4.2.16 Altitude^{32} and Altitude^{16}
Release Notes

TRINNOV | HIGH•END

Introduction

Trinnov Audio, designer and manufacturer of reference audio processors for home theaters, high-end hi-fi, professional audio, and commercial cinemas, is pleased to announce the release of a new software upgrade for the Altitude[32] and Altitude[16] processors.

Software version 4.2.16 adds multiple features and performance upgrades to our world-class audio-video preamplifiers. Because of Trinnov's unique software platform, owners of both Altitude models can upgrade their units through a simple software download. Regardless of the age of the Altitude, this update is available to all owners at no cost.
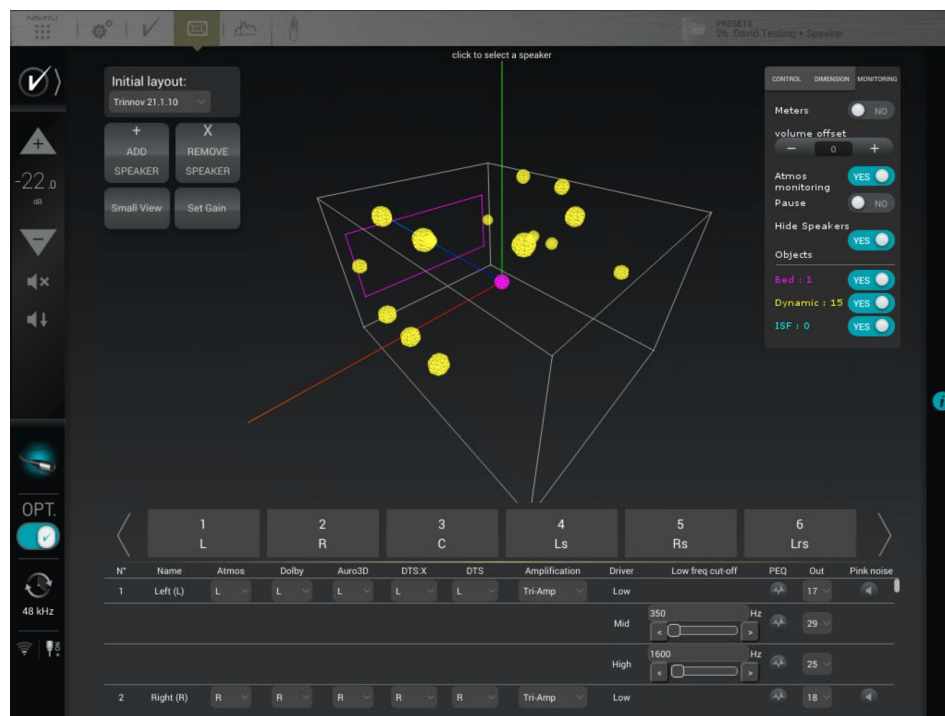
Certain features are available only for the Altitude[32], and others are available only for the Altitude[16].

New Features

[Dolby Atmos Object Viewer](#) (Altitude^{32} & Altitude^{16})

- Provides the ability to display Atmos object locations in real-time
- Object positions are displayed in the Altitude's 3D room representation

- A number of display options are available:
    - Display Atmos objects
    - Show / Hide Speakers
    - Select which objects to display
    - Display volume (see next section)

- Important notes:
    - We are using the metadata in the Atmos stream to give an indication of what the objects are doing. It is not perfect but it is intended as a visual aid to improve your understanding of the complexity of the soundtrack.
    - The information presented may not be accurate with objects encoded in ISF (Intermediate Spatial Format) mostly used in video games.
    - This feature may not be working reliably with Xbox One.

Output per speaker in the 3D view (Volume Monitoring)
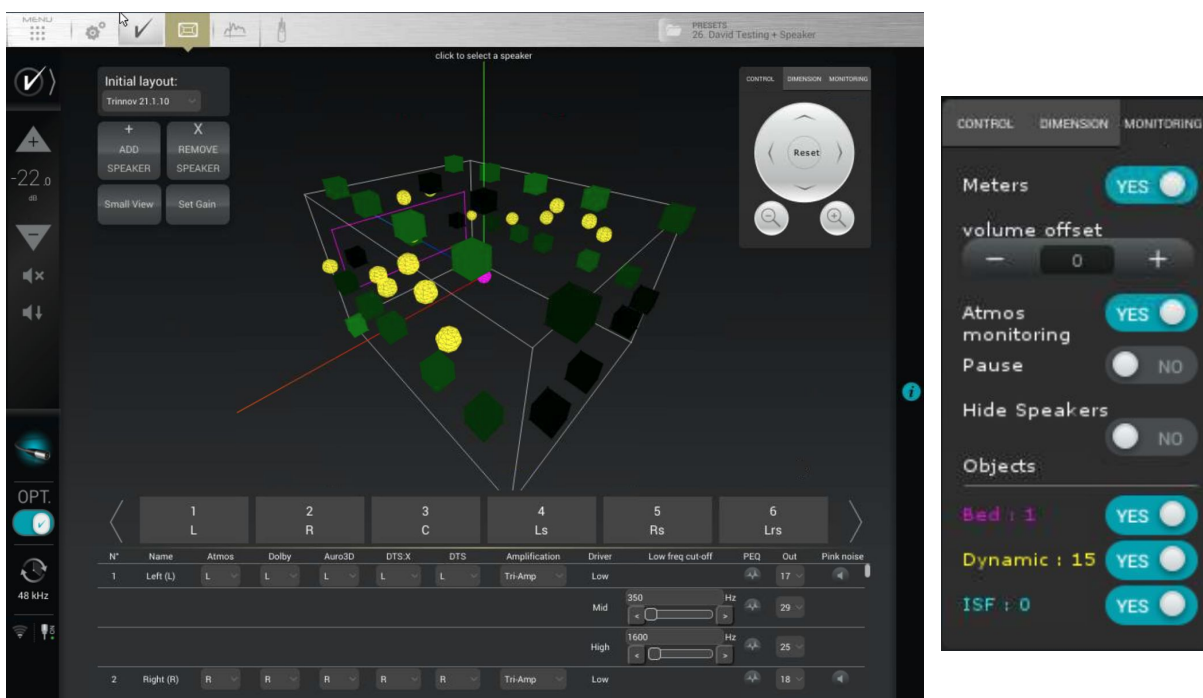
- In addition to object positions, we have added volume monitoring in the 3D view
- The volume of each speaker is represented in the speaker itself.
- A black speaker is silent and it will turn dark green to bright green and red when clipping.
- By default, we display the actual output volume, which is affected by your listening level, which is why we have added a display volume offset option so you can still monitor the relative volumes of each speaker when listening at low volume. This doesn't have any impact on the sound.

New HDMI Board (manufactured by CYP) Support

Earlier in May, Trinnov announced a partnership with Cypress Technology preparing for HDMI 2.1. The first collaboration between Trinnov Audio and CYP towards that goal has been the development of a new HDMI 2.0 board, which is now shipping with new Altitude[16] and Altitude[32].

Software version 4.2.16 includes firmware to support this new HDMI board.

Here is the specification and some details about this board:
- 8x in & 2x out
- Full HDMI 2.0 18 GBps & HDCP 2.2

- Dolby Vision compatible
- HDR HLG compatible
- HDR 10+ compatible
- Faster-switching time
- Output 1 includes down-scaling capability:
  - By default, both outputs are mirrored
  - If the display connected to the output 1 does not support 4K, the built-in downscaler will automatically convert the video signal to HD

Features set of this firmware:
- This firmware maintains the ability to switch inputs between HDMI 1.4 and HDMI 2.0 format
- This firmware allows you to retrieve the following information from the source::
  - Video resolution
  - Video Refresh rate
  - Video bit depth
  - Video color sampling
- The following features are not included but are expected to become available through future updates:
  - Full matrix capability (route any input to any of the outputs)
  - OSD (at least for volume control)
  - EDID management and monitoring for the display
  - Comprehensive EDID manager
  - Built-in cable tester
- This HDMI board does not allow retrieving more advanced information about the video signals.

ARC & eARC (CYP HDMI board only)

- ARC & eARC are supported on output number 1, for audio playback only
- Advanced CEC features (power on & off via remote or volume control) are not supported

Impulse Generator

In the Processor / Input page, a "Pulse" button has been added that allows you to generate a pink pulse that hits -10dB FS.

This test signal is typically used by an advanced calibrator to perform custom time-alignment.

Factory PEQ

- Allows import of factory PEQ from speaker manufacturers
- PEQ parameters are not visible nor editable

- Google form available to submit your requests

Enhancements

DTS Speakers added in the Trinnov Narrow format

- When using a Trinnov narrow template, DTS channels are automatically mapped correctly to the right speakers.

PEQ enhancements

- A speaker with a PEQ is now highlighted in blue
- PEQ list is now alphabetically sorted

ISO Frequencies used for the Graphic EQ faders

- Changed the frequency scale on the Graphic EQ faders
- Complies again with ISO and still allows editing EQ down to 10Hz

Logging system

- Improved system logging when units are not powered off regularly
- Large log files are automatically downsized to prevent system instability

Bug fixes

Various bug fixes with DTS:X

Fixed bad behavior with Active Crossovers filters set to none

- The frequency indicated was still used for some calculations, leading to inaccurate level alignment.

Clipping signal in PCM

- Fixed an issue when using balanced analog inputs with some devices made by Linn, dCS or Pioneer (delivering a certain electrical output level).

User EQs were not saved properly

- The User EQ was not always reloaded properly after preset selection

Altitude[16] front lighting management fixed on Altitude[16]

- The screen was not coming back to the required state

Known Bugs

Both these issues are being investigated with a patch expected soon.

Issue with Dolby TrueHD 192kHz

- Dolby TrueHD 192kHz content may not play correctly on Altitude16 equipped with former HDMI boards (7 inputs)

Issue when switching between different soundtracks

- With the new HDMI board (8 inputs), sound can be muted after a change of soundtrack. Change again will fix the issue, which ever hardly occurs