

Overview Stereophonic Recording Techniques



Stereo recording principle	coincident microphone placement		level differences + minor arrival-time differences	microphones separated by an acoustically opaque object	major arrival-time differences
Name	X/Y	M/S	ORTF (for example)	Jecklin disk (for ex.)	A/B
Geometry					
Distance (d) between microphones	0 cm usually vertically aligned		5 to 30 cm ↑ interdependent ↓ 0° to 180°	depends on the object between them	40 to 80 cm or greater (up to several meters)
Angle between the main axes of the microphones	45° to 180°	90°	0° to 180°	typically 20°	0° to 90°
Acoustic operating principle of the microphones:	pressure gradient transducers, e.g. Schoeps MK 4 cardioid			usually pressure transducers, e.g. Schoeps MK 2 S omnidirectional*	
Sonic impression	— — — depending on the microphones used — — — clean, clear, often bright			big, spacious; especially good low-frequency reproduction when omnidirectional condenser microphones are used	
Spaciousness	often rather limited	satisfactory	good	very good	
Lokalization	←	←	←	←	←
	potentially very good**, but the center of the stereo image tends to become overemphasized.	good	adequate	indistinct (potentially unstable)	
* These recording methods can also employ pressure gradient microphones, though this is not often done.			**The appropriate angle between microphones depends on their directional pattern and the recording angle.		