



YST-SW105

Active Servo Processing Subwoofer System



OWNER'S MANUAL

	CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN	
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.		

IMPORTANT
Please record the serial number of this system in the space below.

Model:
Serial No.:

The serial number is located on the rear of the main unit.
Retain this Owner's Manual in a safe place for future reference.

• Explanation of Graphical Symbols



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert you to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert you to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

SAFETY INSTRUCTIONS

- 1 Read Instructions – All the safety and operating instructions should be read before the unit is operated.
- 2 Retain Instructions – The safety and operating instructions should be retained for future reference.
- 3 Heed Warnings – All warnings on the unit and in the operating instructions should be adhered to.
- 4 Follow Instructions – All operating and other instructions should be followed.
- 5 Water and Moisture – The unit should not be used near water – for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc.
- 6 Carts and Stands – The unit should be used only with a cart or stand that is recommended by the manufacturer.
- 6A A unit and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the unit and cart combination to overturn. 
- 7 Wall or Ceiling Mounting – The unit should be mounted to a wall or ceiling only as recommended by the manufacturer.
- 8 Ventilation – The unit should be situated so that its location or position does not interfere with its proper ventilation. For example, the unit should not be situated on a bed, sofa, rug, or similar surface, that may block the ventilation openings; or placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.
- 9 Heat – The unit should be situated away from heat sources such as radiators, stoves, or other appliances that produce heat.
- 10 Power Sources – The unit should be connected to a power supply only of the type described in the operating instructions or as marked on the unit.
- 11 Power-Cord Protection – Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the unit.
- 12 Cleaning – The unit should be cleaned only as recommended by the manufacturer.
- 13 Lightning – For added protection for this product during a lightning storm, or when it is left unattended and unused for long periods of time. Unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the product due to lightning and power-line surges.
- 14 Object and Liquid Entry – Care should be taken so that objects do not fall into and liquids are not spilled into the inside of the unit.
- 15 Damage Requiring Service – The unit should be serviced by qualified service personnel when:
 - A. The power-supply cord or the plug has been damaged; or
 - B. Objects have fallen, or liquid has been spilled into the unit; or
 - C. The unit has been exposed to rain; or
 - D. The unit does not appear to operate normally or exhibits a marked change in performance; or
 - E. The unit has been dropped, or the cabinet damaged.
- 16 Servicing – The user should not attempt to service the unit beyond those means described in the operating instructions. All other servicing should be referred to qualified service personnel.
- 17 Power Lines – An outdoor antenna should be located away from power lines.
- 18 Grounding or Polarization – Precautions should be taken so that the grounding or polarization is not defeated.

FCC INFORMATION (for US customers only)

1. IMPORTANT NOTICE : DO NOT MODIFY THIS UNIT!

This product, when installed as indicated in the instructions contained in this manual, meets FCC requirements. Modifications not expressly approved by Yamaha may void your authority, granted by the FCC, to use the product.

2. IMPORTANT : When connecting this product to accessories and/or another product use only high quality shielded cables. Cable/s supplied with this product **MUST** be used. Follow all installation instructions. Failure to follow instructions could void your FCC authorization to use this product in the USA.

3. NOTE : This product has been tested and found to comply with the requirements listed in FCC Regulations, Part 15 for Class "B" digital devices. Compliance with these requirements provides a reasonable level of assurance that your use of this product in a residential environment will not result in harmful interference with other electronic devices.

This equipment generates/uses radio frequencies and, if not installed and used according to the instructions found in the users manual, may cause interference harmful to the operation of other electronic devices.

Compliance with FCC regulations does not guarantee that interference will not occur in all installations. If this product is found to be the source of interference, which can be determined by turning the unit "OFF" and "ON", please try to eliminate the problem by using one of the following measures:

Relocate either this product or the device that is being affected by the interference.

Utilize power outlets that are on different branch (circuit breaker or fuse) circuits or install AC line filter/s.

In the case of radio or TV interference, relocate/reorient the antenna. If the antenna lead-in is 300 ohm ribbon lead, change the lead-in to coaxial type cable.

If these corrective measures do not produce satisfactory results, please contact the local retailer authorized to distribute this type of product. If you can not locate the appropriate retailer, please contact Yamaha Electronics Corp., U.S.A. 6660 Orangethorpe Ave, Buena Park, CA 90620.

The above statements apply **ONLY** to those products distributed by Yamaha Corporation of America or its subsidiaries.

We Want You Listening For A Lifetime

YAMAHA and the Electronic Industries Association's Consumer Electronics Group want you to get the most out of your equipment by playing it at a safe level. One that lets the sound come through loud and clear without annoying blaring or distortion – and, most importantly, without affecting your sensitive hearing.

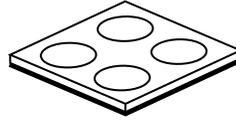
Since hearing damage from loud sounds is often undetectable until it is too late, YAMAHA and the Electronic Industries Association's Consumer Electronics Group recommend you to avoid prolonged exposure from excessive volume levels.



UNPACKING

After unpacking, check that the following item is contained.

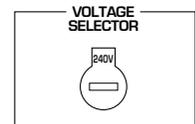
Nonskid pads



CAUTION: Read this before operating your unit.

- To assure the finest performance, please read this manual carefully. Keep it in a safe place for future reference.
- Install this unit in a cool, dry, clean place – away from windows, heat sources, sources of excessive vibration, dust, moisture and cold. Avoid sources of humming (transformers, motors). To prevent fire or electrical shock, do not expose this unit to rain or water.
- Never open the cabinet. If something drops into the set, contact your dealer.
- To reduce the risk of fire or electric shock, do not expose this unit to rain or moisture.
- Do not use force on switches, controls or connection wires. When moving the unit, first disconnect the power plug and the wires connected to other equipments. Never pull the wires themselves.
- When not planning to use this unit for a long period (i.e., vacation, etc.), disconnect the AC power plug from the wall outlet.
- To prevent lightning damage, disconnect the AC power plug when there is an electric storm.
- Since this unit has a built-in power amplifier, heat will radiate from the rear panel. Place the unit apart from the walls, allowing enough spaces above, behind and on both sides of the unit to prevent fire or damage. Furthermore, do not position with the rear panel facing down on the floor or other surfaces.
<For U.K. and Europe models only>
Be sure to allow spaces of at least 20 cm above, behind and on both sides of the unit.
- Do not cover the rear panel of this unit with a newspaper, a tablecloth, a curtain, etc. in order not to obstruct heat radiation. If the temperature inside the unit rises, it may cause fire, damage to the unit and/or personal injury.
- Do not place small metallic objects on this unit. Otherwise, the object may fall, possibly causing an injury.
- Do not place the following objects on this unit:
Glass, china, etc.
If glass etc. falls by vibrations and breaks, it may cause personal injury.
A burning candle etc.
If the candle falls by vibrations, it may cause fire and personal injury.
A vessel with water in it
If the vessel falls by vibrations and water spills, it may cause damage to the unit, and/or you may get an electric shock.
- Do not place this unit where foreign objects such as water drips might fall. It might cause a fire, damage to this unit, and/or personal injury.
- Never open the cabinet. It might cause an electric shock since this unit uses a high voltage. It might also cause personal injury and/or damage to this unit.
- When using a humidifier, be sure to avoid condensation inside this unit by allowing enough spaces around this unit or avoiding excess humidification. Condensation might cause a fire, damage to this unit, and/or electric shock.
- Super-bass frequencies reproduced by this unit may cause a turntable to generate a howling sound. In such a case, move this unit away from the turntable.
- This unit may be damaged if certain sounds are continuously outputted at high volume level. For example, if 20 Hz–50 Hz sine waves from a test disc, bass sounds from electronic instruments, etc. are continuously outputted, or when the stylus of a turntable touches the surface of a disc, reduce the volume level to prevent this unit from being damaged.

- If you hear distorted noise (i.e., unnatural, intermittent “rapping” or “hammering” sounds) coming from this unit, reduce the volume level. Extremely loud playing of a movie soundtrack’s low frequency, bass-heavy sounds or similarly loud popular music passages can damage this speaker system.
- Vibration generated by super-bass frequencies may distort images on a TV. In such a case, move this unit away from the TV set
- Do not attempt to clean this unit with chemical solvents as this might damage the finish. Use a clean, dry cloth.
- Be sure to read the “TROUBLESHOOTING” section regarding common operating errors before concluding that the unit is faulty.
- **Secure placement or installation is the owner’s responsibility.**
YAMAHA shall not be liable for any accident caused by improper placement or installation of speakers.
- **VOLTAGE SELECTOR**
(China and General models only)
The voltage selector switch on the rear panel of this unit must be set for your local main voltage BEFORE plugging this unit into the AC main supply.
Voltagages are 110/120/220/240 V AC, 50/60 Hz.



For U.K. customers

If the socket outlets in the home are not suitable for the plug supplied with this appliance, it should be cut off and an appropriate 3 pin plug fitted. For details, refer to the instructions described below.
Note: The plug severed from the mains lead must be destroyed, as a plug with bared flexible cord is hazardous if engaged in a live socket outlet.

SPECIAL INSTRUCTIONS FOR U.K. MODEL

IMPORTANT:

THE WIRES IN MAINS LEAD ARE COLOURED IN ACCORDANCE WITH THE FOLLOWING CODE:

Blue: NEUTRAL
Brown: LIVE

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows: The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured BLACK. The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or coloured RED. Making sure that neither core is connected to the earth terminal of the three pin plug.

Standby mode

When this unit is turned off by pressing the STANDBY/ON button on the front panel, this unit consumes a small amount of power. This state is called the standby mode. This unit’s power supply is completely cut off from the AC line only when the POWER switch on the rear panel is set in the OFF position or the AC power cable is disconnected.

This unit features a magnetically shielded design, but there is still a chance that placing it too close to a TV set might impair picture color. Should this happen, move this unit away from the TV set.

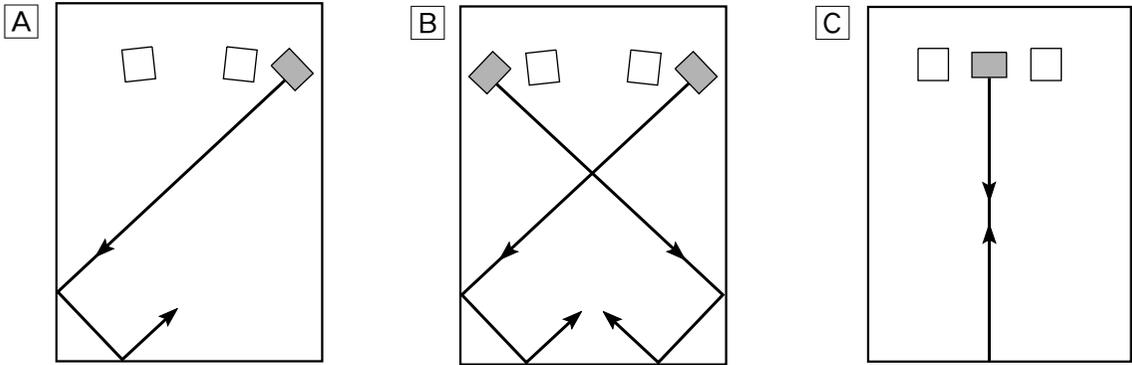
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FEATURES

- This subwoofer system employs Advanced YAMAHA Active Servo Technology which YAMAHA has developed for reproducing higher quality super-bass sound. (Refer to page 12 for details on Advanced YAMAHA Active Servo Technology.) This super-bass sound adds a more realistic, theater-in-the-home effect to your stereo system.
- This subwoofer can be easily added to your existing audio system by connecting to either the speaker terminals or the line output (pin jack) terminals of the amplifier.
- For the effective use of this unit, this unit's super-bass sound should be matched to the sounds of your main speakers. You can create the best sound quality for various listening conditions by using the HIGH CUT control.
- The Automatic power-switching function saves you the trouble of pressing the STANDBY/ON button to turn the power on or turn it to the STANDBY mode.
- You can select bass effect suitable for the source by using the B.A.S.S. button.

PLACEMENT



( : subwoofer,  : main speaker)

One subwoofer will have a good effect on your audio system, however, the use of two subwoofers is recommended to obtain more effect.

If using one subwoofer, it is recommended to place it on the outside of either the right or the left main speaker. (See fig. [A](#).) If using two subwoofers, it is recommended to place them on the outside of each main speaker. (See fig. [B](#).) The placement shown in fig. [C](#) is also possible, however, if the subwoofer system is placed directly facing the wall, the bass effect may die because the sound from it and the sound reflected by the wall may cancel out each other. To prevent this from happening, face the subwoofer system at an angle as in fig. [A](#) or [B](#).

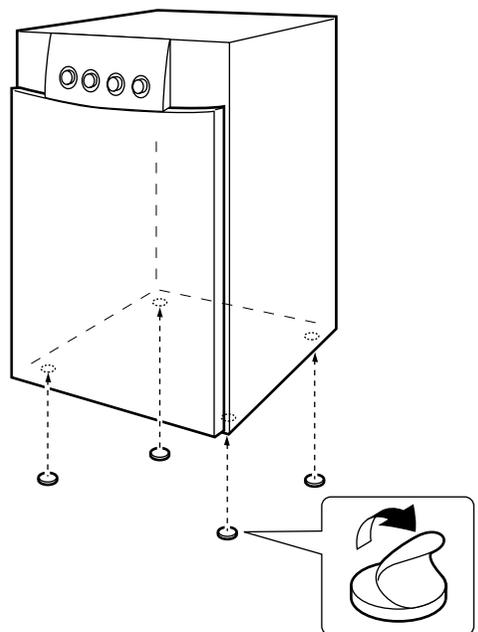
Note

There may be a case that you cannot obtain enough super-bass sounds from the subwoofer when listening in the center of the room. This is because “standing waves” have been developed between two parallel walls and they cancel the bass sounds.

In such a case, face the subwoofer obliquely to the wall. It also may be necessary to break up the parallel surfaces by placing bookshelves etc. along the walls.

Use the nonskid pads

Put the provided nonskid pads at the four corners on the bottom of the subwoofer to prevent the subwoofer from moving by vibrations etc.



CONNECTIONS

Caution: Plug in the subwoofer and other audio/video components after all connections are completed.

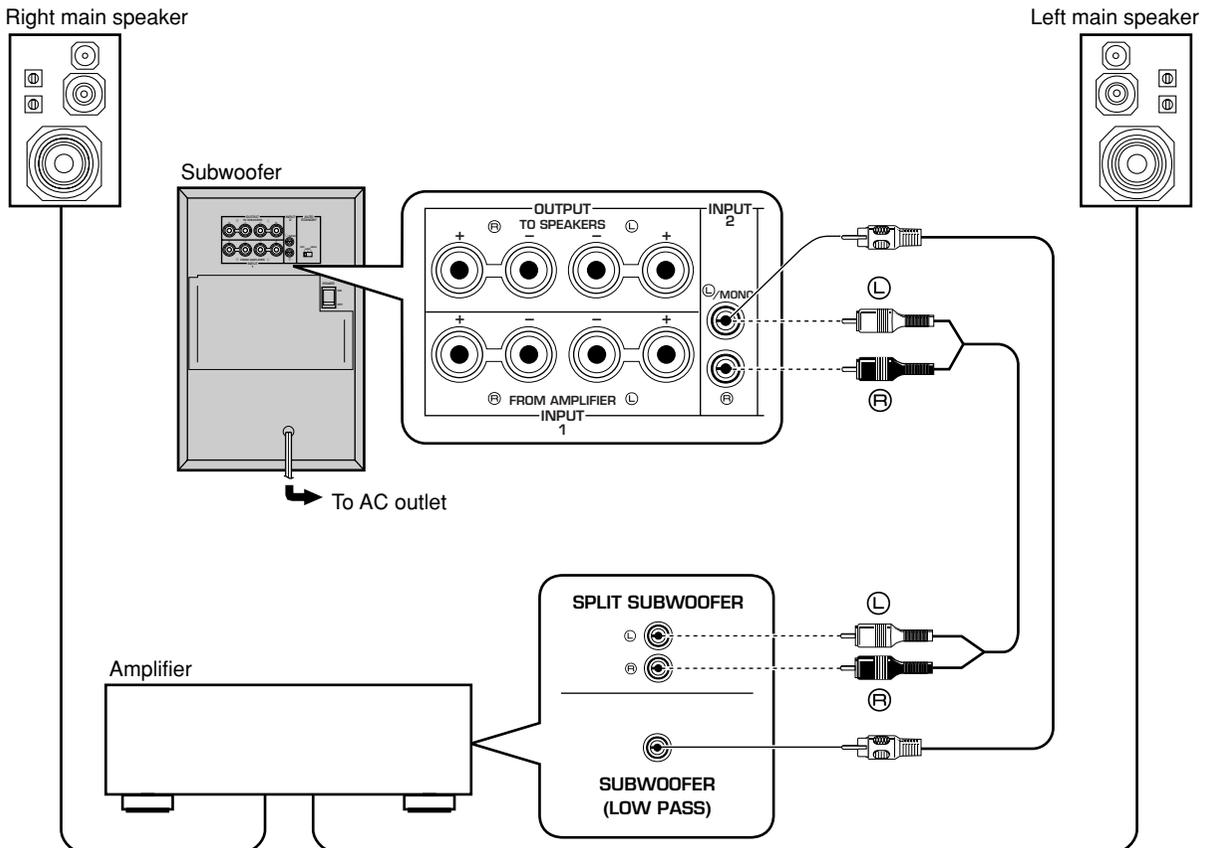
- All connections must be correct, that is to say **L** (left) to **L**, **R** (right) to **R**, “+” to “+” and “-” to “-”. Also refer to the owner’s manual for each of your components.
- Basically, connect the subwoofer to the line output (pin jack) terminal(s) of the amplifier. (Refer to pages 4 and 5 for details.) If your amplifier does not have any line output terminal, connect the subwoofer to the speaker output terminals of the amplifier. (Refer to pages 6 and 7 for details.)

Connecting to line output (pin jack) terminals of the amplifier

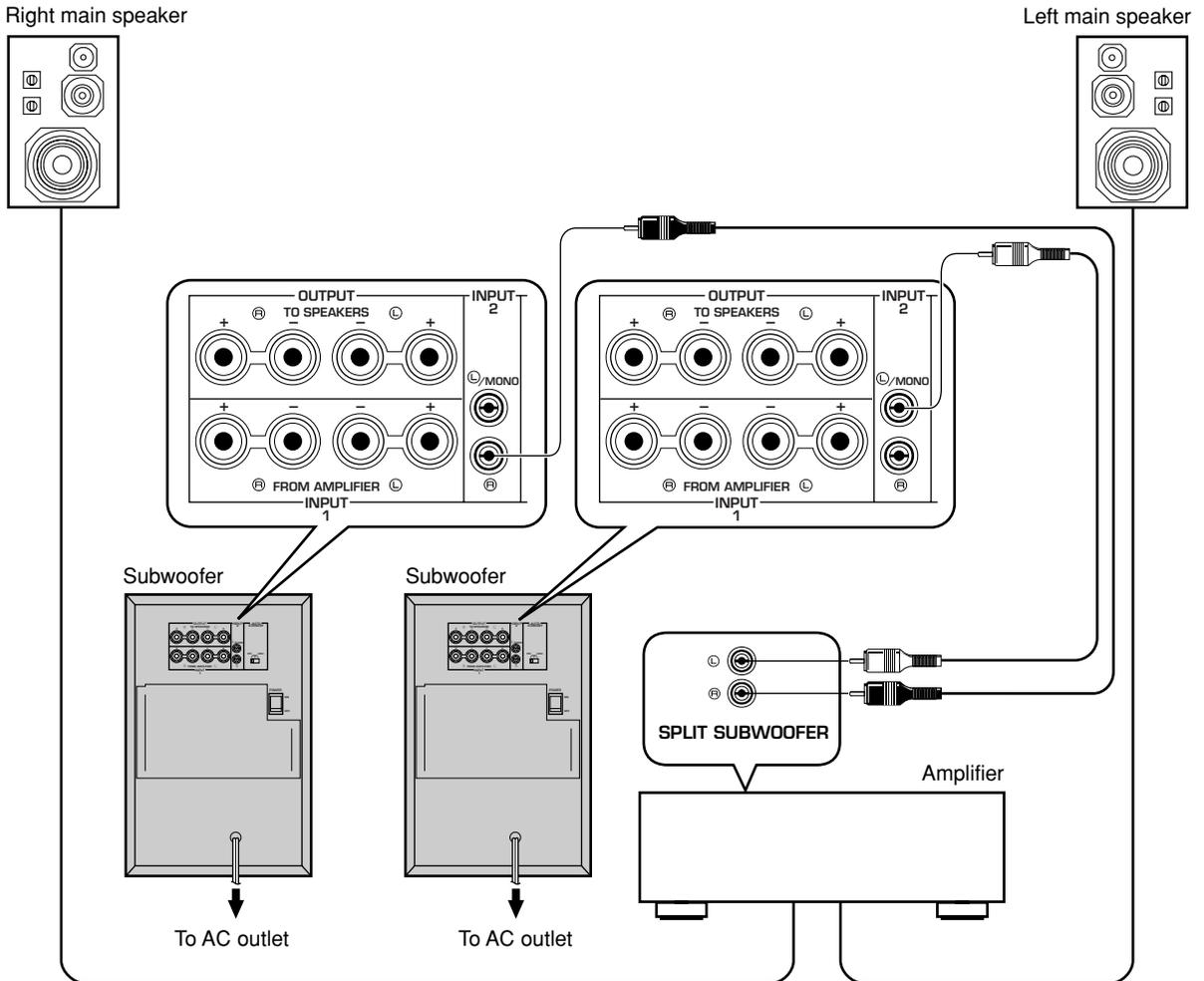
Connect the main speakers to the speaker output terminals of the amplifier.

- To connect with a YAMAHA DSP amplifier (or AV receiver), connect the SUBWOOFER (or LOW PASS etc.) terminal on the rear of the DSP amplifier (or AV receiver) to the **L/MONO INPUT2** terminal of the subwoofer.
- When connecting the subwoofer to the **SPLIT SUBWOOFER** terminals on the rear of the DSP amplifier, be sure to connect the **L/MONO INPUT2** terminal to the “L” side and the **R INPUT2** terminal to the “R” side of the **SPLIT SUBWOOFER** terminals.

■ Using one subwoofer



■ Using two subwoofers



Notes

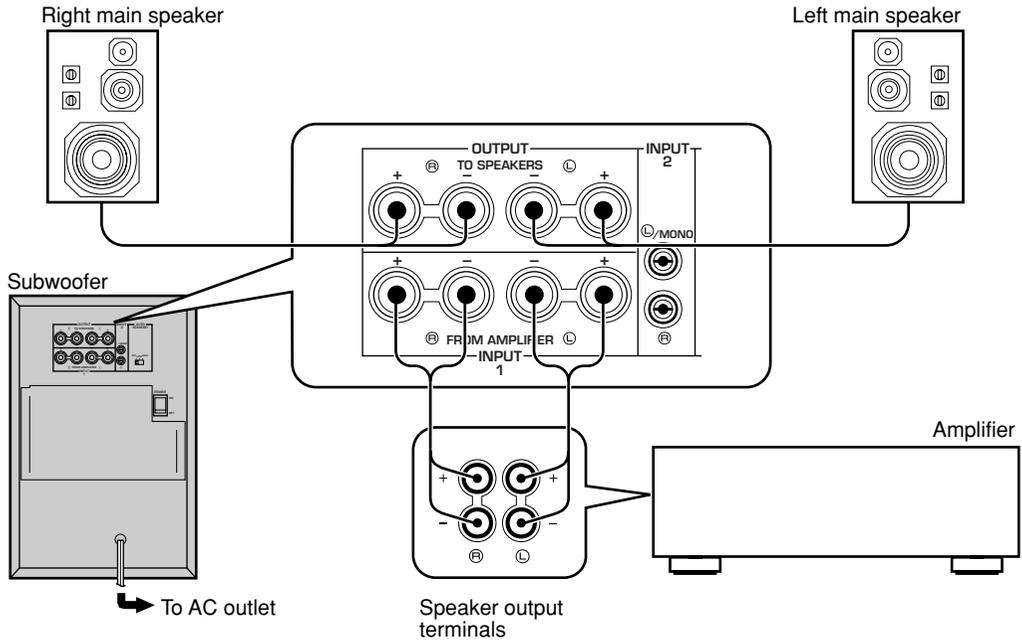
- Some amplifiers have line output terminals labeled PRE OUT. When you connect the subwoofer to the PRE OUT terminals of the amplifier, make sure that the amplifier has at least two sets of PRE OUT terminals. If the amplifier has only one set of PRE OUT terminals, do not connect the subwoofer to the PRE OUT terminals. Instead, connect the subwoofer to the speaker output terminals of the amplifier. (Refer to pages 6 and 7.)
- When connecting to a monaural line output terminal of the amplifier, connect the L/MONO INPUT2 terminal.

Connecting to speaker output terminals of the amplifier

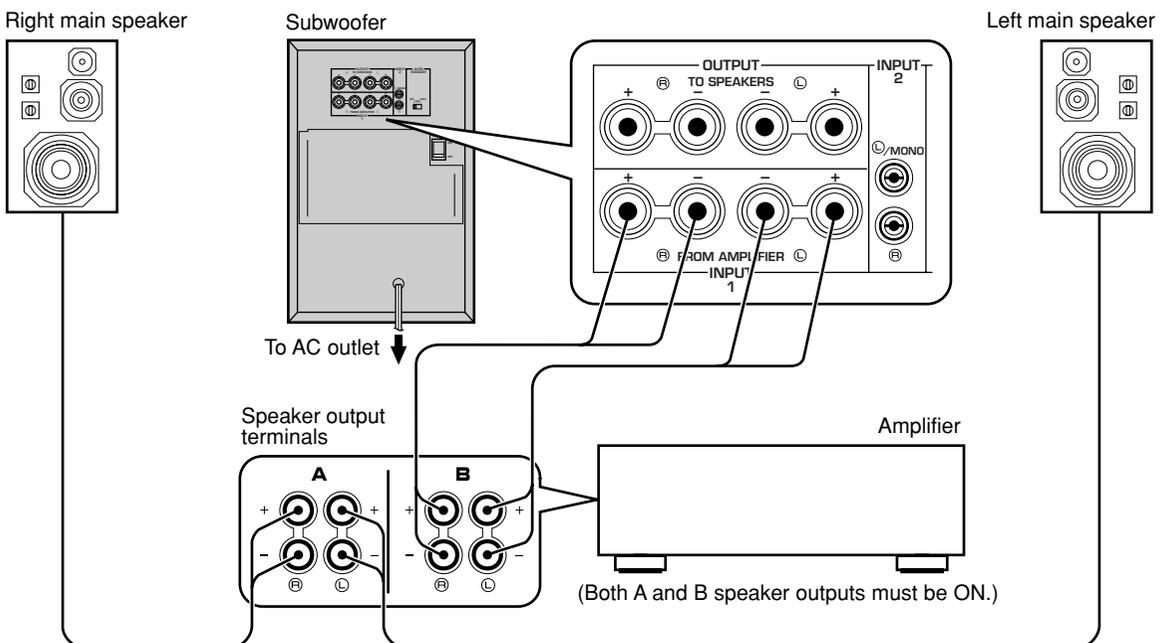
■ Using one subwoofer

If your amplifier has only one set of main speaker output terminals

Connect the speaker output terminals of the amplifier to the INPUT1 terminals of the subwoofer, and connect the OUTPUT terminals of the subwoofer to the main speakers.

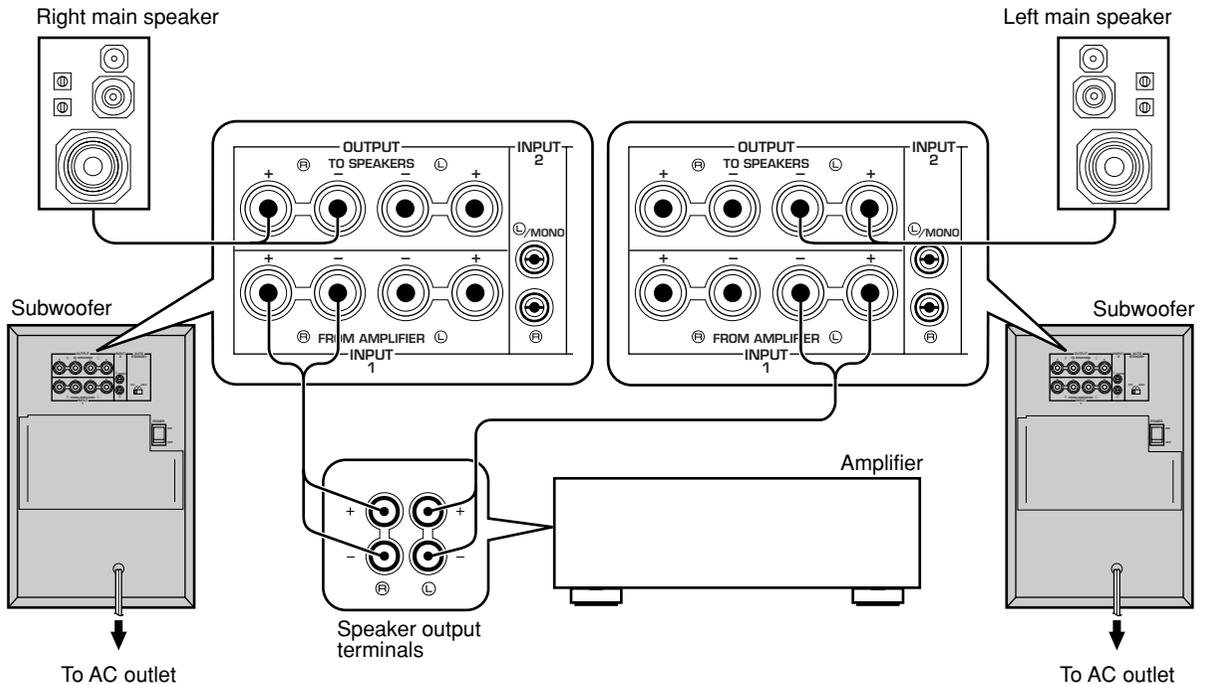


If your amplifier has two sets of speaker output terminals



■ Using two subwoofers

Connect the speaker output terminals of the amplifier to the INPUT1 terminals of the subwoofer, and connect the OUTPUT terminals of the subwoofer to the main speakers.

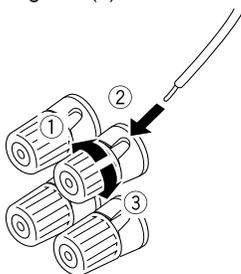


Connecting to the INPUT1/OUTPUT terminals of the subwoofer

For connections, keep the speaker cables as short as possible. Do not bundle or roll up the excess part of the cables. If the connections are faulty, no sound will be heard from the subwoofer or the speakers, or both of them. Make sure that the + and – polarity markings of the speaker cables are observed and set correctly. If these cables are reversed, the sound will be unnatural and lack bass.

How to Connect:

Red: positive (+)
Black: negative (–)



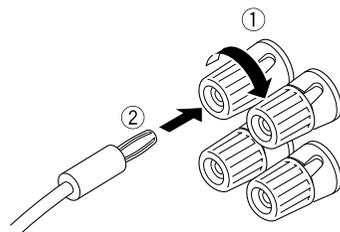
- ① Loosen the knob.
- ② Insert the bare wire.
[Remove the insulation coating at the extremity of each speaker cable by twisting the coating off.]
- ③ Tighten the knob and secure the wire.

Caution

Do not let the bare speaker wires touch each other as this could damage the subwoofer or the amplifier, or both of them.

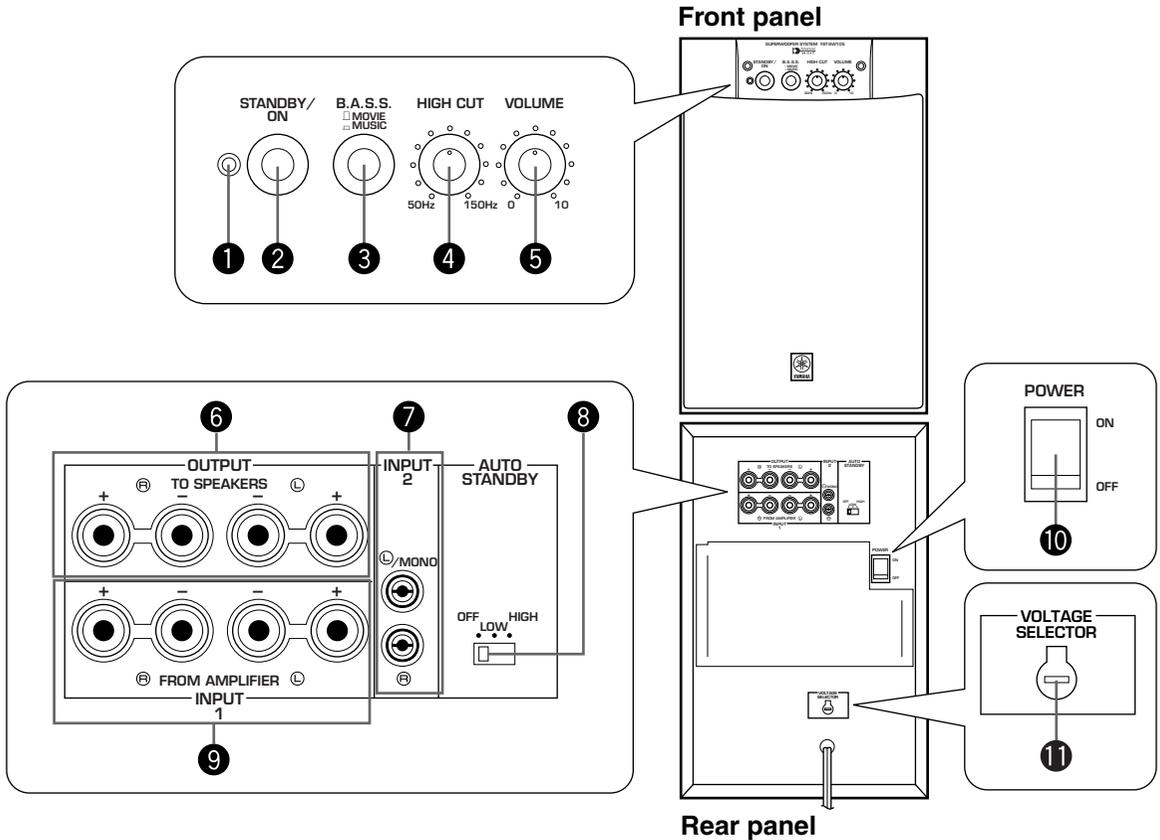
<U.S.A., Canada, Australia, China and General models only>

Banana Plug connections are also possible.



- ① Tighten the terminal knob.
- ② Simply insert the Banana Plug connector into the terminal.

CONTROLS AND THEIR FUNCTIONS



1 Power indicator
Lights up in green while the subwoofer is turned on.

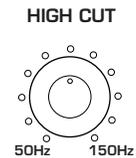
2 **STANDBY/ON** button
Press this button to turn on the power. (The power indicator lights up in green.)
Press again to set the subwoofer in the standby mode. (The power indicator does not light.)
* This button can be used only when the **POWER (10)** switch is set in the ON position.

Standby mode
The subwoofer is still using a small amount of power in this mode.

3 **B.A.S.S.** (Bass Action Selector System) button
When this button is pressed in to the **MUSIC** position, the bass sound in audio software is well reproduced.
By pressing the button again so that it pops out at the **MOVIE** position, the bass sound in video software is well reproduced.



4 **HIGH CUT** control
Adjusts the high frequency cut off point.
Frequencies higher than the frequency selected by this control are all cut off (and no output).
* One graduation of this control represents 10 Hz.



5 **VOLUME** control
Adjusts the volume level. Turn the control clockwise to increase the volume, and counterclockwise to decrease the volume.

- 6 OUTPUT (TO SPEAKERS) terminals**
Can be used for connecting to the main speakers. Signals from the **INPUT1** terminals (**9**) are sent to these terminals.
(Refer to “**CONNECTIONS**” for details.)
- 7 INPUT2 terminals**
Used to input line level signals from the amplifier.
(Refer to “**CONNECTIONS**” for details.)
- 8 AUTO STANDBY (HIGH/LOW/OFF) switch**
This switch is originally set to the OFF position. By setting this switch to the HIGH or LOW position, the subwoofer’s automatic power-switching function operates as described below. If you do not need this function, leave this switch in the OFF position.
* Make sure to change the setting of this switch only when the subwoofer is in the standby mode. (The power indicator does not light.)
- 9 INPUT1 (FROM AMPLIFIER) terminals**
Used to connect the subwoofer with the speaker terminals of the amplifier.
(Refer to “**CONNECTIONS**” for details.)

- 10 POWER switch**
Normally, set this switch to the ON position to use the subwoofer. In this state, you can turn on the subwoofer or turn the subwoofer into the standby mode by pressing the **STANDBY/ON** (**2**) button. Set this switch to the OFF position to completely cut off the subwoofer’s power supply from the AC line.
- 11 VOLTAGE SELECTOR switch (China and General models only)**
If the preset setting of the switch is incorrect, set the switch to the proper voltage (110V, 120V, 220V or 240V) of your area.
Consult your dealer if you are unsure of the correct setting.

WARNING

Be sure to unplug the subwoofer before setting the VOLTAGE SELECTOR switch correctly.

AUTOMATIC POWER-SWITCHING FUNCTION

If the source being played is stopped and the input signal is cut off for 7 to 8 minutes, the subwoofer automatically switches to the standby mode. (When the subwoofer switches to the standby mode by the automatic power-switching function, the power indicator lights up in red.) When you play a source again, the power of the subwoofer turns on automatically by sensing audio signals input to the subwoofer.

This function operates by sensing a certain level of low frequency input signal. Usually set the **AUTO STANDBY** switch to the LOW position. However, if the power is not switched to ON or STANDBY smoothly, set the switch to the HIGH position. In the HIGH position, the power will turn on even with a low level of input signal. But please be aware that the subwoofer may not switch to the standby mode when there is an extremely low input signal.

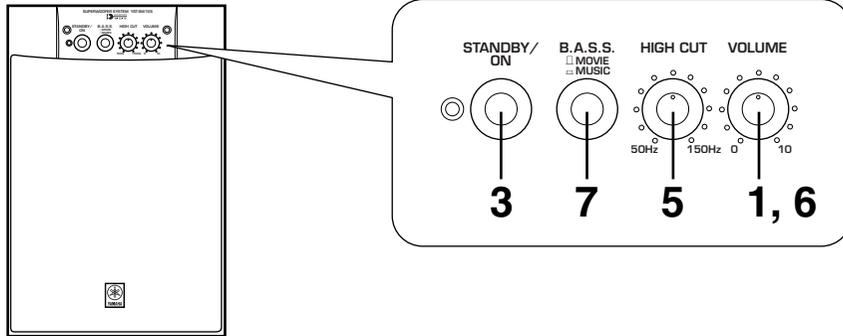
- * The power might turn on unexpectedly by sensing noise from other appliances. If that occurs, set the **AUTO STANDBY** switch to the OFF position and use the **STANDBY/ON** button to switch the power between ON and STANDBY manually.
- * This function detects the low-frequency components below 200 Hz of the input signals (i.e., the explosion in the action movie, the sound of the bass guitar or the bass drum, etc.).
- * The minutes required to switch the subwoofer to the standby mode might change by sensing noise from other appliances.

This function is available only when the power of the subwoofer is on (by pressing the STANDBY/ON button).

ADJUSTING THE SUBWOOFER BEFORE USE

Before using the subwoofer, adjust the subwoofer to obtain the optimum volume and tone balance between the subwoofer and the main speakers by following the procedures described below.

Front panel



- 1 Set the **VOLUME** control to minimum (0).
- 2 Turn on the power of all the other components.
- 3 Make sure that the **POWER** switch is set to the ON position, then press the **STANDBY/ON** button to turn on the subwoofer.
 - * The Power indicator lights up in green.
- 4 Play a source containing low-frequency components and adjust the amplifier's volume control to the desired listening level.
- 5 Adjust the **HIGH CUT** control to the position where the desired response can be obtained.

Normally, set the control to the main speaker's rated minimum reproducible frequency*.

 - * The main speaker's rated minimum reproducible frequency can be looked up in the speakers' catalog or owner's manual.
- 6 Increase the volume gradually to adjust the volume balance between the subwoofer and the main speakers.

Normally, set the control to the level where you can obtain a little more bass effect than when this unit is not used. If the desired response cannot be obtained, adjust the **HIGH CUT** control and the **VOLUME** control again.
- 7 Select "MOVIE" or "MUSIC" according to the played source.

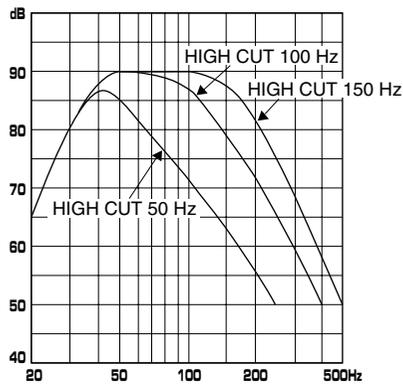
MOVIE: When a movie type source is played, the low-frequency effects are enhanced to allow the listener enjoy more powerful sound. (The sound will be thicker and deeper.)

MUSIC: When an ordinary music source is played, the excessive low-frequency components are cut off to make the sound clearer. (The sound will be lighter and reproduces the melody line more clearly.)

 - **Once the volume balance between the subwoofer and the main speakers is adjusted, you can adjust the volume of your whole sound system by using the amplifier's volume control. However, if you change the main speakers to others, you must make this adjustment again.**
 - **For adjusting the VOLUME control and the HIGH CUT control, refer to "Frequency characteristics" on the next page.**

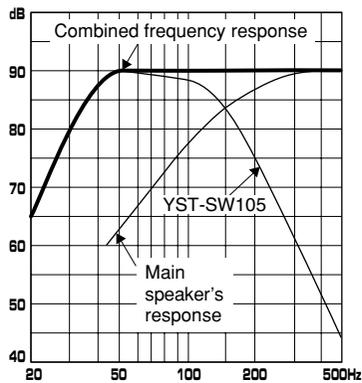
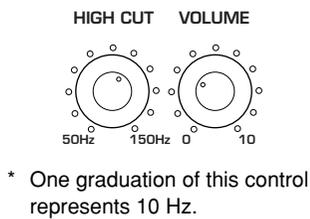
Frequency characteristics

This subwoofer's frequency characteristics

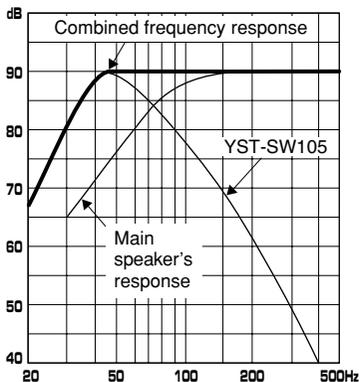
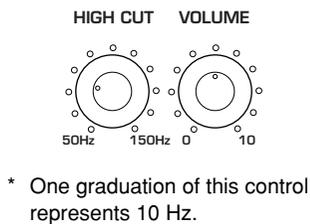


The figures below show the optimum adjustment of each control and the frequency characteristics when this subwoofer is combined with a typical main speaker system.

EX.1 When combined with a 3" or 4" (8 cm or 10 cm) acoustic suspension, 2 way system main speakers



EX.2 When combined with a 5" (13 cm) acoustic suspension, 2 way system main speakers



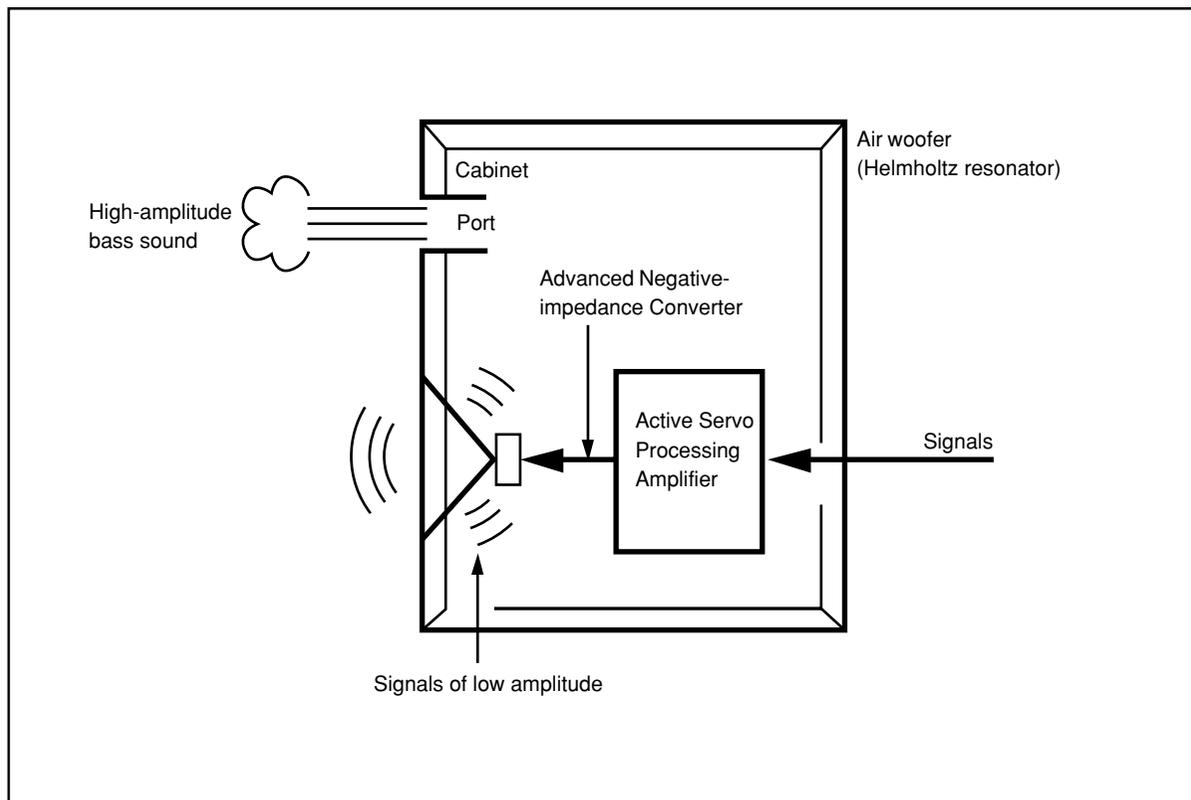
ADVANCED YAMAHA ACTIVE SERVO TECHNOLOGY

The theory of Yamaha Active Servo Technology has been based upon two major factors, the Helmholtz resonator and negative-impedance drive. Active Servo Processing speakers reproduce the bass frequencies through an “air woofer”, which is a port or opening in the speaker’s cabinet. This opening is used instead of, and performs the functions of, a woofer in a conventionally designed speaker system. Thus, signals of low amplitude within the cabinet can, according to the Helmholtz resonance theory, be outputted from this opening as waves of great amplitude if the size of the opening and the volume of the cabinet are in the correct proportion to satisfy a certain ratio. In order to accomplish this, moreover, the amplitudes within the cabinet must be both precise and of sufficient power because these amplitudes must overcome the “load” presented by the air that exists within the cabinet.

Thus it is this problem that is resolved through the employment of a new design in which the amplifier supplies special signals. If the electrical resistance of the voice coil could be reduced to zero, the movement of the speaker unit would become linear with respect to signal voltage. To accomplish this, a special negative-impedance output-drive amplifier for subtracting output impedance of the amplifier is used.

By employing negative-impedance drive circuits, the amplifier is able to generate precise, low-amplitude, low-frequency waves with superior damping characteristics. These waves are then radiated from the cabinet opening as high-amplitude signals. The system can, therefore, by employing the negative-impedance output drive amplifier and a speaker cabinet with the Helmholtz resonator, reproduce an extremely wide range of frequencies with amazing sound quality and less distortion. The features described above, then, are combined to be the fundamental structure of the conventional Yamaha Active Servo Technology.

Our new Active Servo Technology — Advanced Yamaha Active Servo Technology — adopted Advanced Negative Impedance Converter (ANIC) circuits, which allows the conventional negative impedance converter to dynamically vary in order to select an optimum value for speaker impedance variation. With this new ANIC circuits, Advanced Yamaha Active Servo Technology can provide more stable performance and improved sound pressure compared with the conventional Yamaha Active Servo Technology, resulting in more natural and dynamic bass reproduction.



TROUBLESHOOTING

Refer to the chart below when this unit does not function properly. If the problem you are experiencing is not listed below or if the instructions given below do not help, disconnect the power cable and contact your authorized YAMAHA dealer or service center.

Problem	Cause	What to Do
Power is not supplied even though the STANDBY/ON button is set to the ON position.	The power cable is not plugged in, or the POWER switch is set to the OFF position.	Plug the power cable into an AC outlet and/or set the POWER switch to the ON position.
No sound.	The VOLUME control is set to 0.	Turn the VOLUME control to the right.
	Speaker cables are not connected securely.	Connect them securely.
Sound level is too low.	Speaker cables are not connected correctly.	Connect them correctly, that is L (left) to L, R (right) to R, “+” to “+” and “-” to “-”.
	A source sound with few bass frequencies is played.	Play a source sound with bass frequencies. Set the HIGH CUT control to a higher position.
	It is influenced by standing waves.	Reposition the subwoofer or break up the parallel surface by placing bookshelves etc. along the walls.
The subwoofer does not turn on automatically.	The POWER switch is set to the OFF position.	Set the POWER switch to the ON position.
	The STANDBY/ON button is set to OFF.	Set the STANDBY/ON button to ON.
	The AUTO STANDBY switch is set to the OFF position.	Set the AUTO STANDBY switch to the “HIGH” or “LOW” position.
	The level of input signal is too low.	Set the AUTO STANDBY switch to the “HIGH” position.
The subwoofer turns into the standby mode unexpectedly.	The level of input signal is too low.	Set the AUTO STANDBY switch to the “HIGH” position.
The subwoofer turns on unexpectedly.	There is an influence of noise generated from external appliances etc.	Move the subwoofer farther away from such appliances and/or reposition the connected speaker cables. Otherwise, set the AUTO STANDBY switch to the “OFF” position.

SPECIFICATIONS

Type Advanced Yamaha Active Servo Technology

Driver 20 cm (8") cone woofer,
Magnetic shielding type

Amplifier Output 100W/5Ω

Frequency Response 30 Hz to 200 Hz

Power Supply

USA and Canada models AC 120V, 60 Hz

U.K. and Europe models AC 230V, 50 Hz

Australia model AC 240V, 50 Hz

China and General models
..... AC 110/120/220/240V, 50/60 Hz

Power Consumption 80W
(In the standby mode: 0.8W)

Dimensions (W x H x D) 235 mm x 365 mm x 312 mm
(9-5/16" x 14-7/20" x 12-5/16")

Weight 9.5 kg (20 lbs. 15 oz.)

Accessories Nonskid pad x 4

* Please note that all specifications are subject to change without notice.



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