



RDL[®]
Radio Design Labs

SPECIALISTS IN PRACTICAL PRECISION ENGINEERING™

SourceFlex™ Audio System

Flexible Audio Monitoring

Anywhere You Need...

- Multiple Audio Sources
- Remote Source Selection and Level Control
- 1 to 8 Sources
- Industrial Durability, Audio Clarity, Reliability
- Fully Connectorized, Expandable System

You Need The SourceFlex Audio System!

The SourceFlex Audio System is an integrated set of products from RDL used to configure cost-effective, expandable audio monitoring. SourceFlex gives customers the option to select up to 8 audio sources, adjust the volume, and listen with impeccable clarity. Source switching equipment is all electronic. Monitoring stations are ruggedly constructed, easily maintained, and cosmetically attractive!

APPLICATION: The SourceFlex system consists of switching equipment and various options which may be expanded at any time. The following components introduce a new user to the SourceFlex advantages:

SAS-SM8 Sonic Mushroom™ is a tabletop monitor speaker with built-in user source selector, source display, and volume adjustment. Source selection and volume adjustment are all electronic, using touch controls on the top of the mushroom. The SAS-SM8 disburse sound in all directions onto a table top. It is ideally installed on a small table surrounded by people such as those in sports clubs. Because the sound is localized to the table area, people at adjacent tables may clearly and audibly listen to different sources. The selector allows the users to pick one of eight possible sources, or no source (off). Volume may be ramped up or down. After one hour at the selected setting, the volume is automatically decreased by 1 dB per hour until the minimum level is achieved. If system power is turned off, all SM8s in the system power up at minimum level.

SAS-88 Audio Input Interface is a 1/3-rack width module which accepts up to 8 balanced or unbalanced line-level audio inputs. Only one SAS-88 is typically required per system. Each input has a 25-turn trimming control to set the correct operating level. Two LEDs are provided for each input to adjust the audio gain. Correct levels are easily set by turning up the gain until the green LED is as bright as possible without the red LED flashing (overload). The SAS-88 has dip-switches to set the number of sources being used. For example, if the switch is set to 7 inputs, then all SAS-SM8s in the system will only make sources 1 through 7 available. The SAS-88 output port feeds any number of SAS-82 Audio Controllers.

SAS-82 Audio Controller is a 1/3-rack width module which receives audio and data input from a SAS-88 Audio Input Interface. The SAS-82 is supplied with a ribbon cable which connects to the prior port in the system. For example, the first SAS-82 connects to the output port on a SAS-88; while the second and subsequent SAS-82s connect to the output port of the prior SAS-82. The SAS-82 contains the switching circuitry to select one of eight sources, and provides the installer with an audio level control to set the maximum volume level feeding the SAS-SM8. Audio, data and power connections from the SAS-82 to the Sonic Mushrooms are made via installer provided standard telephone cable using RJ-11 6-conductor connectors. Each SAS-82 controls 2 Sonic Mushrooms (or other control components in the SourceFlex system).

SYSTEM CONSIDERATIONS: Routine maintenance of system components is not required because all switching and level control is accomplished electronically without any switches or pots that can get dirty. The SM8 Sonic Mushroom is cast from heavy gauge aluminum. Controls are protected behind a rubber-sealed polycarbonate overlay, fastened by tamper-resistant security screws into the mushroom casting using a steel bezel. The Mushroom mounts directly to the tabletop using screws from the underside of the table. Wiring connections are protected inside one leg of the casting. The speaker is protected from customer damage by a steel grate. In the unlikely event of damage, the buttons, display, polycarbonate laminate, and rubber seals may be easily replaced by a service technician using only the tool required to remove the security screws. Replacement of any system component is easy using the plug-in connectors.

System components are typically rack mounted using *RDL* Rack-Up® series mounting accessories such as the RU-RA3 rack adapter. This accessory mounts 3 control modules across in a single 19-inch rack unit. Each rack-mounted control module (SAS-88 or SAS-82) has an independent 24Vdc ground-referenced power supply input. For system design, 100 mA should be allowed for the SAS-88 Audio Input Interface, and 400 mA for each of the SAS-82 modules. In large systems, a single unregulated, high-current 24Vdc rack supply may be used. In small to medium systems, *RDL* power supplies are available in 400 mA, 1000 mA, and 2 A models. Multiple *RDL* supplies may be mounted in the side of an equipment rack using the *RDL* WH-1 Warthog multiple power supply mount.

The *RDL* SourceFlex Audio System finally offers the optimum, cost-effective solution to facilities where people desire to select and listen to different sources in close proximity.