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 RM82 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 RM82 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 RM82 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

SPECIFICATIONS

<table>
<thead>
<tr>
<th></th>
<th>Mic:</th>
<th>Line:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input Impedance:</td>
<td>10K Ω XLR balanced</td>
<td>20K Ω unbalanced</td>
</tr>
<tr>
<td>1/4”:</td>
<td>20K Ω unbalanced</td>
<td></td>
</tr>
<tr>
<td>Bus Input:</td>
<td>10K Ω unbalanced</td>
<td></td>
</tr>
<tr>
<td>Max Input Level:</td>
<td>0 dBV balanced</td>
<td>+6 dBV</td>
</tr>
<tr>
<td>Tone Control:</td>
<td>12 dB Treble/Bass cut</td>
<td></td>
</tr>
<tr>
<td>Phantom Power:</td>
<td>+48 VDC</td>
<td></td>
</tr>
<tr>
<td>Output Level:</td>
<td>+22 dBV max</td>
<td></td>
</tr>
<tr>
<td>Output Impedance:</td>
<td>51 Ω</td>
<td></td>
</tr>
<tr>
<td>Phase Shift:</td>
<td>&lt;10 degrees, 20Hz to 20 kHz</td>
<td></td>
</tr>
<tr>
<td>Max S/N ratio:</td>
<td>106 dB</td>
<td></td>
</tr>
<tr>
<td>THD:</td>
<td>&lt;.01%</td>
<td></td>
</tr>
<tr>
<td>CMRR:</td>
<td>&gt;52 dB (Mic)</td>
<td></td>
</tr>
<tr>
<td>Size:</td>
<td>19” x 1.75” x 6” (48.3 x 4.5 x 15 cm)</td>
<td></td>
</tr>
<tr>
<td>Weight:</td>
<td>7 lbs. (3 kg)</td>
<td></td>
</tr>
</tbody>
</table>

DIP SWITCH DEFAULT SETTING: ALL OFF
JUMPER DEFAULT SETTING: 1/4” JACKS AS INPUT
MAIN OUTPUT AS LINE
INTRODUCTION
Thank you for your purchase of the Rolls RM82 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 RM82 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 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 are identical.
TRIM: Adjusts the sensitivity of the XLR Microphone Inputs.
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.
MASTER LEVEL: Adjusts the Main Output signal level.
pwr: LED indicating power is applied to the RM82.
Power Switch: Applies power to the unit. Please ensure the power cable is connected to a properly grounded AC outlet.

REAR PANEL
MAIN OUTPUT: XLR balanced jack containing the RM82 main output signal.
PRE-FADE OUTPUT: RCA jack for connection to another RM82 Aux/Bus Input or to another device such as a recorder.
AUX INPUT: RCA jack which connects directly to the RM82 mix bus. The jack may be connected to another RM81 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 RM82 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.

2. CONNECTING TWO RM82 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 RM82 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 PREAMPLIFIER CIRCUITS
The Rolls servo-balanced Microphone Preamps feature 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. Discrete transistor preamps are non-linear at high gains, but not our design. We feature a higher signal swing, which means our preamps have more headroom before clipping.