



**Audio Specialties Group  
Products Division**

**MAS-242  
Multiple Channel  
RF Transmitter Splitter  
Operators Guide**



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Audio Specialties Group and any of its vendors, dealers or representatives forbid the use of any ASG Product in any way that is contrary to FCC Regulations.

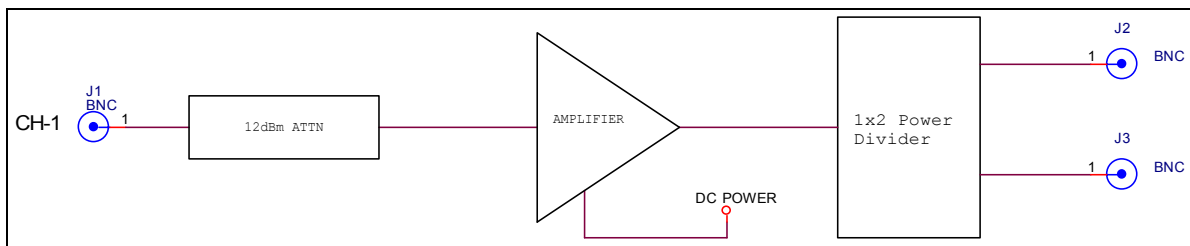
Utilizing any ASG Product in a way that is contrary to FCC Regulations is expressly forbidden.

Maintaining power levels to within FCC regulations is the sole responsibility of the user.

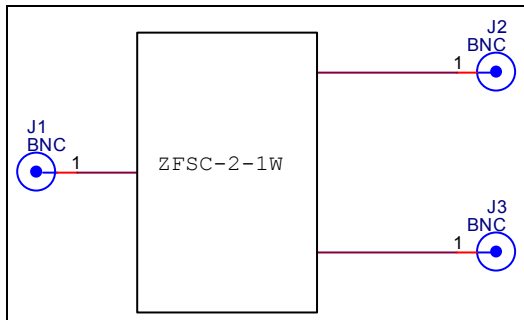
**SECTION 1:**  
**1.0 Introduction**

The MAS-242 is a versatile 2-RU chassis that is available with up to eight 1x2 active power splitters or passive power dividers. Each channel is completely isolated from the other channels which allow the unit to be used in a variety of applications.

**MAS-242 Block Diagram**



**Figure 1 Single Channel Active Design**





**Figure 2 Single Channel Passive Design**

## SECTION 2: Operation

### 2.1 PRECAUTIONS

#### 2.1.1 Explanations


 Identifies important performance information

 Identifies safety information

**Note** Identifies important operator actions


#### 2.1.2 Environmental


 Do not expose the MAS-242 to rain or direct sunlight.


 Maintain proper ventilation for temperature specification.

**Note** Check/clean FAN filters regularly. (If equipped)

#### 2.1.3 Electrical

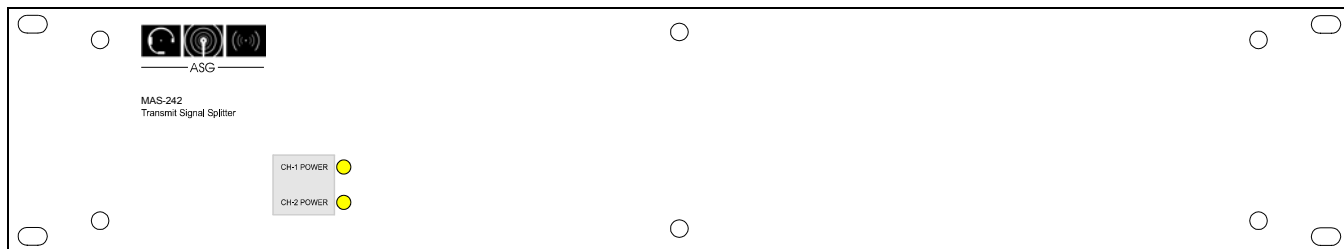
 DO NOT OPERATE THE MAS-242 with the chassis cover removed. Cover must be in place to maintain proper operating temperature. Operating the MAS-242 at full power for longer than thirty minutes with the cover removed could cause the maximum operating temperature to be exceeded

 Emission specifications will only be met if operated within the guidelines of this manual. Operating the MAS-242 other than as specified can generate unwanted radio frequency radiation that could adversely affect the proper operation of other electrical equipment.

 Do not remove output transmission cabling or radiating device from the transmission cable while RF power is active. High power RF energy can cause burns and electrical shock. Damage can occur in the power amplifier stage if the output becomes unloaded.

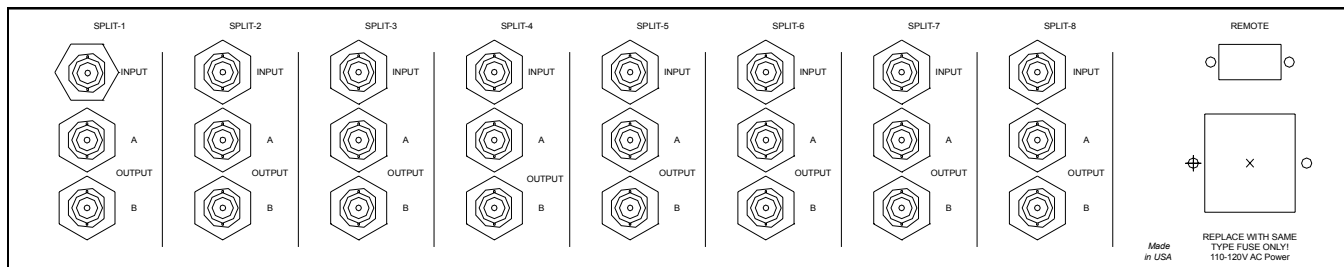
## 2.2 MAS-242 Panel Drawings

### 2.2.1 Front Panel Detail



For units equipped with active power amplification, a power indicator LED is provided for each power supply circuit.

### 2.2.2 Rear Panel Detail



Each column is a complete splitter circuit with the top connector being the input while the lower two connectors are identical split outputs. Individual units may appear different than shown due to design topology differences.

The AC Power receptacle is only used in active splitter designs.

## **SECTION 3: Specifications (General)**

### **3.1 Electrical Specifications**

#### **Power Requirements:**

Current consumption and operating voltages vary with active design topology.  
See design specification supplement for details

#### **Caution:**

Maximum RF Signal Input Level: +23dBm

### **3.2 Mechanical Specifications**

Height: 3.5" (89 mm)  
Width: 19 inches EIA Rack Mount  
Depth: 15 inches (119 mm)

#### **Finish:**

Chassis is Black Anodize  
Graphics are Silk-Screened

## SECTION 4: Specification Supplement

Unit Serial Number: \_\_\_\_\_

Customer Name: \_\_\_\_\_

### 4.1 Electrical Specifications

#### Power Requirements:

1A @120V AC (90-240V AC power)

#### Caution:

Maximum RF Signal Input Level: +23dBm

Input Impedance:	50ohm
Input Signal Isolation:	na
Output Impedance:	50ohm
Frequency Response:	100MHz - 1GHz +-1.5dB

RF Signal Gain: 6dBm (From Input to Either Output)

### 4.2 Mechanical Specifications

Height:	3.5" (89 mm)
Width:	19 inches EIA Rack Mount
Depth:	15 inches (119 mm)
Weight:	7.9LBS

#### Finish:

Chassis is Black Anodize  
Graphics are Silk-Screened