

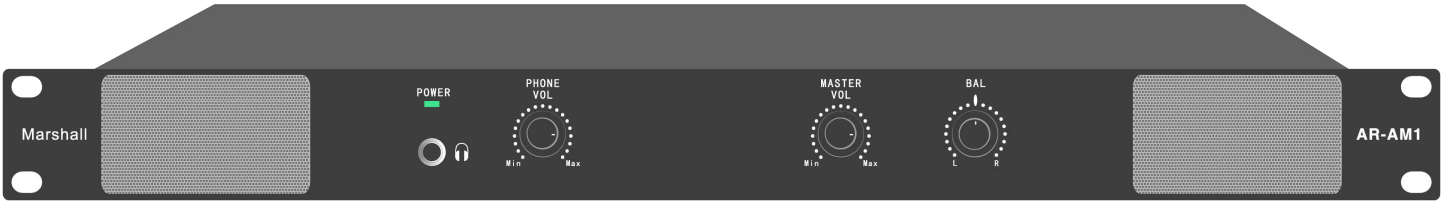
# Warranty

Marshall Electronics warranties to the first consumer that this **AR-AM1** Audio Monitor will, under normal use, be free from defects in workmanship and materials, when received in its original container, for a period of one year from the purchase date. This warranty is extended to the first consumer only, and proof of purchase is necessary to honor the warranty. If there is no proof of purchase provided with a warranty claim, Marshall Electronics reserves the right not to honor the warranty set forth above. Therefore, labor and parts may be charged to the consumer. This warranty does not apply to the product exterior or cosmetics. Misuse, abnormal handling, alterations or modifications in design or construction void this warranty. No sales personnel of the seller or any other person is authorized to make any warranties other than those described above, or to extend the duration of any warranties on behalf of Marshall Electronics, beyond the time period described above. Due to constant effort to improve products and product features, specifications may change without notice.

# Marshall Electronics

**AR-AM1**

Analog Audio Monitor



**Marshall Electronics, Inc.**

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# Operating Instructions

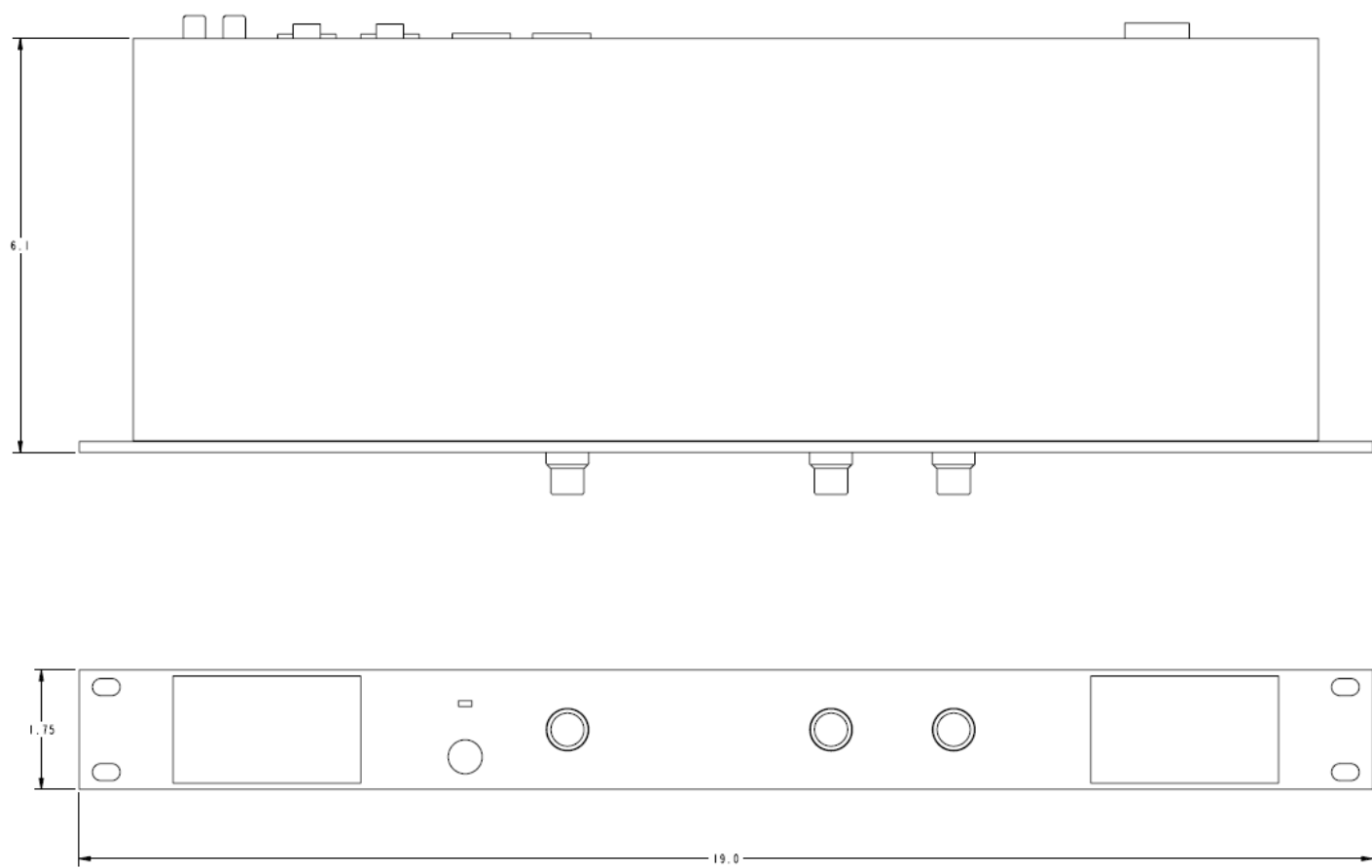
Input / Output

- **ANALOG STEREO INPUT**  
XLR 3-pin Female    +4dBu nominal level (balanced differential)  
RCA-Phono        -10dBV nominal level (unbalanced)
- **ANALOG STEREO OUTPUT**  
Outputs:            2 x Analog (Balanced XLR)  
Reference:         Passive loop from XLR Audio Input

# Specifications

## AR-AM1 Audio Monitor

- **ACOUSTIC**
- Speaker Power Output: Left/Right RMS @ 4Ω: 3W RMS, 5W Peak  
Peak Acoustic Output: 99 dB SPL @ .1m  
Headphone Power Output: 150 mW
- **ELECTRICAL**
- Power Consumption: 40W  
Voltage Requirement: 29VDC  
Included Power Supply  
AC Input: 100V-240V, 1.0A, 50-60Hz  
DC Output: 29VDC, 1.65A,
- **MECHANICAL**
- Dimensions (w x h x d): 19.0" x 1.75" x 6.1"  
Rack Height: 1 RU  
Weight: 4.55 lbs. (2 kg)



# Contents

Product Overview .....5

Features .....5

Installation and Initial Setup .....5

Unpacking .....5

Audio Monitor Mounting .....5

Quick Start Guide.....6

Front Panel Features .....7

Rear Panel Features .....8

Basic Operation .....9

Overview .....9

Volume Control .....9

Balance Control .....9

Headphone Output.....9

Specifications.....10

AR-AM1 Audio Monitor .....10

Input / Output .....11

Warranty .....12

# Basic Operation

## Overview

Basic operation of the AR-AM1 Audio Monitor involves connecting an audio source, and monitoring through the stereo speakers.

The user can choose between listening to the amplified internal speakers, or headphones. Audio volume can be adjusted from front panel controls.

## Controls

### ■ Volume Control

The **VOLUME** control affects only the stereo speakers.

### ■ Balance Control

The **BALANCE** control adjusts the relative levels of the **LEFT** and **RIGHT** channels of the input, affecting both the stereo speakers and headphone output.

### ■ Headphone Output

The headphone output accepts standard stereo headphones with a 1/4" TRS connector. Headphones with an 1/8" (3.5mm) mini-plug connector may be used with an adapter. NOTE: The stereo speakers are NOT muted when a connector is plugged into the headphone output. Headphones are not included with this unit.

# Rear Panel Features



❶ **Power Input Connector**

Use only the included power supply to power the AR-AM1 audio monitor.

❷ **Audio Outputs**

XLR- 3pin male connector. Balanced audio out is same level as XLR audio input. This is a passive output from the XLR Audio Input.

❸ **Audio Inputs**

XLR- 3pin female connector. Balanced audio in. Pin 1= ground, Pin 2= Signal +, Pin 3= Signal -

❹ **Line In \***

RCA-Phono type female connector. Unbalanced audio in.

- NOTE - The RCA Line-In Jacks and the XLR inputs are always active. Use of both at the same time may produce undesired results. Both, inputs are mixed internally and then sent to the speakers/headphones. There are no provisions to adjust the mix between the inputs. Also, signals on the RCA Line-In do NOT appear on the XLR OUTPUTS.

# Product Overview

The AR-AM1 is a single-channel stereo analog audio monitoring system. Designed for ultra-near field audio monitoring in space critical environments, the AR-AM1 is ideal for TV facilities, studios, post-production facilities, VTR bays, mobile production vehicles, satellite links, and wherever analog audio monitoring is required.

The AR-AM1 features stereo loudspeakers in a compact 1RU form factor, with analog amplification and digital processing providing pristine audio quality.

# Features

- **Superior Audio Quality**  
Stereo Loud Speakers provide superior audio quality in a compact 1RU form factor.
- **Digital Processing**  
Digital signal processing provides speaker protection.
- **Stereo Headphone Output**  
¼” stereo headphone jack located on front panel.

# Installation and Initial Setup

## Unpacking

Carefully unpack the AR-AM1 audio monitor and verify that the following items are included:

- AR-AM1 Audio Monitor
- Power Supply with 4-Pin XLR Connector (29VDC)
- AC Power Cable
- Operating Instructions

Inspect the unit for any physical damage that may have occurred during shipping. Should there be any damage, immediately contact Marshall Electronics at (800) 800-6608. If you are not located within the continental United States, call +1 (310) 333-0606.

## Audio Monitor Installation

The AR-AM1 audio monitor can be installed in an EIA-standard 19-inch rack. At only 6.1” inches deep, the AR-AM1 can also be installed in many shallow racks cases. Alternately, the AR-AM1 audio monitor can be placed on any level surface. *For optimum sound quality, the audio monitor should be installed at ear level.*

# Quick Start Guide

## 1. Connect an Audio Source

Connect an audio source to one pair of the rear panel input connectors. We recommend the use of the Balanced XLR female connectors using a balanced audio signal with a nominal level of +4dBu.

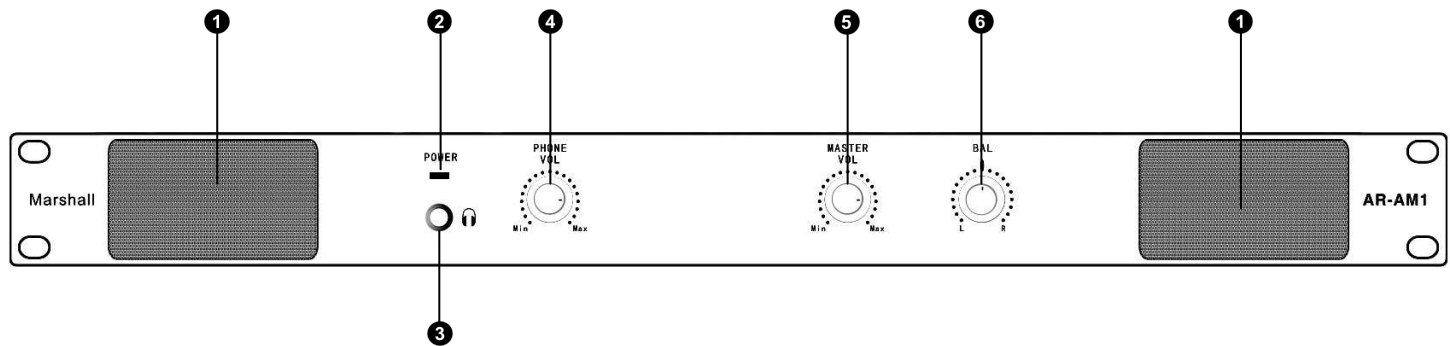
## 2. Power On the Audio Monitor

Supply power to the audio monitor by connecting the included power supply to an AC power source (100-240 V @ 50/60 Hz) and connecting the power supply's 4-pin XLR connector to the back of the audio monitor. The Power LED on the front panel will illuminate green.

## 3. Adjust the Volume and Balance

Use the **Volume** and **Balance** controls to adjust the sound level and stereo balance.

# Front Panel Features



### 1 Stereo Loudspeakers

The stereo loudspeakers are always active regardless of connected headphones.

### 2 Power Indication LED

The power LED will illuminate green when power is supplied to the audio monitor.

### 3 Headphone Output

The headphone output accepts stereo headphones with a 1/4" TRS connector.

### 4 Headphone Volume Control

The headphone volume control affects only the stereo headphone jack.

### 5 Master Volume Control

The master volume control affects only the stereo speakers.

### 6 Balance Control

The balance control adjusts the relative level of each left and right input to the speakers and headphones.