



AUDIO REPRODUCER CALIBRATION TAPE

The first product brought to the market by Quarrybank Media Production is our ARCT01 Audio Reproducer Calibration Tape for reel-to-reel tape recorders.

Technical Specifications

Recorded at a nominal level of 250 nanowebers per meter (nWB/m) suitable for both studio-and-home usages and recordings, our Audio Reproducer Calibration Tape hosts a series of signals and tests to align and set the azimuth, record level, EQ, and other specs of a vintage reel-to-reel tape deck.

The Audio Reproducer Calibration Tape is a Maxell 35-90UD tape recorded directly onto from a signal generator via an highly modified and upgraded vintage Otari MX5050 BII tape machine, aligned to the standard reference level of Recording The Masters SM911 tapes. It is housed on a 7-inch transparent plastic (sometimes smokey black) reel in a box the same size.

A label on the front of the box denotes the purpose of the tape, the machine it was recorded on, and the nanowebers per meter and inches per second (IPS) it was rendered at. This helps the operator of the machine set it to reproduce faithfully to the tones provided.

Test Signals

The first generation ARCT01 provides the following tones in 10-second segments:

- 1 kHz
- 10 kHz
- 100 Hz

White Noise & Frequency Response

Succeeding the tones, the Audio Reproducer Calibration Tape will provide other tests to determine the quality and frequency response thereof of the machine. A stereo (sometimes mono) white noise signal is faded in and out, peaking at -6. This helps determine if there are tape dropouts, or other inconsistencies within an audio channel's reproduce volume.

Phase & Stereo Separation

Succeeding the white noise test, a test of phase and stereo separation is performed. When a reel-to-reel tape recorder is properly in phase, whether by the output stage of the headphone jacks (depending on the machine) or the external line outs of themselves, the stereo indication test of where a signal is should:

- sound proper in location (which speaker the signal is coming from, left or right)
- sound proper in phase (preventing phase cancellation, which can harm the reproduction of tape and be disorientating)

Returns and Contact Information

Contact information is provided at the end of each Audio Reproducer Calibration Tape for returns of damaged or unneeded tapes. They may not contain accurate up-to-date information, so reaching out via other contact measures is recommended.

When a tape concludes, the operator should always rewind the tape to return it tails-out, rewinding it again to reproduce the tape when needed. This helps prevent cross-talk due to the magnetic print-through effect. If a tape is significantly print-throughed, return it to us, and we will provide a replacement tape for free.

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