Soundweb™
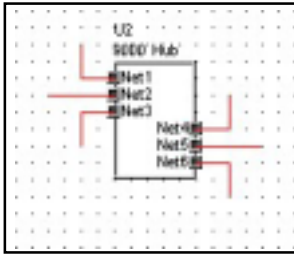

The Soundweb 9000*ii* Network hub is used to expand the routing capabilities of the Soundweb system. It has all the processing facilities of the 9088*ii* DSP unit; 200MIPS of DSP horsepower, analogue GPI control interfacing, and RS232 ports for external control by PC or Panja/Crestron type systems; but has 6 network ports instead of analogue inputs and outputs.

Like the 9088*ii*, each Soundweb 9000*ii* can hold up to 12 completely different system designs in its own memory. The DSP in a 9000*ii* hub is most often used for matrixing, mixing, and routing the signals from 9088*ii* devices, which are then free for signal processing.

The Soundweb 9000*ii* Hub occupies just a single rack space (1U) and includes it's own power supply. Programming the unit is accomplished via the Soundweb Designer software, available free from BSS Audio or on the internet at www.bss.co.uk/soundweb.

For safety-critical systems, the Soundweb 9000*ii* has an opto-isolated output which functions as a watchdog: the opto-isolator conducts when power is applied to the unit and the software is functioning correctly; it is cut off if there has been a power failure or another fault. This function can be used to trigger alarm systems or to construct redundant systems.

The 9000*ii* Network Hub can be used used to extend the matrixing and signal routing capabilities of a Soundweb System Network, and large systems can be constructed using one or more 9000*ii* hubs to interface with 9088*ii* devices.

As an example, a single 9000*ii* hub linked to three 9088*ii* devices can produce a fully matrixed 24 x 24 system.
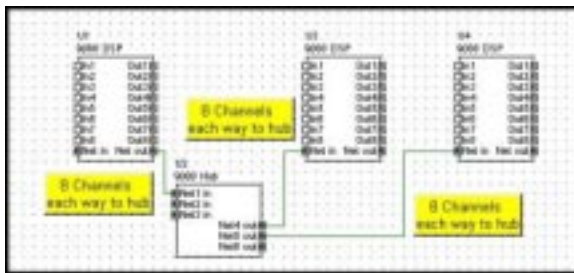
Hubs can also be connected to each other to form large signal busses. Again, as an example, a 24-way bus could be designed quite easily.

Features

» **6 Network ports**

» **200MIPS of DSP resource with all the DSP processing objects of the 9088**

» **Integral PSU**

» **Control ports for analogue GPI hardware interfacing**

» **Front and rear access RS232 ports for PC control**

» **Integral memory holds up to 12 DSP system designs.**

Compatibility with original Soundweb 9000 hubs (mark 1 units)

The 9000*ii* is a drop-in replacement for the original 9000 hub, and can be run without a change in the system design.

To get the maximum performance and features from the 9000*ii* model, the Soundweb Designer software must be upgraded to a version that supports the 9000*ii* (V1.16 or later), and the design file recompiled and loaded.

BSS Audio

Soundweb™ 9000*ii* Network Hub
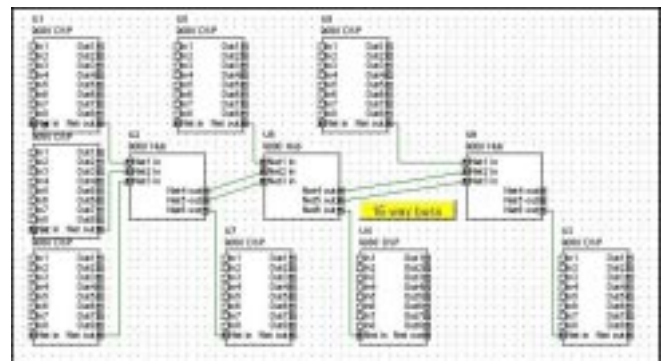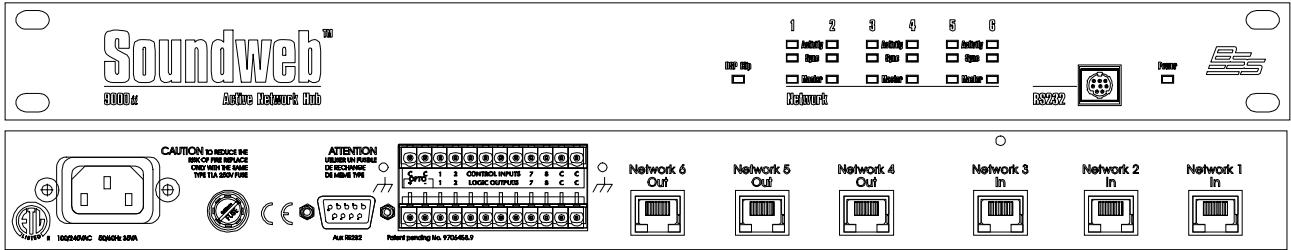
Technical Specifications

POWER
Power Consumption:	<35VA
Mains Voltage:	85-270V AC, 50/60Hz

CONTROL PORTS
Control Port Inputs:	8
Control Input Voltage:	0 to 4.5v
Control Input Impedance:	4.7kOhms to +5V
Control Port Outputs:	8
Logic Output Voltage:	0 or +5V unloaded
Logic Output Impedance:	440 Ohm

WATCHDOG OUTPUT
Fail Safe Connector:	Phoenix/Combicon connector.
Opto Output Series Impedance:	220 Ohms (isolated)
Opto Output Current:	14mA maximum
Withstanding Voltage:	80V maximum (Off)

NETWORK
Network Connections:	6x RJ45 connectors
Network cable length:	300m/1000ft maximum without fibre int.
Led Indicators:	Network Activity, Network Sync, Network Master, DSP Clip, Power.

Dual Redundant Ring System

Using Soundweb 9000ii hubs, it is possible to create a dual-redundant ring, where two network cables carry audio and control around a ring in both directions, so that if one cable is accidentally damaged, the other intelligently routes the signals to continue full operation.
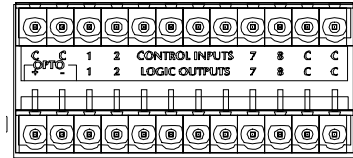

Network Port pin-outs

Pairs, according to TIA/EIA-568-B standard

Pin 1 (White) with Pin 2 (Orange)
Pin 3 (White/Green) with Pin 6 (Green)
Pin 4 (Blue) with Pin 5 (White/Blue)
Pin 7 (White/Brown) with Pin 8 (Brown)

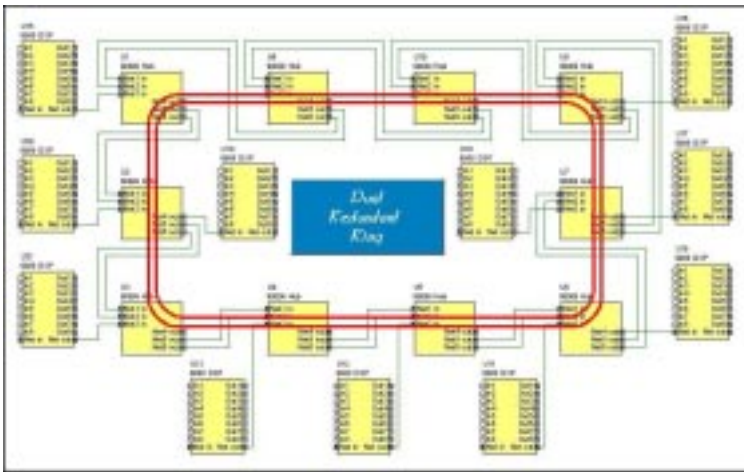## Control port pin-outs

Upper Row: Logic Inputs
Pin 1, 2, 11, 12 : Common
Pin 3,4,5,6,7,8,9,10: Logic Input

Lower Row: Logic Outputs
Pin 1, 2, 11, 12 : Common
Pin 3,4,5,6,7,8,9,10: Logic Output

Rear panel RS232 Port pin-outs

Pin 1: DCD	Pin 2: RX
Pin 3: TX	Pin 4: DTR
Pin 5: GND	Pin 6: DSR
Pin 7: RTS	Pin 8: CTS
Pin 9: N/C	

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