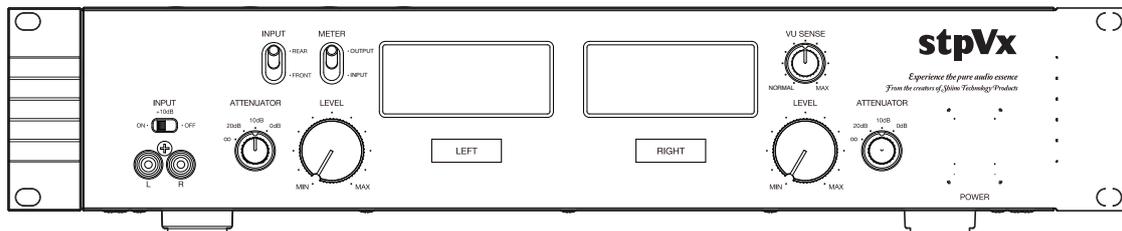


stpVx

Professional Amplifier

STARLING - 椋鳥 -

USER MANUAL



INTRODUCTION

Thank you very much for purchasing STPVestax STARLING Professional Amplifier. Read this manual thoroughly to get the most out of the performance of this amplifier and also to use it safely. In particular, please be sure to read "IMPORTANT SAFELY INSTRUCTIONS" prior to use.

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1. IMPORTANT SAFETY INSTRUCTIONS

For correct operation and safety, please read this manual thoroughly prior to using your amplifier. After reading, please ensure to keep this manual in a safe place for ready reference.

— EXPLANATION OF GRAPHICAL SYMBOLS —

This "Safety Instructions" contain various pictorial symbols in order to use our product safely and correctly, to prevent injury to you and other users, and to prevent damage to property. Please be sure to understand the meaning of each symbol prior to reading on.



WARNING

WARNING indicates a hazardous situation which, if not avoided and handling it incorrectly could result in death or serious injury.



CAUTION

CAUTION indicates a hazardous situation which, if not avoided and handling it incorrectly could result in minor or moderate injury, or only property damage.



⊘ This Symbol indicates a prohibited action.

Specific prohibited action (The left figure indicates do not disassemble) indicated by transparent "No" circle-symbol.



● This Symbol indicates an action or instruction.

Specific instruction (The left figure indicates the power plug is unplugged from the power outlet) is illustrated.



△ This Symbol indicates a warning or caution.

Specific warning image (The left figure shows caution to not jam fingers) is illustrated.



WARNING



- Fire or electric shock may occur if you continue to use the amplifier when it is behaving abnormally, such as smoke, unusual odor, or noise. Turn off the power switch immediately and unplug the power cord from the AC outlet. Confirm that smoke does not come out and ask your dealer for repair.

- Fire or electric shock may occur if you continue to use the amplifier when water or liquid enter the unit. Turn off the power switch immediately, unplug the power cord from the AC outlet, and contact your dealer for advice.



Unplug the power cord from the AC outlet

- Fire or electric shock may occur if you continue to use the amplifier when foreign objects are placed in or enter the unit. Turn off the power switch immediately, unplug the power cord from the AC outlet, and contact your dealer for advice.



When the power cord is damaged (exposing wire core, break in cable, etc.), ask your dealer for a replacement. Continued use may cause fire or electric shock.



Do not use near water

- Do not use in places such as bathrooms or moist environments where the device is exposed to water droplets or mist. It may cause fire or electric shock.



Do not touch

- Do not touch the power cord during electric storms. It may cause fire or electric shock.



- Do not use this device at a voltage other than indicated voltage (AC 100V). It may cause fire or electric shock.

- Do not connect to a direct current (DC) power source, such as used in a ship. It may cause a fire.

- Do not allow water or fluids to enter or touch this device. It may cause fire or electric shock. Pay particular attention to usage of this device in rain, snow, coastal or water-adjacent sites.

WARNING



Unplug the power cord from the AC outlet

- Fire or electric shock may occur if you continue to use the amplifier when the device is dropped or its cabinet is damaged. Turn off the power switch immediately and unplug the power cord from the AC outlet, and contact your dealer.



- Do not place naked flame sources on top of the device, such as lighted candles. It may cause fire.



- Do not block the ventilation ducts. Blocked ventilation ducts may cause heat to accumulate inside and result in fire. This device has ventilation ports both at the top and bottom of the chassis to prevent internal temperature-rise. Please pay particular attention to the following recommendations:

- Do not place the device upside down, sideways or face upwards.
- Do not push the device into any narrow and poorly-ventilated space such as a bookcase or closet.(other than on the dedicated rack).
- Do not cover the device with a table cloth or place it on a carpet or bed.



- Do not insert or drop metals, flammable materials etc inside the unit. This may result in fire or electric shock. Be vigilant especially when it is used by children.

- Do not place small metal objects nor any containers on top of this device, such as vases, flower-pots, cups, cosmetics, chemicals or water containers. Spillage or leakage may cause fire or electric shock.



Do not disassemble

- Do not remove the device's cover, cabinet or rear panel. There are high voltage parts within, and you may receive an electrical shock. Contact your dealer for internal inspection, maintenance, or repairs.

- Do not modify this device. It may cause fire or electric shock.



- When installing this equipment, keep 10 cm space from the wall. Also, to improve heat dissipation, keep it away from other equipment.

When mounting unit in a rack etc, ensure to have a gap of more than 2 cm from the top panel, more than 5 cm from the back. This will prevent internal heat from rising - which if trapped could cause overheating and fire.



- Do not scratch, modify, bend, twist, pull, or heat the power cord. A damaged cord is a fire and electrical shock hazard.



- Do not place heavy objects on the power cord nor run the cord under heavy objects. The cord may be damaged and this could cause fire or electric shock. Be careful not to cover the cord with rugs, matts etc, as you may inadvertently place heavy objects on the cord without noticing.

CAUTION



- Do not place any location exposed to oil smoke or steam, such as near cooking stoves, humidifiers, etc. It may cause fire or electric shock.
- Do not place the unit in a physically-unstable situation such as an unsteady table or sloping surface. Falling unit or collapsing operating-bench may cause injury.
- Do not place the power cord close to a heater. The coating of the cord may melt, causing fire or electrical shock.
- Do not leave the unit in excessively hot environment, such as in a car with windows closed, or exposed to direct sunlight etc. It may have a negative influence on the cabinet and internal parts, and could result in fire.
- Do not place unit in an excessively humid or dusty environment. It may result in fire or electric shock.



- When connecting audio equipment, TV, video equipment, game machine or speakers, make sure to read the instruction manual of each equipment carefully, turn off the power, and connect accordingly as described. Use only specified cable for connection. Using non-specified cable or extending the cable may cause overheating and cause burns.

- Make sure to minimize the volume control before turning on the power. A sudden loud blast of sound may damage your hearing. Also, minimize the volume control when you connect this device's speakers with TV.

CAUTION

 <p>Unplug the power cord from the AC outlet</p> <ul style="list-style-type: none"> ● Even when the power switch is in the OFF position, the unit is not completely isolated from the power supply. In order to prevent accidents, place this product near the AC outlet and so that you can immediately unplug the power cord from AC outlet in case of emergency. ● Use only the specified AC cord which is included in the product package. Do not use other non-specified AC cords. 	 <p>Unplug the power cord from the AC outlet</p> <ul style="list-style-type: none"> ● To move/relocate the device, turn off the power switch, make sure to disconnect the power cord from AC outlet, and remove all connected cables between other devices. This is to prevent cord damage and the potential to cause fire or electric shock.
 <p>Unplug the power cord from the AC outlet</p> <ul style="list-style-type: none"> ● For safety, make sure to unplug the power cord from the AC outlet whenever you do not use the device for long periods of time, such as on vacation etc. ● When cleaning, unplug the power cord from AC outlet for safety to prevent electric shock. 	 <ul style="list-style-type: none"> ● Do not use sound distortion through the unit for long periods of time. This may cause your speakers to generate heat and could result in fire.
 <ul style="list-style-type: none"> ● Consult your dealer about internal servicing of the unit once every five years. (In case of usage public-space use in music bars etc, once a year internal servicing is recommended). Dust may accumulate inside the device when not cleaned for a long periods of time. This may cause fire or malfunction. In regions where high-humidity/ rainy-seasons are common, it is recommended to clean units prior to that time. Consult your dealer about service/maintenance fees. 	 <ul style="list-style-type: none"> ● Do not place anything on top of this device. There are vent holes on the top panel. Blocking the ventilation holes may cause heat accumulation inside and cause fire. ● Do not relocate unit while using with TV, audio equipment etc. Falling or dropped device may cause injury. ● Do not sit on nor hang from this device. Pay attention especially when children are nearby. Unit may fall or break, resulting in injury.
 <ul style="list-style-type: none"> ● Do not plug or unplug the power cord with wet hands. It may result in electric shock. 	 <p>High temperature</p> <ul style="list-style-type: none"> ● Do not handle the device during use nor immediately after use, except for the user controls and rear connection terminals, as its high operating temperature is a potential burn hazard. In particular, do not touch the upper surface panel.
 <ul style="list-style-type: none"> ● When disconnecting the power cord from AC outlet, hold the power cord plug and never pull the cord. A damaged power cord is a fire and electrical shock hazard. 	 <ul style="list-style-type: none"> ● Do not place heavy or large objects on this device that protrude from the outer frame. This may upset balance and cause accidents resulting in damage or injury.

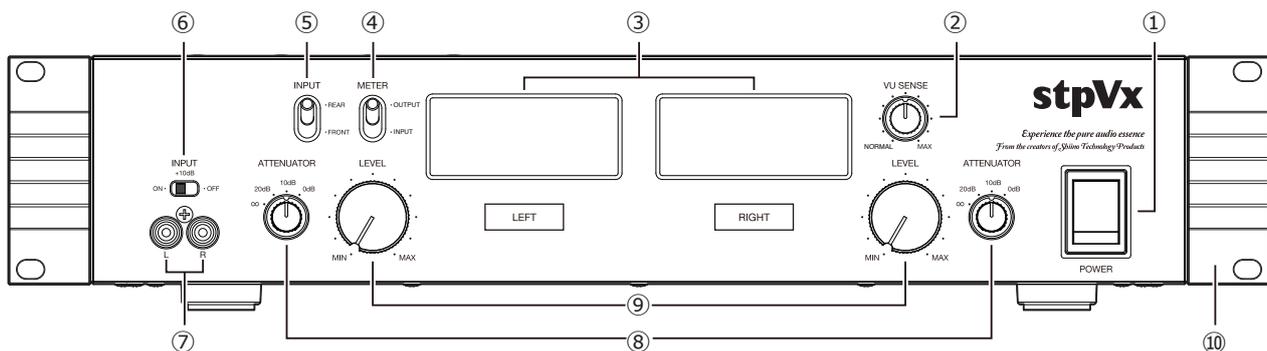
For details of product functions, name of each parts and specifications, please visit www.stpvestax.com

2. MAIN FEATURES

Digital Hi-Fi power amplifier for music-lovers who desire to hear the pure sound essence of musical instruments.

- A digital power amplifier for super home-listening/small-venue installation, and which integrates high-level exclusive technologies and ideas for both Hi-Fi Audio and Pro-Audio applications.
- Realize excellent channel separation ability by strictly separating LR channels of volume control, attenuator, circuit, etc. Stand out sound images of voices and instruments by clarifying the sound localization of individual sound source in music to avoid auditory masking effect of similar frequency bandwidth.
- Power Supply from an extra large R core transformer supports the super high speed signal, and produces a natural and powerful drive which exceeds digital amplifier performance.
- The input level setting, which is essential in the pursuit of quality sound production, can be checked by using a high-quality pro-standard VU meter, as each channel has an independent attenuator. The best level matching can be done at 0 dB, 10 dB, 20 dB or ∞ with the rotary selector.
- The VU meter can display both input and output levels by switching. RED LED indicates that INPUT is selected, and BLUE LED indicates OUTPUT is selected, allowing the current displayed level to be immediately recognized.
- SEND OUT is equipped to output the input signal directly as line level, and is intended for constructing various installation systems such as using multiple amps / speakers at the same time, or adding a powered woofer.
- SEND OUT is also possible to output the signal to another power amplifier that drives a passive woofer, by turning on the built-in low pass filter circuit. The filtering frequency point can be adjusted with the rotary volume from 80 Hz to 350 Hz (-12 dB / oct). Moreover, phase (0 degree / 180 degrees) switch enables to resolve the clogged bass due to the interference of the full-range and woofer.
- With three kinds of inputs: RCA, Φ 6.3 standard phone, XLR (balance / 2 HOT), it allows the user to select the best input option depending on the application.
- For speaker terminals, it adopts a large-size connector terminal which is easy to connect and less prone to causing short circuit accidents due to frayed wire. In addition, it is equipped with professional audio standard SPEAKON NL4 terminals.
- Rack mount size EIA 19 "2U.
- Maximum operation output: 100 W + 100 W / 8 ohm (150 W + 150 W / 4 ohm)
- Made in Japan.

3. FRONT PANEL NAMES AND FUNCTIONS



① POWER(Power switch)

Switch the power on or off. VU meter lights up when power is on.

② VU SENSE (VU meter sensitivity adjust)

Adjusts the VU meter output level sensitivity. Ensure the needle is adjusted to prevent it passing the defined limit. This function is disabled when the input level is displayed.

③ VU METER

Displays the input level or output level in left and right independently. (0VU = +4dBm*) When the input level is displayed, the light illuminates to RED and while for output level it lights up in BLUE. Ensure to switch the input attenuator to work at 0 VU or less. Thereby, distortion in the internal circuit can be prevented.

※ In this product, level (voltage) is defined 1 mW power at 600 Ω load as 0 dBm (= 0 dBV ≈ 0.775 Vrms).

The VU meter indication value is specified that 0 VU indicates when a input signal level of 1.228 Vrms (1 kHz) is supplied to the input terminal from a device having an output resistance 600 Ω.

The output level indication is not within this provision.

④ METER (Meter select switch)

Select the VU meter display to OUTPUT (output level), or INPUT (input level).

⑤ INPUT (Input select switch)

Select the input of REAR or FRONT.

⑥ INPUT (Front input gain select switch)

When using the FRONT input terminal, select +10dB ON for connecting a device with a low signal output level. Even if the attenuator is switched to 0 dB (no attenuation) and the input level of the VU meter swings are very small, you can use this function.

⑦ FRONT INPUT TERMINALS

RCA input terminals for unbalanced audio signals.

⑧ ATTENUATOR(Attenuator)

When using a device with a high output signal level, switch to 10 dB (attenuation) or 20 dB (attenuation). Thereby the VU input level shows 0 VU or less. By setting it to ∞ (infinity) it shuts off the output. It operates left and right channels independently.

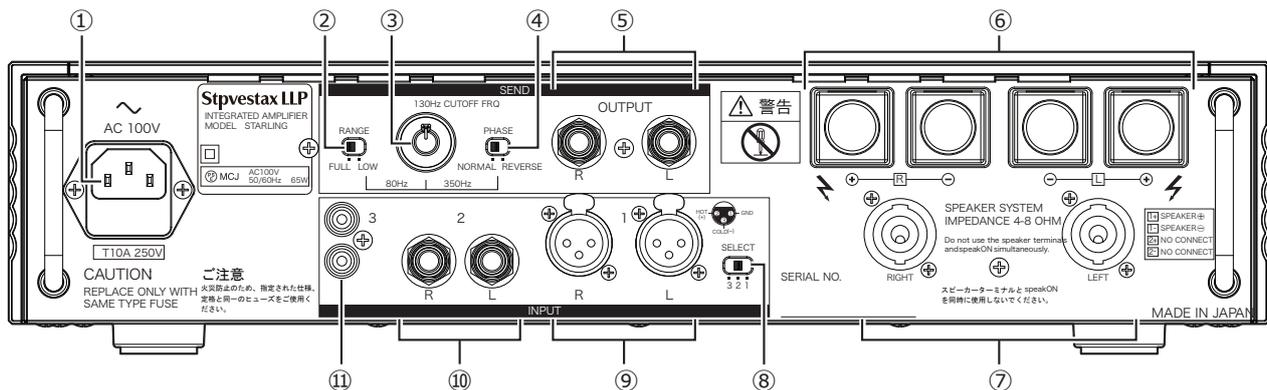
⑨ LEVEL (Level)

Volume adjustment. It operates left and right channels independently.

⑩ RACK MOUNT EARS

For use in rack mounting the unit. Remove the feet when rack mounting.

4. REAR PANEL NAMES AND FUNCTIONS



① AC inlet

Connect the included power cable to 100V AC outlet.

- ※ For Japan domestic specifications, the ground terminal and the internal-circuit ground are not connected.

Make sure to turn off this unit when connecting the cable to the input/output terminals, or the speaker terminals.

② RANGE (Output frequency range select switch)

Select the output frequency range of the SEND terminals. FULL outputs the same component (full range) signal as the input. LOW outputs a low frequency component (low range) signal which is cut off high frequency of input.

③ fc cont (Cut off frequency adjust)

When LOW (low range) output is selected, you can adjust the cutoff frequency of the low pass filter between 80 and 350 Hz. The frequency response of the low pass filter is -12 dB/oct. It is disabled at FULL (full range) mode.

④ PHASE (Output phase select switch)

When LOW (low range) output is selected, output signal phase can be switched. NORMAL outputs a signal in-phase with the input. REVERSE outputs an inverted signal to the input. It is disabled at FULL (full range) mode.

⑤ SEND

($\phi 6.3$ standard mono-phone) output terminals
Output terminals for line level output. When FULL (full-range) output is selected, it outputs the input signal as it is. While LOW (low range) is selected, only the low frequency component is extracted with the high-cut filter.

- ※ The output volume is not affected by attenuator settings or LEVEL volume settings.

⑥ TERMINAL (Speaker terminals)

Output terminals for speaker systems. A speaker of more than 4Ω can be used.

- ※ Do not connect additional equipment other than your speakers as it may cause the unit to malfunction.
- ※ Install the speaker cable and input cables as far as possible onto the terminals.
- ※ Do not use speakON terminals simultaneously.
- ※ Do not use high impedance speakers.

⑦ **SpeakON (SpeakON terminals)**

Output terminals for speaker systems. A speaker of more than 4 Ω can be used.

- ※ Do not connect additional equipment other than your speakers as it may cause the unit to malfunction.
- ※ Install the speaker cable and input cable as far as possible onto the terminals.
- ※ Do not use speaker terminals simultaneously.
- ※ 4 pole socket NL 4 is available.
Connect cable only 1- and 1+, and do not connect cable to 2- and 2+.
- ※ Carefully check how the cable is connected before attempting to insert or use.

⑧ **INPUT (Input select switch)**

Selecting input either XLR (Balance) , Φ 6.3 Standard Phone (Unbalanced) or RCA.

- ※ Simultaneous input is not possible.

⑨ **XLR (Balanced) Input terminals**

Input terminals for XLR connector cable balanced audio signal.

Pin1: GND Pin2: HOT Pin3:COLD

⑩ **Φ 6.3 Standard phone(unbalanced) input terminals**

Input terminals for audio signals. Make sure to insert plugs deeply into the sockets.

⑪ **RCA pin input terminals**

Input terminals for RCA pin cables audio signal.

5. TROUBLE-SHOOTING

*There is no sound.

- Is the unit power on?
- Is the attenuator selected correctly?
- Is the REAR/FRONT input selected correctly?
- Is the REAR input selected correctly?
- Is the input device connected correctly?
- Is the input device powered ON?
- Is the input device setting correct?
- Is the speaker systems connected correctly?

*The sound from the speakers is intermittent.

- Is the speaker systems connected correctly? Speaker terminals and SpeakON terminals can not be used simultaneously.
- Are you using a speaker less than 4 Ω? A speaker of 4 Ω or more is required for this unit.
- Is speaker system connected in parallel? This device is not compatible with parallel connection.
- Are the surroundings too hot? The ambient temperature should be less than 45°C. If you need a loud volume, further lowering ambient temperature is required. When installing it in the rack, make sure to keep a sufficient clearance on the top, bottom and side.

6. SPECIFICATIONS

INPUT STAGE

(At input level 8Ω load 50W Output/Impedance)

REAR PANEL

XLR output ×2 (balanced) 0dBv/22kΩ
Φ6.3 Standard mono phone×2 (unbalanced)
..... 0dBv/22kΩ
RCA pin (unbalanced) 0dBv/22kΩ

FRONT PANEL

RCA pin (unbalanced) 0dBv/22kΩ

OUTPUT STAGE (Output/Impedance)

SEND output
(Φ6.3 Standard mono phone×2 (unbalanced))
..... -0.6dBv/10kΩ
(Maximum output power/impedance)
Speaker output 100W×2/8Ω
150W×2/4Ω

Frequency response (At 8Ω/1W output)
..... 20~20kHz/-0dB +1.2dB

THD+N (At 1kHz/8Ω/50W output)
..... less than 0.02%

Power supply AC100V 50/60Hz
Power consumption 65W.max
Dimensions..... 420mm(w) x 98mm(h) x 337mm(d)
(excl.rackmount parts and max. protruded parts)
..... 483mm(w) x 98mm(h) x 337mm(d)
(incl.rackmount parts, excl.max.protruded parts)
Weight 11.5kg (without rack mount adapter)
12.0kg (with rack mount adapter)
Accessories Power cable

(NOTE) For improvement, specifications and appearance are subject to change without notice.

7. WARRANTY AND AFTER-SALES SERVICE

(1) WARRANTY CARD

There is no printed warranty card included. The purchase date, owner information, and the serial number of this unit will be registered and managed by "Stpvestax LLP", and can be verified by the dealer or owner by contacting the manufacturer "Stpvestax LLP" (stpvestax.com). (Privacy/Personal data is strictly handled). If the unit's owner changes, the warranty period will be continued by verification from both the previous owner and the new owner.

Warranty period is one (1) year.

- ※ From the date from the original retail purchase.
- ※ The owner shall bear the freight-costs for repair, even within the warranty period.

(2) REPAIR QUESTIONS

For repair consultation and product questions, please contact your original dealer from whom you purchased the unit, or "Stpvestax LLP" (stpvestax. Com)

(3) REPAIR REQUESTS

For unit failures or faults, immediately cease using it and request a repair from the original dealer from whom you purchased the unit. (Even within the warranty period, repair fees may be charged depending upon the nature and cause of the defect).

During the warranty period, repairs will be performed according to our warranty policy.

Following the expiration of the warranty period, the unit can be repair at your request. If you require an estimate first, please tell us in advance. An "Estimate Fee" will also be charged, but it will be included in that repair fee if you decide to proceed with the repair.

If for any reason, the original dealer from whom you purchased the unit has closed, please contact "Stpvestax LLP" (stpvestax.com) for support.

(4) NON-REPAIRABLE CASES AND CONDITIONS

Repairs may not be possible, or we may refuse to repair a unit if it exhibits any of the following conditions ... Faults caused by opening and modifying the unit by the Purchaser or 3rd Party. Additionally, in the case where liquid-spillage from drinks or continued usage in wet environments has resulted in prior repairs, the unit may fail again due to adjunct damage which develops over time. Therefore, a repair cannot be guaranteed to prevent a recurrence of product failure or faults.

(5) REPLACEMENT UNIT DURING REPAIR PERIOD

We are not able to offer a replacement unit during the repair period. If using our unit for business purposes, we recommend you purchase a back-up machine as necessary.

If you have any questions or want to know more information, please visit our official website.

www.stpvestax.com