

DX-RVC Predefined Functions

| DX-RVC Remote Volume Control (2-button/12-LED) | | | | | |
|--|-------------|--------------------|------------------|-------------|-----------------------------|
| Switch Positions | | | Switch Positions | | |
| ID | 1 through 8 | Function | ID | 1 through 8 | |
| 0 | 00000000 | Input Level 1A (1) | 32 | 00000100 | Output Level A (1) |
| 1 | 10000000 | Input Level 1A (2) | 33 | 10000100 | Output Level A (2) |
| 2 | 01000000 | Input Level 1B (1) | 34 | 01000100 | Output Level B (1) |
| 3 | 11000000 | Input Level 1B (2) | 35 | 11000100 | Output Level B (2) |
| 4 | 00100000 | Input Level 2A (1) | 36 | 00100100 | Output Level A&B (1) |
| 5 | 10100000 | Input Level 2A (2) | 37 | 10100100 | Output Level A&B (2) |
| 6 | 01100000 | Input Level 2B (1) | 38 | 01100100 | Group Level 1 (1) |
| 7 | 11100000 | Input Level 2B (2) | 39 | 11100100 | Group Level 1 (2) |
| 8 | 00010000 | Input Level 3A (1) | 40 | 00010100 | Group Level 2 (1) |
| 9 | 10010000 | Input Level 3A (2) | 41 | 10010100 | Group Level 2 (2) |
| 10 | 01010000 | Input Level 3B (1) | 42 | 01010100 | Group Level 3 (1) |
| 11 | 11010000 | Input Level 3B (2) | 43 | 11010100 | Group Level 3 (2) |
| 12 | 00110000 | Input Level 4A (1) | 44 | 00110100 | Group Level 4 (1) |
| 13 | 10110000 | Input Level 4A (2) | 45 | 10110100 | Group Level 4 (2) |
| 14 | 01110000 | Input Level 4B (1) | 46 | 01110100 | Group Level 5 (1) |
| 15 | 11110000 | Input Level 4B (2) | 47 | 11110100 | Group Level 5 (2) |
| 16 | 00001000 | Input Level 5A (1) | 48 | 00001100 | Group Level 6 (1) |
| 17 | 10001000 | Input Level 5A (2) | 49 | 10001100 | Group Level 6 (2) |
| 18 | 01001000 | Input Level 5B (1) | 50 | 01001100 | Group Level 7 (1) |
| 19 | 11001000 | Input Level 5B (2) | 51 | 11001100 | Group Level 7 (2) |
| 20 | 00101000 | Input Level 6A (1) | 52 | 00101100 | Group Level 8 (1) |
| 21 | 10101000 | Input Level 6A (2) | 53 | 10101100 | Group Level 8 (2) |
| 22 | 01101000 | Input Level 6B (1) | 54-255 | | Reserved for future updates |
| 23 | 11101000 | Input Level 6B (2) | | | |
| 24 | 00011000 | Input Level 7A (1) | | | |
| 25 | 10011000 | Input Level 7A (2) | | | |
| 26 | 01011000 | Input Level 7B (1) | | | |
| 27 | 11011000 | Input Level 7B (2) | | | |
| 28 | 00111000 | Input Level 8A (1) | | | |
| 29 | 10111000 | Input Level 8A (2) | | | |
| 30 | 01111000 | Input Level 8B (1) | | | |
| 31 | 11111000 | Input Level 8B (2) | | | |

Each of the predefined functions has two IDs (1) and (2) to allow two remote controls to perform the same function.

MACKIE®
INDUSTRIAL™

industrial@mackie.com

16220 Wood-Red Road NE Woodinville, WA 98072

TEL +888.337.7404, FAX +425.487.4337

UK +44.1268.570.808, FAX +44.1268.570.809 +industrial@rcf-uk.com

ITALY +39.0522.354.111, FAX +39.0522.332.294 +industrial@rcf.it

FRANCE +33.3.8546.9160, FAX +33.3.8546.9161 +industrial@rcf.fr

GERMANY +49.2572.96042.0, FAX +49.2572.96042.10 +industrial@mackie.de

Part No. 910-298-20 Rev. B 9/00

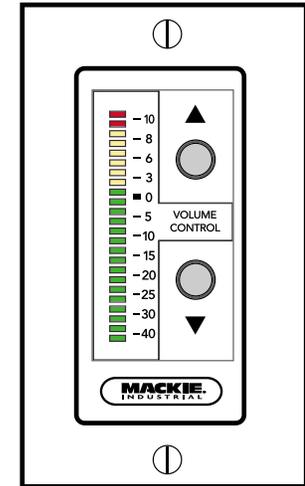
© 2000 Mackie Industrial. All Rights Reserved. Printed in the USA.

MACKIE®
INDUSTRIAL™

DX-RVC
Remote Volume Control

Quick-Start Guide

The DX-RVC is a real-time remote volume control for use with the DX8 Digital Audio Mixer/Signal Processor. The DX-RVC can be programmed to operate the volume for any of the eight inputs, either output, grouped outputs, or Group Levels 1-8. The predefined functions are programmed via the eight DIP-switches on the back of the circuit board. Up to nine remote controls (including the DX-RVC and the DX-SW4) can be connected to the DX8 REMOTE BUS connector.

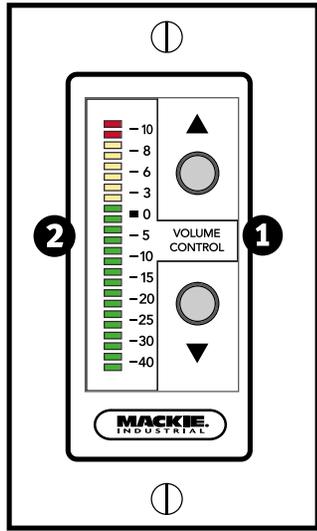


Safety First!

Before connecting and using the equipment, please read this Quick-Start Guide carefully and keep it for future reference.

WARNING! This equipment has been designed to be installed by qualified professionals only! There are many factors to be considered when installing professional sound reinforcement systems, including mechanical and electrical considerations, as well as acoustic coverage and performance. Mackie Industrial strongly recommends that this equipment be installed only by a professional sound installer or contractor.

1. Never install, connect, or disconnect the remote control with the DX8 power supply on.
2. Before applying power to the DX-RVC, make sure the wiring is correct as described in this Quick-Start Guide.



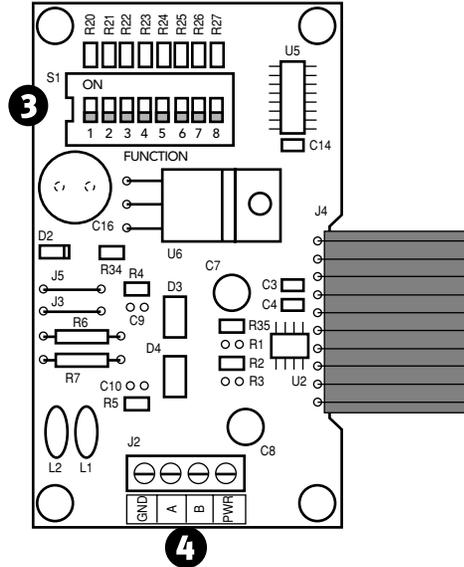
Front Panel Features

1 UP/DOWN VOLUME CONTROL

Use to adjust the level for the Input, Output, or Group assigned to the remote control. Duplicates the function of the UP/DOWN buttons on the DX8 front panel.

2 LED DISPLAY

Indicates the level setting of the Input, Output, or Group assigned to the remote control. "0" corresponds to "10" on the DX8 front panel LED display, which is unity gain. "+10" corresponds to "OL" on the DX8 front panel LED display, which is maximum gain.



Rear Panel Features

3 PREDEFINED FUNCTION SELECTION SWITCH

This 8-position DIP switch provides 256 unique functions that can be assigned to the DX-RVC remote. Refer to the chart on the back page for a list of all predefined functions currently available.

Each remote control must have the selection switch set to a unique ID. When the DX8 is first turned on, it polls the REMOTE BUS and identifies the remote controls connected to it by each unique ID.

Many of the predefined functions have two ID addresses assigned to it to allow two remote controls to be connected to a DX8 that both control the same function.

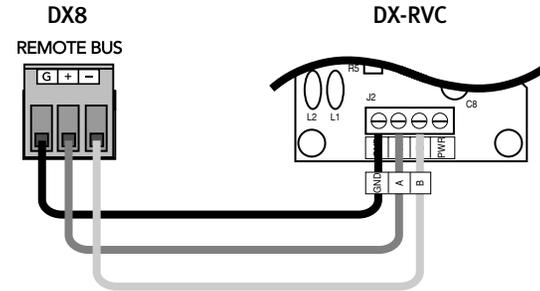
4 CONNECTOR (J2)

Connect the wires from the DX8 REMOTE BUS directly to this connector. Strip the wire back about 1/4", insert the wire as far as it will go into the connector and tighten down the screw with a small slot-head screwdriver.

Use a high-quality three-conductor shielded cable to make this connection, such as Belden 8451, 9451, or equivalent.

The connector is wired as follows:

| Remote | DX8 |
|--------|---|
| GND | G (Ground) |
| A | + (+ Data with +24V DC power) |
| B | - (- Data with +24V DC power) |
| PWR | N/C (This is for an external power supply, described in the next section) |



Using an External Power Supply

The DX-RVC is powered by the DX8 over the data lines. An external power supply can be used by removing jumpers J3 and J5 from the DX-RVC circuit board, and connecting a power supply rated at 9 to 16V AC or DC to the PWR terminal on the connector (J2). A number of "wall-warts" or bell transformers are readily available from local electrical supply houses with output ratings between 9V and 16V. Allow 25mA per remote.

Installing the DX-RVC

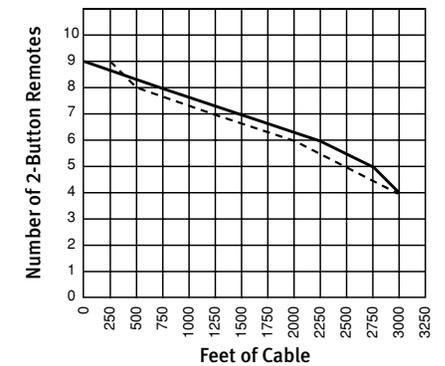
The DX-RVC can be installed in a single standard electrical box, or in a double-gang box along with a second DX-RVC or DX-SW4 remote control.

Connecting Multiple Remote Controls

Up to nine remote controls can be connected to the DX8 REMOTE BUS. The maximum length of the cable depends on the type of cable used and the number and type of remote controls used in the system.

As a general rule, using 22 gauge wire (at 0.014 Ω /ft. and 34 pF/ft.), one remote can be up to 3000 feet away, five remotes can be up to 2500 feet away, and eight remotes can be up to 500 feet away before transmission losses become a factor.

Feet of Cable versus Maximum Number of 2-Button Remotes



Distance Chart for DX-RVC Cable

