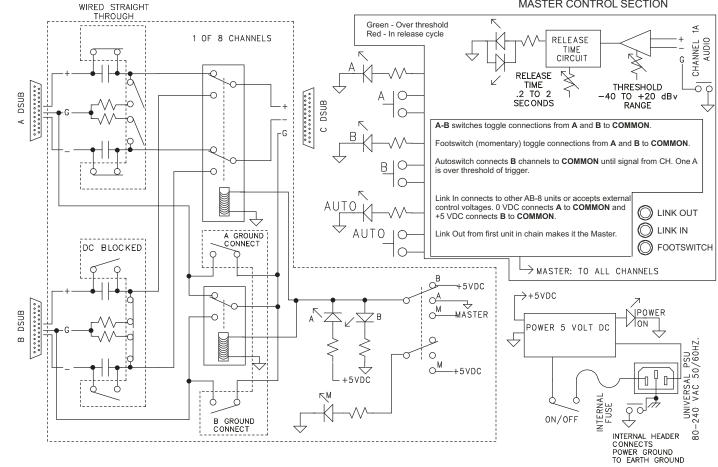
# whirlwind

8 Channel Audio Switcher

## **OPERATIONS MANUAL**





#### Introduction

The AB-8 is an 8-channel, balanced, bidirectional signal switcher (1 in - 2 out or 2 in -1 out). Mic level audio, line level audio, and MIDI signals can be routed with the AB-8. The AB-8 auto-senses loss of input on the primary inputs, and automatically switches to secondary inputs for backup in live tracking applications. It can also be used to manually switch between inputs and outputs when multi-tracking in a studio. Channels can be switched individually or globally and AB-8 units can be master/slaved for switching large numbers of channels.

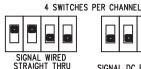
#### **Features**

- Eight channels of balanced A-B switching for line or mic level audio or MIDI signals •
- Each of the eight channels can be individually switched or assigned to a Master Control circuit ٠
- Master control through front panel pushbuttons, footswitch or automatically triggered • by loss of signal on channel one **A** input
- Can be configured as two inputs to one output, one input to two outputs or a mixture of each ٠
- Multiple units can be ganged together under Master Control of the first unit or control voltage input ٠
- Indicator lights show status of each channel
- Automatic switchover to redundant copy of backing tracks for live performance ۰
- Easily switch from tracking to mixing in recording setups
- All signal paths are connected A to COMMON when AC power is removed ٠
- Internal DIP switches configure ground path switching and DC blocking requirements.
- Auto trigger has sensitivity and hold time controls to accommodate input signal levels from -40dB to +20dB ٠

GROUND SELECT SWITCHES A/B TO C ALWAYS CONNECTED THRU SWITCHED THRU RELAY A B | A B | 2

DC blocking switches help eliminate small popping noises between the **A** and **B** jacks and the Common by applying DC blocking circuitry between them. This is caused when equipment being connected through the AB-8 have small DC offset voltages between them. Factory setting is with no DC blocking, which is the position required for passing phantom power.

A/B SIGNAL PATH DC BLOCKING CIRCUIT



SIGNAL DC BLOCKED

#### WARRANTY

This product is guaranteed to be free from defects in materials and workmanship to the original purchaser for a period of 5 years from the date of purchase. Should service be required, return the unit postage prepaid along with the original sales receipt to:

Whirlwind Attention - Repair 99 Ling Road Rochester, New York 14612

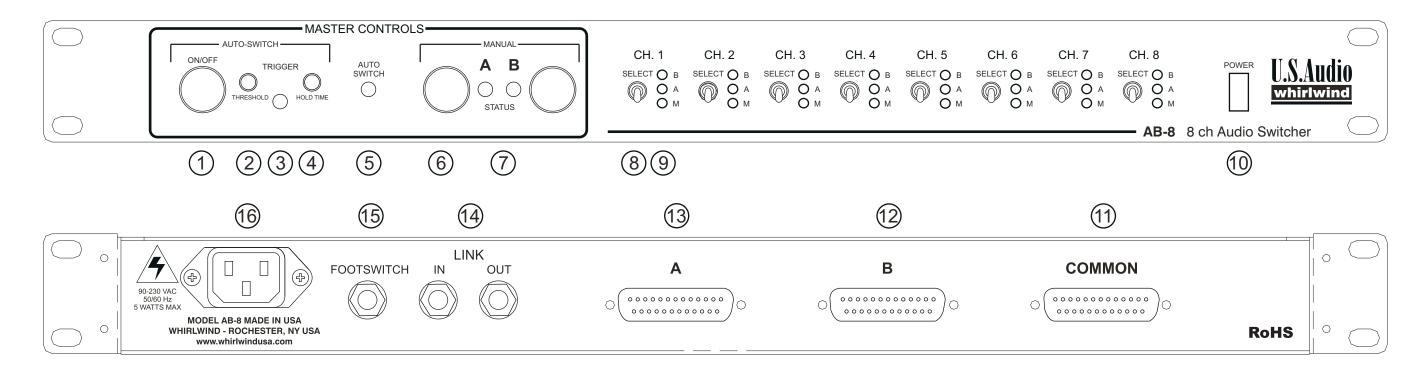
The warranty on this product shall not apply to defects or damage resulting from abuse, abnormal use or from repairs or modifications performed by anyone other than Whirlwind. If it is determined a manufacturing defect has occurred, Whirlwind will repair or replace the unit at our option and pay the postage back to you.

> 99 Ling Road - Rochester, NY 14612 800-733-9473 / 585-663-8820 Fax: 585-865-8930 Website: http://www.whirlwindusa.com Email: sales@whirlwindusa.com



Internal DIP switches are provided to configure parameters for two switching options of the AB-8. These switches are located on top of the circuit board.

Ground select switches route the shield wires from the A and B Dsub 25 jacks to be relay switched (factory setting) or permanently connected to the Common jack. A and B shields can be routed independently.

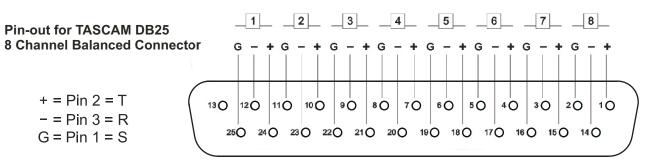


### **Controls and Functions**

- 1. Auto-switch on/off switch engages the signal sensing circuit to control when the unit switches from A to B with the loss of signal on channel one A.
- 2. Threshold control sets the level at which the signal present on channel one A will keep the A channels connected to **COMMON**. When the channel one **A** signal falls below this threshold, the AB-8 will automatically switch **COMMON** channels to the **B** channels. Only **COMMON** channels set to the M (Master) position are switched, COMMON channels set to A or B are not switched automatically. The threshold operates through a signal range of -40 dB to +20 dB.
- 3. Trigger LED illuminates green when the signal level on channel one **A** is above the threshold level and stays green until that signal is removed. It then illuminates red through the duration of the hold time.
- Hold time control adjusts the length of time before the AB-8 Auto-switches the **COMMON** channels from **A** to 4. **B** when the channel one **A** signal falls below the level set by the threshold trim pot.
- Auto-switch LED illuminates when the Auto-switch function is engaged. 5.
- Manual A B switches change all channels assigned to the Master Controls with a single push of either 6. switch.
- A B LEDs indicate whether A or B channels assigned to the Master Controls are connected to the COMMON 7. channels.
- 8. Channel Select switches control the A - B connection to COMMON individually for each channel. Any of the eight channels can independently connect A or B to COMMON or assign the channel to the Master Controls for simultaneous multi channel switching.
- Channel yellow and red LEDs indicate the current switching status of each individual channel and the green 9. LED illuminates when the channel is connected to the Master Controls.
- 10. Power switch turns the power on to the AB-8. The AB-8 automatically connects A to COMMON on all eight channels when power is turned off. However, the LEDs will show no indications.
- 11. **COMMON** Female Dsub 25 connector can be either an input or output connection for eight channels of balanced audio. The connector is wired to the Tascam DA88 standard pinout.

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- contact of the jack. In this configuration all Master Controls are deactivated.
- the **A B** Buttons on the front panel. The jack is <sup>1</sup>/<sub>4</sub>" tip- sleeve.

<sup>®</sup>Tascam DA88 is a registered trademark of the TEAC corporation Toyko, Japan



12. **B** Female Dsub 25 connector can be either an input or output connection for eight channels of balanced audio.

13. A Female Dsub 25 connector can be either an input or output connection for eight channels of balanced audio.

14. Link In and Out jacks are standard <sup>1</sup>/<sub>4</sub>" tip- sleeve and are used for connecting multiple AB-8 units together under Single Master Control from the first unit in the chain. The Master Control sections and footswitch controls of all slave units are disconnected. An external control voltage can also be used to activate switching from A to B. 0 VDC applied to the tip of the LINK IN jack connects A channels to COMMON and +5 VDC on the tip connects B channels to **COMMON**. Both control voltages are referenced to the sleeve

15. Footswitch jack allows Master Manual switching using a standard momentary N.O. footswitch in addition to

16. Power IEC inlet connects to incoming AC power with a voltage range of 90- 230 VAC at 50 or 60 Hz.