

# AC12B

## AUDIO INSTRUMENTS

### DISTORTION METER CALIBRATOR



#### General

The AC12B distortion meter calibrator is a standard distorted wave generator designed for the calibration of distortion meters. It generates distorted waves precisely in a range of -10 (31.6%) to -90 dB (0.00316%), and the desired distortion factor can be set in 1 dB increments.

In addition, since the output voltage of this calibrator is precise and stable, it can also be used for the calibration of voltmeters.

#### Specifications

- Fundamental frequencies  
20, 100, 400 Hz, 1, 10, 20 kHz
- Frequency accuracy  
± 1%
- Harmonic frequency  
Doubled frequency, synchronized to the fundamental wave
- Fundamental wave output level  
-40 to +10 dB (0 dB = 1 V),  
in 1 dB increments, continuously variable
- Conversion table (dB/%)

dB \ dB	0	-1	-2	-3	-4	-5	-6	-7	-8	-9
-10	31.6 %	28.2	25.1	22.4	20.0	17.8	15.8	14.1	12.6	11.2
-20	10.0	8.91	7.94	7.08	6.31	5.62	5.01	4.47	3.98	3.54
-30	3.16	2.82	2.51	2.24	2.00	1.78	1.58	1.41	1.26	1.12
-40	1.00	0.891	0.794	0.708	0.631	0.562	0.501	0.447	0.398	0.354
-50	0.316	0.282	0.251	0.224	0.200	0.178	0.158	0.141	0.126	0.112
-60	0.100	0.0891	0.0794	0.0708	0.0631	0.0562	0.0501	0.0447	0.0398	0.0354
-70	0.0316	0.0282	0.0251	0.0224	0.0200	0.0178	0.0158	0.0141	0.0126	0.0112
-80	0.0100	0.00891	0.00794	0.00708	0.00631	0.00562	0.00501	0.00447	0.00398	0.00354
-90	0.00316									

- Output accuracy ±0.3 dB
- Output impedance  
600 Ω, unbalanced
- Distortion range -10 to -90 dB, in 1 dB increments
- Distortion accuracy

Frequency	Distortion(dB)		
	-10 to -69	-70 to -79	-80 to -90
20 Hz~1kHz	±0.2	±0.5	+1
10 kHz	±0.25	±0.5	
20 kHz	±0.3	±1	

- General specifications  
Power supply AC 100, 120, 220, 240 V ±10%,  
50/60 Hz  
Power consumption  
Max. 60 VA  
Operating temperature range  
0°C to 40°C  
Relative humidity 25% to 90% RH (non-dewing)  
Dimensions 426 (W) × 149 (H) × 460 (D) mm  
Weight Approx. 8.7 kg