User Manual of Product 1:

Sony SSCS5 3-Way 3-Driver Bookshelf Speaker System (Pair) - Black

User Manual of Product 2:

Sony STRDH190 2-ch Home Stereo Receiver with Phono Inputs & Bluetooth Black

SONY

4-533-660-**11**(3)

* 4 5 3 3 6 6 0 1 1 * (3)

Active Subwoofer
Altavoz de subgraves activo

Operating Instructions GB

Mode d'emploi FR

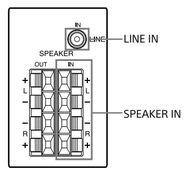
Manual de instrucciones ES

http://www.sony.net/

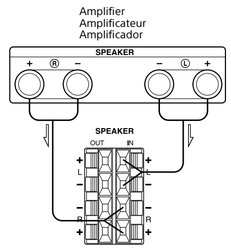
© 2014 Sony Corporation Printed in Malaysia

SA-CS9

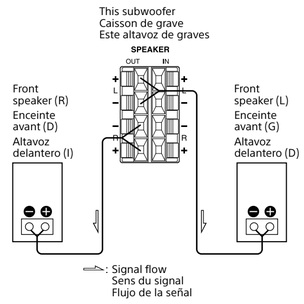
A



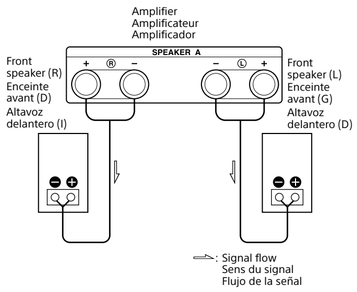
B



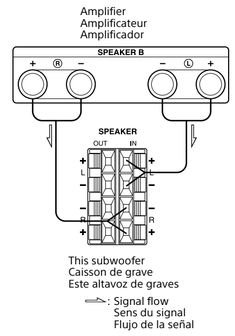
C



D



E



English

WARNING

To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

To reduce the risk of fire, do not cover the ventilation opening of the appliance with newspapers, tablecloths, curtains, etc.
Do not expose the appliance to naked flame sources (for example, lighted candles).
To reduce the risk of fire or electric shock, do not expose this appliance to dripping or splashing, and do not place objects filled with liquids, such as vases, on the appliance.
As the main plug is used to disconnect the unit from the mains, connect the unit to an easily accessible AC outlet. Should you notice an abnormality in the unit, disconnect the main plug from the AC outlet immediately.
Do not install the appliance in a confined space, such as a bookcase or built-in cabinet.
The unit is not disconnected from the mains as long as it is connected to the AC outlet, even if the unit itself has been turned off.

For customers in the United States

Owner's Record

The model and serial numbers are located on the rear of the unit. Record these numbers in the space provided below. Refer to them whenever you call upon your Sony dealer regarding this product.
Model No. _____ Serial No. _____

This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Important Safety Instructions

1) Read these instructions.
2) Keep these instructions.
3) Heed all warnings.
4) Follow all instructions.
5) Do not use this apparatus near water.
6) Clean only with dry cloth.
7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11) Only use attachments/accessories specified by the manufacturer.
12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

13) Unplug this apparatus during lightning storms or when unused for long periods of time.
14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

For customers in Europe

Disposal of Old Electrical & Electronic Equipment (Applicable in the European Union and other European countries with separate collection systems)

This symbol on the product or on its packaging indicates that this product shall not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources. For more detailed information about recycling of this product, please contact your local Civic Office, your household waste disposal service or the shop where you purchased the product.

Notice for customers: The following information is only applicable to equipment sold in countries applying EU Directives.

This product has been manufactured by or on behalf of Sony Corporation, 1-7-1 Konan Minato-ku Tokyo, 108-0075 Japan. Inquiries related to product compliance based on European Union legislation shall be addressed to the authorized representative, Sony Deutschland GmbH, Hedelfinger Strasse 61, 70327 Stuttgart, Germany. For any service or guarantee matters, please refer to the addresses provided in the separate service or guarantee documents.

Precautions

On safety

- Before operating the subwoofer, be sure that the operating voltage of your subwoofer is identical with that of your local power supply.
- Unplug the subwoofer from the wall outlet if it is not to be used for an extended period of time. To disconnect the cord, pull the cord by grasping the plug. Never pull the cord itself.
- Should any liquid or solid object fall into the subwoofer, unplug the subwoofer and have the subwoofer checked by qualified personnel before operating it any further.
- AC power cord must be changed only at the qualified service shop.

When turning on or off an amplifier or other equipment

Lower the volume of the amplifier to minimum.

To avoid damaging the subwoofer

- Be careful in setting the volume control of the amplifier to avoid an excessive input power.
- Do not attempt to open the enclosure or remove speaker units and networks.
- Do not press the dust cap intentionally or unintentionally.

On installation

- Do not place the speakers in locations that are:
  - Extremely hot or cold
  - Dusty or dirty
  - Very humid
  - Subject to vibrations
  - Subject to direct sunlight
  - Near magnetic cards (credit cards, commuter passes, etc.)
    Magnetic cards may fail due to the magnets in the speaker units.
  - Near televisions
    The speakers are not magnetically shielded. Therefore, if you use the speakers near CRT-based televisions, color shading occurs on the television screen.
- Good ventilation is essential to prevent internal heat build-up in the subwoofer. Place the subwoofer in a location with adequate air circulation. Do not place the subwoofer on a soft surface or too close to a wall as this may obstruct the ventilation hole on the back.
- Use caution when placing the subwoofer on a specially treated (waxed, oiled, polished, etc.) floor, as staining or discoloration may result.
- Take care to avoid any possible injury on the corners of the subwoofer.

On cleaning the cabinet

Clean the cabinet with a soft cloth lightly moistened with water. Do not use any type of abrasive pad, scouring powder or solvent such as alcohol or benzine.

If you have any questions or problems concerning your subwoofer that is not covered in this manual, please consult your nearest Sony dealer.

Installation

Since the human ear cannot detect the direction and position where the bass sound being reproduced by a subwoofer (below 200 Hz) comes from, you can install the subwoofer wherever you like in your room. To obtain a better bass reproduction, we recommend you to install the subwoofer on a solid floor where the resonance is unlikely to occur.
You can obtain a sufficient heavy bass reproduction from a single subwoofer. However if you use a couple of the subwoofers, you can obtain an even more effective heavy bass reproduction.

Notes

- Always install the subwoofer vertically, keeping a few centimeters away from the wall.
- Do not place an object on the subwoofer or sit on it.
- If the subwoofer is installed in the center of a room, the bass could be extremely weakened. This is due to the influence of the standing wave of the room. If this happened, move the subwoofer away from the center of a room or eliminate the cause of the standing wave, by installing a bookshelf on the wall, etc.

Hooking Up the System

Overview

Use the LINE IN jacks or the SPEAKER IN terminals of the subwoofer when you connect the amplifier (A).

- If your amplifier has one of the following types of output jacks, connect the LINE IN jack and the amplifier's jack using the supplied audio connecting cord.
  - MONO OUT jack
  - MIX OUT jack
  - SUBWOOFER output jack(s)
  - SUPER WOOFER output jack(s)
- If your amplifier does not have the above mentioned output jacks, connect the speaker terminals of the amplifier to the SPEAKER IN terminals instead.

Before you get started

- Turn off the power of the amplifier and the subwoofer before making any connection.
- Use the audio connecting cords that are supplied to the respective equipment. If there are not enough audio connecting cords to make the necessary connections, you need to purchase some optional audio connecting cords.
- Be sure to make connections firmly to avoid noise.
- Connect the AC power cord from the subwoofer to a wall outlet.
- You cannot connect the CENTER output jack for use with Dolby Pro Logic function to the subwoofer. Bass sound is not output with some Dolby Pro Logic modes.

Connecting to an amplifier with a single set of speaker terminals

Connect the subwoofer to the amplifier and then connect the front speakers to the subwoofer.

1 Connect the subwoofer to the amplifier. (B)
Connect the SPEAKER IN terminals of the subwoofer to the amplifier's speaker terminals with the speaker cords. Be sure to connect both L and R channels.

2 Connect the front speakers to the subwoofer. (C)
Connect the speakers to the SPEAKER OUT terminals of the subwoofer.

Connecting to an amplifier with double (A + B) sets of speaker terminals

If your amplifier has double (A + B) sets of speaker terminals, connect both the subwoofer and the front speakers to the amplifier.

1 Connect the front speakers to the amplifier. (D)
Connect the speakers to your amplifier's SPEAKER A terminals.

2 Connect the subwoofer to the amplifier. (E)
Connect the SPEAKER IN terminals of the subwoofer to the amplifier's SPEAKER B terminals using speaker cords (not supplied).

When using the double (A + B) sets of speakers, make sure that you select the "A + B" position with your amplifier.

Note

When you are using SPEAKER A terminals only (front speaker only) or when the power of the amplifier is turned off, turn down the volume or turn off the power of the subwoofer otherwise, hum noise may be heard.

Français

AVERTISSEMENT

Afin de réduire les risques d'incendie et de choc électrique, ne pas exposer cet appareil à la pluie ni à l'humidité.

Afin de réduire les risques d'incendie, ne couvrez pas les orifices de ventilation de l'appareil avec des journaux, nappes, rideaux, etc.
N'exposez pas l'appareil à des sources de flammes nues (par exemple, bougies allumées).
Afin de réduire les risques d'incendie et de choc électrique, n'exposez pas l'appareil à des gouttelettes ou à des éclaboussures et ne posez aucun objet rempli de liquide, comme un vase, sur l'appareil.
Comme la prise secteur sert à déconnecter l'appareil du secteur, reliez l'appareil à une prise de courant accessible. Si vous remarquez une anomalie sur l'appareil, débranchez immédiatement la prise secteur.
N'installez pas l'appareil dans un espace confiné comme dans une bibliothèque ou un meuble encastré.
L'appareil n'est pas déconnecté du secteur tant qu'il reste branché sur la prise de courant, même si l'appareil proprement dit a été mis hors tension.

Pour les clients aux Etats-Unis

Archives du propriétaire

Les numéros de modèle et de série se trouvent à l'arrière de l'appareil. Indiquez ces numéros de série dans l'espace prévu à cet effet ci-dessous. Vous devrez vous y référer lors d'un appel à votre revendeur Sony au sujet de ce produit.
N° de modèle _____ N° de série _____

Ce symbole est destiné à avertir l'utilisateur de la présence d'une « tension dangereuse » non isolée dans le boîtier du produit dont l'amplitude peut être suffisante pour constituer un risque d'électrocution.

Ce symbole est destiné à avertir l'utilisateur de la présence d'instructions d'utilisation et de aintenance (entretien) importantes dans la documentation qui accompagne l'appareil.

Consignes de sécurité importantes

1) Lisez ces instructions.
2) Conservez ces instructions.
3) Tenez compte de tous les avertissements.
4) Respectez toutes les instructions.
5) N'utilisez pas cet appareil à proximité de l'eau.
6) Nettoyez l'appareil uniquement avec un chiffon sec.
7) Ne bloquez pas les ouvertures de ventilation. Installez l'appareil conformément aux instructions du fabricant.
8) N'installez pas l'appareil à proximité d'une source de chaleur, telle qu'un radiateur, un poêle, une cuisinière ou d'autres appareils (notamment des amplificateurs) qui dégagent de la chaleur.
9) Pour des raisons de sécurité, veillez à utiliser une fiche polarisée ou une fiche avec terre. Une fiche polarisée possède deux lames dont une est plus large que l'autre. Une fiche avec terre possède deux lames et une broche de mise à la masse. La lame large ou la troisième broche sont prévues pour votre sécurité. Si la fiche fournie n'est pas adaptée à la prise, consultez un électricien pour remplacer la prise obsolète.
10) Protégez le cordon d'alimentation afin d'éviter qu'il soit piétiné ou pincé, en particulier au niveau des fiches, des prises multiples et du point de sortie de l'appareil.
11) Utilisez uniquement des options/accessoires spécifiés par le fabricant.
12) Utilisez l'appareil uniquement avec le chariot, le socle, le trépied, le support ou la table spécifiés par le fabricant ou vendus avec l'appareil. Si vous utilisez un chariot, soyez prudent lors du déplacement de la combinaison chariot/appareil afin d'éviter de vous blesser en cas de renversement.

13) Débranchez l'appareil pendant les orages ou lorsque vous ne l'utilisez pas pendant des périodes prolongées.
14) Tout entretien ne peut être effectué que par un technicien qualifié. Un entretien est nécessaire si l'appareil a été endommagé d'une quelconque manière, par exemple si le cordon ou la fiche d'alimentation est endommagé, si du liquide a pénétré dans l'appareil ou si des objets sont tombés à l'intérieur de celui-ci, s'il a été exposé à la pluie ou à l'humidité, s'il ne fonctionne pas normalement ou s'il a subi une chute.

Pour les clients en Europe

Traitement des appareils électriques et électroniques en fin de vie (Applicable dans les pays de l'Union Européenne et aux autres pays européens disposant de systèmes de collecte sélective)

Ce symbole, apposé sur le produit ou sur son emballage, indique que ce produit ne doit pas être traité avec les déchets ménagers. Il doit être remis à un point de collecte approprié pour le recyclage des équipements électriques et électroniques. En vous assurant que ce produit sont mis au rebut de façon appropriée, vous participez activement à la prévention des conséquences négatives que leur mauvais traitement pourrait provoquer sur l'environnement et sur la santé humaine. Le recyclage des matériaux contribue par ailleurs à la préservation des ressources naturelles. Pour toute information complémentaire au sujet du recyclage de ce produit, vous pouvez contacter votre municipalité, votre déchetterie locale ou le point de vente où vous avez acheté le produit.

Avis à l'attention des clients : les informations suivantes concernent uniquement les appareils vendus dans les pays appliquant les directives de l'UE.

Ce produit a été fabriqué par ou pour le compte de Sony Corporation, 1-7-1 Konan Minato-ku Tokyo, 108-0075 Japon. Toutes les questions relatives à la conformité des produits basées sur la législation européenne doivent être adressées à son représentant, Sony Deutschland GmbH, Hedelfinger Strasse 61, 70327 Stuttgart, Allemagne.
Pour toute question relative au Service Après-Vente ou à la Garantie, merci de bien vouloir vous référer aux coordonnées qui vous sont communiquées dans les documents « Service (SAV) » ou Garantie.

Précautions

Sécurité

- Avant d'utiliser le caisson de grave, vérifiez que sa tension de fonctionnement est identique à celle du secteur local.
- Si vous prévoyez de ne pas utiliser le caisson pendant longtemps, débranchez-le de la prise murale. Pour débrancher le cordon d'alimentation secteur, tirez sur la fiche. Ne jamais tirer sur le cordon proprement dit.
- Si un liquide ou un solide tombait dans le coffret, débranchez le caisson et faites-le contrôler par un technicien qualifié avant de le remettre en service.
- Le cordon d'alimentation secteur doit être changé par un professionnel seulement.

Avant d'allumer ou d'éteindre l'amplificateur ou un autre appareil

N'oubliez pas de baisser complètement le volume.

Pour éviter d'endommager le caisson de grave

- Réglez avec soin le volume de l'amplificateur pour éviter toute entrée de son excessive.
- Ne pas essayer d'ouvrir le coffret ou de modifier les haut-parleurs et les circuits.
- Ne pas appuyer sur le cache-poussière, ni intentionnellement ni par erreur.

Installation

- N'installez pas les enceintes aux endroits :
  - Extrêmement chauds ou froids
  - Poussiéreux ou sales
  - Très humides
  - Exposés à des vibrations
  - Exposés à la lumière directe du soleil
  - À proximité de cartes magnétiques (cartes de crédits, carte à puce d'abonnement aux transports en commun, etc.)
    Les aimants présents dans les haut-parleurs peuvent provoquer un mauvais fonctionnement des cartes magnétiques.
  - À proximité des téléviseurs
    Les enceintes ne sont pas équipées d'un blindage magnétique. Dès lors, si vous utilisez les enceintes à proximité d'un téléviseur à écran cathodique cathodique, des taches de couleur apparaissent sur l'écran du téléviseur.
- Une bonne ventilation est essentielle pour éviter une surchauffe interne du caisson. Installez le caisson dans un endroit où la circulation d'air est suffisante. Ne pas l'installer sur une surface molle ou trop près d'un mur pour ne pas boucher l'orifice de ventilation à l'arrière du caisson.
- Faites attention si le caisson de graves doit être posé sur une sol traité (ciré, huilé, poli, etc.) car il peut salir ou décolorer le sol.
- Veillez à ne pas vous blesser en heurtant les coins du caisson.

Nettoyage du coffret

Nettoyez le coffret avec un chiffon doux légèrement imprégné d'eau. Ne pas utiliser de tampons abrasifs, poudre à récurer ou diluant, comme l'alcool ou la benzine.

Pour toute question ou problème au sujet du caisson de grave, veuillez contacter votre revendeur Sony le plus proche.

Installation

Comme l'oreille humaine ne peut pas détecter la direction ni la position des basses reproduites par un caisson de grave (en dessous de 200 Hz), vous pouvez installer le caisson où vous voulez dans la pièce. Pour obtenir une meilleure reproduction du grave, il est toutefois conseillé de l'installer sur un sol ferme, où la résonnance est peu probable.
Vous pouvez obtenir suffisamment de grave à partir d'un seul caisson. Toutefois, si vous utilisez plusieurs caissons de grave, les basses seront naturellement plus puissantes.

Remarques

- Installez toujours le caisson à la verticale et à plusieurs centimètres du mur.
- Ne pas poser d'objet sur le caisson ni s'asseoir dessus.
- Si le caisson est installé au centre d'une pièce, le son grave est extrêmement affaibli. Ce phénomène est dû aux ondes stationnaires de la pièce. Le cas échéant, éloignez le caisson du centre de la pièce, ou éliminez la cause des ondes stationnaires, en installant, par exemple, une étagère.

Raccordement du système

Aperçu

Utilisez les prises LINE IN ou les bornes SPEAKER IN du caisson quand vous raccordez l'amplificateur. (A)

- Si votre amplificateur comporte l'un des modèles de prises de sortie suivants, raccordez-la à la prise LINE IN et la prise de l'amplificateur à l'aide du câble de connexion audio fourni.
  - Prise MONO OUT
  - Prise MIX OUT
  - Prise(s) de sortie SUBWOOFER
  - Prise(s) de sortie SUPER WOOFER
- Si l'amplificateur n'offre aucune des prises de sortie indiquées, reliez les bornes d'enceintes de l'amplificateur aux bornes SPEAKER IN.

Avant de commencer

- Éteignez l'amplificateur et le caisson de grave avant de les relier.
- Utilisez les cordons audio fournis avec les différents appareils. Si vous n'avez pas assez de cordons pour faire les liaisons nécessaires, vous devrez acheter des cordons de liaison audio en option.
- Veillez à insérer à fond les fiches dans les prises pour éviter toute source de parasites.
- Branchez le cordon d'alimentation secteur du caisson sur une prise murale.
- Vous ne pouvez pas relier la prise de sortie CENTER à ce caisson pour utiliser la fonction Dolby Pro Logic. Le son grave n'est pas fourni par certains modes Dolby Pro Logic.

Raccordement à un amplificateur avec une seule paire de bornes d'enceintes

Raccordez le caisson de grave à l'amplificateur, puis les enceintes avant au caisson de grave.

1 Raccordez le caisson de grave à l'amplificateur. (B)
Raccordez les bornes SPEAKER IN du caisson aux bornes d'enceintes de l'amplificateur avec les cordons d'enceintes. Veillez à raccorder les canaux gauche (L) et droit (R).

2 Raccordez les enceintes avant au caisson de grave. (C)
Raccordez les enceintes aux bornes SPEAKER OUT du caisson de grave.

Raccordement à un amplificateur avec double paire (A + B) de bornes d'enceintes

Si votre amplificateur possède une double paire de bornes d'enceintes (A + B), raccordez le caisson de grave et les enceintes avant à l'amplificateur.

1 Raccordez les enceintes avant à l'amplificateur. (D)
Raccordez les enceintes aux bornes SPEAKER A de votre amplificateur.

2 Raccordez le caisson de grave à l'amplificateur. (E)
Raccordez les bornes SPEAKER IN du caisson de grave aux bornes SPEAKER B de l'amplificateur avec des cordons d'enceintes (non fournis).

Quand vous utilisez la double paire de prises (A + B), veillez à sélectionner la position « A + B » sur l'amplificateur.

Remarque

Lorsque vous utilisez les bornes SPEAKER A seulement (enceintes avant seulement) ou lorsque l'amplificateur est éteint, réduisez le volume du caisson de grave, ou éteignez-le, sinon du bruit sera audible.

Español

POR FAVOR LEA DETALLADAMENTE ESTE MANUAL DE INSTRUCCIONES ANTES DE CONECTAR Y OPERAR ESTE EQUIPO. RECUERDE QUE UN MAL USO DE SU APARATO PODRÍA ANULAR LA GARANTÍA.

ADVERTENCIA

Para reducir el riesgo de incendios o descargas eléctricas, no exponga este aparato a la lluvia ni a la humedad.

Para reducir el riesgo de incendios, no cubra la abertura de ventilación del aparato con periódicos, manteles, cortinas, etc.
No exponga el aparato a ninguna fuente de llamas al descubierto (por ejemplo, velas encendidas).
Para reducir el riesgo de incendios o descargas eléctricas, no exponga el aparato a goteos o salpicaduras, ni coloque recipientes con líquidos, como jarrones, sobre el aparato.
Puesto que el enchufe principal se utiliza para desconectar la unidad de la red, conecte la unidad a una toma de ca de fácil acceso. Si detecta alguna anomalía en la unidad, desconecte el enchufe principal de la toma de ca inmediatamente.
No instale el aparato en un espacio cerrado, como una estantería para libros o un armario empotrado.
Aunque apague la unidad, no se desconectará de la red mientras permanezca conectada a la toma de ca.

Este símbolo tiene el propósito de alertar al usuario en cuanto a la presencia de un"voltaje peligroso" no aislado dentro de la cubierta del producto, el cual pudiera ser de la suficiente magnitud como para constituir un riesgo de choque eléctrico para las personas.

Este símbolo tiene el propósito de alertar al usuario en cuanto a la existencia de importantes instrucciones de operación y mantenimiento (reparación) en la literatura que se entrega con el aparato.

Para los clientes en Europa

Tratamiento de los equipos eléctricos y electrónicos al final de su vida útil (aplicable en la Unión Europea y en países europeos con sistemas de tratamiento selectivo de residuos)

Este símbolo en el equipo o en su embalaje indica que el presente producto no puede ser tratado como residuos doméstico normal. Debe entregarse en el correspondiente punto de recogida de equipos eléctricos y electrónicos. Al asegurarse de que este producto se desecha correctamente, usted ayuda a prevenir las consecuencias potencialmente negativas para el medio ambiente y la salud humana que podrían derivarse de la incorrecta manipulación en el momento de desharcerse de este producto. El reciclaje de materiales ayuda a conservar los recursos naturales. Para recibir información detallada sobre el reciclaje de este producto, póngase en contacto con el ayuntamiento, el punto de recogida más cercano o el establecimiento donde ha adquirido el producto.

Aviso para los clientes: La siguiente información solo se aplica al equipo que se comercializa en países que aplican las directivas de la UE.

Este producto ha sido fabricado por, o en nombre de Sony Corporation, 1-7-1 Konan Minato-ku Tokyo, 108-0075 Japón. Las consultas relacionadas con la conformidad del producto basadas en la legislación de la Unión Europea deben dirigirse al representante autorizado, Sony Deutschland GmbH, Hedelfinger Strasse 61, 70327 Stuttgart, Alemania. Para cualquier asunto relacionado con el servicio o la garantía, por favor diríjase a la dirección indicada en los documentos de servicio o garantía adjuntados con el producto.

Precauciones

Seguridad

- Antes de utilizar el altavoz de subgraves activo, compruebe si la tensión de alimentación del mismo coincide con la de la red local.
- Cuando no vaya a utilizar el altavoz de subgraves activo durante mucho tiempo, cerciórese de desenchufarlo de la toma de la red. Para desconectar el cable de alimentación, tire del enchufe. No tire nunca del propio cable.
- Si dentro del altavoz de subgraves activo entra cualquier objeto sólido o líquido, desenchúfelo de la red y haga que sea comprobado por personal cualificado.
- El cable de alimentación de ca solamente deberá cambiarse en un taller de reparaciones cualificado.

Antes de conectar o desconectar la alimentación del amplificador o de otro equipo

Reduzca el volumen del amplificador al mínimo.

Para evitar dañar el altavoz de subgraves activo

- Tenga cuidado al ajustar el control de volumen del amplificador a fin de evitar una potencia de entrada excesiva.
- No intente abrir la caja acústica, ni extraer las unidades altavoces ni las redes.
- No presione la tapa guardapolvos voluntaria ni involuntariamente.

Instalación

- No coloque los altavoces en lugares:
  - Muy calientes o fríos
  - Con polvo o suciedad
  - Muy húmedos
  - Expuestos a vibraciones
  - Expuestos a los rayos directos del sol
  - Cerca de tarjetas magnéticas (tarjetas de crédito, billetes de metro, etc.)
    Las tarjetas magnéticas podrían desmagnetizarse por el contacto con los imanes de los altavoces.
  - Cerca de televisores
    Los altavoces no tienen protección magnética. Por tanto, si utiliza los altavoces cerca de televisores de tubo, es posible que el color de la pantalla del televisor se difumine.
- Para evitar el recalentamiento interno del altavoz de subgraves activo, será esencial que esté bien ventilado. Coloque este altavoz de subgraves activo en un lugar con circulación de aire adecuada. No lo coloque sobre una superficie blanda ni demasiado cerca de una pared ya que podría obstruir del orificio de ventilación de la parte posterior.
- Tenga cuidado cuando coloque el altavoz de subgraves activo sobre superficies tratadas de manera especial (con cera, aceite, pulimentadas, etc.) ya que esto podría resultar en manchas o decoloración.
- Procure evitar dañar en lo posible las esquinas del altavoz de subgraves.

Limpieza de la caja

Limpie la caja con un paño suave ligeramente humedecido en agua. No utilice ningún tipo de estropajos, polvos abrasivos, ni disolventes como alcohol o bencina.

Si tiene alguna pregunta o problema en relación con el altavoz de subgraves activo que este manual no pueda resolver, consulte a su proveedor Sony.

Instalación

Como el oído humano no puede detectar la dirección ni la posición de donde viene el sonido de graves producido por un altavoz de subgraves activo (menos de 200 Hz), usted podrá instalar el altavoz de graves en el lugar que desee de la sala. Para obtener una mejor reproducción de graves, le recomendamos que instale el altavoz de subgraves activo sobre un piso sólido en el que sea difícil que se produzca resonancia.
Usted podrá obtener una reproducción con suficientes graves profundos con un solo altavoz de subgraves activo. Sin embargo, si utiliza un par de altavoces de subgraves activos, obtendrá una reproducción de graves profundos todavía más efectiva.

Notas

- Instale siempre el altavoz de subgraves activo en posición vertical, alejado varios centímetros de la pared.
- No coloque ningún objeto ni se siente sobre el altavoz de subgraves activo.
- Si instala el altavoz de subgraves activo en el centro de una sala, los graves pueden debilitarse extremadamente. Esto se debe a la influencia de las ondas estacionarias de la sala. Si sucede esto, mueva el altavoz de subgraves activo del centro de una sala, o elimine la causa de las ondas estacionarias, instalando una librería en la pared, etc.

Conexión a un sistema

Descripción general

Utilice la toma LINE IN (ENTRADA DE LÍNEA) o los terminales SPEAKER IN (ENTRADA DE ALTAVOCES) del altavoz de subgraves activo para conectarlo al amplificador. (A)

- Si su amplificador dispone de uno de los siguientes tipos de tomas de salida, conecte la toma LINE IN (ENTRADA DE LÍNEA) y la toma del amplificador con el cable conector de audio suministrado.
  - Toma MONO OUT (SALIDA MONOAURAL)
  - Toma MIX OUT (SALIDA DE MEZCLA)
  - Toma(s) de salida SUBWOOFER (ALTAVOZ DE SUBGRAVES ACTIVO)
  - Toma(s) de salida SUPER WOOFER (SÚPER ALTAVOZ DE SUBGRAVES ACTIVO)
- Si su amplificador no posee las tomas de salida mencionadas arriba, conecte en su lugar los terminales para altavoces del amplificador a los terminales SPEAKER IN (ENTRADA DE ALTAVOCES).

Antes de comenzar

- Desconecte la alimentación del amplificador y del altavoz de subgraves activo antes de realizar cualquier conexión.
- Utilice los cables conectores de audio suministrados con los equipos respectivos. Si no tiene suficientes cables conectores de audio para realizar las conexiones necesarias, tendrá que adquirir otros adicionales.
- Cerciórese de realizar conexiones firmes para evitar ruido.
- Conecte el cable de alimentación de ca del altavoz de subgraves activo a una toma de la red.
- No podrá conectar la toma de salida CENTER (CENTRAL) al altavoz de subgraves activo para utilizar la función Dolby Pro Logic. El sonido de graves no se emitirá con ciertos modos Dolby Pro Logic.

Conexión de un amplificador con un solo juego de terminales para altavoces

Conecte el altavoz de subgraves activo al amplificador y después conecte los altavoces delanteros al altavoz de subgraves activo.

1 Conecte el altavoz de subgraves activo al amplificador. (B)
Conecte los terminales SPEAKER IN (ENTRADA DE ALTAVOCES) del altavoz de subgraves activo a los terminales para altavoces del amplificador con los cables para altavoces suministrados. Cerciórese de conectar ambos canales, izquierdo y derecho.

2 Conecte los altavoces delanteros al altavoz de graves. (C)
Conecte los altavoces a los terminales SPEAKER OUT (SALIDA DE ALTAVOCES) del altavoz de subgraves activo.

Conexión de un amplificador con juegos de terminales para altavoces dobles (A + B)

Si su altavoz posee juegos dobles de terminales para altavoces (A + B), conecte el altavoz de subgraves y los altavoces delanteros al amplificador.

1 Conecte los altavoces delanteros al amplificador. (D)
Conecte los altavoces a los terminales SPEAKER A (ALTAVOZ A) de su amplificador.

2 Conecte el altavoz de graves al amplificador. (E)
Conecte los terminales SPEAKER IN (ENTRADA DE ALTAVOCES) del altavoz de subgraves a los terminales SPEAKER B (ALTAVOZ B) utilizando cables para altavoces (no suministrados).

Cuando utilice los juegos dobles (A + B) de terminales de altavoces, cerciórese de seleccionar la posición "A + B" en el amplificador.

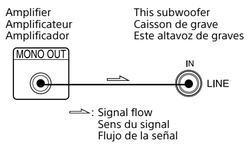
Nota

Si está utilizando solamente los terminales SPEAKER A (ALTAVOZ A) (sólo altavoces delanteros), o cuando vaya a desconectar la alimentación del amplificador, reduzca el volumen o desconecte la alimentación del altavoz de subgraves activo, ya que de lo contrario podría oír ruido.

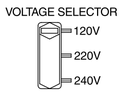
F



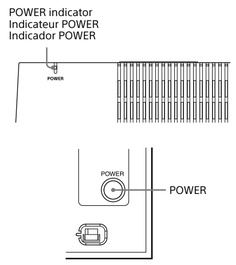
G



H



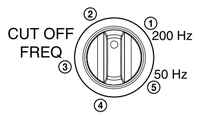
I



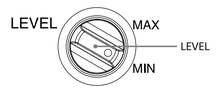
J



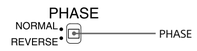
K



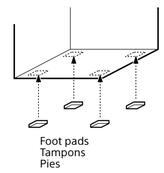
L



M



N



English

Connecting to an amplifier with a special jack for a subwoofer

If your amplifier has a special jack for a subwoofer (like a MONO OUT jack, MIX OUT jack, SUBWOOFER jack or SUPER WOOFER jack), connect the LINE IN jack of the subwoofer to one of those jacks using the supplied audio connecting cord. (F)

Hookups

Connect the MONO OUT jack of your amplifier to the LINE IN jack of the subwoofer with the supplied audio connecting cord. (G)

Note
If the output level of your amplifier is not large enough, the sound may not be loud enough. In this case, connect the speaker terminals of the amplifier directly to the SPEAKER IN terminals of the subwoofer.

Setting the voltage selector (voltage selector equipped models only) (H)

Check that the voltage selector on the rear panel of the subwoofer is set to the local power line voltage. If not, set the selector to the correct position using a screwdriver before connecting the AC power cord to a wall outlet.

Connecting the AC power cord

- Connect the AC power cord from the subwoofer and from your amplifier to a wall outlet.
- Make sure that power to the subwoofer is turned off before you plug in or unplug any power cord.

Listening to the Sound (I)

1 Turn on the amplifier and select the program source.

2 Press POWER.
The subwoofer turns on and the POWER indicator lights up in green.

3 Play the program source.
Adjust the VOLUME so that sound from the front speakers is not distorted.
If it is distorted, the sound from the subwoofer will also be distorted.

To turn on and off the power automatically — Auto power on/off function (J)
When the subwoofer is on (i.e, the POWER indicator lights up green) and there is no signal input for a few minutes, the POWER indicator changes to red and the subwoofer enters power saving mode. While in this mode a signal is input to the subwoofer, the subwoofer automatically turns on (auto power on/off function).
To turn this feature off, slide the POWER SAVE switch on the rear panel to OFF.

Notes
- Never set the amplifier's tone control (BASS, TREBLE, etc.) or the equalizer output to a high level or input sine curves of 20 Hz to 50 Hz recorded on a commercially-available test disc or special sound (bass sound of electronic musical instrument, pop noise of analog disc turntable, sound with abnormally enhanced bass, etc.) in a high level to this unit. These actions may cause damage to the speakers.
- When a special disc containing abnormally enhanced bass is played, noise may be output in addition to the original sound. In such a case, decrease the sound level.
- The subwoofer output signal (DOLBY digital signal) of the digital surround processor sold singularly is set 10 dB higher by Dolby Laboratories Licensing Corporation. In the case of using normally, adjust the subwoofer level.
- If you turn down the volume level of the amplifier too low, the auto power on/off function may activate, causing the subwoofer to enter power saving mode.

Adjusting the Sound

You can adjust the sound of the subwoofer to suit the sound of your front speakers. Reinforcing the bass sound gives you a greater sense of atmosphere.

1 Adjust the cut-off frequency. (K)
Turn the CUT OFF FREQ control, depending on the reproduction frequencies of your front speakers. Refer to the following when adjusting.
① Typical very small sized speakers: 4 – 5 cm (1 5/8 – 2 in.) dia.
② Typical small sized speakers: 6 – 8 cm (2 3/8 – 3 1/8 in.) dia.
③ Typical medium sized speakers: 9 – 15 cm (3 5/8 – 5 7/8 in.) dia.
④ Typical large sized speakers: 16 – 24 cm (6 3/8 – 9 1/2 in.) dia.
⑤ Typical very large sized speakers: more than 25 cm (9 7/8 in.) dia.
To make the most of the low level converter function
When playing back the sound of LFE signals, Dolby digital, or DTS, we recommend to set the CUT OFF FREQ control to 200Hz (maximum) to obtain the best performance from the low level converter function.

2 Adjust the volume level of the subwoofer. (L)
Turn the LEVEL control so that you can hear the bass sound a little more than before. To increase the volume, turn the control clockwise. To decrease the volume, turn the control counterclockwise.

3 Play your favorite song and movie.
Male vocal tunes and voice containing bass sounds are most suitable for adjustment.Turn the volume for front speakers to the same level as usual.

4 Select the phase polarity. (M)
Use the PHASE selector to select the phase polarity.

5 Repeat steps 1 to 4 to adjust for your preference.
Once you have adjusted the subwoofer to the settings you desire, use the VOLUME control on the amplifier to adjust the volume of the subwoofer with that of the other speakers. You don't need to adjust the subwoofer settings when you change the volume level of the amplifier.

Notes
- If the sound distorts when you turn on the bass reinforcement from your amplifier (such as, D.B.F.B., GROOVE, the graphic equalizer, etc.), turn off the bass reinforcement and adjust the sound.
- Selecting NORMAL or REVERSE with the PHASE selector reverses the polarity and may provide better bass reproduction in certain listening environments (depending on the type of front speakers, the position of the subwoofer and the adjustment of the cut-off frequency). It may also change the expanse and tightness of sound, and effect the feeling of the sound field. Select the setting that provides the sound you prefer when listening in your normal listening position.

Setting the subwoofer (N)

To prevent subwoofer vibration or movement while listening, attach the supplied foot pads to the subwoofer.

Troubleshooting

If you experience any of the following difficulties while using the subwoofer, use this troubleshooting guide to help you remedy the problem. Should any problem persist, consult your nearest Sony dealer.

The Power indicator lights up in red.
- If there is no signal input for a few minutes, the POWER indicator lights up in red and the subwoofer enters power saving mode. To turn off this power saving mode, slide the POWER SAVE switch on the rear panel to OFF.

There's no sound.
- Check that this subwoofer and components are connected correctly and securely.
- Turn LEVEL clockwise to turn the volume up.
- Reset the level.

The sound has suddenly stopped.
- The speaker cords may have short-circuited. Connect the cords properly.

The sound is distorted.
- The input signal is imperfect.
- The input signal level is too high.
- Set the CUT OFF FREQ as high as possible when playing back the Dolby digital.

Severe hum or noise is heard.
- Connect the ground wire of the turntable properly.
- The contacts between the plugs of the connecting cords and the corresponding jacks have not been made properly. Connect the plugs firmly.
- The audio system is picking up some noise from a TV set. Move the audio system away from the TV set or turn the TV set off.

Specifications

AUDIO POWER SPECIFICATIONS
For the U.S.A. model
POWER OUTPUT AND TOTAL HARMONIC DISTORTION:
With 6 ohm loads, from 28 – 200 Hz; rated 60 W, minimum RMS power, with no more than 6 % total harmonic distortion from 250 milliwatts to rated output.

System
Type Active Subwoofer
Speaker unit Woofer : 25 cm dia. (10 in.), cone type
Continuous RMS output 115 W (6 ohms, 80 Hz, 10% THD)
Reproduction frequency range 28 Hz – 200 Hz
High frequency cut-off frequency 50 Hz – 200 Hz
Phase selector NORMAL, REVERSE

Inputs
Input jacks LINE IN: input pin jack
SPEAKER IN: input terminals
Output jacks SPEAKER OUT: output terminals

General
Power requirements
North American models: 120 V AC, 60 Hz
European models: 230 V AC, 50/60 Hz
Australian models: 230-240 V AC, 50/60 Hz
Power consumption 70 W
Standby: 0.5 W (in power-saving mode)
Dimensions Approx. 295 × 345 × 400 mm (11 5/8 × 13 5/8 × 15 3/4 in.) (w/h/d)
Mass Approx. 11.5 kg (25 lb 5 oz)
Supplied accessories
Foot pads (4)
Audio connecting cord (1 phono – 1 phono), 2 m (6 ft 6 1/2 in.) (1)

Design and specifications are subject to change without notice.

Français

Raccordement à un amplificateur doté d'une prise spéciale pour caisson de grave

Si votre amplificateur comporte une prise spéciale pour caisson de grave (comme une prise MONO OUT, MIX OUT, SUBWOOFER ou SUPER WOOFER), raccordez la prise LINE IN du caisson à l'une de ces prises à l'aide du câble de connexion audio fourni. (F)

Raccordements

Raccordez la prise MONO OUT de votre amplificateur à la prise LINE IN du haut-parleur à l'aide du câble de connexion audio fourni. (G)

Remarque
Si le niveau de sortie de l'amplificateur n'est pas suffisant, le son peut ne pas être assez puissant. Dans ce cas, reliez les bornes d'enceintes de l'amplificateur directement aux bornes SPEAKER IN du caisson.

Réglage du sélecteur de tension (sur les modèles pourvus d'un sélecteur de tension seulement) (H)

Assurez-vous que le sélecteur de tension sur le panneau arrière du caisson de graves est réglé sur la tension secteur locale. Si ce n'est pas le cas, réglez-le sur la position correcte avec un tournevis avant de brancher le cordon d'alimentation sur une prise secteur.

Raccordement du cordon d'alimentation secteur

- Branchez le cordon d'alimentation secteur du caisson de grave et de l'amplificateur sur une prise murale.
- Assurez-vous que le caisson de grave est hors tension avant de brancher ou de débrancher un câble d'alimentation.

Pour écouter le son (I)

1 Allumez l'amplificateur et sélectionnez la source de programme.

2 Appuyez sur POWER.
Le caisson est mis sous tension et l'indicateur POWER s'allume en vert.

3 Reproduisez la source de programme.
Ajustez VOLUME pour que le son des enceintes avant soit sans distorsion.
Si le son des enceintes avant présente une distorsion, il en sera de même du son du caisson de grave.

Mise sous et hors tension automatique — Fonction de mise sous/hors tension automatique (J)
Si le caisson de grave est sous tension (le témoin POWER est allumé en vert) et si aucun signal n'est transmis pendant quelques minutes, le témoin POWER devient rouge et le caisson de grave se met en mode d'économie d'énergie. Si, dans ce mode, un signal est entré sur le haut-parleur, le haut-parleur se met automatiquement sous tension (fonction de mise sous/hors tension automatique).
Pour désactiver cette fonction, ramenez le commutateur POWER SAVE du panneau arrière sur OFF.

Remarques
- Ne réglez jamais le timbre (BASS, TREBLE, etc.) de l'amplificateur ou la sortie de l'égaliseur sur un niveau élevé. Ne laissez jamais entrer à niveau élevé des ondes sinusoïdales de 20 Hz à 50 Hz enregistrées sur les disques d'essai vendus dans le commerce ou des sons spéciaux (son grave d'un instrument de musique électronique, bruit de surface d'une platine tourne-disque, son avec des graves excessivement accentués, etc.), car les enceintes pourraient être endommagées.
- La lecture d'un disque qui contient des graves excessivement accentués peut produire des parasites en plus du son d'origine. Dans ce cas, diminuez le niveau sonore.
- Le signal de sortie d'extrême grave (signal numérique DOLBY) du processeur de son numérique vendu séparément est réglé 10 dB plus haut par Dolby Laboratories Licensing Corporation. Pour une utilisation normale, ajustez le niveau de l'extrême grave.
- Si vous réduisez trop le volume de l'amplificateur, il se peut que la fonction de mise sous/hors tension automatique soit activée et que le caisson de grave passe en mode d'économie d'énergie.

Réglage du son

Vous pouvez ajuster le son du caisson de grave pour l'adapter au son des enceintes avant. L'amplification du grave intensifiera l'ambiance générale.

1 Ajustez la fréquence de coupure. (K)
Tournez la commande CUT OFF FREQ en fonction des fréquences que peuvent reproduire les enceintes avant.
Pour faire le réglage, tenez compte des indications suivantes :
① Haut-parleurs typiques de très petites dimensions : 4 – 5 cm (1 5/8 – 2 po.) de diamètre
② Haut-parleurs typiques de petites dimensions : 6 – 8 cm (2 3/8– 3 1/8 po.) de diamètre
③ Haut-parleurs typiques de moyennes dimensions : 9 – 15 cm (3 5/8 – 5 7/8 po.) de diamètre
④ Haut-parleurs typiques de grandes dimensions : 16 – 24 cm (6 3/8 – 9 1/2 po.) de diamètre
⑤ Haut-parleurs typiques de très grandes dimensions : plus de 25 cm (9 7/8 po.) de diamètre
Pour profiter pleinement de la fonction de convertisseur à bas niveau
Lorsque vous écoutez des signaux LFE, Dolby digital ou DTS, il est conseillé de régler la commande CUT OFF FREQ sur 200 Hz (maximum) afin d'optimiser les performances de la fonction de convertisseur à bas niveau.

2 Réglez le volume du caisson de grave. (L)
Tournez la commande LEVEL de manière à entendre un peu plus le grave. Pour augmenter le volume, tournez la commande vers la droite et pour le diminuer, tournez-la vers la gauche.

3 Reproduisez un de vos morceaux favoris.
Les voix d'hommes contiennent des sons graves qui permettent d'effectuer facilement les réglages. Réglez le volume des enceintes avant au niveau habituel.

4 Sélectionnez la polarité de la phase. (M)
Utilisez le sélecteur PHASE pour sélectionner la polarité de la phase.

5 Refaites les réglages 1 à 4 pour obtenir le son qui vous convient.
Une fois que le caisson de grave a été ajusté selon vos préférences, utilisez la commande VOLUME sur l'amplificateur pour régler le volume du caisson de grave et des autres enceintes. Vous n'avez pas besoin de changer les réglages du caisson lorsque vous réglez le volume sur l'amplificateur.

Remarques
- Si le son présente une distorsion quand le système de renforcement des graves de votre amplificateur est en service (D.B.F.B., GROOVE, égaliseur graphique, etc.) mettez-le hors service et ajustez le son.
- Une inversion de polarité avec le sélecteur PHASE (réglage sur NORMAL ou REVERSE) peut assurer une meilleure reproduction du son grave dans certaines situations d'écoute (en fonction du type d'enceintes avant, de la position du caisson de grave et du réglage de la fréquence de coupure). Elle peut aussi changer la sensation d'expansion ou de contraction du son et modifier le champ sonore. Sélectionnez le réglage qui donne le son que vous préférez par rapport à votre position d'écoute habituelle.

Installation du caisson de graves (N)

Pour éviter les vibrations ou le déplacement du caisson de graves pendant l'écoute, fixez les tampons fournis au caisson de graves.

Guide de dépannage

Si vous rencontrez une des difficultés suivantes quand vous utilisez le caisson de grave, lisez le guide de dépannage pour vous aider à trouver une solution. Si vous n'y parvenez pas, adressez-vous à votre revendeur Sony le plus proche.

L'indicateur POWER est allumé en rouge.
- Si aucun signal nest transmis pendant quelques minutes, l'indicateur POWER est allumé en rouge et le caisson de graves se met en mode économie d'énergie. Pour désactiver ce mode économie d'énergie, ramenez le commutateur POWER SAVE du panneau arrière sur OFF.

Aucun son
- Vérifiez si le caisson de grave et les différents éléments sont raccordés comme il faut.
- Tournez la commande LEVEL dans le sens des aiguilles d'une montre pour augmenter le volume.
- Réajustez le niveau.

Le son s'est soudainement arrêté.
- Il y a peut-être eu un court-circuit au niveau des cordons d'enceintes. Raccordez-les correctement.

Le son présente une distorsion.
- Le signal d'entrée n'est pas parfait.
- Le niveau du signal d'entrée est trop élevé.
- Réglez CUT OFF FREQ le plus possible lorsque vous écoutez des enregistrements en Dolby numérique.

Bourdonnement ou bruit important.
- Raccordez le fil de masse du tourne-disque correctement.
- Le contact entre les fiches des cordons de liaison et les prises correspondantes est mauvais. Insérez les fiches à fond.
- La chaîne audio capte le bruit d'un téléviseur. Éteignez la chaîne audio du téléviseur ou éteignez le téléviseur.

Spécifications

Système
Type Haut-parleur d'extrêmes-graves actif
Haut-parleurs Grave : dia. 25 cm (10 po.), à cône
Puissance de sortie RMS continue 115 W (6 ohms, 80 Hz, 10% THD)
Plage de fréquences 28 Hz à 200 Hz
Fréquence de coupure haute fréquence 50 Hz à 200 Hz
Sélecteur de phase NORMAL (phase normale), REVERSE (phase inversée)

Entrées
Prises d'entrée LINE IN : Prise à broche d'entrée
SPEAKER IN : Bornes d'entrée
Prises de sortie SPEAKER OUT : Bornes de sortie

Généralités
Alimentation
Modèles nord-américains : 120 V CA, 60 Hz
Modèles européens : 230 V CA, 50/60 Hz
Consommation 70 W
Veille : 0,5 W (en mode d'économie d'énergie)
Dimensions Approx. 295 × 345 × 400 mm (11 5/8 × 13 5/8 × 15 3/4 po.) (l/h/p)
Poids Approx. 11,5 kg (25 li. 5 on.)
Accessoires fournis
Tampons (4)
Cordons de liaison audio (1 phono á 1 phono), 2 m (6 pi 6 1/2 po.) (1)

La conception et les spécifications sont sujettes à modification sans préavis.

Español

Conexión a un amplificador que disponga de una toma especial para altavoz de subgraves activo

Si el amplificador dispone de una toma especial para altavoz de subgraves activo (como una toma MONO OUT (SALIDA MONOAURAL), MIX OUT (SALIDA DE MEZCLA), SUBWOOFER (ALTAVOZ DE SUBGRAVES ACTIVO) o SUPER WOOFER (SÚPER ALTAVOZ DE SUBGRAVES ACTIVO)), conecte la toma LINE IN (ENTRADA DE LÍNEA) del altavoz de subgraves activo a una de esas tomas mediante el cable conector de audio suministrado. (F)

Conexións

Conecte la toma MONO OUT (SALIDA MONOAURAL) del amplificador a la toma LINE IN (ENTRADA DE LÍNEA) del altavoz de graves con el cable conector de audio suministrado. (G)

Nota
Si el nivel de salida de su amplificador no es suficientemente grande, es posible que el sonido no sea suficientemente fuerte. En este caso, conecte los terminales para altavoces del amplificador directamente a los terminales SPEAKER IN (ENTRADA DE ALTAVOCES) del altavoz de graves.

Ajuste del selector de tensión (modelos equipados con selector de tensión solamente) (H)

Compruebe si el selector de tensión del panel posterior del altavoz de subgraves activo está ajustado a la tensión de la red. Si no lo está, ajuste el selector a la posición correcta utilizando un destornillador antes de conectar el cable de alimentación de ca a una toma de corriente de la red.

Conexión del cable de alimentación de ca

- Conecte el cable de alimentación de ca del altavoz de subgraves activo de su amplificador a una toma de la red.
- Compruebe que la alimentación del altavoz de subgraves activo está desactivada antes de enchufar o desenchufar cualquier cable de alimentación.

Escucha de sonido (I)

1 Conecte la alimentación del amplificador y seleccione la fuente de programa.

2 Presione POWER (ENCENDIDO).
Se conectará la alimentación del altavoz de graves, y el indicador POWER (ENCENDIDO) se encenderá en verde.

3 Ponga en reproducción la fuente de programa.
Ajuste VOLUME (VOLUMEN) de forma que el sonido de los altavoces delanteros no se oiga distorsionado.
Si está distorsionado, también se distorsionará el sonido del altavoz de graves.

Para activar y desactivar la alimentación automáticamente — Función de activación/desactivación automática (J)
Cuando el altavoz de subgraves activo esté encendido (es decir, cuando el indicador POWER (ENCENDIDO) esté iluminado en verde) y no haya entrada de señal durante algunos minutos, dicho indicador POWER (ENCENDIDO) cambiará a rojo, y el altavoz de subgraves activo entrará en el modo de ahorro de energía. Si el altavoz de subgraves activo recibe alguna señal mientras se encuentra en este modo, dicho altavoz se activará automáticamente (función de activación/desactivación automática).
Para desactivar esta función, deslice el interruptor POWER SAVE (AHORRO DE ENERGÍA) del panel trasero hasta OFF (APAGADO).

Notas
- No ajuste nunca los controles de tono (BASS (BAJOS), TREBLE (AGUDOS), etc.) del amplificador ni del ecualizador a un nivel alto, ni aplique las ondas senoidales de 20 a 50 Hz grabadas en un disco de prueba, ni sonido especial (sonido de graves de un instrumento musical electrónico, ruido de chasquido de un giradiscos analógico, sonido con graves anormalmente reforzados, etc.) de alto nivel continuamente a esta unidad. Estas acciones podrían dañar los altavoces. Cuando reproduzca un disco que contenga graves anormalmente reforzados, puede salir ruido además del sonido original. En tal caso, reduzca el nivel del sonido.
- Las señales de salida del altavoz de subgraves activo (señal digital DOLBY) del procesador perimpetrico digital normalmente están ajustadas a 10 dB más que el valor de Dolby Labaratories Licensing Corporation. Normalmente ajuste el nivel del altavoz de subgraves.
- Si reduce demasiado el volumen del amplificador, es posible que se active la función de conexión/desconexión automática de la alimentación, haciendo que el altavoz de subgraves activo entre en el modo de ahorro de energía.

Ajuste del sonido

Usted podrá ajustar el sonido del altavoz de subgraves activo de acuerdo con el sonido de sus altavoces delanteros. El refuerzo del sonido de graves le ofrecerá una mayor sensación de atmósfera.

1 Ajuste la frecuencia de corte (K)
Gire el control CUT OFF FREQ (FRECUENCIA DE CORTE) dependiendo de las frecuencias de reproducción de sus altavoces delanteros.
Para ajustar, refiérase a lo siguiente.
① Altavoces típicos de tamaño muy pequeño: 4 – 5 cm de diámetro.
② Altavoces típicos de tamaño pequeño:
6 – 8 cm de diámetro.
③ Altavoces típicos de tamaño mediano: 9 – 15 cm de diámetro.
④ Altavoces típicos de tamaño grande: 16 – 24 cm de diámetro.
⑤ Altavoces típicos de tamaño muy grande:
más 25 cm de diámetro.
Para sacar el máximo partido de la función del convertidor de bajo nivel
Cuando reproduzca el sonido de las señales "LFE", Dolby digital o "DTS", se recomienda que ajuste el control CUT OFF FREQ (FRECUENCIA DE CORTE) en 200 Hz (valor máximo) para obtener el mejor rendimiento de esta función.

2 Ajuste el nivel de volumen del altavoz de subgraves activo.(L)
Gire el control LEVEL (NIVEL) de forma que oiga el sonido de graves un poco mejor que antes. Para aumentar el volumen, gire el control hacia la derecha. Para reducir el volumen, gire el control hacia la izquierda.

3 Ponga en reproducción su canción o película favorita.
Para el ajuste será más adecuada una canción de un vocalista masculino que contenga sonidos graves. Ajuste el volumen de los altavoces delanteros al nivel normal.

4 Seleccione la polaridad de fase. (M)
Utilice el selector PHASE (FASE) para seleccionar la polaridad de fase.

5 Repita los pasos 1 a 4 para ajustar el sonido a su gusto.
Después de haber ajustado el altavoz de subgraves activo a su gusto, utilice el control VOLUME (VOLUMEN) del amplificador para ajustar el volumen del altavoz de subgraves activo de acuerdo con el de los demás altavoces. Usted no necesitará ajustar el altavoz de graves cuando cambie el nivel del volumen del amplificador.

Notas
- Si el sonido se distorsiona después de haber activado el refuerzo de graves desde su amplificador (con "D.B.F.B.", "GROOVE", el ecualizador gráfico, etc.), desactive tal refuerzo y ajuste el sonido.
- Al elegir NORMAL (normal) o REVERSE (INVERSA) con el selector PHASE (FASE), se invertirá la polaridad y puede proporcionar una reproducción de graves mejor en ciertos ambientes de escucha (dependiendo del tipo de altavoces delanteros, la posición del altavoz de graves y del ajuste de la frecuencia de corte). También puede cambiar la amplitud y la consistencia del sonido, e influir en la sensación del campo acústico. Seleccione el ajuste que ofrezca el sonido preferido cuando escuche desde su posición de escucha normal.

Ajuste del altavoz de subgraves activo (N)

Para evitar la vibración o el movimiento del altavoz de subgraves activo durante la escucha, fije las almohadillas amortiguadoras a dicho altavoz.

Solución de problemas

Si experimenta cualquiera de las dificultades siguientes cuando utilice el altavoz de subgraves activo, use esta guía como ayuda para resolver el problema. Si el problema persiste, consulte a su proveedor Sony más cercano.

El indicador POWER (ENCENDIDO) se ilumina de color rojo.
- Cuando no hay entrada de señal durante algunos minutos, el indicador POWER (ENCENDIDO) se ilumina de color rojo y el altavoz de subgraves activo entra en el modo de ahorro de energía. Para desactivar esta función, deslice el interruptor POWER SAVE (AHORRO DE ENERGÍA) del panel trasero hasta la posición OFF (APAGADO).

No hay sonido.
- Compruebe si el altavoz de subgraves activo y los componentes están instalados correctamente y con seguridad.
- Gire LEVEL (NIVEL) hacia la derecha para aumentar el volumen.
- Reajuste el nivel.

El sonido se paró repentinamente.
- Los cables del altavoz pueden haberse cortocircuitado. Conecte los cables adecuadamente.

El sonido se oye distorsionado.
- La señal de entrada es imperfecta.
- El nivel de la señal de entrada es demasiado alto.
- Ajuste CUT OFF FREQ (FRECUENCIA DE CORTE) a 200 Hz (MAX) cuando reproduzca con digital Dolby.

Se oye mucho zumbido o ruido.
- Conecte adecuadamente el conductor de puesta a tierra del tornamesa.
- El contacto entre las clavijas de los cables conectores y las tomas correspondientes no es correcto. Conecte firmemente las clavijas.
- El sistema de audio está captando cierto ruido de un televisor. Aleje el sistema de audio del televisor o desconecte la alimentación de éste.

Especificaciones

Sistema
Tipo Altavoz de subgraves activo
Altavoces De graves: 25 cm de diámetro., tipo cono
Salida de potencia RMS (Raíz Media Cuadrática) continua 115 W (6 Ohms 80 Hz 10% de distorsión armónica total)
Gama de frecuencias de reproducción 28 Hz – 200 Hz
Gama de corte de altas frecuencias 50 Hz – 200 Hz
Selector de fase NORMAL (normal), REVERSE (inversa)

Entradas
Tomas de entrada LINE IN (ENTRADA DE LÍNEA): Toma fono de entrada
SPEAKER IN (ENTRADA DE ALTAVOCES): Terminales de entrada
Tomas de salida SPEAKER OUT (SALIDA DE ALTAVOCES): Terminales de salida

Generales
Requisitos de alimentación
Modelos para Norteamérica: ca de 120 V 60 Hz
Modelos para Europa: ca de 230 V 50/60 Hz
Consumo de potencia 70 W
Pausa: 0,5 W (en modo de ahorro de energía)
Dimensiones Aprox. 295 × 345 × 400 mm (An. x Alt. x Prof.)
Peso Aprox. 11,5 kg
Accesorios suministrados
Almohadillas (4)
Cable conector de audio
(1 clavija fono – 1 clavija fono), 2 m (1)

Diseño y especificaciones sujetos a cambio sin previo aviso.

SONY

Stereo Receiver

Operating Instructions

Connection and Preparation

Playback

Tuner

Menu/Other Functions

Troubleshooting/
Specifications

For the customers in the USA

Owner's Record

The model and serial numbers are located on the rear of the receiver. Record the serial number in the space provided below. Refer to these numbers whenever you call upon your Sony dealer regarding this product.

Model No. STR-DH190

Serial No. _____

WARNING

To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

To reduce the risk of fire, do not cover the ventilation opening of the appliance with newspapers, tablecloths, curtains, etc.
Do not expose the appliance to naked flame sources (for example, lighted candles).

To reduce the risk of fire or electric shock, do not expose this appliance to dripping or splashing, and do not place objects filled with liquids, such as vases, on the appliance.

Do not install the appliance in a confined space, such as a bookcase or built-in cabinet.

As the main plug is used to disconnect the unit from the mains, connect the unit to an easily accessible AC outlet. Should you notice an abnormality in the unit, disconnect the main plug from the AC outlet immediately.

The unit is not disconnected from the mains as long as it is connected to the AC outlet, even if the unit itself has been turned off.

CAUTION

Risk of explosion if the battery is replaced by an incorrect type.
Do not expose batteries or appliances with battery-installed to excessive heat, such as sunshine and fire.



CAUTION
HOT SURFACE
To reduce the risk of thermal burn hazard, do not touch the hot surface where this symbol is displayed.

FOR UNITED STATES CUSTOMERS. NOT APPLICABLE IN CANADA, INCLUDING IN THE PROVINCE OF QUEBEC.

POUR LES CONSOMMATEURS AUX ÉTATS-UNIS. NON APPLICABLE AU CANADA, Y COMPRIS LA PROVINCE DE QUÉBEC.

For the customers in the USA



This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Important Safety Instructions

1) Read these instructions.
2) Keep these instructions.
3) Heed all warnings.
4) Follow all instructions.
5) Do not use this apparatus near water.
6) Clean only with dry cloth.
7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11) Only use attachments/accessories specified by the manufacturer.

12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.



13) Unplug this apparatus during lightning storms or when unused for long periods of time.
14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

NOTE:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

CAUTION

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

Properly shielded and grounded cables and connectors must be used for connection to host computers and/or peripherals in order to meet FCC emission limits.

To reduce the risk of electric shock, the speaker cable should be connected to the apparatus and the speakers in accordance with the following instructions.

1) Disconnect the AC power cord from the MAINS.
2) Strip 10 to 15 mm of the wire insulation of the speaker cable.
3) Connect the speaker cable to the apparatus and the speakers carefully so as not to touch the core of speaker cable by hand. Also disconnect the AC power cord from the MAINS before disconnecting the speaker cable from the apparatus and the speakers.

This equipment must not be co-located or operated in conjunction with any other antenna or transmitter.

For the customers in Canada

Properly shielded and grounded cables and connectors must be used for connection to host computers and/or peripherals.

This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions:
(1) This device may not cause interference; and
(2) This device must accept any interference, including interference that may cause undesired operation of the device.

For the customers in the USA and Canada

This equipment complies with FCC/IC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines and RSS-102 of the IC radio frequency (RF) Exposure rules. This equipment should be installed and operated keeping the radiator at least 20 cm or more away from person's body.

For the customers in Australia



Disposal of old electrical & electronic equipment (applicable in the European Union and other countries with separate collection systems)

For the customers in Europe



Disposal of waste batteries and electrical and electronic equipment (applicable in the European Union and other countries with separate collection systems)

This symbol on the product, the battery or on the packaging indicates that the product and the battery shall not be treated as household waste. On certain batteries this symbol might be used in combination with a chemical symbol. The chemical symbol for lead (Pb) is added if the battery contains more than 0.004% lead. By ensuring that these products and batteries are disposed of correctly, you will help to prevent potentially negative consequences for the environment and human health which could be caused by inappropriate waste handling. The recycling of the materials will help to conserve natural resources. In case of products that for safety, performance or data integrity reasons require a permanent connection with an incorporated battery, this battery should be replaced by qualified service staff only. To ensure that the battery and the electrical and electronic equipment will be treated properly, hand over these products at end-of-life to the appropriate collection point for the recycling of electrical and electronic equipment. For all other batteries, please view the section on how to remove the battery from the product safely. Hand the battery over to the appropriate collection point for the recycling of waste batteries. For more detailed information about recycling of this product or battery, please contact your local Civic Office, your household waste disposal service or the shop where you purchased the product or battery.

Notice for customers: the following information is only applicable to equipment sold in countries applying EU directives

This product has been manufactured by or on behalf of Sony Corporation.
EU Importer: Sony Europe Limited.
Inquiries to the EU Importer or related to product compliance in Europe should be sent to the manufacturer's authorized representative, Sony Belgium, bijkantoor van Sony Europe Limited, Da Vincilaan 7-D1, 1935 Zaventem, Belgium.

Hereby, Sony Corporation declares that this equipment is in compliance with Directive 2014/53/EU.
The full text of the EU declaration of conformity is available at the following internet address:
http://www.compliance.sony.de/

CE

This radio equipment is intended to be used with the approved version(s) of software that are indicated in the EU Declaration of Conformity. The software loaded on this radio equipment is verified to comply with the essential requirements of the Directive 2014/53/EU.
You can check the software version by pressing AMP MENU, then select "VERSION" using ↑/↓ and ⊕.

This Stereo Receiver is intended for sound playback from connected devices, music streaming from a BLUETOOTH® device, and FM tuner.

This equipment has been tested and found to comply with the limits set out in the EMC regulation using a connection cable shorter than 3 meters.

Excessive sound pressure from earphones and headphones can cause hearing loss.

Table of Contents

Supplied Items 6
Main Features of the Receiver 6
Parts and Controls 7

Connection and Preparation

1: Preparing Necessary Items 12
2: Setting/Connecting Speakers 13
3: Connecting Audio-Visual Devices 15
4: Connecting the FM Antenna (aerial) 18
5: Turning on the Receiver 18
6: Setting the Speakers 19

Playback

Playing Back Sound on Audio-Visual Devices 21
Playing Back Sound on a BLUETOOTH Device 21

Tuner

Tuning to a FM Station Automatically (Automatic Tuning) 24
Presetting FM Radio Stations (Preset Memory) 25
Receiving RDS Broadcasts (European and Asia-Pacific models only) 26

Menu/Other Functions

Using the Menu 27
Enjoying High-fidelity Sound (Pure Direct) 29
Changing the Name for Each Input and Preset Station (NAME IN) 29
Viewing Information on the Display Panel 30
Recording Using the Receiver 31
Reverting to the Factory Default Settings 31
Saving Power 32

Troubleshooting/ Specifications

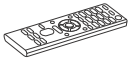
Troubleshooting 33
Precautions 36
Specifications 37
On BLUETOOTH Communication 38
On Copyrights 39
Index 40

Supplied Items

- Receiver (1)



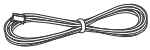
- Remote control (1)



- R03 (size AAA) batteries (2)



- FM wire antenna (aerial) (1)



- Startup Guide (1)



Explains how to connect the stereo speaker system, connect devices and listen to connected devices.

- Operating Instructions (this booklet) (1)



About manuals provided for this product

- Some illustrations are presented as conceptual drawings, and may be different from the actual products.
- The manuals provided for this product mainly describe the procedures for using the remote control. You can also use the controls on the receiver if they have the same or similar names as those on the remote control.

Main Features of the Receiver

Compatible with BLUETOOTH® wireless technology

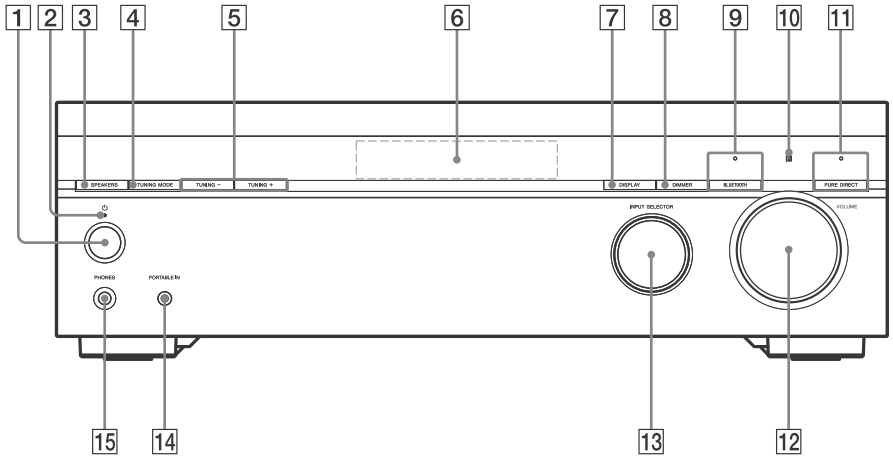
- Connect a WALKMAN®, smartphone, or tablet to the receiver via the BLUETOOTH function to play music content on those devices wirelessly (page 21).
- You can turn on this receiver from a paired BLUETOOTH device even when the receiver is in standby mode (page 27).

Equipped with PHONO IN jacks

You can enjoy high quality sound of a turntable by connecting it to the receiver (page 15).

Parts and Controls

Receiver front panel



1 ⏻ (power)
Turns the receiver on or sets it to the standby mode.

2 Power indicator
- **Green**: The receiver is turned on.
- **Red**: The receiver is in standby mode, and you have set "BT STBY" to "STBY ON".*
- **The indicator goes off**: The receiver is in standby mode, and you have set "BT STBY" to "STBY OFF".

* The indicator lights up in red only if a device has been paired with the receiver and "BT POWER" is set to "BT ON". If no devices are paired with the receiver or "BT POWER" is set to "BT OFF", the indicator turns off.

3 SPEAKERS (page 19)
Switches the speaker system.

Note

No sound is output from the speakers when you select "OFF SPEAKERS". Be sure to select setting other than "OFF SPEAKERS".

4 TUNING MODE (page 24, 25)

5 TUNING +/– (page 24, 25)

6 Display panel (page 8)

7 DISPLAY (page 30)

8 DIMMER
Adjusts the brightness of the display panel.

9 BLUETOOTH
Switches the input of the receiver to "BLUETOOTH" and automatically connects to the last connected device. Sets the receiver to pairing mode when there is no pairing information on the receiver.
Disconnects the BLUETOOTH device when the receiver is connected to a BLUETOOTH device.

BLUETOOTH indicator (page 21)

10 Remote control sensor
Receives signals from remote control.

11 PURE DIRECT (page 29)
The indicator above the button lights up when the Pure Direct function is activated.

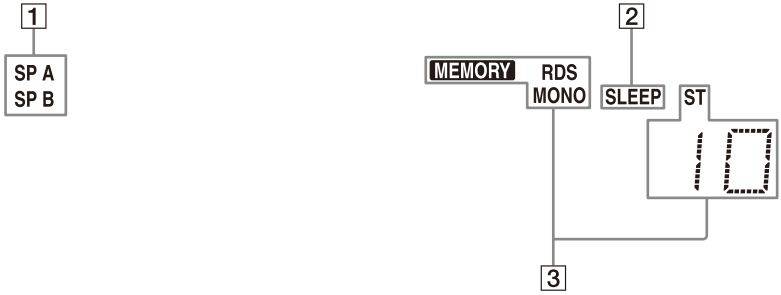
12 VOLUME (page 21)

13 INPUT SELECTOR
Selects the input channel connected to the device you want to use.

14 PORTABLE IN jack (page 16)

15 PHONES jack
Connect headphones here.

Indicators on the display panel



1 Speaker system indicator (page 19)

Note

These indicators do not light up if the speaker output is turned off or if headphones are connected.

2 SLEEP
Lights up when the sleep timer is activated.

3 Tuning indicator
Lights up when the receiver tunes to a radio station.

MEMORY
A memory function, such as Preset Memory (page 25), etc., is activated.

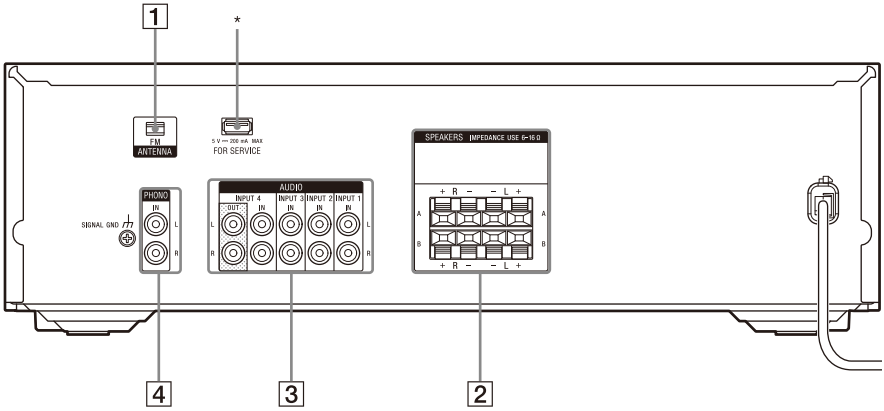
RDS (European and Asia-Pacific models only)
Tuned to a station with RDS services.

MONO
Monaural broadcast

ST
FM stereo broadcast

10
Preset station number (The number will change according to the preset station you select.)

Receiver rear panel



1 FM ANTENNA terminal (page 18)

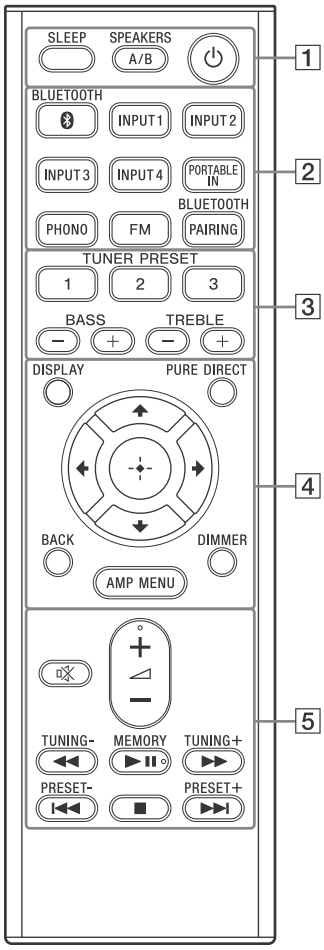
2 SPEAKERS terminals (page 13, 14)

3 AUDIO IN/OUT jacks (page 15, 17)
Audio input and output jacks.

4 PHONO IN jacks (page 15)
For connecting a turntable.

* For service purpose only.

Remote control



1 ⏻ (power) (page 18)

Turns the receiver on or sets it to the standby mode.

SLEEP

Sets the receiver to turn off automatically at a specified time. Each time you press this button, the display changes cyclically as follows.

0-30-00 → 1-00-00 → 1-30-00 → 2-00-00 → OFF

When Sleep Timer is being used, "SLEEP" indicator lights up on the display panel.

Tip

- To check the remaining time before the receiver turns off, press SLEEP. The remaining time appears on the display panel.
- The Sleep Timer will be canceled when you perform the following.
  - Press SLEEP again.
  - Press ⏻ (power).

SPEAKERS A/B (page 19)

Switches the speaker system. Each time you press this button, the display changes cyclically as follows.

SPK A → SPK B → SPK A+B → OFF SPEAKERS*

* "OFF" and "SPEAKERS" appears alternately on the display panel.

Note

No sound is output from the speakers when you select "OFF SPEAKERS". Be sure to select setting other than "OFF SPEAKERS".

2 Input buttons

BLUETOOTH, INPUT 1, INPUT 2, INPUT 3, INPUT 4, PORTABLE IN, PHONO, FM

Selects the input channel connected to the device you want to use. When you press any of the input buttons, the receiver turns on.

Note

When you press BLUETOOTH, the receiver turns on only if "BT POWER" is set to "BT ON" (page 28).

BLUETOOTH PAIRING (page 22)
Switches the input of the receiver to "BLUETOOTH" and sets the receiver to the pairing mode.

3 TUNER PRESET 1, 2, 3 (page 25)
Selects preset station 1, 2, or 3. When you press any of these buttons, the receiver turns on and tunes to the selected preset station.

BASS +/– (page 20)

TREBLE +/– (page 20)

4 DISPLAY (page 30)

PURE DIRECT (page 29)
Activates the Pure Direct function which allows you to enjoy higher-fidelity sound from all inputs.

⊕ (enter), ↑/↓/←/→
Press ↑, ↓, ←, → to select the menu items. Then, press ⊕ to enter the selection.

BACK
Returns to the previous menu.

DIMMER
Adjusts the brightness of the display panel.

AMP MENU
Displays the menu on the display panel to operate the receiver.

5 (muting)
Turns off the sound temporarily. Press the button again to restore the sound.

(volume) +*/–
Adjusts the volume level of all speakers at the same time.

◀◀/▶▶ (fast rewind/fast forward), ▶II (play/pause)*, I◀◀ /▶▶I (previous/next), ■ (stop)
Search, play, pause, skip, stop operation.

TUNING +/–
Scans a FM station.

PRESET +/–
Selects preset stations or channels.

MEMORY*
Stores a station that you are receiving as a preset station.

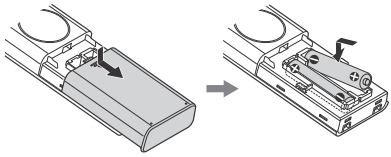
* The + , ▶II, and MEMORY buttons have tactile dots. Use the tactile dots as reference when operating the receiver.

Note

- The above explanation is intended to serve as examples.
- Depending on the model of your connected device, some functions explained in this section may not work with the supplied remote control.

To insert batteries into the remote control

Insert two R03 (size AAA) batteries (supplied) in the remote control. Make sure that the + and – ends are in the correct position when installing batteries.



Note

- Do not leave the remote control in an extremely hot or humid place.
- Do not use a new battery with an old one.
- Do not mix manganese batteries and other kinds of batteries.
- We recommend that you use AAA manganese batteries.
- Do not expose the remote control sensor on the front panel of the receiver to direct sunlight or lights. Doing so may cause a malfunction.
- If you do not intend to use the remote control for an extended period of time, remove the batteries to avoid possible damage from battery leakage and corrosion.
- When the receiver no longer responds to the remote control, replace both of the batteries with new ones.

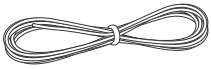
1: Preparing Necessary Items

Supplied items

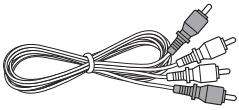
Make sure that you have all the items listed in “Supplied Items” (page 6).

Cables required for connection (not supplied)

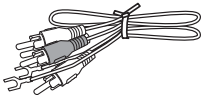
ⓐ Speaker cables



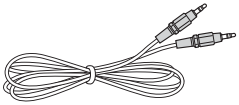
ⓑ Stereo audio cables*



ⓒ PHONO cables with grounding wires*



ⓓ 3.5 mm Stereo audio cable*



* Not required depending on the connection configuration.

2: Setting/Connecting Speakers

Set up and connect the speakers according to the number of speakers that you are using. This manual describes the installation, connections, and setting procedures using the stereo speaker system with A/B speakers as an example.

Note

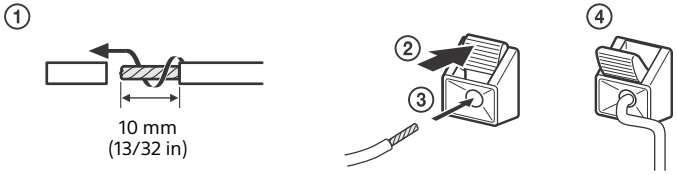
- Connect speakers with a nominal impedance of 6 ohms to 16 ohms.
- When you connect all the speakers with a nominal impedance of 8 ohms or higher, set "SP IMP." to "8 OHM". In other connections, set it to "6 OHM". For details, see "6: Setting the Speakers" (page 19).
- Before connecting cables, be sure to disconnect the AC power cord (mains lead).
- Before connecting the AC power cord (mains lead), make sure that metallic wires of the speaker cables are not touching each other between the SPEAKERS terminals or on the receiver rear panel. If the wires are touching, it may result in damage to the amplifier circuit.

How to connect speaker cables

Connect speaker cables with the polarities + (red)/– (black) matched between the receiver and the speakers as illustrated below.

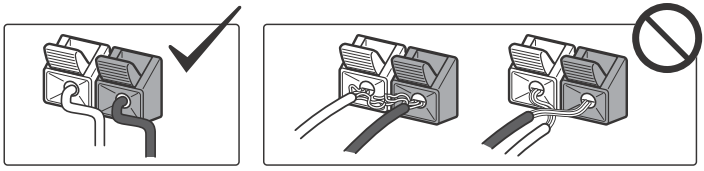


Strip the jacket to 10 mm (13/32 in) at each end of the speaker cables, and then tightly twist the speaker wire strands. Insert the stripped ends of the cables into the terminals as illustrated below.



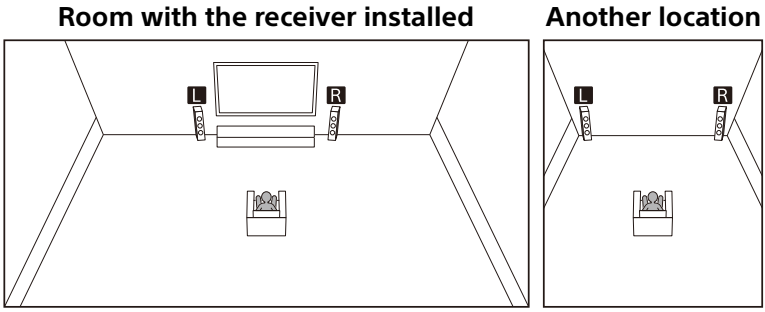
Note

- Be sure not remove too much of the speaker cable sleeves, so as to prevent the wires of the speaker cables from touching each other.
- Improper connection may result in fatal damage to the receiver.

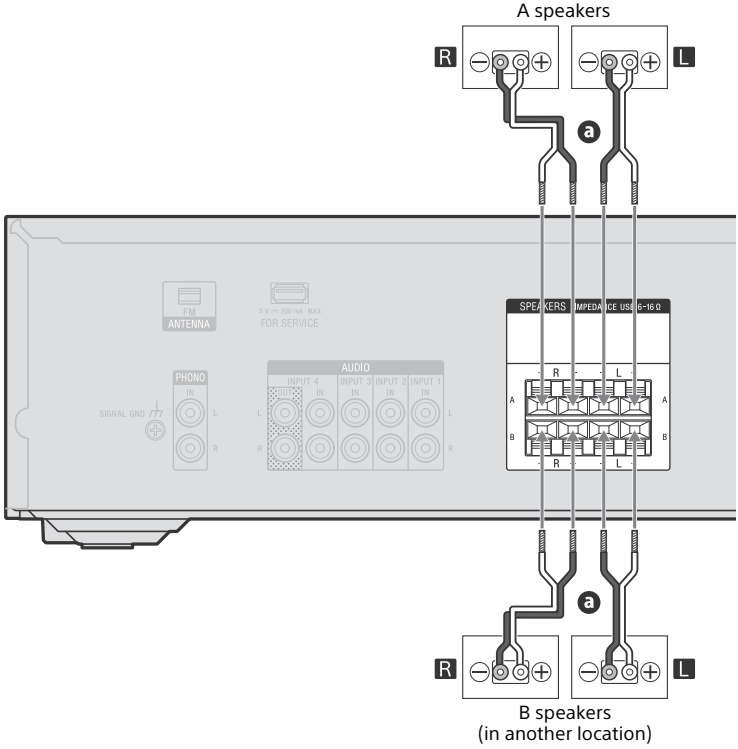


Stereo speaker system with A/B speakers

You can also enjoy the audio in another location by connecting additional B speakers.



L : Left speaker
R : Right speaker



a Speaker cable (not supplied)

Note

If you connect additional B speakers, you can select the speakers you want to use with the SPEAKERS A/B button (page 19). No sound is output from the speakers when you select “OFF SPEAKERS”. Be sure to select setting other than “OFF SPEAKERS”.

3: Connecting Audio-Visual Devices

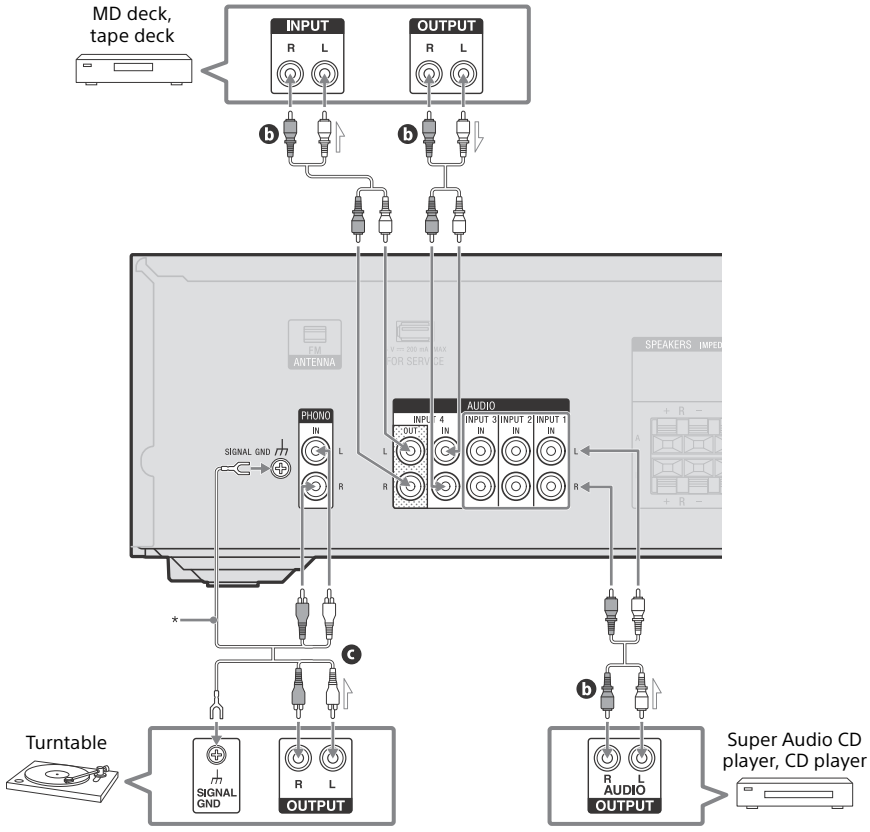
Note

Be sure to make cable connections before connecting the AC power cord (mains lead).

Tip

- You can connect devices other than those indicated below to the AUDIO IN/OUT jacks.
- You can rename each input so that the name can be displayed on the display panel of the receiver (page 29).

Connecting audio devices

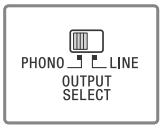


b Stereo audio cable (not supplied)
c PHONO cables with grounding wires (not supplied)

* If your turntable has a grounding terminal, connect the grounding wire.

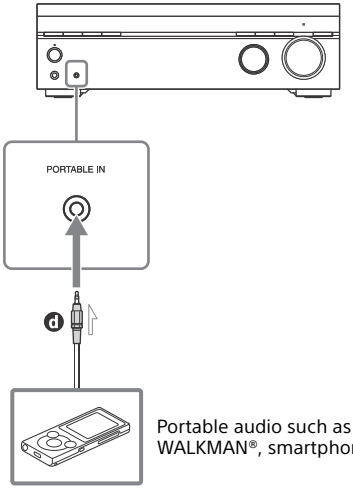
Note

- When you connect a turntable with a PHONO/LINE switch, be sure to set the PHONO/LINE switch to PHONO.



- This receiver equipped with Phono Equalizer amplifier to meet MM type PHONO cartridges. MM type cartridge used on turntable have a variation of audio output level. In case MM type cartridge output is small, you can use phono volume setting to increase the level (page 28).
- To record the sound from the receiver, you must connect your device to the AUDIO INPUT 4 OUT jacks.

Connecting a portable audio device



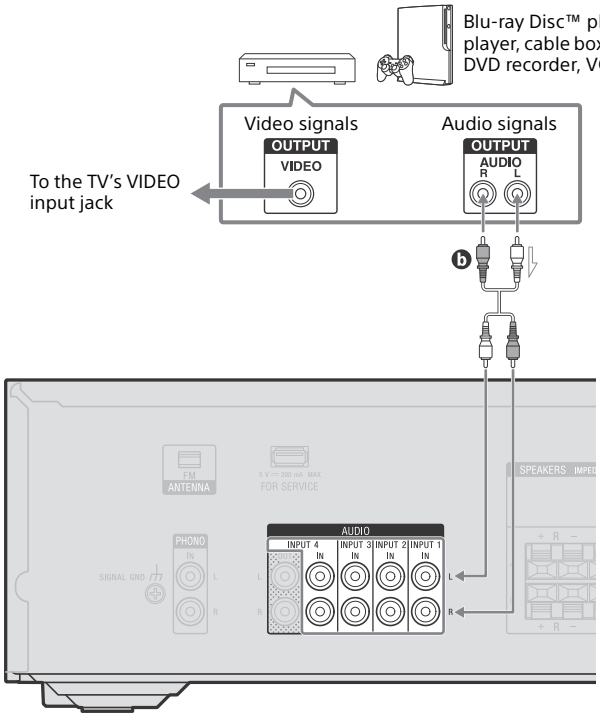
Portable audio such as WALKMAN®, smartphone

d 3.5 mm Stereo audio cable (not supplied)

Note

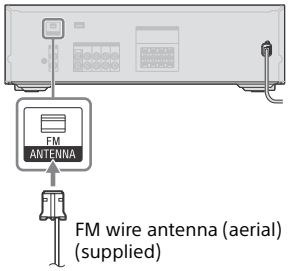
- When listening to a device connected to the PORTABLE IN jack, sound may be distorted or interrupted. This is not a malfunction and will depend on the connected device.
- If the sound from the device connected to the PORTABLE IN jack is very soft, you may increase the volume level. However, before you switch to other input, be sure to reduce the volume level to avoid damaging your speaker.

Connecting visual devices



b Stereo audio cable (not supplied)

4: Connecting the FM Antenna (aerial)

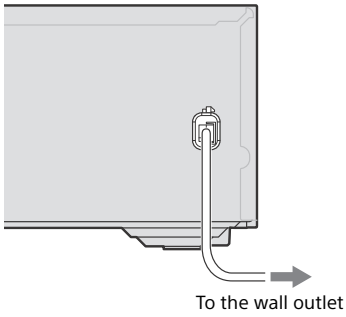


Note

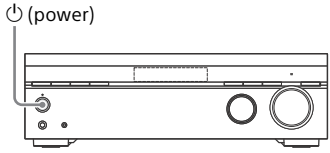
- Be sure to fully extend the FM wire antenna (aerial).
- After connecting the FM wire antenna (aerial), keep it as horizontal as possible.

5: Turning on the Receiver

1 Connect the AC power cord (mains lead) to a wall outlet.



2 Press ⏻ (power) to turn on the receiver.



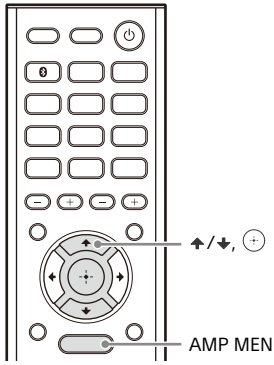
Tip

You can also turn on the receiver using ⏻ (power) on the remote control. To turn off the receiver, press ⏻ (power) again.

6: Setting the Speakers

Setting the speaker impedance

Set the appropriate speaker impedance for the speakers you are using.



1 Press AMP MENU.

The menu is displayed on the display panel.

2 Press ↑/↓ to select "SP IMP.", and then press ⊕.

3 Press ↑/↓ to select the appropriate speaker impedance, and then press ⊕.

"8 OHM": The default setting. Select this when you connect all speakers with a nominal impedance of 8 ohms or higher.
"6 OHM": Select this when you connect all speakers with a nominal impedance of lower than 8 ohms.

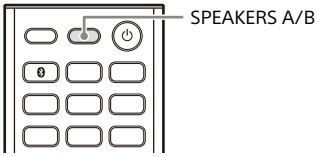
Note

- If you are not sure of the impedances of the speakers, refer to the operating instructions supplied with your speakers. (This information is often on the back of the speaker.)
- When you connect speakers to both the SPEAKERS A and B terminals, connect the speakers with a nominal impedance of 12 ohms or higher.
- When you connect speakers to either SPEAKERS A or B terminals, connect the speakers with a nominal impedance of 8 ohms or 6 ohms.

Switching the speaker system

When two speaker systems are connected to the receiver, you can select the speaker system you want to operate.

Press SPEAKERS A/B repeatedly to select the speaker system you want to operate.



Each time you press this button, the display changes cyclically.
"SPK A": Speakers connected to the SPEAKERS A terminals.
"SPK B": Speakers connected to the SPEAKERS B terminals.
"SPK A+B": Speakers connected to both the SPEAKERS A and B terminals (parallel connection).
"OFF SPEAKERS": "OFF" and "SPEAKERS" appears alternately on the display panel. No audio signals are output from any speaker terminals.

Note

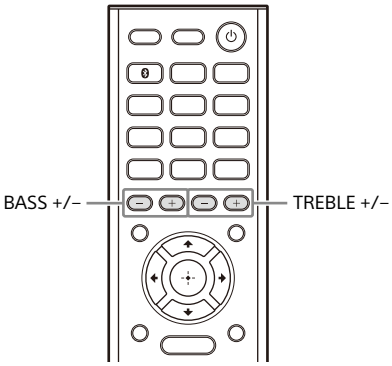
This setting is not available when headphones are connected.

Tip

- The "SP A" or/and "SP B" indicators on the display panel lights up to show which set of terminals are selected. "SP A" and "SP B" light off when the speaker system is turned off.
- You can also use SPEAKERS button on the receiver to select the speaker system.

Adjusting the tone

You can adjust the tonal balance of the speakers.

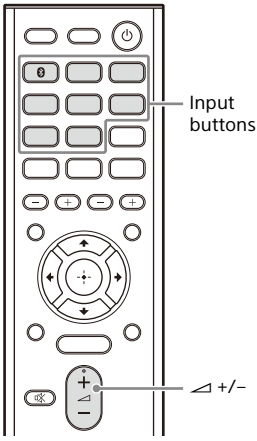


Press TREBLE + or TREBLE – repeatedly to adjust the treble level.

Press BASS + or BASS – repeatedly to adjust the bass level.

You can adjust from –10 dB to +10 dB in 1 dB step.
The initial setting is 0 dB.

Playing Back Sound on Audio-Visual Devices



1 Press the input button which corresponds to the device you want to play.

The selected input appears on the display panel.

2 Start playback on the connected device.

3 Press +/– to adjust the volume.

Note

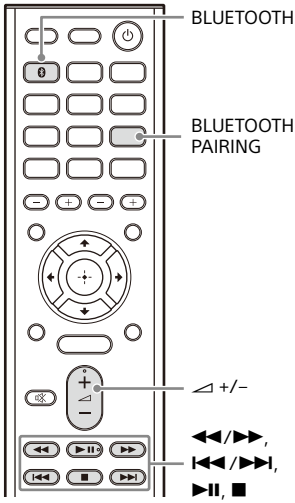
Before you turn off the receiver, be sure to turn down the volume level to avoid damaging your speakers the next time you turn on the receiver.

Tip

- To turn the volume up or down quickly
  - Turn the VOLUME knob quickly.
  - Press and hold one of the +/– buttons.
- To make fine adjustments
  - Turn the VOLUME knob slowly.
  - Press one of the +/– buttons and release it immediately.

Playing Back Sound on a BLUETOOTH Device

You can receive audio content from a WALKMAN®, smartphone or tablet that has a BLUETOOTH function and listen to it via this receiver.



About the BLUETOOTH indicator

The BLUETOOTH indicator above the BLUETOOTH button on the receiver lights up or flashes in blue to show the BLUETOOTH status.

Receiver status	Indicator status
The receiver is searching for a BLUETOOTH device to connect	Flashes slowly
BLUETOOTH pairing	Flashes quickly
BLUETOOTH connection is established	Lights up

Registering BLUETOOTH devices to the receiver (Pairing operation)

Pairing is an operation in which BLUETOOTH devices are registered to each other before connection. Follow the steps below to pair the BLUETOOTH device and the receiver. Once the BLUETOOTH devices are paired, there is no need to pair them again. When the pairing is complete, proceed to "Listening to sound on a paired BLUETOOTH device" (page 22).

1 Place the BLUETOOTH device within 1 meter (3.3 feet) of the receiver.

2 Press BLUETOOTH PAIRING.

"PAIRING" flashes on the display panel. Perform step 3 within five minutes, otherwise pairing will be canceled. If pairing is canceled, repeat this step.

3 Perform pairing on the BLUETOOTH device to detect the receiver.

For details, refer to the operating instructions of your BLUETOOTH device.
A list of detected devices may appear on the BLUETOOTH device display depending on the type of BLUETOOTH device. The receiver is displayed as "STR-DH190".

4 Select "STR-DH190" on the BLUETOOTH device display.

If "STR-DH190" is not displayed, repeat this process from step 1.
When the BLUETOOTH connection is established, the paired device name appears on the display panel.

5 Start playback on the BLUETOOTH device.

6 Adjust the volume.

Adjust the volume of the BLUETOOTH device first. If the volume level is still too low, press ◿ +/– to adjust the volume level of the receiver.

To cancel pairing operation

Pairing operation will be canceled when you switch the input.

Note

- Some applications of BLUETOOTH device cannot be controlled from the receiver.
- If a passkey is required on the display of the BLUETOOTH device in step 4, enter "0000". The passkey may be called "Passcode", "PIN code", "PIN number" or "Password".
- You can pair up to ten BLUETOOTH devices. If an 11th BLUETOOTH device is paired, the least recently connected device will be replaced by the new one.

Tip

- You can operate a BLUETOOTH device using ◀◀/▶▶ (fast rewind/fast forward), ⏮/⏭ (previous/next), ▶II (play/pause), ■ (stop).
- If you press ▶II in "BLUETOOTH" input when no BLUETOOTH device is connected, the receiver automatically connects to the last connected BLUETOOTH device.

Listening to sound on a paired BLUETOOTH device

1 Turn on the BLUETOOTH function on the BLUETOOTH device.

2 Press BLUETOOTH.

The receiver connects to the last connected BLUETOOTH device and the device name appears on the display panel.

3 Start playback on the BLUETOOTH device.

4 Adjust the volume.

Adjust the volume of the BLUETOOTH device first. If the volume level is still too low, press ◿ +/– to adjust the volume level of the receiver.

To disconnect a BLUETOOTH connection

The BLUETOOTH connection will be disconnected when you perform either of the following operations:

- Switch the input.
- Turn off the BLUETOOTH function on the BLUETOOTH device.
- Press BLUETOOTH PAIRING.
- Turn off the receiver or the BLUETOOTH device.
- Press BLUETOOTH on the receiver again.

Note

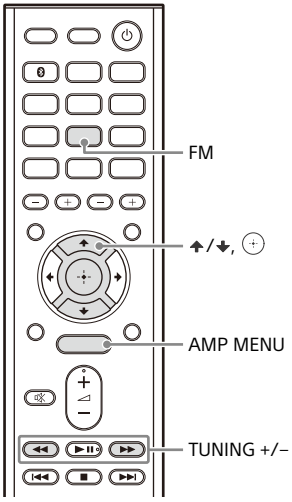
- The functions may differ depending on the specifications of the BLUETOOTH device.
- The audio playback on this receiver may be delayed from that on the BLUETOOTH device because of the characteristics of the BLUETOOTH wireless technology.

Tip

- You can enable or disable AAC codec reception from BLUETOOTH device (page 27).
- You can connect to the receiver from a paired BLUETOOTH device when “BT POWER” is set to “BT ON” (page 28).

Tuning to a FM Station Automatically (Automatic Tuning)

You can listen to FM broadcasts through the built-in tuner. Before operation, make sure you have connected the FM antenna (aerial) to the receiver (page 18).



1 Press FM.

2 Press TUNING + or TUNING –.

TUNING + scans from lower to higher frequency stations and TUNING – for scanning higher to lower.
The receiver stops scanning whenever a station is received.

Using the control buttons on the receiver

1 Turn INPUT SELECTOR to select “FM TUNER”.

2 Press TUNING MODE repeatedly to select “AUTO”.

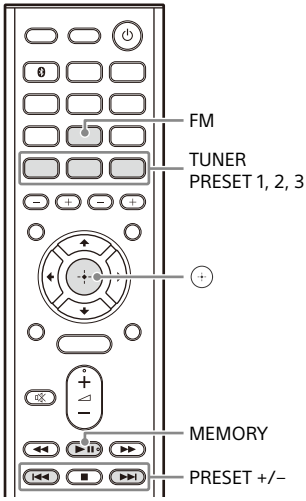
3 Press TUNING + or TUNING –.

In case of poor FM stereo reception

If the FM stereo reception is poor and “ST” flashes on the display panel, select monaural audio to lessen the sound distortion.
Press AMP MENU, and then press ↑/↓ and + to select “FM MODE” – “MONO”.
To return to the stereo mode, select “STEREO”.

Presetting FM Radio Stations (Preset Memory)

You can store up to 30 FM stations as your favorite stations as preset stations.



1 Press FM.

2 Tune to the station that you want to preset using Automatic Tuning (page 24).

3 Press MEMORY.

4 Press PRESET + or PRESET – to select a preset number.

5 Press ⊕.

The station is stored as the selected preset number.

6 Repeat steps 1 to 5 to store another station.

Tuning to preset stations

1 Press FM.

2 Press PRESET + or PRESET – repeatedly to select the station.

Tip

You can also use TUNER PRESET 1, 2 or 3 to select a preset station.

Using the control buttons on the receiver

1 Turn INPUT SELECTOR to select "FM TUNER".

2 Press TUNING MODE repeatedly to select "PRESET".

3 Press TUNING + or TUNING – to select the preset station you want.

Receiving RDS Broadcasts

(European and Asia-Pacific models only)

This receiver allows you to use Radio Data System (RDS), which enables FM radio stations* to send additional information along with the regular programming signal. This receiver offers convenient RDS features, such as Program Service name display.

* Not all FM stations provide RDS service, nor do they provide the same type of services. If you are not familiar with the RDS services in your area, check with your local radio stations for details.

Simply select a station on the FM band using Automatic Tuning (page 24) or Tuning with Preset Station (page 25).

When you tune to a station that provides RDS services, “RDS” lights up and the Program Service name appears on the display panel.

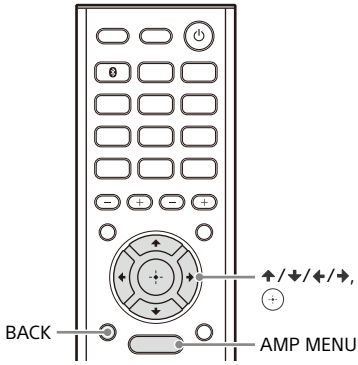
Note

RDS may not work properly if the station you tuned to does not transmit the RDS signal or if the signal strength is weak.

Tip

While a Program Service name is displayed, you can check the frequency by pressing DISPLAY repeatedly (page 30).

Using the Menu



1 **Press AMP MENU.**

The menu is displayed on the display panel.

2 **Press ↑/↓ to select the menu item you want and then press ⊕.**

3 **Press ↑/↓/←/→ to select the parameter/setting you want, and then press ⊕.**

To return to the previous display

Press ← or BACK.

To exit the menu

Press AMP MENU.

Note

Some parameters and settings may appear dimmed on the display panel. This means that they are either unavailable or fixed and unchangeable.

Menu list

The default settings are underlined.

■ "SP IMP." (Speaker impedance)

For details, see "Setting the speaker impedance" (page 19).

■ "FM MODE" (FM station receiving mode)

- "STEREO"
  This receiver will decode the signal as stereo signal when the radio station is broadcast in stereo.
- "MONO"
  This receiver will decode the signal as mono signal regardless of the broadcast signal.

■ "BT MENU" (BLUETOOTH settings menu)

- "BT STBY" (BLUETOOTH standby mode)
  - "STBY ON": You can turn on this receiver from a paired BLUETOOTH device.
  - "STBY OFF": This receiver cannot be turned on from a paired BLUETOOTH device.

Note

- If you set "BT STBY" to "STBY ON", this receiver turns on when you establish a BLUETOOTH connection from a BLUETOOTH device.
- You cannot change this setting when "BT POWER" is set to "BT OFF".

- "BT AAC" (BLUETOOTH codec – AAC)
  - "AAC ON": AAC audio is available if the BLUETOOTH device supports AAC.
  - "AAC OFF": AAC audio is not available.

Note

- You cannot change this setting when "BT POWER" is set to "BT OFF".
- While a BLUETOOTH device is connected, the settings of this function cannot be changed.

Tip

You can enjoy high-quality sound if AAC is enabled.

- "BT POWER" (BLUETOOTH signal)
  - "BT ON": You can connect to the receiver from a paired BLUETOOTH device.
  - "BT OFF": The receiver cannot be connected from a paired BLUETOOTH device.

Note

You cannot change this setting when "BLUETOOTH" input is selected.

■ "PH.OFFSET" (Phono volume setting)

Lets you adjust the volume level of the device connected to PHONO IN jacks.
MM type cartridge used on turntable have a variation of audio output level.
In case MM type cartridge output is small, you can use phono volume setting to increase the level.
You can adjust from 0 dB to +6 dB in 1 dB/step.
The initial setting is "PHONO 0".

■ "BALANCE" (Speaker balance)

Lets you adjust the balance between left and right speakers.
You can adjust from "BAL. L+10" to "BAL. R+10" in 1 dB/step.
The initial setting is "BAL. 0".

■ "NAME IN" (Naming inputs)

Lets you set the name of inputs and preset stations. For details, see "Changing the Name for Each Input and Preset Station (NAME IN)" (page 29).

■ "AUTO.STBY" (Auto standby)

Lets you set the receiver switch to standby mode automatically when you do not operate the receiver or when there is no signals input to the receiver.

- "STBY ON"
  Switches to standby mode after approximately 20 minutes.
- "STBY OFF"
  Does not switch to standby mode.

Note

- This function does not work when "FM TUNER" input is selected.
- If you use the Auto Standby mode and the Sleep Timer at the same time, the Sleep Timer has priority.

■ "UPDATE" (Software update)

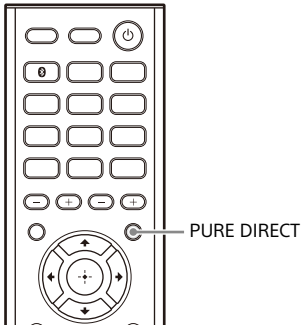
For service purpose only.

■ "VERSION" (Software version)

Lets you check the system's software version information.

Enjoying High-fidelity Sound (Pure Direct)

You can enjoy higher-fidelity sound from all inputs using the Pure Direct function. When the Pure Direct function is on, the display panel lights off to suppress noise that affects sound quality.



Press PURE DIRECT.

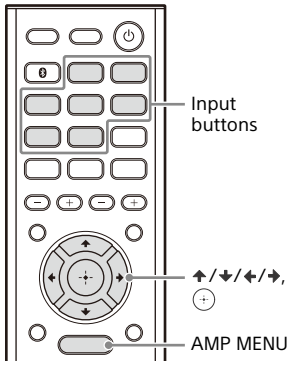
The indicator above the button lights up when the Pure Direct function is activated. To cancel the Pure Direct function, press PURE DIRECT again.

Note

- Bass and treble do not work when the Pure Direct function is selected.
- The Pure Direct function will be canceled when you press BASS +/– or TREBLE +/–.

Changing the Name for Each Input and Preset Station (NAME IN)

You can enter a name of up to 8 characters for inputs (except “FM TUNER” and “BLUETOOTH”) and preset stations to appear on the display panel.
It is more recognizable having the device named on the display than the jacks.



1 For “FM TUNER” input

Press FM, then tune to the preset station you want to create an index name for (page 25).

For other inputs (except “BLUETOOTH”)

Press the corresponding input button which you want to create an index name.

2 Press AMP MENU.

3 Press ↑/↓ repeatedly to select “NAME IN”, then press ⊕ or →.

The cursor flashes and you can enter a character.

4 Press ↑/↓ to select a character, then press ←/→ to move the input position backward and forward.

Tip

- You can select the character type as follows by pressing ↑/↓.
  Alphabet (upper case) → Numbers → Symbols
- To enter a blank space, press → without selecting a character.

If you made a mistake

Press ←/→ until the character you want to change flashes, then press ↑/↓ to select the correct character.

5 Press ⊕.

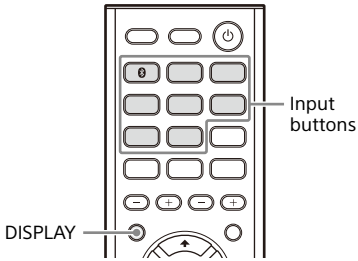
The name you entered is registered.

Note

(European and Asia-Pacific models only)

When you name an RDS (Radio Data System) station and tune to that station, the Program Service name appears instead of the name you entered.

Viewing Information on the Display Panel



1 Press the corresponding input button which you want to check the information.

2 Press DISPLAY repeatedly.

Each time you press the button, the display changes cyclically as follows.

Index name of the input* → Selected input → Volume level

When listening to FM radio

Preset station name* → Frequency, band and preset number → Volume level

When receiving RDS broadcasts (European and Asia-Pacific models only)

Program Service name or preset station name* → Frequency, band and preset number → Volume level

When connecting to a BLUETOOTH device

BLUETOOTH device name → BLUETOOTH MAC address → Volume level → "BLUETOOTH"

* Index name appears only when you have assigned one to the input or preset station (page 29). Index name does not appear when only blank spaces have been entered, or it is the same as the input name.

Note

Character or marks may not be displayed for some languages.

Recording Using the Receiver

You can record sound from an audio device using the receiver. Refer to the operating instructions supplied with your recording device.

1 Press the input button which corresponds to the playback device.

2 Prepare the playback device for playing.

For example, insert the CD you want to copy into the CD player.

3 Prepare the recording device.

Insert a blank MD or tape into the recording device (connected to AUDIO INPUT 4 OUT jacks).

4 Start recording on the recording device, then start the playback device.

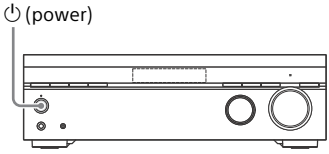
Note

- The recorded music is limited to private use only. Use of the music beyond this limit requires permission of the copyright holders.
- Sound adjustments do not affect the signal output from the AUDIO INPUT 4 OUT jacks.
- While the source is being recorded, the auto standby function of the receiver may start up and interrupt the recording. In this case, set the "AUTO.STBY" to "STBY OFF" (page 28).
- You can record the sound from the visual device connected to this receiver. However, you cannot record the image via this receiver.

Reverting to the Factory Default Settings

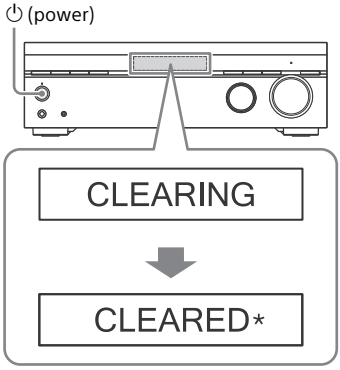
You can clear all memorized settings and restore the receiver to the factory default settings by the following procedure.
Be sure to use the buttons on the receiver to perform this operation.

1 Press ⏻ (power) to turn off the receiver.



2 Press and hold ⏻ (power) for 5 seconds.

"CLEARING" appears on the display panel during initialization. When initialization is complete, "CLEARED⁎" appears on the display panel.



Note

It takes a few seconds for the memory to be cleared completely. Do not turn the receiver off until "CLEARED⁎" appears on the display panel.

Saving Power

You can save power by setting “BT STBY” to “STBY OFF” in the “BT MENU” menu.

Troubleshooting

If a problem occurs while operating the receiver, check the following to resolve the problem before consulting your nearest Sony dealer.

- Check to see if the problem is listed in this "Troubleshooting" section.
- Clear all saved settings and restore the receiver to the factory default settings (page 31).

If the problem persists after doing all of the above, consult your nearest Sony dealer.

General

The receiver is turned off automatically.

- If "AUTO.STBY" is set to "STBY ON", set it to "STBY OFF" (page 28).
- The sleep timer function was activated.
- "PROTECT" (page 35) was activated.

The indicator on the display panel turns off.

- If the PURE DIRECT indicator on the front panel lights up, press PURE DIRECT to turn off this function.
- Press DIMMER to select "BRIGHT" or "DARK".

Audio

No sound or only a very low level of sound is heard, no matter which device is selected.

- Check that all connecting cables are inserted to their input/output jacks on the receiver, speakers and the devices.
- Check that the receiver and all devices are turned on.
- Check that VOLUME on the receiver is not set to "VOL MIN".
- Press SPEAKERS A/B to select a setting other than "OFF SPEAKERS" (page 19).
- Check that headphones are not connected to the receiver.
- Press 🔇 (muting) to cancel the muting function.
- Try pressing the input button on the remote control or turning INPUT SELECTOR on the receiver to select the input to which you want to listen.
- The protective device on the receiver has been activated. Turn off the receiver, eliminate the short-circuit problem, and turn on the power again.

There is severe humming or noise.

- Check that the speakers and device are connected securely.
- Make sure that the connecting cables are not near a transformer or motor.
- Move your audio device away from the TV.
- If the plugs and jacks are dirty, wipe them with a cloth slightly moistened with alcohol.

No sound or only a very low level of sound is heard from specific speakers.

- Connect a pair of headphones to the PHONES jack to verify that sound is output from the headphones. If only one channel is output from the headphones, the device may not be connected to the receiver correctly. Check that all of the cables are fully inserted into the jacks on both the receiver and the device.
  If both channels are output from the headphones, the speaker may not be connected to the receiver correctly. Check the connection of the speaker that is not outputting any sound.
- Make sure you have connected to both the L and R jacks of an analog device, as analog devices require both L and R jack connections. Use a stereo audio cable (not supplied).

There is no sound from a specific device.

- Check that the device is correctly connected to the corresponding audio input jacks.
- Check that the cable(s) used for the connection is (are) fully inserted into the jacks on both the receiver and the device.

The left and right sound is unbalanced or reversed.

- Check that the speakers and device are connected correctly and securely.
- Check the speaker balance (page 28).

There is severe hum, interrupted noise or distortion from the device connected to the PORTABLE IN jack.

- Check that the device is connected securely.
- This is not a malfunction and will depend on the connected device.

Recording cannot be carried out.

- Check that the device is connected correctly.
- Select the source device using the input buttons (page 31).

Turntable

Only a very low level of sound is heard.

- Check that MM type cartridge is used on the turntable.

There is severe humming.

- If your turntable has a grounding terminal, connect grounding wire (page 15).

There is distorted sound.

- If you connect a turntable with a PHONO/LINE switch, make sure that the PHONO/LINE switch on the turntable is set to PHONO (page 16).

FM radio

The FM reception is poor.

- Extend and adjust the position of the FM wire antenna (aerial) to a place where the reception conditions are good.
- Place the FM wire antenna (aerial) near a window.
- Position the FM wire antenna (aerial) as horizontally as possible.

You cannot tune to radio stations.

- Check that the antennas (aerials) are connected securely. Adjust the antennas (aerials) if necessary.
- No stations have been preset or the preset stations have been cleared (when tuning by scanning preset stations is used). Preset the stations.
- Press DISPLAY repeatedly so that the frequency appears on the display panel.

RDS does not work.*

- Make sure that you are tuned to an FM RDS station.
- Select a stronger FM station.
- The station you tuned to is not transmitting the RDS signal or the signal strength is weak.

The RDS information that you want does not appear.*

- The service may be temporarily out of order. Contact the radio station and find out whether they actually provide the service in question.

* European and Asia-Pacific models only.

BLUETOOTH device

Pairing cannot be done.

- Move the BLUETOOTH device closer to the receiver.
- Pairing may not be possible if there are other BLUETOOTH devices near the receiver. In this case, turn off the other BLUETOOTH devices.

- Correctly enter the same passkey that was entered on the BLUETOOTH device.

Cannot make a BLUETOOTH connection.

- The BLUETOOTH device you attempted to connect does not support the A2DP profile, and cannot be connected with the receiver.
- Press BLUETOOTH to connect to the last connected BLUETOOTH device.
- Turn on the BLUETOOTH function of the BLUETOOTH device.
- Establish a connection from the BLUETOOTH device.
- The pairing registration information has been erased. Perform the pairing operation again.
- While connected to a BLUETOOTH device, this receiver cannot be detected.
- Erase the pairing registration information of the BLUETOOTH device on the BLUETOOTH device and perform the pairing operation again.

The sound skips or fluctuates, or the connection is lost.

- The receiver and the BLUETOOTH device are too far apart.
- If there are obstructions between the receiver and your BLUETOOTH device, remove these or move the receiver and/or device avoid them.
- If there is a device that generates electromagnetic radiation, such as a wireless LAN, other BLUETOOTH device, or a microwave oven nearby, move it away.

The sound of your BLUETOOTH device cannot be heard on the receiver.

- Turn up the volume on your BLUETOOTH device first, and then adjust the volume using ⊿ + on the remote control (or VOLUME on the receiver).

Severe humming or noise.

- If there are obstructions between the receiver and your BLUETOOTH device, remove them or move the receiver and/or device avoid them.
- If there is a device that generates electromagnetic radiation, such as a wireless LAN, other BLUETOOTH device, or a microwave oven nearby, move it away.
- Turn down the volume of the connected BLUETOOTH device.

Remote control

The remote control does not function.

- Point the remote control at the remote control sensor on the receiver.
- Remove any obstructions between the remote control and the receiver.
- Replace both of the batteries in the remote control with new ones if they are weak.

Error messages

“PROTECT” appears on the display panel.

The receiver will automatically turn off after a few seconds. Check the followings: Unplug the AC power cord (mains lead) and let the receiver cool down for 30 minutes while performing the following troubleshooting:

– Disconnect all of the speakers.
– Check that the speaker wires are tightly twisted on both ends.
– Check that the receiver is not covered and ventilation holes are not blocked.
– Check that the nominal impedance of the connected speakers fall within the impedance range indicated on the rear panel of the receiver.

After checking the above items and fixing any problems, plug in the AC power cord (mains lead) and turn on the receiver. If the problem persists, consult your nearest Sony dealer.

Precautions

On safety

Should any solid object or liquid fall into the cabinet, unplug the receiver and have it checked by qualified personnel before operating it any further.

On power sources

- Before operating the receiver, check that the operating voltage is identical with your local power supply.
  The operating voltage is indicated on the nameplate on the rear of the receiver.
- If you are not going to use the receiver for a long time, be sure to disconnect the receiver from the wall outlet. To disconnect the AC power cord (mains lead), grasp the plug itself; never pull the cord.
- The AC power cord (mains lead) must be changed only at a qualified service shop.

On heat buildup

Although the receiver heats up during operation, this is not a malfunction. If you continuously use this receiver at a large volume, the cabinet temperature of the top, side and bottom rises considerably. To avoid burning yourself, do not touch the cabinet.

On placement

- Place the receiver in a location with adequate ventilation to prevent heat buildup and prolong the life of the receiver.
- Do not place the receiver near heat sources, or in a place subject to direct sunlight, excessive dust, or mechanical shock.
- Do not place anything on top of the cabinet that might block the ventilation holes and cause malfunctions.
- Do not place the receiver near device such as a TV, VCR, or tape deck. (If the receiver is being used in combination with a TV, VCR, or tape deck, and is placed too close to that device, noise may result, and picture quality may suffer. This is especially likely when using an indoor antenna (aerial).)
- Use caution when placing the receiver on surfaces that have been specially treated (with wax, oil, polish, etc.) as staining or discoloration of the surface may result.

On operation

Before connecting other device, be sure to turn off and unplug the receiver.

On cleaning

Clean the cabinet, panel, and controls with a soft cloth slightly moistened with a mild detergent solution. Do not use any type of abrasive pad, scouring powder, or solvent, such as alcohol or benzine.

On replacement of parts

In the events that this receiver is repaired, repaired parts may be retained for reuse or recycling purposes.

Specifications

AUDIO POWER SPECIFICATIONS

POWER OUTPUT AND TOTAL HARMONIC DISTORTION: (USA models only)

With 8 ohm loads, both channels driven, from 20 Hz – 20,000 Hz; rated 90 watts per channel minimum RMS power at stereo mode, with no more than 0.09% total harmonic distortion from 250 milliwatts to rated output.

Amplifier section[1)]

Speaker impedance use
6 ohms – 16 ohms

Impedance of A/B speakers and its corresponding speaker impedance setting

Speaker system	Speaker impedance setting (page 19)	
	"6 OHM"	"8 OHM"
A or B	6 ohms – 16 ohms	8 ohms – 16 ohms
A and B	12 ohms – 16 ohms	> 16 ohms

Minimum RMS Output Power
(8 ohms, 20 Hz – 20 kHz, THD 0.09%)
90 W + 90 W

Stereo Mode Output Power
(8 ohms, 1 kHz, THD 1%)
100 W + 100 W

[1)] Measured under the following conditions:

Area	Power requirements
USA, Canada, Taiwan	120 V AC, 60 Hz
Oceania, Europe	230 V AC, 50 Hz

Frequency response
Analog
10 Hz – 100 kHz, +0.5/–2 dB (with BASS = 0 dB, TREBLE = 0 dB)

Input (Analog)
PHONO IN
For MM type cartridge
Equalizer RIAA; +/–1 dB
S/N[2)]: 80 dB
PORTABLE IN
Sensitivity: 500 mV/50 kilohms
S/N[2)]: 90 dB
AUDIO IN
Sensitivity: 500 mV/50 kilohms
S/N[2)]: 96 dB

Output (Analog)
AUDIO OUT
Voltage: 500 mV/10 kilohms

Tone
Gain levels
±10 dB, 1 dB step

[2)] A weighted network/input short with BASS = 0 dB, TREBLE = 0 dB.

FM tuner section

Tuning range
USA and Canadian models:
87.5 MHz – 108.0 MHz (100 kHz step)
Other models:
87.5 MHz – 108.0 MHz (50 kHz step)

Antenna (aerial)
FM wire antenna (aerial)

Antenna (aerial) terminals
75 ohms, unbalanced

Service section

Output voltage
DC 5 V

Maximum current
200 mA

BLUETOOTH section

Communication system
BLUETOOTH Specification version 4.2

Output
BLUETOOTH Specification Power Class 1

Maximum communication range
Line of sight approx. 30 m (98.4 feet)[1)]

Frequency band
2.4 GHz band

Modulation method
FHSS (Freq Hopping Spread Spectrum)

Compatible BLUETOOTH profiles[2)]
A2DP 1.2 (Advanced Audio Distribution Profile)
AVRCP 1.6 (Audio Video Remote Control Profile)

Supported Codecs[3)]
SBC[4)], AAC

Transmission range (A2DP)
20 Hz – 20,000 Hz (Sampling frequency 44.1 kHz)

Frequency band and maximum output power (European models only)

BLUETOOTH

Frequency band	Maximum output power
2,400 MHz – 2,483.5 MHz	≤ 5.0 dBm

1) The actual range will vary depending on factors such as obstacles between devices, magnetic fields around a microwave oven, static electricity, cordless phone, reception sensitivity, antenna's performance, operating system, software application, etc.

2) BLUETOOTH standard profiles indicate the purpose of BLUETOOTH communication between devices.

3) Codec: Audio signal compression and conversion format

4) Subband Codec

General

Power requirements

Area	Power requirements
USA, Canada, Taiwan	120 V AC, 60 Hz
Oceania	230 V AC, 50 Hz
Europe	230 V AC, 50/60 Hz

Power consumption

200 W

Standby mode: 0.3 W

(When "BT STBY" is set to "STBY OFF".)

BLUETOOTH Standby mode (all wireless network ports are activated): 1.0 W

(When "BT STBY" is set to "STBY ON".)

Dimensions (width/height/depth) (Approx.)

430 mm × 133 mm × 284 mm (17 in × 5 1/4 in × 11 1/4 in) including projecting parts and controls

Mass (Approx.)

6.7 kg (14 lb 13 oz)

Design and specifications are subject to change without notice.

On BLUETOOTH Communication

Supported BLUETOOTH version and profiles

Profile refers to a standard set of functions for various BLUETOOTH product features. See "BLUETOOTH section" in "Specifications" (page 37) for the BLUETOOTH version and profiles supported by this receiver.

Effective communication range

BLUETOOTH devices should be used within approximately 10 meters (33 feet) (unobstructed distance) of each other. The effective communication range may become shorter under the following conditions.

- When a person, metal object, wall or other obstruction is between the devices with a BLUETOOTH connection
- Locations where a wireless LAN is installed
- Around microwave ovens that are in use
- Locations where other electromagnetic waves are generated

Effects of other devices

BLUETOOTH devices and wireless LAN (IEEE 802.11b/g/n) device use the same frequency band (2.4 GHz). When using your BLUETOOTH device near a device with wireless LAN capability, electromagnetic interference may occur. This could result in lower data transfer rates, noise, or inability to connect. If this happens, try the following remedies:

- Use this receiver at least 10 meters (33 feet) away from the wireless LAN device.
- Turn off the power to the wireless LAN device when using your BLUETOOTH device within 10 meters (33 feet).

- Install this receiver and BLUETOOTH device as closer to each other as possible.

Effects on other devices

The radio waves broadcast by this receiver may interfere with the operation of some medical devices. Since this interference may result in malfunction, always turn off the power on this receiver and BLUETOOTH device in the following locations:

- In hospitals, on trains, in airplanes, at gas stations, and any place where flammable gasses may be present
- Near automatic doors or fire alarms

Note

- This receiver supports security functions that comply with the BLUETOOTH specification to ensure secure connection during communication using BLUETOOTH technology. However, this security may be insufficient depending on the setting contents and other factors, so always be careful when performing communication using BLUETOOTH technology.
- Sony shall not be held liable in any way for damages or other loss resulting from information leaks during communication using BLUETOOTH technology.
- BLUETOOTH communication is not necessarily guaranteed with all BLUETOOTH devices that have the same profile as this receiver.
- BLUETOOTH devices connected with this receiver must comply with the BLUETOOTH specification prescribed by the Bluetooth SIG, Inc., and must be certified to comply. However, even when a device complies with the BLUETOOTH specification, there may be cases where the characteristics or specifications of the BLUETOOTH device make it impossible to connect, or may result in different control methods, display or operation.
- Noise may occur or the audio may cut off depending on the BLUETOOTH device connected with this receiver, the communications environment, or surrounding conditions.

If you have any questions or problems concerning your receiver, please consult your nearest Sony dealer.

On Copyrights

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

WALKMAN® and WALKMAN® logo are registered trademarks of Sony Corporation.

All other trademarks and registered trademarks are of their respective holders. In this manual, ™ and ® marks are not specified.

Index

A

AUTO.STBY 28

B

B speakers 14

BALANCE 28

BASS 20

Batteries 11

BLUETOOTH
- Pairing 22
- Playback 21
- Profile 37
- Version 37

BLUETOOTH settings menu 27

BT AAC 27

BT POWER 28

BT STBY 27

C

Cable 13

Connecting
- Audio-visual devices 15
- FM Antenna 18
- Speaker 13

D

Default settings
- Receiver 31

E

Error messages 35

F

FM MODE 27

I

Initialization
- Receiver 31

M

Menu 27

Messages 35

N

NAME IN 28

P

Pairing 22

PH.OFFSET 28

Power
- Power consumption 38
- Saving power 32

PURE DIRECT 29

R

RDS 26

Receiver
- Display panel 8
- Front panel 7
- Rear panel 9

Remote control 10

Reset
- Receiver 31

S

Sleep Timer 10

SP IMP. 27

Speaker cable 13

Supplied items 6

T

TREBLE 20

U

UPDATE 28

V

VERSION 28

http://www.sony.net/



(1)

©2018 Sony Corporation Printed in Malaysia

4-726-907-**11**(1)