

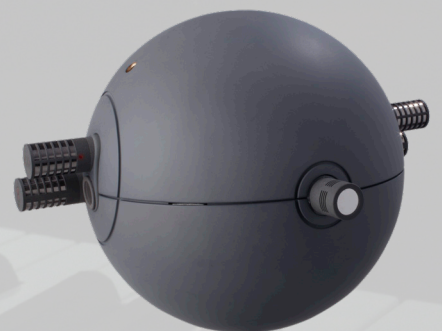
VR Ball is a binaural stereo microphone added with extra 2 pairs of figure-8 microphones in order to differentiate sound for front to back and up to down in order to decode as simple 2-channel stereo, 5.1 surround sound, or Dolby Atmos surround, and even VR sound.

VR Ball can be configured according to the user's preference, and all the microphones inside the VR Ball can be taken out for other recording scenario, such as MS, Blumlein, AB, or exchange with other cardioid/super cardioid capsules for ORTF and any configuration.

Extra center microphone can be a super cardioid for center channel, although most center channel is closer pickup. Also it can be an omni microphone for sub-woofer channel, or can be a center microphone as the one in Decca tree. In case the VR Ball is up close to the sound source, center channel become vital in stabilized the sound stage.

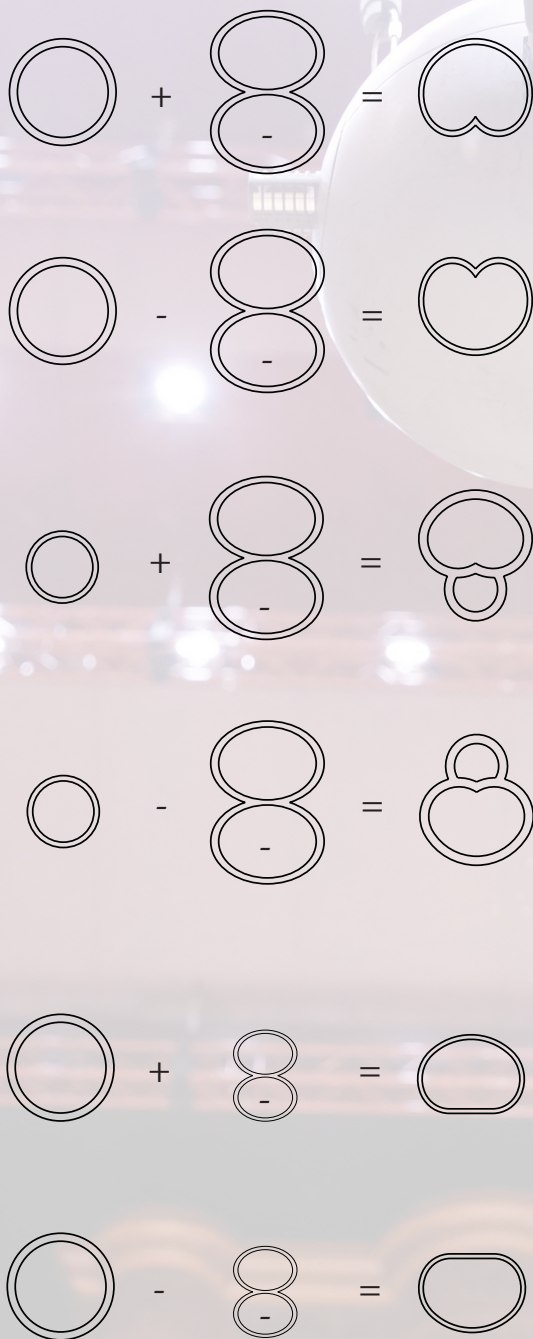
Total 4x 3/8" thread built-in for any mounting/suspension needed to deploy the VR Ball.

Dedicate 3 or 4 channel, low profile microphone cables are available for order. 7-pin or 10-pin XLR jacks together with breakout cable are included for outfit order.



How it works?

How to decode the VR Ball? It is based on MS concept. Take the left or right omni microphone as M, and the figure-8 microphone as S. You can achieve: Left-Front / Left-Rear, Right-Front / Right-Rear. And also Left-Up/Left Down, Right-Up/Right-Down



Why Omni for directional result?

Omni microphone is an pressure transducer, it reacts to all air pressure variation. The frequency response doesn't change with the sound source distance, and the bass response is the most obvious part, since it doesn't exhibit "proximity effect" which makes directional microphone sound thin when the sound source is distant, and/or the sound become muddy if the sound source is getting closer.

In order to keep the left/right channel with minimum phase difference, the microphone capsules cannot be too far away. As soon as there's half wave length distance difference between the left and right microphone, there's out of phase phenomenon which is not healthy in audio signal.

A ball similar to human head, or 20cm in between the microphone is acceptable in phase consideration. But 20cm is too short for the omni pair to tell the L/R difference and the playback result is very monolith.

With a 20cm ball in between the omni pair, the stereo effect is incredibly good, and also it exhibit the best frequency response. This is the reason why binaural (Ball) stereo recording is popular in music recording.

Recording engineers can get more benefit with a binural stereo plus figure-8 micorphones. This allow the engineer to change the directivity and pointing of the microphone in post, and find the best balance he/she likes.

