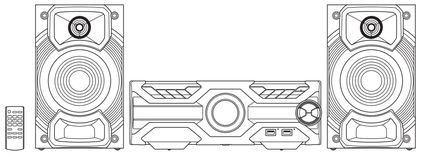
Panasonic

Operating Instructions

CD Stereo System

Model No. **SC-AKX520**
SC-AKX320



This illustration shows SC-AKX320.

Thank you for purchasing this product.
For optimum performance and safety, please read these instructions carefully.
Please keep this manual for future reference.

Manufactured by: Panasonic Corporation
Kadoma, Osaka, Japan
Importer for Europe: Panasonic Marketing Europe GmbH
Panasonic Testing Centre
Winsbergring 15, 22525 Hamburg, Germany

EU

Panasonic Corporation
Web Site: http://www.panasonic.com

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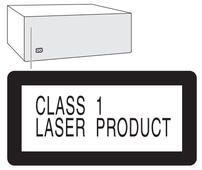
These operating instructions are applicable for models SC-AKX520 and SC-AKX320.
AKX520: Indicate features applicable to SC-AKX520.
AKX320: Indicate features applicable to SC-AKX320.

System	SC-AKX520	SC-AKX320
Main unit	SA-AKX520	SA-AKX320
Speakers	SB-AKX440	SB-AKX220

Unless otherwise indicated, illustrations in these operating instructions are of SC-AKX320.
Your system and the illustrations can look differently.



Back of product

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

~	AC
⧈	Class II equipment (The construction of the product is double-insulated.)
|	ON
⏻	Standby

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 let metal objects fall inside this unit.

CAUTION!

Unit
- To reduce the risk of fire, electric shock or product damage,
  - Do not install or place this unit in a bookcase, built-in cabinet or in another confined space. Ensure this unit is well ventilated.
  - Do not obstruct this unit's ventilation openings with newspapers, tablecloths, curtains, and similar items.
  - Do not place sources of naked flames, such as lighted candles, on this unit.
- This unit is intended for use in moderate climates.
- 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 utilizes a laser. Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.
- Set the unit up on an even surface away from direct sunlight, high temperatures, high humidity, and excessive vibration.

AC mains lead
- The mains plug is the disconnecting device. Install this unit so that the mains plug can be unplugged from the socket outlet immediately.

Battery
- Danger of explosion if battery is incorrectly replaced. Replace only with the type recommended by the manufacturer.
- When disposing of the batteries, please contact your local authorities or dealer and ask for the correct method of disposal.
- Do not heat or expose to flame.
- Do not leave the battery(ies) in a car exposed to direct sunlight for a long period of time with doors and windows closed.
- Do not break open or short-circuit the battery.
- Do not charge the alkaline or manganese battery.
- Do not use the battery if the cover has peeled off.
- Remove the battery if you do not use the remote control for a long period of time. Keep in a cool, dark area.

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 ㊀ or the BSI mark ㊁ 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.

Figure A

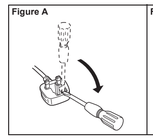
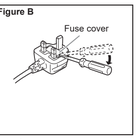


Figure B



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

Figure A

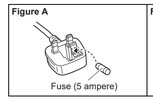
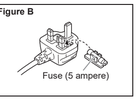


Figure B



NORSK

ADVARSEL!

Produkt
- For å redusere faren for brann, elektrisk støt eller skade på apparatet:
  - Dette apparatet må ikke utsettes for regn, fuktighet, drypp eller sprut.
  - Ikke plasser objekter som er fylt med væske, som vaser, på apparatet.
  - Bruk anbefalt tilbehør.
  - Fjern ikke deksler.
  - Dette apparatet må ikke repareres på egen hånd. Overlat servicearbeider til kvalifisert servicepersonell.

FORSIKTIG!

Produkt
- For å redusere faren for brann, elektrisk støt eller skade på apparatet:
  - Ikke plasser apparatet i en bokhylle, et innebygget kabinett eller et annet lukket sted. Pass på at apparatet er godt ventilert.
  - Apparatets ventilasjonsåpninger må ikke dekkes til med aviser, duker, gardiner eller lignende.
  - Plasser ikke åpen ild, slik som levende lys, oppå apparatet.
- Dette apparatet er beregnet til bruk under moderate klimaforhold.
- Dette apparatet anvender en laser. Betjening av kontroller, justeringer eller andre inngrep enn de som er beskrevet i denne bruksanvisning, kan føre til farlig bestråling.

Vekselstrømnett
- Støpselet er frakoblende enhet. Strømuttaket må befinne seg i nærheten slik at støpselet lett kan kobles ut fra uttaket umiddelbart.

Disposal of Old Equipment and Batteries
Only for European Union and countries with recycling systems

These symbols on the products, packaging, and/or accompanying documents mean that used electrical and electronic products and batteries must 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 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.

Note for the battery symbol (bottom symbol):
This symbol might be used in combination with a chemical symbol. In this case it complies with the requirement set by the Directive for the chemical involved.

Maintenance

Disconnect the AC mains lead before maintenance. Clean this system with a soft, dry cloth.
- Never use alcohol, paint thinner or benzine to clean this system.
- Before using chemically treated cloth, read the instructions that came with the cloth carefully.

Safety information for customers in the EU

English
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	Frequency band	Maximum power (dBm E.I.R.P.)
Bluetooth®	2402 – 2480 MHz	10 dBm

Português
Declração de Conformidade (DoC)

Com o presente documento, a "*Panasonic Corporation*" declara que este produto se encontra em conformidade com os requisitos específicos e demais especificações referentes à Diretiva 2014/53/UE.

Os clientes podem baixar uma cópia da declaração de conformidade (DoC) para nossos produtos RE do Server DoC:
http://www.ptc.panasonic.eu
Contacto com um Representante Autorizado:
Panasonic Marketing Europe GmbH, Panasonic Testing Centre, Winsbergring 15, 22525 Hamburg, Alemanha

Tipo de ligação sem fios	Banda de frequência	Potência máxima (dBm e.i.r.p.)
Bluetooth®	2402 – 2480 MHz	10 dBm

Latviski
Atbilstības deklarācija (DoC)

Ar šo "*Panasonic Corporation*" paziņo, ka šis izstrādājums atbilst pamatprasībām un pārējiem Direktīvas 2014/53/ES noteikumiem.

Pircēji var lejupielādēt oriģinālo DoC kopiju mūsu RE izstrādājumos no mūsu DoC servera:
http://www.ptc.panasonic.eu
Lūdzam sazināties ar pilnvaroto parstāvi:
Panasonic Marketing Europe GmbH, Panasonic Testing Centre, Winsbergring 15, 22525 Hamburg, Vācijā

Bezvadu tips	Frekvenču josla	Maksimālā jauda (dBm EIRP)
Bluetooth®	2402 – 2480 MHz	10 dBm

Eesti keel
Vastavusdeklaratsioon (DoC)

Käesolevaga kinnitab "*Panasonic Corporation*", et see toode vastab direktiivi 2014/53/EL olulistele nõuetele ja teistele asjakohastele sätetele.

Kliendid saavad koopia meie RE toodetele kehtiva originaalvastavusdeklaratsiooni koopia alla laadida meie DoC-serveristt:
http://www.ptc.panasonic.eu
Võike ühendust volitatud esindajaga:
Panasonic Marketing Europe GmbH, Panasonic Testing Centre, Winsbergring 15, 22525 Hamburg, Saksamaa

Juhtmevaba seadme tüüp	Sagedusriba	Maksimaalne võimsus (dBm EIRP)
Bluetooth®	2402 – 2480 MHz	10 dBm

Lietuviškai
Atitikties deklaracija (AD)

Bendrovė "*Panasonic Corporation*" patvirtina, kad šis gaminys atitinka direktyvos 2014/53/ES esminius reikalavimus ir kitas taikytinas nuostatas.

Mūsų RE gaminių originalios atitikties deklaracijos kopiją klientai gali atsisiųsti iš mūsų AD serverio:
http://www.ptc.panasonic.eu
Įgaliotojo atstovo adresas:
Panasonic Marketing Europe GmbH, Panasonic Testing Centre, Winsbergring 15, 22525 Hamburg, Vokietija

Bevielio ryšio tinklas	Dažnių diapazonas	Maksimali siuntimo galia (dBm e.i.r.p.)
Bluetooth®	2402 – 2480 MHz	10 dBm

Norsk
Samsvarserklæring (DoC)

"*Panasonic Corporation*" erklærer herved at dette produktet samsvarer med de grunnleggende kravene og andre relevante bestemmelser i direktivet 2014/53/EU.

Kundene kan laste ned en kopi av den originale samsvarserklæringen (DoC) for vårt RE utstyr fra vår DoC server:
http://www.ptc.panasonic.eu
Kontaktinformasjon autorisert representant:
Panasonic Marketing Europe GmbH, Panasonic Testing Centre, Winsbergring 15, 22525 Hamburg, Tyskland

Type trådløs	Frekvensbånd	Maks. effekt (dBm e.i.r.p.)
Bluetooth®	2402 – 2480 MHz	10 dBm

Slovensko
Izjava o skladnosti (DoC)

"*Panasonic Corporation*" v tem dokumentu izjavlja, da je izdelek v skladu z bistvenimi zahtevami in drugimi pomembnimi določbami Direktive 2014/53/EU.

Stranka lahko naloži izvod izvirnega DoC o naših izdelkih RE s strežnika DoC:
http://www.ptc.panasonic.eu
Naslov pooblaščenega predstavnika:
Panasonic Marketing Europe GmbH, Panasonic Testing Centre, Winsbergring 15, 22525 Hamburg, Nemčija

Vrsta brezžične povezave	Frekvenčni pas	Največja moč (dBm EIRP)
Bluetooth®	2402 – 2480 MHz	10 dBm

Български
Декларация за съответствие (DoC)

С настоящото "*Panasonic Corporation*" декларира, че този продукт е в съответствие с основните изисквания и други съответни разпоредби на Директива 2014/53/ЕС.

Потребителите могат да свалят копие от оригиналните DoC към нашите продуктите от типа RE от сървъра, на който се съхраняват DoC:
http://www.ptc.panasonic.eu
Свържете се с нашия упълномощен представител:
Panasonic Marketing Europe GmbH, Panasonic Testing Centre, Winsbergring 15, 22525 Hamburg, Германия

Вид безжична връзка	Честотна лента	Максимална мощност (dBm e.i.r.p.)
Bluetooth®	2402 – 2480 MHz	10 dBm

Slovensky
Vyhlásenie o zhode (DoC)

"*Panasonic Corporation*" týmto vyhlasuje, že tento výrobok je v súlade so základnými požiadavkami a ďalšími príslušnými ustanoveniami smernice 2014/53/EÚ.

Zákazníci si môžu stiahnuť kópiu pôvodného DoC na naše RE výrobky z nášho servera DoC:
http://www.ptc.panasonic.eu
Kontakt na splnomocneného zástupcu:
Panasonic Marketing Europe GmbH, Panasonic Testing Centre, Winsbergring 15, 22525 Hamburg, Nemecko

Typ bezdrôtového pripojenia	Frekvenčné pásmo	Maximálny výkon (dBm e.i.r.p.)
Bluetooth®	2402 – 2480 MHz	10 dBm

Román
Declarație de Conformitate (DoC)

"*Panasonic Corporation*" declară prin prezenta că acest produs este conform cu cerințele esențiale și alte prevederi relevante ale Directivei 2014/53/UE.

Clienții pot descărca o copie a DoC-ului original al produselor noastre RE de la adressa noastră DoC din Internet:
http://www.ptc.panasonic.eu
Contactați Reprezentanful Autorizat:
Panasonic Marketing Europe GmbH, Panasonic Testing Centre, Winsbergring 15, 22525 Hamburg, Germania

Tip de wireless	Interval de frecvență	Putere maximă (dBm e.i.r.p.)
Bluetooth®	2402 – 2480 MHz	10 dBm

Magyar
Megfelelőségi Nyilatkozat (DoC)

Ezennel a, "*Panasonic Corporation*" kijelenti, hogy a jelen termék kielégíti az 2014/53/EU Irányelv létfontosságú követelményeit és más vonatkozó rendelkezéseit.

A vásárlók letölthetik az RE termékek eredeti DoC másolatát a DoC szerverünkről:
http://www.ptc.panasonic.eu
A hivatalos képviselő eléréhetősége:
Panasonic Marketing Europe GmbH, Panasonic Testing Centre, Winsbergring 15, 22525 Hamburg, Németország

Wireless típus	Frekvenciasáv	Maximális teljesítmény (dBm e.i.r.p.)
Bluetooth®	2402 – 2480 MHz	10 dBm

Hrvatski
Deklaracija o podobnosti (DoC)

Ovime „*Panasonic Corporation*" izjavljuje da ovaj proizvod udovoljava osnovnim zahtjevima i ostalim relevantnim odredbama Direktive 2014/53/EU.

Kupci mogu preuzeti kopiju originalne DoC za naše RE proizvode s našeg DoC poslužitelja:
http://www.ptc.panasonic.eu
Adresa ovlaštenog predstavništva:
Panasonic Marketing Europe GmbH, Panasonic Testing Centre, Winsbergring 15, 22525 Hamburg, Njemačka

Vrsta bežične mreže	Frekvencijski pojas	Maksimalna snaga (dBm e.i.r.p.)
Bluetooth®	2402 – 2480 MHz	10 dBm

Ελληνικά
Δήλωση συμμόρφωσης (DoC)

Η "*Panasonic Corporation*" δηλώνει ότι το προϊόν αυτό είναι συμμορφωμένο προς τις βασικές απαιτήσεις και άλλες σχετικές διατάξεις της Οδηγίας 2014/53/ΕΕ.

Οι πελάτες μπορούν να κατεβάσουν ένα αντίγραφο του πρωτοτύπου DoC για τα RE προϊόντα μας από τον DoC server μας:
http://www.ptc.panasonic.eu
Επικοινωνήστε με τον Εξουσιοδοτημένο Αντιπροσωπό μας:
Panasonic Marketing Europe GmbH, Panasonic Testing Centre, Winsbergring 15, 22525 Hamburg, Γερμανία

Τύπο ασύρματης	Ζώνη συχνοτήτων	Μέγιστη ισχύς (dBm e.i.r.p.)
Bluetooth®	2402 – 2480 MHz	10 dBm

Türkçe
Uygunluk Beyanı (DoC)

"*Panasonic Corporation*" bu belge ile bu ürünün 2014/53/EU Direkti'nin temel gerekliliklerine ve diğer ilgili hükümlerine uygun olduğunu beyan eder.

Müşterilerimiz RE ürünlerimizle ilgili orijinal DoC belgesinin bir kopyasını DoC sunucumuzdan indirebilir:
http://www.ptc.panasonic.eu
Yetkili Temsilci ile temasa geçin:
Panasonic Marketing Europe GmbH, Panasonic Testing Centre, Winsbergring 15, 22525 Hamburg, Almanya

Kablosuz türü	Frekans bandı	Maksimum güç (dBm e.i.r.p.)
Bluetooth®	2402 – 2480 MHz	10 dBm

About Bluetooth®

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

Frequency band
- This system uses the 2.4 GHz frequency band.

Certification
- This system conforms to the 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 main unit.
  - 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 the 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 unit 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.).

Licenses

The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Panasonic Corporation is under license. Other trademarks and trade names are those of their respective owners.

Android and Google Play are trademarks of Google LLC.

Specifications

General

Power supply	AC 220 V to 240 V, 50 Hz
Power consumption	
AKX520	86 W
AKX320	60 W
Power consumption in standby mode (approximate)	
With "BLUETOOTH STANDBY" set to "OFF"	0.5 W
With "BLUETOOTH STANDBY" set to "ON"	0.6 W
Dimensions (W x H x D)	400 mm x 142 mm x 250 mm
Mass (SA-AKX520)	2.5 kg
Mass (SA-AKX320)	2.5 kg
Operating temperature range	0°C to +40°C
Operating humidity range	35% to 80% RH (no condensation)

Amplifier section

RMS output power stereo mode	
AKX520	
Front Ch (both ch driven)	325 W per channel (3 Ω), 1 kHz, 30% THD
Total RMS stereo mode power	650 W
AKX320	
Front Ch (both ch driven)	225 W per channel (4 Ω), 1 kHz, 30% THD
Total RMS stereo mode power	450 W

Tuner section

Frequency modulation (FM)	
Preset memory	30 stations
Frequency range	87.50 MHz to 108.00 MHz (50 kHz step)
Antenna terminals	75 Ω (unbalanced)
Amplitude modulation (AM)	
Preset memory	15 stations
Frequency range	522 kHz to 1629 kHz (9 kHz step) 520 kHz to 1630 kHz (10 kHz step)

Disc section

Disc played (8 cm or 12 cm)	CD, CD-R/RW (CD-DA, MP3*1)
*1 MPEG-1 Layer 3, MPEG-2 Layer 3	
Pick up	
Wavelength	790 nm (CD)
NORSK	
Bølgelengde	790 nm (CD)
Laserstyrke	Ingen farlig stråling sendes ut

Terminal section

USB port	
USB standard	USB 2.0 full speed
Media file format support	MP3 (*.mp3)
USB device file system	FAT12, FAT16, FAT32
AUX IN	
Audio input	Pin jack (1 system)
AKX520	
Microphone	
Terminal	Mono, 6.3 mm jack (2 system)

Bluetooth® section

Version	Bluetooth® Ver. 4.2
Class	Class 2
Supported profiles	A2DP, AVRCP, SPP
Frequency band	2.4 GHz band FH-SS
Operating frequency	2402 MHz to 2480 MHz
Maximum power (EIRP)	10 dBm
Operation distance	10 m line of sight
Supported codec	SBC

Speaker section

SB-AKX440	
Speaker unit(s)	
Woofer	20 cm cone type x 1
Tweeter	6 cm cone type x 1
Impedance	3 Ω
Dimensions (W x H x D)	257 mm x 422 mm x 219 mm
Mass	4.5 kg
SB-AKX220	
Speaker unit(s)	
Woofer	16 cm cone type x 1
Tweeter	6 cm cone type x 1
Impedance	4 Ω
Dimensions (W x H x D)	199 mm x 333 mm x 210 mm
Mass	3.3 kg

Note:
- Specifications are subject to change without notice.
  Mass and dimensions are approximate.
- Total harmonic distortion is measured by the digital spectrum analyser.

Note on disc
- This system can play CD-R/RW with CD-DA or MP3 format content.
- Before playback, finalise the disc on the device it was recorded on.
- Some CD-R/RW cannot be played because of the condition of the recording.

Note on USB device
- This system does not guarantee connection with all USB devices.
- This system supports USB 2.0 full speed.
- This system can support USB devices of up to 32 GB.
- Only FAT 12/16/32 file system is supported.

Note on MP3 file
- Files are defined as tracks and folders are defined as albums.
- Tracks must have the extension ".mp3" or ".MP3".
- Tracks will not necessarily be played in the order you recorded them.
- Some files can fail to work because of the sector size.

MP3 file on disc
- This system can access up to:
  - 255 albums (including root folder)
  - 999 tracks
  - 20 sessions
- Disc must conform to ISO9660 level 1 or 2 (except for extended formats).

MP3 file on USB device
- This system can access up to:
  - 800 albums (including root folder)
  - 8000 tracks
  - 999 tracks in one album

Sales and Support Information

For the United Kingdom and Ireland

Customer Communications Centre
- For customers within the UK: 0344 844 3899
- For customers within Ireland: 01 289 8333
- Monday – Friday 9:00am – 5:00pm (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 9:00am – 5:00pm (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.

Supplied accessories

Check and identify the supplied accessories.
Product numbers correct as of January 2019. These may be subject to change.

☐ For Australia and New Zealand
1 AC mains lead
For Europe
2 AC mains leads
For the United Kingdom and Ireland
(K2CT2YY00089)

☐ **1 AM loop antenna**
(N1DYYYY00011)

☐ AKX520
2 Ferrite cores
(J0KG0000071)

☐ **1 FM indoor antenna**
(RSAX0002)

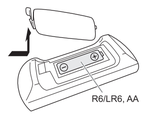
☐ **1 Remote control**
(N2QAYB001215)

☐ **1 Remote control battery**

☐ For the United Kingdom and Ireland
1 Antenna plug adaptor
(K1YZ0200013)

Note:
Use the AC mains lead that is suitable for your household mains socket.

Preparing the remote control



Use alkaline or manganese battery.

Install the battery so that the poles (+ and –) align with those in the remote control.

Placement of speakers

The left and right speakers are the same.

AKX520

AKX320

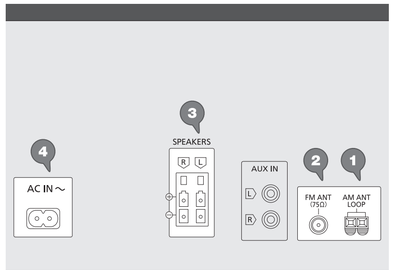
Use only the supplied speakers.
You can cause damage to the system and decrease the sound quality if you use other speakers.

Note:
- Keep your speakers more than 10 mm from the main unit for ventilation.
- Put the speakers on a flat safe surface.
- These speakers do not have magnetic shielding. Do not put them near TVs, PCs or other equipment easily influenced by magnetism.
- When you play at high levels for a long period, it can cause damage to the speakers and decrease the life of the speakers.
- Decrease the volume in these conditions to prevent damage:
  - When the sound is distorted.
  - When you adjust the sound quality.

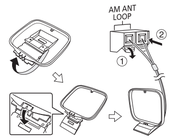
CAUTION!
- **Use the speakers only with the recommended system. If not, you can cause damage to the amplifier and speakers and can cause a fire. Consult an approved service personnel if damage occurs or if there is a sudden apparent change in performance.**
- **Do not modify the speaker or speaker wires as this can cause damage to the system.**
- **Do the procedures included in these instructions when you attach the speakers.**
- **Do not touch the speaker cone's reverberating surfaces:**
  - **This may damage the speaker cone.**
  - **The speaker cone may be hot.**

Making the connections

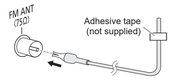
Connect the AC mains lead only after all the other connections have been made.



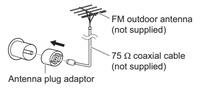
1 Connect the AM loop antenna.
Stand the antenna up on its base until it clicks.



2 Connect the FM indoor antenna.
Put the antenna where reception is best.



For the United Kingdom and Ireland
Connect the FM outdoor antenna.
Use an outdoor antenna if reception is poor.

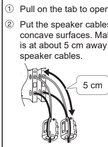


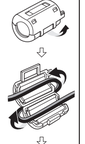
CAUTION!
Keep the antenna plug adaptor out of reach of children to prevent swallowing.

Note:
- Do not use the outdoor antenna during a lightning storm.
- Disconnect the outdoor antenna if you do not use the system.

3 Connect the speakers.

AKX520
Attaching the ferrite core
① Pull on the tab to open.
② Put the speaker cables onto one of the concave surfaces. Make sure the ferrite core is at about 5 cm away from the end of the speaker cables.

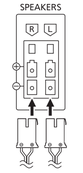




③ Coil the speaker cables around the ferrite core and onto the other concave surface.
④ Close the ferrite core until it clicks.

Note:
Failure to attach the ferrite core to the speaker cables may result in poor radio reception.

Connect the speaker cables to the corresponding terminal.



4 Connect the AC mains lead.
Do not use any other AC mains leads except the supplied one.

(For the AC mains plug of three pins)
READ THE "Caution for AC mains lead" BEFORE CONNECTION.

Conserving power
The system consumes a small amount of power even when it is in standby mode. Disconnect the power supply if you do not use the system.
Some settings will be lost after you disconnect the system. You have to set them again.

Note:
Keep the antennas away from the speaker cables and the AC mains lead to avoid picking up noise.

For Australia

Panasonic Warranty

1. 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 have a manufacturing defect within one (1) year or (12 months) (the "warranty period") from the date of purchase appearing on your purchase receipt.
2. This warranty only applies to Panasonic products purchased in Australia and sold by Panasonic Australia, it's Authorised Distributors, or Dealers, and only where the products are used and serviced within Australia or its territories. Warranty cover only applies to the services that are carried out by a Panasonic Authorised Service Centre and only if valid proof of purchase is presented when the warranty service is requested.
3. This warranty only applies if the product has been installed and/or 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 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), 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) Consumable parts
   (b) Cosmetic parts
   (c) Worn or damaged parts
   (d) Information stored on Hard Disk Drives, Optical Discs, USB Devices, SD Cards, Tapes
   (e) 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) 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:
   - Contact Panasonic's Customer Care Centre on 132 600 for Service Centre information.
   - Confirm the opening and acceptance times with the Authorised Service Centre that you choose.
   - Then send or take the product to a Panasonic Authorised Service Centre together with your proof of purchase receipt.
   - Any freight and insurance costs associated with the transport of the product to and/or from your nearest Authorised Service Centre must be arranged and paid for by you.
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, freighting, 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 132 600 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
www.panasonic.com.au

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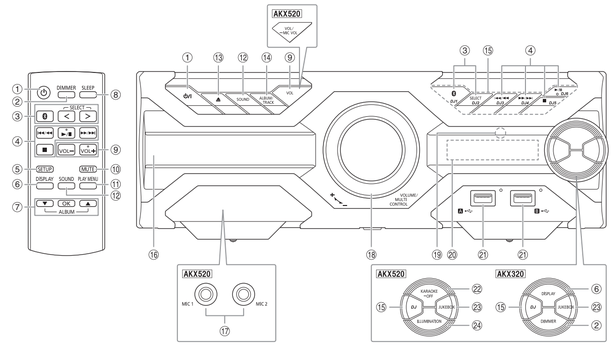
Overview of controls

Do the procedures with the remote control. You can also use the buttons on the main unit if they are the same.



① **Standby/on switch [⏻], [◷/]**
Press 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 **Decrease the brightness of the display panel**
To cancel, press the button again.
AKX520
The illumination effect is also switched off.

③ **Select the audio source**
Press [SELECT <, >] (main unit: [SELECT]) repeatedly to select the source:
USB A → USB B → CD → FM
↑ ↓
BLUETOOTH ← AUX ← AM
On the main unit:
To start Bluetooth® pairing, press and hold [ ].

④ Basic playback control

⑤ View the setup menu

⑥ View the content information

⑦ Select or confirm the option

⑧ Set the sleep timer

⑨ **Adjust the volume level**
On the main unit:
Press [VOL] and then turn [VOLUME/MULTI CONTROL] to adjust the volume.
AKX520
Adjust the microphone volume level
Press and hold [–MIC VOL] until "MIC VOL" is shown.
Turn [VOLUME/MULTI CONTROL] to adjust the volume.

⑩ **Mute the sound**
To cancel, press the button again.
"MUTE" is also cancelled when you adjust the volume or when you switch off the system.

⑪ View the play menu

⑫ Select the sound effects

⑬ Open or close the disc tray

⑭ **Select MP3 album or track**
Press [ALBUM/TRACK] to select album or track.
Browse tracks or albums
Turn [VOLUME/MULTI CONTROL] to browse.
To start playback from the selection, press [▶/❚❚].

⑮ **DJ function direct buttons**
Press [DJ] to switch on the DJ function.
Press [DJ1] to [DJ6] to select the desired function.
To cancel, press the selected [DJ1] to [DJ6] again.

⑯ Disc tray

⑰ AKX520
Microphone jack

⑱ Volume or multi control knob

⑲ **Remote control sensor**
Distance: Within approximately 7 m
Angle: Approximately 10° up and 30° down, 30° left and right

⑳ Display panel

㉑ USB port (•⇷•)
USB status indicator

㉒ AKX520
Select the Karaoke effects
To cancel, press and hold [–OFF] until "OFF EFFECT" is shown.

㉓ Select DJ jukebox

㉔ AKX520
Select the illumination effects

Preparing media

Disc

1 Press [⏏] to open the disc tray.
Put in a disc with the label facing up.
Press again to close the disc tray.

2 Press [SELECT <, >] repeatedly to select "CD".

USB

Preparation
Before you connect a USB device to the system, make sure you do a backup of the data.

1 Decrease the volume and connect the USB device to the USB port.
Hold the main unit when connecting or disconnecting the USB device.

2 Press [SELECT <, >] repeatedly to select "USB A" or "USB B".
USB status indicator lights up in red when selected.

Note:
- Do not use a USB extension cable. The system cannot recognise USB device connected through a cable.
- Some devices cannot be charged as the maximum USB charging current is 0.5 A only.

Bluetooth®

You can connect and play an audio device wirelessly through Bluetooth®.

Preparation
- Switch on the main unit.
- Switch on the Bluetooth® feature of the device and put the device near the system.
- Read the operating instructions of the device for details.

Pairing a device

AKX320
Preparation
If this system is connected to a Bluetooth® device, disconnect it
(➪ "Disconnecting a device").

1 Press [ ].
If "PAIRING" is shown, continue with step 3.

2 Press [PLAY MENU] to select "PAIRING" and then press [OK].

3 Select "SC-AKX520" or "SC-AKX320" from the Bluetooth® menu of the device.
If prompted for a passkey, input "0000" or "1234".
The device connects with this system automatically after pairing is complete.
The MAC address (example: 6C:5A:B5:B3:1D:0F) may be shown before "SC-AKX520" or "SC-AKX320" is shown.
The name of the connected device is shown for a few seconds.

Using the main unit

1 Press and hold [ ] until "PAIRING" is shown.

2 Select "SC-AKX520" or "SC-AKX320" from the Bluetooth® menu of the device.

Note:
- You can pair up to 8 devices with this system. If a 9th device is paired, the device that has not been used for the longest time will be replaced.
- Depending on the searching functionality of the Bluetooth® device and the surrounding environment, if the product name is not shown on the Bluetooth® menu of the device, switch off and then switch on the Bluetooth® feature of the device repeatedly during the pairing process.

Connecting a device

AKX320
Preparation
If this system is connected to a Bluetooth® device, disconnect it
(➪ "Disconnecting a device").

1 Press [ ].
"BLUETOOTH READY" is shown.

2 Select "SC-AKX520" or "SC-AKX320" from the Bluetooth® menu of the device.
The name of the connected device is shown for a few seconds.

3 Start playback on the device.

Note:
- A device must be paired to connect.
- When "BLUETOOTH" is selected as the source, this system will automatically try to connect to the last connected device. ("LINKING" is shown during this process.)

Multi Connect

AKX520
This system supports Multi Connect, which can connect up to 3 devices simultaneously.

To switch between the connected devices
When one of the connected devices is playing, you can easily switch control to another connected device simply by starting a playback on that device. The previous playback will be paused automatically.

Note:
This function may not work for some apps or devices (depending on app or device specifications).

Disconnecting a device

While a Bluetooth® device is connected

1 Press [PLAY MENU] repeatedly to select "DISCONNECT?".

2 Press [▲, ▼] to select "OK? YES" and then press [OK].
"BLUETOOTH READY" is shown.
To cancel, select "OK? NO".

AKX320
Using the main unit
Press and hold [ ] until "PAIRING" is shown.

Note:
- AKX520
This function disconnects all connected devices.
- A device is disconnected when you:
– Select a different source.
– Move the device out of the maximum range.
– Disable the Bluetooth® transmission of the device.
– Switch off the system or the device.

Media playback

The following marks indicate the availability of the feature.

CD : CD-R/RW in CD-DA format or with MP3 files.
USB : USB device with MP3 files.
BLUETOOTH : Bluetooth® device.

Basic playback

CD USB BLUETOOTH

Play	Press [▶/❚❚].
Stop	Press [■]. USB The position is memorised. "RESUME" is shown. Press again to stop fully.
Pause	Press [▶/❚❚]. Press again to continue playback.
Skip	Press [⏮/◀◀] or [▶▶/⏭] to skip track. CD USB Press [▲, ▼] to skip MP3 album.
Search	Press and hold [◀◀/◀◀] or [▶▶/▶▶].

Note:
Depending on the Bluetooth® device, some operations may not work.

Viewing available information

CD USB BLUETOOTH

You can view the available information, such as MP3 album and track number, on the display panel.

Press [DISPLAY] repeatedly.
Example: MP3 album and track number display.

Note:
- Maximum characters that can be shown: Approximately 32
- This system supports ver. 1.0, 1.1 and 2.3 ID3 tags.
- Text data that the system does not support can show differently.

Play menu

CD USB

1 CD
Press [PLAY MENU].
USB
Press [PLAY MENU] repeatedly to select "PLAYMODE".

2 Press [▲, ▼] to select the setting and then press [OK].

OFF PLAYMODE	Cancel the setting.
1-TRACK 1	Play one selected track. Press [⏮/◀◀] or [▶▶/⏭] to select the track.
1-ALBUM 1	Play one selected MP3 album. Press [▲, ▼] to select the MP3 album.
RANDOM RND	Play all tracks randomly.
1-ALBUM RANDOM 1 RND	Play all tracks in one selected MP3 album randomly. Press [▲, ▼] to select the MP3 album.
ALL REPEAT	Repeat all tracks.
1-TRACK REPEAT 1	Repeat 1-TRACK.
1-ALBUM REPEAT 1	Repeat 1-ALBUM.
RANDOM REPEAT RND	Repeat random playback.
1-ALBUM RANDOM REPEAT 1 RND	Repeat 1-ALBUM RANDOM.

Note:
- During random playback, you cannot skip to tracks which have been played.
- The setting is cancelled when you open the disc tray or disconnect the USB device.

Link mode

BLUETOOTH
You can change the link mode to suit the connection type.

Preparation
If this system is connected to a Bluetooth® device, disconnect it
(➪ "Disconnecting a device").

1 Press [PLAY MENU] repeatedly to select "LINK MODE".

2 Press [▲, ▼] to select the mode and then press [OK].

MODE 1	Emphasis on connectivity.
MODE 2 (default)	Emphasis on sound quality.

Note:
- When enjoying video contents with this function, the video and audio output may not be synchronised. In this case, select "MODE 1".
- Select "MODE 1" if the sound is interrupted.

Radio

Preparation
Press [SELECT <, >] repeatedly to select "FM" or "AM".

Manual tuning

1 Press [PLAY MENU] repeatedly to select "TUNE MODE".
Or press [■] on the main unit to select "MANUAL". Continue with step 3.

2 Press [▲, ▼] to select "MANUAL" and then press [OK].

3 Press [⏮/◀◀] or [▶▶/⏭] to tune in to the station.
To tune automatically, press and hold the button until the frequency starts changing quickly.
"STEREO" is shown when a stereo broadcast is being received.

Memory presetting

You can preset up to 30 FM stations and 15 AM stations.

Automatic presetting

1 Press [PLAY MENU] to select "A.PRESET".

2 Press [▲, ▼] to select "LOWEST" or "CURRENT" and then press [OK].

LOWEST	Tuning begins from the lowest frequency.
CURRENT	Tuning begins from the current frequency.

The tuner presets all the stations it can receive into the channels in ascending order.
To cancel, press [■].

Manual presetting

1 Press [PLAY MENU] repeatedly to select "TUNE MODE".
Or press [■] on the main unit to select "MANUAL". Continue with step 3.

2 Press [▲, ▼] to select "MANUAL" and then press [OK].

3 Press [⏮/◀◀] or [▶▶/⏭] to tune in to the station.

4 Press [OK].

5 Press [▲, ▼] to select a preset number and then press [OK].
Do steps 3 through 5 again to preset more stations.
The new station replaces any station that occupies the same preset number.

Selecting a preset station

1 Press [PLAY MENU] repeatedly to select "TUNE MODE".
Or press [■] on the main unit to select "PRESET". Continue with step 3.

2 Press [▲, ▼] to select "PRESET" and then press [OK].

3 Press [⏮/◀◀] or [▶▶/⏭] to select the preset station.

Improving the sound quality

When "FM" is selected

1 Press [PLAY MENU] repeatedly to select "FM MODE".

2 Press [▲, ▼] to select "MONO" and then press [OK].
To cancel, select "STEREO".
"MONO" is also cancelled when you change the frequency.

To memorise the setting
Continue with step 4 of "Manual presetting" (➪ above).

When "AM" is selected

1 Press [PLAY MENU] repeatedly to select "B.PROOF".

2 Press [▲, ▼] to select the setting that provides the best reception and then press [OK].

Checking the signal status

When "FM" is selected

For Australia and New Zealand
Press [DISPLAY].
Except for Australia and New Zealand
Press [DISPLAY] to select "FM STATUS".

FM – – – –	The FM signal is weak. The system is not tuned in to a station.
FM ST	The FM signal is in stereo.
FM MONO	"MONO" is selected as the "FM MODE". The FM signal is in monaural.

RDS broadcasting

Except for Australia and New Zealand
This system can show the text data transmitted by the radio data system (RDS) available in some areas.

When "FM" is selected

Press [DISPLAY] repeatedly.

FREQ	Frequency
PS	Programme service
PTY	Programme type

Note:
RDS may not be available if reception is poor.

AM allocation setting

This system can also receive AM broadcasts allocated in 10 kHz steps.

When "AM" is selected

Press and hold [▶/❚❚] on the main unit.

After a few seconds, the display panel shows the current minimum radio frequency. Release the button when the minimum frequency changes.
- To go back to the initial setting, do the above steps again.
- Preset frequencies are erased after you change the setting.

Sound effects

1 Press [SOUND] repeatedly to select the effect.

2 Press [▲, ▼] to select the setting and then press [OK].
Or turn [VOLUME/MULTI CONTROL] to select the setting.

PRESET EQ	"ROCK", "POP", "AFRO BEAT", "ARABIC", "PERSIAN", "INDIA BASS", "DANGDUT", "MALAY POP", "ELECTRONICA", "REGGAETON", "SALSA", "SAMBA", "FOOTBALL", "KARAOKE" AKX520 or "FLAT".
BASS/MID/TREBLE	–4 to +4 **Note:** These settings can change when you select a PRESET EQ setting.
SURROUND	"ON SURROUND" or "OFF SURROUND"
D.BASS LEVEL	"OFF", "LEVEL 1" to "LEVEL 6"
D.BASS BEAT	"ON D.BASS BEAT" or "OFF D.BASS BEAT" **Note:** • This function emphasises the attack level of the drumbeat and produces a punchy sound. Depending on the track, the effect may be small. • This function does not work when "D.BASS LEVEL" is set to "OFF".

Illumination effects

AKX520
You can change the illumination effect on the system.

Press [SETUP] repeatedly to select "ILLUMINATION" and then press [▲, ▼] to select the effect.
Or press [ILLUMINATION] repeatedly to select the effect.

COLOR	A selection of 3 different illumination colours on the main unit.
AUTO	Illuminate in 3 different colours and change alternately.
OFF	Cancel the effect.

You can also turn [VOLUME/MULTI CONTROL] to select the next or previous effect.

Note:
When the dimmer function is switched on, the illumination on the system will remain off even when you switch on the illumination function.

DJ functions

You can use the DJ functions to add sound effects between songs.

Using the "Panasonic MAX Juke" app
You can download and install the free Android™ app "Panasonic MAX Juke" on Google Play™ for additional features, such as to request song playback from multiple devices simultaneously. You can also call up the tracks you want to play through the app. For details on the app, refer to the site below.
http://av.jpn.support.panasonic.com/support/global/cs/audio/app/
(This site is in English only.)

DJ jukebox

USB
You can use the DJ jukebox function to add cross-fade effect between songs.

1 Press [PLAY MENU] to select "JUKEBOX".

2 Press [▲, ▼] to select the setting and then press [OK].

Using the main unit
Press [JUKEBOX] repeatedly to select the setting.

OFF CROSSFADE	Cancel cross-fading.
ON CROSSFADE	Add cross-fading.
OFF	Switch off DJ jukebox.

Note:
- The system switches to repeat mode automatically when you switch on DJ jukebox.
- DJ jukebox is switched off when you switch off the system or change to another source.
- The cross-fade function may not work between songs that have different sampling frequencies.

Changing the repeat setting

1 Press [PLAY MENU] repeatedly to select "PLAYMODE".

2 Press [▲, ▼] to select the setting and then press [OK].

RANDOM REPEAT RND	Repeat random playback.
ALL TITLE REPEAT	Repeat all tracks.

DJ effect

(Except for AUX source)

By main unit only
You can use the DJ effect function to add sound effects.

1 Press [DJ] to select "DJ EFFECT SELECT NUMBER" or "ON DJ EFFECT".
To cancel, select "OFF EFFECT".

2 Press [DJ1] to [DJ6] to select the effect.

[DJ1]	PHASER Add space and dimension to the sound.
[DJ2]	FILTER Enhance or filter specific ranges of the sound.
[DJ3]	SOUND CHOPPER Cut off the sound periodically.
[DJ4]	ELECTRO ECHO Add digital echo to the sound.
[DJ5]	PITCH SHIFTER Adjust the keys of the sound.
[DJ6]	HARMONIZER Add notes to the sound to create harmony.

To cancel, press the button again.

3 Turn [VOLUME/MULTI CONTROL] to select the setting.

Note:
DJ effect is switched off when you switch off the system or change to AUX source.

Using a microphone

AKX520
Preparation
Decrease the volume of the system to its minimum before you connect or disconnect a microphone.

1 Connect a microphone (not supplied) to the microphone jack.
Plug type: Ø 6.3 mm monaural

2 Press [SOUND] repeatedly to select "MIC VOL".
Or press and hold [–MIC VOL] until "MIC VOL" is shown.

3 Press [▲, ▼] to adjust the volume of the microphone and then press [OK].
Or turn [VOLUME/MULTI CONTROL] to adjust the volume of the microphone.

4 If you want to sing with the background music, play the music source and adjust the volume of the system.

Note:
- If a strange noise (howling) is emitted, move the microphone away from the speakers, or decrease the volume of the microphone.
- When you do not use the microphone, disconnect it from the microphone jack, and decrease the volume of the microphone to its minimum.

Karaoke

AKX520
Preparation
Select the music source.

Note:
The Karaoke function is switched off when you switch off the system.

Karaoke effect

You can use the Karaoke effect function to add sound effects.

1 Press [SOUND] repeatedly to select "KARAOKE EFFECT" and then press [▲, ▼] to select the effect.
Or press [KARAOKE] repeatedly to select the effect.

VOCAL CANCEL	Reduce the vocal level or change the audio mode (depending on the source).
ECHO	Add an echo effect to the sound.
KEY CONTROL	Change the key of a song. **Note:** The setting is cancelled when you change to another source.
TEMPO	CD USB Change the speed of a song.
BGM	Change the background music level.
MIC EQ	Select a MIC EQ mode.
OFF EFFECT	Cancel the effect. Press [OK] to confirm. Or press and hold [–OFF] until "OFF EFFECT" is shown.

To check the current setting, press [OK].

2 Press [⏮/◀◀] or [▶▶/⏭] to select the setting and then press [OK].
Or turn [VOLUME/MULTI CONTROL] to select the setting.

VOCAL CANCEL	"OFF", 1 to 3, "L", "R", "L+R" ***When using stereo source not formatted for Karaoke*** It is recommended to use "2 VOCAL CANCEL" for most songs. ***When using Karaoke formatted source*** L: Only left channel sound (accompaniment only) R: Only right channel sound (vocals only) L+R: Left and right channel sounds are mixed
ECHO	"OFF", 1 to 4
KEY CONTROL	–6 to +6
TEMPO	"OFF", –2 to +2
BGM	"OFF", 1 to 3
MIC EQ	"SINGING" or "SPEECH"

Note:
To use Karaoke effect in AUX source, set "AUX MODE" to "MODE 1"
(➪ "AUX mode").

Clock and timers

Setting the clock

This is a 24-hour clock.

1 Press [SETUP] to select "CLOCK".

2 Press [▲, ▼] to set the time and then press [OK].

To check the time
Press [SETUP] to select "CLOCK" and then press [OK].
In standby mode, press [DISPLAY].

Note:
Reset the clock regularly to maintain accuracy.

Sleep timer

The sleep timer switches off the system after the set time.

Press [SLEEP] repeatedly to select the setting (in minutes).
To cancel, select "OFF".

SLEEP 30 → SLEEP 60 → SLEEP 90 → SLEEP120
↑ OFF ←

To check the remaining time
Press [SLEEP].

Note:
- The remaining time is shown for a few seconds every minute. "SLEEP 1" is always shown when only 1 minute remains.
- The sleep timer always comes first. Be sure not to set an overlap of timers.

Play timer

(Except for Bluetooth® and AUX source)

You can set the timer to come on at a certain time to wake you up.

Preparation
Set the clock.

1 Press [SETUP] repeatedly to select "TIMER ADJ".

2 Press [▲, ▼] to set the start time and then press [OK].

3 Do step 2 again to set the end time.

4 Press [▲, ▼] to select the source you want to play and then press [OK].

To start the timer

1 Prepare the source you want to listen to (disc, USB or radio) and set the volume.

2 Press [SETUP] repeatedly to select "TIMER SET".

3 Press [▲, ▼] to select "PLAY ON" and then press [OK].
"◷" is shown.
To cancel, select "PLAY OFF".
The system must be switched off for the timer to operate.

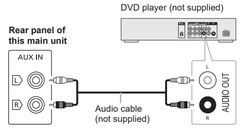
To check the setting
Press [SETUP] repeatedly to select "TIMER ADJ" and then press [OK].
In standby mode, press [DISPLAY] two times.

Note:
- The timer starts at a low volume and increases gradually to the preset level.
- The timer comes on at the set time every day if the timer is on.
- If you switch off the system and then switch on again while a timer is in operation, the timer will not stop at the end time.

External equipment

You can connect a VCR, DVD player etc., and listen to the audio through this system.

Preparation
- Disconnect the AC mains lead.
- Switch off all equipment and read the appropriate operating instructions.



1 Connect the external equipment.

2 Press [SELECT <, >] repeatedly to select "AUX".

3 Play the external equipment.

Note:
- Do not bend cables at sharp angles.
- Components and cables are sold separately.
- Sound distortion can occur when you use an adaptor.
- If you want to connect equipment other than those described, refer to the audio dealer.

AUX mode

AKX520

1 Press [PLAY MENU] to select "AUX MODE".

2 Press [▲, ▼] to select the mode and then press [OK].

MODE 1 (default)	Select this mode to use the Karaoke effect function.
MODE 2	Select this mode when watching TV, movies or using an external player with Karaoke features.

Others

Auto off

This system automatically switches off when you do not use it for approximately 20 minutes.

1 Press [SETUP] repeatedly to select "AUTO OFF".

2 Press [▲, ▼] to select "ON" and then press [OK].
To cancel, select "OFF".

Note:
- This function does not work when you are in radio source or when a Bluetooth® device is connected.
- AKX520
This function may not work when a microphone is connected.

Bluetooth® standby

This function automatically switches on the system when you establish a Bluetooth® connection from a paired device.

1 Press [SETUP] repeatedly to select "BLUETOOTH STANDBY".

2 Press [▲, ▼] to select "ON" and then press [OK].
To cancel, select "OFF".

Note:
Some devices may take longer to respond. If you are connected to a Bluetooth® device before switching off the system, wait for a minimum of 5 seconds before connecting to this system from your Bluetooth® device again.

Software update

Occasionally, Panasonic may release updated software for this unit that may add or improve the way a feature operates. These updates are available free of charge. For more details, refer to the following website.
http://panasonic.jp/support/global/cs/
(This site is in English only.)

Checking the software version

1 Press [SETUP] repeatedly to select "SW VER." and then press [OK].
The software version is shown.

2 Press [OK] again to exit.

Troubleshooting

Before requesting service, make the following checks. If you are in doubt about some of the check points, or if the solutions indicated do not solve the problem, consult your dealer for instructions.

Common problems

The unit does not work.
- The safety device has been activated. Do the following:
1. Press [◷/] on the main unit to switch the unit to standby mode. If the unit does not switch to standby mode, disconnect the AC mains lead and then connect it again.
2. Press [◷/] again to switch on the unit. If the problem persists, consult your dealer.

The display panel lights up and changes continuously in standby mode.
- Press and hold [■] on the main unit until "DEMO OFF" or "SDEMO OFF" is shown.

No operations can be done with the remote control.
- Examine that the battery is installed correctly.

Sound is distorted or no sound.
- Adjust the volume of the system.
- Switch off the system, determine and correct the cause, and then switch on again. It can be caused by straining of the speakers through excessive volume or power, and when using the system in a hot environment.

A humming sound can be heard during playback.
- An AC mains lead or fluorescent light is near the cables. Keep other appliances and cords away from the cables of this system.

The sound level reduces.
- The protection circuit has been activated due to the continuous use at high volume output. This is to protect the system and maintain the sound quality.

Disc

Display not shown correctly.
Playback does not start.
- You have not put in the disc correctly. Put it in correctly.
- Disc is dirty. Clean the disc.
- Replace the disc if it is scratched, warped, or non-standard.
- There is condensation. Let the system dry for 1 to 2 hours.

The total number of tracks shown is incorrect.
The disc cannot be read.
Distorted sound is heard.
- You put in a disc that the system cannot play. Change to a playable disc.
- You put in a disc that has not been finalised.

USB

The USB device or the contents in it cannot be read.
- The format of the USB device or the contents in it are not compatible with the system.
- USB devices with storage capacity of more than 32 GB cannot work in some conditions.

Slow operation of the USB device.
- Large content size or large memory USB device takes longer time to read.

Bluetooth®

Pairing cannot be done.
- Check the Bluetooth® device condition.
- The device is out of the 10 m communication range. Move the device nearer to the system.

The device cannot be connected.
- The pairing of the device was unsuccessful. Do pairing again (➪ "Pairing a device").
- The pairing of the device has been replaced. Do pairing again (➪ "Pairing a device").
- This system might be connected to a different device. Disconnect the other device and try connecting the device again.
- The system may have a problem. Switch off the system and then switch on again.
- If "MODE 2" is selected in "LINK MODE", select "MODE 1" (➪ "Link mode").

The device is connected but audio cannot be heard through the system.
- For some built-in Bluetooth® devices, you have to set the audio output to "SC-AKX520" or "SC-AKX320" manually. Read the operating instructions of the device for details.

Playback during Multi Connect is not working or no sound.
- Restart the app of the device.
- The control of the device was not switched successfully. Disconnect the existing connected devices and try again.

Sound from the device is interrupted.
- The device is out of the 10 m communication range. Move the device nearer to the system.
- Remove any obstacle between the system and the device.
- Other devices that use the 2.4 GHz frequency band (wireless router, microwaves, cordless phones, etc.) are interfering. Move the device nearer to the system and distance it from the other devices.
- Select "MODE 1" for stable communication (➪ "Link mode").

Radio

Sound is distorted.
- Use an optional FM outdoor antenna. The antenna should be installed by a competent technician.

A beat sound is heard.
- Switch off the TV or move it away from the system.
- Move mobile telephones away from the system if the interference is apparent.
- When in AM tuner mode, select the "B.PROOF" setting that provides the best reception.

A low hum is heard during AM broadcasts.
- Move the antenna away from other cables and cords.

AUX

Playback image and sound are not synchronised.
- Set "AUX MODE" to "MODE 2".

Karaoke effect cannot be used.
- Set "AUX MODE" to "MODE 1".

Main unit displays

"–:–"
- You connected the AC mains lead for the first time or there was a power failure recently. Set the clock.
- Track play time is more than 99 minutes.

"ADJUST CLOCK"
- The clock is not set. Adjust the clock.

"ADJUST TIMER"
- The play timer is not set. Adjust the play timer.

"AUTO OFF"
- The system has not been used for 20 minutes and will switch off within a minute. To cancel, press any button.

"DEVICE CONNECTED FULL"
- You have connected 3 Bluetooth® devices. To connect another device, disconnect one of the connected devices and try again.

"ERROR"
- An incorrect operation was done. Read the instructions and try again.

"F□□" / "F□□□" ("□" represents a number.)
- The protection circuit has been activated and the system may be switched off automatically.
- Disconnect the AC mains lead and wait for a few seconds before connecting it again. If the problem persists, disconnect the AC mains lead and consult your dealer.

"NO DISC"
- You have not put in a disc.

"NO PLAY"
"UNSUPPORT"
- There is no album or track in the USB device.
- Examine the content. You can only play supported format.
- The system may have a problem. Switch off the system and then switch on again.

"NOT SUPPORT MULTI CONNECT"
- The Bluetooth® connection cannot be established. Disconnect the existing connected devices and try again.

"NOT SUPPORTED"
- To use Karaoke effect in AUX source, set "AUX MODE" to "MODE 1".

"PLAYERROR"
- An unsupported MP3 file has been played. The system will skip that track and play the next one.

"REMOTE 1"
"REMOTE 2"
- The remote control and the main unit are using different codes. Change the code of the remote control.
– When "REMOTE 1" is shown, press and hold [OK] and [ ] on the remote control for a minimum of 4 seconds.
– When "REMOTE 2" is shown, press and hold [OK] and [<] for a minimum of 4 seconds.

"TEMP NG"
- The temperature protection circuit has been activated, and the system will switch off. Let the unit cool down before switching it on again.
- Check that the ventilation opening of the unit is not obstructed.
- Ensure this unit is well ventilated.

"USB A NO DEVICE"
"USB B NO DEVICE"
- The USB device is not connected. Examine the connection.

"USB OVER CURRENT ERROR"
- The USB device is drawing too much power. Disconnect the USB device, switch off the system and then switch on again.
- Check the connection, it may be caused by a faulty USB cable.

"VBR"
- The system cannot show the remaining play time for variable bit rate (VBR) tracks.

Remote control code

When other Panasonic equipment responds to the remote control of this system, change the remote control code for this system.

Preparation
Press [SELECT] repeatedly on the main unit to select "AUX".

To set the code to "REMOTE 2"

1 Press and hold [SELECT] on the main unit and [<] until "REMOTE 2" is shown.

2 Press and hold [OK] and [<] for a minimum of 4 seconds.

To set the code to "REMOTE 1"

1 Press and hold [SELECT] on the main unit and [ ] on the remote control until "REMOTE 1" is shown.

2 Press and hold [OK] and [ ] on the remote control for a minimum of 4 seconds.

System memory reset

Reset the memory when the following situations occur:
- There is no response when buttons are pressed.
- You want to clear and reset the memory contents.

1 Disconnect the AC mains lead.

2 While you press and hold [◷/] on the main unit, connect the AC mains lead again.
Continue to press and hold the button until "– – – – – – – – –" is shown.

3 Release [◷/].
All the settings are set back to the factory preset.
It is necessary to set the memory items again.