SONIFEX

IP Streamers
Pro Audio Streamers

Catalogue 2016

IP Streamers
Pro Audio Streamers

The Pro Audio Streamers are a range of three IP to audio and audio to IP streamers which have professional analogue and digital inputs and outputs. They allow audio to be streamed around a building, wan or lan using IP audio and CAT5 cabling infrastructure. Typical applications include:

- As a backup STL (studio to transmitter link).
- For audio confidence monitoring in remote locations, such as at a radio transmitter site.
- For distribution of audio and music around a building, such as for passing audio to speakers in a conference room.
- As an internet-based IP music distribution system.
- As a tannoy, paging or IP based public address system.
- For in-house audio applications and distribution.
- For streaming internet radio in bars and clubs.
- For radio and music channels in hotel rooms distributed via an IP network.
- For playing audio from a PC, a jukebox application, or from a USB stick.

There are three products in the range providing encoding/decoding and streaming:

The PS-SEND converts an audio input to an IP stream.

The PS-PLAY reads an IP stream and outputs to balanced and unbalanced audio line levels.

The PS-AMP reads an IP stream and outputs audio to stereo speakers.

PS-SENDS Audio to IP Streaming Encoder.

PS-PLAYS IP to Audio Streaming Decoder.

PS-AMPS IP to Speakers Streaming Decoder.

PS-SEND Audio to IP Streaming Encoder

based network to one or more PS-PLAY or PS-AMP units or other proprietary servers such as those for Icecast or Shoutcast.

All the configuration settings for the unit are accessed via a local web-server built into it. The type of encoding and the transport mechanism are defined by selecting the connection from a pre-defined list. The PS-SEND encodes an audio source into an MP3 (from analogue or digital inputs), G.711 or PCM (from analogue inputs only) audio stream using HTTP, RTP, raw UDP or raw TCP protocols, including multicast support and the following encoder types are available: Mpeg1 & 2 Layer3, MP3-CBR (constant bit-rate), PCM linear and A-law, U-law, with 8kHz-48kHz sample rates . The unit can configure its own IP address using DHCP/BOOTP, IPzator or AutoIP. A readout of the set IP address can be heard on every reset using SONICIP technology, if selected. Remote level monitoring is also possible using SNMP traps.

Two red and green front panel LEDs indicate what state the unit is currently in, be it normal operational mode or bootstrap mode, and also indicates the current network connection status. A blue LED denotes power to the unit. The input being routed to the IP stream can be

Category: Pro Audio Streamers.
Product Function: Audio to IP converter.
Typical Applications: See the front page of this section for application ideas.

Features:
- Audio to IP streamer.
- Built-in web server for configuration.
- Balanced & unbalanced analogue audio inputs.
- AES/EBU, S/PDIF and TOSlink digital audio inputs.
- Front panel headphone monitor with volume control.
- 6 x GPI for triggering remote events.

The PS-SEND is a freestanding audio to IP converter which is also available in a 1U rack-mount as the PS-SENDS.

It receives audio from a number of user selectable external stereo sources including balanced and unbalanced analogue audio, AES/EBU, S/PDIF & TOSlink digital audio. Once an audio source is selected, the unit encodes the audio in real time and sends it to the network as an encoded stream. The audio stream can be distributed over an IP-

monitored on the front panel ¼" (6.35mm) stereo jack socket in combination with a headphone volume knob.

The rear panel has 2 x RJ45 connectors, one for the 10/100Mbit Ethernet interface and one for GPI connections. The PS-SEND has 6 x GPIs which can be used to trigger the sending of the audio stream and which can also be used to trigger remote events using an output relay on the PS-PLAY and PS-AMP. There is a 9 way D-type RS232 serial connection for control of the unit by automation systems and firmware updates. The unit can be remote controlled via serial connection, TCP or UDP.

Power to the unit is via a universal supply 85V - 264V fused IEC mains socket.

Specification For PS-SEND

Analogue Inputs:	2 x XLR 3 pin (balanced)(L&R) 2 x RCA phono (unbalanced) (L&R)
Analogue Max	18dBu XLR balanced
Input Level:	8dBu RCA phono unbalanced
Input Impedance:	20kΩ bridging (analogue balanced)
Input Impedance:	20kΩ (analogue unbalanced)
Analogue Input SNR:	74dB
Input THD:	0.02% Relative
Interchannel Isolation (Cross Talk):	80dB (Ref FSD)
Digital Inputs:	1 x AES/EBU XLR 3 pin female 1 x S/PDIF RCA phono 1 x TOSLink optical input
Analogue Outputs:	1 x 6.35mm (¼") jack headphone socket
Headphones Output:	Drives 150mW into 32Ω to 600Ω stereo headphones
GPIs (General Purpose Inputs):	6 x GPIs, selectable via webpage control on RJ45 socket
Serial Port:	1 x 9 way D-type socket, used to send control commands and update firmware
Ethernet Port:	1 x RJ45 socket. Remote control commands can be sent via TCP or UDP as well as firmware updates
Mains Input:	Filtered IEC, 85 - 264VAC, 47 - 63 Hz, 10W, max
Fuse Rating:	Anti-surge fuse 1A 20 x 5mm

Audio Codec Specifications PS-SEND

G.711 (U Law/A Law 8kHz to 48kHz sampling rate)

WAV (IMA ADPCM+ 16bit PCM uncompressed: 8kHz to 48kHz)

MP3 MPEGv1 Layer 3 (32, 44.1 and 48 kHz, CBR)

MP3 MPEGv2 Layer 3 (16, 22.05 and 24 kHz, CBR)

General Features

Supported network transport protocols
RTP - UDP
HTTP - TCP
Raw UDP
Raw TCP
Can also act as Icecast/Shoutcast source
SNMP - traps for remote management
DHCP, BOOTP, IPZator or AUTOIP - Dynamic IP address resolution
SonicIP Address readout

Physical Specification

PS-SEND

Dimensions (Raw):	22cm (W) x 13.7cm (D) x 4.3cm (H) 8.67" (W) x 5.39" (D) x 1.7" (H)
Dimensions (Boxed):	34cm (W) x 27cm (D) x 6cm (H) 13.4" (W) x 10.6" (D) x 2.4" (H)
Weight:	Nett: 1.0kg Gross: 1.7kg Nett: 2.2lbs Gross: 3.7lbs

PS-SENDS

Dimensions (Raw):	48.3cm (W) x 13.7cm (D) x 4.3cm (H) 19" (W) x 5.39" (D) x 1.7" (H)
Dimensions (Boxed):	58.8cm (W) x 27cm (D) x 6.8cm (H) 23" (W) x 10.6" (D) x 2.7" (H)
Weight:	Nett: 1.1kg Gross: 1.8kg Nett: 2.4lbs Gross: 4.0lbs

PS-SEND Home Page.

PS-SEND Streaming Settings Page.

PS-SEND Network Settings Page.

PS-PLAY IP to Audio Streaming Decoder

PS-PLAY IP to Audio Streaming Decoder.

Category: Pro Audio Streamers.
Product Function: IP to audio converter.
Typical Applications: See the front page of this section for application ideas.
Features:
• IP to audio streamer.

• Built-in web server for configuration.
• Balanced & unbalanced analogue audio outputs.
• AES/EBU, S/PDIF and TOSlink digital audio outputs.
• Front panel headphone monitor with local & remote volume control.
• USB port acts as an audio source.
• Can decode from a multitude of services, e.g. Shoutcast, Icecast.
• 2 x GPO relays controlled remotely from a PS-SEND.

The PS-PLAY is a freestanding IP to audio converter which is also available in a 1U rack-mount as the PS-PLAYS.

It takes an IP audio feed and converts it to a number of simultaneous stereo outputs: balanced and unbalanced analogue audio, AES/EBU, S/PDIF & TOSlink digital audio outputs.

As for the PS-SEND, all the configuration settings for the unit are accessed via a local web-server built into it. The unit can decode one of a number of audio streams, such

as those generated by the PS-SEND (MP3, G.711 and PCM) and including Ogg Vorbis audio files from external USB as well as from sources such as Shoutcast, Icecast (Internet radio), VLC and from RTP servers. The unit can receive streams from HTTP (TCP/IP) and RTP (UDP) protocols, as well as raw TCP and UDP packets. The unit can also configure its own IP address using DHCP/BOOTP, IPzator or AutoIP. A readout of the set IP address can be heard on every reset using SONICIP technology, if selected.

Two red and green front panel LEDs indicate what state the unit is currently in, be it normal operational mode or bootstrap mode, and also indicates the current network connection status. A blue LED denotes power to the unit. The audio output can be monitored on the front panel ¼" (6.35mm) stereo jack socket in combination with a headphone volume knob. The analogue audio outputs can be switched to be either a fixed level output or to be controlled by the front panel volume knob. The volume can also be adjusted, as well as many other features, using an infra-red remote control (available separately).

The PS-PLAY can be configured with up to 3 sources. The sources are prioritized in number order. If one has failed, the next one will attempt to play. If all fail, an

external USB drive will be used as a back-up source. The external USB plugs into the USB socket on the front of the unit. This enables the PS-PLAY to act as a USB audio player, playing any of the audio formats previously mentioned.

The rear panel has 2 x RJ45 connectors, one for the 10/100Mbit Ethernet interface and one for GPIO connections. The PS-PLAY has 2 output relay contacts which can triggered remotely over IP from a connected PS-SEND unit. There is a 9 way D-type RS232 serial connection for control of the unit by automation systems and for firmware updates. The unit can be remote controlled via serial connection, TCP or UDP and remote management of the unit is also possible using SNMP traps.

Power to the unit is via a universal supply 85V - 264V fused IEC mains socket.

Specification For PS-PLAY

Analogue Outputs: L&R)	2 x XLR 3 pin (balanced)(L&R) 2 x RCA phono (unbalanced)(1 x ¼ inch (6.35mm) stereo jack headphone socket
Analogue Max Output Level:	18dBu XLR balanced 8dBu RCA phono unbalanced
Output Impedance:	<50Ω (analogue balanced)
Output Impedance:	<75Ω (analogue unbalanced
Output SNR:	94dB
Output THD:	0.03% Relative
Interchannel Isolation (Cross Talk):	80dB (Ref FSD)
Analogue Output Gain Range:	-60dB to 18dB via front panel control knob, or optional IR controller
Digital Outputs:	1 x AES/EBU XLR 3 pin female 1 x S/PDIF RCA phono 1 x TOSLink optical input
Headphones Output:	Drives 150mW into 32Ω to 600Ω stereo headphones
USB Port:	1 x USB A socket
GPOs (General Purpose Outputs):	2 x switchable relay contacts (simultaneously switched) controlled from PS-SEND
Serial Port:	1 x 9 way D-type socket, used to send control commands and update firmware
Ethernet Port:	1 x RJ45 socket. Remote control commands can be sent via TCP or UDP as well as firmware updates.
IR Remote Receiver:	Remote commands can be sent using optional remote control via built in IR sensor
Mains Input:	Filtered IEC, 85 - 264VAC, 47 - 63 Hz, 10W, max
Fuse Rating:	Anti-surge fuse 1A 20 x 5mm

Audio Codec Specifications PS-PLAY

G.711 (U Law/A Law 8kHz to 48kHz sampling rate)
WAV (IMA ADPCM+ 16bit PCM uncompressed: 8kHz to 48kHz)
MP3 MPEGv1 Layer 3 (32, 44.1 and 48kHz, CBR +VBR +ABR)
MP3 MPEGv2 Layer 3 (16, 22.05 and 24kHz, CBR +VBR +ABR)
Ogg Vorbis (floor 1)

General Features

Supported network transport protocols
RTP - UDP
HTTP - TCP
Raw UDP
Raw TCP
SNMP - traps for remote management
DHCP, BOOTP, IPZator or AUTOIP - Dynamic IP address resolution
SonicIP IP Address readout

Physical Specification

PS-PLAY

Dimensions (Raw):	22cm (W) x 13.7cm (D) x 4.3cm (H) 8.67" (W) x 5.39" (D) x 1.7" (H)
Dimensions (Boxed):	34cm (W) x 27cm (D) x 6cm (H) 13.4" (W) x 10.6" (D) x 2.4" (H)
Weight:	Nett: 1.0kg Gross: 1.7kg Nett: 2.2lbs Gross: 3.7lbs

PS-PLAYS

Dimensions (Raw):	48.3cm (W) x 13.7cm (D) x 4.3cm (H) 19" (W) x 5.39" (D) x 1.7" (H)
Dimensions (Boxed):	58.8cm (W) x 27cm (D) x 6.8cm (H) 23" (W) x 10.6" (D) x 2.7" (H)
Weight:	Nett: 1.1kg Gross: 1.8kg Nett: 2.4lbs Gross: 4.0lbs

PS-PLAY Home Page.

PS-PLAY Advanced Stream Settings Page.

PS-PLAY Network Settings Page.

PS-AMP IP to Speakers Streaming Decoder

Category: Pro Audio Streamers.

Product Function: IP to audio converter.

Typical Applications: See the front page of this section for application ideas.

Features:

- IP to audio speaker terminals streamer.
- Built-in web server for configuration.
- 1 x stereo speaker terminal outputs.
- Front panel headphone monitor with local & remote volume control.
- USB port acts as an audio source.
- Can decode from a multitude of services, e.g. Shoutcast, Icecast.
- 2 x GPO relays controlled remotely from a PS-SEND.

The PS-AMP is a freestanding unit which converts an IP audio stream directly to speaker outputs.

It is also available in a 1U rack-mount as the PS-AMPS. The PS-AMP has the same feature-set as the PS-PLAY except that there are no individual audio outputs other than the speaker terminals. The PS-AMP uses an integrated 2 x 15W D-class amplifier to deliver audio directly to a pair of connected speakers.

For further information on features please refer to the PS-PLAY.

PS-AMP IP to Speakers Streaming Decoder

Specification For PS-AMP

Analogue Outputs:	2 x speaker connectors (2 each black and red terminals) 1 x ¼" (6.35mm) stereo jack headphone socket
Headphones Output:	Drives 150mW into 32Ω to 600Ω stereo headphones
Headphone Level Range:	-60dB – 18dB via front panel control knob or optional IR controller
USB Port:	1 x USB A socket
GPOs (General Purpose Outputs):	2 x switchable relay contacts (simultaneously switched) controlled from PS-SEND
Serial Port:	1 x 9 way D-type socket, used to send control commands and update firmware
Ethernet Port:	1 x RJ45 socket. Remote control commands can be sent via TCP or UDP as well as firmware updates.
IR Remote Receiver:	Remote commands can be sent using optional remote control via built in IR sensor
Speaker Power:	15W per channel into 8Ω @ 10% THD+N
Mains Input:	Filtered IEC, 85 - 264VAC, 47 - 63 Hz, 60W max
Fuse Rating:	Anti-surge fuse 1A 20 x 5mm

Audio Codec Specifications PS-AMP

G.711 (U Law/A Law 8kHz to 48kHz sampling rate)
WAV (IMA ADPCM+ 16bit PCM uncompressed: 8kHz to 48kHz)
MP3 MPEGv1 Layer 3 (32, 44.1 and 48kHz, CBR +VBR +ABR)
MP3 MPEGv2 Layer 3 (16, 22.05 and 24kHz, CBR +VBR +ABR)
Ogg Vorbis (floor 1)

General Features

Supported network transport protocols
RTP - UDP
HTTP - TCP
Raw UDP
Raw TCP
SNMP - traps for remote management
DHCP, BOOTP, IPZator or AUTOIP - Dynamic IP address resolution
SonicIP IP Address readout

Physical Specification

PS-AMP

Dimensions (Raw):	22cm (W) x 13.7cm (D) x 4.3cm (H) 8.67" (W) x 5.39" (D) x 1.7" (H)
Dimensions (Boxed):	34cm (W) x 27cm (D) x 6cm (H) 13.4" (W) x 10.6" (D) x 2.4" (H)
Weight:	Nett: 1.0kg Gross: 1.7kg Nett: 2.2lbs Gross: 3.6lbs

PS-AMPS

Dimensions (Raw):	48.3cm (W) x 13.7cm (D) x 4.3cm (H) 19" (W) x 5.39" (D) x 1.7" (H)
Dimensions (Boxed):	58.8cm (W) x 27cm (D) x 6.8cm (H) 23" (W) x 10.6" (D) x 2.7" (H)
Weight:	Nett: 1.1kg Gross: 1.9kg Nett: 2.4lbs Gross: 4.2lbs

PS-AMP Home Page.

PS-AMP Advanced Stream Settings Page.

PS-AMP Network Settings Page.

SONIFEX

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