



**Audio Specialties Group
Products Division**

**MAS-517
High-Power Divider
Technical Specifications**

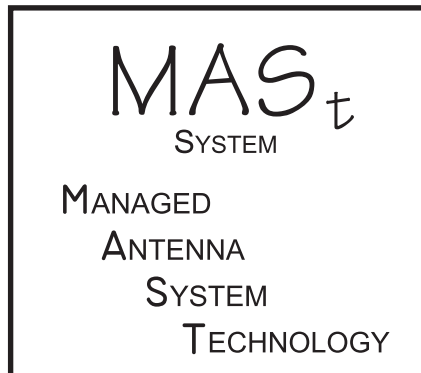


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SECTION 1 INTRODUCTION

The MAS-517 Transmit Signal Power Divider is a 1-HP (horizontal pitch) module that is compatible with the ASG MAS-Rack Series 500 system. It is a passive device used for feeding up to four intentional radiators.

SECTION 2 FEATURES

Available as a 1x2 or 1x4 version, the MAS-517 serves to distribute a high-power transmitter or transmit amplifier. An optional front-panel TEST output is available for signal monitoring without interrupting the transmission outputs.

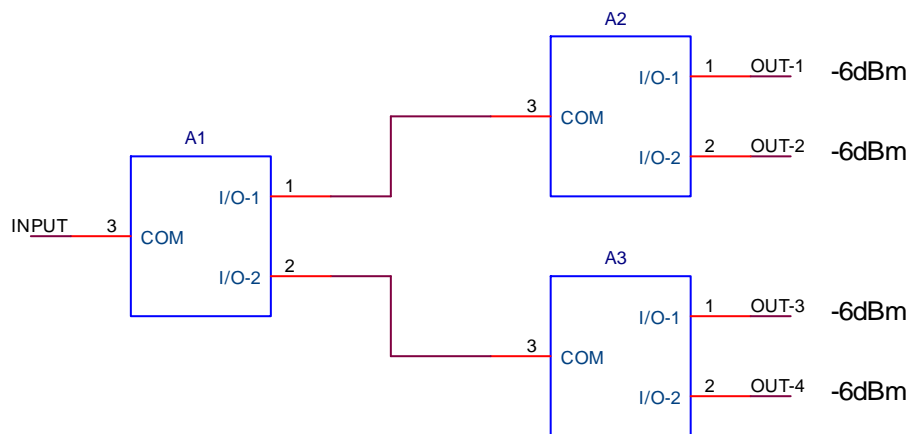
SECTION 3 OPERATION

3.1 Configurations

A single RF connection is provided for the input. Each of the four outputs a -6dBm^1 equivalent signal. These outputs would typically be routed to individual transmit antennas used to cover separate electromagnetically isolated regions of the same facility. For example, a single IFB transmitter needs to feed two studios, a news room and the loading dock, the MAS-517 can deliver the required signal to a transmitting antenna in each area. When used in conjunction with a power amplifier of sufficient output level, the MAS-517 can deliver a full legal limit of 250mW on each output.

3.1.1 1x4 Configuration

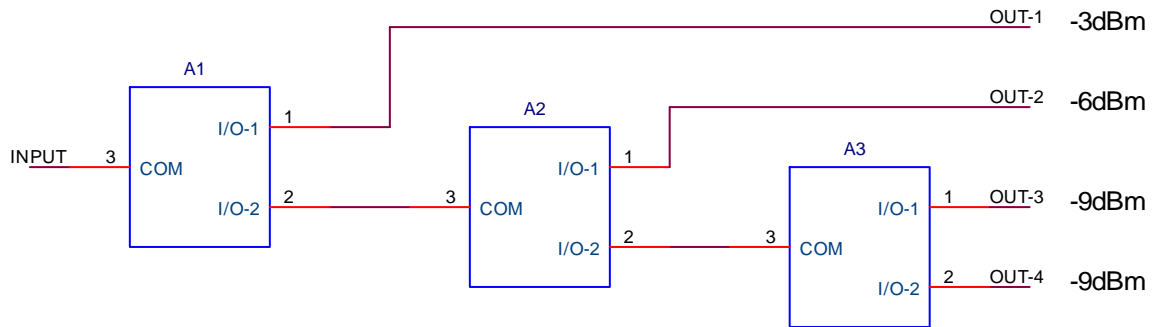
Each output provides an equivalent level signal for applications which require evenly distributed power to four separate areas. Each output is 6dBm below input amplitude.



¹ Loss values represent a simulated ideal device. Actual values may be $\pm 1.5\text{dBm}$ from stated value. See Section 4, Specifications for details.

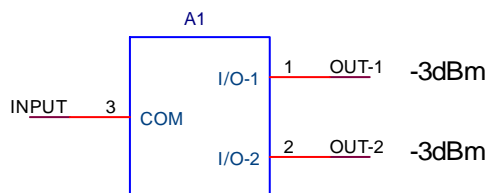
3.1.2 1x4 Cascade Configuration

In this configuration, output #1 is 3dBm, output #2 is 6dBm, output #3 and #4 are each 9dBm below input amplitude. This allows a minimum loss output for applications requiring maximum power delivery for the largest studio and outputs with less output level for applications which require less than the maximum available.



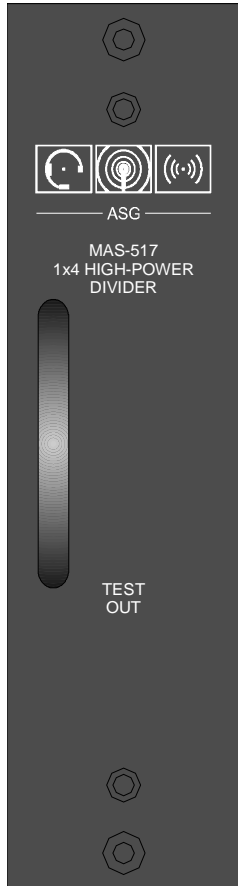
3.1.3 1x2 Configuration

For the 1x2 version, only two output connectors are provided. Each output is 3dBm below the input signal amplitude.

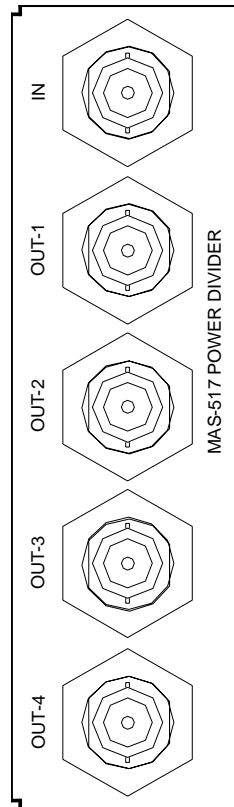


3.2 PANEL LAYOUTS

3.2.1 Front Panel Layout



3.2.2 Rear Panel Layout



SECTION 4 SPECIFICATIONS

4.1 Electrical Specifications

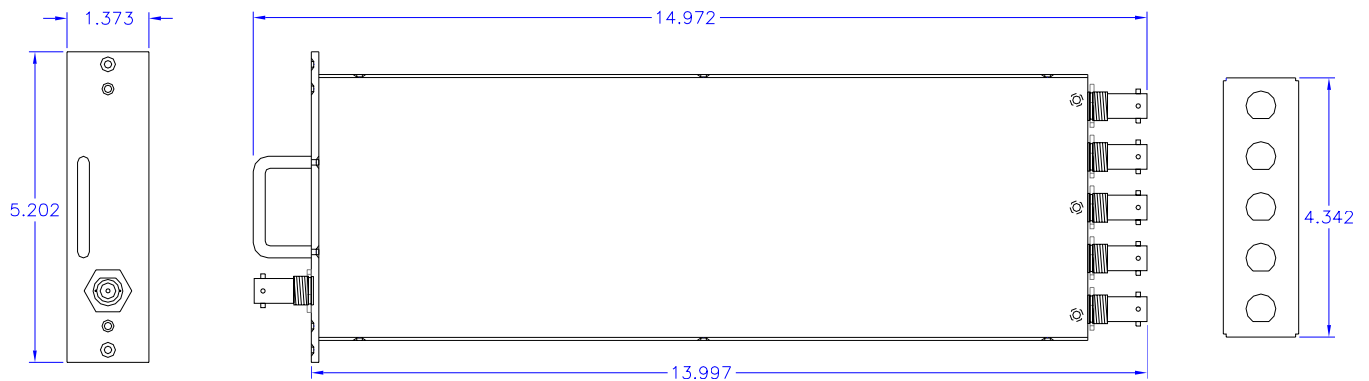
RF Bandwidth :	100MHz to 1GHz
Noise Figure:	na
Maximum output:	na
Maximum RF Input level:	+36dBm (5 Watts) with no damage. Single Carrier

Output Level variation from simulated ideal:	+0 to -2dBm across entire stated bandwidth
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4.2 Operational Conditions

Temperature 20 Degrees Celsius to 60 Degrees Celsius

4.3 Mechanical Parameters



Specifications subject to change without notice.

Measured Performance (MAS-517)

Serial # _____

Test Parameters

Average Loss across 470-700MHz

Output #1 _____

Output #2 _____

Output #3 _____

Output #4 _____