

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, TRANSPORTATION 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.

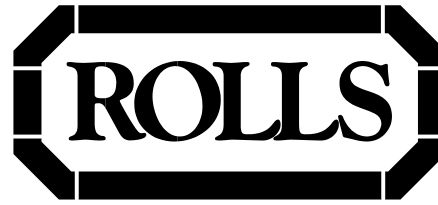
This warranty shall be invalid if the product is damaged as a result of defacement, misuse, abuse, neglect, accident, destruction or alteration of the serial number, improper electrical voltages or currents, repair, alteration or maintenance by any person or party other than our own service facility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

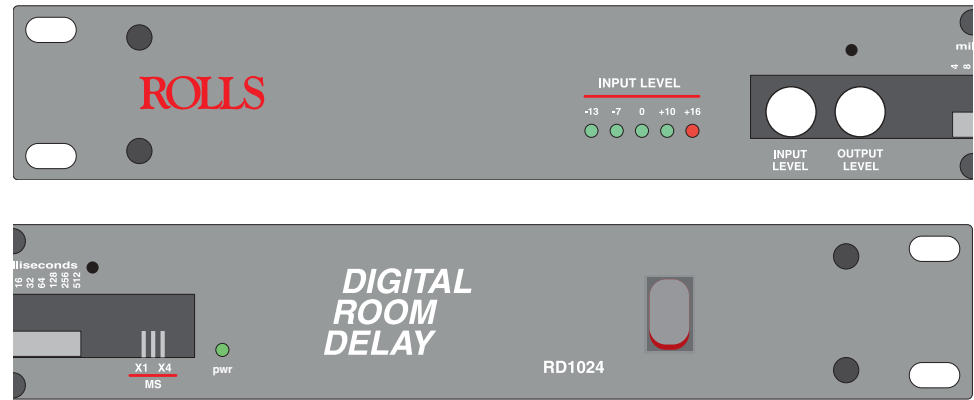
IN NO EVENT SHALL WE BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF THIS OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, WHATSOEVER. Some states do not allow the exclusion or limitation of special, incidental or consequential damages so the above limitation or exclusion may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



ROLLS CORPORATION
SALT LAKE CITY, UTAH
6/03



RD1024 Digital Room Delay



SPECIFICATIONS

Max. Input:	+16 dBV
Input Impedance:	10k Ω balanced
Output Impedance:	50 Ω balanced
Delay Range:	4 - 1024 mSec as shipped 4 - 4096 mSec. with 4 update RAM chips
Delay Resolution:	4 mS or 16mS in X 4 jumper position
Frequency Response:	20Hz to 20kHz (+/-3 dB)
THD:	0.3%
Size:	1.75" H x 19" W x 5.25" D.
Weight:	7 lbs.

OWNERS MANUAL

INTRODUCTION

The RD1024 Digital Delay is used for speaker distance delay. With the extra memory it may even be used as part of a broadcast profanity delay. The RD1024 is housed in a single rack space chassis.

PLEASE NOTE: THIS MANUAL ASSUMES THE USER HAS A WORKING KNOWLEDGE OF BASIC AUDIO CONNECTION AND OPERATION PRINCIPLES.

DESCRIPTION FRONT PANEL



INPUT LEVEL LEDs: Indicate the amount of input signal level, in decibels.

INPUT LEVEL: Adjusts the amount of input signal.

OUTPUT LEVEL: Adjusts the amount of output signal.

DIP SWITCHES: Set the delay time

JUMPER: for setting the maximum delay X 4 if extra RAM has been installed

PWR: Indicates that the RD1024 has power and the power switch is in the ON position.

REAR PANEL



OUT: The “+” sign indicates the positive or non-inverting terminal, and the “-” indicates the negative or inverting terminal. Use these, along with the Ground terminal for a balanced output.

IN: The “+” sign indicates the positive or non-inverting terminal, and the “-” indicates the negative or inverting terminal. Use these, along with the Ground terminal for a balanced input. When using the inputs / outputs unbalanced, be sure to use the + and GROUND terminals.

OPERATION

Setting the Input and Output levels

Use the LED bargraph for setting the input level. With a typical sound level input, set the Input level as high as possible so the 0 dB LED is on approximately all the time, and the red +16 dB LED lights occasionally - only on the highest peaks. Set the output level to drive the power amp or signal processing that follows the delay. The input level range is from -infinity to unity gain. Remember to run the input level as high as possible without clipping to achieve the highest signal to noise ratio. The output level is from minus infinity to 15dB.

OPERATION Cont.

Selecting the Delay range

The number of switches in the up position determines the delay time + 4 mS. Each switch to the left doubles the delay time and you add the number of switches up delay times to calculate the total delay then add 4 mS. The Switch positions are 4 8 16 32 64 128 256 512 mS

Figuring the Time Delay

Time delay in milliseconds (mS) is figured by adding the DIP switch **OFF** (Switch Up) positions then add 4.

Example, If the 4 and 64 switches are up and the rest down then the delay time is

$4 + 64 + 4 = 72$ milliseconds of delay time.

SCHEMATIC

