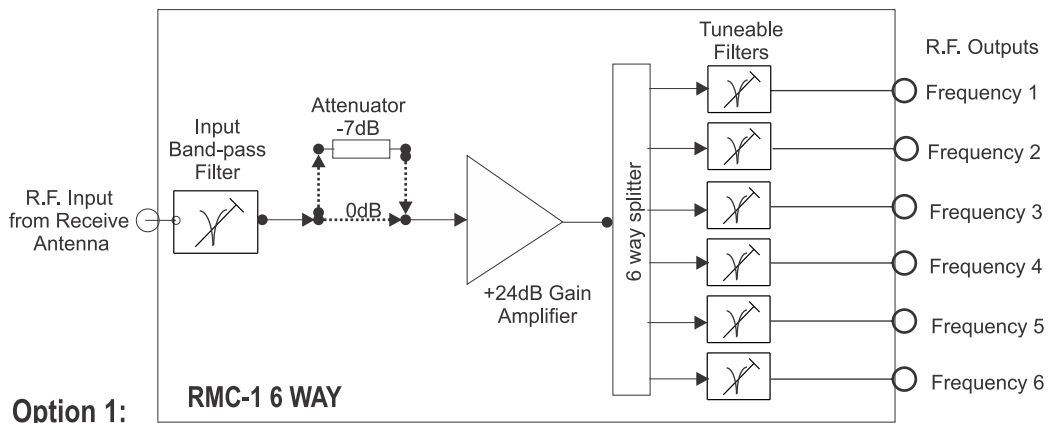
AC Power Input	230V +/-15% 110V (optional)
AC Frequency Variation	50 - 60 Hz
Power Consumption	6VA
A/C Mains connector:	IEC 230V.
A/C Mains fuse:	1 Amp 20mm type.

ENVIRONMENTAL

Storage temperature	-40 to +60 °C
Operating temperature	-10 to +45 °C
Operating altitude	<2500 metres
Humidity	20 to 90% (non condensing)

PHYSICAL

Dimensions (mm)	455W x 350D x 44.45H (1U)
Weight	3kg



SCHEMATIC DIAGRAM OF RMC-1 6 or 12 WAY RECEIVER MULTI-COUPLER