

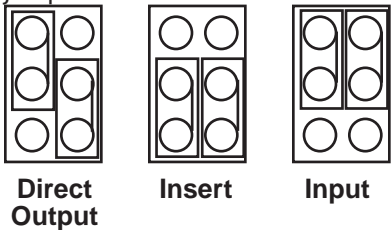
## OPERATION

### CONFIGURING THE 1/4" INPUT JACKS AS DIRECT OUTPUTS

The eight 1/4" Input jacks come from the factory configured as line inputs and are electrically mixed with the XLR jacks. They may be used together if desired. To configure a channel's 1/4" jack as a Direct Out, first remove the RM83T lid. For each channel there are dual three-pin headers with shorting jumper on two pins. The setting from the factory is on "IN". By moving the shorting jumpers to the configuration shown as "OUT" (one jumper up, the other down), the jack then becomes a Direct Output.

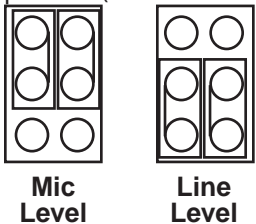
### CONFIGURING THE 1/4" INPUT JACKS AS INSERTS

To configure a channel's 1/4" jack as an Insert, first remove the RM83T lid and locate the corresponding channel's dual three-pin header. Move both shorting jumpers down as shown below as "INSRT", the jack then becomes an Insert.



### CONFIGURING THE OUTPUT FOR MIC OR LINE LEVEL

The RM83T ships from the factory with the XLR Main Output configured as Line Level (+4 dB). To change this to Mic Level (-10 dB), carefully remove the lid, locate the Mic/Line header which is near the Main Output jack. Move the two jumpers from the Line Level position (shown below on the right), to the Mic Level position (shown on the left).

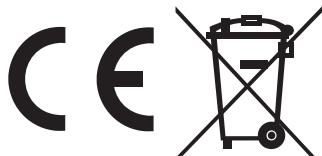


### JUMPER DEFAULTS

The internal jumpers are configured from the factory as follows:

1/4" = INPUTS

MAIN OUT LEVEL = LINE LEVEL



ROLLS CORPORATION  
SALT LAKE CITY, UTAH  
4/11

# ROLLS

## RM83T

## Eight Channel Mic Mixer



### SPECIFICATIONS

Input Impedance:	Mic:	600 $\Omega$ XLR balanced
	1/4":	10K $\Omega$ unbalanced
	Bus Input:	10K $\Omega$ unbalanced
Max Input Level:	Mic:	+4 dBV balanced
	Line:	+22 dBV
Input Connectors:		8: XLR, 8: 1/4" (Line), 1: RCA (Bus input)
Outputs:		XLR bal., RCA unbalanced Prefade out
Max Gain:	Mic:	60 dB
	Line:	35 dB
Tone Control:		12 dB Treble/Bass cut
Phantom Power:		+48 VDC
Output Level:		+22 dBV max
Output Impedance:		51 $\Omega$
Phase Shift:		<10 degrees, 20Hz to 20 kHz
Max S/N ratio:		106 dB
THD:		<.01%
CMRR:		>120 dB (Mic)
Size:		19" x 1.75" x 6" (48.3 x 4.5 x 15 cm)
Weight:		6 lbs.

DIP SWITCH DEFAULT SETTING: ALL OFF  
JUMPER DEFAULT SETTING: 1/4" JACKS AS INPUT

## Start Guide

## INTRODUCTION

Thank you for your purchase of the Rolls RM83T Mic Line eight channel audio mixer. It is intended for sound reinforcement or studio applications where several microphones or line sources need to be combined to a single output. Please review this manual for proper operation.

## INSPECTION

1. Unpack and inspect the RM83T 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](http://www.rolls.com) and register your warranty at the "Register Your Warranty Here" text, or complete the Warranty Registration Card and return it to the factory.

## DESCRIPTION

### FRONT PANEL



NOTE: Descriptions for Channels 1 - 8

LEVEL: Adjusts the level of signal in the channel from off to +20 dB of gain.

TONE: Cuts the signal up to 12 dB, below 200 Hz when turned clockwise, or above 6 kHz when turned counter-clockwise.

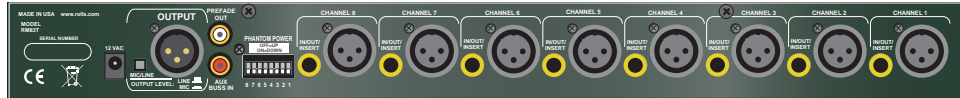
1/8" STEREO INPUT: Channel 5 stereo line level input for Ipod type input accessible from the front panel.

MASTER LEVEL: Adjusts the Main Output signal level.

pwr: LED indicating power is applied to the RM83T.

Power Switch: Applies power to the unit.

### REAR PANEL



MAIN OUTPUT: XLR balanced jack containing the RM83T main output signal.

MIC/LINE: Switches the output XLR level from mic to line level.

PRE-FADE OUTPUT: RCA jack for connection to another RM83T Aux/Bus Input or to another device such as a recorder.

AUX INPUT: RCA jack which connects directly to the RM83T mix bus. The jack may be connected to another RM83T Pre-Fade Output - making this unit the "Master".

PHANTOM POWER SWITCHES: 8 individual DIP switches for applying 48 Volts of phantom power to the indicated channel's XLR Input. The phantom power is for powering condenser microphones. The Phantom Power switches are in the OFF position when the RM83T is shipped from the factory.

CHANNEL INPUTS 1 - 8: 1/4" TS unbalanced, and XLR balanced input jacks.

The eight 1/4" jacks come from the factory configured as line inputs and are electrically mixed with the XLR jacks. They may be used together if desired. These inputs may be reconfigured as either Direct Outputs, or Inserts. See page 4 for details.

## CONNECTION

### 1. MICROPHONE AND MAIN OUTPUT CONNECTION

Connect microphones to the XLR Inputs as shown here. If the microphones are condenser type, and require phantom power - remember to switch on (down) the corresponding Phantom Power switch.

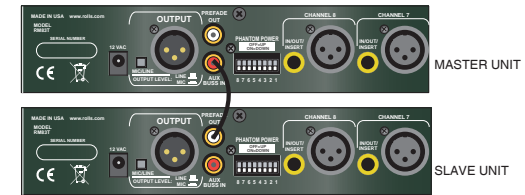
Connect the Output to the next device in your signal chain.



Connect to amplifier, recording device, mixer input, etc.

### 2. CONNECTING TWO RM83T UNITS TOGETHER

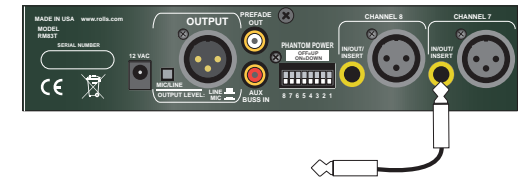
Using a single RCA cable, connect from the Pre-Fader Output of the "Slave" unit to the Aux Bus input of the "Master" unit. This "Master" unit's Master Level control will now adjust the overall level of both units.



### 3. CHANNEL DIRECT OUTPUT

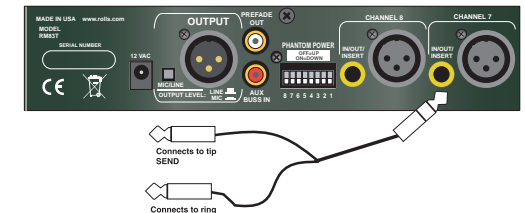
For each channel you wish to have Direct Output access, you must first configure that channel's 1/4" Input as a Direct Output. Follow the instructions shown on the back page.

Connect a 1/4" unbalanced Tip-Sleeve cable to the channel's 1/4" jack and to the next device you want the signal sent to. Note, the channel's signal will still be present at the RM83T Main Output.



### 4. CHANNEL INSERT

For each channel you wish to have the ability to insert into, you must first configure that channel's 1/4" Input as an INSERT. Follow the instructions shown on the back page. Connect a 1/4" Tip-Ring-Sleeve INSERT cable into the channel's 1/4" jack, and to the processor or other device you want the signal connected to.



### A NOTE ABOUT ROLLS MICROPHONE TRANSFORMER PREAMPLIFIER

The Rolls Transformer Balanced Input Microphone Preamp features many advantages over other mic preamps. Among these are simplicity of design, 40db or higher CMRR (common mode rejection ratio) than transistor input mic preamps. This means much lower noise on long input lines, and very low distortion at high gain.

### IMPORTANT NOTE WHEN SETTING UP MIXER:

When setting up the RM83T turn all channels that are not being used off (volume at 0). Each channel is always active and can generate hum. So if a channel is not being used the volume for that channel should be set at 0.