

Kasina Basic Session Format

The Kasina Basic Session (KBS) format is a proprietary, modern, advanced, yet easy to use format for Auditory-Visual Stimulation sessions playable by the MindPlace Kasina and Limina devices.

While AudioStrobe and SpectraStrobe sessions are essentially just large audio files, a KBS file is a kind of table of parameters controlling the generation of light and sound signals by the device playing these sessions. KBS files are very compact in size, only about 1 kB.

A KBS session consists of a number of segments and each segment is a group of parameters and values that defines the generation of light and sound signals in time. As the KBS session plays, its parameters' values smoothly "ramp" / interpolate from one segment to the next segment, and the values defined in given segment are reached only when the segment playing ends.

A KBS session has **Global Parameters** and **Segment Parameters**. Global Parameters are defined once for the whole session. Segment Parameters are defined in each segment of the session.

KBS sessions allow the creation of binaural beats. To create a binaural beat with a frequency of (for example) 8 Hz, it is necessary to set a 8 Hz difference between L Pitch and R Pitch values (say 106 and 114 Hz).

To create a pure binaural beat without the isochronic pulses with their frequency controlled by the **Beat** parameter, it is necessary to set **S Depth** (sound modulation depth) to 0.

Please visit the MindPlace support site at <http://www.mindplacesupport.com> for further information, discussions, and examples.

The Global Parameters are:

Color Control Mode (0 - 3):

- 0: Output color controlled by the ColorSet setting on the MindPlace device
- 1: Output color controlled by the Global ColorSet
- 2: Output color controlled by the ColorSet defined for each session's segment
- 3: Output color controlled by custom RGB values per segment

Global ColorSet (1 – 16) This global ColorSet is used for the whole session if the Color Control Mode (above) is set to 1

The Segment Parameters are:

Time [s]	Segment duration (0.00s – 655.35 seconds) (approximately 10 minutes)
Beat [Hz]	Stimulation frequency; frequency of light pulses and sound pulses (0.00 – 65.53 Hz)
L Ptch [Hz]	Left ear tone pitch (0.00 – 655.35 Hz)
R Ptch [Hz]	Right ear tone pitch (0.00 – 655.35 Hz)
L Phse [%]	Phase shift between pulses for left and right eye. (0 – 100%) 50% value represents equal left vs right alternating pulses in the light glasses
S Phse [%]	Phase shift between pulses for left and right ear. (0 – 100%) 50% value represents equal left vs right alternating pulses in the headphones
L AMDpth [%]	Light modulation depth. (0 – 100%) 100% represents full range pulses between maximum brightness and zero brightness, 0% represents no pulses, just steady light
S AMDpth [%]	Sound modulation depth. (0 – 100%) 100% represents full range pulses between maximum and zero volume, 0% represents no pulses, just steady, non-modulated sound
Bright [%]	Light brightness (of the glasses). (0 – 100%) Allows to program brightness changes during session playing and also fade-ins and fade-outs at beginning and end
Vol [%]	Sound volume (of the headphones). (0 – 100%) Allows to program volume changes during session playing and also fade-ins and fade-outs
SndWF	Sound waveform. (Available waveforms are Sine, Square, Triangle, Saw Up, Saw Down and Pink Noise). The waveform setting affects character of the tone generated by the MindPlace device
SndModWF	Sound modulation waveform. (Available waveforms are Sine, Square, Triangle, Saw Up, Saw Down and Pink Noise) The waveform setting defines shape of the sound pulses generated by the MindPlace device
LgtModWF	Light modulation waveform. (Available waveforms are Sine, Square, Triangle, Saw Up, Saw Down and Pink Noise). The waveform setting defines shape of the light pulses generated by the MindPlace device
LgtModPW	Light modulation pulse width. (0 – 100%) This parameter has any effect only if L Mod WF is set to Square in the same segment. Then it defines percentage width of light pulses
SndPW	Sound waveform pulse width. (0 – 100%) This parameter has any effect only if S Wave is set to Square in the same segment. Then it affects character of generated tone
SndModPW	Sound modulation pulse width. (0 – 100%) This parameter has any effect only if S Mod WF is set to Square in the same segment. Then it defines percentage width of sound pulses
SegCS	ColorSet 1 – 16. ColorSets are RGB color presets defining color of visual output. Some ColorSets are static, some are dynamic, making light color changing in time. More information on ColorSets can be found in user manuals for Kasina and Limina devices
Red [%]	Brightness of the red color channel.
Green [%]	Brightness of the green color channel.
Blue [%]	Brightness of the blue color channel.