

Mastering Console

Manual

Version 1.5.0

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Approved for



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by fiedler audio

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What is the Mastering Console?

The Mastering Console is the perfect solution for editing and mastering Dolby Atmos ADM/BWF files.

On the Input Configuration page you can edit the Binaural mode, Description and Group for beds and dynamic objects.

On the Master Channel page you can use modules to process imported ADM/BWF files, like you would do with a plugin for mastering a mix track. The first available module is gravitas MDS, a highend mastering compressor. A separate license for gravitas MDS is required to run the module in the Master Channel of the Console.

On the same page you can also quickly measure the loudness of the ADM/BWF file, after being passed through the modules and adjust the Master Gain to match the requirements of the distributors.

On the Options page you can adjust Downmix, Trim and Balance and more. Set the desired formats for export and hit the Export button on the bottom to write the result to disk.

For more information please check out the tutorials mentioned on page 3 of this manual.

TRIAL AND ACTIVATION

After successful installation, open the Mastering Console and a window will open automatically, showing you the about screen and the possibility to start your 14 day trial period or to activate the plugin.

To start your trial period just click the "Try" button. The trial period starts with the first click on this button.

After purchasing the Mastering Console you will receive a serial number via email. To activate the plugin just copy the serial number, paste it into the grey field and hit "Activate". The window will close automatically and the plugin is activated. A purchased serial number allows activation on two computers.

If for some reason starting your trial or activation does not work please check out the Spacelab tutorial about activation for trouble shooting. The activation processes of Spacelab and the Mastering Console are identical. If the solutions provided there don't work please contact our customer support.



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TUTORIALS

Instead of writing a manual which is miles long we decided to explain everything about Mastering Console in video tutorials.

All tutorials can be found on our youtube channel at:

<https://www.youtube.com/channel/UC7Z9C1zLrJ5hRnsJCgpCquA>

The topics of the tutorials are:

1. Walkthrough

SYSTEM REQUIREMENTS

Supported Operating Systems: macOS 10.14 through 14
Windows 10, 11

CPU: Intel min. 2 GHz, x64 with at least SSE3
support, or Apple Silicon M1 or higher

Display/Graphics: min. 1440 x 900 px, OpenGL 3.3 or newer

Memory: min. 4 GB RAM

Sample Rates: 48 kHz, 96 kHz



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ADDITIONAL INFORMATION

1. The folders for storing your personalized HRTFs are the following:
Mac: /Library/Application Support/Fiedler Audio/Atmos Composer/PHRTF
Win: C:\Program Files\Common Files\Fiedler Audio\Atmos Composer\PHRTF

2. Description of 5.1 and 5.1.x downmix options

- Standard (Lo/Ro) - default:

Downmixes to 7.1 and then to 5.1 using the coefficients:

$$* L_s = 0 \text{ dB} \times L_{ss} + 0 \text{ dB} \times L_{rs}$$

$$* R_s = 0 \text{ dB} \times R_{ss} + 0 \text{ dB} \times R_{rs}$$

- Dolby Pro Logic IIx:

Downmixes to 7.1 and then to 5.1 using the coefficients:

$$* L_s = L_{ss} + (-1.2 \text{ dB} \times L_{rs}) + (-6.2 \text{ dB} \times R_{rs})$$

$$* R_s = R_{ss} + (-6.2 \text{ dB} \times L_{rs}) + (-1.2 \text{ dB} \times R_{rs})$$

- Direct Render with room balance:

Renders from Dolby Atmos to 5.1 directly applying an updated Dolby rendering algorithm that reduces the comb filter effects associated with phantom imaging of objects positioned halfway between the front and rear of the room. Room balance refers to how the Renderer deals with content that is panned between the midpoint and rear of the room. With this setting, the content is presented at a constant level in the surround speakers between the rear and midpoint of the room, avoiding any need for phantom imaging until it is in the front half of the room.

- Direct render:

Renders from Dolby Atmos to 5.1 directly accurately re-creating the sound field at the central listening position using phantom imaging between the surround speakers and front speakers.

ADDITIONAL INFORMATION

3. Description of the 5.1 to 2.0 downmix options

The coefficients for the two-channel downmixes from 5.1.x are:

- LoRo:

$$* L_o = L + (-3 \text{ dB} \times C) + (-3 \text{ dB} \times L_s)$$

$$* R_o = R + (-3 \text{ dB} \times C) + (-3 \text{ dB} \times R_s)$$

- Lt/Rt (Pro Logic II) and Lt/Rt (Pro Logic II) w/Phase 90:

$$* L_t = L + (-3 \text{ dB} \times C) - (-1.2 \text{ dB} \times L_s) - (-6.2 \text{ dB} \times R_s)$$

$$* R_t = R + (-3 \text{ dB} \times C) + (-6.2 \text{ dB} \times L_s) + (-1.2 \text{ dB} \times R_s)$$

The phase 90 filter used provides the all-pass 90-degree phase-shift filtering for the Ls/Rs feeds into the downmix, which reduces undesirable signal cancellation, improves imaging, and enables proper matrix decoding. It is strongly recommended to use the 90-degree phase shift for any Lt/Rt downmixes.

