

DX-RVC PREDEFINED FUNCTIONS

DX-RVC Remote Volume Control (For DX810 Applications)				
Switch Positions *		Switch Positions		
ID 1 through 8	Function	ID 1 through 8	Function	
0	00000000	Input Level 1A	61 10111100	Input Level 7B
1	10000000	Input Level 1B	62 01111100	Input Level 7C
2	01000000	Input Level 1C	63 11111100	Input Level 7D
3	11000000	Input Level 1D	64 00000010	Input Level 7E
4	00100000	Input Level 1E	65 10000010	Input Level 7F
5	10100000	Input Level 1F	66 01000010	Input Level 7G
6	01100000	Input Level 1G	67 11000010	Input Level 7H
7	11100000	Input Level 1H	68 00100010	Input Level 7I
8	00010000	Input Level 1I	69 10100010	Input Level 7J
9	10010000	Input Level 1J	70 01100010	Input Level 7K
10	01010000	Input Level 2A	71 11100010	Input Level 7L
11	11010000	Input Level 2B	72 00010010	Input Level 7M
12	00110000	Input Level 2C	73 10010010	Input Level 7N
13	01110000	Input Level 2D	74 01010010	Input Level 7O
14	01110000	Input Level 2E	75 10110010	Input Level 7P
15	11110000	Input Level 2F	76 00100100	Input Level 7Q
16	00001000	Input Level 2G	77 10110010	Input Level 7R
17	10001000	Input Level 2H	78 01110010	Input Level 7S
18	01001000	Input Level 2I	79 11110010	Input Level 7T
19	11001000	Input Level 2J	80 00001010	Output Level A
20	00101000	Input Level 3A	81 10001010	Output Level B
21	10101000	Input Level 3B	82 01001010	Output Level C
22	01010000	Input Level 3C	83 11001010	Output Level D
23	11010000	Input Level 3D	84 00101010	Output Level E
24	00010000	Input Level 3E	85 10101010	Output Level F
25	10010000	Input Level 3F	86 01101010	Output Level G
26	01010000	Input Level 3G	87 11101010	Output Level H
27	11010000	Input Level 3H	88 00011010	Output Level I
28	00110000	Input Level 3I	89 10011010	Output Level J
29	10110000	Input Level 3J	90 01011010	Group Level 1
30	01110000	Input Level 4A	91 11011010	Group Level 2
31	11110000	Input Level 4B	92 00111010	Group Level 3
32	00000100	Input Level 4C	93 10111010	Group Level 4
33	10000100	Input Level 4D	94 01111010	Group Level 5
34	01000100	Input Level 4E	95 11111010	Group Level 6
35	11000100	Input Level 4F	96 00000110	Group Level 7
36	00100100	Input Level 4G	97 10000110	Group Level 8
37	10100100	Input Level 4H	98 01000110	Group Level 9
38	01100100	Input Level 4I	99 11000110	Group Level 10
39	11100100	Input Level 4J	100 00100110	Group Level 11
40	00010100	Input Level 5A	101 10100110	Group Level 12
41	10010100	Input Level 5B	102 01100110	Group Level 13
42	01010100	Input Level 5C	103 11100110	Group Level 14
43	11010100	Input Level 5D	104 00010110	Group Level 15
44	00110100	Input Level 5E	105 10010110	Group Level 16
45	10110100	Input Level 5F	106 01010110	Group Level 17
46	01110100	Input Level 5G	107 11010110	Group Level 18
47	11110100	Input Level 5H	108 00110110	Group Level 19
48	00001100	Input Level 5I	109 10110110	Group Level 20
49	10001100	Input Level 5J	110 01110110	Group Level 21
50	01001100	Input Level 6A	111 11110110	Group Level 22
51	11001100	Input Level 6B	112 00001110	Group Level 23
52	00101100	Input Level 6C	113 10001110	Group Level 24
53	10101100	Input Level 6D	114 01001110	Group Level 25
54	01101100	Input Level 6E	115 11001110	Group Level 26
55	11101100	Input Level 6F	116 00101110	Group Level 27
56	00011100	Input Level 6G	117 10101110	Group Level 28
57	10011100	Input Level 6H	118 01101110	Group Level 29
58	01011100	Input Level 6I	119 11101110	Group Level 30
59	11011100	Input Level 6J	120 00011110	Group Level 31
60	00111100	Input Level 7A	121 10011110	Group Level 32
			122-255	Reserved for future updates

DX-RVC Remote Volume Control (For DX8 Applications)				
Switch Positions *		Switch Positions		
ID 1 through 8	Function	ID 1 through 8	Function	
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.
*Switch Positions: 1 = ON; 0 = OFF

*Switch Positions: 1 = ON; 0 = OFF



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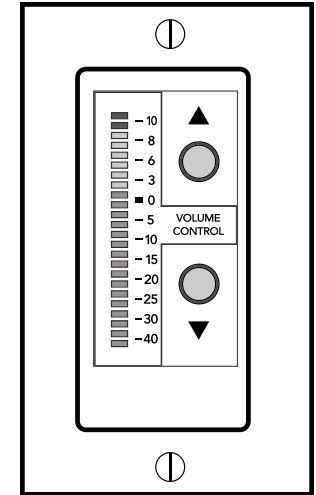
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Quick-Start Guide

The DX-RVC is a real-time remote volume control for use with the DX8 and DX810 Digital Audio Mixer/Signal Processor. The DX-RVC can be programmed to operate the volume for any of the eight inputs, any output, or grouped outputs. 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 or DX810 REMOTE BUS connector.



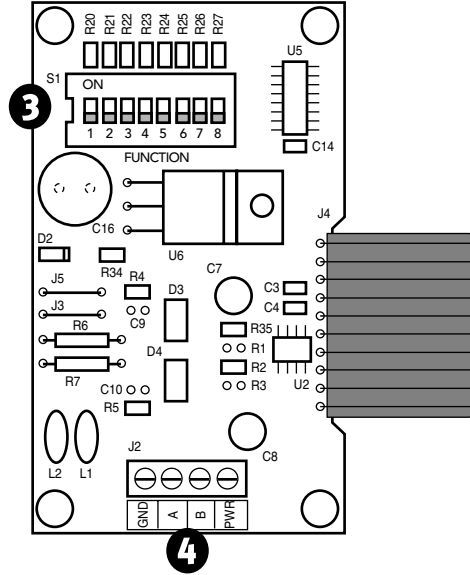
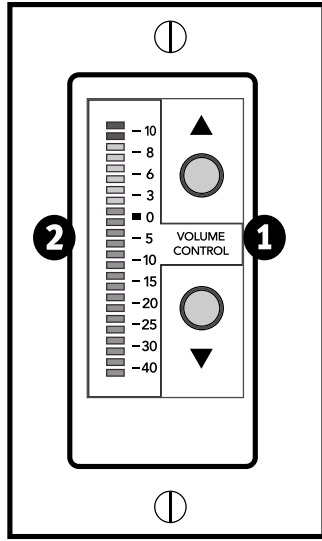
SAFETY FIRST!

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. Some of these factors include mechanical and electrical considerations, as well as acoustic coverage and performance. LOUD Technologies 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 or DX810 power supply on.
2. Before applying power to the DX-RVC, make sure the wiring is correct as described in this Quick-Start Guide.

CAUTION: To avoid the risk of electric shock, never allow this equipment to be exposed to rain or dampness.



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/DX810 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/DX810 front panel LED display, which is unity gain. "+10" corresponds to "OL" on the 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/DX810 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/DX810 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/DX810
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)

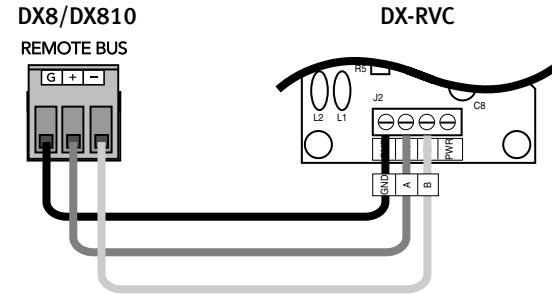
INSTALLING THE DX-RVC

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

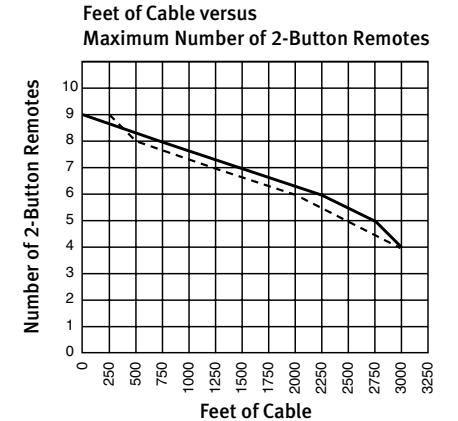
Up to nine remote controls can be connected to the DX8/DX810 REMOTE BUS. The maximum length of the cable depends on the type of cable used and the number and type of remote controls used in the system.

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.



USING AN EXTERNAL POWER SUPPLY

The DX-RVC is powered by the DX8/DX810 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.



— Belden 8451 (22 AWG, 34pf/ft)
 - - - Belden 1192A (24 AWG, 39pf/ft)

DISTANCE CHART FOR DX-RVC CABLE

