

# SONIFEX

Redbox RB-SD1IP

Silence Detection Unit With Ethernet & USB

2014-15  
Catalogue





## RB-SD1IP Silence Detection Unit With Ethernet & USB



**Category:** Synchronisers, Delays & Silence Detectors.

**Product Function:** To detect silence in an analogue audio signal and switch to a second source, or third USB source.

**Typical Applications:** At a radio transmitter site, before the input to the transmitter. A local audio source can become the secondary input in case silence is detected and if this fails, USB audio can play. At a radio studio in case of failure of broadcast playout server, it can switch in an emergency playback system.

**Features:** IP Enabled with web browser control interface, SNMP V1 compatible, trap generation for non-networked hardware via GPIO port, USB playback functionality, adjustable silence detect threshold level and silence duration, passive signal path, switching of external equipment on silence detection, automatic or manual operation, mono or stereo operation, front panel LED indications of alarm status.

The RB-SD1IP silence detection unit is an upgraded version of the existing RB-SD1. The unit is a 1U rack mount device used to monitor an unattended stereo studio feed and in the event of the signal going “quiet” after a given period the unit will switch through an alternative stereo audio signal.

This signal could be a recorded message (e.g. “Normal service will be resumed”, etc), a feed from a flashcard player, audio from a connected USB flash drive or an alternative recorded program. Controls are provided to start external equipment and to provide remote status indication.

### New Features:

The RB-SD1IP offers all of the functionality of the standard RB-SD1 with several extra capabilities. Ethernet connectivity provides the ability to set up and control the unit via a browser based GUI. The network capabilities allow the user to more finely control silence level (-60dBu to 0dBu in 3dBu steps) and silence duration (1 second to 24 hours). You can also remotely lock/unlock the front panel controls on the unit and opt to use either the hardware configured settings or web based settings. In addition to the front panel LEDs the GUI home page offers a real time view of signal levels and alarm statuses.

Using the new browser GUI, left and right channels can be treated independently and remote relay triggers can be configured as one of many events including the new GPIO pins. You can also choose to lock/unlock the use of the remote pins to control the unit and firmware updates can also be performed using the web GUI.

SNMP V1 is implemented so that the unit can be controlled by existing network management systems. The addition of 6 extra GPIO pins to the rear panel allows customisable functionality, including the use of the RB-SD1IP network interface to generate SNMP Traps on behalf of other, non-networked, hardware.

The RB-SD1IP has been fitted with a USB interface on the front panel and can act as a host in two ways. Firstly the USB port can be used to upgrade the firmware on the unit from a USB flash drive. Secondly, such a drive can hold a pre-recorded message which the unit can play out in the event that both main and auxiliary signals fall silent.



RB-SD1IP Home Page.



RB-SD1IP Levels Page.

**Specification For RB-SD11P**

**Audio Specification**

Maximum Input Level:	+28dBu
Input Impedance:	>100kΩ balanced
Maximum Output Level:	+28dBu
Output Impedance:	As input, except when using unbalanced auxiliary input where output impedance <50Ω
Frequency Response:	20Hz - 20kHz ±0.1dB
Gain:	+8dB (for unbal input B-optional)
Noise:	<-93dB, unity gain, ref +8dBu output for unbal input
Distortion:	As input for balanced input, <0.02% @ 1kHz ref +8dBu output for unbalanced input

**Rear Panel Connections and Controls**

Inputs (Main & Auxiliary):	4 x XLR 3 pin female (balanced, auxiliary can be unbalanced)
Output:	2 x XLR 3 pin male (balanced)
Remotes:	15 way D-Type plug
GPIO:	9 way D-Type socket
Alarm Threshold:	-15dBu to -60dBu in 3dB steps via rotary switch 0dBu to -60dBu in 3dB steps via web GUI
Silence Detect Duration:	2 - 30 seconds in 2 second intervals & 125 second option via rotary switch 1 second - 24 hours using web GUI
Detection Type:	Mono or Stereo, via DIP switch Mono, Stereo, or dual mono via web GUI

Silence Switch Defeat:	Disable/enable silence switching, via DIP switch or GUI
Remote Start:	Latched or momentary, via DIP switch or GUI
Ethernet:	10/100Mbps on 1xRJ45 socket with status LEDs
Mains Input:	Filtered IEC, continuously rated 85-264VAC @47-63hz 10W max
Fuse Rating:	Anti-surge fuse 1A 20 x 5mm (250VAC)
<b>Front Panel Controls and Indicators</b>	
Controls (With Indicators):	Source Select, Mode Select and Restore
Indicator:	Program and Alarm indicators for left and right source for both Main and Auxiliary channels, power indicator
Reset:	Recessed push button
USB Port:	1 x USB A socket

**USB**

The RB-SD11P can act as a host for low powered USB Mass Storage devices in order to playback Audio files as an emergency backup system for when both Main and Auxiliary sources fail.

File System(s):	FAT & FAT32
Supported Audio:	.wav extension (16 bit Stereo PCM @ 48KHz, 24KHz, 12KHz, 44.1KHz, 22.050KHz, 11.025KHz, 32KHz, 16KHz, 8KHz)

Note: Additional Audio support may be added in future updates

**Equipment Type**

RB-SD11P:	Silence Detection Unit With Ethernet & USB
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**Physical Specification**

Dimensions (Raw):	48cm (W) x 10.8cm (D) x 4.2cm (H) (1U) 19" (W) x 4.3" (D) x 1.7" (H) (1U)
Dimensions (Boxed):	58.5cm (W) x 22.5cm (D) x 7cm (H) 23" (W) x 8.9" (D) x 2.8" (H)
Weight:	Nett: 1.4kg Gross: 2.0kg Nett: 3.1lbs Gross: 4.4lbs



# **SONIFEX**

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