

# HOMETHEATER SOUND SYSTEM SYSTEME AUDIO HOME CINEMA

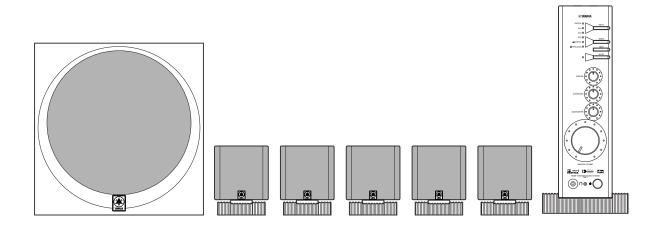
# TSS-1







# OWNER'S MANUAL MODE D'EMPLOI





### 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 these instructions.
- 2 Keep these instructions.
- 3 Heed all warnings.
- 4 Follow all instructions.
- **5** Do not use this apparatus near water.
- 6 Clean only with dry cloth.
- 7 Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8 Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9 Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

- 10 Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11 Only use attachments/accessories specified by the manufacturer.
- 12 Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.



- 13 Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14 Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

#### 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.

- 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.

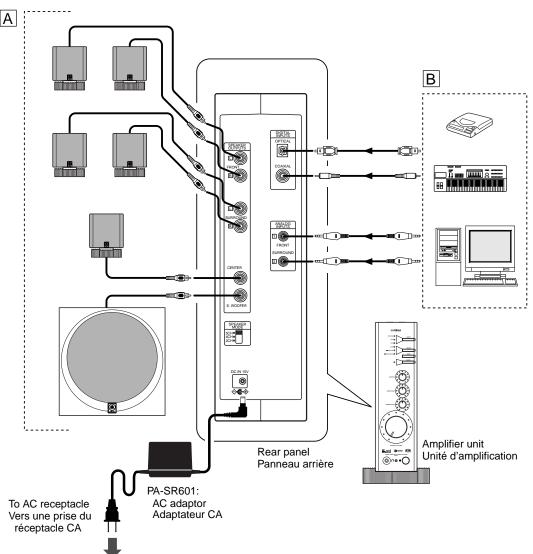


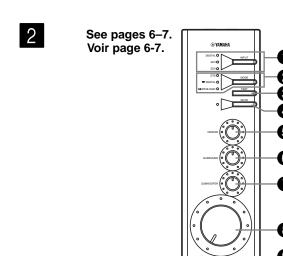
#### For Canadian Customers

To prevent electric shock, match wide blade of plug to wide slot and fully insert.

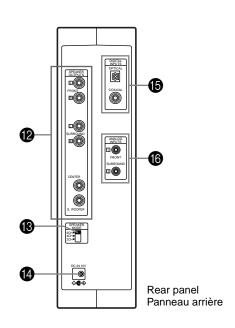
This Class B digital apparatus complies with Canadian ICES-003.







Front panel Panneau Avant



#### Thank you for selecting Yamaha TSS-1 Home Theater Sound System.

#### **Cautions**

Please read the following operating precautions before use. YAMAHA will not be held responsible for any damage and/or injury caused by not following the cautions below.

- When you disconnect the AC adaptor from the AC receptacle, hold the plug itself and not the cord.
- If you plan not to use this system for a while, disconnect the AC adaptor from the AC receptacle.
- Always disconnect the AC adaptor from the AC receptacle before making any connections.
- This system does not contain any user serviceable parts.
   Refer all servicing to your Yamaha dealer.
- Never open the cabinet. If a foreign object drops into the set, contact your dealer and stop using this system. Otherwise, you may cause a fire.
- Do not expose this system to extreme temperatures, direct sunlight, excessive dust, humidity, or vibration.
- Position this system on a level, stable surface. Do not drop, apply excessive force to its controls, or put heavy items on top of it.
- Do not place small metallic objects on this system.
   Otherwise, the object may fall, possibly causing an injury.
- Since the amplifier unit has a built-in power amplifier, heat will radiate from the ventilation slits. Place the amplifier unit apart from the walls, allowing a space of at least 20 cm (7-7/8") above, 10 cm (3-15/16") behind and on both sides of the amplifier unit.
  - Also, do not position with the rear panel facing down on the floor or other surfaces and do not cover the amplifier unit with a newspaper, a tablecloth, a curtain, etc. in order not to obstruct heat radiation.

If the temperature inside the amplifier unit rises, it may cause fire, damage to the amplifier unit and/or personal injury.

 Do not place the following objects on this system: 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 this system, and/or you may get an electric shock.

- To protect this system, avoid microphone feedback, continuous and excessive output from electronic musical instruments, and excessive signal distortion.
- If this system is located close to a monitor, or fluorescent or neon lights, a slight hum may be heard. In this case, relocate this system away from the light.
- Although this system is magnetically shielded, keep floppy disks and tapes away from it.

- Avoid sources of hum (transformers, motors). To prevent fire or electrical shock, do not expose to rain or water.
- Do not use force on switches, knobs, or cables. When you move this system, first turn off the power, then disconnect the AC adaptor from the AC receptacle and the cables from the connected devices.
- Always set the MASTER VOLUME control fully to the left before starting to play the audio source: turn the control gradually after playback has started.
- Be sure to only use the AC adaptor (PA-SR601) supplied with this system. Otherwise, you might cause a fire or damage to this system.

#### Standby mode

When this system is turned off by pressing the power switch, this system consumes a small amount of power. This state is called the standby mode. The power supply is completely cut off from the AC line only when the AC adaptor is disconnected.

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

#### 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.

#### Contents

SAFETY INSTRUCTIONS	II
Cautions	1
Unpacking	2
Features	2
Setting up the system	4
Connections	6

Controls & connectors	6
Adjusting speaker balance	8
Playing a source	8
Troubleshooting	9
Specifications 1	0

## **Unpacking**

After unpacking, check that the following parts are included.

- Amplifier unit
- Satellite speaker x 5
  - Satellite speaker with a 3 m cord x 3
  - Satellite speaker with a 7 m cord x 2
- Subwoofer
- Accessories
  - AC adaptor (PA-SR601) x 1
  - Stereo mini plug cable x 2
  - · Optical fiber cable x 1
  - · RCA pin-plug cable x 1
  - · Stand for the amplifier unit x 1
  - Screw x 2
  - Pad x 24
  - Fastener x 1

#### **Features**

Multi-Channel Surround System for Home Theater, Game Amusement and PC DVD.

- Combination of Amplifier Unit, Five Satellite Speakers and Subwoofer
- Dolby Digital and DTS decoder (Refer to the next page.)
- 5.1-Channel Full-Scale System for DVD Movie Entertainment
- 5.1-Ch Full-Scale, 4.1-Ch (Game Surround) and Stereo (Virtual Surround) Speaker Modes
- Yamaha's Exclusive Active Servo Technology for Powerfull Bass Response
- 1 Optical and 1 Coaxial Digital Inputs
- Two Analog Inputs (front/rear channel)
- Test Tone Generator for Accurate Speaker Balancing

#### Welcome to the exciting world of digital home entertainment.

The TSS-1 is a compact, but complete and advanced home theater sound system that takes you to the exciting world of digital surround sound entertainment. Though some of the advanced features of this system may not be familiar to you, they are easy to use. Incorporated state-of-the-art technology such as Dolby Digital and DTS can bring the same audio experience to your home as they have brought to feature films in quality theaters around the world. Take some time now to read more about these features and enjoy the new experiences this system brings to your home theater.

#### **■** Dolby Surround

Dolby Surround uses four discrete channels and five speakers to reproduce realistic and dynamic sound effects: two main channels (left and right), a center channel for dialog, and a rear channel for special sound effects. The rear channel reproduces sound within a narrow frequency range.

Most video tapes and laser discs include Dolby Surround encoding, as do many TV and cable broadcasts. The Dolby Pro Logic decoder built into this unit employs a digital signal processing system that stabilizes each channel for even more accurate sound positioning than is available with standard analog processors.

#### ■ Dolby Digital\*

Dolby Digital is a digital surround sound system that provides completely independent multi-channel audio to you. Dolby Digital provides five full-range channels in what is sometimes referred to as a "3/2" configuration: three front channels (left, center and right), and two surround channels. A sixth bass-only effect channel is also provided for output of LFE (low frequency effect), or low bass effects that are independent of other channels. (This is called the "LFE channel".) This channel is counted as 0.1, thus giving rise to the term 5.1 channels in total.

The wide dynamic range of sound reproduced by the five full-range channels and precise sound orientation by digital sound processing provides listeners with excitement and realism that have never been experienced before.

# ■ DTS (Digital Theater System) Digital Surround\*\*

DTS was developed to replace the analog soundtracks of movies with six discrete channels of digital soundtracks, and it is now installed in many theaters around the world. The DTS digital playback system changed the way we experienced movies in theaters with six discrete channels of superb digital audio.

DTS technology, through intense research and development, has made it possible to deliver similar encode/decode discrete technology to home audio surround-sound entertainment.

DTS Digital Surround is an encode/decode system which delivers six channels of master-quality, 20-bit audio; technically, it offers 5.1 channels, which means 5 full-range (left, center, right and two surround) channels, plus a subwoofer (LFE) channel (as "0.1"). It is compatible with the 5.1 speaker configurations that are currently available for home theater systems.

#### Notes

- When playing an ordinary CD on this system following playback of a CD or an LD encoded with DTS, some operations, such as resetting input modes, may be required.
- Even if connected to this system with a digital connection, some CD, LD, and DVD players may make this system fail to decode DTS or produce noise. This is because certain digital data processing by such players can result in DTS data decoding errors that cause playback failure although the same data processing may cause only a slight change in volume or in frequency response with normal digital sound.
- If an error occurs in the player's digital output data during playback of an LD or CD encoded with DTS, playback may be disrupted. If this occurs, stop playback and repower the player.
- When digital sound signals from the computer are played, errors in WAVE signals, etc. may occur resulting in noise or playback failure.

# \* DIGITAL

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# \*\* dts

Manufactured under license from Digital Theater Systems, Inc. US Pat. No. 5,451,942 and other worldwide patents issued and pending. "DTS", "DTS Digital Surround", are trademarks of Digital Theater Systems, Inc. Copyright 1996 Digital Theater Systems, Inc. All Rights Reserved.

## **Setting up the system**

#### **System configuration**

This system includes an amplifier unit, five satellite speakers and a subwoofer.

The three satellite speakers with a 3 m cord are used as front speakers and a center speaker.

The two satellite speakers with a 7 m cord are used as surround speakers.

#### The role of respective speakers

The front speakers are used for reproducing main channel sound. The surround speakers are used for effect sounds, and the center speaker is for center channel sound (dialog etc.).

The subwoofer is used for reproducing sounds of low frequencies from the front, center and surround channels. The subwoofer also reproduces sounds of the subwoofer channel when a DTS or Dolby Digital encoded source is played.

#### Recommended speaker placement

Before making connections, place all speakers in their respective positions. The positioning of the speakers is important because it controls the overall sound quality of this system.

Place the speakers depending on your listening position by following the instructions below.

\* The satellite speakers can be mounted on a wall. (See the next page.)

**Front speakers:** On both sides of and at approximately

the same height as the TV (or computer

monitor).

Surround speakers:

Behind your listening position or on both sides of the listening room.

**Center speaker:** Precisely between the front speakers.

\* The center speaker can be mounted on the monitor as shown on the next

page.

**Subwoofer:** On the floor. The position of the

subwoofer is not so critical because low bass tones are not highly directional.

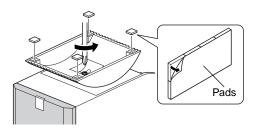
Left front speaker Speaker Surround speaker unit

Subwoofer Left surround speaker

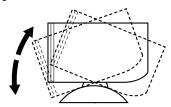
#### Adjusting the front angle of the satellite speakers

The front angle of the satellite speakers can be adjusted as shown below.

- 1 Loosen the screw on the bottom of the speaker stand.
  - \* Attach the supplied nonskid pads at the four corners on the bottom of the stand for improved stability.



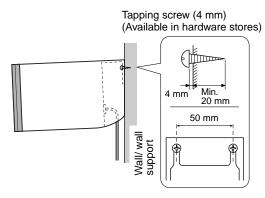
2 Adjust the speaker angle on the stand as you prefer, and then tighten the screw.



#### ■ Mounting satellite speakers on a wall

The satellite speakers can also be hung on the wall. Fasten screws into a firm wall or wall support as shown in the figure, and hang the slits on the rear of the speaker on the protruding screws.

 Make sure that the screws are securely caught by the slits.



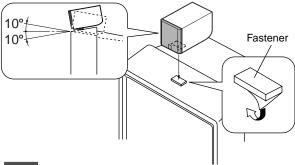
#### Warning

- Each speaker weighs 0.4 kg (0.9 lbs.). Do not mount them
  on thin plywood or a wall with soft surface material. If
  mounted, the screws may come out of the flimsy surface
  and the speakers may fall. This could damage the speakers
  and cause personal injury.
- Do not install the speakers on a wall with nails, adhesives, or any other unstable hardware. Long-term use and vibrations may cause them to fall.
- To avoid accidents resulting from tripping over loose speaker cords, fix them to the wall.

# Placing a center speaker on top of the monitor

When placing the center speaker on top of the monitor, remove the stand from the speaker, and attach the provided fastener at the bottom of the speaker and on top of the monitor to prevent the speaker from falling.

\* Do not place the speaker on top of the monitor with an inclination of more than 10 degrees.



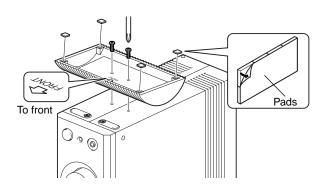
#### Note

Though this speaker is a magnetically shielded type, there may be some influence on the monitor picture depending on the type of monitor or the placement of the speaker. In such a case, place the speaker further apart from the monitor until there is no influence on the monitor picture.

# ■ Mounting the amplifier unit on the supplied stand

For improved stability, it is recommended to mount the amplifier unit on the supplied stand with the supplied screws as shown below.

 Attach the supplied nonskid pads at the four corners on the bottom of the stand for improved stability.



#### **Connections**

(See figure 1 on page IV.)

#### Caution: Plug in the amplifier unit and other equipment after all connections are completed.

- A: Connect the three satellite speakers with a 3 m cord to the FRONT L, R and CENTER terminals. Connect the two satellite speakers with a 7 m cord to the SURROUND L and R terminals. Connect the subwoofer to the SUBWOOFER terminal.
- B: Connect external audio/video units (a personal computer, a video game player, a portable DVD/CD player, a video cassette player, etc. which send playback signals to this system) to these terminals.

#### Cautions

- When placing the provided AC adaptor on the desk, etc., be sure to fix the adaptor on the desk, etc. to prevent it from falling. If the adaptor falls, it may cause personal injury or damage to the adaptor and/or other equipment.
- The SPEAKER OUTPUT terminals on the rear of the amplifier unit are only designed for connection of the supplied speakers. Never connect these terminals to an AV amplifier or a power amplifier, as it may cause misoperation, fire and/or damage to this system.

## **Controls & connectors**

(See figure 2 on page IV.)

#### INPUT selector button and indicators

Press this button repeatedly to select an input mode between **DIGITAL**, **4CH** and **2CH**. The current mode is shown by the lighting of the corresponding indicator.

#### DIGITAL:

Select this mode to reproduce signals received at the **OPTICAL** or the **COAXIAL** terminal on the rear panel. When both **OPTICAL** and **COAXIAL** terminals receive signals, the signals at the **OPTICAL** terminal are selected.

#### 4CH:

Select this mode to reproduce signals received at the analog input **FRONT** and **SURROUND** terminals on the rear panel in 4-channel surround sound mode. (The center speaker is not used in this mode.)

#### 2CH:

Select this mode to reproduce signals received at the analog input **FRONT** terminal on the rear panel. (The **IXI PROLOGIC** surround mode can be used in this mode.)

#### 2 MODE selector button and indicators

Press this button repeatedly to select the desired surround mode between **on** (**DTS**, **IXI DIGITAL**, **IXI PROLOGIC**) and **off**. The current mode is shown by the lighting of the corresponding indicator.

\* If a DTS or Dolby Digital encoded signal is inputted when the surround mode is off, the corresponding indicator lights up dimly.

#### DTS:

Select this mode to reproduce a DTS encoded input source.

This mode can be selected only when the input signal is encoded with DTS and the input mode is set to **DIGITAL**.

#### IXI DIGITAL:

Select this mode to reproduce a Dolby Digital encoded input source.

This mode can be selected only when the input signal is encoded with Dolby Digital and the input mode is set to **DIGITAL**.

#### IXI PROLOGIC:

Select this mode to reproduce a Dolby Prologic encoded input source.

This mode cannot be selected when the input mode is set to **4CH**.

#### 3 TEST button

Press this button to reproduce a test tone from the speakers. A test tone is reproduced from each speaker as shown below. The test tone is used for adjusting volume balance among all the speakers.

FRONT L  $\longrightarrow$  CENTER  $\longrightarrow$  FRONT R  $\stackrel{}{}$  SURROUND L  $\longleftarrow$  SURROUND R  $\stackrel{}{}$ 

\* Not all of the speakers reproduce the test tone depending on the setting of the SPEAKER MODE switch (18).

#### **4** MUTE button and indicator

Press this button to cut off sound output temporarily. When this function is active, the indicator lights up. Press this button again to restore sound output.

\* Sound output will also be restored by changing the status of this system between standby and power-on modes, and changing the input mode or the surround mode.

#### **5** CENTER level control

This control is used for adjusting the sound level from the center speaker. Turn this control clockwise to increase the level, and counterclockwise to decrease the level.

#### 6 SURROUND level control

This control is used for adjusting the sound level from the surround speakers. Turn this control clockwise to increase the level, and counterclockwise to decrease the level.

#### SUBWOOFER level control

This control is used for adjusting the sound level from the subwoofer. Turn this control clockwise to increase the level, and counterclockwise to decrease the level.

#### MASTER VOLUME control

This control is used for adjusting the overall volume level of this system. Turn this control clockwise to increase the level, and counterclockwise to decrease the level.

#### 9 Headphone jack

Stereo headphones can be connected to this mini-jack for private listening. Sound output from the speakers is cut off when headphones are connected to this jack. Sounds of all channels are mixed into 2 channels and reproduced over the headphones.

#### Power indicator

Lights up when the power of this system is on.

#### Power switch

Each press of this switch changes the status of this system between standby mode and power on. When the power is on, the power indicator (10) lights up.

 Note that this system uses a small amount of power in the standby mode.

## **12** SPEAKER OUTPUTS

#### FRONT:

Connect one satellite speaker with a 3 m cord to the L terminal and another to the R terminal. They are used as the front speakers.

#### SURROUND:

Connect one satellite speaker with a 7 m cord to the L terminal and the other to the R terminal. They are used as the surround speakers.

#### **CENTER:**

Connect one satellite speaker with a 3 m cord to this terminal. It is used as the center speaker.

#### S. WOOFER:

Connect the subwoofer to this terminal.

#### **B** SPEAKER MODE switch

Normally, set this switch to **5CH**. According to your preference, set this switch to another position.

#### SCH-

All speakers are used in this mode.

#### 4CH:

Select this position when you will not use the center speaker. In this mode, center sound is mixed and outputted from the front L and R speakers.

#### 2CH

Select this position when you will not use the center and surround speakers. In this mode, sounds of all channels are mixed and reproduced from the front L and R speakers as virtual surround sounds. [The surround speakers reproduce the same sounds as the front speakers (except for the test tone).]

#### DC IN connector

Connect the supplied AC adaptor to this connector.

#### **(b)** DIGITAL INPUTS

External units with digital signal output terminals can be connected to these terminals.

Input signals received at the **OPTICAL** terminal have priority over the signals at the **COAXIAL** terminal.

#### **OPTICAL:**

Connect an external unit (a DVD/CD player, an MD recorder, a video game player, etc.) with an optical digital output terminal to this terminal by using the supplied optical cable.

#### COAXIAL:

Connect an external unit (a DVD/CD player, an MD recorder, a video game player, etc.) with a coaxial digital output terminal to this terminal by using the supplied RCA pin-plug cable.

#### **(16)** ANALOG INPUTS

Connect the analog signal output terminals of an external unit to these mini-jack terminals by using the supplied mini plug cables or commercially available pin-to-mini plug cables.

#### FRONT:

Connect the analog (stereo) signal output terminal of an external unit to this terminal by using the supplied mini plug cable. When you connect a sound board on a computer which has 4-channel output terminals, connect the front channel output terminal of the sound board to this terminal.

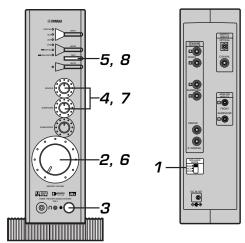
#### SURROUND:

When you connect a sound board on a computer which has 4-channel output terminals, connect the rear channel output terminal of the sound board to this terminal.

## Adjusting speaker balance

This procedure lets you adjust the sound output level balance between the front, center and surround speakers by using the built-in test tone generator. Make this adjustment so that each speaker output level is about the same when heard at the listening position. This is important for high performance of the built-in DTS decoder and Dolby Digital decoder.

 Once you have completed this adjustment, you can adjust the overall volume level of this system by using only the MASTER VOLUME control.



- 1 Set the SPEAKER MODE switch to "5CH".
- 2 Turn the MASTER VOLUME control fully counterclockwise to decrease the volume to minimum.
- 3 Turn on this system.
- 4 Set the CENTER and SURROUND level controls at the center position.



- **5** Press the TEST button.
- 6 Adjust the master volume to the desired level.
  - \* You will hear a test tone (so called pink noise) from each speaker for about two seconds in the following order.

FRONT L  $\longrightarrow$  CENTER  $\longrightarrow$  FRONT R  $\stackrel{\uparrow}{}$  SURROUND L  $\longleftarrow$  SURROUND R  $\stackrel{\downarrow}{}$ 

- 7 Adjust the CENTER and SURROUND level controls while listening to the test tones so that their levels become about the same as the front speakers' level.
  - \* Adjust the right-left volume balance of the front speakers and the surround speakers by changing the position of each speaker.
- 8 When the adjustment is completed, press the TEST button.
  - \* The test tone stops .

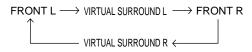
#### Notes

#### When the SPEAKER MODE switch is set to "4CH":

The test tone for the center channel is reproduced from both the left and right front speakers at the same time.

#### When the SPEAKER MODE switch is set to "2CH":

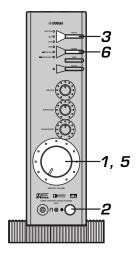
The test tones for the left and right surrounnd channels are reproduced from the left and right front speakers respectively. The output order of the test tones is as follows.



 Adjust the subwoofer level while listening to playback sounds of a source.

## Playing a source

This section explains how to turn on this system and select input sources. Before turning on this system, turn on the external audio unit to be used.



- 1 Turn the MASTER VOLUME control fully counterclockwise to decrease the volume to minimum.
- **2** Turn on this system.
- 3 Select the appropriate input mode by pressing the INPUT selector button.
  - \* The indicator for the selected input mode lights up.
  - \* Refer to the "Controls & connectors" on page 6 for details about the input modes.
- 4 Play a source on the external unit.
- 5 Adjust the volume to the desired level.
- 6 Select a desired surround mode.
  - \* Refer to the "Controls & connectors" on page 6 for details about the surround modes.

# **Troubleshooting**

Refer to the chart below if this system 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 AC adaptor and contact your authorized YAMAHA dealer or service center.

Problem	Cause	What to Do
No sound from the speakers or subwoofer.	The AC adaptor is not properly plugged into the AC receptacle.	Insert the AC adaptor firmly into the AC receptacle.
	The power of the amplifier unit is set in the standby mode.	Turn on the power by pressing the power switch. (The power indicator lights up.)
	Connections are faulty or incomplete.	Make the connections again.
	The appropriate input mode is not selected.	Select the appropriate input mode by pressing the INPUT selector button.
	The volume setting is low.	Turn the MASTER VOLUME control clockwise to increase the volume.
	The MUTE function is active. (The indicator on the left side of the MUTE button is lit.)	Press the MUTE button to cancel this function.
No sound from the surround speakers	The SURROUND level control is set to minimum.	Turn the SURROUND level control clockwise to increase the level.
	The surround mode is off.	Select the appropriate surround mode by pressing the MODE button. If no mode can be selected, change the input source to another which is encoded with DTS, Dolby Digital or Dolby Prologic.
No sound from the center speaker	The CENTER level control is set to minimum.	Turn the CENTER level control clockwise to increase the level.
	The SPEAKER MODE switch on the rear panel of the amplifier unit is set to "2CH" or "4CH".	Set the SPEAKER MODE switch to "5CH".
	The surround mode is off.	Select the appropriate surround mode by pressing the MODE button. If no mode can be selected, change the input source to another which is encoded with DTS, Dolby Digital or Dolby Prologic.
No sound from the center and surround speakers though the DTS or IXI DIGITAL mode indicator is dimly illuminated.	Dim illumination of an indicator means that signals encoded with the corresponding format (DTS or Dolby Digital) is inputted to this system. In this case, the signals are mixed into 2 channels and reproduced from the front speakers only.	Press the MODE button for the appropriate surround format. The indicator turns bright, and the center and surround speakers reproduce sounds since the surround format is decoded.
Though a Dolby Digital encoded source is inputted to this system, the IXI DIGITAL mode indicator is dimly illuminated and the IXI PROLOGIC mode indicator is brightly illuminated.	A Dolby Digital 2-channel encoded source is inputted to this system.	If the input source is compatible with 5.1 channels, select "5.1-channel mode" on the player which is sending signals to this system. (If the input source is not compatible with 5.1 channels, you can enjoy the source in a multi-channel mode by using the DD PROLOGIC surround mode.)
Sound is distorted.	The level of the input signal is too high.	Turn down the output level on the connected component.
Noise.	The level of the input signal is too low.	Turn up the output level on the connected component.
	Connections are faulty or incomplete.	Make the connections again.
	The amplifier unit is too close to the monitor.	Place the amplifier unit away from the monitor.

# **Specifications**

# **Amplifier unit**

Output Power per Channe	I		
Sat	ellite: 6W (1 kHz, 4Ω, 10% THD)		
Subwoof	er: 18W (100 Hz, 4Ω, 10% THD)		
Input Sensitivity	200 mV		
Headphone Jack Output Level/Output Impedance			
•	450 mV/30Ω (1 kHz, 200 mV)		
Frequency Response	40 Hz–20 kHz		
Dimensions (W $\times$ H $\times$ D)	113 $ imes$ 272 $ imes$ 206 mm		
	$(4-7/16" \times 10-11/16" \times 8-1/8")$		

Weight ...... 1.5 kg (3.3 lbs.)

#### Subwoofer

Type
<b>Driver</b>
mpedance
Dimensions (W x H x D) 220 mm x 224 mm x 222 mm (8-11/16" × 8-13/16" × 8-3/4")
<b>Neight</b> 3.4 kg (7.5 lbs.)

### Satellite speakers

Туре	Full range speaker system Magnetically shielded type
Driver	5 cm (2") spruce cone type
Impedance	4Ω
Dimensions (W x H x D)	70 mm $\times$ 95 mm $\times$ 118 mm (2-3/4" $\times$ 3-3/4" $\times$ 4-5/8")
Weight	0.4 kg (0.9 lbs.)

#### **Accessories**

AC adaptor (PA-SR601)  $\times$  1 Stereo mini plug cable (1.8m)  $\times$  2 Optical fiber cable (1.0m)  $\times$  1 RCA pin-plug cable (1.8m)  $\times$  1 Stand for the amplifier unit  $\times$  1 Screw  $\times$  2 Pad  $\times$  24 Fastener  $\times$  1

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

