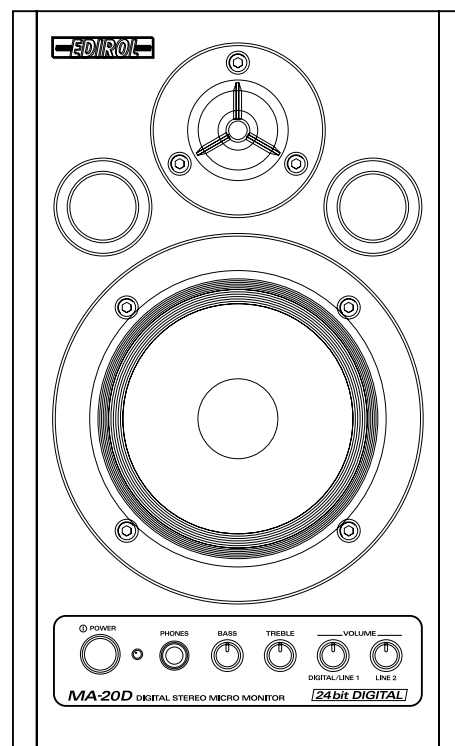
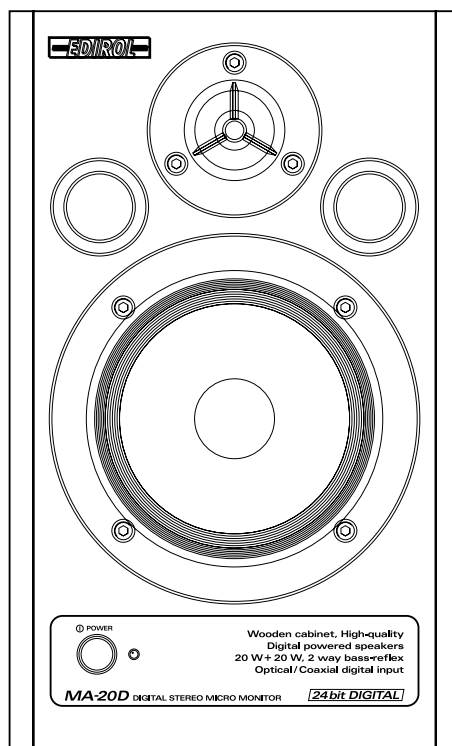




**DIGITAL STEREO MICRO MONITOR****MA-20D****Owner's Manual  
Bedienungsanleitung  
Mode d'emploi  
Manuale d'uso  
Manual del usuario**

Before using this unit, carefully read the sections entitled: "IMPORTANT SAFETY INSTRUCTIONS" (p. 2), "USING THE UNIT SAFELY" (pp. 3-4), and "IMPORTANT NOTES" (p. 5). These sections provide important information concerning the proper operation of the unit. Additionally, in order to feel assured that you have gained a good grasp of every feature provided by your new unit, Owner's manual should be read in its entirety. The manual should be saved and kept on hand as a convenient reference.



 <b>CAUTION</b> RISK OF ELECTRIC SHOCK DO NOT OPEN	
<b>ATTENTION:</b> RISQUE DE CHOC ELECTRIQUE NE PAS OUVRIR	
<b>CAUTION:</b> TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.	



The lightning flash with arrowhead symbol, within an equilateral triangle, 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.




The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

INSTRUCTIONS PERTAINING TO A RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS.

## IMPORTANT SAFETY INSTRUCTIONS SAVE THESE INSTRUCTIONS

**WARNING** - When using electric products, basic precautions should always be followed, including the following:

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 a dry cloth.
7. Do not block any of the ventilation openings. Install in accordance with the manufacturers 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. When 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. Never use with a cart, stand, tripod, bracket, or table except as 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 the U.K.**

**IMPORTANT:** THE WIRES IN THIS MAINS LEAD ARE COLOURED IN ACCORDANCE WITH THE FOLLOWING CODE.

BLUE: NEUTRAL  
BROWN: LIVE

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:  
 The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured BLACK.  
 The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or coloured RED.  
 Under no circumstances must either of the above wires be connected to the earth terminal of a three pin plug.

# USING THE UNIT SAFELY

## INSTRUCTIONS FOR THE PREVENTION OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS

### About ⚠ WARNING and ⚠ CAUTION Notices

<b>⚠ WARNING</b>	Used for instructions intended to alert the user to the risk of death or severe injury should the unit be used improperly.
<b>⚠ CAUTION</b>	Used for instructions intended to alert the user to the risk of injury or material damage should the unit be used improperly. * Material damage refers to damage or other adverse effects caused with respect to the home and all its furnishings, as well to domestic animals or pets.

### About the Symbols

	The ⚠ symbol alerts the user to important instructions or warnings. The specific meaning of the symbol is determined by the design contained within the triangle. In the case of the symbol at left, it is used for general cautions, warnings, or alerts to danger.
	The ⓧ symbol alerts the user to items that must never be carried out (are forbidden). The specific thing that must not be done is indicated by the design contained within the circle. In the case of the symbol at left, it means that the unit must never be disassembled.
	The ⚡ symbol alerts the user to things that must be carried out. The specific thing that must be done is indicated by the design contained within the circle. In the case of the symbol at left, it means that the power-cord plug must be unplugged from the outlet.

## ALWAYS OBSERVE THE FOLLOWING





### ⚠ WARNING

- Before using this unit, make sure to read the instructions below, and the Owner's Manual.
- Do not open or perform any internal modifications on the unit.
- Do not attempt to repair the unit, or replace parts within it (except when this manual provides specific instructions directing you to do so). Refer all servicing to your retailer, the nearest EDIROL/Roland Service Center, or an authorized EDIROL/Roland distributor, as listed on the "Information" page.
- Never use or store the unit in places that are:
  - Subject to temperature extremes (e.g., direct sunlight in an enclosed vehicle, near a heating duct, on top of heat-generating equipment); or are
  - Damp (e.g., baths, washrooms, on wet floors); or are
  - Humid; or are
  - Exposed to rain; or are
  - Dusty; or are
  - Subject to high levels of vibration.
- Make sure you always have the unit placed so it is level and sure to remain stable. Never place it on stands that could wobble, or on inclined surfaces.
- The unit should be connected to a power supply only of the type described in the operating instructions, or as marked on the unit.
- Use only the attached power-supply cord.











### ⚠ WARNING

- Do not excessively twist or bend the power cord, nor place heavy objects on it. Doing so can damage the cord, producing severed elements and short circuits. Damaged cords are fire and shock hazards!
- This unit, either alone or in combination with an amplifier and headphones or speakers, may be capable of producing sound levels that could cause permanent hearing loss. Do not operate for a long period of time at a high volume level, or at a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should immediately stop using the unit, and consult an audiologist.
- Do not allow any objects (e.g., flammable material, coins, pins); or liquids of any kind (water, soft drinks, etc.) to penetrate the unit.
- Immediately turn the power off, remove the power cord from the outlet, and request servicing by your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information" page when:
  - The power-supply cord, or the plug has been damaged; or
  - If smoke or unusual odor occurs
  - Objects have fallen into, or liquid has been spilled onto the unit; or
  - The unit has been exposed to rain (or otherwise has become wet); or
  - The unit does not appear to operate normally or exhibits a marked change in performance.

**⚠ WARNING**

- In households with small children, an adult should provide supervision until the child is capable of following all the rules essential for the safe operation of the unit. 
- Protect the unit from strong impact. (Do not drop it!) 
- Do not force the unit's power-supply cord to share an outlet with an unreasonable number of other devices. Be especially careful when using extension cords—the total power used by all devices you have connected to the extension cord's outlet must never exceed the power rating (watts/amperes) for the extension cord. Excessive loads can cause the insulation on the cord to heat up and eventually melt through. 
- Before using the unit in a foreign country, consult with your retailer, the nearest EDIROL/Roland Service Center, or an authorized EDIROL/Roland distributor, as listed on the "Information" page. 

**⚠ CAUTION**

- The unit should be located so that its location or position does not interfere with its proper ventilation. 
- Always grasp only the plug on the power-supply cord when plugging into, or unplugging from, an outlet or this unit. 
- Any accumulation of dust between the power plug and the power outlet can result in poor insulation and lead to fire. Periodically wipe away such dust with a dry cloth. Also, disconnect the power plug from the power outlet whenever the unit is to remain unused for an extended period of time. 
- Try to prevent cords and cables from becoming entangled. Also, all cords and cables should be placed so they are out of the reach of children. 
- Never climb on top of, nor place heavy objects on the unit. 
- Never handle the power cord or its plugs with wet hands when plugging into, or unplugging from, an outlet or this unit. 
- Before moving the unit, disconnect the power plug from the outlet, and pull out all cords from external devices. 
- Before cleaning the unit, turn off the power and unplug the power cord from the outlet (Maintenance → p. 5). 
- Whenever you suspect the possibility of lightning in your area, pull the plug on the power cord out of the outlet. 
- Take care not to allow children to swallow the included rubber feet during handling. Also be sure to attach the feet to the speakers' underside to protect the surfaces on which they are placed. 

# IMPORTANT NOTES

In addition to the items listed under “IMPORTANT SAFETY INSTRUCTIONS” and “USING THE UNIT SAFELY” on pages 2–4, please read and observe the following:

## Power Supply

- Do not use this unit on the same power circuit with any device that will generate line noise (such as an electric motor or variable lighting system).
- Before connecting this unit to other devices, turn off the power to all units. This will help prevent malfunctions and/or damage to speakers or other devices.
- When it is necessary to switch off the power completely, first switch off the unit's power switch, then unplug its power cord from the outlet. To facilitate doing this, you should plug the power cord into an outlet that is as close to the unit as possible, and can be easily reached when necessary.

## Placement

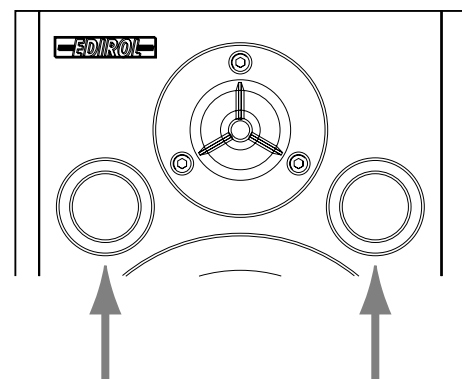
- Using the unit near power amplifiers (or other equipment containing large power transformers) may induce hum. To alleviate the problem, change the orientation of this unit; or move it farther away from the source of interference.
- This device may interfere with radio and television reception. Do not use this device in the vicinity of such receivers.
- Noise may be produced if wireless communications devices, such as cell phones, are operated in the vicinity of this unit. Such noise could occur when receiving or initiating a call, or while conversing. Should you experience such problems, you should relocate such wireless devices so they are at a greater distance from this unit, or switch them off.
- Do not expose the unit to direct sunlight, place it near devices that radiate heat, leave it inside an enclosed vehicle, or otherwise subject it to temperature extremes. Also, do not allow lighting devices that normally are used while their light source is very close to the unit (such as a piano light), or powerful spotlights to shine upon the same area of the unit for extended periods of time. Excessive heat can deform or discolor the unit.
- When moved from one location to another where the temperature and/or humidity is very different, water droplets (condensation) may form inside the unit. Damage or malfunction may result if you attempt to use the unit in this condition. Therefore, before using the unit, you must allow it to stand for several hours, until the condensation has completely evaporated.
- Do not allow rubber, vinyl, or similar materials to remain on the unit for long periods of time. Such objects can discolor or otherwise harmfully affect the finish.
- Do not put anything that contains water (e.g., flower vases) on the unit. Also, avoid the use of insecticides, perfumes, alcohol, nail polish, spray cans, etc., near the unit. Swiftly wipe away any liquid that spills on the unit using a dry, soft cloth.
- Do not paste stickers, decals, or the like to this instrument. Peeling such matter off the instrument may damage the exterior finish.
- Do not allow objects to remain on top of the unit while it is in operation. Placing heavy objects on this unit may result in injury if it overturns or falls.

## Maintenance

- To clean the unit, use a dry, soft cloth; or one that is slightly dampened. Try to wipe the entire surface using an equal amount of strength, moving the cloth along with the grain of the wood. Rubbing too hard in the same area can damage the finish.
- Never use benzine, thinners, alcohol or solvents of any kind, to avoid the possibility of discoloration and/or deformation.

## Additional Precautions

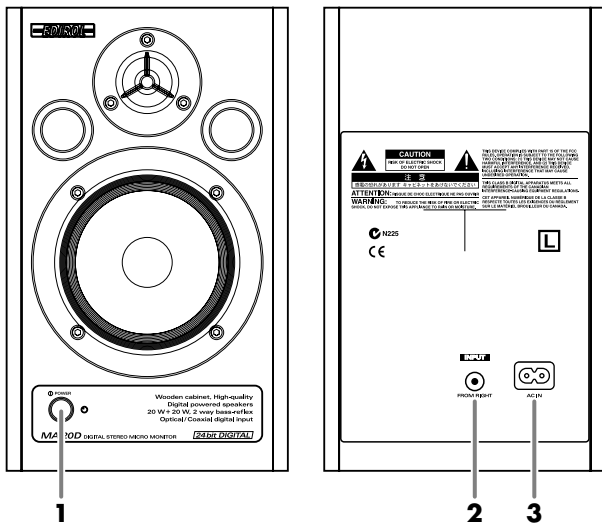
- Use a reasonable amount of care when using the unit's buttons, sliders, or other controls; and when using its jacks and connectors. Rough handling can lead to malfunctions.
- When connecting / disconnecting all cables, grasp the connector itself—never pull on the cable. This way you will avoid causing shorts, or damage to the cable's internal elements.
- A small amount of heat will radiate from the unit during normal operation.
- To avoid disturbing your neighbors, try to keep the unit's volume at reasonable levels. You may prefer to use headphones, so you do not need to be concerned about those around you (especially when it is late at night).
- When you need to transport the unit, package it in the box (including padding) that it came in, if possible. Otherwise, you will need to use equivalent packaging materials.
- Be sure to avoid inserting your fingers in the bass reflex ports when transporting or moving the speakers, as your fingers may become wedged and stuck in the ports.



- Use a cable from Roland to make the connection. If using some other make of connection cable, please note the following precautions.
  - Some connection cables contain resistors. Do not use cables that incorporate resistors for connecting to this unit. The use of such cables can cause the sound level to be extremely low, or impossible to hear. For information on cable specifications, contact the manufacturer of the cable.

# Panel Description

## Left Channel



## Left Channel

### 1. POWER Switch, POWER Indicator

This turns the power of the left (L) channel on/off. When the power is on, the indicator located at the side of the switch will light.

### 2. L Channel Input Jack

Connect this to L Channel Output Jack **14** on the right-side unit. For the connection, use the included speaker cable.

### 3. AC Inlet

Connect the included Power cord here (p. 17). Plug it firmly in, so that the cable does not accidentally become disconnected.

## Right Channel

### 4. POWER Switch, POWER Indicator

This turns the power of the right (R) channel on/off. When the power is on, the indicator located at the side of the switch will light.

### 5. PHONES Jack

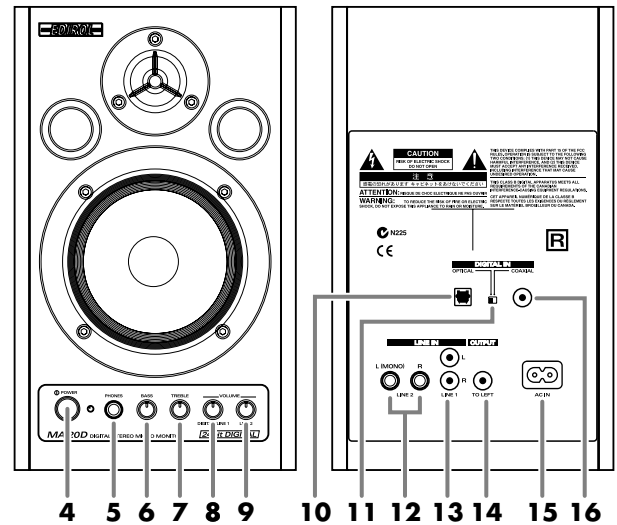
When you connect headphones to this jack, no sound will be heard from the speakers.

### 6. BASS Control Knob

### 7. TREBLE Control Knob

These adjust the tones of the bass and treble. Set to center to make the tones flat.

## Right Channel



### 8. VOLUME Knob (DIGITAL/LINE 1)

This adjusts the volume of devices connected to digital input connectors **10**, **16**, and LINE 1 Input Jacks **13**.

### 9. VOLUME Knob (LINE 2)

This adjusts the volume of the device connected to LINE 2 Input Jacks **12**.

### 10. Digital Input Connector (Optical)

This is the digital input connector for optic-fiber cable.

### 11. Digital Input Select Switch

This switch selects digital input connector **10** or **16** on the rear panel. Select the connector used for the input signal.

### 12. LINE 2 Input Jacks (L (MONO), R) (1/4" phone type)

For mono input, use the L (MONO) jack.

### 13. LINE 1 Input Jacks (L, R) (RCA phono type)

### 14. L Channel Output Jack

Connect this to L Channel Input Jack **2** on the left-side unit.

### 15. AC Inlet

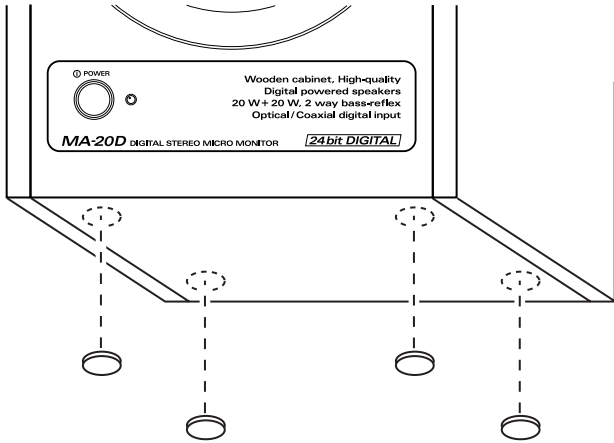
Connect the included Power cord here (p. 17). Plug it firmly in, so that the cable does not accidentally become disconnected.

### 16. Digital Input Connector (Coaxial)

This is the digital input connector for coaxial cable.

# Connections

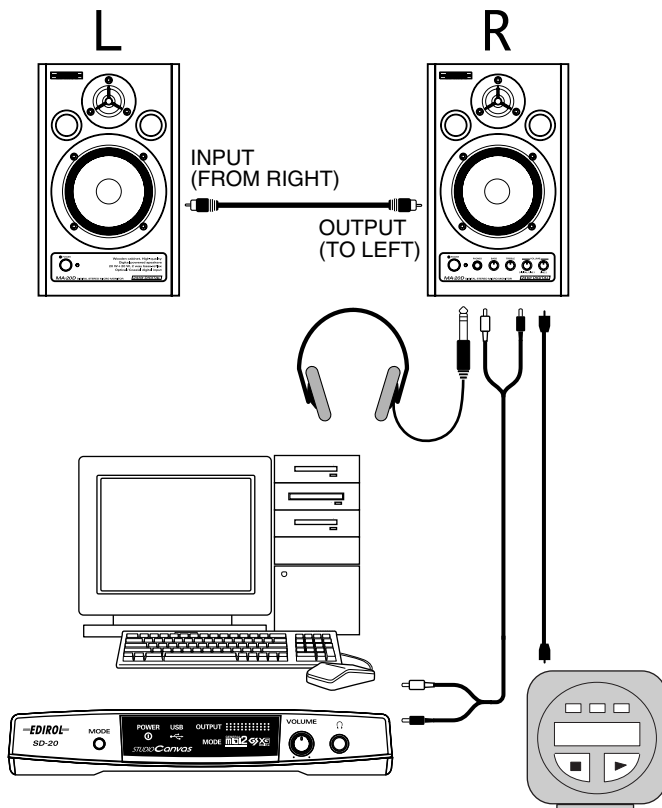
## Attaching the Rubber Feet (Included)



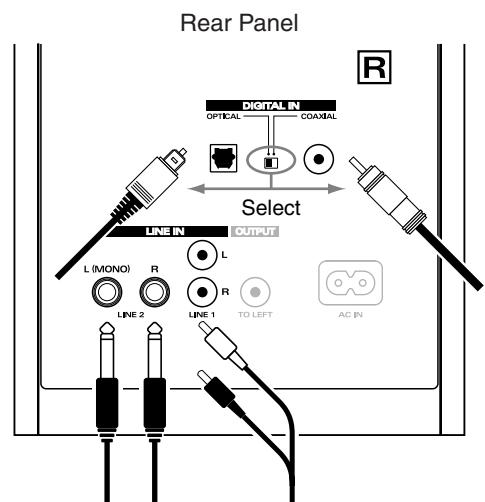
## Precautions When Connecting and Turning on the Power

- To prevent malfunction and/or damage to speakers or other devices, always turn down the volume, and turn off the power on all devices before making any connections.
- Using a connection cable that contains a resistor can cause the sound level to be low. Use a connection cable that does not contain a resistor.
- Once the connections have been completed, turn on power to your various devices in the order specified. By turning on devices in the wrong order, you risk causing malfunction and/or damage to speakers and other devices. (When turning the power off, reverse this procedure.)  
< Connected devices → MA-20D (R) → MA-20D (L) >
- This unit is equipped with a protection circuit. A brief interval (a few seconds) after power up is required before the unit will operate normally.

## Connection Example

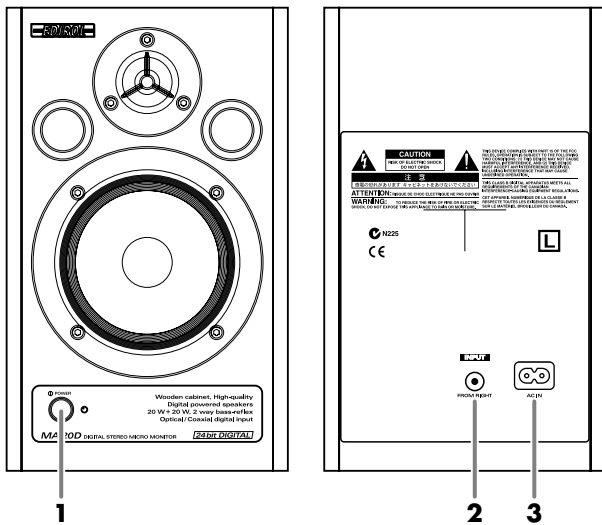


Sound Module, CD Player, MD Player, etc.



# Bedienfeldbeschreibung

## Linker Kanal



## Linker Kanal

### 1. POWER-Schalter, POWER-Anzeige

Schaltet das Signal für den linken Kanal (L) ein/aus. Bei eingeschaltetem Signal leuchtet die Anzeige an der linken Seite des Schalters auf.

### 2. L-Kanal-Eingangsbuchse

Verbinden Sie diese Buchse mit der L-Kanal-Ausgangsbuchse **14** der Einheit auf der rechten Seite. Verwenden Sie für den Anschluss das beiliegende Lautsprecherkabel.

### 3. AC-Einlass

Schließen Sie hier das beiliegende Netzkabel an (s. 17). Stecken Sie das Kabel fest ein, damit es nicht versehentlich vom Anschluss getrennt werden kann.

## Rechter Kanal

### 4. POWER-Schalter, POWER-Anzeige

Schaltet das Signal für den rechten Kanal (R) ein/aus. Bei eingeschaltetem Signal leuchtet die Anzeige an der linken Seite des Schalters auf.

### 5. PHONES-Buchse

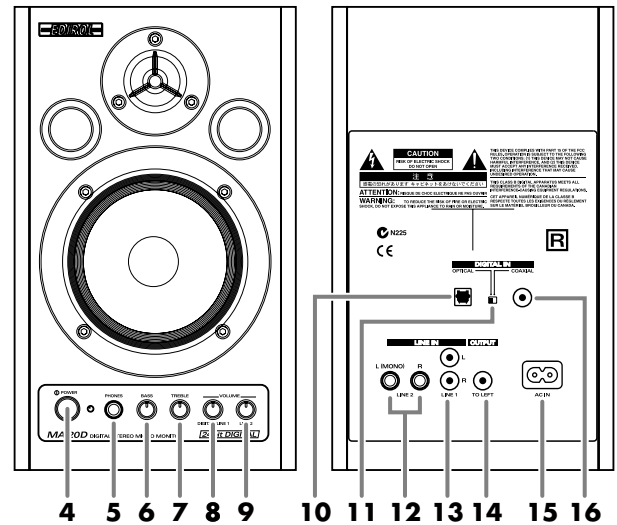
Wenn Sie an diese Buchse Kopfhörer anschließen, hören Sie keinen Sound aus den Lautsprechern.

### 6. BASS-Drehknopf

### 7. TREBLE-Drehknopf

Mit diesen Bedienelementen werden Bass und Treble reguliert. Drehen Sie die Drehknöpfe bis zur Mitte, um einen tiefen Ton zu erzeugen.

## Rechter Kanal



### 8. VOLUME-Schaltknopf (DIGITAL/LINE 1)

Stellt die Lautstärke der Geräte ein, die an den Digital-Eingängen **10**, **16** und an den LINE 1-Eingangsbuchsen **13** angeschlossen sind.

### 9. VOLUME-Schaltknopf (LINE 2)

Stellt die Lautstärke der Geräte ein, die an den LINE 2-Eingangsbuchsen **12** angeschlossen sind.

### 10. Anschluss Digitaleingabe (optisch)

Dies ist der Digitaleingabe-Anschluss für faseroptische Kabel.

### 11. Digitaleingabe-Auswahlschalter

Dieser Schalter wählt den Digitaleingabe-Anschluss **10** oder **16** auf der Rückseite aus. Wählen Sie den Anschluss, der für das Input-Signal verwendet wird.

### 12. LINE 2-Eingangsbuchsen (L (MONO), R) (1/4-Zoll-Cinchbuchse)

Für Mono-Eingang verwenden Sie die L (MONO)-Buchse.

### 13. LINE 1-Eingangsbuchsen (L, R) (RCA-Stift)

### 14. L-Kanal-Ausgangsbuchse

Verbinden Sie diese Buchse mit der L-Kanal-Eingangsbuchse **2** der Einheit auf der linken Seite.

### 15. AC-Einlass

Schließen Sie hier das beiliegende Netzkabel an (s. 17). Stecken Sie das Kabel fest ein, damit es nicht versehentlich vom Anschluss getrennt werden kann.

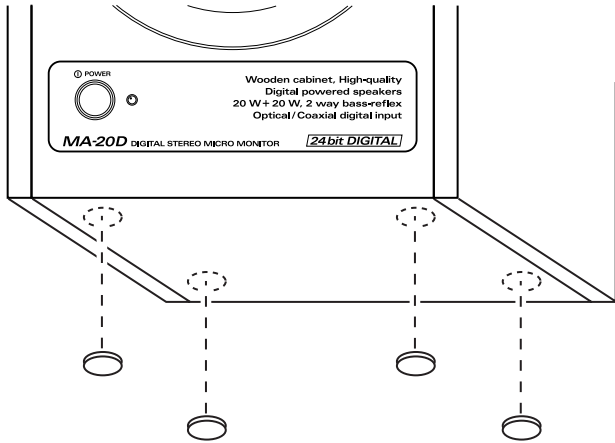
### 16. Anschluss Digitaleingabe (koaxial)

Dies ist der Digitaleingabe-Anschluss für Koaxialkabel.



# Anschlüsse

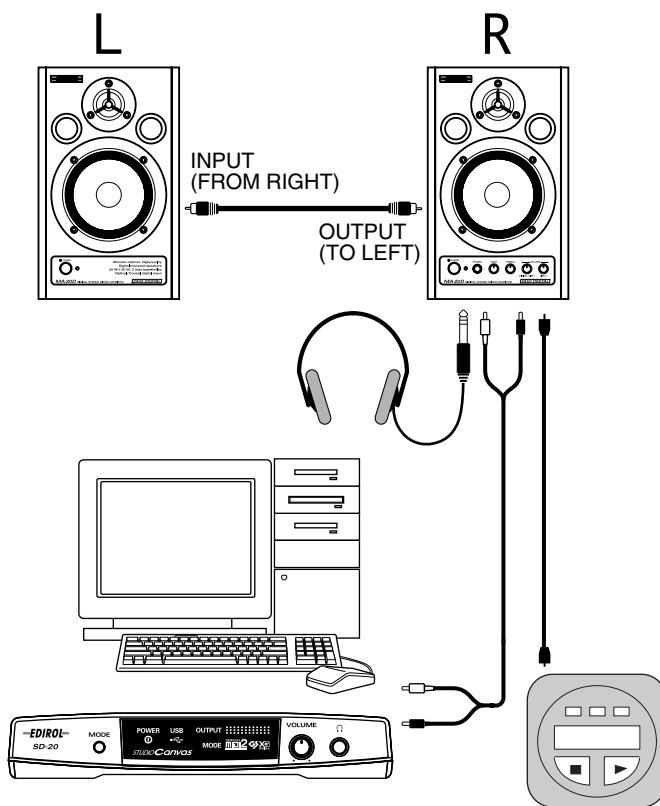
## Anschliessen der Gummibeine (in der Packung)



## Vorsichtsmaßnahmen beim Anschließen des Netzkabels und beim Einschalten

- Um Fehlfunktionen und/oder Schäden an Lautsprechern oder anderen Geräten zu verhindern, reduzieren Sie stets die Lautstärke und schalten alle Geräte ab, bevor Sie die Verbindungen einrichten.
- Die Verwendung von Anschlusskabeln mit Widerstand kann der Grund für eine zu geringe Lautstärke sein. Verwenden Sie ein Anschlusskabel, das keinen Widerstand enthält.
- Nachdem die Anschlüsse fertig gestellt wurden, schalten Sie die verschiedenen Geräte in der angegebenen Reihenfolge ein. Wenn Sie die Geräte in der falschen Reihenfolge einschalten, besteht die Gefahr von Fehlfunktionen und/oder Schäden an Lautsprechern und anderen Geräten. (Gehen Sie beim Ausschalten der Geräte in der umgekehrten Reihenfolge vor).  
< Angeschlossene Geräte → MA-20D (R) → MA-20D (L) >
- Dieses Gerät ist mit einer Schutzschaltung versehen. Ein kurzes Intervall (einige Sekunden) nach dem Einschalten ist erforderlich, bevor das Gerät normal arbeitet.

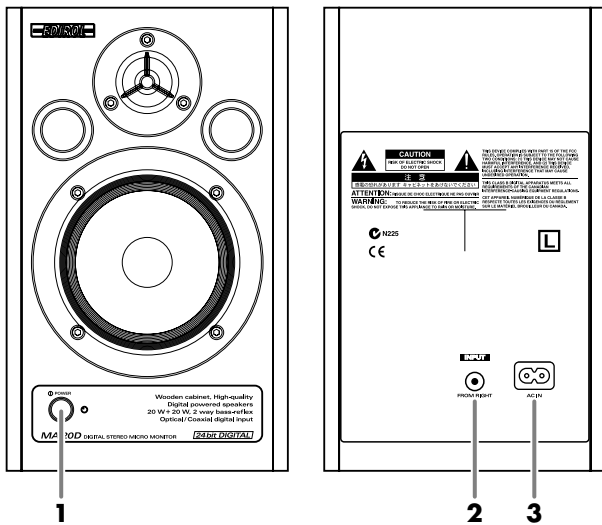
## Anschluss-Beispiel



Soundmodul, CD-Player, MD-Gerät, etc.

# Description

## Canal gauche



## Canal gauche

### 1. Commutateur POWER, voyant POWER

Ce commutateur sert à activer ou à désactiver le canal gauche (L). Le voyant situé à côté du commutateur s'allume lorsque le canal est activé.

### 2. Prise d'entrée canal L (G)

Connectez à la prise de sortie du canal L **14** sur la droite de l'appareil. Pour la connexion, utilisez le câble pour enceintes inclus.

### 3. Connecteur AC IN

Branchez ici le cordon d'alimentation (p. 17). Enfichez-le fermement, pour éviter que le cordon ne soit déconnecté par accident.

## Canal droit

### 4. Commutateur POWER, voyant POWER

Ce commutateur sert à activer ou à désactiver le canal droit (R). Le voyant situé à côté du commutateur s'allume lorsque le canal est activé.

### 5. Prise PHONES (casque)

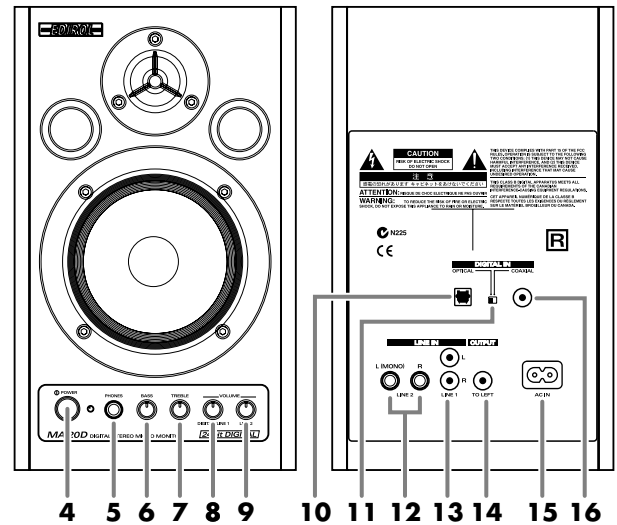
Si vous reliez un casque à cette prise, le son ne passera plus sur les enceintes.

### 6. Bouton BASS

### 7. Bouton TREBLE

Ils servent à régler les basses et les aigus. Pour obtenir un réglage neutre, mettre les boutons en position médiane.

## Canal droit



### 8. Bouton VOLUME (DIGITAL/LINE 1)

Ce bouton ajuste le volume des appareils connectés aux connecteurs d'entrée numérique (**10** et **16**) et aux prises d'entrée LINE 1 (**13**).

### 9. Bouton VOLUME (LINE 2)

Ce bouton ajuste le volume de l'appareil connecté aux prises d'entrée LINE 2 (**12**).

### 10. Connecteur d'entrée numérique (optique)

C'est le connecteur d'entrée numérique pour câble en fibre optique.

### 11. Commutateur Entrée numérique

Ce commutateur sert à sélectionner le connecteur d'entrée numérique **10** ou **16** sur la face arrière. Sélectionnez le connecteur utilisé pour le signal d'entrée.

### 12. Prises d'entrée LINE 2 (L (MONO), R) (1/4 po. type téléphone)

Pour l'entrée mono, utilisez la prise L (MONO).

### 13. Prises d'entrée LINE 1 (L, R) (type RCA)

### 14. Prise de sortie canal L (G)

Connectez à la prise de sortie du canal L **2** sur la gauche de l'appareil.

### 15. Connecteur AC IN

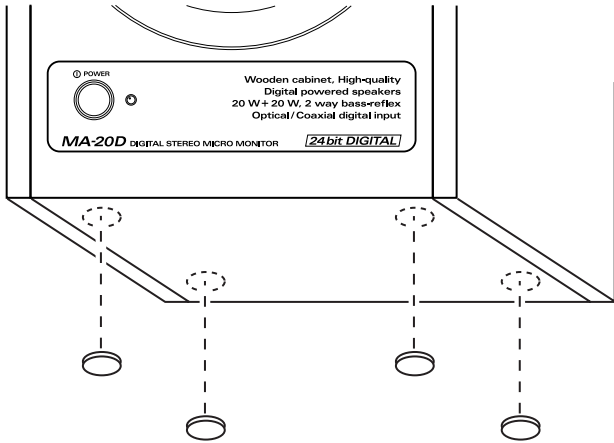
Branchez ici le cordon d'alimentation (p. 17). Enfichez-le fermement, pour éviter que le cordon ne soit déconnecté par accident.

### 16. Connecteur d'entrée numérique (coaxial)

C'est le connecteur d'entrée numérique pour câble coaxial.

# Connexions

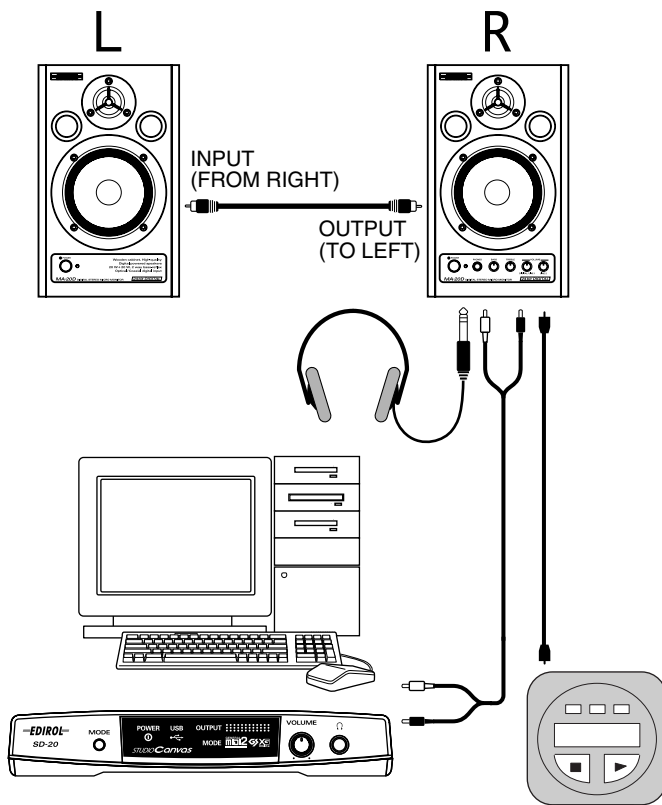
## Fixer les pieds en caoutchouc (inclus)



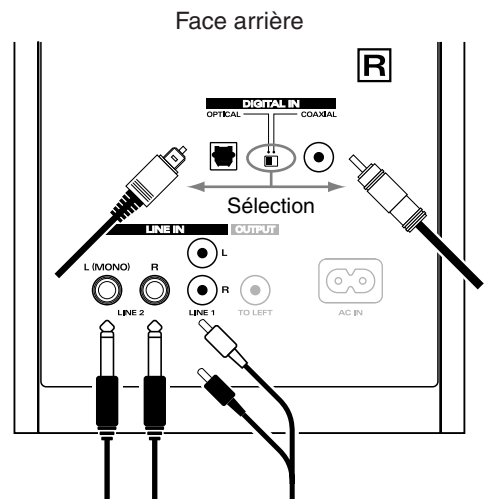
## Précautions à prendre lors des connexions et de la mise sous tension

- Afin d'éviter un mauvais fonctionnement et/ou d'endommager les enceintes et autres périphériques, diminuez toujours le volume et mettez toujours les périphériques hors tension avant d'effectuer une connexion.
- L'utilisation d'un câble à résistance peut entraîner une perte de niveau sonore. Utilisez des câbles ne contenant pas de résistance.
- Quand les connexions sont effectuées, mettez sous tension les différents appareils dans l'ordre spécifié. Ne pas respecter cet ordre peut entraîner des dysfonctionnements et/ou endommager les enceintes ou tout autre appareil. (Lors de la mise hors tension, suivez la procédure inverse.)  
< Appareils connectés → MA-20D (R) → MA-20D (L) >
- Cet appareil est muni d'un circuit de protection. Après la mise sous tension, un court délai (quelques secondes) est nécessaire avant que l'appareil fonctionne normalement.

## Exemple de connexion

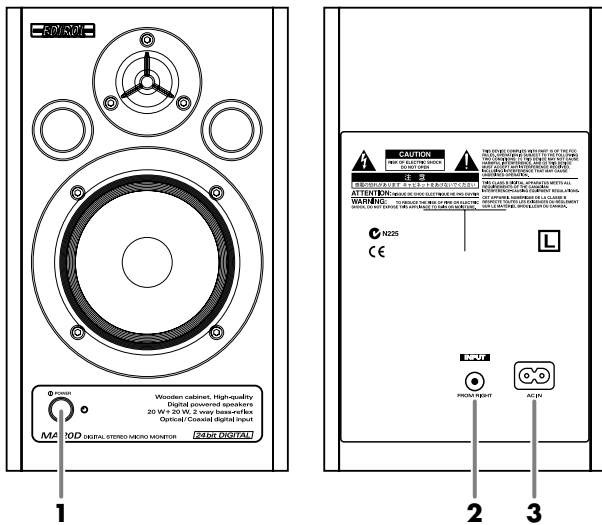


Module de sons, Lecteur CD, Lecteur MD, etc.



# Descrizione del pannello

## Canale sinistro



## Canale sinistro

### 1. Interruttore POWER, Indicatore POWER

Questo accende o spegne il canale sinistro (S). Quando acceso, l'indicatore situato a lato dell'interruttore si illuminerà.

### 2. Presa d'ingresso canale sinistro

Collegare alla presa d'uscita del canale sinistro **14** sul lato destro dell'apparecchio. Per effettuare il collegamento, utilizzare il cavo per altoparlanti in dotazione.

### 3. Presa AC

Collegare a questa presa il cavo di alimentazione in dotazione (p. 17). Inserirlo a fondo per evitare che si scollegi accidentalmente.

## Canale destro

### 4. Interruttore POWER, Indicatore POWER

Questo accende o spegne il canale destro (D). Quando acceso, l'indicatore situato a lato dell'interruttore si illuminerà.

### 5. Presa PHONES

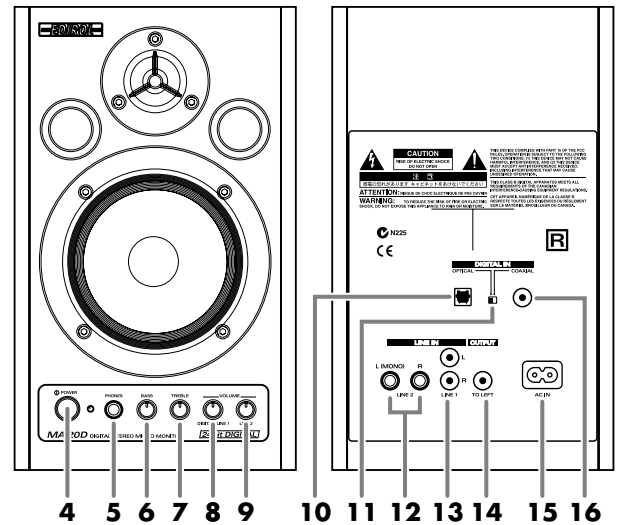
Se si collegano le cuffie a questa presa, non verrà emesso alcun suono dagli altoparlanti.

### 6. Manopola BASS

### 7. Manopola TREBLE

Regolano i bassi e gli acuti. Regolare al centro per uniformare il suono.

## Canale destro



### 8. Manopola VOLUME (DIGITAL/LINE 1)

Questo regola il volume dei sistemi collegati ai connettori d'ingresso digitali **10, 16** e prese d'ingresso LINE 1 **13**.

### 9. Manopola VOLUME (LINE 2)

Questo regola il volume dei sistemi collegati a prese d'ingresso LINE 2 **12**.

### 10. Connettore di ingresso digitale (ottico)

Connettore d'ingresso digitale per il cavo a fibre ottiche.

### 11. Interruttore di selezione ingresso digitale

Questo interruttore seleziona il connettore di ingresso digitale **10** o **16** sul pannello posteriore. Selezionare il connettore utilizzato per il segnale in entrata.

### 12. Prese d'ingresso LINE 2 (L (MONO), R) (1/4" tipo telefono)

Per ingresso mono, utilizzare la presa L (MONO).

### 13. Prese d'ingresso LINE 1 (L, R) (pin tipo RCA)

### 14. Presa d'uscita canale sinistro

Collegare alla presa d'ingresso del canale sinistro **2** sul lato sinistro dell'apparecchio.

### 15. Presa AC

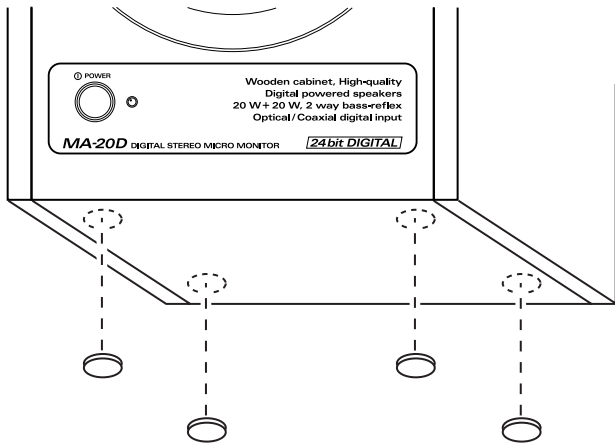
Collegare a questa presa il cavo di alimentazione in dotazione (p. 17). Inserirlo a fondo per evitare che si scollegi accidentalmente.

### 16. Connettore di ingresso digitale (coassiale)

Connettore d'ingresso digitale per il cavo coassiale.

# Collegamenti

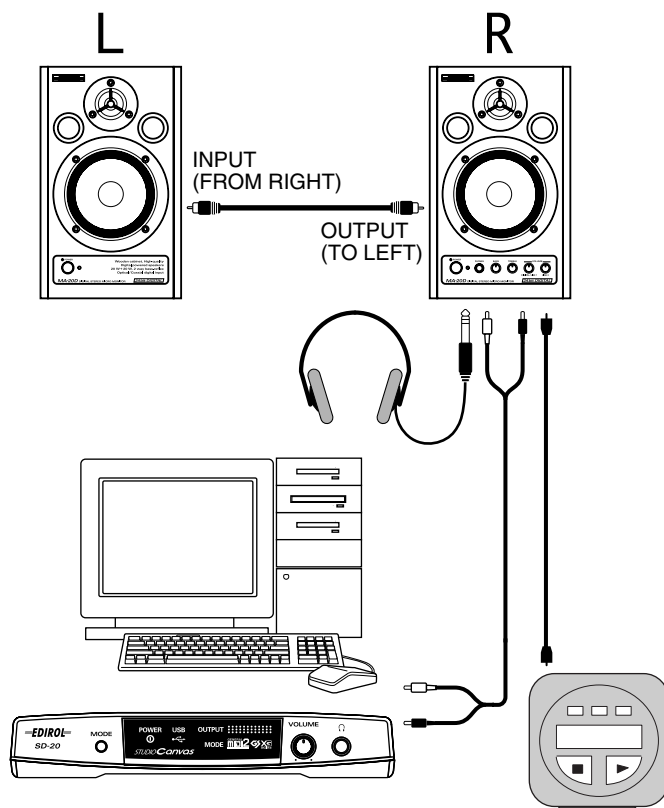
## Montare i Piedini in Gomma (Inclusi)



## Precauzioni durante i collegamenti e l'accensione

- Per evitare malfunzionamenti e/o danni ai diffusori o ad altri dispositivi, abbassare sempre il volume e accertarsi che tutti gli apparecchi non siano alimentati prima di effettuare i collegamenti.
- L'uso di un cavo provvisto di un resistore potrebbe risultare in un livello audio basso. Utilizzare un cavo di collegamento senza resistore.
- Una volta terminati i collegamenti, accendere i vari dispositivi nell'ordine indicato. Se i dispositivi vengono accesi nell'ordine sbagliato, si rischia di provocare malfunzionamenti e/o danni ai diffusori e agli altri dispositivi. (Seguire la procedura al contrario nella fase di spegnimento.)  
< Dispositivi collegati → MA-20D (R) → MA-20D (L) >
- Quest'unità è dotata di un circuito di protezione. È necessario un breve intervallo (di pochi secondi) dopo l'accensione prima che l'unità funzioni normalmente.

## Esempio di collegamenti



Modulo sonoro, lettore CD, lettore MD, ecc.

English

Deutsch

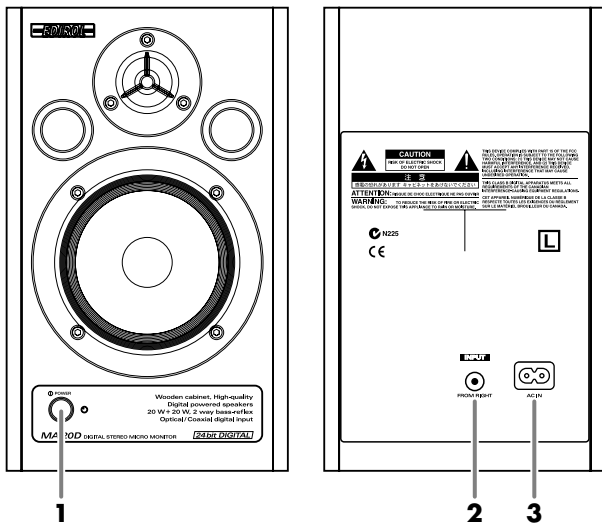
Français

Italiano

Español

# Descripción del panel

## Canal izquierdo



## Canal izquierdo

### 1. Interruptor POWER, Indicador POWER

Esto enciende/apaga el suministro de energía del canal izquierdo (L). Al encender el suministro de energía, se enciende el indicador ubicado a un lado del interruptor.

### 2. Jack de entrada del canal izquierdo

Conéctelo al jack de salida del canal izquierdo **14** que se encuentra en el lado derecho de la unidad. Para la conexión, utilice el cable del altavoz que viene incluido.

### 3. Entrada CA

Conecte aquí el cable de alimentación (Paginas 17).  
Enchúfelo de modo que el cable no se pueda desconectar accidentalmente.

## Canal derecho

### 4. Interruptor POWER, Indicador POWER

Esto enciende/apaga el suministro de energía del canal derecho (R). Al encender el suministro de energía, se enciende el indicador ubicado a un lado del interruptor.

### 5. Jack de los auriculares

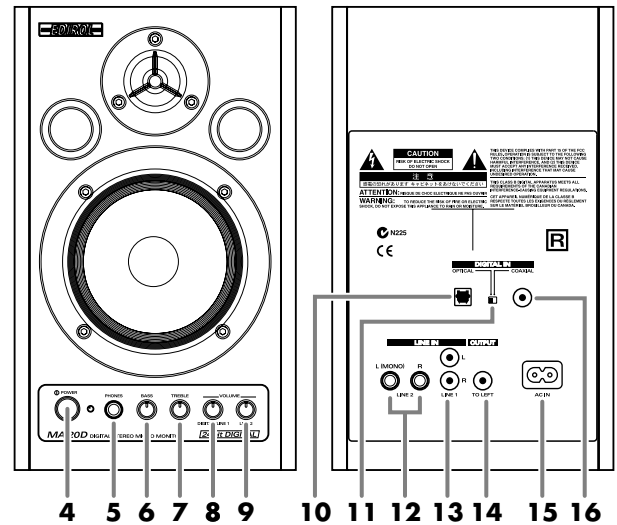
Cuando conecte los auriculares a este jack, los altavoces no emitirán ningún sonido.

### 6. Control BASS

### 7. Control TREBLE

Estos botones ajustan el tono de los bajos y los agudos. Cóloquelos en el centro para que los tonos queden nivelados.

## Canal derecho



### 8. Control VOLUME (DIGITAL/LÍNEA 1)

Esto ajusta el volumen de los dispositivos conectados a los conectores de entrada digital **10**, **16**, y los enchufes de entrada **13** de la LÍNEA 1.

### 9. Control VOLUME (LÍNEA 2)

Esto ajusta el volumen del dispositivo conectado a los enchufes **12** de la LÍNEA 2.

### 10. Conector de entrada digital (Optical)

Este es el conector de entrada digital para el cable de fibra óptica.

### 11. Interruptor de selección de entrada digital

Este interruptor selecciona el conector de entrada digital **10** o **16** en el panel posterior. Seleccione el conector que se utiliza para la señal de entrada.

### 12. Jacks de entrada de la LÍNEA 2 (Izquierda (MONO), Derecha) (tipo teléfono de 1/4")

Para entrada monoaural, use el enchufe L (MONO).

### 13. Jacks de entrada de la LÍNEA 1 (Izquierda, Derecha) (tipo de patilla RCA)

### 14. Jack de salida del canal izquierdo

Conéctelo al jack de entrada del canal izquierdo **2** que se encuentra en el lado izquierdo de la unidad.

### 15. Entrada CA

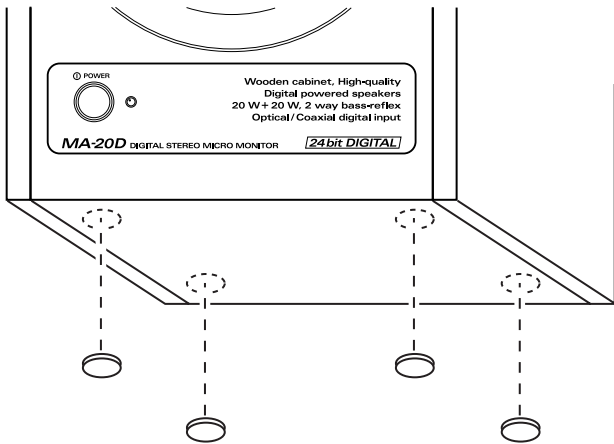
Conecte aquí el cable de alimentación (Paginas 17).  
Enchúfelo de modo que el cable no se pueda desconectar accidentalmente.

### 16. Conector de entrada digital (Coaxial)

Este es el conector de entrada digital para el cable coaxial.

# Conexiones

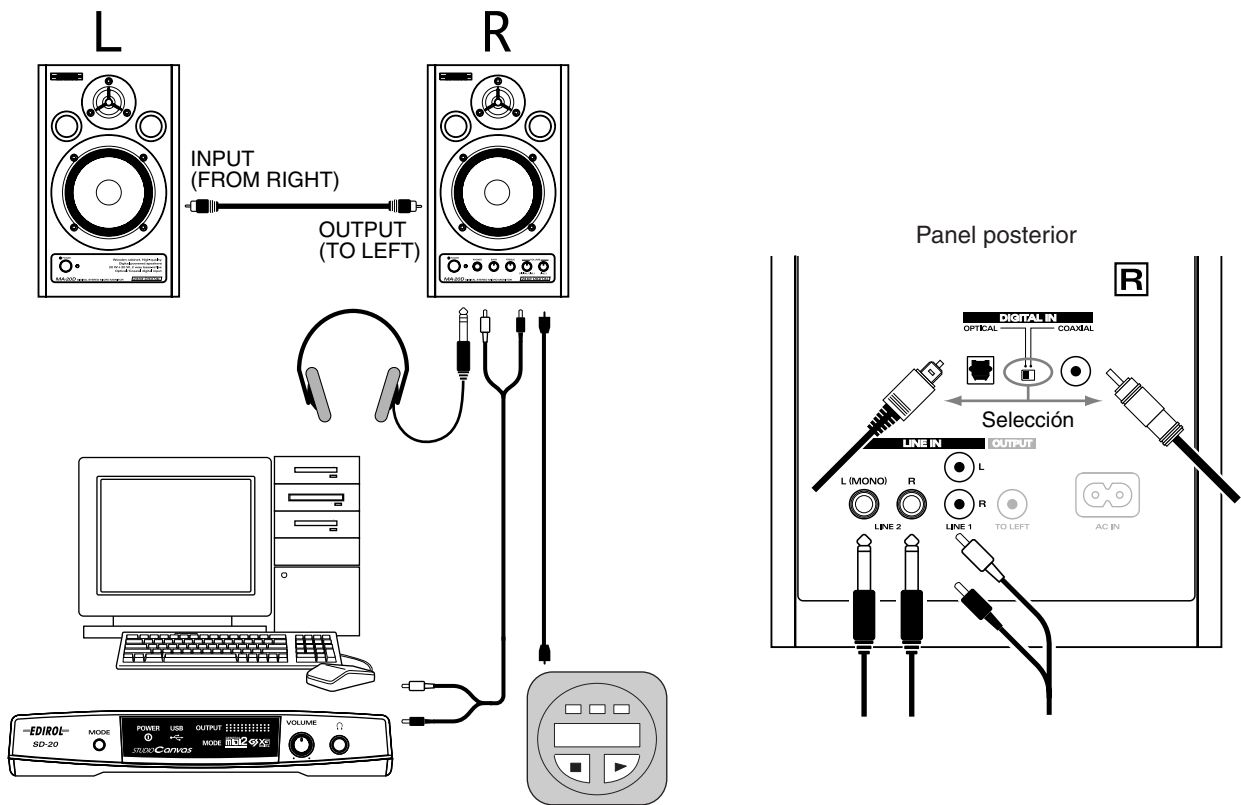
## Incluye los pies de goma



## Precauciones que debe tener en cuenta cuando conecte y encienda la unidad

- Para evitar anomalías en el funcionamiento o daños en los altavoces u otros aparatos, baje siempre el volumen y apague todos los aparatos antes de realizar cualquier conexión.
- Si utiliza un cable que posea un reostato, el nivel de sonido puede bajar. Utilice un cable de conexión que no contenga un reostato.
- Una vez completadas las conexiones, encienda los diferentes aparatos en el orden especificado. Si enciende los aparatos en un orden equivocado, puede causar anomalías en el funcionamiento o daños en los altavoces y otros aparatos. (Cuando apague el sistema, siga estas instrucciones en el orden inverso)  
< Aparatos conectados → MA-20D (R) → MA-20D (L) >
- Esta unidad está equipada con un circuito de protección. Se requiere de un breve intervalo (unos cuantos segundos) después de encender el suministro de energía antes de que la unidad opere normalmente.

## Ejemplo de conexión



Módulo de sonido, reproductor de CD, reproductor de MD, etc.

# Specifications

## Rated Power Output

40 W (20 W + 20 W)

## Speaker Units

Woofer: 12 cm /  
4-3/4" (Magnetically-Shielded)  
Tweeter: 4 cm /  
1-5/8" (Magnetically-Shielded)

## Frequency Range

50 Hz to 22 kHz

## Nominal Input Level

Line 1: -10 dBu  
Line 2: -10 dBu

## Input Impedance

18 k ohms

## Controls

< R Channel >

BASS Control Knob

TREBLE Control Knob

VOLUME Knob x 2

- VOLUME 1 (digital input + RCA phono)
- VOLUME 2 (1/4" phono)

POWER Switch

Digital Input Select Switch

< L Channel >

POWER Switch

## Indicators

< R Channel/L Channel >

Power Indicator

## Connectors

< R Channel >

Front: PHONES Jack (stereo 1/4" phono type)

Rear: LINE 1 Jacks (L, R) (RCA phono type)

LINE 2 Jacks (L (MONO), R) (1/4" phono type)

L Channel Output Jack (RCA phono type)

Digital Input Connector (Optical)

Digital Input Connector (Coaxial)

< L Channel >

Rear: L Channel Input Jack (RCA phono type)

## Digital Input Section

Sampling Rate: 32/44.1/48/96 kHz

D/A Converter: 24 bits

## Enclosure

2-way Bass-reflex type (Wooden Cabinet)

## Power Supply

AC 117 V, AC 230 V or AC 240 V

## Current Draw

230 mA (AC 117 V) x 2

120 mA (AC 230 V) x 2

110 mA (AC 240 V) x 2

## Dimensions

< R Channel >

170 (W) x 261 (D) x 280 (H) mm

6-3/4 (W) x 10-5/16 (D) x 11-1/16 (H) inches

< L Channel >

170 (W) x 256 (D) x 280 (H) mm

6-3/4 (W) x 10-1/8 (D) x 11-1/16 (H) inches

## Weight

< R Channel >

4.5 kg / 9 lbs 15 oz

< L Channel >

4.2 kg / 9 lbs 5 oz

## Accessories

Owner's Manual

Speaker Cable (RCA phono type)

Power Cord

Rubber Foot x 4

\* 0 dBu = 0.775 V rms

\* In the interest of product improvement, the specifications and/or appearance of this unit are subject to change without prior notice.



**For 230 V (English)**

This box contains continental and British power cables. Please select the correct type for your country.

**Für 230 V (Deutsch)**

Diese Packung beinhaltet europäische und britische Netzkabel. Bitte suchen Sie sich die richtige Variante für Ihr Land aus.

**Pour 230 V (Français)**

Cette boîte contient des alimentations anglaises ou continentales. Merci de choisir l'alimentation appropriée de votre pays.

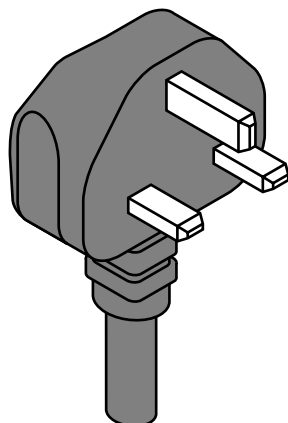
**Per 230 V (Italiano)**

La confezione contiene alimentatori con spina europea e Inglese. Scegliete quella adatta alla Vostra nazione.

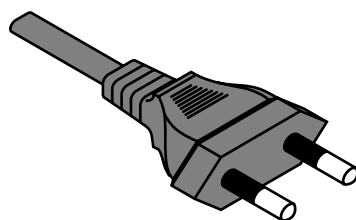
**Para 230 V (Español)**

Esta caja contiene cables de corriente continentales y británicos. Por favor seleccione el tipo correcto para su país.

**Application of AC230 V  
Power Cord**



for UK



except for UK





This product complies with the requirements of European Directives EMC 89/336/EEC and LVD 73/23/EEC.

For EU Countries

## FEDERAL COMMUNICATIONS COMMISSION RADIO FREQUENCY INTERFERENCE STATEMENT

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.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

Unauthorized changes or modification to this system can void the users authority to operate this equipment.  
This equipment requires shielded interface cables in order to meet FCC class B Limit.

For the USA

## NOTICE

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

## AVIS

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

For Canada

