

CH PRECISION 45 RPM CALIBRATION RECORD

SIDE 1: Optimal impedance loading measurement for P1 's MM/MC voltage input

TRACK 1: Pink noise (from 250 Hz to 30 kHz), lateral (left and right channels in phase) 8'00"

Side 1 contains a test signal to be used while running the P1 's auto-calibration procedure. The optimal cartridge loading allows the whole [turntable + tonearm + cartridge + cable + phonostage] system to achieve the most extended and the flattest frequency response. Underloading a cartridge (i.e. using a load of a too high impedance) underdamps the stylus, causing a ringing in the upper-midrange/treble. The sound would be bright or even aggressive, and bass may seem a bit light. On the other hand, overloading a cartridge overdamps the stylus, which tames the whole dynamics and limits the frequency response in high frequencies. The sound would be dark or even slow, lacking impact. Cartridge manufacturers usually provide loading recommendations. The latter can be further refined, as the whole loading seen by the cartridge is not only the variable load that can often be set in the phonostage, but it consists of a combination of this phonostage loading, the impedance of the cable connecting the cartridge to the phonostage and possibly an impedance transformation induced by an additional step-up transformer. The P1 calibration procedure automatically determines the optimal impedance that the P1 phonostage will use to load any cartridge (let it be a moving coil with or without step-up transformer, a moving magnet or a moving iron type) connected to its MM/MC voltage input, to ensure optimal frequency response all the way to the output of the phonostage, while preserving all the dynamics engraved on the record. Please follow the step-by-step instructions on the P1 front panel display to conduct the MM/MC voltage input calibration.

SIDE 2: Cartridge alignment for best channel separation and level matching

TRACK 1: Sine 1 kHz, lateral (left and right channels in phase) 2'00"
TRACK 2: Sine 1 kHz, left channel only 0'30"
TRACK 3: Sine 1 kHz, right channel only 0'30"
TRACK 4: Sine 1 kHz, vertical (left and right channels out of phase) 0'30"

Side 2 contains test signals to be used to properly adjust the cartridge's azimuth. When the cartridge azimuth is properly tuned, track 1 will produce 1 kHz test signal of equal amplitude on both left and right outputs. Track 2's right channel and track 3's left channel should be silent. Track 4 can be used in conjunction with a preamplifier that has a mono setting (such as the CH Precision's L1 line preamplifier) that sums the left and right channels. In that case azimuth is optimally set when the mono (left + right) output is minimal.

