

# SW9016 Video/Audio Matrix Switcher

# SOUNDWEB™



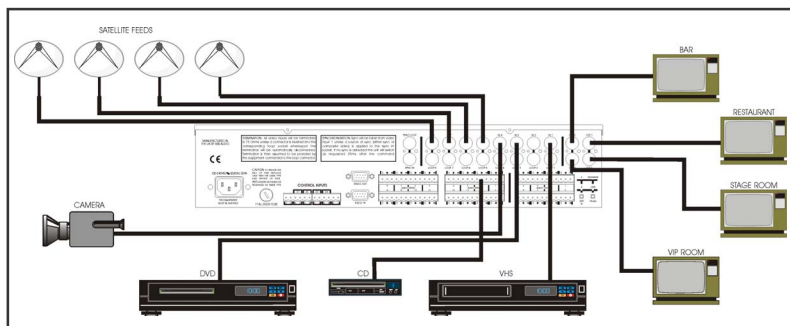
Expanding the applications of Soundweb is the SW9016 Video/Audio Matrix Switcher, allowing video and audio sources to be routed by Soundweb Designer presets or simple remote control.

Integrating Soundweb Audio Processing and Networking with these switchers provides a unique and totally integrated multimedia processing system for Theme Bars, Restaurants, Clubs, Home Theatre Systems, Videoconferencing, Corporate Boardrooms, Classrooms and other environments where there may be several areas, each requiring it's own video/audio feed possibilities. In these systems, the theme is very much 'video follows audio' in that the video feeds are switched when the audio sources are re-routed according to event need.

The SW9016 features 8 video source inputs (NTSC or PAL) on BNC connections, along with 16 balanced audio inputs which allow easy input expansion for Soundweb audio inputs. Four video output zones are fed from BNC connectors with 8 balanced audio outputs.

In addition to seamless integration within Soundweb systems, the SW9016 is equally suited to stand alone operation. When used in this way it can be used as simple routing switches or alternatively loaded with up to eight pre-sets that allow any combination of audio/video routing and audio level to be instantly recalled in up to four independent zones. If no pre-sets are loaded, the units automatically default to a simple four zone source selector with 'audio follows video' routing, audio level control being independent for each zone.

Control can be remote via RS232 using simple string commands, or local from a contact closure port, for example using up to four 9012 panels. The baud rate of the RS232 can be changed to suit the application. BSS can also supply an 'active X' plugin to aid the easy integration with bespoke windows based control applications.



BSS Audio supplies a standalone PC program that can be used to both set-up and control the devices when they are not part of a Soundweb system. To increase flexibility, up to two SW9016s may be connected to a single Soundweb or other RS232 device.

## SW9016 Video/Audio Switcher Features

- ▶▶ 8 Video input sources and 16 audio inputs matrixable to 4 video outputs and 8 balanced audio outputs, either audio-follows-video or independently, with audio output level controls
- ▶▶ Controlled via Soundweb Designer or 9010/9012 controller presets, or a standalone PC application
- ▶▶ Simple control via simple switches
- ▶▶ 2 units may be cascaded to increase capacity

## Seam-free switching

*The SW9016 is capable of switching the video during the 'vertical blanking interval' which will provide interference free switching between video sources that are synchronised. Sync can be taken from either a dedicated sync input or from video input 1. A 'sync out' connector is provided for connection to other equipment. If no sync is detected, the SW9016 will switch after 25ms thereby preventing it from locking up if sync is lost.*

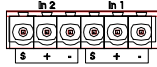
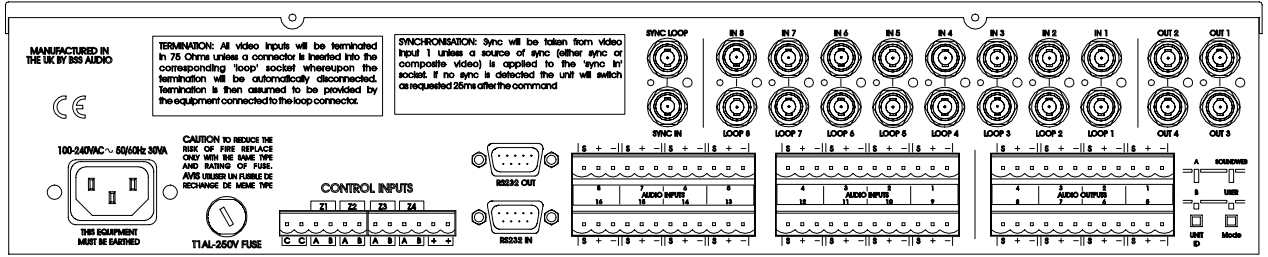
*Each video input is provided with a 'loop' connection to allow daisy chaining. Plugging a cable into the loop connector automatically disconnects the 75Ohm termination inside the unit to avoid double terminating the source.*

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## Audio Input Connector

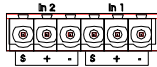
Each 6-way connector accommodates two inputs, pin 1 is on right when viewed from rear:

Pin 1: Input 1 (3,5,7,9,11,13,15) Screen (ground)  
 Pin 2: Input 1 (3,5,7,9,11,13,15) +ve (hot)  
 Pin 3: Input 1 (3,5,7,9,11,13,15) -ve (cold)  
 Pin 4: Input 2 (4,6,8,10,12,14,16) Screen (ground)  
 Pin 5: Input 2 (4,6,8,10,12,14,16) +ve (hot)  
 Pin 6: Input 2 (4,6,8,10,12,14,16) -ve (cold)



## Video Input and Output Connector

Centre - Signal, Outer - Ground

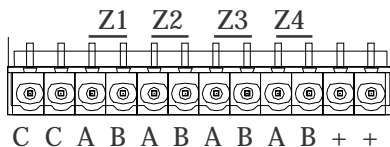


## Audio Output Connector

Each 6-way connector accommodates two outputs, pin 1 is on right when viewed from rear:

Pin 1: Input 1 (3,5,7,9,11,13,15) Screen (ground)  
 Pin 2: Input 1 (3,5,7,9,11,13,15) +ve (hot)  
 Pin 3: Input 1 (3,5,7,9,11,13,15) -ve (cold)  
 Pin 4: Input 2 (4,6,8,10,12,14,16) Screen (ground)  
 Pin 5: Input 2 (4,6,8,10,12,14,16) +ve (hot)  
 Pin 6: Input 2 (4,6,8,10,12,14,16) -ve (cold)

## Control port pin-outs



## Preset/Zone Trigger Inputs

Pin 1 is on right when viewed from rear:  
 Pin 1, 2, : +5V. Pin 11, 12 : Common  
 Zone Mode  
 Pin A Gain, Pin B Source Select  
 Preset Mode  
 Use Z1 connections only

## Technical Specifications

Video Inputs	8 Composite Video inputs (CBVS or SVideo) on BNC connectors with BNC loopthrough connectors
Video Standard	PAL or NTSC (auto selected)
Video Bandwidth	150Mhz
Video Crosstalk	<70dB up to 10MHz
Sync	Automatically either Channel 1 or 'Sync' input
Impedance	75 Ohm self-terminating
Routing	8x4 Video Matrix
Video outputs	4 x 75Ohm Composite Video Outputs on BNC connectors
Audio Inputs	16 Balanced Audio inputs on Phoenix Combicon removable screw connectors.
Routing	16x8 Audio Matrix, each channel independently addressable
Input Impedance	10kOhm
Maximum Input Level	+20dBu
THD	<0.02%
Frequency Response	20Hz-20kHz +0/-0.2dB
S/N Ratio	>110dB at unity gain
Crosstalk	<-100dB
CMRR	>40dB
Audio Outputs	8 Balanced Audio Outputs on Phoenix/Combicon removable screw connectors.
Output gain	adjustable, -inf to +20dB
Control & Presets	
Presets	8 presets per video output zone when used with standalone PC app
Serial Control Port	RS232 connects to Soundweb 9088ii, 9008ii or 9000ii or PC
Dimensions	2RU (3.5") high, 19" wide, 6.6" deep (89mm x 445mm x 168mm)
Weight	3kgs (6.6lbs)

*BSS Audio have a policy of continued product improvement and accordingly reserve the right to change features and specifications without prior notice.*

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