



DOLBY DIGITAL HOME CINEMA SYSTEM

OWNER'S MANUAL

MODEL : FA-P3000

(Speakers: FE-3000TE, FA-3000AWE)

Before connecting, operating or adjusting this product,
please read this instruction booklet carefully and completely.



Safety Precautions



CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN



WARNING: TO REDUCE THE RISK OF ELECTRIC SHOCK
DO NOT REMOVE COVER (OR BACK)
NO USER-SERVICEABLE PARTS INSIDE
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



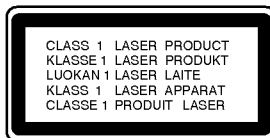
This lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated dangerous voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



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 appliance.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

WARNING: Do not install this equipment in a confined space such as a book case or similar unit.



CAUTION:

To ensure proper use of this product, please read this owner's manual carefully and retain for future reference, should the unit require maintenance, contact an authorized service location—see service procedure.

Use of controls, adjustments or the performance of procedures other than those specified herein may result in hazardous radiation exposure.

The apparatus shall not be exposed to water, dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.

SERIAL NUMBER: The serial number is found on the back of this unit. This number is unique to this unit and not available to others. You should record requested information here and retain this guide as a permanent record of your purchase.

Model No. _____

Serial No. _____

Table of Contents

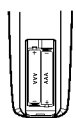
Safety Precautions	2
Table of Contents	3
Before Use	3
Precautions	3
About the Symbols for instructions	3
Diagrams of equipment	4
Front View	4
Rear View	4
Display	4
Remote Control	4
Speaker Settings	5
Connections	6-7
Speaker System Connection	6
Connecting to Optional Equipment	7
Display Information about External Digital Input Signal	7
Speaker Setup	8
Delay Time Setting	8
Mini Glossary for Sound Mode	9
Sound Adjustment	10
Sound Mode	10
Sound Level	10
Mute	10
Test Tone	10
Sleep Timer Setting	10
Selecting input source	10
Before Requesting Service	11
Specifications	11
Accessories	
• Audio cable	1
• Speaker cables	5
• Speakers	5
• Batteries (AAA)	2
• Remote control	1

Remote Control Operation Range

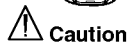
Point the remote control at the remote sensor and press the buttons.

- **Distance:** About 23 ft (7 m) from the front of the remote sensor
- **Angle:** About 30° in each direction of the front of the remote sensor

Remote control battery installation



Detach the battery cover on the rear of the remote control, and insert two R03 (size AAA) batteries with \oplus and \ominus aligned correctly.



Caution

Do not mix old and new batteries. Never mix different types of batteries (standard, alkaline, etc.).

Before Use

Precautions

Handling the unit

When shipping the unit

The original shipping carton and packing materials come in handy. For maximum protection, re-pack the unit as it was originally packed at the factory.

To keep the surface clean

Do not use volatile liquids, such as insecticide spray, near the unit. Do not leave rubber or plastic products in contact with the unit for a long period of time. They will leave marks on the surface.

Installing

- Do not install the unit in a confined space, such as a bookcase or built-in cabinet.
- Allow adequate air circulation to prevent internal heat buildup.
- Do not place the unit on surfaces (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the ventilation slots.
- Do not install the unit near heat sources such as radiators or air ducts, or in a place subject to direct sunlight, excessive dust, mechanical vibration or shock.
- Do not place heavy objects on the unit.

Cleaning the unit

To clean the cabinet

Use a soft, dry cloth. If the surfaces are extremely dirty, use a soft cloth lightly moistened with a mild detergent solution. Do not use strong solvents, such as alcohol, benzine, or thinner, as these might damage the surface of the unit.

About the symbols for instructions



Indicates hazards likely to cause harm to the unit itself or other material damage.



Indicates special operating features of this unit.



Indicates tips and hints for making the task easier.

Manufactured under license from Dolby Laboratories.

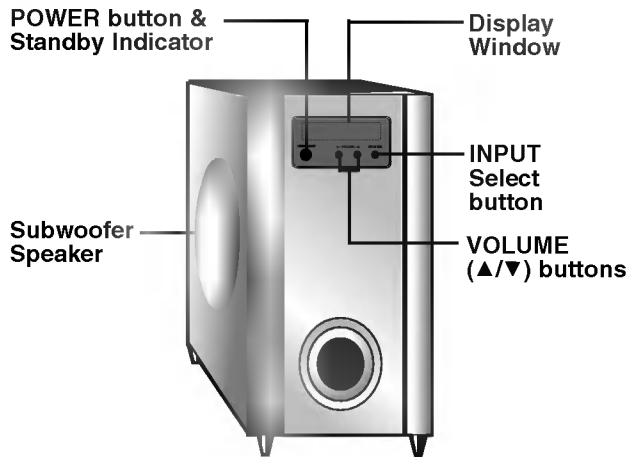
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Manufactured under license from Digital Theater Systems, Inc. US Pat. No. 5,451,942 5,956,674, 5,974,380, 5,978,762 and other world-wide patents issued and pending. "DTS" and "DTS Digital Surround" are registered trademarks of Digital Theater Systems, Inc. Copyright 1996, 2000 Digital Theater Systems, Inc. All rights reserved.

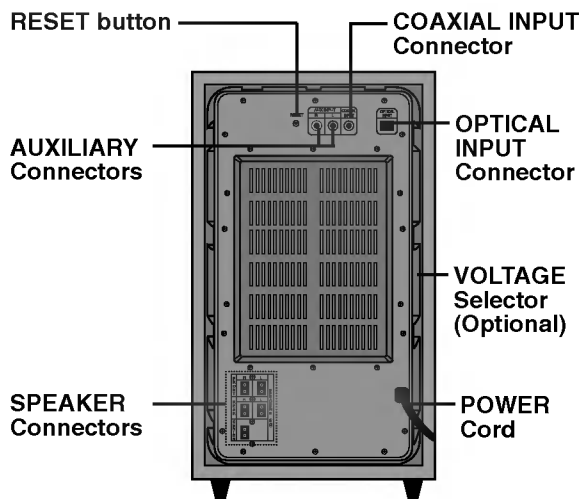


Diagrams of equipment

Front View



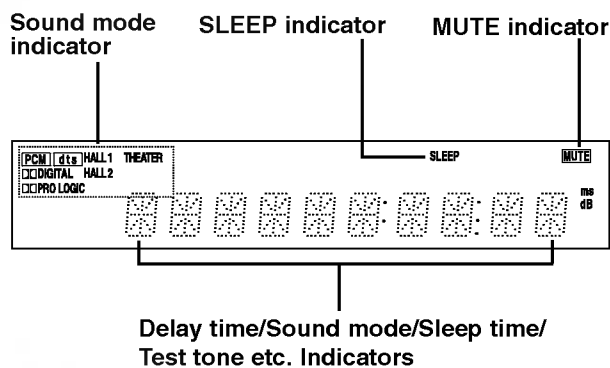
Rear View



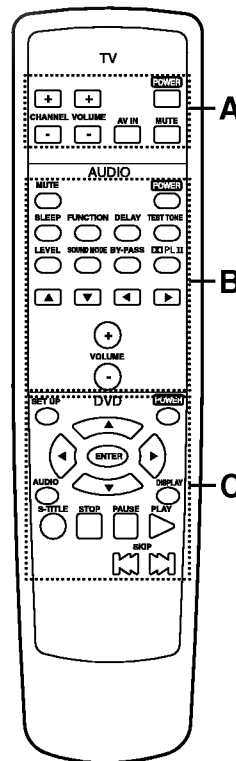
Using the RESET button

- This button is used to solve the problem as following symptom;
- When the power can not on, even if power cord is connected to the outlet.
 - When the window display does not display.
 - When the unit does not operate normally.
 - Unplug and press the RESET button by using a pencil or ball-pen.

Display



Remote control



A. TV control buttons (LG brand only)

- CHANNEL(+/-) buttons
- VOLUME(+/-) buttons
- POWER button
- AV INPUT button
- MUTE button

B. AUDIO control buttons

- MUTE button
- POWER button
- SLEEP button
- FUNCTION button
- DELAY button
- TEST TONE button
- LEVEL button
- SOUND MODE button
- BY-PASS button
- DOLBY PRO LOGIC II button
- CURSOR(▲/▼/◀/▶) buttons
- VOLUME (+/-) buttons

C. DVD control buttons

- SET UP button
- POWER button
- CURSOR(▲/▼/◀/▶) buttons
- ENTER button
- AUDIO button
- DISPLAY button
- SUB TITLE button
- STOP button
- PAUSE button
- PLAY button
- SKIP(◀◀/▶▶) buttons

Controlling TV with the remote control

The remote control can operate your TV's functions.(LG brand only)

- Hold POWER and press CHANNEL+ button repeatedly until turn the TV on or off.

Controlling DVDs with the remote control

The remote control can operate your DVD's functions.

- Hold POWER and press CURSOR(C: ▲) button repeatedly until turn the DVD on or off.

Brand of controllable DVDs:

LG, JVC, Hitachi, Panasonic, SSE, Phillips, Sharp, Sony, Toshiba.

Speaker Positioning

In the case of normal position use the 5 speakers (2 front speakers, center speaker and 2 rear speakers).

- **Front speakers**

According to your listening position set up the speakers for equal distance. And by hearing position set up the interval between speakers to 45 degree.

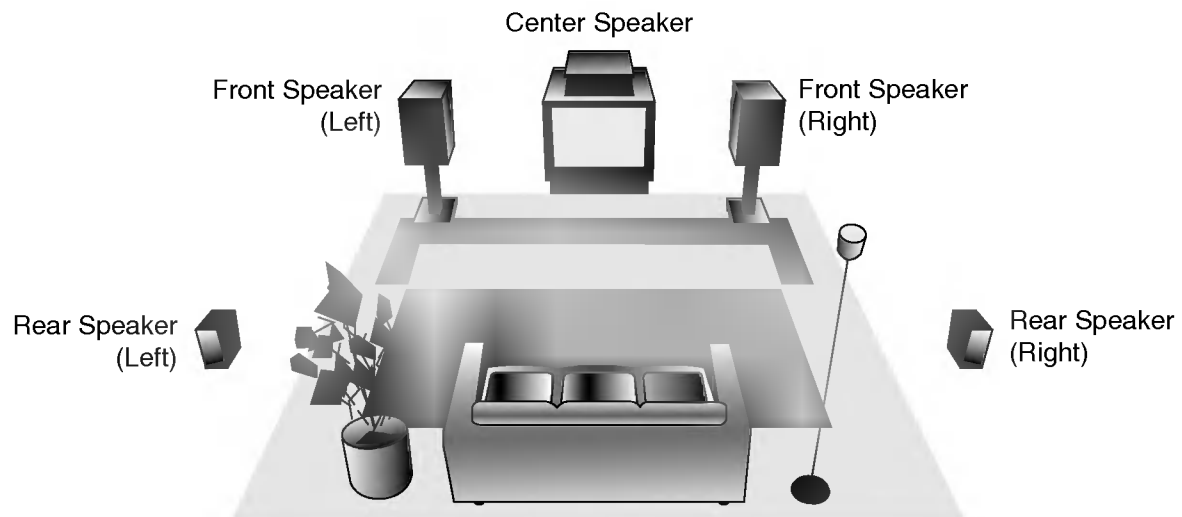
- **Center speaker**

It is ideal that the center speakers and front speakers are same height. But normally place it above or below the television.

- **Rear speakers**

Place left and right behind the listening area. These speakers recreate sound motion and atmosphere required for surround playback. For best results, do not install the rear speakers too far behind the listening position and install them at or above the level of the listener's ears. It is also effective to direct the rear speakers towards a wall or ceiling to further disperse the sound.

In the case of a smaller room size, if the audience is near to the rear wall set the rear speakers opposite each other, and set the rear speakers above 60 - 90 cm than the listener's ears.



Speaker Positioning Example

Connections

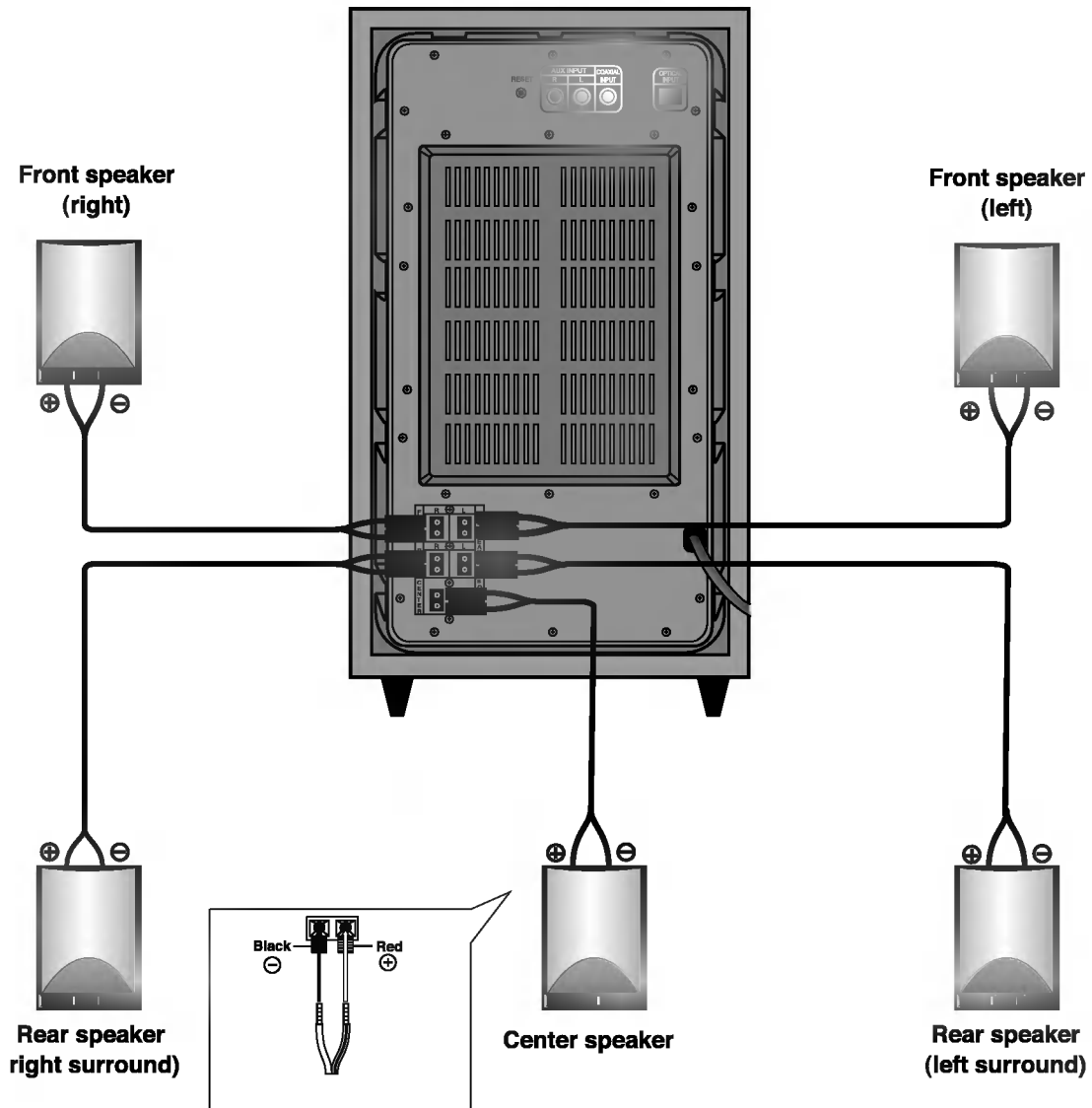
Speaker System Connection

Connect the speakers using the supplied speaker cords by matching the colors of the terminals and those of the cords. To obtain the best possible surround sound, adjust the speaker parameters (distance, level, etc.).

Notes

- Be sure to match the speaker cord to the appropriate terminal on the components: + to + and – to –. If the cords are reversed, the sound will be distorted and will lack base.
- If you use front speakers with low maximum input rating, adjust the volume carefully to avoid excessive output on the speakers.
- Do not disassemble the front cover of supplied speaker.

Rear of Dolby Digital Home Cinema System



Connections (Cont'd)

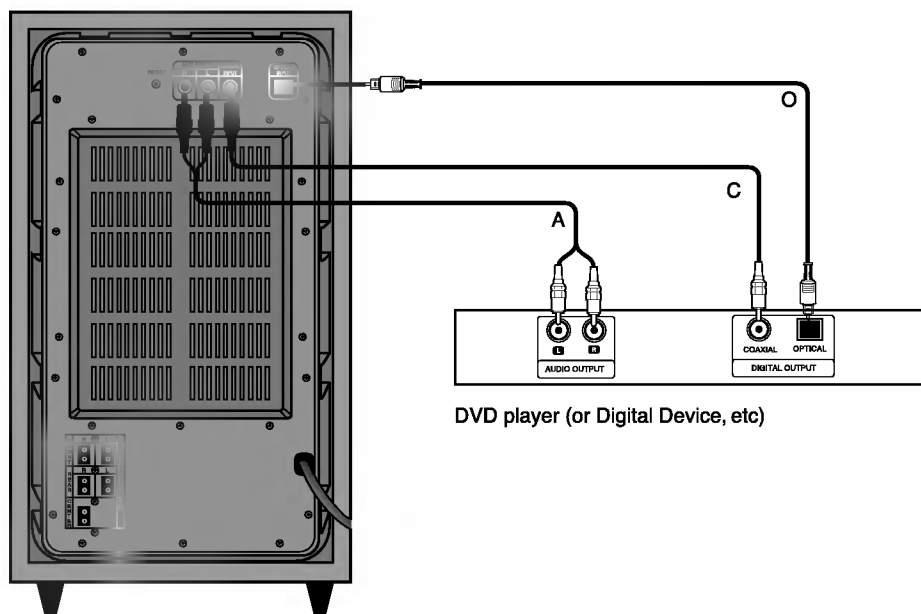
Connecting to Optional Equipment

Connecting to amplifier with two-channel analog stereo or Dolby Surround

Connect Left and Right AUX INPUT jacks on the Dolby Digital Home Cinema System into the Audio Left and Right OUT jacks on your DVD player, Digital Device or stereo system by the supplied audio cables (**A**).

Connect one of the Dolby Digital Home Cinema System DIGITAL AUDIO OUT jacks (OPTICAL **O** or COAXIAL **C**) to the corresponding out jack on your DVD player, Digital Device or Stereo system. Use an optional digital (optical **O** or coaxial **C**) audio cable.

Rear view of Dolby Digital Home Cinema System



Display Information about External Digital Input Signal

This display appears depending on the change of the external digital input signal.

UNLOCK DISPLAY	appears when the problem gets in external digital input while normally operating in optical or coaxial function. It could be displayed instantaneously according to the external system quality while operating in switching audio or in skip, open and channel up/down.
CHANNEL DISPLAY	appears when Audio coding mode is changed or when the stream information is changed or the function mode is switched.
1+1	ch1, ch2
1/0	C
2/0	L, R
3/0	L, R, C
2/1	L, R, S(Mono Surround)
2/2	L, R, Ls, Rs
3/1	L, R, C, S(Mono Surround)
3/2	L, R, C, Ls, Rs
.1	LFE signal, no LFE signal

Speaker Setup

Delay Time Setting

In Dolby Digital or Dolby Pro Logic mode it is assumed that the distance from the listener to each of the speakers is equal. If not then setting the delay times of the center or rear speakers the sound will be heard simultaneously by the listener.

The interval from the speakers to the listener. If the distance from the listener to each speakers is same, in the Dolby Digital and Dolby Pro Logic mode the delay time of each speakers is as following.

In Dolby Digital mode

Center delay time : 0 ~ 5ms

Rear delay time: 0 ~ 15ms

In Dolby Pro Logic mode

Center delay time : cannot setting

If the rear delay time is set in Dolby Digital mode, in the Dolby Pro Logic mode the delay time will be automatically set.

The delay time is 1 msec per 30 cm.

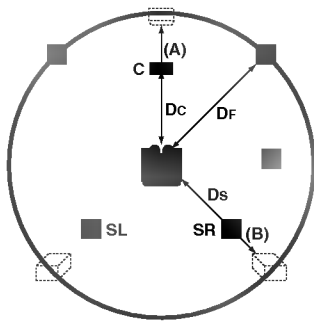
If the center and rear speakers are further than the front speakers from the listener, the delay time will be at minimum.

Surround delay time setting

If the distance of Ds is equal to or longer than the Df in the left figure, set the Surround Delay Time as 0ms.

Otherwise, change the setting according to the below.

Ex) If the distance from front speakers to the listener is 3 m and from rear speakers from the listener is 1.5 m, in the Dolby Digital mode the rear delay time is 5 msec.
 $3\text{m (Df)} - 1.5\text{m (Ds)} = 1.5\text{m (B)}$
 $1.5\text{m (B)} = 150\text{cm} / 30\text{cm} = 5\text{msec}$



In Dolby Pro Logic II (Surround delay time):

- Pro Logic: 10 ~ 25msec
- Movie: 10 ~ 25msec
- Music: 0 ~ 15msec
- Virtual: cannot setting
- Matrix: 0 ~ 15msec

Center delay time setting (Dolby Digital mode only)

If the distance of Df is equal to the distance of Dc in the left figure, set the Center Delay Time as 0ms. Otherwise, change the setting according to the table below.

Ex) If the distance from the front speakers to the listener is 3m and from the center speaker to the listener is 2.4m, the center delay time is 2msec.

$3\text{m (Df)} - 2.4\text{m (Dc)} = 60\text{cm (A)}$

$60\text{cm (A)} / 30\text{cm} = 2\text{msec}$

Setting the delay time in the Dolby Digital and Dolby Pro Logic (II) mode

1 Press DELAY.

The current surround delay time appears in the display window.

You can select center delay time by pressing ◀/▶ in the Dolby Digital mode only.

2 Press ▲/▼ to change the delay time.

3 If setting is complete, press DELAY.

Notes

You can adjust the center delay time only in the Dolby Digital mode and its delay time appears.

Center Width (MUSIC mode of Dolby Pro Logic II only)

This control allows center-channel sounds to be positioned between the center speaker and the left/right speakers over a range of eight steps. Step "3" uses a combination of all three front speakers to give the best vocal imaging and most seamless soundstage presentation, and is recommended for most recordings. Step "0" places all center sound in the center speaker. Step "7" places all center sound equally in the left/right speakers, just as in conventional stereo.

DIMENSE (MUSIC mode of Dolby Pro Logic II only)

This control allows the user to gradually adjust the soundfield either towards the front or the rear. This can be useful to help achieve the desired balance from all the speakers with certain recordings that may contain either too much or too little spatial effect. Step "0" is the recommended setting, which has no effect on the sound. Steps 1, 2, and 3 gradually move the sound forward, and steps -1, -2, and -3 move the sound towards the surrounds.

PANORAMA (MUSIC mode of Dolby Pro Logic II only)

This control extends the front stereo image to include the surround speakers for an exciting "wraparound" effect with side-wall imaging. It is particularly effective for recordings which have strong left- or right-channel elements in the mix, as these are detected and accentuated by the Panorama process.

Mini Glossary for Sound Mode

dts

Allows you to enjoy 5.1 (or 6) discrete channels of high quality digital audio from DTS program sources bearing the trademark such as discs, DVD and compact discs, etc. DTS Digital Surround delivers up to 6 channels of transparent audio (which means identical to the original masters) and results in exceptional clarity throughout a true 360 degree sound field. The term DTS is a trademark of DTS Technology, LLC. Manufactured under license from DTS Technology, LLC.

DOLBY DIGITAL

The Dolby Digital surround format lets you enjoy up to 5.1 channels of digital surround sound from a Dolby Digital program source. If you play DVDs with the "Dolby Digital" mark, you can enjoy even better sound quality, greater spatial accuracy, and improved dynamic range.

HALL 1

When playing recordings of live music and classic, this mode provides a feeling similar to actually being in a small concert hall.

HALL 2

When playing recordings of live music and classic, this mode provides a feeling similar to actually being in a large concert hall.

THEATER

This mode provides a three dimensional effect similar to that of movie theater.

DOLBY PRO LOGIC (II)

Dolby Pro Logic II creates five full-bandwidth output channels from two-channel sources. This is done using an advanced, high-purity matrix surround decoder that extracts the spatial properties of the original recording without adding any new sounds or tonal colorations.

PRO LOGIC mode:

The Pro Logic Emulation mode offers users the same robust surround processing as original Pro Logic, in case the source content is not of optimum quality, or if there is a desire to hear the program more "as it used to be." When this mode is used, it is called Pro Logic, as before. There is no "Pro Logic I" mode. The Pro Logic emulation mode is optional. Dolby does not require PLII products to use the original Pro Logic decoding algorithm. However, if the DSP contains the original Pro Logic code, and if the product maker would like to use it, this is quite acceptable and even encouraged. A product must not offer both original Pro Logic and the Pro Logic emulation mode.

MOVIE mode:

The Movie mode is for use with stereo television shows and all programs encoded in Dolby Surround. The result is enhanced soundfield directionality that approaches the quality of discrete 5.1-channel sound.

MUSIC mode:

The Music mode is for use with any stereo music recordings, and provides a wide and deep sound space. The Music mode includes controls that allow the sound to be tailored to individual listening tastes.

VIRTUAL mode:

The Virtual mode is usually used when Pro Logic II is connected to a virtual process for speaker use. However, there might be some virtualizers for which this mode does not produce the intended result. For those virtualizers, Movie mode may give the best surround effect. Virtual mode is designed to be used with the virtual process developed by Dolby Laboratories. The Pro Logic II mode should be called only "Pro Logic II" so the Virtual name can be reserved to describe the speaker virtualization process itself.

MATRIX mode:

The Matrix mode is the same as the Music mode except that the directional enhancement logic is turned off. It may be used to enhance mono signals by making them seem "larger." The Matrix mode may also find use in auto systems, where the fluctuations from poor FM stereo reception can otherwise cause disturbing surround signals from a logic decoder. The ultimate "cure" for poor FM stereo reception may be simply to force the audio to mono.

SURROUND OFF (2CH STEREO)

Outputs the sound from the front left and right speakers and subwoofer. Standard two channel (stereo) sources completely bypass the sound field processing. This allows you to play any source using only the front left and right speakers and subwoofer. **You can select SURROUND OFF by pressing BY-PASS on the remote control.**

Sound Adjustment

Sound Mode

When PCM indicator is only displayed in the display window:

Each time you press **SOUND MODE** button, the sound mode is changed as the following order;

PRO LOGIC → HALL1 → HALL2 → THEATER



Each time you press **PLII** button, the sound mode of Pro Logic II is changed as the following order;



PRO LOGIC → MOVIE → MUSIC → VIRTUAL → MATRIX



Tip

You can select SURROUND OFF (2CH STEREO) mode by pressing BY-PASS button.

For your reference

- You can identify the encoding format of program software by looking at its packaging.
 - Dolby Digital discs are labeled with the  logo.
 - Dolby Surround encoded programs are labeled with the  logo.
 - DTS Digital Surround discs are marked with DTS.

Sound Level

You can set the sound level of the desired channel.

1 Press LEVEL.

The level indicator will appear in the display window.

2 Press ◀/▶ to select a desired speaker to set.

Each time you press the ◀/▶ button, it is changed as the following order;

FL (Front Left) → C (Center) → FR (Front Right) →

SR (Surround Right) → SL (Surround Left) →

SW (Subwoofer) → FL (Front Left)

- On the 2 channel stereo mode, you can only select the SW (Subwoofer).

3 Press ▲/▼ to adjust the sound level of the selected channel. (-6dB ~ +6dB)

4 Repeat step 2-3 and adjust the sound level of the other channels.

5 If setting is complete, press LEVEL.

Mute

Press MUTE to mute your unit.

You can mute your unit in order, for example, to answer the telephone, "MUTE" indicator flashes in the display window.

Test Tone

This function allows you can easily adjust the sound balance of the speakers from the listener's position.

1 Select the test tone mode by pressing TEST TONE.

- A hiss noise comes out for 2 seconds from each speakers in the following order;
FL (Front Left) → C (Center) → FR (Front Right) →
SR (Surround Right) → SL (Surround Left) →
SW (Subwoofer) → FL (Front Left)

2 You can adjust the sound level during operating the test tone, first press LEVEL then press ▲/▼ buttons, so that all speaker's sound level is same from the listener's position.

- During operating the test tone, if you adjust the sound level, it will be paused in the current speaker channel.

3 If setting is complete, press TEST TONE.

Sleep Timer Setting

You can set the Surround Sound System to turn off automatically at a specified time.

1 Press SLEEP to set the desired sleep time.

The SLEEP indicator and sleep time appears in the display window.

2 Each time you press SLEEP the setting changes in the following order.

SLEEP 120 → 90 → 60 → 50 → 40 → 30 → 20 → 10 → OFF



Note

- You can check the time remaining before the Surround Sound System turns off.
Press SLEEP. The remaining time appears in the display window.

Selecting input source

You can use DVDs or other units connected to the AUX INPUT(R/L), COAXIAL INPUT or OPTICAL INPUT connector. Refer to the owners manual supplied with the unit for further information on the operation.

Press INPUT SELECT repeatedly on the front panel or press FUNCTION repeatedly on the remote control to select the desired input source.

Each time you press this button, the mode of the function changes in the following sequence:

- **ANALOG:** for selecting the analog signal from AUX INPUT (R/L) Connectors.
- **OPTICAL:** for selecting the digital signal from OPTICAL IN Connector.
- **COAXIAL:** for selecting the digital signal from COAXIAL IN Connector.



Note

- The Optical input function is available only when the other unit's Sampling Frequency is 32 ~ 48kHz.

Before Requesting Service

Symptom	Cause	Correction
No sound.	<ul style="list-style-type: none"> • Speaker cords are not connected securely. • The volume control is set to 0. 	<ul style="list-style-type: none"> • Connect them securely. • Turn the VOLUME control to the right.
Sound level is too low.	<ul style="list-style-type: none"> • Speaker cords are not connected correctly. 	<ul style="list-style-type: none"> • Connect them correctly, that is L (left) to L, R (right) to R.
Power is not supplied even though the POWER/ON STANDBY button is pressed in.	<ul style="list-style-type: none"> • The power cord is not plugged in. 	<ul style="list-style-type: none"> • Plug the power cord into an AC outlet.
The remote control does not work properly.	<ul style="list-style-type: none"> • The remote control is not pointed at the remote sensor of this unit. 	<ul style="list-style-type: none"> • Point the remote control at the remote sensor of this unit.
	<ul style="list-style-type: none"> • The remote control is too far from this unit. 	<ul style="list-style-type: none"> • Operate the remote control within about 23 ft (7 m).
	<ul style="list-style-type: none"> • There is an obstacle in the path of the remote control and this unit. 	<ul style="list-style-type: none"> • Remove the obstacle.
	<ul style="list-style-type: none"> • The batteries in the remote control are exhausted. 	<ul style="list-style-type: none"> • Replace the batteries with new ones.

Specification

Power supply	AC 220V, 50Hz	
Power consumption	150 W	
Mass	12.4 kg	
External dimensions (W x H x D)	235 x 430 x 483 mm	
Operating conditions	Temperature: 5°C to 35°C, Operation status: Horizontal	
Frequency response (audio)	150 Hz to 20 kHz	
Signal-to-noise ratio (audio)	More than 80 dB (1 kHz, NOP, JIS FILTER)	
Harmonic distortion (audio)	0.5 % (1 kHz, at 12W position) (30 kHz LPF/A Filter)	
Surround mode	Front: 30W + 30W (THD 10 %) Center*: 30W Surround*: 30W + 30W (8Ω at 1 kHz, THD 10 %) Subwoofer*: 50W (4Ω at 30 Hz, THD 10 %)	
Inputs	AUX, COAXIAL, OPTICAL AUDIO	
	Satellite Speaker (FE-3000TE)	Active Subwoofer (FA-3000AWE)
Type	1 Way 1 Speaker	1 Way 1 Speaker
Impedance	8 Ω	4 Ω
Frequency Response	110 - 20,000 Hz	40 - 2,500 Hz
Sound Pressure Level	83 dB/W (1m)	82 dB/W (1m)
Rated Input Power	30W	50 W
Max. Input Power	60 W	100 W
Net Dimensions (W x H x D)	90 x 125 x 107 mm	235 x 430 x 483 mm
Net Weight	0.7 kg	12.4 kg

* Designs and specifications are subject to change without notice.



P/NO: 3828R-D028A