SONY

3-862-889-**11**(1)

Digital Processing Amplifier

Operating Instructions **EN**

®œ•Œª°©˙Æ– **C**

TAD-M30

WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

Precautions

On safety

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

On power sources

- Before operating the processing amplifier, check that the operating voltage is identical with your local power supply. The operating voltage is indicated on the nameplate at the rear of the processing amplifier.
- The unit is not disconnected from the AC power source (mains) as long as it is connected to the wall outlet, even if the unit itself has been turned off.
- If you are not going to use the processing amplifier for a long time, be sure to disconnect the processing amplifier from the wall outlet. To disconnect the AC power cord, grasp the plug itself; never pull the cord.
- AC power cord must be changed only at the qualified service shop.
- The voltage selector is located at the bottom of the apparatus.

On placement

- Do not install the appliance in a confined space, such as a bookcase or built-in cabinet.
- Place the processing amplifier in a location with adequate ventilation to prevent heat buildup and prolong the life of the processing amplifier.
- Do not place the processing amplifier 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.

On operation

Before connecting other components, be sure to turn off and unplug the processing amplifier.

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.

If you have any question or problem concerning your processing amplifier, please consult your nearest Sony dealer.

About This Manual

- The connections and required setup differ depending on the components used together with the processing amplifier. Be sure to read “Getting Started” on pages 4 and 5 and to confirm these items before using the processing amplifier.
- The instructions in this manual describe operation with the Sony DVP-M35 DVD player recommended for use with the processing amplifier.
- The instructions in this manual mainly describe the controls on the processing amplifier. You can also use the controls on the supplied remote if they have the same or similar names as those on the processing amplifier.
- The following icons are used in this manual.

Icon	Meaning
	Indicates that you can use only the remote to do the task.
	Indicates hints and tips for making the task easier.

This processing amplifier incorporates the Dolby* Digital decoder.

* *Manufactured under license from Dolby Laboratories Licensing Corporation. DOLBY, the double-D symbol ◻◻, the Dolby Digital and “PRO LOGIC” are trademarks of Dolby Laboratories Licensing Corporation.*

TABLE OF CONTENTS

EN

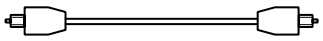
Getting Started

Be sure to read this section before operating the processing amplifier.

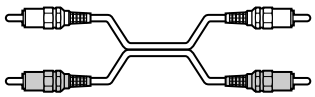
Checking the Accessories

Check that you have received the following items with the processing amplifier.

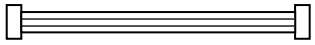
- Remote commander (remote) (1)
- Size AA (R6) batteries (2)
- Optical cable (1)



- Audio cord (1)



- Audio bus cord (1)

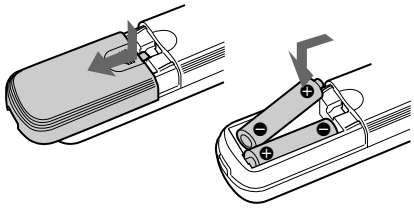


- Instruction manual (1)

If any of these items are missing, consult your nearest Sony dealer.

Inserting batteries into the remote

Insert two size AA (R6) batteries with the + and – as shown in the battery compartment. When using the remote, point it at the remote sensor ▣ on the processing amplifier.



When to replace the batteries

Under normal use, the batteries should last for about 6 months. When the remote no longer operates the processing amplifier, replace both batteries with new ones.

Notes

- Do not leave the remote in an extremely hot or humid place.
- Do not use a new battery with an old one.
- Do not expose the remote sensor to direct sunlight or lighting apparatuses. Doing so may cause a malfunction.
- If you don't use the remote for an extended period of time, remove the batteries to avoid possible damage from battery leakage and corrosion.

Checking the Necessary Components

This digital processing amplifier lets you enjoy sound recorded on a DVD with surround effects.
Sound signals recorded on a DVD are decoded and then sent to the connected speakers.
You can enjoy 5.1ch surround sound by using the processing amplifier together with an existing stereo system or stereo amplifier, or 3ch surround sound when using the processing amplifier alone.

5.1ch and 3ch

Surround sound is basically 5.1ch. The "5" in 5.1ch indicates five speakers (two front speakers (L/R), one center speaker, and two rear speakers (L/R)), and the "1" indicates one sub woofer. Dividing the sound between these five speakers and one sub woofer reproduces realistic sound with a sense of space. When the shape of the room or other conditions prevent you from connecting five speakers, you can still enjoy surround effects using only the three front and center speakers (3ch).

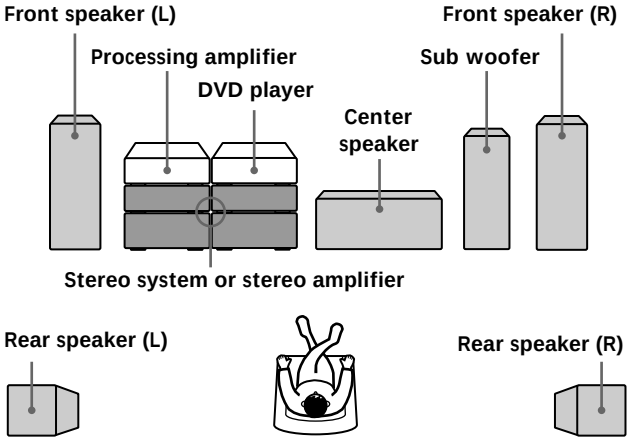
Sub woofer

The sub woofer reinforces the bass sound. You can enjoy satisfactory surround effects even without a sub woofer, but using a sub woofer lets you obtain heavier bass sounds for more realistic surround effects.

To enjoy 5.1ch surround sound

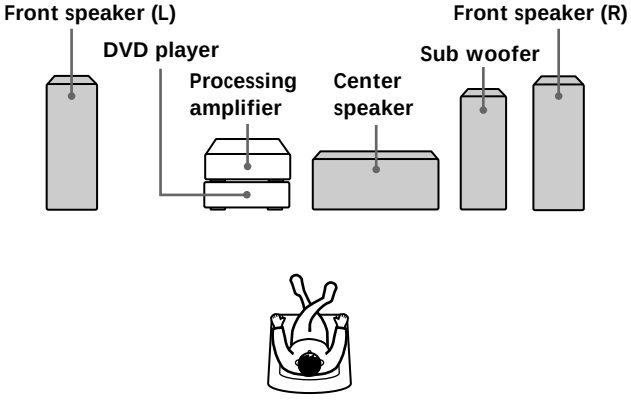
You can enjoy 5.1ch surround sound by using the processing amplifier together with any of the following stereo systems or stereo amplifiers. See "Connections and Setup for 5.1ch Surround" on page 6 for a description of the necessary connections and setup.

- ☐ Recommended Sony stereo system model: DHC-MD717 (This model may not be sold in certain countries)
- ☐ Stereo systems or stereo amplifiers with audio input jacks for external components.



To enjoy 3ch surround sound

You can enjoy 3ch surround sound by using only the processing amplifier and a DVD player. See "Connections and Setup for 3ch Surround" on page 16 for a description of the necessary connections and setup.



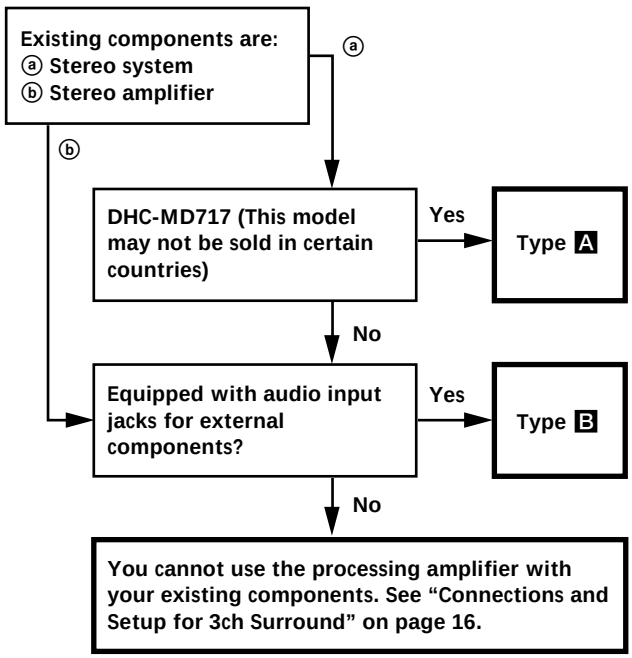
Connections and Setup for 5.1ch Surround

This section describes the connections and setup necessary to enjoy 5.1ch (SYSTEM UP MODE) surround sound together with your existing components.

Hooking Up the System

Checking the connection type

The connections differ according to the components used together with the processing amplifier. Be sure to check your existing components and the connection type beforehand.



Differences in functions for each connection type

For connection type **A**, the volume adjustment is controlled and the speaker volume balance set by the TEST TONE function is constantly maintained by the audio bus cord connection, so these items do not need to be reset.

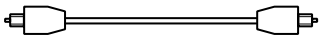
For connection type **B**, the volume control of the connected stereo system or stereo amplifier changes only the front speaker volume, disrupting the volume balance set by the TEST TONE function.

To return each speaker to the original volume balance, adjust the volume control of the connected component so that the front volume matches that of the other speakers, or do the TEST TONE adjustment again.

What cords will I need?

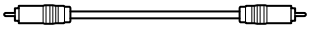
☐ **Optical cable (supplied, 1)**

This is used to connect a DVD player.
This cable is not necessary when connecting the DVD player with the coaxial digital connecting cable.



☐ **Coaxial digital connecting cable (1)**

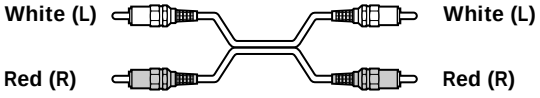
This is used to connect a DVD player.
This cable provides better sound quality than connection with the optical cable.



When you connect both the optical cable and the coaxial digital connecting cable, press OPTICAL (optical digital) or COAXIAL (coaxial digital) on the processing amplifier to select the sound you want to listen to during playback.

☐ **Audio cord (supplied, 1)**

This sends the front speaker sound from the FRONT OUT jacks of the processing amplifier to the front speakers through the stereo system or stereo amplifier.



Connection type A only:

☐ **Audio bus cord (supplied, 1)**

This controls the volume adjustment.

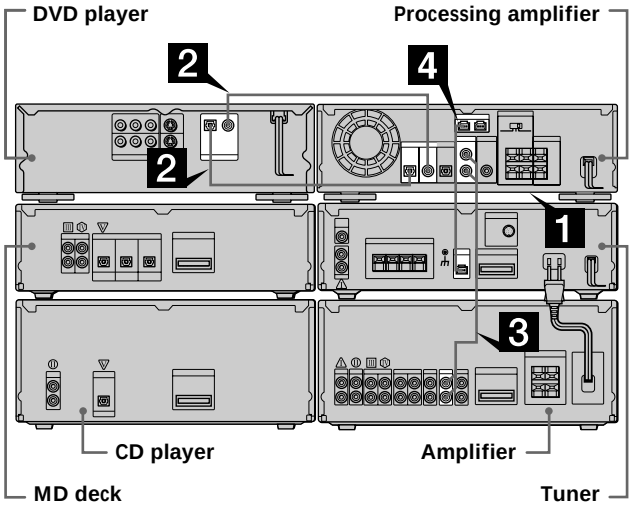
Note

You cannot control the volume adjustment for connection type B stereo systems even if you connect the audio bus cord.

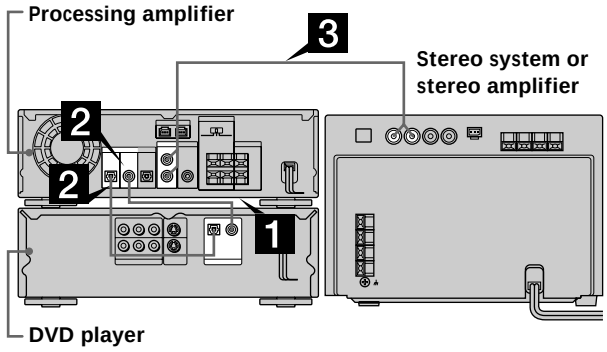
Connecting a DVD player and other components to the processing amplifier

Connect the cords and cables according to the procedure 1 to 4 shown in the illustration below depending on the connected component type A or B.
Be sure to turn off each component before connecting the cords and cables. Also, do not connect the power cord of the processing amplifier to an AC outlet before completing all speaker and sub woofer connections (see page 10).

Type A



Type B

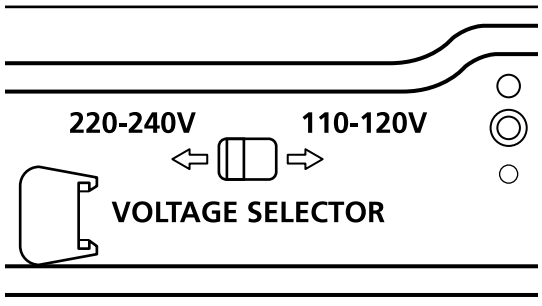


Notes

- Do not stack the DVD player on top of the processing amplifier, as the heat emitted from the processing amplifier may cause the DVD player to malfunction.
- This processing amplifier does not support 96 kHz or 24-bit discs.

1 Set the voltage selector.

Check that the voltage selector on the bottom of the processing amplifier is set to the local power line voltage. If not, set the voltage selector to the correct position using a screwdriver before connecting.

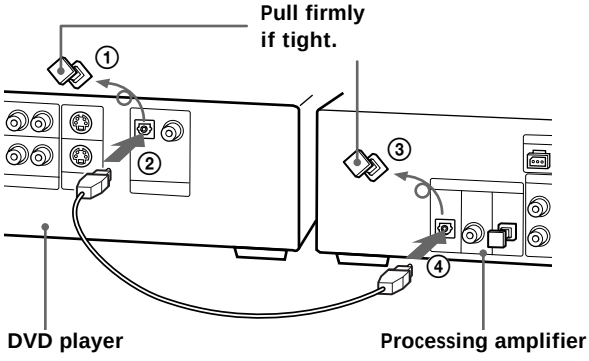


2 Connect the DVD player.

Connect the DVD player with the optical cable or the coaxial digital connecting cable. For better sound quality, we recommend using the coaxial digital connecting cable.

Connecting the optical cable

Connect the cable plugs to the DIGITAL OUT OPTICAL jack on the DVD player and the DIGITAL OPTICAL IN jack on the processing amplifier. Remove the cap from each jack (① and ③) and insert the plugs parallelly until they click into place (② and ④).

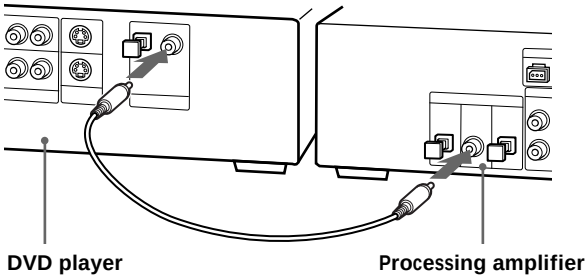


Notes

- Do not fold or bundle the optical cable.
- Store the caps carefully for future use.

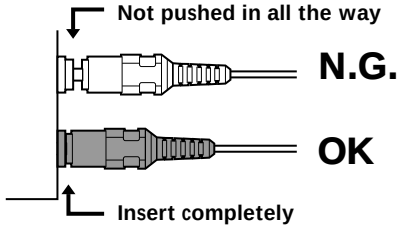
Connecting the coaxial digital connecting cable

Connect the cable plugs to the DIGITAL OUT COAXIAL jack on the DVD player and the DIGITAL COAXIAL IN jack on the processing amplifier.



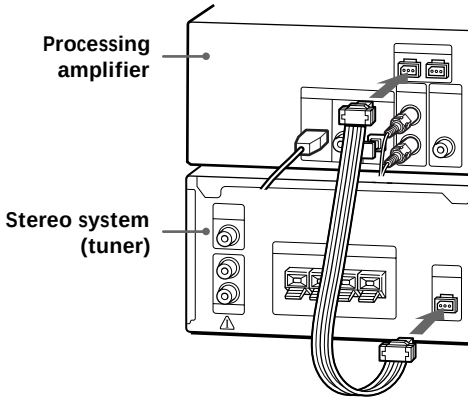
3 Connect the stereo system or stereo amplifier.

Connect the audio cord to the audio input jacks for external components on the connected component and the FRONT OUT jacks on the processing amplifier. Match the color of the plugs and the jacks, and insert the plugs firmly, pushing them in all the way.



4 (Type A only) Connect the audio bus cord.

Connect the audio bus cord to the AU BUS connectors on the DHC-MD717 stereo system (tuner) and the processing amplifier.



Note

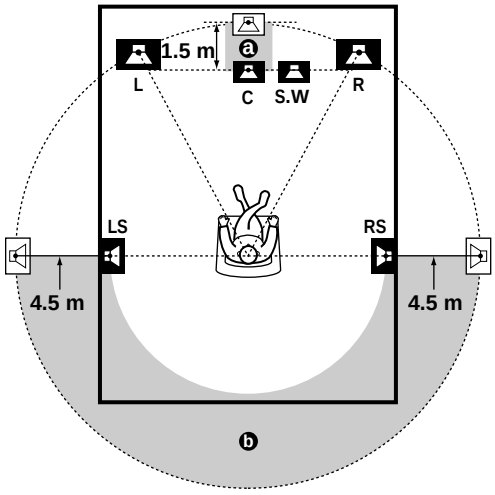
Even if you connect components other than the DHC-MD717 using the audio bus cord, operation does not change.

Connecting the Speakers and the Sub Woofer

Speaker placement

Care should be taken for the following points to obtain the best possible surround sound.

- Place the front speakers symmetrically to the right and left of the listening position.
- Place the center speaker within the range ⓐ in the illustration below.
- Place the rear speakers symmetrically to the right and left within the range ⓑ in the illustration below.



L : Front speaker (left)
R : Front speaker (right)
C : Center speaker
LS : Rear speaker (left)
RS : Rear speaker (right)
S.W : Sub woofer

Note

When placing the rear speakers slightly behind the listening position and using the VIRTUAL MULTI REAR or VIRTUAL REAR SHIFT sound-field effects (Digital Cinema Sound), be sure to check the speaker positions with the SET UP menu before use (see pages 12 and 13).

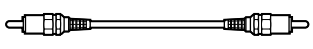
What cords will I need?

☐ **Speaker cords (3)**

These are used to connect the center speaker and the rear speakers (L/R). If cords are supplied with the speakers, use the supplied cords.

☐ **Audio cord (monaural, 1)**

This is used to connect the sub woofer. If a cord is supplied with the sub woofer, use the supplied cord.

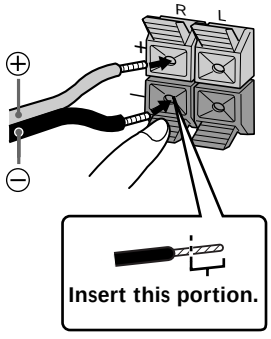


Connecting the speakers

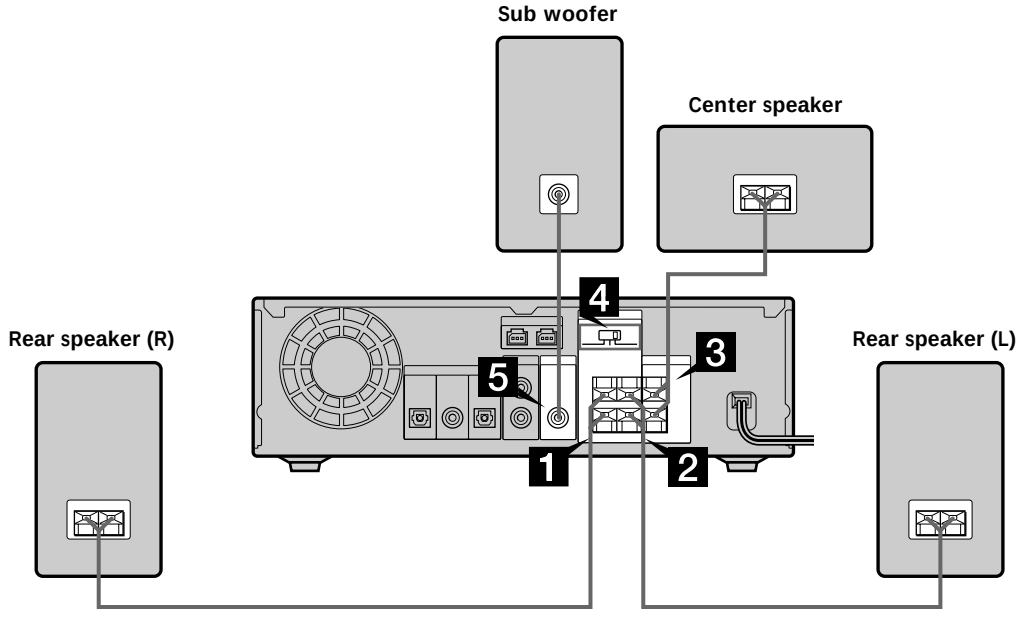
Connect the cords according to the procedure **1** to **5** below to hook up the speakers.

1 Connect the rear right (R) speaker.

① Connect the speaker cord to the SPEAKER (R) terminals of the same polarity (+/–).



② Pull gently on the speaker cord to make sure it is connected correctly.
If the speaker cord pulls out, connect it again.



2 Connect the rear left (L) speaker.

Connect the speaker cord to the SPEAKER (L) terminals in the same manner as step **1**.

3 Connect the center speaker.

Connect the speaker cord to the CENTER SPEAKER terminals in the same manner as step **1**.

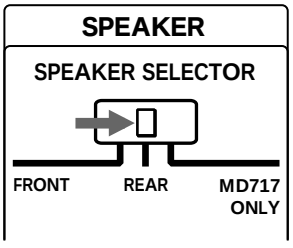
4 Set SPEAKER SELECTOR to match the connected components.

When using the DHC-MD717:

➡ Set to "MD717 ONLY".

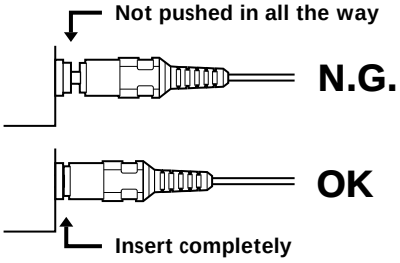
When using a different stereo system or a stereo amplifier:

➡ Set to "REAR".



5 Connect the sub woofer.

Connect the audio cord to the left (L) channel of the line input jack on the sub woofer and the WOOFER OUT jack on the processing amplifier. Insert the plugs firmly, pushing them in all the way.



Connecting the power cord to an AC outlet

When you have finished all the connections, plug the power cord of the processing amplifier into an AC outlet.

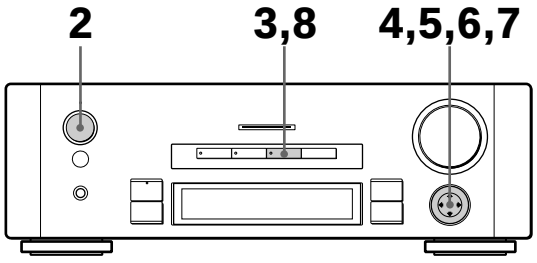
Note

When you want to use only the stereo system, turn off the DVD player and the processing amplifier. If you leave the DVD player and processing amplifier power on, this may cause noise during radio reception.

Speaker and Sub Woofer Set Up

Settings required for surround sound — *SET UP*

The speaker set up consists of three items: the connection status, the rear speaker position and the distance from the listening position to the speakers. Be sure to follow the procedure below to set the connection status and the rear speaker position. If these items are not set correctly, sound may not come from the speakers.
When you want to obtain more accurate surround effects, set the distance to the speakers (see page 13).



1 **Make sure the SPEAKER SELECTOR switch on the rear panel of the processing amplifier is set to "REAR" (or "MD717 ONLY" when using the DHC-MD717).**

2 **Turn on the processing amplifier.**

The ON-STANDBY indicator above the I/⏻ button on the processing amplifier goes off.

3 **Press SET UP.**

The SET UP button lights and "SPEAKER SETUP" appears in the display.

4 **Set the center speaker connection status.**

① Press CURSOR ↑/↓ repeatedly until "CENTER [LARGE*]" appears in the display.

② Press CURSOR ←/→ to select the center speaker connection status.

Center speaker connection status		Setting
None		NO
Connected	Normal	LARGE
	If the sound is distorted	SMALL

* The last setting is stored in the memory, so [SMALL] or [NO] may appear instead.

5 **Set the rear speaker connection status.**

① Press CURSOR ↑/↓ repeatedly until "REAR [LARGE*]" appears in the display.

② Press CURSOR ←/→ to select the rear speaker connection status.

Rear speaker connection status		Setting
None		NO
Connected	Normal	LARGE
	If the sound is distorted	SMALL

* The last setting is stored in the memory, so [SMALL] or [NO] may appear instead.

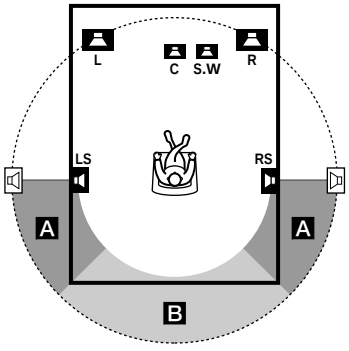
6 **Set the rear speaker position.**

① Press CURSOR ↑/↓ repeatedly until "REAR [SIDE*]" appears in the display.

② Press CURSOR ←/→ to select the rear speaker position setting with respect to the listening position.

Rear speaker position	Setting
Within range A	SIDE
Within range B	BEHIND

* The last setting is stored in the memory, so [BEHIND] may appear instead.



7 **Set the sub woofer connection status.**

① Press CURSOR ↑/↓ repeatedly until "WOOFER [YES*]" appears in the display.

② Press CURSOR ←/→ to select the sub woofer connection status.

Sub woofer connection status	Setting
None	NO
Connected	YES

* The last setting is stored in the memory, so [NO] may appear instead.

8 **To enjoy more accurate surround effects, skip to step 2 of the following section "Setting the distance to the speakers".**
To complete the settings, press SET UP.

If the sound is distorted

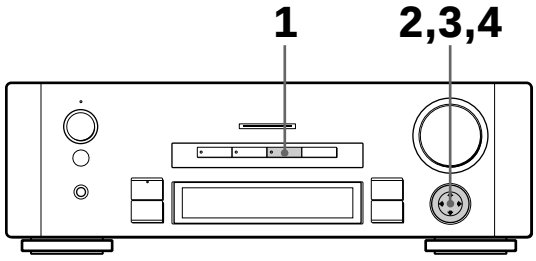
Select "SMALL" for the center and rear speaker connection settings. Note that "LARGE" should be normally selected to obtain satisfactory surround effects.

Note

If you do not press CURSOR to start the setting operations within approximately 8 seconds after pressing SET UP, the SET UP button goes off.

Setting the distance to the speakers — *SET UP*

Set the distance from the listening position to the speakers to enjoy more accurate surround effects.



1 **Press SET UP.**

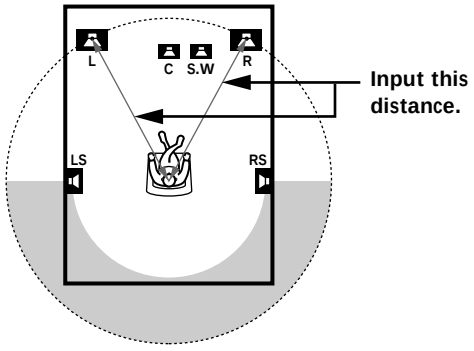
The SET UP button lights and "SPEAKER SETUP" appears in the display.

2 **Set the distance to the front speakers.**

① Press CURSOR ↑/↓ repeatedly until "FRONT 5.0*meter" appears in the display.

* The value set last is displayed.

② Press CURSOR ←/→ to set the distance from the listening position to the front speakers.
You can set the distance in 0.1 m (10 cm) steps from 1 to 12 m.

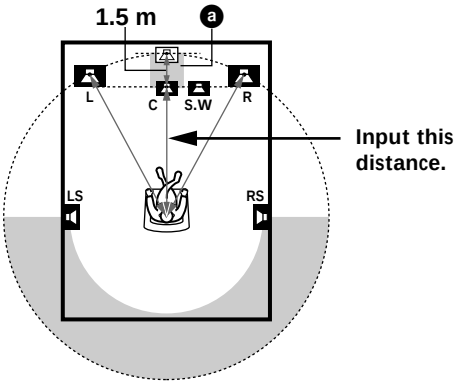


3 Set the distance to the center speaker.

① Press CURSOR ↑/↓ repeatedly until "CENTER 5.0*meter" appears in the display.

* The value set last is displayed.

② Press CURSOR ←/→ to set the distance from the listening position to the center speaker.
You can set the distance in 0.1 m (10 cm) steps up to –1.5 m starting from the front speaker position set in step 2. (For example, if you placed the front speakers at a position of 6.0 m, you can place the center speaker within the range of 4.5 to 6.0 m. Note that you cannot place the center speaker farther away from the listening position than the front speakers.)
If you have placed the center speaker outside of range ⓐ in the illustration below, relocate the center speaker so that it is within range ⓐ.

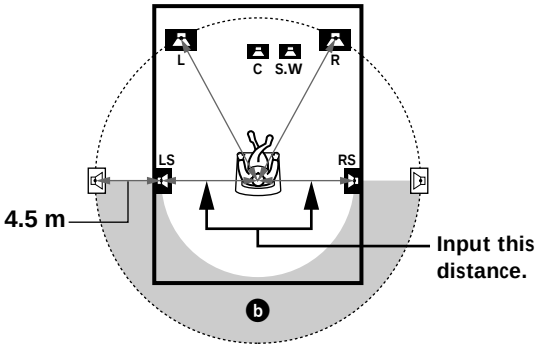


4 Set the distance to the rear speakers.

① Press CURSOR ↑/↓ repeatedly until "REAR 5.0*meter" appears in the display.

* The value set last is displayed.

② Press CURSOR ←/→ to set the distance from the listening position to the rear speakers.
You can set the distance in 0.1 m (10 cm) steps up to –4.5 m starting from the front speaker position set in step 2. (For example, if you placed the front speakers at a position of 6.0 m, you can place the rear speakers within the range of 1.5 to 6.0 m. Note that you cannot place the rear speakers farther away from the listening position than the front speakers.)
If you have placed the rear speakers outside of range ⓑ in the illustration below, relocate the rear speakers so that they are within range ⓑ.

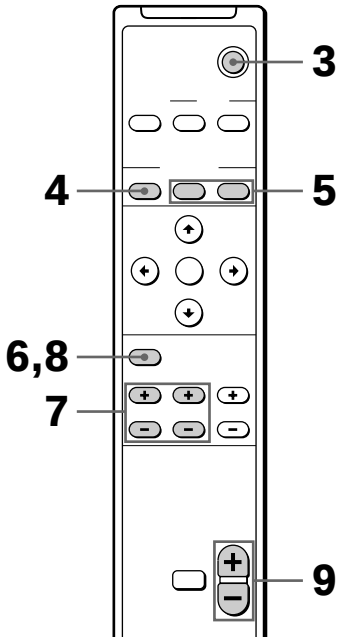


Note

If you do not press CURSOR to start the setting operations within approximately 8 seconds after pressing SET UP, the SET UP button goes off.

Adjusting the volume — *TEST TONE*

Adjust the volumes of the rear and center speakers to match the volume of the front speakers.
While adjusting the speaker volumes, also check to make sure all the speakers are connected and set correctly.



1 **Switch the function of the stereo system or stereo amplifier to a function other than DVD (i.e., tuner) and adjust the front speaker volume to an appropriate level.**

2 **Switch the function of the stereo system or stereo amplifier to the function of the jack to which the processing amplifier is connected.**

Switch the function to "LD / DVD" for the DHC-MD717.

3 **Turn on the processing amplifier.**

The ON-STANDBY indicator above the **I/⏻** button on the processing amplifier goes off.

4 **Press SURROUND ON/OFF so that the SURROUND ON/OFF button on the processing amplifier lights.**

5 **Press SURROUND MODE UP or DOWN so that "NORMAL SURROUND" appears in the display.**

6 **Press TEST TONE on the remote.**

You will hear the test tone from each speaker in sequence.

If the test tone is not heard from a speaker

Press TEST TONE to turn off the test tone, then check the following two points.

- Is the speaker connected correctly? (See page 10.)
- Is the speaker connection setting correct? (See page 12.)

After checking these points, press TEST TONE again.

7 **Press REAR and CENTER +/– on the remote to adjust the volume so that the test tone can be heard at the same level from all speakers.**

Press	To adjust
REAR +/–	the rear speaker volume within the range of –20 dB to +10 dB (1 dB steps).
CENTER +/–	the center speaker volume within the range of –20 dB to +10 dB (1 dB steps).

When using components other than the DHC-MD717

If the front speaker volume is still too low even after lowering the volume of the rear and center speakers to –20 dB, or too high even after raising the volume to +10 dB, raise or lower the front speaker volume using the volume control of the stereo system or stereo amplifier and then press REAR and CENTER +/– to adjust the volume again.

8 **Press TEST TONE to turn off the test tone.**

9 **Turn MASTER VOLUME on the processing amplifier (or press VOL +/– on the remote) to adjust the overall volume.**

To adjust the volume when using components other than the DHC-MD717

After finishing the test tone adjustment, be sure to adjust the overall volume using MASTER VOLUME on the processing amplifier.
If you turn the volume control of the connected stereo system or stereo amplifier after adjusting the volume with the test tone, only the front speaker volume changes, disrupting the volume balance between the front speakers and the other speakers. Even if you turn MASTER VOLUME on the processing amplifier in this condition, only the overall volume changes and the front speaker volume remains too high (or low).
In these cases, turn the volume control of the connected stereo system or stereo amplifier so that the front speaker volume is balanced with that of the other speakers, or do the TEST TONE adjustment again.

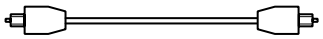
Connections and Setup for 3ch Surround

This section describes the connections and setup necessary to enjoy 3ch (3ch SELF AMP) surround sound by connecting front speakers, a center speaker and a sub woofer to the processing amplifier.

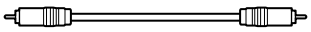
Hooking Up the System

What cords will I need?

☐ **Optical cable (supplied, 1)**
This is used to connect a DVD player.
This cable is not necessary when connecting the DVD player with the coaxial digital connecting cable.



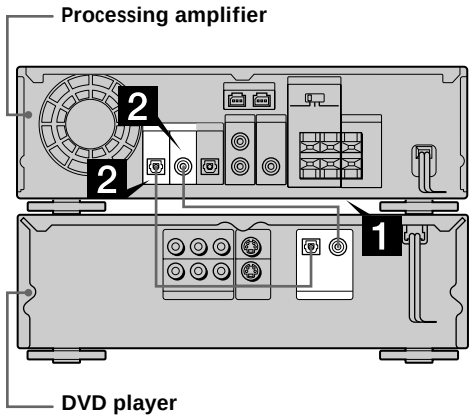
☐ **Coaxial digital connecting cable (1)**
This is used to connect a DVD player.
This cable provides better sound quality than connection with the optical cable.



When you connect both the optical cable and the coaxial digital connecting cable, press OPTICAL (optical digital) or COAXIAL (coaxial digital) on the processing amplifier to select the sound you want to listen to during playback.

Connecting a DVD player to the processing amplifier

Connect the DVD player using the optical cable or the coaxial digital connecting cable as shown in the illustration below.
Be sure to turn off each component before connecting the cords and cables. Also, do not connect the power cord of the processing amplifier to an AC outlet before completing all speaker and sub woofer connections (see page 18).
The illustrations in the description below show the DVP-M35.

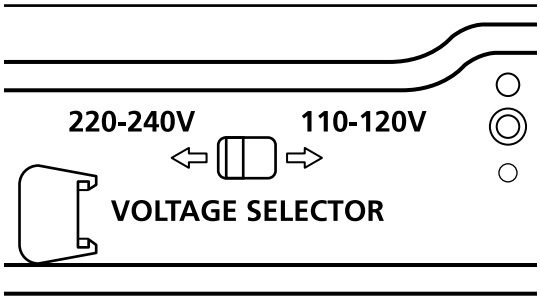


Notes

- Do not stack the DVD player on top of the processing amplifier, as the heat emitted from the processing amplifier may cause the DVD player to malfunction.
- This processing amplifier does not support 96 kHz or 24-bit discs.

1 Set the voltage selector.

Check that the voltage selector on the bottom of the processing amplifier is set to the local power line voltage. If not, set the voltage selector to the correct position using a screwdriver before connecting.

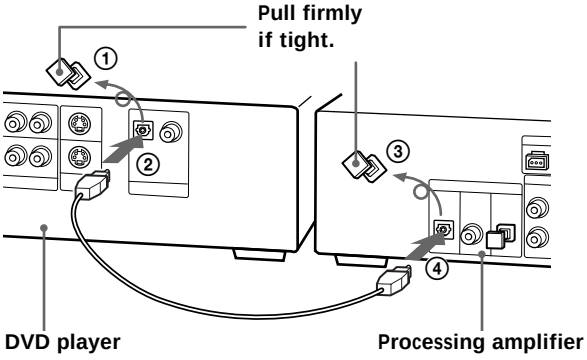


2 Connect the DVD player.

Connect the DVD player with the optical cable or the coaxial digital connecting cable. For better sound quality, we recommend using the coaxial digital connecting cable.

Connecting the optical cable

Connect the cable plugs to the DIGITAL OUT OPTICAL jack on the DVD player and the DIGITAL OPTICAL IN jack on the processing amplifier.
Remove the cap from each jack (① and ③) and insert the plugs parallelly until they click into place (② and ④).

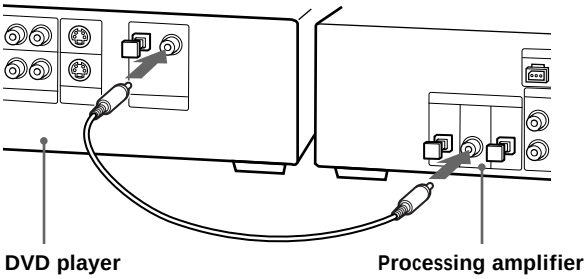


Notes

- Do not fold or bundle the optical cable.
- Store the caps carefully for future use.

Connecting the coaxial digital connecting cable

Connect the cable plugs to the DIGITAL OUT COAXIAL jack on the DVD player and the DIGITAL COAXIAL IN jack on the processing amplifier.

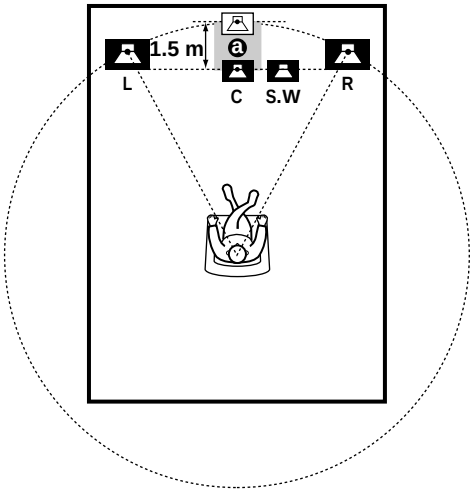


Connecting the Speakers and the Sub Woofer

Speaker placement

Care should be taken for the following points to obtain the best possible surround sound.

- Use the highest performance speakers* possible.
  * We recommend the SS-T505, etc.
- Place the front speakers symmetrically to the right and left of the listening position.
- Place the center speaker within the range ⓐ in the illustration below.



L : Front speaker (left)
R : Front speaker (right)
C : Center speaker
S.W : Sub woofer

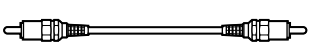
What cords will I need?

☐ **Speaker cords (3)**

These are used to connect the front speakers (L/R) and the center speaker. If cords are supplied with the speakers, use the supplied cords.

☐ **Audio cord (monaural, 1)**

This is used to connect the sub woofer. If a cord is supplied with the sub woofer, use the supplied cord.

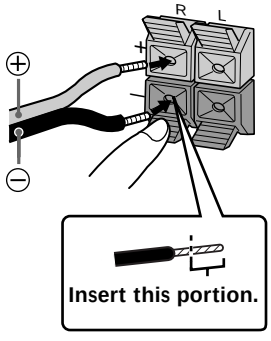


Connecting the speakers

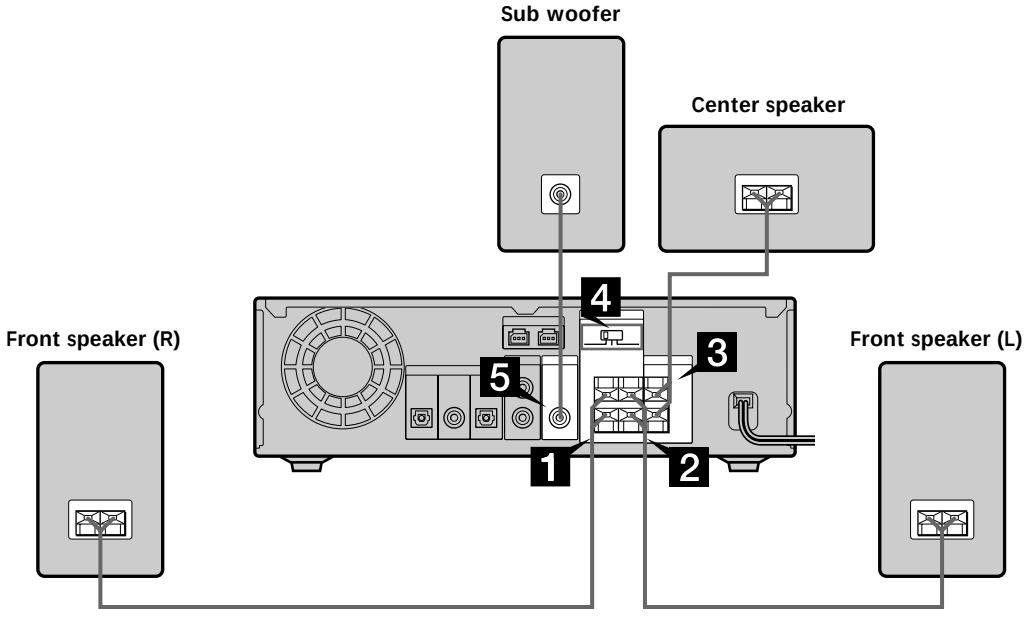
Connect the cords according to the procedure **1** to **5** below to hook up the speakers.

1 Connect the front right (R) speaker.

① Connect the speaker cord to the SPEAKER (R) terminals of the same polarity (+/–).



② Pull gently on the speaker cord to make sure it is connected correctly.
If the speaker cord pulls out, connect it again.



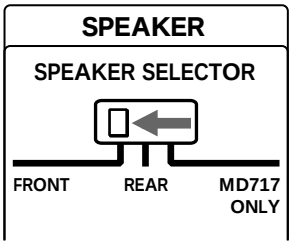
2 Connect the front left (L) speaker.

Connect the speaker cord to the SPEAKER (L) terminals in the same manner as step 1.

3 Connect the center speaker.

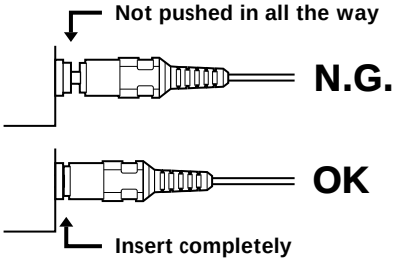
Connect the speaker cord to the CENTER SPEAKER terminals in the same manner as step 1.

4 Set SPEAKER SELECTOR to "FRONT".



5 Connect the sub woofer.

Connect the audio cord to the left (L) channel of the line input jack on the sub woofer and the WOOFER OUT jack on the processing amplifier. Insert the plugs firmly, pushing them in all the way.



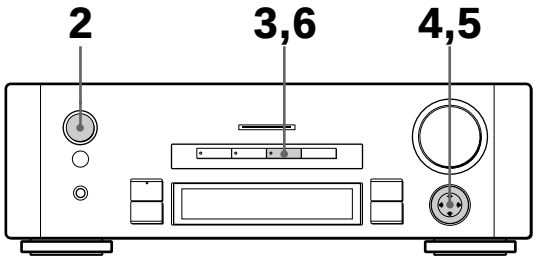
Connecting the power cord to an AC outlet

When you have finished all the connections, plug the power cord of the processing amplifier into an AC outlet.

Speaker and Sub Woofer Set Up

Settings required for surround sound — *SET UP*

The speaker set up consists of two items: the connection status and the distance from the listening position to the speakers. Be sure to follow the procedure below to set the connection status. If the connection status is not set correctly, sound may not come from the speakers.
When you want to obtain more accurate surround effects, set the distance to the speakers.



1 **Make sure the SPEAKER SELECTOR switch on the rear panel of the processing amplifier is set to "FRONT".**

2 **Turn on the processing amplifier.**

The ON-STANDBY indicator above the I/⏻ button on the processing amplifier goes off.

3 **Press SET UP.**

The SET UP button lights and "SPEAKER SETUP" appears in the display.

4 **Set the center speaker connection status.**

① Press CURSOR ↑/↓ repeatedly until "CENTER [LARGE*]" appears in the display.

② Press CURSOR ←/→ to select the center speaker connection status.

Center speaker connection status		Setting
None		NO
Connected	Normal	LARGE
	If the sound is distorted	SMALL

* The last setting is stored in the memory, so [SMALL] or [NO] may appear instead.

5 **Set the sub woofer connection status.**

① Press CURSOR ↑/↓ repeatedly until "WOOFER [YES*]" appears in the display.

② Press CURSOR ←/→ to select the sub woofer connection status.

Sub woofer connection status	Setting
None	NO
Connected	YES

* The last setting is stored in the memory, so [NO] may appear instead.

6 **To enjoy more accurate surround effects, skip to step 2 of the following section "Setting the distance to the speakers".**
To complete the settings, press SET UP.

If the sound is distorted

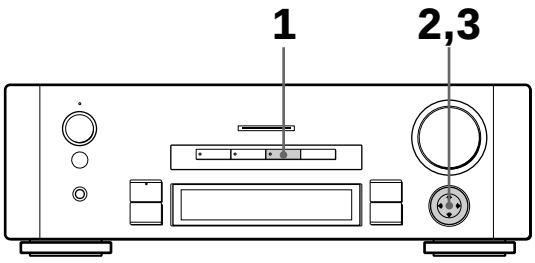
Select "SMALL" for the center speaker connection setting. Note that "LARGE" should be normally selected to obtain satisfactory surround effects.

Note

If you do not press CURSOR to start the setting operations within approximately 8 seconds after pressing SET UP, the SET UP button goes off.

Setting the distance to the speakers — *SET UP*

Set the distance from the listening position to the speakers to enjoy more accurate surround effects.



1 Press SET UP.

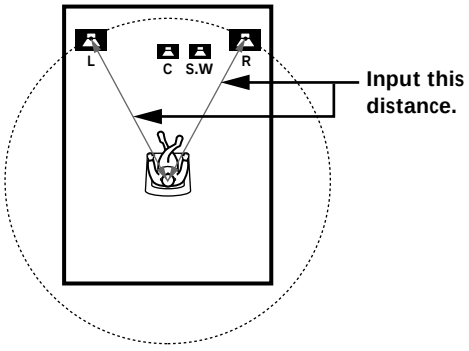
The SET UP button lights and "SPEAKER SETUP" appears in the display.

2 Set the distance to the front speakers.

① Press CURSOR ↑/↓ repeatedly until "FRONT 5.0*meter" appears in the display.

* The value set last is displayed.

② Press CURSOR ←/→ to set the distance from the listening position to the front speakers.
You can set the distance in 0.1 m (10 cm) steps from 1 to 12 m.

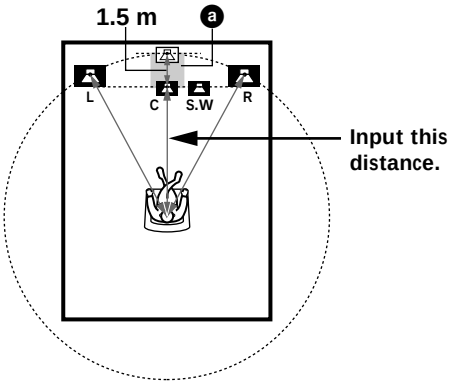


3 Set the distance to the center speaker.

① Press CURSOR ↑/↓ repeatedly until "CENTER 5.0*meter" appears in the display.

* The value set last is displayed.

② Press CURSOR ←/→ to set the distance from the listening position to the center speaker.
You can set the distance in 0.1 m (10 cm) steps up to –1.5 m starting from the front speaker position set in step 2. (For example, if you placed the front speakers at a position of 6.0 m, you can place the center speaker within the range of 4.5 to 6.0 m. Note that you cannot place the center speaker farther away from the listening position than the front speakers.)
If you have placed the center speaker outside of range ⓐ in the illustration below, relocate the center speaker so that it is within range ⓐ.

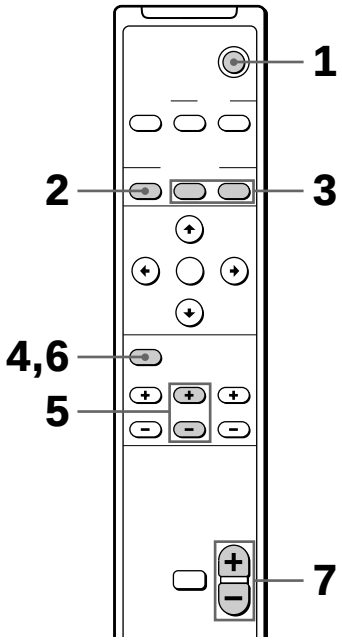


Note

If you do not press CURSOR to start the setting operations within approximately 8 seconds after pressing SET UP, the SET UP button goes off.

Adjusting the volume — *TEST TONE*

Adjust the volumes of the speakers, and at the same time check to make sure all the speakers are connected and set correctly.



1 **Turn on the processing amplifier.**

The ON-STANDBY indicator above the **I/⏻** button on the processing amplifier goes off.

2 **Press SURROUND ON/OFF so that the SURROUND ON/OFF button on the processing amplifier lights.**

3 **Press SURROUND MODE UP or DOWN so that "NORMAL SURROUND" appears in the display.**

4 **Press TEST TONE on the remote.**

You will hear the test tone from each speaker in sequence.

If the test tone is not heard from a speaker

Press TEST TONE to turn off the test tone, then check the following two points.

- Is the speaker connected correctly? (See page 18.)
- Is the speaker connection setting correct? (See page 20.)

After checking these points, press TEST TONE again.

5 **Press CENTER +/– on the remote to adjust the volume so that the test tone can be heard at the same level from all speakers.**

Press	To adjust
CENTER +/–	the center speaker volume within the range of –20 dB to +10 dB (1 dB steps).

Note

You cannot use REAR +/– if the SPEAKER SELECTOR switch is set to "FRONT". ("NOW 3ch AMP MODE" appears in the display.)

6 **Press TEST TONE to turn off the test tone.**

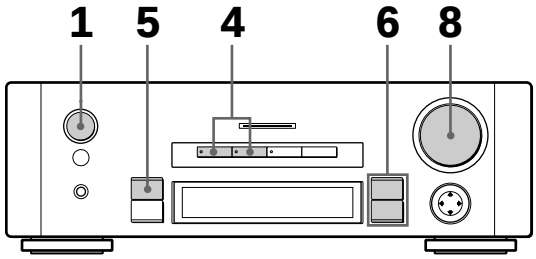
7 **Turn MASTER VOLUME on the processing amplifier (or press VOL +/– on the remote) to adjust the overall volume.**

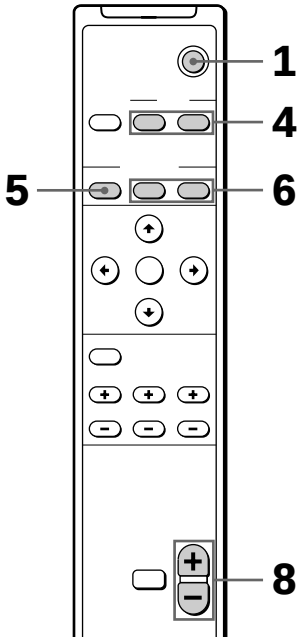
Surround Function

This processing amplifier incorporates several pre-programmed “Digital Cinema Sound” surround modes. Select the desired surround mode and adjust for the room conditions to enjoy powerful surround effects from a wide variety of software.

Applying Surround Effects

You can set surround effects at any time regardless of whether a DVD is playing or in stop mode.





1 **Turn on all of the components.**

2 **If you have connected the processing amplifier to a stereo system or stereo amplifier, switch the function of the stereo system or stereo amplifier to the jack to which the processing amplifier is connected.**

Switch the function to “LD / DVD” for the DHC-MD717.

3 **When playing Dolby Digital DVD software, set the audio digital output on the DVD player to “Dolby Digital/PCM”*.**

* *When using components that incorporate a Dolby Digital (AC-3) decoder, the setting item name differs according to the DVD player (i.e., “Dolby Digital”). See the instruction manual supplied with the DVD player for the setting method.*

4 Press OPTICAL or COAXIAL to select the desired component.

When the component is connected to	Press
DIGITAL OPTICAL IN	OPTICAL
DIGITAL COAXIAL IN	COAXIAL

The selected button lights.

5 Press SURROUND ON/OFF so that the SURROUND ON/OFF button on the processing amplifier lights.

6 Press SURROUND MODE UP or DOWN to select the desired surround mode.

See the tables on pages 25 and 26 for a description of surround modes and effects.

7 Start playing the DVD.

8 Turn MASTER VOLUME on the processing amplifier (or press VOL +/– on the remote) to adjust the volume.

To cancel the surround effects

Press SURROUND ON / OFF so that the SURROUND ON / OFF button goes off.

To adjust the DVD volume during 5.1ch surround

When using the processing amplifier with the DHC-MD717

The volume control of the stereo system does not function when the processing amplifier is turned on and the stereo system function is set to "LD / DVD" such as when playing a DVD. In these cases, adjust the DVD volume using MASTER VOLUME on the processing amplifier. (The volume of the front speakers connected to the stereo system also changes simultaneously.)

In cases other than the above

If you turn the volume control of the stereo system or stereo amplifier, only the volume heard from the front speakers changes. However, since this disrupts the balance with the other speaker volumes adjusted by the TEST TONE function (see page 15), be sure to adjust the DVD volume using MASTER VOLUME on the processing amplifier.

If the speaker volume balance has been lost, turn the volume control of the stereo system or stereo amplifier so that the front speaker volume is balanced with that of the other speakers, or do the TEST TONE adjustment again.

Notes

- If you perform the following operations, the volume switches to the level set on the stereo system or stereo amplifier. Therefore, be sure to set the volume control of the connected stereo system or stereo amplifier to a suitable position before:
  - Switching the stereo system or stereo amplifier to a function other than DVD (i.e., CD).
  - Turning off the processing amplifier.
- When using the TEST TONE function, if the front speaker volume set on the stereo system or stereo amplifier is too low, the DVD volume may not be loud enough even if MASTER VOLUME on the processing amplifier is turned up all the way. Therefore, be sure to set a proper front speaker volume in step 1 of "Adjusting the volume" on page 15.
- Sound will not come from the front speakers unless the stereo system or stereo amplifier is turned on and the function is set to the jack to which the processing amplifier is connected ("LD / DVD" for the DHC-MD717).

Surround Modes and Effects

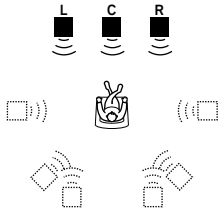
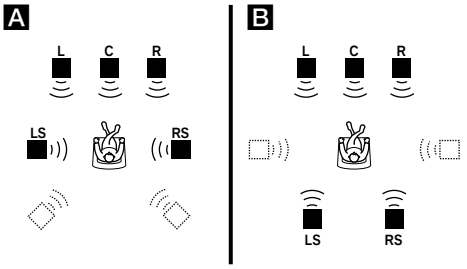
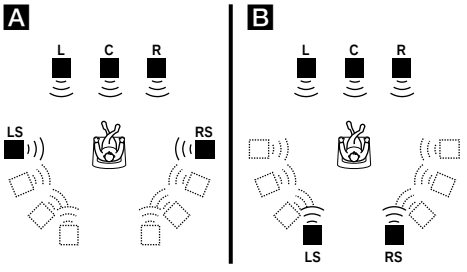
The surround effects are determined by the audio encoding method of the software to be played.
These audio encoding methods are listed below.
Sony's original digital signal processing technology lets you enjoy epoch-making surround effects by creating virtual rear speakers that do not actually exist or by producing sound that seems to come from farther back or even outside of the actual rear speaker positions (Digital Cinema Sound).

Audio encoding method	Encoded audio and how it is heard	Software types and identification methods
Dolby Digital 5.1ch	Audio tracks are encoded separately for each of the front R/L (2ch), center (1ch), rear R/L (2ch) and sub woofer (0.1ch) channels for a total of 5.1ch. Therefore, different sound is heard from each speaker. If there are not enough speakers or if the existing speakers are unable to fully reproduce the encoded audio, the audio for all channels can be played using only the front speakers by not applying surround effects (Down-Mixing).	DVD (Discs with the DOLBY DIGITAL logo* on the package) * Software without this logo cannot be decoded using Dolby Digital (AC-3) processing.
Dolby Surround (Dolby Digital 2ch or Dolby Pro Logic)	Audio tracks are encoded separately for each of the front R/L (2ch) channels. Audio encoded by this method can be decoded with surround effects by processing with Pro Logic to extract the center and rear sound components from each channel.	**Dolby Digital:** DVD (Discs with the DOLBY DIGITAL logo on the package) **Dolby Pro Logic:** DVD, LD, VHS, etc.
Stereo (2ch)	Audio tracks are encoded separately for the front R/L (2ch) channels. However, this audio is not processed with Dolby Surround so surround effects are realized by sound-field processing (adjusting the three elements of direct sound, early reflections and reverberation).	CDs, tapes, etc. (regardless of the sound source)
Monaural (1ch)	Only the front (1ch) audio is encoded.	Old movies, etc.

Surround modes (sound fields) and effects

Mode	Effect	Remarks
AUTO DECODE	Automatically identifies the audio signal encoding method and decodes the signals in the manner which they are encoded. For example, when you play a DVD encoded with only front sound, the sound comes only from the front speakers.	Sound may not come from the rear and center speakers while this mode is selected. However, this is not a malfunction and simply means that rear and center sound is not recorded on the disc you are playing. To listen to sound from the rear and center speakers as well, select a different mode.
NORMAL SURROUND	Decodes 5.1ch software in the manner which it is encoded. Automatically processes 2ch software using Pro Logic to create surround effects.	
ENHANCED SUR(ROUND)	Converts the surround channels to quasi-stereo (2ch) in order to add a sense of width when the rear sound is monaural (1ch) such as Dolby Pro Logic.	
CINEMA STUDIO A	Reproduces the acoustics of the Sony Pictures Entertainment "Cary Grant Theater" cinema production studio.	Standard movie viewing mode.
CINEMA STUDIO B	Reproduces the acoustics of the Sony Pictures Entertainment "Kim Novak Theater" cinema production studio.	Mode for viewing SFX and action movies with lots of sound effects.
CINEMA STUDIO C	Reproduces the acoustics of a scoring stage for recording music.	Mode for viewing classic and musical movies with lots of music.
SMALL THEATER	Reproduces the acoustics of a small theater with about 100 to 200 seats.	
LARGE THEATER	Reproduces the acoustics of a large theater with about 1200 to 2000 seats.	
MONO MOVIE	Provides theater-like sound effects for movies recorded with monaural soundtracks.	

Surround Modes and Effects

Mode	Effect	Remarks
VIRTUAL ENHANCED (SURROUND)	Reproduces virtual rear speakers from the sound of only the front speakers without using actual rear speakers.	
VIR. (VIRTUAL) REAR SHIFT	Shifts the sound of the rear speakers to the rear or outside of the actual speaker positions when the room conditions make it necessary to place the rear speakers closer than the front speakers. The shifted position differs according to the rear speaker position setting (see the SET UP menu). **A**: When the rear speaker position setting is "SIDE"* **B**: When the rear speaker position setting is "BEHIND"* * See page 12 for the rear speaker position setting.	 Note: See "Note" below.
VIR. (VIRTUAL) MULTI REAR	Creates an array of virtual rear speakers from a single pair (L/R) of rear speakers. The virtual speaker positions differ according to the rear speaker position setting (see the SET UP menu). **A**: When the rear speaker position setting is "SIDE"* **B**: When the rear speaker position setting is "BEHIND"* * See page 12 for the rear speaker position setting.	 Note: See "Note" below.
HALL	Reproduces the acoustics of a concert hall with about 1500 to 2000 seats.	Ideal for orchestra and other acoustic music.
OPERA HOUSE	Reproduces the acoustics of an opera house.	Ideal for operas and musicals.
JAZZ CLUB	Reproduces the acoustics of a large jazz club with about 500 seats.	
LIVE HOUSE	Reproduces the acoustics of a rock and roll club with about 300 seats.	Ideal for pops and rock.
KARAOKE	Reduces the vocal tracks (singer's voice) of 2ch stereo music sources for Karaoke.	
STADIUM	Reproduces the feeling of a baseball stadium or other large open-air stadium.	
GAME	Obtains maximum audio impact from video game software.	

Note

You can use the VIR. REAR SHIFT and VIR. MULTI REAR modes only when rear speakers are connected. You can not select these modes when:

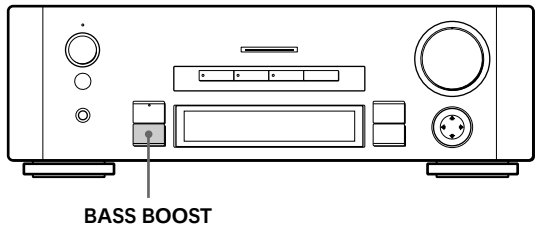
- The SPEAKER SELECTOR switch on the rear panel of the processing amplifier is set to "FRONT".
- The SPEAKER SELECTOR switch on the rear panel of the processing amplifier is set to "REAR" (or "MD717 ONLY"), but the rear speaker connection status is set to "NO" by the speaker settings.

L : Front speaker (left)
R : Front speaker (right)
C : Center speaker
LS : Rear speaker (left)
RS : Rear speaker (right)
□ : Virtual speaker

Adjusting the Sound

Reinforcing the bass frequencies — *BASS BOOST*

This function lets you reinforce the bass frequencies.



➡ **Press BASS BOOST.**

"BASS BOOST ON" appears, then "B.BOOST" lights in the display and the bass sound is reinforced.

To cancel the BASS BOOST function

Press BASS BOOST so that "BASS BOOST OFF" appears and "B.BOOST" disappears from the display.

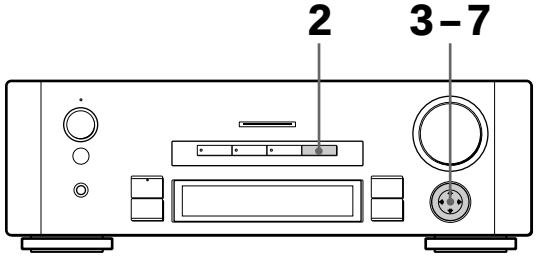
Note

If you reinforce the bass frequencies, the sound may become distorted depending on the speaker connection status setting.

Adjusting the speaker volume — *LEVEL ADJUST*

This function adjusts the balance and volume of the connected speakers.

Item	Adjustment contents	Initial value
F.BAL	Front speaker L/R volume balance	Center
R.BAL	Rear speaker L/R volume balance	Center
REAR	Rear speaker volume	0 dB
CENTER	Center speaker volume	0 dB
WOOFER	Woofer volume with respect to the other speakers	0 dB



1 Select the desired surround mode (see page 24) and play the DVD.

2 Press CURSOR MODE repeatedly until "LEVEL ADJUST" appears in the display.

"CURSOR ▶ LEVEL" lights in the display.

3 Adjust the front speaker balance.

Adjust the balance so that sound can be heard at the same level from the left (L) and right (R) front speakers.

① Press CURSOR ↑/↓ repeatedly until "F.BAL" appears in the display.

② Press CURSOR ←/→ to adjust the L/R balance.

* You can adjust the balance up to 8 steps either to the left (L) or right (R) from the center.

4 Adjust the rear speaker balance.

Adjust the balance so that sound can be heard at the same level from the left (L) and right (R) rear speakers.

① Press CURSOR ↑/↓ repeatedly until “R.BAL” appears in the display.

② Press CURSOR ←/→ to adjust the L/R balance.

* You can adjust the balance up to 8 steps either to the left (L) or right (R) from the center.

5 Adjust the rear speaker volume.

① Press CURSOR ↑/↓ repeatedly until “REAR” appears in the display.

② Press CURSOR ←/→ to adjust the volume.

* You can adjust the volume in 1 dB steps within the range of –20 dB to +10 dB. Increasing the value raises the volume.

6 Adjust the center speaker volume.

① Press CURSOR ↑/↓ repeatedly until “CENTER” appears in the display.

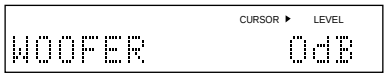
② Press CURSOR ←/→ to adjust the volume.

* You can adjust the volume in 1 dB steps within the range of –20 dB to +10 dB. Increasing the value raises the volume.

7 Adjust the sub woofer volume.

① Press CURSOR ↑/↓ repeatedly until “WOOFER” appears in the display.

② Press CURSOR ←/→ to adjust the volume.



* You can adjust the volume in 1 dB steps within the range of –20 dB to +10 dB. Increasing the value raises the volume.

Notes

- You cannot adjust the speakers or the sub woofer if the connection status is set to “NO” by the speaker or sub woofer settings (see page 12 or page 20).
- If you feel the rear and center speaker volumes are not balanced with the front speaker volume even after the adjustment, perform the TEST TONE adjustment again to achieve the proper volume balance for each speaker.

Customized surround mode sounds are stored in the memory for about 1 week even if you unplug the power cord of the processing amplifier.

To change a customized surround mode, select and adjust the respective surround mode again. To return to the original sound, set the initial values.

Adjusting the playback volume of Low Frequency Extension (LFE) signals encoded on a DVD — *LFE MIX*

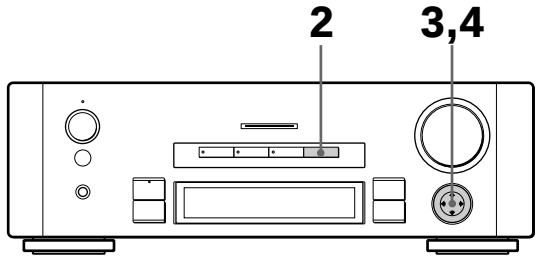
Low Frequency Extension (LFE) signals are a type of audio signal encoded on a DVD, and reinforce only the specified bass frequencies at the specified location in order to provide more real sound effects.
LFE signals can normally be heard from the sub woofer, but if the sub woofer connection status is set to "NO" by the speaker settings (see pages 13 and 20), the sound is output from the front and rear speakers. If you feel the bass is too strong at this time, perform the following operations.

Note

LFE signals are a type of DVD audio signal encoded in a specific location in order to reinforce a specific bass sound. Therefore, other bass sounds are not reduced even if you adjust the LFE signal. If you adjust the LFE signal but the bass sounds are still not reduced, perform one of the following operations.

- When "B.BOOST" is lit in the display, press BASS BOOST so that "BASS BOOST OFF" appears and "B.BOOST" goes off (see page 27).
- Adjust "WOOFER" in the LEVEL ADJUST menu to reduce the sub woofer volume (see page 28).
- Adjust "BASS GAIN" in the EQUALIZER menu (see page 31).

Item	Adjustment contents	Initial value
LFE MIX	Signal input mixing level (Value indicating the amount of bass mixed into the overall volume) Valid only when playing a DVD encoded with LFE signals	0 dB



1 **Select the desired surround mode (see page 24) and play the DVD.**

2 **Press CURSOR MODE repeatedly until "LEVEL ADJUST" appears in the display.**

"CURSOR ▶ LEVEL" lights in the display.

3 **Press CURSOR ↑/↓ repeatedly until "LFE MIX" appears in the display.**

4 **Press CURSOR ←/→ to select the desired LFE signal input mixing level.**

Setting	Effect
(MUTING)	The LFE signal audio is not output.
–20 to –1 dB	The LFE signal playback volume decreases as the value becomes smaller (i.e., –1, –2, –3, ... dB).
0 dB	Encoded LFE signals are played back at the original input mixing level.

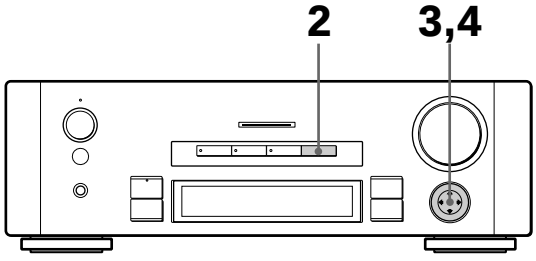
Customized surround mode sounds are stored in the memory for about 1 week even if you unplug the power cord of the processing amplifier.

To change a customized surround mode, select and adjust the respective surround mode again. To return to the original sound, set the initial value.

Adjusting the volume difference between audio signals encoded on a DVD — *D.RANGE COMP*

This function lets you increase the dynamic range compression ratio in order to reduce the difference in volume between high-volume sections (the loudest sounds) such as explosions and screams and low-volume sections (the softest sounds) such as background noises and gasps. This is useful when watching movies at low volumes at night or for soft sounds which are otherwise difficult to hear.

Item	Adjustment contents	Initial value
D.RANGE COMP	Playback volume difference	OFF



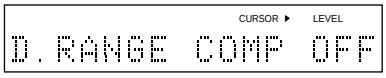
1 **Select the desired surround mode (see page 24) and play the DVD.**

2 **Press CURSOR MODE repeatedly until "LEVEL ADJUST" appears in the display.**

"CURSOR ▶ LEVEL" lights in the display.

3 **Press CURSOR ↑/↓ repeatedly until "D.RANGE COMP" appears in the display.**

4 **Press CURSOR ←/→ to select the desired compression ratio.**



Volume difference:

Encoded volume difference — Minimum

Setting value: OFF 0.1 0.2 0.3 ... 0.8 0.9 STD MAX

Setting	Effect
OFF	Encoded volume difference
0.1 to 0.9	The volume difference decreases as the value becomes larger (i.e., 0.1, 0.2, 0.3 ...).
STD	The volume difference is reduced to the recommended level encoded on the DVD software you are playing.
MAX	Minimum volume difference

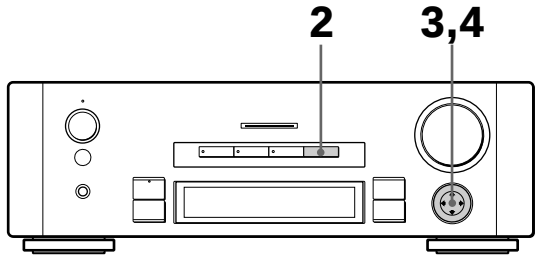
Customized surround mode sounds are stored in the memory for about 1 week even if you unplug the power cord of the processing amplifier.

To change a customized surround mode, select and adjust the respective surround mode again. To return to the original sound, set the initial value.

Adjusting the speaker treble and bass frequencies — *EQUALIZER*

This function lets you adjust the levels of specified frequencies to create the desired sound.
The EQUALIZER menu "EQ" parameters and their functions are as follows.

Item	Adjustment contents
BASS FREQ	Selects the bass frequency (99 to 992 Hz) to be adjusted.
BASS GAIN	Adjusts the bass frequency level.
TREB FREQ	Selects the treble frequency (1.0 to 8.6 kHz) to be adjusted.
TREB GAIN	Adjusts the treble frequency level.



1 Select the desired surround mode (see page 24) and play the DVD.

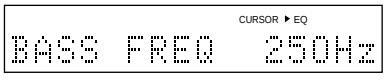
2 Press CURSOR MODE repeatedly until "EQUALIZER" appears in the display.

"CURSOR ▶ EQ" lights in the display.

3 Adjust the bass frequencies (99 to 992 Hz).

① Press CURSOR ↑/↓ repeatedly until "BASS FREQ" appears in the display.

② Press CURSOR ←/→ to select the frequency you want to adjust.



③ Press CURSOR ↑/↓ repeatedly until "BASS GAIN" appears in the display.

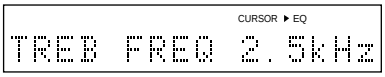
④ Press CURSOR ←/→ to adjust the level.

* You can adjust the level in 1 dB steps within the range of ±10 dB.

4 Adjust the treble frequencies (1.0 to 8.6 kHz).

① Press CURSOR ↑/↓ repeatedly until "TREB FREQ" appears in the display.

② Press CURSOR ←/→ to select the frequency you want to adjust.



③ Press CURSOR ↑/↓ repeatedly until "TREB GAIN" appears in the display.

④ Press CURSOR ←/→ to adjust the level.

* You can adjust the level in 1 dB steps within the range of ±10 dB.

Customized surround mode sounds are stored in the memory for about 1 week even if you unplug the power cord of the processing amplifier.

To change a customized surround mode, select and adjust the respective surround mode again.

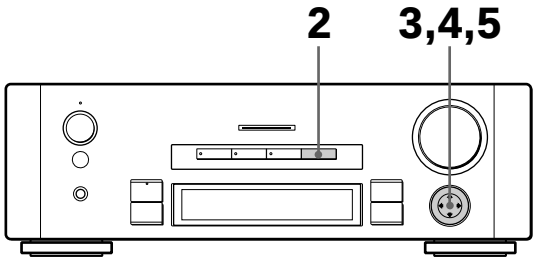
Adjusting the sound field to match the room conditions — *SURROUND*

This function lets you adjust how the surround effects are applied to match the room conditions.
The SURROUND menu "SURR" parameters and their functions are as follows.

Item	Adjustment contents
EFFECT	Adjusts the size of the surround effects (presence) with respect to the overall sound field.
WALL	Automatically adjusts the treble frequency level to match the wall materials of the room.
REV.	Adjusts the reverberation time (time until the output sound disappears). (Setting a longer reverberation time is effective for wide rooms, and a shorter time for narrow rooms.)

Note

You may be unable to adjust some items depending on the selected surround mode. (If "NOT IN USE" appears in the display when you press CURSOR, you cannot use that item.)



1 Select the desired surround mode (see page 24) and play the DVD.

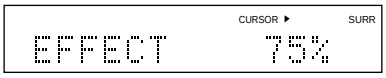
2 Press CURSOR MODE repeatedly until "SURROUND" appears in the display.

"CURSOR ▶ SURR" lights in the display.

3 Adjust the surround effects.

① Press CURSOR ↑/↓ repeatedly until "EFFECT" appears in the display.

② Press CURSOR ←/→ to adjust the surround effects.



* You can adjust the surround effects in 5% steps within the range of 0 (no surround effects) to 100%.

Note

If you set a high "EFFECT" value (%) while the "KARAOKE" surround mode is selected (see page 24), you may be unable to reduce the vocal tracks.

4 Adjust for the wall materials.

① Press CURSOR ↑/↓ repeatedly until "WALL" appears in the display.

② Press CURSOR ←/→ to adjust for the wall materials.

* You can adjust for the wall materials in 8 steps either to the softer (S) or harder (H) sides from the center.

5 Adjust the reverberation time.

① Press CURSOR ↑/↓ repeatedly until "REV." appears in the display.

② Press CURSOR ←/→ to adjust the reverberation time.

* You can adjust the reverberation time in 8 steps either to the shorter (S) or longer (L) sides from the center.

Customized surround mode sounds are stored in the memory for about 1 week even if you unplug the power cord of the processing amplifier.

To change a customized surround mode, select and adjust the respective surround mode again.

Additional Information

Troubleshooting

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

There's no sound or only a very low-level sound is heard.

➡ Check that the speakers and components are connected correctly.
➡ Check that the desired component has been selected by pressing OPTICAL or COAXIAL (see page 24).
➡ You are playing a 96 kHz or a 24-bit disc.

The sound is low.

When using the DHC-MD717:
➡ Check that the audio bus cord is connected correctly.

When using a different stereo system or stereo amplifier:
➡ Check that the SPEAKER SELECTOR switch on the rear panel is set to "REAR" (see page 11).

The sound is too loud (when using the DHC-MD717).

➡ Check that the SPEAKER SELECTOR switch on the rear panel is set to "MD717 ONLY" (see page 11).

The left and right sounds are unbalanced or reversed.

➡ Check that the speakers and components are connected correctly.
➡ Adjust the L/R balance (see page 27).

Severe hum or noise is heard.

➡ Check that the speakers and components are connected correctly.

There's no sound from the front speakers.

➡ Check that the SPEAKER SELECTOR switch on the rear panel is set to "REAR" during 5.1ch surround (or "MD717 ONLY" when using the DHC-MD717) (see page 11).
➡ Check that the SPEAKER SELECTOR switch on the rear panel is set to "FRONT" during 3ch surround (see page 19).
➡ The volume of the stereo system or stereo amplifier is reduced when using components other than the DHC-MD717. Adjust the volume of the stereo system or stereo amplifier so that the front sound is the proper level.

Only the front sound is too high or too low.

➡ Adjust the volume of the stereo system or stereo amplifier so that the front sound is the proper level, or do the TEST TONE adjustment again.

There's no sound from the center speaker.

➡ Set a surround mode (see page 23).
➡ Check that the center speaker is connected correctly (see pages 11 and 19).
➡ Check whether the speaker connection status for the center speaker is set to "NO" (see pages 12 and 20).
➡ Adjust the center speaker volume (see pages 15, 22 and 28).

You cannot select the desired component even by pressing OPTICAL or COAXIAL.

➡ Check that the desired component is connected correctly to the DIGITAL IN jack.
➡ During 5.1ch surround, check that the function of the stereo system or stereo amplifier is set to the jack to which the processing amplifier is connected.

There's no sound or only a very low-level sound is heard from the rear speakers.

➡ Set a surround mode (see page 23).
➡ Check that the rear speakers are connected correctly (see page 10).
➡ Check that the SPEAKER SELECTOR switch on the rear panel is set to "REAR" (or "MD717 ONLY" when using the DHC-MD717) (see page 11).
➡ Check whether the speaker connection status for the rear speakers is set to "NO" (see page 12).
➡ Adjust the rear speaker volume (see pages 15 and 28).

The speaker sound is distorted.

➡ The speaker connection status is set to "LARGE" even though the speaker cannot fully reproduce bass frequencies. Reset the parameter to "SMALL" (see pages 12 and 20).
➡ Set a smaller "LFE MIX" value (see page 29).

Surround effects cannot be obtained.

➡ Set a surround mode (see page 23).
➡ Increase the surround effect value (%) at the SURROUND menu (see page 32).

There's only sound from the front speakers.

When playing 5.1ch, 3ch or other multi-channel DVD software:

➡ The audio digital output of the DVD player is set to "PCM".
See the instruction manual supplied with the DVD player and switch to the setting (i.e., "Dolby Digital/PCM" or "Dolby Digital") for using components that incorporate a Dolby Digital (AC-3) decoder.
➡ The audio of the current chapter is not a multi-channel signal.
➡ Surround is "OFF".

When playing 2ch music software such as 2ch DVD software or a CD:

➡ Surround is "OFF".

The remote does not function.

➡ Point the remote at the remote sensor R on the processing amplifier.
➡ Remove any obstacles in the path of the remote and the processing amplifier.
➡ Replace both batteries in the remote with new ones if they are weak.

The DIGITAL input indicator does not light.

➡ Surround is "OFF".
➡ You are playing DVD software that is not compatible with Dolby Digital.
See the instruction manual supplied with the DVD player and switch to the setting (i.e., "Dolby Digital/PCM" or "Dolby Digital") for using components that incorporate a Dolby Digital (AC-3) decoder.
➡ The audio of the current chapter is not a multi-channel signal such as 5.1ch or 3ch.

The sound drops out momentarily.

➡ When you connect a DVD player using the coaxial digital connecting cable, the sound may drop out momentarily due to the effects of static electricity, etc. If these drop-outs occur frequently, try connecting the DVD player using the optical cable.

Specifications

Digital inputs Optical: 1
Coaxial: 1

Digital outputs Optical: 1

Audio outputs Front (L/R)
Woofer

Continuous RMS power output (reference)
Front/Rear (switchable):
50 + 50 watts
Center: 50 watts
(6 ohms at 1 kHz, 10% THD)

Peak music power output (reference)
1000 watts

Speaker impedance 6 to 16 ohms

Tone control BASS: ±10 dB (center frequency 99 to 992 Hz)
TREBLE: ±10 dB (center frequency 1.0 to 8.6 kHz)

Power requirements 110 – 120 V AC, 220 – 240 V AC, 50/60 Hz (adjustable with the voltage selector)

Power consumption 120 watts

Dimensions (w/h/d) 280 x 91 x 350 mm

Mass (Approx.) 4.5 kg

Supplied accessories See page 4.

Design and specifications are subject to change without notice.

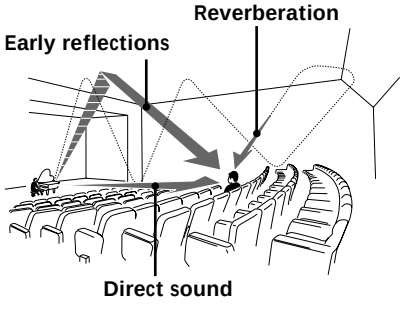
Glossary

Effect Level
You can adjust the surround effects to the desired level using a combination of early reflections and reverberation. Setting a high level produces a "live" feeling (lots of reverberation), while setting a low level produces a "dead" feeling (little reverberation).

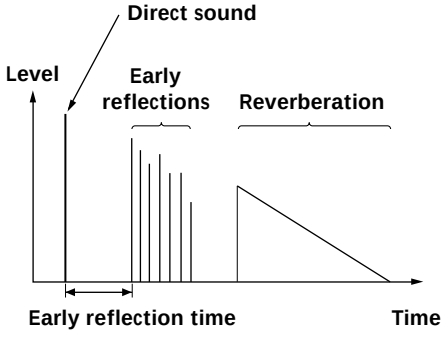
Sound Field
Sound pattern that creates a single or multiple sound sources in a particular environment using direct sound, reflected sound and the acoustics of where you hear the sound. This processing amplifier incorporates several pre-programmed sound fields, letting you easily enjoy a wide variety of surround sounds.

Surround Sound
Sound that consists of three elements: direct sound, early reflected sound (early reflections) and reverberative sound (reverberation). The acoustics where you hear the sound affect the way these three elements are heard. These sound elements are combined in such a way that you can actually feel the size of a concert hall or other location.

■ Sound elements



■ Transition of sound output from rear speakers



Digital Cinema Sound

General name for surround sound developed by Sony using digital signal processing technology to allow you to enjoy powerful theater-like sounds in the comfort of your own home. In contrast to the former sound field reproduction based on spaces for performing music, Digital Cinema Sound was developed solely for movie enjoyment.

Dolby Surround

Encoding and decoding system of Dolby Surround sound for consumer use. Dolby Surround decodes the extra channels on the Dolby Surround-encoded sound tracks of movie videos or other software and produces sound effects and echoes that make the action seem to envelop you.

Dolby Pro Logic Surround

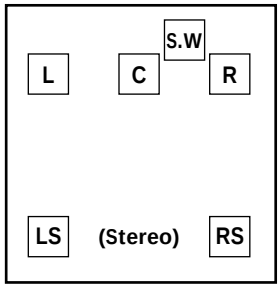
Decoding system of Dolby Surround sound that decodes sound encoded in two channels into four channels. This reproduces sound movement and position more naturally than the former Dolby Surround system. To take advantage of Dolby Pro Logic Surround, you should have one pair of front speakers, one center speaker, and one pair of rear speakers. The rear speaker output is monaural.

Dolby Digital (AC-3)

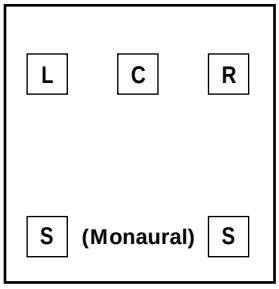
Movie sound format developed for theaters by further expanding Dolby Pro Logic. Dolby Digital (AC-3) provides stereo rear output, an increased frequency bandwidth, and an independent sub woofer for the bass frequencies. (The sub woofer output activates only when heavy bass effects are necessary, so it is counted as 0.1ch and the mode is called 5.1ch.) The 5.1 channels are encoded separately beforehand, offering excellent channel separation. Further, all sound is processed using digital signals so there is little deterioration. The “AC-3” indicates that this is the third Audio Coding method developed by Dolby Laboratories.

Comparison of Dolby Digital (AC-3) and Dolby Pro Logic

Item	Dolby Digital (Dolby AC-3)	Dolby Pro Logic
Process	Digital discrete	Analog matrix
Encoded channels	5.1ch	2ch
Decoded channels	5.1ch	4ch
Rear sound	Stereo	Monaural
Rear bandwidth	3 Hz to 20 kHz	100 Hz to 7 kHz
Independent sub woofer	Yes	No



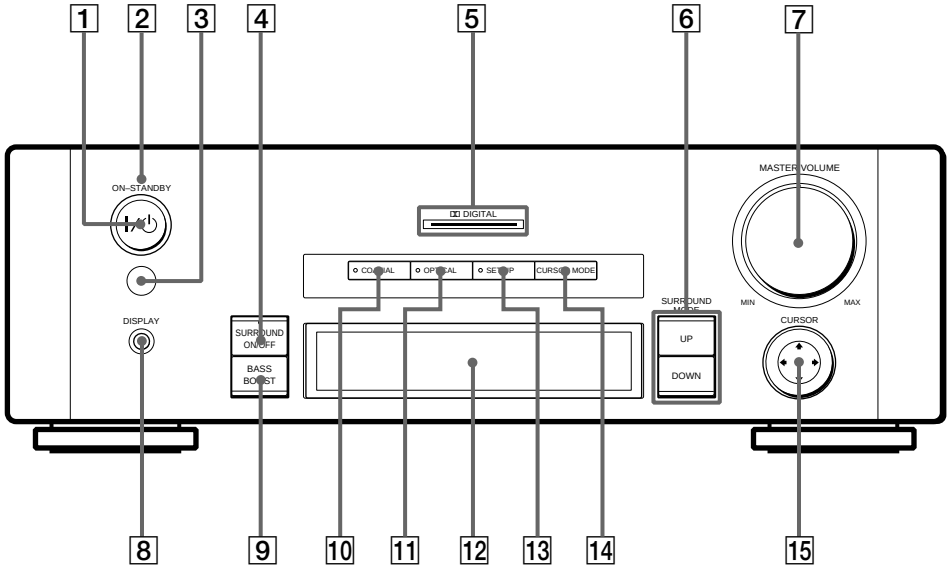
Dolby Digital



Dolby Pro Logic

Name and Function of Each Part

Front panel



1 **I/⏻**
Turns on the power.

2 **ON-STANDBY indicator**
Lights red when the processing amplifier is in standby (power-on standby) mode. Goes off when the power is turned on.

3 **Remote sensor**

4 **SURROUND ON/OFF**
Applies the surround effects.

5 **DIGITAL input indicator**
Lights when the input audio signal is processed for Dolby Digital while Surround is ON. Does not light even for Dolby Digital DVD software when the input audio signal is processed for Dolby Pro Logic.

6 **SURROUND MODE (UP/DOWN)**
Selects the surround mode.

7 **MASTER VOLUME**
Adjusts the volume.

8 **DISPLAY**
Switches the display between the currently selected surround mode and the input signal (OPTICAL or COAXIAL) each time it is pressed.

9 **BASS BOOST**
Reinforces the bass sound.

10 **COAXIAL**
Press to listen to the audio from the component connected to the DIGITAL COAXIAL IN jack.

11 **OPTICAL**
Press to listen to the audio from the component connected to the DIGITAL OPTICAL IN jack.

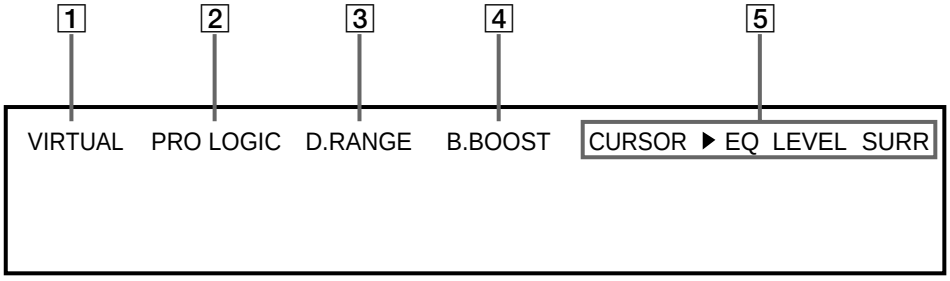
12 **Display**

13 **SET UP**
Sets the speaker connection status, position and distance.

14 **CURSOR MODE**
Selects the “LEVEL ADJUST”, “EQUALIZER” or “SURROUND” menu.

15 **CURSOR (↑/↓/←/→)**
Selects the setting contents after selecting the item to be set with SET UP or CURSOR MODE.

Reading the display



1 VIRTUAL
Lights when the "VIRTUAL ENHANCED", "VIR. REAR SHIFT" or "VIR. MULTI REAR" surround mode (see page 26) is selected while Surround is ON.

2 PRO LOGIC
Lights when an input 2ch (front L/R) audio signal is processed by Pro Logic and output as surround sound while Surround is ON.

3 D.RANGE
Lights when "D.RANGE COMP" in the "LEVEL ADJUST" menu selected by CURSOR MODE is set to other than "OFF" (set to compress the dynamic range, see page 30) in order to reduce the volume difference between the high and low volumes, and an audio signal encoded by the Dolby Digital (AC-3) method is input to the processing amplifier.

4 B.BOOST
Lights when BASS BOOST on the front panel of the processing amplifier is pressed to reinforce the bass sound (see page 27).

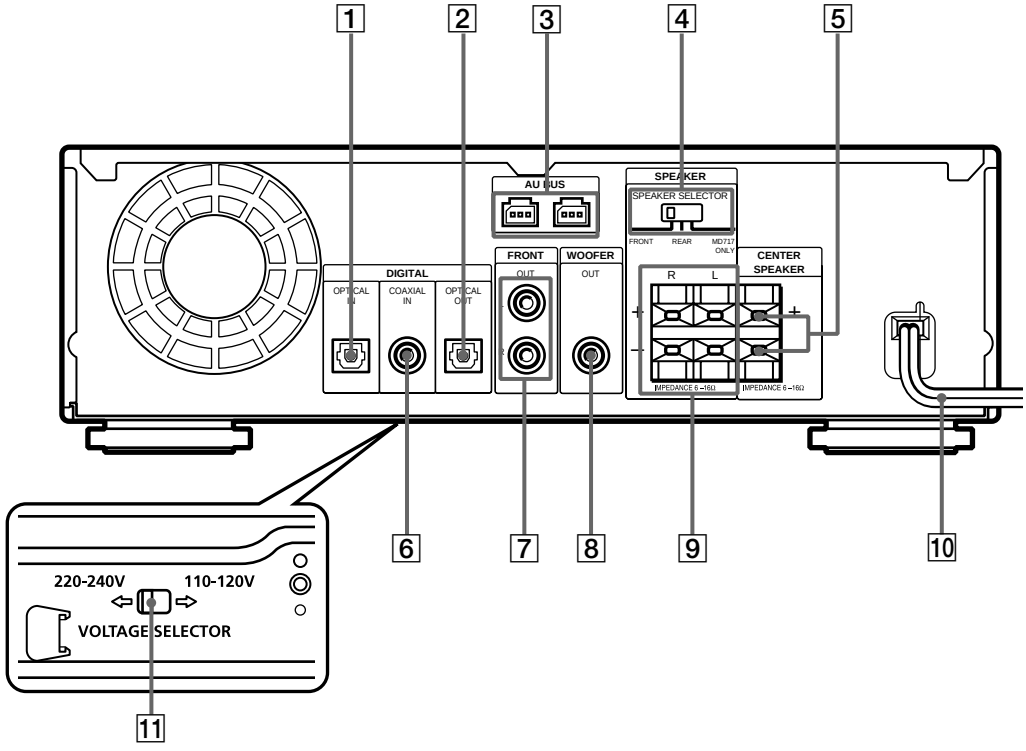
5 Cursor modes
These light to indicate the CURSOR MODE status. They go off when performing SET UP operations (i.e., setting the speaker connection status).

EQ : Appears when adjusting the EQUALIZER (speaker treble and bass frequencies) settings (see page 31).

LEVEL : Appears when adjusting the LEVEL ADJUST (speaker and sub woofer volume balance, LFE MIX, D.RANGE COMP) settings (see pages 27 to 30).

SURR : Appears when adjusting the SURROUND (surround effects) settings (see page 32).

Rear panel



1 DIGITAL OPTICAL IN
Connects a DVD player to the processing amplifier using an optical cable.

2 DIGITAL OPTICAL OUT
Connects an MD deck or other digital component when digitally recording the audio from a DVD player. Use an optical cable.

Notes

- If you do not connect the DVD player to the DIGITAL OPTICAL IN jack, sound is not output from the DIGITAL OPTICAL OUT jack.
- Many types of DVD software cannot be digitally recorded. In these cases, an analog recording is made even if the DVD player is connected using an optical cable.
- You cannot digitally record 5.1ch DVD software.

3 AU BUS
Connects the DHC-MD717 stereo system to the processing amplifier.

4 SPEAKER SELECTOR (FRONT, REAR, MD717 ONLY)
Set to "REAR" (or "MD717 ONLY" when using the DHC-MD717) during 5.1ch surround or to "FRONT" during 3ch surround.

5 CENTER SPEAKER
Connects the center speaker.

6 DIGITAL COAXIAL IN
Connects a DVD player to the processing amplifier using a coaxial digital connecting cable.

7 FRONT OUT
Connects to the audio input jacks for external components of a stereo system or stereo amplifier during 5.1ch surround.

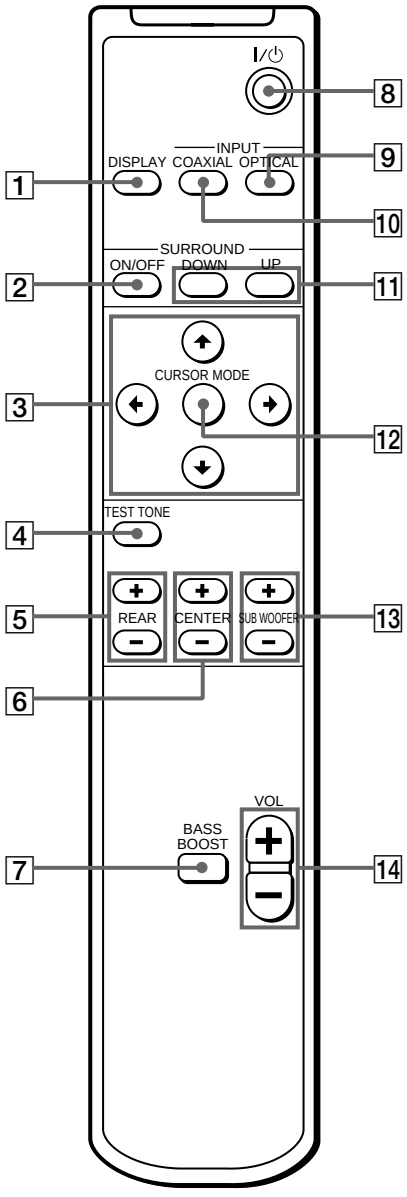
8 WOOFER OUT
Connects the sub woofer.

9 SPEAKER
Connects the speakers (front or rear).

10 AC power cord

11 VOLTAGE SELECTOR
Switches the voltage.

Remote commander



1 DISPLAY
Switches the display between the currently selected surround mode and the input signal (OPTICAL or COAXIAL) each time it is pressed.

2 SURROUND ON/OFF
Applies the surround effects.

3 CURSOR (↑/↓/←/→)
Selects the setting contents after selecting the item to be set with CURSOR MODE.

4 TEST TONE
Outputs the test tone used to adjust the speaker volumes.

5 REAR +/–
Adjusts the rear speaker volume.

6 CENTER +/–
Adjusts the center speaker volume.

7 BASS BOOST
Reinforces the bass sound.

8 I/⏻
Turns on the power.

9 OPTICAL
Press to listen to the audio from the component connected to the DIGITAL OPTICAL IN jack.

10 COAXIAL
Press to listen to the audio from the component connected to the DIGITAL COAXIAL IN jack.

11 SURROUND UP/DOWN
Selects the surround mode.

12 CURSOR MODE
Selects the “LEVEL ADJUST”, “EQUALIZER” or “SURROUND” menu.

13 SUB WOOFER +/–
Adjusts the sub woofer volume.

14 VOL +/–
Adjusts the processing amplifier volume. Changes the overall volume (volume of all the speakers connected to the processing amplifier).

Index

Sony Corporation Printed in Japan