

# *CD-S3000*

## *Compact Disc Player Lecteur Compact Disc*



# A Living Tradition in Sound

A piano comes into this world through the perfect synergy of advanced technical skill and artistry. Such a piano can create sound that truly reflects the player's feelings.

The final stage in piano production is called "voicing". It is here that the instrument is given its soul.

A highly skilled expert concentrates his mind and sensitivity on the sound of each key, finely adjusting the dynamic feel of the hammers, bringing the tone and vibrancy of all 88 keys together perfectly; a truly stunning achievement.

It is a quality of sound that can only be determined by an astute, sensitive ear. We apply this very same concept to the manufacture of our audio products. The technician performs exhaustive listening tests and every component is considered, in order to finally achieve the ideal sound.

Yamaha's tradition of audio quality stretches back over 125 years, and continues to live on in all Yamaha products today.



## Excellence in Audio Achievement

1920-  
1960s

**First HiFi System introduced in 1920**

**We introduced numerous HiFi components (turntables, FM/AM tuners, integrated amplifiers, preamplifiers, power amplifiers and speakers) in 1955 - 1965.**

**Natural Sound Speaker Series introduced in 1967**

**NS-20 Monitor Speaker**



NS-20



CA-1000

1970s

**CA-1000 Integrated Amplifier**

Featuring A-Class operation, the CA-1000 set the standard for integrated amplifiers.

**NS-690 Natural Sound Speaker**



NS-690



NS-1000M

**NS-1000M Monitor Speaker**

A truly legendary speaker still revered by HiFi enthusiasts.

**B-1 Power Amplifier**

An innovative power amp that used vertical FETs in all stages.



B-1



C-2

**C-2 Control Amplifier**

Received top prize at the Milan International Music and HiFi Show.

**NS-10M Studio Monitor Speaker**

Became of the most popular studio monitors in the world.



PX-2



NS-10M

**A-1 Integrated Amplifier**

**PX-2 Turntable**

Yamaha's first straight arm turntable.



A-1

1980s

**B-6 Power Amplifier**

Pyramid-shaped power amplifier.

**GT-2000/L Turntable**

**First CD Player (CD-1) introduced in 1983**

**B-2x Power Amplifier**

**MX-10000 Power Amplifier and**

**CX-10000 Control Amplifier**

Redefined the capabilities of separate components.

**AX-1 Integrated Amplifier**



MX-10000



CX-10000



B-6



B-2x



GT-2000/L



CD-1

1990s

**GT-CD1 CD Player**

**MX-1 Power Amplifier and**

**CX-1 Preamplifier**



Soavo-1



A-S2000



CD-S2000

2000s

**Soavo-1 and Soavo-2 Natural Sound Speaker Systems**

**A-S2000 Stereo Amplifier and**  
**CD-S2000 Super Audio CD Player**

2010s

**NP-S2000 Network Player**



NP-S2000

# CD-S3000

- ◆ *Full-stage balanced signal transmission beginning with the DAC achieves the ultimate in CD reproduction*
- ◆ *Independent power supplies with digital and analog completely separated*
- ◆ *Exclusive Yamaha loading mechanism and high precision CD drive*
- ◆ *Left-right symmetrical design with rigid, stable construction*
- ◆ *Pure Direct*
- ◆ *Super sound from Super Audio CDs*
- ◆ *Heavy feet with newly-developed antivibration spikes*
- ◆ *DSD playback via 192 kHz, 24-bit USB DAC*

## ■ Supplied accessories

Please check that you have received all of the following parts.

- Power cable
- Remote control
- Batteries (AAA, R03, UM-4) (×2)
- Stereo pin cable
- SAFETY BROCHURE

## **Contents**

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## ■ About this manual

- ✨ indicates a tip for your operation.
- The color of images in this manual may vary from the original.
- Read the “SAFETY BROCHURE” before using this unit.

# *CD-S3000*

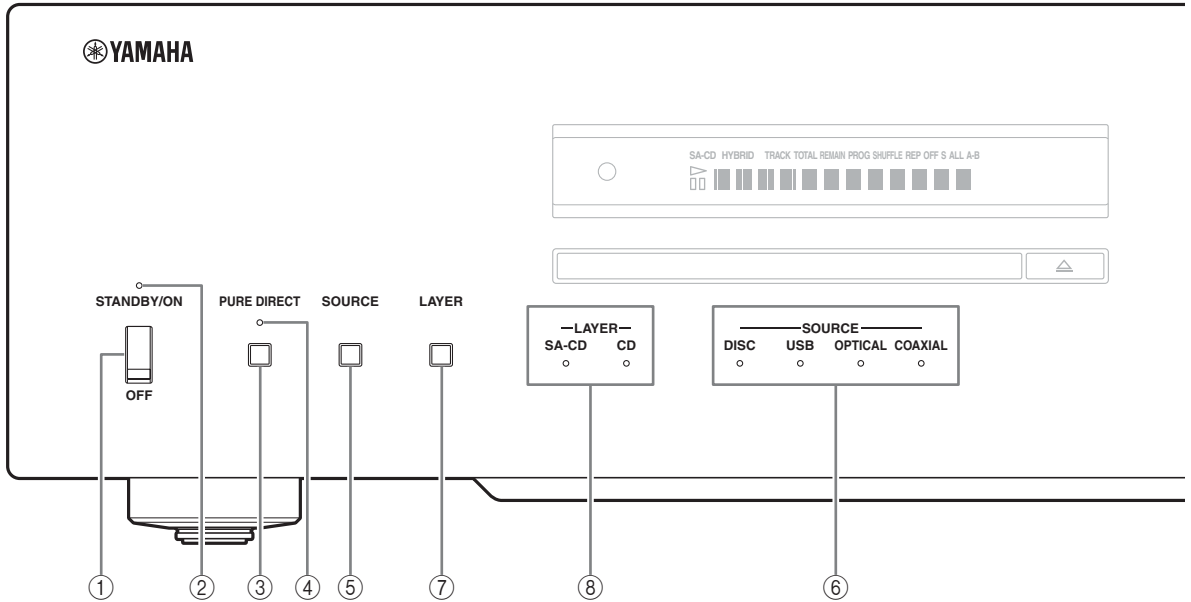
## **Controls and functions**

In this chapter, you will learn the controls and functions of CD-S3000.



# Controls and functions

## ■ Front panel (pages 6 to 9)



### ① STANDBY/ON/OFF switch

Turns on or off this unit.

#### STANDBY/ON (upper position):

In this position, you can select STANDBY or ON, using the CD key on the remote control.

#### OFF (lower position):

The power of this unit is turned off.

#### Notes

- When you turn on this unit, it will take a few seconds before this unit can reproduce sound.
- If this unit is not operated for 30 minutes with no audio signal detected, it goes to STANDBY mode (page 15).
- If you disconnect the power cable from the AC outlet and connect it again when this unit is in STANDBY mode, the power of the unit is turned on (page 20). If the unit is not to be operated for a long time, set the STANDBY/ON/OFF switch to OFF.

### ② STANDBY/ON indicator

#### Lit brightly:

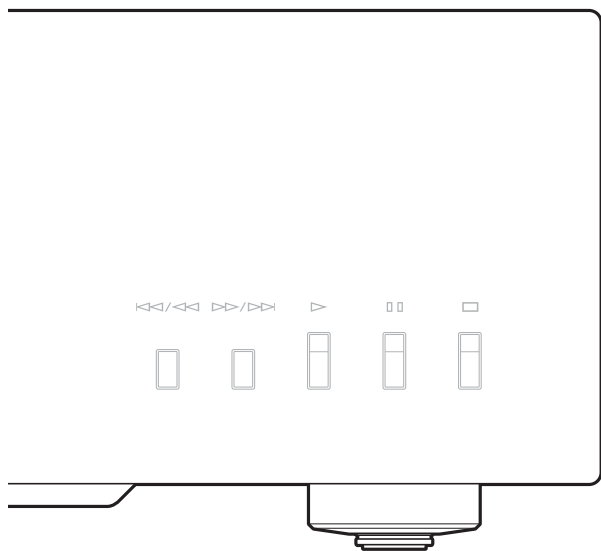
Shows that the power of the unit is ON. In this condition, you can switch the unit to STANDBY mode using the CD key on the remote control.

#### Lit dimly:

Shows that the unit is in STANDBY mode. In this condition, press the CD key on the remote control to turn on the unit.

#### Off:

Shows that the power of the unit is OFF. In this condition, you can turn on the unit using the STANDBY/ON/OFF switch only.



③ **PURE DIRECT key**

Turns on the PURE DIRECT mode to improve audio quality.

When this unit is in the PURE DIRECT mode:

- No signal is output from the DIGITAL OUT (OPTICAL and COAXIAL) jacks on the rear panel (page 10).
- The least indicators and messages appear on the front panel display.



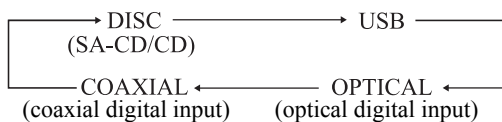
- Press this key again to turn off the PURE DIRECT mode.
- This setting is retained even if you turn off this unit.

④ **PURE DIRECT indicator**

Lights when the PURE DIRECT mode is turned on.

⑤ **SOURCE key**

Selects the audio source to be played back. Each time you press this key, the audio source is switched.



The audio source setting is retained even if you turn off this unit.

⑥ **SOURCE indicators**

The indicator of the audio source selected with the SOURCE key lights.

⑦ **LAYER key**

Switches the playback layer of a hybrid Super Audio CD between SA-CD and CD while playback is stopped (page 27).



This setting is retained even if you turn off this unit.

**Note**

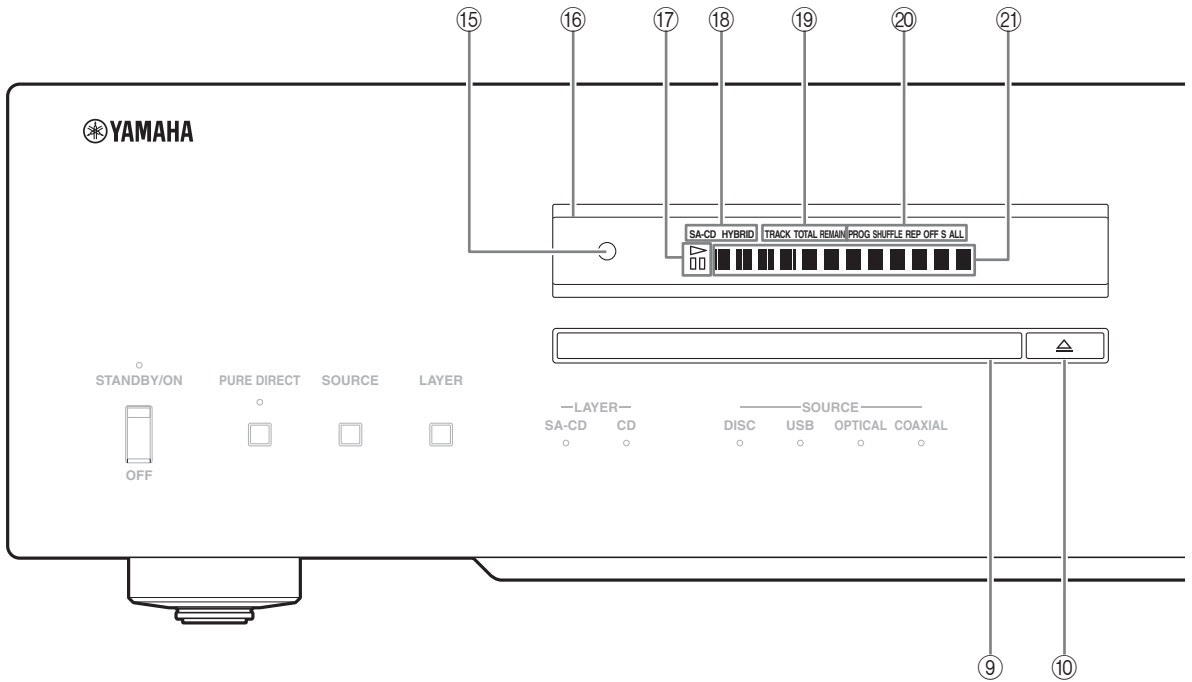
When SA-CD layer is selected, audio signals are output only from the BALANCED OUT and ANALOG OUT jacks.

⑧ **LAYER indicators**

The indicator of the layer selected with the LAYER key lights.

# Controls and functions

## ■ Front panel (pages 6 to 9)



⑨ **Disc tray**

Loads a disc.

⑩ **△ (Open/Close) key**

Opens or closes the disc tray.



The disc tray also closes automatically when you press:

- the ▷ (Play) key on the front panel or on the remote control.
- the front edge of the disc tray gently.
- a numeric button on the remote control.

⑪ **◀◀/◀ (Skip/Search backward) key**

Press the key once to skip back to the beginning of the current track.

Press it twice to skip to the beginning of the previous track.

Press and hold it to search backward.

▶▶/▶ (Skip/Search forward) key

Press the key once to skip to the next track.

Press and hold it to search forward.

⑫ **▷ (Play) key**

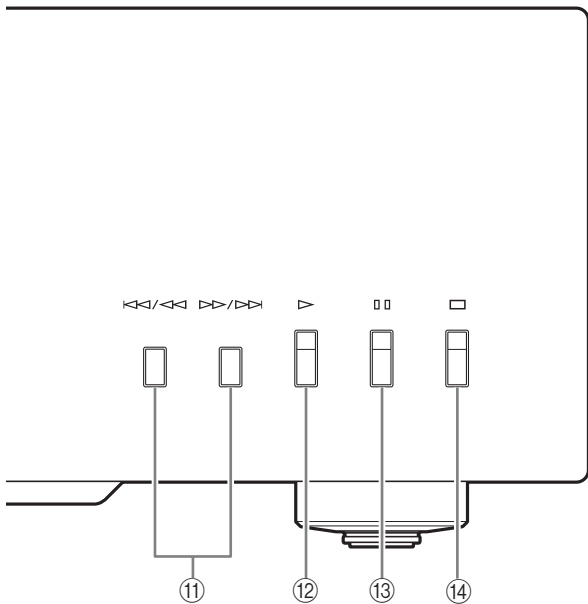
Starts playback.

⑬ **▢▢ (Pause) key**

Pauses playback. Press the ▷ or ▢▢ key to resume playback.

⑭ **◻ (Stop) key**

Stops playback.

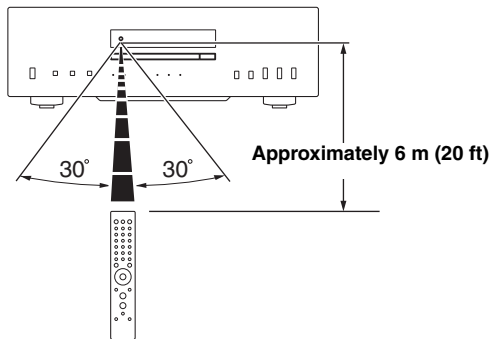


**15 Remote control sensor**

Receives signals from the remote control.



The remote control transmits a directional infrared beam. Be sure to aim the remote control directly at the remote control sensor on the front panel of this unit during operation.



**16 Display**

The brightness can be adjusted with the DIMMER key on the remote control (page 12).

**17 ▷ (playback) / ▢▢ (pause) indicator**

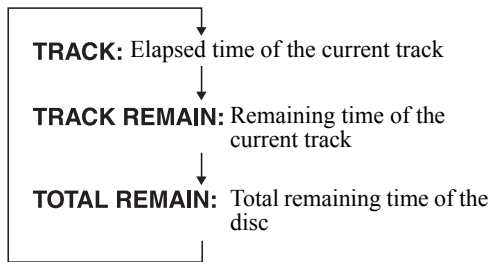
Lights in the playback/pause mode.

**18 Disc type indicator**

Indicates the type (SA-CD/CD/HYBRID) of the disc in the disc tray.

**19 Time display mode indicator**

Indicates the time display mode of the display. Change the mode by pressing the DISPLAY key on the remote control (page 13).



**20 Playback mode indicator**

Indicates the current playback mode.

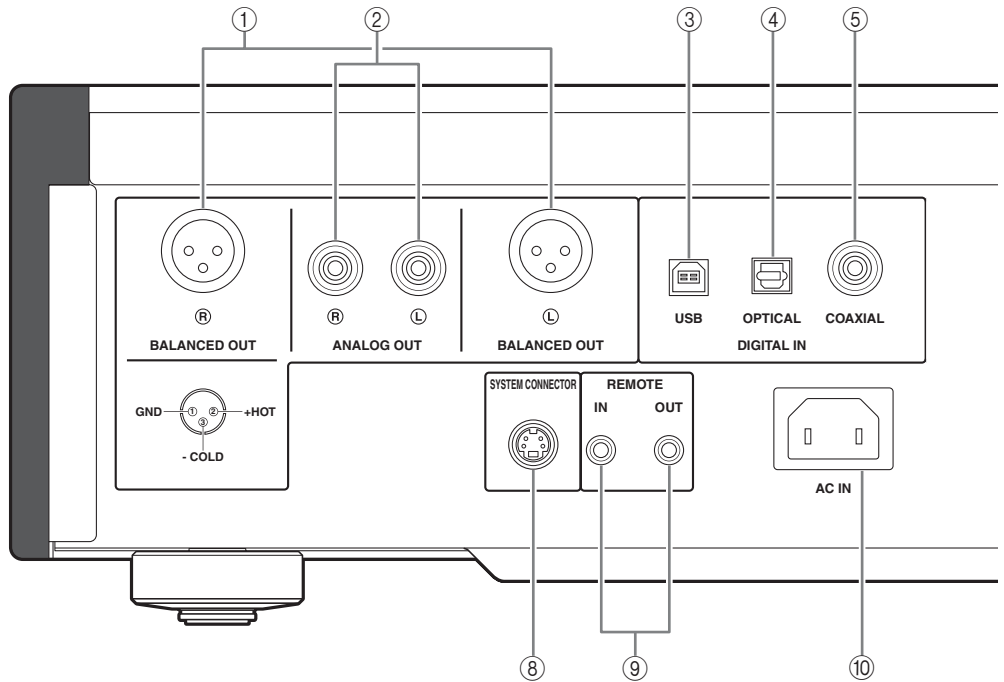
- PROG:** Program playback (page 14)
- SHUFFLE:** Shuffle playback (page 13)
- REP OFF:** Repeat playback off (page 12)
- REP S:** Single repeat playback (page 12)
- REP ALL:** All repeat playback (page 12)

**21 Information display**

See page 28 for more information on MP3/WMA playback.

# Controls and functions

## ■ Rear panel



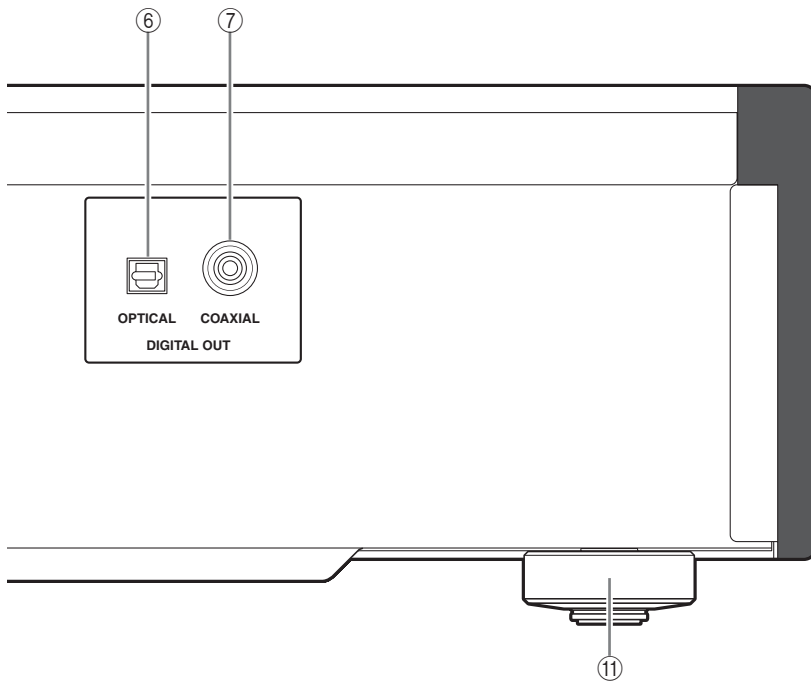
See page 18 for connection information.

- ① **BALANCED OUT jacks (male)**
- ② **ANALOG OUT jacks**
- ③ **DIGITAL IN USB jack (Type B)**
- ④ **DIGITAL IN OPTICAL jack**
- ⑤ **DIGITAL IN COAXIAL jack**
- ⑥ **DIGITAL OUT OPTICAL jack**
- ⑦ **DIGITAL OUT COAXIAL jack**

### Note

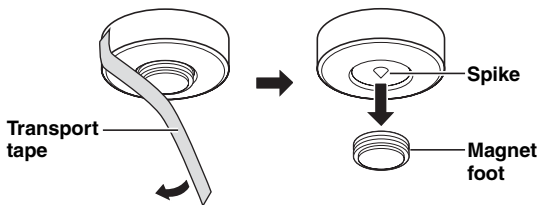
While playing the Super Audio CD layer, the audio signals are output only from the BALANCED OUT and ANALOG OUT jacks.

- ⑧ **SYSTEM CONNECTOR**  
Use this connector to connect a product testing device for servicing.
- ⑨ **REMOTE IN/OUT jacks**  
Use these jacks to connect an external component for remote operation.  
For details on the connection, see page 21.
- ⑩ **AC IN inlet**  
Use this inlet to plug in the supplied power cable.  
See page 20 for connection information.



⑪ **Foot**

The feet of this unit include built-in spikes. Using the spikes can reduce the effect of vibrations on the set. When using the spikes, remove the transport tape, then remove the magnet foot by pulling it.



**Caution**

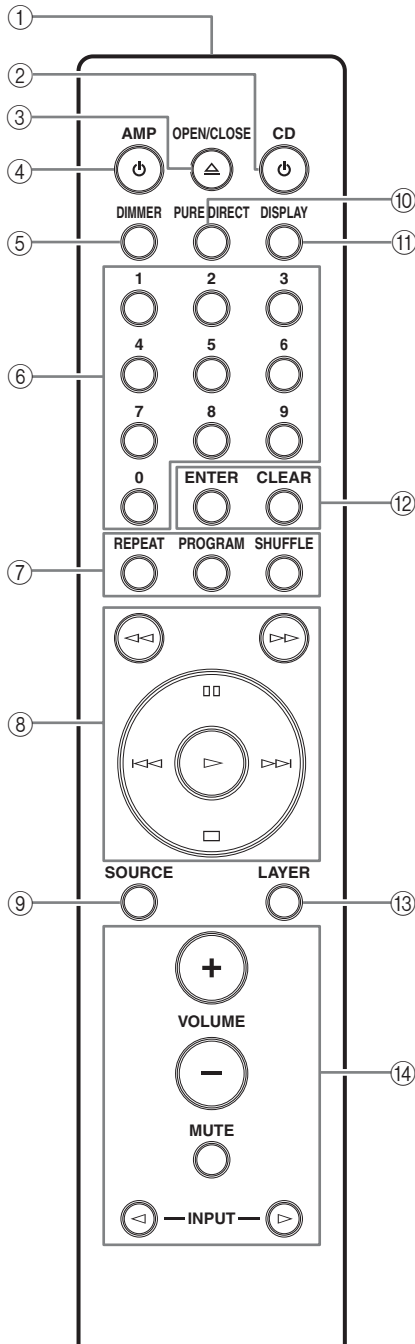
When using the feet's built-in spikes, the spikes may scratch the shelf or floor on which this unit is installed. Use the magnet feet or appropriate supports when placing this unit on expensive furniture, etc.



If this unit is unstable, you can adjust the foot height by rotating it.

# Controls and functions

## Remote control



① **Infrared signal transmitter**

Sends infrared signals to this unit.

② **CD key**

Turns this unit ON or switches it to STANDBY mode. For details on STANDBY, see “Front panel” (page 6).

③ **△ OPEN/CLOSE key**

Opens or closes the disc tray.

④ **⏻ AMP key**

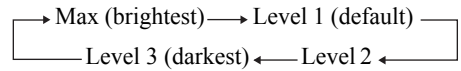
Turns the Yamaha amplifier ON or switches it to STANDBY mode.

**Note**

Some Yamaha amplifiers cannot be controlled with the ⏻ AMP key of this remote control.

⑤ **DIMMER key**

Selects the brightness level for the front panel display. Each time you press the DIMMER key, the brightness level changes in the following order:



This setting is retained even if you turn off this unit.

⑥ **Numeric buttons**

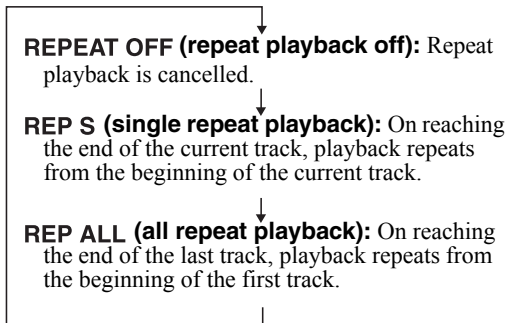
Use to select a track directly.

**Note**

This operation is ineffective for MP3 or WMA discs.

⑦ **REPEAT key**

Repeats playback of a single track or all tracks. Each time you press the REPEAT key during playback, the repeat playback mode changes as follows:



**Note**

This operation is ineffective for MP3 or WMA discs.

**PROGRAM key**

Turns on or off the program playback mode. See “Program playback” (page 14).

## SHUFFLE key

Plays tracks on the disc in random order (shuffle playback).

### Notes

- This operation is ineffective for MP3 or WMA discs.
- The shuffle playback mode is cancelled when playback is stopped or the disc is ejected.

## ⑧ ◀◀ (Search backward) key

### ▶▶ (Search forward) key

Searches tracks backward/forward.

### ⏸ (Pause) key

Pauses playback. Press the ▶▶ or ⏸ key to resume playback.

### ▶ (Play) key

Starts playback.

### ◀◀ (Skip backward) key

Press the key once to skip back to the beginning of the current track.

Press it twice to skip to the beginning of the previous track.

### ▶▶ (Skip forward) key

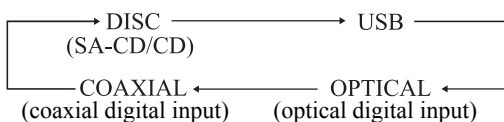
Press the key once to skip to the next track.

### ⏹ (Stop) key

Stops playback.

## ⑨ SOURCE key

Selects the audio source to be played back. Each time you press this key, the audio source is switched.



The audio source setting is retained even if you turn off this unit.

## ⑩ PURE DIRECT key

Turns on the PURE DIRECT mode to improve audio quality.

When this unit is in the PURE DIRECT mode:

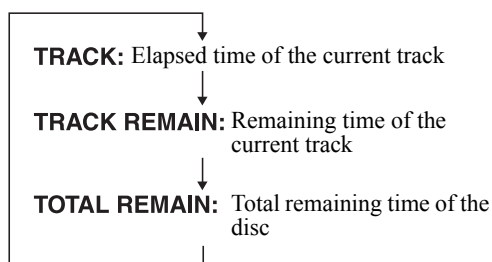
- The PURE DIRECT indicator lights.
- No signal is output from the DIGITAL OUT (OPTICAL and COAXIAL) jacks on the rear panel (page 10).
- The least indicators and messages appear on the front panel display.



- Press this key again to turn off the PURE DIRECT mode.
- This setting is retained even if you turn off this unit.

## ⑪ DISPLAY key

Switches the time display. Each time you press the DISPLAY key during playback, the time display changes as follows:



## ⑫ ENTER key

Confirms a track number entered when you are programming tracks.

## CLEAR key

Erases the last programmed track when this unit is in the program editing mode. See “Program playback” (page 14).



To erase all programmed tracks, press the CLEAR key while programmed playback is stopped.

## ⑬ LAYER key

Switches the playback layer of a hybrid Super Audio CD between SA-CD and CD while playback is stopped (page 27).



This setting is retained even if you turn off this unit.

### Note

When SA-CD layer is selected, audio signals are output only from the BALANCED OUT and ANALOG OUT jacks.

## ⑭ Yamaha amplifier operation keys

Operates the Yamaha amplifier.

Refer to the owner’s manual of your amplifier for details.

### Note

Some Yamaha amplifiers cannot be controlled with the keys of this remote control.

See page 28 for more information on MP3/WMA playback.

## Controls and functions

### ■ Program playback

In the program playback mode, you can play back tracks in a programmed sequence.

#### Notes

- This operation is ineffective for MP3 or WMA discs.
- The programmed tracks are erased in the following cases:
  - when the disc is ejected
  - when this unit is turned off or goes to STANDBY mode
  - when an audio source other than the disc is selected
  - when the playback layer of a hybrid Super Audio CD is switched between SA-CD and CD

#### 1 Press PROGRAM while playback is stopped.

This unit is set to the program editing mode.

#### 2 Select a track by using the numeric buttons and press ENTER.

#### 3 Repeat step 2 to program the next track.

You can program up to 24 tracks.

#### 4 Press the ▷ (Play) key.

Playback starts from the beginning of the programmed sequence.

### ■ Setting the DPLL (Digital Phased Lock Loop) bandwidth

The audio DAC (ES9018) of this unit employs DPLL to generate accurate clock signals synchronized with the clock of the input digital audio signal. The 7-step DPLL bandwidth setting gives the unit tolerance for fluctuation of the clock of the input digital signal and adjustment of the accuracy of the operating clock in the DAC.

#### 1 Press SOURCE to select the audio source to be played back.

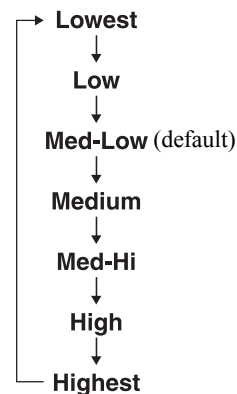
The DPLL bandwidth can be set for each audio source, respectively.

#### 2 Within 5 seconds after selecting the audio source, press ENTER.

The unit enters the setting mode, and the DPLL bandwidth currently set appears on the information display.

#### 3 Select the DPLL bandwidth using the ◻◻ (pause) key and the ◻ (stop) key.

Each time the ◻◻ (pause) key is pressed, the bandwidth changes in the following order. If you press the ◻ (stop) key, it changes in reverse order.



---

#### 4 Press ENTER.

The setting value flashes for 3 seconds, then the unit resumes to normal mode.

To cancel the setting, press CLEAR.

#### Notes

- As the DPLL bandwidth setting value approaches “Lowest,” the accuracy of the operating clock in the DAC improves, but the unit may be susceptible to a change in the clock of the external component. The sound from such a component may more easily skip.
- As the DPLL bandwidth setting value approaches “Highest,” the accuracy of the operating clock in the DAC deteriorates, but the unit is far less susceptible to a change in the clock of the external component, and the sound from such a component hardly skips.

#### ■ Setting the AUTO POWER STANDBY function

The AUTO POWER STANDBY function can be set to ON or OFF. When set to ON, if the unit is not operated for 30 minutes with no audio signal detected, it automatically goes to STANDBY mode. When set to OFF, the unit does not go to STANDBY mode automatically.

---

#### 1 Open the disc tray and remove any currently-loaded disc from the unit.

Skip step 1 to 3 if “NO DISC” appears on the information display.

---

#### 2 Close the disc tray.

---

#### 3 Press SOURCE to select “DISC” as the audio source.

“NO DISC” appears on the information display.

---

#### 4 Press and hold the $\square$ (Stop) key or $\triangleright$ (Play) key on the front panel for about 2 seconds to switch the setting.

$\square$  (Stop) key: The AUTO POWER STANDBY function switches to ON, and “AutoSTBY ON” appears on the information display.

$\triangleright$  (Play) key: The AUTO POWER STANDBY function switches to OFF, and “AutoSTBY OFF” appears on the information display.

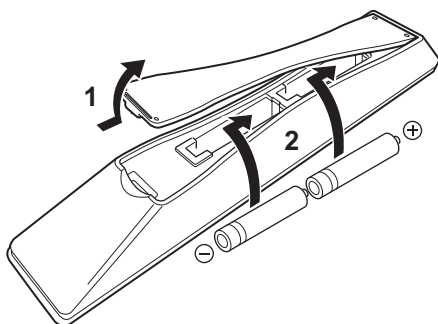
#### Notes

- The default setting for the AUTO POWER STANDBY function is ON.
- This setting is retained even if you turn off this unit.

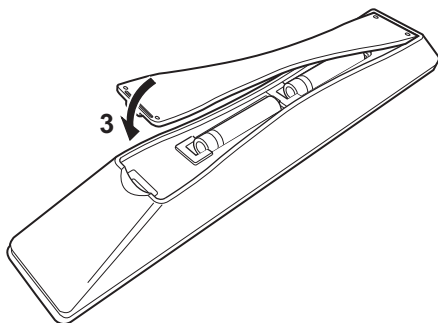
## Controls and functions

### ■ Installing batteries in the remote control

- 1 Remove the battery compartment cover.
- 2 Insert the two batteries (AAA, R03, UM-4) according to the polarity markings (+ and -) on the inside of the battery compartment.



- 3 Reinstall the battery compartment cover.

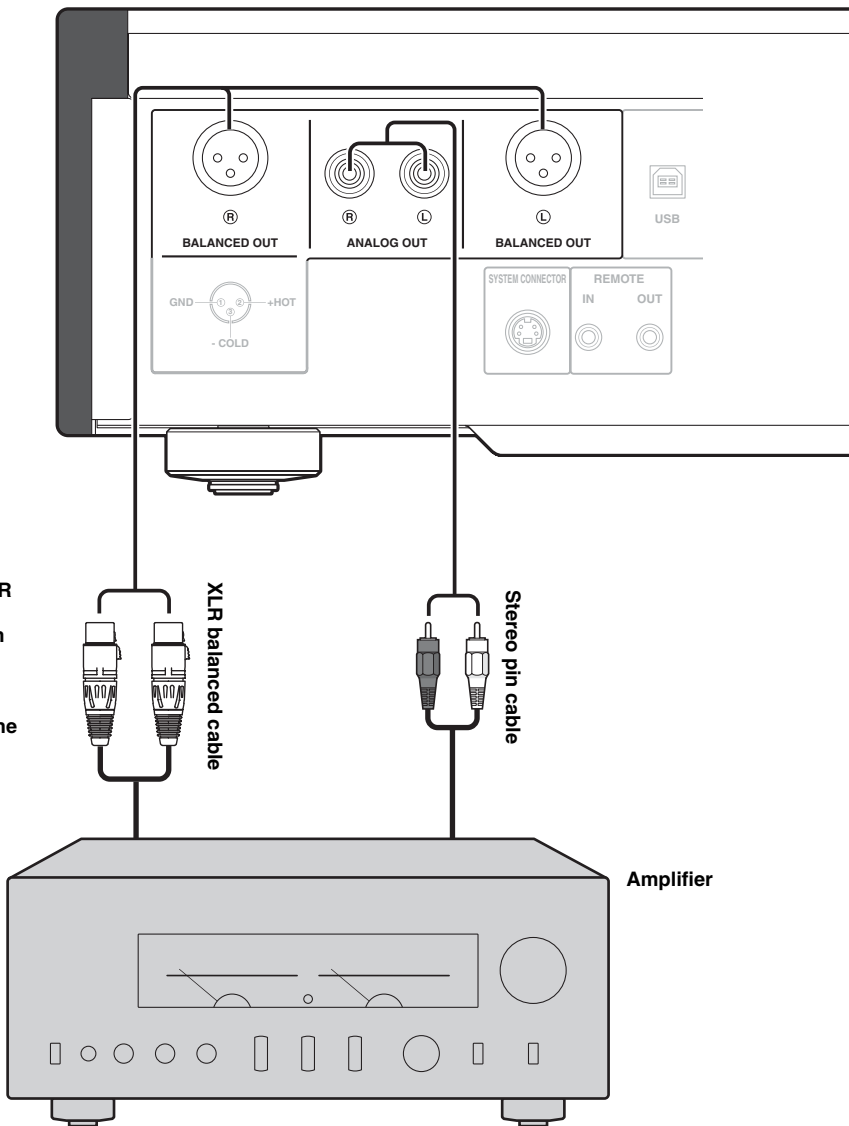




# *CD-S3000* **Connections**

In this section, you will make connections between CD-S3000 and your amplifier.

# Connections



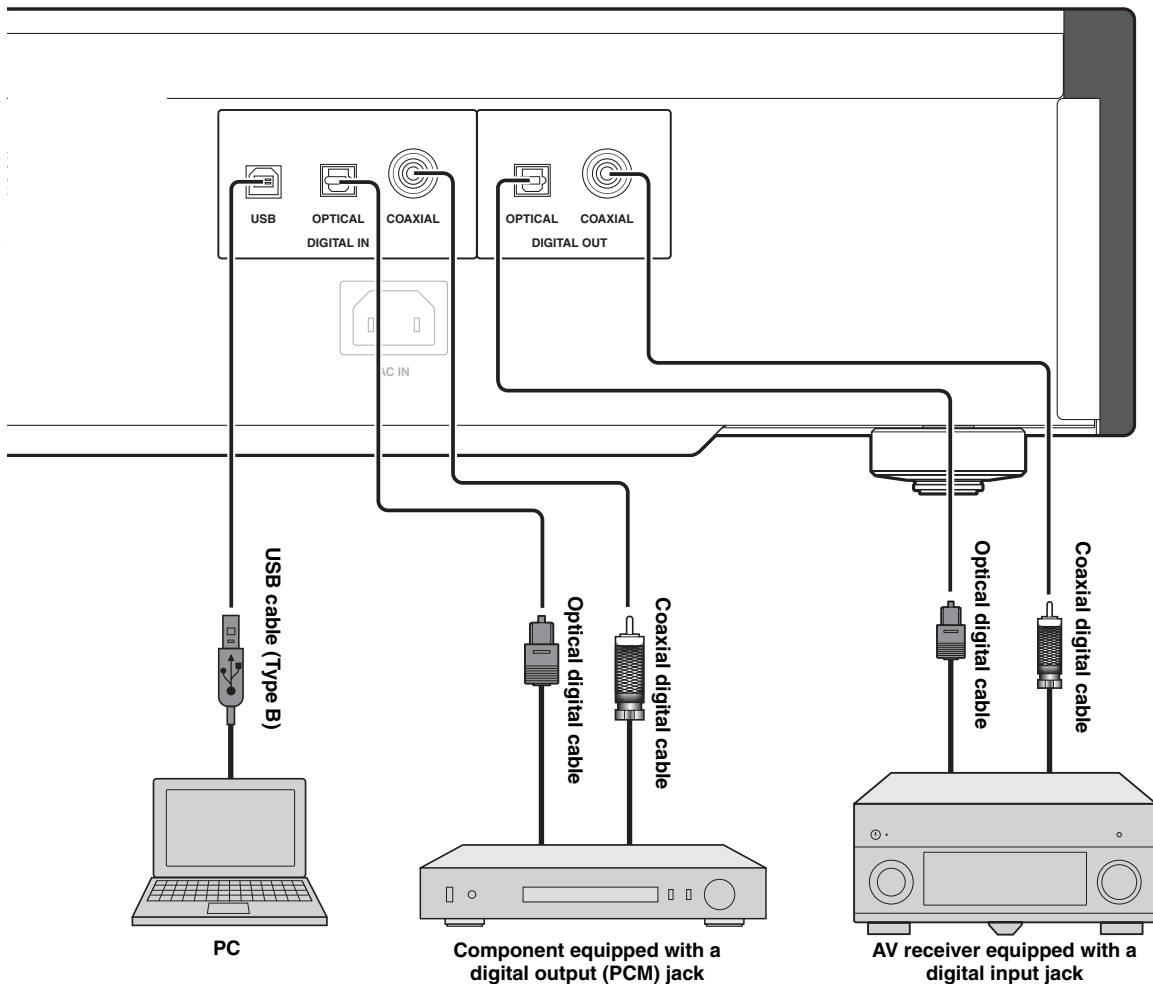
If your amplifier is equipped with XLR balanced input jacks, we recommend balanced connection for optimum audio performance.

When the SA-CD layer is played, the audio signals are output only from the BALANCED OUT and ANALOG OUT jacks.

XLR balanced cable

Stereo pin cable

Amplifier



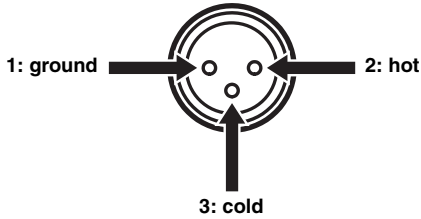
**Note**

Only PCM signals can be input to the DIGITAL IN (OPTICAL/COAXIAL) jacks of this unit. For details on the supported PCM signals, see page 26.

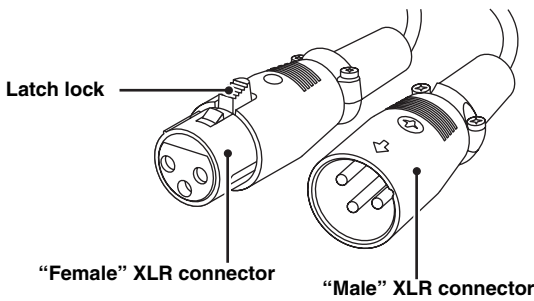
# Connections

## ■ Connecting to the BALANCED OUT jacks

Connect your amplifier with the XLR balanced input jacks. The pin assignments for these jacks are shown below. Refer to the owner’s manual supplied with your amplifier and verify that its XLR balanced input jacks are compatible with the pin assignments.

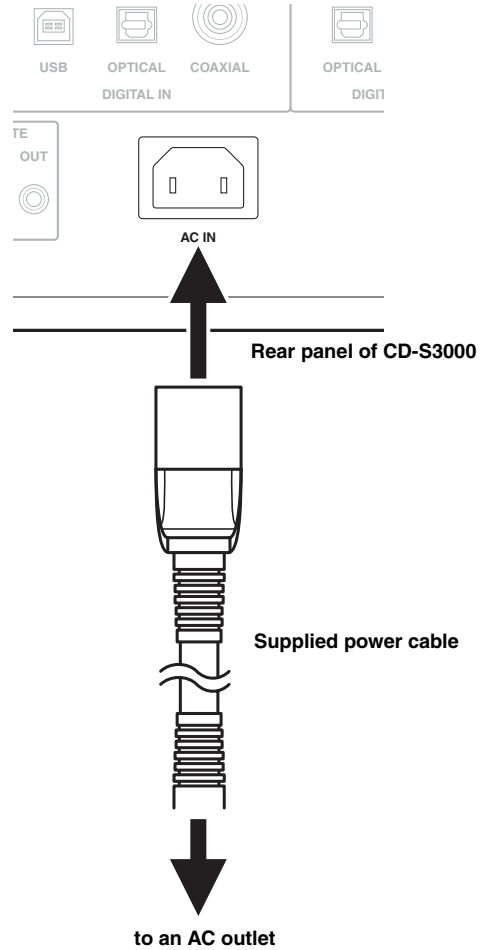


When connecting, be sure to match the pins and insert the connector of the “female” XLR balanced cable. When disconnecting, pull out the “female” XLR balanced cable while pressing down the latch lock on the plug.



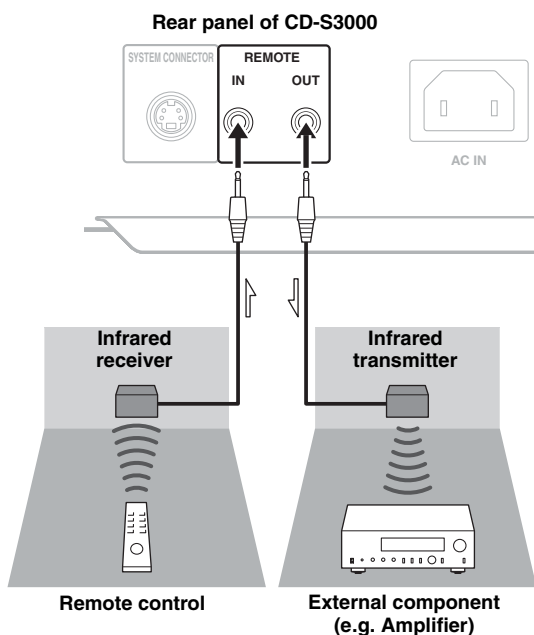
## ■ Connecting the power cable

Plug the power cable into the AC IN inlet when all connections are complete, and then plug in the power cable to the AC outlet.



## ■ Operating this unit from another room

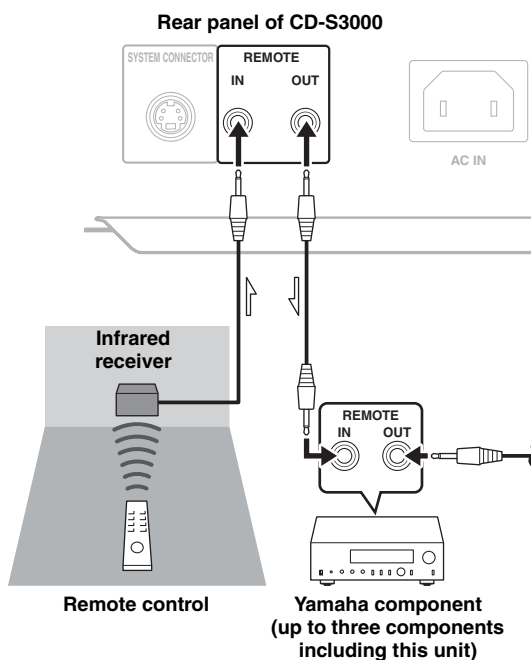
If you connect an infrared receiver and transmitter to the REMOTE IN/OUT jacks of this unit, you can operate the unit and/or external component using the supplied remote control located in another room.



## ■ Remote connection between Yamaha components

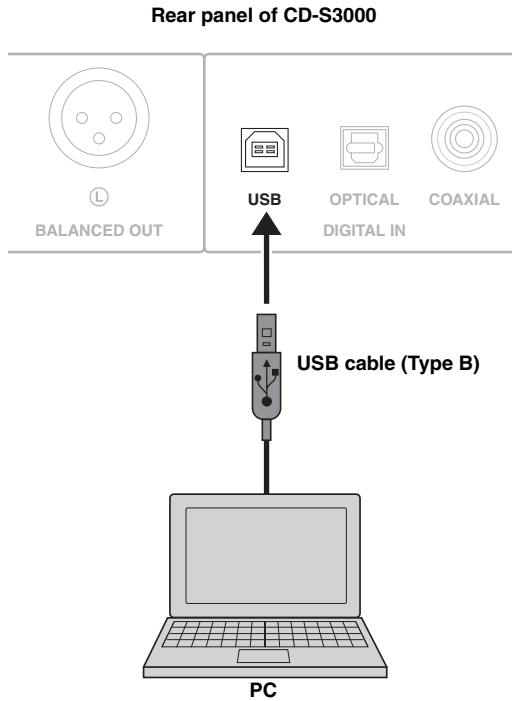
When you have another Yamaha component supporting remote connection, as this unit does, an infrared transmitter is not necessary. You can transmit remote signals by connecting an infrared receiver and the REMOTE IN jack of the other component to the REMOTE IN/OUT jacks of this unit, using cables with monaural miniplugs.

Up to three Yamaha components (including this unit) can be connected.



## Playback of music files stored on a PC

When a PC is connected to the USB jack of this unit, the unit functions as a USB DAC, enabling music files stored on the PC to be played via an amplifier connected to the unit.



### Supported operating systems

The USB connection with this unit is for PCs with the following operating systems:

**Windows:** Windows Vista (SP2, 32bit/64bit)/  
Windows 7 (32bit/64bit)/  
Windows 8 (32bit/64bit)

**Mac:** OS X 10.5.8/10.6.8/10.7.x/10.8.x

#### Notes

- Operations with other operating systems are not guaranteed.
- Operations may be disabled even with the above-mentioned operating systems, depending on the configuration or environment of the PC.
- Operations may not be executed correctly if the PC is connected to this unit before the driver is installed.

### Installing the dedicated driver

Before connecting a PC to this unit, install the dedicated driver on the PC.

- 1 Access the following URL, download the dedicated “Yamaha Steinberg USB Driver,” then extract and execute the file.**

**Website for downloading the exclusive driver  
URL: <http://download.yamaha.com/>**

- 2 Install the downloaded “Yamaha Steinberg USB Driver” on the PC.**

For details, refer to the Installation Guide supplied with the downloaded driver.

- 3 When installation is complete, quit all running applications.**

- 4 Set the audio output destination of the computer to “Yamaha CD Player.”**

**With Windows OS:**

Control Panel → Sound → [Playback] tab

**With Mac OS:**

System Preferences → Sound → [Output] tab

The setting may vary, depending on the operating system. For details, consult the manufacturer of your PC.



Transmittable sampling frequencies are as follows:  
44.1 kHz/48 kHz/88.2 kHz/96 kHz/176.4 kHz/192 kHz

#### Notes

- Operations may not be executed correctly if the PC is connected to this unit before the driver is installed.
- When the driver is installed on a Windows XP computer, the operation speed of the computer may be reduced. In such a case, restart the computer.
- The “Yamaha Steinberg USB Driver” is subject to change without prior notice. For details and the latest information, refer to the download page for the driver.

## ■ Playing back music files stored on the PC

- 1 Connect the PC to this unit, using a USB cable.**
- 2 Turn on the PC.**
- 3 Turn this unit on by pressing the STANDBY/ON/OFF switch on the front panel.**
- 4 Select “USB,” using the SOURCE key of this unit.**
- 5 Set the audio output destination of the PC to “Yamaha CD Player.”**

### With Windows OS:

Control Panel → Sound → [Playback] tab

### With Mac OS:

System Preferences → Sound → [Output] tab

The setting may vary, depending on the operating system. For details, consult the manufacturer of your PC.

- 6 Operate the PC to start playback of music files.**

When the music signal is fed from the PC to the unit, the sampling frequency of the file being played is indicated on the display of the unit.

## ■ Adjusting the sound volume

To obtain higher sound quality, set the sound volume at the PC to the maximum, and gradually increase the volume at the amplifier from the minimum to your desired level.

### Notes

- Do not disconnect the USB cable, turn off the unit, or change the input with the SOURCE key while playback on a PC connected via the USB cable is in progress. Doing so may cause a malfunction.
- To mute operation sounds of the PC during music playback, change the setting on the PC.
- If music files cannot be played correctly, restart the computer and perform the mentioned procedure again.
- The music files stored on a PC cannot be controlled from this unit or the remote control of this unit. Operate them on the PC.



# *CD-S3000* Specifications

In this section, you will find technical specifications for CD-S3000.



# Specifications

## AUDIO SECTION

- Frequency Response (1 kHz, 0 dB)
  - SA-CD ..... 2 Hz to 50 kHz (–3 dB)
  - CD ..... 2 Hz to 20 kHz
- Playback Frequency Range ..... 2 Hz to 96 kHz
- Harmonic Distortion (1 kHz, 0 dB)
  - SA-CD ..... 0.002% or less
  - CD ..... 0.002% or less
- Signal to Noise Ratio (IHF-A Network) (1 kHz, 0 dB)
  - SA-CD/CD ..... 116 dB or more
- Dynamic Range (1 kHz, 0 dB)
  - SA-CD ..... 110 dB or more
  - CD ..... 100 dB or more
- Output Level (1 kHz, 0 dB)
  - SA-CD/CD ..... 2.0 ± 0.3 V

## LASER DIODE PROPERTIES

- Wavelength
  - SA-CD ..... 655 nm
  - CD ..... 790 nm
- Output Power
  - SA-CD ..... 1.89 mW (max)
  - CD ..... 1.36 mW (max)

## INPUT/OUTPUT SECTION

- Digital Input (DIGITAL IN)
  - USB (Type B) × 1 ..... USB 2.0 compliant
  - OPTICAL × 1
  - COAXIAL × 1
  - Support audio sample rate ..... 44.1/48/88.2/96/176.4/192 kHz
  - Word depths ..... 16 bit/24 bit
- Digital Output (DIGITAL OUT)
  - OPTICAL × 1
  - COAXIAL × 1
  - Support audio sample rate ..... 44.1/48/88.2/96/176.4/192 kHz
  - Word depths ..... 16 bit/24 bit
- Audio Output
  - ANALOG OUT ..... Unbalanced × 2 ch (L/R)
  - BALANCED OUT ..... Balanced × 2 ch (L/R)
- Remote Input/Output
  - REMOTE IN
  - REMOTE OUT
- System Connector
  - SYSTEM CONNECTOR

## GENERAL

- Power Supply
    - [China, Korea, Asia, Australia, U.K. and Europe models]
    - ..... AC 220 – 240 V, 50/60 Hz
    - [U.S.A., Canada and Taiwan models]
    - ..... AC 110 – 120 V, 50/60 Hz
  - Power Consumption ..... 30 W
  - Standby Power Consumption (reference data) ..... 0.3 W
  - Dimensions (W × H × D) ..... 435 × 142 × 440 mm  
(17-1/8" × 5-5/8" × 17-3/8")
  - Weight ..... 19.2 kg (42.3 lbs)
- \* Specifications are subject to change without notice.

### Taking care of this unit

#### Polish finish on the side panels

Use of Yamaha Unicon cloth (sold separately) is recommended. For heavy dirt, use Yamaha Piano Unicon (sold separately). For purchasing, contact your nearest authorized Yamaha dealer or service center.

#### Other finish

When you wipe this unit, do not use chemical solvents (alcohol, thinner, etc.), which might damage the finish. Use a clean, dry cloth. For heavy dirt, dampen a soft cloth in detergent diluted with water, wring it out, and clean this unit with the cloth.

## Supported disc types

This unit is designed to play back compact discs bearing the marks shown below. Never attempt to load any other types of discs into this unit. This unit can also play back 8-cm (3-inch) compact discs.

### Super Audio CD

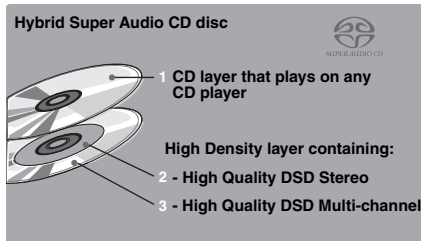
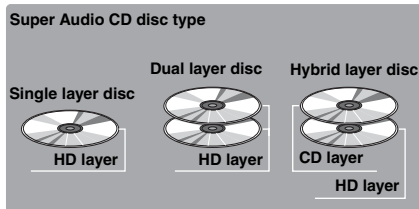


SUPER AUDIO CD

Audio format based upon the current CD standards but includes a greater amount of information that provides higher quality sound. There are three types of discs: single layer, dual layer and hybrid discs. The hybrid disc can be played on existing CD players as well as Super Audio CD players since it contains both standard audio CD and Super Audio CD information.

#### Note

This unit does not show text data on the front panel display.



### Compact discs (digital audio)



The most popular discs for commercially available audio CDs.

### CD-R, CD-RW digital audio discs



Music CDs made by copying onto a CD-R or CD-RW (including MP3 or WMA format files).

#### Notes

- Be sure to use a CD-R or CD-RW disc made by a reliable manufacturer.
- Be sure to use a CD-R or CD-RW disc which has at least one of the following phrases on the disc or disc case.
  - FOR CONSUMER
  - FOR CONSUMER USE
  - FOR MUSIC USE ONLY
- Be sure to use a finalized CD-R or CD-RW disc.

### CD-TEXT discs



The discs recorded with text data such as album titles, track titles, and artist names. These discs can be played back with ordinary CD players.

#### Note

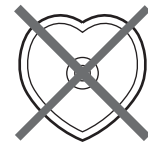
This unit does not show text data on the front panel display.

#### NOTE:

This unit may not be able to play back some CD-RW discs or discs on which recording was not made correctly.

#### To prevent a malfunction of this unit:

- Do not use any nonstandard shaped disc (heart, etc.) available in the market as it might damage this unit.
- Do not use a disc with tape, seals, or paste on it. Such a disc may get stuck in this unit or cause damage to this unit.



## Playable disc format

### ■ About MP3 and WMA discs

You can play back MP3 and WMA files recorded on a CD-R or CD-RW with similar uses as a music CD.

#### MP3

MP3 (MPEG-1 Audio Layer-3) is a standard technology and format for compressing an audio sequence into a small-sized file. However, the original level of sound quality is preserved during playback.

#### Notes

- This unit plays back MP3 files in alphanumeric order.
- Up to 648 folders and files (combined) and up to 299 folders are recognized; however, some folders and files may not be recognized depending on their directory structure.
- Depending on recording conditions such as recording software settings, this unit may not be able to play back the disc or files in the order they were recorded.
- This unit is compatible with a sampling frequency of 44.1 kHz.
- This unit is compatible with a bitrate of 32, 40, 48, 56, 64, 80, 96, 112, 128, 160, 192, 224, 256, or 320 kbps. Variable bitrate is not supported.
- The disc must be ISO9660 compatible.
- The text data contained in the files are not displayed on this unit.

#### WMA

WMA (Windows Media Audio) is a Microsoft file format for encoding digital audio files similar to MP3 although WMA can compress files at a higher rate than MP3.

#### Notes

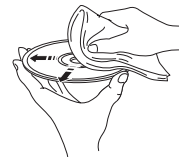
- This unit plays back WMA files in alphanumeric order.
- Up to 648 folders and files (combined) and up to 299 folders are recognized; however, some folders and files may not be recognized depending on their directory structure.
- This unit is compatible with a sampling frequency of 44.1 kHz.
- This unit is compatible with a bitrate of 48, 64, 80, 96, 128, 160, or 192 kbps. Variable bitrate is not supported.
- The disc must be ISO9660 compatible.
- Copyright-protected WMA files cannot be played back with this unit.
- The text data contained in the files are not displayed on this unit.

### ■ Handling compact discs

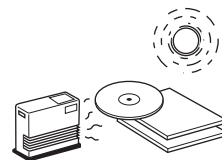
- Always handle a disc with care so that its surface is not scratched.



- Compact discs are rarely worn out during playback, but damage to the disc surface when the disc is being handled can adversely affect the disc playback.
- Be sure to use a felt-tip pen or similar writing tool when writing on the label side of a disc. Do not use a ball-point pen, pencil, or other hard-tipped writing tools as these may damage the disc and may adversely affect the disc playback.
- Do not warp discs.
- When a disc is not currently being used, remove it from this unit and store it in an appropriate case.
- When removing or storing a disc, be careful not to scratch the playing surface.
- Compact discs are not affected by small particles of dust or fingerprints on their playing surface, but even so they must be kept clean. Wipe the disc surface with a clean, dry cloth. Do not wipe the disc surface with a circular motion; wipe it straight outward from the center.



- Do not try to clean the disc surface with any type of disc cleaner, record spray, anti-static spray or liquid, or any other chemical-based liquid as such substances may irreparably damage the disc surface.
- Do not expose discs to direct sunlight, high temperature, or high humidity for a long period of time as these conditions may warp or otherwise damage the disc.



- To play back an 8-cm (3-inch) compact disc, place it in the inner recessed area of the disc tray. Do not put a normal 12-cm CD on top of an 8-cm CD.

# Troubleshooting

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

Problem	Cause	Remedy	See page
<b>The unit does not switch ON when STANDBY/ON/OFF is pressed upward.</b>	The power cable is not connected nor completely connected.	Securely connect the power cable.	20
<b>This unit automatically goes to STANDBY mode.</b>	The automatic standby function is activated.	If the unit is not operated for 30 minutes with no audio signal detected, it automatically goes to STANDBY mode.	6
<b>The disc tray does not close completely.</b>	A foreign object is obstructing the tray.	Carefully check the disc tray and remove the foreign object.	—
<b>Playback does not start.</b>	The disc is damaged.	Check the disc carefully; replace it if necessary.	—
	There is moisture on the laser pickup.	Wait 20 to 30 minutes after switching the unit ON before trying to play back a disc.	—
	The disc is loaded upside down.	Reload the disc with the label side up.	—
	The disc is dirty.	Clean the disc.	28
	The MP3 or WMA formats are not compatible with this unit.	Replace the disc with a correctly recorded disc playable with this unit.	28
	The CD-RW (ReWritable) disc is not recorded correctly.	Replace the disc with a correctly recorded disc playable with this unit.	27
	The disc is a non-standard disc not playable with this unit.	Replace the disc with a correctly recorded disc playable with this unit.	27
<b>Playback is delayed, or begins at the wrong place.</b>	The disc may be scratched or damaged.	Check the disc carefully; replace it if necessary.	28
<b>No sound.</b>	Improper output cable connections.	Connect the cables properly. If the problem persists, the cables may be defective.	18
	Improper amplifier operation.	Set the amplifier controls to the correct input selection.	—
<b>No playback sound from the component connected to the digital input jacks.</b>	The unit is in PURE DIRECT mode.	Turn off PURE DIRECT mode.	7
	The Super Audio CD layer is being played.	Change the layer for playback.	7
<b>Sound “skips.”</b>	This unit is being subjected to vibrations or impacts.	Relocate this unit.	—
	The disc is dirty.	Clean the disc.	28
	The clock of the playback audio signal is fluctuated.	Change the DPLL bandwidth of the audio DAC (ES9018).	14
<b>Sound “hums.”</b>	Improper cable connections.	Securely connect the audio cables. If the problem persists, the cables may be defective.	18

# Troubleshooting

Problem	Cause	Remedy	See page
<b>Noise from a nearby tuner.</b>	The tuner is too close to this unit.	Move the tuner and this unit farther apart.	—
<b>Noise from inside of the disc tray.</b>	The disc may be warped.	Replace the disc.	28
<b>No sound from the component connected to the DIGITAL IN (OPTICAL or COAXIAL) jack.</b>	The output audio source setting on the connected component is not "PCM."	Only PCM audio sources can be played via the DIGITAL IN (OPTICAL/COAXIAL) jacks of this unit. Set the output audio source of the connected component to "PCM."	—
<b>The remote control does not work.</b>	The batteries of the remote control are too weak.	Replace the batteries with new ones.	16
	Remote control is too far away or tilted too much.	Use within 6 m and 60° radius.	9
	Direct sunlight or lighting (of an inverter type fluorescent lamp etc.) is striking the remote control sensor of this unit.	Reposition this unit.	9

## ■ On USB connection

Problem	Cause	Remedy	See page
<b>The connected PC does not recognize this unit.</b>	The operating system of the PC is not supported.	Use a PC with an operation-guaranteed operating system.	22
	Improper USB cable connection	Connect the USB cable properly.	19, 22
	The output of the PC or application is muted.	Cancel the sound muting of the PC or application.	—
<b>Noisy playback.</b>	Another application is launched on the PC while a music file is being played.	If another application is launched while a music file is being played, sound may be momentarily lost or noise may be generated. Do not launch other applications during playback.	—
<b>Music files cannot be played.</b>	The music data are not properly reproduced, because this unit is connected to the PC or the input of this unit is switched to "USB" while the music application is running on the PC.	Connect this unit to the PC and set the input of the unit to "USB" in advance. Then launch the music application and start playback.	23
	The dedicated "Yamaha Steinberg USB Driver" has not been installed correctly.	Install the "Yamaha Steinberg USB Driver" again, following the correct procedure.	22

## ■ Messages on the information display

Message	Status
<b>NO DISC</b>	No disc is set on the disc tray.
<b>Check Cable</b>	The dedicated “Yamaha Steinberg USB Driver” has not been installed correctly. Or, the audio output of the computer has not been set to “Yamaha CD Player.”
<b>Check PC</b>	The audio signal from the computer cannot be recognized.
<b>Fs: ----kHz</b>	No audio signal is recognized.



# Reference Information

## Playing back DSD audio using foobar2000

### Contents

<b>NOTICE.....</b>	<b>1</b>
<b>Required components .....</b>	<b>1</b>
<b>Installing foobar2000 .....</b>	<b>2</b>
<b>Installing Yamaha Steinberg USB Driver and configuring its settings .....</b>	<b>2</b>
<b>Installing the “ASIO support” component .....</b>	<b>3</b>
<b>Installing the “Super Audio CD Decoder” component .....</b>	<b>5</b>
<b>Configuring DSD playback settings of foobar2000.....</b>	<b>7</b>

### NOTICE

- “foobar2000” is not Yamaha product. Yamaha cannot be held responsible for any damages arising out of the use of the software.
- “foobar2000” is installable only on Windows computers. The procedures described in this documentation are based on Windows 7.
- The documentation is based on information as at May 2013 (We have no plans to offer updates).

### Required components

#### **foobar2000**

“foobar2000” is an advanced freeware audio player for Windows. By installing foobar2000 and other components on your Windows computer, you can enjoy DSD (Direct Stream Digital) audio playback on the unit (via USB DAC).

#### **Yamaha Steinberg USB Driver**

Driver software required for connecting a device compatible with Yamaha Steinberg USB Driver to a computer.

#### **ASIO support**

A component required for DSD audio playback on foobar2000.

#### **Super Audio CD Decoder**

A decoder required for direct DSD playback of Super Audio CD ISO images, DSDIFF and DSF files on compatible devices.

# Installing foobar2000

- 1 Download the latest stable version of foobar2000 at the following website.  
<http://www.foobar2000.org/download>
- 2 Double-click the downloaded file “foobar2000\_v\*.\*.exe” to start installation.
- 3 Follow the on-screen instructions to install the software.

# Installing Yamaha Steinberg USB Driver and configuring its settings

- 1 Download “Yamaha Steinberg USB Driver” at the following Yamaha website.  
<http://download.yamaha.com/>

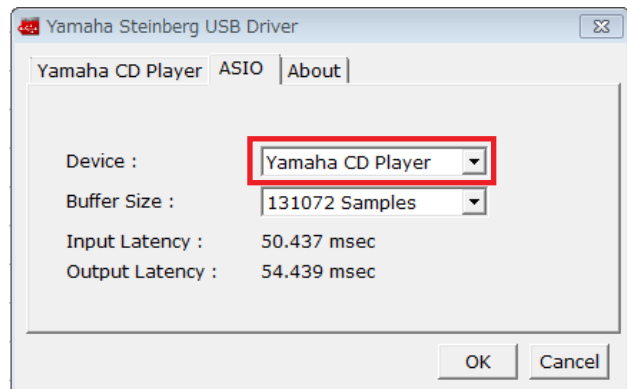
- 2 Install “Yamaha Steinberg USB Driver” on your computer, connect the unit to your computer, then open its control panel.

For details on the installation and how to open the control panel of the driver, refer to the Installation Guide supplied with the driver software.

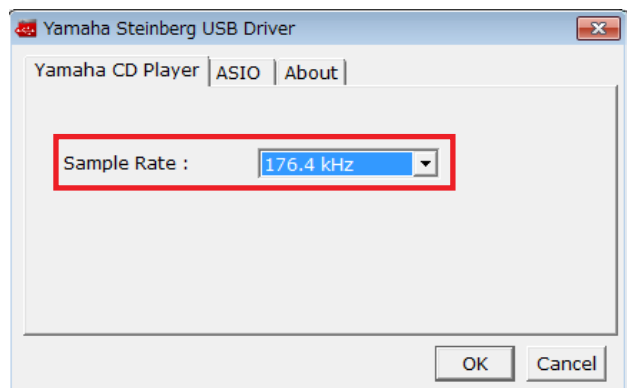
For details on the connection, refer to the Owner's Manual of the unit.

- 3 Configure the following control panel settings.

- “ASIO” setting  
**Device:** Yamaha CD player



- “Yamaha CD Player” setting  
**Sample Rate:** 176.4 kHz



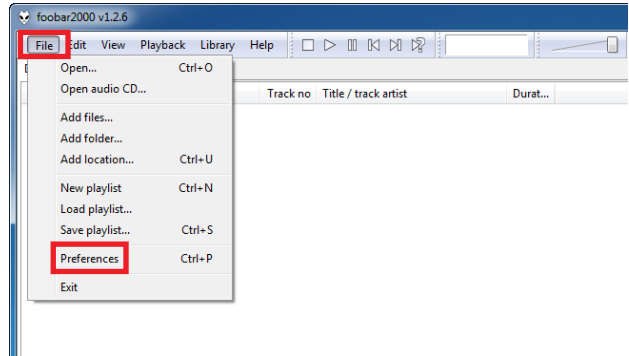
- 4 Click [OK].

Installation and settings of “Yamaha Steinberg USB Driver” is now completed.

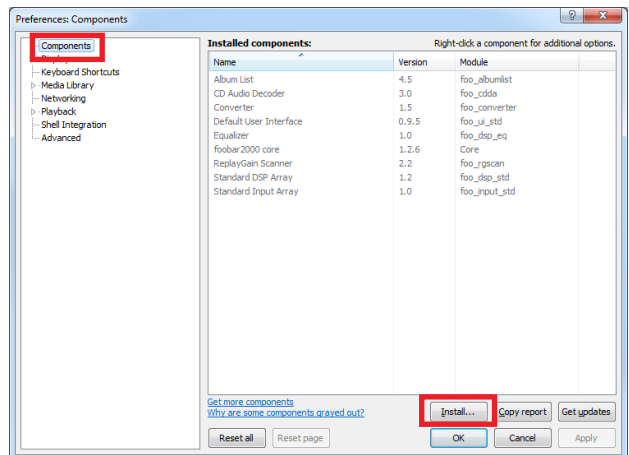
# Installing the “ASIO support” component

**1** Download the “ASIO support” component (foo\_out\_asio) at the following website.  
[http://www.foobar2000.org/components/view/foo\\_out\\_asio](http://www.foobar2000.org/components/view/foo_out_asio)

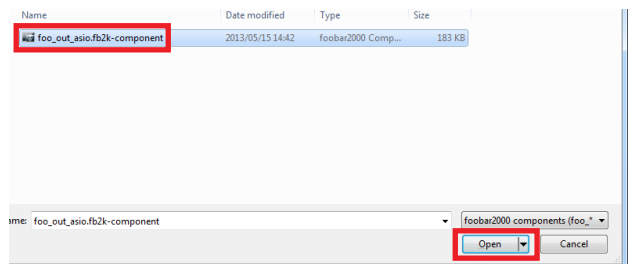
**2** Run foobar2000, then select [File] → [Preferences].



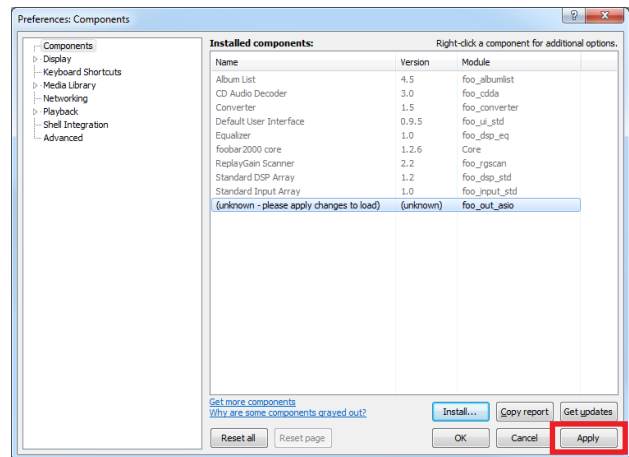
**3** Click [Components] → [Install].



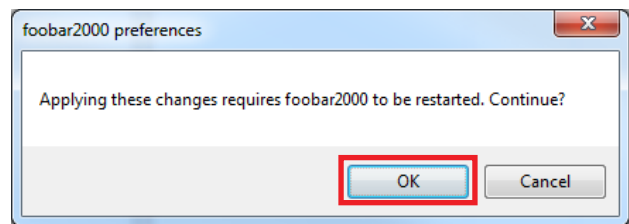
**4** Select the downloaded component “foo\_out\_asio.fb2k-component”, then click [Open].



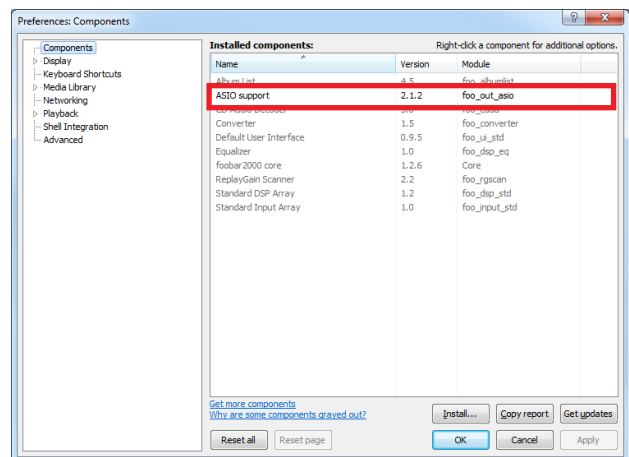
**5** Click [Apply].



**6** In the dialog box, click [OK] to restart foobar2000.



**7** If foobar2000 is restarted, click [File] → [Preferences] → [Components], then confirm “ASIO support” is listed in “Installed components”.  
Installation of the “ASIO support” component is now completed.



# Installing the “Super Audio CD Decoder” component

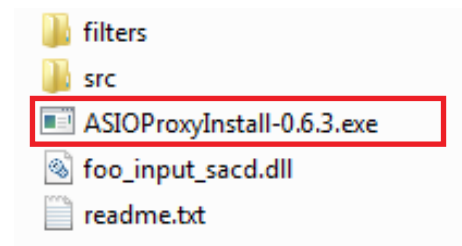
- 1 Download the latest version of “foo\_input\_sacd-0.\*.\*.zip” at the following website.

[http://sourceforge.net/projects/sacddecoder/files/foo\\_input\\_sacd/](http://sourceforge.net/projects/sacddecoder/files/foo_input_sacd/)

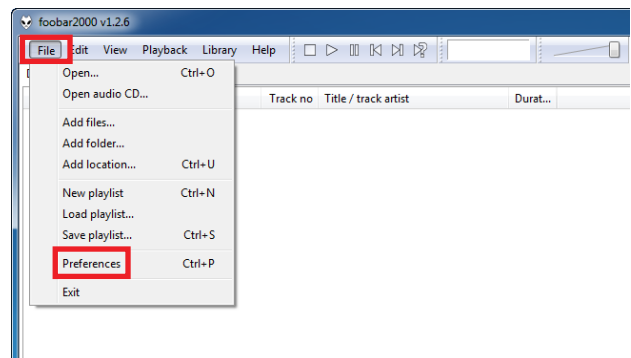
Looking for the latest version? [Download foo\\_input\\_sacd-0.6.4.zip \(442.2 kB\)](#)



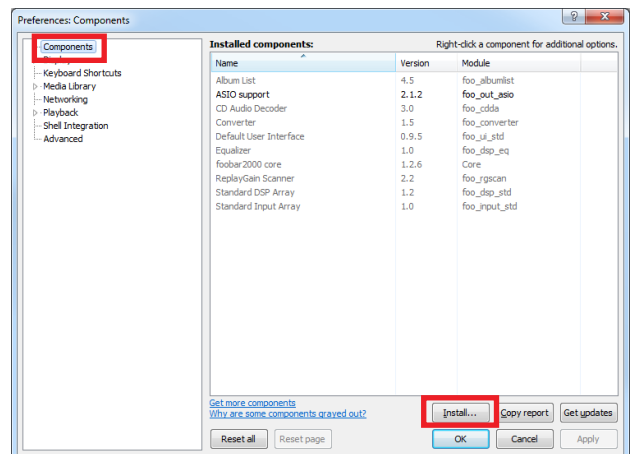
- 2 Uncompress the downloaded file “foo\_input\_sacd-0.\*.\*.zip”.
- 3 In the uncompressed folder, double-click “ASIOProxyInstall-0.\*.\*.exe” to start installation.



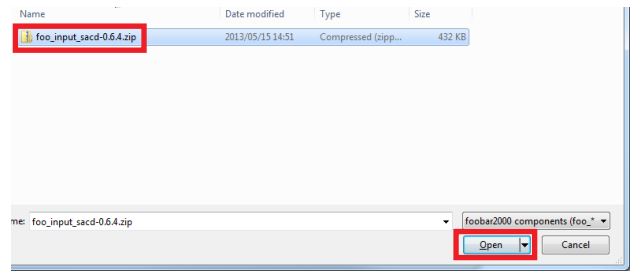
- 4 Follow the on-screen instructions to install the component.
- 5 Run foobar2000, then select [File] → [Preferences].



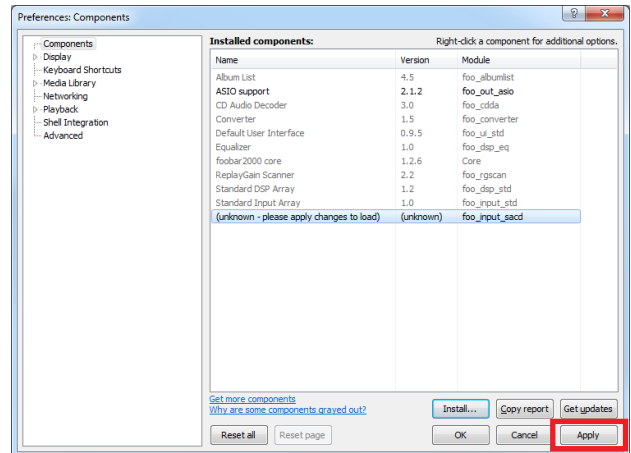
- 6 Click [Components] → [Install].



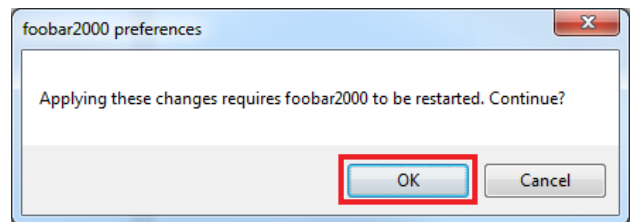
**7** Select the downloaded component “foo\_input\_sacd-0.\*.\*.zip”, then click [Open].



**8** Click [Apply].

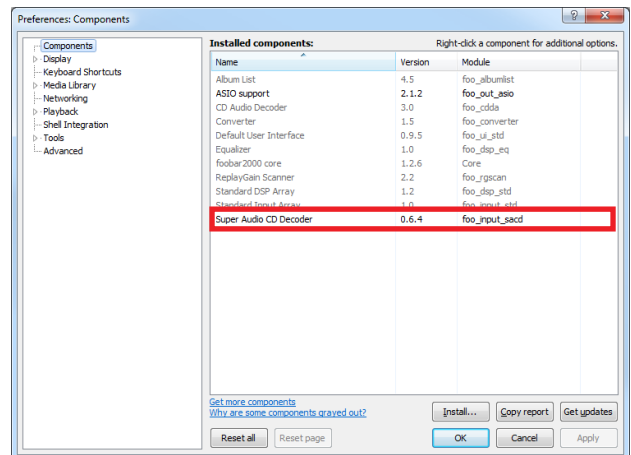


**9** In the dialog box, click [OK] to restart foobar2000.



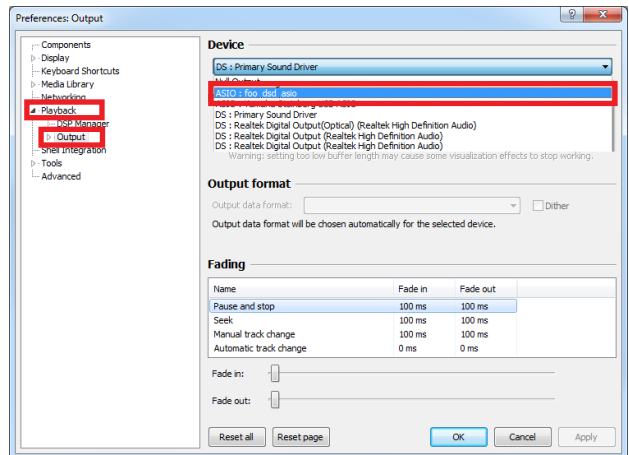
**10** If foobar2000 is restarted, click [File] → [Preferences] → [Components], then confirm “Super Audio CD Decoder” is listed in “Installed components”.

Installation of the “Super Audio CD Decoder” component is now completed.

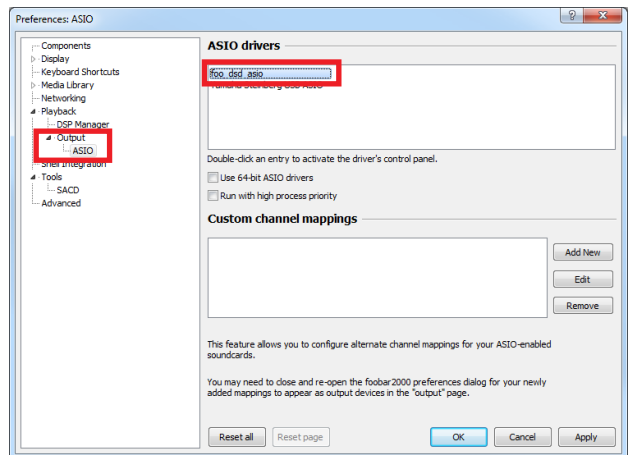


# Configuring DSD playback settings of foobar2000

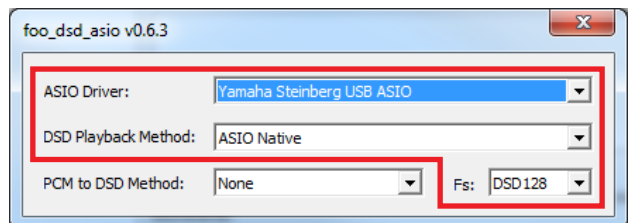
- 1 Click [File] → [Preferences] → [Playback] → [Output], then select “ASIO:foo\_dsd\_asio” from the “Device” pull-down list.



- 2 Click [Output] → [ASIO], then double-click “foo\_dsd\_asio” in “ASIO drivers”.



- 3 Configure the following settings.  
**ASIO Driver:** Yamaha Steinberg USB ASIO  
**DSD Playback Method:** ASIO Native  
**Fs:** DSD64 (normal speed playback) or DSD128 (double speed playback)



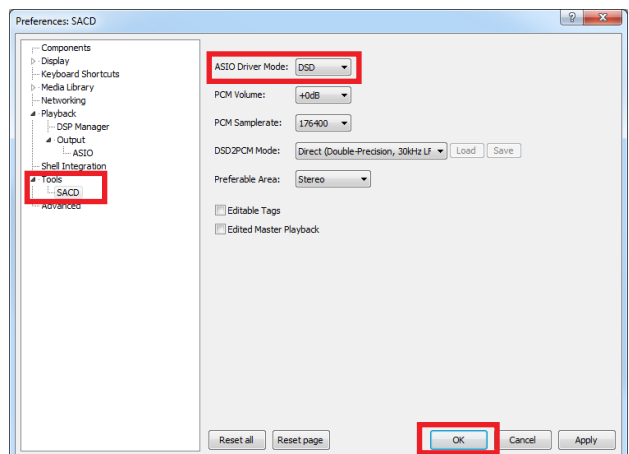
- 4 Click [X] (close button) to close the window.

- 5 Click [Tools] → [SACD], configure the following setting.

ASIO Driver Mode: DSD

- 6 Click [OK].

DSD playback settings of foobar2000 is now completed.  
You are ready to enjoy DSD audio playback on the unit.





# *CD-S3000*

---

*Compact Disc Player*

*Lecteur Compact Disc*

# IMPORTANT SAFETY INSTRUCTIONS

	<b>CAUTION</b> <b>RISK OF ELECTRIC SHOCK</b> <b>DO NOT OPEN</b>	
<p><b>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.</b></p>		

• 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.

## 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.

- 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.



## 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.

### FCC CAUTION

Change or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

### 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)

### COMPLIANCE INFORMATION STATEMENT

(DECLARATION OF CONFORMITY PROCEDURE)

Responsible Party: Yamaha Corporation of America A/V Division  
Address: 6600 Orangethorpe Avenue, Buena Park, CA 90620, USA

Telephone: 1-714-522-9011

Type of Equipment: Compact Disc Player

Model Name: CD-S3000

This device complies with Part 15 of the FCC Rules.

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 of this device.
- See user manual instructions if interference to radio reception is suspected.

## 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: 10 cm (4 in)  
Rear: 10 cm (4 in)  
Sides: 10 cm (4 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 objects 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 cord disconnected from a wall outlet or the 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 read the “Troubleshooting” section in the owner’s manual on common operating errors before concluding that this unit is faulty.
- 17 Before moving this unit, press STANDBY/ON/OFF downward to turn off this unit and then disconnect the AC power plug from the AC 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 system off, then leave this unit alone for cooling.
- 20 Install this unit near the wall 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.
  - Keep the batteries in a location out of reach of children. Batteries can be dangerous if a child were to put in his or her mouth.
  - If the batteries grow old, the effective operation range of the remote control decreases considerably. If this happens, replace the batteries with new one as soon as possible.
  - Do not use old batteries together with new ones.
  - Do not use different types of batteries (such as alkaline and manganese batteries) together. Read the packaging carefully as these different types of batteries may have the same shape and color.
  - Exhausted batteries may leak. If the batteries have leaked, dispose of them immediately. Avoid touching the leaked material or letting it come into contact with clothing, etc. Clean the battery compartment thoroughly before installing new batteries.
  - If you plan not to use the unit for a long period of time, remove the batteries from the unit. Otherwise, the batteries will wear out, possibly resulting in a leakage of battery liquid that may damage the unit.
  - Do not throw away batteries with general house waste. Dispose of them correctly in accordance with your local regulations.

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 POWER. 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.

**CAUTION**  
Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type.

## ■ Handling the remote control

- The area between the remote control and this unit must be clear of large obstacles.
- 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 types of conditions:
  - places of high humidity, such as near a bath
  - places of high temperature, such as near a heater or a stove
  - places of extremely low temperatures
  - dusty places
- Do not expose the remote control sensor to strong lighting, in particular, an inverter type fluorescent lamp; otherwise, the remote control may not work properly. If necessary, position this unit away from direct lighting.

## LASER SAFETY

This unit employs a laser. Due to possible eye injury, only a qualified service person should remove the cover or attempt to service this device.

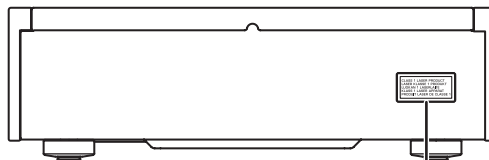
## DANGER

This unit emits visible laser radiation when open. Avoid direct eye exposure to beam. When this unit is plugged into the wall outlet, do not place your eyes close to the opening of the disc tray and other openings to look into inside.

## CAUTION

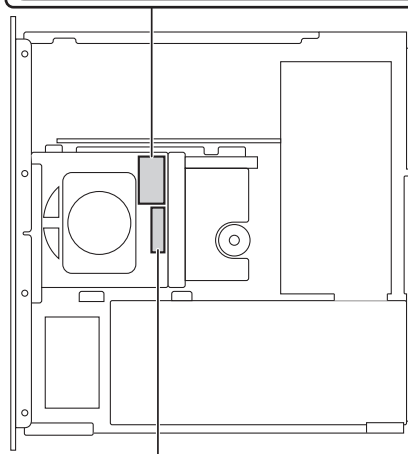
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

The laser component in this product is capable of emitting radiation exceeding the limit for Class 1.



CLASS 1 LASER PRODUCT  
LASER KLASSE 1 PRODUKT  
LUOKAN 1 LASERLAITE  
KLASS 1 LASER APPARAT  
PRODUIT LASER DE CLASSE 1

CAUTION - CLASS 3B VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN. AVOID EXPOSURE TO BEAM.  
VARNING - KLASS 3B SYNLIIG OCH OSYNLIIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD. STRÅLEN ÄR FÄRLIG.  
VARO! AVATTAESSA OLET ALLTIINA LUOKAN 3B NÄKYVÄLLE JA NÄKYMÄTÖMÄLLE LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.  
VARNING - KLASS 3B SYNLIIG OCH OSYNLIIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD. BETRÄKTA EJ STRÅLEN.  
VORSICHT! SICHTBARE UND UNSICHTBARE LASERSTRAHLUNG KLASSE 3B WENN ABDECKUNG GEÖFFNET. NICHT DEM STRAHL AUSSETZEN.  
ATTENTION - RADIATION VISIBLE ET INVISIBLE CLASSE 3B LORSQUE L'APPAREIL EST OUVERT, ÉVITEZ TOUTE EXPOSITION AU FAISCEAU.



DANGER - VISIBLE AND INVISIBLE RADIATION WHEN OPEN. AVOID DIRECT EXPOSURE TO BEAM.

CAUTION INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCKS DEFEATED. AVOID EXPOSURE TO BEAM.

