# WARRANTY

Crosley Radio Products are warranted against defects in material and workmanship for a period of 90 days beginning from the date of sale to the original purchaser.

Should the unit fail under normal usage during the 90 day warranty period, a request for RETURN AUTHORIZATION (R.A.) must be made by the original customer before returning the unit. Call Crosley Radio customer service for Return Authorization at (502) 583-4246 from 9 AM to 5 PM (EST) Monday to Friday.

Upon receiving the RETURN AUTHORIZATION number from the Customer Service Department, properly pack your unit in its original packaging. Include any adapters, parts, & accessories which were originally provided with the product, along with a check or money order for $19.95 made out to Crosley Radio to cover the handling and return postage. Display the R.A. # on the outside of the carton and ship PREPAID via standard UPS or its equivalent.

## CROSLEY RADIO

**ATTN: RETURNS DEP'T**
**2001 PRODUCTION DRIVE**
**BAY 2 & 3**
**LOUISVILLE, KY 40299**

CROSLEY RADIO assumes no responsibility for units sent without prior Return Authorization.

The purchaser's bill of sale is the only proof of warranty entitlement and must accompany the unit.

The warranty does not cover damage due to acts of nature, accident, misuse, abuse, negligence, commercial use or modification of, or to any part of the product. This warranty does not cover damage due to improper operation or maintenance, connection to improper voltage supply, or attempted repair by anyone other than a facility authorized by Crosley Radio to service the product. This warranty does not cover products sold AS IS or consumables (such as fuses or batteries). This warranty is valid only in the United States.
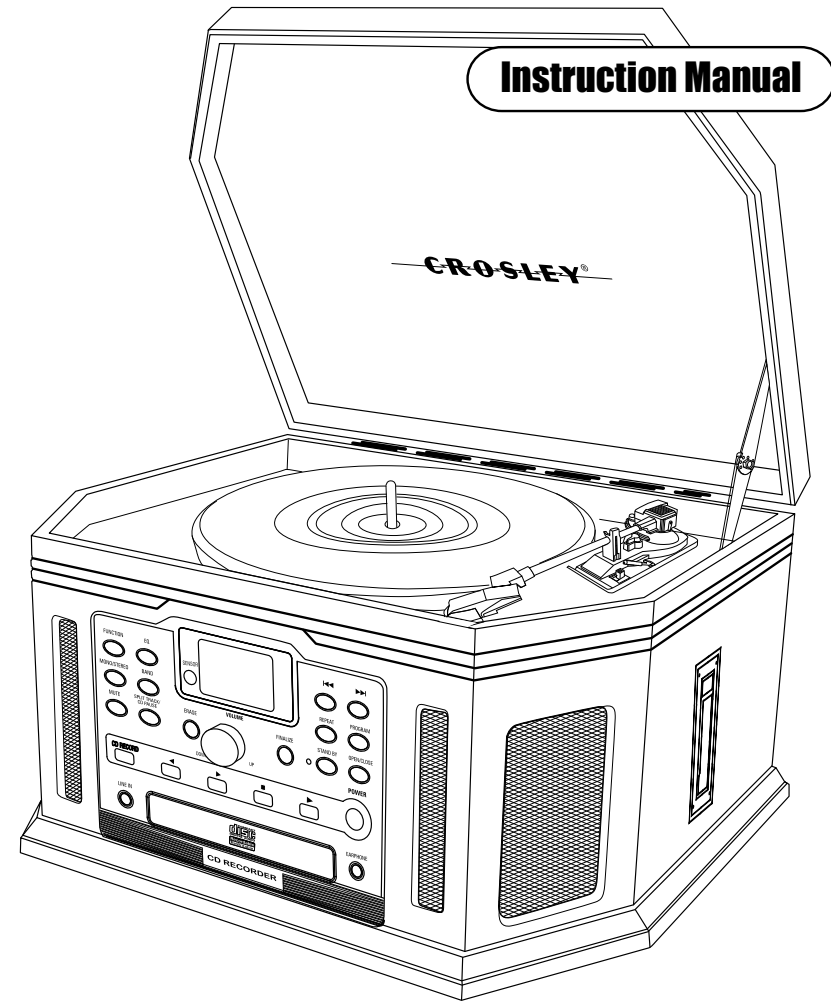
This warranty gives the purchaser specified legal rights in addition to any rights which may vary from state to state.

In accordance with the "Moss-Magnuson Warranty Act" of July 10, 1975, this is termed a "limited warranty" which in no way compromises Crosley Radio, high standards of Quality and Workmanship.

910-252800-003

## CROSLEY RADIO

# CR248

## Songwriter CD Recorder

Instruction Manual



22-9-06

# VCD Operation

## Playing Video CD

The Songwriter will play video disks in the follows formats: VCD, Mpeg and Jpeg. To play these video files though your unit, make sure to have the video cable connected correctly to your TV. If the disc contains audio, the Audio Output cables will need to be hooked up as well. Refer to the Audio/Video Connections section of this manual for information on making these connections. To play a video disc, follow the instructions below.

1  Press the FUNCTION button (28/58) to set the unit to CD mode.

2  Press the PAL/NTSC button to set the units output to match the tuner in your television.

   **NOTE**: Most all TV's in the U.S. use NTSC tuners.

3  Press the OPEN/CLOSE button (19/48) to open the CD drawer. Insert a VCD or video disc with Jpeg or Mpeg files into the CD tray with the label side of the disc facing up.

4  Press the OPEN/CLOSE button (19/48) again to close the CD drawer. The display will show "Load" for a few seconds and playback will automatically begin.

   **NOTE**: Make sure your TV is set to receive the input from the video cable.

## Fast Forward And Fast Rewind

Press FAST FORWARD button(11/68) or FAST REWIND button(9/53) during playback:

Each press of the FAST FORWARD button (11/68) or FAST REWIND button (9/53) will forward or rewind the speed of play in increments of 2, 4, 6, 8 or 16X"s the normal playing speed. To return to normal playback speed, press the PLAY button (15/63).

**NOTE**: No sound is reproduced while fast forwarding or rewinding the CD.

## Intro Play

1  Press the INTRO button (51) once during VCD playback. The first few seconds of each chapter of the disc will play.

2  To cancel Intro Play, press the INTRO button (51) again.

## Zooming a Picture

Using the Zoom feature allows you to zoom in on the picture. You can use the Zoom feature while the disc is playing normally, in slow mode or paused.

1  Press the ZOOM button (67) once to increase the magnification level. Each press after that increased the level of magnification. Once the max size has been reached, the next push of the button will return the picture size back to normal.

2  Press the CLEAR button (65) to decrease the amount of zoom.

## PBC (Playback Control)

Video CD equipped with the PBC(Version 2.0) function.(PBC is the abbreviation of Playback Control) You can enjoy two playback variations depending on the type of disc.

**VIDEO CD not equipped with PBC function on (Version1.1)**

Sound and movies can be played on this unit in the same way as and audio CD.

In addition to operation of the Video CD not equipped with PBC function, you can enjoy playback with interactive software and with search function by using the menu displayed on the TV screen(Menu Playback).

# WARNING:

TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE. DO NOT REMOVE COVER. PILOT LAMPS SOLDERED IN PLACE. NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

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

## CAUTION
### RISK OF ELECTRIC SHOCK DO NOT OPEN

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.

The exclamation point within an equilateral triangle is intended to alert user to the presence of important operating and maintenance (servicing) instruction in the literature accompanying the appliance.

## Specification

| | |
|---|---|
| Frequency Range | : AM 525 - 1710 KHz |
| | : FM 87.5 - 108 MHz |
| Power Supply | : AC 120V ~ 60Hz |
| Power Consumption | : 65W |
| Speed | : 33 1/3, 45, 78 RPM |
| Speaker | : 5" 8ohm 5W x 2 |

\*  DESIGN AND SPECIFICATIONS SUBJECT TO CHANGE WITHOUT  NOTICE.

## Manual Track Division

You can divide your recording into separate tracks if you wish. By doing this, each song will have its own sequential track number. To do this, you must use the Split Track button (5/70).

While Recording your record or cassette, listen for the end of each song. There will usually be a brief silence between songs. Once you are at the end of the song, press the Split Track button. The recording will then go to the next track number by increments of one. Once the recording is finished, you can press the Preset Up (22/52) or the Preset Down (23/54) buttons to go to the beginning of each song.

## Erasing a CD-RW

If using a CD-RW, you can erase the whole CD and rerecord it. Erase procedures are only possible with CD-RW discs. It is not possible to erase or rerecord a CD-R CD. To erase a CD-RW, follow the steps below.
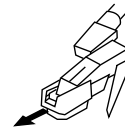
1 Press the FUNCTION button (28/58) to set the unit to CD mode.

2 Load a recorded CD-RW into the unit.

3 Press the STOP button (13/77) to stop playback.

4 Press the ERASE button (10/57). ERASE will appear on the display and the erasing process will begin. When finished, the display will first read "F Done" and then "BLANK".

5 The CD is now ready to record.

NOTE: Once a CD is erased, the contents that were on the CD cannot be retrieved.

## Unpacking
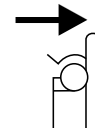
1 Remove packing materials from unit.

NOTE: Save all packing materials.

2 Remove plastic bag covering radio.

3 Remove plastic safety cover from A/C plug.

4 Remove tie from A/C cord and untie antenna wire on back of radio.

5 Open lid and remove styrofoam shipping material from turntable.

6 Remove black tie-wrap from under the tone arm.

7 Remove white protective needle cover by gently pulling towards the front of the unit.

8 Using your fingers, turn large chrome screw clockwise until it is all the way down. do not force it. This allows turntable to float on its shock absorbers.
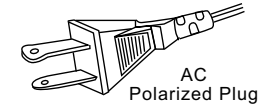
9 Release tone arm hold down clip by gently pushing to the right. This will unlock tone arm from its arm rest. Re-lock the hold down clip when moving the unit to another location.

## Power Source

1 Unwind the AC POWER CORD (43) at the back of the unit and connect it to a power outlet.

2 Plug A/C cord into appropriate outlet.

AC
Polarized Plug

3 This product is equipped with a polarized alternating current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature, If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact you electrician to replace your obsolete outlet. Do not defeat the purpose of the polarized plug.

## Headphones Jack Operation

1 Connect headphones to the Headphone Jack (16)

2 Adjust volume to the desired listening level.

NOTE: When using headphones, the sound to the unit speakers will be cut off.

Headphone Jack(16)

The sound from all speakers is cut off.

## Playing a CD

1 Press the FUNCTION button (28/58) to set the unit to CD mode.

2 Press the OPEN/CLOSE button (19/48) to open the CD drawer. Insert a CD into the tray with the label side facing up.

3 Press the OPEN/CLOSE button again to close the CD drawer. The display will show "Load" for a few seconds and playback will automatically begin.

4 To advance forwards or backwards through the tracks, press the PRESET UP (22/54) or PRESET DOWN (23/52).

5 To fast forward or rewind through a particular song, press the TUNING UP (9/53) or TUNING DOWN (11/68) buttons. Once you reach the point of the track you wish to hear, press the Play button (15/63) to resume playback.

## Repeat Playback

1 To repeat a single track, select the desired track number and press the REPEAT button (21/73) once. Press the PLAY button. "Repeat one" will show on the display and the selected track will repeat once it is finished.

2 To repeat a whole CD, press the REPEAT button (21/73) twice. The display will show "Repeat All". Once the disc is finished, it will start over again from the beginning.

3 To turn off the repeat feature, press the REPEAT button (21/73) again. The repeat display will disappear from the LCD.

## Random Play

1 While playing a CD, press the RANDOM button (75) on the remote control. "Rand" will show on the LCD display. The unit will randomly select songs from the CD.

2 To cancel Random playback, press the RANDOM button (75) again.

## Programmed Playback

1 Make sure the CD is stopped.

2 Press the PROGRAM button (20/49). " 01" will shown on the display.

3 Press the PRESET UP button (22/52) or the PRESET DOWN button (23/54) to select a desired track.

4 Press the PROGRAM button (20/49) twice to store the selected track number.

5 Repeat above steps 3 and 4 to program additional tracks into memory.

NOTE: Maximum of 16 tracks can be programmed into memory.

## Search (For Audio CD Only)

1 When playing any audio CD, press the FAST FORWARD button(11/68) or FAST REWIND button (9/53) or at fast forward or fast backward direction.

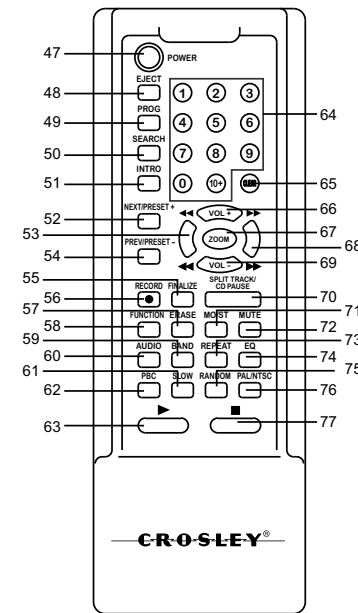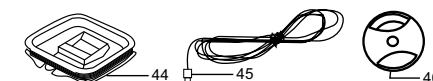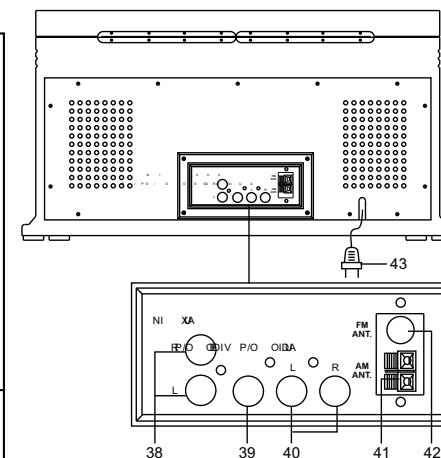2 Normal play will continue when you press the PLAY button (15/63).

## Unit Controls

| 38 | Aux In Jack |
|---|---|
| 39 | Video Output Jack |
| 40 | Audio Output Jack |
| 41 | AM Antenna Jack |
| 42 | FM Antenna Socket |
| 43 | AC Power Cord |
| 44 | AM Loop Antenna |
| 45 | FM Antenna Wire |
| 46 | Adapter For 45 rpm Records |

## Remote Controls

| 47 | Power/Stand By Button |
|---|---|
| 48 | Eject Button |
| 49 | Program Button |
| 50 | Search Button |
| 51 | Intro Button |
| 52 | Next/Preset Up Button ▶▶❙ |
| 53 | Tuning Down Button |
| 54 | Previous/Preset Down Button ❙◀◀ |
| 55 | Finalize Button |
| 56 | Record Button |
| 57 | Erase Button |
| 58 | Function Button |
| 59 | Band Button(AM/FM) |
| 60 | Audio Button |
| 61 | Slow Button |
| 62 | PBC Button(Playback Control) |
| 63 | Play Button ▶ |
| 64 | 0-9, 10+ Button |
| 65 | Clear Button |
| 66 | Volume Up |
| 67 | Zoom Button |
| 68 | Tuning Up Button |
| 69 | Volume Down |
| 70 | Split Track/CD Pause Button |
| 71 | Mono/Stereo Button |
| 72 | Mute Button |
| 73 | Repeat Button |
| 74 | EQ Button |
| 75 | Random Button |
| 76 | PAL/NTSC Button |
| 77 | Stop Button ◼ |

REMARK: Tuning Up button = Fast Forward button
Tuning Down button = Fast Rewind button
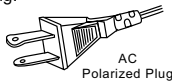(on Audio/Video operation)

# IMPORTANT SAFETY INSTRUCTION

**PLEASE READ CAREFULLY ALL THE FOLLOWING IMPORTANT SAFEGUARDS
THAT ARE APPLICABLE TO YOUR EQUIPMENT**

1.  Read Instructions - All the safety and operating instructions should be read before the product is operated.
2.  Retain instructions - The safety and operating instructions should be retained for future reference.
3.  Heed Warnings - All warnings on the product and in the operating Instructions should be adhered to.
4.  Follow Instructions - All operating and use instructions should be followed.
5.  Cleaning - Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
6.  Attachments - Do not use attachments not recommended by the product manufacturer as they may cause hazards.
7.  Water and Moisture - Do not use this product near water - for example, near a bath tub, wash bowl, kitchen sink, or laundry tub; in a wet basement; or near a swimming pool; and the like.
8.  A product and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to overturn.
9.  Ventilation - Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating, and these openings must not be blocked or covered, The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should not be placed in a built - in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.
10. Power Sources - This product should be operated only from the type of power source indicated on the marking label, if you are not sure of the type of power supply to your home. Consult your product dealer or local power company. For products intended to operate from battery power, or other sources, refer to the operating instructions.
11. Grounding or Polarization - This product may be equipped with a polarized alternating-current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet try reversing the plug, If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.
12. Power - Cord Protection - Power - supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product.
13. Lightning - For added protection for this product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the product due to lightning and power - line surges.
14. Power Lines - An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.
15. Overloading - Do not overload wall outlets, extension cords, or integral convenience receptacles as this can result in a risk of fire or electric shock.
16. Object and Liquid Entry - Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short - out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.
17. Servicing - Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
18. Damage Requiring Service - Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions;
    a.  When the power-supply cord or plug is damaged.
    b.  If liquid has been spilled, or objects have fallen into the product.
    c.  If the product has been exposed to rain or water.
    d.  If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.
    e.  If the product has been dropped or damaged in any way.
    f.  When the product exhibits a distinct change in performance - this indicates a need for service.
19. Replacement Parts - When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.
20. Safety Check - Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.
21. Wall or ceiling Mounting - The product should be mounted to a wall or ceiling only as recommended by the manufacturer.
22. Heat - The product should be situated away from heat sources such as radiators. Heat registers, stoves, or other products (including amplifiers) that produce heat.

AC
Polarized Plug

**WARNING:** Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**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 generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful intereference 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 circuit different from that to which the receiver is connected.
-  Consult the dealer or an experienced radio TV  technician for help.

---

# General

## Troubleshooting

### There is no Power

1  Make sure the radio is plugged in correctly.

2  Check to see that the power button is pushed in.

### There is no Sound

1  Check the volume level by turning the volume knob.

### Turntable will not work

1  Make sure the function switch is set to phono.

2  Make sure there is no cassette tape in the cassette compartment..

3  Try moving the tone arm to the right until you hear a click.

4  Make sure the protective needle cover is removed.

### CD does not play

1  Check to make sure CD is inserted correctly (label side facing up).

2  Check that the surface of the CD is clean

3  Make sure function switch is set to CD.

# Welcome

Thank you for purchasing the Crosley Songwriter CD Recorder (CR248). Before operating this unit, please read this manual thoroughly and retain it for future reference.

# About This Manual

Instructions in this manual describe the control functions of the CR248.

**Included in the package:**
- Songwriter CD Recorder
- Remote Control
- FM antenna
- AM loop antenna
- 45 RPM adaptor
- Turntable pad

# Table of Contents

# Audio / Video Connections

## Audio Connections

### Aux Input
Using the Aux Input allows you to hook up additional external audio components and listen to them through your unit. Any component with an audio output such as a Tuner, AV receiver or VCR, can be connected by using the correct cables (not included). This unit uses standard RCA cables. Simply plug the red and white connectors on one end of the cable to the red and white Aux In jacks on the back of your unit. The other end of the cable will plug into the Audio Output jack on the external component. For more information on hooking up the external component, see the owner's manual for that component.

### Audio Output
Using the Audio Output will allow you to run the audio from your unit into a home stereo, television or other stereo source. To make this connection, you will need standard RCA cables. Plug the red and white connectors on one end of the cable into the red and white Audio O/P jacks on the back of the unit. The other end of the cable will plug into the Aux Input jacks of your selected component. For more information on hooking up to the external component, see the owner's manual for that component.

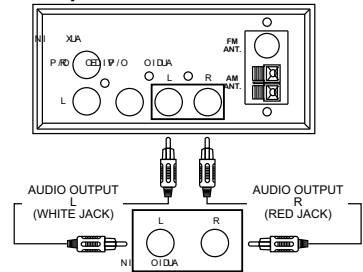**NOTE**: You can still listen to your unit when using the Audio Output feature

### Line In Jack
The Line In Jack is located on the front of you unit. This jack uses a 3.5 mm mini pin cable for connection. This connection is especially useful in hooking up smaller audio components like MP3 players. To make this connection, you will need a 3.5mm audio cable (not included). Hook one end of the cable into the Line In Jack on the front of your unit. The other end will plug into the Audio Output or headphone jack on the selected component. For more information on hooking up the external component, see the owners manual for that component.
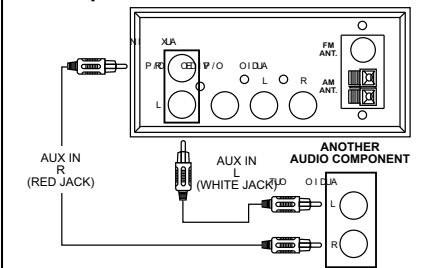
### Video Connection
Your Songwriter will also play certain types of Video Disks. This is covered on the following page. You will need a RCA video cable (not included) to make the connection. To make the video connection to your television, connect one end of the video cable to the yellow Video O/P jack on the back of your unit. Connect the other end to the Video input jack on your television.
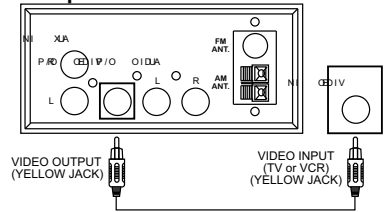
**Audio Output**

AUDIO OUTPUT L (WHITE JACK)   AUDIO OUTPUT R (RED JACK)

**Aux Input**

AUX IN R (RED JACK)   AUX IN L (WHITE JACK)   ANOTHER AUDIO COMPONENT

**Video Output**

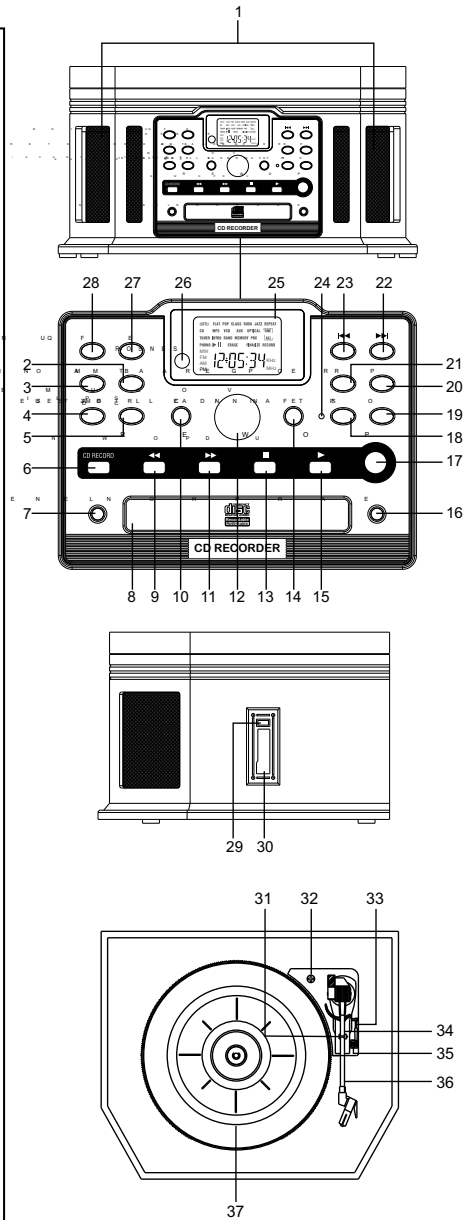VIDEO OUTPUT (YELLOW JACK)   VIDEO INPUT (TV or VCR) (YELLOW JACK)

If your television does not have the required Video Input, you will need an RF Modulator (Radio Frequency Modulator), which connects your TV Antenna or cable line and serves as Video Input. An RF Modulator can be purchased at almost any consumer electronics retailer. If you are connecting the video to either a television or a VCR video input jack, you must specify the source the TV or VCR is to display. Your TV or VCR user guide can tell you how to display the video signal from the Video in. jack.

**NOTE**: Some projection TV sets do not display the standard blue background used on most VCD/ Jpeg/ Mpeg files disc properly. If the background color is inconsistent or flashing, please try connecting to a standard tube television.

## Unit Controls

1 Speakers
2 Band Button(AM/FM)
3 Mono/Stereo Button
4 Mute Button
5 Split Track/CD Pause Button
6 Record Button
7 Line In Jack
8 CD Drawer
9 Tuning Down Button ◀◀
10 Erase Button
11 Tuning Up Button ▶▶
12 Volume Knob
13 Stop Button ■
14 Finalize Button
15 Play Button ▶
16 Headphone Jack
17 Power Button
18 Stand By Button
19 Open/Close Button (CD Door)
20 Program Button
21 Repeat Button
22 Preset Up Button ▶▶|
23 Preset Down Button |◀◀
24 Stand By Indicator
25 LCD Display
26 Sensor
27 EQ Button
28 Function Button
   (CD/PHONO/RADIO/AUX)
29 Cassette Eject/Fast Forward
30 Cassette Door
31 Hold Down Clip
32 Turntable Suspension Screw
33 Cue Lever
34 Tone Arm Rest
35 Speed Control Switch
36 Tone Arm
37 Turntable

## CD Recording Operation

### Preparation
This unit is designed to record CD-R and CD-RW discs bearing the identification logo "Compact Disc Recordable" or "CD-Rewritable". If CD's do not conform to this standard, they may not record properly.

**NOTE:** There is no video output when it is recording.

## Recording Records to CD

1 Load a compatible blank CD-R or CD-RW into the unit.

2 Press the FUNCTION button (28/58) to set the unit to Phono mode.

3 Set the SPEED CONTROL SWITCH (35) to the correct speed (33 1/3, 45 or 78 rpm) for the selected record.

4 Use the CUE LEVER (33) to raise the tone arm off its rest. Move the tone arm over the record and use the cue lever to lower it to the point you want the recording to start.

5 Press the CD RECORD button (6/56). "Record" will flash on the LCD. The CD will begin recording.

6 Once the first side of the record is finished, press the STOP button (13/77). "R Done" will be shown on the display.

7 Turn the record over and repeat steps 4-6 to record the other side.

8 Once you have finished the recording, press the FINALIZE button (14/55). "FINAL" will show on the display and "Finalize" will flash during the process.

9 Once the CD has been finalized, the display will show "F DONE". The CD is now finalized and ready for use.

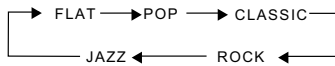   **NOTE:** If the CD is not finalized, it will not play in any other CD player.

## Recording Cassettes to CD

1 Load a compatible blank CD-R or CD-RW into the unit.

2 Press the FUNCTION button (28/58) to set the unit to Phono mode.

3 Load a pre-recorded cassette tape into the cassette player. Make sure to get the cassette to the point in which you want to start the recording.

4 Once the cassette is ready and playing, press the CD RECORD button (6/56) to begin recording.

5 Once the first side of the cassette is finished, press the STOP button (13/77).

6 Eject the cassette tape and flip it over to the other side.

7 Once it begins playing, press the CD RECORD button (5/56) again to resume recording.

8 Once you have finished the recording, press the FINALIZE button (14/55). "FINAL" will show on the display and "Finalize" will flash during the process.

9 Once the CD has been finalized, the display will show "F DONE". The CD is now finalized and ready for use.

   **NOTE:** If the CD is not finalized, it will not play in any other CD player.

## General

1 Make sure the unit is plugged in correctly to an AC outlet.

2 Press the POWER button (17) to turn on the main power. This button should be left pressed in even when the unit is not in use. If the main power is turned off, all preset radio stations will be lost and will have to be reprogrammed.

3 Press the STAND BY button (18/47) to turn on the unit power. This is the power button that should be used to turn the unit on or off.

4 Once the power is turned on, press the FUNCTION button (28/58) to switch between Tuner/CD/Phono/Aux. When switching between functions, wait 1 second after pressing the function button before pressing it again. This gives the unit time to load the correct information for the selected function.

5 While listening to any of the above functions, you may change the tone of the music by pressing the EQ button (27/74). Each press of the EQ button will toggle between the following settings:

```
    ┌──► FLAT ──►POP ──► CLASSIC ─┐
    │                             │
    └─── JAZZ ◄──── ROCK ◄────────┘
```

## Radio Operation

1 Press the FUNCTION button (28/58) to set the unit to Tuner mode

2 Press the BAND button (2/59) to select the desired tuning band (AM/FM).

3 Press the TUNING UP (11/68) or TUNING DOWN button (9/53) to select a station.

4 Adjust the volume to the desired listening level.

## Programming Preset Stations

1 Tune into the station that you want to program into memory.

2 Press the PROGRAM button (20/49), Memory will flash on the LCD.

3 Press the PRESET UP (22/54) or PRESET DOWN (23/52) buttons to select the desired memory location.

4 Press the Program button again to store the station into memory.

5 Once you have the presets stored, you can press the PRESET UP (22/54) or PRESET DOWN (23/52) buttons to select your stored stations.

## Antenna

Antenna: for external FM reception, the unit is provided with a FM ANTENNA WIRE (45), move the wire until the reception is clear and with no interferences. For AM reception, the unit is provided with a directional build-in ferrite antenna. Rotate the set to find the position in which the best reception is obtained.
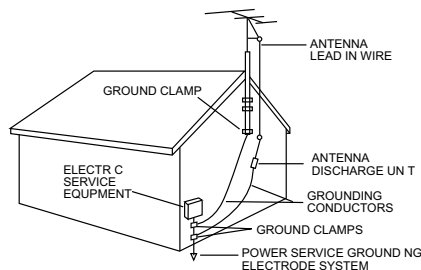
**AM Loop Antenna (44)**     **FM Antenna Wire (45)**

## Outdoor Antenna Grounding

If an outside antenna is connected to the receiver, be sure the antenna system is grounded so as to provide some protection against voltage surges and buit-up static charges. Article 610 of the National Electrical Code, ANSI/NFPA 70, provides information with regard to proper grounding of the mast and supporting conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See figure:

ANTENNA LEAD IN WIRE

GROUND CLAMP

ANTENNA DISCHARGE UN T

ELECTR C SERVICE EQUPMENT

GROUNDING CONDUCTORS

GROUND CLAMPS

POWER SERVICE GROUND NG ELECTRODE SYSTEM
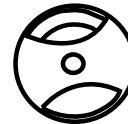
**NOTE:** Please use outside antenna for better reception.

## Turntable Operation

1 Press the FUNCTION button (28/58) to set the unit to Phono mode.

2 Set the SPEED CONTROL SWITCH (35) to the correct speed (331/3, 45 or 78 rpm) for the selected record.

3 Use the CUE LEVER (33) to raise the tone arm off its rest. Move the tone arm over the record and use the cue lever to lower it to the point you want the record to start.

4 At the end of the record, the tone arm will return to its rest.

  **NOTE**: The turntable and the cassette both operate in the same mode. If a cassette is fully inserted into the unit, the record player will not play. To use the record player, make sure the cassette is ejected.

## Accessory: ADAPTER FOR 45 RPM

To play the 45rpm record, place the ADAPTER (46) on the spindle.

## Cassette Operation

1 While in Phono mode, insert a prerecorded tape through the Cassette Door (30).

2 Adjust the volume level by turning the VOLUME KNOB (12).

3 For fast forwarding, press the CASSETTE EJECT/F.F (29) half way in. Pressing again, will stop the fast forwarding and return the cassette to the playing mode.

4 To stop and eject the cassette, press the CASSETTE EJECT/F.F (29) in completely.

5 When one side of the tape finishes playing, the cassette will automatically stop.

  **NOTE**: Remove the tape from the unit when it is not in use or stopped.