

SRN1-T8000 DRIVER UNIT for STAX EARSPEAKERS

Owner's Manual



This product contains high-voltage circuitry. To avoid dangerous electric shock, do not disassemble or modify the unit.

RISK OF ELECTRIC SHOCK DO NOT OPEN!

The SRM-T8000 contains high voltage circuitry.

It is dangerous to disassemble or to remodel it. Please observe Don'ts.

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Thank you very much for purchasing the SRM-T8000 driver unit for STAX earspeakers. Please read this manual carefully in order to use the unit safely and to bring out its maximum performance for many years of listening pleasure. Please be sure to keep this manual along with the warranty card after reading.



Safety information (Please read first)

Prior to use - About WARNING/CAUTION marks

Various WARNING and CAUTION marks are used in this manual for safe usage of the unit. The possible danger or trouble caused by disregarding the marks and mishandling the unit are classified as follows. Please read the manual with these WARNING/CAUTION marks in mind.

warning warning	Disregarding this mark and mishandling the unit could result in serious injury or death.
CAUTION	Disregarding and mishandling this mark might result in injury or physical damage.



This mark urges user to take precaution (warning included). Left example shows "electric shock" caution.



This mark tells prohibited actions. Left example shows "disassembly-forbidden".



This mark tells actions you must take without fail. Left example shows "pull out plug from wall socket".

WARNING:



- Do not pull out or insert mains or earspeaker plug with wet hand to avoid electric shock.
- Do not use any other mains voltage than indicated.
- Do not bend, twist or pull the power cable by force, nor modify it.
- Do not cover the heat dissipation holes on the top panel and side panels.
- Do not put metal, liquid or other object into the unit.
- Do not touch the output terminal for earspeaker.

WARNING:



In case smoke comes out or unusual smell or sound is perceived, stop using and shut off the power immediately, and then pull out mains plug from wall socket.

Further using the unit involves the risk of a fire or electric shock, etc. It is dangerous for a customer to repair the unit. Please contact your audio shop or the service division of our company.



- Do not remove the bottom plate or the top cover.
- Do not attempt disassembly or modification.

CAUTION:



Do not put this product on the following places. Otherwise, it may cause injury or unit failure.

- Places sensitive to vibration or shock, slanted or exposed to direct sunlight.
- Places with much moisture, humidity and dust.
- Places where temperature differs intensely or near heating appliance (stove, heater, etc.).
- Do not put earspeaker or any other object on the unit. It may cover the venting holes and cause heat generation resulting in unit failure.



- Dropping or giving a shock should be avoided. It becomes the cause of failure.
- Don't raise volume too much. Listening with large volume could lead to hearing damage. Listening with moderate volume is recommended both for your ear and for the unit.

Features

- The SRM-T8000 is an exclusive driver unit (power amplifier) with 4-input selector developed in order to ideally drive STAX electrostatic earspeakers.
- The unit incorporates a high-quality double-axis 4-gang volume controller along with XLR connectors that can connect to all kinds of analog line-level output terminals.
- The hybrid amplifier configuration with strictly selected low-noise 6922 dual triode tube for the first stage and high-current emitter-follower at output stage brings out the maximum performance of earspeakers. Its natural uncolored sound has been realized by eliminating the coupling capacitor that affects sound quality.
- The balanced amplifier configuration with low-noise dual triode tube eliminated transformer or inverting amplifier after the XLR balanced input terminal.
- Non-magnetic chassis construction is employed, and only the carefully selected electronic components free from aged deterioration are used taking both their sonic quality and performance into consideration.
- The SRM-T8000 is equipped with "direct mode" function, enabling it to connect to preamplifier output terminal or to use your favorite attenuator. Also, two RCA inputs and XLR balanced input can bypass the incorporated volume controller (Line 4 input does not have this function).
- Optional extension slot (LINE4) is provided for future use. Refer to the instruction manual of this optional card.
- The foot rubber of the SRM-T8000 features fire-resistant ultra-hard highgrip type and vibration-proof properties. So the unit hardly slides when placed on a table etc. Please lift it up when you move it.

Precautions for use



- There are high-voltage dangerous sections inside the unit. Do not remove the top cover or the bottom plate, and avoid using the unit in humid or dusty places.
- Since the driver unit generates heat, do not cover the venting holes on the top, side and bottom plates. Put it in an airy place if possible, and when installing it in a rack etc., keep 5cm or more opening above the upper and side surface of the unit. Do not use the unit with side panel down.
- Since the degree of adhesion of foot is very high, be careful when moving the unit.
- Take care when "LEVEL CONTROL" is in "EXTERNAL" position, because in this position the volume of this unit is bypassed and the volume is not controlled.
- Since large volume may come out, do not switch "LEVEL CONTROL" to "EXTERNAL" when wearing your earspeaker.
- When the option card is not equipped, do not remove the cover of the optional slot. Using the unit without the slot cover may cause failure of the unit.
- Noise such as hum may come out when SOURCE is switched to LINE4 with no option card equipped. This is normal and not a failure.

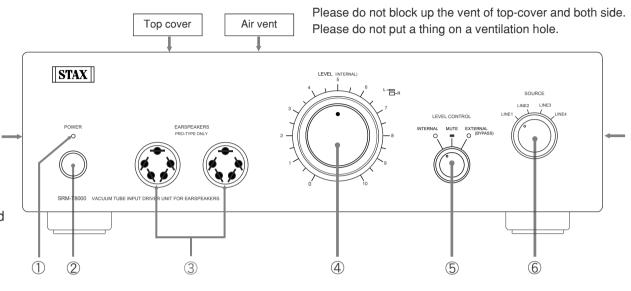
Switches and functions (Front panel)

①Power indicator LED: this blinks for about 1 minute after powered on and lights up when the tube heater is warmed up. (Even when the unit is turned on right after it was turned off, the power indicator blinks again for about 1 minute.)

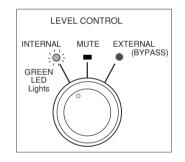
When power on and off:

It is recommendable to turn down the volume control knob to "0" or to set the "LEVEL CONTROL" to "MUTE".

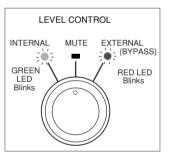
- ②Power switch: pushing in the switch turns the unit on, and pushing it out turns the unit off.
- ③Sockets for PRO Type earspeaker: insert 5-pin type earspeaker plug.
- Volume knob: double-axis structure enables to turn left and right channel simultaneously. In case right-and-left channel volume is unbalanced, adjust the volume by inde- pendently turning the separate volume knobs. The front side is L-CH and the back side is R-CH.
- We recommend to return volume knob to "0 " when you turn on or off the unit.
- ⑤LEVEL CONTROL: volume control operation can be switched either to the internal volume of the unit, or to the external volume using attenuator or preamplifier.
- 1. INTERNAL: Green LED lights up and level can be controlled by internal volume.
- 2. MUTE: Green/Red LED blinks and mutes sound in order to urge you to pay attention before using external volume.
- 3. EXTERNAL: Red LED lights up and level can be controlled by preamplifier or external volume.



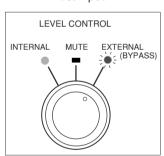
Factory default



"MUTE" position



Direct input



- **6**SOURCE: input selector.
- 1. LINE1/LINE2: selects RCA plug input. Use RCA pin cable provided or your favorite one.
- 2. LINE3: selects XLR balance cable input. Polarity is 1-SHIELD 2-HOT 3 -COLD. When connecting equipment with 3-HOT, use polarity conversion adaptor or conversion cable.
- 3. LINE4: can be selected only when option card is used.

Terminals and functions (Rear panel)

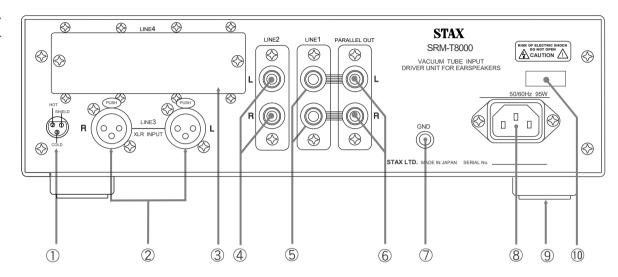
①XLR polarity indication:

XLR balance input polarity is 1-SHIELD, 2-HOT, 3-COLD. When connecting equipment with 3-HOT, use polarity conversion adaptor or conversion cable.

②LINE3: XLR input terminals for equipment provided with XLR balance output.

③LINE4: optional slot with cover.

When option card is not equipped, do not remove the cover. Refer to the instruction manual of this option card.



4 LINE2: RCA input terminal.

⑤LINE1: RCA input terminal.

Both LINE1 and LINE2 connect to audio equipment with RCA output (CD player, etc.) or to REC OUT terminal of amplifiers.

- ©PARALLEL OUT: RCA output terminal. PARALLEL OUT terminal directly outputs signals connected to LINE1. It can be used for connection to another driver unit or to the amplifier to drive loudspeaker. Remove the cable when equipment connected to PARALLEL OUT is not used.
- **On rare occasions, signals from source equipment's are distorted when the equipment connected to the "PARALLEL OUT" terminal is powered off. In this case, turn on the connected equipment or remove the cable from "PARALLEL OUT" terminal.

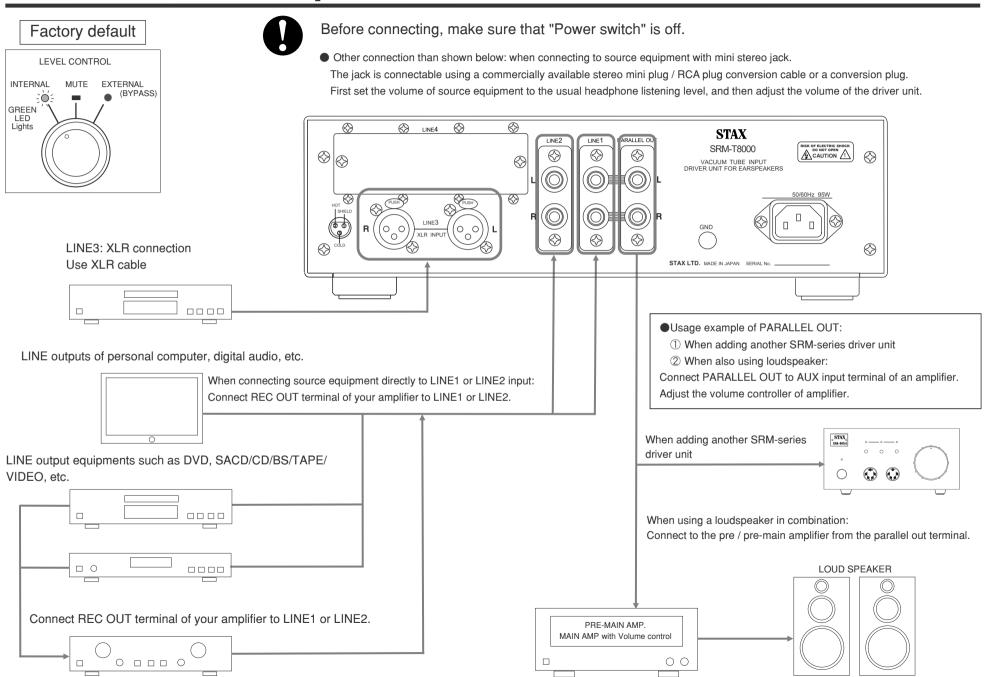
When adding another SRM-series driver unit using "PARALLEL OUT" terminal, the power ON/OFF of the added driver unit does not affect sound if its volume is set to zero.

⑦GND: ground terminal.

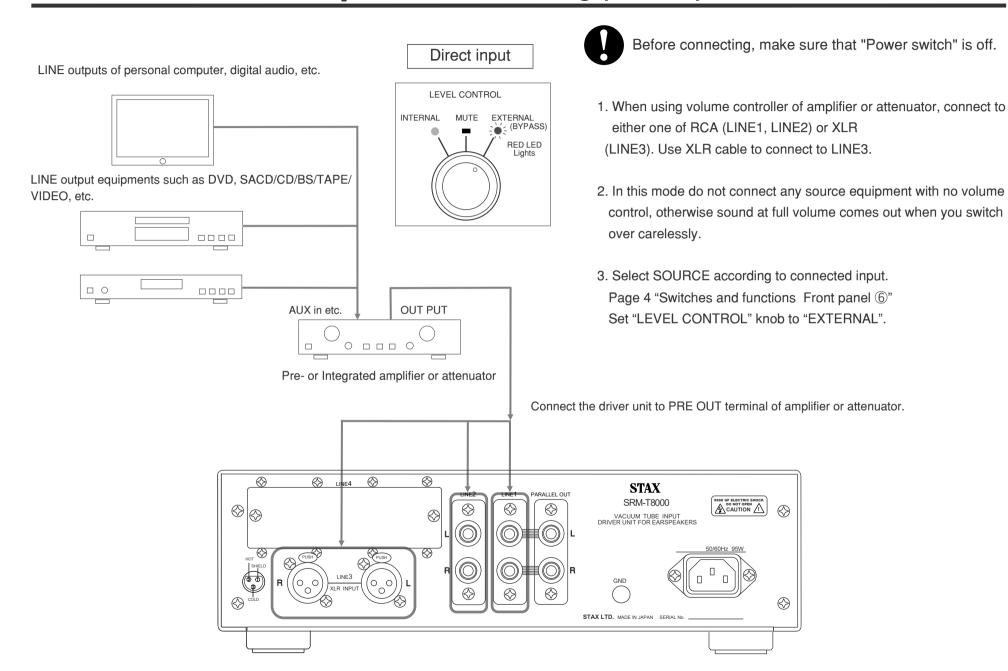
In case of hum noise connect this terminal to the ground terminal or to metal part (screw, etc.) of other equipment. Use any available cord for this purpose.

- ®AC inlet: insert supplied power cable.
- **®Voltage indication**: depending on your country's voltage.

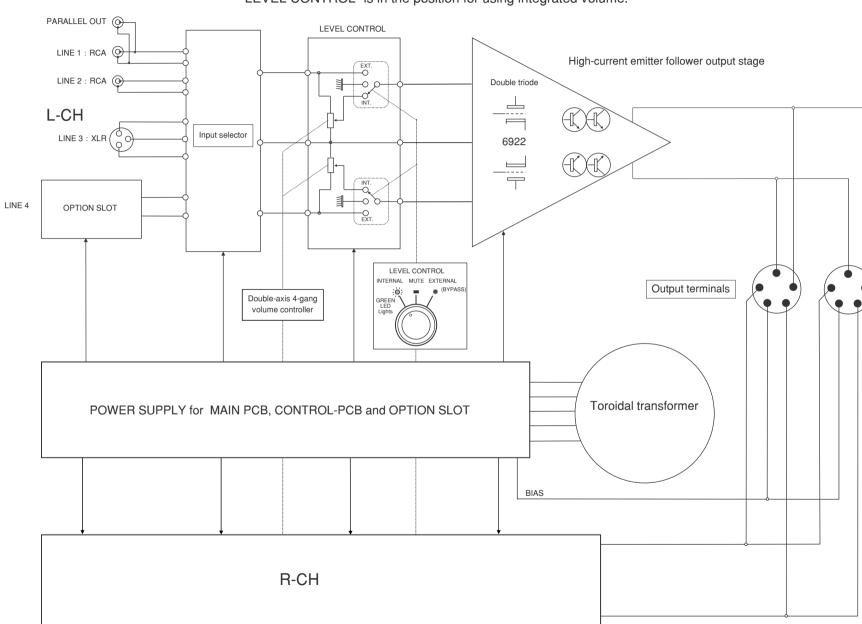
Connection example — Standard connection



Connection example - When using preamplifier or attenuator



Block diagram



"LEVEL CONTROL" is in the position for using integrated volume.

Troubleshooting

No Sound

- Is the plug of Power cable inserted into the wall socket?
- Is the power switch on ?
- Does LED on the front panel light up?
- See that "LEVEL CONTROL" is not in "MUTE" position.
- Check that nothing is wrong with connecting cable..
- When connected to pre- or integrated amplifier, check that the amplifier selector is set to connected source..

Sound is distorted

- Is supply voltage in stipulated range?
 Turning up the volume too much distorts the sound. Listen with moderate volume.
- See that "LEVEL CONTROL" is not in "EXTERNAL" position. Excessive input level can distort the sound.
- When the preamplifier (integrated amplifier) connected to the "PARALLEL OUT" is powered off, it is possible that the sound is distorted because of the lowered impedance. In this case, simply disconnect the cable. The SRM-T8000 does not affect other connected equipment even when powered off.

Unbalanced sound between right and left channel

- Are input signals all right ?
- Level difference between channels can be corrected by adjusting double -axis volume knobs independently.
- When raising volume slowly from zero, it sometimes happens that sound does not start to come out at the same time from left and right channels. This is normal and not a failure.
- Volume cannot be adjusted? See that "LEVEL CONTROL" is not in "EXTERNAL" position. Set it to "INTERNAL" position.

Hum noise is heard

- Are input terminals connected correctly? If the ground side of cable is floated or in poor contact, hum noise may come out.
- In case of buzzing hum noise connect GND terminal to the ground terminal or to metal part of other equipment.
- Connecting GND terminal to window aluminum sash is also effective.
- Is there any poor contact?
- Is supply voltage in stipulated range?
- Because of the non-magnetic aluminum chassis hum noise can be induced through connected equipment's. If equipment's with large-sized transformer or microwave oven etc. are located near driver unit, keep them away from the unit.

If you have other problems than described above, please contact your dealer or our distributor in your country.

When you replace the vacuum tube of drive unit, be sure to ask the purchased store or distributor. Disqualified vacuum tube may sometimes cause breakdown.

Specifications

- Frequency response: 1Hz 115kHz +0, -3dB
- Rated input level: 100mV (at 100V output)
- Maximum input level: 30Vrms. (at minimum volume)
- Gain: 60dB (x 1000)
- Harmonic distortion: 0.01% or less (1kHz)
- Input impedance: 50kΩ (RCA input), 50kΩx 2 (XLR input)
- Maximum output voltage: 470Vrms (1330Vp-p) / 1kHz
- Bias voltage: 580V DC
- Mains voltage: AC120V/AC220/AC230/AC240, 50/60Hz (depending on your country's voltage)
- Power consumption: 95W/Max. 58W (without optional slot)
- Operating temperature: 0 to 35 degrees C (less than 90% humidity, non condensing)
- Dimension: 320 (W) x103 (H) x395 (D) mm (maximum protruding portion included)
- Weight: 7.3kg
- Others: equipped with PARALLEL OUT, optional slot and volume bypass function and mute function.
- *Specifications and appearance are subject to change without notice for improvement.
- *This product is adjusted to mains voltage depending on each country.

Care and cleaning

- Pull out power cable from wall socket and wipe it with dry soft cloth.
 When very dirty, wipe off dirt with wet cloth and then again with dry cloth.
- ■Do not use benzine, thinner or alcohol since paint, printing, etc. may come off. Before using chemical dust cloth, check its attached explanation if it is usable for audio equipment.

Accessories

Power cable	• •	 •	•	•	• •	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	1
RCA cable \cdots	• •	 •	•	•		•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	1
Owner's man	ual	•	•			•	•	•	•	•	•	•	•	•					•	•	•	•	•	•	1

