



UAB

Front Surround System

# YAS-306



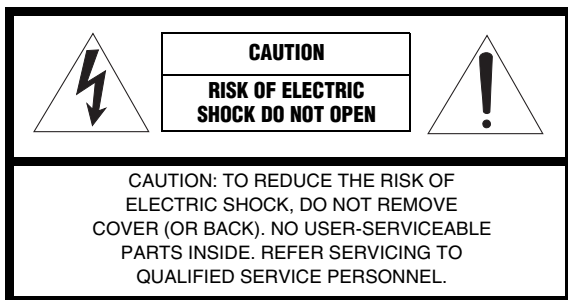
## Quick Start Guide

musicCast

For more detailed information, refer to the Owner's Manual on the CD-ROM.

**Caution: Do not attempt to play this CD-ROM in an audio player.**

# IMPORTANT SAFETY INSTRUCTIONS



• 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.

- 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.



**IMPORTANT**

Please record the serial number of this unit in the space below.

MODEL:

Serial No.:

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

**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.

## FCC INFORMATION (for US customers)

### 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 Corporation of America A/V Division, 6600 Orangethorpe Avenue, Buena Park, CA 90620, USA.

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

- This device complies with Part 15 of FCC Rules and Industry Canada licence-exempt RSS standard(s).
- Operation is subject to the following two conditions: 1) this device may not cause harmful interference, and 2) this device must accept any interference received including interference that may cause undesired operation.

## NOTICE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This equipment complies with FCC/IC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines and RSS-102 of the IC radio frequency (RF) Exposure rules. This equipment should be installed and operated keeping the radiator at least 20cm or more away from person's body.

This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

## COMPLIANCE INFORMATION STATEMENT (DECLARATION OF CONFORMITY PROCEDURE)

Responsible Party: Yamaha Corporation of America A/V Division  
Address: 6600 Orangethorpe Avenue, Buena Park, CA 90620  
Telephone: 714-522-9011  
Type of Equipment: Front Surround System  
Model Name: YAS-306

This device complies with Part 15 of the FCC Rules. Operation is subject to the following conditions:

- 1) this device may not cause harmful interference, and
- 2) this device must accept any interference received including interference that may cause undesired operation.

## FOR CANADIAN CUSTOMERS

To prevent electric shock, match wide blade of plug to wide slot and fully insert.  
CAN ICES-3 (B)/NMB-3 (B)

## CAUTION: READ THIS BEFORE OPERATING YOUR UNIT.

- 1 To assure the finest performance, please read this manual carefully. Keep it in a safe place for future reference.
- 2 Install this sound system in a well ventilated, cool, dry, clean place - away from direct sunlight, heat sources, vibration, dust, moisture, and/or cold. For proper ventilation, allow the following minimum clearances.  
Top: 5 cm (2 in), Rear: 5 cm (2 in), Sides: 5 cm (2 in)
- 3 Locate this unit away from other electrical appliances, motors, or transformers to avoid humming sounds.
- 4 Do not expose this unit to sudden temperature changes from cold to hot, and do not locate this unit in an environment with high humidity (i.e. a room with a humidifier) to prevent condensation inside this unit, which may cause an electrical shock, fire, damage to this unit, and/or personal injury.
- 5 Avoid installing this unit where foreign object may fall onto this unit and/or this unit may be exposed to liquid dripping or splashing. On the top of this unit, do not place:
  - Other components, as they may cause damage and/or discoloration on the surface of this unit.
  - Burning objects (i.e. candles), as they may cause fire, damage to this unit, and/or personal injury.
  - Containers with liquid in them, as they may fall and liquid may cause electrical shock to the user and/or damage to this unit.
- 6 Do not cover this unit with a newspaper, tablecloth, curtain, etc. in order not to obstruct heat radiation. If the temperature inside this unit rises, it may cause fire, damage to this unit, and/or personal injury.
- 7 Do not plug in this unit to a wall outlet until all connections are complete.
- 8 Do not operate this unit upside-down. It may overheat, possibly causing damage.
- 9 Do not use force on switches, knobs and/or cords.
- 10 When disconnecting the power cable from the wall outlet, grasp the plug; do not pull the cable.
- 11 Do not clean this unit with chemical solvents; this might damage the finish. Use a clean, dry cloth.
- 12 Only voltage specified on this unit must be used. Using this unit with a higher voltage than specified is dangerous and may cause fire, damage to this unit, and/or personal injury. Yamaha will not be held responsible for any damage resulting from use of this unit with a voltage other than specified.
- 13 To prevent damage by lightning, keep the power cable and outdoor antennas disconnected from a wall outlet or this unit during a lightning storm.
- 14 Do not attempt to modify or fix this unit. Contact qualified Yamaha service personnel when any service is needed. The cabinet should never be opened for any reasons.
- 15 When not planning to use this unit for long periods of time (i.e. vacation), disconnect the AC power plug from the wall outlet.
- 16 Be sure to refer to the “Troubleshooting” section of the Owner’s Manual on the CD-ROM for common operating errors before concluding that this unit is faulty.
- 17 Before moving this unit, press  $\phi$  to set it to standby mode and disconnect the AC power plug from the wall outlet.
- 18 Condensation will form when the surrounding temperature changes suddenly. Disconnect the power cable from the outlet, then leave this unit alone.
- 19 When using this unit for a long time, this unit may become warm. Turn the power off, then leave this unit alone for cooling.
- 20 Install this unit near the AC outlet and where the AC power plug can be reached easily.
- 21 The batteries shall not be exposed to excessive heat such as sunshine, fire or the like. When you dispose of batteries, follow your regional regulations.
- 22 Excessive sound pressure from earphones and headphones can cause hearing loss.
- 23 Keep the product out of reach of children to avoid them swallowing small parts.

This unit is not disconnected from the AC power source as long as it is connected to the wall outlet, even if this unit itself is turned off by  $\phi$ . This state is called the standby mode. In this state, this unit is designed to consume a very small quantity of power.

### WARNING

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

Do not use this unit within 22 cm (9 inches) of persons with a heart pacemaker implant or defibrillator implant.

Radio waves may affect electro-medical devices.  
Do not use this unit near medical devices or inside medical facilities.

The name plate for YAS-306 is located on the bottom of the unit.

We, Yamaha Music Europe GmbH hereby declare that this unit is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.



**Yamaha Music Europe GmbH**

Siemensstr. 22-34 25462 Rellingen, Germany

Tel: +49-4101-303-0

## ■ Notes on remote controls and batteries

- Do not spill water or other liquids on the remote control.
- Do not drop the remote control.
- Do not leave or store the remote control in the following conditions:
  - places of high humidity, such as near a bath
  - places of high temperatures, such as near a heater or stove
  - places of extremely low temperatures
  - dusty places
- Insert the battery according to the polarity markings (+ and -).
- If the batteries grow old, the effective operation range of the remote control decreases considerably. If this happens, replace the batteries with two new ones as soon as possible.
- If the batteries run out, immediately remove them from the remote control to prevent an explosion or acid leak.
- If you find leaking batteries, discard the batteries immediately, taking care not to touch the leaked material. If the leaked material comes into contact with your skin or gets into your eyes or mouth, rinse it away immediately and consult a doctor. Clean the battery compartment thoroughly before installing new batteries.
- Do not use old batteries together with new ones. This may shorten the life of the new batteries or cause old batteries to leak.
- Do not use different types of batteries (such as alkaline and manganese batteries) together. Danger of explosion may happen if batteries are incorrectly replaced. Specification of batteries may be different even though they look the same.
- Before inserting new batteries, wipe the compartment clean.
- Keep batteries away from children. If a battery is accidentally swallowed, contact your doctor immediately.
- When not planning to use the remote control for long periods of time, remove the batteries from the remote control.
- Do not charge or disassemble the supplied batteries.

### Information for users on collection and disposal of old equipment and used batteries:



These symbols on the products, packaging, and/or accompanying documents mean that used electrical and electronic products and batteries should not be mixed with general household waste.

For proper treatment, recovery and recycling of old products and used batteries, please take them to applicable collection points, in accordance with your national legislation.



By disposing of these products and batteries correctly, you will help to save valuable resources and prevent any potential negative effects on human health and the environment which could otherwise arise from inappropriate waste handling.



For more information about collection and recycling of old products and batteries, please contact your local municipality, your waste disposal service or the point of sale where you purchased the items.

### Information on Disposal in other Countries outside the European Union:

These symbols are only valid in the European Union. If you wish to discard these items, please contact your local authorities or dealer and ask for the correct method of disposal.



### Note for the battery symbol (bottom two symbol examples):

This symbol might be used in combination with a chemical symbol. In this case it complies with the requirement set by the EU Battery Directive for the chemical involved.

Pb

## ■ 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.

For more detailed information, refer to the Owner's Manual on the CD-ROM. To view the Owner's Manual, click on "English" in the screen displayed automatically when you insert the CD-ROM into your PC, or click on the model name if the screen to select models is displayed, and then click on "English" in the next screen. Then, follow the onscreen instructions. If the screen is not displayed automatically, open the "index.html" in the CD-ROM.

### Caution: Do not attempt to play this CD-ROM in an audio player.

The Owner's Manual contained in the CD-ROM can be downloaded from the following website.

<http://download.yamaha.com/>

# Contents

## PREPARATION

---

<b>Supplied items .....</b>	<b>7</b>
<b>Part names and functions .....</b>	<b>8</b>
<b>Installation .....</b>	<b>10</b>
<b>Connecting the unit .....</b>	<b>11</b>
Connecting the unit to a TV .....	11
Connecting the unit to other devices.....	12

## PLAYBACK

---

<b>Operations.....</b>	<b>13</b>
------------------------	-----------

## NETWORKS

---

<b>Networks .....</b>	<b>17</b>
Network functions and the MusicCast CONTROLLER app .....	17
Connecting to a network .....	17

## SETTINGS

---

<b>Using the TV's remote control to adjust the unit's volume .....</b>	<b>21</b>
Clearing all learned commands .....	23

### **About this Quick Start Guide**

This Quick Start Guide provides basic setup to use the unit and feature of the unit. For more information, refer to Owner's Manual in the supplied CD-ROM.

In this booklet, iOS and Android mobile devices are collectively referred to as "mobile devices". The specific type of mobile device is noted in explanations as needed.

#### **NOTE**

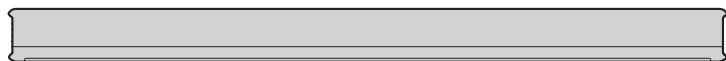
This indicates precautions for use of the product and its feature limitations.

#### **HINT**

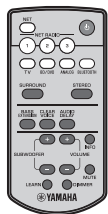
This indicates supplementary explanations for better use.

# Supplied items

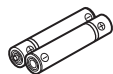
Make sure you have received all of the following items.



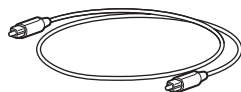
The unit



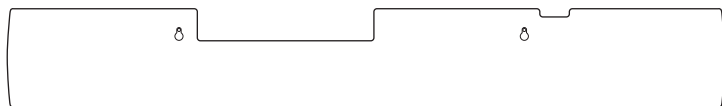
Remote control



Batteries x 2  
(AAA, R03, UM4)



Optical digital audio cable  
(1.5 m [4.9 ft])



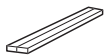
Mounting template

Use when mounting the unit on a wall. See page 9 in the Owner's Manual.



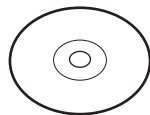
Cover (for the TV remote repeater)

See page 9 in the Owner's Manual.



Spacers x 2

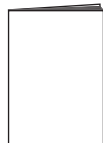
Use when mounting the unit on a wall. See page 9 in the Owner's Manual.



Owner's Manual  
CD-ROM



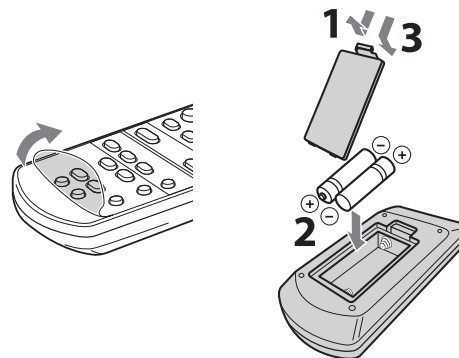
Quick Start Guide



MusicCast  
Setup Guide

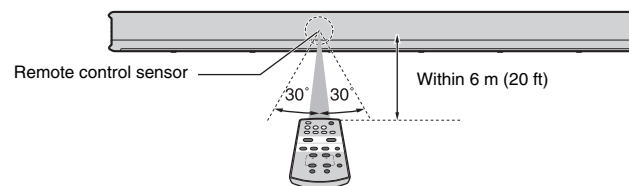
## Preparing the remote control

Peel off the protection sheet before use.



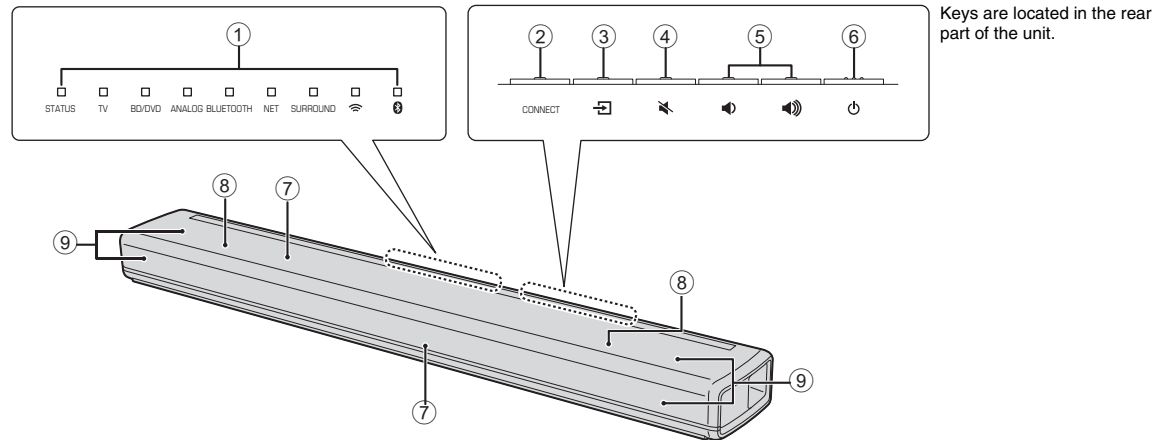
## Operating range of the remote control

Operate the remote control within the range as shown below. When the unit is mounted on a wall, point the remote control at the remote control sensor on the top panel (p. 10).



# Part names and functions

## The unit (front panel/top panel)



### ① Indicators

The indicators on the top panel flash or glow, to show the operation and setting status. In this manual, illustrations of the nine in-line indicators are used for explanation as necessary.

□ : Off      ■ : Glows      ☀ : Flashes

**Example:** When the STATUS indicator glows, and the Wi-Fi indicator flashes

■ □ □ □ □ □ □ ☀ □

### ② CONNECT key

Use to connect the unit to a network using the MusicCast CONTROLLER app (p. 18).

### ③ (input) key

Select an input source to be played back (p. 13).

### ④ (mute) key

Mute the audio output. Press the key again to unmute (p. 14).

### ⑤ (volume +/-) keys

Adjust the volume (p. 14).

### ⑥ (power) key

Turn on or off the unit (p. 13).

#### **HINT**

- The unit may automatically turn off when the auto power standby function is enabled (p. 29 in the Owner's Manual).

### ⑦ Remote control sensors

Receive infrared signals from the remote control of the unit (p. 7) or TV's remote control (p. 10). The remote control sensors are located on the front panel and on the top panel of the unit (p. 10).

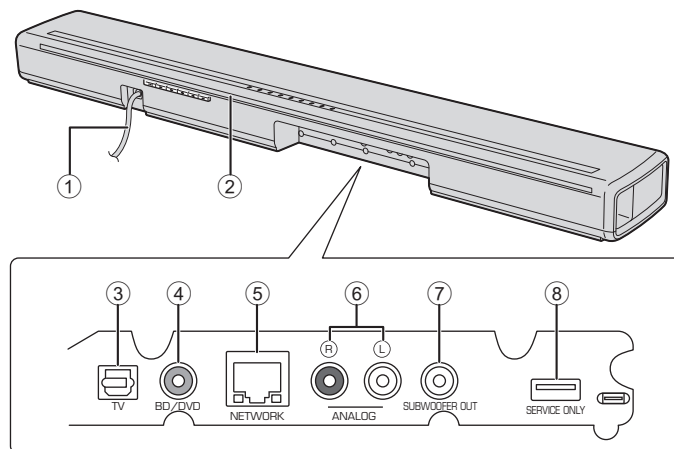
### ⑧ Dual built-in subwoofers

The built-in subwoofers are located in the top part of the unit.

### ⑨ Speakers



## The unit (rear panel)



### ① Power cable

For connecting to an AC wall outlet (p. 11).

### ② TV remote repeater

Used to transmit signals from the TV's remote control, received by the unit's remote control sensor, to the TV (p. 10).

### ③ TV input jack

For connecting to a TV with an optical digital audio cable (p. 11).

### ④ BD/DVD input jack

For connecting to a playback device, such as a Blu-ray Disc (BD) player, with a coaxial digital audio cable (p. 12).

### ⑤ NETWORK jack

For connecting to a network with a network cable (p. 17).

### ⑥ ANALOG input jacks

For connecting to an external device with a stereo cable (p. 11, 12).

### ⑦ SUBWOOFER OUT jack

For connecting to an external subwoofer with an RCA mono cable (p. 29 in the Owner's Manual).

### ⑧ SERVICE ONLY jack

Used only for after-sales servicing. This jack is not normally used.

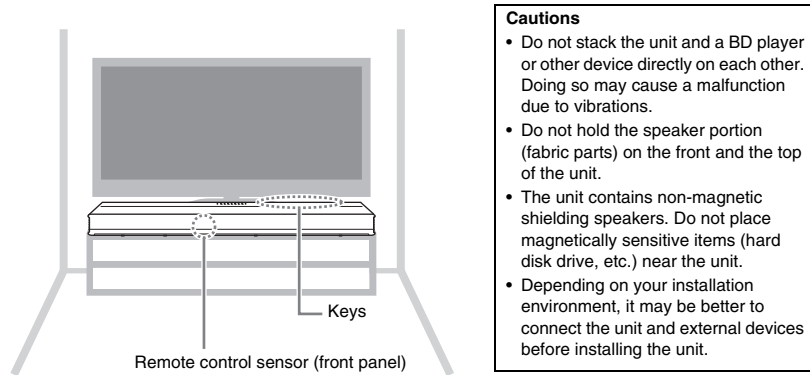
# Installation

The unit can be installed on a TV stand or mounted on a wall.

It is equipped with remote control sensors positioned to support installation on a TV stand or mounting on a wall.

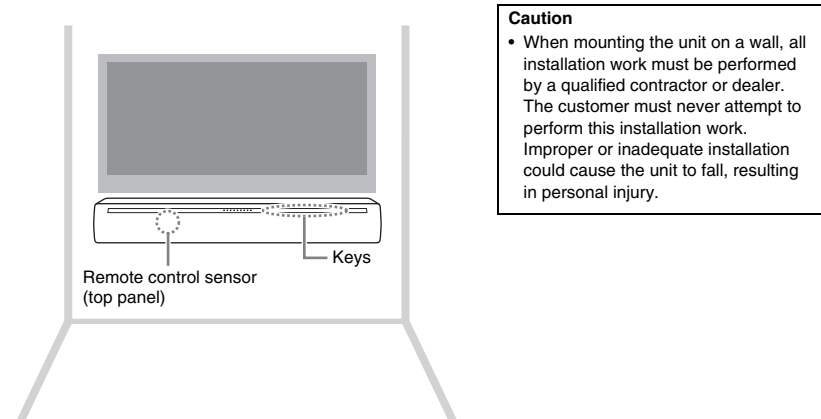
## Installing the unit on a TV stand, etc.

Position the unit so that the keys are on the far side of the unit.



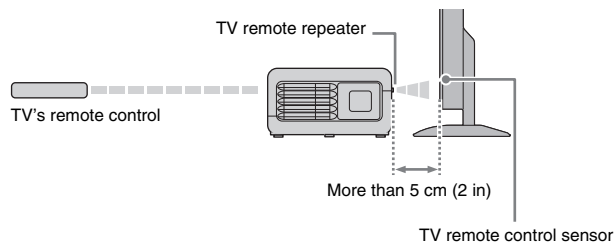
## Mounting the unit on a wall

Mount the unit on the wall so that the keys face upwards. Follow the instructions on page 9 in the Owner's Manual when mounting the unit on a wall.



## About the TV remote repeater

The unit receives signals from the TV's remote control via the remote control sensor located on the front panel. It then transmits these signals from the TV remote repeater located on the rear panel. See page 8 in the Owner's Manual for more information.



# Connecting the unit

The way in which the unit is connected will vary depending upon the type of jacks with which the TV or playback devices (BD/DVD player, etc.) are equipped, and how the TV and playback devices are connected. Refer to the connection examples on pages 11 and 12 to connect the unit.

- 1 Be sure that the unit's power cable is not plugged into an AC wall outlet.**
- 2 Refer to the connection examples on pages 11 and 12 to connect the unit to a TV and playback devices.**

To connect the unit using the supplied optical digital audio cable, remove the cap, confirm orientation, and then plug it firmly into the TV input jack.



## HINT

- Connect the supplied optical digital audio cable to the TV input jack, a coaxial digital audio cable to the BD/DVD input jack, and a stereo cable to the ANALOG input jacks.

- 3 Plug the unit's power cable into an AC wall outlet.**
- 4 Set TV volume as low as possible, or disable output from the TV's built-in speaker(s).**

## Caution

Do not use excessive force when inserting the cable plug. Doing so may damage the cable plug or terminal.

## HINT

- If a setting to disable the speaker output is not available on your TV in step 4, you may disable it by connecting headphones to the headphones jack on the TV. For details, refer to the manuals of the TV.
- The TV and BD/DVD input jacks support the following audio signals.
  - PCM (2 channel)
  - Dolby Digital (up to 5.1 channel)
  - DTS Digital Surround (up to 5.1 channel)

## Connecting the unit to a TV

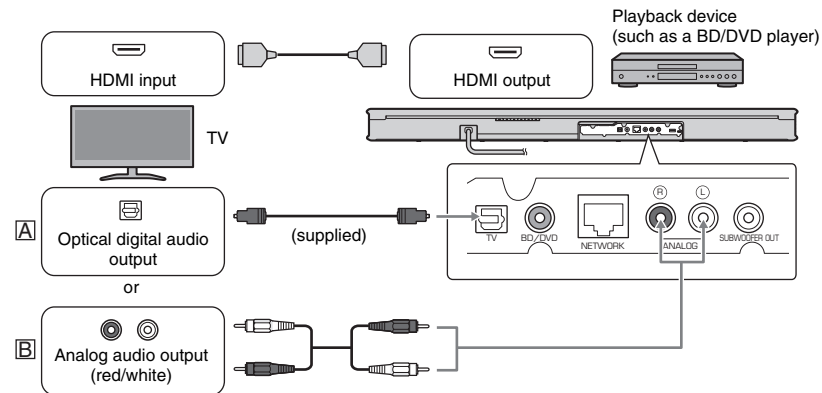
### Connection method 1: Connect the unit to a TV

#### A If the TV has an optical audio output jack


Connect one end of the supplied optical digital audio cable to the unit's TV input jack, and the other to the optical digital audio output jack on the TV.

#### B If the TV has no optical audio output jack

Use an optional stereo cable to connect the unit's ANALOG input jacks to the analog audio output jacks on the TV.



### To watch TV or play content from other devices

<b>Change the TV's input source</b>	<b>When watching TV</b>	Switch to the input source for watching TV (select the same input source used before the unit was connected to the TV).
	<b>When playing content from a device</b>	Switch to the input source for the BD/DVD player or other device.
<b>Select the unit's input source</b>		Press the input keys on the unit's remote control to change the unit's input source. 
	<b>NOTE</b>	<ul style="list-style-type: none"> <li>When sound from the TV cannot be output in a digital audio format (Dolby Digital or DTS Digital Surround), be sure that the TV's digital audio output is set to PCM (2ch).</li> </ul>

## Connection method 2: Connect the unit to a playback device (BD/DVD player, etc.)

Use this method to connect the unit to a playback device when it cannot be connected to the TV as explained with method 1 because the TV has no optical digital audio output jack or analog audio output jacks.

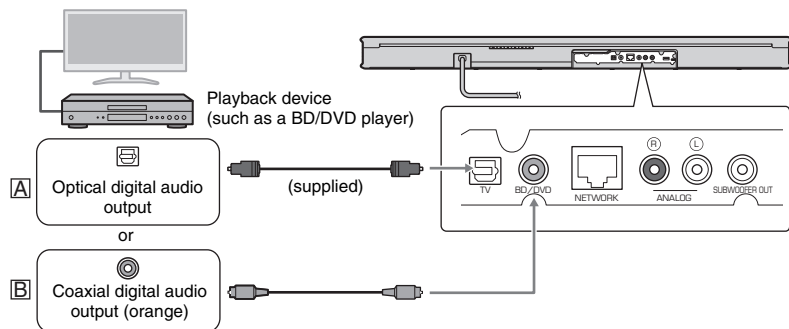
This method can also be used to connect the unit to a playback device, after it has been connected to the TV, when sound from a BD/DVD player or other device connected to the TV is not output as surround sound.

### A If the playback device has an optical digital audio output jack

Connect one end of the supplied optical digital audio cable to the unit's TV input jack, and the other to the optical digital audio output jack on the playback device.

### B If the playback device has no optical digital audio output jack

Connect one end of an optional coaxial digital audio cable to the unit's BD/DVD input jack, and the other to the coaxial digital audio output jack on the playback device.

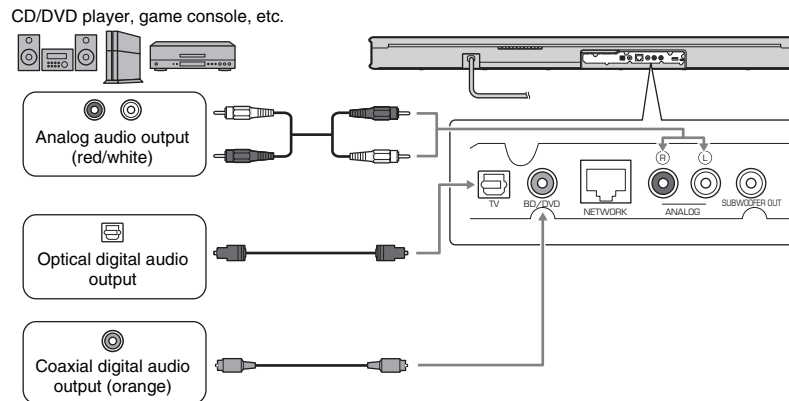


## To watch video from a playback device connected to the TV

<b>Change the TV's input source</b>	Switch to the input source for the BD/DVD player or other playback device connected to the TV.
<b>Select the unit's input source</b>	Press the input keys on the unit's remote control to change the unit's input source. 

## Connecting the unit to other devices

Connect devices such as CD/DVD players or game consoles to the unit for dynamic sound playback. Use an optical digital audio cable, coaxial digital audio cable, or stereo cable to connect audio output jack(s) on each playback device to input jack(s) on the unit.



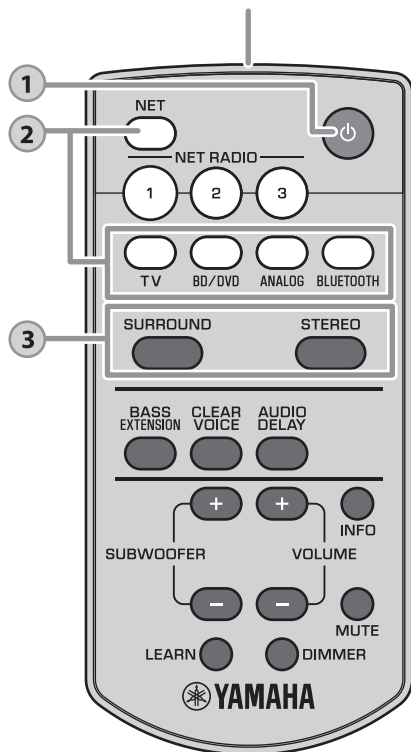
## To watch video from an external device

<b>Change the TV's input source</b>	Switch to the input source for the external device.
<b>Select the unit's input source</b>	To play sound from an external device, press the input key (ANALOG, TV, or BD/DVD) that corresponds to the jack(s) on the unit to which the external device is connected.  <b>NOTE</b> <ul style="list-style-type: none"> <li>When sound from the external device cannot be output in a digital audio format (Dolby Digital or DTS Digital Surround), be sure that the device's digital audio output is not set to PCM (2ch).</li> <li>If volume can be adjusted using the device connected to the unit's ANALOG input jacks, set that device's volume to the same level as that of other devices connected to the unit's TV and BD/DVD input jacks to prevent volume from being louder than expected.</li> </ul>

# Operations

## Remote control signal transmitter

Transmits infrared signals.

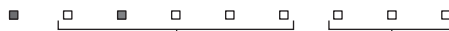


# 1

## ⏻ (power) key

Turns on or off the unit.

### Turned on



The indicator for the last input source selected glows green.

Indicates the surround setting, and network (p.17) or *Bluetooth* (p.16 in the Owner's Manual) connection status.

### Turned off (network standby function enabled, p.30 in the Owner's Manual)



Glow (red)

### Turned off



### HINT

- When the unit is turned on for the first time after purchase, the indicator flashes slowly.



While the indicator is flashing, network settings from your iOS device (an iPhone, etc.) can be applied to the unit to connect the unit to a wireless network. For details on settings, see "Playing back music with AirPlay" (p.24 in the Owner's Manual). Press any key on the remote control to cancel this function if it will not be used.

The indicator does not flash if the unit's NETWORK jack is connected to a router using a cable (wired connection).

# 2

## Input keys

Select an input source to be played back.

- TV** ..... TV audio or sound from a device connected to the unit's TV input jack
- BD/DVD** ..... Sound from a device connected to the BD/DVD input jack
- ANALOG** ..... Sound from a device connected to the ANALOG input jacks
- BLUETOOTH** ..... Sound from a *Bluetooth* connected device
- NET** ..... Audio acquired via a network  
The last audio source listened to is selected when the NET key is pressed.

The indicator for the selected input source glows.  
(Example: when TV is selected)



### HINT

- To play sound from the device connected to the TV or to watch video from the device, set the TV's input source to the playback device.
- For playback from a *Bluetooth* device, refer to page 16 in the Owner's Manual. For audio playback via a network, refer to pages 22 to 25 in the Owner's Manual.

# 3

## SURROUND and STEREO keys

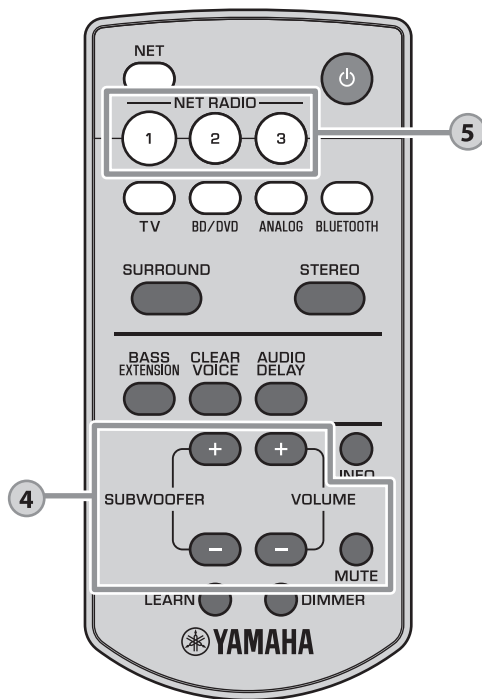
Switch between surround and stereo (2 channels) playback. When surround playback is selected, you can enjoy a realistic sound effect using Yamaha's exclusive AIR SURROUND XTREME.

**SURROUND** ..... Glows (surround playback)

**STEREO** ..... Off (stereo playback)

### HINT

- Dolby Pro Logic II is used when 2-channel stereo signal is played in surround.
- The TV PROGRAM, MOVIE, MUSIC, SPORTS, or GAME surround mode can be selected using the MusicCast CONTROLLER app (p.18) installed on a mobile device.



**4**

### SUBWOOFER (+/-) keys

Adjust the volume of the subwoofer.



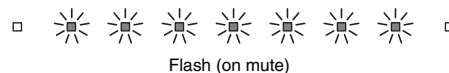
### VOLUME (+/-) keys

Adjust the volume of the unit.



### MUTE key

Mute the audio output. Press the key again to unmute.



**5**

### NET RADIO (1-3) keys

Assign audio input via a network (Internet radio stations, music files stored on media servers, etc.) to the NET RADIO key.

#### Assign a station

- 1 Play the desired Internet radio station (p.22 to 25 in the Owner's Manual).
- 2 Hold down the NET RADIO 1, 2, or 3 key for more than 3 seconds.

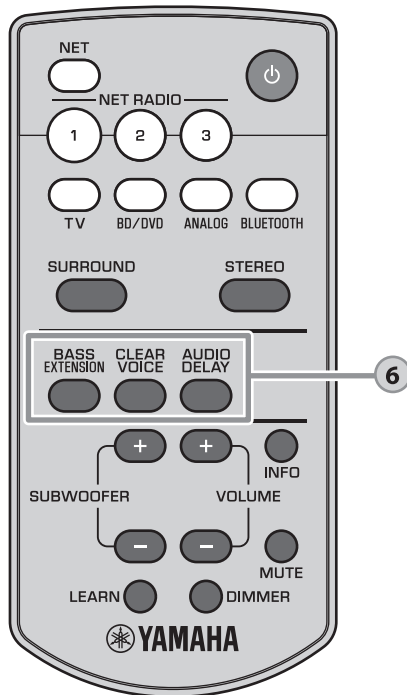


#### Tune-in to an assigned Internet radio station

- 1 Press the NET RADIO 1, 2, or 3 key to which the desired Internet radio station has been assigned.

#### HINT

- When an Internet radio station is assigned to the NET RADIO 1, 2, or 3 key on the remote control, the same station is also registered with No. 1, 2, or 3 in the MusicCast CONTROLLER app's "Favorites". When an Internet radio station is registered with No. 1, 2, or 3 in "Favorites" with the MusicCast CONTROLLER app, the same station is also assigned to the NET RADIO 1, 2, or 3 key on the remote control.



6

### BASS EXTENSION key

Enable/disable the bass extension function. When this function is enabled, you can enjoy a powerful bass sound with the Yamaha original bass boost technology “Advanced Bass Extension Processing.”



Enabled: Flashes three times and goes out  
 Disabled: Flashes once and goes out

### CLEAR VOICE key

Enable/disable the clear voice function. When this function is enabled, human voices such as lines in movies and TV shows, or news and sport commentary, are played clearly.



Enabled: Flashes three times and goes out  
 Disabled: Flashes once and goes out

### AUDIO DELAY key

Adjust the audio delay to synchronize the sound with the video when the video image on the TV may seem delayed with respect to the sound. Follow the procedure below to adjust the audio delay.

#### NOTE

- The audio delay cannot be adjusted in the following situations.
  - When *Bluetooth* or *NET* is selected as the input source.
  - When sound is distributed from the unit to one or more other MusicCast-enabled devices.

**1 Hold down the AUDIO DELAY key for more than 3 seconds.**

The indicator at far left flashes.



**2 Press the SUBWOOFER (+/-) key to adjust the audio delay.**

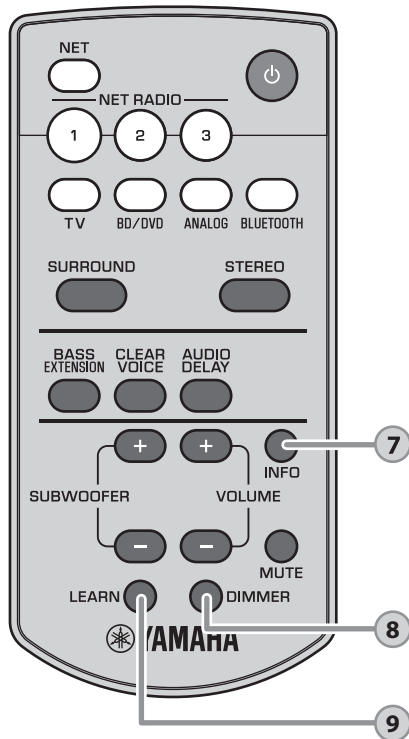
Pressing the SUBWOOFER (+) key delays the audio output timing.



**3 To finish the adjustment, press the AUDIO DELAY key.**

#### HINT

- The adjustment will be finished automatically if no operations are performed for 20 seconds.



# 7

## INFO key

While the INFO key is held down, status, including the type of audio signal being input and whether the clear voice function is enabled or disabled, can be confirmed by the glowing of indicators.

### Type of audio signal being input

DTS Digital Surround



Dolby Digital



Dolby Pro Logic II is used (when 2-channel stereo signal is played in surround)



### Unit functions and positioning

The bass extension function is enabled



The clear voice function is enabled



When positioned on top of something, such as a TV stand



When mounted on a wall



## HINT

- The unit is able to play the following types of audio signal. The indicators do not glow when analog or PCM audio signal is input.
  - Analog signal
  - PCM (2 channels)
  - Dolby Digital
  - DTS Digital Surround

# 8

## DIMMER key

Change the brightness of the indicators. Each time the key is pressed, the brightness of the indicators changes as follows.

Dim (default setting) → Off → Bright



Indicators glow brightly just after operation and change to the specified brightness after a few seconds.

# 9

## LEARN key

The unit enters learning mode, in which it can learn TV remote control commands (p.21).



# Networks

## Network functions and the MusicCast CONTROLLER app

A network connection allows you to listen to Internet radio stations or music streaming services, and to use AirPlay to play music files, or to play music files stored on your computer (media server) via this unit.

Most playback requires the “MusicCast CONTROLLER” app for mobile devices. Install and use the MusicCast CONTROLLER app on your mobile device to play music files.

Proceed from network connection to playback in the following sequence.

1 Choose a wired network connection (p. 17) or a wireless network connection (p. 18).



2 Use the MusicCast CONTROLLER app to connect the unit to a network, and register the unit as a MusicCast-enabled device (p. 18).



3 Use the MusicCast CONTROLLER app to play music over a network\* (p. 22 to 25 in the Owner’s Manual).

\* AirPlay can be used to play music files without using the MusicCast CONTROLLER app.

### NOTE

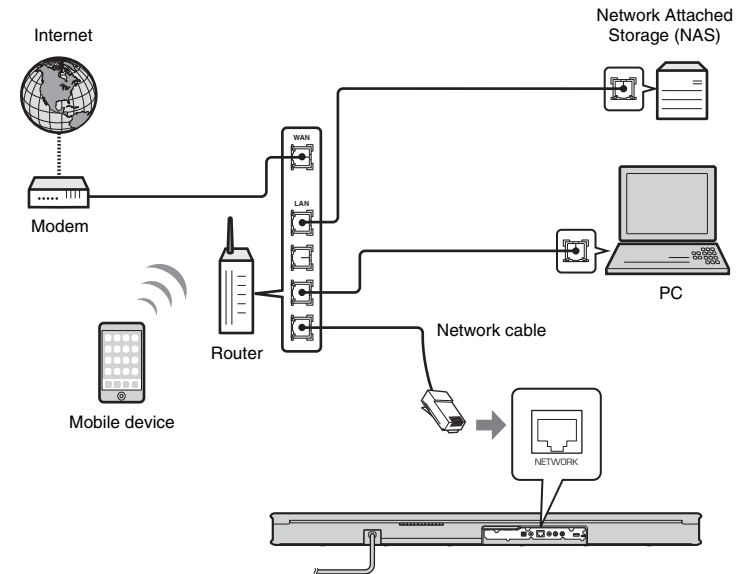
- To use network function, the unit, your PC and mobile device must be connected to the same router.
- When using a multiple SSID router, access to the unit might be restricted depending on the SSID to connect. Connect the unit and mobile device to the same SSID.
- Some security software installed on your computer, or network device settings (such as a firewall), may block the unit’s access to your computer or Internet radio stations. Should this occur, change security software and/or network device settings.
- A network connection cannot be established if the MAC address filter on your router is enabled. Check your router’s settings.
- To configure your router’s subnet mask manually, apply the same subnet used by this unit to all devices.
- Use of a broadband connection is recommended when using Internet services.
- The unit cannot be connected to a network that requires manual setup. Connect the unit to a DHCP-enabled router.

## Connecting to a network

Choose a wired or wireless network connection based on your network environment.

### Wired network connections

To use a wired network connection, connect the unit to a router via an STP network cable (category 5 or higher straight cable; not supplied).



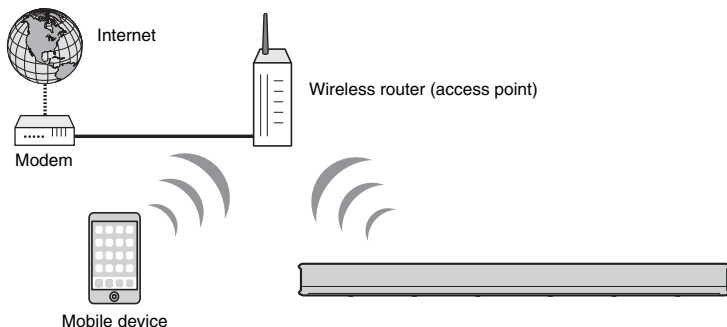
### HINT


- If network connections or settings are changed, use the MusicCast CONTROLLER app to connect the unit to a network and register the unit as a MusicCast-enabled device again (p. 18).

## Wireless network connections

Connect the unit to a wireless router (access point) to use a network.  
Refer to the following for instructions on connecting to a wireless router (access point).

- Using the MusicCast CONTROLLER app (p. 18)
- Applying iOS device (iPhone, etc.) settings to the unit (p.24 in the Owner's Manual)



The  indicator on the unit glows when the unit is connected to a wireless network.



### NOTE

- If the unit and the wireless router (access point) are too far apart, the unit may not connect to a wireless router (access point). In such case, place them close to each other.

## Connecting with the MusicCast CONTROLLER app (registering the unit as a MusicCast-enabled device)

Install the MusicCast CONTROLLER app on your mobile device to connect the unit to a network and register it as a MusicCast-enabled device.

### HINT

- Confirm that your mobile device is connected to your home router before beginning.
- This section uses MusicCast CONTROLLER app screens displayed in English on an iPhone as examples.
- MusicCast CONTROLLER app screens and menu labels are subject to change without prior notice.

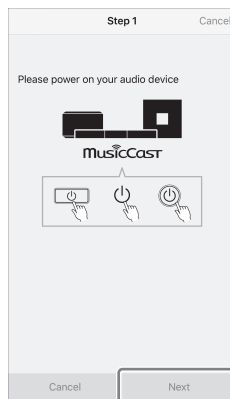
### 1 Install the MusicCast CONTROLLER app on your mobile device, and open the app.

Search for “MusicCast CONTROLLER” on the App Store or Google Play.

### 2 Tap “Setup”.



### 3 Turn on the unit, and then tap “Next”.

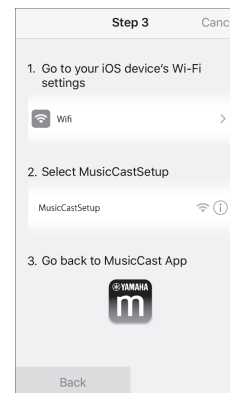


### 4 Hold down the CONNECT key until the indicator on the unit starts flashing.

### 5 Follow the on-screen instructions to configure network settings.

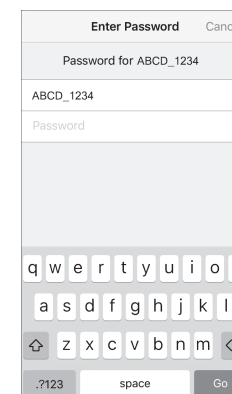
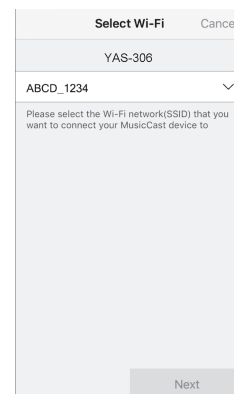
#### HINT

- When a screen like that below is displayed, follow the on-screen instructions to configure network settings.



- Use the Home button on your mobile device to return to the Home screen.
- Select “Wi-Fi” from “Settings”.
- Select “MusicCastSetup” from “CHOOSE A NETWORK...”.
- Use the Home button to return to the MusicCast CONTROLLER app.

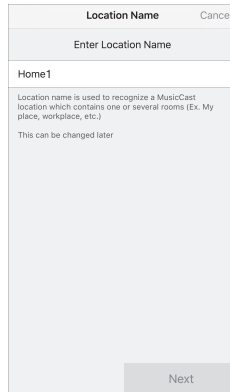
- When a screen like that at left below is displayed, select the network to which the unit will be connected and enter the router’s password (encryption key). The router’s password (encryption key) is often noted on the router itself. Refer to documentation supplied with the router for details.



## 6 To register the unit as a MusicCast-enabled device, configure the following items.


- Location name (“home”, “John’s house”, etc.)
- Name and photo of the room where the unit is installed

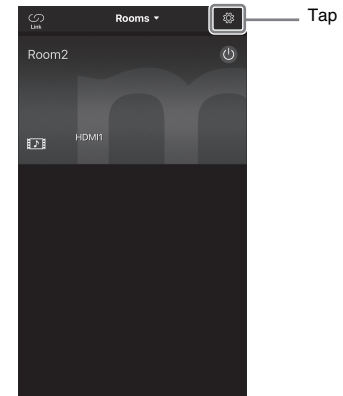
The location name, and the name and photo of the room where the unit is installed can be changed later.



Network connection with the MusicCast CONTROLLER app is now complete, and the unit has been registered as a MusicCast-enabled device.

### HINT

- If a different MusicCast-enabled device is already registered with the MusicCast CONTROLLER app, tap  (Setup) in the room selection screen, and then select “Add New Device” to add the unit to the app.



# Using the TV's remote control to adjust the unit's volume

The unit can be “taught” to read signals from a TV's remote control. This allows the TV and unit to be turned on or off simultaneously, or the volume to be adjusted, using the TV's remote control.

## NOTE

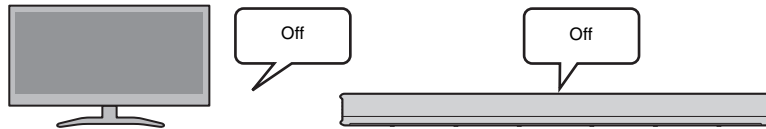
- This function is available only if the TV's remote control uses infrared (IR) signal. A remote control that uses radio signals cannot be used.

### For cable or satellite set-top box users

Use the TV's remote control (not the remote control for the cable or satellite set-top box) to teach the unit TV remote control commands. Once the unit is taught TV remote control commands, the remote control for the cable or satellite set-top box can be used to operate the unit.

## 1 Turn off the unit and the TV.

If the TV is on while the unit is learning TV remote control commands, light emitted by the TV may interfere with the learning process.




## 2 Point the unit's remote control at the appropriate remote control sensor on the unit, and hold down the LEARN key for at least 3 seconds.

The unit will enter learning mode. The unit's indicators will flash as shown below.



Green (when the unit is installed on a TV stand)  
Blue (when the unit is mounted on a wall)

## NOTE

- Only the TV's remote control and the keys on the unit are used for steps 3 through 6. The unit's remote control is not used.
- If the unit has already learned functions, indicators will glow as follows.  
Mute: BD/DVD  
Volume (-): ANALOG  
Volume (+): BLUETOOTH  
Power: NET  
If the unit is taught TV remote control commands by following steps 3 through 7, all previous learning will be cleared. To prevent this, press the LEARN or  (power) key on the unit's remote control to cancel learning mode.
- Learning takes place all at once. Be sure to teach the unit all necessary TV remote control commands at once, as attempting to teach the unit additional commands later will clear all previous learning.

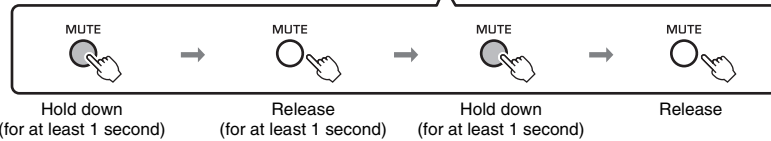
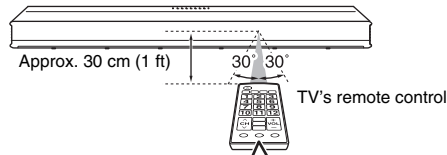
### 3 Teach the unit the TV remote control's "Mute" command.


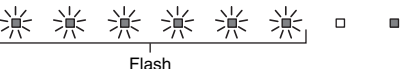
3-1 Press the  key on the unit.



3-2 Point the TV's remote control at the remote control sensor on the unit, hold down the mute key for at least 1 second, and then release it for at least 1 second. Perform this operation twice.

The position of the remote control sensor varies depending upon the installation of the unit (p. 10).



Result	Bleep/buzzer	Indicators
Successfully learned	Once	 Glow
Failed to learn Repeat from Step 3-1.	Twice	 Flash

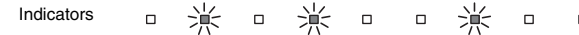
#### Troubleshooting the unit's failure to learn commands

- ✓ Is the TV turned off?
- ✓ Is direct sunlight or fluorescent light striking the unit and interfering with operation?
- ✓ Are you using the TV's remote control for Steps 3 through 6? (The unit's remote control is not used.)
- ✓ Are you using the remote control within the range indicated above?
- ✓ Are you holding down keys on the TV's remote control for at least 1 second, and then releasing them for at least 1 second?

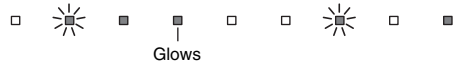
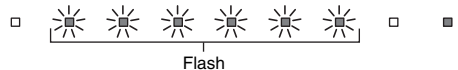
If the unit fails to learn commands even after checking all of the above, hold down and release the key on the TV's remote control three times.

### 4 Teach the unit the TV remote control's "Volume (-)" command.

4-1 Press the  key on the unit.



4-2 Point the TV's remote control at the remote control sensor on the unit, hold down the volume (-) key for at least 1 second, and then release it for at least 1 second. Perform this operation twice.


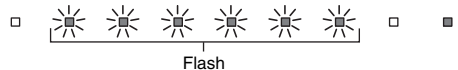
Result	Bleep/buzzer	Indicators
Successfully learned	Once	 Glow
Failed to learn Repeat from Step 4-1.	Twice	 Flash

### 5 Teach the unit the TV remote control's "Volume (+)" command.

5-1 Press the  key on the unit.

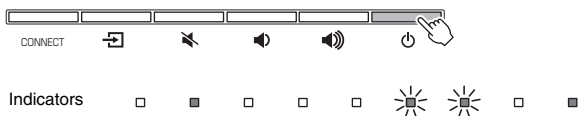


5-2 Point the TV's remote control at the remote control sensor on the unit, hold down the volume (+) key for at least 1 second, and then release it for at least 1 second. Perform this operation twice.


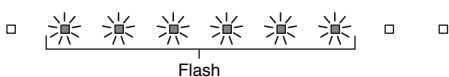
Result	Bleep/buzzer	Indicators
Successfully learned	Once	 Glow
Failed to learn Repeat from Step 5-1.	Twice	 Flash

## 6 Teach the unit the TV remote control's "Power" command.

6-1 Press the  key on the unit.



6-2 Point the TV's remote control at the remote control sensor on the unit, hold down the power key for at least 1 second, and then release it for at least 1 second. Perform this operation twice.


Result	Bleep/buzzer	Indicators
Successfully learned	Once	 Glow
Failed to learn Repeat from Step 6-1.	Twice	 Flash

## 7 To finish the learning mode, press the LEARN key on the unit's remote control.

This completes the necessary settings. Now you can operate the unit with the TV remote control's mute key, volume keys, or power key.



### HINT

- The unit exits learning mode automatically if no operations are performed for 5 minutes.
- You can press the  key on the unit's remote control to finish learning mode.

### About TV volume

If the learning function is used to teach the unit the TV remote control's "Volume (+)" command, TV volume may increase along with the unit's volume when the TV's remote control is used to increase volume. Should this occur, set TV volume as low as possible using the button on the TV itself, or disable output from the TV's internal speaker(s).

### HINT

- If the volume of the speaker(s) built into the TV cannot be adjusted, speaker output can be disabled by connecting a device such as headphones to the headphones (earphones) jack on the TV. Refer to documentation supplied with the TV for details.

## Clearing all learned commands

### 1 Turn off the unit, and then hold down the LEARN key on the unit's remote control for more than 3 seconds.

The unit enters learning mode. When the unit is in learning mode, the indicators flash as shown below.



### 2 Hold down the key on the unit for more than 3 seconds.



Indicators corresponding to learned commands turn off, and the indicators flash as shown below.



If the clearing is completed, you will hear the bleep sound three times.

### 3 Press the LEARN key on the unit's remote control.

**Important Notice: Guarantee Information for  
customers in EEA\* and Switzerland****English**

For detailed guarantee information about this Yamaha product, and Pan-EEA\* and Switzerland warranty service, please either visit the website address below (Printable file is available at our website) or contact the Yamaha representative office for your country. \*EEA:European Economic Area

<http://europe.yamaha.com/warranty/>

Yamaha Global Site  
<http://www.yamaha.com/>

Yamaha Downloads  
<http://download.yamaha.com/>

Manual Development Group  
© 2016 Yamaha Corporation

Published 06/2016 KS-A0  
Printed in Indonesia

ZV20060