DX-SW4 PREDEFINED FUNCTIONS

DX-SW4 Remote Switch Control (4-button/4-LED) for DX8

ID	Switch Positions 1 through 8	Function	Control 1	Control 2	Control 3	Control 4
0	00000000	Mute Input 1-4 (1)	Mute Input 1	Mute Input 2	Mute Input 3	Mute Input 4
1	10000000	Mute Input 1-4 (2)	Mute Input 1	Mute Input 2	Mute Input 3	Mute Input 4
2	01000000	Mute Input 5-8 (1)	Mute Input 5	Mute Input 6	Mute Input 7	Mute Input 8
3	11000000	Mute Input 5-8 (2)	Mute Input 5	Mute Input 6	Mute Input 7	Mute Input 8
4	00100000	Mute Group 1-4 (1)	Mute Group 1	Mute Group 2	Mute Group 3	Mute Group 4
5	10100000	Mute Group 1-4 (2)	Mute Group 1	Mute Group 2	Mute Group 3	Mute Group 4
6	01100000	Mute Group 5-8 (1)	Mute Group 5	Mute Group 6	Mute Group 7	Mute Group 8
7	11100000	Mute Group 5-8 (2)	Mute Group 5	Mute Group 6	Mute Group 7	Mute Group 8
8	00010000	Force On 1-4 (1)	Force On 1	Force On 2	Force On 3	Force On 4
9	10010000	Force On 1-4 (2)	Force On 1	Force On 2	Force On 3	Force On 4
10	01010000	Force On 5-8 (1)	Force On 5	Force On 6	Force On 7	Force On 8
11	11010000	Force On 5-8 (2)	Force On 5	Force On 6	Force On 7	Force On 8
12	00110000	Force Off 1-4 (1)	Force Off 1	Force Off 2	Force Off 3	Force Off 4
13	10110000	Force Off 1-4 (2)	Force Off 1	Force Off 2	Force Off 3	Force Off 4
14	01110000	Force Off 5-8 (1)	Force Off 5	Force Off 6	Force Off 7	Force Off 8
15	11110000	Force Off 5-8 (2)	Force Off 5	Force Off 6	Force Off 7	Force Off 8
16	00001000	Preset Recall 1-4 (1)	Preset Recall 1	Preset Recall 2	Preset Recall 3	Preset Recall 4
17	10001000	Preset Recall 1-4 (2)	Preset Recall 1	Preset Recall 2	Preset Recall 3	Preset Recall 4
18	01001000	Preset Recall 5-8 (1)	Preset Recall 5	Preset Recall 6	Preset Recall 7	Preset Recall 8
19	11001000	Preset Recall 5-8 (2)	Preset Recall 5	Preset Recall 6	Preset Recall 7	Preset Recall 8
20-255		For Future Updates				

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

DX-SW4 Remote Switch Control (4-button/4-LED) for DX-810 v3.3 (Firmware v7.06)

ID	Switch Positions 1 through 8	Function	Control 1	Control 2	Control 3	Control 4
0	00000000	Mute Input 1-4	Mute Input 1	Mute Input 2	Mute Input 3	Mute Input 4
1	10000000	Mute Input 5-8	Mute Input 5	Mute Input 6	Mute Input 7	Mute Input 8
2	01000000	Mute Output A-D	Mute Output A	Mute Output B	Mute Output C	Mute Output D
3	11000000	Mute Output E-H	Mute Output E	Mute Output F	Mute Output G	Mute Output H
4	00100000	Mute Output G-J	Mute Output G	Mute Output H	Mute Output I	Mute Output J
5	10100000	Mute Group 1-4	Mute Group 1	Mute Group 2	Mute Group 3	Mute Group 4
6	01100000	Mute Group 5-8	Mute Group 5	Mute Group 6	Mute Group 7	Mute Group 8
7	11100000	Mute Group 9-12	Mute Group 9	Mute Group 10	Mute Group 11	Mute Group 12
8	00010000	Mute Group 13-16	Mute Group 13	Mute Group 14	Mute Group 15	Mute Group 16
9	10010000	Mute Group 17-20	Mute Group 17	Mute Group 18	Mute Group 19	Mute Group 20
10	01010000	Mute Group 21-24	Mute Group 21	Mute Group 22	Mute Group 23	Mute Group 24
11	11010000	Mute Group 25-28	Mute Group 25	Mute Group 26	Mute Group 27	Mute Group 28
12	00110000	Mute Group 29-32	Mute Group 29	Mute Group 30	Mute Group 31	Mute Group 32
13	10110000	Preset Recall 1-4	Preset Recall 1	Preset Recall 2	Preset Recall 3	Preset Recall 4
14	01110000	Preset Recall 5-8	Preset Recall 5	Preset Recall 6	Preset Recall 7	Preset Recall 8
15	11110000	Preset Recall 9-12	Preset Recall 9	Preset Recall 10	Preset Recall 11	Preset Recall 12
16	00001000	Preset Recall 13-16	Preset Recall 13	Preset Recall 14	Preset Recall 15	Preset Recall 16
17	10001000	Preset Recall 17-20	Preset Recall 17	Preset Recall 18	Preset Recall 19	Preset Recall 20
18	01001000	Preset Recall 21-24	Preset Recall 21	Preset Recall 22	Preset Recall 23	Preset Recall 24
19	11001000	N/A	N/A	N/A	N/A	N/A
20	00101000	N/A	N/A	N/A	N/A	N/A
21	10101000	Force On Group 1-4	Force On Grp 1	Force On Grp 2	Force On Grp 3	Force On Grp 4
22	01101000	Force On Group 5-8	Force On Grp 5	Force On Grp 6	Force On Grp 7	Force On Grp 8
23	11101000	Force On Group 9-12	Force On Grp 9	Force On Grp 10	Force On Grp 11	Force On Grp 12
24	00011000	Force On Group 13-16	Force On Grp 13	Force On Grp 14	Force On Grp 15	Force On Grp 16
25	10011000	Force On Group 17-20	Force On Grp 17	Force On Grp 18	Force On Grp 19	Force On Grp 20
26	01011000	Force On Group 21-24	Force On Grp 21	Force On Grp 22	Force On Grp 23	Force On Grp 24
27	11011000	Force On Group 25-28	Force On Grp 25	Force On Grp 26	Force On Grp 27	Force On Grp 28
28	00111000	Force On Group 29-32	Force On Grp 29	Force On Grp 30	Force On Grp 31	Force On Grp 32
29	10111000	Force Off Group 1-4	Force Off Grp 1	Force Off Grp 2	Force Off Grp 3	Force Off Grp 4
30	01111000	Force Off Group 5-8	Force Off Grp 5	Force Off Grp 6	Force Off Grp 7	Force Off Grp 8
31	11111000	Force Off Group 9-12	Force Off Grp 9	Force Off Grp 10	Force Off Grp 11	Force Off Grp 12
32	00000100	Force Off Group 13-16	Force Off Grp 13	Force Off Grp 14	Force Off Grp 15	Force Off Grp 16
33	10000100	Force Off Group 17-20	Force Off Grp 17	Force Off Grp 18	Force Off Grp 19	Force Off Grp 20
34	01000100	Force Off Group 21-24	Force Off Grp 21	Force Off Grp 22	Force Off Grp 23	Force Off Grp 24
35	11000100	Force Off Group 25-28	Force Off Grp 25	Force Off Grp 26	Force Off Grp 27	Force Off Grp 28
36	00100100	Force Off Group 29-32	Force Off Grp 29	Force Off Grp 30	Force Off Grp 31	Force Off Grp 32
37	10100100	Combine Group 1-4	Combine 1	Combine 2	Combine 3	Combine 4
38	01100100	Combine Group 5-8	Combine 5	Combine 6	Combine 7	Combine 8
39	11100100	Combine Group 9-12	Combine 9	Combine 10	Combine 11	Combine 12
40	00010100	Combine Group 13-16	Combine 13	Combine 14	Combine 15	Combine 16
41	10010100	Assignable in Remote Mapping Window				
42	01010100	Assignable in Remote Mapping Window				
43	11010100	Assignable in Remote Mapping Window				
44	00110100	Assignable in Remote Mapping Window				
45	10110100	Assignable in Remote Mapping Window				
46	01110100	Assignable in Remote Mapping Window				
47	11110100	Assignable in Remote Mapping Window				
48	00001100	Assignable in Remote Mapping Window				
49	10001100	Assignable in Remote Mapping Window				
50	01001100	Assignable in Remote Mapping Window				
51	11001100	Assignable in Remote Mapping Window				
52	00101100	Assignable in Remote Mapping Window				
53	10101100	Assignable in Remote Mapping Window				
54	01101100	Assignable in Remote Mapping Window				
55	11101100	Assignable in Remote Mapping Window				
56	00011100	Assignable in Remote Mapping Window				
57-255		For Future Updates				

EAW Commercial
One Main Street | Whitinsville, MA 01588 USA
www.eawcommercial.com
TEL: toll free in US & Canada 888.337.7404
TEL outside US 425.892.6503 | FAX: 425.485.1152
UK 44.1268.570.808 | FAX 44.1268.570.809

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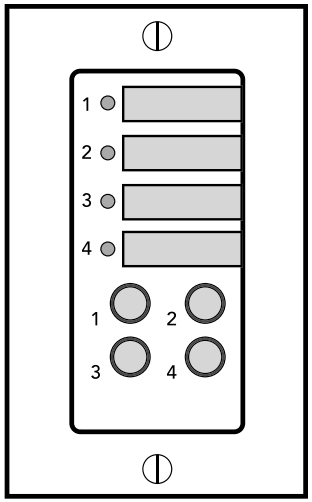
DX-SW4

Remote Switch Control

Quick-Start Guide

The DX-SW4 is a real-time remote switch control for use with the DX8 Digital Audio Mixer/Signal Processor. The DX-SW4 can be programmed to select various functions on the DX8, including Input, Output, and Group muting, preset selection, and force-on/off. 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.



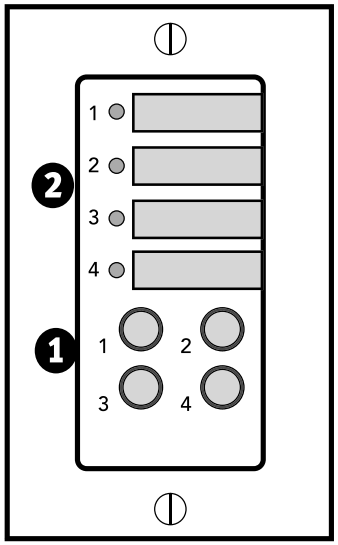
SAFETY FIRST!

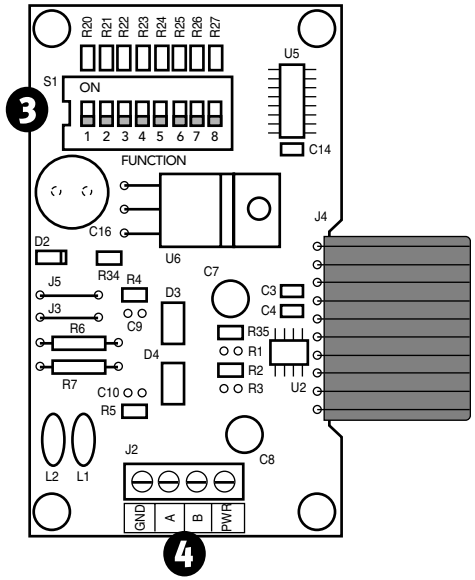
Before connecting and using the equipment, please read this Quick-Start Guide carefully and keep it for future reference.

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. 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-SW4, 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

❶ **SELECT BUTTONS**

Use to select the functions programmed with the Function Select Switch on the back of the remote control. Pressing a button once toggles the predefined function ON (active), and pressing it again toggles the function OFF (inactive).

❷ **SELECT LED INDICATORS**

Indicates the state of the corresponding select button. When the LED is lit, the selected function is ON (active).

A space is provided next to each indicating LED for inserting a 1/4" x 7/8" label to identify the predefined function assigned to each select button.

REAR PANEL FEATURES

❸ **PREDEFINED FUNCTION SELECTION SWITCH**

This 8-position DIP switch provides 256 unique functions that can be assigned to the DX-SW4 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 functions.

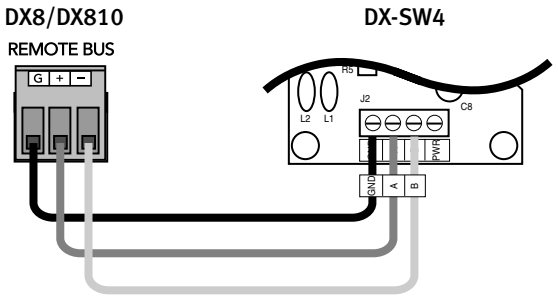
❹ **CONNECTOR (J2)**

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.

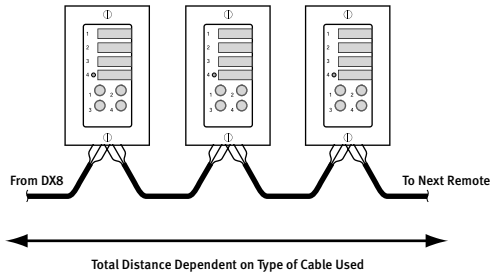
The connector is wired as follows:

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)



USING AN EXTERNAL POWER SUPPLY

The DX-SW4 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.



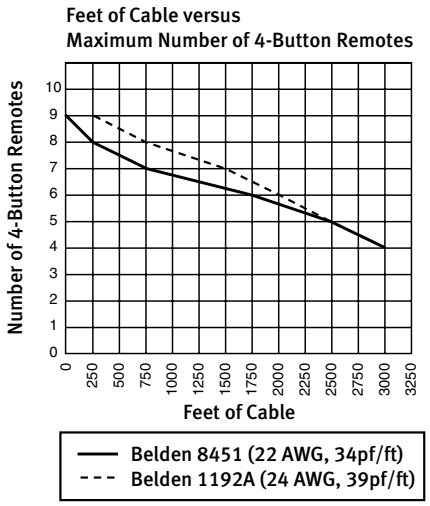
INSTALLING THE DX-RVC

The DX-SW4 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.



DISTANCE CHART FOR DX-SW4 CABLE