

FREQUENCY TEST RECORD 33 1/3 RPM STEREO & MONO

DIN 45541

(UDC 681.841.2)

March 1971

1. Dimensions

The frequency test record has the same outside dimensions as the 33 stereo record according to DIN 45547 and the 33 mono record according to DIN 45537; nominal diameter 300 mm (12")

2. Recording

The frequency response corresponds to the time constants 3180/318/75  $\mu$ s according to DIN 45547 and DIN 45537 respectively. The reference level is the peak recorded velocity  $\hat{v} = 8$  cm/s on side A and  $\hat{v} = 10$  cm/s on side B, corresponding to full modulation at 1000 Hz ( $\hat{v} = 0$  dB<sub>rel</sub>) per DIN 45547 & 45537.

The radius of the bottom of the groove is  $\leq 4$   $\mu$ m. The vertical tracking angle for stereo recording is 15°.

2.1 Recording on side A (33 stereo)

The following are recorded in the groove flanks:

2.1.1. Reference level band: 1 kHz, 0 dB  
 ( $\hat{v} = 8$  cm/s), 15 s left, 15 s right.

2.1.2. Gliding frequency band: left: 31.5 to 20,000 Hz; level same as for fixed frequencies (see table) duration: 47 s.

2.1.3. Gliding frequency band: right: 31.5 - 20,000 Hz; level same as for fixed frequencies (see table) duration 47 s.

2.1.4. Fixed frequencies as shown in table.

Between the individual recorded frequencies there are identification spirals. These are wider after the reference level tone, after 16, 10 and 1 kHz and after 80 and 31.5 Hz.

2.1.5. Long constant level tone cut laterally (mono). 10 kHz, -20 dB, duration: 6 minutes.

2.2. Recording on side B (33 mono)

The following recordings are cut laterally (mono):

2.2.1 Reference level band: 1 kHz, 0 dB  
 ( $\hat{v} = 10$  cm/s), 15 s.

2.2.2. Gliding frequency band: 31.5 to 20,000 Hz; level as for fixed frequency band (see Table).

2.2.3 Fixed frequencies as shown in table.

Between the individual recorded frequencies there are identification spirals. These are wider after the reference level tone, after 16, 10 and 1 kHz and after 80 and 31.5 Hz.

2.2.4 Gliding frequency band: 5 to 125 Hz (rumble frequency range), -20 dB, with interruptions at 16 and 50 Hz.

Frequency	Relative level	
	Required value dB	Permissible variation dB
1 kHz	0	$\pm 0.5$
20 kHz	-20	$\pm 1$
18 kHz 16 kHz		$\pm 0.5$
14 kHz 12.5 kHz 10 kHz	-20	$\pm 0.5$
8 kHz 6.3 kHz 4 kHz 2 kHz 1 kHz	-20	$\pm 0.5$
1000 Hz 500 Hz 250 Hz 125 Hz 80 Hz	-10	$\pm 0.5$
63 Hz 40 Hz	-10	$\pm 0.5$
31.5 Hz		$\pm 1$
1000 Hz	0	$\pm 0.5$

TABLE: Recording on side A and B;  
 Duration of tone in each  
 case: 10 seconds.