



TSL Announces New Features For PAM2-3G16

TSL has added new functionality to the double award-winning PAM2-3G16 Audio Monitoring Unit.

The latest software for PAM2-3G16 contains new features, designed in response to customer feedback, to ensure the Audio Monitoring Unit maintains its class leading position. Available at no charge to existing customers, the latest software is now shipping as standard in all production units.

Since the PAM2-3G16 was launched at IBC 2009, the product has evolved consistently to help our customers to meet the challenge of increasingly complex programme delivery requirements.

The new PAM2-3G16 now includes:

- **Scroll to Hear:** Key to the ease of use for your PAM2-3G16. Scroll to Hear now enables you to step through up to 16 channels of incoming audio in mono or stereo divisions
- **Dolby Digital Plus:** The latest software revision to the optional Dolby CAT552 decoder card includes support for Dolby Digital Plus decoding. A PAM2-3G16 shipped after October 2010 will have the latest Dolby software installed
- **Audio Delay:** The Setup Menu now includes a soft 'button' which enables you to insert up to a 250ms delay into the variable audio output signal path. This is designed for use in applications where video screen or processing latency causes the audio monitoring to become out of sync with vision. A typical example would be in a Master Control Suite where a multiviewer system and LCD display result in several frames of video delay. By setting the audio delay on the PAM2-3G16 to the same value, audio playback through internal, external loudspeakers or headphones will be synchronised to the image on screen
- **Internal Speaker Mute:** The Setup 2 Menu now includes a soft 'button' which enables you to mute the internal loudspeakers (and headphones). As this feature is saved as part of a preset rather than as a default condition. It is now possible to configure preset monitoring conditions which automatically switch between internal and external speaker systems as operational requirements demand. An example might be in an Ingest or QC Suite where operations are generally conducted using the nearfield capability of the internal speakers but occasionally require reference to a full range 5.1 monitoring system for quality review of programme content
- **External Speaker Mute:** The Setup 2 Menu now includes a soft 'button' which enables you to mute the External loudspeaker outputs. This feature is similar to the Internal Speaker Mute described above in that it is saved as part of a preset condition and can be used to configure monitoring settings in a similar manner
- **Energy Saving Mode:** The Setup 2 Menu now includes a soft 'button' which enables you to set a 'screen saver' condition which dims the OLED displays 5, 10 or 20 minutes. This unique power saving feature is designed to save you energy and operational costs when the PAM2-3G16 is not in constant use
- **Preset Standard Rules:** The Setup 2 Menu now includes a soft 'button' which enables you to programme a pair of specially configured user presets which will be automatically recalled depending upon the input signal being SD or HD. An example of an application where this feature may be particularly useful is where the monitored signal is switched upstream of the PAM2-3G16 and carries SD content with a default condition of stereo audio on group 1 pair 1, switching to an HD signal carrying an encoded Dolby E signal (or discreet 5.1 channels) on group 1 pair 2
- **Assign Matrix:** PAM2-3G16 is now equipped with a user configurable routing system called the Assign Matrix. This comprises a 16 into 6 matrix which enables you to re-assign the channel order of the incoming signal to the multichannel or stereo output busses. A typical application would be an international broadcast where a clean 4.0 surround mix is defined within the embedded audio signal and multiple mono languages carried within the remaining channels. The Assign Matrix can be used to route the clean surround mix to the appropriate speaker outputs whilst selecting the desired language channel to send to the centre speaker. Multiple Assign Matrix configurations can be saved to user preset locations for instant recall during live operation
- **Loudness:** PAM2-3G16 is now equipped with a comprehensive set of ITU-R BS1770 Loudness Measurement tools. These are designed for universal use and adopt the parameters recommended by both the EBU and ATSC whilst giving you power to configure their own variations where appropriate. A Histogram is included to provide a record of Loudness against time for durations from 2 to 80 minutes and GPI control included to enable automated start/stop/reset of measurement parameters. A GPI output is automatically activated to notify external systems of persistent Loudness target infringements. Loudness displays can also be disabled when not in use.