

**TIME-ALIGN™** TECHNIQUE as applied to loudspeakers, is a real-time design method, utilizing proprietary instrumentation, which allows the acoustic output of a multi-way loudspeaker system to be adjusted so that the fundamental and overtones of a complex transient arrive at a listener's ears with the same time relationships they had in the electrical signal at the loudspeaker's input terminals. Both the amplitude and time characteristics are carefully adjusted, with particular attention paid to spicing the time characteristics of any two adjoining frequency ranges. The acoustical position of a driver is a function of both its high frequency cutoff and that of the electrical network feeding it. This fact is overlooked by many designers who consider that lining up the voice coils of the various drivers in a multi-way system, is sufficient to provide time compensation. In the SONEX TWO MK II, both driver placement and electrical network techniques are used to provide exact **TIME-ALIGNMENT™** of the acoustical output.

#### PERFORMANCE SPECIFICATIONS

##### FREQUENCY RESPONSE

±3dB 55Hz to 18kHz (4π steradians, free field)  
±6dB 32Hz to 18kHz (wall-floor boundaries)

##### POWER REQUIREMENTS

10 Watts for 93dB SPL per 1000 ft.<sup>3</sup> room volume  
1 Watt for 89 dB SPL @ 1 meter (4π steradians, free field)

##### POWER HANDLING

40 Watts continuous, 320 Watts (10% duty cycle) below 1 kHz  
15 Watts continuous, 120 Watts (10% duty cycle) above 1 kHz

##### SENSITIVITY

80 dB SPL/volt/meter

##### DISTORTION

Less than 1% 2nd or 3rd harmonic 80Hz to 18kHz  
Less than 5% 2nd or 3rd harmonic 32Hz to 18kHz  
(90 dB SPL @ 1 meter)

##### IMPEDANCE

8 Ohms nominal, 3.5 Ohms minimum

#### DESIGN SPECIFICATIONS

##### SYSTEM TYPE

TIME-ALIGN™, 4-way system, driver offset

##### DRIVERS

Two 16 cm (6½") Bass Drivers  
One 9 cm (3½") Mid Driver  
One 2.5 cm (1") Treble Driver  
One 25 cm (10") Passive Radiator

##### CROSSOVER

TIME-ALIGN™, slow gradient, minimum phase design  
1.3 kHz and 7 kHz. (60 Hz to Passive Radiator)

##### ENCLOSURE VOLUME

70 Liters (2.5 cubic feet)

##### ENCLOSURE DIMENSIONS

90 cm X 40.6 cm X 31.8 cm  
35½" X 16" X 12½"

##### ENCLOSURE CONSTRUCTION AND FINISH

Handrubbed satin walnut finish. Walnut veneer on ¾" and ½" high density particle board material. Lockmitre joints. Internal bracing.

##### GRILLE

Brown cloth on wood frame with foam diffraction buffers.

##### SYSTEM HEIGHT

26.3 kg (58 lbs) Net  
30.8 kg (68 lbs) Shipping

**SONEX**

PO BOX 5046 BERKELEY CALIF 94705



**SONEX**

*"... a truly musical experience"*