UNDERSTANDING MID-SIDE
Applications for Broadcast, Film and Video Production
Mid-side recording is a technique that offers variable directivity, focus and spatial width of a recorded source.

- Mid-side recording techniques use two microphones.

- The Mid (middle channel) is typically a cardioid capsule however anything from dynamic mics to hyper-cardioid can be used.

- The side is a figure eight condenser.
Mid-side offers the greatest control over the stereo image in post production

- You can control the amount of direct sound from the mid mic and the ambient sound from the side mic offering exceptional control over the stereo field width.
- With other stereo recording techniques you are stuck with what was recorded
- Ambient space can be adjusted to the perceived on screen image

Mid side is totally mono compatible

- With the left and right signals combined, the summed output is solely from the mid pickup mic.
- Because of its ability to be folded into a perfect mono signal
- It is the ideal technique for stereo recording that may eventually be broadcast in mono
MID-SIDE APPLICATIONS

- Documentary
- Ambient and background recording
- Interviews
- Live music recording
- Wide-angle establishing shoots
- Special effects
- Not suited for multi angle feature style shooting
• The center mic is a directional mono and is pointed at the center of the sound source.

• The figure eight is arranged so that it is aligned in the cardioid mic’s vertical axis as close to the cardioid mic as possible.

• The figure of 8 is pointed 90 degrees away from the cardioid mic with the positive (+) normal phase side of the capsule facing stage left (this is important) and the negative (-) reverse phase side facing stage right.

• It is important that the two mics align on the same vertical axis as this technique depends upon the signals being phase aligned.
On Location – in the field
- You record two discreet tracks
- One Mid or center
- One Side capturing the left and right ambience

In Post-Production
- Post takes your recorded signal copies the side channel
- The copied channel is inverted
- They now have three discreet channels
- with these three channels they can adjust the stereo field by increasing the levels of the side channels or fold all three channels into a true mono channel with no phasing artifacts
• Import the tracks into a DAW
• Make a copy of the side track
• Using an inversion plug in reverse the polarity (invert) the side track copy
• Pan original side track hard left and copy of side track hard right
• Group side track, now your left and right stereo track
• Adjust the level of the left and right track to create you stereo image
• Add more side tracks to add width to your mix or less to draw focus to the recorded source
THINGS TO REMEMBER

• Position and on axis
• The closer to the source the better the results
• Unless directly specified by production record discreet channels without applying recording devices decoders
• Have fun and experiment
• Incorporate cardioid capsule and bidirectional capsule in Mid-Side (MS) arrangement
• Built-in matrix allows for stereo wide, stereo narrow and MS output
• 5-pin XLRM output connector, includes short fan out cable (two 3-pin XLRM connectors)
• Requires phantom power
• Provides very narrow (line/gradient) pickup pattern & high off axis rejection
• Needs to be oriented properly to maintain L-R point of view (UP – designation on mic)
• Interference tube design: Longer tube – more directionality
• Special design helps to minimize wind and noise pickup
• Can sacrifice audio quality for a more focused pickup
• BP4027 – 14.96” (380.0 mm) long; BP4029 – 9.29” (236.0 mm) long

• Used in Film/Video production to achieve greater working distance between microphone and talent
• Used in ENG and Broadcast as “on-camera” mic for capturing ambient or nat-sound
• Can be used in live sound as “stereo ambient” mics for IEM systems
• Innovative side-address Mid-Side stereo microphone engineered for professional recording, broadcast and sound reinforcement applications
• Independent cardioid and figure-of-eight elements
• Dual diaphragm capsules maintain precise polar pattern definition
• Switch selection of: Mid-Side or two internally matrixed modes (90° and 127°)
• Transformerless circuitry virtually eliminates low-frequency distortion and provides superior correlation of high-speed transients
• 5-pin XLRM output connector; includes two output cables
• 5.0 m (16.5’') balanced fan out cable (Two 3-pin XLRM connectors)
• Phantom power operation
• Integral 80 Hz high-pass filter and 10 dB pad switch
• Includes custom shock mount

• Applications include: choral, and ensemble miking, drum overheads, string sections, Foley SFX
• Broadcast applications include: sports area miking, crowd mics, ambience
THANKS FOR ATTENDING

Come back for our other sessions:

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- Rigging Lavaliers and Wireless Microphones for Film and Video Production
- Microphone Techniques for DSLR Cameras
- Recording music for Film and Television