

# MDS-1400

Music Distribution System

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# INSTRUCTION MANUAL



Quality Cinema Products

Ultra\*Stereo Labs, Inc. • 181 Bonetti Drive,  
San Luis Obispo, CA 93401  
Telephone (805) 549-0161

## One Year Limited Warranty



Ultra\*Stereo Labs , Inc. warrants that each product manufactured by it will be free from defects in material and workmanship under normal usage for a period of one year after its purchase new from an authorized dealer. Our obligation under this warranty is limited to repairing or replacing any product or component which we are satisfied does not conform with the foregoing warranty and which is returned to our factory, freight paid, or serviced by one of our authorized contractors. The foregoing Warranty is exclusive and in lieu of all other warranties, whether expressed or implied. Such warranty shall not apply to any product or component (A) repaired or altered by anyone other than Ultra\*Stereo Labs or an authorized service contractor; (B) tampered with or altered in any way or subjected to misuse, negligence or accident or (C) which has been improperly connected, installed or adjusted otherwise than in accordance with Ultra\*Stereo Labs instruction.

Ultra\*Stereo Labs, Inc.  
181 Bonetti Drive  
San Luis Obispo, CA 93401  
USA  
Telephone (805) 549-0161  
FAX (805) 549-0163

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# Table of Contents

Introduction ..... 4

Installation ..... 7

Specifications ..... 10

Please record the following information for your records:

Model: \_\_\_\_\_ Serial Number: \_\_\_\_\_  
Date of Purchase: \_\_\_\_\_ Purchased from: \_\_\_\_\_

# Introduction

*Please read this entire manual before commencing your installation.*

The Ultra\* Stereo MDS has been designed for high performance, ease of use, and years of trouble free service. No special tools are required for installation.

The components that make up the MDS are a computer grade for reliability. All controls are individually sealed for long life. All Ultra\* Stereo equipment has been "burned-in" at the factory for an extended period in order to eliminate the possibility of premature failure.

Unpack the unit carefully. If the container has been damaged, thoroughly inspect the equipment to make certain that there is no hidden damage. File a claim immediately with the carrier if any damage is found. Also advise your dealer or factory.

## **TOOLS REQUIRED**

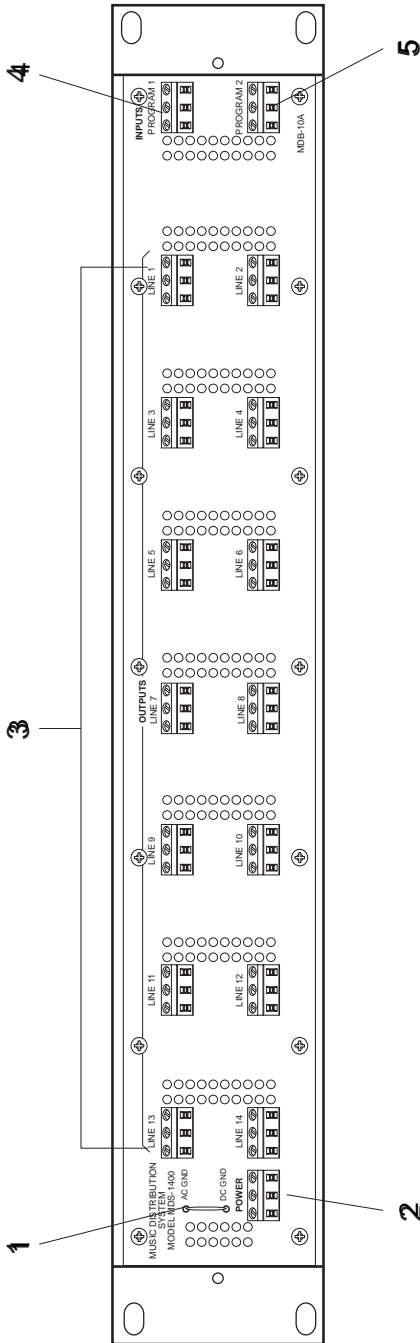
- Trimpot adjustment tool
- No.2 philips screwdriver
- Wire strippers

## **YOU WILL NEED TO SUPPLY THE FOLLOWING MATERIALS:**

- Shielded audio cable for connecting the MDS to the music source (cassette deck or compact disc) and to the cinema processors.
- Four 10-32 \* 1/2" screws to mount the MDS in the audio equipment Rack.

## Features

- Modular construction for ease of servicing and expansion.
- All outputs are transformer coupled to eliminate hum and noise.
- Four input channels (2 stereo sources), individually adjustable from 50 millivolts to 1.25 volts.
- Optional input leveling module compensates for a wide variety of music levels.



1. **AC/DC Ground Jumper** - normally closed, this wire may be cut to separate the AC ground from the MDS System (DC) ground.

2. **Power Input Terminal** - connect the wires from the AC Power Supply here.

3. **Output Terminals 1-14** - connect these terminals to the Non/Sync (Intermission Music) input terminals of the sound system at each remote location or to a power amplifier to feed a lobby or other area. There are 3 terminals for each block corresponding to Left

4. **Program 1 Input Terminals** - connect the output of your first music source (CD,Cassette) to these terminals. There are 3 terminals for each block corresponding to Left (Lt), Com (Ground) and Right (Rt).

5. **Program 2 Input Terminals** - connect the output of your second music source (CD,Cassette) to these terminals. There are 3 terminals for each block corresponding to Left(Lt), Com (ground) and Right (Rt)

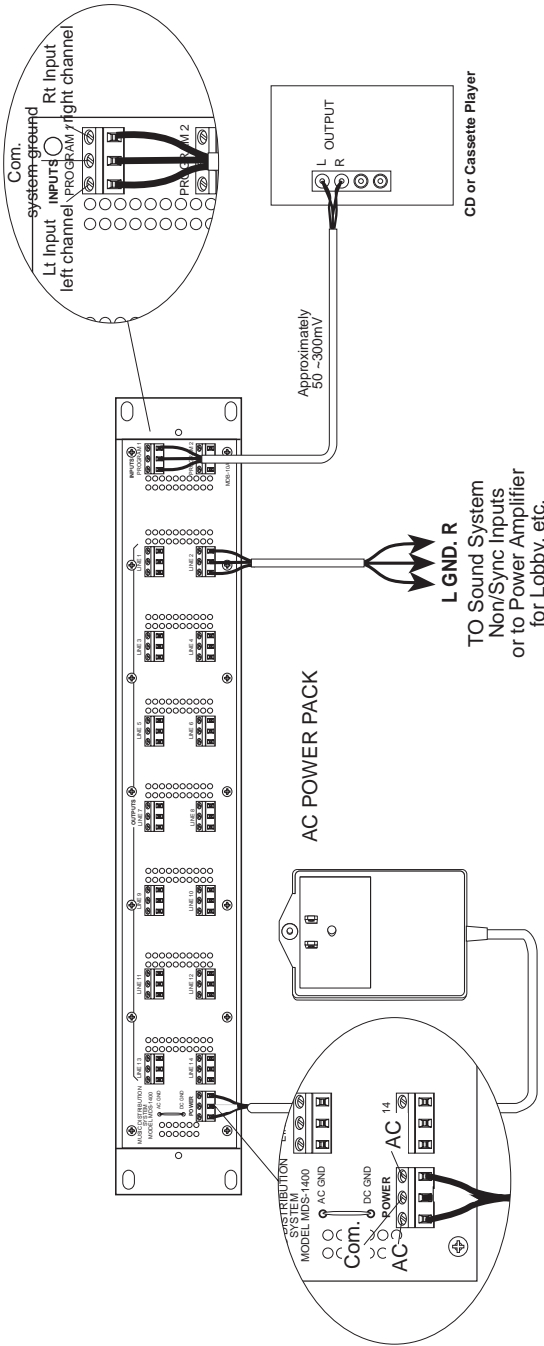
# Installation

The ideal place for the MDS is near the music source. Shielded audio cables are used to connect the outputs from the MDS to the Non/Sync (intermission music) inputs on each theater's sound system or to a power amplifier for lobby or other area. The terminal blocks on the rear of the MDS will secure stripped wires- no crimp type spade lug terminals are required.

## **SETTING INPUT LEVELS**

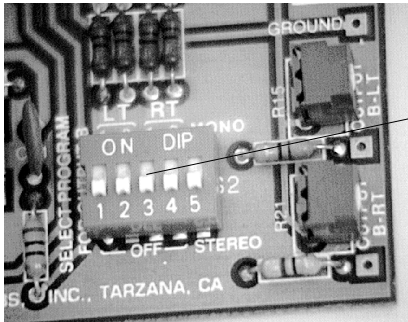
Output levels of different players vary considerably. Most CD players have a nominal 300mV output, whereas, cassette tape players can have a 50mV to 500mV output level. In addition, the level of the program material varies. Start by setting the input level pot on the MDI-10 at the mid-position (for players with a 300mV output). If your player has a lower output, raise the pot. The MDLI-10A Leveling Input Card automatically adjusts the volume of source material, so there is no need to set levels.

# MDS-1400 Hookup





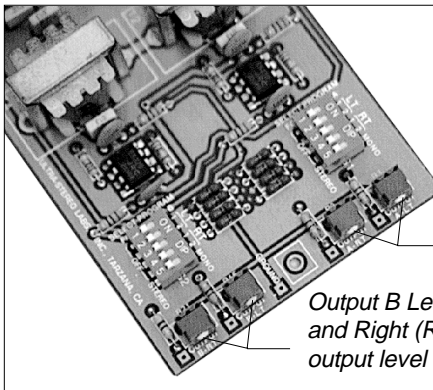
## SELECTING PROGRAM SOURCE CHANNELS



*Output DIP switches*

The MDO-10A Output Card handles a total of four outputs (two stereo or four mono). DIP switches are used to route either or both of the two stereo program sources to the appropriate outputs. To select which source feeds which output, remove the output module and set the corresponding DIP switches to the UP position. For example, if you wish to route program source 1 (L&R) to output line A (L&R), remove the corresponding Output Card and set the output A DIP switches 1 & 3 to the UP position. It is also possible to send a mono feed to a particular location by setting the "MONO/STEREO" DIP switch.

## SETTING OUTPUT LEVELS



*Output A Left (Lt)  
and Right (Rt)  
output level controls*

*Output B Left (Lt)  
and Right (Rt)  
output level controls*

In general, the higher the signal level, the fewer the problems with hum and noise pickup. We recommend that the level pots be set at mid-position.

# Specifications

## INPUTS

Four input channels - two stereo pairs. Input impedance is 50k $\Omega$ .

Input sensitivity - 50 millivolts. Maximum input level +20dbm at 600 $\Omega$ .

## OUTPUTS

From 2 to 26 stereo output channels (4 to 52 mono output channels).

Maximum output level is +20dbm at 600 $\Omega$ .

## CONTROLS

Four independently adjustable input level trimpots control input levels. DIP switches on each output module select the program inputs for that module. Output levels for each output module channel control output levels.

## REAR PANEL

A jumper connects the MDS system ground to the AC ground.

## POWER REQUIREMENTS

An external AC power supply powers the MDS-1400.

Input voltage: 106 - 125VAC, 50~60 cycles, 28 watts.

## CONSTRUCTION

The MDS-1400 is constructed of steel to minimize hum and noise pickup. Gold plated card edge connectors and 1% precision components are used throughout. The overall size of the unit is 3.5" x 19" x 8" and is designed to fit in a standard rack frame.



