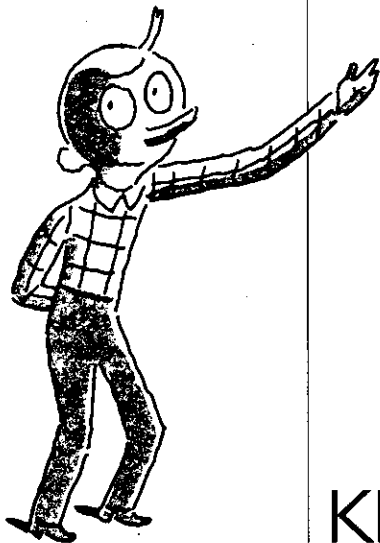


1

**Setting up your
Kenwood
KR-X1000
THX[®] Receiver**



KENWOOD

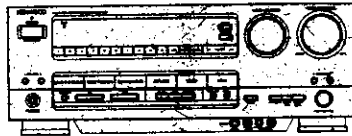
Unpacking your Kenwood KR-X1000

Unpack your receiver carefully and examine the unit for shipping damage. If it is damaged or fails to operate, notify your dealer immediately. If your KR-X1000 was shipped to you directly, notify the shipping company without delay. Only the person or company who originally received the unit can file a claim against the carrier for shipping damage. Keep the original carton and packing materials in case you need to transport or ship your KR-X1000.

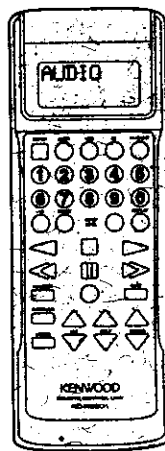
Did you get everything?

Check the list below to make sure you have everything. And before you start setting up the Receiver, look at the lists of tools and other items you'll need. If you're setting up other components, read the user manual that came with each component in your system to see what you need.

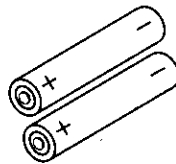
In this box, you should have...



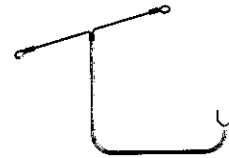
Kenwood KR-X1000 unit (1)



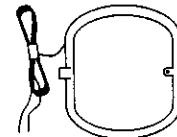
Kenwood RC-R0901 Remote (1)



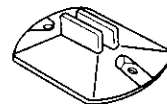
Batteries for remote (AA or R6) (2)



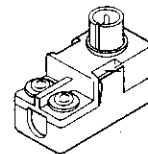
FM indoor antenna (1)



AM loop antenna (1)



AM loop antenna stand (1)



Antenna adaptor (1)

Setting up

You may need to purchase:

- Audio cables
- Video cables
- S-video cables (for monitors with S-video capability, only)
- RF modulator (for televisions without a video terminal)
- Speaker wire (as needed)

You'll need these tools:

- Screwdriver (slot and/or Phillips)
- Wire cutters
- Wire strippers
- Sound level meter (optional)
Radio Shack part #33-2050

For your records

Record the serial number (found on the back of the unit) on the warranty card, and in the space below. If you need to call your dealer for information or service, you'll need the model and serial numbers. And be sure to save your original receipt.

Model

KR-X1000

Serial Number

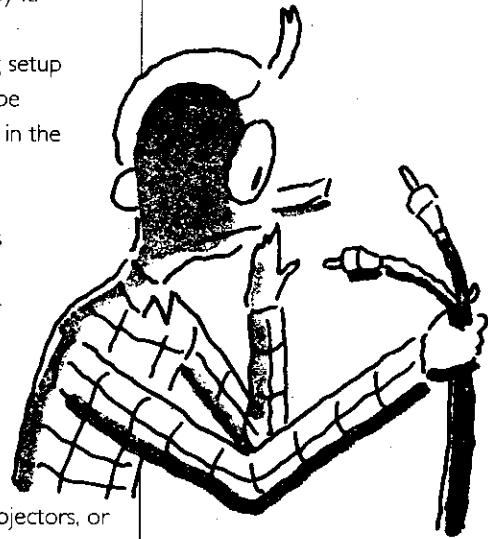
Welcome

You're just a few steps away from experiencing one of the most amazing home theater systems available. Setting up your new receiver isn't hard, but you should follow the instructions in this manual carefully to get maximum performance. It's much easier than you think. And you'll probably even enjoy it!

- Perform the following setup steps in order. You'll be connecting the cables in the easiest order.
- Use these instructions with those in the manuals for any other equipment you're connecting (like CD or cassette players, amplifiers, equalizers, speakers, laser disc players, VCRs, projectors, or direct-view televisions).
- Some steps are optional, and if they don't apply, just skip ahead to the next step.

Important:

Please wait until you've connected all of the cables before plugging the receiver into the AC wall outlet and turning it on.



Step 1

Connect your speakers

We're asking you to connect the speakers first to make it easier to get at the connections on the receiver.

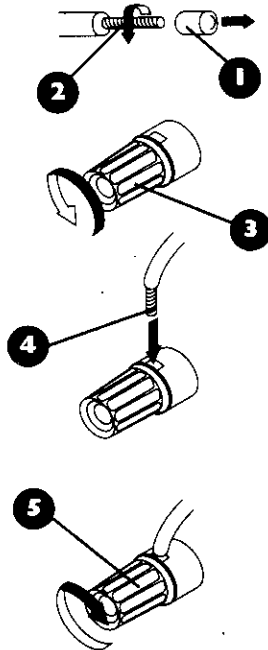
- Place the speakers in their approximate locations first—then leave a little extra speaker cable so you can fine-tune their location
- Use good-quality speaker cable—if you're not sure, talk to the staff where you bought this Receiver
- Connect one speaker at a time or use temporary labels to keep track of the connections
- You can use regular speaker wire or speaker cable with banana-plug connections
- Be sure to connect the positive connections to each other and connect the negative connections to each other when connecting speaker wires—reversing polarities (such as, + to - or - to +) can cause poor stereo imaging and diminished bass response
- Never allow the positive and negative speaker wires to touch each other (this will cause a short-circuit which could damage your receiver)

The following instructions apply to your front (left, center, right) and surround speakers. Be sure to read the instructions that came with each

of those speakers for more specific instructions.

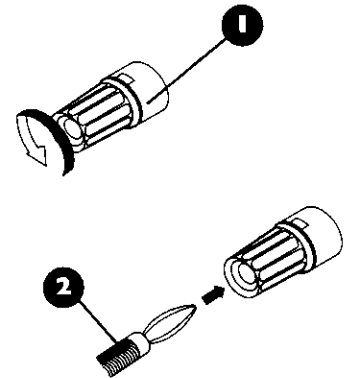
Using speaker wire

- 1 Strip 1/2" of the plastic insulation from the end of the wire.
- 2 Twist the wire to get rid of the loose strands.
- 3 Loosen the terminal.
- 4 Insert the wire.
- 5 Tighten the terminal.
- 6 Check to make sure that no strands from one terminal touch any other terminal.



Using banana plugs

- 1 Tighten the terminal.
- 2 Insert the banana plug into the hole in the rear of the connector.

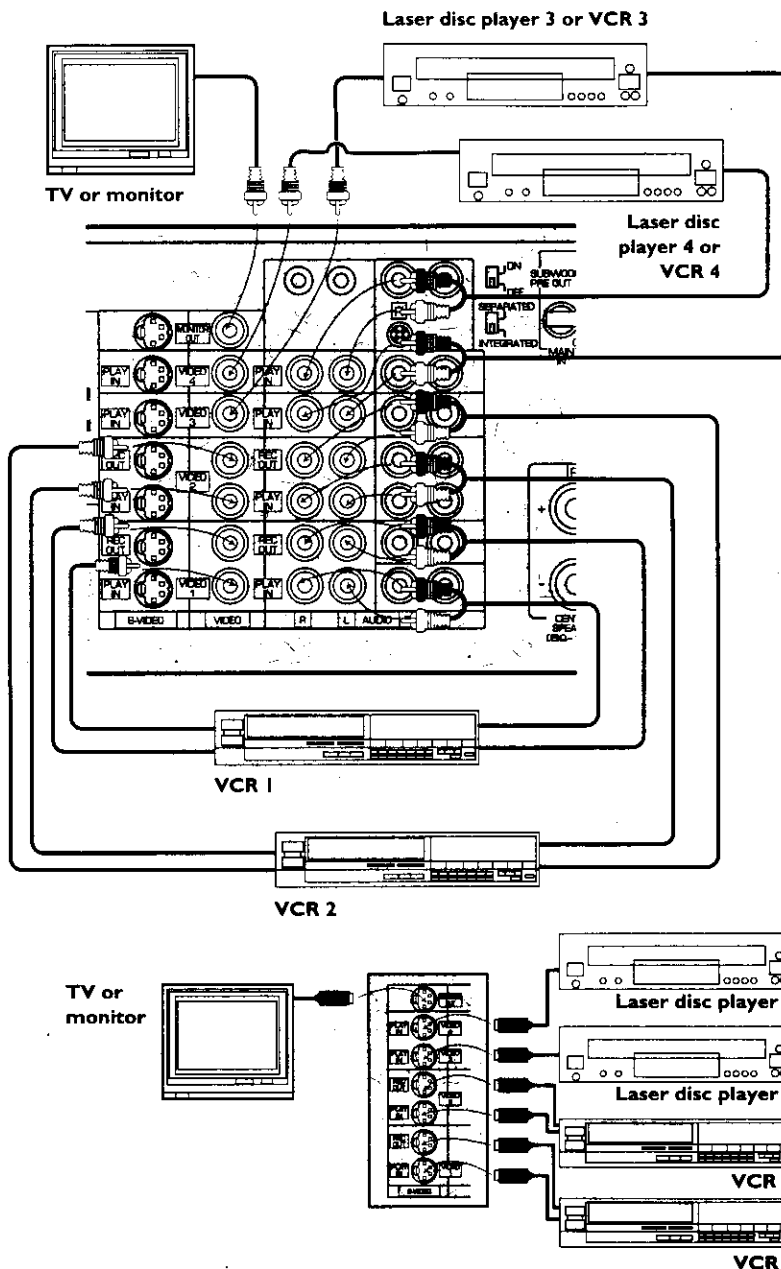


Step 2

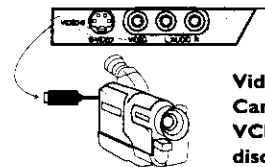
Connect your video components

Use this diagram to connect the KR-X1000 to your video components, such as your TV, VCR, or laser disc player.

Be sure to plug the correct cables into each connection.



- Make sure that you connect all plugs firmly, so there's no sound loss or unwanted noise later
- Whenever you connect or disconnect cables, turn off the power and unplug the power cord from the AC wall outlet to avoid damaging your unit
- The cables shown in this diagram are not included
- For more instruction, read the manual that came with each component
- In addition to the video connections on the rear panel, there is another connection on the front for connecting components like camcorders



Video 5:
Camcorder,
VCR, or laser
disc player

About S-video

If your video components have S-video capability, using the S-video terminals will provide superior video performance. Remember that if you use the S-video connectors, you must use them for both the video source and TV connections. Composite video sources are not output though the KR-X1000 S-video outputs (and visa-versa).

Step 3

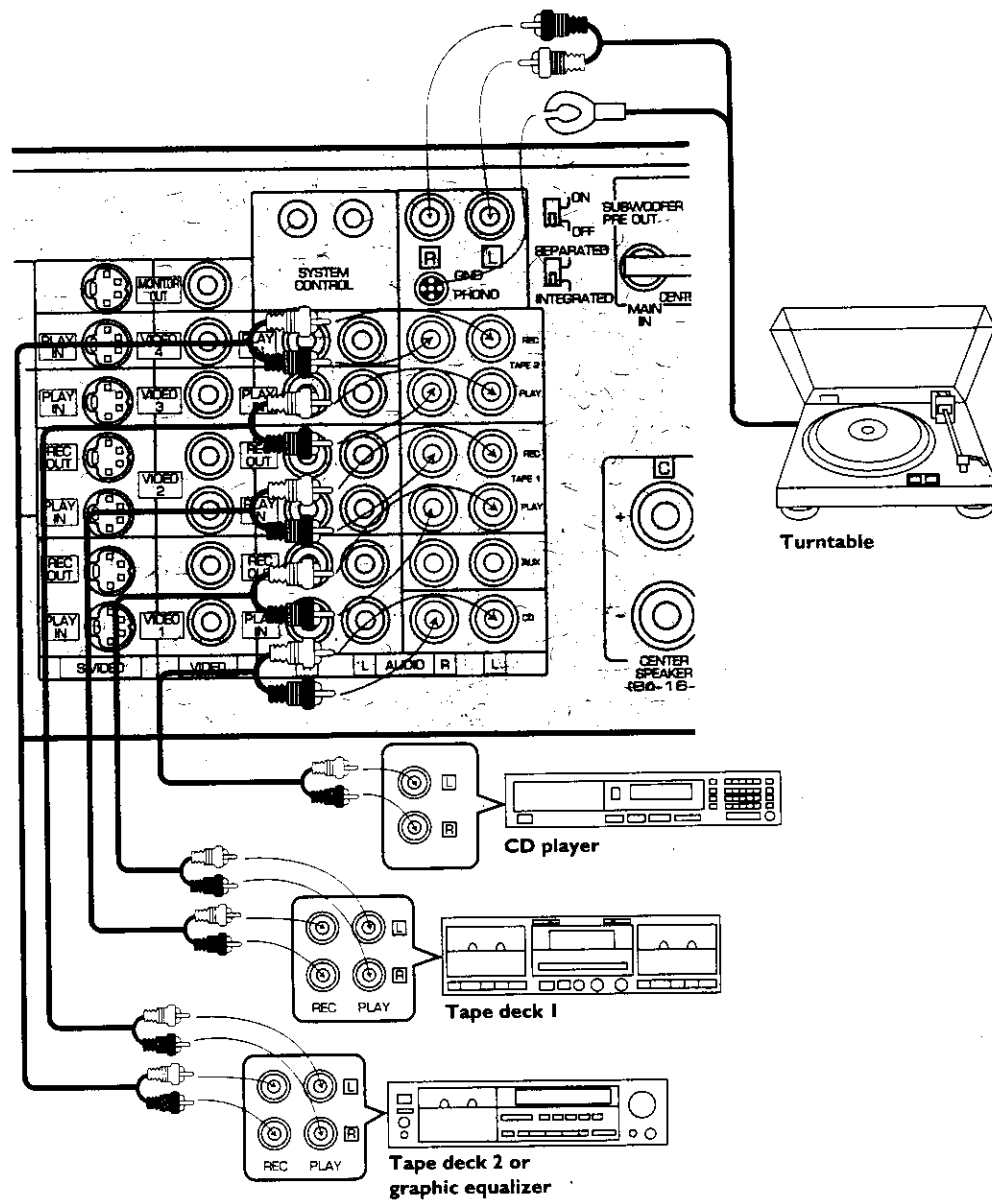
Connect your audio components

Use this diagram to plug cables into the appropriate connection.

- Make sure that you connect all plugs firmly, so there's no sound loss or unwanted noise later

- Whenever you connect or disconnect cables, turn off the power and unplug the power cord from the AC wall outlet to avoid damaging your unit

- To connect the other audio components shown here (CD and cassette players, turntable, and so on), read the corresponding manuals for specific instructions



Step 4

Connect your subwoofer (optional)

If your home theater system includes a powered subwoofer or a passive subwoofer (like Kenwood's SW-X1) plus amplifier (like Kenwood's KM-X1000) you'll need to connect them. If not, skip to step 5.

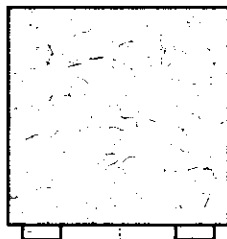
1 Connect the powered subwoofer or subwoofer plus amplifier as in the diagram.

Read the subwoofer owner's manual for more detailed instructions.

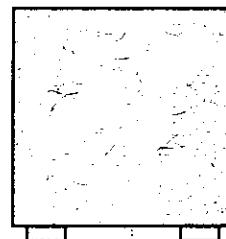
2 Set the SUBWOOFER PRE-OUT switch on the back of the KR-X1000 to ON.

If the KR-X1000 is ON when you set the switch, you must turn the receiver OFF and then ON again to activate the subwoofer pre-out.

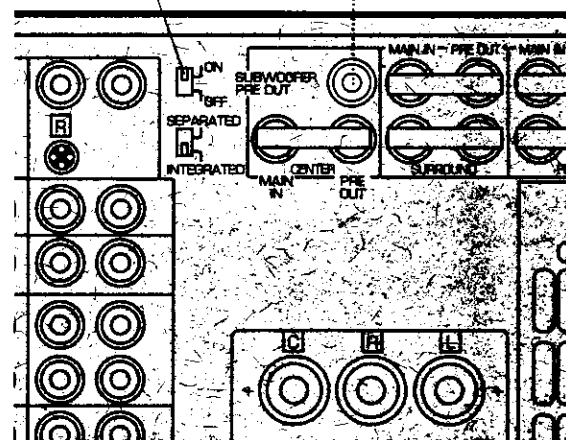
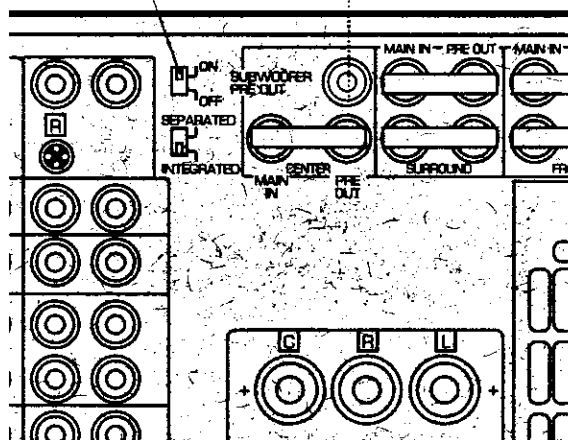
Powered subwoofer



Passive subwoofer



Power amplifier



Step 5

Connect your external amplifier (optional)

Although the KR-X1000 has plenty of built-in power to drive most home theater speakers, you may want to add a multichannel amplifier (like the Kenwood KM-X1000 or KM-X1) to feed power-hungry speakers. If not, skip to step 6.

- 1 Remove the JUMPER BARS from the PRE-OUT and MAIN IN connectors on the back of the KR-X1000.

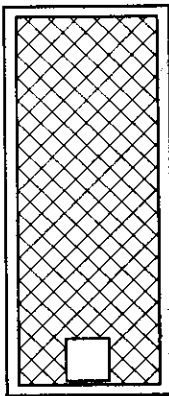
- 2 Connect the amplifier(s).

Read the amplifier owner's manual for more detailed instructions.

- 3 Set the SEPARATED/INTEGRATED switch on the back of the KR-X1000 to SEPARATED.

If the KR-X1000 is ON when you set the switch, you must turn the receiver OFF and then ON again to activate the signal separation.

Center

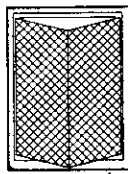


KM-X1000



2

Left surround

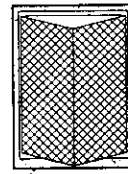


KM-X1000

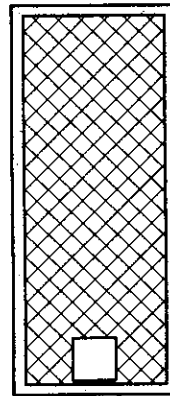


2

Right surround



Left front

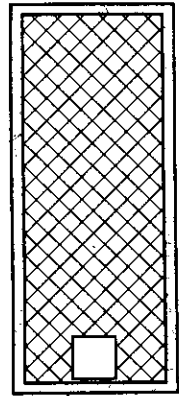


KM-X1000

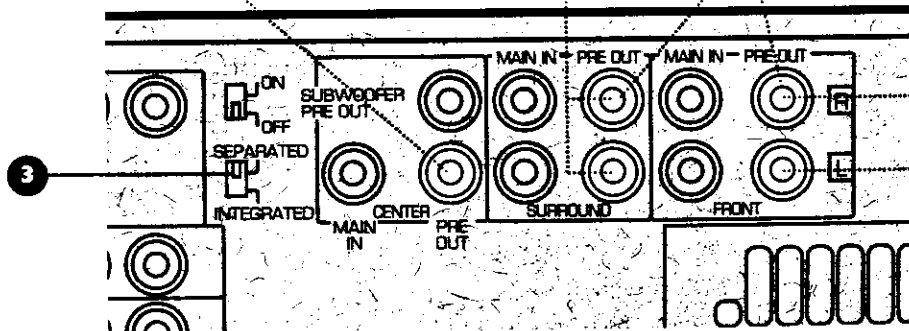


1

Right front



2



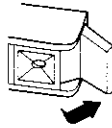
Step 6

Connect the antennas

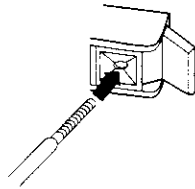
Antennas play an important role in the FM/AM reception of your home theater system. The quality of this reception depends on how well you install and tune the antennas.

Connecting the antenna wire to the antenna terminal

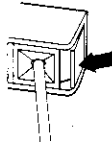
- 1 Push open the lever.



- 2 Insert the wire.

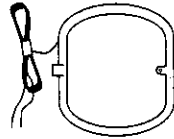


- 3 Close the lever.



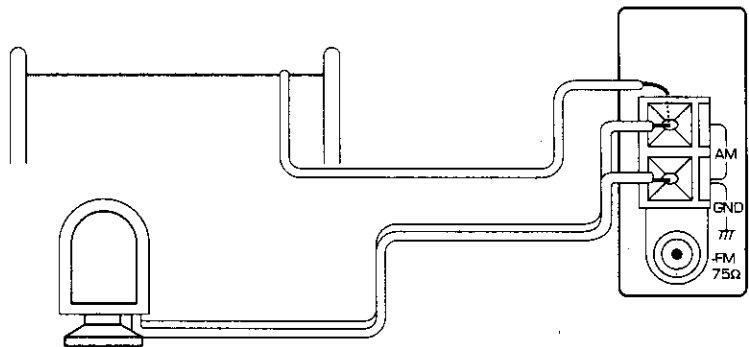
Using the AM indoor loop antenna (supplied)

- Place the antenna as far away as possible from the main system, television, speaker wires, and power cord. Rotate the antenna until you get the best reception.



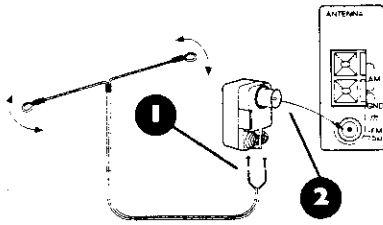
Using an AM outdoor antenna (optional)

- If you're using the AM loop antenna, but reception is poor, run a vinyl-coated wire of more than 20 feet (6 meters) outdoors. Do not disconnect the loop antenna.



Using the FM indoor antenna (supplied)

Use this antenna until you can install an outdoor antenna. When you do, remove this indoor antenna.

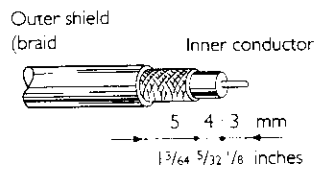


- 1 Connect the loose ends to the screw terminals.
- 2 Connect the antenna adapter to the Receiver.
- 3 Place the antenna along a wall or on bookshelves.
- 4 Adjust the antenna to find the position that provides the best reception.
- 5 Affix the 2 ends to the wall or bookshelves.

Using an FM outdoor antenna (optimum)

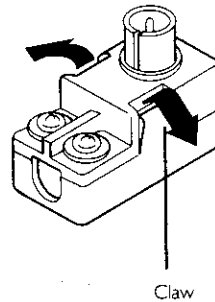
For the best sound quality, install an FM outdoor antenna. Use a coaxial cable for the connection between the outdoor antenna and the FM antenna terminal.

- 1 Prepare the coaxial cable as illustrated.

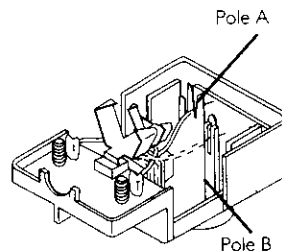


RG-6 (5C-2V) or RG-59 (3C-2V)

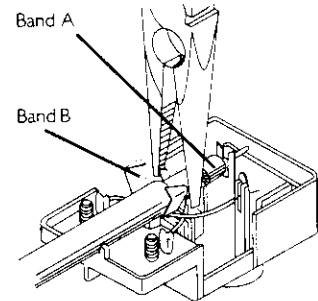
- 2 Open the antenna adapter. Open the claws (with your fingers) to release the lock and pull off the cover.



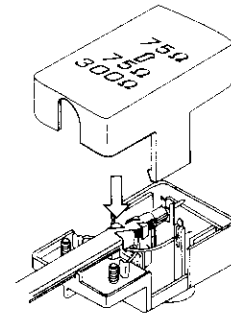
- 3 Remove the inner conductor from the groove of pole 'A' and insert it into the groove of pole 'B'.



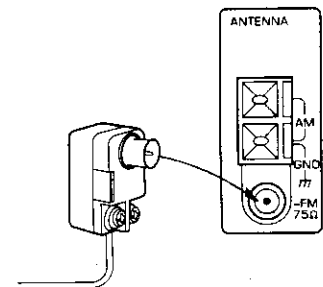
- 4 Insert the cable into the slit on the clip. Close bands 'A' and 'B' around the cable, using a pair of pliers.



- 5 Replace the cover



- 6 Connect the adapter to the antenna terminal.

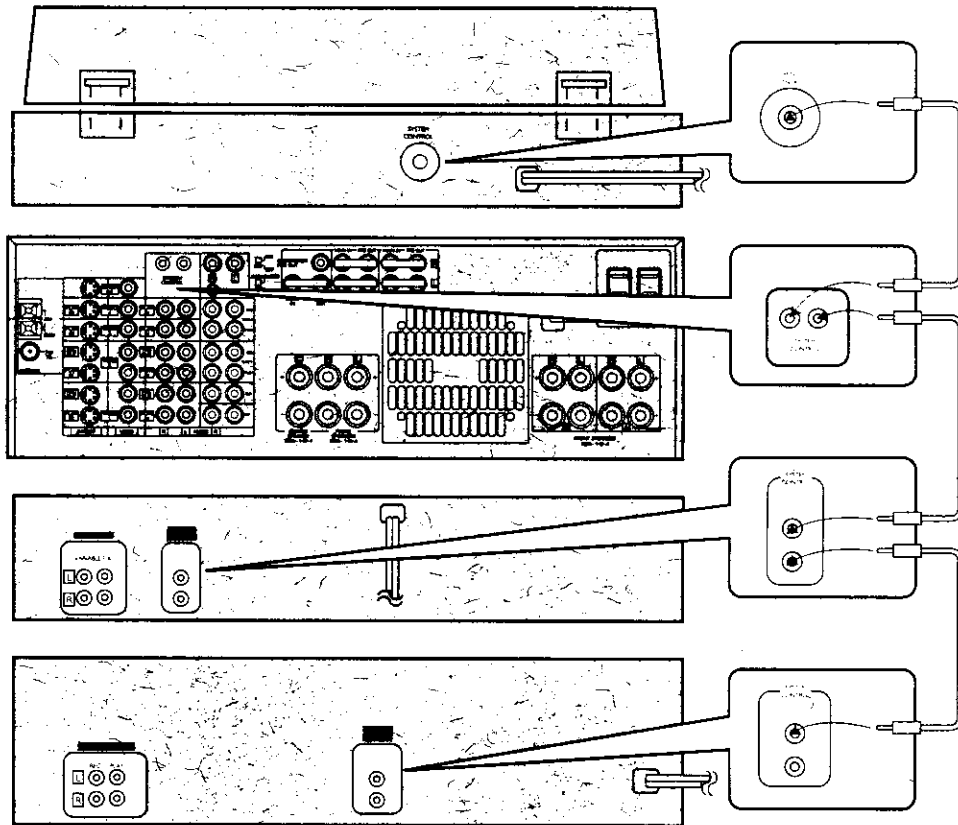


Step 7

Connect the system controls (when you have other Kenwood components)

If you have other Kenwood components equipped with system control terminals, the KR-X1000 lets you take advantage of the automatic system features. If not, skip to step 8.

Connect the system control terminals as shown below. Make sure to push the plug all the way in.



Step 8

Set the center speaker mode

Whether or not you're using a center speaker, you'll need to set the center speaker mode for the KR-X1000. The only things you'll need to know are whether or not you have a center speaker, whether it's THX-certified, and if not, what size it is (if you're not sure about the size, ask your salesperson).

- 1 Make sure the KR-X1000 is in either HOME THX CINEMA, DOLBY PRO LOGIC, or DSP LOGIC modes.

Read the instructions in the **Using Your Kenwood KR-X1000 THX Receiver** manual.

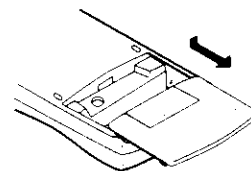
- 2 Press the CENTER MODE button. Each time you press it, it cycles through the mode settings, and displays them on the receiver display.
 - If you're using a THX-Certified center speaker and a subwoofer, select 'Wideband'
 - If your center speaker is small or medium size, select 'Normal'
 - If your center speaker is large, select 'Wideband'
 - If you're not using a center speaker, select 'Phantom' (the center channel signal is sent to the left and right speakers)

Step 9

Load batteries into your remote

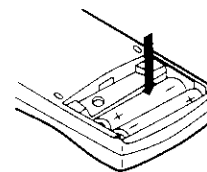
You'll need the remote to calibrate your system, so you'll need to load the batteries. We won't give you any of the instructions for the remote here—they're covered in the **Using Your Kenwood KR-X1000 THX Receiver** manual.

- 1 Remove the cover by pressing down on the ridged area, and sliding it off in the direction of the arrow.

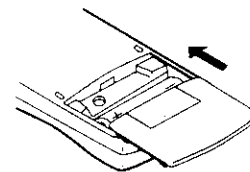


- 2 Insert 2 AA-size batteries.

Be sure to pay attention to the '+' and '-' signs when you're inserting the batteries.



- 3 Close the cover.



Step 10 · Calibrate your system

Hold on there—we're near the end. It doesn't sound very exciting, but calibrating is an important step in making sure your system sounds as good as possible. During calibration, you'll be balancing the channels to create the right environment, and setting a volume reference level. Once set, carefully transferred films will play at the volume levels intended by their makers when the volume is set to 0 dB. You can, of course, still set the overall volume level to your own preferences.

There are 2 ways you can calibrate your system (and we'll give you instructions for both):

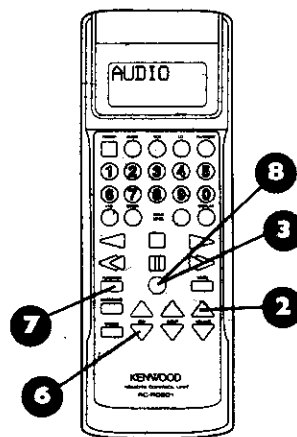
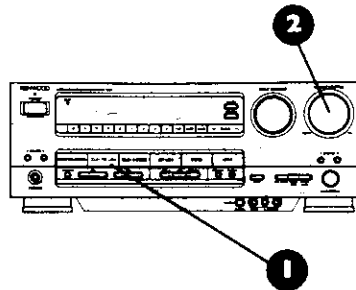
- Using a Sound Pressure Level (SPL) meter—this will be the most accurate, but you'll need to purchase a meter (see 'Unpacking your Kenwood KR-X1000' at the front of this manual)
- Using your own ears—it's not as accurate, but it's very handy

Before you start

- Eliminate as many external noise sources as possible
- Plug in the receiver's AC cord, press POWER, and press the AUDIO button on the remote

Calibrating using an SPL meter

These instructions assume you are using a Radio Shack SPL Meter, model 33-2050.



- 1 Select DOLBY PRO LOGIC.
- 2 Set the volume to 0 dB.
- 3 Press the RECORD button.

The display will first show 'TEST TONE ON', then change to 'LEFT CH. LEVEL 0 dB'. You'll hear a test noise on the channel shown on the display.

- 4 On the SPL meter, choose 70 dB on the large dial, and set the meter controls to 'C' and 'SLOW'.
- 5 Sit in the place where you (and your guests) are most likely to sit while watching movies. Hold the meter at arm's length at ear height (we're trying to make sure that the sounds reaching your ears are calibrated).
- 6 Using the remote, raise (or lower) the test tone level using the ANY keys until you see the needle on the meter point between 4 and 6 (this will be 75 dB).
- 7 Advance to the next channel by pressing the FUNCTION key. Then repeat steps 5 and 6 for each active channel.

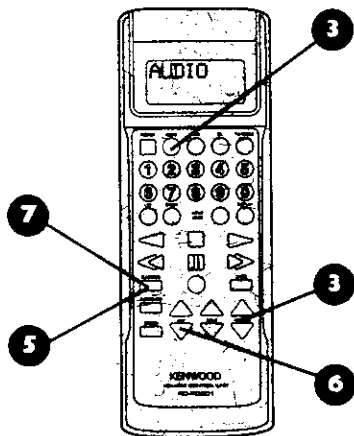
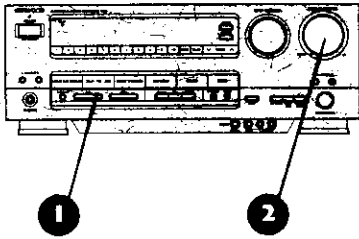
When you've set the test tone level reading to 75 dB on each channel, you've balanced your system.

- 8 Press the RECORD button to turn off the test tone.

Calibrating by ear

When you calibrate your system by ear, you are only matching the volume level between your speakers. You are not setting the filmmakers' reference volume level.

- 1 Select DOLBY PRO LOGIC.



- 2 Set the volume to 0 dB.

- If this is uncomfortably loud, lower the volume—but not below -6 dB.

- 3 Press the RECORD button.

- The display will first show 'TEST TONE ON', then change to 'LEFT CH. LEVEL 0 dB'. You'll hear a test noise on the channel shown on the display.

- 4 Sit in the place where you (and your guests) are most likely to sit while watching movies. Listen to the test tone level carefully.

- 5 Press the FUNCTION key to advance to the next channel and compare its level against the previous channel.

- 6 Raise (or lower) the test tone level, using the ANY keys, until the channels sound approximately the same.

- 7 Advance to the next channel by pressing the FUNCTION key. Then repeat steps 5 and 6 for each active channel.

- When all of the channels sound like they're the same volume, you've balanced your system.

- 8 Press the RECORD button to turn off the test tone.

Important

You cannot calibrate the level of your subwoofer by ear using the test noise. To set the subwoofer level, listen to a piece of music you know well and adjust the subwoofer level until it sounds right.

Step 11

Set the delay time

This is it—the final step. Setting the delay time compensates for the way our ears receive sound. When you're watching a movie, your front and surround speakers are all at unequal distances from you.

Without setting a delay time, sound from the surround speakers would reach your ears at the wrong time compared to the front speakers, potentially ruining the surround effect. The correct delay time blends the sound of the front and surround speakers. You only need to set the delay time once (unless you rearrange your room), but it's a good idea to check it periodically.

Before you start

- 1 Measure the distance from the main seating area to the front speakers and the distance from the main seating area to the surround speakers.
- 2 Look at the point on the graph below that represents where these distances meet and note the delay time.

| | | | | | | | |
|-------------------------------|----------------------------|-------|-------|-------|-------|-------|----|
| Distance to surround speakers | 35 ft | | | | | 15 | |
| | 30 ft | | | | | 15 | 15 |
| | 25 ft | | | | 15 | 15 | 20 |
| | 20 ft | | | 15 | 15 | 20 | 25 |
| | 15 ft | | 15 | 15 | 20 | 25 | 30 |
| | 10 ft | 15 | 15 | 20 | 25 | 30 | 30 |
| 5 ft | 15 | 20 | 25 | 30 | 30 | 30 | |
| | 5 ft | 10 ft | 15 ft | 20 ft | 25 ft | 30 ft | |
| | Distance to front speakers | | | | | | |

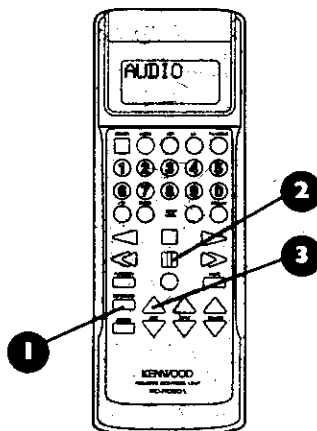
Shaded areas indicate preferred distances; blank areas mean not recommended.

About the delay time

You can set the delay time from 15 to 30 milliseconds (ms). In the average living room, 20 ms sounds good, but you can fine-tune the delay time until the sound from the front and surround speakers blends.

The last delay time you set is stored in memory.

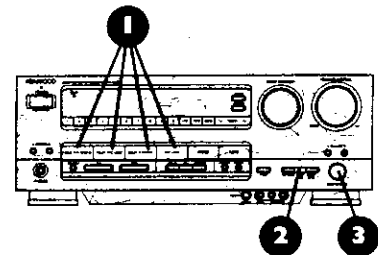
Using your remote



- 1 Press the SURROUND button to select either HOME THX CINEMA, DOLBY PRO LOGIC, or DSP LOGIC.
- 2 Press the PAUSE button.
- 3 Use the ANY buttons to increase (or decrease) the delay to match the delay time value from the graph.
 - Each press of the button (up or down) adjusts the delay time 1 ms.

- 4 When you're finished making adjustments wait 5 seconds for the adjustments to be saved.

Using the front panel



- 1 Select HOME THX CINEMA, DOLBY PRO LOGIC, or DSP LOGIC.
- 2 Select DELAY TIME.
- 3 Use the MULTI CONTROL knob to increase (or decrease) the delay to match the delay time value from the graph.
- 4 When you're finished making adjustments wait 5 seconds for the adjustments to be saved.

Note

You can check the delay settings using the information screen. Read 'Viewing the test tone screen' on page 11 of the **Using Your KR-X1000 THX Receiver** manual.

Congratulations!

Your KR-X1000 THX Receiver is set up and ready to go. To learn how to really enjoy it, read the second manual, **Using Your Kenwood KR-X1000 THX Receiver.**

Have fun!



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