

PAM-IP-3G

SMPTE 2022-6 and SMPTE 2110 Monitoring

The PAM-IP-3G range from TSL Products is a fully comprehensive Audio Monitoring Solution designed for use in SMPTE 2022-6 and SMPTE 2110 environments.

Developed specifically to address the requirements of customers needing to monitor uncompressed SMPTE 2022-6 and SMPTE 2110 sources, the PAM-IP 3G is equipped with 2 x 10Gig/E interfaces for direct connection into COTS IP fabrics.



Proven and Easy to Use Operation

The PAM-IP-3G range retains the same front panel user interface and feature set already made popular in TSL's PAM1 MK2 and PAM2 MK2 Audio Monitors. Engineers and Operators familiar with traditional Audio Monitoring unit operation can now monitor 2022-6 and 2110 uncompressed IP sources without having to re-train or understand IP networks.

As with the PAM1 MK2 and PAM2 MK2, the following functionality remains possible, even when working with 2022-6 and 2110 uncompressed IP sources:

- Video Confidence monitoring of 2022-6, 2110 uncompressed IP and 3G/HD/SD-SDI sources directly on the front panel.
- Comprehensive Loudness Monitoring, complete with Histogram display.
- Full Monitoring (including Metadata) of Dolby encoded sources.

Future Proof Connectivity

As well as featuring 10Gig/E interfaces, the PAM-IP-3G is also equipped with Primary and Redundant 1Gig/E Dante/AES67 ports, whilst also maintaining 3G/HD/SD-SDI, discrete AES and Analogue I/O connectivity, making it suitable for use in both IP and non-IP infrastructures and helping customers transition to IP with ease.

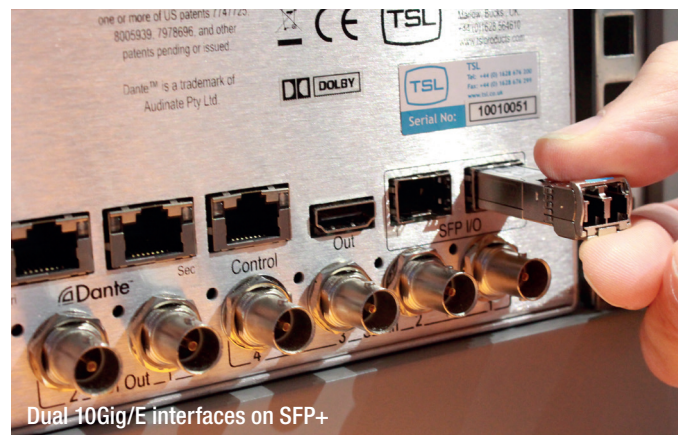
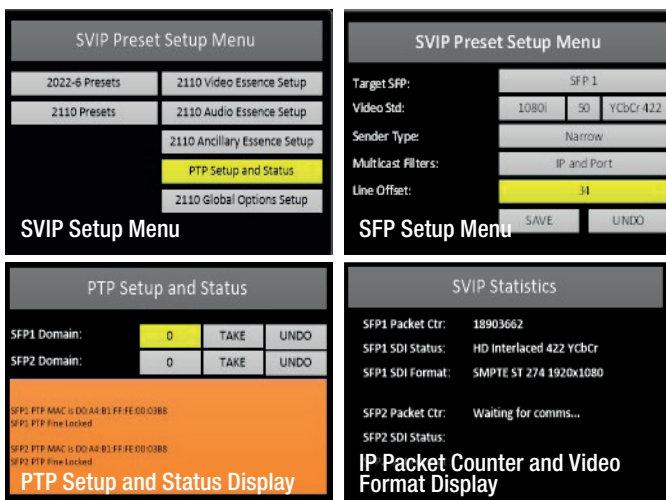
Connection into 2022-6 and 2110 COTS IP networks is made possible through the use of optional SFP+ modules, allowing customers looking to transition to IP, to do so at a pace that suits them without having to replace their entire Audio Monitoring Unit.

IP Monitoring Tools

Alongside the ability to present Audio Levels, Dolby Metadata, Loudness Histograms and Video directly on the front panel, the PAM-IP-3G also includes diagnostic information to help troubleshoot issues when working with SMPTE 2022-6 and SMPTE 2110 uncompressed sources.

External Control

Support for control protocols such as Ember+ and NMOS allow for 'In-Band' control of the PAM-IP, offering tight integration with a variety control systems. 'Out of Band' control integration is also possible using TSL's RESTful API.



Key Features

- Comprehensive monitoring of SMPTE 2022-6, SMPTE 2110 and 3G/HD/SD-SDI Video and Video Sources.
- Comprehensive monitoring of Dante/AES67, AES3 and Analogue Audio Sources.
- Dual displays.
- Scroll to Select – Easy to Use Audio Source Selection.
- 2 x Re-clocked 3G/HD/SDI-SDI Outputs.
- High Quality In-Built Amplification and Loudspeaker system.
- Balanced Line Level Output allows connection to external Loudspeakers and other devices.
- Headphone Output.
- Remote control, configuration and management available over TCP/IP Network.
- Support for Ember+
- Support for AMWA NMOS.

Specifications

Inputs

- 4 x Auto-Sensing 3G/HD/SD-SDI Inputs (23.98, 24, 25, 29.97, 30, 50, 59.94, 60Hz)
- 4 x AES Input Pairs
- 2 x Balanced Analogue Audio Input Pairs

Outputs

- 1 x Balanced Audio Output
- 1 x Fixed or Variable 5.1 Analogue Output
- 4 x AES Outputs
- 1 x Headphone Output (Stereo Jack Socket Type A, 50Ω)
- 2 x Reclocked SDI Monitoring Outputs.
- 1 x Configurable Quad Screen Monitoring Output.

IP Connectivity

- 2 x 10Gig/E SFP Ports
- Primary and Secondary 1Gig/E Dante/AES67 Ports

Control and Monitoring

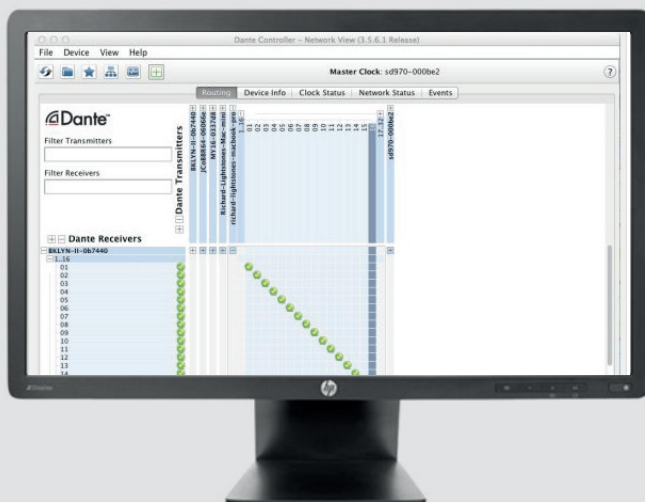
- 1 x USB for Loading and Saving of Configurations and Software Updates.
- 1 x Ethernet Control Port (RJ45)
- Network Monitoring and Control using Web-Browser

Power

- Optional redundant power supply
- Supply Voltage 90-250V AC
- Power Consumption: 40W
- Operating Temperature 5-40°C

Physical Dimensions

- Height: 1/RU & 2/RU
- Width 483mm (19")
- PAM1 Depth 280mm
- PAM2 Depth 350mm
- Weight: 2kg & 4kg



Ordering Information

PAM2-IP-3G
PAM1-IP-3G

Dante Option
Dante Option

S2022-6 Option
S2022-6 Option

Dolby Option 2110
Dolby Option 2110