

Terms / Distinctions / Differentiations

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Monophonic (mono) – (Greek: monos = one, single, alone / phone = sound), a single channel of audio information

2-channel audio – referring to an audio reproduction system or recording having two channels
(may or may not be stereo)

2-channel mono – a single channel of audio information recorded or delivered over two channels

mono [point] source – monophonic audio information – can be panned/positioned within two or more audio channels.

Stereophonic (stereo) – (Greek: stereo = solid / phone = sound)

Relating to or constituting a three-dimensional effect of auditory perspective; in audio, a recording involving two or more microphones designed to capture a sound image from two (or more) locations relative to the sound source, thus recording not only frequencies and amplitudes, but also time differences (phase differences) of the direct sound, as well as, time differences of the reflected sound, based upon the location of the individual microphones.

The information from each microphone is separately channeled (panned/positioned) within the two-channel audio system in an effort to recreate the three-dimensional sonic image of that original sound – in which the timing information, emanating from the two loudspeakers of the two-channel sound reproduction system, is different.

Stereo is different from “binaural.” Binaural properly applies to a two-channel audio system designed for headphone reproduction in which the two microphones used to record the sound are spaced at a distance of about seven inches (normal ear separation).

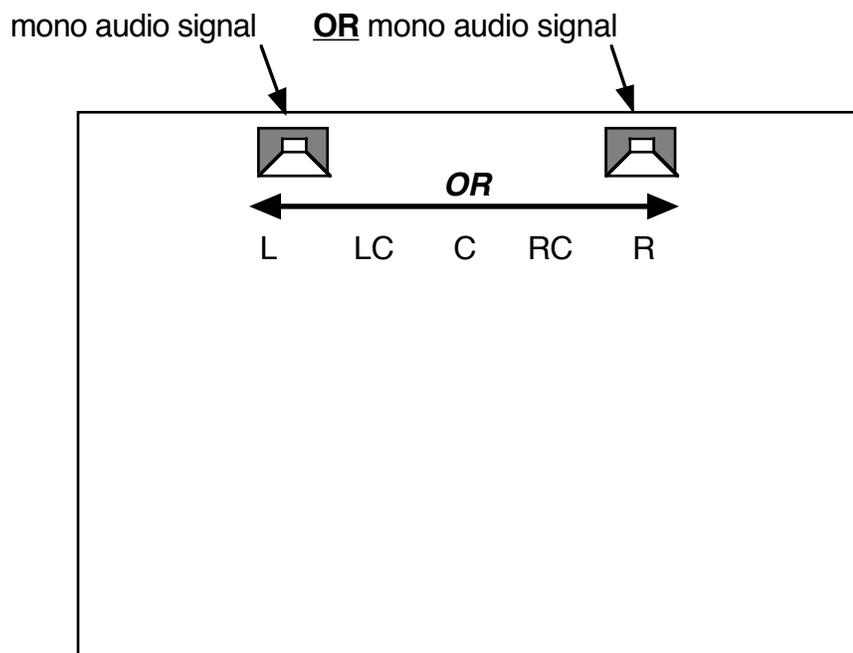
Stereo employs microphone positioning at distances wider than seven inches to account for the position of loudspeaker delivery.

Pseudo stereo – a monophonic sound source recorded on or delivered over a two-channel audio system with the audio information of one of the channels delayed.

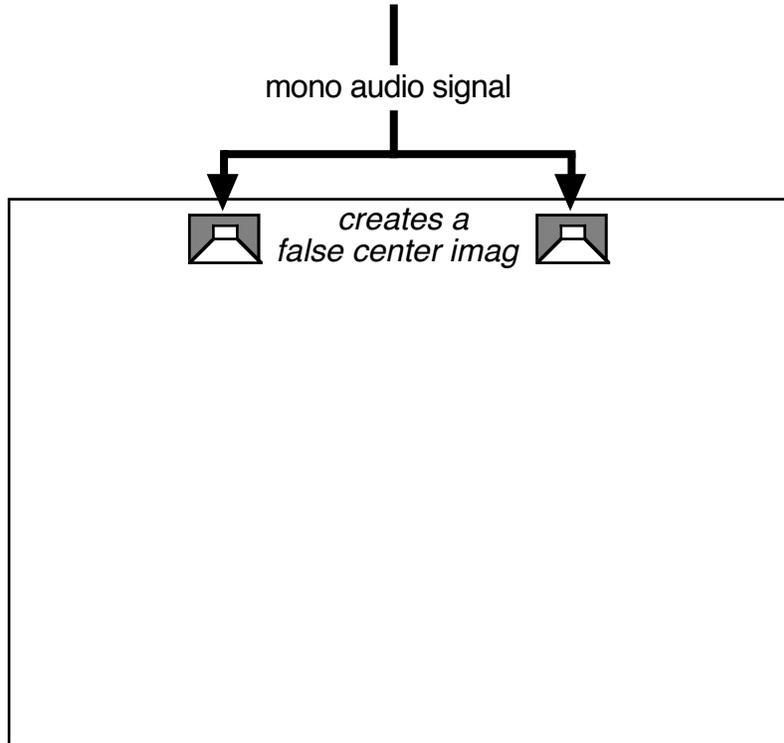
The audible difference between true stereo and pseudo stereo is quite different.

Within a two-channel audio context, spatial juxtapositioning could include the following options:

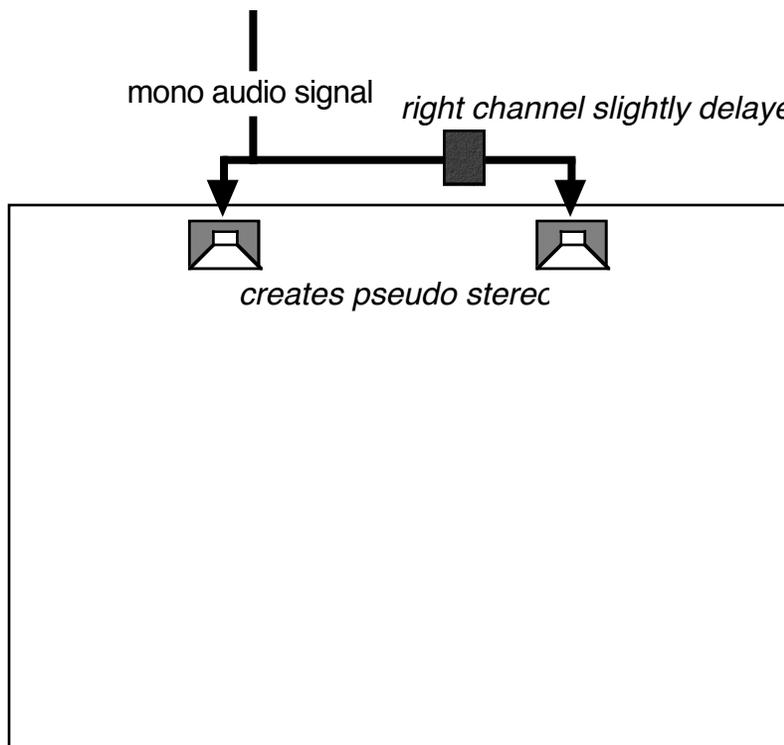
- **single channel mono source** positioned exclusively in the left or right channel



- **mono source positioned in both channels**
(referred to as two-channel mono)



- **pseudo stereo image** created from mono source
incorporating subtle delay between L and R channels
(*reverb may be added to this mix*)



- true stereo image

*recorded as a true stereo image with two microphon
maintaining channel integrity*

left channel audio signal

right channel audio signal



*presents a true stereo image
with phase and timing difference*

- stereo image with altered depth of field

*recorded as a true stereo image with two microphon
maintaining channel integrity*

filtered, reduced amp., reverb added

left channel audio signal

right channel audio signal

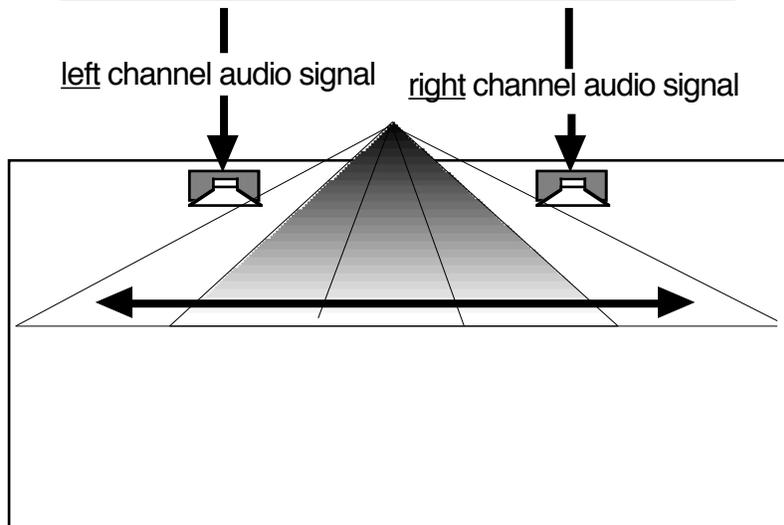


*presents a stereo image
with reduced proximity
(further away)*

- stereo image with altered horizontal stereo field width

*recorded as a true stereo image with two microphone
maintaining channel integrity*

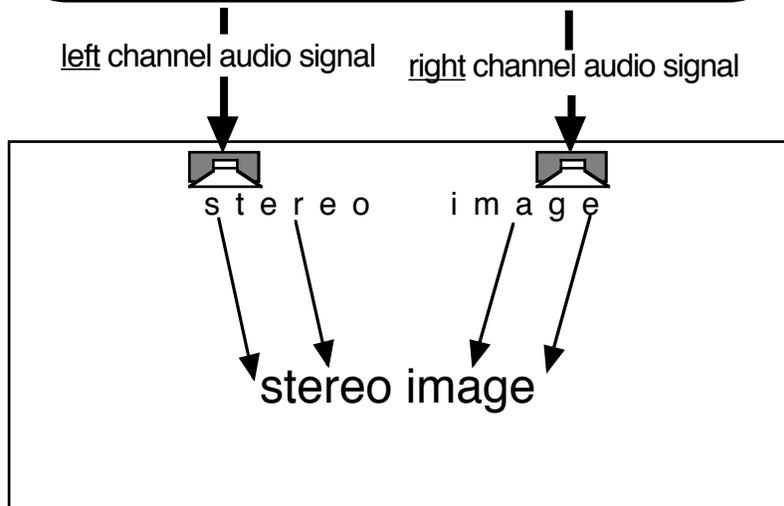
stereo field expander plugin or hardware process



- stereo image combined with inverted copy of the stereo image (the inverted copy must have reduced stereo field width [60 to 80% panning])

*recorded as a true stereo image with two microphone
maintaining channel integrity*

*stereo track copied, the copy is inverted,
panning of copy is reduced, then mixed with original*



- **stereo or pseudo stereo image, copied, subtly delayed,** reduced amplitude, and mixed back with the original image → creates a ghosting image.

