

TT-N503

NETWORK TURNTABLE / PLATINE VINYLE CONNECTÉE
Сетевой Виниловый проигрыватель

MusicCast VINYL 500

Owner's Manual
Mode d'emploi
Bedienungsanleitung
Bruksanvisning
Manuale di istruzioni
Manual de instrucciones
Gebruiksaanwijzing
Manual do Proprietário
Инструкция по эксплуатации

 **YAMAHA**

English

Français

Deutsch

Svenska

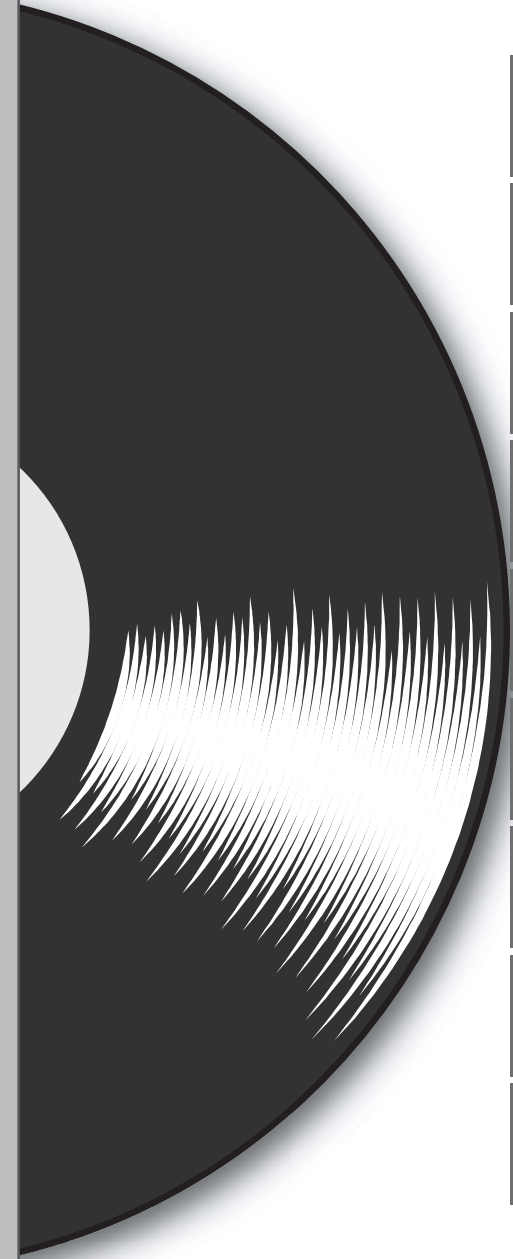
Italiano

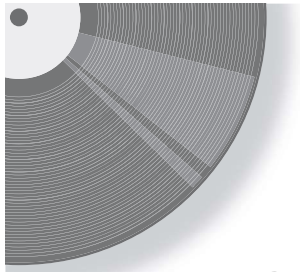
Español

Nederlands

Português

Русский





This product is designed for use at home to enjoy listening to audio.

PRECAUTIONS

PLEASE READ CAREFULLY BEFORE USE. BE SURE TO FOLLOW THESE INSTRUCTIONS.

The precautions listed below are to prevent risk of harm to the user and others, as well as to prevent property damage, and to help the user use this unit properly and safely. Be sure to follow these instructions.

After reading this manual, be sure to keep it in a safe place where it can be referenced at any time.

- Be sure to request inspections or repairs from the dealer where you purchased the unit or from qualified Yamaha service personnel.
- Yamaha cannot be held responsible for injury to you or damage of the products caused by improper use or modifications to the unit.
- This product is for ordinary homes. Do not use for applications requiring high reliability, such as managing lives, health care or high-value assets.



WARNING

This content indicates “risk of serious injury or death.”

Power supply/AC adaptor

- Do not do anything that could damage the power cord.
 - Do not place it near a heater.
 - Do not bend it excessively or alter it.
 - Do not scratch it.
 - Do not place it under a heavy object.
- Using the power cord with the core of the cord exposed could cause electric shocks or a fire.
- Do not touch the power plug or cord if there is a chance of lightning. Failure to observe this may cause electric shocks.
- Use this unit with the power supply voltage printed on it. Failure to connect to an appropriate AC outlet may cause a fire, electric shocks, or malfunctions.
- Be sure to use the supplied AC adaptor. Failure to observe the above may cause a fire, burns, or malfunctions.
- Check the electric plug periodically and remove any dirt or dust which may have accumulated on it. Failure to observe this may cause a fire or electric shocks.

- When setting up the unit, make sure that the AC outlet you are using is easily accessible. If some trouble or malfunction occurs, immediately turn off the power switch and disconnect the plug from the AC outlet. Even when the power switch is turned off, as long as the power cord is not unplugged from the wall AC outlet, the unit will not be disconnected from the power source.
- If you hear thunder or suspect approaching lightning, quickly turn off the power switch and pull the power plug from the AC outlet. Failure to observe this may cause a fire or malfunctions.
- If not using the unit for long periods of time, be sure to pull the power plug from the AC outlet. Failure to observe this may cause a fire or malfunctions.

Do not disassemble

- Do not disassemble or modify this unit. Failure to observe this may cause a fire, electric shocks, injury, or malfunctions. If you notice any irregularities, be sure to request an inspection or repair from the dealer where you purchased the unit or from qualified Yamaha service personnel.

Water warning

- Do not expose the unit to rain, use it near water or in damp or wet conditions, or place on it any containers (such as vases, bottles or glasses) containing liquids which might spill into any openings or places where water may drop. A liquid such as water getting into the unit may cause a fire, electric shocks, or malfunctions. If any liquid such as water seeps into the device, turn off the power immediately and unplug the power cord from the AC outlet. Then, request an inspection from the dealer where you purchased the unit or from qualified Yamaha service personnel.
- Never insert or remove an electric plug with wet hands. Do not handle this unit with wet hands. Failure to observe this may cause electric shocks or malfunctions.

Fire warning

- Do not place any burning items or open flames near the unit, since they may cause a fire.

Wireless unit

- Do not use this unit near medical devices or inside medical facilities. Radio waves from this unit may affect electro-medical devices.
- Do not use this unit within 15 cm (6 in) of persons with a heart pacemaker implant or a defibrillator implant. Radio waves from this unit may affect electro-medical devices, such as a heart pacemaker implant or defibrillator implant.

If you notice any abnormality

- If any of the following abnormalities occur, immediately turn off the power and disconnect the power plug.
 - The power cord/plug is damaged.
 - An unusual smell or smoke is emitted from the unit.
 - Foreign material gets into the interior of the unit.
 - There is a crack or damage in the unit.Continued use could cause electric shocks, a fire, or malfunctions. Immediately request an inspection or repair from the dealer where you purchased the unit or from qualified Yamaha service personnel.
- Be careful not to drop or apply strong impact to this unit or the AC adaptor. If you suspect the unit may have been damaged due to dropping or impact, immediately turn off the power and pull the power plug from the AC outlet. Failure to observe this may cause electric shocks, a fire, or malfunctions. Immediately request an inspection from the dealer where you purchased the unit or from qualified Yamaha service personnel.



CAUTION

This content indicates “risk of injury.”

Power supply/AC adaptor

- Do not cover or wrap the AC adaptor with a cloth or blanket. Failure to observe this may trap heat, causing deformation in the case or a fire.
- Do not use an AC outlet where the power plug fits loosely when inserted. Failure to observe this may cause a fire, electric shocks, or burns.
- When removing the electric plug from the unit or an AC outlet, always hold the plug itself and not the cord. Pulling by the cord can damage it and cause electric shocks or a fire.
- Insert the power plug firmly all the way into the AC outlet. Using the unit when it is not plugged in sufficiently can cause dust to accumulate on the plug, causing a fire or burns.

Installation

- Do not place the unit in an unstable position where it might accidentally drop or fall over and cause injuries.
- When installing this unit:
 - Do not cover it with any cloth.
 - Do not install it on a carpet or rug.
 - Make sure the top surface faces up; do not install on its sides or upside down.
- Ensure that the top is facing upwards. Failure to observe this may cause malfunctions or for the unit to fall and cause injury.

- Do not install the unit in places where it may come into contact with corrosive gases or salt air or places that have excessive smoke or steam. Doing so may result in malfunction.
- Avoid being near the unit during a disaster, such as an earthquake. Since the unit may turn over or fall and cause injury, quickly move away from the unit and go to a safe place.
- Before moving this unit, be sure to turn off the power switch and disconnect all connection cables. Failure to observe this may damage the cables or cause you or someone else to trip and fall.

Hearing loss

- Before connecting the unit to other devices, turn off the power for all devices. Failing to do so may result in hearing loss, electric shock, or device damage.
- When turning on the AC power in your audio system, always turn on the amplifier or receiver LAST, to avoid hearing loss and speaker damage. When turning the power off, the amplifier or receiver should be turned off FIRST for the same reason. Failure to observe the above may cause hearing impairment or speaker damage.

Maintenance

- Remove the power plug from the AC outlet before cleaning the unit. Failure to observe this may cause electric shocks.

Handling caution

- Keep small parts out of the reach of infants. Your children may accidentally swallow them.
- Do not do the following:
 - stand on or sit on the equipment.
 - put heavy items on top of the equipment.
 - place the equipment in a stack.
 - apply unreasonable force to buttons, switches, input/output terminals, etc.
 - lean against the equipment.
- Avoid pulling the connected cables to prevent injuries or damage to the unit by causing it to fall.

Notice

Indicates points that you must observe in order to prevent product failure, damage or malfunction and data loss.

Power supply/AC adaptor

- If not using the unit for a long period of time, be sure to pull the power plug from the outlet. A minute current is still flowing even if the power has been turned off (the power is in standby).

Installation

- Do not use this unit in the vicinity of other electronic equipment, such as a TV, radio, or mobile phone. Failure to observe this may cause this unit or the TV or radio to produce noise.
- Do not use this unit in a location that is exposed to direct sunlight that becomes extremely hot, such as near a heater, or extremely cold, or that is subject to excessive dust or vibration. Failure to observe this may cause the unit's panel to become deformed, the internal components to malfunction, or for operation to become unstable.
- If using a wireless function, avoid installing this unit near metal walls or desks, microwave ovens, or other wireless network devices. Obstructions could shorten the transmission distance.

Connections

- If connecting external units, be sure to thoroughly read the manual for each unit and connect them in accordance with the instructions.
Failure to properly handle a unit in accordance with the instructions could cause malfunctions.

Handling

- Do not place plastic or rubber products on this unit. Failure to observe this may cause discoloration or deformation in the panel of this unit.
- If the ambient temperature changes drastically (such as during unit transportation or under rapid heating or cooling) and there is a chance condensation may have formed in the unit, leave the unit for several hours without turning on the power until it is completely dry before use. Using the unit while there is condensation can cause malfunctions.

Maintenance

- If the temperature or humidity changes drastically, water droplets (condensation) may form on the unit surface. If water droplets form, immediately wipe them off with a soft cloth. If water droplets are left on the unit, they may be absorbed into the wooden parts, causing deformation.
- When cleaning the unit, use a dry, soft cloth. Using chemicals such as benzine or thinner, cleaning agents, or chemical scrubbing cloths can cause discoloration or deformation.

Information

About content in this manual

- The illustrations and screens in this manual are for instructional purposes only.
- The company names and product names in this manual are the trademarks or registered trademarks of their respective companies.
- Software may be revised and updated without prior notice.

■ About the name plate of the unit

The model number, serial number, power requirements, etc., may be found on or near the name plate, which is at the bottom of the unit. You should note this serial number in the space provided below and retain this manual as a permanent record of your purchase to aid identification in the event of theft.

Model No.

Serial No.

(bottom_en_01)

[Europe model]

Wireless communication functions

Bluetooth

Radio Frequency (Operational Frequency): 2402 MHz to 2480 MHz
Maximum Output Power (EIRP): 7.27 dBm

Wi-Fi (2.4 GHz)

Radio Frequency: 2402 MHz to 2482 MHz
Maximum Output Power (EIRP): 19.98 dBm

Wi-Fi (5 GHz)

Radio Frequency, Maximum Output Power (EIRP):
5170 to 5250MHz, 22.03 dBm
5250 to 5330MHz, 22.27 dBm
5490 to 5710MHz, 24.56 dBm
5735 to 5835MHz, 13.96 dBm

- Wireless devices transmitting over a 5 GHz frequency band can only be used indoors. Use of such devices outdoors is prohibited by law.

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.



For business users in the European Union:

If you wish to discard electrical and electronic equipment, please contact your dealer or supplier for further information.



Information on Disposal in other Countries outside the European Union:

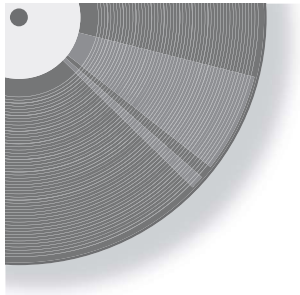
These symbols are only valid in the European Union. If you wish to discard these items, please contact your local authorities or dealer and ask for the correct method of disposal.

Cd

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.

(weee_battery_eu_en_02)



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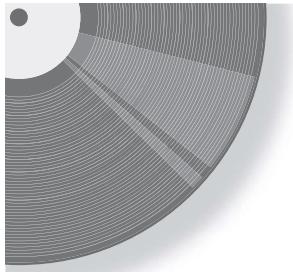
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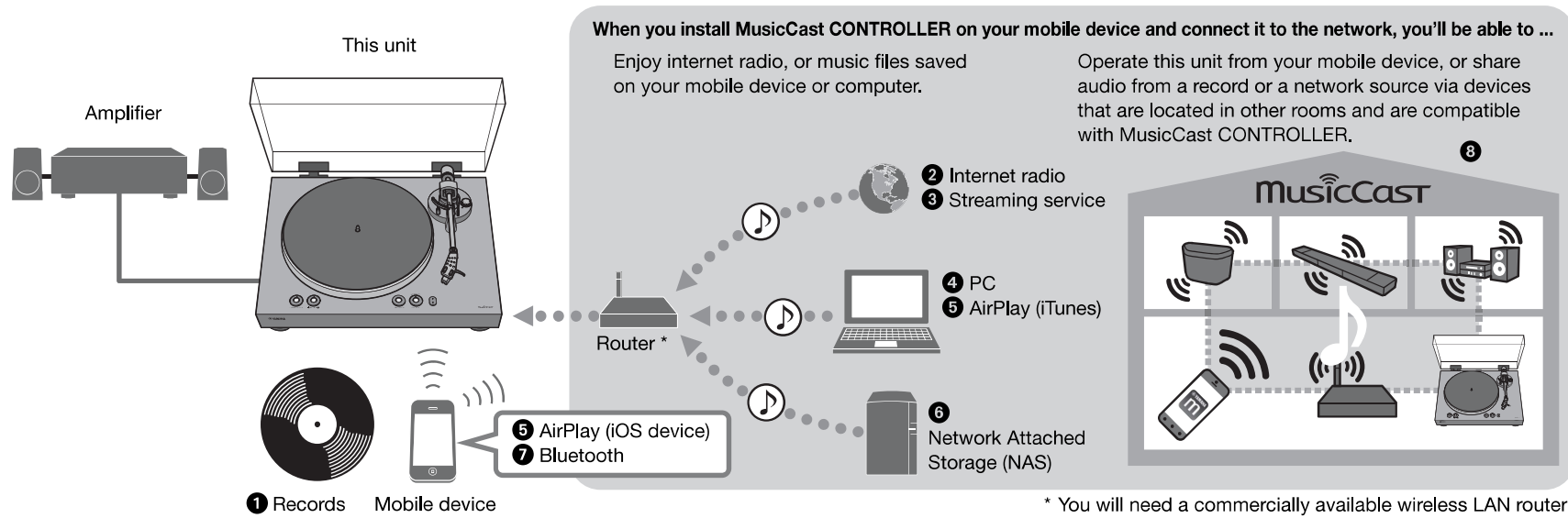
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Before you start

What you can do with the unit

This unit is a network turntable that supports playback from network sources such as media servers or mobile devices, in addition to playing records.



- 1** Record playback (⇒ page 25)
- 2** Listening to Internet radio (⇒ page 28)
- 3** Listening to streaming services (⇒ page 28)
- 4** Playing music files stored on your PC (⇒ page 29)
- 5** Playing music files with AirPlay (⇒ page 31)

- 6** Playing music files stored on a Network Attached Storage (NAS) device (⇒ page 29)
- 7** Playing audio content from a Bluetooth device (⇒ page 30)
- 8** Playing music using MusicCast CONTROLLER (⇒ page 23)

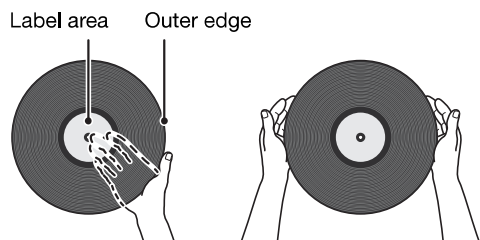
About this manual

When reading this manual, please note the following.

- ◆ Specifications and appearance are subject to change without notice in order to improve the product.
- ◆ In this manual, iPhone, iPad and iPod touch are collectively referred to as “iOS device”.
- ◆ This manual uses MusicCast CONTROLLER screens displayed in English on an iPhone as examples.
- ◆ Explanation of graphic symbols used in this manual:
 - **⚠ WARNING** indicates points that you must observe to avoid risk of death or serious injury.
 - **⚠ CAUTION** indicates points that you must observe to avoid risk of injury.
 - **NOTICE** indicates points that you must observe to avoid damaging the product or causing it to malfunction.
 - **NOTE** indicates supplementary information that you will find useful.

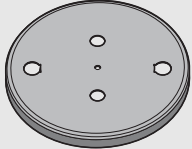
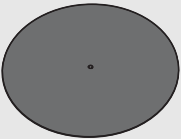
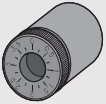
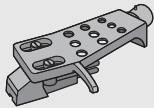
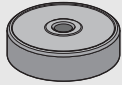
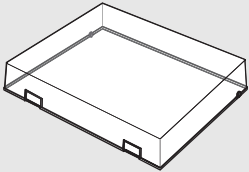
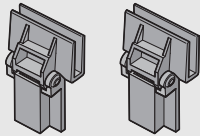
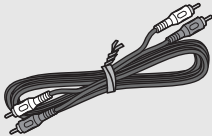
Handling records

When you hold a record, you should either support the record’s label area and its outer edge, or hold the record’s outer edges between your two hands.



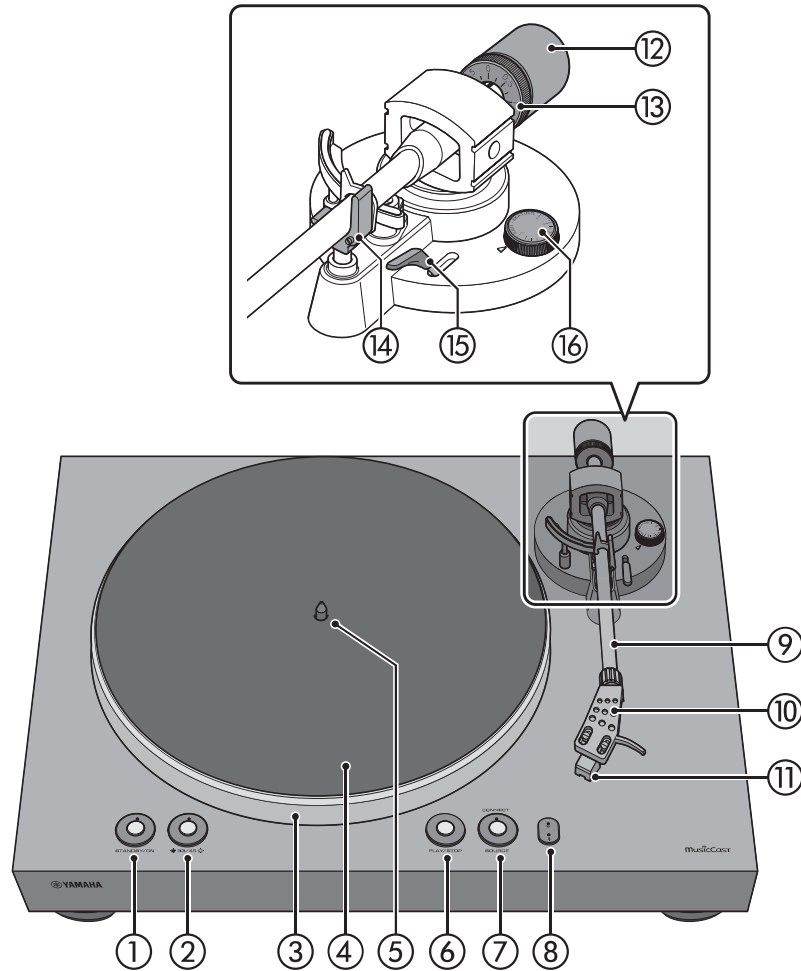
Check the supplied accessories

Make sure that all items are present.

<input type="checkbox"/> Platter x1 	<input type="checkbox"/> Platter sheet x1 	<input type="checkbox"/> Belt x1 * The belt is installed on the platter.
<input type="checkbox"/> Counter weight x1 	<input type="checkbox"/> Head shell x1 (with cartridge) 	<input type="checkbox"/> 45 rpm adaptor x1 
<input type="checkbox"/> Dust cover x1 	<input type="checkbox"/> Dust cover hinge x2 	<input type="checkbox"/> RCA stereo cable x1 
<input type="checkbox"/> AC adaptor x1 * For details, refer to the included “Supplement” (leaflet).	<input type="checkbox"/> Owner’s Manual (this manual) <input type="checkbox"/> Supplement (leaflet)	

Parts and their functions

Top panel



① **STANDBY/ON (power)**

This switches the unit's power between on and standby (off). (⇒ page 22)

STANDBY/ON (power) indicator

This indicates the status of the unit's power.

Lit: Power is on

Dimly lit: Power is in the network standby state (⇒ page 22)

Unlit: Power is in the eco standby state (⇒ page 22)

② **33/45 (speed)** (⇒ page 26)

Speed indicator (⇒ page 26)

③ **Platter** (⇒ page 15)

④ **Platter sheet** (⇒ page 16)

⑤ **Center spindle** (⇒ page 15)

⑥ **PLAY/STOP (play/stop)** (⇒ page 26)

Makes the platter rotate or stop.

NOTE

- ◆ If the source (audio source) is network or Bluetooth, this plays/stops the network source.

⑦ **SOURCE**

Selects the source (audio source) for this unit. Each time you press this, the source alternates between PHONO, network, and Bluetooth.

NOTE

- ◆ The source can be switched if this unit's back panel audio output select switch is set to LINE OUT.

SOURCE indicator

The color of the indicator changes depending on the source.

Source	Indicator color
PHONO	White
network (AirPlay)	Pink
network (other than AirPlay)	Green
Bluetooth	Blue

NOTE

- ◆ When new firmware is provided, the indicator flashes orange. (⇒ page 34)

CONNECT

Use this when using MusicCast CONTROLLER to make network connection settings. (⇒ page 23)

⑧ **(wireless LAN) indicator**

Lights when this unit connects wirelessly. (⇒ page 23)

(Bluetooth) indicator

Lights when this unit connects to a Bluetooth device. (⇒ page 30)

⑨ **Tone arm** (⇒ page 16)

⑩ **Head shell** (⇒ page 16)

⑪ **Cartridge**

⑫ **Counter weight** (⇒ page 21)

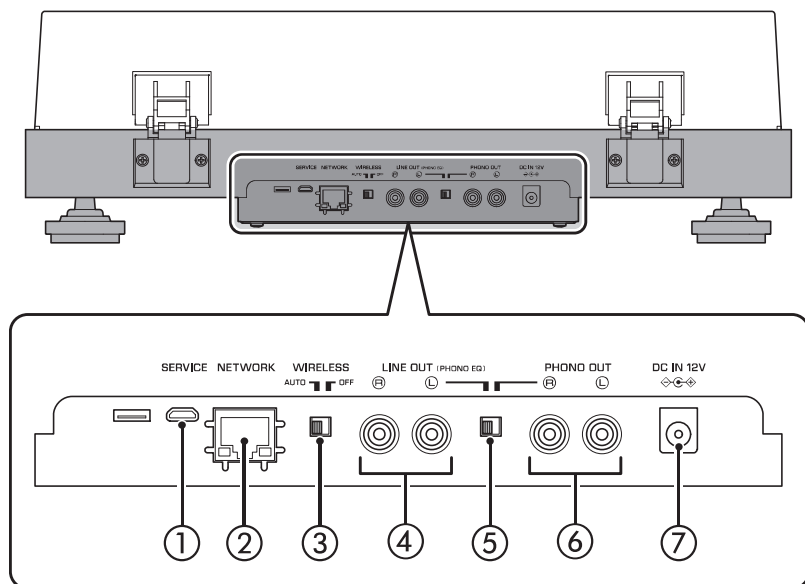
⑬ **Counter ring** (⇒ page 21)

⑭ **Arm rest** (⇒ page 20)

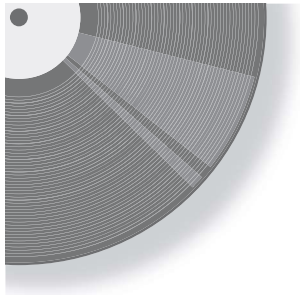
⑮ **Lift lever** (⇒ page 26)

⑯ **Anti-skating** (⇒ page 22)

Back panel



- ① **SERVICE jack**
This jack is only for service. It is not normally used.
- ② **NETWORK jack**
Use a LAN cable (commercially available) to connect this to your network.
- ③ **WIRELESS switch**
Enables/disables this unit's wireless functionality (including Bluetooth).
AUTO (default): Wireless functionality is enabled.
OFF: Wireless functionality is disabled.
- ④ **LINE OUT jacks**
Output the playback audio from the record or the network source. (⇒ page 18)
- ⑤ **Audio output select switch**
Switches the audio output. (⇒ page 18)
LINE OUT (default): The signal from the cartridge is amplified by the phono equalizer that is built into this unit, and is output from the LINE OUT jacks.
PHONO OUT: The signal from the cartridge is output directly from the PHONO OUT jacks.
- ⑥ **PHONO OUT jacks**
These jacks output the playback audio of the record. (⇒ page 19)
- ⑦ **DC IN jack**
Connect the AC adaptor (included) to this jack. (⇒ page 18)



Getting ready

Location

Because record playback is easily affected by vibration, you should place the unit in a level location that is not subject to external vibration. Place it sufficiently far from your speaker system so that it will not be affected by sound pressure or vibration.

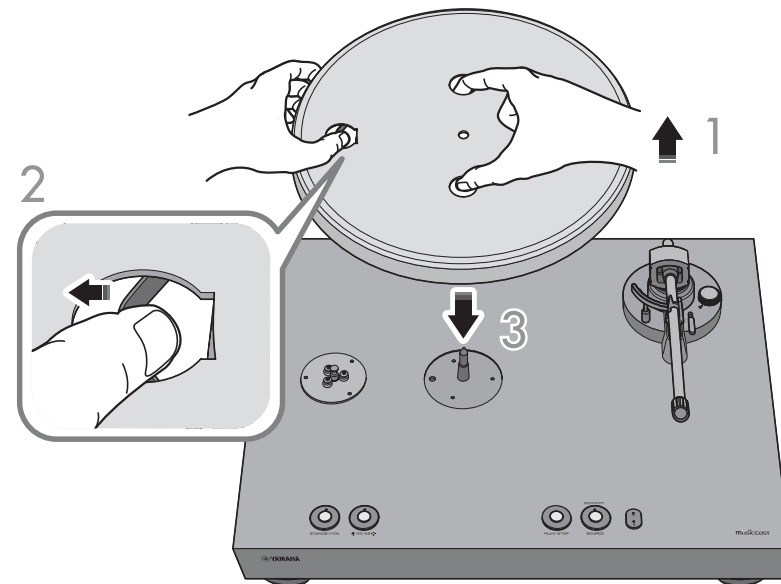
Assembly

Assembling the unit

- 1 Lift up the platter.
- 2 Reaching through the round hole in the platter, pull the belt outward, hooking it over your finger.
- 3 Insert the platter onto the center spindle.

CAUTION

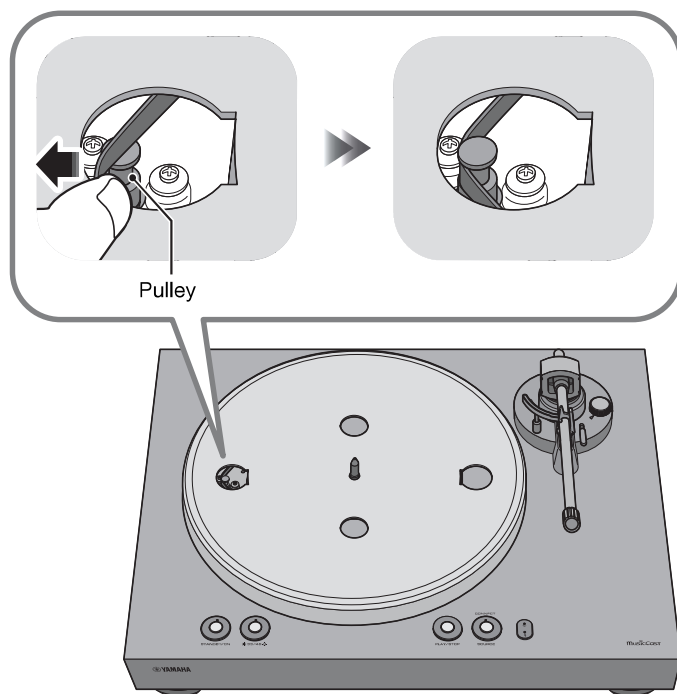
- ◆ Take care not to drop the platter. Dropping it might cause injury, or might damage the unit.



4 Align the round hole of the platter with the pulley.

5 Use your finger to hook the belt onto the pulley.

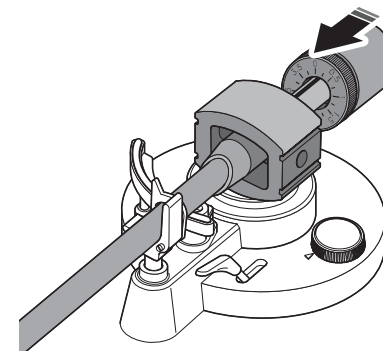
Take care that the belt is not twisted. After hooking the belt onto the pulley, rotate the platter several times to ensure that the belt is smoothly in place.



6 Place the platter sheet on the platter.

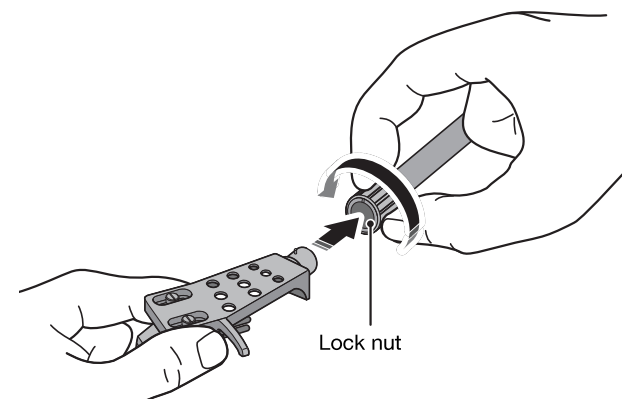
7 Attach the counter weight to the tone arm.

With the markings on the counter weight facing you, slide it onto the back end of the tone arm.



8 Attach the head shell to the tone arm.

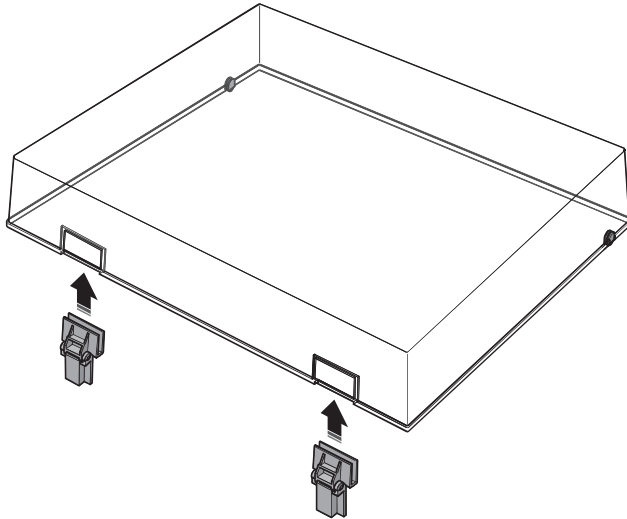
Insert the head shell into the front end of the tone arm, and turn the lock nut to secure it.



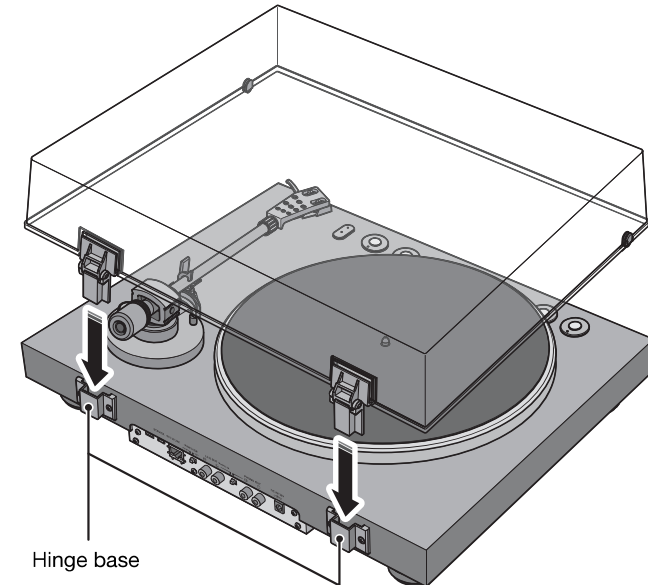
Attaching the dust cover

The dust cover protects this unit from dust etc.

- 1 Insert the hinges into the appropriate locations at two sides of the dust cover.



- 2 Attach the dust cover by inserting the hinges into the hinge bases located on the back panel of the unit.



NOTE

- ◆ To remove the dust cover, grasp the two sides of the dust cover and slowly lift upward to remove the cover together with its hinges.



CAUTION

- ◆ Take care not to pinch your hands or fingers when opening or closing the dust cover.

Making connections

Connecting to an amplifier

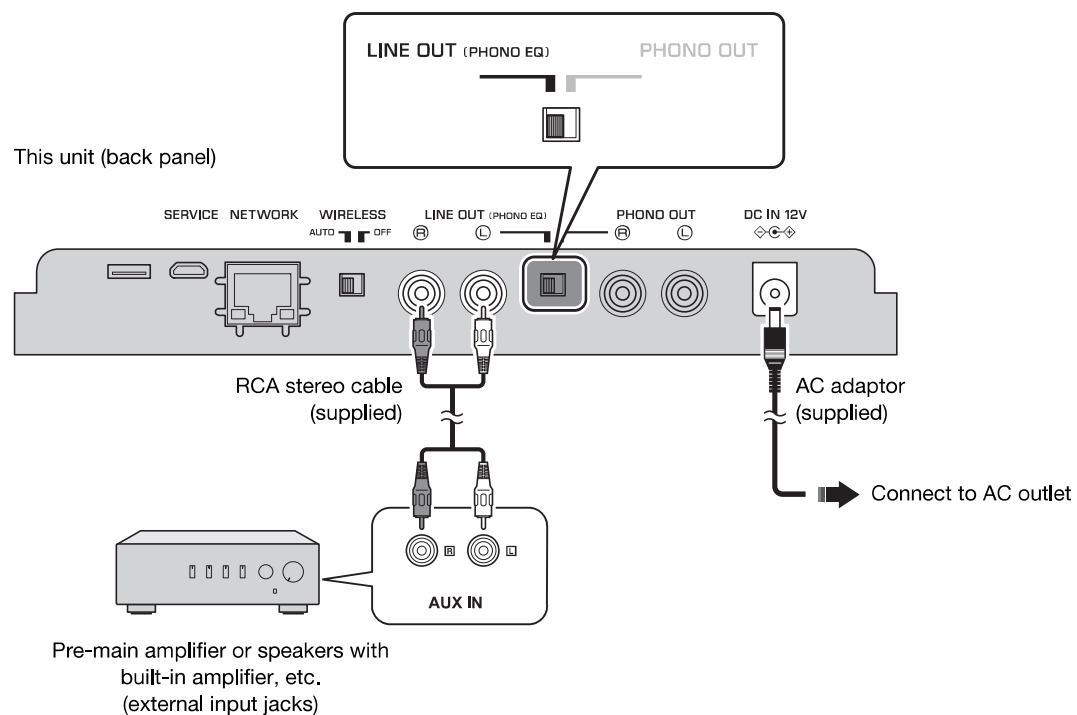
Make connections as shown in the following illustration.

CAUTION

- Do not plug the power cords of this unit and other connected devices into AC outlets until all connections and audio output select switch settings are complete.

■ If using this unit's LINE OUT jacks

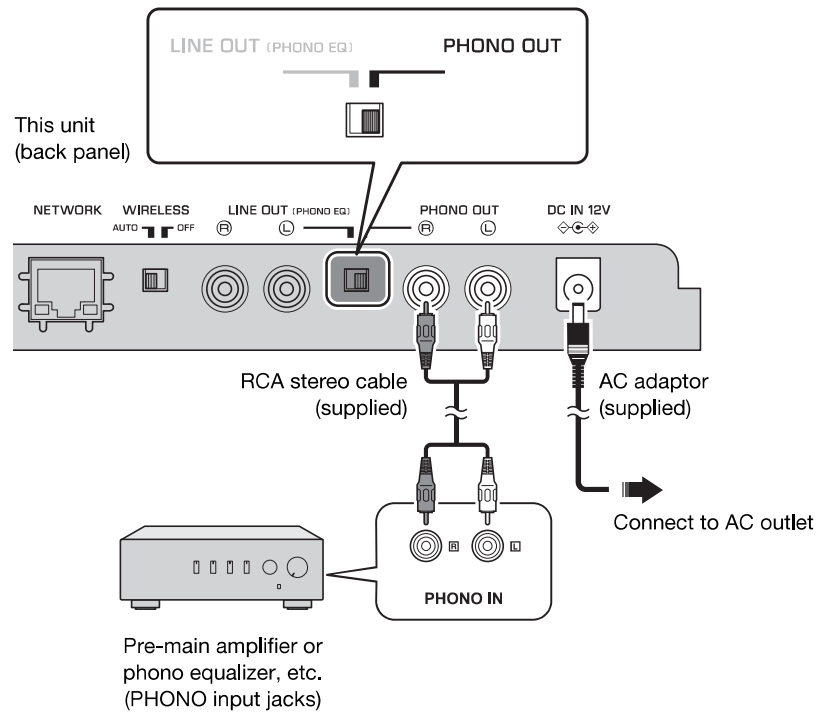
Sources that can be played back: Records, all network sources including internet radio, Bluetooth



■ If using this unit's PHONO OUT jacks

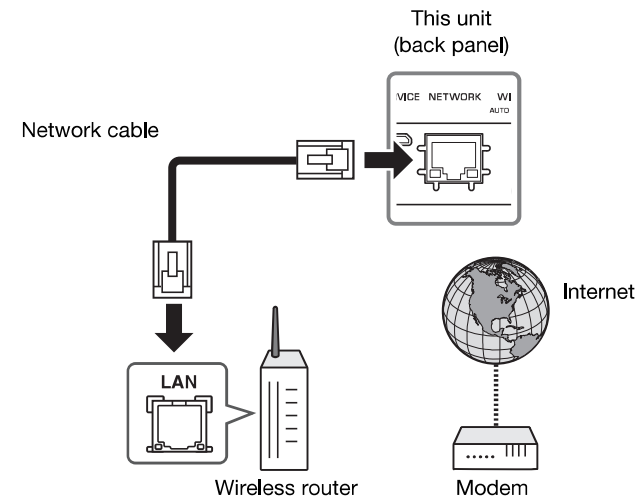
Sources that can be played back: Records

This unit's network functionality cannot be used.



Connecting a network cable

To use a wired connection to the network, connect this unit to your router using a commercially-available STP network cable (CAT-5 or higher straight cable). To connect wirelessly to the network, proceed to "Connecting the unit to the network" (⇒ page 23).



NOTE

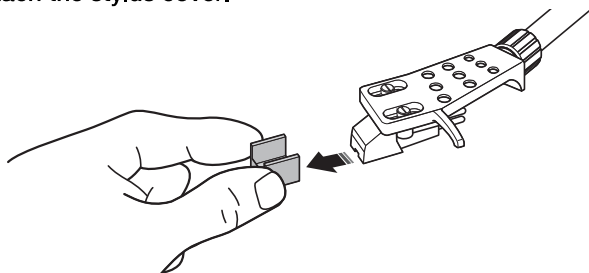
- ◆ Connect the network cable before you turn on the power of this unit.
- ◆ You can connect to the network via a wired connection regardless of whether the WIRELESS switch located on the back panel of this unit is set to AUTO or OFF. (⇒ page 14)
- ◆ If the unit is already wirelessly connected to the network, put this unit's power in standby mode, connect the network cable, turn the back panel WIRELESS switch OFF, and then turn on the power. (⇒ page 14)

Making adjustments

Adjusting the stylus pressure

Adjust the tone arm so that the appropriate stylus pressure is applied to the record.

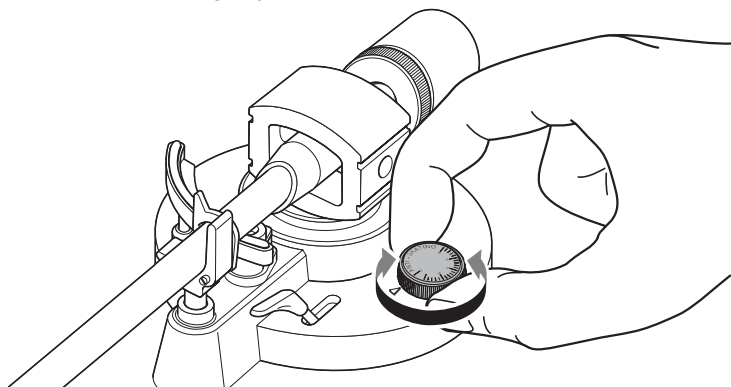
- 1 Detach the stylus cover.



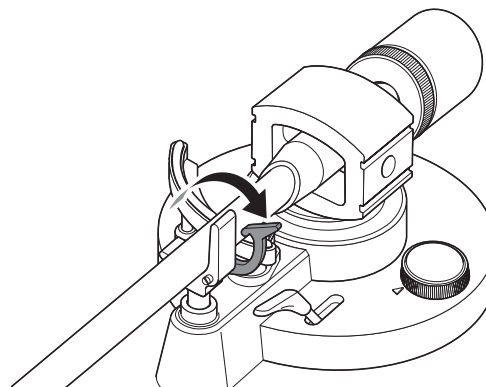
NOTICE

- ◆ Take care that the stylus cover or your finger do not contact the stylus.

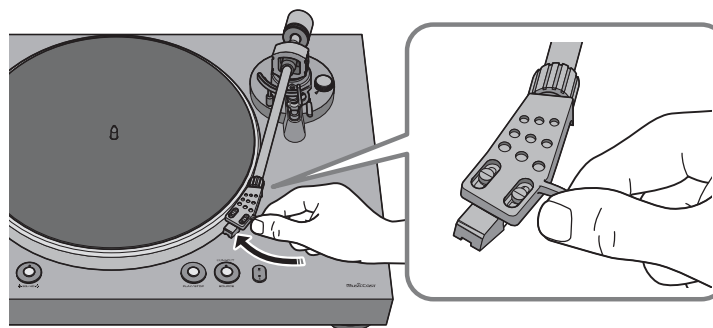
- 2 Set the anti-skating adjustment to the "0" position.



- 3 Release the tone arm lock.



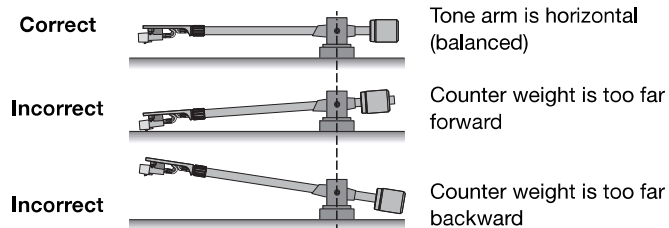
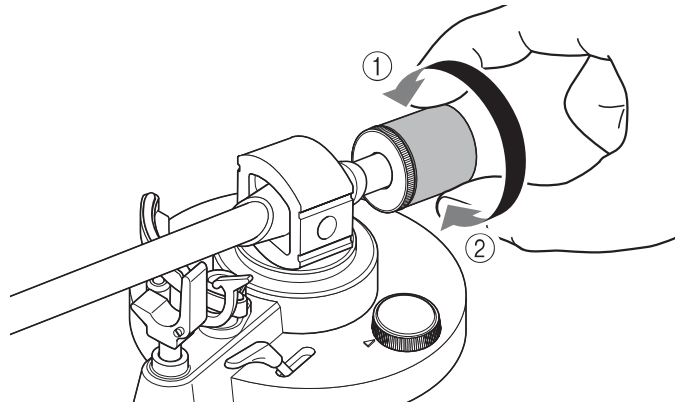
- 4 Move the tone arm off of the arm rest and slightly to the left.



NOTICE

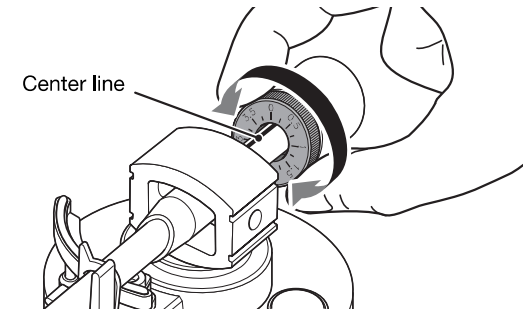
- ◆ Take care that the needle does not contact any part of the unit.

- 5 Turn the counter weight so that the tone arm is horizontal.
 Toward ①: Counter weight moves forward on the tone arm.
 Toward ②: Counter weight moves backward on the tone arm.



- 6 Return the tone arm to the arm rest, and lock it in place.

- 7 Turn the counter ring so that the “0” marking is aligned with the center line on the back end of the tone arm.

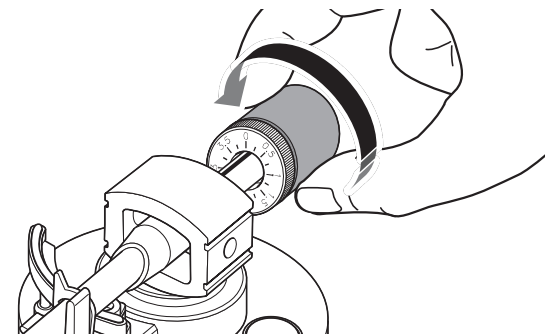


NOTE

- ◆ When turning the counter ring, use your fingers to press the counter weight so that it does not rotate.

- 8 By turning the counter weight, set the counter weight markings to the stylus pressure specified for the cartridge.

The specified stylus pressure for the supplied cartridge is 3.5 g.



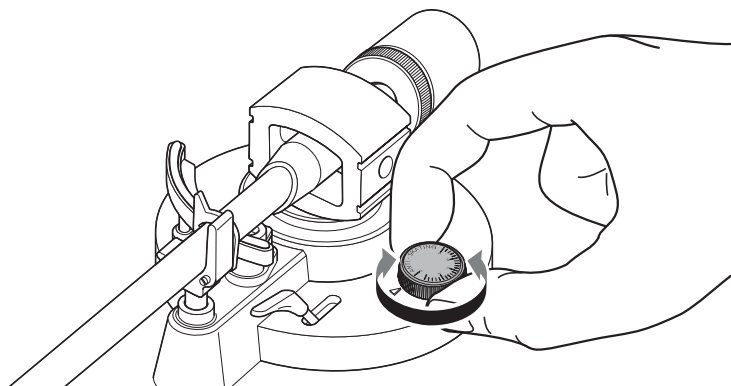
NOTE

- ◆ Turning the counter weight also turns the counter ring.

Adjusting the anti-skating

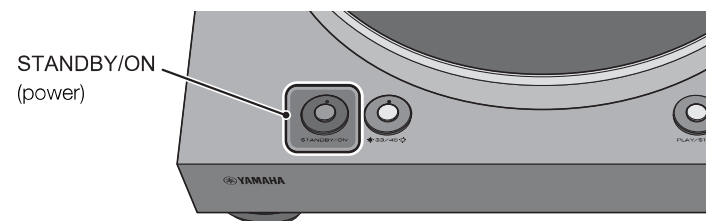
As the platter rotates, the tip of the stylus generates a force that pulls it toward the center of rotation. If the anti-skating value is set to the same value as the stylus pressure, a force is generated that pulls the tip of the stylus outward away from the center of rotation, and the two forces cancel each other.

- 1 Turn the anti-skating adjustment to the same value as the stylus pressure of the cartridge.




Turning the power on

On the top panel of the unit, press STANDBY/ON (power) to turn on the power of the unit. Press STANDBY/ON (power) once again to put the unit in standby mode.



NOTE

- ◆ When you first turn on the power after purchasing the unit or initializing it, the  (wireless LAN) indicator might flash. If it flashes, you can connect to the wireless network by sharing the network settings of your iOS device. (⇒ page 35) In order to enjoy music from a variety of network sources, use MusicCast CONTROLLER to connect to your network. (⇒ page 23)

About this unit's standby modes

This unit has two types of standby mode.

Network standby: This device's power can be turned on from a network device. (only when the audio output select switch is set to LINE OUT)

Eco standby: This mode reduces the standby power consumption.

NOTE

- ◆ If you want to switch to the eco standby setting, you can use your web browser to change the Standby setting. (⇒ page 33)
- ◆ If you want to temporarily switch to eco standby, hold down STANDBY/ON (power) for five seconds while the unit is powered-on. (only when the audio output select switch is set to LINE OUT)

Connecting the unit to the network

This section explains how to register the unit with MusicCast and set up the unit for the network connection.

Even if this device is connected to the network via a cable, MusicCast registration is necessary in order to play back network sources.

NOTE

- ◆ If you want to play high-resolution audio sources via the network, a wired connection is recommended for more stable playback. (⇒ page 19)
- ◆ Your mobile device must already be connected to the wireless LAN router (access point).

1 Install MusicCast CONTROLLER on your mobile device.

In the App Store or in Google Play, search for MusicCast CONTROLLER (free), and install it on your mobile device.

For more about MusicCast CONTROLLER, refer to the following website.

<https://www.yamaha.com/musiccast/>



MusicCast CONTROLLER is an app for controlling devices that support MusicCast. It allows you to share music between multiple MusicCast compatible devices that are placed in different rooms. You can use your smartphone or other mobile device as a remote controller, and easily select songs and make settings on the MusicCast compatible device.

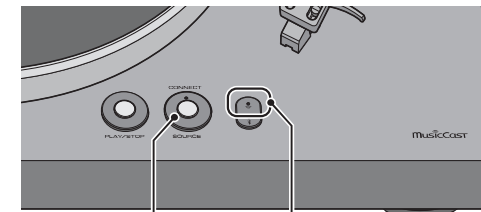
2 Start the MusicCast CONTROLLER on your mobile device, and then tap "Setup".




Tap here.

3 Operate MusicCast CONTROLLER as directed by the instructions that appear on the screen of your mobile device, and on the top panel of this unit, hold down the CONNECT button for five seconds.

The  (wireless LAN) indicator flashes.



CONNECT

 (wireless LAN) indicator


4 Follow the instructions on the display of the mobile device to operate MusicCast CONTROLLER to make the network settings.

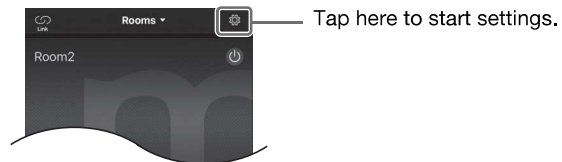
When this unit connects to the network, the  (wireless LAN) indicator is lit.

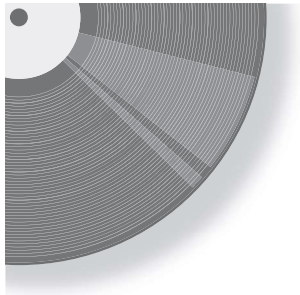
Now the unit is registered with MusicCast and the network settings are complete.

Use MusicCast CONTROLLER to play the music.

NOTE

- ◆ To set up additional MusicCast-compatible devices, tap the  (Settings) in the upper-right corner of the MusicCast CONTROLLER screen, and then select "Add New Device".





Playback

Listening to a record

Here's how to play back a record.

■ Starting playback

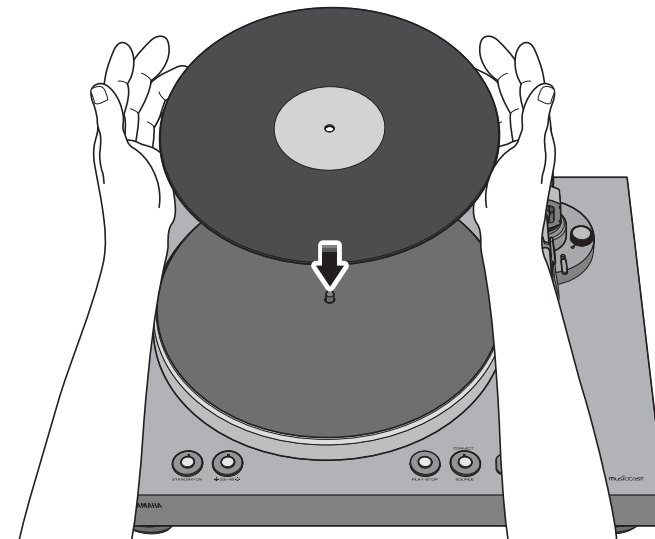
CAUTION

- ◆ If you play back a record without sufficiently lowering the volume of your amplifier, a loud sound might occur when the tip of the stylus contacts the record. This can cause hearing loss and might damage your amplifier and speaker, so be sure to lower the volume of your amplifier.
- ◆ If you are playing a record and the sound is being output from the LINE OUT jacks, the platter will stop when you switch the source from PHONO to network or Bluetooth.

NOTE

- ◆ MusicCast CONTROLLER cannot start/stop record playback or switch the speed.

- 1 **Open the dust cover, and place the record on the platter.**
If you're playing a 45 rpm record, use the included 45 rpm adaptor.



- 2 Press 33/45 (speed) to select the appropriate speed for the record.

The speed switches each time you press 33/45 (speed).

Speed indicator lit: 33 1/3 rpm

Speed indicator unlit: 45 rpm

- 3 Press SOURCE to switch the source to PHONO.

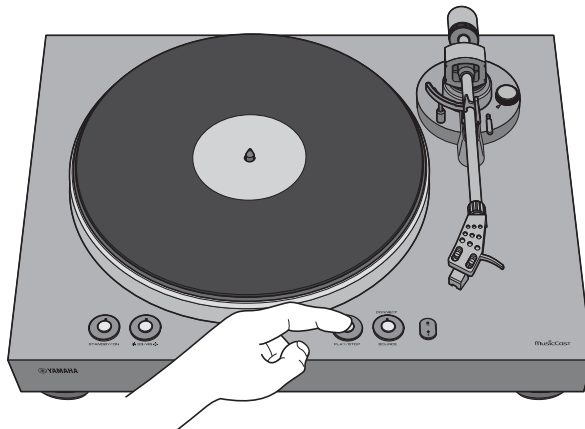
The SOURCE indicator is lit white.

NOTE

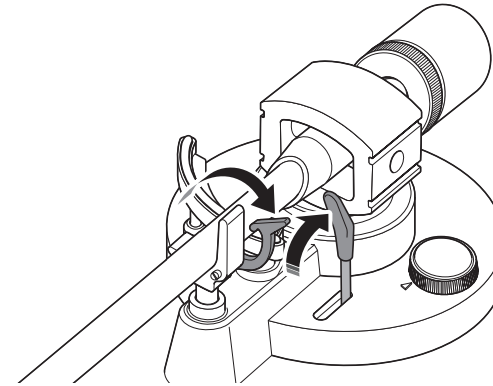
- ◆ If the audio output select switch is set to PHONO OUT, there's no need to switch the source.

- 4 Press PLAY/STOP (play/stop).

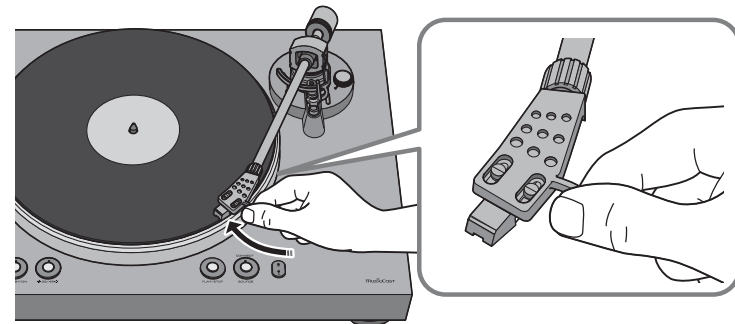
The platter rotates.



- 5 Release the tone arm lock, and raise the lift lever.

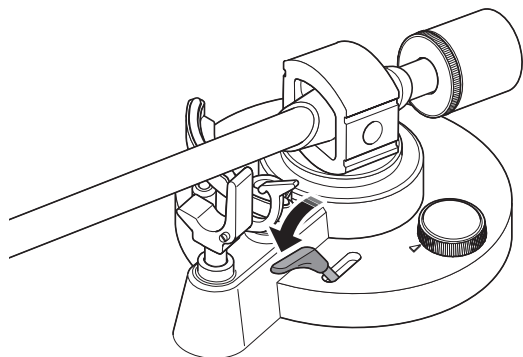


- 6 Move the tone arm to the playback position of the record.



7 Lower the lift lever.

The tone arm is lowered, and playback starts.



■ Pausing playback

If you raise the lift lever, the tone arm rises and playback pauses.

When you lower the lift lever, playback resumes.

■ Stopping playback

- 1 Raise the lift lever.
- 2 Return the tone arm to the arm rest.
- 3 Lower the lift lever.
- 4 Press **PLAY/STOP (play/stop)**.
The platter stops rotating.
- 5 Lock the tone arm.

NOTE

- ◆ The tone arm does not automatically rise when the record finishes playing.
- ◆ If you will not be using the unit for a time, attach the cover to the stylus to protect it.

Listening to Internet radio

Here's how to select an internet radio station using the MusicCast CONTROLLER that's installed on your mobile device.

NOTE

- ◆ Before you select a station, register this unit with MusicCast. (⇒ page 23)
- ◆ Certain Internet radio stations might not be available at all times or during certain hours.
- ◆ This function uses the “airable.Radio” service. This service is provided by Tune In GmbH.
- ◆ This service may change or end without notice.

- 1 Use MusicCast CONTROLLER to select the room in which this unit is located (e.g., Room 1).
- 2 Tap “Net Radio”.
- 3 Select the internet radio station to which you want to listen.

Listening to streaming services

You can listen to a streaming service using the MusicCast CONTROLLER that's installed on your mobile device. For details on streaming services, refer to the supplementary explanation(s) regarding the streaming service(s) that are available in your area. Access the Yamaha Downloads site to download the supplementary explanation(s).

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

NOTE

- ◆ Service is limited to certain areas.
- ◆ Services supported by the unit might not be available depending on the region in which the unit was purchased.
- ◆ The service may change or end without notice.

Playing music files stored on a media server (PC/NAS)

You can play music files stored on your PC or DLNA-compatible Network Attached Storage (NAS) device on the unit.

NOTE

- ◆ Audio may be interrupted while using a wireless network connection. In this case, use a wired network connection. (⇒ page 19)
- ◆ For information on the file format that can be played by the unit, please refer to “Supported devices and file formats” (⇒ page 43). Also, please refer to the specifications for the NAS device.

Media sharing setup

To play music stored on the PC (or NAS device) on the unit, you need to enable media sharing between this unit and the other devices.

■ For a PC that runs Windows Media Player

The setting procedure may vary depending on the PC or the version of Windows Media Player. The following instructions use Windows Media Player12 as an example.

NOTE

- ◆ The method will depend on the computer and the settings that you’re using. For details, refer to the manufacturer of your computer or to the Windows Media Player help.

- 1 Start Windows Media Player 12 on your PC.
- 2 Select “Stream”, then “Turn on media streaming”.
- 3 Click “Turn on media streaming”.

- 4 Select “Allowed” from the drop-down list next to the unit’s model name.

- 5 Click “OK” to exit.

■ For a PC or a NAS that runs DLNA server software other than Windows Media Player

Refer to the instruction manual for the device or software and configure the media sharing settings.

Playing music files

Here’s how to play back using the MusicCast CONTROLLER that’s installed on your mobile device.

NOTE

- ◆ Register the unit as a MusicCast-enabled device before playing music files. (⇒ page 23)

- 1 Use MusicCast CONTROLLER to select the room in which this unit is located (e.g., Room 1).
- 2 Tap “Server”.
- 3 Follow the on-screen instructions to select a song.

Listening to music via Bluetooth

You can play music files stored on a Bluetooth device (such as a smartphone) on the unit.

NOTE

- ◆ In order to use Bluetooth functionality, set the WIRELESS switch located on the back panel of this unit to AUTO. (⇒ page 14)
- ◆ For information on supported Bluetooth devices, refer to “Supported devices and file formats” (⇒ page 43).

1 On the top panel of this unit, press SOURCE to switch the source to Bluetooth.

The SOURCE indicator is lit blue.

2 On the Bluetooth device, turn the Bluetooth function on.

3 On the Bluetooth device, select this unit from the list of available devices.

When this unit connects to a Bluetooth device, the  (Bluetooth) indicator is lit.

NOTE

- ◆ If you are prompted to enter a passkey, enter the number “0000”.
- ◆ If the unit is registered as a MusicCast device, the room name will appear on the available device list.

4 On the Bluetooth device, select a song and start playback.

NOTE

- ◆ If the unit detects a Bluetooth device that was previously connected, the unit will automatically connect to the Bluetooth device after you perform Step 1. To establish another Bluetooth connection, first terminate the current Bluetooth connection.
- ◆ To terminate a Bluetooth connection, perform one of the following operations:
 - Disconnect from the Bluetooth device.
 - Select any option other than “Bluetooth” as the source for this unit.
- ◆ If you enable Bluetooth standby, this unit automatically turns on when a connect operation is performed on the Bluetooth device. (⇒ page 33)

Listening to music via AirPlay

You can use the AirPlay function to play iTunes or iOS device music files music files via a network.

NOTE

- ◆ If the iOS device does not recognize the unit, check your network environment (such as the router)
- ◆ For information on supported iOS devices, please refer to “Supported devices and file formats” (⇒ page 43).

1 Start iTunes, or display the Music playback screen on the iOS device.

Once the iTunes or iOS device recognizes the unit, the AirPlay icon appears.

E.g., (iOS 10)



E.g., (iTunes)



2 In iTunes or on the iOS device, click (tap) the AirPlay icon, and then select this unit as the output destination for the audio.

3 Select a song in iTunes or on the iOS device to start playback.

This unit's source automatically switches to network (Airplay), and playback starts.

The SOURCE indicator is lit pink.

Using MusicCast CONTROLLER to register favorites

You can register up to 40 favorite content items (songs stored on your PC and Internet Radio stations).

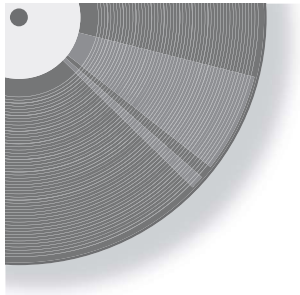
- 1 Play a song or an Internet Radio station that you want to register.
- 2 In the playback screen, tap **⋮** and then tap “Add to favorites”.



Tap here.

■ Recalling registered content

- 1 Use MusicCast CONTROLLER to select the room in which this unit is located (e.g., Room 1).
- 2 Tap “Favorites”, and select the content that you want to play.



Detailed settings

Making settings via MusicCast CONTROLLER

You can use MusicCast CONTROLLER to make settings for a variety of functions.

Setting the sleep timer

This function automatically sets this unit's power to standby mode after the specified time has elapsed.

Settings: Off (default), 30 Min., 60 Min., 90 Min., 120 Min.

NOTE

- ◆ The sleep timer setting is canceled if you perform any of the following actions.
 - Set this unit's power to standby mode.
 - Unplug this unit from the AC outlet.
 - Switch the source to PHONO.
- ◆ The sleep timer cannot be used if the source is set to PHONO.

Enabling/disabling automatic playback

This function specifies whether songs from the computer (server) will play automatically when the source is switched to Server.

Settings

On (default): Automatic playback is enabled.
If the unit keeps a history of playback, the last item that was played will be played again. If such an item no longer exists, the unit will not play it.

Off: Automatic playback is disabled.

Enabling/disabling automatic standby

This function automatically sets the power to standby mode after the specified time has elapsed without any playback or operation being performed.

Settings

Off: Automatic standby is disabled.

On: Automatic standby is enabled.
If this unit has not been playing for the last 20 minutes, or has not been operated for the last eight hours, the power automatically switches to standby mode.

Default

U.K., Europe and Korea models: On

Other models: Off

NOTE

- ◆ Immediately before entering standby mode, the STANDBY/ON (power) indicator flashes.

Making settings via a web browser

You can use a web browser on your computer or other device to make settings for this unit and for the network connection. Here we explain the Standby setting. Connect this unit to the network before you proceed with the following operations. (⇒ pages 19 and 23)

Accessing the settings screen

Here's how to access the settings screen on your computer.

- 1 Use MusicCast CONTROLLER to find out the IP address of this unit.
- 2 Start a web browser on your computer.
- 3 In the address bar of your web browser, enter the IP address that you found, and then press Enter.

The settings screen appears.

NOTE

- ◆ We do not guarantee that this will work with all devices or browsers.

■ Standby setting

Network Standby

Specifies whether this unit's power can be turned on from a network device.

Auto (default): Network standby is enabled.

If this unit is not connected to a network, network standby is automatically disabled. (This unit enters eco standby mode.)

On: Network standby is enabled. This setting will consume more power than the "Off" setting.

Off: Network standby is disabled. (This unit enters eco standby mode.)

Bluetooth Standby

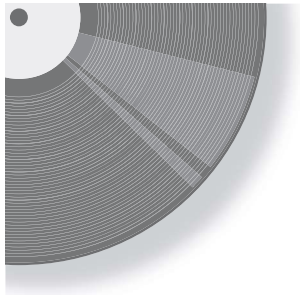
Specifies whether this unit's power can be controlled from the Bluetooth device. If this setting is "On", this unit automatically turns on when a connect operation is performed on the Bluetooth device.

On (default): Bluetooth standby is enabled. (Only if the network standby setting is "Auto" or "On".)

Off: Bluetooth standby is disabled.



With an advanced energy saving design, this product achieves a low power consumption of not more than 2 watts when in Network Standby mode.



When necessary

Updating the firmware

New firmware that provides additional features or product improvements is released as needed. You can update the firmware using the MusicCast CONTROLLER that's installed on your mobile device.

When new firmware is available, the screen of MusicCast CONTROLLER shows the message "Update new firmware now?".

1 Tap "Yes".

Firmware update begins.


During the update, a progress bar is shown in the screen of MusicCast CONTROLLER, and the SOURCE indicator of this unit flashes light blue.

When the update is successful, the screen of MusicCast CONTROLLER indicates "Firmware update completed." and the SOURCE indicator of this unit is lit light blue.

NOTICE

- ◆ While the firmware is being updated, do not operate this unit or disconnect the AC adaptor or the network cable.

NOTE

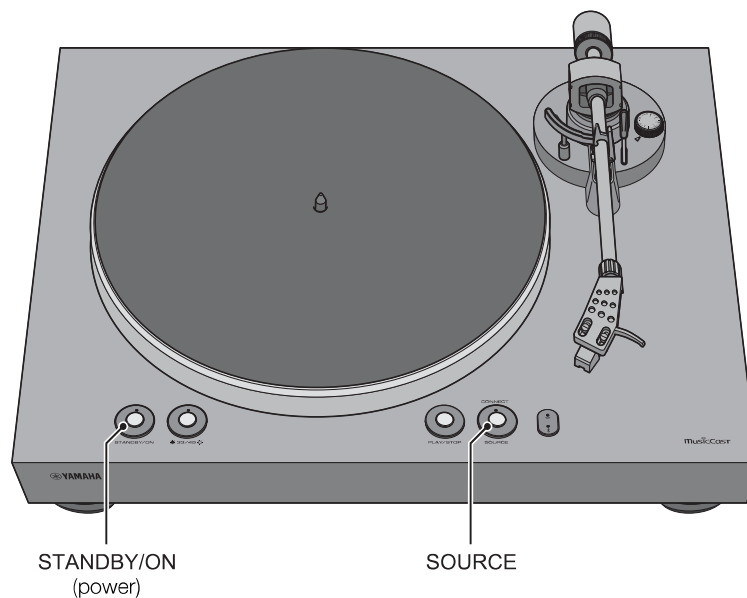
- ◆ If you chose "Later", tap  (Settings) in MusicCast CONTROLLER and choose "New firmware is available". Update the firmware as directed by the screen.
- ◆ When new firmware is available, the SOURCE indicator also flashes orange when the power of this unit is turned on.
- ◆ If you're not using MusicCast CONTROLLER, the firmware update starts when you hold down PLAY/STOP (play/stop) and press STANDBY/ON (power) while this unit's power is in standby mode.
- ◆ For more about the firmware, refer to the Yamaha website.

Initializing the settings


Here's how to initialize the settings of this unit.

- 1 Press **STANDBY/ON (power)** to put this unit's power in standby mode.
- 2 While holding down **SOURCE**, press **STANDBY/ON (power)** to turn on the power of this unit.

The settings will be initialized.



Connecting to a network using the WAC function

When you first turn on the power after purchasing the unit or initializing it, the  (wireless LAN) indicator will flash. (Except when the unit is already connected to the network via a cable, or when the audio output select switch is set to PHONO OUT) While it is flashing, you can connect to the wireless network by sharing the network settings of your iOS device (WAC function).

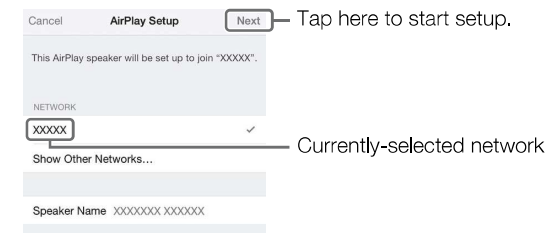
To use this function, proceed as follows.

- 1 In the Wi-Fi screen of your iOS device, select this unit as the AirPlay speaker.

E.g., (iOS 10)



- 2 Make sure that the "Network" field is set to your preferred network, and then tap "Next".



When the setup is complete, the unit will automatically connect to the selected network (access point).

Care

■ Caring for this unit

Wipe it with a soft dry cloth. Do not use chemicals such as benzine or thinner, since they might damage the surface.

■ Caring for the record stylus

The tip of the record stylus is extremely delicate. Handle it with care so that it is not damaged. If dust should adhere to the tip of the stylus, use a soft pointed brush to wipe it off starting at the base of the stylus and moving toward the tip, or use a commercially available cleaner made for that purpose.

■ Caring for records

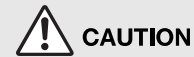
Dirt adhering to a record can cause skips or noise. Use a commercially available record cleaner to remove dirt.

Replacement

Replacing the belt

Depending on the conditions of use, the belt can wear out or break. If this occurs, replace the belt. For a replacement belt, contact your nearest authorized Yamaha dealer or service center.

- 1 **Turn off the power of this unit and of the connected devices, and disconnect this unit's AC adaptor from the AC outlet.**
- 2 **Remove the platter sheet from the platter.**
- 3 **Detach the belt from the pulley.**
- 4 **Insert your fingers into the round holes of the platter, and lift up the platter.**



CAUTION

- ◆ Take care not to drop the platter. Dropping it might cause injury, or might damage the unit.

- 5 **Turn the platter over, and remove the belt.**
- 6 **Install the replacement belt on the platter.**
Take care that the belt is not twisted.
- 7 **Install the platter on this unit.**
For details on installation, refer to "Assembly" on page 15.

Replacing the record stylus

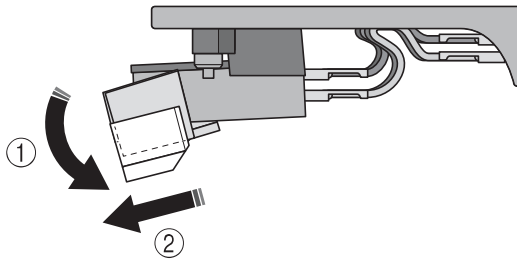
When the tip of the record stylus becomes worn down or damaged, replace it immediately.

As the replacement stylus, please purchase an ATN3600L replacement stylus made by Audio-Technica.

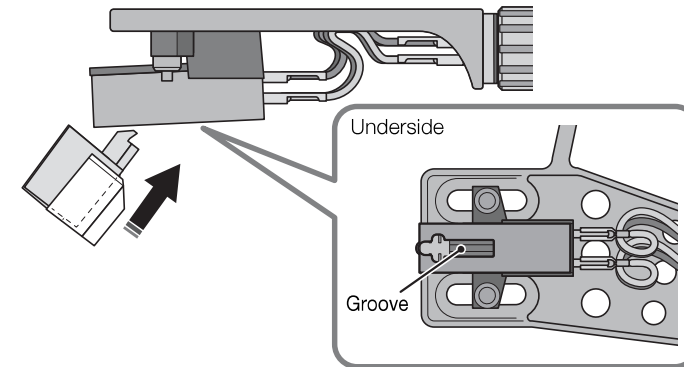
CAUTION

- ◆ Attach the stylus cover before replacing the stylus. The tip of the stylus might injure you, or it might become damaged.
- ◆ Take care that children do not swallow the stylus when it is removed.

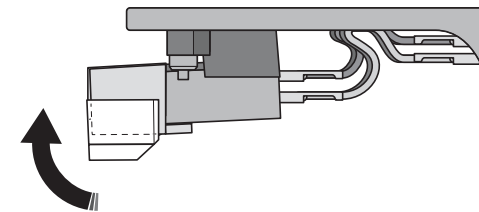
- 1 Turn off the power of this unit and of the connected devices, and disconnect this unit's AC adaptor from the AC outlet.
- 2 While using your fingers to hold the body of the cartridge, press the stylus down in the direction of ①, and pull it in the direction of ② to remove it.



- 3 While using your fingers to hold the body of the cartridge, insert the tab of the replacement stylus into the groove on the underside of the cartridge.



- 4 Press the stylus upward until you hear a click.



Moving this unit

When moving this unit, lock the tone arm so that it does not move.

Troubleshooting

If the unit stops operating correctly, check the following points.

If taking the appropriate action does not solve the problem, or if there is a problem not listed below, press the STANDBY/ON (power) button located on the unit's back panel to turn off the power, disconnect the power cord, and contact your nearest authorized Yamaha dealer or service center.

General

Problem	Cause	Action	Reference page
Pressing STANDBY/ON (power) does not turn on the power.	The AC adaptor has come unplugged from this unit's DC IN jack or from the AC outlet, or is not firmly plugged in.	Firmly plug the AC adaptor into this unit's DC IN jack and into an AC outlet.	18
When you press STANDBY/ON (power), the STANDBY/ON (power) indicator flashes and the power does not turn on.	The protection circuit operated three times in succession.	In order to protect the unit, the power will no longer turn on. Contact a Yamaha service center to have the unit repaired.	—
Pressing SOURCE does not switch the source.	The audio output select switch is set to PHONO OUT.	Set the audio output select switch to LINE OUT.	14
The platter does not rotate.	The belt is not correctly positioned on the platter and pulley, or the belt has come off.	Attach the belt correctly to the platter and the pulley.	15
	STANDBY/ON (power) is not on.	Turn STANDBY/ON (power) on.	22
No sound.	The head shell is not correctly attached to the tone arm.	Attach the head shell correctly to the tone arm.	16
	The RCA stereo cable is not connected correctly.	Connect the RCA stereo cable correctly.	18
	The mute setting of the amplifier is on.	Turn off the mute setting of the amplifier.	—
	The audio output select switch of this unit is set incorrectly.	Set the audio output select switch correctly for the device that is connected.	18

Problem	Cause	Action	Reference page
Volume is too weak or too loud.	The cartridge setting of the amplifier or phono equalizer is incorrect.	Set the cartridge setting of the amplifier or phono equalizer correctly for the type of cartridge that you're using (MM or MC).	—
	The audio output select switch is set incorrectly.	Set the audio output select switch correctly for the device that is connected.	18
Something is wrong with the left/right balance of the sound.	The unit is tilted.	Place the unit on a level location.	—
Playback speed is wrong.	The speed setting is incorrect.	Set the 33/45 (speed) setting correctly. This unit does not support playback of SP records (78 rpm).	12
Hum is audible.	The RCA stereo cable is not connected correctly.	Connect the RCA stereo cable correctly.	18
	The head shell is not firmly secured to the tone arm.	Use the lock nut to firmly secure the head shell to the tone arm.	16
Skips occur. Noise occurs. The sound is distorted.	The stylus pressure is not adjusted correctly.	Set the counter weight markings to the stylus pressure specified for the cartridge.	20
	The record is scratched or warped.	Do not use scratched or warped records.	—
	The record is dirty.	Use a commercially available record cleaner to clean the record.	—
	The record is statically charged.	Use an anti-static brush to remove the static charge.	—
	The stylus is dirty.	Remove the dirt from the stylus.	36
	The stylus is worn down.	Replace the stylus.	37
	The unit is placed in a location that is subject to vibration.	Place the unit in a level location that is not subject to vibration.	—
Feedback occurs.	The unit is too close to the speakers.	Locate the unit farther away from the speakers.	—
	The playback volume is too high.	Adjust the volume of the amplifier.	—

Bluetooth

Problem	Cause	Action	Reference page
Unable to pair the unit with the Bluetooth device.	The WIRELESS switch located on the back panel of this unit is turned OFF.	Set the WIRELESS switch located on the back panel of this unit to AUTO.	14
	The audio output select switch of this unit is set to PHONO OUT.	Set the audio output select switch of this unit to LINE OUT.	14
	Another Bluetooth device is already connected to this unit.	Disconnect the Bluetooth device that is currently paired, and then pair with the desired Bluetooth device.	30
	The unit and the Bluetooth devices are too far apart.	Move the Bluetooth device closer to the unit.	—
	Wireless communication is being obstructed by interference from a device that uses the 2.4 GHz frequency band (e.g., microwave oven or wireless LAN).	Move this unit or your Bluetooth device farther away from such devices. If your wireless LAN router supports the 5 GHz frequency band, switch to a connection that uses the 5 GHz frequency band.	—
	Your Bluetooth device does not support the A2DP protocol.	Use a Bluetooth device that supports the A2DP protocol.	—
	The connection profile registered in the Bluetooth device may not be functioning correctly for some reason.	Delete the Bluetooth profile in the Bluetooth device, and then connect the Bluetooth device to this unit.	—
	The passkey of the devices, such as a Bluetooth adaptor, that you want to pair with the unit is other than "0000".	Use a connecting device with a passkey "0000".	—
No sound can be heard, or the sound cuts off intermittently.	The volume level of the Bluetooth device is too low.	Increase the volume level of the Bluetooth device.	—
	The Bluetooth device is not set to send audio signals to this unit.	On the Bluetooth device, select this unit as the audio output destination.	30
	The Bluetooth connection has been cut.	Perform Bluetooth connection operations again.	30
	The unit and the Bluetooth devices are too far apart.	Move the Bluetooth device closer to the unit.	—
	Wireless communication is being obstructed by interference from a device that uses the 2.4 GHz frequency band (e.g., microwave oven or wireless LAN).	Move this unit or your Bluetooth device farther away from such devices. If your wireless LAN router supports the 5 GHz frequency band, switch to a connection that uses the 5 GHz frequency band.	—

Network

Problem	Cause	Action	Reference page
Unable to use the network function.	The network parameters (IP address) have not been obtained properly.	Enable the DHCP server function of your router.	—
	The audio output select switch of this unit is set to PHONO OUT.	Set the audio output select switch of this unit to LINE OUT.	14
	The WIRELESS switch located on the back panel of this unit is turned OFF.	Set the WIRELESS switch located on the back panel of this unit to AUTO.	14
	You are attempting to connect to an IPv6 type router.	This unit is not compatible with IPv6 networks. Connect it to an IPv4 network.	—
The unit is unable to connect to the Internet via a wireless LAN router (access point).	The wireless LAN router (access point) is turned off.	Turn on the power to the wireless LAN router (access point).	—
	The unit and the wireless LAN router (access point) are too far apart.	Place the unit and the wireless LAN router (access point) closer to each other.	—
	There is an obstacle between the unit and the wireless LAN router (access point).	Remove the obstruction that is between this unit and your wireless LAN router (access point).	—
The wireless network cannot be used.	A device emitting electromagnetic waves (such as a microwave oven, a wireless device and so on) may be located nearby.	When connecting the unit wirelessly, do not use it near devices that emit electromagnetic waves.	—
	Access to the network is restricted by the firewall settings of the wireless LAN router (access point).	Check the firewall settings of the wireless LAN router (access point).	—
The computer (server) cannot be detected.	The media sharing settings on the PC (or server) may be incorrect.	Modify the media sharing settings so that the unit will be able to access the folders on the PC (or server).	—
	Access is restricted due to the security settings on the PC (or server) or router.	Check the security settings on the PC (or server) or router.	—
	The unit and the PC are not connected to the same network.	Check the network connection and the router settings to make sure that they are connected to the same network.	—
Files on the PC (or server) are not displayed (or played back).	The file format is not supported by the unit or the PC (or server).	Be sure to use a file format that is supported by the unit and the PC.	43

Problem	Cause	Action	Reference page
Unable to play the Internet radio.	The selected Internet radio station is currently out of service.	There may be a network problem at the radio station, or the broadcasting service may have been stopped. Try to play the station later or select another station.	—
	The currently-selected radio station is broadcasting silence.	Some Internet radio stations broadcast silence at certain times of the day. In this case, there is no problem with the reception, but no audio will be produced. Try to play the station later or select another station.	—
	Access to the network is restricted by the firewall settings of the network devices (such as the router).	Check the firewall settings on your devices. The Internet radio can be played only through the port designated by each radio station. The port number varies depending on the radio station.	—
The iOS device does not detect the unit when using AirPlay.	You may be using a router that supports multiple SSIDs.	The router's network separator function may be blocking access to the unit. If you are connecting an iOS device to the unit, use an SSID that allows access to the unit. (Try to connect to the Primary SSID.)	—
The unit is not detected when using a dedicated application on a mobile device.	The unit and the mobile device are not on the same network.	Check the network connection and the router settings to make sure that they are connected to the same network.	—
	You may be using a router that supports multiple SSIDs.	The router's network separator function may be blocking access to the unit. If you are connecting an iOS device to the unit, use an SSID that allows access to the unit. (Try to connect to the Primary SSID.)	—
The firmware on this unit failed to update.	The network connection may not be good.	Try updating again after a while.	34
The unit is unable to connect to the wireless LAN router (access point).	MAC address filtering may have been enabled on the wireless LAN router (access point).	The unit is unable to connect to the router if MAC address filtering is enabled. Change the setting on the wireless LAN router (access point), and try to connect the unit again.	—

Supported devices and file formats

The following devices and file formats can be used by the unit.

Supported devices

■ Bluetooth devices

- ◆ You can use Bluetooth devices that support the A2DP protocol.
- ◆ Yamaha does not guarantee the connections of all Bluetooth devices.

■ AirPlay

AirPlay works with iPhone, iPad, and iPod touch with iOS 4.3.3 or later, Mac with OS X Mountain Lion or later, and PC with iTunes 10.2.2 or later.

Compatible models (as of July, 2018)

Made for.

iPhone X, iPhone 8 Plus, iPhone 8, iPhone 7 Plus, iPhone 7, iPhone SE, iPhone 6s Plus, iPhone 6s, iPhone 6 Plus, iPhone 6, iPhone 5s, iPhone 5c, iPhone 5, iPhone 4s

iPad Pro (10.5"), iPad Pro (12.9") 2nd Generation, iPad Pro (12.9") 1st Generation, iPad Pro (9.7"), iPad mini 4, iPad Air 2, iPad mini 3, iPad Air, iPad mini 2, iPad mini, iPad (5th generation), iPad (4th generation), iPad (3rd generation), iPad 2, iPod touch (6th generation), iPod touch (5th generation)

File formats

■ PC/NAS

File	Sampling frequency (kHz)	Bit depth (bit)	Bitrate (kbps)	Number of channels	Support for gapless playback
WAV *	32/44.1/48/ 88.2/96/ 176.4/192	16/24	-	2	✓
MP3	32/44.1/48	-	8-320	2	-
WMA	32/44.1/48	-	8-320	2	-
MPEG-4 AAC	32/44.1/48	-	8-320	2	-
FLAC	32/44.1/48/ 88.2/96/ 176.4/192	16/24	-	2	✓
ALAC	32/44.1/48/ 88.2/96	16/24	-	2	✓
AIFF	32/44.1/48/ 88.2/96/ 176.4/192	16/24	-	2	✓
DSD	2.8 MHz/ 5.6 MHz 11.2 MHz	1	-	2	-

* Linear PCM format only

- ◆ To play back FLAC files stored on your PC/NAS, you must install server software that supports the sharing of FLAC files via DLNA on your PC, or use a NAS device that supports FLAC files.
For more information, refer to the instruction manual for the server software.
- ◆ Digital Rights Management (DRM) encoded content cannot be played back.

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<https://download.yamaha.com/sourcecodes/musiccast/>

Licenses

For information on the licenses of the third-party software in this product, refer to the following.

[http://\(IP address of this product*\)/licenses.html](http://(IP address of this product*)/licenses.html)

* IP address of this product is checked with MusicCast CONTROLLER.

Specifications

The specifications of this unit are as follows.

Platter section

Drive method	Belt drive
Motor	DC motor
Rotation Speed	33 1/3 rpm, 45 rpm
Rotation Speed Variation	±2%
Wow and flutter . . . . .	.0.2%
Platter	Aluminium die-casting Diameter 30 cm

Tone arm section

Type	Static balance straight tone arm
Effective arm length . . . . .	.223.5 mm
Stylus pressure adjustment range	0–4 g
Acceptable cartridge weight	15.5–19 g (including head shell)
Overhang	19 mm

Cartridge section

Type	MM type
Output voltage	2.5 mV (1 kHz, 3.54 cm/sec)
Stylus pressure . . . . .	.3.5 ±0.5 g
Cartridge weight . . . . .	.5.0 ±0.3 g
Cartridge Height . . . . .	.17.0 ±0.7 mm
Head shell weight	10 g (including screws, nuts, and wires)

Input/output terminals

Analog audio (RCA Unbalanced)
PHONO OUT×1
LINE OUT×1
NETWORK (Wired) ×1 (100Base-TX/10Base-T)

Bluetooth

Sink Function	
Source Device to this unit (ex. Smartphone/Tablet)	
Supported codec . . . . .	.SBC, AAC
Supported profile . . . . .	.A2DP, AVRCP
Bluetooth version . . . . .	.Ver. 4.2
Wireless output . . . . .	.Bluetooth Class 2
Maximum communication distance . . . . .	.10 m without interference

Network

AirPlay supported
Internet Radio

Wireless Network

Wireless Network Standards	IEEE 802.11 a/b/g/n/ac*
	* 20 MHz channel bandwidth only
Radio Frequency Band	2.4 GHz, 5 GHz
WPS (Wi-Fi Protected Setup)	
PIN method	
Available Security Method	
WEP	
WPA2-PSK (AES)	
Mixed Mode	

Audio section (Network, Bluetooth)

Output level (1 kHz, 0 dB, Fs 44.1 kHz)	2.0 ±0.3 V
Signal to Noise Ratio (IHF-A Network) (Infinity zero, Fs 44.1 kHz)	110 dB or higher
Dynamic range (1 kHz, -60 dB, Fs 44.1 kHz)	100 dB or higher
Harmonic Distortion (1 kHz, 0 dB, Fs 44.1 kHz)	0.003% or lower
Frequency Response	
Fs 44.1 kHz	2 Hz-20 kHz (+0/-3 dB)
Fs 48 kHz	2 Hz-24 kHz (+0/-3 dB)
Fs 96 kHz	2 Hz-48 kHz (+0/-3 dB)
Fs 192 kHz	2 Hz-96 kHz (+0/-6 dB)

Audio section (PHONO)

Output level	
PHONO OUT (1 kHz, 3.54 cm/sec)	2.5 mV ±3 dBV
LINE OUT	450 mV (-7 dBV)
Signal to Noise Ratio (A-weighted, 20 kHz LPF)	67 dB or higher

General

AC adaptor power supply	
Input	AC 100-240 V 50/60 Hz
Output	12 V 1 A
Power consumption	6 W
Eco standby	0.3 W
Network Standby On/Bluetooth Standby Off	
Wired	1.4 W
Wireless (Wi-Fi)	1.8 W
Network Standby On/Bluetooth Standby On	
Wired	1.6 W
Wireless (Wi-Fi)	1.8 W
Weight	5.7 kg
Dimensions (width × height × depth)	450 × 136 × 368 mm (including legs and protrusions)

- ◆ The contents of this manual apply to the latest specifications as of the publishing date. To obtain the latest manual, access the Yamaha website then download the manual file.