

SPICA  
SERVO SUBWOOFER  
PRELIMINARY LITERATURE

The SPICA SERVO SUBWOOFER is a system designed to operate optimally with the SPICA TC-50. The SERVO is the result of many months of research into computer optimized subwoofer crossover design with the aim of achieving the most accurate amplitude summing with the lowest addition of phase error. This is the first system of its kind to be made available to the audiophile and represents a milestone in loudspeaker design.

The SERVO consists of four functional modules:

1. Woofer

A proprietary 8" woofer designed to SPICA's specifications. This superb driver is capable of a phenomenal 1" peak to peak excursion. This gives us the benefits of a 10" with all of the advantages of using a smaller cone.

2. Amplifier

The amplifier, designed by PS Audio, is integrated with the woofer and complements its characteristics. By using this amplifier we retain control of system characteristics and give you the best reproduction possible.

3. Servo feedback system

This is an electronic feedback system that compares the input to the amplifier with its output to the speaker in real time and corrects any errors instantaneously. This allows the SERVO to reproduce the information sent to it with complete accuracy.

4. Crossover

Computer optimized by SPICA, it consists of the highest quality parts (matched to better than 1%) to ensure a proper match between the SERVO and the satellite used.

The three electronic modules are all mounted on one circuit board which is in the woofer enclosure. This reduces the wire lengths and allows SPICA to maintain control over the characteristics of the entire chain, and assures you that you will receive a system that will perform correctly within your stereo system.

Specifications:

System type	: Sealed box
Woofer enclosure volume	: 1.23 cu. ft.
System resonance / Q	: 30Hz, Total Q=.5
Low frequency extension	: -3dB @ 25Hz
Woofer	: 8" with 1" peak to peak excursion
Hipass crossover	: Passive 1'st order, -3dB @ 88Hz
Lopass crossover	: Electronic w/computer derived slope
Input Impedance	: 110 kOhms open, 10 kOhms one input shorted
Polarity	: Inverting, for use with non-inverting TC-50's
Level control	: Continuously variable within a 12 dB range
Power amplifier	: Solid state, 70 watts RMS minimum
Size in inches (cm)	: 17.5(44.5)W X 14.5(36.8)H X 15.875(40.3)D
Weight	: 47 lbs. - 21.4 kg