

# ST110

## Advanced Arm Technology Eliminates Resonance



*© beim Hersteller  
Archiv Michael-Otto*



**CEC**  
Chuo Denki

# ST110

## Belt-Drive Automatic Turntable

The all new ST 110 has many improved features and added quality for high performance. The compact design contains a wealth of operational excellence combined with simplicity.

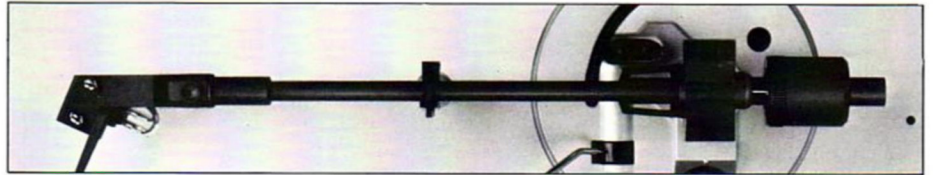
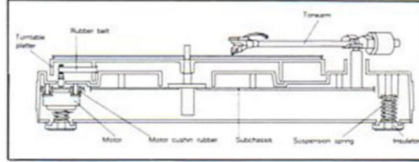
### HIGH PRECISION DRIVE MOTOR

Platter rotation is accurately controlled by the precision 4-pole synchronous motor. The shaft and bearings have been machined to close tolerances to eliminate noise or vibration.

### VIBRATION ISOLATION

External vibrations can not influence the operation of the ST 110 because an original vibration

isolation system is incorporated into the cabinet design. This combination of damping rubber and vibration matched steel springs effectively isolate the platter from outside vibrations.



### LOW MASS, STRAIGHT TONEARM PLUS LOW MASS CARTRIDGE

Trackability is greatly improved with the low mass, straight tonearm and the low mass cartridge which are incorporated into ST 110. Resonance problems are solved by matching the arm system to a fundamental frequency of 11 Hz for optimum performance. (Note: The cartridge is optional in some areas.)



### LOW RUMBLE

Exhaustive vibration analysis resulted in the design of a motor suspension which provides minimum rumble. Vibrations were even further reduced by dynamic balance of the motor itself.

### OIL-DAMPED CUEING

Oil-damped cueing of ST 110 brings the stylus to rest in the groove with such precision and gentleness, your records will no longer be damaged on cueing. Lead-in is safe, easy and accurate.

### COST PERFORMANCE

High performance and low cost are main features of this greatly improved turntable.

### SPECIFICATIONS

#### TURNTABLE

Motor	4-pole synchronous motor
Speeds	33-1/3 and 45 r.p.m.
Wow & Flutter	0.08% (WRMS), $\pm 0.12\%$ (DIN45507)
Rumble	36 dB DIN45539A (unweighted) 63 dB DIN45539B (weighted)
Turntable platter	302 mm aluminum alloy die-cast

#### TONEARM

Effective length	222 mm
Overhang	16.8 mm
Adjustable tracking force	0-2.5 g with direct readout weight
Usable cartridge weight	4-6.5 g

#### CARTRIDGE (OPTION)

Frequency response	20-20,000 Hz
Output voltage	3 mV $\pm 3$ dB at 1 kHz 3.54 cm/sec.
Channel balance	Within 2 dB at 1 kHz
Channel separation	More than 18 dB at 1 kHz
Load resistance	47 Kohm
Weight	4.6 g w/ spacer
Optimum stylus force	1.8 g

Moving Magnet type, Model MM3 with 0.6 mil diamond stylus
20-20,000 Hz
3 mV $\pm 3$ dB at 1 kHz 3.54 cm/sec.
Within 2 dB at 1 kHz
More than 18 dB at 1 kHz
47 Kohm
4.6 g w/ spacer
1.8 g

#### GENERAL

Automatic functions	Automatic return and automatic shutoff
Power source	220V 50Hz for Europe, 120V 60Hz for North America
Power consumption	8 watts
Dimensions	420(w) $\times$ 121(h) $\times$ 365(d) mm
Weight	4 kg (net)

Automatic return and automatic shutoff
220V 50Hz for Europe, 120V 60Hz for North America
8 watts
420(w) $\times$ 121(h) $\times$ 365(d) mm
4 kg (net)

Design and specifications subject to change without notice for improvements.