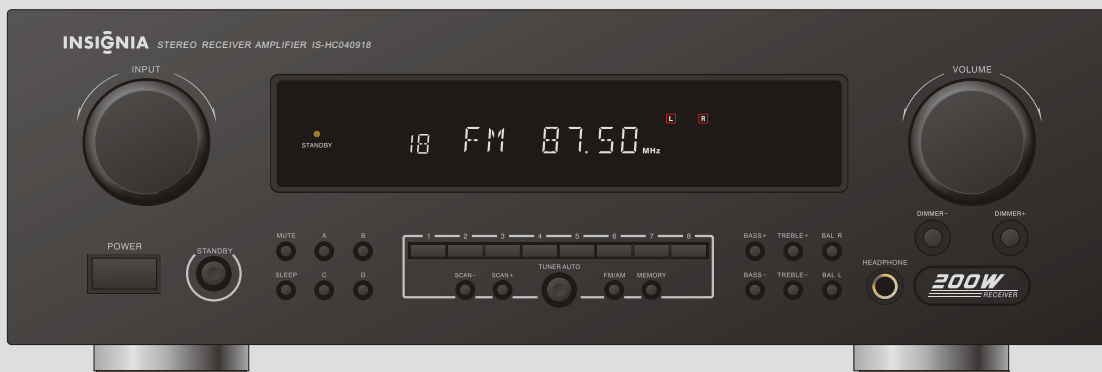


INSIGNIA

IS-HC040918

AM/FM STEREO RECEIVER





User's Manual

IMPORTANT SAFETY INSTRUCTIONS

NOTICE! !

Thank you for purchasing our product. To assure the finest performance, please read this manual carefully. Keep it in a safe place for future reference.

	CAUTION RISK OF SHOCK	
<p>CAUTION: To reduce the risk of electric shock, do not remove cover (or back). No user-serviceable parts inside. Only refer servicing to qualified service personnel.</p>		

Explanation of Graphical Symbols



The lightning flash & arrowhead symbol, within an equilateral triangle, is intended to alert you to the presence of danger.



The exclamation point within an equilateral triangle is intended to alert you to the presence of important operating and servicing instructions.

WARNING

To reduce the risk of fire or electric shock, do not expose this unit to rain or moisture.

Voltage:

Voltages are 120V AC, 60Hz.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This Class B digital apparatus complies with Canadian ICES-003.

Wet Location Marking-C-UL

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

1. Read Instructions - All the safety and operating instructions should be read before the appliance is operated.

2. Retain Instructions - The safety and operating instructions should be retained for future reference.

3. Heed Warnings - All warnings on the appliance and in the operating instructions should be adhered to.

4. Follow Instructions - All operating and use instructions should be followed.

5. Do not use this apparatus near water.

6. Clean only with dry cloth.

7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.

8. Do not near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet. Consult an electrician for replacement of the obsolete outlet.

10. Protect the power cord from being walked on or pinched.

11. Only use attachments/accessories specified by the manufacturer.

12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.



13. Unplug this apparatus during lightning storms or when unused for long periods of time.

14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug damage, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, or the apparatus does not operate normally or has been dropped.

IMPORTANT SAFETY INSTRUCTIONS

15. Cleaning - Unplug this unit from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

16. Power lines - An outdoor antenna should be located away from power lines.

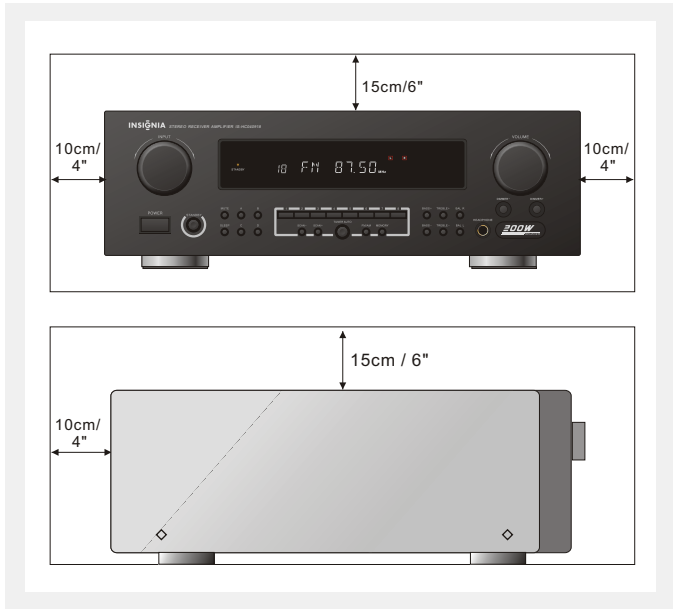
17. Object and Liquid Entry - Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.

Note:

To CATV system installer's (U.S.A.): 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 as close to the point of cable entry as practical.

SETUP AND MAINTENANCE OF THE RECEIVER

1. Provide spaces for sufficient ventilation as indicated:



2. Do not connect to the AC power cords until all apparatus are completed.

3. Do not use your receiver immediately after transferring it from a cold place to a warm due to there is risk of condensation.

4. Do not expose your receiver to water or excessively high temperatures.

5. After having disconnected your receiver, clean the case with a soft cloth, or with a slightly damp leather chamois. Never use strong solvents.

PROTECT YOUR RECEIVER FROM OVERHEATING

1. Do not block ventilation holes. Arrange the receiver so that air can circulate freely.

2. Do not stack the receiver and other components directly on top of each other.

3. Allow adequate ventilation when placing your receiver in a stand.

4. Place an amplifier near the top shelf of the stand so heated air rising from it will not affect other apparatus. If you have a satellite receiver, you should place it on the top shelf.

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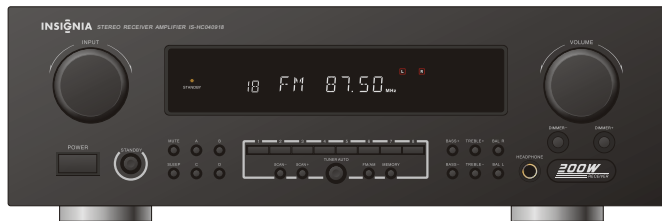
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FIRST THINGS FIRST

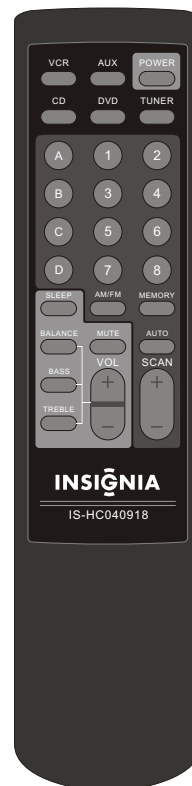
UNPACKING THE RECEIVER

You should receive the following items:

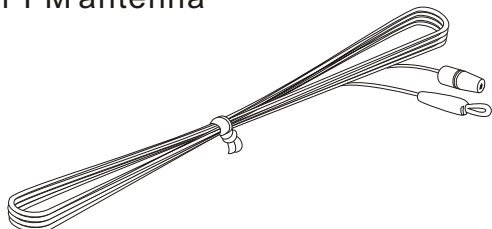
One receiver unit



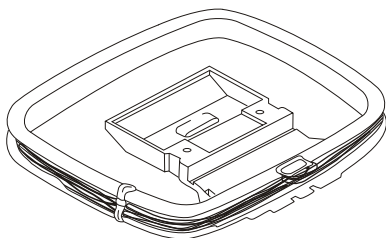
One Remote Control



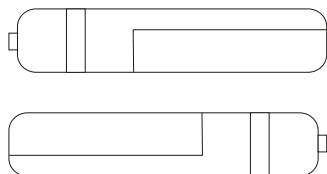
Indoor FM antenna



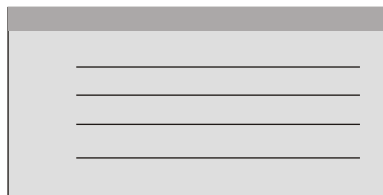
AM loop antenna



AAA,R3,UM-4 batteries



Warranty Card



One instruction book



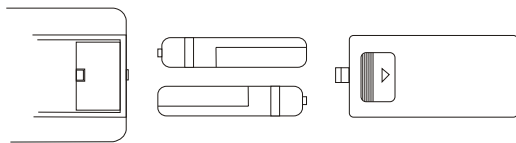
FIRST THINGS FIRST

ABOUT REMOTE CONTROL

INSTALLING BATTERIES IN THE REMOTE CONTROL

Since the remote controller will be used for many of this unit control operations, you should begin by installing the supplied batteries.

1. Turn the remote controller over and slide the battery compartment cover in the direction of the arrow.
2. Insert the batteries (AAA, R03, UM-4 TYPE) according to the polarity markings on the inside of the battery compartment.
3. Close the battery compartment cover.



CAUTION

Danger of explosion if battery is incorrectly replaced.

NOTES ABOUT THE REMOTE CONTROL

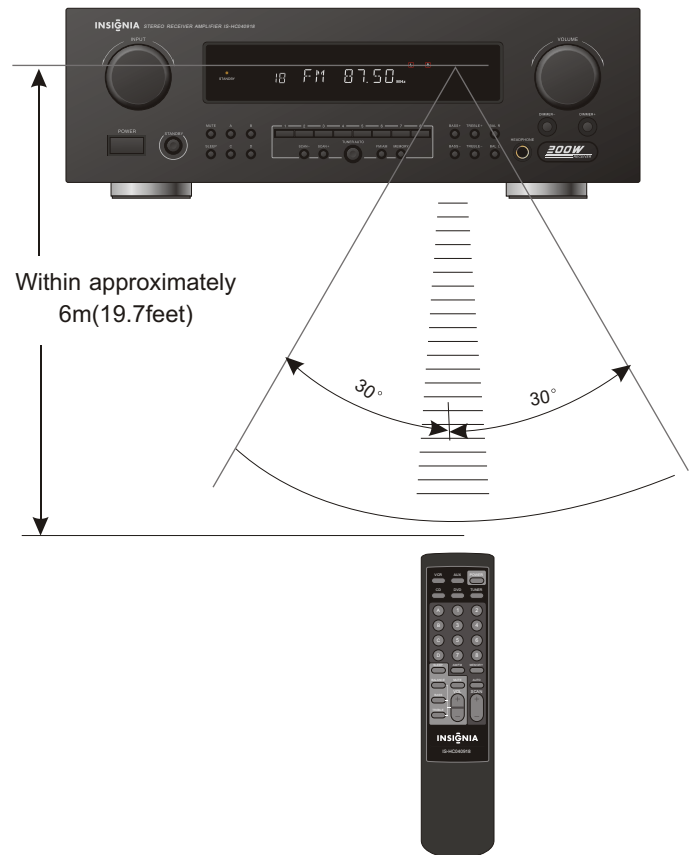
Batteries Replacement

If you find that the remote controller must be used close to the main unit, the batteries are weak. Replace both batteries with new ones.

NOTES:

1. Use AAA, R03, UM-4 batteries.
2. Be sure the polarities are correct. (See the illustration inside the battery compartment.)
3. Remove the batteries if the remote controller is not used for an extended period of time. If batteries leak, dispose of them immediately.
4. Avoid touching the leaked material and contact with clothing, etc. Clean the battery compartment thoroughly before installing new batteries.

REMOTE CONTROL OPERATION RANGE



NOTES:

1. The area between the remote controller and the main unit must be clear of large obstacles.
2. Do not expose the remote control sensor to strong lighting, in particular an inverter type fluorescent lamp. Otherwise, the remote controller may not work properly. If necessary, position the main unit away from direct lighting.

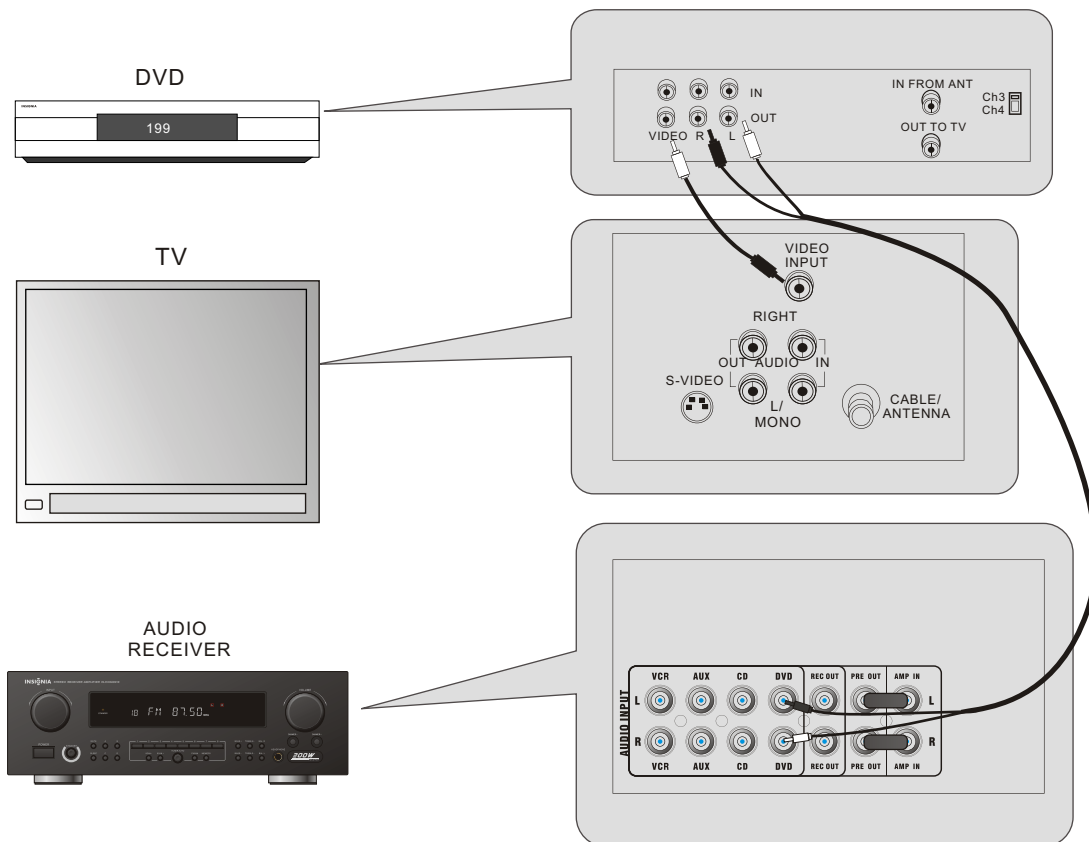
FIRST THINGS FIRST

BASIC CONNECTIONS

Assuming you have a DVD, the following steps will help you quickly set up your new receiver. If you have more electronic components, consult the table of contents or index for the page on which to find the connection description that best suits your situation.

* *the wires(bought from store) and jacks have been color-coded to assist you.*

1. Using an audio wire with red and white connectors, connect the audio “OUT” jack on the back of your stereo DVD to the audio “IN” jack under the DVD heading on the back of the receiver.
2. Using the video cable with yellow connectors, connect the video “OUT” jack on the back of your DVD to the “VIDEO IN” or “VIDEO INPUT” on the back of your TV. If there are multiple video jacks on the back of your TV, use “VIDEO 1” .



FIRST THINGS FIRST

CONNECTING THE SPEAKERS

CONNECTING THE WIRES

1. Loosen the knob.
2. Insert the bare wire. [Remove approx. 5mm (1/4") insulation from the speaker wires].
3. Tighten the knob and secure the wire.

Or you also may use a banana plug.

Speaker Polarity

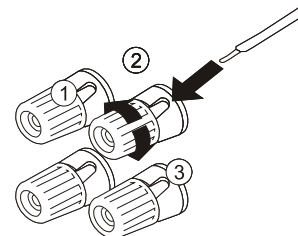
When connecting the speakers, make sure the polarities ("+" speaker wire to "+" on the receiver) of speaker wires and terminals are matched. If the cords are reversed, the sound will be distorted and will lack bass ("out of phase" effect).

NOTE:

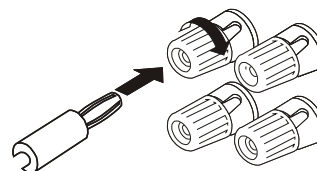
1. Do not let the bare speaker wires touch each other or any metal part of this unit. This could damage this unit or the speakers, or both.
2. Connect the speakers terminals to your speakers with the wire of the proper gauge (keep as short as possible). If the connections are faulty, no sound will be heard from the speakers.

CONNECTING THE MAIN SPEAKERS

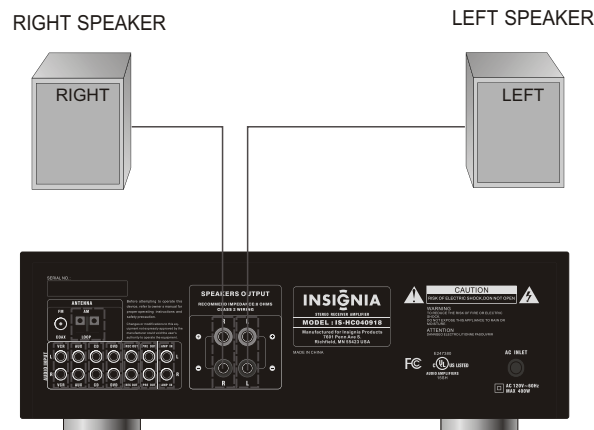
The two main speakers should be set between six and 10 feet apart. Putting the speakers any closer or any farther apart may result in distorted sound. The speakers should also form a 45 degree angle to the central listening point in the room, creating a triangle of listening enjoyment.



Method 1

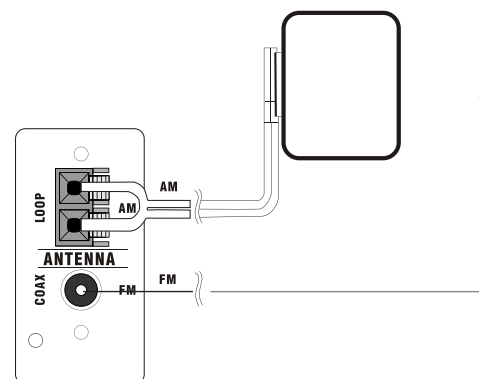


Method 2



CONNECTING THE ANTENNAS

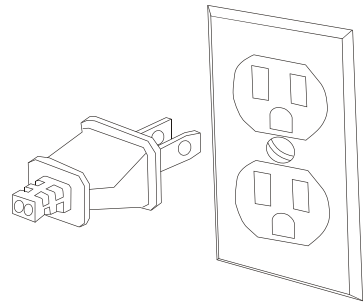
The AM and FM antennas connect to the AM and FM terminals on the system's back panel. They must be hooked up for you to receive clear reception. Uncoil the antenna wires and locate the bare ends. Press down on the tab to open the terminal and insert the wire. Snap the tab closed. After connecting the antennas, extend them to their full length and adjust their positioning for better reception.



FIRST THINGS FIRST

CONNECTING FOR POWER

Make sure you connect all your other electronic components and the speakers before plugging your receiver into the outlet. Plug the power cord into the wall outlet, matching the wide blade of the plug with the wide slot in the outlet. Be sure to insert the plug completely.



USING HEADPHONES

To listen privately through your audio system, use the HEADPHONES jack on the receiver. However, make sure you turn down the volume before you put on the headphones. Increase the volume to the desired level after headphones are in place.

Hearing Comfort & Well-Being

1. Do not play your headset at a high volume. hearing experts advise against continuous extended play.
2. If you experience a ringing in your ears, reduce volume or discontinue use.



RECEIVER CONTROLS & OPERATIONS

PANEL INTRODUCTION



1.INPUT selector

Turn the knob to select the input source you want to listen to or watch.

2.Standby indicator

Lights up when this unit is in standby mode.

3.Number 1-8 button

Press these buttons to select preset tuning channel.

4.Display window

Display a variety of information. (e.g. Main volume source and parameter etc.)

5.Remote control sensor

Receives signals from the remote controller.

6.Master volume

Controls the output level of all audio channels.

7.POWER switch

Press this switch to turn on the power. Press the switch again to turn off the power.

8.Standby button

Press this button to set this in the standby mode. Press again turn on the power of this unit.

9.MUTE

Mute the sound. Press again to restore the audio out to the previous volume level.

10.SLEEP button

Press the button repeatedly to turn the sleep time on and off, and set the sleep time(10-20-30-40-50-60-70-80-90mins).

11.A/B/C/D

Selects one of the 4 preset station groups (A to D).

12.Tuning scan button

Press the SCAN+ side to tune to a higher Frequency. Press the SCAN- side to tune to a lower frequency. Press and keep two second minutes, scan automatically.

13.TUNER automatically tuning button

Hold down this button for more than 3 seconds to start automatically preset tuning(AM/FM is detached).

14.FM/AM band switches button

Press the button to switch the reception band between FM and AM.

15.Stores a station in the memory

16.BASS Parameter adjustment buttons

Press the buttons to adjust the low-frequency response.

17.TREBLE Parameter adjustment buttons

Press the buttons to adjust the high-frequency response.

18.BALANCE Parameter adjustment buttons

Press the buttons to adjust the balance between left and right.

19.Headphone jack

Allows you enjoyment for private listening with headphones. When you connect headphones, no signals are output to all speakers.

20.Display(VFD)brightness adjustment buttons

Press them to adjust brightness of the display(VFD).

RECEIVER CONTROLS & OPERATIONS

DISPLAY MESSAGES

The following is an example of all the display messages you may encounter while using your receiver. Specific messages are referenced within the section(s) they apply.



STEREO

- Tuner stereo signal detected.

TUNED

- Tuner station detected.

SLEEP

- Unit in Sleep mode

KHz MHz

- Tuner frequency unit

TUNING THE RECEIVER

SELECT THE AM/FM BAND

1. Push the **FM/AM** button on the front panel (or the **AM/FM** button on the remote) to activate the tuner.

2. When using the remote you must press the **AM/FM** button on the remote again to select the FM or AM band.

MANUAL TUNING

Press the **SCAN +** button on your remote button to move up the AM or FM band. Press the **SCAN -** arrow button on your remote to move down the AM or FM band. You may press and hold **SCAN +** or **SCAN -** buttons 3 seconds to automatically find next station.

NOTES:

1. If there is interference, modify the location of the antenna until the optimal sound is heard. TV and other electronic devices could be the cause of interferences so try to position the antenna away of them.
2. Weak signal can affect the "auto Search function". Adjust the antenna for better reception for more efficient search.

AUTO TUNING

Use the **AUTO** feature to automatically search for stations of sufficient strength.

Press and hold **AUTO** button for 3 seconds on the remote.

Radio frequencies will be browsed and radio station stored automatically. When all available radio stations are stored or if all 32 memory locations are full, the auto preset will stop.

NOTE:

Weak signal can affect the "Automatic Preset Storing Function" efficiency. Adjust the antenna for the best reception for more efficient search.

RECEIVER CONTROLS & OPERATIONS

STORING STATIONS IN MEMORY

You can store up to 32 AM and FM stations, these stations can be stored in random order.

TO STORE A STATION

1. Press the **FM/AM** button on the front panel or remote control to select the reception band.
2. Select the station you want to store in memory using the methods described above.
3. Press the **MEMORY** button on the remote, "MEMORY" blinks in the display. While "MEMORY" is blinking, press number buttons on the remote for the station.

If the Memory indicator on the display turns off before you preset your station selection, press MEMORY again.

MANUAL PRESET

1. Select the band wave by pressing FM/AM repeatedly.
2. Tune to a radio station (see "Manual tuning" on page 8 above for details).
3. Select a group (A - D) of preset stations. this group will be displayed on the front panel display. For example: "A".
4. Press **MEMORY** button on the remote control. "MEMORY" appears on the display.
5. While the word "MEMORY" is still on, input your desired preset number (1-8) buttons on the remote control to select a preset radio station number. For example this number is "1". "MEM OK" appears on the display. This station has been stored to "A1".
6. Repeat steps 1 to 5 to store other stations.

NOTE:

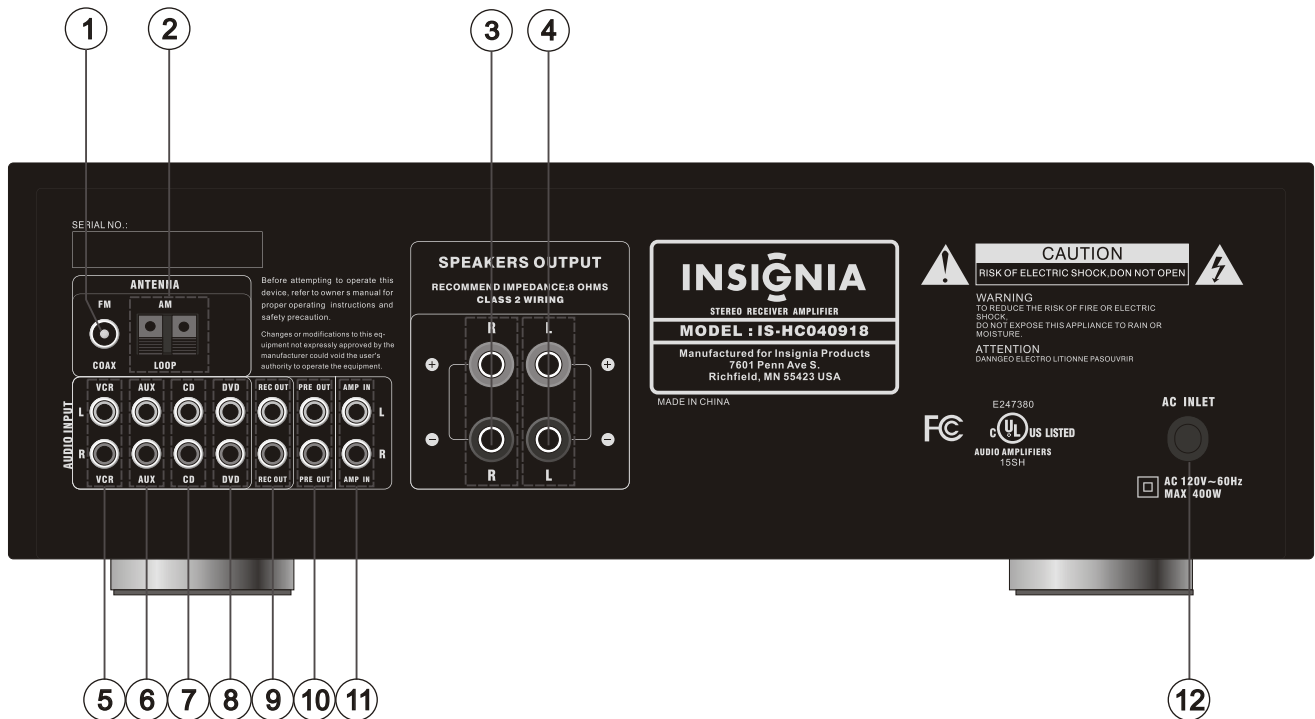
1. A new setting can be programmed in place of the former one.
2. This memory is forever before reset.

RETRIEVING PRESET STATIONS

1. Turn the **INPUT** knob on the front panel or press **TUNER** button on the remote control to select **TUNER** as the input source.
2. Press **A/B/C/D** button on the panel or the remote control to select the group of preset stations that you are desire.
3. Press number (1-8) buttons on the remote control to select the number of preset stations that you are desire. Station selected is displayed on the front panel display.
4. In the same way, You can select other stations stored.

CONNECTING AUXILIARY COMPONENTS

BACK PANEL INTRODUCTION



1.FM antenna input

2.AM antenna input

3.Right channel speaker output

4.Left channel speaker output

5.VCR audio input jacks

6.AUX audio input jacks

7.CD audio input jacks

8.DVD audio input jacks

9.REC audio output jacks

NOTE:

The level is controlled by master volume.

10.Pre out jacks

NOTE:

A short plug is used between 10 and 11 jacks.

11.Amplifier input jacks

NOTE:

A short plug is used between 10 and 11 jacks.

12.AC 120V/60Hz power input plug

CONNECTING AUXILIARY COMPONENTS

BEFORE YOU CONNECT.....

CONNECTING THE CABLES

- Protect components from power surges.
- Connect all components before plugging power cords into the wall outlet.
- Always turn off the receiver and/or components before you connect or disconnect any cables.
- Always make sure the color-coded plugs match the color of the terminals in which they are inserted.
- The connection cable plugs and jacks are color-coded as follows:

Speaker Terminals: Red for positive (+) terminals. Black for negative (-) terminals.

- Some units may be supplied with connection plugs that are color-coded red and black instead of red and white. In this case, the black plug takes the place of the white plug.

POSITION CABLES CORRECTLY TO AVOID AUDIO HUM OR INTERFERENCE

- Insert all cable plugs firmly into their jacks.
- Place audio/video cables to the sides of the receiver's back panel instead of straight down the middle after you connect the components.
- Try not to coil any power cables and keep them away from the audio/video cables as much as possible.
- Make sure all antennas and cables are properly grounded. Refer to the Safety Tips sheet packed with your receiver.

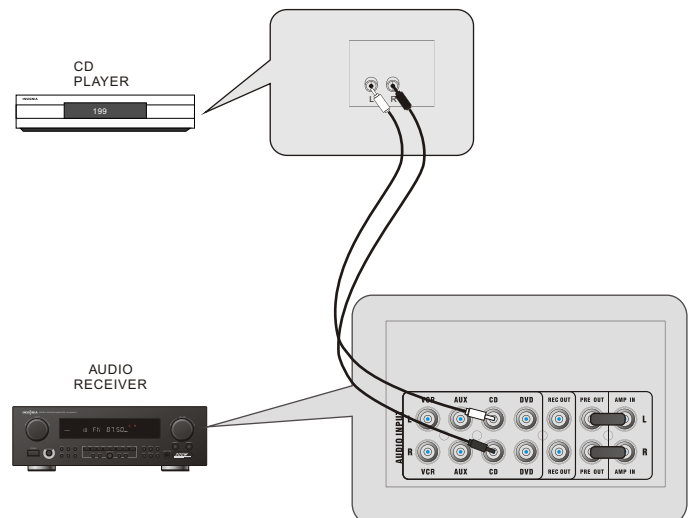
CONNECTING A COMPACT DISC PLAYER

Using one paired (red/white) stereo cable, connect your new receiver to your compact disc player as shown to the right.

To play a CD, press CD, put the receiver in CD mode and press PLAY.

NOTE:

The AUDIO SOURCE connection can be used as input for any stereo audio signal.



CONNECTING AUXILIARY COMPONENTS

REMOTE CONTROL

1. Input selector buttons

Press these buttons to select an input source.

2.A/B/C/D button

Press the buttons to select a group of preset stations.

3.SLEEP button

Press the button repeatedly to turn the sleep timer on and off, and set the sleep time(10-20-30-40-50-60-70-80-90mins).

4.BALANCE Parameter selector button

Press the button to select balance parameter. then press the "8" button to adjust the balance between left and right.

5.MUTE

Mute the sound. Press again to restore the audio out to the previous volume level.

6.BASS Parameter selector button

Press the button to select bass tone, then press the "8" button to adjust the low-frequency response.

7.TREBLE Parameter selector button

Press the button to select treble tone, then press the "8" button to adjust the high-frequency response.

8.PARAMETER selected and MASTER VOLUME adjustment buttons

To adjust parameter selected or main volume.

9.Power button

Press this button to set this in the standby mode. Press again turn on the power of this unit.

10.Number 1-8 button

Press the button to call preset station number.

11.MEMORY button

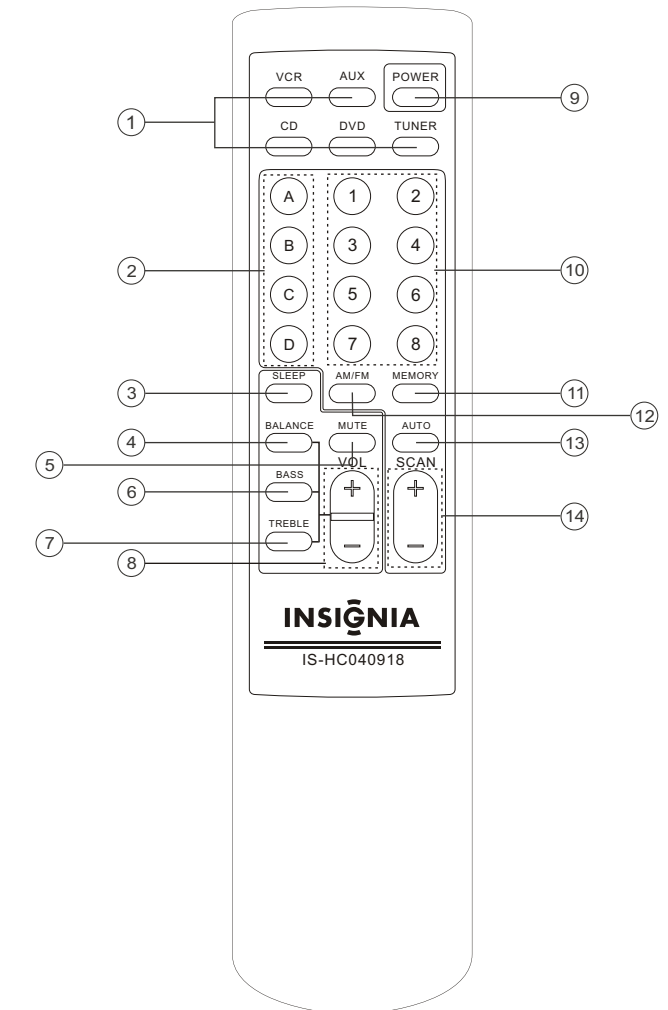
Use the button to enter a station to memory.

12.FM/AM band switches button

Press the button to switch the reception band between FM and AM.

13.TUNER automatic tuning button

Press and hold the button 3 seconds, all stations are browsed and stored automatically.(AM/FM is detached)



14.TUNING SCAN+,SCAN- buttons

Press the SCAN+ side to tune in to a higher frequency. Press the SCAN- side to tune in to a lower frequency. Press and keep two second minutes, scan automatically.

CARE AND MAINTENANCE

TROUBLESHOOTING TIPS

RECEIVER/TUNER OPERATION

STEREO indicator is off.

- Adjust the antenna.
- The signal is too weak. Connect an external antenna.
- The signal is Mono.
- Sever hum or noise.
- The signal is too weak. Connect an external antenna.

GENERAL

No audio.

- Make sure the MUTE indicator on the front panel is off.
- Make sure the speakers are turned on.
- Check the connections.
- Check the short plug between **PRE OUT** jacks and **AMP IN** on the rear panel is inserted.
- Check the power cord connection.

No audio from one channel.

- Check the speaker wire connection or connecting cable.
- Check the connection between the receiver and the speaker.

Noise when the TV is turned on.

- The TV too close to the unit.

REMOTE CONTROL OPERATION

The remote control does not operate the unit.

- Another function is selected on the remote. Press the correct function button.
- No batteries installed. Install the batteries before attempting to operate the remote.
- The batteries are exhausted. Replace all batteries.
- The remote is not pointed at the remote control sensor on the main unit or there is an obstacle between the remote and the main unit.
- The remote control is too far from the main unit. Move closer.

NOTE:

Be sure to match the + and - ends of each battery to the symbols shown in the remote battery compartment.

CLEANING THE EXTERIOR

CLEANING THE EXTERIOR

- Disconnect the system from AC power before cleaning the exterior of the system with a soft dust cloth.

EQUIPMENT SPECIFICATIONS

AMPLIFIER SECTION

Left & Right Channel.....2X100Watts
Signal to Noise(A weight).....85dB
Frequency Response.....20Hz-20 KHz+/-1.5 dB

AM TUNER SECTION

Frequency Response.....80Hz 2.3 KHz +/- 6dB
Usable Sensitivity.....55dBu @ S/N 20 dB
Signal to Noise.....38 dB
Image Ratio..... 30 dB @ 1000KHz
IF Rejection40 dB

FM TUNER SECTION

Frequency Response..... 40Hz-15 KHz+/- 3dB
Quieting.....24 dBu
Signal to Noise..... 60 dB (stereo)/65 dB (mono)
Image Ratio.....40dB
IF Rejection..... 65dB

Specifications and features are subject to change without notice.

INSIGNIA

IS-HC040918

STEREO RECEIVER AMPLIFIER

Manufactured for Insignia Products

7601 Penn Ave S.

Richfield, MN 55423 USA