

Double M/S - Surround Sound



Easy and Flexible

BASIC Double M/S Tool Plug-in

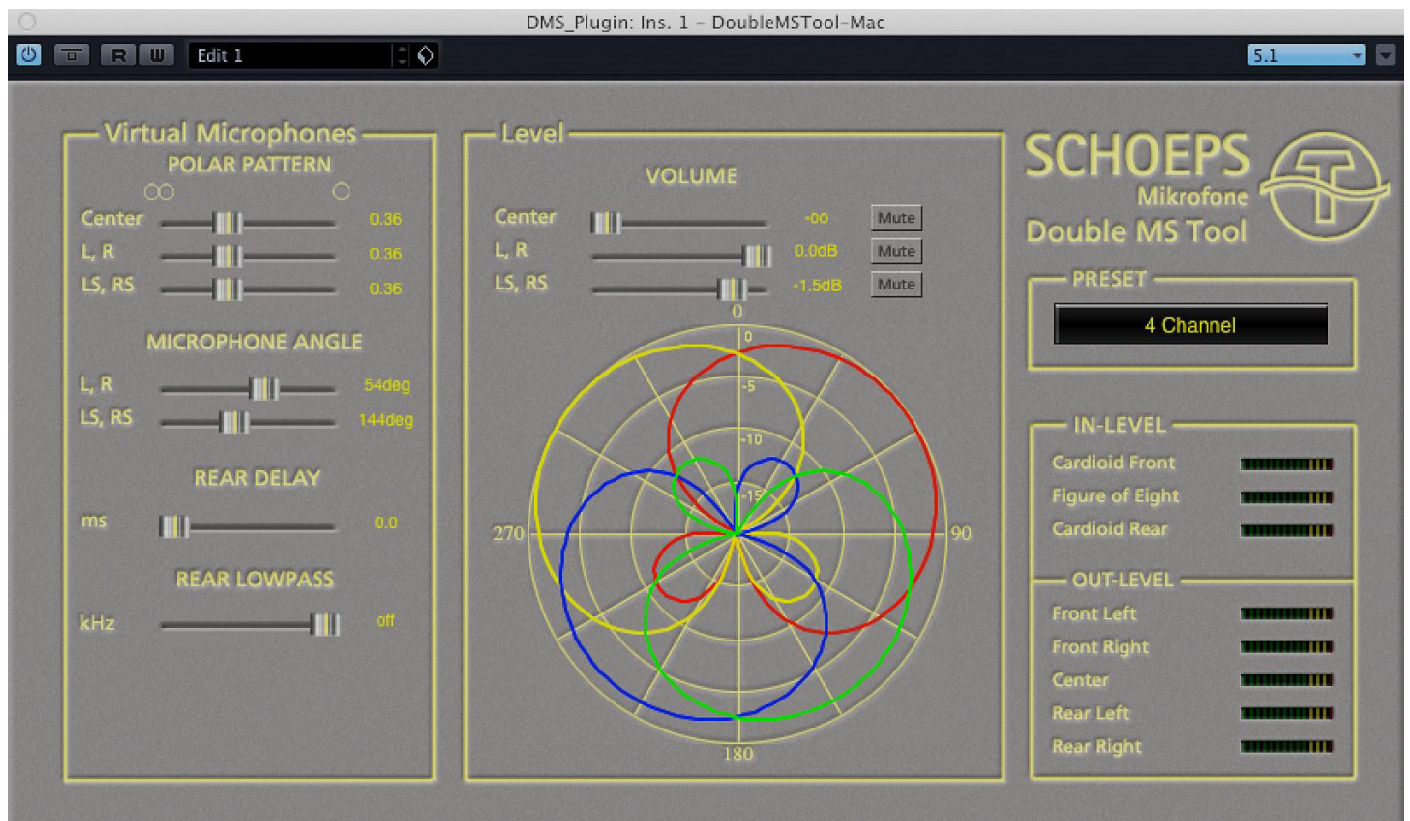
Plug-in for VST, VST3, RTAS, AU

www.schoeps.de/dms

- » Free software for decoding Double M/S signals
- » Input: 3 microphone signals; Output: 5.0 Surround
- » Intuitive operation

The plug-in features the following control elements:

- **Polar pattern** of the C, L/R and LS/RS output channels, adjustable continuously between figure-8 and omni directional
- **Microphone angle** between the L/R and LS/RS virtual microphones, adjustable continuously between 0° and 90°
- **Surround Delay** of the LS/RS output channels to avoid false localization, adjustable continuously between 0 and 20 ms
- **Surround Lowpass** of the LS/RS channels to avoid false localization and to fine-tune the room sound a first-order low pass filter (6 dB/octave), with limit frequency adjustable between 1 kHz and "off"
- **Output Gain** and Mute for the C, L/R and LS/RS output channels, adjustable continuously between 0 dB and "off"
- **Polar diagram** display: Five polar diagrams in distinct colors allow you to visualize the resulting directivity characteristics; you always hear what you see
- **Presets:** Standard two-, four- and five-channel output configurations are available
- **Input and output** level metering to monitor the functions and levels of the three input and five output channels



BEAMFORMING Double M/S Tool Plug-in

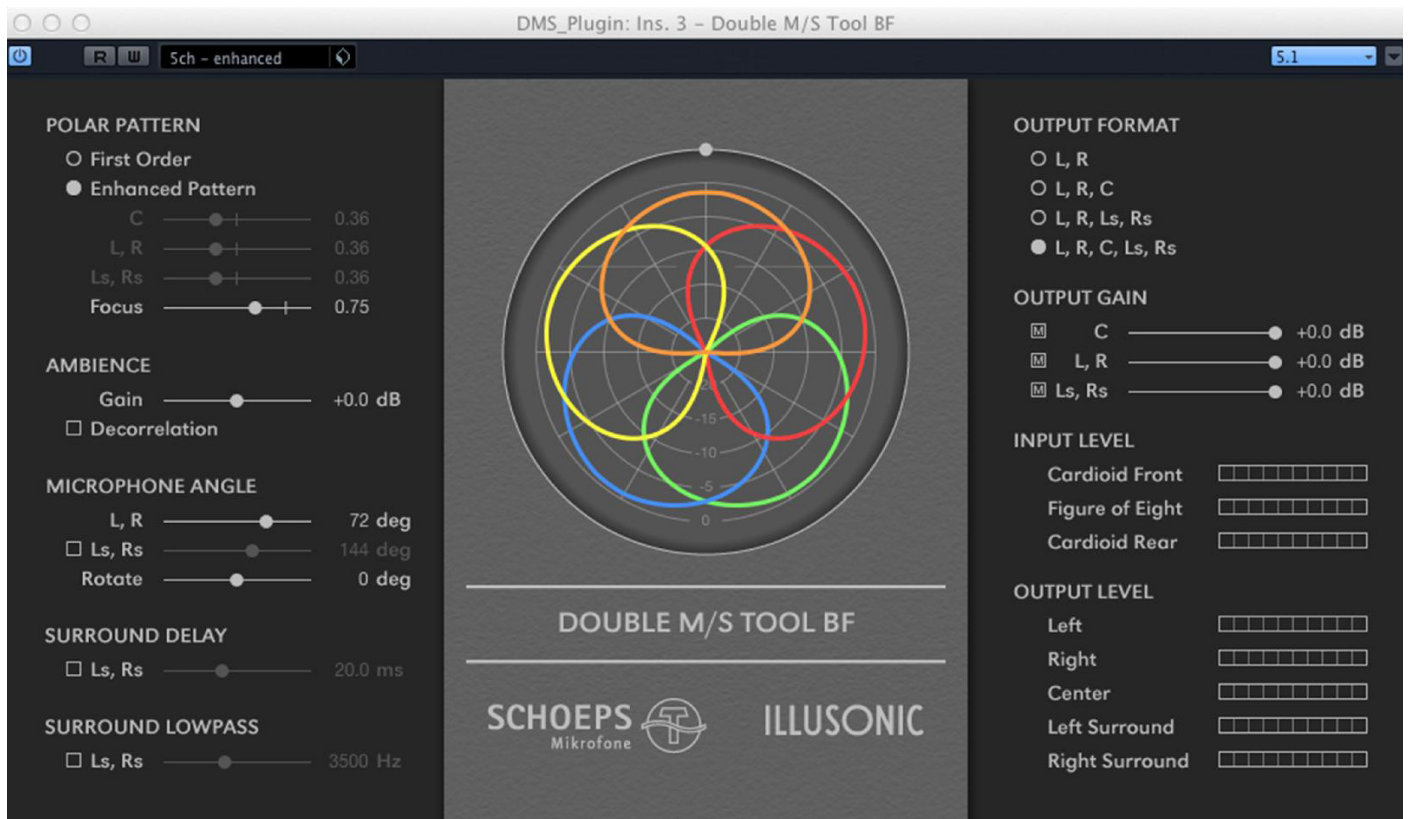
Plug-in for VST, VST3, RTAS, AU

www.schoeps.de/dms

- » Extended version of the Double MS Tool (Basic) with further BEAMFORMING functionalities
- » developed in collaboration with Illusonic GmbH using Illusonic algorithms
- » Free software for decoding Double M/S signals
- » Input: 3 microphone signals; Output: 5.0 Surround

The plug-in features the following control elements:

- **Polar pattern** of the C, L/R and LS/RS output channels, adjustable continuously between figure-8 and omnidirectional. BEAMFORMING: Enhanced patterns give even greater directivity and channel separation
- BEAMFORMING: **Ambience**: The diffuse sound in the recording can be controlled independently from the direct sound. With the "decorrelation" option you can avoid unwanted correlation in the diffuse sound
- **Microphone angle** between the L/R and LS/RS virtual microphones, adjustable continuously between 0° and 90°. BEAMFORMING: Rotate option
- **Surround Delay** of the LS/RS output channels to avoid false localization, adjustable continuously between 0 and 20 ms
- **Surround Lowpass** of the LS/RS channels to avoid false localization and to fine-tune the room sound – a first-order low pass filter (6 dB/octave), with limit frequency adjustable between 1 kHz and "off"
- **Output Gain** and Mute for the C, L/R and LS/RS output channels, adjustable continuously between 0 dB and "off"
- **Polar diagram** display: Five polar diagrams in distinct colors allow you to visualize the resulting directivity characteristics; you always hear what you see. BEAMFORMING: Drag the white button to rotate the image
- **Output format**: Choice between two-channel and five channel output
- **Input and output** level metering to monitor the functions and levels of the three input and five output channels
- **Presets**: Different two-, four- and five-channel output configurations are available



SCHOEPS Double M/S

The **SCHOEPS** Double M/S method is a compact and flexible setup for Stereo and Surround recording. You only record three microphone signals which are then dematrixed in post-production to get discrete 5.1 surround channels.

Double M/S is popular for film, documentary, sports, radio drama and music recording. Its particular advantages are:

- The timbral and spatial quality is excellent. This is due to the optimized decoding; offering sonic and spatial aesthetics better than those of an ordinary coincident microphone setup.
- The microphone setup is small, it fits into one windscreen
- The setup is robust and easy to use
- Only 3 channels are required on the recorder/DAW
- The decoding can be done during post-production, with easy tools like the free software plugins (<http://www.schoeps.de/dmsplugin>) or the plug&play decoder box MDM/S U

CMIT Double M/S

The CMIT Double M/S technique is particularly useful for Surround for documentary and ENG. Instead of the frontfacing cardioid, a shotgun is utilized. This is optimal for dialogue recording.



CMIT Double M/S microphone setups:
Left: SCHOEPS WSC Piano PIA-3S (Cinela OEM)
Right: SCHOEPS WSR DMS CMIT (Rycote OEM)

Double M/S microphone setup

The standard Double M/S microphone setup consists of two CCM 4V cardioid microphones and one CCM 8 figure-8 microphone. These are mounted in a special elastic suspension.



Double M/S
setup with windshield
WSR DMS LU

Double M/S Sets

A Double M/S Set contains the three microphones, the suspension, a windscreen with windjammer, and a multicore cable.

In addition the sets include:

- Double M/S Set "Plug-in":
a breakout cable to record the 3 signals directly;
- Double M/S Set "MDMS":
the plug&play decoding box MDMS U for instant recording of 5.0 surround signals



MDMS U:
passive decoder box