RCWPB8DESK

TECHNICAL DATA

Pushbutton Remote Control for ASPEN & DM Series Processors

INSTALLATION GUIDE



- **Versatile remote control for ASPEN & DM Series processors through the logic I/O ports**
- **Switch contacts can be used to recall presets, launch macros or control levels**
- **Upper six LEDs under control of logic out connections on DM processor**
- **Lower two LEDs light with button press**
- **Sturdy desktop pedestal included**
- **Optional CAT-5 to DB-25 adapter simplifies installation**



The RCWPB8DESK is a complete kit with PB8 assembly and bezel, desktop stand and hardware.

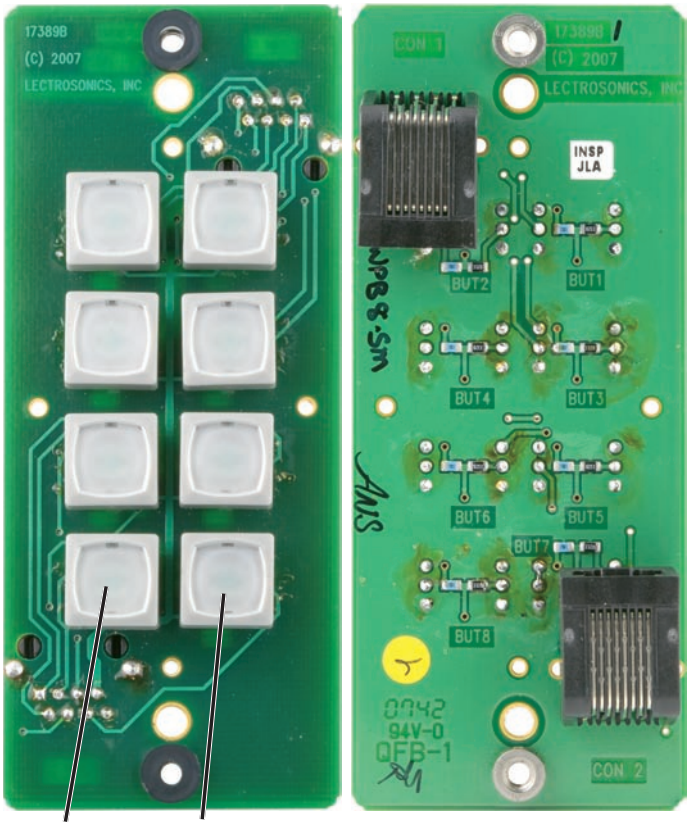
Extensive remote control functions for ASPEN & DM Series processors can be implemented easily and inexpensively with the RCWPB8 switch panel. LEDs built into each switch indicate various functions and states at a glance.

Typical control functions include recalling presets to configure the sound system for particular purposes, muting and enabling sound masking, level controls of single or groups of inputs or outputs, signal routing changes and numerous other custom functions created using macros in the processor.

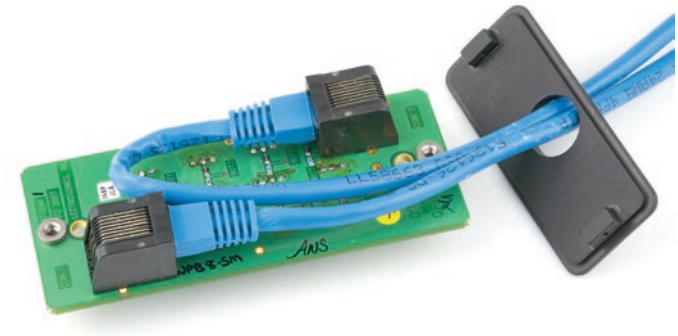
Standard RJ-45 connectors allow a convenient interface to the processor logic ports using CAT-5 cabling. The optional DB2CAT5 adapter provides a convenient, pre-wired interface between the control and processor.

LECTROSONICS®
Rio Rancho, NM, USA
www.lectrosonics.com

Actual size



Button 7 *Button 8*



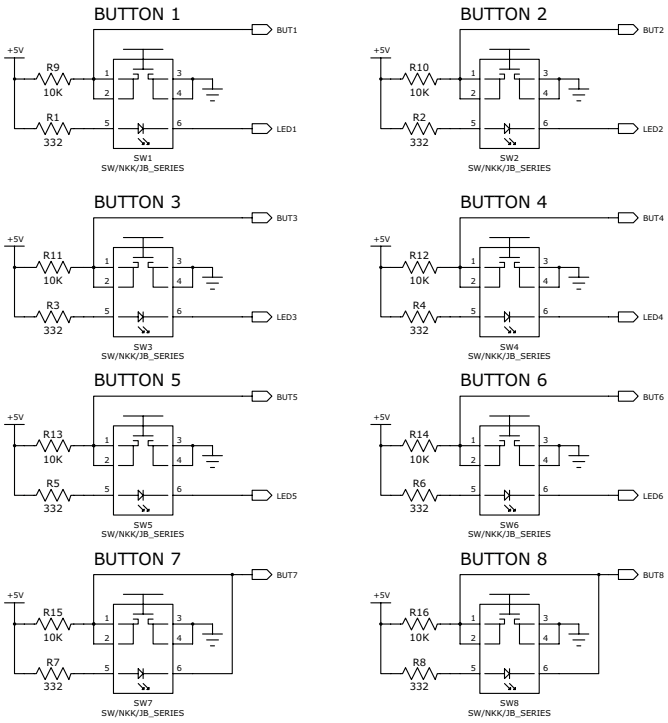
Standard CAT-5 connections on the back of the PCB

Eight switches are wired to RJ-45 jacks on the circuit board assembly for control connections with the ASPEN & DM processor. All eight buttons execute a momentary contact when pressed.

LEDs built into the buttons are used to indicate active modes or to confirm button presses. The activity of the upper six LEDs is defined by the stored system setup and driven by the logic outputs on the processor. The bottom two LEDs (buttons 7 and 8) simply light while the button is being pressed, which is useful for volume UP and DOWN controls.

IMPORTANT

The RCWPB8 control was designed for direct connection to a DM Series processor only. Connection to any other voltage source may permanently damage the unit, which will not be covered under the warranty.



CABLE PAIRING AND COLORS BASED ON TIA/EIA-568-B STANDARD

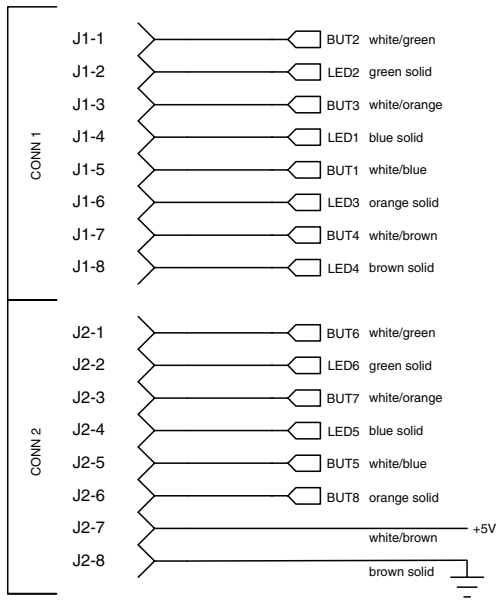
BUTTONS 1-6
SOLID COLOR = LED CTRL
STRIPED COLOR = BUTTON TRIG

BUTTONS 7 & 8
BUTT TRIGGER ONLY, NO LED CTRL

BUT1 - CABLE 1 BLUE
BUT2 - CABLE 1 GREEN
BUT3 - CABLE 1 ORANGE
BUT4 - CABLE 1 BROWN

BUT5 - CABLE 2 BLUE
BUT6 - CABLE 2 GREEN
BUT7 - CABLE 2 ORANGE STRIPE
BUT8 - CABLE 2 ORANGE SOLID

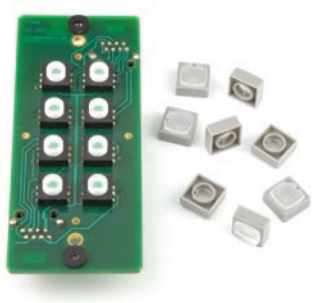
+5V - CABLE 2 BROWN STRIPE
GND - CABLE 2 BROWN SOLID



Desk Stand Assembly

Remove Button Caps

Caps snap off easily with fingernails. Note the small black dots on the top of the cap indicating the orientation.



Attach Cables

Run CAT-5 cables through bottom panel then attach to the PB8 circuit board assembly. Insert assembly into the desk stand housing.



Install Bezel and Check Spacers

Place plastic bezel over switches, as shown.

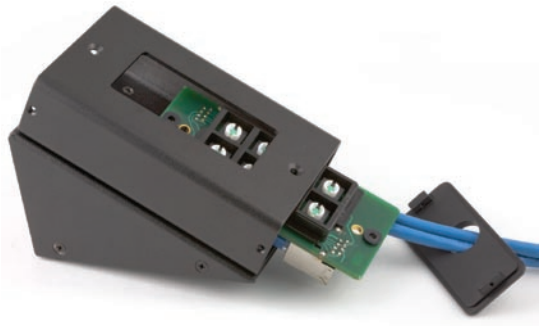


CAUTION: Unit can be damaged if these spacers are missing.

The spacers prevent warping the circuit board when the screws are tightened. Early PB8 assemblies did not have spacers glued onto the circuit board. If your unit does not have these spacers, glue a small washer or spacer (as close to this size as possible) about 1/16" thick or order Lectrosonics part number P1247.

Insert Switch Assembly Into Housing

Reach inside the housing and hold the switch assembly in the housing with screw holes aligned and secure with two screws. Do not overtighten.



Attach Housing Covers and Strain Relief

Install the two end covers and secure each one with two screws. Be sure that the hold for the cable exit is towards the bottom/back of the housing as shown.

Wrap the strain relief around the two cables and insert it into the hole on the bottom/back of the panel as shown.



Install Button Caps

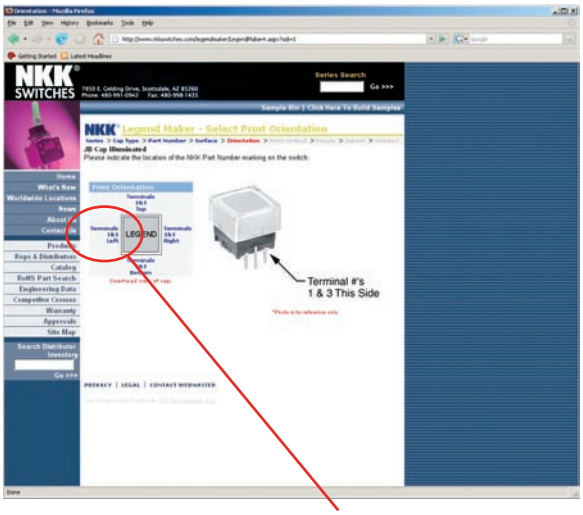
Orient the small black dot on each cap toward the top of the assembly and press the caps onto the switches.

NKK Switch Labeling

Custom engraved or screened switch caps can be specified and ordered on the NKK web site. Click on this link or enter the url in your browser:

www.nkkswitches.com/legendmaker1.aspx

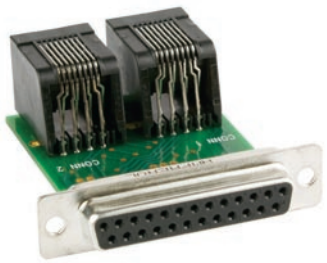
Select the switch Series: JB Cap Illuminated with Frame Caps. Be sure to select terminals 1 and 3 on the left side for proper orientation in the assembly.



Select pins 1 and 3 on the left side

Optional DB2CAT5 Adapter

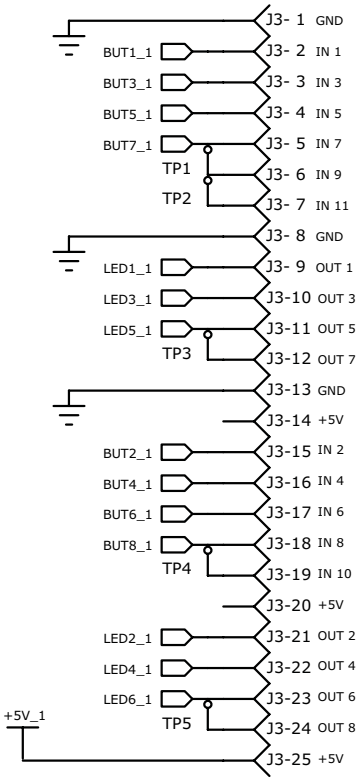
A convenient adapter provides pre-wired connections between the ASPEN & DM processor logic ports and the pushbutton remote control to save installation time and



complexity.

A DB-25 female connector and two RJ-45 connectors are mounted on a circuit board with pin to pin wiring in a logi-





cal configuration.

The wiring follows a pattern where button 1 is connected to logic input 1, LED 1 is connected to logic output 1 and so on. Buttons and LEDs 7 and 8 are combined so that the LED lights while the button is pressed.

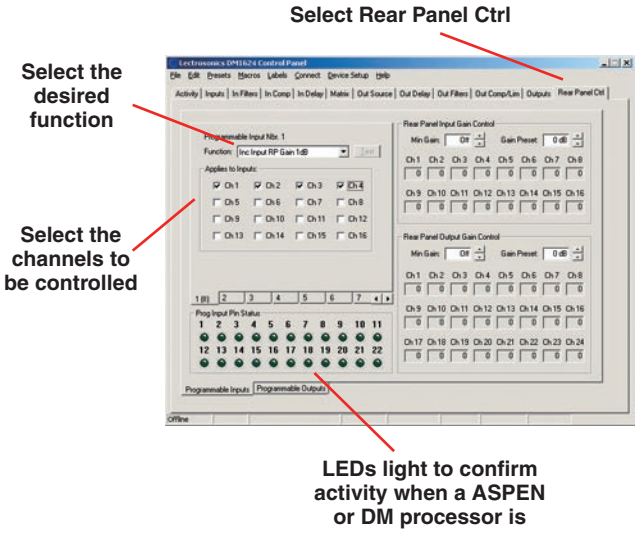
Logic inputs and outputs are combined on the DB-25 connector and are wired to the buttons and LEDs as

Programming is Simple

Programming the button functions is as simple as a few mouse clicks in the processor GUI. In the example at right, A DM1624 is being configured for Logic input 1 (button 1 using the DB2CAT5 adapter) to increase the gain in 1 dB steps on inputs 1 through 4. This is done by simply selecting the function from a pull down list and the input channels to be affected. Settings are then stored to a preset in the processor with a mouse click and selection of the desired preset.

The buttons illuminate under the control of the ASPEN & DM processor logic outputs with a few mouse clicks on another screen in the GUI.

There is no code to write, and complex functions can be implemented using the macro capabilities built into the DM Series processors.



LECTROSONICS®
581 Laser Road NE • Rio Rancho, NM 87124 USA • www.lectrosonics.com
(505) 892-4501 • (800) 821-1121 • fax (505) 892-6243 • sales@lectrosonics.com

14 April 2010