# LIMITED WARRANTY

This product is warranted to the original consumer purchaser to be free from defects in materials and workmanship under normal installation, use and service for a period of one (1) year from the date of purchase as shown on the purchaser's receipt.

The obligation of Rolls Corporation under this warranty shall be limited to repair or replacement (at our option), during the warranty period of any part which proves defective in material or workmanship under normal installation, use and service, provided the product is returned to Rolls Corporation, TRANS-PORTATION CHARGES PREPAID. Products returned to us or to an authorized Service Center must be accompanied by a copy of the purchase receipt. In the absence of such purchase receipt, the warranty period shall be one (1) year from the date of manufacture.

This warranty shall be invalid if the product is damaged as a result of defacement, misuse, abuse, neglect, accident, destruction or alteration of the serial number, improper electrical voltages or currents, repair, alteration or maintenance by any person or party other than our own service facility or an authorized Service Center, or any use violative of instructions furnished by us.

This one-year warranty is in lieu of all expressed warranties, obligations or liabilities. ANY IMPLIED WARRANTIES, OBLIGATIONS, OR LIABILI-TIES, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, SHALL BE LIMITED IN DURATION TO THE ONE YEAR DURATION OF THIS WRITTEN LIMITED WARRANTY. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

IN NO EVENT SHALL WE BE LIABLE FOR ANY SPECIAL, INCI-DENTAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF THIS OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, WHATSOEVER. Some states do not allow the exclusion or limitation of special, incidental or consequential damages so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.



# MA2355 Mixer / Amplifier





ROLLS CORPORATION SALT LAKE CITY, UTAH 1/04

**OWNERS MANUAL** 

# INTRODUCTION

Thank your for your purchase of the Rolls MA2355 Mixer / Amplifier. The MA2355 is a two rack space mixer amplifier designed for restaurants, schools, churches, clubs etc. The unit provides a compact and efficient way to mix up to three sources such as AM/FM tuners, CD players, and video players with up to two microphones. Priority talkover is provided on Microphone Two for paging, and on Source One for a jukebox, telephone, etc. The power output section may be connected to 8, or 16 ohm speakers.

# NOTE: THIS MANUAL ASSUMES THE USER HAS A WORKING KNOWLEDGE OF AUDIO ELECTRONICS, BALANCED AND UNBALANCED CONNECTIONS, AND PROPER SIGNAL LEVEL SETTING.

### INSPECTION

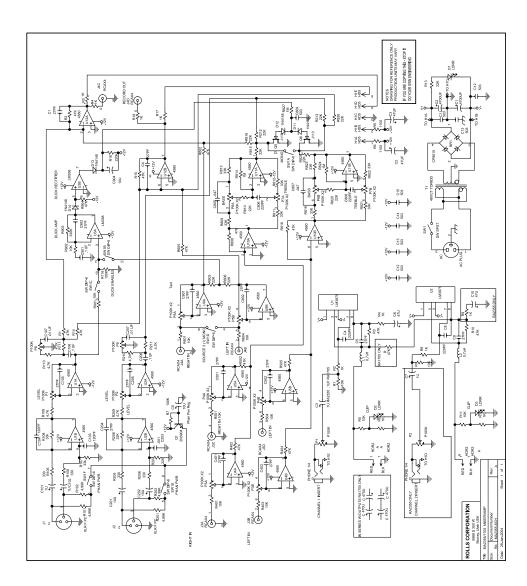
1. Unpack and inspect the MA2355 box and package.

If obvious physical damage is noticed, contact the carrier immediately to make a damage claim. We suggest saving the shipping carton and packing materials for safely transporting the unit in the future.

2. Please visit our website at **www.rolls.com** and click on the Register Your Warranty Here button, or complete the Warranty Registration Card and return it to the factory.

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#### SPECIFICATIONS

#### MIXER

Input Impedance:

Max Input Level:

Connectors: Phantom Power: Max Gain:

Tone Controls:

Noise Floor:

S/N Ratio: Priority Attenuation:

POWER AMP

Recommended Load: THD + Noise:

Weight: Size: Mic: 600 Ohms XLR balanced Source: 22K Ohms RCA Insert: 22K Ohms 1/4" TS unbal. -14 dBV Mic level Max Mic: Source: 24 dBV Insert: 24 dBV 2: XLR, 6: Stereo RCA, 3: 1/4" TRS, 1: 1/4" TS +12 VDC 60 dBV Mic: Source: 26 dBV +/-12 dB 100 Hz Bass +/-12 dB 11kHz Treble Speaker out: -67 dBV Pre Out: -90 dBV 96 dBV 60 dBV

8 Ohms .06% typical-82 dBV 120 VAC 50-60 Hz 5.5 lbs (2.5 kg) 19" x 1.75" x 5" (48cm x 4.5cm x 12.7cm)

# FRONT PANEL



<u>Mic 1, 2</u>: Adjust the level of signal from the corresponding Mic Input. <u>TONE 1, 2</u>: Adjusts the frequency content of the microphone signal in the channel. When the control is turned counter-clockwise, the high frequencies are cut, when

the control is turned clockwise, the low frequencies are cut.

<u>Source 1 - 3</u>: Adjust the volume of input from the RCA Source Inputs.

Bass: Adjusts the low frequencies of the Source 2 and 3 signals only.

 $\underline{\text{Treble}}$ : Adjusts the high frequencies of the Source 2 and 3 signals only.

Left / Right Output: Adjusts that channel's output level

<u>Clip</u>. LED indicating clipping in the MA2355 amplifier.

Power: LED indicating power is applied to the MA2355 and the unit is on.

#### **REAR PANEL**



<u>Right / Left Output</u>: Spring-loaded terminal for connection to the speakers. <u>LEFT/RIGHT AMP INSERT</u>: 1/4" Tip-Send, Ring-Return insert jack.

MICROPHONE ONE and TWO: Balanced XLR inputs to be connected to dynamic or condenser microphones.

<u>DIP SWITCH</u>: Contains the small switches for engaging Mic 1, 2 phantom power, Source 3 Stereo or Mono, the priority (Talk Over) functions, and the Mono/Stereo select.

<u>SOURCE INPUTS</u>: Stereo RCA jacks, Channels 1 - 3, for connection to stereo sources such as AM/FM tuners, cassette players, cd players, or video players. <u>RECORD OUT</u>: Stereo RCA jacks, contains all mixed signals before the Master Level controls.

# CONNECTION

#### Inputs

Connect low impedance microphones to the Mic inputs. If a paging microphone is being used, connect it to Mic Input 2 so it may be used with the Talk Over function. Connect source signals such as CD players, cassette players or video players to the RCA Source Inputs. If a jukebox is being connected, and you want its signal to mute the other source signals, connect it to Source input 1.

For recording purposes, connect a stereo RCA cable to the Record Out jacks, and to your recording device.

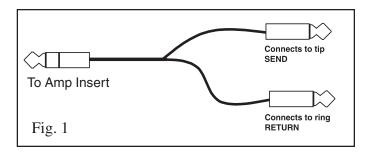
#### Amp Inserts

To connect a signal processor to the MA2355 signal(s), use an insert plug, or cable wired as shown in Fig. 1. This return signal is then sent to the output level section of the amplifier.

# Outputs

Connect speakers (we recommend loads no lower than 8 ohms) to the Outputs of the MA2355 by pressing in each of the spring-loaded terminals and inserting the proper wire into the proper terminal i.e.; + = red, - = black.

Connect the MA2355 to a properly grounded AC outlet.



## DIP SWITCH SETTINGS (From left to right)

• If a microphone requires phantom power, move the Mic channel's corresponding PHANTOM POWER switch to the up position. This applies 12 volts dc phantom power to the indicated microphone.

• SOURCE 1 MONO; this switch sums the Right and Left inputs of Source 1 to mixed dual-mono inputs.

• Mic 2 Priority; when in the up position, all program material on Mic 1 and Sources 2 and 3 will be "ducked" or muted when a signal is present at Mic 2. Source 1 is left un-muted. This function is used for paging.

• Source 1 Priority: when in the up position, Source 2, and 3 will be "ducked" or muted by the signals at Source 1.

This function is for jukebox priority. With a jukebox connected to Source input 1, and the Talkover switch 2 on, the other Source input signals such as background music, will be muted and only the jukebox will be heard.

• MONO / STEREO: When up, the output of the MA2355 is summed to mono. Either jack can be used as a mono output.

### FAULT PROTECTION

The fault protection in the MA2355 limits the current to the output stage. This mode is entered whenever the output stage is called upon for too much power, it may also be fooled by impedances lower than four ohms - which may cause the output stage to overheat and be irreversably damaged.

Since the MA2355 is convection cooled, the unit radiates heat from the front panel and, depending on the load demand, it may become very hot if drawn upon heavily.