



No.M31098

2011.09 Rev.1

## **TEST CD**

# For Checking CD Players and CD Drives *TCD-783*

#### 1. Purpose of use, Features

TCD-783 is a Test Disc using Mini CD (8cm Single CD) designed for measurement of Audio Characteristics and various kinds of evaluation and adjustment of HF Signal, Eye Pattern, Block Error rate, Servo adjustment and Access Check etc., of CD Players and Drives etc..

As for Audio characteristics, measurement of Frequency Response, Dynamic Range, S/N Ratio, Channel Separation, De-Emphasis and Tone Control are available to confirm.

Since Eccentricity, Tilt, Birefringence, Modulation, Jitter and Block error rate are strictly managed than CD Specifications, stable evaluation and adjustment are available.

#### 2. Specifications

Disc type : CD-DARecorded time : 20min. 2sec.

· Physical Characteristics: Complies with Compact Disc Digital Audio System.

However, following parameters are managed as described specifications.

Parameters	Managed Specifications	CD Specifications		
Outer diameter	80 ± 0.2 mm	80 ± 0.2 mm		
Center hole diameter	15.0 +0.1/ −0 mm	15.0 +0.1/ −0 mm		
Substrate thickness	$1.2 \pm 0.03 \; \text{mm}$	$1.2 \pm 0.1 \; \text{mm}$		
Scanning velocity	1.25 m/s (for reference)	1.2 ~ 1.4 m/s		
Track pitch	1.6 $\mu$ m (for reference)	1.6 $\pm$ 0.1 $\mu$ m		
Eccentricity	$\leq$ 40 $\mu$ m(0-p)	$\leq$ 70 $\mu$ m(0-p)		
Radial tilt ( $eta$ angle)	±0.2°(ave.)以下 at R33mm	±0.6°以下		
Birefringence	≦±80 nm	≦±100 nm		
Reflectivity	<b>≦</b> 75%	<b>≦</b> 70%		
Modulation(I11/I11H)	<b>≦</b> 77%	<b>≦</b> 60%		
Modulation(I3/I11H)	<b>≦</b> 45%	30 <b>~</b> 70%		
Asymmetry	<b>−12 ~ −5</b> %	−15 <b>~</b> +5%		
Jitter (3T Pit)	≦25 ns	≦35ns		
Block error rate	≦70 (max.)	≦220		

Values in this specification sheet are measured by the equipments ALMEDIO-owned.





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### 3. Content

Track No. Index	Time		Contents	Channel	Level	Emphasis	Purpose		
	min	sec	Contents	di	dB	B Emphasis	Furpose		
1	1	0	05	Minuetto	L&R	-	ON	Access	
2	1	0	56	1kHz Sine wave	L&R	0	OFF	Reference level	
3	1	0	56	17Hz Sine wave	L&R	0	OFF		
4	1	0	56	127Hz Sine wave	L&R	0	OFF		
5	1	0	56	997Hz Sine wave	L&R	0	OFF	Frequency response	
6	1	0	56	10007Hz Sine wave	L&R	0	OFF	THD vs. frequency	
7	1	0	56	17989Hz Sine wave	L&R	0	OFF		
8	1	0	56	19997Hz Sine wave	L&R	0	OFF		
9	1	0	56	Infinity 0	L&R	-∞	OFF	S/N	
10	1	0	56	1kHz Sine wave	L	0	OFF	Channel separation	
11	1	0	56	10kHz Sine wave	L	0	OFF		
12	1	0	56	1kHz Sine wave	R	0	OFF		
13	1	0	56	10kHz Sine wave	R	0	OFF		
14	1	0	26	1kHz Sine wave	L&R	-20	ON		
15	1	0	56	4kHz Sine wave	L&R	-20	ON	De-emphasis error	
16	1	0	56	16kHz Sine wave	L&R	-20	ON		
17	1	0	56	100Hz Sine wave	L&R	-20	OFF	Tone control	
18	1	0	56	1kHz Sine wave	L&R	-20	OFF	Frequency response	
19	1	0	56	10kHz Sine wave	L&R	-20	OFF		
20	1	0	56	997Hz Sine wave	L&R	-59.94	OFF	Dynamic range	
21	1	0	56	997Hz Sine wave	L&R	-80.77	OFF		
22	1	0	05	Ouverture Miniature	L&R	-	OFF	Access	
23	1	0	20	Marche	L&R	-	OFF	General	
TOTAL	TOTAL TIME (Including pause time) 20min 02sec								

note) No pause time on track No.22 to 23.

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