

**STAX**®

electrostatic  
audio  
products

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**S1938** ≡

Advanced Lambda Series & System

**SR-L700 / SR-L500**

electrostatic earspeaker

**SRS-5100**

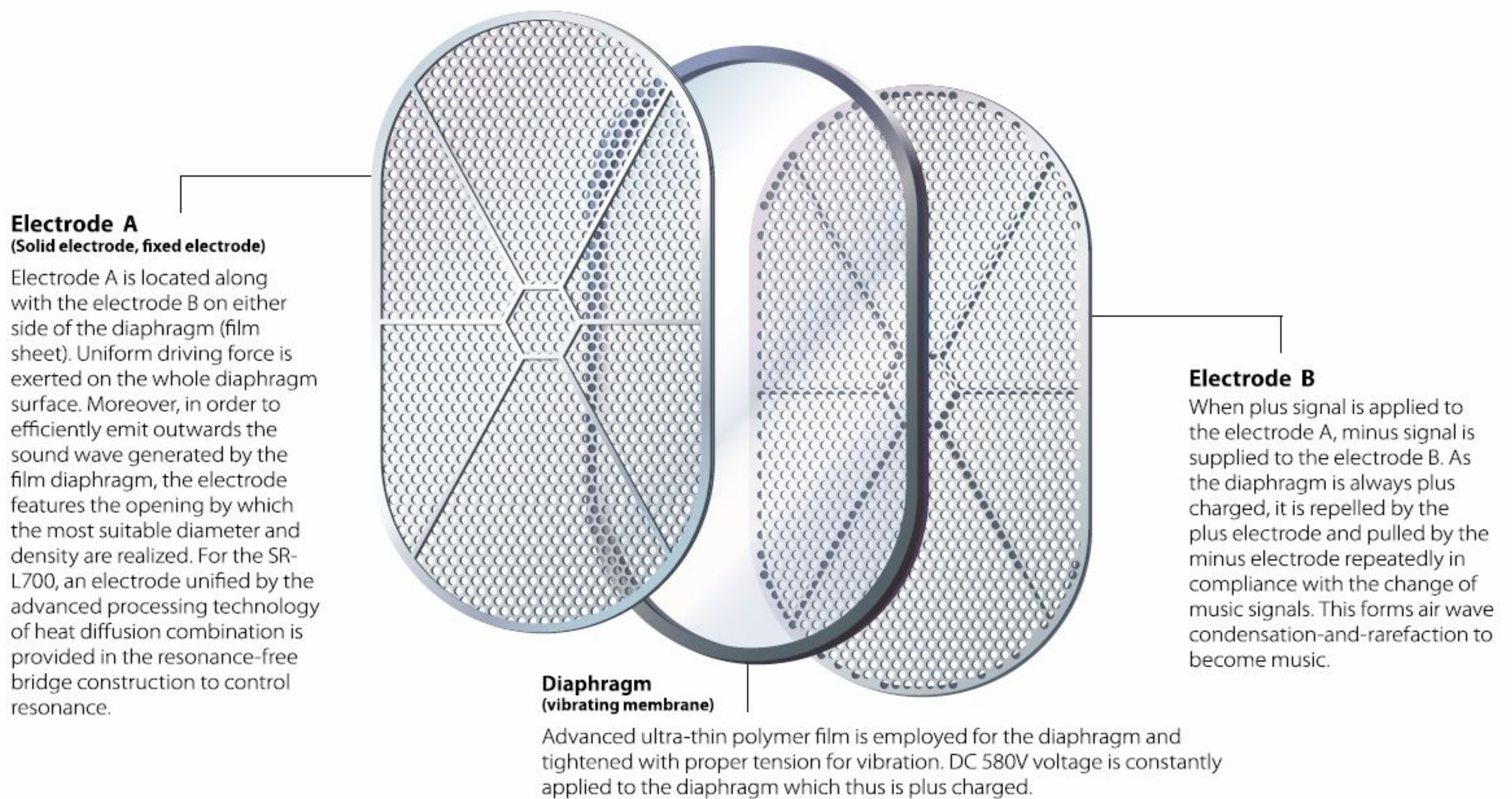
electrostatic earspeaker system

**SRM-353X / SRM-006tS**

driver unit for earspeakers



The trend "high-resolution" is nothing but "an eternal challenge to the further implementation of super-wide range." The essence is to improve the transient characteristic of audible range, so-called slew rate characteristic. And here is a transducer which most fits the characteristic improved by leaps and bounds.



**Principle:** It is clear that light object can be moved more easily than heavy one. The same is said about the ease of stopping. Energy required in order to move light object is also small enough. Time lags and loss of energy are overwhelmingly few until light object begins to move. In the STAX earspeaker, advanced ultra-thin high polymer film is used for the diaphragm which changes electric signal into the condensation-and-rarefaction of air wave. As shown in the figure, the diaphragm is fixed to the frame with equal tension maintained. The diaphragm is thin and light, indeed. This is the fundamental factor of overwhelmingly good-sounding earspeaker. When conductivity is given to this and certain voltage called bias is applied, the film(=diaphragm) will acquire an electrical charge of plus. And when signal voltage is applied to the two fixed electrodes installed to shut in the diaphragm so that one electrode is plus charged and the other minus, a phenomenon occurs that the diaphragm, being fixedly plus charged, is pulled to the minus-charged fixed electrode and pushed by the plus-charged fixed electrode(=push-pull operation). Reproduction of infinitely faithful "sound" is realized by repeating this process using music signal. If compared to the lens of a camera, "the high-resolution sound world" will spread out where sonic quality is fundamentally different from other reproduction system as if the quality of glass itself is different.

**Merit 1:** "Movement" of diaphragm is the whole-surface direct drive by voltage which changes in synchronization with music signal at high speed with few transmission loss. The conversion system which simultaneously drives the whole diaphragm surface is allowed only for electrostatic system. This does not mean that the movement acts only on one part(for example, a center) of vibrating object and then spreads out to the whole surface. Therefore, distortion by the time lag of propagation is not produced. Since in the electrostatic system the whole surface is driven with electric charge and voltage, high rigidity(therefore, it becomes heavy!) to drive one part of diaphragm and to propagate vibration is not needed, either.

**Merit 2:** As shown in the above figure, in the electrostatic system electrodes(=fixed poles) are put on the both sides of diaphragm. And the music signals of positive/negative reversed polarity are fed from an amplifier into each electrode. The output of an amplifier directly affects the diaphragm. In the listening with speaker system, the scale of power amplifier must be generally enlarged in various meanings. In the headphone listening, however, "speaker" and ear link directly so that low signal level will do allowing to select high-quality and good-sounding components such as transistor, vacuum tube, resistor and capacitor, etc. without respect to signal level. This is a big merit because it gives top priority to the design of sonic quality.

STAX named the world's first electrostatic headphone "earspeaker" or "earspeaker system" instead of calling it a headphone when it was first manufactured in 1960 from the thought that the electrostatic system is more than a headphone and ideal as the main system of pure sound, pure music and pure audio.

# SR-L700 NEW

electrostatic earspeaker

$\Lambda$  (Lambda) is the highest tone quality of all time. Appearance is alike, however starting with the sound element the case body, the ear pad and the cable are all new. It's the spiritual "present" to be inherited.



There once was an earspeaker called SR- $\Lambda$ (Lambda). The earspeaker is based on the universal design concept which amenably follows the very natural sound perception style of man that man using his whole outer ear catches all the sound at a concert or in the nature world which mostly forms plane wave at the moment of reaching human ear. The SR- $\Lambda$ (Lambda) was first developed in 1979, and until today it has polished intently its technology taking in the advanced materials of the time for components such as sound element, electrode, cable, and ear pad etc. And now, the special ultra-thin film is adopted for the diaphragm. New generation ellipse fixed electrode MLER (Multi Layer Electrodes) realized thinner thickness, improved flatness, lower resonance and high transmissivity of sound wave making full use of the high-technology of heat diffusion combination which unifies metal on an atomic level under high temperature and high pressure. Other features follow further; the low-resonance housing newly designed by investigating details thoroughly, 6N-Cu high-purity annealed copper core wire excellent in transmission characteristic with 6 silver coated annealed copper wires on the periphery. Thus the highest tone quality of SR-  $\Lambda$  (lambda) has been compiled into the new earspeaker. New technology should be found out while spending much time in listening to music, and the outcome is the SR-L700, the top-model of "Advanced Lambda Series".



#### Newly developed MLER ellipse type sound element:

Resonance-controlling bridge was unified by heat diffusion combination. The fixed electrode of photo-etching stainless steel with very low resonance characteristic and ultra-thin moisture-proof film to shield electrodes and sound element from humidity are also provided.



#### Pure silver coated 6N-Cu 6-strand parallel cable:

Hybrid cable of 6N-Cu high-purity annealed copper wire excelled in transmission characteristic is employed for the core conductor as well as 6 silver coated annealed copper wire for the periphery. The terminal is pure gold coated.



#### Arc assembly:

The arc assembly is equipped with 10-click slider mechanism for head-pad height adjustment and for weight separation. Once adjusted, the slider always maintains its optimal position. The head band with soft texture enables you to enjoy hours of pleasant listening to music with optimal wear comfort.



#### Genuine leather ear pad:

New ear pad is carefully made by craftsman using cushion material with proper elasticity as well as genuine leather (sheepskin) excellent in breathability to keep environmental humidity of the whole ear in good condition. This greatly enhances the "freshness of sound" and "the grace of sound."

**SR-L700 Specifications** ● **Type:** push-pull electrostatic, oval sound element, rear open-air type enclosure ● **Frequency response:** 7 - 41,000Hz ● **Electrostatic capacitance:** 110pF (including attached code) ● **Impedance:** 145k $\Omega$  (including attached cable, at 10kHz) ● **Sound pressure sensitivity:** 101dB / input 100Vr.m.s. / 1kHz ● **Maximum sound pressure level:** 118dB / 400Hz ● **Bias voltage:** 580V DC ● **Right/left channel indication:** 'L' and 'R' indicated on the arc assembly (inside head spring), solid line (left) and dotted line (right) on cable ● **Ear pad:** real leather (skin-touching portion), high-class artificial leather (surrounding portion) ● **Cable:** parallel 6-strand, 2.5m full length, low-capacity special wide cable ● **Cable conductor:** 6N (99.9999%) annealed OFC with silver coating ● **Weight:** 496g (including attached cable), 360g (without cable)

# SR-L500 NEW

electrostatic earspeaker

New interpretation? Performance expression changes by researching music history. Vivaldi — shade is also deep on account of brightness. Covered pops can change into something else as if it were an entirely new song — the power of good music.



Human ear has outer shape compounded from a large and small circle. There's also complicated convex-concave shape. Why has human ear evolved into such shape? "Ear" has created man's music. Chirping of a bird, the sound of wind and the sound of an insect were regarded as comfortable sound, and an action called emotion came into existence inside human. Bach, Mozart, and Beethoven are there. There's also a piano, a violin and a kanun. And the same is said with Carmen, Wotan, and Yanagida Kakunoshin. They all form sound wave which covers the whole area of the outer ear. This is because in almost all cases sound becomes plane wave when coming into the ear. And the sound itself has the completely airy, infinitely transparent and vast frequency characteristic. So no choice is left other than the open air type of electrostatic system. Furthermore, in SR-L700 / L500 the position of sound element is somewhat angled to fit the ear facing front. Therefore, the front part of the main body became quite thicker than the rear one. Many other features such as sound element to be called new design, new material HiFC conductor which has the maximum transmission capability, arc assembly realizing light feeling of wearing and new housing design. All these enable music to go beyond media.



#### Sound element:

Strictly selected high-quality, ultra-thin film diaphragm has been employed. Also, the tough stainless fixed electrodes with extreme flatness and low resonance characteristic realized high-resolution reproduction from rich deep bass to delicate high-frequency.



#### New low-capacitance HiFC wide cable:

High-performance new HiFC cable has been employed for the core wires. The whole cable uses the conventional wide parallel structure to lower the capacitance between each wire strand. This further improves the "freshness of sound". The terminal is pure-gold coated.



#### Arc assembly with click slider:

The arc assembly is equipped with 10-click slider mechanism for head-pad height adjustment. Once adjusted, the slider always maintains its optimal position. The head band with soft texture enables you to enjoy hours of pleasant listening to music with optimal wear comfort.



#### High-quality artificial leather ear pad:

Strictly selected high-quality artificial leather ear pad with utmost wearing comfort is carefully made by craftsman. It greatly contributes to enhance the wearing comfort along with "freshness of sound" and "the grace of sound."

**SR-L500 Specifications** ● **Type:** push-pull electrostatic, oval sound element, rear open-air type enclosure ● **Frequency response:** 7 - 41,000Hz ● **Electrostatic capacitance:** 110pF (including attached code) ● **Impedance:** 145kΩ (including attached cable, at 10kHz) ● **Sound pressure sensitivity:** 101dB / input 100Vr.m.s. / 1kHz ● **Maximum sound pressure level:** 118dB / 400Hz ● **Bias voltage:** 580V DC ● **Right/left channel indication:** 'L' and 'R' indicated on the arc assembly (inside head spring), solid line (left) and dotted line (right) on cable ● **Ear pad:** high-quality artificial leather ● **Cable:** parallel 6-strand, 2.5m full length, low-capacity special wide cable ● **Cable conductor:** HiFC ※ HiFC is the registered trademark of Hitachi metal company's conductor ● **Weight:** 465g (including attached cable), 339g (without cable)

# SRS-5100 NEW

SR-L500 + SRM-353X  
electrostatic earspeaker system

Man requires a partner. Addition rather becomes subtraction. If a partner of multiplication is found, the meaning of life is almost fulfilled. Suffering may seem to have been pleasant if looked back later on.



Headphone listening brings about very deep devotion to music. It may be short, but dense time passes away. Such time is produced by the SRS-5100 (SR-L500+SRM-353X) system with the tone quality more than necessary and sufficient. Celebrating a new year in Vienna, walking on the Abbey Road pedestrian crossing, asking Beethoven in Karlsbad who the "immortal sweetheart" is, and doing nothing against Mozart's loneliness and irritation in Salzburg, enjoying the origin of jazz in New Orleans, and then seeing snow in Tsugaru Straits. All these can be an encounter with a lifelong best partner. And the duet reproduces exactly the particle of sound indispensable to music such as the sound of Stradivarius body and the attenuation linearity of hall tone which resonates and disappears in the stratosphere.

**SR-L500 Specifications** ● **Type:** push-pull electrostatic, oval sound element, rear open-air type enclosure ● **Frequency response:** 7 - 41,000Hz ● **Electrostatic capacitance:** 110pF (including attached code) ● **Impedance:** 145k $\Omega$  (including attached cable, at 10kHz) ● **Sound pressure sensitivity:** 101dB / input 100Vr.m.s. / 1kHz ● **Maximum sound pressure level:** 118dB / 400Hz ● **Bias voltage:** 580V DC ● **Right/left channel indication:** 'L' and 'R' indicated on the arc assembly (inside head spring), solid line (left) and dotted line (right) on cable ● **Ear pad:** high-quality artificial leather ● **Cable:** parallel 6-strand, 2.5m full length, low-capacity special wide cable ● **Cable conductor:** HiFC ※ HiFC is the registered trademark of Hitachi metal company's conductor ● **Weight:** 465g (including attached cable), 339g (without cable)

**SRM-353X Specifications** ● **Frequency response:** DC - 90kHz (when used with one SR-L series earspeaker) ● **Rated input level:** 100mV (at 100V output) ● **Gain:** 60dB ● **Harmonic distortion:** 0.01% or less (with one SR-L500 at 100Vr.m.s. / 1kHz output) ● **Input impedance:** 50k $\Omega$  (RCA) / 50k $\Omega$  x 2 (XLR) ● **Input terminal:** RCA x 1 or XLR x 1 (alternative) ● **Maximum output voltage:** 400Vr.m.s. / 1kHz ● **Standard bias voltage:** DC580V ● **Mains voltage:** local mains voltage (50/60Hz) ● **Power consumption:** 30W ● **Operating temperature / humidity:** 0 to 35 degrees C / less than 90% (non condensing) ● **Dimension:** 150 (W) x 100 (H) x 360 (D) mm (protruding portion included) ● **Weight:** 3.0kg ● **Others:** input-bypassing parallel output (RCA)

# SRM-353X NEW

driver unit for earspeakers

How important is the infinite resolution for audio? This becomes clear, whenever technology progresses. It is proved by the fact that emotion deepens more when musical structure comes clearly into sight.



The SRM-353X was developed in order to drive the new electrostatic earspeaker of STAX more ideally. High-quality components of audio grade with little aging degradation are selected carefully to improve the purity of fundamental tone quality, and the circuit was reexamined in detail to achieve much more wider frequency range. Accurate solid-state throughput achieves high-speed and high-resolution sharp sound. The XLR or RCA selectable terminal makes it possible to connect to the output of precedent equipments with balance output through the custom-made 2-axis 4-gang volume controller. Furthermore, original low noise dual FET is adopted for the first stage as well as all-stage direct-coupled class-A DC amplifier configuration with no coupling capacitor. The emitter follower circuit at output stage has been brushed up for more higher resolution and significant expansion of the dynamic range especially at high frequency. The chassis made of extravagant non-magnetic aluminum alloy steadily supports highly transparent tone quality.



**Custom-made 2-axis 4-gang volume controller**



**Pure balanced direct-coupled class-A DC circuit**



**XLR balanced input terminal**



**XLR-RCA selector switch**

**SRM-353X Specifications** ● Frequency response: DC - 90kHz (when used with one SR-L series earspeaker) ● Rated input level: 100mV (at 100V output) ● Gain: 60dB ● Harmonic distortion: 0.01% or less (with one SR-L500 at 100Vr.m.s. / 1kHz output) ● Input impedance: 50k $\Omega$  (RCA) / 50k $\Omega$  x 2 (XLR) ● Input terminal: RCA x 1 or XLR x 1 (alternative) ● Maximum output voltage: 400Vr.m.s. / 1kHz ● Standard bias voltage: DC580V ● Mains voltage: local mains voltage (50/60Hz) ● Power consumption: 30W ● Operating temperature / humidity: 0 to 35 degrees C / less than 90% (non condensing) ● Dimension: 150 (W) x100 (H) x360 (D) mm (protruding portion included) ● Weight: 3.0kg ● Others: input-bypassing parallel output (RCA)

# SRM-006tS

vacuum tube output driver unit  
for earspeakers

What a fresh and transparent sound! Bach's insanity dances and the felicity of "Trout" shines. Indeed, an excellent portrait. Aha! Discovery and voyage exist inside the sound.



Density growth of resolution means widening the frequency range—in other words, the slew rate of sound is improved. This leads to the reexamination of all the response characteristics such as that of active and passive components and circuitry which secures stabilized operation up to ultra-high frequency. Lower distortion and infinitely high-speed characteristic are needed for device itself which at the same time must clear the operating condition. The vacuum tube featuring quick electronic transmission speed has a merit for this purpose. So the dual triode tube 6FQ7 (6CG7) is used at output stage. For the heater power supply, an ultra-high speed rectification circuit is arranged combining low-noise, low-loss shot key barrier diode with large-capacity electrolysis condenser. The signal-to-noise ratio is improved by the low-ripple DC power supply. On the other hand, the balance input at input stage is directly connected to the low-noise FET at first stage using custom-made 2-axis 4-gang volume controller. The proper circuit and strictly selected components bring out rich powerful low frequency and fully transparent sound. Pin arrangement of balance input: 1=shield, 2=hot, 3=cold.



**Selected dual triode output tube**



**XLR balanced input terminal**



**Custom-made 2-axis 4-gang volume controller**



**High quality parts**

**SRM-006tS Specifications** ● Frequency response: DC-80kHz (when used with one SR-L series earspeaker) ● Rated input level: 100mV (at 100V output) ● Gain: 60dB ● Harmonic distortion: 0.01% or less at 100Vr.m.s. / 1kHz output (with one SR-L series) ● Input impedance: 50k $\Omega$  (RCA) / balance input 50k $\Omega$  x 2 (XLR) ● Input terminal: 3/XLR x 1, RCA x 2 ● Maximum output voltage: 300Vr.m.s. / 1kHz ● Standard bias voltage: DC580V ● Mains voltage: local mains voltage (50/60Hz) ● Power consumption: 49W ● Operating temperature / humidity: 0 to 35 degrees C / 90% (non condensing) ● Dimension: (W) 195 x (H) 103 x (D) 380 mm (protruding portion not included) ● Weight: 3.4kg ● Others: input-bypassing parallel output (RCA)

# ACCESSORIES

HPS-2  
earspeaker stand



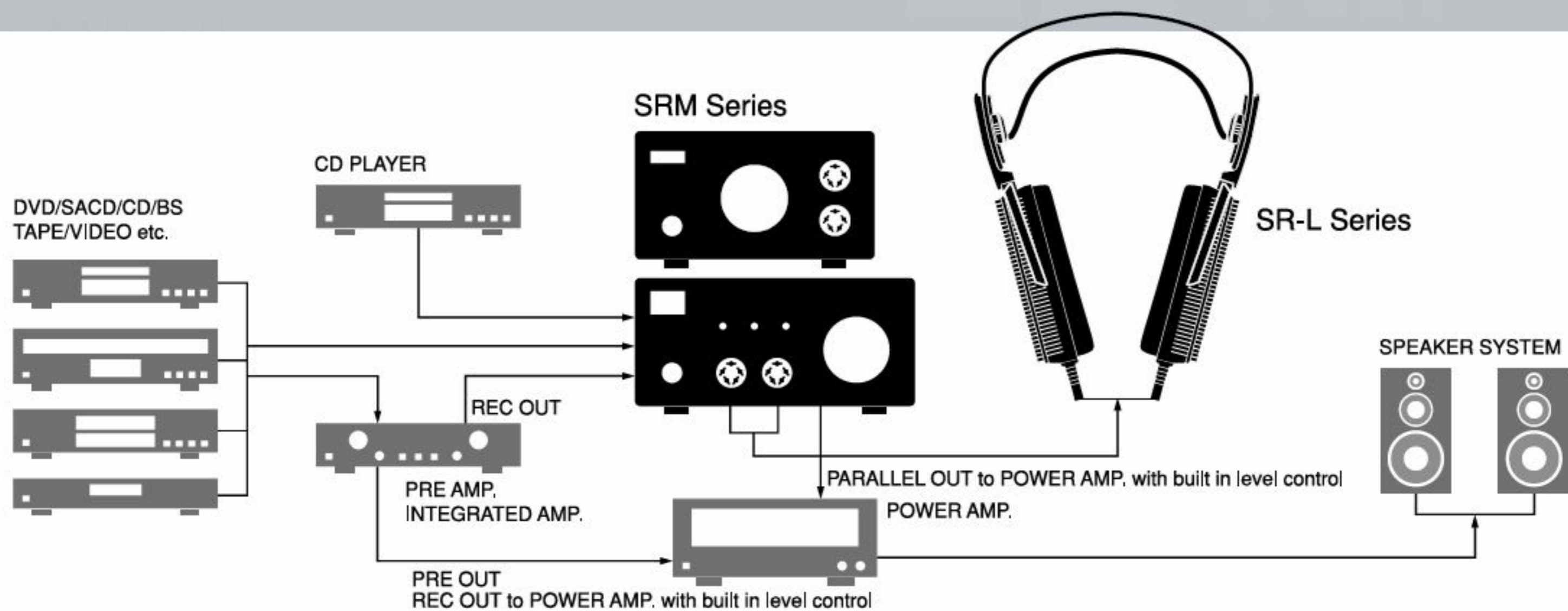
CPC-1  
protection sack for earspeaker



SRE extension cable for earspeaker



SRE-950S	6NCu Silver coated	5m
SRE-925S	6NCu Silver coated	2.5m
SRE-750	PC-OCC	5m
SRE-725	PC-OCC	2.5m



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