



**Broadcast Devices, Inc.**

# **REM-100 Remote Panel**

**TECHNICAL REFERENCE MANUAL**

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## I. Introduction

The REM-100 remote control panel is designed to be used in conjunction with the CBS AIR/REH/CUE Custom Audio Controller and the BDI 8-2X1 passive switcher. The unit is a single EIA rack unit with two sets of front panel buttons. The left hand buttons control the 8-2X1 switcher and the right hand set of buttons and volume control interface directly to the CBS AIR/REH/CUE Audio Controller. Rear panel connection to each set of buttons is via DB-25 connectors.

### A. Unpacking and Inspection

Carefully unpack the unit after receipt and inspect for damage that may have occurred during shipping. If damage is noted, contact the shipper immediately and file a damage claim. The contents of the package have been insured to cover total replacement cost. Make certain that the package contents are the same as noted on the packing slip. If not, contact Broadcast Devices, Inc. Check to make sure all mechanical parts are secure. Units are delivered from the factory configured for 120 volts A.C. 60 Hz. Operation. Check to make sure that the power source is correct for proper operation. Units are field configurable for 240 Volt operation. See initial configuration section of part III, installation section for different power configuration.

### B. General Description

The REM-100 switch boards contain two or three SPST momentary pushbuttons and status indicator lights. Provision is made to set the switches up for ground or dry contact closure. For most applications ground start is desirable and is accomplished by placing jumpers in the ground positions. For dry contact closure the ground jumpers are lifted and connections are applied to the appropriate GND input in on the respective DB-25 connector and the SW number corresponding to its GND pin. Factory default is ground start configuration with the jumpers in place.

The REG/EMG half of the remote control utilizes SW1 and SW2 and their respective status indicators. The AIR/REH/CUE half of the remote control panel utilizes SW2, SW3, and SW4. In addition, provision is made for the remote control of cue volume. When the REM-100 is used with the CBS AIR/REH/CUE Custom Audio Controller simply connect a 25 conductor DB-25 cable between the remote control connector of the AIR/REH/CUE chassis and the AIR/REH/CUE half of the REM-100. Refer to the schematic diagram for pin connections for other applications... Factory default is for the switches to provide a momentary ground to the respective SW DB-25 pin. Indicator lights are common to +5 VDC and applying a ground to the respective status input will illuminate the status LED.

## II. Specifications

Input Connectors:	DB25
Operating Temperature Range:	0 - 60° Celsius non condensing atmosphere
Physical Dimensions:	1.75 H X 19 W X 2.00 D (inches)

## III. Installation

### A. Initial Configuration

Factory default is for the GND jumpers on the JMP1 headers to be installed. For dry contact closure remove these jumpers.

## B. Remote Control/Status Connection

Refer to the table below for remote control and status connections. The REM-100 provides a momentary ground or dry contact closure for switching operation.

### **Remote Control Status Table REG/EMG**

Pin 1 NC  
 Pin 2 NC  
 Pin 3 NC  
 Pin 4 GND SW1 REG  
 Pin 5 GND SW2 EMG  
 Pin 6 GND SW3 – not used  
 Pin 7 GND SW4 – not used  
 Pin 8 +5VDC – supplied by equipment connected  
 Pin 9 +5VDC - supplied by equipment connected  
 Pin 10 +5VDC - supplied by equipment connected  
 Pin 11 +5VDC - supplied by equipment connected  
 Pin 12 GND Common to connected equipment  
 Pin 13 NC  
 Pin 14 NC  
 Pin 15 NC  
 Pin 16 NC  
 Pin 17 SW REG Command  
 Pin 18 SW EMG Command  
 Pin 19 NC  
 Pin 20 NC  
 Pin 21 SW1 REG Status Input – GND Common provided by equipment connected  
 Pin 22 SW2 EMG Status Input - GND Common provided by equipment connected  
 Pin 23 NC  
 Pin 24 NC  
 Pin 25 +5VDC

### **Remote Control Status Table AIR/REH/CUE**

Pin 1 NC  
 Pin 2 NC  
 Pin 3 NC  
 Pin 4 GND SW1 –not used  
 Pin 5 GND SW2 AIR  
 Pin 6 GND SW3 REH  
 Pin 7 GND SW4 CUE  
 Pin 8 +5VDC – supplied by equipment connected  
 Pin 9 +5VDC - supplied by equipment connected  
 Pin 10 +5VDC - supplied by equipment connected  
 Pin 11 +5VDC - supplied by equipment connected  
 Pin 12 GND Common to connected equipment  
 Pin 13 Volume control potentiometer wiper  
 Pin 14 NC  
 Pin 15 NC  
 Pin 16 NC  
 Pin 17 NC

Pin 18 SW2 AIR Command

Pin 19 SW3 REH Command

Pin 20 SW4 CUE Command

Pin 21 NC

Pin 22 SW2 AIR Status Input - GND Common provided by equipment connected

Pin 23 SW3 REH Status Input - GND Common provided by equipment connected

Pin 24 SW4 CUE Status Input - GND Common provided by equipment connected

Pin 25 +5VDC

#### **IV. Warranty**

Broadcast Devices, Inc. products are warranted against failure due to faulty materials or workmanship for a period of one year from the date of shipment to the ultimate user. The warranty covers repair or replacement of defective parts at the factory, provided the unit has been returned prepaid by the user. All shipments to the factory shall have affixed to the outside of the container an R. A. number obtained from the factory. The above warranty is void if the unit has been modified by the user outside of any recommendations from the factory or if the unit has been abused or operated outside of its electrical or environmental specifications. If customer conducted field tests suggest that the unit may be faulty, whether or not the unit is in warranty, a full report of the difficulty should be sent to Broadcast Devices, Inc. factory at Cortlandt Manor, New York. The office may suggest further tests or authorize return for factory evaluation.

Units sent to the factory should be well packed and shipped to Broadcast Devices, Inc. 5 Crestview Avenue, Cortlandt Manor, NY 10567. Remember to affix the R.A. number to the outside of the carton. Any packages received without such R.A. number will be refused. Note: freight collect shipments will also be refused. When the unit has been received, inspected and tested, the customer will receive a report of the findings along with a quotation for recommended repairs, which are found falling outside of the standard warranty. Units returned for in-warranty repairs which are found not to be defective will be subject to an evaluation and handling charge. In-warranty units will be repaired at no charge and returned via prepaid freight.

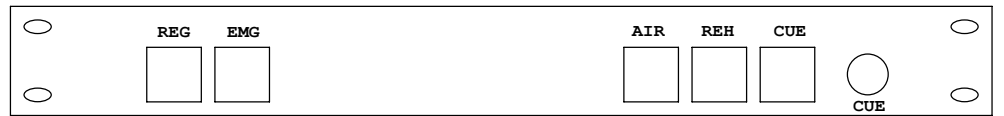
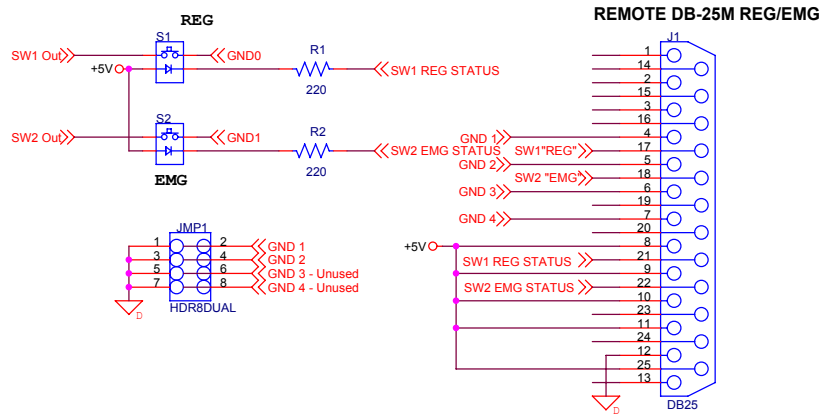
Out-of-warranty units needing repair require a purchase order and will be invoiced for parts, labor, and shipping charges.

When ordering replacement part, always specify A) Part number or Description, and Quantity; B) Date of Purchase, Where Purchased; C) Any Special Shipping Instructions. Always specify a street address, as shipping companies cannot deliver to a postal box.

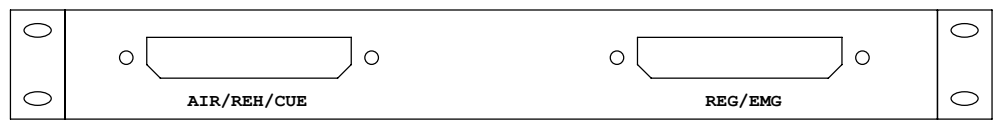
Broadcast Devices, Inc. is not responsible for any other manufacturer's warranty on original equipment. Nor are we responsible for any failure, damage, or loss of property that may occur due to the installation or operation of our equipment outside of recommended specifications.

## V. Schematic Diagrams

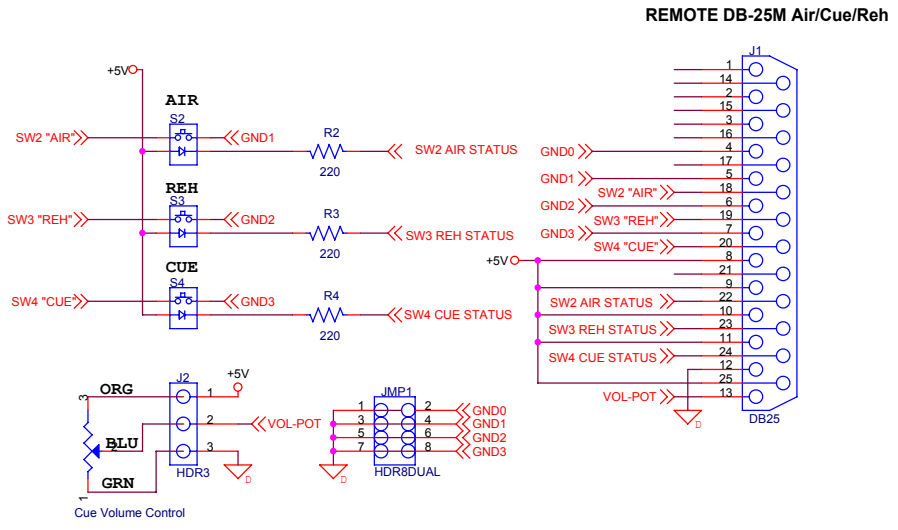
### A. Schematic Diagram



Front View



Rear View



The REM-100 is intended for use with the BDI AIR/REH/CUE Audio Control System.

Direct connection using a standard 25 conductor DB-25 cable can be accomplished between the AIR/REH/CUE chassis and the REM-100.

<b>Broadcast Devices, Inc.</b>		
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