COOK - SERIES 10-LP TEST RECORDS*

* To be used in conjunction with the Series 10 Technical Bulletin

---

1. General - The Series 10-LP Test Record is essentially a 33-1/3 R.P.M. long playing version of the standard COOK SERIES 10. With the exception of recorded volume level, the two records are identical except as follows.

2. "A" Side - This is the calibration side, and uses frequencies recorded on a constant velocity (flat) basis above 1,000 cycles. This side will not play back flat on an ordinary phonograph because the high frequencies are not pre-emphasized. A theoretically perfect phonograph mechanism will measure this voltage characteristic at the speaker voice coil terminals when the "A" side is played:

Frequency		Relative Voltage
1,000	-	1.0 (reference)
20,000	-	0.1
17,000	-	0.125
15,000	-	0.137
12,000	-	0.16
10,000	-	0.20
9,000	-	0.22
8,000	-	0.25
7,000	-	0.29
6,000	-	0.33
5,000	-	0.39
4,000	-	0.45
3,000	-	0.55
2,000	-	0.70
1,500	-	0.85
1,000	-	1.0
~~1,000 to 20~~	-	~~1.0~~

3. "A" Side - At the inside diameter of this side is a band containing 1,000-10,000-1,000 cps. This is for the purpose of determining translation loss, and is also a convenient and positive method of identifying a worn stylus condition. Compare the meter reading obtained at 10,000 cycles at the outer edge of the side with that produced by this same frequency at the inner diameter, and the condition of the playback point may be evaluated:

RELATIVE VOLTS

10 Kc Outside	10 Kc Inside	Stylus Condition
1.0	0.40	good
1.0	0.33	fair
1.0	0.25	poor

4. Despite various advertising to the contrary, it is a well established fact that permanent "precious metal," "universal" points, and even sapphire to a lesser degree are "good" for only a few plays; the bona-fide long wear stylus is diamond. For one who is collecting a record library, the diamond is a necessary and economical investment to protect against the record damage that will inevitably take place with other materials.

5. "B" Side - The LP "spot check" band at the outside diameter should give a "flat" or constant meter reading at the speaker terminals of a phonograph which has been equalized to fit the LP characteristic promulgated by Columbia. This recording contains pre-emphasis of high frequencies. It differs from the low frequency characteristic of "A" side only in that the low frequency "tip-up" of the "Columbia" curve is used, as indicated by the relative level of the 100 cycle frequency being 3db (1.4X) above that of "A" side.

6. Intermodulation is less than 4% in production pressings for the first few months of life, but may increase somewhat even if not played unless stored in a constant-temperature environment. The ultimate value after many temperature cycles is probably no more than 10%, after which no further increase may be expected unless through playback wear.

7. Tracking sweep is the same as on the Series 10, except that a standard (LP) 500 cycle crossover is used.

IMPORTANT - NOISE

The Series 10-LP test record is produced under special conditions. It employs a relatively deep LP groove, cut with the "ANM" (Anti-Noise Modulation) heated stylus. Pressing of a deep groove of this type in clear vinyl often results in clicks caused by incomplete molding. If this occurs somewhere in your pressing please bear in mind that it is unavoidable at present, that it does not interfere with the accuracy or usefulness of the record; it is a by-product of our attempt to give you the best possible combination of ingredients in a test record.

NOTE: For white noise testing ask for our descriptive bulletin on the COOK SERIES 20 (78 RPM)

The L.P. Specialty series SOUNDS OF OUR TIMES records are produced by COOK LABORATORIES with the same equipment and techniques as used for the Series 10-LP.

With the 640AA condenser microphone, feedback cutter, 30db margin between operating and overload, SOUNDS OF OUR TIMES records actually transmit a wider frequency range than ever before on long playing records.

See your dealer or send for catalog

COOK LABORATORIES R-2 STAMFORD, CONNECTICUT

CUTTERS - FEEDBACK RECORDING HEADS -
DOUBLE-SPEED MASTERING -
COMPLETE RECORDING SYSTEMS -
ENGINEERING TEST RECORDS -
SOUNDS OF OUR TIMES Long Playing Specialty Records

1/28/52