



**Audio Specialties Group  
Products Division**

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



## TABLE OF CONTENTS

|           |                      |   |
|-----------|----------------------|---|
| SECTION 1 | INTRODUCTION .....   | 3 |
| SECTION 2 | FEATURES .....       | 3 |
| SECTION 3 | OPERATION .....      | 3 |
| 3.2       | PANEL LAYOUTS .....  | 5 |
| SECTION 4 | SPECIFICATIONS ..... | 6 |

## 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.

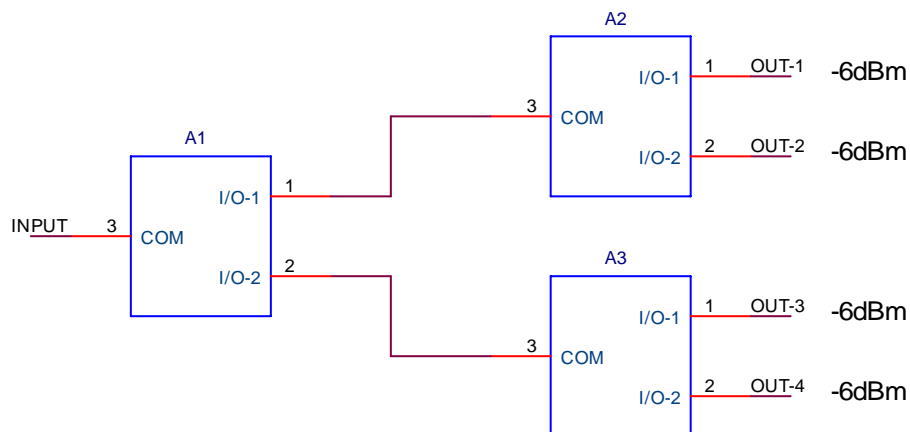
## SECTION 3 OPERATION

### 3.1 Configurations

A single RF connection is provided for the input. Each of the four outputs a  $-6\text{dBm}^1$  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

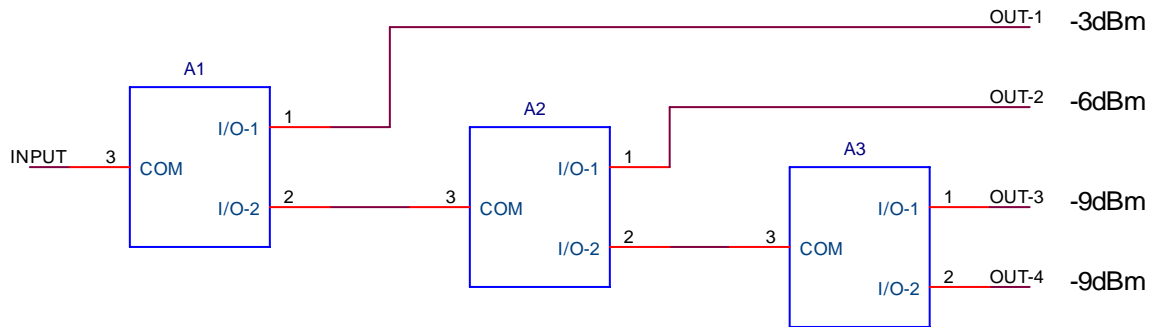
Each output provides an equivalent level signal for applications which require evenly distributed power to four separate areas. Each output is 6dBm below input amplitude.



<sup>1</sup> 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.

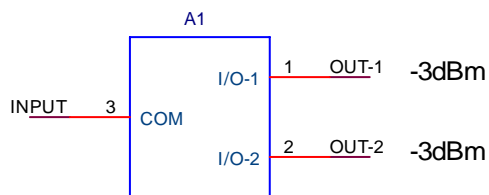
### 3.1.2 1x4 Cascade Configuration

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.



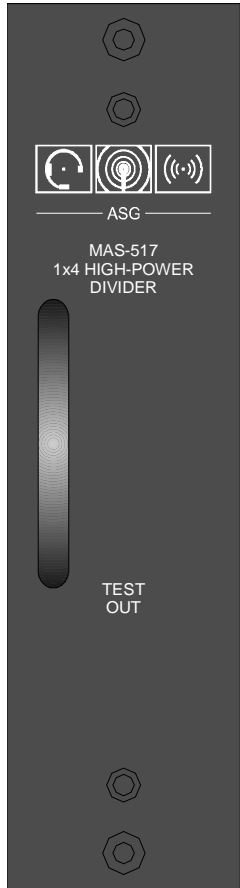
### 3.1.3 1x2 Configuration

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

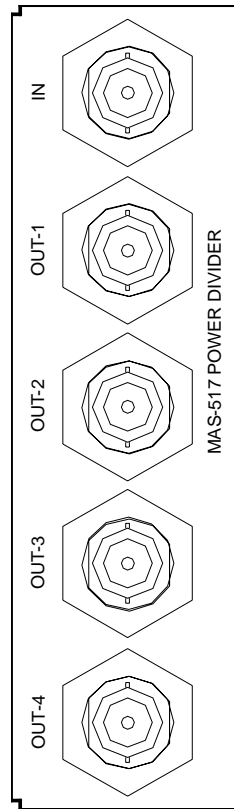


## 3.2 PANEL LAYOUTS

### 3.2.1 Front Panel Layout



### 3.2.2 Rear Panel Layout



## SECTION 4 SPECIFICATIONS

### 4.1 Electrical Specifications

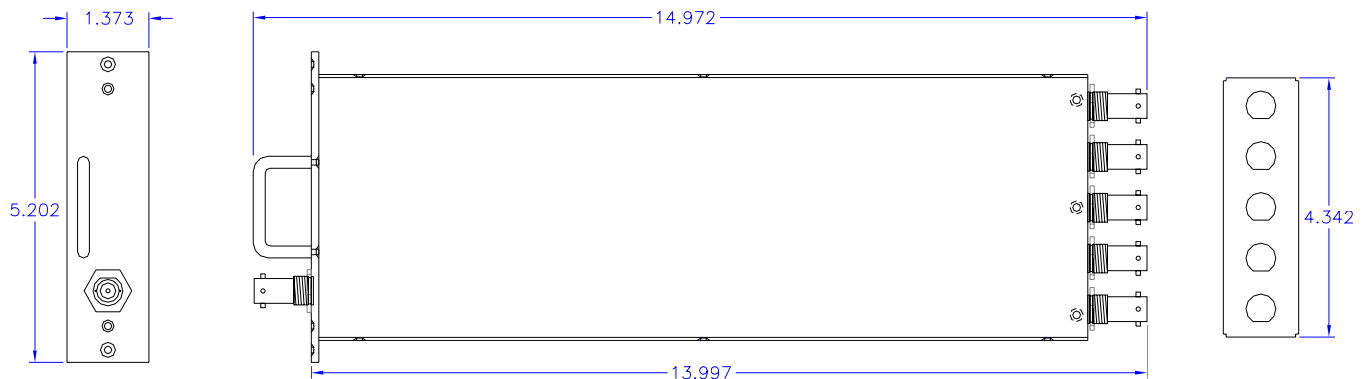
|                         |   |
|-------------------------|---|
| RF Bandwidth :          | 100MHz to 1GHz                                  |
| Noise Figure:           | na  |
| Maximum output:         | na  |
| Maximum RF Input level: | +36dBm (5 Watts) with no damage. Single Carrier |

|   |  |
|---|--|
| Output Level variation<br>from simulated ideal: | +0 to -2dBm across entire stated bandwidth |
|---|--|

### 4.2 Operational Conditions

Temperature 20 Degrees Celsius to 60 Degrees Celsius

### 4.3 Mechanical Parameters



Specifications subject to change without notice.