LASER SAFETY

This unit employs a laser. Only a qualified service person should remove the cover or attempt to service this device, due to possible eye injury.

"CAUTION—USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURE OTHER THAN SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE."

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

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

WARNING
TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.
Your Compact Digital Audio Disc Player employs ultra-precise manufacturing techniques and sophisticated digital and servo technology to assure you an audio output which is the full equivalent of that at the studio console where the original recording was made. Your listening area will never be the same again!

Please read this instruction manual carefully before using your Compact Digital Audio Disc Player. This player has been manufactured with the greatest of care to ensure trouble-free operation; however, should you encounter any problem, please promptly notify the store where you purchased the machine or your nearest service center.

FEATURES

The compact disc system is a new era for audio systems, which makes the best of state-of-the-art digital techniques.

High-Performance

The FD3040 is extremely superior in performance to the conventional analog audio systems as demonstrated by the following characteristics.

- Frequency range: 4 Hz to 20 kHz
- Dynamic range: 90 dB or greater
- Distortion factor: 0.003%
- Wow and flutter: less than measurable limit
- Channel separation: 90 dB or greater

Our unique, perfectly balanced swing mechanism provides excellent anti-vibration characteristics and immunity against oblique setting.

HIGH QUALITY SOUND

The newly developed digital filter, large-scale power transformer, audio capacitor and other high grade parts enable the conversion of all the information recorded on the disc into high quality sound.

VARIETY OF FUNCTIONS

Each audio disc contains various information other than music (e.g. selection numbers, length of each selection, etc.) and the FD3040 reads this information to provide many useful functions.

- Random access programming
  Any number of selections (up to 24) can be automatically played in the desired order using the random access programming function.

- Delete programming
  Any selections can be skipped automatically by using the delete programming function.

- All play
  Of course, all selections can be played in the recorded order.

- Search scan
  When the SEARCH button is pressed, the beginning of each selection recorded on the disc is automatically played for 10 seconds.

- Tune selection with Index No.
  The FD3040 enables you to select tunes by their Index Numbers.

- Tune selection with time specification
  Tune selection by specifying time is also possible even during play.

- Quick tune selection
  When the music No. is specified, play starts promptly from the beginning of the specified tune.

- Skip feature
  By pressing the NEXT button during play you can skip selections. The number of selections skipped corresponds to the numbers of times the button is pressed and play starts from the beginning of the selected tune.

- Back skip feature
  When the BACK button is pressed once during play, the unit enters pause mode at the beginning of the current selection. When the button is pressed twice, the unit returns to the beginning of the previous selection and enters pause mode. This feature is useful for recording.

- Repeat feature
  Either all or selected selections can be played repeatedly.

- A-B repeat feature
  When the beginning and end of the section to be played repeatedly is specified, the section can be played repeatedly.

- Music standby feature
  With this feature, the unit pauses at the beginning of the specified selection. This feature is useful for recording.

- Easy-to-read display
  The display shows program and operation status, elapsed time for playing each selection, time remaining to complete the program.

REMOVING SHIPPING SCREWS

Two shipping screws have been set at the factory before shipping. Be sure to remove them as shown below. Keep these screws because they will be required when the unit is transported. Use a screwdriver to remove these screws.

CAUTION:
Operating the unit before removing these shipping screws may damage the unit.

DISCS

Note how the surface of discs gleam with all the colors of the rainbow. This is because of light diffraction caused by the discs' micron-size tracks. The FD3040 Compact Disc Player uses a beam of laser light to read audio information from these tracks; thus, the discs are never subjected to stylus wear as is the case with conventional record players.

- Handle discs carefully to avoid scratching their surface.

- Keep the surface of discs clean.
  This is important, because there may be as many as 15 billion bits of information recorded on their surface and excessive dust can result in intermittent interruption of sound. Remove ordinary dust and fingerprints by breathing on the disc and wiping it gently with a clean cotton handkerchief or gauze.

- To maintain the quality of your discs, avoid placing them in locations such as the following.

  - Locations which are exposed to direct sunlight or heat (such as radiators)
  - Locations with high concentrations of dust or humidity
  - Places which may be exposed to water, such as near windows

- Place your discs in their protective cases when they are not in use.
ABOUT THIS MANUAL

Refer to the figures given on page 3 and 4. The callout numbers correspond to those found in this manual. All references to the connections and controls are printed in BOLDFACE, hold type as they appear on the unit.

REAR PANEL CONNECTIONS

All connections to the rear panel should be made with the power to the entire system turned off. To avoid confusion, connect one cable at a time between the different components of your system. This is the safest way to avoid cross-connecting channels or confusing signal inputs with outputs.

1. POWER SWITCH

Pressing this switch once turns power on. Pressing it again turns the power off.

2. PROGRAM KEYS (1-0)

Used to specify the music No. or time, etc.

3. MEMORY BUTTON

This button makes the computer memorize the selection number set by the PROGRAM keys.

4. CANCEL BUTTON

This button cancels the selection number set by the PROGRAM keys.

5. INDEX BUTTON

Some discs have an index No. With the INDEX button, play from a certain section in a tune is possible.

6. LAP/REMAIN BUTTON

This button is used to switch the time display (LAP TIME/REMAIN TIME) between the REMAIN and LAP time.

7. TIME AND MINUTE BUTTONS

Used for time selection. See page 7 for further details.

8. OPEN/CLOSE BUTTON

Press this button to open the disc tray. Press it again to close it.

9. BACK BUTTON

When this button is pressed once during playback, the unit enters pause mode at the beginning of the current tune. When the button is pressed again, the mode remains the same but at the beginning of the previous tune.

10. REW BUTTON (Reverse)

Keeping this button pressed causes the laser pickup to move toward the beginning of the disc from the selection which is currently being played.

11. FF BUTTON (Fast Forward)

Keeping this button pressed causes the laser pickup to move toward the end of the disc from the selection which is currently being played.

12. NEXT BUTTON

Used to start play from the next or preceding tune.

13. MUSIC/STANDBY BUTTON

When the NEXT button is pressed with this button pressed, the unit enters standby mode at the beginning of the next tune. To release standby mode, press the PAUSE or PLAY button.

14. PAUSE BUTTON

When this button is pressed during playback, the player stops at the point at which the button is pressed. Pressing the button again causes playback to resume at the point at which it was interrupted.

15. PLAY BUTTON

Press this button to start play.

16. STOP BUTTON

This button is used to stop the play and to rotate the disc. It is also used to cancel a program.

17. SEARCH BUTTON

Used to play the beginning of all the tunes on the disc for 10 seconds each. When the SEARCH button is pressed during auto music scan, normal play starts where the button is pressed.

18. REPEAT BUTTON

Pressing this button makes it possible to repeat all selections. Pressing it again cancels the repeat operation.
**A-B BUTTON AND CLEAR BUTTON**

Used to repeat the required section (from A to B) on the disc. To release A-B repeat, press the CLEAR button.

**INDICATORS and DISPLAYS**

**A MUSIC NO. INDICATOR**

The indicator shows the selection numbers to be played. After a selection has been played, the corresponding number disappears from the display but, if the function is on, the number does not disappear.

**TIME DISPLAY (LAP TIME/REMAIN TIME)**

This indicator normally shows the time (minutes and seconds) elapsed after the current selection has been started. This time is referred to as the LAP time. Pressing the LAP/REMAIN button makes this indicator display the time required for completing play. This time is referred to as the REMAIN time.

**INDEX NUMBER INDICATOR**

Indicates the music number currently being played or programmed.

**FUNCTION INDICATORS**

**PLAY** : Lights during playback.

**REPEAT** : Lights when the repeat function is activated.

**SEARCH** : Lights during auto music or index scanning.

**READY** : Play and programming are possible only when this indicator is lit. This indicator flashes immediately after the disc is loaded, and the built-in microprocessor reads the information stored on the disc.

**PAUSE** : Lights during pause.

**A>B** : Flashes when A point is set. When B point is set, the unit enters A-B repeat mode and the indicator lights. When the CLEAR button is pressed, the A-B repeat mode is released and the indicator goes off.

**STANDBY**: Lights when the STANDBY button is pressed, and goes out when the button is pressed again.

**ERROR** : Flashes for a moment if the number of selections exceeds 24. The selection numbers entered after this indicator has flashed are ignored. This indicator also flashes if the disc is set upside down or if there is a significant scratch on the disc.

**REMOTE SENSOR**

Lights red for a moment when the infrared ray signal of the optional remote controller is received. For details, refer to page 10.

**PHONES JACK**

Plug the headphones into this jack.

**OUTPUT LEVEL CONTROLS**

Audio output voltage can be adjusted between 0 to 2.0 V with these controls. To lower the output voltage, turn the controls counterclockwise.

**OUTPUT JACKS (CD OUTPUT)**

Plug the RCA plug cable provided into these jacks and connect the other end of the cable to the CD or AUX jacks of your amplifier. Be sure not to connect to the PHONO jacks.

**AFS (AUTO FUNCTION SELECT) BUS JACK**

Using the green bus cable, connect stereo components equipped with AFS bus jack to this jack. Pay attention to the color of the jacks when connecting the AFS bus cable. Connecting it to a jack other than the specified one may result in problems. The Auto Function Select bus acts as a remote source selector for the amplifier. Therefore, you need not operate the source selector of the amplifier when you change and use source programs such as the tape and tuner.

**REMOTE CONT. BUS JACK**

Used only for the system remote control. Connect the remote control bus cable (orange) provided to this jack and the other end of the cable to the remote control bus jack (orange) of the other unit. Never connect this jack to any other than an orange jack.

**FUSE REPLACEMENT**

If the fuse blows, find establish the cause, and replace it with another one of the same type and value. Use of a fuse having a higher value than that specified will not provide adequate protection for the amp and will render the warranty invalid. Be sure to unplug the unit from the wall socket before changing the fuse.

**AC POWER CORD**

The correct power for operating your system is written on the rear panel. Be sure the POWER switch is off before plugging the AC line cord into an electrical outlet.
OPERATING PROCEDURES

NORMAL PLAY

1. Set the POWER switch to ON.
2. Press the OPEN/CLOSE button. The disc tray comes out.
   Place a compact disc on the disc tray with the label surface upward.
3. Press the OPEN/CLOSE button. The disc tray returns and the READY indicator flashes.
4. When the READY indicator lights, the total time of the disc is displayed and the total number of the selections is displayed in the MUSIC NO. indicator.
   This condition is referred to as play standby mode.
5. Press the PLAY button. Playback starts from the first selection of the disc. When playback starts, the time display changes from REMAIN TIME to LAP TIME and the MUSIC NO. indicator of the selection being played flashes. The MNR and INDEX indicators show the music No. and index No. of the selection being played.
6. When playback of the last selection is completed, the unit enters play standby mode. When the PLAY button is pressed again, playback starts from the beginning of the first selection.

AUTO PLAY

Place a side on the tray and press the PLAY button. The tray is automatically drawn and the playback starts from the beginning of the first tune.

TO STOP PLAY DURING PLAYBACK

TO STOP PLAY

1. Press the STOP button.
2. The unit enters play standby mode.
3. When the PLAY button is pressed again, play starts from the beginning of the first selection.

TO UNLOAD THE DISC

1. Press the OPEN/CLOSE button.
2. The play stops and the disc tray comes out.

TO STOP PLAY TEMPORARILY

1. Press the PAUSE button.
2. The PAUSE indicator lights and the unit enters pause mode.
3. To release the pause mode, press the PAUSE button again or press the PLAY button. Play starts from the point at which the unit entered the pause mode.

TO SELECT NEXT OR PREVIOUS TUNE DURING PLAY

TO SELECT NEXT TUNE

1. Press the NEXT button during play. Each time the NEXT button is pressed, the MNR indicator increases by one and the flashing MUSIC NO. indicator goes off in turn. After a while, play starts from the beginning of the selected tune.
2. When playing a compact disc with index Nos., play can be shifted to the next index No. section of the same tune. For this operation, press the INDEX button once and the NEXT button once.

TO PLAY FROM THE PREVIOUS SECTION OR THE BEGINNING OF THE PREVIOUS SELECTION

1. Press the BACK button during play. When the button is pressed once, the unit enters pause mode at the beginning of the current selection. To release the pause mode, press the PAUSE button again or press the PLAY button.
2. When the BACK button is pressed twice or more, the MNR indicator decreases and the flashing MUSIC NO. indicator lights in turn. When the MNR indicator reaches the specified music No., the PAUSE indicator lights and the unit enters pause mode.
3. When playing a compact disc with index Nos., play can be started from the beginning of the specified index section of the same selection. For this operation, press the INDEX button once and the BACK button once. After a while, the PAUSE indicator lights and the unit enters pause mode. At this time, the INDEX indicator remains off.

TO REPEAT PLAY

Press the REPEAT button. The REPEAT indicator lights to show that the unit is in repeat mode and play is repeated. To release the repeat mode, press the REPEAT button again. The REPEAT indicator goes off.

TUNE SELECTIONS

With the FD3040, the tune can be selected as follows.

- Random access programming
  1. Load a compact disc referring to "NORMAL PLAY".
  2. When the READY indicator lights and the total time is displayed, the unit enters play standby mode and programming is possible.
  3. Specify the music No. of the required selection with the PROGRAM keys.
     The MNR indicator shows the specified No. and the same number of the MUSIC NO. indicator flashes.
     To select third tune

     | READY | TIME | MNR | INDEX |
     |-------|------|-----|-------|
     | 3:51  | 1    | 3   | 1     |

     4. Press the MEMORY button. The selected tune is programmed. At this time, the MUSIC NO. indicator, except the programmed one, goes off.

     | READY | TIME | MNR | INDEX |
     |-------|------|-----|-------|
     | 3:51  | 1    | 3   | 1     |

     The LAP/REMAIN indicator shows the play time of the programmed selection.

Repeat the above procedures for other selections.

5. When programming is completed, press the PLAY button. Play will begin in the order of programming.

* If more than 24 selections are programmed, the ERROR indicator flashes each time the MEMORY button is pressed and selection storing is not possible.
TO CHANGE THE PROGRAMMING

With random access programming, up to 24 selections can be programmed. If the selection is erroneously programmed or to change the programming, specify the music No. of the selection to be erased with PROGRAM keys and press the CANCEL button.

The MUSIC NO. indicator goes off, the LAP/REMAIN indicator flashes and the specified selection is erased.

- To erase the seventh selection from the 6 selection programming with a total play time of 29 min 14 sec

Before erasing

At this time, the total play time indicated in the LAP/REMAIN indicator decreases to show that the selection is erased.

After programming is changed

To add a program during play

With the random access programming, a program can be added during play.

With the PROGRAM keys, MEMORY button and CANCEL button, the programming can be completely changed.

Delete play programming

1. Load a compact disc referring to "NORMAL PLAY".
2. When the ready indicator lights and the total time is displayed, the unit enters play standby mode and programming is possible.
3. Specify the music No. which is not to be programmed with PROGRAM keys. The MNR indicator shows the specified No. and the same number of the MUSIC NO. indicator flashes.

When a disc has 13 selections with a total play time of 59 min 12 sec

To delete second selection

Press 2.

The music No. is displayed.

Flashes.

Music No. to be erased.

5. Repeat the above procedures for other selections and make the programming required.
6. This procedure can be carried out during play.
OTHER TUNE SELECTIONS

QUICK SELECTION

1. Quick selection with search feature
   With the search feature, the beginning of each selection recorded on the compact disc can be played for 10 seconds. When the required selection is found, start play.
2. Time program selection
   By setting the music No. and start time play can be started from the required point.
3. Index No. selection
   By setting the index No., the playback can be started from the desired section of the tune.
4. Skip play
   With this feature, the selection which is not desired can be skipped.

The above selections can be carried out only when the unit is in play mode or play standby mode. When random access programming or delete play programming is specified, the above selections are not possible.

Search feature and operation

1. When the SEARCH button is pressed, the beginnings of all the selections recorded on the compact disc are played for about 10 seconds. When the required selection is found, press the PLAY button. The SEARCH feature is released and the unit enters play mode.

   Plays for 10 seconds.

2. When the unit is in normal play mode, pressing the PLAY button will put the unit in search mode.
   During search, the SEARCH, LAP TIME, MNR and MUSIC NO. indicators are displayed.

When the required tune is the 6th and the time is 58 min 42 sec

   Lights.

   Flashes.

3. When the compact disc has index Nos., pressing the INDEX button and then the SEARCH button will effect SEARCH of the index sections.

   Plays for 10 seconds.

   Flashes when the PLAY button is pressed.

4. Press the PLAY button. Play starts from the specified point.
   * The A < D > B indicator flashes. This means that point A of the A-B repeat play is specified. For details, refer to "A-B REPEAT PLAY".
   * Make a habit of noting the start time of your favorite section for this play.

Time program selection

1. By programming the music No. and the start time, play can be started from the specified point.
2. Set the unit to play standby mode.
3. When the second selection with a start time of 3 min 45 sec is to be played, proceed as follows.

   ① Press the PROGRAM key.
   ② Press the TIME button.
   ③ Press the PROGRAM key and MNR button.
   ④ Press the PROGRAM and keys.
   ⑤ Press the MEMO button.

With the above procedures, program selection is completed.
**Tune selection with index No.**

1. By setting the music number and index number, the play can be started from the desired index No. section.

2. Set the music and index numbers in the stop mode specified in "NORMAL PLAY" on page 6.

3. For example, to start play from the section with music No. of 3 and index No. of 2, proceed as follows.

   1. Press PROGRAM \( \text{No. 3} \) key is displayed in MNR and MUSIC NO. 3 flashes.

   2. Press the INDEX button.

   3. Press PROGRAM \( \text{No. 2} \) key. The INDEX NO. 2 lights.

   4. Press PLAY button. The play starts from the specified section.

**Skip play**

1. Set skip play mode in play standby mode.

2. To start play from the 5th selection, press the PROGRAM 5 key, then the PLAY button. The selections from 1st to 4th are skipped and play starts from the beginning of the 5th selection through to the last selection.

To start play from the 5th selection of a compact disc which has 9 selection of 50 min 55 sec

**A-B REPEAT PLAY**

With this feature, a particular section can be played repeatedly.

1. When play reaches the point at which repeat play should start, press the A \(<\) \(B \) button. The A \(<\) \(B \) indicator flashes to indicate the start point is specified.

2. When play reaches the point at which repeat play should finish, press the A \(<\) \(B \) button. The A \(<\) \(B \) indicator lights to indicate A-B repeat play is specified. The unit immediately returns to the start point and plays the specified section repeatedly.

3. To release A-B repeat play, press the CLEAR button.

* A-B repeat play can be set when the unit is in normal play mode (excluding quick selection play) and cannot be set in random access programming or delete play programming.

**CLEARING THE ENTIRE MEMORY**

The entire memory is cleared when the STOP button is pressed or the OPEN/CLOSE button is set to the OUT position to open the drawer. Therefore, when a disc is replaced, the program stored in memory is automatically canceled.

**REPEAT FUNCTION**

All programmed selections can be repeated any number of times by pressing the REPEAT button. The REPEAT indicator lights when this function is operating. Press the REPEAT button again to reset this function.

**MUSIC STANDBY FEATURE**

When the MUSIC/STANDBY button is pressed, the STANDBY indicator lights and the unit enters music standby mode. In this mode, the unit enters pause mode after tune selection.

To release music standby mode, press the MUSIC/STANDBY button again.

* In music standby mode, the unit enters pause mode each time the selection ends. Use this mode only when required and do not forget to release the mode after operation.
To carry out music standby on the 5th selection of an 8 selection compact disc

Press the button, then the PROGRAM key.

When the PLAY button is pressed, the PAUSE indicator lights when the unit reaches the beginning of the 5th selection.

Press the PLAY or PAUSE button to start play.

TIME DISPLAY

When the power switch is turned on, the TIME display first displays the time required for playing all selections contained in the disc. After you have programmed, the time required for playing all selections programmed is displayed.

When the PLAY button is pressed, the display indicates the time elapsed since the current selection has started. The indication is 0:00 at the beginning of each selection. The indication is preceded by the minus (-) sign (e.g., -0:02, -0:01) at an interselection gap so that you can know when the next selection starts.

Pressing the REMAIN/LAP button displays the time required for the player to complete all the remaining selections. The indication is preceded by the minus (-) sign (e.g., -45:03).

Pressing the REMAIN/LAP button returns the display to the elapsed time.

* A disc containing 8 selections (42 minutes) is used for explanation below.

1. The total time of selections is displayed when the information of the disc is read.

2. After programming is completed, the total time of the selections programmed is displayed.

3. Play starts when the PLAY button is pressed, and the TIME display switches to the elapsed time.

4. The TIME display becomes 0:00 at the beginning of each selection. The indication precedes the indication at an interselection gap (e.g., 0:02, 0:01).

5. To check the time required for finishing the program, press the REMAIN/LAP button. The remaining time is displayed as 28:03.

6. The elapsed time is displayed when the REMAIN/LAP button is pressed again.
REMOTE CONTROL FEATURE

Two remote control systems are available for the FD3040
1. Infrared remote control MRR061
2. System remote control

1. REMOTE CONTROL ON/OFF/LOCK SWITCH
To activate the remote controller, set this switch to ON.

2. SEND INDICATOR
LED lights when any of the various buttons on the remote control unit is pressed.

3. INFRARED EMITTER WINDOW
The infrared signal is emitted from this window.

4. BACK BUTTON
When this button is pressed during play, the unit returns to the beginning of the current selection and enters pause mode. When the button is pressed again, the unit enters pause mode at the beginning of the previous selection.

5. NEXT BUTTON
When this button is pressed once during play, play starts from the beginning of the next selection.
When the button is pressed repeatedly, the selections are skipped according to the number of times the button is pressed.

6. REPEAT BUTTON
When this button is pressed, the unit enters repeat play mode. To release repeat play mode, press the button again.

7. SEARCH BUTTON
When this button is pressed, the beginnings of all the selections recorded on the compact disc are played for 10 seconds. When the PLAY button is pressed in auto music scan mode, the unit enters normal play mode.

8. PAUSE BUTTON
When this button is pressed during play, the unit enters pause mode. When the button is pressed again or the PLAY button is pressed, play starts at the point at which the unit enters pause mode.

9. PLAY BUTTON
Press to start play.

10. MUSIC/STANDBY BUTTON
When this button is pressed, it comes to the pause condition at the head of the tune to be played. Press once more, and it will be released.

11. STOP BUTTON
Used to stop play. The disc stops and the program is erased.

Range of operations for the remote control unit
The range of operation for the remote control unit is approximately 5 m from the infra-red receptor of the FD3040.
Normal operations will not be possible if the remote control unit is not pointed at the receptor or if there is anything between the remote control and the FD3040 main unit.

Inserting the batteries
The batteries of this remote control unit should last 1 year under normal operating conditions. Remove the batteries if the remote control unit is not going to be used for a long period of time. Replace weak batteries as soon as possible.

1. Remove the cover.

2. Insert the batteries with + and – correctly oriented.

3. Secure the cover by snapping it back into place.
IN CASE OF DIFFICULTY

If you experience any difficulty, check the following before contacting your dealer or the nearest service station.

DISC DOES NOT ROTATE

1. Make sure that the power cord is properly connected.
2. Confirm that the POWER switch is on.
3. Confirm that the drawer is in place.
4. Check that the transport screws have been removed.
5. Confirm that the disc has been loaded with the label side up.

DISC ROTATES BUT NO SOUND IS HEARD

1. Check connections between the disc player, amplifier and speakers.
2. Confirm that the amplifier POWER switch is ON.
3. Check the volume control setting of the amplifier.
4. Confirm that the source selector of the amplifier is set to CD or to the position to which the FD3040 is connected.

SOUND IS INTERRUPTED INTERMITTENTLY

1. Check dirt on the disc.
2. Check the disc for large scratches.
3. Check the disc for warp.

CAUTION

In winter, the windows in a heated room collect moisture or drops of water. This phenomenon is called dew condensation. The optical lens of a CD player may have dew condensation in the following conditions.
• Immediately after a heating system is switched on
• In a moist room
• When brought from a cold place into a heated room

In these conditions, wait about 30 minutes before use, because the CD player may not operate correctly or the music number may not be read correctly.

If the CD player causes electric wave interruption to turners or TVs, keep the CD player, turners or TVs away from each other.

Compared with analogue records, the residual noise of a compact disc is very low. Be careful to start playback with the volume control of the amplifier set to the optimum position. Excessive volume control setting may damage the speakers.

TECHNICAL SPECIFICATIONS

AUDIO PERFORMANCE

Number of Channels ........................................... 2
Frequency Response ........................................... 4 Hz - 20 kHz
Dynamic Range ................................................. > 90 dB
Signal-to-Noise Ratio ......................................... > 90 dB
Total Harmonic Distortion (incl. noise) ..................... 0.003 %
Wow and Flutter ............................................... unmeasurable
D/A Conversion ............................................... 16 bit with digital filtering
Error Correction System ...................................... Cross Interleave Solomon Code (CIRC)
Audio Output Level ........................................... 2 V rms

OPTICAL READOUT SYSTEM

Laser .................................................. semi-conductor AlGaAs
Wavelength .................................................. 0.78 µm

SIGNAL FORMAT

Sampling Frequency ........................................... 44.1 kHz
Quantization .................................................. 16 bit linear/channel

DISC

Diameter .................................................. 4-3/4" (120 mm)
Thickness .................................................. 1/20" (1.2 mm)
Direction of Rotation (seen from reading side) ........... counter-clockwise
Scanning Velocity .......................................... 1.2 - 1.4 m/s
Rotation Speed ........................................... 500 - 200 rpm
Playing Time (maximum) ................................... 60 min (stereo)
Track Pitch .................................................. 1.6 µm
Material .................................................. plastic

CABINET, GENERAL

Dimensions (with drawer closed)
Panel Width .................................................. 16-17/32" (420 mm)
Panel Height .................................................. 3-11/32" (85 mm)
Depth ..................................................... 11-13/16" (300 mm)
Weight ................................................... 17.6 lbs. (8.0 kg)
SAFETY INSTRUCTION
READ BEFORE OPERATING EQUIPMENT

This product was designed and manufactured to meet strict quality and safety standards. There are, however, some installation and operation precautions which you should be particularly aware of.

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. Head 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. Water and Moisture — The appliance should not be used near water-for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc.
6. Carts and Stands — The appliance should be used only with a cart or stand that is recommended by the manufacturer.
7. Wall or Ceiling Mounting — The appliance should be mounted to a wall or ceiling only as recommended by the manufacturer.
8. Ventilation — The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings; or, placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.
9. Heat — The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.
10. Power Sources — The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.
11. Grounding or Polarization — The precautions that should be taken so that the grounding or polarization means of an appliance is not defeated.
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 appliance.
13. Cleaning — The appliance should be cleaned only as recommended by the manufacturer.
14. Power Lines — An outdoor antenna should be located away from power lines.
15. 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 built up static charges. Section 810 of the National Electrical Code, ANSI/NFPA No. 70-1981, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See Fig. 1.

16. Nonuse Periods — The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.
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.
18. Damage Requiring Service — The appliance should be serviced by qualified service personnel when:
   A. The power-supply cord or the plug has been damaged; or
   B. Objects have fallen, or liquid has spilled into the appliance; or
   C. The appliance has been exposed to rain; or
   D. The appliance does not appear to operate normally or exhibits a marked change in performance; or
   E. The appliance has been dropped, or the enclosure damaged.
19. Servicing — The user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

![Diagram of Lightning Arrestor Installation](Fig. 1. Typical Installation for Lightning Arrestor)

- A) Use No. 10 AWG (5.3 mm²) copper or No. 8 AWG (8.4 mm²) aluminum or No. 17 AWG (1.0mm²) copper clad steel or bronze wire, or larger as ground wires for both mast and lead-in.
- B) Secure lead-in wire from antenna to lightning arrestor and mast ground wire to house with stand-off insulators, spaced from 4 feet (1.22 meters) to 6 feet (1.83 meters) apart.
- C) Mount lightning arrestor as closely as possible to where lead-in enters house.
LIMITED WARRANTY
MAGNAVOX Component Audio

Thank you for selecting a Magnavox Component Audio Unit. Please read carefully the Operating Instructions furnished with this product. We believe that you will be very satisfied with your purchase and provide the following warranty to you, as the original purchaser.

WHAT N.A.P. WILL DO

SERVICE LABOR — For the first 12 months from date of purchase, an N.A.P. Authorized Service Center will repair any product defect and replace any defective part without charge to you for parts or labor.

REPLACEMENT PARTS — For the first 12 months from date of purchase, an Authorized Service Center will supply you with a new or at our option, remanufactured part for any part found to be defective without charge to you for the part. Replacement parts are warranted only for the balance of the original warranty period.

WARRANTY COVERAGE — This warranty is extended to the original retail purchaser for products purchased within the United States. It does not apply to products used in commercial applications and covers defects in workmanship and materials only. It does not cover damage resulting from owner misuse or abuse, and all other failures not attributable to manufacturing defects.

IMPORTANT

This warranty gives you specific legal rights, and you may also have other rights that vary from state to state. If at any time during the warranty period your dealer or his servicer is unable to make a satisfactory repair on this product, please contact the nearest NAPCEC Consumer Affairs office identified on this page.

WHAT THE PURCHASER MUST DO

BEFORE CALLING FOR SERVICE — Read and become familiar with the instructions for connection of your unit and adjustment of the customer controls described in your instruction book. Your warranty does not cover labor charges for installation or adjustment of customer controls.

TO OBTAIN WARRANTY SERVICE — If you have determined that service is required during the warranty period, you must take your player to the dealer from which you purchased it or an Authorized Service Center and pick it up after completion of service.

PROVIDE PROOF OF PURCHASE — You must provide proof of the date on which the product was first purchased (sales receipt or other evidence) when requesting service or replacement of parts under warranty.

IMPORTANT REMINDER

Please fill out your Warranty Registration Card and mail it to N.A.P. Consumer Electronics Corp. promptly. It will be easier for us to notify you if it should ever be required. Return of the Warranty Registration Card is not a condition to warranty coverage.

CONSUMER AFFAIRS

All dealers offer repair service through their own service departments or through one or more nearby NAPCEC Authorized Service Centers. Although it is expected that needed repair service will be furnished on request by the Dealer’s service organization, situations which he may not resolve to the owner’s satisfaction should be reported to the nearest NAPCEC Area Service Office for investigation and follow-up.

Call or write to NAPCEC, Consumer Affairs Manager, at —

N.A.P. CONSUMER ELECTRONICS CORP.
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