



DrMS

Focus on your stereo field.

Mathew Lane DrMS v5

spatial processor plug-in

User Manual

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www.mathewlane.com

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Installation

1. Download the installer for your platform from the product page on our website:
<https://www.mathewlane.com/drms>
2. Run the downloaded installer and follow the install instructions in the install wizard.
3. Make sure you also have the latest iLok License Manager installed from the iLok website:
<https://www.ilok.com>

Where is DrMS installed?

On OSX:

- AAX: Macintosh HD/Library/Application Support/Avid/Audio/Plug-Ins
- AU: Macintosh HD/Library/Audio/Plug-Ins/Components
- VST: Macintosh HD/Library/Audio/Plug-Ins/VST
- VST3: Macintosh HD/Library/Audio/Plug-Ins/VST3
- Presets: Macintosh HD/Library/Application Support/Mathew Lane/DrMS

On Windows 64 bit:

- AAX: C:\Program Files\Common Files\Avid\Audio\Plug-Ins
- VST: C:\Program Files\Steinberg\VstPlugins
- VST3: C:\Program Files\Common Files\VST3
- Presets: C:\ProgramData\Mathew Lane\DrMS *(hidden folder)*

On Windows 32 bit:

- AAX: C:\Program Files(x86)\Common Files\Avid\Audio\Plug-Ins
- VST: C:\Program Files(x86)\Steinberg\VstPlugins
- VST3: C:\Program Files(x86)\Common Files\VST3
- Presets: C:\ProgramData\Mathew Lane\DrMS *(hidden folder)*

How do I uninstall DrMS?

On OSX:

1. Remove the DrMS plug-in file from each of the plug-in format folders (see above).
2. Delete the Presets folder (see above).

On Windows :

1. Uninstall DrMS via Windows Control Panel using uninstall under "Programs" or "Apps & Features".

Activation

To activate DrMS, you require a FREE iLok user account and a DrMS License.

- ❗ If you don't have an iLok user account yet, create yours here for FREE:

<https://www.ilok.com>

- ❗ Do I need an iLok USB dongle?

No! Dongle-free Machine (Host Computer) Authorisation is supported.
A physical iLok USB dongle (iLok2 or iLok3) is optional but NOT required.

When demo-ing or buying DrMS, you will receive an iLok License Activation Code.

- ❗ This iLok License Activation Code has the following format:

XXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XX

A specific code can only be used once. It 'redeems' the License into your iLok Account, after which it can be activated twice. Each activation can be done to a computer or to an iLok USB dongle, see below.

To redeem your iLok License Activation Code into a License and to activate this License:

1. Run DrMS in your DAW, and choose 'Activate' in the pop-up window.
2. *1st activation:* Enter (copy/paste) your iLok License Activation Code.
2nd activation: Don't enter your already redeemed Code, but choose 'No' to continue.
3. Login to your iLok user account.
4. *1st activation:* Select a location (computer or iLok) for your License to activate to.
2nd activation: Select your available License and then a location to activate it to.

- ❗ Advanced license management such as moving and (de/re-)activating licenses between different locations (computers or iLoks) is possible using the iLok License Manager.

Please note that to authorise an internet connection is required. When using an iLok USB dongle, you can move the dongle after authorisation from an internet connected computer to an offline DAW computer.

It is required to have the iLok License Manager installed on the computer where the plug-in is used, as this manager software includes the necessary drivers and extensions for the plug-in license to work.

Introduction

DrMS presents a new way to approach the manipulation of stereo audio. It is based on MS (Mid-Side) processing, although DrMS splits the stereo signal into four sections rather than the normal two, giving you new levels of control: Zoom in, add Depth, change Width or any combination and more.

DrMS has a wide range of applications for mixing, mastering and post production – going from simple MS encoding/decoding, over stereo field and depth enhancement, to fixing mono compatibility issues and more.

At first sight, DrMS can be a bit overwhelming because of the many possibilities. However, the hardware-like interface and clear layout per section will help you become comfortable with DrMS very fast.

Section Overview

There are 4 main processing sections:

- MID
- SIDE
- FOCUS
- FIELD

And 4 utility sections:

- INPUT
- OUTPUT
- OPTION
- FEEDBACK

Furthermore we have:

- POWER switch (bypass)
- Presets controls
- Phase Scope

Utility Sections

INPUT

The INPUT section features a *Gain* control and a *Format* selector. The green LED shows signal presence on input, the red LED indicates clipping.

- The INPUT *Gain* allows to adjust the volume of the incoming signal if needed, for example to avoid digital overs later on in the processing. This control is always active, even when DrMS is bypassed using the *Power* switch, to allow level-matched A/B comparison. Use Alt-click to set the *Gain* to 0.0dB.
- The INPUT *Format* switch selects the stereo format DrMS expects to receive at its inputs. Since DrMS internally works in MS mode, the switch will decide if an MS-encoder is



OUTPUT

The OUTPUT section features a *Gain* control and a *Format* selector. The green LED shows signal presence on output, the red LED indicates clipping.

- The OUTPUT *Gain* allows to adjust the volume of the outgoing signal if needed, for level matching when AUTOGAIN (see further) isn't being used. This control will be bypassed when DrMS is bypassed using the *Power* switch, to allow level-matched A/B comparison. Use Alt-click to set the *Gain* to 0.0dB.
- The OUTPUT *Format* switch selects the stereo format DrMS will output. Since DrMS internally works in MS mode, the switch will decide if an MS-decoder is active (in case of LR output) or not (in case of MS output).



OPTIONS

The OPTIONS section sets AUTOGAIN and SOLO behavior.

- AUTOGAIN can be activated with its *IN* button, standard it is on. AUTOGAIN will automatically adjust the internal gain of DrMS to ensure the processed signal is level-matched as good as possible to the original unprocessed signal. This makes A/B comparison a breeze.
- AUTOGAIN is only being updated whenever actual DrMS parameters are adjusted, it stays constant when you're done.
- The 2nd AUTOGAIN control is there to “lock” to the current gain value. In normal mode, this AUTOGAIN *Lock* switch is in unlocked mode, meaning the AUTOGAIN circuit will continue to update its value whenever you adjust a DrMS parameter.
- When the AUTOGAIN *Lock* is in locked position, the AUTOGAIN will not be updated anymore, but is kept at the value it had on the moment of switching to locked mode. This way you can easily continue tweaking from there without further automatic adjustments of the internal gain.
- When the CntrSOLO *IN* button is active, the signal of the soloed main processing section(s) will be presented as a monophonic stereo-centered signal (CenterSOLO). For the MID and FIELD sections this will make no difference. For SIDE and FOCUS, the otherwise stereo spread signal will now be heard as a mono signal. This can be an aid in setting the processing tool parameters of a soloed processor section.



FEEDBACK

When the FEEDBACK *IN* button is active, audio will be fed back from FOCUS into FIELD and the other way around at the chosen FEEDBACK %. This section is useful to create additional space and reverb-like effects.

- i** Note that using this section only makes sense when both FOCUS and FIELD are active. See further for more info about these sections.

Watch out for your speakers as too high values can result in a loud feedback loop!

Higher FEEDBACK % (value can go up to 200%) can be appropriate when volume settings in FOCUS and FIELD are conservative. But be careful!



Phase Scope

DrMS features a Phase Scope to give visual feedback of your stereo signal. The signal shows as a 'cloud' of lines or dots.

- The louder the signal, the bigger the 'cloud'
- A normal stereo signal 'cloud' will be higher than wide
- The wider the signal, the wider the 'cloud'
- A mono (MID only) signal will show as a straight vertical line
- A SIDE only signal will show as a straight flat line
- clipped/limited signals will look like a diamond



i Use *Ctrl-click* on the Phase Scope to switch between *Vector Mode* (lines, standard) and *Dot Mode* (slightly lighter on CPU)

Processing Sections

DrMS has 4 processing sections. Each of the sections has a different purpose in the stereo field, but all share a similar set of processing tools on blue rotaries (see next chapter).

The 4 processing sections of DrMS are:

- MID
- SIDE
- FOCUS
- FIELD

An incoming signal is split up into these 4 individual signals that can be processed differently and then are recombined at the output into a stereo stream. Each of the 4 sections has its own function in the resulting stereo signal, with the section level and the used processing (see next chapter) defining the impact.

Each of the processing sections has similar master controls:

- a *SOLO* button (use Shift-click to solo more than one section at once)
- a phase (Ø) switch
- a green 'level' rotary (use Shift-drag to finetune, and Alt-click for 100% value)
- a main *IN* button under the green rotary

MID

The MID section contains the sum of Left and Right of a stereo signal. This is the center-information of the stereo signal.

- The MID's *IN* button under the *LEVEL* rotary serves as a bypass button for the whole section. When it is off, no processing will happen in this section, and the section level will be 100%. When you switch it in, the *LEVEL* control and all the switched in processing tools become active.
- The *LEVEL* control allows you to lower the volume of the MID signal if needed. In general, you don't need this often as the MID signal is the core of your audio, but it can be helpful if you're after a particular effect.
- A set of processing tools is available. (see next chapter)



SIDE

The SIDE section contains the difference between the Left and Right of a stereo signal. This is the true stereo information of the stereo signal.

- The SIDE's *IN* button under the *WIDTH* rotary serves as a bypass button for the whole section. When it is off, no processing will happen in this section, and the section level will be 100%. When you switch it in, the *WIDTH* control and all the switched in processing tools become active.
- The level of the SIDE section will influence the signal's width, therefore the level rotary is called *WIDTH* in this section. Turning it above 100% will widen the stereo-image, turning it lower will narrow the stereo-image.
- A set of processing tools is available. (see next chapter)



FOCUS

The FOCUS section uses original mid-information to create new side-information in the final stereo output.

- The FOCUS's *IN* button under the *ZOOM* rotary serves as a bypass button for the whole section. When it is off, no processing will happen in this section, and the section level will be 0%. When you switch it in, the *ZOOM* control and all the switched in processing tools become active.
- Raising the level of the FOCUS section will give the impression of zooming in, therefore the level rotary is called *ZOOM* in this section. It allows you to zoom in on the mid-information by making it louder and more stereo.
- A set of processing tools is available. (see next chapter)



FIELD

The FIELD section uses original side-information to create new mid-information in the final stereo output.

- The FIELD's *IN* button under the *DEPTH* rotary serves as a bypass button for the whole section. When it is off, no processing will happen in this section, and the section level will be 0%. When you switch it in, the *DEPTH* control and all the switched in processing tools become active.
- Raising the level of the FIELD section will give the impression of adding depth, therefore the level rotary is called *DEPTH* in this section. It allows you to make the stereo field deeper and more 3D. You can also use this section effectively to save stereo-information that otherwise would get lost on mono-summation, making a certain stereo signal more mono-compatible.
- A set of processing tools is available. (see next chapter)



Processing Tools

Each of the processor sections features 3 processing tools:

- High Pass Filter (HPF)
- Low Pass Filter (LPF)
- Delay

High Pass Filter (HPF) & Low Pass Filter (LPF)

The HPF removes low frequencies – and passes highs.
The LPF removes high frequencies – and passes lows.

Each of these filters has 2 switches and 2 rotary controls:

- An *IN* button to activate the HPF or LPF in question.
- A *Slope* selector to switch between a non-resonant 6dB/octave slope to a steeper resonant 12dB/octave filter.
- *Frequency* to set the filter cutoff frequency.
- *Resonance* to amplify the audio around the cutoff frequency when using the 12dB/octave filter, with 0.7 being no resonance and 3 maximum resonance.

i *The HPF often is good to use on SIDE and FOCUS if you want to keep the low frequencies tight and mono centered.*

The LPF often is useful to avoid a too large high frequency build up in the combination of the different sections.

The Resonance parameter only is active when the filter is set to 12db/octave slope. A 6db/octave filter is always non-resonant.



Delay

The Delay gives a section a set latency rather than acting as a typical delay(echo) effect.

- The Delay can be activated with its *IN* button.
- The Delay *Time* can be set from 0,00 to 30,0 milliseconds.

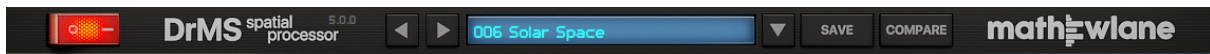
i *Use the delay on the FOCUS section to choose how ZOOM reacts.*

On the FIELD section it can create additional depth and space.

Use it on MID or SIDE to fix errors or to achieve new interesting sounds.



Presets



Presets Browser

The Presets Browser at the top of DrMS gives easy access to factory and user presets.

- Use the *Left arrow* and *Right arrow* buttons to browse alphabetically through all Presets
- Click on the *Preset display* or the *Down arrow* to see the full list and select a Preset
- The *SAVE* button allows you to save the current DrMS settings into your own Preset. It will be saved in the DrMS Presets folder (see further) as a “.drms” preset file, and will show up in the Presets list when saved. You can over-save existing presets if required.
- The *COMPARE* button allows you to switch DrMS settings between the current active settings and the previously saved settings.
- Factory Presets are included to help you use and learn DrMS. These Presets were created by industry professionals Dylan '3D' Dresdow (Black Eyed Peas, Michael Jackson, Usher), Dave Pensado (Pensado's Place) and Emre Ramazanoglu (Shakira, Duffy, Alexander McQueen).

Presets Overview

000 INIT: a neutral setting to start from

001 BEP Fizz Synth: a synth preset used in a song of a popular band

002 Hi Strings Stretch: nice to open up and widen strings/pads/...

003 hUsher Synth: a synth preset used in a song of a popular artist

004 Juno Synth Width: for that very wide and full sound

005 Beat This!: run loops through this

006 Solar Space: very big out-of-this-world space

007 Vocal Focal: focus on the vocal

008 Vocalokeeish Stereo: get rid of lead vocal, for stereo playback only

009 Vocalokeeish Mono: get rid of lead vocal, for mono playback

010 AnaMix: put this on your mixbus in your DAW and mix into it

011 Gentle Mix Widen: does what it says

012 Honey In The Middle: does something nice in the middle of the stereo field

- 013 Inside Out: flips mid and side around!
- 014 Ring Stinger: ringing effect
- 015 Wide and Airy: another obvious one
- 016 High Freq Enhancer: opens up the top end of your mix
- 017 Aux Bus Small Room: use this on a bus as a short reverb
- 018 Aux Bus Reflective Room: use this on a bus as a more live reverb
- 019 MS Encoder: simple mid side encoder
- 020 MS Decoder: simple mid side decoder
- 021 Mid Split: use together with Side Split on track duplicates
- 022 Side Split: the companion to Mid Split, apply different processing on each track
- 023 Mono to Stereo: upmix a mono source to stereo, 100% mono-compatible
- 024 Sides To The Centre: side info heard in the center and sides
- 025 No Loss Mono Fold Down: downmix stereo to mono without losing information
- 026 UpMix Dry: upmix without ambience
- 027 UpMix Wet: upmix with more ambience
- 028 Subtle 3D Stage: creates a subtle realistic 3D sound stage
- 029 Larger 3D Stage: creates a more profound realistic 3D sound stage
- 030 Depth Enhancer: gives your signal more depth in a natural way
- 031 Depth and Distance: not just more depth but also a more distant placement
- 032 Open Sound Field: a nice unique sound stage

Following included Presets by Dave Pensado speak for themselves:

- DP BEYOND THE SPEAKERS
- DP BIG PHAT AND WIDE
- DP CLAP AND SNARE
- DP EXTRA WIDTH AND CHARACTER
- DP MONO INSTRUMENTS TO STEREO
- DP OUTSIDE THE SPEAKERS
- DP PUNCHY WIDER KICK
- DP STEREO WIDTH DEPTH AND PRESENCE

Support

FAQ

The Mathew Lane website has a Support section with Frequently Asked Questions:

<https://www.mathewlane.com/support>

You'll most likely find a solution for your problem there right away.

Contact

If you can't find back the answer in the FAQ above, please contact us via the email form on our Support page:

<https://www.mathewlane.com/support>

We are here to help you and always try to get back to you as soon as possible.