

Microphone Techniques: ORTF Stereo Miking

Developed by the French national broadcasting agency, Office de Radiodiffusion–Television Francaise, this technique is intended to emulate the placement of ears in the average adult human head. Two cardioid capsules are placed 17cm (about 6 – 3/4 inches) apart at a 110 degree angle to one another. ORTF can produce the wide imagery and depth common to the Blumlein technique, however the use of cardioids means that the configuration captures much less reverberant reflection.

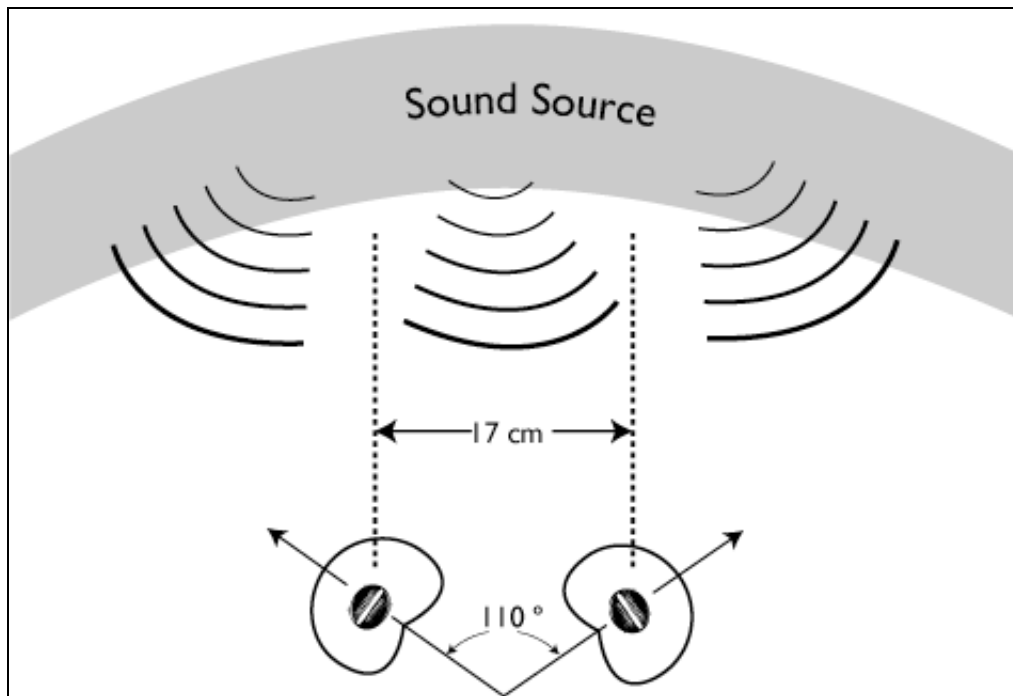


Fig. The ORTF technique positions a matched pair of mics in a configuration similar to that of human ears

The specified distance for ORTF makes wavelengths below about 500Hz effectively phase coherent. The time delays or phase incoherence above that frequency typically contribute to a sense of stereo separation, along with the perception of a pleasing open or airy quality. ORTF also exhibits adequate monophonic compatibility. Similar experiments by the Dutch broadcasting counterpart—Nederlandsche Omroep Stichting—yielded the NOS technique where a pair of cardioids are placed 30cm apart at a 90 degree angle. You can use the ORTF and NOS stereo miking techniques with both the M–Audio Luna and Solaris microphones.

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