



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



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-

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

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	80dB (Ref FSD)
Isolation (Cross Talk):	
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 IP Address readout

Physical Specification

PS-SEND			
Dimensions	22cm (W) x 13.7cm (D) x 4.3cm (H)		
(Raw):	8.67" (W) x 5.39" (D) x 1.7" (H)		
Dimensions	34cm (W) x 27cm (D) x 6cm (H)		
(Boxed):	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	48.3cm (W) x 13.7cm (D) x 4.3cm (H)		
(Raw):	19" (W) x 5.39" (D) x 1.7" (H)		
Dimensions	58.8cm (W) x 27cm (D) x 6.8cm (H)		
(Boxed):	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.

SONIFEX

www.sonifex.co.uk

UK Office:

Sonifex Ltd

61 Station Road, Irthlingborough,

Northants, NN9 5QE, UK

Tel: +44 (0) 1933 650700

Fax: +44 (0) 1933 650726

Email: sales@sonifex.co.uk

Australian Office:

Sonifex Pty Ltd

12/6 Leighton Place,

Hornsby NSW 2077, Australia

Tel: +61 (2) 9987 0499

Fax: +61 (2) 9476 4950

Email: sales@sonifex.com.au