

# NEW PENTEO 360 AND PENTEO 16 PRO+ UPMIX/DOWNMIX PLUGINS RELEASED

Binaural output added for headphone use

One-Click modes speed Facebook360 and Youtube360 audio workflows

**PerfectSurround Ltd., Los Angeles, CA (November 26, 2021)** – PerfectSurround Ltd., creators of the only phaseless upmix/downmix DSP, has released two new Penteo plugins – Penteo 360 and Penteo 16 Pro+, as well as updating the award-winning Penteo 16 Pro upmix/downmix audio plugin.

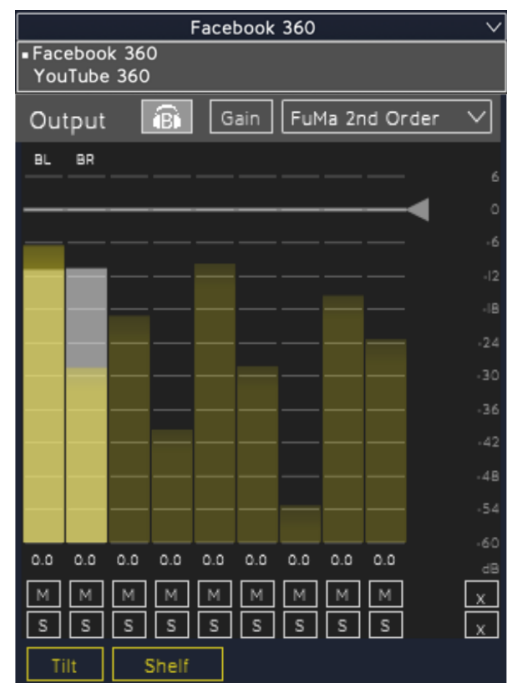
Built using PerfectSurround’s unique phaseless DSP, Penteo’s new products meet the specific needs of 360 audio, which can be a complicated and time-consuming process for 360 content creators. Penteo brings its award-winning DSP to 360 audio creation by including Binaural output from any supported Penteo input format and adds new One-Click modes to speed Facebook360 & Youtube 360 audio workflows .

“Recent expansion of multichannel sound delivery via headphones has driven an explosion in 360 content creation from mainly Stereo and 5.1 Surround inputs” said Jeffrey Read, CEO of PerfectSurround Ltd. “Although 360 content creators want greater control over their sound, they don’t have a lot of time to invest in a mix. That’s why we made Penteo’s new One-Click Facebook360 and Youtube360 modes. They deliver an immediate high quality Binaural output and Penteo’s unique ability to upmix from any format into Binaural is a game-changer.”

Penteo has added 360 audio features to Penteo 360 and Penteo 16Pro+ and enhanced Penteo 16 Pro so sound designers can choose the right set of features to meet their mixing requirements.

**Penteo 360** is a new plugin that speeds the creation of 360 audio via Ambisonics allowing any mixer to generate studio-quality phaseless upmixes quickly and easily. Penteo 360 upmixes or downmixes from any supported Penteo 360 format via 1<sup>st</sup> or 2<sup>nd</sup> Order Ambisonics with binaural output. Key features include:

- **One-Click 360 Audio** - Penteo 360 is the first to provide one-click Facebook360 and Youtube360 modes that eliminates time and complexity for stereo to 360 binaural upmixes
- **1<sup>st</sup> and 2<sup>nd</sup> Order Ambisonics encoder / decoder** - Only Penteo 360 encodes both 1<sup>st</sup> and 2<sup>nd</sup> order Ambisonics formats with binaural output for Facebook360



**Penteo Binaural output:** - When Binaural mode is enabled, the first two output meters (white) represent BL BR channels while monitoring Ambisonics in real-time.

- **Surround Upmixer / Downmixer** - Penteo 360 includes a phaseless Surround upmixer and downmixer (Stereo, 3.0 / 3.1 LCR, 4.0 / 4.1 Quad, 5.0 / 5.1 Surround formats included)

**Penteo 16 Pro** is the industry standard phaseless upmix/downmix plugin for all Surround, Atmos, Auro3D, DTSX and Immersive formats up to 16 channels. Penteo 16 Pro also includes 1<sup>st</sup>/2<sup>nd</sup>/3<sup>rd</sup> Order Ambisonics encoder / decoder. Penteo 16 Pro enhancements include:

- **Downmix DSP** – Enhanced DSP for improved downmix channel integrity
- **Low Latency persistence** - If selected, low latency will remain in that mode until deselected
- **LFE** – DSP has been enhanced for any input format that contains LFE
- **Pyramix** has been added as a fully supported DAW up to 16 channels
- **AU format** is now supported for upmixing/downmixing in Logic Pro (limited to 7.1.4)

**Penteo 16 Pro+** is designed for the power-user to handle every upmix/downmix situation for any format up to 16 channels including 360 Binaural output. Penteo 16 Pro+ contains all of the features of Penteo 360 and Penteo 16 Pro combined into a single new product:

- Penteo 16 Pro+ phaselessly upmixes / downmixes and encodes / decodes any supported format to any other format up to 16 channels for all Surround, Atmos, Auro3D, DTSX and 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> Order Ambisonics formats
- Penteo 16 Pro+ also includes Penteo’s One-Click Facebook360 and Youtube360 modes, and the ability to output Binaural from any supported Penteo format, from Stereo to Atmos 9.1.6
- LoRo has been added as a supported downmix – now any supported Penteo format can downmix to LoRo.

## Supported Operating Systems and DAWs

All Penteo products support 64-bit AAX, VST3 and AU formats for Mac OS Big Sur and Windows 10.

Specific DAWs supported: ProTools 2021.10, Reaper, Pyramix, Nuendo, Cubase Pro, JRiver, Audition (up to 5.1) and Logic Pro (up to 7.1.4).

**Pricing and Availability** – All Penteo products are available starting today at [www.perfectsurround.com](http://www.perfectsurround.com)  
Penteo’s new release sale saves \$100 off any Penteo product until December 10, 2021:

- Penteo 360 sale \$199 – regularly \$299 USD
- Penteo 16 Pro sale \$349 – regularly \$449 USD
- Penteo 16 Pro+ sale \$499 – regularly \$599 USD

### 3 Penteo Upmix/Downmix Plugins

All Penteo plugins include:				
<ul style="list-style-type: none"> <li>✓ Award-winning phaseless DSP</li> <li>✓ Perfect 100% ITU downmix</li> <li>✓ 2D and 3D sound visualizer</li> </ul>		<b>Penteo 360</b>	<b>Penteo 16<sub>pro</sub></b>	<b>Penteo 16<sub>pro</sub>+</b>
		One-Click 360 Audio Creation Ambisonics Encoder/Decoder 5.1 Upmixer/Downmixer	All Formats 16 Channel Upmixer 16 Channel Downmixer	All-In-One 16 Channel Up/Downmixer + One-Click 360 audio + Binaural
Surround	2.0 Stereo	✓	✓	✓
	3.0 / 3.1 LCR	✓	✓	✓
	3.0 / 3.1 Triangle		✓	✓
	4.0 / 4.1 Quad	✓	✓	✓
	5.0 / 5.1 Surround	✓	✓	✓
	6.0 / 6.1		✓	✓
Immersive	7.0 / 7.1 Surround		✓	✓
	All Dolby Atmos formats 2.1.2 > 9.1.6		✓	✓
	Auro 3D 9.1, 10.1, 11.1, 13.1		✓	✓
360 / Game	DTS X 13.1		✓	✓
	1st > 3rd Order Ambisonics AmbiX/FuMa	1st / 2nd	✓	✓
	One-Click FB360 / YT360 Audio Creation	✓		✓
Downmix	Binaural Output	✓		✓
	Downmixer	10 Channel	16 Channel	16 Channel
	LoRo Downmix			✓

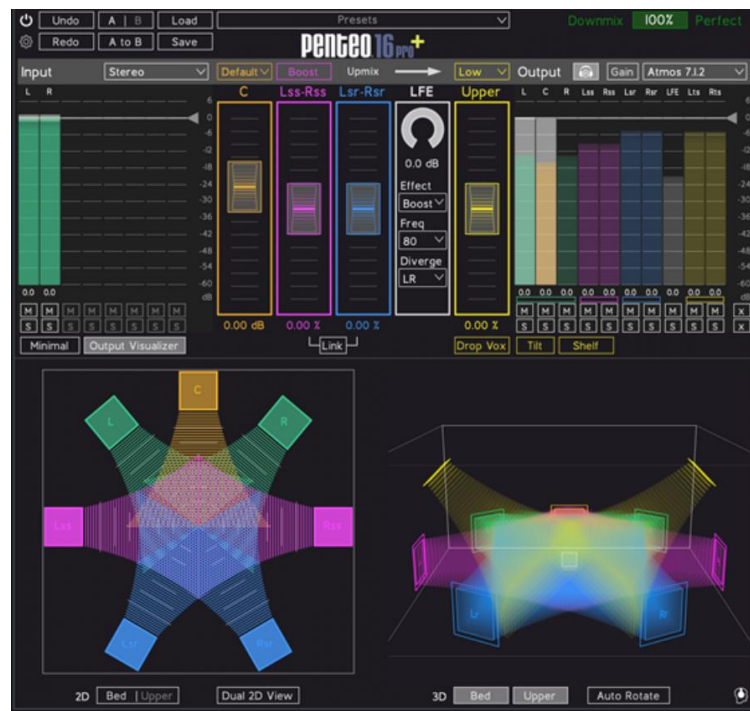
### About Penteo

Established in 2012, thousands of post-production mixers, sound designers, composers and educators in over 50 countries rely on Penteo audio plugins to deliver an immediate, phaseless, high quality upmix or downmix from any format between stereo to 16-channel 3D immersive sound formats, now with binaural output. Penteo invests in the latest innovations to deliver the most powerful controls and logic that does the heavy work to speed your mixing session.

Only Penteo is completely phaseless so sound designers never have to compromise. Penteo plugins deliver a perfect upmix that will always downmix back to the original source 100% ITU, every time from any supported source. Penteo delivers a deeply immersive and most natural sounding quality with wide channel separation without introducing any unwanted sonic artifacts into the process. To learn more visit [www.perfectsurround.com](http://www.perfectsurround.com)



**Penteco 360 plugin:** One-Click Facebook360 mode automatically upmixes Stereo into Binaural via 1st or 2nd Order Ambisonics. 1st & 2nd Order modes are automatically loaded for comparison in the A/B, allowing for the optimal Order to be selected.



**Penteco 16 Pro+ plugin** upmixes from any supported Penteco input format up to 16 channels into high quality Binaural output. This example is a Stereo to Binaural upmix via Dolby Atmos 7.1.2, with Penteco's output Visualizer enabled.