YAMAHA

Lighting Audio System

LSX-70

OWNER'S MANUAL

Relit

Read the supplied booklet "Safety Brochure" before using the unit.

Made for
iPod iPhone iPad

Bluetooth®

aptX®
CSR

AB

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High quality sound with ease of use

A fusion of music and lighting

Introduction

Confirm the package contents and thoroughly read this manual.

◗ Supplied accessories

AC adaptor
(DC 12 V/1.5 A
Model No.
U.K. model: MU18-D120150-B2
Australia model: MU18-D120150-A3)

◗ About this manual

- **Operations**
  "iPhone" described in this manual may also refer to "iPod touch" or "iPad."

- **Illustrations**
  Illustrations may differ from actual item depicted.

- **Symbols**

 | ! | Indicates precautions for use of the unit and feature limitations. |
  |---|---|
  | ★ | Indicates supplementary explanations for better use. |
  | ☞ | Indicates the corresponding reference page(s). |

◗ Recharging this unit

When using this unit for the first time, connect the supplied AC adaptor to the unit and charge it from a wall outlet.

- If charging the unit with both the power and light turned off, the indicator blinks slowly in orange. Once charging is complete, the indicator turns off.
- If the remaining battery level of this unit becomes low, the indicator will blink rapidly in orange.

Indicator
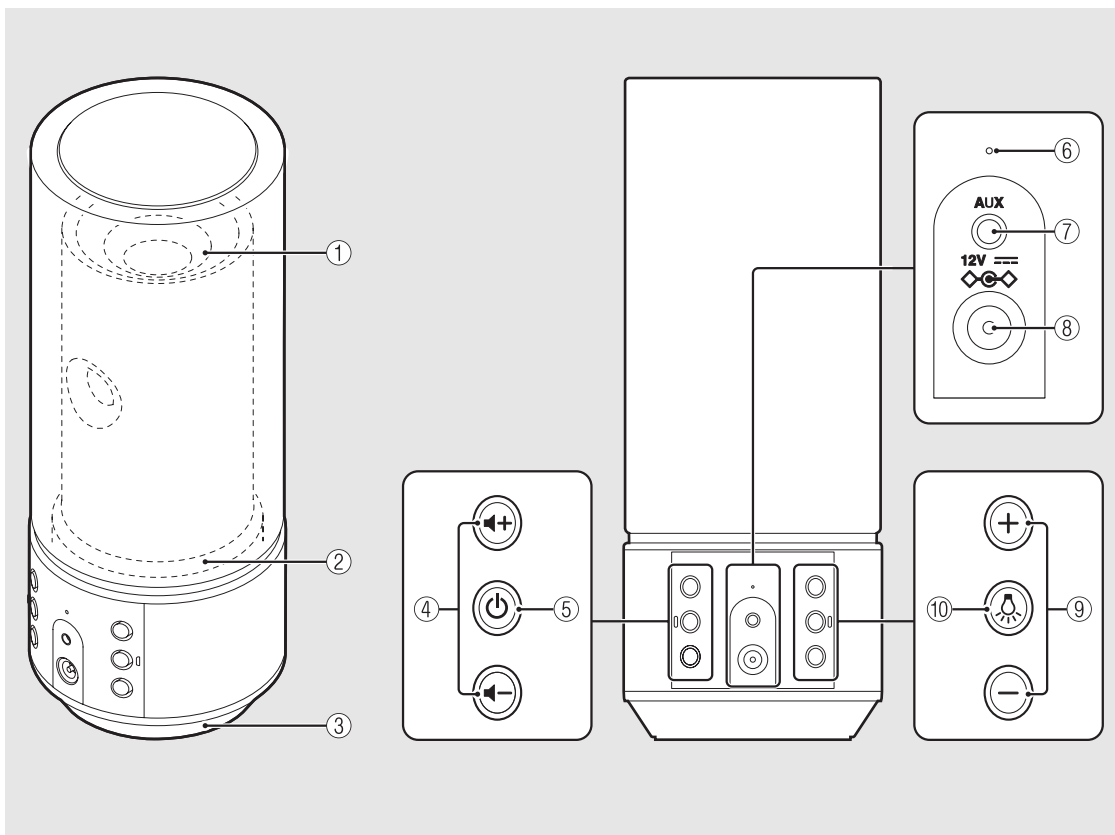
AUX

12V

AC adaptor

★
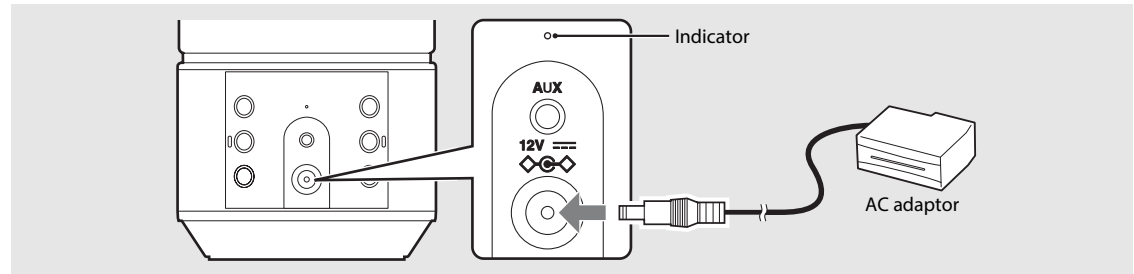
- The charging time for the battery is approximately 4 hours when the unit is off and approximately 7 hours when the unit is on.
- Check the remaining battery level of the unit from "DTA CONTROLLER" (☞ P.6).

!

- In the place where temperature is very high or low, the unit may be recharged earlier than usual or fail to be recharged.
- In order to maintain the function, the unit should be recharged every six months.
- The rechargeable battery has a limited lifespan. Its capacity decreases gradually with the frequency of use and the passage of time.
- The lifespan of the rechargeable battery varies according to how it is stored, usage conditions and usage environment.
- In order to achieve the maximum duration from the battery, there may be a difference in sound volume and quality when using the unit with the battery and when using the unit connected with the AC adaptor.
- The power may turn off depending on the volume and light status regardless of the remaining battery level.

Part names

Familiarize yourself with all parts and these functions.

① **Light/speaker**

② **Light**

③ **Speaker**

④ **◀+/◀− (VOLUME)**
Controls the volume.

⑤ **⏻ (Power) (☞ P.6)**
Press: Turns the unit on/off.
Press and hold: Disconnects a *Bluetooth* device.
The unit plays a startup tone when turned on and a shutdown tone when turned off.

⑥ **Indicator**
Lights up when turning on the unit. Blinks when the status of the *Bluetooth* connection and the status of the rechargeable battery change.

⑦ **AUX (☞ P.10)**
Connects to an external device via a commercially available 3.5 mm stereo mini-plug cable.

⑧ **DC IN (☞ P.4)**
Connects the supplied AC adaptor.

⑨ **Lighting +/− (☞ P.6)**
Press to adjust the lighting brightness.

⑩ **💡 (Lighting) (☞ P.6)**
Press to turn on or off the light.

* The light effects represent the sound expansion.

Preparations

Install Yamaha's application "DTA CONTROLLER" and turn the unit on.

�] Installing "DTA CONTROLLER"

Installing DTA CONTROLLER application on a mobile device, such as a smartphone or tablet computer, allows you to use a variety of additional convenient features of Yamaha desktop audio systems.

Features

- Turning on/off of the unit, adjusting volume
- Turning on/off the lighting, adjusting the brightness of the lighting
- Setting of the SMART TIMER (☞ P.11)
- Playing back songs stored in a smart phone or tablet

The mobile device needs to be connected with the unit via *Bluetooth* connection (☞ P.7).

Available on the App Store

http://itunes.com/app/dtacontroller

(For users in the U.S.A.)

https://itunes.apple.com/us/app/dta-controller-us/id549333293?mt=8

Google Play™

https://play.google.com/store/apps/details?id=com.yamaha.av.dtacontroller
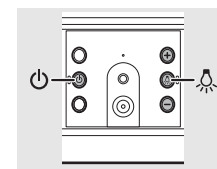
* If access to any of these fails, search for "DTA CONTROLLER" on the App Store or Google Play.

▎ Turning on the lighting/power

1 Connect the AC adaptor to the unit and plug the power plug into a wall outlet.

2 • Press 💡 to turn on the light.

  - Lighting can be turned on/off even when the power of the unit is off.
  - To adjust the brightness, press the **Lighting +/–** button (5 steps).

• Press ⏻ to turn on the unit.

  - The unit plays a startup tone and turns on. You can then play music.

★ **Auto standby function**
- The auto standby function will be activated as follows (default setting).
  - The unit turns off automatically if no operation has been performed for more than 20 minutes with no device connected to AUX or via *Bluetooth* connection.
  - The unit turns off automatically if no operation has been performed for more than 8 hours.

Activating/deactivating the auto standby function

1 Press 💡 to turn on the light.

2 Press and hold 💡 for at least 10 seconds.

  - The auto standby function switches and the lighting (☞ P.5) blinks.
    - **Auto standby is activated:** The lighting blinks three times.
    - **Auto standby is deactivated:** The lighting blinks once.

Turning the notification-tone function on/off

- If you want to turn the notification tones (startup tone/shutdown tone, *Bluetooth* connection tone, maximum/minimum volume notification tone) on or off, when the unit is off, press ⏻ while pressing 🔉— to turn on the unit.
  - **If turning on the notification tones:** The unit plays the startup tone.
  - **If turning off the notification tones:** The unit does not play the startup tone.

Listening to music via *Bluetooth* connection
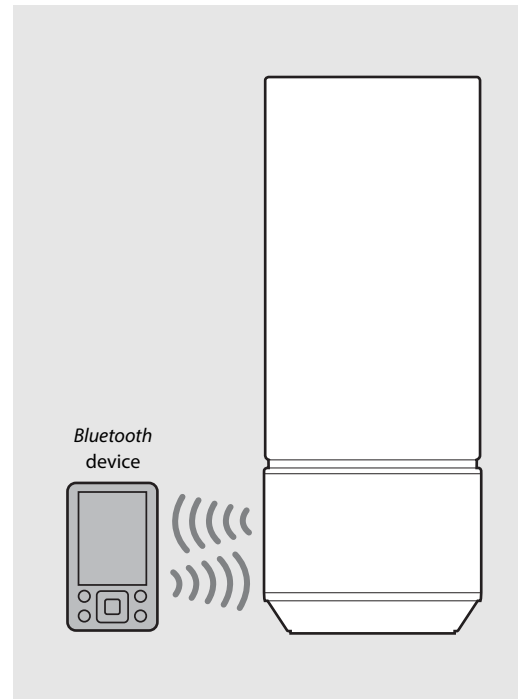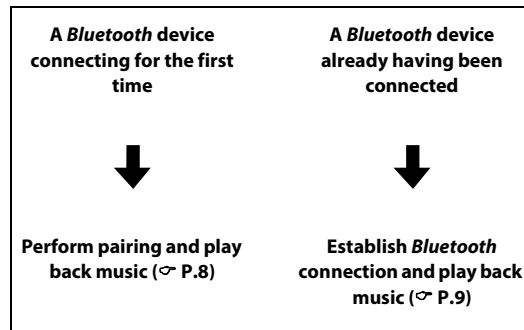
You can listen to sound wirelessly from a *Bluetooth* compatible device.

▶ Pairing a device with the unit

When connecting a *Bluetooth* device to the unit for the first time, the device is required to be registered to the unit. This process is called "pairing." Once pairing is completed, subsequent connection can be made with a couple of easy steps.

| A *Bluetooth* device connecting for the first time	A *Bluetooth* device already having been connected
⬇	⬇
Perform pairing and play back music (☞ P.8)	**Establish *Bluetooth* connection and play back music (☞ P.9)**

Bluetooth device

★
- If pairing information for a device is deleted, you will need to perform pairing of that device again in order to connect it again.

7

▌ Performing pairing and playing back music

iPhone

1 Press ⏻ to turn on the unit (☞ P.6).

- The indicator lights in orange.

2 Tap "Settings" and "*Bluetooth*" on your iPhone to turn on its *Bluetooth* function.

3 On the connecting list in the "Device" field, tap "LSX-70 Yamaha."

- After pairing is complete, the indicator (☞ P.5) blinks in blue and the unit plays a *Bluetooth* connection tone when a *Bluetooth* connection is established.

4 Play back music on your iPhone.
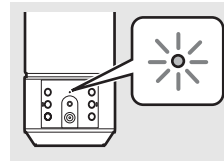
⭐
- If another device is already connected to the unit, terminate that *Bluetooth* connection by pressing and holding ⏻, then perform pairing with the new device.
- The pairing operation may differ depending on your iPhone or version of device OS.

Other than iPhone

1 Press ⏻ to turn on the unit (☞ P.6).

- The indicator lights in orange.

2 Turn on the *Bluetooth* function on your device.

3 In the *Bluetooth* setting of the device, select "LSX-70 Yamaha."

- After pairing is complete, the indicator (☞ P.5) blinks in blue and the unit plays a *Bluetooth* connection tone when a *Bluetooth* connection is established.
- If the device does not connect to the unit automatically after the pairing is completed, select "LSX-70 Yamaha" again in the *Bluetooth* setting on your device.
- For details, see the owner's manual of your device.

4 Play back music on your device.
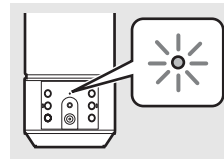
⭐
- If another device is already connected to the unit, terminate that *Bluetooth* connection by pressing and holding ⏻, then perform pairing with the new device.
- If a passkey is required during the pairing operation, enter the number "0000."

▶ Connecting a paired *Bluetooth* device and playing back music

If the unit is connected to another device via *Bluetooth* connection, terminate that connection (see "Terminating the *Bluetooth* connection" on the right) before connecting to the target device.

1 Press ⏻ to turn on the unit.

2 Perform *Bluetooth* connection.

- Turn on the *Bluetooth* function on the device and select "LSX-70 Yamaha."
- The indicator blinks in blue and the unit plays a *Bluetooth* connection tone when a connection is established.
- If the device is latest recently connected one via *Bluetooth* connection, this unit and the connecting device are connected automatically via *Bluetooth* connection when you turn on the power of this unit.

3 Play back music on the connected device.

1

2, 3

Indicator
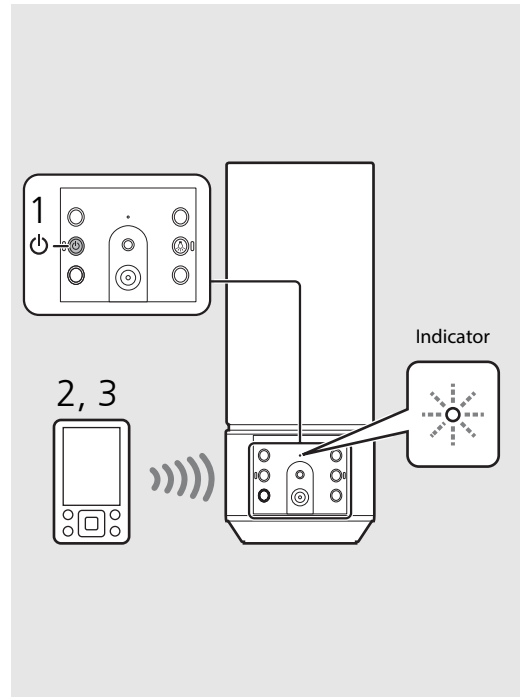
⚠ • **Decrease the volume of the unit before playback.** Otherwise, playback volume may be too loud.

★ **Terminating the *Bluetooth* connection**
- *Bluetooth* connection can be terminated by either one of the following.
  - Turn off the *Bluetooth* function of the connected device.
  - Press and hold ⏻ on the unit.
  - Turn off both the power and light of the unit.
- The indicator blinks in blue and the unit plays a *Bluetooth* disconnection tone when the connection is terminated.

Music enhancer

This function enhances the sound of compressed digital sound by regenerating musical elements that are lost through compression via *Bluetooth* connection.

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Listening to external sources

This unit allows playback of external devices connected to the AUX terminal. A commercially available 3.5 mm stereo mini-plug cable is required for this connection. **Be sure to turn off the unit by pressing ⏻ before connecting the external device.**

▶ Connecting an external device

1 Plug the cable into the AUX terminal of the unit.

2 Connect the other end of the cable to the external device.

▶ Playing back

1 Press ⏻ to turn on the unit.

2 Play back the external device.

- For details on playback, see the owner's manual supplied with the external device.

1

2

External device

3.5 mm stereo mini-plug cable
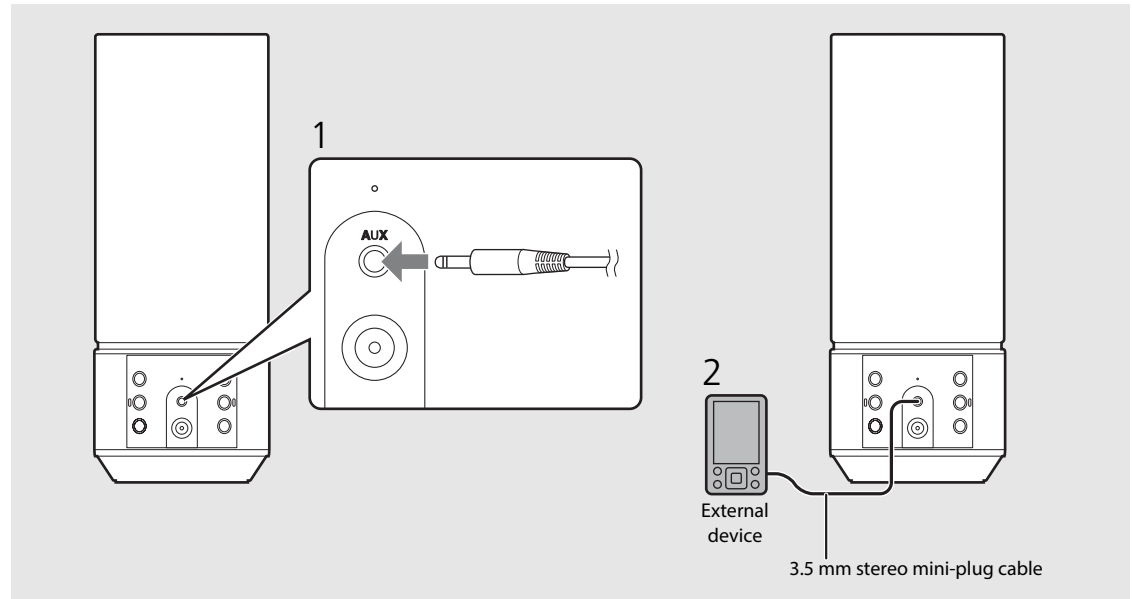
- **!** • Decrease the volume of the unit and the external device before connection.

- **★** • If both a *Bluetooth* device and external device are played back, sound from both devices will be heard.

Using the SMART TIMER

The SMART TIMER allows you to turn on the lighting at the brightness you set and play back your favorite music as a wake-up timer every morning. You can also turn off the lighting and stop music playback automatically while you are in bed listening to music.
SMART TIMER can be used only when the unit is connected to a power source.

What the SMART TIMER can do

| On-timer	Off-timer
• Turn on the lighting at a specified time. • Specify the brightness of the lighting. • Play back the music of a connected device at a specified time. • Specify a song. • Preset the volume level.	• Turn off the lighting at a specified time. • Turn off the power at a specified time.

▶ Setting the SMART TIMER

SMART TIMER settings can be performed with a smart phone or tablet that has the DTA CONTROLLER application (☞ P.6) installed.

1 Connect a device via *Bluetooth* connection (☞ P.8, 9).

2 Start DTA CONTROLLER on the device and make the SMART TIMER settings.

3 Synchronize the SMART TIMER with the unit by DTA CONTROLLER.

   • Be sure to synchronize the SMART TIMER with the unit every time you perform the SMART TIMER setting.
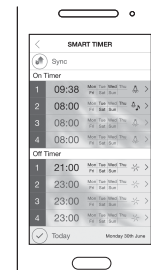
Due to product improvements, specifications and appearance are subject to change without notice.

⚠ • To play back a song via *Bluetooth* connection at a set time, it is required that the *Bluetooth* function of your smart phone or tablet is turned on. Additionally, in the case of an iPhone, do not quit DTA CONTROLLER while multitasking.

   • If another *Bluetooth* device is connected to the unit at the time you set, the song you set as the on-timer will not be played back. Disconnect any other device before the time you set.

★ • The on-timer and off-timer of the SMART TIMER can be activated/deactivated by DTA CONTROLLER only.

Inner clock of the unit

   • The unit copies the time to the unit's inner clock from DTA CONTROLLER when a device connects to the unit via *Bluetooth* connection. The SMART TIMER follows the unit's inner clock.

   • If you disconnect the AC adaptor and the remaining battery level completely runs out, the clock setting will reset and SMART TIMER will turn off.

Troubleshooting

Refer to the table below if the unit does not function properly. If your solution is not listed below or if the instruction below does not help, turn off the unit, disconnect the AC adaptor, and contact your nearest authorized Yamaha dealer or service center.

◗ General

Problem	Cause	Solution
The unit turns off soon after the power is turned on. The unit does not operate properly.	The AC adaptor is not properly connected.	Connect the AC adaptor firmly.
	The battery in this unit is weak.	Recharge the battery (☞ P.4).
	This unit has been exposed to a strong external electric shock such as lightning or strong static electricity.	Hold down ⏻ on the front panel for more than 10 seconds to initialize and reboot the unit.
The speakers make no sound.	The volume is minimum.	Turn up the volume.
	The power is off.	Turn on the unit and play the music again.
	The auto standby function is activated.	Turn on the unit (☞ P.6).
The unit and/or lighting turn off suddenly.	The auto standby function is activated.	Turn on the unit and/or lighting (☞ P.6).
	The off-timer of the SMART TIMER is set.	Check the setting of the off-timer from DTA CONTROLLER.
	The battery in this unit is weak.	Recharge the battery (☞ P.4).
The unit and lighting turn on suddenly.	The on-timer of the SMART TIMER is set.	Check the setting of the on-timer from DTA CONTROLLER.
The indicator blinks rapidly in orange.	The battery in this unit is weak.	Recharge the battery (☞ P.4).
SMART TIMER does not operate.	SMART TIMER is not set from DTA CONTROLLER.	Set the SMART TIMER from DTA CONTROLLER and synchronize it to the unit (☞ P.11).
There is noise interference from digital or high-frequency equipment.	This unit is too close to the digital or high-frequency equipment.	Place this unit farther away from such equipment.
This unit does not work at all.	The battery in this unit is weak.	Recharge the battery (☞ P.4).

▶ *Bluetooth*

Problem	Cause	Solution
Cannot make the unit pair with a *Bluetooth* device.	The unit is turned off.	Turn the unit on and perform the paring (☞ P.8).
	Another *Bluetooth* device is connected.	Terminate current *Bluetooth* connection, and perform pairing with the new device.
	This unit and the device are too far apart.	Pair the unit and device within a distance of 10 m (33 ft).
	There is a device (microwave oven, wireless LAN, etc.) that outputs signals in the 2.4 GHz frequency band nearby.	Move this unit away from the device that is emitting radio-frequency signals.
	A *Bluetooth* adaptor, etc., that you want to pair with this unit has a passkey other than "0000."	Use a *Bluetooth* adaptor, etc., whose passkey is "0000."
	The *Bluetooth* device does not support A2DP.	Perform pairing with a device which supports A2DP.
Cannot make a *Bluetooth* connection.	The unit is turned off.	Turn the unit on.
	Another *Bluetooth* device is connected.	Terminate current *Bluetooth* connection, then establish a *Bluetooth* connection with that device again.
	The *Bluetooth* function of the device is turned off.	Turn on the *Bluetooth* function of the device.
	The pairing information has been deleted.	Perform pairing again (☞ P.8). This unit can be paired with eight devices. If pairing with a ninth device is performed, the pairing information with the earliest connection date will be deleted.
	This unit is not registered on the device's *Bluetooth* connection list.	Perform paring again (☞ P.8).
No sound is produced, or the sound is interrupted during playback.	The volume of the connecting device is set too low.	Turn up the volume of the connecting device.
	The connecting device is not set to send *Bluetooth* audio signals to the unit.	Switch the output of *Bluetooth* audio signals of the connecting device to the unit.
	The *Bluetooth* connection of the unit with the device has terminated.	Perform *Bluetooth* connection operations again (☞ P.9).
	There is a device (microwave oven, wireless LAN, etc.) that outputs signals in the 2.4 GHz frequency band nearby.	Move this unit away from the device that is emitting radio-frequency signals.
	This unit and the connecting device are too far apart.	Move the connecting device to within 10 m (33 ft) of the unit.

Specifications

Bluetooth section

Bluetooth version	Ver. 2.1+EDR
Supported profile	A2DP (Advanced Audio Distribution Profile)
Compatible codecs	SBC, AAC, aptX®
Wireless output	*Bluetooth* Class 2
Maximum communication range	10 m [33 ft] (without obstructions)

AUX section

Input connector	3.5 mm stereo mini jack

Lighting section (LED*)

Lifetime	(Luminous flux under 70%) About 36,000 hours
Power consumption	(When only the lighting is on) 8 W

Rechargeable battery

Built-in battery	Lithium-ion battery
Capacity/Voltage	2900 mAh/3.6 V
Playable time	Under the fully recharged condition, about 8 hours (output: 200 mW)
Recharge time	Power-on condition: About 7 hours
	Power-off condition: About 4 hours

General

Power supply	U.K. model	AC 230 V, 50 Hz
	Australia model	AC 240 V, 50 Hz
Power consumption	Power-on condition (music is played back and the lighting is on): 10 W	
	Power-off condition (lighting and SMART TIMER are off and no *Bluetooth* connection): 0.2 W Standby condition (SMART TIMER is on): 0.5 W	
AC adaptor	U.K. model	MU18-D120150-B2 (DC 12 V/1.5 A)
	Australia model	MU18-D120150-A3 (DC 12 V/1.5 A)
Dimensions (W × H × D)	94 × 241 × 94 mm (3-3/4 × 9-1/2 × 3-3/4 in)	
Weight	950 g (2.09 lbs.)	

Specifications are subject to change without notice.

* The estimated lifetime of LED lighting is about 36,000 hours.
This figure is based on the shorter of either the duration until the lighting is worn out, or the duration before luminous flux drops to below 70% of the original. Note, however, that the estimated 36,000 hour duration is not guaranteed.

Made for
iPod iPhone iPad

"Made for iPod," "Made for iPhone," and "Made for iPad" mean that an electronic accessory has been designed to connect specifically to iPod, iPhone, or iPad, respectively, and has been certified by the developer to meet Apple performance standards.

Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards.

Please note that the use of this accessory with iPod, iPhone, or iPad may affect wireless performance.

iPad, iPhone, iPod and iPod touch are trademarks of Apple Inc., registered in the U.S. and other countries.

Bluetooth

- *Bluetooth* is a technology for wireless communication between devices within an area of about 10 meters (33 ft) employing the 2.4 GHz frequency band, a band which can be used without a license.
- *Bluetooth* is a registered trademark of the *Bluetooth* SIG and is used by Yamaha in accordance with a license agreement.

Handling *Bluetooth* communications

- The 2.4 GHz band used by *Bluetooth* compatible devices is a radio band shared by many types of equipment. While *Bluetooth* compatible devices use a technology minimizing the influence of other components using the same radio band, such influence may reduce the speed or distance of communications and in some cases interrupt communications.
- The speed of signal transfer and the distance at which communication is possible differs according to the distance between the communicating devices, the presence of obstacles, radio wave conditions and the type of equipment.
- Yamaha does not guarantee all wireless connections between this unit and devices compatible with *Bluetooth* function.

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