



PROFESSIONAL  
PRODUCTS LTD

# PAM2 MK2

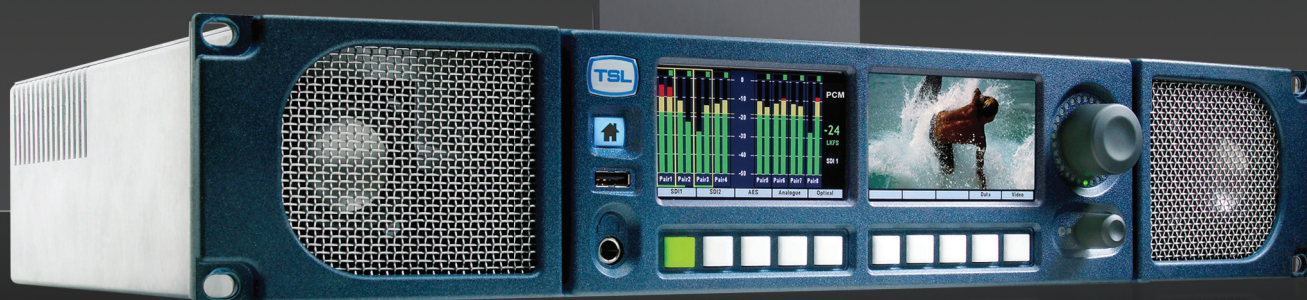
Audio Monitoring Redefined

**AVAILABLE NOW**

Designed &  
built in the  
UK

Concise monitoring of multichannel audio in numerous positions throughout **NOC/Remote Broadcast Vehicle/ Production/Post production facilities.** Ideal for **Master Control, QC, TX and Playout Operators as well as Directors, Floor Managers, Producers, Editors** and more...

**Dolby E**  
PARTNER



Brand new from TSL, the PAM2 MK2 represents the latest stage in the evolution of the award-winning PAM product family. Uniquely, PAM2 MK2 is equipped with an SDI output which exports the bargraph, data and Loudness Histogram displays to an external monitor (such as a multiviewer or video display) for 'at a glance' review of mission critical audio information.

## Dolby decoding and monitoring – introducing CAT1100

As a member of the Dolby OEM Partner Program, TSL is proud to announce that the PAM2 MK2 is one of the first audio monitoring solutions to feature Dolby's CAT1100 module (as an option), a new platform for comprehensive decoding and monitoring of Dolby audio formats that are used throughout the HD broadcast chain (Dolby Digital Plus, Dolby Digital and Dolby E). The new module will enable the PAM2 MK2 to perform Dolby E decoding and external speaker monitoring, as well as Dolby Digital Plus with surround descriptive audio and stream mixing, which will evolve to 7.1 as broadcasters adopt the full cinematic experience.

Additional features which the CAT1100 card brings to the PAM2 MK2 include Dialogue Intelligence Loudness Measurement, simultaneous Multichannel and Stereo outputs and selectable error concealment ensuring that PAM2 MK2 maintains its reputation as the worlds leading Dolby 'loaded' audio monitoring unit.

## Compliance loudness measurement for international standards

Loudness measurement has become a major issue for broadcasters, especially as the world embraces regional, national and local recommendations and legislation such as the CALM Act in the U.S.

Configurable loudness information in full compliance with EBU R128 and ATSC A85 is one of the resident metering sets available both on-board the PAM2 MK2 and exportable to an external display from the SDI port. The established PAM Loudness Histogram provides a visual display of Loudness against time and with the addition of real-time logging over Ethernet, PAM2 MK2 gives you the confidence that the audio leaving you is compliant .

As a practical benefit for field operations, the SDI bar graph feed from a truck, for example, can be sent over a reserve circuit back to master control for accurate compliance and confidence monitoring of remote broadcast sources, thereby verifying the integrity of the signal chain between outside broadcast and the host.

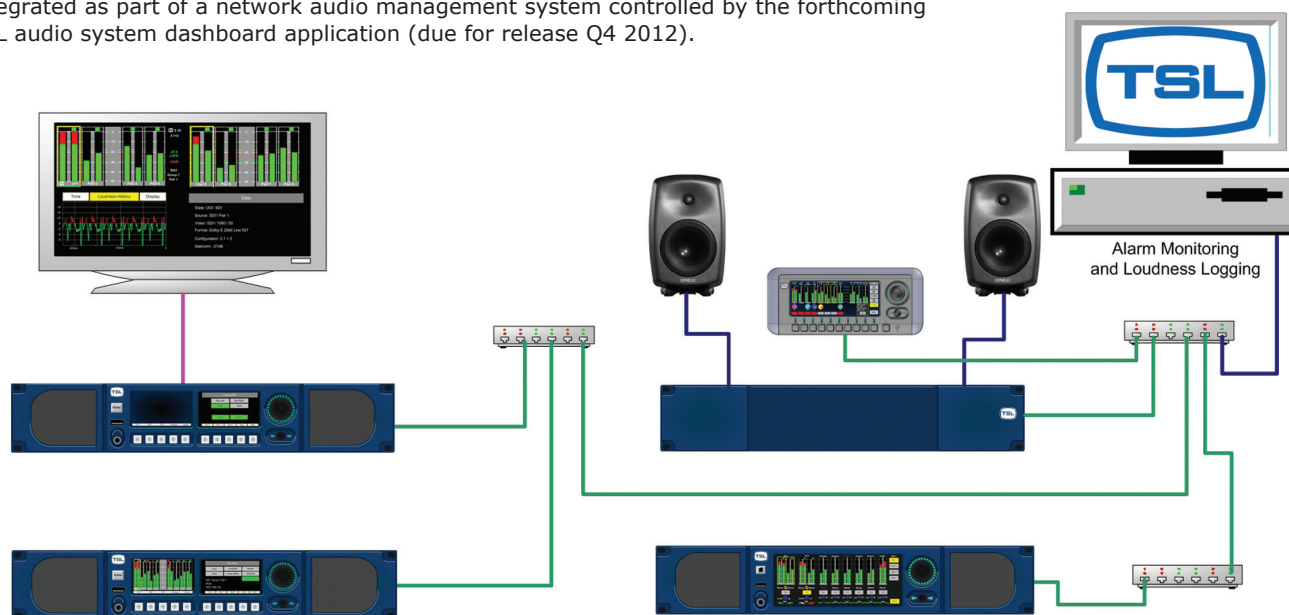
## Features

- Dual auto-sensing, 1080p (60, 59, 94 and 50Hz), HD SDI video inputs
- HD SDI Bargraph / Data / Metadata External Screen Display Output
- Ethernet Connectivity for networked audio system management with Alarm Monitoring / Loudness Logging
- De-embedded audio monitoring from video (HD/SDI) with intuitive selection from up to sixteen channels (four groups)
- 8 AES (8 Pairs/16 Channel) Inputs– 110Ohm Balanced or 75Ohm unbalanced via optional CAB-D25-BNC cable
- SPDIF Optical Input
- 6 Analogue Stereo Inputs
- 'Scroll To Hear' – top level bargraph navigation using rotary encoder
- Downmix of discrete multichannel audio to stereo for compatibility monitoring
- Multichannel audio outputs for external stereo or 5.1 loudspeaker system integration
- EBU, ATSC and user configurable loudness measurement and Histogram
- User Programmable 'Assign Matrix'
- Audio Output Delay
- Dolby E, Dolby Digital and Dolby Digital Plus decoding from HD SDI and AES signal sources
- Dolby Digital Plus with surround descriptive audio and stream mixing
- Automatic mode switching – depending on signal type
- Energy Saver Screen Mode
- Lt Rt and Lo Ro Downmixing of Dolby Signals
- Hi Resolution Video confidence monitoring
- Re-clocked HD/SDI with down converted SDI or composite (PAL,NTSC) video outputs selected via rear panel Config. Switch
- Dual high resolution OLED screens for 16 bargraphs, setup and metadata display
- Choice of user selectable bargraph scales (BBC PPM, EBU PPM, EBU Digital, Nordic,VU and DIN)
- User programmable presets. 8 by hardware buttons, GPI and 24 internal, accessible by high level menu selection
- Factory preset recall – 5 presets selecting SDI1, SDI2, AES, Analogue and Optical Inputs
- Fixed or variable analogue multichannel outputs (8 mono)
- Fixed or variable AES multichannel outputs (8 pairs/ 16 Channels)
- Variable stereo analogue outputs
- High quality internal full range loudspeaker system
- Variable LED brightness control
- Dual 12V DC inputs
- Serial remote control
- Headphone output with LS muting
- Compact, lightweight (5.1Kg) 2RU case, 320mm deep

## PAM2 MK2 as part of a network

PAM2 MK2 is the latest TSL Audio Monitoring Unit to feature network integration.

The diagram below shows how PAM2 MK2, AVM-T-MIX and AVM-T-MIX Pilot can be integrated as part of a network audio management system controlled by the forthcoming TSL audio system dashboard application (due for release Q4 2012).



### Global reseller network

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TSL Professional Product Limited. Units 1&2, First Avenue, Globe Park, Marlow SL7 1YA, England, UK.  
Tel: +44 (0)1628 676 200 Fax: +44 (0)1628 676 299 E-mail: [products@tsl.co.uk](mailto:products@tsl.co.uk)  
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