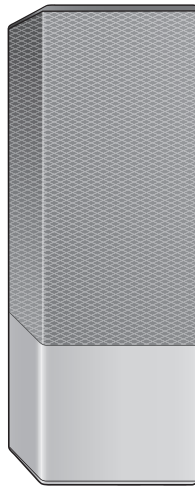




Operating Instructions

Wireless Speaker System

Model No. SC-GA10



Thank you for purchasing this product.
Please read these instructions carefully before using this product, and save this manual for future use.

Model number suffix "EB" denotes UK model.

EB GN

TQBJ2055-1

Safety precautions

WARNING

Unit

- To reduce the risk of fire, electric shock or product damage,
 - Do not expose this unit to rain, moisture, dripping or splashing.
 - Do not place objects filled with liquids, such as vases, on this unit.
 - Use the recommended accessories.
 - Do not remove covers.
 - Do not repair this unit by yourself. Refer servicing to qualified service personnel.
 - Do not place any item on top of this unit.

AC mains lead

- To reduce the risk of fire, electric shock or product damage,
 - Ensure that the power supply voltage corresponds to the voltage printed on this unit.
 - Insert the mains plug fully into the socket outlet.
 - Do not pull, bend, or place heavy items on the lead.
 - Do not handle the plug with wet hands.
 - Hold onto the mains plug body when disconnecting the plug.
 - Do not use a damaged mains plug or socket outlet.
- The mains plug is the disconnecting device.
Install this unit so that the mains plug can be unplugged from the socket outlet immediately.

CAUTION

Unit

- This unit may receive radio interference caused by mobile telephones during use. If such interference occurs, please increase separation between this unit and the mobile telephone.
- This unit is intended for use in moderate climates.
- Do not carry this unit with one hand to prevent injury by dropping.

Placement

- Place this unit on an even surface.
- Do not expose this unit to direct sunlight, high temperatures, high humidity, and excessive vibration.

Caution for AC Mains Lead



(For the AC mains plug of three pins)

For your safety, please read the following text carefully.

This appliance is supplied with a moulded three pin mains plug for your safety and convenience.

A 5-ampere fuse is fitted in this plug.

Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 5-ampere and that it is approved by ASTA or BSI to BS1362.

Check for the ASTA mark  or the BSI mark  on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced.

If you lose the fuse cover the plug must not be used until a replacement cover is obtained.

A replacement fuse cover can be purchased from your local dealer.

Before use

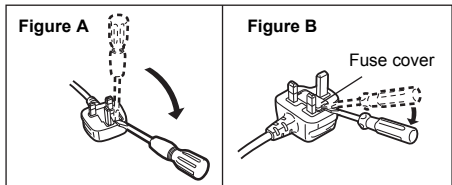
Remove the connector cover.

How to replace the fuse

The location of the fuse differ according to the type of AC mains plug (figures A and B). Confirm the AC mains plug fitted and follow the instructions below.

Illustrations may differ from actual AC mains plug.

1. Open the fuse cover with a screwdriver.



2. Replace the fuse and close or attach the fuse cover.

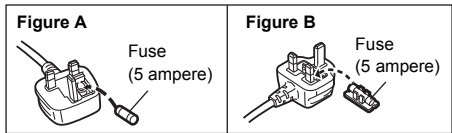


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For the United Kingdom and Ireland

Declaration of Conformity (DoC)

Hereby, "Panasonic Corporation" declares that this product is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU. Customers can download a copy of the original DoC to our RE products from our DoC server:
<http://www.ptc.panasonic.eu>
Contact to Authorised Representative:
Panasonic Marketing Europe GmbH, Panasonic Testing Centre, Winsbergring 15, 22525 Hamburg, Germany

Type of wireless	Operating Frequency	Maximum Power (EIRP)
WLAN	2412 - 2472 MHz 5180 - 5320 MHz 5500 - 5700 MHz	19 dBm 19 dBm 19 dBm
Bluetooth®	2402 - 2480 MHz	4 dBm

5.15 - 5.35 GHz band is restricted to indoor operations only in the following countries.

AT	BE	BG	CZ	DK	EE	FR	DE	IS	IE	IT
EL	ES	CY	LV	LI	LT	LU	HU	MT	NL	NO
PL	PT	RO	SI	SK	TR	FI	SE	CH	UK	HR

The WLAN feature of this product shall exclusively be used inside buildings.
This product on purpose to connect to access point of 2.4 GHz or 5 GHz WLAN.



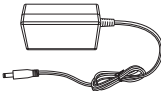
Product Identification Marking is located on the bottom of the unit.


About descriptions in these operating instructions

- Pages to be referred to are indicated as "→ ○○".
- Labels on this unit are indicated as [○○] in these operating instructions.

Accessories

Check the supplied accessories before using this unit.

- ☐ 1 AC mains lead
- For the United Kingdom and Ireland
(K2CT3YY00034)
- 
- For Australia and N.Z.
(K2CJ2YY00052)
- 
- ☐ 1 AC adaptor
- (TXH0002FA)
- 

- 
- Do not use the AC mains lead with other equipment.
 - Product numbers provided in these operating instructions are correct as of October 2017. These may be subject to change.


The symbols on this product (including the accessories) represent the following:

~

AC

==


DC




Class II equipment (The construction of the product is double-insulated.)

|

On

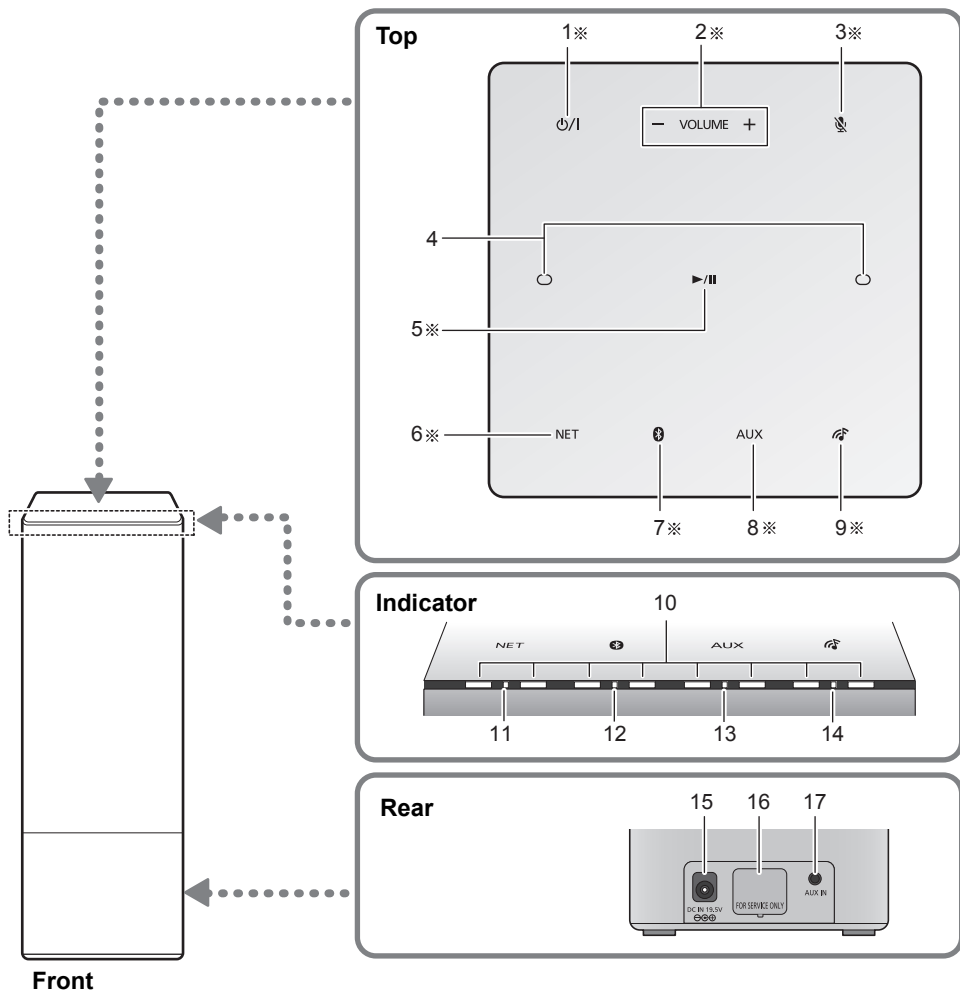


Standby



Positive polarity

Control reference guide




- ※ These switches work just by touching the marks. To ensure correct operation, touch the centre of the mark.
- To avoid operating these switches unintentionally, do not put any object on them.

- 1 Standby/on switch [⏻/⏻]
 - Touch to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.
- 2 Volume control switch [– VOLUME +]
- 3 Mic mute switch [🔇]
 - To mute the microphones, touch [🔇]. The status indicators will light up in orange. (→ 6)
 - The unit will not hear any command and your Google Assistant features will not work. To use your Google Assistant features, touch [🔇] again to unmute the microphones.
- 4 Built-in microphone
- 5 Play/pause switch [▶/⏸]
 - Your Google Assistant can be activated when you touch and hold [▶/⏸] for at least two seconds. (→ 9)
- 6 Network selector switch [NET]
- 7 Bluetooth® selector switch [📶]
- 8 AUX selector switch [AUX]
- 9 “Panasonic Music Control” mode selector switch [🎵]
- 10 Status indicators
 - Show the status of your Google Assistant (→ below)
 - Show the status of updating firmware (→ 6)
- 11 NET (Network) selector indicator (→ 6)
- 12 📶 (Bluetooth®) selector indicator (→ 12)
- 13 AUX selector indicator (→ 13)
- 14 🎵 (“Panasonic Music Control” mode) selector indicator (→ 11)
- 15 DC IN terminal (→ 7)
- 16 LAN port (for service use only)
- 17 AUX IN terminal (→ 7)


Indicator illumination

The below illustrates the indicator illumination patterns.

■ The Google Assistant (→ 9)

Indicator	Description
<p>Illumination: white</p> 	<p>All the status indicators light up one by one from left to right, then simultaneously blink slowly</p> <ul style="list-style-type: none"> ● Your Google Assistant is waiting for your command. <p>The status indicator scrolls from the 1st position (left) to the last position (right)</p> <ul style="list-style-type: none"> ● Your Google Assistant is processing your request. <p>All the status indicators blink simultaneously</p> <ul style="list-style-type: none"> ● Your Google Assistant is responding.





■ Mic mute

Indicator	Description
Illumination: orange 	The 3rd to 6th status indicators light up <ul style="list-style-type: none"> • The microphones are muted. The unit will not hear any command and your Google Assistant features will not work. <ul style="list-style-type: none"> – To use your Google Assistant features: Touch [👆] again.



■ Firmware update (→ 14)

Do not disconnect the AC adaptor and the AC mains lead during the update.

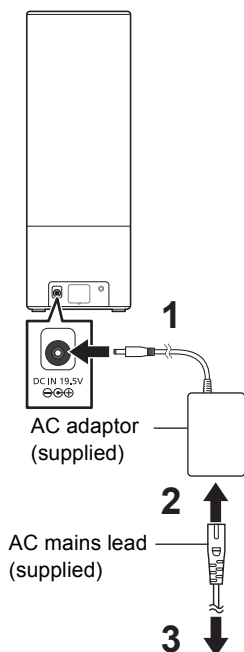
- During the update process, no operations can be performed, and you cannot use your Google Assistant.

Indicator	Description
Illumination: white    	The selector indicator scrolls from left to right <ul style="list-style-type: none"> • The unit is starting the firmware update process. The status indicator scrolls from the 1st position (left) to the 4th position repeatedly <ul style="list-style-type: none"> • The unit is updating the firmware. The status indicator scrolls from the 5th position to the last position (right) repeatedly <ul style="list-style-type: none"> • The unit is updating the firmware. The selector indicator scrolls from left to right <ul style="list-style-type: none"> • The unit is finishing the firmware update process. When the scrolling stops, firmware update is completed.

■ NET (Network) selector indicator

Indicator	Description
Illumination: white  	The Network selector indicator blinks slowly <ul style="list-style-type: none"> • The unit is ready for the network setup. • The unit is disconnected from network. • The network setup has failed. The Network selector indicator lights up <ul style="list-style-type: none"> • The unit is in Network selector mode with network connected.

Connections



To a household mains socket

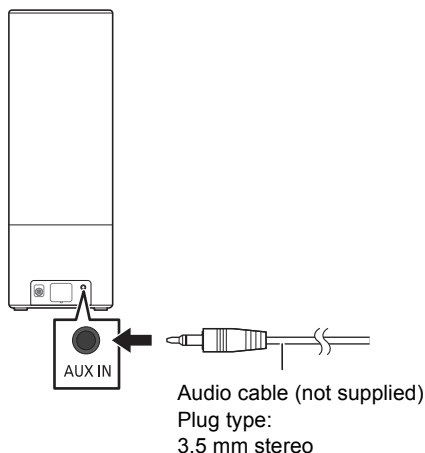
- The unit will automatically turn on and start initialising. The selector indicator starts scrolling from left to right. Do not perform any operation until the scrolling stops (initialising completes).



- This unit consumes a small amount of power (→ 17) even when turned off.
- The unit is in the standby condition when the AC adaptor is connected. The primary circuit is always “live” as long as the AC adaptor is connected to an electrical outlet.
- In the interest of energy conservation, if you will not be using this unit for an extended period of time, unplug it from the mains socket.
- This unit does not have magnetic shielding. Do not place the unit near a TV, PC or other magnetic devices.
- Do not disconnect the AC mains lead when the unit is on. Doing so may cause malfunction or damage.

The unit will not automatically turn to standby mode even if there is no sound and no operation is performed, as your Google Assistant will stay active.

Connection of an external music device



- For details, refer to the operating instructions of the device.

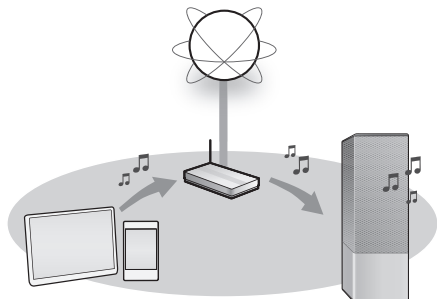
Network setup

You can stream online music services or music stored on your devices to this unit.

This unit has the Google Assistant built in. You can ask it questions and tell it to do things.

- For more information about your Google Assistant, visit g.co/assistant

To use these features, this unit must join the same internet-connected network as the device.



Availability and performance of certain features, services and applications are device- and network-dependent and may not be available in all countries/regions; subscription(s) may be required, and additional terms, conditions and/or changes may apply.

The Google Assistant is not available in all languages or countries/regions.

Preparation

- Make sure that the Wi-Fi function is activated on your smartphones/tablet.
- Make sure the unit is on.

1 Download the free app “Google Home” on your smartphone/tablet.

- To download the Google Home app, visit

<https://www.google.com/cast/setup/>



2 Start the app and follow the on-screen instructions.

3 Check that the connection has completed.

- When the connection is established, the Network selector indicator will stop blinking and will light up.
- If the connection is failed, the Network selector indicator will blink slowly. In this case, try the setting again.



- This unit will be displayed as “Panasonic GA10-□□□□” if the device name is not set. (“□” stands for a character that is unique to each set.)
- You can check your network information (SSID, MAC address and IP address) from the “Google Home” app or “Panasonic Music Control” app (→ 10).
- Certain on-screen display items, etc. of the “Google Home” app may not apply to this unit.

Operations by voice (the Google Assistant)

You can make simple voice requests for the unit to play music, podcasts or radio, and so on.

Preparation

- Complete the network setup. (→ 8)
 - Make sure that the network is connected to the Internet.
- Make sure that your smartphone/tablet has a Google account and already signed in via the “Google Home” app.
- Make sure the unit is on.
- The mic mute function must be off. (→ 5)
- Any external devices to be operated must be in the same network as the unit.

1 Say “Ok Google” or “Hey Google” to the unit to activate your Google Assistant.

- All the status indicators light up one by one from left to right, then simultaneously blink slowly. (→ 5)
- Sometimes, your voice command may not be recognised by the unit (for example, during music playback at high volume).

Instead of activating your Google Assistant by voice, you can touch and hold [▶/⏸] on the unit for at least two seconds when the unit is on.

2 Give a command to the unit.

e.g.,

Purpose	Command Say “Ok Google” or “Hey Google,” then ...
To play personalized suggested content from chosen service.	• Play some music
To stop music	• Stop • Stop the music
To pause music	• Pause • Pause the music
To play next song	• Skip • Next song



- The music service chosen as default in the “Google Home” app will be used first when asked to play music.
- Your Google Assistant works only when the unit is on.

For more things to try, visit
g.co/assistant/discover



Volume control

You can control the volume by voice.

e.g.,

Purpose	Command Say “Ok Google” or “Hey Google,” then ...
To increase volume	• Turn it up
To decrease volume	• Turn it down
To set specific volume level	• Volume level five* • Volume to 65 %*

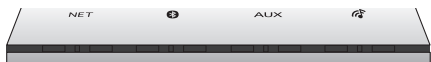
※ Scale is 1 to 10 or 1 to 100 %.

■ Indication from status indicators during volume adjustment

The status indicators (→ 5) show the volume condition.

• Minimum volume

All the status indicators go off.



• Maximum volume

All the status indicators light up.



Streaming music over the network

You can stream online music services or music files from your smartphone/tablet to this unit.

Streaming online music

This unit is compatible with Chromecast-enabled apps. For the list of Chromecast-enabled apps, visit g.co/cast/apps

Preparation

- Complete the network setup. (→ 8)
- Make sure that the network is connected to the Internet.
- Connect a device with a Chromecast-enabled app installed to the same network as this unit.
- Make sure the unit is on.

1 Start the Chromecast-enabled app.

2 Tap the Cast icon and select this unit.

- Use the “Google Home” app to group speakers when streaming online music to other compatible speakers.

3 Select the desired music on your Chromecast-enabled app.

Not all music services are available in all countries/regions. Registration/subscription required. Fees may apply. Services subject to change. For details, visit the individual music service's website.

Streaming music files on network devices

You can stream music files from the device on your network to this unit by using the free app “Panasonic Music Control”.

Preparation

- Complete the network setup. (→ 8)
- Connect the following devices to the same network as this unit.
 - Device with “Panasonic Music Control” app installed
 - Device containing music source

1 Download the free app “Panasonic Music Control” on your smartphone/tablet.



- **Android** : Google Play™



- **iOS** : App Store



2 Start the app “Panasonic Music Control”.

- Always use the latest version of the app.

- 3 **Select this unit as the output speaker.**
- 4 **Select a music source.**
- 5 **Select a music file.**

The operations and on-screen display items, etc. of the app "Panasonic Music Control" are subject to change. For the latest information, visit

<http://panasonic.jp/support/global/cs/audio/app/>


(This site is in English only.)

■ Enhancing the sound

When using the free app "Panasonic Music Control", you can use the below sound functions from the settings of the app.

- Equalizer
- D.Bass (powerful bass effect)



- When using this function for music playback, the "Panasonic Music Control" mode selector indicator () lights up.
- When playing back music from the DLNA server (PC with Windows 7 or later installed, smartphone, Network Attached Storage (NAS) device, etc.), add the contents and folder to the libraries of the Windows Media® Player, the smartphone, or the NAS device, etc.
- Playlist of Windows Media® Player can play back only the contents that are stored in the libraries.
- About supported format, refer to "Audio support format (Panasonic Music Control)" (→ 17).
- Depending on the contents and the connected equipment, playback may not be performed properly.

Bluetooth® operations

By using the Bluetooth® connection, you can listen to the sound of the Bluetooth® audio device wirelessly.

- Refer to the operating instructions of the Bluetooth® device for further instruction on how to connect a Bluetooth® device.

Connecting via Bluetooth® menu

Preparation

- Complete the network setup. (→ 8)
- Turn on the Bluetooth® feature of the device and place the device near this unit.
- Make sure the unit is on.

Pairing with Bluetooth® devices

1 Touch [].

- If the Bluetooth® selector indicator blinks fast, go to step 3.

2 To enter pairing mode, touch and hold [] for at least 2 seconds.

- The Bluetooth® selector indicator blinks fast.

3 Select this unit from the Bluetooth® device's menu.

- The MAC address (alpha-numerical string that is unique to each set) may be displayed before this unit is displayed.
- The Bluetooth® selector indicator lights up and the device is connected to this unit.

4 Start playback on the Bluetooth® device.

Connecting a paired Bluetooth® device

1 Touch [].

- The Bluetooth® selector indicator blinks slowly.
- If the Bluetooth® selector indicator lights, a Bluetooth® device is already connected with this unit. Disconnect it. (→ 13)

2 Select this unit from the Bluetooth® device's menu.

- The Bluetooth® selector indicator lights up and the device is connected to this unit.

3 Start playback on the Bluetooth® device.



- This unit will be displayed as "Panasonic GA10-□□□□" if the device name is not set. ("□" stands for a character that is unique to each set.)
- If the speaker name is changed by using the "Panasonic Music Control" app or during the network setup, the speaker name for Bluetooth® will be also changed.
- If prompted for the passkey, input "0000".
- You can register up to 8 devices with this unit. If a 9th device is paired, the device that has not been used the longest will be replaced.
- This unit can only be connected to one device at a time.
- This unit will automatically switch to Bluetooth® selector once it connects with a Bluetooth® device.
- When Bluetooth® is selected as the source, this unit will automatically try and connect to the last connected Bluetooth® device. If the connection attempt fails, try to establish a connection again.
- Your Google Assistant works for some basic playback operations such as volume adjustment or muting. (→ 9)


Disconnecting a Bluetooth® device

Touch and hold [] for at least 2 seconds to disconnect it.

Bluetooth® link mode

You can change the link mode to prioritise connectivity quality or sound quality.

Preparation

- Make sure the unit is on.
- Touch [].
- If a Bluetooth® device is already connected, disconnect it.

Change the setting by “Panasonic Music Control” app. (→ 10)

Mode 1: Emphasis on connectivity

Mode 2: Emphasis on sound quality



- Select Mode 1 if the sound is interrupted.
- When enjoying video contents with this function, the video and audio output may not be synchronised. In this case, select Mode 1.
- The factory default is Mode 2.

AUX input

You can listen to music from an external music device through this unit.

Preparation

- Connect an external music device. (→ 7)
- For details, refer to the operating instructions of the device.

1 Touch [AUX].

- The AUX selector indicator lights up.

2 Start playback on the connected device.

To select the sound input level of the external device

1 While in AUX mode, touch and hold [AUX] and [] for at least 4 seconds.

- The selector indicator shows the current input level.

Network selector indicator blinks

Normal level



“Panasonic Music Control” mode selector indicator () blinks

High level



2 Touch [– VOLUME](normal level) or [VOLUME +](high level) to change the input level.



- The factory default is high level.
- Turn the volume of the external device down to reduce the input signal. High level of input signal will distort the sound.
- When enjoying video contents with this function, the video and audio output may not be synchronised.
- Your Google Assistant works for some basic playback operations such as volume adjustment or muting. (→ 9)

Others

Dimmer mode

You can dim the brightness of indicators.

Touch and hold [NET] and [] for more than 4 seconds.

- All indicators will turn dim.



- To turn off dimmer mode, repeat the operation above.
- The setting is maintained until it is changed again.
- The factory default is off.

Firmware updates

Occasionally, Panasonic may release updated firmware for this unit that may add or improve the way a feature operates. These updates are available free of charge.



DO NOT DISCONNECT the AC adaptor and the AC mains lead during the update.

- During the update process (→ 6), no operations can be performed, and you cannot use your Google Assistant.

Automatic updates

When a new update is available, this unit will update the firmware automatically after midnight if the unit is not in use. (This works only when the unit is on.)

- Connect this unit to the network. (→ 8)
 - Make sure that the network is connected to the Internet.
- Make sure the unit is on.

Manual updates

Preparation

- Connect this unit and your smartphone/tablet to the network. (→ 8)
 - Make sure that the network is connected to the Internet.
 - Make sure that the free app “Panasonic Music Control” is already installed with your smartphone/tablet.
- Make sure the unit is on.

1 Start the app “Panasonic Music Control”.

- Always use the latest version of the app.

2 Select this unit in the speaker settings.

- If update is available, notification will appear on this unit's name.

3 Follow the on-screen instructions.



- If an update is detected during the network setup, updating will be performed as a part of the network setup. (→ 8)
- When you connect the AC mains lead to the AC mains socket (→ 7), or when you turn on the unit, updating will be performed if new update is available.
- If a critical update is detected while the unit is in use, updating will be prioritised.
- Updating will require several minutes. It may take longer or may not work properly depending on the connection environment.

Wi-Fi signal strength

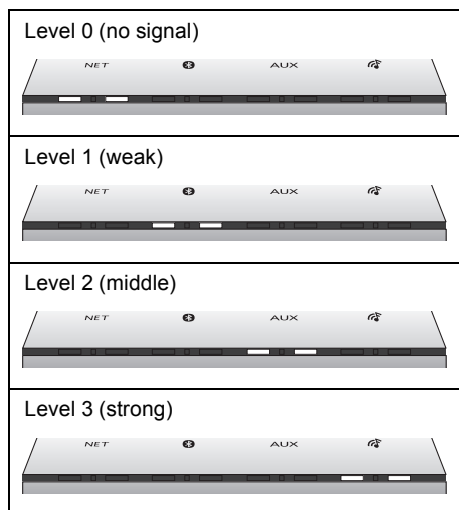
You can check the Wi-Fi signal strength where the unit is located.

Preparation

- Connect this unit to the network. (→ 8)

Touch and hold [NET] and [AUX] for at least 4 seconds.

The status indicators (→ 5) will light up and show the strength.



- It is recommended to have a signal strength of 3. Change the position or angle of your wireless router or this unit if the indication is 2 or 1, and see if the connection improves.
- If the strength is level 0, the unit cannot establish a link with the wireless router.

Troubleshooting

Before requesting service, make the following checks. If the problem remains unresolved, consult your dealer for instructions.

Do you have the latest firmware installed?

Panasonic is constantly improving the unit's firmware to ensure that our customers are enjoying the latest technology. (→ 14)

For further dedicated help, support and advice about your product, visit <http://panasonic.jp/support/global/cs/audio/>
(This site is in English only.)

General

To return all settings to the factory defaults

This will reset all memory contents and network settings.

- ① Turn this unit on.
- ② Touch and hold [] and [] for at least 4 seconds.
 - All the status indicators light up in orange, one by one from left to right. Then the selector indicators (white) start scrolling.
- ③ Confirm the Network selector indicator blinks slowly.

Humming heard during playback.

- If an AC mains lead or fluorescent lights are near the unit's AC mains lead, keep other cords and appliances away from the unit's AC mains lead.

The sound is distorted when using the AUX IN terminal.

- High level of input signal distorts the sound. To reduce the input signal level, lower the volume of the connected device or set the sound input level to normal level. (→ 13)

Bluetooth®

Pairing cannot be done.

- Check the Bluetooth® device condition.
- Make sure that the network setup is completed. (→ 8)

The device cannot be connected.

- The pairing of the device was unsuccessful or the registration has been replaced. Try pairing the device again. (→ 12)
- This unit might be connected to a different device. Disconnect the other device and try pairing the device again.
- If Mode 2 is selected in the link mode, select Mode 1 by using "Panasonic Music Control" app. (→ 13)
- If the problem persists, turn the unit off and on, then try again.

The device is connected but audio cannot be heard through this unit.

- For some Bluetooth® devices, you have to set the audio output to this unit manually. Read the operating instructions for the device for details.

The sound is interrupted.

- The device is out of the 10 m communication range. Place the Bluetooth® device close to this unit.
- Remove any interference between this unit and the device.
- Other devices that use the 2.4 GHz frequency band such as wireless routers, microwaves, cordless phones, etc. are interfering. Place the Bluetooth® device closer to this unit and distance it from the other devices.
- Select Mode 1 for stable communication by using "Panasonic Music Control" app. (→ 13)

Firmware updates

The following status indicators keep lighting up in orange.



An error has occurred. Disconnect the AC mains lead from the mains socket, reconnect it to the mains socket after about 30 seconds. The unit will try to update again.

Network

Cannot connect to the network.

- Make sure that the multicast function on the wireless router is enabled.
- This unit's Wi-Fi security does not support WPA2-Enterprise. For details on the security supported by your router and how to change the settings, please refer to the operating instructions for the router or contact your Internet service provider.

Cannot select this unit as the output speakers.

- Make sure that your devices are connected to the same network as this unit.
- Reconnect your devices to the network.
- Turn off and then on the wireless router.

Playback does not start.

The sound is interrupted.

- If using the 2.4 GHz band on the wireless router, simultaneous use with other 2.4 GHz devices, such as microwaves, cordless telephones, etc., may result in connection interruptions. Increase the distance between this unit and these devices.
 - If your wireless router supports 5 GHz band, try using the 5 GHz band. To change to the 5 GHz band, redo the network setup to select your network name for the 5 GHz band.
- Do not place this unit inside a metal cabinet, for it might block the Wi-Fi signal.
- Place this unit closer to the wireless router.
- If several wireless devices are simultaneously using the same network as this unit, try turning off the other devices or reducing their network usage.
- Reconnect the devices to the network.
- Turn off and then on the wireless router.

Error indications

The status indicators (→ 5) show one of the following blinking patterns in orange.



- There is a problem with this unit. Disconnect the AC mains lead from the mains socket, reconnect it to the mains socket after about 30 seconds. If the problem still persists, disconnect the AC mains lead and consult your dealer.

Specifications

■ GENERAL

AC Adaptor	
Input	AC 100 V to 240 V, 50/60 Hz
Output	DC 19.5 V, 3.34 A
Main unit	
Power supply	DC 19.5 V, 3.34 A (DC IN terminal)
Power consumption	11 W
Power consumption in standby mode	Approx. 0.5 W

Dimensions (W×H×D)	100 mm×284 mm×100 mm
Mass	Approx. 1.7 kg
Operating temperature range	0 °C to +40 °C
Operating humidity range	35 % to 80 % RH (no condensation)

■ AMPLIFIER

RMS output power	
Front Ch (both ch driven)	20 W per channel (8 Ω), 1 kHz, 10 % THD
Total RMS power	40 W

■ SPEAKER SYSTEM

Speaker unit(s)	
Woofer	8 cm cone type×1
Tweeter	2 cm dome type×2

■ TERMINAL

AUX IN	Stereo, Ø3.5 mm jack
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■ Bluetooth®

Version	Bluetooth® Ver.4.2
Class	Class 2
Supported Profiles	A2DP, AVRCP
Frequency Band	2.4 GHz band FH-SS
Operation Distance	10 m Line of sight
Supported Codec	AAC, SBC

(For the United Kingdom and Ireland)	
Operating Frequency	2402 MHz to 2480 MHz
Maximum Power (EIRP)	4 dBm

■ Wi-Fi

Wi-Fi	
WLAN Standard	IEEE802.11ac/a/b/g/n
Security	WPA™/WPA2™

(For Australia and N.Z.)	
Frequency range	2.4 GHz band / 5 GHz band

(For the United Kingdom and Ireland)	
Operating Frequency, Maximum Power (EIRP)	
	2412 MHz to 2472 MHz, 19 dBm
	5180 MHz to 5320 MHz, 19 dBm
	5500 MHz to 5700 MHz, 19 dBm

Audio support format (Panasonic Music Control)	
MP3	
Sampling frequency	32/44.1/48 kHz
Audio word size	16 bits
Channel count	2 ch
Bit-rate	32-320 kbps
AAC	
Sampling frequency	32/44.1/48/88.2/96 kHz
Audio word size	16 bits
Channel count	2 ch
Bit-rate	8-320 kbps

FLAC®/WAV/AIFF/ALAC	
Sampling frequency	32/44.1/48/88.2/96/176.4/192 kHz
Audio word size	16/24 bits
Channel count	2 ch



- Specifications are subject to change without notice.
 - Mass and dimensions are approximate.
 - Total harmonic distortion is measured by a digital spectrum analyzer.
- ※ Uncompressed FLAC files may not operate correctly.

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About Bluetooth®

Panasonic bears no responsibility for data and/or information that is compromised during a wireless transmission.

Frequency band used

This system uses the 2.4 GHz frequency band.

Certification of this device

- This system conforms to frequency restrictions and has received certification based on frequency laws. Thus, a wireless permit is not necessary.
- The actions below are punishable by law in some countries:
 - Taking apart or modifying the system.
 - Removing specification indications.

Restrictions of use

- Wireless transmission and/or usage with all Bluetooth® equipped devices is not guaranteed.
- All devices must conform to standards set by Bluetooth SIG, Inc.
- Depending on the specifications and settings of a device, it can fail to connect or some operations can be different.
- This system supports Bluetooth® security features. But depending on the operating environment and/or settings, this security is possibly not sufficient. Transmit data wirelessly to this system with caution.
- This system cannot transmit data to a Bluetooth® device.

Range of use

Use this device at a maximum range of 10 m.
The range can decrease depending on the environment, obstacles or interference.

Interference from other devices

- This system may not function properly and troubles such as noise and sound jumps may arise due to radio wave interference if this system is located too close to other Bluetooth® devices or the devices that use the 2.4 GHz band.
- This system may not function properly if radio waves from a nearby broadcasting station, etc. is too strong.

Intended usage

- This system is for normal, general use only.
- Do not use this system near an equipment or in an environment that is sensitive to radio frequency interference (example: airports, hospitals, laboratories, etc.).

Unit care

Remove the AC mains lead and the AC adaptor before maintenance.

Clean this unit with a soft, dry cloth.

- Never use alcohol, paint thinner or benzine to clean this unit.
- Before using chemically treated cloth, carefully read the cloth's instructions.

To dispose or transfer this unit

The unit may keep the user settings information in the unit. If you discard this unit either by disposal or transfer, then follow the procedure to return all the settings to the factory defaults to delete the user settings. (→ 15, "To return all settings to the factory defaults")

Licenses

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MPEG Layer-3 audio coding technology licensed from Fraunhofer IIS and Thomson.
Other names of systems and products mentioned in these instructions are usually the registered trademarks or trademarks of the manufacturers who developed the system or product concerned.

Limited Warranty (ONLY FOR AUSTRALIA)

Panasonic Warranty

1. The product is warranted for 12 months from the date of purchase. Subject to the conditions of this warranty Panasonic or its Authorised Service Centre will perform necessary service on the product without charge for parts or labour, if in the opinion of Panasonic, the product is found to be faulty within the warranty period.
2. This warranty only applies to Panasonic products purchased in Australia and sold by Panasonic Australia or its Authorised Distributors or Dealers and only where the products are used and serviced within Australia or its territories. Warranty cover only applies to service carried out by a Panasonic Authorised Service Centre and only if valid proof of purchase is presented when warranty service is requested.
3. This warranty only applies if the product has been installed and used in accordance with the manufacturer's recommendations (as noted in the operating instructions) under normal use and reasonable care (in the opinion of Panasonic). The warranty covers normal domestic use only and does not cover damage, malfunction or failure resulting from use of incorrect voltages, incorrect installation, accident, misuse, neglect, build-up of dirt or dust, abuse, maladjustment of customer controls, mains supply problems, thunderstorm activity, infestation by insects or vermin, tampering or repair by unauthorised persons (including unauthorised alterations), introduction of sand, humidity or liquids, commercial use such as hotel, office, restaurant, or other business or rental use of the product, exposure to abnormally corrosive conditions or any foreign object or matter having entered the product.
4. This warranty does not cover the following items unless the fault or defect existed at the time of purchase:
 - (a) Cabinet Part(s)
 - (b) Video or Audio Tapes
 - (c) SD cards or USB devices
 - (d) User replaceable Batteries
etc
 - (e) DVD, Blu-ray or Recordable Discs
 - (f) Video / Audio Heads from wear and tear in normal use
 - (g) Information stored on Hard Disk Drive, USB stick or SD card
 - (h) DTV reception issues caused by TV Aerial / Cabling / Wall socket(s)
5. Some products may be supplied with Ethernet connection hardware. The warranty is limited on such products and will not cover
 - (a) Internet and or DLNA connection / setup related problems
 - (b) Access fees and or charges incurred for internet connection
 - (c) The use of incompatible software or software not specifically stipulated in the product operations manual;
and
 - (d) Any indirect or consequential costs associated with the incorrect use or misuse of the hardware, its connection to the internet or any other device.
6. To claim warranty service, when required, you should:
 - Telephone Panasonic's Customer Care Centre on 132600 or visit our website referred to below and use the Service Centre Locator for the name/address of the nearest Authorised Service Centre.
 - Send or take the product to a Panasonic Authorised Service Centre together with your proof of purchase receipt as a proof of purchase date. Please note that freight and insurance to and / or from your nearest Authorised Service Centre must be arranged by you.
 - Note that home or pick-up/delivery service is available for the following products in the major metropolitan areas of Australia or the normal operating areas of the nearest Authorised Service Centres:
 - Plasma/LCD televisions / displays (screen size greater than 103 cm)
7. The warranties hereby conferred do not extend to, and exclude, any costs associated with the installation, de-installation or re-installation of a product, including costs related to the mounting, de-mounting or remounting of any screen, (and any other ancillary activities), delivery, handling, freight, transportation or insurance of the product or any part thereof or replacement of and do not extend to, and exclude, any damage or loss occurring by reason of, during, associated with, or related to such installation, de-installation, re-installation or transit.

Panasonic Authorised Service Centres are located in major metropolitan areas and most regional centres of Australia, however, coverage will vary dependant on product. For advice on exact Authorised Service Centre locations for your product, please telephone our Customer Care Centre on 132600 or visit our website and use the Service Centre Locator.

In addition to your rights under this warranty, Panasonic products come with consumer guarantees that cannot be excluded under the Australian Consumer Law. If there is a major failure with the product, you can reject the product and elect to have a refund or to have the product replaced or if you wish you may elect to keep the goods and be compensated for the drop in value of the goods. You are also entitled to have the product repaired or replaced if the product fails to be of acceptable quality and the failure does not amount to a major failure.

If there is a major failure in regard to the product which cannot be remedied then you must notify us within a reasonable period by contacting the Panasonic Customer Care Centre. If the failure in the product is not a major failure then Panasonic may choose to repair or replace the product and will do so in a reasonable period of time from receiving notice from you.

**THIS WARRANTY CARD AND THE PURCHASE DOCKET (OR SIMILAR PROOF OF PURCHASE)
SHOULD BE RETAINED BY THE CUSTOMER AT ALL TIMES**

If you require assistance regarding warranty conditions or any other enquiries, please visit the **Panasonic Australia** website **www.panasonic.com.au** or contact by phone on **132 600**

If phoning in, please ensure you have your operating instructions available.

Panasonic Australia Pty. Limited

ACN 001 592 187 ABN 83 001 592 187

1 Innovation Road, Macquarie Park NSW 2113

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Sales and Support Information

Customer Communications Centre

- For customers within the UK: 0344 844 3899
- For customers within Ireland: 01 289 8333
- Monday–Friday 9:00 am – 5:00 pm (Excluding public holidays).
- For further support on your product, please visit our website:
www.panasonic.co.uk

Direct Sales at Panasonic UK

- Order accessory and consumable items for your product with ease and confidence by phoning our Customer Communications Centre Monday–Friday 9:00 am – 5:00 pm (Excluding public holidays).
- Or go on line through our Internet Accessory ordering application at www.pas-europe.com.
- Most major credit and debit cards accepted.
- All enquiries transactions and distribution facilities are provided directly by Panasonic UK.
- It couldn't be simpler!
- Also available through our Internet is direct shopping for a wide range of finished products. Take a browse on our website for further details.



Disposal of Old Equipment

Only for European Union and countries with recycling systems

This symbol on the products, packaging, and/or accompanying documents means that used electrical and electronic products must not be mixed with general household waste.

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

By disposing of them correctly, you will help to save valuable resources and prevent any potential negative effects on human health and the environment.

For more information about collection and recycling, please contact your local municipality.

Penalties may be applicable for incorrect disposal of this waste, in accordance with national legislation.

Manufactured by: Panasonic Corporation
Kadoma, Osaka, Japan

Importer for Europe: Panasonic Marketing Europe GmbH
Panasonic Testing Centre
Winsbergring 15, 22525 Hamburg, Germany

Panasonic Corporation

Web Site: <http://www.panasonic.com>

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