

AUDIO VIDEO SURROUND RECEIVER

KR-X1000

KR-X1000(G)

# INSTRUCTION MANUAL

KENWOOD CORPORATION

Manufactured under license from Lucasfilm Ltd. U.S. patent numbers 5,043,970; 5,189,703; and 5,222,059. Foreign patents pending. Lucasfilm and THX are registered trademarks of Lucasfilm Ltd.

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### For your records

Record the serial number, found on the back of the unit, in the spaces designated on the warranty card, and in the space provided below. Refer to the model and serial numbers whenever you call upon your dealer for information or service on this product.

Model \_\_\_\_\_ Serial Number \_\_\_\_\_

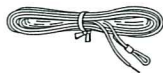
### Unpacking

Unpack the unit carefully and make sure that all accessories are put aside so they will not be lost. Examine the unit for any possibility of shipping damage. If your unit is damaged or fails to operate, notify your dealer immediately. If your unit was shipped to you directly, notify the shipping company without delay. Only the consignee (the person or company receiving the unit) can file a claim against the carrier for shipping damage.

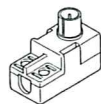
We recommend that you retain the original carton and packing materials for use should you transport or ship the unit in the future.

### Accessories

FM indoor antenna (1) Antenna adaptor (1) AM loop antenna (1) Loop antenna stand (1)



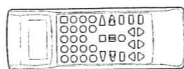
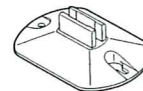
Remote control unit (1)



Batteries (R6/AA) (2)



\* AC plug adaptor (1)



\* Use to adapt the plug on the power cord to the shape of the wall outlet. (Accessory only for regions where use is necessary.)

KENWOOD

# Before applying power

⚠ **Caution : Read this page carefully to ensure safe operation.**

KR-X1000 (En)

Units are designed for operation as follows.

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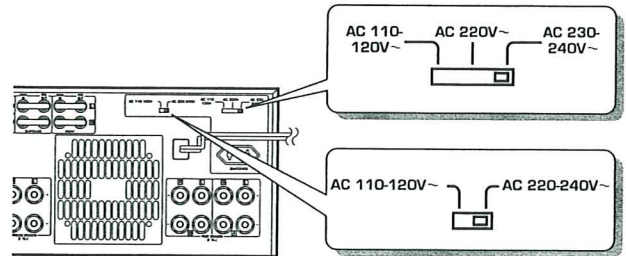
**U.S.A., Mexico and Canada** ..... **AC 120 V only**  
**Australia** ..... **AC 240 V only**

**\*Other countries** ..... **AC 110-120/220-240 V switchable**

## \*AC voltage selection

The AC voltage selector switch on the rear panel is set to the voltage that prevails in the area to which the unit is shipped. Before connecting the power cord to your AC outlet, make sure that the setting position of this switch matches your line voltage. If not, it must be set to your voltage in accordance with the following direction.

## AC voltage selector switch



Note:

Our warranty does not cover damage caused by excessive line voltage due to improper setting of the AC voltage selector switch.

Move switch lever to match your line voltage with a small screwdriver or other pointed tool.

# Safety precautions

**WARNING :** TO PREVENT FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

	<p><b>CAUTION</b> RISK OF ELECTRIC SHOCK DO NOT OPEN</p>		<p>CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE, REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.</p>
	<p>THE LIGHTNING FLASH WITH ARROWHEAD SYMBOL, WITHIN AN EQUILATERAL TRIANGLE, IS INTENDED TO ALERT THE USER TO THE PRESENCE OF UNINSULATED "DANGEROUS VOLTAGE" WITHIN THE PRODUCT'S ENCLOSURE THAT MAY BE OF SUFFICIENT MAGNITUDE TO CONSTITUTE A RISK OF ELECTRIC SHOCK TO PERSONS.</p>		
	<p>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.</p>		

**For the U.S.A.**

## FCC WARNING

This equipment may generate or use radio frequency energy. Changes or modifications to this equipment may cause harmful interference unless the modifications are expressly approved in the instruction manual. The user could lose the authority to operate this equipment if an unauthorized change or modification is made.

## NOTE:

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

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

**For the U.S.A.**

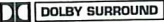
## Note to CATV system installer:

This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

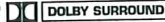


# Special features

## HOME THX CINEMA

This is a surround reproduction system developed for smaller spaces with the theme of "an uncompromising home cinema experience". Video software bearing the  logo can be played directly through this system. The THX CINEMA system provides an overwhelming feeling of presence through signal processing based on a unique theory. Use a speaker system with THX logo approved by Lucas Arts Entertainment Company (6-speaker configuration) for the surround reproduction in this mode.

## DOLBY PRO LOGIC & DOLBY 3 STEREO

The surround system reproduces video software program carrying the  mark with similar acoustic effects to movie theaters.

The DOLBY PRO LOGIC mode controls the audio signals of the Front Left/Right, Center and Rear surround channels using the built-in directivity enhancer circuit to reproduce the feeling of realistic sound motion. The DOLBY 3 STEREO mode can reproduce the location of sound even when only the front and center speakers are used, by providing proper acoustic position using the directivity enhancer circuit.

## DSP LOGIC




This mode adds presence sound components obtained from the DSP (Digital Signal Processor) to the signals output from the DOLBY PRO LOGIC (Left, Center, Right and Surround channels), allowing movie software programs to be played with a similar feeling of presence to movie theaters in a listening room at home.

## MONO

Use this mode when watching old movies, etc., that have a monaural audio sound track. The audio is heard from the center speaker only. If HOME THX CINEMA, DOLBY PRO LOGIC or DSP LOGIC is set to the PHANTOM mode which does not use the center speaker, the left and right main speakers output monaural audio.

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# System connection

KR-X1000 (En)

## Connection of Audio components

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Make connections as shown below.

When connecting the related system components, refer also to the instruction manuals of the related components.

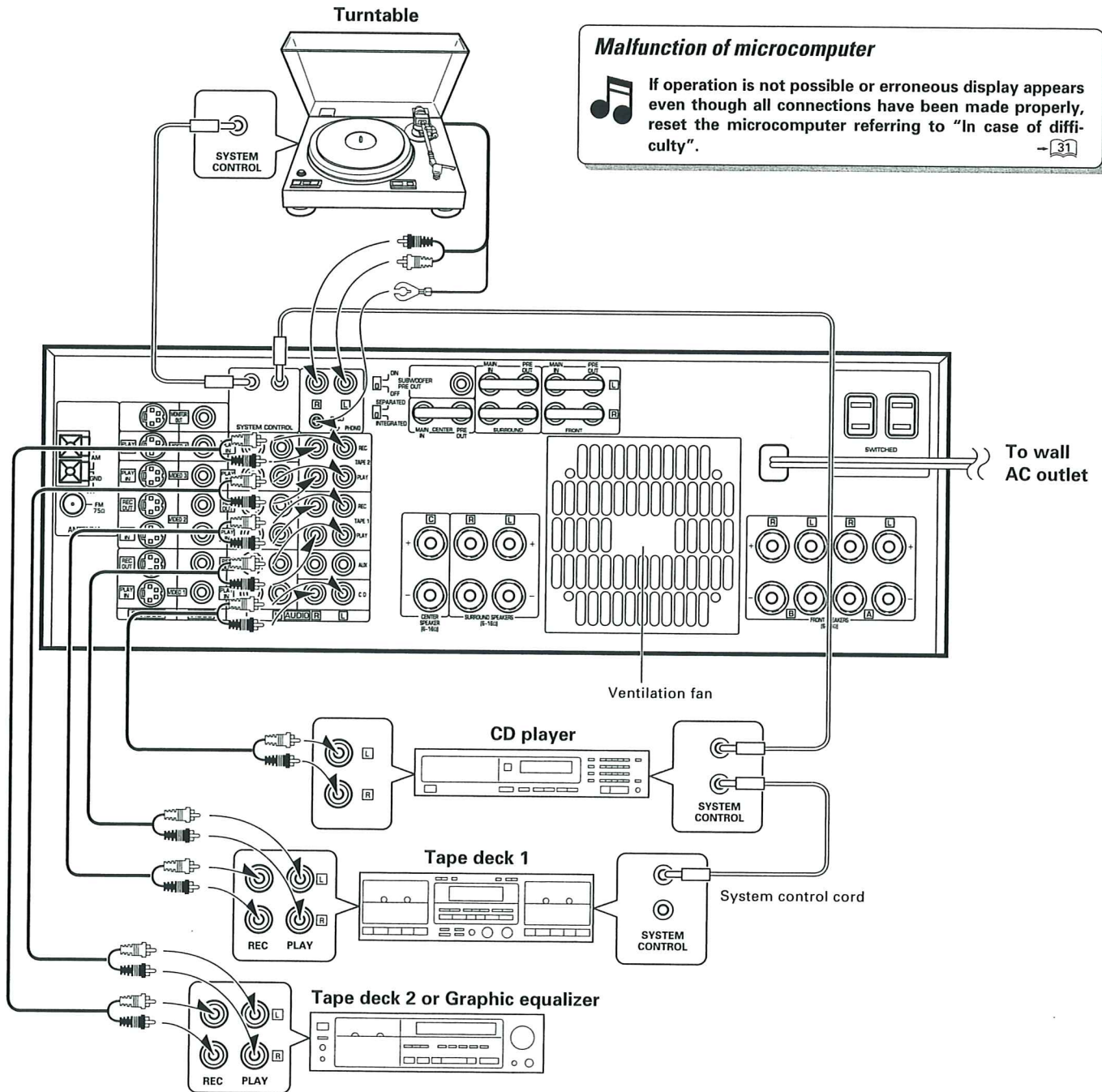
Do not plug in the power lead until all connections are completed.

### Malfunction of microcomputer



If operation is not possible or erroneous display appears even though all connections have been made properly, reset the microcomputer referring to "In case of difficulty".

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A side panel is included with the KR-X1000 (G).

### Ventilation fan

The fan rotates when the internal temperature rises. To allow the ventilation, install the component by reserving a certain distance between its rear and the wall.

### Automatic operation

If you connect other KENWOOD components (i.e. a cassette deck or CD player) to this unit's SYSTEM CONTROL, this unit's input selector will automatically switch to that component when you start playback from it. This also works when you use the remote control. (Automatic operation is not possible with Tape deck 2 or Video machines.)







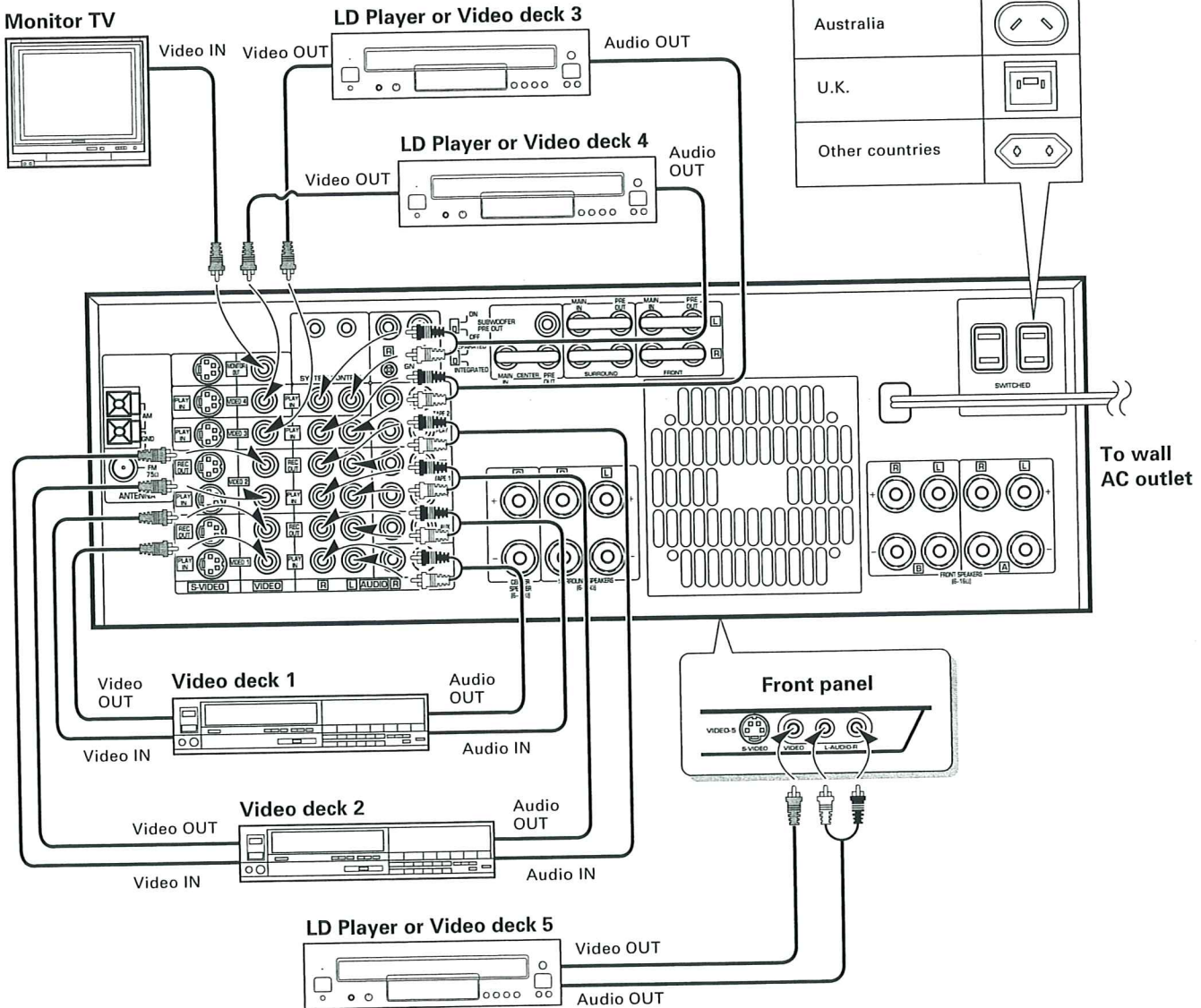
## Connection of Video components

Make connections as shown below.

When connecting the related system components, refer also to the instruction manuals of the related components.  
Do not plug in the power lead until all connections are completed.

### Shape of AC outlets

U.S.A. and Canada	
Australia	
U.K.	
Other countries	



A side panel is included with the KR-X1000 (G).

- This unit has a cooling fan on the rear panel. Do not place anything near the cooling fan.



- 1 Connect all cords firmly. If connections are loose, there could be loss of sound or noise produced.
- 2 When plugging and unplugging connection cords, be sure to first remove the power cord from the AC outlet. Plugging / unplugging connection cords without removal of the power cord can cause malfunctions or damage to the unit.
- 3 Do not connect up a power source which is larger than that indicated on the socket at the rear of the unit.
- 4 Insert the system control plugs completely into the jacks.
5. If the system control cords or audio cords are not connected properly, the remote control or automatic operation between system components will not work properly.

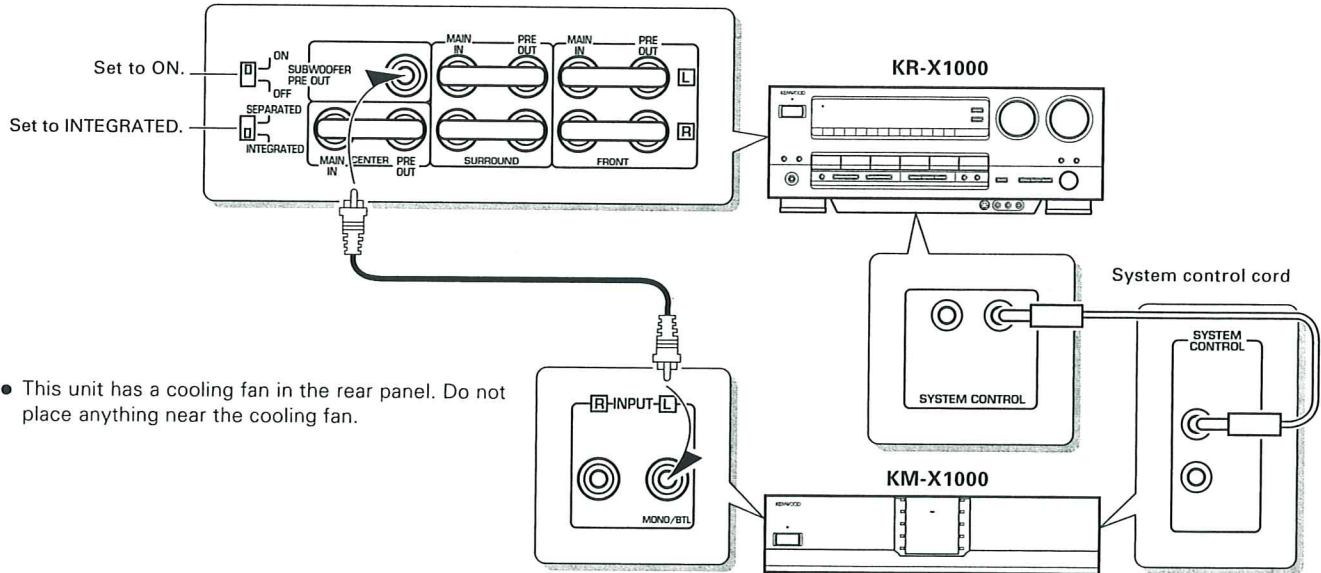
### 6 Connection with an external amplifier

Speakers cannot output sufficient sound level even when they are connected directly to the PRE OUT jacks. These jacks should be connected to speakers containing an amplifier or to amplifiers to which speakers are connected. Also read carefully the instruction manual of the amplifier to be used. In case your system does not use an external amplifier, set the POWER switch to OFF, attach all of the shorting plugs to the original positions, set the SUBWOOFER switch to OFF and the INTEGRATED/SEPARATED switch to INTEGRATED.

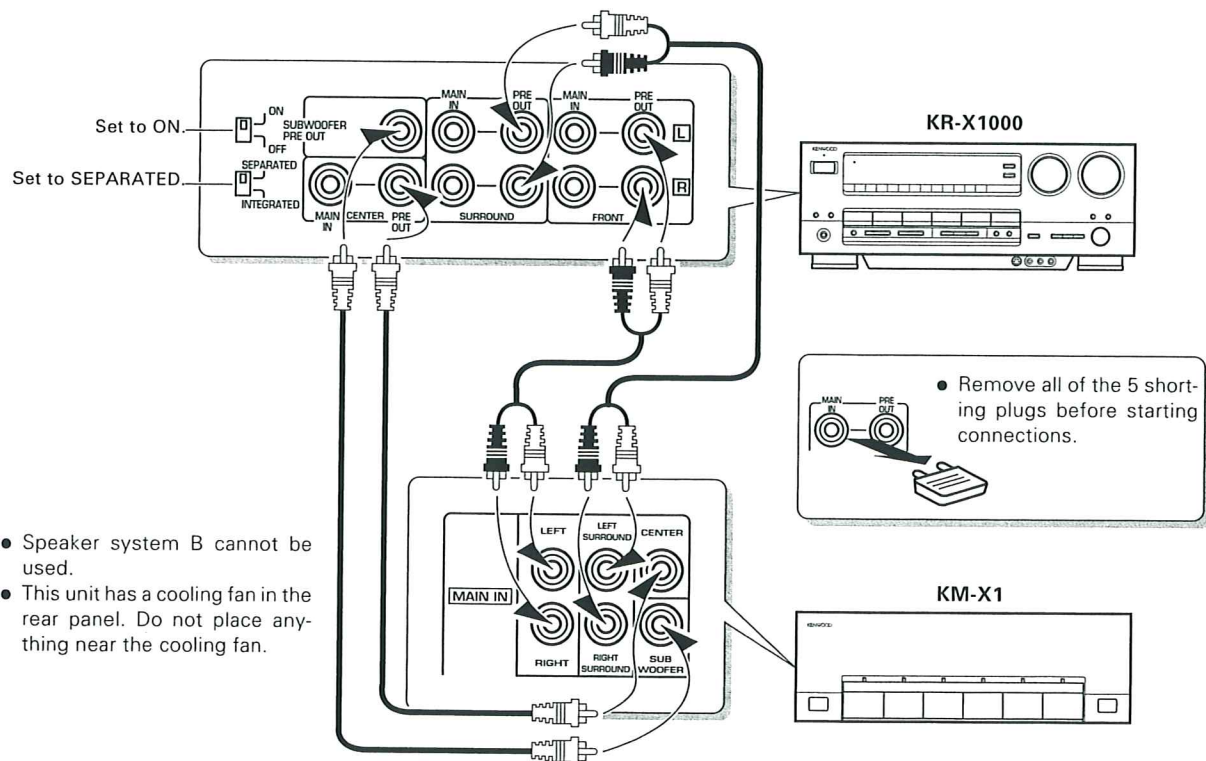
### Caution in connection with an external amplifier

After switching the POWER switch of the amplifier OFF, set the SUBWOOFER and INTEGRATED/SEPARATED switches on the rear panel of this unit, make all of the required connections then switch the amplifier's POWER switch ON.

### Connection with a subwoofer amplifier (optional) (Example: Connection with the KM-X1000)

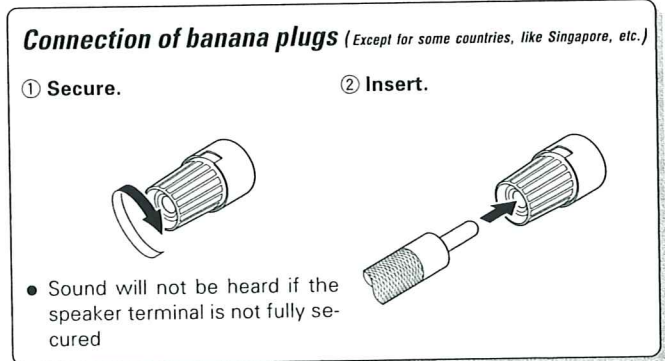
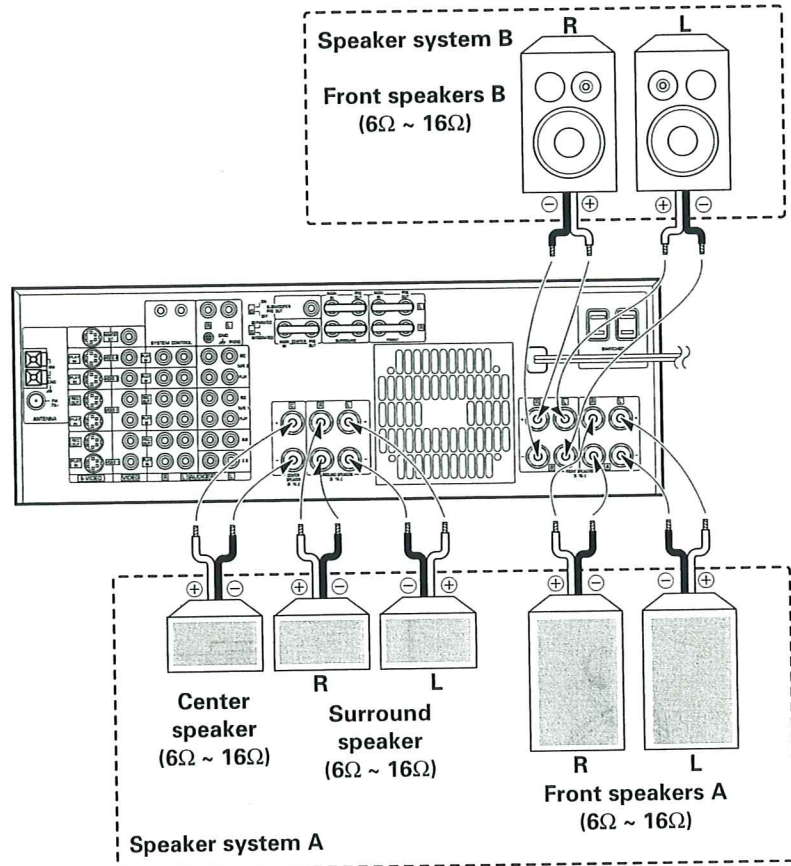
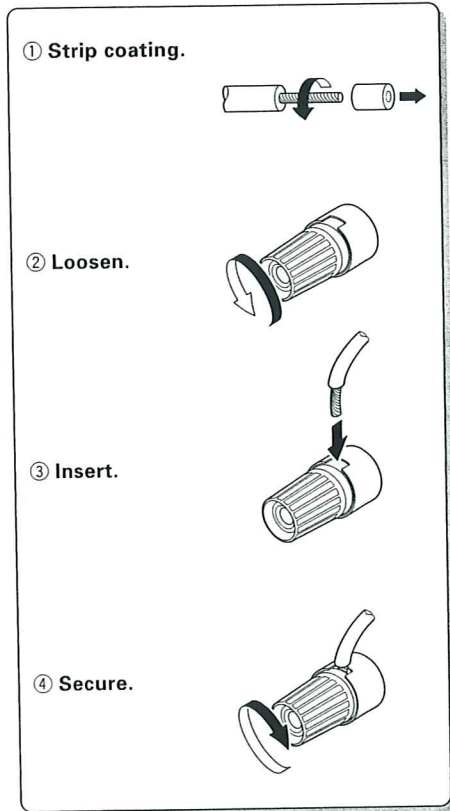


### Connection with a multi-channel main amplifier (optional) (Example: Connection with the KM-X1)





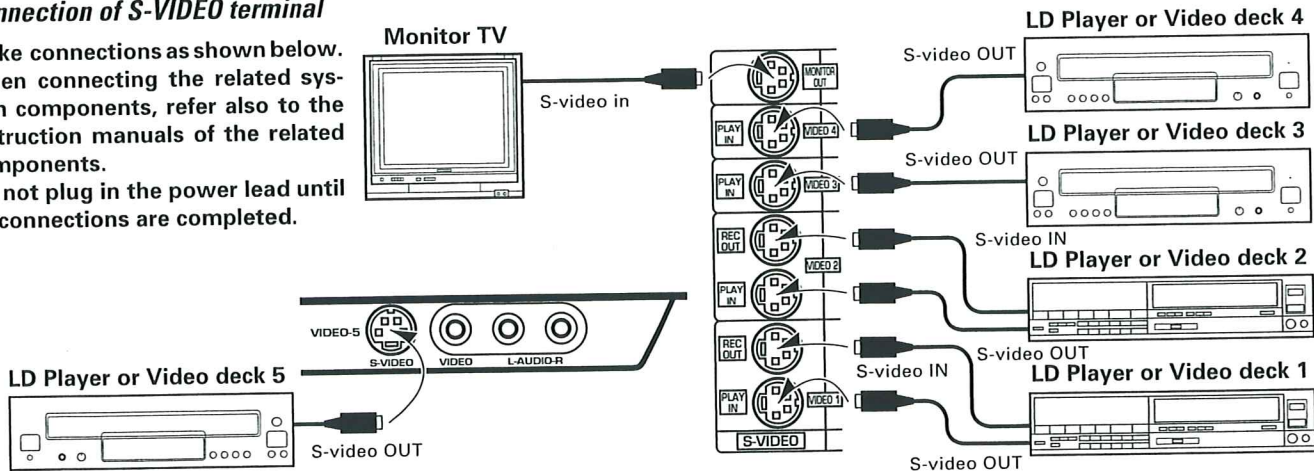
# Connection of speakers



- Never short-circuit the + and - speaker cords.
- If the left and right speakers are connected inversely or if the speaker cords are connected with reversed polarity, the sound becomes unnatural with ambiguous acoustic image positioning. Be sure to connect the speakers and speaker cords correctly.
- Speaker system B can be used only in STEREO or LINE STRAIGHT mode. In addition, speaker system B is defeated while the **INTEGRATED/SEPARATED** switch is set to SEPARATED.
- The **SPEAKERS A/B** key allows to switch each speaker system independently ON/OFF.

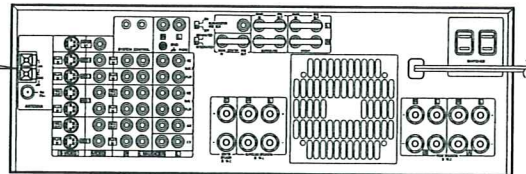
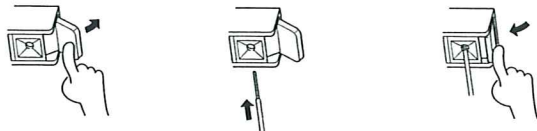
## Connection of S-VIDEO terminal

Make connections as shown below. When connecting the related system components, refer also to the instruction manuals of the related components. Do not plug in the power lead until all connections are completed.



**Connection method to each antenna terminal**

- ① Push lever.      ② Insert cord.      ③ Return lever.



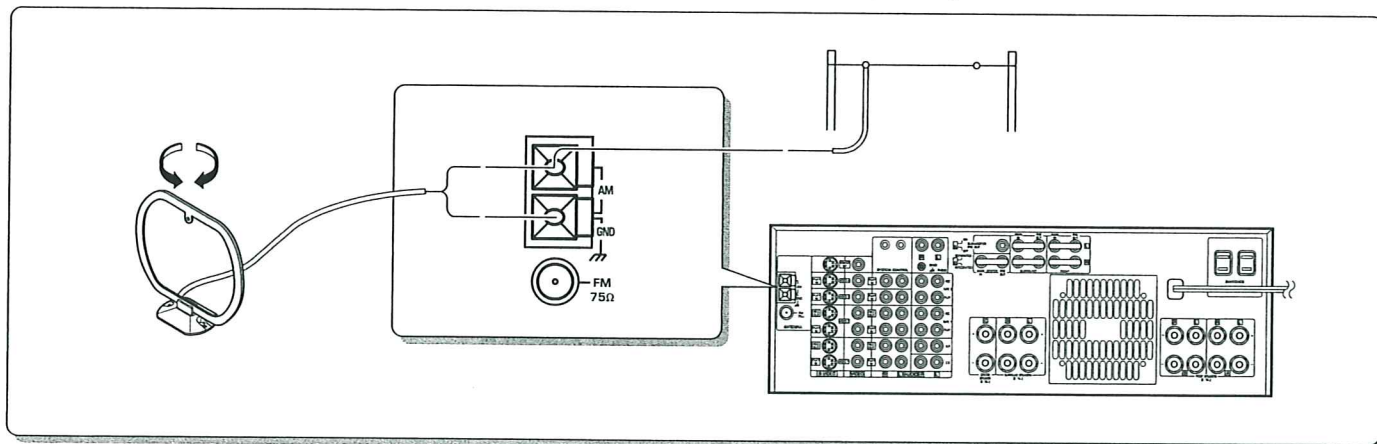
## Connection of AM antenna

### AM loop antenna connection

The supplied antenna is for indoor use. Place it as far as possible from the main system, TV set, speaker cords and power cord, and set it to a direction which provides the best reception.

### AM outdoor antenna connection

If the reception is poor when the AM loop antenna is used, distribute a vinyl-coated wire of more than 6 meters outdoors, without disconnecting the loop antenna.



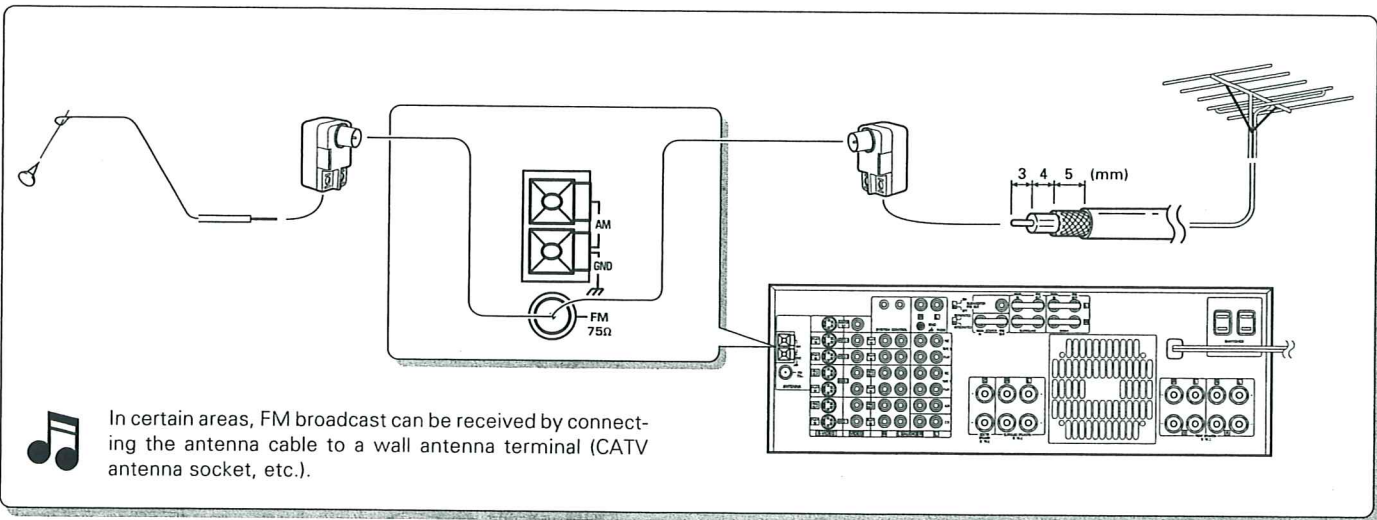
## Connection of FM antenna

### FM indoor antenna connection

The accessory antenna is for temporary indoor use only. For stable signal reception we recommend using an outdoor antenna. Remove the indoor antenna if you connect one outdoors.

### FM outdoor antenna connection

Lead the 75 Ω coaxial cable connected to the FM outdoor antenna into the room and connect it to the FM 75 Ω terminal.



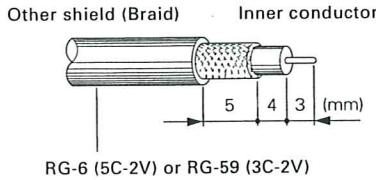
In certain areas, FM broadcast can be received by connecting the antenna cable to a wall antenna terminal (CATV antenna socket, etc.).



# Connection of antenna adaptor

**① Prepare the cable.**

**When coaxial cable is used**

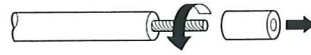


Other shield (Braid) Inner conductor

5 4 3 (mm)

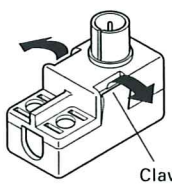
RG-6 (5C-2V) or RG-59 (3C-2V)

**When the provided simplified antenna is used**



Remove the vinly coating and twist conductors.

**② Open the antenna adaptor.**

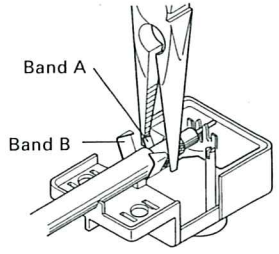


Claw

Open the claws with the fingers to release the lock and pull out the cover.

**③ Attach the cable and close the cover.**

**When coaxial cable is used**

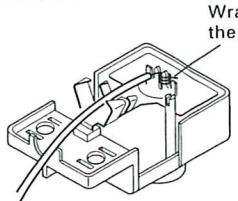


Band A

Band B

Insert the cable into the slit on the clip. Fasten bands A and B using a pair of pliers.

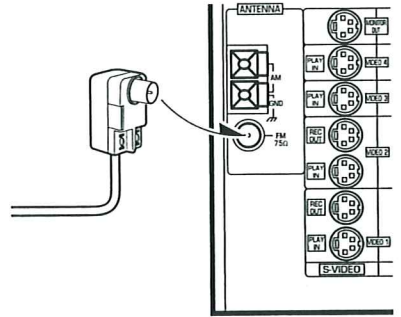
**When the provided simplified antenna is used**



Wrap around the terminal.

Insert the antenna cord tip into the slit on the hardware and wrap the cord around it.

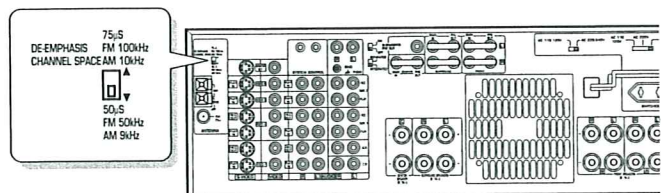
**④ Connect the adaptor to the antenna terminal.**



## FM DE-EMPHASIS / CHANNEL SPACE switch (Except for U.S.A., Canada and Australia)

The FM DE-EMPHASIS / CHANNEL SPACE switch on the rear panel is set to the correct setting that prevails in the area to which the unit is shipped. However, if the FM DE-EMPHASIS / CHANNEL SPACE setting is not matched to the area where the unit is to be used; for instance, when you moved from area 1 to area 2 or vice versa, desired reception of AM / FM broadcasts is not expected. In this case, change the FM DE-EMPHASIS / CHANNEL SPACE setting in accordance with the area corresponding to the table. The FM DE-EMPHASIS is switched over at the same time.

- When changing the setting of the FM DE-EMPHASIS / CHANNEL SPACE switch, first disconnect the power cord of the amplifier, then reset the channel space switch, connect the power cord again, and turn the power on.



Area	CHANNEL SPACE freq.	FM DE-EMPHASIS
1	U.S.A., Canada, Hawaii, South American countries FM: 100kHz AM: 10kHz	75 $\mu$ s
2	Other countries FM: 50kHz AM: 9kHz	50 $\mu$ s

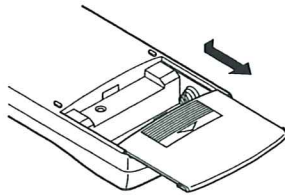
# Operation of remote control unit

KR-X1000 (En)

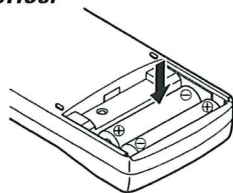
10

## Loading batteries

### 1 Remove the cover.

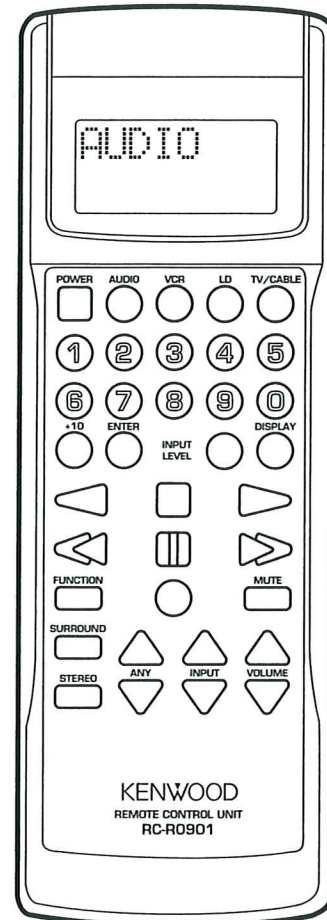
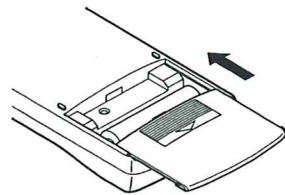


### 2 Insert batteries.



- Insert two AA-size (R6 / SUM-3) batteries as indicated by the polarity marking.

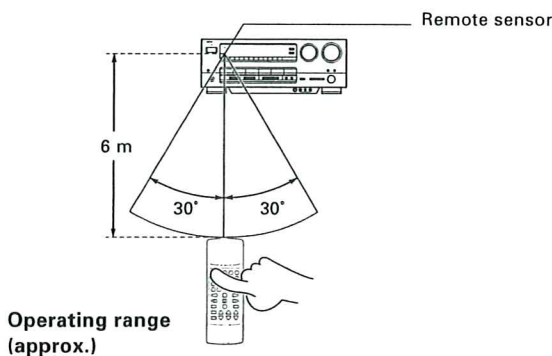
### 3 Close the cover.



Model: RC-R0901  
Infrared ray system

## Operation procedure

Plug the power cord of the system into an AC wall outlet, and press the **POWER** key on the remote control unit to turn the power on. When the power is turned on, press the key of the source component to be operated.



- When two operation keys on the remote control unit are pressed successively, press each key securely reserving an interval of more than 1 second for each press.
- Components connected via the system control cords, such as the CD player, can also be remote-controlled. In this case, please read the instruction manual supplied with your CD player.
- When the batteries are exhausted and replacement becomes necessary, replace them with alkaline batteries (LR6).



1. The supplied batteries are intended for use in operation checks. Therefore, their lives may be shorter than ordinary batteries.
2. When the remote-controllable distance gets shorter than before, replace both batteries with new ones.
3. Malfunction may occur if direct sunlight or the light of a high-frequency lighting fluorescent lamp enters the remote control light sensor. In such a case, change the system installation position to prevent the malfunction.



# Remote operation of KENWOOD components




















KR-X1000 (En)

The remote control unit provided with this unit can control a KENWOOD CD player and cassette deck as well as this unit. Additionally, it can also control video components from other manufacturers than KENWOOD by recalling the maker codes preset in the remote control unit. For the method of recalling the maker codes and controlling these components, please refer to the setup code table. 11

## To control this receiver:

- ① Press the **AUDIO** key so that "AUDIO" or "TUNER" is displayed.
- ② Press the **POWER** key to switch this unit ON.
- ③ Press the desired operation key.

\* This mark indicates that only the right side key can be used.

 <b>Select the source component to be controlled.</b> <b>Select by pressing the AUDIO key repeatedly.</b>												
Display on the remote control unit	① → ② → ③ → ④ → ⑤											
Operation keys	AUDIO      TUNER      CD      TAPE A      TAPE B											
	POWER      POWER      POWER      POWER      POWER											
	<table border="0"> <tr> <td>1 :MENU → 29</td> <td rowspan="3">Numeric keys → 20</td> <td rowspan="3">Numeric keys</td> <td></td> <td></td> </tr> <tr> <td>6 :DIMMER → 17</td> <td></td> <td></td> </tr> <tr> <td>+10 :DISPLAY MODE → 28</td> <td></td> <td></td> </tr> </table>	1 :MENU → 29	Numeric keys → 20	Numeric keys			6 :DIMMER → 17			+10 :DISPLAY MODE → 28		
1 :MENU → 29	Numeric keys → 20	Numeric keys										
6 :DIMMER → 17												
+10 :DISPLAY MODE → 28												
	For use in controlling non-KENWOOD components. → 12 → 13 → 33											
												
	INPUT LEVEL → 16											
	Displays the name of the component which can be controlled for a few seconds.											
		P.CALL(▲, ▼) → 21	* ▶/	◀,▶	◀,▶							
	EFFECT → 28	BAND → 19	■	■	■							
			⏮, ⏭	⏮, ⏭	⏮, ⏭							
	DELAY → 25		DISC SKIP									
	CHANNEL MODE → 24	DIRECT → 20										
	TEST TONE → 24			●	●							
	MUTE → 16	MUTE	MUTE	MUTE	MUTE							
	SURROUND MODE → 27	SURROUND MODE	SURROUND MODE	SURROUND MODE	SURROUND MODE							
	MULTI CONTROL → 24											
	INPUT SELECTOR → 15	INPUT SELECTOR	INPUT SELECTOR	INPUT SELECTOR	INPUT SELECTOR							
	VOLUME CONTROL → 15	VOLUME CONTROL	VOLUME CONTROL	VOLUME CONTROL	VOLUME CONTROL							
	STEREO → 24	STEREO	STEREO	STEREO	STEREO							

# How to preset the set-up codes

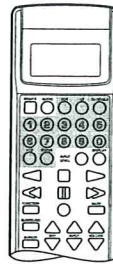
KR-X1000 (En)

## PRESET REMOTE CONTROL

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The preset remote control contains preset memory of the remote control codes of video components from many manufacturers. By simply entering the manufacturer codes, a single unit can operate video components owned by individual users.

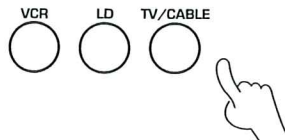
Use the following procedure to recall the setup codes for controlling non-KENWOOD components from this remote control unit.



: Keys or controls to be used in this operation

**1** Find the set-up code of the component to be registered.

**2** Set the display for the component to be registered.



Refer to the set-up code list and after to find the set-up code of the component to be registered. → 33

Example: To register a VCR from KENWOOD, 056, 061 or 082

Each press of each key switches the display as follows:

	Displayed characters
VCR	VCR 1 ↔ VCR 2
LD	LD
TV/CABLE	TV ↔ CABLE

Example: Press the VCR key to select "VCR1" or "VCR2".

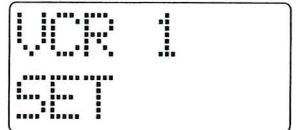


Go to step 3 within 5 sec.

**3** Press the ENTER key.

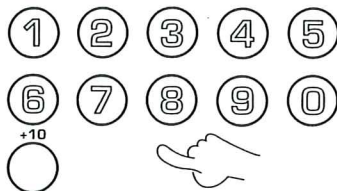


The display shows "SET".



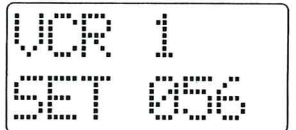
Go to step 4 within 5 sec.

**4** Enter the set-up code.



Enter with numeric keys.

Example: **0**, **5**, **6**



- If you commit a mistake, wait until the displayed number disappears and restart from step 2.



Go to step 5 within 5 sec.

**5** Press the ENTER key.



When presetting is OK



When presetting is NG



- If you made a mistake entering the set-up code, start over from step 4 within 5 seconds of the "NG" indication.



The set-up codes are designed to be compatible with several models, but there may be some incompatible models. (With some models, only some of the functions can be operated.)



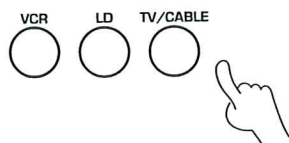
# Operating components preset with remote codes

KR-X1000 (En)



Keys or controls to be used in this operation

## 1 Set the display for the component to be registered.



Each press of each key switches the display as follows:

	Displayed characters
VCR	VCR 1 ↔ VCR 2
LD	LD
TV/CABLE	TV ↔ CABLE

## 2 Point to the preset component and press the POWER key.



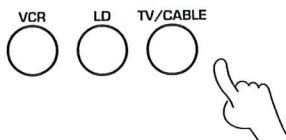
## 3 Operate the keys.

- Operate referring to the remote control key correspondence table.

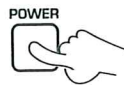
→ 32

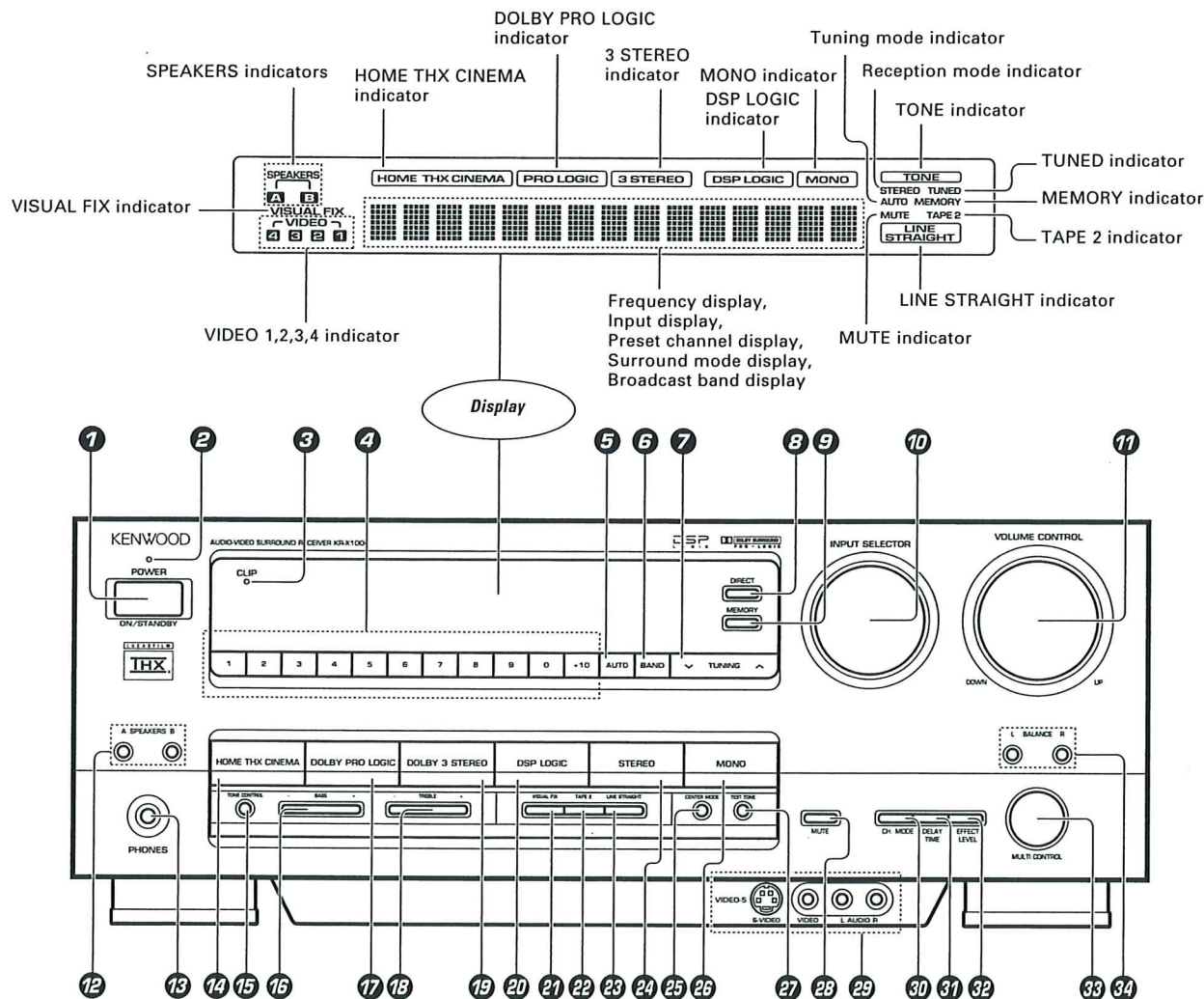
### To turn the power OFF

#### ① Set the display for the component to be turned OFF.



#### ② Press the POWER key.





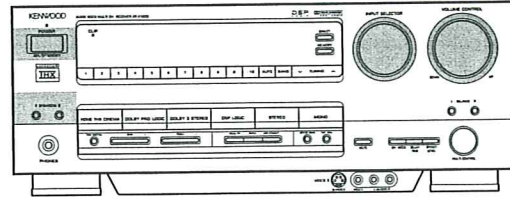
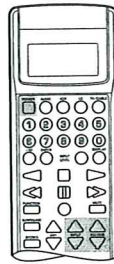
- |  |      |  |
|--|------|--|
| <b>1 POWER key</b>   |      |  |
| <b>2 STANDBY indicator</b>   |      |  |
| <b>3 CLIP indicator</b>  | - 16 |  |
| <b>4 Numeric keys</b>  | - 20 |  |
| Used for storing and recalling stations.   |      |  |
| <b>5 AUTO key</b>  | - 19 |  |
| Press to select the auto tuning mode.  |      |  |
| <b>6 BAND key</b>  | - 19 |  |
| Press to switch the broadcast band.  |      |  |
| <b>7 TUNING keys</b>   | - 19 |  |
| Press to tune broadcast stations.  |      |  |
| <b>8 DIRECT key</b>  | - 20 |  |
| Press for direct station tuning based on numerical input.  |      |  |
| <b>9 MEMORY key</b>  | - 21 |  |
| Press to preset a station in the memory.   |      |  |
| <b>10 INPUT SELECTOR knob</b>  | - 15 |  |
| Turn to select the input sources.  |      |  |
| <b>11 VOLUME CONTROL knob</b>  | - 15 |  |
| <b>12 SPEAKERS A/B keys</b>  | - 15 |  |
| Press to select the A and/or B speaker systems.  |      |  |
| <b>13 PHONES jack</b>  | - 17 |  |
| Used for headphone listening.  |      |  |
| <b>14 HOME THX CINEMA key</b>  | - 25 |  |
| <b>15 TONE CONTROL key</b>   | - 16 |  |
| <b>16 BASS key</b>   | - 16 |  |
| <b>17 DOLBY PRO LOGIC key</b>  | - 25 |  |
| <b>18 TREBLE key</b>   | - 16 |  |
| <b>19 DOLBY 3 STEREO key</b>   | - 24 |  |
| <b>20 DSP LOGIC key</b>  | - 25 |  |
| <b>21 VISUAL FIX key</b>   | - 22 |  |
| <b>22 TAPE 2 key</b>   | - 18 |  |
| Press to monitor the sound being recorded.   |      |  |
| <b>23 LINE STRAIGHT key</b>  | - 17 |  |
| To listen to a source with high quality sound.   |      |  |
| <b>24 STEREO key</b>   | - 24 |  |
| Press to cancel the surround modes.  |      |  |
| <b>25 CENTER MODE key</b>  | - 24 |  |
| Press to select the center mode of HOME THX CINEMA, DOLBY PRO LOGIC surround and DOLBY 3 STEREO. |      |  |
| <b>26 MONO key</b>   | - 28 |  |
| <b>27 TEST TONE key</b>  | - 24 |  |
| <b>28 MUTE key</b>   | - 16 |  |
| Mute the sound temporarily.  |      |  |
| <b>29 VIDEO-5 terminals</b>  | - 5  |  |
| <b>30 CHANNEL MODE key</b>   |      |  |
| <b>31 DELAY TIME key</b>   | - 25 |  |
| <b>32 EFFECT LEVEL key</b>   | - 27 |  |
| <b>33 MULTI CONTROL knob</b>   | - 24 |  |
| <b>34 BALANCE key</b>  | - 16 |  |
| Press to adjust the volume balance between left and right.                                       |      |  |


A side panel is included with the KR-X1000 (G).

## STANDBY mode of POWER switch

When the power cord of this system is plugged into an AC outlet, the **STANDBY** indicator lights up regardless of the ON/OFF setting of the POWER switch. This indicates that a small amount of current is being supplied to the unit to back up the memory contents. This mode is referred to as the Standby mode. While the **STANDBY** indicator is lit, the power of the system can be switched ON/OFF from the remote control unit.





 : Keys or controls to be used in this operation

## Normal playback

### 1 Turn the power ON.

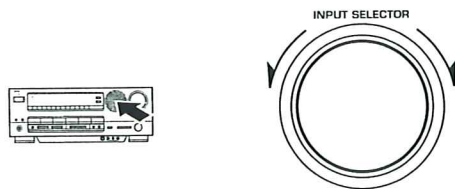


### 2 Select the SPEAKERS switch setting.



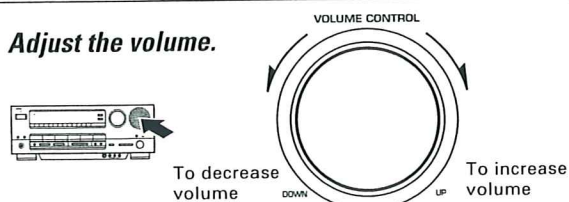
The indicators of the speaker systems to be used should light up.

### 3 Select the input source.



### 4 Play the selected source.

### 5 Adjust the volume.



	Display tube information	FRONT SPEAKERS A	SURROUND SPEAKERS	CENTER SPEAKER	FRONT SPEAKERS B	SUBWOOFER PRE OUT
Non-surround modes	SPEAKERS A	○	—	—	—	* ○
	SPEAKERS B	—	—	—	○	* ○
	SPEAKERS A B	○	—	—	○	* ○
	SPEAKERS	—	—	—	—	—
Surround modes	SPEAKERS A	○	○	** ○	—	* ○
	SPEAKERS	—	—	—	—	—

"○" in the table above indicates the presence of output and "—" indicates the absence.

\* The SUBWOOFER PRE OUT signal is not output when the SUBWOOFER switch on the rear panel is set to OFF.

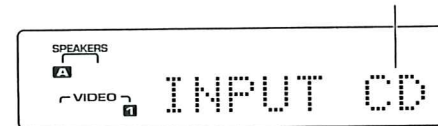
\*\* The CENTER SPEAKER signal is not output when the CENTER MODE is PHANTOM.

• While the INTEGRATED/SEPARATED switch on the rear panel of this unit is set to SEPARATED, FRONT SPEAKERS B cannot be used and the subwoofer output cannot be turned off.

The input sources are switched in the following order:

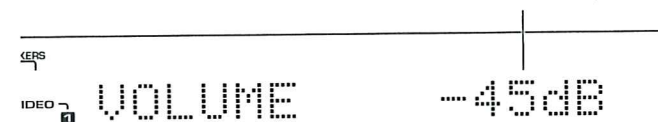
- ① TUNER (frequency display)
- ② TAPE1
- ③ AUX
- ④ VIDEO1
- ⑤ VIDEO2
- ⑥ VIDEO3
- ⑦ VIDEO4
- ⑧ VIDEO5
- ⑨ CD
- ⑩ PHONO

The selected source is displayed.



• The selected input source is held in memory for about 3 days even after the power cord is unplugged from the mains outlet.


Volume level is displayed.



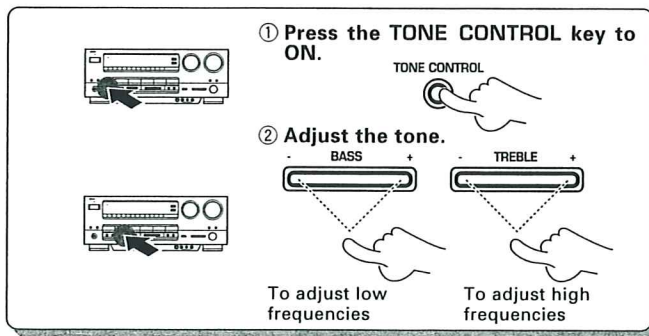
• The sound of input source cannot be listened to while TAPE 2 is ON.

# Sound adjustment functions

## Preparation

- Press the **AUDIO** key of the remote control unit to display "AUDIO". 

## Adjusting the tone



① Press the **TONE CONTROL** key to ON.


② Adjust the tone.

**BASS**      **TREBLE**

To adjust low frequencies      To adjust high frequencies

Lights

---



TONE CONTROL ON


---

- Use in the STEREO mode.

**To cancel:**  
Press the **TONE CONTROL** key again.

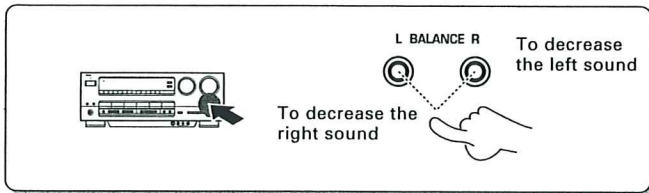
---

Goes off



TONE DEFEAT

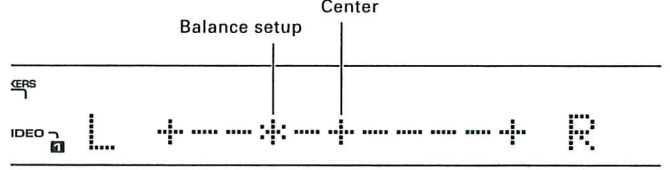
## Adjusting the left/right sound balance



**L BALANCE R**

To decrease the right sound      To decrease the left sound

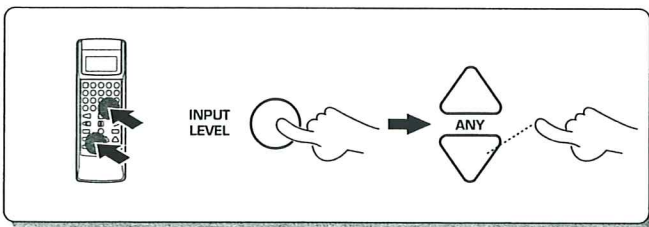
Balance setup      Center



● Use in the STEREO mode or when LINE STRAIGHT is ON.

## INPUT LEVEL key

Adjust the input level so that the CLIP indicator does not light.



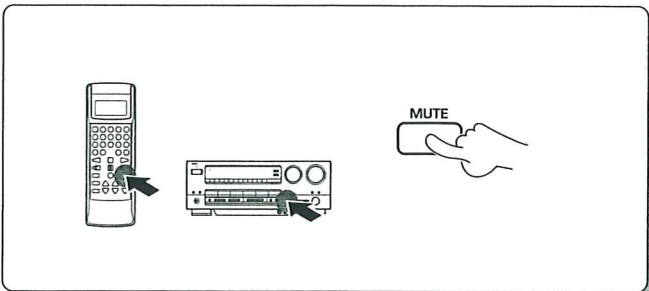
**INPUT LEVEL**      **ANY**

Each press of the **MULTI CONTROL (ANY )** key changes the input level as follows.



0dB → -2dB → -4dB → -6dB

- The set INPUT LEVEL value can be preset separately for each input selector.

## To mute sound temporarily





**MUTE**

 **MUTE ON**      

---

**To cancel**  
Press the key again.

---

 **MUTE OFF**      

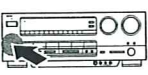
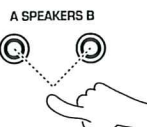
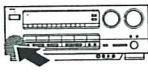

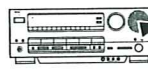

Goes off



**DIMMER key (numeric key 6)**

Press the AUDIO key of the remote control unit to display "AUDIO", and pressing numeric key "6" allows you to change the brightness of the display on the main unit in 3 steps.

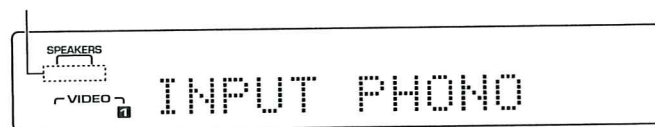
**To listen through headphones**

- ① Set both of the **SPEAKERS** switches to OFF.
 

- ② Plug headphones.
 

- ③ Adjust the volume.
 


To decrease volume

To increase volume

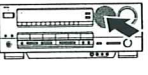
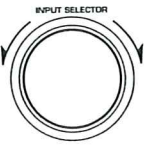
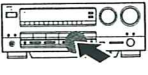
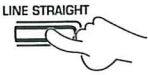
Ensure that the indicators are off.



- While the **INTEGRATED/SEPARATED** switch on the rear panel of this unit is set to **SEPARATED**, switching the **SPEAKERS A** key OFF does not switch the subwoofer output OFF.

**Playback with Line Straight**

This feature allows you to enjoy music sources such as CD with an even higher sound quality.

- ① Choose the playback source.
 

- ② Press the **LINE STRAIGHT** key.
 

- ③ Playback the source.

LINE STRAIGHT



Lights

- Tone controls are inoperative during playback with line straight.
- Pressing keys related to surround sound will cancel line straight playback.

**To cancel**

Press the key again.

STEREO

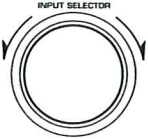
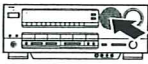


Goes off

- The display returns to the state immediately before the key was pressed.

## To record a music source

① Select the source to be recorded.




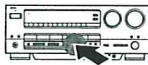
Select an input source other than TAPE 1.

② Put the cassette deck in record-pause mode.

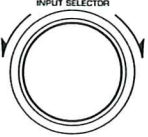
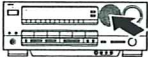
③ Play the source and start recording.

## Copying tape (Tape dubbing TAPE 2 → TAPE 1)

① Press the TAPE 2 key.



② Select a source other than TAPE 1.



③ Play cassette deck 2 and start recording on cassette deck 1.

TAPE2 MONITOR



Lights

- For copying a tape using a double cassette deck, read the instruction manual of the double cassette deck.

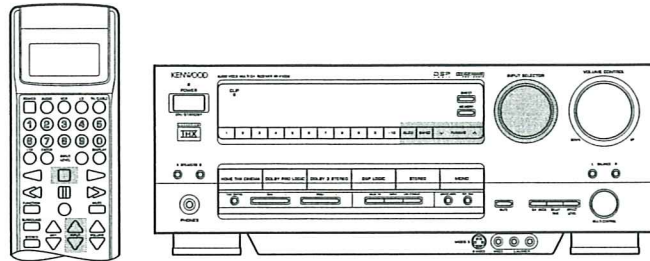
## Copying tape (Tape dubbing TAPE 1 → TAPE 2)


Play the cassette deck connected to the TAPE 1 jacks and start recording of the cassette deck connected to the TAPE 2 jacks.

## TAPE 2 (Monitor function)

A cassette deck or graphic equalizer can be connected to this unit's TAPE 2 terminals. If you connect a graphic equalizer, turn the TAPE 2 key ON. If you connect a 3-head cassette deck, you can monitor the source sound, or the sound being recorded, while recording. Pressing the TAPE 2 key lets you compare the recorded sound and the source sound. Refer to the operating manual for the component you connected for further details.

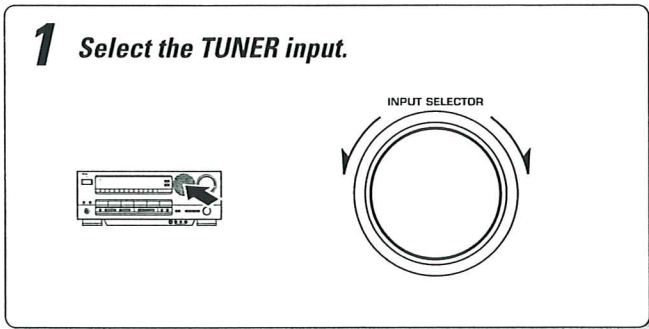




 : Keys or controls to be used in this operation

## Receiving a broadcast station

### 1 Select the TUNER input.



The input sources are switched in the following order:

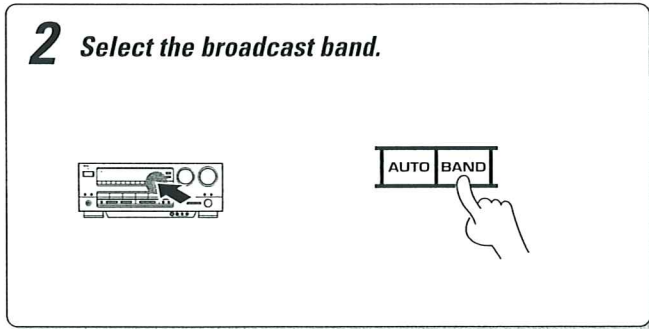
- ① TUNER (frequency display)
- ② TAPE1
- ③ AUX
- ④ VIDEO1
- ⑤ VIDEO2
- ⑥ VIDEO3
- ⑦ VIDEO4
- ⑧ VIDEO5
- ⑨ CD
- ⑩ PHONO

Frequency display

FM 98.00MHz

- The last frequency tuned before is displayed.

### 2 Select the broadcast band.



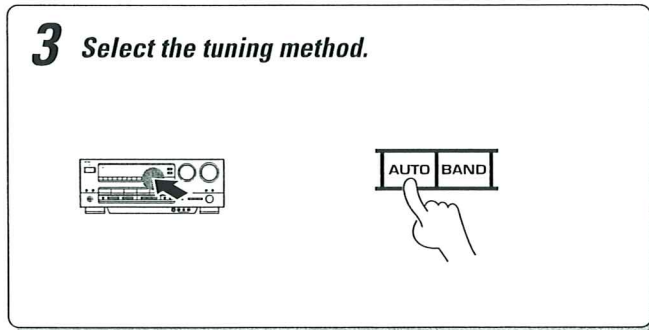
Each press switches the band as follows:

- ☐ ① FM
- ☐ ② AM

"FM" or "AM" is displayed.

FM 98.00MHz

### 3 Select the tuning method.



Each press switches the tuning method as follows:

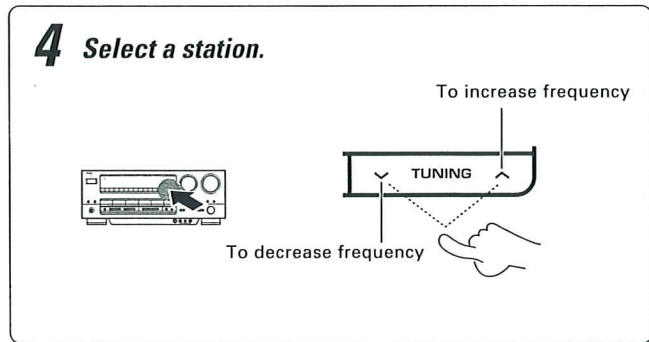
- ☐ ① AUTO lit (auto tuning)
- ☐ ② AUTO not lit (manual tuning)



- Usually, set the switch to **AUTO** (auto tuning).

Select manual tuning when noise interferes due to weak radio waves. (The stereo broadcasting is received in monaural during manual tuning.)

### 4 Select a station.

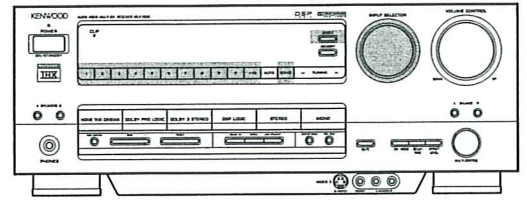



Frequency display

FM 98.00MHz

"TUNED" lights up when a station is tuned.

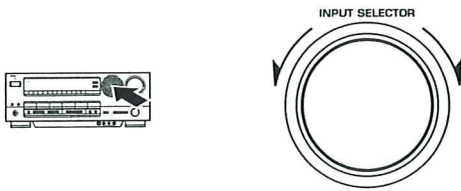
Auto tuning: The next station found is tuned automatically.  
Manual tuning: Press repeatedly or hold until a station is tuned.



 : Keys or controls to be used in this operation

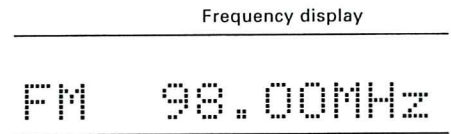
# Receiving a radio station by specifying its frequency

## 1 Select the TUNER input.



The input sources are switched in the following order:

- ① TUNER (frequency display)
- ② TAPE1
- ③ AUX
- ④ VIDEO1
- ⑤ VIDEO2
- ⑥ VIDEO3
- ⑦ VIDEO4
- ⑧ VIDEO5
- ⑨ CD
- ⑩ PHONO

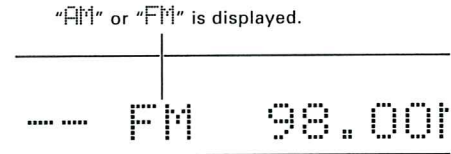


## 2 Select the broadcast band.



Each press switches the band as follows:

- ① FM
- ② AM

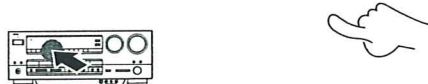


## 3 Specify the frequency.

① Press the DIRECT key.



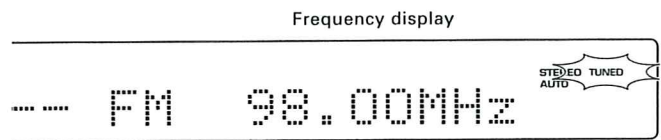
② Enter the frequency of the desired station.



Press the numeric keys according to the frequency to be tuned as shown below.

Desired station	Order of pressing numeric keys
FM 90 MHz	[9], [0], [0] * (100 kHz space) [9], [0], [0], [0] (50 kHz space)
FM 102.5 MHz	[1], [0], [2], [5] (100 kHz space) [1], [0], [2], [5], [0] (50 kHz space)
AM (MW) 810 kHz	[8], [1] (10 kHz space) [8], [1], [0] (9 kHz space)
AM (MW) 1260 kHz	[1], [2], [6] (10 kHz space) [1], [2], [6], [0] (9 kHz space)

\* FM DE-EMPHASIS/CHANNEL SPACE switch



"TUNED" lights up when a station is tuned.

● If you make a mistake, repeat step 3 again.

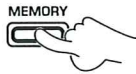
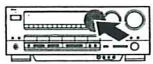


**Preparation**

- Tune the station to be stored in memory. -19
- Press the **AUDIO** key of the remote control unit to display "TUNER". -11

## Storing radio stations in memory (Station preset)

### 1 Press the MEMORY key during receiving a station.



Lights (for 5 sec.)

FM 98.00MHz



**Proceed to step 2 within 5 sec.**

(If more than 5 sec. have elapsed, press the MEMORY key again.)

### 2 Select one of the preset numbers from 1 to 40.



Press the numeric keys in the following order.

To store in "15" ..... [+10], [5]

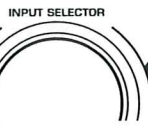
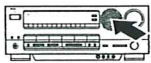
To store in "20" ..... [+10], [+10], [0]

- Repeat steps 1 and 2 for each of the stations to be stored in memory.
- If a station is stored in a preset number which already stores a station memory under it, the previous memory is replaced by the new memory content.
- Once the memory content has been preset, it is held for about 3 days even after the power cord is unplugged from the mains outlet.

## Receiving a preset station

**Press the preset number of the desired station.**

- 1 Select the TUNER input with the INPUT SELECTOR.



2



3

15 FM 98.00MHz



Press the numeric keys in the following order.

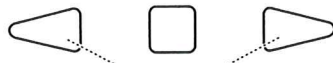
To recall "15" ..... [+10], [5]

To recall "20" ..... [+10], [+10], [0]

## Receiving all preset stations in order



To increase preset No.



To decrease preset No.



- Every time the key is pressed, the next station in the order of the preset number is received.

When you press  $\triangleright$  key..... 01  $\rightarrow$  02  $\rightarrow$  03 ..... 38  $\rightarrow$  39  $\rightarrow$  40

When you press  $\triangleleft$  key..... 01  $\leftarrow$  02  $\leftarrow$  03 ..... 38  $\leftarrow$  39  $\leftarrow$  40

If the key is held pressed ..... Preset stations will be received successively for about half a second each.

# Operation of video components

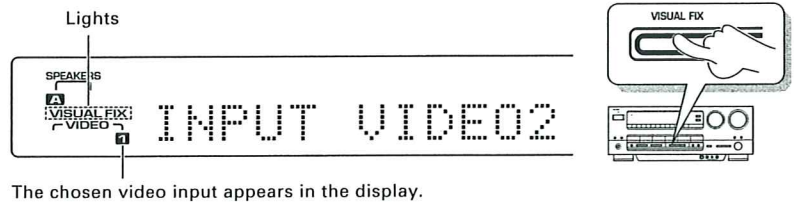
KR-X1000 (En)

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For the connections and operations, also carefully read the instruction manuals of the video components. — 5

## Regarding the VISUAL FIX key

This key prevents visual input sources from switching. For example, with VISUAL FIX on, even though you change the input source from VIDEO 1 to VIDEO 2, the VIDEO 1 images continue uninterrupted and only the audio portion changes to the VIDEO 2 source.

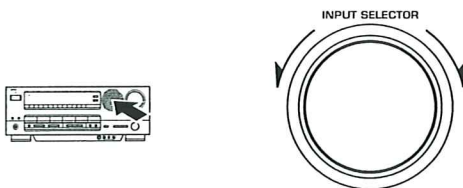


- If the video input source being selected is not indicated by any of VIDEO input indicators 1 2 3 4, it is VIDEO5 that is being selected.

## Playback of videotape

**1** Turn the power of the monitor TV ON.

**2** Select the VIDEO 1 input.



The input sources are switched in the following order:

- ① TUNER (frequency display)
- ② TAPE1
- ③ AUX
- ④ VIDEO1
- ⑤ VIDEO2
- ⑥ VIDEO3
- ⑦ VIDEO4
- ⑧ VIDEO5
- ⑨ CD
- ⑩ PHONO

"VIDEO1" should be displayed.

INPUT VIDEO1

- Select the input to which a video deck is connected.
- If the video input source being selected is not indicated by any of VIDEO input indicators 1 2 3 4, it is VIDEO5 that is being selected.

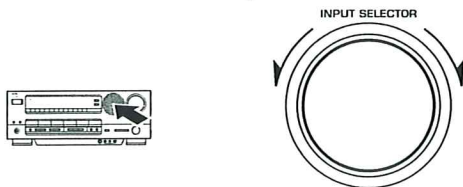
**3** Play the video deck.

## Recording of video source (Example: VIDEO2 → VIDEO1)

**1** Connect the video source component to be played.

- Connect the component to be played to the VIDEO 2 jacks.
- The connectable components include a video deck (playback only), video camera (playback only), LD player or DBS tuner.

**2** Select the VIDEO 2 input.



The input sources are switched in the following order:

- ① TUNER (frequency display)
- ② TAPE1
- ③ AUX
- ④ VIDEO1
- ⑤ VIDEO2
- ⑥ VIDEO3
- ⑦ VIDEO4
- ⑧ VIDEO5
- ⑨ CD
- ⑩ PHONO

"VIDEO2" should be displayed.

INPUT VIDEO2

**3** Play the source component.

**4** Start recording on the recording video deck.

- Start recording with the video deck which is connected to the VIDEO 1 jacks.



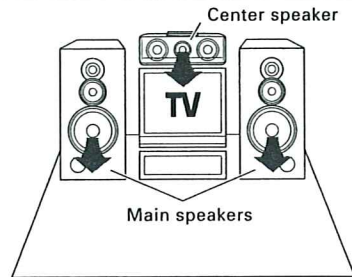
The surround modes allow to enjoy the feeling of realism. Select the mode according to the source or components played. For the connections of the rear and/or center speakers, refer to "Connection of speakers".

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## DOLBY 3 STEREO mode

If the left and right speakers are installed apart from each other, the center acoustic image (dialogue, etc.) may vary depending on the listener's position. The DOLBY 3 STEREO mode provides an improved positioning of the center acoustic image regardless of the listening position.

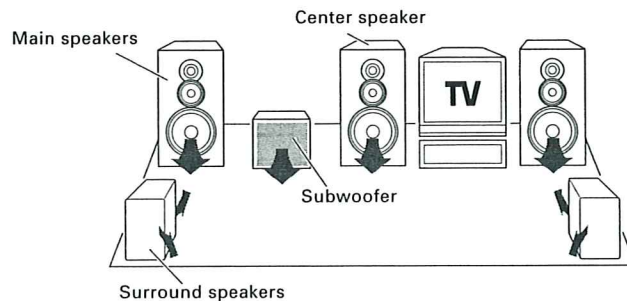
To use this mode, connect the center speaker.



## HOME THX CINEMA

This is a surround reproduction system developed for smaller spaces with the theme of "an uncompromising home cinema experience". Video software bearing the DOLBY SURROUND logo can be played directly through this system.

The THX CINEMA system provides an overwhelming feeling of presence through signal processing based on a unique theory. Use a speaker system with THX logo approved by Lucas Arts Entertainment Company (6-speaker configuration) for the surround reproduction in this mode.

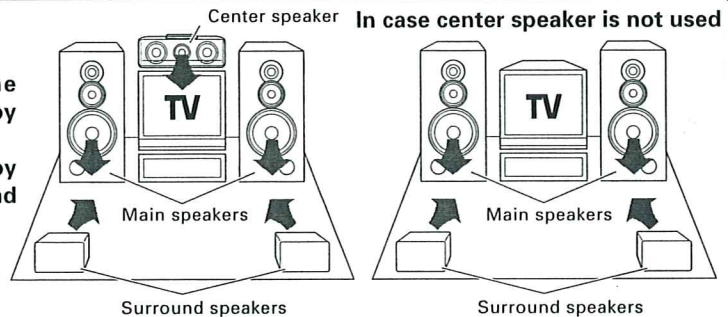


## DOLBY PRO LOGIC surround mode

Video and LD software programs carrying the DOLBY SURROUND mark contain a recording of the same Dolby Surround data as those used in movie theaters.

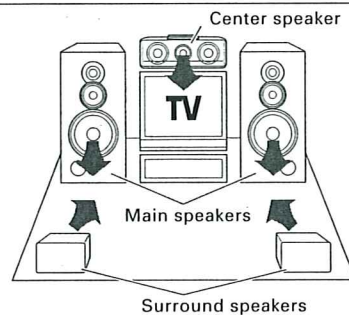
The DOLBY PRO LOGIC surround mode uses the Dolby Surround data and brings into the home a similar sound field to that of movie theaters.

To use this mode, connect the rear (and center) speakers.



## DSP LOGIC

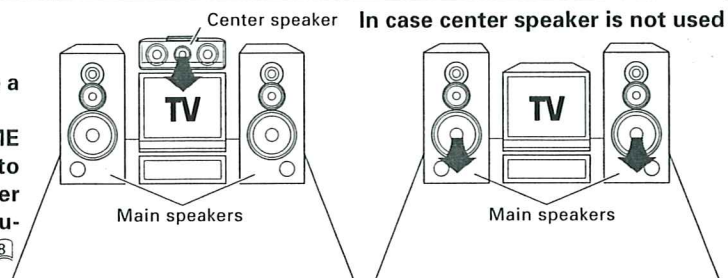
This mode provides the atmosphere of a movie theater by adding the reverberation component of movie theater to the DOLBY PRO LOGIC. To use this mode, connect both the rear and center speakers.



## MONO

Use this mode when watching old movies, etc., that have a monaural audio sound track.

The audio is heard from the center speaker only. If HOME THX CINEMA, DOLBY PRO LOGIC or DSP LOGIC is set to the PHANTOM mode which does not use the center speaker, the left and right main speakers output monaural audio.



# DOLBY 3 STEREO adjustment and playback

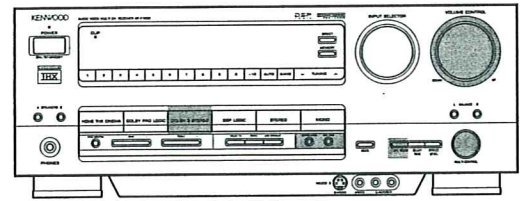
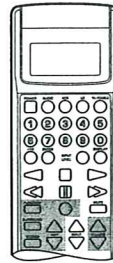
KR-X1000 (En)


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This mode improves the positioning of the acoustic image of dialogue, etc., by applying directivity enhancer processing and using an additional center speaker when video software program recorded with ordinary 2-channel stereo is played. (without surround speakers.)

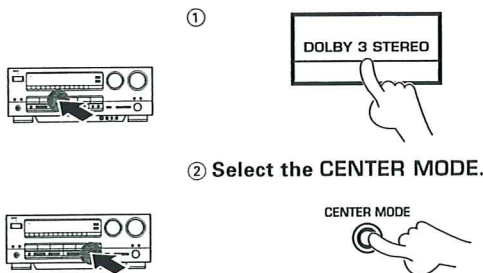
## Preparation

- Press the **AUDIO** key of the remote control unit to display "AUDIO".
- If the subwoofer is used, set the **SUBWOOFER PRE OUT** switch on the rear panel to ON then switch the power ON again.

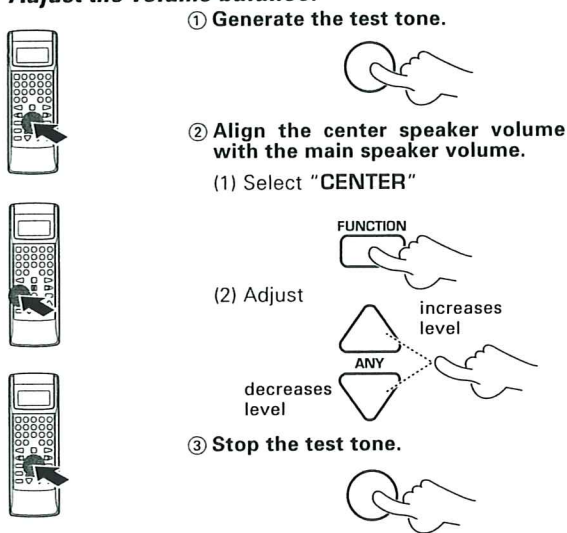


 : Keys or controls to be used in this operation

## 1 Activate the DOLBY 3 STEREO mode.

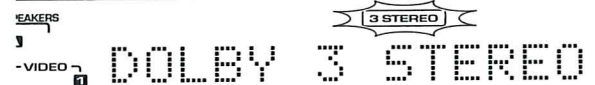


## 2 Adjust the volume balance.



## 3 Play a video software program.

## 4 Adjust the volume.



Each press of the **CENTER MODE** key switches the center modes as follows:

- ① **NORMAL** :When the center speaker is a compact-sized speaker.
  - ② **WIDEBAND** :When the center speaker is a medium- or large-sized speaker.
- If you cannot tell whether your center speaker is compact or medium-sized, try two modes and select according to your liking.
  - The selected center mode is automatically stored in memory and held unless it is changed later.

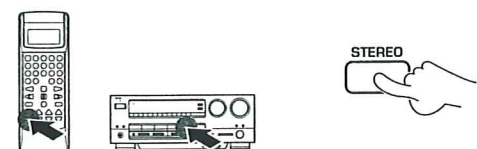
- A noise-like test tone is output.
- Each press of the **CHANNEL MODE (FUNCTION)** key changes the channel reproducing the test tone as shown below.

- LEFT (LEFT)
- CENTER (CENTER)
- RIGHT (RIGHT)
- SUBWOOFER (SUBWOOFER)



- Be sure to adjust from your listening position.
- The center level is adjusted in 1dB steps each time you press the **MULTI CONTROL (ANY)** keys.
- The center level can be adjusted in the range from -12 dB to +12 dB.

## To cancel DOLBY 3 STEREO play





# Adjustments for surround play (except DOLBY 3 STEREO)

KR-X1000 (En)

The following procedure allows to adjust various condition to improve the feeling of presence of playback according to the speakers and listening room used.

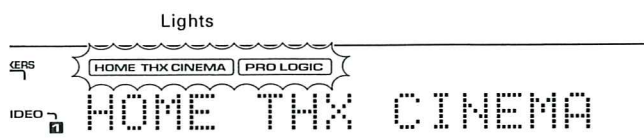
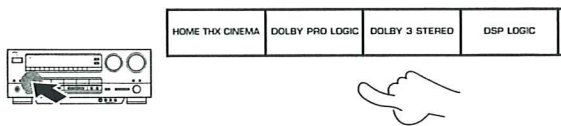
The adjusted results are stored automatically in memory; once the adjustment has completed in one of the surround modes, re-adjustment is not required even when the surround mode is changed (except for DOLBY 3 STEREO).

## Preparation

- Press the **AUDIO** key of the remote control unit to display "AUDIO". → 11
- If the subwoofer is used, set the **SUBWOOFER PRE OUT** switch on the rear panel to ON then switch the power ON again.

## 1 Select one of the surround modes.

Select a mode other than DOLBY 3 STEREO and MONO.



Example when HOME THX CINEMA is selected

Each press of the **CENTER MODE** key switches the center modes as follows:

- ① **NORMAL** : When the center speaker is a compact-sized speaker.
- ② **WIDEBAND** : When the center speaker is a medium- or large-sized speaker.
- ③ **PHANTOM** : When the center speaker is not used.

- If you cannot tell whether your center speaker is compact or medium-sized, try two modes and select according to your liking.

## 2 Select the CENTER MODE

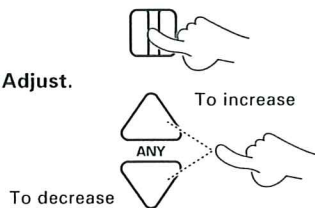


## 3 Adjust the delay time.

① Select DELAY TIME.



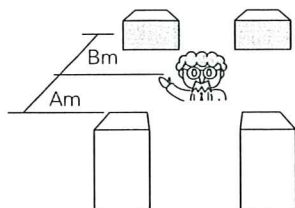
② Adjust.



- The delay time can be adjusted in the range from 15 ms to 30 ms, in 1 ms steps.

## How to calculate the proper delay time

Assuming that the distance from the front speaker is A meters and the distance from the rear speakers is B meters

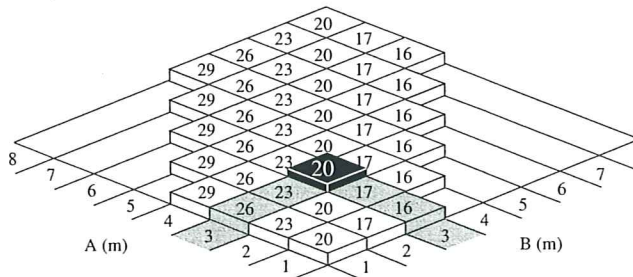


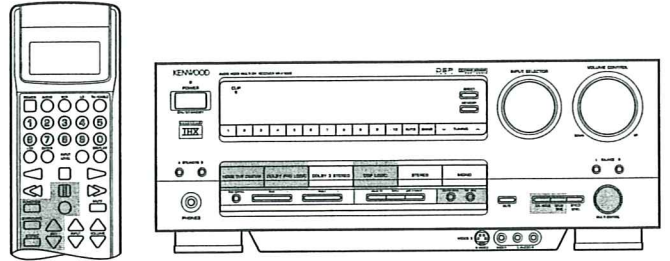
① Use the delay time calculation chart on the right.


Example: When A = 3 m, B = 3 m, the delay time is 20 ms.

② Use the following formula for calculation.

Delay time = 20 + 3 × (A - B) (Unit: ms)





 : Keys or controls to be used in this operation

## 4 Adjust the volume balance.

① Generate the test tone.

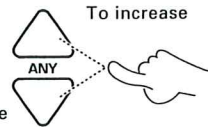


② Set the sound level of all speakers to identical.

(1) Select a set of speakers channel.



(2) Adjust



③ Stop the test tone.



- A noise-like test tone is output.
- Each press of the **CHANNEL MODE (FUNCTION)** key changes the channel reproducing the test tone as shown below.

**In NORMAL and WIDE BAND modes:**

- ▶ LEFT (LEFT)
- ▶ CENTER (CENTER)
- ▶ RIGHT (RIGHT)
- ▶ SUR. R (SURROUND RIGHT)
- ▶ SUR. L (SURROUND LEFT)
- ▶ SUBWOOFER (SUBWOOFER)

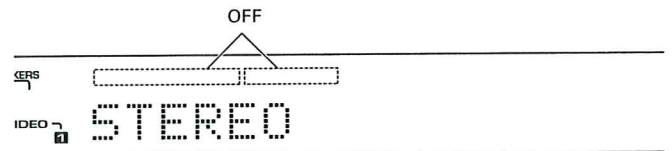
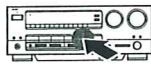
**In PHANTOM mode:**

- ▶ LEFT (LEFT)
- ▶ RIGHT (RIGHT)
- ▶ SUR. R (SURROUND RIGHT)
- ▶ SUR. L (SURROUND LEFT)
- ▶ SUBWOOFER (SUBWOOFER)



- Be sure to adjust from your listening position.
- The volume is adjusted in 1dB steps each time you press the **MULTI CONTROL (ANY)** keys.
- The volume levels can be adjusted in the range from -12 dB to +12 dB.

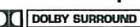
## To cancel the SURROUND play.



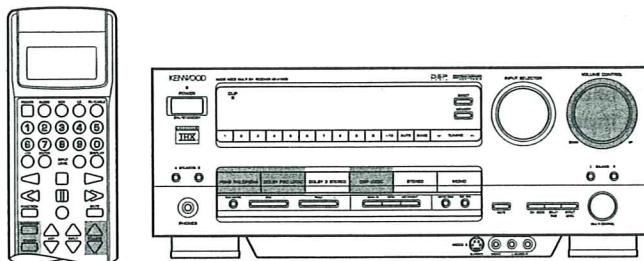



# Surround play (except DOLBY 3 STEREO)

KR-X1000 (En)

The HOME THX CINEMA and DOLBY PRO LOGIC modes are effective when playing videotape (or LD) software carrying the  logo. The DSP LOGIC mode is effective with general sources.

Be sure to complete "Adjustments for surround play" prior to starting playback in one of these surround modes, 



 : Keys or controls to be used in this operation

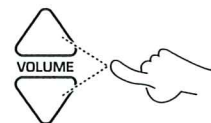
## 1 Select one of the surround modes.

Select a mode other than DOLBY 3 STEREO and MONO.

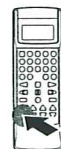


## 2 Play a video software program.

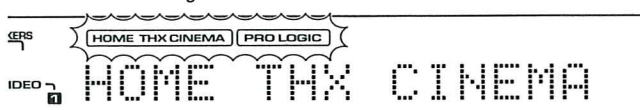
## 3 Adjust the volume.



## To cancel the SURROUND play



Lights

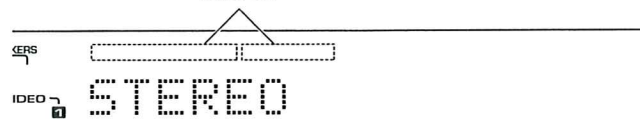


Example when HOME THX CINEMA is selected

Each press of the key switches the modes as follows:

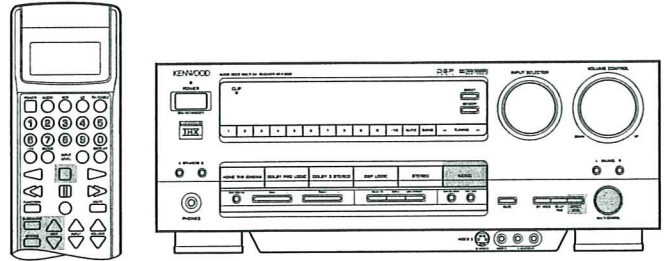
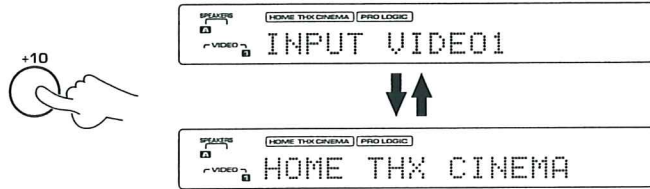
- ① HOME THX CINEMA
- ② DOLBY PRO-LOGIC
- ③ DOLBY 3 STEREO
- ④ DSP LOGIC
- ⑤ MONO

Goes off



**DISPLAY MODE key (numeric key +10)**

Press the AUDIO key of the remote control unit to display "AUDIO" and pressing numeric key "+10" allows to switch the character display information on the main unit between the input source and the surround mode being selected



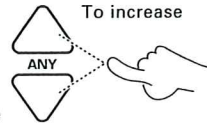
: Keys or controls to be used in this operation

**Adjusting the surround effects (DSP LOGIC only)**

① Select the effect to be adjusted.



② Adjust.



Each press switches the band as follows:

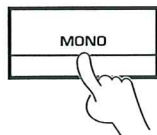
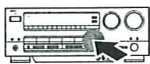
- ① ROOM SIZE : Simulates the room size by adjusting the reflection sounds.
- ② EFFECT : Varies the sound field effect.
- ③ WALL : Simulates the sounds reflected on the walls. A higher value simulates harder walls.



- The setting value changes by 1 step each time you press the **MULTI CONTROL (ANY)** key.
- The adjustment range of ROOM SIZE is 1 to 3, that of EFFECT is 1 to 5 and that of WALL is 1 to 3.

**Playback in MONO mode**

This mode is convenient when playing an old movie, etc.



- A monaural sound is reproduced even when a stereo source is played.
- If the center mode is PHANTOM, the audio is reproduced from the left and right main speakers.
- If the center mode is NORMAL or WIDEBAND, the audio is reproduced from the center speaker.
- The subwoofer output is output normally.

**To cancel MONO mode play**

Press the STEREO key.

**What is DSP?**



The DSP stands for Digital Signal Processor. In the DSP LOGIC mode, the reverberation components (elements of sound echoed in various spaces) which determine the feeling of presence are created by digital processing by the DSP without spoiling the sound quality of the original music source.



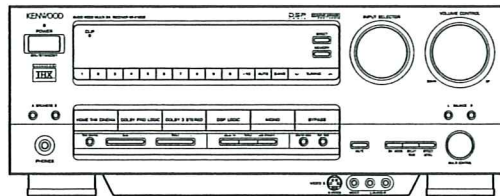
# Information display on TV monitor screen


KR-X1000 (En)

This function allows you to display various setting conditions and the list of preset stations on the screen of the TV monitor connected to the MONITOR OUT jack.

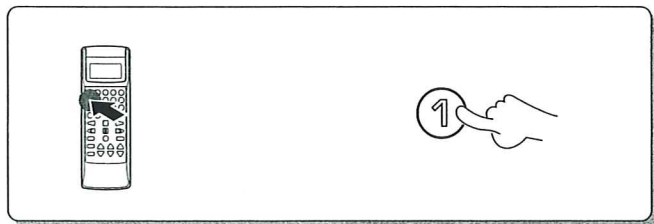
## Preparation

- Press the **AUDIO** key of the remote control unit to display "AUDIO". → 11



 : Keys or controls to be used in this operation

## Switching the information display



Each press of the **MENU** key (numeric key 1) changes the displayed information as follows.

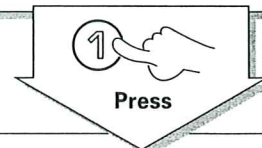
- ▶ **A** INFORMATION ON
- ▶ **B** SURROUND
- ▶ **C** TUNER MEMORY (1-10): When TUNER input is selected
- ▶ **D** TUNER MEMORY (11-20): When TUNER input is selected
- ▶ **E** TUNER MEMORY (21-30): When TUNER input is selected
- ▶ **F** TUNER MEMORY (31-40): When TUNER input is selected
- ▶ **G** INFORMATION OFF

### **A** INFORMATION ON screen

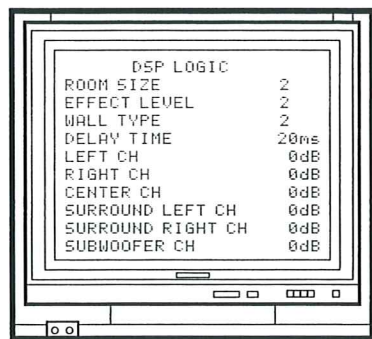


When this message is selected, the information display function is switched from OFF to ON. This message is not displayed if the function has already been switched ON. When the information is ON, the contents of various operations, including the volume adjustment and input selection, are displayed on the TV monitor screen for a few seconds.

- If it is required only to switch the information display ON, wait for a few seconds until the message disappears.
- To display the surround settings or preset stations or to switch the information display OFF, press the **MENU** key (numeric key 1) more to advance to the desired screen.

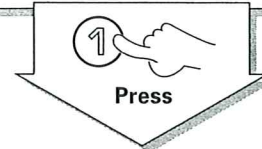


### **B** Surround screen

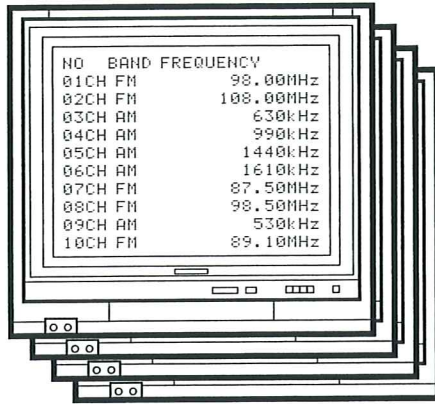


When the **MENU** key (numeric key 1) is pressed while the information display is ON, this screen appears after the first press. This screen shows the list of settings related to the surround function, such as the surround mode, delay times and channel levels.

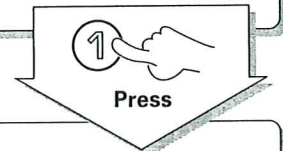
- The displayed contents are the settings of the currently selected surround mode.



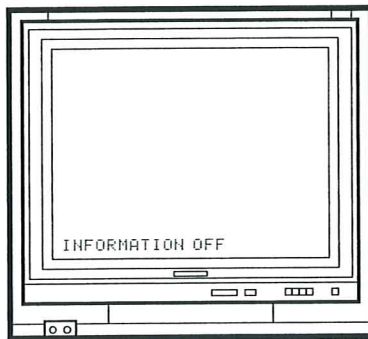
**C D E F** Tuner memory screen (1/4 to 4/4)



This screen appears only when the tuner is selected as the input source. It displays the frequencies of the preset stations on a total of 4 display pages, with 10 stations displayed per page. Each press the MENU key (numeric key 1) switches over the screen.

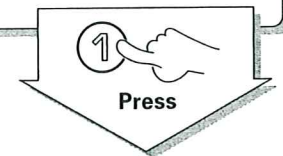


**G** INFORMATION OFF screen



When this message appears and you wait for a few seconds, the information display function is switched from ON to OFF and the message disappears. Character information is not displayed while the information function is OFF.

- When the MENU key (numeric key 1) is pressed again while this message is displayed, the information display function is returns to ON again.
- If the MENU key (numeric key 1) is pressed again while INFORMATION OFF is displayed, the INFORMATION display is changed to ON again.



**Test tone screen**

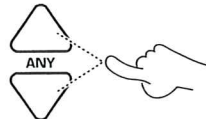
① Press the TEST TONE key while the information display is ON.



② Select the channel to be adjusted.



③ Adjust the level.



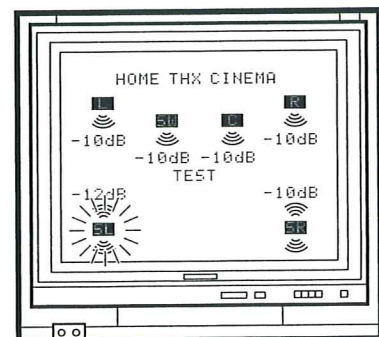
④ After having adjusted all of the channels by repeating ② and ③ above, press the TEST TONE key again to OFF.



When the TEST TONE key is pressed while the information display is ON to prepare for surround playback, the test tone screen appears on the TV monitor.

Each press of the key changes the pages as follows (which is an example with HOME THX CINEMA mode).

- ① FRONT L CH
- ② CENTER CH
- ③ FRONT R CH
- ④ SURROUND R CH
- ⑤ SURROUND L CH
- ⑥ (SUB WOOFER CH)



The channel being adjusted blinks.



## Operation to reset

The microcomputer may fall into malfunction (impossibility to operate, erroneous display, etc.) when the power cord is unplugged while power is ON or due to an external factor. In this case, execute the following procedure to reset the microcomputer and return it to normal condition.

**Unplug the power cord from the power socket and, while holding the POWER key depressed, plug the power cord into the socket again.**

- Please note that resetting the microcomputer clears the contents stored in it and returns it to the condition when it left the factory.

## Amplifier

Symptom	Cause	Remedy
Sound is not output.	<ul style="list-style-type: none"> <li>● The speaker cords are disconnected.</li> <li>● The VOLUME is set to the minimum position.</li> <li>● MUTE is ON. (The MUTE indicator is blinking)</li> <li>● The SPEAKERS switches are set to OFF.</li> <li>● The TAPE 2 key is set to ON.</li> </ul>	<ul style="list-style-type: none"> <li>● Connect them properly referring to "System connection". → 7</li> <li>● Adjust the volume to a proper level.</li> <li>● Press the MUTE key to OFF. → 16</li> <li>● Set the SPEAKERS switch(es) to ON. → 15</li> <li>● Set the TAPE 2 key to OFF.</li> </ul>
The STANDBY indicator blinks and sound is not output.	<ul style="list-style-type: none"> <li>● Speaker cords are short-circuited.</li> </ul>	<ul style="list-style-type: none"> <li>● Turn the power off, eliminate the short-circuiting, then turn on the power again. → 7</li> </ul>
Sound is not output from one of the speakers.	<ul style="list-style-type: none"> <li>● The speaker cord is disconnected.</li> <li>● The BALANCE control is set to an extreme position.</li> </ul>	<ul style="list-style-type: none"> <li>● Connect it properly referring to "System connection".</li> <li>● Adjust the Left/Right balance.</li> </ul>
Sound is not output from the Surround rear speaker and/or center speaker, or their sound is very small.	<ul style="list-style-type: none"> <li>● The rear-speaker cords and/or center speaker cord are disconnected.</li> <li>● The Surround play mode has not been engaged.</li> <li>● The REAR VOL. and/or CENTER VOL. controls are set to the minimum level.</li> </ul>	<ul style="list-style-type: none"> <li>● Connect them properly referring to "System connection".</li> <li>● Set the presence mode.</li> <li>● Adjust the REAR VOL. and CENTER VOL. controls.</li> </ul>
A hum noise is generated when the PHONO input selector key is pressed.	<ul style="list-style-type: none"> <li>● The audio cord from the turntable is not inserted securely into the PHONO jacks.</li> <li>● The turntable is not grounded.</li> </ul>	<ul style="list-style-type: none"> <li>● Insert the audio cord plugs securely into the PHONO jacks.</li> <li>● Connect the grounding wire to the GND terminal on the rear panel.</li> </ul>

## Tuner

Symptom	Cause	Remedy
Radio stations cannot be received.	<ul style="list-style-type: none"> <li>● No antenna is connected.</li> <li>● The broadcast band is not set properly.</li> <li>● The frequency of the desired station is not tuned.</li> </ul>	<ul style="list-style-type: none"> <li>● Connect an antenna.</li> <li>● Set the broadcast band properly.</li> <li>● Tune the frequency of the desired station. → 19</li> </ul>
Interference.	<ul style="list-style-type: none"> <li>● Noise due to ignition noise of an automobile.</li> <li>● Noise due to an influence from an electric appliance.</li> <li>● Noise due to a nearby TV set.</li> </ul>	<ul style="list-style-type: none"> <li>● Install the outdoor antenna away from the road.</li> <li>● Turn off the power to the appliance.</li> <li>● Install the system farther away from the TV set.</li> </ul>
A station which was preset cannot be received by pressing the corresponding numeric key.	<ul style="list-style-type: none"> <li>● The preset station belongs to a frequency that cannot be received.</li> <li>● The preset memory was cleared because the power cord had been unplugged for a long period of time.</li> <li>● The TUNER input is not selected.</li> </ul>	<ul style="list-style-type: none"> <li>● Preset a station with a receivable frequency.</li> <li>● Preset the station again.</li> <li>● Select the TUNER input.</li> </ul>

## Remote control unit

Symptom	Cause	Remedy
Remote control operation is not possible.	<ul style="list-style-type: none"> <li>● Batteries are exhausted.</li> <li>● The remote control unit is too far away from the main system, controlling angle is too large, or there is an obstacle in between.</li> <li>● The audio cords and system control cords are not connected properly.</li> <li>● The source component to be operated does not contain the tape(s) or CD.</li> <li>● An attempt is made to play a tape which is being recorded in the cassette deck.</li> </ul>	<ul style="list-style-type: none"> <li>● Replace with new batteries. → 10</li> <li>● Operate the remote control unit within the controllable range.</li> <li>● Connect properly referring to "System connection". → 4</li> <li>● Place the tape(s) or CD in the source component to be played.</li> <li>● Wait until the recording is completed.</li> </ul>
























Do not use contact cleaners because it could cause a malfunction. Be specially careful against contact cleaners containing oil, for they may deform the plastic components.

# Remote control key correspondence table

KR-X1000 (En)

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Refer to the following table before remote controlling each function. Pressing one of the illustrated keys in the table activates the function according to the selected component.

COMPONENT DISPLAY KEY	VCR (VCR)		LD (LD)	TV/CABLE (TV/CABLE)	
	VCR 1	VCR 2	LD	TV	CABLE
	ON/OFF	ON/OFF	ON/OFF	ON/OFF	ON/OFF
	1	1	1	1	1
	2	2	2	2	2
	3	3	3	3	3
	4	4	4	4	4
	5	5	5	5	5
	6	6	6	6	6
	7	7	7	7	7
	8	8	8	8	8
	9	9	9	9	9
	0	0	0	0	0
	+10	+10	+10	+10	+10
	PLAY	PLAY	PLAY	TV VOLUME UP	TV VOLUME UP
	STOP	STOP	STOP	TV MUTE	TV MUTE
				TV VOLUME DOWN	TV VOLUME DOWN
	FAST FORWARD	FAST FORWARD	FAST FORWARD		
	PAUSE	PAUSE	PAUSE		
	FAST REWIND	FAST REWIND	FAST REWIND		
	RECORD	RECORD			
	VCR1/TV INPUT SELECT	VCR2/TV INPUT SELECT	OPEN/CLOSE	TV/VCR INPUT SELECT	TV/VCR INPUT SELECT
	VCR1 CHANNEL UP	VCR2 CHANNEL UP	SEARCH UP	TV CHANNEL UP	CABLE TV CHANNEL UP
	VCR1 CHANNEL DOWN	VCR2 CHANNEL DOWN	SEARCH DOWN	TV CHANNEL DOWN	CABLE TV CHANNEL DOWN



## VCR set-up code

Maker	Set-up code
AIKO	293
AIWA	015
AKAI	056,064,068,076,257
ANAM	045,177
ANAM NATIONAL	045
AUDIOVOX	052
BELL & HOWELL	119
BLAUPUNKT	045
BROKSONIC	136,199,226,376
CANON	050,182
CAPEHART	035
CARVER	096
CCE	087,293
CRAIG	062,255,286
CURTIS MATHES	050
DAEWOO	035,060,061,102,293
DAYTRON	035
DYNATECH	015
EMERSON	015,017,052,076,136,199,223,224,226,227,309,310,376
FISHER	062,069,081,119
FUNAI	015
GARRARD	015
GE	050,075,080
GENERAL	067
GO VIDEO	247,294
GOLDSTAR	033,052,053
GRADIENTE	015
HARMAN/KARDON	053,090
HITACHI	015,056,057,080,120,181
JCL	050
JENSEN	056
JVC	023,056,082
KENWOOD	053,056,061,082
LLOYD	015
LOGIK	087
LXI	052
MAGNAVOX	015,050,054,096,125,164
MARANTZ	050,053,096
MARTA	052
MEI	050
MEMOREX	015,050,052,054,061,062,063,119
MGA	058,076
MGN TECHNOLOGY	255
MINOLTA	057,120
MITSUBISHI	058,076,090,188,229,257
MTC	015,255
MULTITECH	015,087
NAD	073
NATIONAL	045
NEC	053,055,056,065,082,097
NIKKO	052
NOBLEX	255
OPTIMUS	063,073
OPTONICA	063,077
PANASONIC	045,050,092,111,177,397
PENNEY	050,052,053,055,057,255
PENTAX	057,080,120
PHILCO	050
PHILIPS	050,077,096,125
PILOT	052

Maker	Set-up code
PIONEER	073,082
PORTLAND	035
PULSAR	054
QUARTZ	061
QUASAR	050,092,111
RADIO SHACK	015,052
RCA	050,057,080,092,111,120,164,217
RCA UNIFIED	075
REALISTIC	015,050,052,061,062,063,077,081,119,255
RICOH	049
RUNCO	054
SAMSUNG	060,068,255
SANSUI	056,082,097,286
SANYO	061,062,119,255
SCOTT	060,136,199,225,227
SEARS	050,052,057,061,062,069,081,119,120
SHARP	063,077
SHINTOM	087
SONY	047,048,049,050
STS	057
SYLVANIA	050,058,096,125
SYMPHONIC	015
TANDY	015,119
TATUNG	056
TEAC	015,056
TECHNICS	050,177
TEKNIKA	015,050,052,067
TOSHIBA	058,060,081,225,227
TOTEVISION	052,255
UNITECH	255
VECTOR RESEARCH	053,055
VICTOR	023,056,082
VIDEO CONCEPTS	055,076
VIDEOSONIC	255
WARDS	015,050,057,062,063,077,087,164,227,255
YAMAHA	053,056
ZENITH	048,049,054

## LD set-up code

Maker	Set-up code
AIWA	218
CARVER	079
DENON	187
FUNAI	218
GOLDSTAR	187
KENWOOD	251,273
MAGNAVOX	079,232,256
MARANTZ	079
MITSUBISHI	074
NAD	074
PANASONIC	219,245
PHILIPS	079
PIONEER	074
RCA	366
REALISTIC	218
SHARP	016
SONY	208,216
YAMAHA	232

## TV set-up code

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Maker	Set-up code
A-MARK	018
ADMIRAL	108
AIKO	107
AKAI	045,113
ANAM	018,019,195
ANAM NATIONAL	070
AOC	018,034,045,067,152,200
ARCHER	018
AUDIOVOX	018,195
BELL & HOWELL	031,169
BROKSONIC	018
CANDLE	045,061,071,201
CAPEHART	067
CAPETRONIC	018,045
CARVER	069
CITIZEN	045,054,061,063,071,075,107,201,295
CONCERTO	071
CONTEC	173,195,200
CRAIG	195
CROWN	054,063,195
CURTIS MATHES	045,054,063,075,169
CXC	195
DAEWOO	034,054,063,106,107,406,466
DAYTRON	054,063
DYNATECH	064
EMERSON	173,192,193,194,195,196,197,198,200,251,285,295,297,478
ENVISION	045
FISHER	169,174
FORTRESS	108
FUJITSU	194
FUNAI	194,195
FUTURETECH	195
GE	036,042,044,062,066,070,189,193,297
GENERAL	201
GOLDSTAR	016,017,034,045,054,063,071,121,193
HALLMARK	193
HITACHI	053,071,110,112,160,166,188,242
INFINITY	069
JBL	069
JENSEN	065
JVC	051,068,197
KAMP	231
KAWASHO	231,323
KENWOOD	045
KLOSS	039,061
KMC	121
KTV	054,063,195,200,232,295
LOGIK	031
LUXMAN	071
LXI	062,069,163,169,171
MAGNAVOX	035,039,043,045,069,111,201,202
MARANTZ	045,069
MATSUI	232
MATSUSHITA	066,265
MEMOREX	031,169,193
MGA	034,045,165,170,193
MINISUBISHI	034,113,165,170,193
MTC	034,045,064,071,075,106,200
MULTITECH	064,232
NAD	171,181

Maker	Set-up code
NEC	034,045,051,071,185
NICAMAGIC	231
NIKKO	045,107,332
ONWA	195
OPTONICA	108,180
ORION	251
PANASONIC	066,069,070,177,265,353
PENNEY	017,033,034,036,045,047,054,062,063,075,125,150,164,171
PENNY	018,066
PHILCO	034,035,039,043,045,069,201,202
PHILIPS	015,069
PIONEER	053,181
PORTLAND	034,054,063,107
PROTON	018,046,054,063,067,193
PULSAR	032
QUASAR	066,070,265
RADIO SHACK	047,180,195
RCA	033,034,044,053,150,189,412
RCA UNIFIED	062
REALISTIC	169
RHAPSODY	231
RUNCO	032,045
SAMPO	045,067,115,125
SAMSUNG	034,045,047,054,063,071,075
SANYO	161,169,174
SCOTT	194,195,251
SEARS	062,069,071,161,163,164,169,171,174,186,193,194
SHARP	108,180
SIGNATURE	031
SONY	015,026,095,126,288
SOUNDESIGN	193,195,201
SPECTRICON	018,152
SSS	034,195
STARLITE	195
SUPRE-MACY	061
SYLVANIA	035,039,043,045,069,080,201,202
SYMPHONIC	186
TANDY	054,063,108,233
TATUNG	018,064,070
TECHNICS	066,265
TECHWOOD	071
TEKNIKA	031,034,054,063,071,075,107,165,194,195,201,327,337
TERA	046
TMK	071,193
TOSHIBA	051,075,164,169,171
TOSONIC	200
TOTEVISION	054,063
ULTRA	406
UNIVERSAL	036,042
VECTOR RESEARCH	045
VICTOR	051,068,265
VIDEO CONCEPTS	113
VIDTECH	034,193
VIKING	061
WARDS	031,034,035,036,042,043,044,045,069,071,111,180,189,193,194,202
YAMAHA	034,045
ZENITH	031,032
ZONDA	018



**CABLE set-up code**

Maker	Set-up code
ABC	022,026,028,032
ANTRONIX	222
ARCHER	054,168,222
CENTURY	168
CITIZEN	168
COLOUR VOICE	040,046
COMBAND	247,248
COMTRONICS	055,075
CONTEC	034
EASTERN	017
ELECTRICORD	093
GARRARD	168
GC ELECTRONICS	222
GE	247,248
GEMINI	030,072,085,257
GENERAL INSTRUMENT	026
HAMLIN	024,035,049,274,288
HITACHI	026
JASCO	168
JERROLD	018,026,027,029,030,039,041,062,113,291
MACOM	048
MAGNAVOX	042
MEMOREX	015
MOVIE TIME	078,093,171
NORTHCOAST	329
NSC	078,085,171
OAK	022,034,263
PANASONIC	036,122
PARAGON	015
PHILIPS	040,042,043,044,045,046,075,168,305
PHILIPS ECG	257
PIONEER	038,159,275
POPULAR MECHANICS	415
PULSAR	015
RCA	036
REALISTIC	222
REGAL	035,274,288,294
REGENCY	017
REMBRANDT	085
RUNCO	015
SAMSUNG	055,159
SCIENTIFIC ATLANTA	021,023,032,292,342
SIGNAL	030,055
SIGNATURE	026
SL MARX	055
SPRUCER	036,322
STANDARD COMPONENTS	111
STARCOM	018,030,062,113
STARGATE	030,055
SYLVANIA	016
TANDY	273
TATUNG	112
TEKNIKA	161
TELECATION	236
TEXSCAN	016,111
TOCOM	027,028,074
TOSHIBA	015
TUSA	030
TV86	078
UNIKA	168,222
UNITED ARTISTS	022

Maker	Set-up code
UNITED CABLE	018
UNIVERSAL	054,092,093,168,206,222,337
VIDEOWAY	265
VIDTECH	259
VIEWSTAR	042,075,078,226,273,304
ZENITH	015,069

## For the U.S.A. and Canada

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### AUDIO section

Rated power output at the STEREO operation

125 watts per channel minimum RMS, both channels driven, at 6 Ω from 20 Hz to 20 kHz with no more than 0.08 % total harmonic distortions. (FTC)

Power output at the Surround operation

Front

130 watts per channel minimum RMS, both channels driven, at 6 Ω 1 kHz with no more than 0.08 % total harmonic distortions. (FTC)

Center

130 watts per channel minimum RMS, both channels driven, at 6 Ω 1 kHz with no more than 0.08 % total harmonic distortions. (FTC)

Rear

80 watts per channel minimum RMS, both channels driven, at 6 Ω 1 kHz with no more than 0.08 % total harmonic distortions. (FTC)

Rated output voltage (PRE OUT) .. 940 mV (20 Hz ~ 20 kHz, 0.01 %)

Total harmonic distortion ..... 0.006 % (1 kHz, 62.5 W, 6 Ω)

Frequency response

LINE (CD, AUX, TAPE) ..... 5 Hz ~ 100 kHz, + 0 dB, - 3 dB

Signal to noise ratio (IHF A)

PHONO (MM) ..... 76 dB

LINE (CD, AUX, TAPE) ..... 96 dB

Input sensitivity / impedance

PHONO (MM) ..... 2.5 mV / 47 kΩ

LINE (CD, AUX, TAPE) ..... 200 mV / 47 kΩ

MAIN IN (FRONT, CENTER, SURROUND) .. 940 mV / 16 kΩ

Output level / impedance

TAPE REC ..... 200 mV / 330 Ω

PRE OUT (FRONT, CENTER, SURROUND, SUBWOOFER)

..... 940 mV / 500 Ω

Tone control

BASS ..... ± 8 dB (at 100 Hz)

TREBLE ..... ± 8 dB (at 10 kHz)

## For the other countries

### AUDIO section

Rated power output at the STEREO operation

(EIAJ) 1 kHz, 10 % T.H.D. at 8 Ω ..... 135 W + 135 W

(DIN / IEC) from 63 Hz to 12,500 Hz,

0.7 % T.H.D., at 8 Ω ..... 105 W + 105 W

Power output at the Surround operation

FRONT (1 kHz, 10 % T.H.D. at 6 Ω) ..... 175 W + 175 W

CENTER (1 kHz, 10 % T.H.D. at 6 Ω) ..... 175 W

REAR (1 kHz, 10 % T.H.D. at 6 Ω) ..... 120 W + 120 W

Rated output voltage (PRE OUT)

..... 940 mV (20 Hz ~ 20 kHz, 0.01 %)

Total harmonic distortion ..... 0.006 % (1 kHz, 52.5 W, 8 Ω)

Frequency response

LINE (CD, AUX, TAPE) ..... 5 Hz ~ 100 kHz, + 0 dB, - 3 dB

Signal to noise ratio (IHF A)

PHONO (MM) ..... 76 dB

LINE (CD, AUX, TAPE) ..... 96 dB

Input sensitivity / impedance

PHONO (MM) ..... 2.5 mV / 47 kΩ

LINE (CD, AUX, TAPE) ..... 200 mV / 47 kΩ

MAIN IN (FRONT, CENTER, SURROUND) ... 940 mV / 16 kΩ

Output level / impedance

TAPE REC ..... 200 mV / 330 Ω

PRE OUT (FRONT, CENTER, SURROUND, SUBWOOFER)

..... 940 mV / 500 Ω

Tone control

BASS ..... ± 8 dB (at 100 Hz)

TREBLE ..... ± 8 dB (at 10 kHz)

## Common

### VIDEO inputs / outputs

TELEVISION format ..... NTSC

VIDEO (composite) ..... 1 Vp-p / 75 Ω

S-VIDEO (luminance signal) ..... 1 Vp-p / 75 Ω

(chrominance signal) ..... 0.286 Vp-p / 75 Ω

### FM tuner section

Tuning frequency range ..... 87.5 MHz ~ 108 MHz

Usable sensitivity (IHF) ..... 13.2 dBf (1.2 μV at 75 Ω)

50 dB quieting sensitivity

STEREO ..... 41.2 dBf (32 μV at 75 Ω)

Total harmonic distortion at 1 kHz

MONO ..... 0.6 %

STEREO ..... 0.7 %

Signal to noise ratio at 65 dBf (IHF)

MONO ..... 75 dB

STEREO ..... 68 dB

Selectivity (IHF ± 400 kHz) ..... 50 dB

Stereo separation (IHF at 1 kHz) ..... 40 dB

Frequency response ..... 30 Hz ~ 15 kHz, + 0.5 dB, - 3.0 dB

### AM tuner section

Tuning frequency range

9 kHz step ..... 531 kHz ~ 1.602 kHz (For other countries)

10 kHz step ..... 530 kHz ~ 1.610 kHz (For other countries)

530 kHz ~ 1.700 kHz (For the U.S.A. and Canada)

Usable sensitivity ..... 12 μV / (500 μV / m)

Total harmonic distortion ..... 0.7 %

Signal to noise ratio ..... 48 dB

Selectivity ..... 30 dB

## GENERAL

Power consumption ..... 6.5 A

..... 650 W

AC outlet

SWITCHED (For other countries) ..... 1 (total 200 W max.)

SWITCHED (For the U.S.A. and Canada)

..... 2 (total 200 W, 1.6 A max.)

Dimensions (KR-X1000) ..... W: 440 mm (17-5 / 16")

H: 169 mm (6-5 / 8")

D: 427 mm (16-13 / 16")

Dimensions (KR-X1000 (G)) ..... W: 476 mm (18-3 / 4")

H: 169 mm (6-5 / 8")

D: 427 mm (16-13 / 16")

Weight (net) (KR-X1000) ..... 16.5 kg (36.4 lb)

Weight (net) (KR-X1000 (G)) ..... 18.0 kg (39.7 lb)



KENWOOD follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.