

Specifications - Typical at 25°C

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|-------------------------------------|--|
| Frequency range | 60- 960 MHz |
| Insertion Loss: RF outputs 1-8 | 10.5 ± 0.5 dB |
| Insertion Loss variation with temp. | ±0.2 dB |
| Impedance | 50 ohm |
| Input return loss | >14 dB |
| Output return loss | >14 dB |
| Isolation between outputs | >20 dB |
| Maximum Input Level | 24 dBm |
| RF Connectors | N female |
| Operating temperature range | -30 to +60 °C |
| Earthing | M6 earthing stud |
| Mechanical Dimensions | To fit a 1U high rack space 44x482x120mm, including connectors |
| Weight | 1.2 kg |

Help

For help on using this product contact your nearest RFI Sales Office.

RX0696-3008-31
EXPANSION SHELF

Quick Start Guide



INTRODUCTION

The RFI Receiver Multicoupler Expansion Shelf is a wideband low loss 8 way splitter with high isolation between outputs and is available as an optional accessory for the range of RFI Receiver Multicouplers to expand system channel capacity. The Expansion Shelf is designed for broadband operation and is suitable for use with any model in the RFI Receiver Multicoupler range.

INSTALLATION

Mounting

The Expansion Shelf is to be mounted indoors only. It is designed to fit in a 1U rack space and should be mounted clear of any equipment that generates excess heat.

Earthing

Connect an earthing strap from the chassis to an appropriate earth point to protect the Expansion Shelf from being exposed to high transient voltages.

RF Input

The specified maximum signal level into this input should be observed to avoid damaging the input circuitry.

RF Outputs 1 to 8

Eight equal level N connector RF outputs are available. Best performance will be achieved if 50 ohm terminations are fitted to any unused RF outputs however, as the outputs are well isolated from each other, the performance degradation is minimal if the unused RF outputs are left unterminated.

Cabling

Please ensure that all cables to the Expansion Shelf are properly grounded to avoid lightning transients travelling to the unit. If the Expansion Shelf is located some distance from the Receiver Multicoupler longer cables will be required. Only use high quality, well screened coaxial cables between units.

Connection to the Receiver Multicoupler

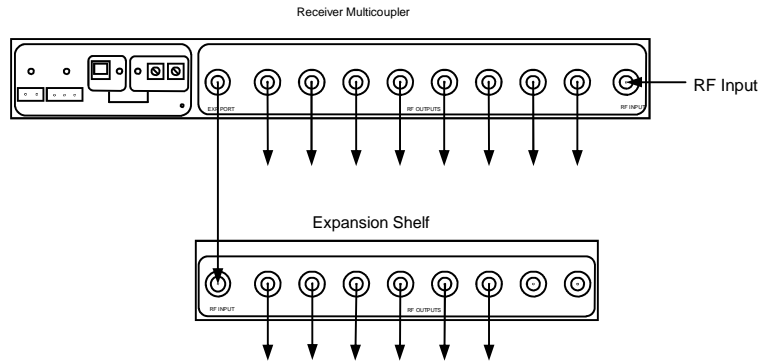
Connect the supplied N male to N male cable from the Receiver Multicoupler Expansion Port or RF Output (as determined by configuration) to the RF Input on the Expansion Shelf.

Using Multiple Expansion Multicouplers

In systems where more than 16 outputs are required multiple Expansion Shelves can be used with one Receiver Multicoupler. Using multiple units, up to 128 equal level outputs can be provided.

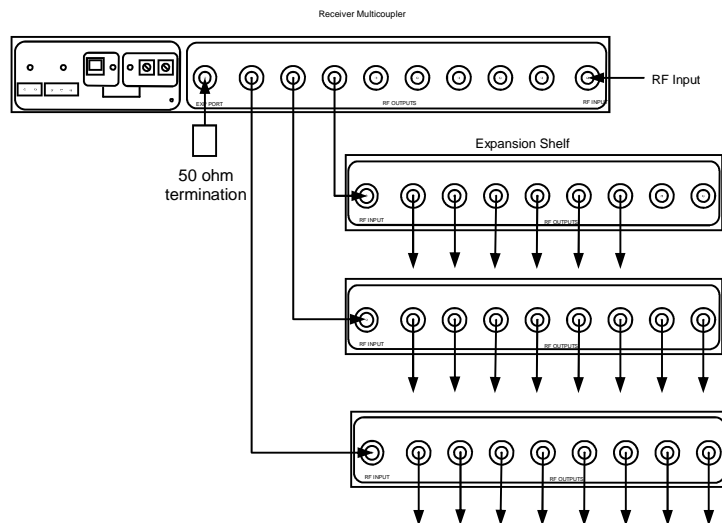
Receiver Multicoupler - Expansion Shelf Configurations

Up to 16 Outputs



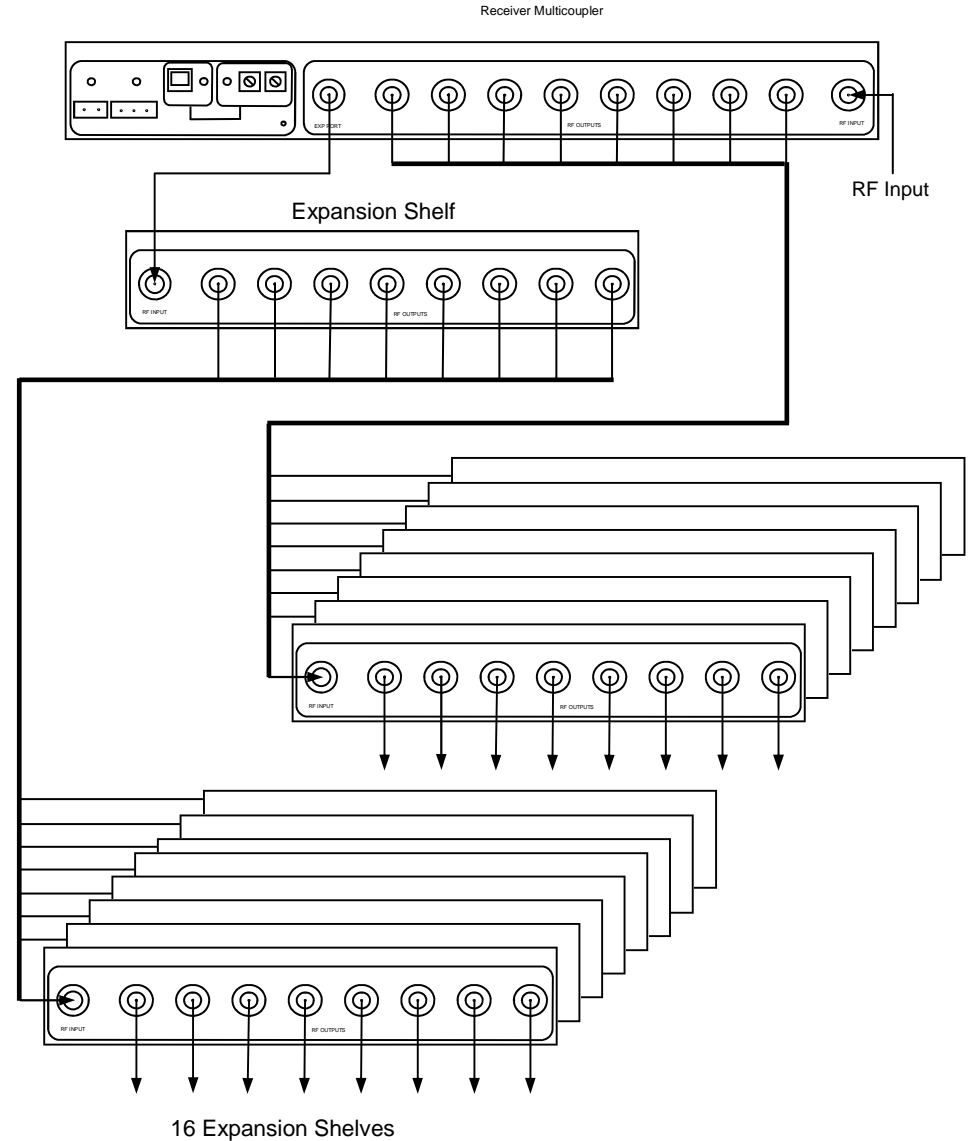
Example: 14 RF Outputs each with a gain of 0 to +15dB

Up to 64 Outputs



Example: 22 RF Outputs each with a gain of 0 to +5dB

Up to 128 Outputs



Example: 128 Outputs each with a gain of 0 to +5dB