

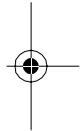
Cat. No.14-547

OWNER'S MANUAL

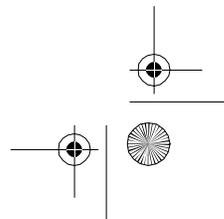
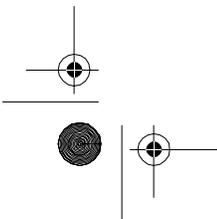
Please read before using this equipment.

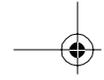


Portable Triple Play
Compact Disc Player
with AM/FM Stereo
Cassette Recorder



OPTIMUS®





FEATURES

Your Optimus CD-3322 Portable Triple Play Compact Disc Player with AM/FM Stereo Cassette Recorder is a compact, portable, all-in-one music system. It lets you listen to your favorite CDs, AM and FM radio stations, or pre-recorded cassette tapes, and record onto a cassette tape from a CD or the radio. You can take the CD-3322 with you almost anywhere — indoors or out, at work or play.

CD PLAYER FEATURES

Automatic Search Music System (ASMS) — lets you quickly locate and play any track on a CD.

Audible Search — helps you locate a particular section of a CD by rapidly playing it in either direction.

Direct Track Selection — lets you select and play any track on a CD by simply pressing the track number on the remote control.

Programmable Play — lets you program and play up to 20 tracks in any order.

Random Play — lets you set the system to automatically play a CD's tracks in random order.

INTRO (Introduction) Scanning — lets you review the first 10 seconds of each

track on a CD, so you can easily find a track you want to listen to.

Repeat Play — lets you automatically repeat a single track, all tracks on the CD, or a programmed sequence of tracks.

3- or 5-Inch CD Compatible — lets you play either 3- or 5-inch CDs on the system.

CASSETTE DECK FEATURES

Multiple Source Recording — lets you record onto a cassette tape from the CD player or radio.

Automatic Level Control (ALC) — automatically adjusts the recording level.

Auto-Stop — to protect the tape and tape-handling parts, automatically stops the cassette tape when it reaches the end.

Soft Cassette Tape Eject — slowly opens the cassette compartment door so the tape does not pop out.

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OTHER SPECIAL FEATURES

Memory Tuning — lets you store and easily select up to 20 of your favorite AM and FM radio stations (10 AM and 10 FM).

Remote Control — lets you control most of the system's functions from a distance.

Liquid Crystal Display — clearly displays your system's indicators for easy viewing in almost any lighting condition.

Bass Boost Control — boosts low tones for an emphasized bass sound.

Four Preset Equalizer Settings — at the press of a button, provide you with common sound settings for enhancing rock, jazz, classical, or vocal (like acappella or opera) music.

Three Power Options — let you power your system from internal batteries (not supplied), AC power, or your vehicle's cigarette lighter socket (using an optional DC-to-AC inverter).

Note: The remote control requires two AAA batteries (not supplied) for power.

Read this manual carefully. It will help you get the most enjoyment from your CD-3322.

We recommend you record your system's serial number here. The number is on the bottom of the CD-3322.

Serial Number _____

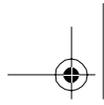
Warning: This CD player employs a laser light beam. Only a qualified service person should remove the cover or attempt to service this device, due to possible eye injury.

Warning: To prevent fire or shock hazard, do not expose this product to rain or moisture.

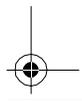
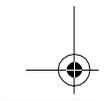
	 RISK OF ELECTRIC SHOCK. DO NOT OPEN.	
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER OR BACK. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED PERSONNEL.		

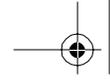


This symbol is intended to alert you to the presence of uninsulated dangerous voltage within the product's enclosure that might be of sufficient magnitude to constitute a risk of electric shock. Do not open the product's case.



This symbol is intended to inform you that important operating and maintenance instructions are included in the literature accompanying this product.

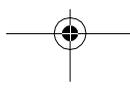




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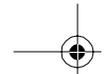
Specifications 33

- Most CDs that can be played on this player have this mark on them:



- Most material on compact discs and prerecorded tapes is copyrighted. Unauthorized duplication of copyrighted material is a violation of the copyright laws of most countries and such duplication may result in fines and/or imprisonment. Note, however, that in the United States, it is not a violation of U.S. copyright laws for a consumer to use an audio recording device to duplicate musical recordings for noncommercial (personal) use.

Notes:



Connecting Power



You can power the CD-3322 from any of these power sources:

- Internal battery power, using eight D batteries and two AA batteries (not supplied — see “Using Batteries”)
- AC power, using the supplied AC power cord and a standard AC outlet (see “Using AC Power” on Page 8)
- Your vehicle's cigarette lighter socket, using an optional DC-to-AC inverter (see “Using Vehicle Battery Power” on Page 8)

illustration

2. Put the AA then the D batteries in the compartment (on top of the attached ribbon) as indicated by the polarity symbols (+ and -) marked inside.

Caution: Do not mix old and new batteries, different types of batteries (standard, alkaline, or rechargeable), or rechargeable batteries of different capacities.

illustration

Using Batteries

You can power your CD-3322 with eight D batteries (for normal operation) and two AA batteries (for memory backup). For the best results, we recommend alkaline batteries, such as RadioShack Cat. No. 23-550 (D cells) and 23-552/557 (AA cells).

Caution: Only use fresh batteries of the required size and type.

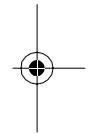
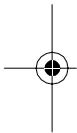
Follow these steps to install batteries.

1. Press down and pull out on the tabs at the top of the battery compartment to remove the cover.

3. Replace the cover.

Notes:

- If you do not plan to use the CD-3322 with batteries for a week or more, or if you plan to use only AC or vehicle battery power, remove the D batteries.
- To save any radio stations stored in memory in case power is disconnected or interrupted, always leave the AA batteries installed.
- If the sound weakens or distorts, or the CD-3322 does not operate properly, replace the D batteries.





- Replace the AA batteries about every 6 months, or more often if power is frequently disconnected or interrupted.
- To easily remove the batteries, pull up on the attached ribbon.

Caution: Always dispose of old batteries promptly and properly.

Using AC Power

To use AC power, plug the supplied power cord into AC INPUT on the back of the system, then plug the other end into a standard AC outlet.

illustration

Caution: Your system's power cord has a polarized plug (one blade is wider than the other). If you have difficulty inserting the plug into the outlet, do not force it! Turn the plug over and try again.

Notes:

- Always plug the power cord into the CD-3322 before you plug it into the AC outlet. Always unplug the power cord from the outlet before you unplug it from the CD-3322.

- Connecting the power cord to the CD-3322 automatically disconnects the internal D batteries.

Using Vehicle Battery Power

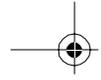
You can power the CD-3322 from your vehicle's cigarette lighter socket by converting your vehicle's DC power to 115V AC using an optional DC-to-AC inverter, such as RadioShack Cat. No. 22-132.

Follow the instructions included with the inverter to connect it to your vehicle's cigarette lighter socket. Then plug the CD-3322's power cord into AC INPUT and plug the other end into the AC outlet on the inverter.

Caution: Always plug the power cord into the CD-3322 before you plug it into the inverter. Always unplug the power cord from the inverter before you unplug it from the CD-3322.

Note: If the CD-3322 hums when you turn it off while using vehicle battery power, this is not a malfunction. Simply unplug the inverter from your vehicle's cigarette-lighter socket.





Installing Batteries in the Remote Control

The remote control requires two AAA batteries (not supplied) for power. For the best performance and longest life, we recommend alkaline batteries, such as RadioShack Cat. No. 23-555.

Caution: Always use fresh batteries of the required size and type.

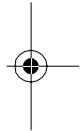
1. To open the battery compartment cover, slide the cover in the direction of the arrow, then lift the cover away from the compartment.

- If you will not be using the remote control for a month or more, remove the batteries.
- To easily remove the batteries, pull up on the attached ribbon.
- You can use the remote control up to a distance of about 16 feet (5 meters), from an angle of up to 30° in front of the CD-3322. If it does not operate properly within this range, replace the remote control's batteries.

illustration



illustration



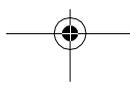
Caution: Always dispose of old batteries promptly and properly.

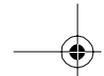
2. Insert the batteries into the compartment (on top of the attached ribbon) according to the polarity symbols (+ and -) marked inside.

illustration

3. Replace the cover.

Notes:





Basic Operation



Important: After receiving a static electric shock, the CD-3322 might lock up and become inoperable. If this happens, see "Resetting the System" on Page 32 for instructions on resetting it.

POWER indicator is off (see "Using the Remote Control to Turn Power On/Off" on Page 11).

Using the Remote Control

Turning Power On/Off

To use the remote control, be sure that its front end is pointing with a clear path toward REMOTE SENSOR on the front of the CD-3322, then press the desired button(s).

Turning On/Off Main Power

To turn on the CD-3322's main power for normal or remote control operation, press POWER on top of the system. The POWER indicator turns on.

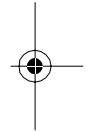
illustration

illustration



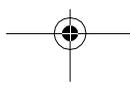
Caution: Exposing the remote control or REMOTE SENSOR to direct sunlight or strong lights, such as a spotlight, will reduce the remote control's operating distance and can make it inoperative.

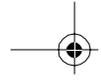
To turn off the main power (if you will not be using the remote control), press POWER again so the POWER indicator turns off.



Notes:

- Several control buttons on both the system and the remote control operate the same function.
- You cannot operate the tape deck using the remote control (see "Cassette Deck Operation" on Page 25).
- You cannot operate the CD-3322 using the remote control if the





Using the Remote Control to Turn Power On/Off

While the main power is on (the POWER indicator is on), you can press POWER on the remote control to turn the CD-3322 on or off.

Notes:

- To turn off the sound temporarily, press MUTE on the remote control. The MUTE indicator on the system turns on. To resume listening, press MUTE again so the indicator turns off.

illustration

illustration

Note: When you turn off the system using the remote control, the POWER indicator stays on.

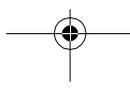
Setting the Sound

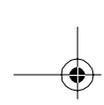
Adjusting the Volume

To increase or decrease the system's volume, press VOLUME UP or DOWN, or VOLUME \wedge or \vee on the remote control).

- The MUTE indicator turns on automatically when FUNCTION is set to CD and no CD is playing or a CD is paused (see "CD Player Operation" on Page 17), or when FUNCTION is set to RADIO and no signal is being received (see "Radio Operation" on Page 14). This is not a malfunction. When this happens, you cannot turn off the indicator by pressing MUTE.

illustration





Adjusting the Balance

To adjust the sound balance between the left and right speakers, turn BALANCE on the main system toward LEFT or RIGHT.

illustration

Each time you turn on the main power, the CD-3322 automatically selects the equalizer setting CLASSIC. To select a different setting, simply press that setting's button on the main system so its indicator turns on.

illustration
(show CLASSIC and the surrounding area)

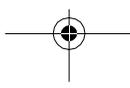
Using the Preset Equalizer Settings

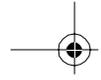
You can adjust the balance of the CD-3322's sound frequencies using its four preset equalizer (sound balance) settings: CLASSIC (equal balance on all sound frequencies), ROCK (more treble than bass), JAZZ (more bass than treble), or VOCAL (for heavy vocals such as acappella or opera). Each setting is designed to give you the best sound for that type of music.

Boosting the Bass

Press E-BASS down for an enhanced bass effect. Press E-BASS again (so the button pops up) for normal bass sound.

illustration





Using Headphones

To listen without disturbing others, you can connect a pair of 1/8-inch plug stereo headphones (not supplied) to the CD-3322. Your local RadioShack store sells a wide selection of stereo headphones.

To connect headphones, plug the headphones' 1/8-inch plug into the PHONES jack on the back of the CD-3322.

illustration



Note: Connecting headphones automatically disconnects the CD-3322's speakers.

Listening Safely

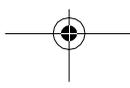
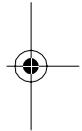
To protect your hearing, follow these guidelines when you use headphones.

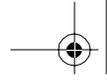
- Set the volume to the lowest setting before you begin listening. After you begin listening, adjust the volume to a comfortable level.
- Do not listen at extremely high volume levels. Extended high-volume listening can lead to permanent hearing loss.
- Once you set the volume, do not increase it. Over time, your ears adapt to the volume level, so a volume level that does not cause discomfort might still damage your hearing.

Traffic Safety

Do not wear headphones while operating a motor vehicle or riding a bicycle. This can create a traffic hazard and could be illegal in some areas.

Even though some headphones let you hear some outside sounds when listening at normal volume levels, they still can present a traffic hazard.





Radio Operation



Listening to the Radio

1. Set FUNCTION to RADIO. The last selected radio band and frequency appear on the display.

illustration

illustration

2. Repeatedly press BAND to select the desired band. As you press it, AM or FM and the last selected station in that band appear on the display.

To rapidly scan for a station, press and hold TUNING UP/▶▶I or DOWN/I◀◀ (or SKIP/TUNING s or t on the remote control) for about a second. When you release it, the tuner automatically stops at the next strong station.

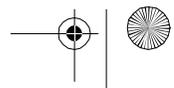
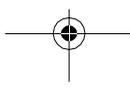
Notes:

- The CD-3322 is preset to receive FM broadcasts in stereo. If a broadcast is being received in stereo, ■ appears on the display.

illustration

illustration

3. Press TUNING UP/▶▶I or DOWN/I◀◀ (or SKIP/TUNING s or t on the remote control) to tune to the next highest or lowest station. As you press it, the frequency number changes on the display.



- To improve reception for weak FM stations, set FM MODE on the back of the system to MONO so  disappears. The sound is no longer in stereo, but reception should improve. To return to stereo sound, set FM MODE to STEREO again.

Memory Tuning

You can store and easily recall up to 20 of your favorite AM and FM radio stations (10 AM and 10 FM) using the CD-3322's memory.

Storing a Station in Memory

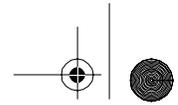
1. Press BAND to select AM or FM.
2. Press TUNING UP/▶▶▶ or DOWN/◀◀◀ (or SKIP/TUNING s or t on the remote control) to select the desired station.
3. Press PROGRAM/MEMORY. CH 00 (the preset station number) appears, and MEMORY flashes on the display.

illustration

- The AM antenna is built-in. Move the CD-3322 to improve AM reception.
- For the best FM reception, fully extend the telescoping antenna on the back of the CD-3322 and swivel the antenna to the position that produces the best reception.

4. Adjust VOLUME UP or DOWN (or VOLUME ^ or v on the remote control), and select the desired E-BASS, BALANCE, and preset equalizer settings.

illustration



4. To select a memory position, within about 5 seconds, repeatedly press REPEAT/SCAN until the desired preset station number appears (or press the desired preset station number (1 to +10) on the remote control), then press PROGRAM/MEMORY to store your selection in memory.

Recalling a Stored Station

1. Press BAND to select AM or FM.
2. Repeatedly press REPEAT/SCAN until the desired preset station number appears (or press the desired preset station number (1 to +10) on the remote control).

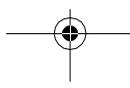
illustration

Note: If MEMORY and the preset station number disappear before you press PROGRAM/MEMORY, begin again from Step 3.

5. Repeat Steps 1–4 to store up to 10 stations each in FM and AM.

Note: You cannot clear a station from memory, but you can store a new one in its place.

Caution: The CD-3322 will lose any station(s) you stored in memory if power is disconnected or interrupted for one minute or longer and the memory backup batteries are run-down or not installed (see "Using Batteries" on Page 7).





CD Player Operation



Loading and Playing a CD

1. Set FUNCTION to CD. The CD indicator turns on, 00:00 and TRACK 00 appear for a few seconds, then DISC flashes on the display.

illustration

right side of the door (on the area marked PUSH TO CLOSE) until it clicks shut. After a few seconds, the loaded CD's total playing time and number of tracks appear on the display.

illustration showing the door being closed

2. Press OPEN ▲ on top of the system. TRACK 00 appears on the display and the CD compartment door opens.

illustration: show OPEN, door opening, and surrounding area

5. To begin play, press ►|| (or PLAY/PAUSE on the remote control). TRACK 01 then the elapsed play time appears, and the CD begins to play.

illustration

Caution: Do not try to force the CD door open. You might damage it.

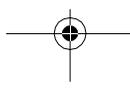
3. Carefully place a CD, label side up, in the compartment.

illustration: show CD being placed in the CD compartment

Notes:

- To skip over, search, or repeat tracks, see "Special CD Player Features" on Page 18.
- To briefly stop play, press ►|| (or PLAY/PAUSE on the remote control). The elapsed play time flashes on the display. To resume play, press it again.

4. To close the CD compartment door, press down gently on the





- To display the CD's remaining play time during play, press DISPLAY MODE. To return to the elapsed play time, press it again.

illustration

Special CD Player Features

Automatic Search Music System (ASMS)

The CD-3322's automatic search music system lets you skip forward or backward through the tracks on a CD.

illustration

6. Adjust VOLUME UP or DOWN (or VOLUME \wedge or \vee on the remote control), and select the desired E-BASS, BALANCE, and preset equalizer settings.
7. The CD-3322 automatically stops play at the end of the CD's last track. To stop it sooner, press \blacksquare (or STOP on the remote control). The CD's total playing time and number of tracks appear.

illustration

- To skip to the beginning of the next track during play, press and release $\blacktriangleright\blacktriangleright$ (or SKIP/TUNING s on the remote control).
- To return to the beginning of the current track during play, press and release $\blacktriangleleft\blacktriangleleft$ (or SKIP/TUNING t on the remote control).
- To skip forward or backward through additional tracks, repeatedly press $\blacktriangleright\blacktriangleright$ or $\blacktriangleleft\blacktriangleleft$ (or SKIP/TUNING s or t on the remote control) until the desired track number appears on the display.

8. To remove the CD, wait a few seconds for the CD to stop spinning, then press OPEN \blacktriangle . When the compartment door opens, remove the CD then close the door.

Caution: Do not try to remove the CD until it stops spinning.



Direct Track Selection

To select a specific track on a CD, simply press the desired track's number on the remote control. For example, to select track number 7, press 7.

illustration

To select a track number of 10 or greater, press +10 the number of times to equal the track's first digit, then press the number for the second digit. For example, press:

- +10 to select track 10
- +10 then 7 to select track 17,
- +10 +10 to select track 20
- +10, +10, then 9 to select track 29

Cue

To select a track while the CD player is stopped or paused, press ►► (or SKIP/TUNING s or t on the remote control) until the desired track number appears on the display. Then press ►|| (or PLAY/PAUSE on the remote control) to play the track.

Audible Search

To search forward or backward during play, press and hold ►►► or ◀◀◀ (or SKIP/TUNING s or t on the remote control). The CD plays rapidly and you hear the music at a high speed and low volume.

Release the button to resume normal play.

Random Play

The CD-3322 lets you set the CD player to play a CD's tracks in random order.

1. Before play, press RANDOM so RANDOM appears on the display.

illustration

2. To begin random play, press ►|| (or PLAY/PAUSE on the remote control). The first randomly selected track number appears, then the track begins to play and its elapsed play time appears.



Notes:

- To skip to a different randomly selected track, press ►► or ◀◀ (or SKIP/TUNING s or t on the remote control).
 - You can search forward or backward or repeat (see "Repeat Play" on Page 21) the current track during random play.
3. To briefly stop random play, press ►|| (or PLAY/PAUSE on the remote control). The elapsed play time flashes on the display. To resume play, press it again.
 4. The CD-3322 plays all tracks randomly on the loaded CD, then stops automatically. To stop it sooner, press ■ (or STOP on the remote control). RANDOM disappears and the CD's total number of tracks and playing time appear.

illustration

Note: To cancel random play and resume normal play, simply press RANDOM. RANDOM disappears from the display and the CD player resumes normal play.

INTRO Scanning

The INTRO (introduction) scanning feature lets you review the first 10 seconds of each track on a CD.

To use the INTRO scanning feature, simply press INTRO on the remote control while the CD is stopped (not playing). INTRO appears on the display and the CD player plays the first 10 seconds of each track on the loaded CD, beginning with the first track, then stops.

illustration

To cancel INTRO scanning and stop play sooner, press ■ (or STOP on the remote control) so INTRO disappears from the display.

To cancel INTRO scanning without stopping play, press INTRO on the remote control again. INTRO disappears and the CD player simply resumes normal play.

Note: You can search forward or backward during INTRO scanning.





Repeat Play

The CD-3322 lets you continuously repeat a single track, all tracks on a CD, or an entire programmed sequence of tracks (see “Programmed Play”).

To continuously repeat a single track, press REPEAT/SCAN twice before or during play so REPEAT flashes on the display.

illustration

To cancel repeat play during or after play, repeatedly press REPEAT/SCAN until REPEAT disappears from the display. If repeat is cancelled during play, the CD player resumes normal play.

Note: Pressing ■ (or STOP on the remote control) stops play and cancels repeat play.

Programmed Play

You can program the CD player to play up to 20 tracks in any order you choose, and you can program the same track to play more than once.

Storing/Playing a Programmed Sequence

1. With a CD loaded but not playing, press PROGRAM/MEMORY. MEMORY, P-01 (memory position 1) and TRACK 00 appear on the display (MEMORY and TRACK flash).

To continuously repeat all tracks on the CD, press REPEAT/SCAN once before or during play so REPEAT appears steadily on the display.

illustration

illustration

To continuously repeat an entire programmed sequence, first program the tracks you want to play (see “Programmed Play”), then press REPEAT/SCAN once before or during play so REPEAT appears steadily on the display along with MEMORY.





Note: You must complete Steps 2-5 within about 10 seconds of one another. If MEMORY disappears, you must start over again from Step 1.

2. To select the desired track, press ►► or ◀◀ (or SKIP/TUNING s or t on the remote control).

5. Press ►|| (or PLAY/PAUSE on the remote control) to play the programmed tracks. The first programmed track number then the elapsed play time appears, and the CD begins to play starting with the first programmed track.

illustration

illustration

Note: You cannot select tracks for a programmed sequence using the number buttons on the remote control.

3. To store the selected track, press PROGRAM/MEMORY again. The memory position number automatically increases by 1, indicating the CD-3322 is ready to store the next track.
4. Repeat Steps 2-3 to store up to 20 tracks.

Note: If you try to store more than 20 tracks, the CD player automatically returns to the first memory position and stores new tracks over the old ones.

Notes:

- You can repeat (all), skip over, or search through programmed tracks.
 - To briefly stop programmed play, press ►|| (or PLAY/PAUSE on the remote control). The elapsed play time flashes on the display. To resume play, press it again.
6. Adjust VOLUME UP or DOWN (or VOLUME ^ or v on the remote control), and select the desired E-BASS, BALANCE, and preset equalizer settings.





7. Programmed play automatically stops at the end of the last programmed track. To stop it sooner, press **■** (or STOP on the remote control). The CD's total number of tracks and playing time appear.

illustration

illustration

Notes:

- Repeat Steps 1 and 5 to play the programmed sequence again.
- To resume regular or random play after playing a programmed sequence, you must first erase the programmed sequence (see "Erasing a Programmed Sequence").

Reviewing/Replacing a Programmed Sequence

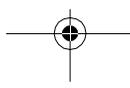
To review a programmed sequence, while play is stopped, repeatedly press PROGRAM/MEMORY. As you press it, MEMORY and TRACK flash, and the CD number, track number, and memory position number of each stored track appear on the display for a few seconds.

To replace a programmed track, press PROGRAM/MEMORY until the memory position number of the track you want to replace appears on the display. Then repeat Steps 2 and 3 listed in "Storing/Playing a Programmed Sequence" to select and store the new track.

Erasing a Programmed Sequence

You can do any of the following to erase a programmed sequence:

- Press PROGRAM/MEMORY then **■** (or STOP on the remote control) before or after programmed play.
- Press OPEN ^S before or after programmed play.
- Press POWER to turn off the CD-3322.





CD and CD Player Care Tips

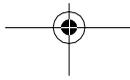
Although a CD is very durable, you should handle it with care. We recommend the following precautions.

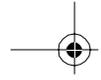
- Keep the CD in its protective case or sleeve when you are not playing it.
- Keep the CD clean. Your local RadioShack store sells a suitable CD cleaner kit.
- Keep the CD dry. A drop of moisture can act as a lens and affect the laser beam's focus. If it gets wet, wipe the CD with a soft, dry cloth before playing it.
- Do not write on either side of a CD, especially the non-label side.
- Handle the CD by its edges to avoid fingerprints and surface scratches, which can prevent the laser from accurately reading the CD. If the CD gets scratched, use Scratch 'n Fix (RadioShack Cat. No. 42-127) to keep the CD from skipping during play.
- Do not store CDs in high-temperature, high-humidity locations.

If the CD-3322 is subjected to a sudden shock or jolt during play, the CD's rotation speed might suddenly change, and the music might be briefly interrupted. This is not a malfunction.

Cautions:

- To avoid damaging the CD player, do not place anything but a CD in the CD compartment.
- Remove any loaded CD from the CD compartment before moving the system to avoid damaging the CD.
- Moving the CD-3322 suddenly from a cold place to a warmer one can cause moisture to form on the CD player's pickup lens and disrupt operation. If this happens, unplug the CD-3322, then wait about an hour before plugging it back in and playing a CD.





Cassette Deck Operation



The CD-3322's cassette deck lets you play cassette tapes or record from the radio or CD player.

Note: You cannot operate the cassette deck using the remote control.

illustration

Loading a Tape

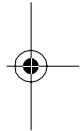
1. Take up any slack in the cassette tape by turning the hub with a pencil. This prevents the tape from tangling in the tape mechanism. (Avoid touching the tape with your fingers.)

4. Close the door.

Playing a Tape

1. Set FUNCTION to TAPE. The display turns off.

illustration



2. Press to open the cassette compartment door.

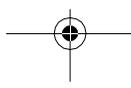
illustration

2. Press on the system. The button locks down and the tape begins to play.

illustration

illustration

3. Insert the cassette tape into the guides on the door with the exposed tape edge facing down, the side you want to play facing you, and the full reel to the left.





Notes:

- To briefly stop the tape during playback, press **II**. The button locks down and the tape stops. To resume playback, press **II** again so the button releases.

Fast-Forwarding/Rewinding

To rapidly advance or rewind a cassette tape while the tape is stopped, press **▶▶** or **◀◀**. The button locks down and the tape fast-forwards or rewinds.

illustration

illustration

- To conserve battery power when powering the CD-3322 with batteries, do not use PAUSE for an extended period of time.

The CD-3322 automatically stops the tape when it reaches the end. To stop it sooner, press **■▲**.

3. Adjust VOLUME UP or DOWN (or VOLUME \wedge or \vee on the remote control), and select the desired E-BASS, BALANCE, and preset equalizer settings.
4. The CD-3322 automatically stops the tape when it reaches the end. To stop it sooner, press **■▲**.



Recording a Cassette Tape

Notes:

- The CD-3322's Automatic Level Control (ALC) feature automatically adjusts the recording level. The settings of VOLUME, E-BASS, BALANCE, and the preset equalizer settings have no effect on the recording.
- Tape quality greatly affects the quality of the recording. We recommend regular length (60- or 90-minute) cassette tapes. We do not recommend long-play cassette tapes, such as C-120s, because they are thin and can easily tangle in the cassette mechanism. For low-noise, wide-range recordings, use normal-bias tape.
- Before recording, be sure the cassette tape's erase-protection tabs are in place. See "Preventing Accidental Erasure" on Page 29.

Recording from the Radio

Follow these steps to record onto a cassette tape from any AM or FM radio station.

1. Set FUNCTION to RADIO, then select the desired band and station.
2. Load a blank cassette tape, or one you want to record over, into the cassette deck, with the side you want to record on facing you and the full reel to the left.
3. Press  on the cassette deck.  and  lock down, the RECORD indicator turns on, and the cassette deck starts recording.

illustration

Note: To briefly stop the tape during recording, press . The button locks down and recording stops. To resume recording, press  again so the button releases.

4. To listen to the radio during recording, adjust VOLUME UP or DOWN (or VOLUME \wedge or \vee on the remote control), and select the desired E-BASS, BALANCE, and preset equalizer settings.



5. The CD-3322 automatically stops the tape when it reaches the end. To stop recording sooner, press . and release, and recording stops.

Recording from the CD Player

Follow these steps to record from a CD onto a cassette tape.

1. Set FUNCTION to CD, then load the CD you want to record.

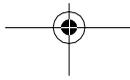
Note: If you want to record only selected tracks from the CD or change the sequence in which the tracks are recorded, program the desired sequence of tracks now.

2. Load a blank cassette tape, or one you want to record over, into the cassette deck with the full reel to the left and the side you want to record on facing you.
3. Press on the cassette deck. and lock down, the RECORD indicator turns on, and the cassette deck starts recording.
4. Press (or PLAY/PAUSE on the remote control) to start the CD player.

Notes:

- To briefly stop the tape during recording, press . The button locks down and recording stops, but the CD continues to play. To resume recording, press again so the button releases.
 - If you press (or PLAY/PAUSE on the remote control) during recording, the CD pauses but the tape continues recording.
5. To listen to the CD during recording, adjust VOLUME UP or DOWN (or VOLUME \wedge or \vee on the remote control), and select the desired E-BASS, BALANCE, and preset equalizer settings.
 6. The CD-3322 automatically stops the tape when it reaches the end. To stop recording sooner, press . and release and recording stops.

Note: If the end of the CD or programmed sequence is reached before the end of the tape, the CD player automatically stops, but you must press to stop the tape.





Tape Tips

Erasing a Cassette Tape

To record over a cassette tape, simply record over the previous recording. To erase the entire cassette tape, select a function with no audio (such as CD with no CD playing) and let the tape record to the end.

Note: The tape you are recording over must be a normal bias-type tape.

To quickly erase a tape, you might prefer to use a bulk tape eraser (available at your local RadioShack store).

Preventing Accidental Erasure

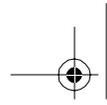
Cassette tapes have two erase-protection tabs — one for each side.

To protect a recording from being accidentally recorded over or erased, carefully break off that side's plastic tab with a screwdriver.



illustration





If you break off a tab and decide later that you want to record on that side of the tape, carefully cover that side's tab hole with a piece of adhesive tape.

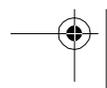
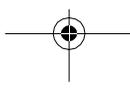
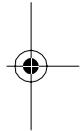
Caution: Removing the erase-protection tape does not prevent a bulk eraser from erasing a cassette tape.

Restoring Tape Tension and Sound Quality

After you play a cassette tape several times, the tape might become tightly wound on the reels. This can cause playback sound quality to deteriorate.

To restore the sound quality, fast-forward the tape from the beginning to the end of one side, then completely rewind it. Then loosen the tape reels by gently tapping each side of the cassette's outer shell on a flat surface.

Caution: Be careful not to damage the cassette when tapping it. Do not touch the exposed tape or allow any sharp objects near the cassette.



Troubleshooting

If your CD-3322 is not working as it should, these suggestions might help you eliminate the problem. If the system still does not operate normally, take it to your local RadioShack store for assistance.

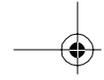
Symptom	Possible Cause	Suggestion(s)
Power does not turn on when you press POWER on the system.	Power problem.	Check the power connections.
Power does not turn on when you press POWER on the remote control.	The system's main power is not turned on.	Press POWER on the system so the POWER indicator turns on.
No sound when the radio, CD, or a cassette tape is playing.	VOLUME is set to its lowest setting or the sound is muted.	Press VOLUME UP on the main system, or VOLUME \wedge or MUTE on the remote control.
CD player does not work.	CD is loaded upside down.	Load the CD label side up.
	FUNCTION is not set to CD.	Set FUNCTION to CD.
Sound from the CD skips.	CD is dirty or damaged.	Clean the CD, use Scratch 'n Fix (Cat. No. 42-127) to fix the CD, or try a different one.
Poor sound quality during cassette tape playback.	Cassette tape head, capstan, tape guides, and/or pinch rollers are dirty.	Clean the cassette deck's tape-handling parts (see "Cleaning the Tape-Handling Parts" on Page 35).
Cassette tape does not record.	Erase-protection tabs are removed from the cassette tape.	Cover the tab holes with adhesive tape.

Symptom	Possible Cause	Suggestion(s)
None of the system's functions work. Symptom	Static electric shock has locked up the system. Possible Cause	Reset the system (see "Resetting the System" on Page 32). Suggestion(s)
Output sound is not stereo.	The station you are listening to is an AM station, or an FM station that is too weak to receive in stereo.	Try an FM station that you can receive in stereo.
	FM MODE is set to MONO.	Set FM MODE to STEREO.

Resetting the System

After receiving a static electric shock, your CD-3322 might lock up and become inoperable. If this happens, follow these steps to reset it.

1. Press POWER on the system to turn off the CD-3322.
2. Unplug the system's cord from the AC outlet to disconnect power.
3. Wait at least 3 minutes, then plug the system's cord back into the AC outlet.



Care and Maintenance



Your Optimus CD-3322 Portable Triple Play Compact Disc Player with AM/FM Stereo Cassette Recorder is an example of superior design and craftsmanship. The following suggestions will help you care for the CD-3322 so you can enjoy it for years.



Keep the CD-3322 dry. If it gets wet, wipe it dry immediately. Liquids contain minerals that can corrode the electronic circuits.



Handle the CD-3322 gently and carefully. Dropping it can damage the circuit boards and can cause the CD-3322 to work improperly.



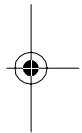
Use and store the CD-3322 only in normal temperature environments. Temperature extremes can shorten the life of electronic devices, damage batteries, and distort or melt plastic parts.



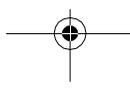
Keep the CD-3322 away from dust and dirt, which can cause premature wear of parts.

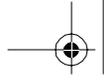


Wipe the CD-3322 with a damp cloth occasionally to keep it looking new. Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the CD-3322.



Modifying or tampering with the CD-3322's internal components can cause a malfunction and might invalidate its warranty and void your FCC authorization to operate it. If your CD-3322 is not performing as it should, take it to your local RadioShack store for assistance.



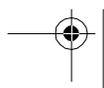
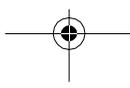


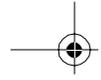
The FCC Wants You to Know

This stereo system complies with the limits for a Class B digital device as specified in Part 15 of FCC Rules. These limits provide reasonable protection against radio and TV interference in a residential area. However, your stereo system might cause TV or radio interference even when it is operating properly. To eliminate interference, you can try one or more of the following corrective measures:

- Reorient or relocate the receiving antenna
- Increase the distance between the stereo system and the radio or TV
- Use outlets on different electrical circuits for the stereo system and the radio or TV

Consult your local RadioShack store if the problem still exists.





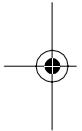
Cleaning the Tape-Handling Parts



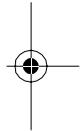
Dirt, dust or particles of the tape's coating can accumulate on the tape deck's tape heads and other parts that the tape touches. This can greatly reduce the performance of the cassette player. Use the following cleaning procedure for the cassette deck after every 20 hours of tape player operation.

1. Disconnect power.
2. Open the cassette compartment door.
3. Use a cotton swab dipped in denatured alcohol or tape head cleaning solution to clean the record/play head, pinch roller, capstan, erase head, and tape guides.

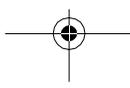
illustration

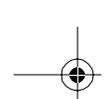


4. When you finish cleaning, close the cassette compartment door and reconnect power.



Your local RadioShack store sells a complete line of cassette deck cleaning supplies.



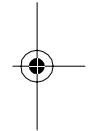


Specifications



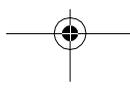
CD PLAYER

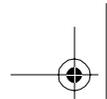
Number of Programmable Tracks 20
Frequency Response (at -3 dB) 80
Hz-16 kHz
Dynamic Range 76 dB
Signal-to-Noise (JIS-A) 56 dB
Harmonic Distortion (at 1 kHz) 0.5%
Separation (at 1 kHz) 42 dB
Sampling Frequency 44.1 kHz
Quantization Number 16-Bit
Linear/Channel Oversampling 2
Times
Pick-Up System 3 Beam
Optical Source Semiconductor Laser
Wavelength 60-820 nm



CASSETTE DECK

Tape Speed $1\frac{7}{8}$ ips
Wow and Flutter 0.25%
Frequency Response (at -3 dB) 100
Hz-8 kHz
Recording System AC Bias
Erase System Magnetic Erase
Headphones (Stereo) Impedance 16-
32 Ohms
Power Output 2 Watts per Channel





GENERAL

Power Supply 120V AC 60 Hz

Tuning Range: AM: 530–1710 kHz
FM: 88–108 MHz

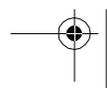
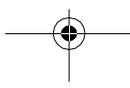
Speaker Size 4 Inches

Dimensions (HWD) $7\frac{1}{2} \times 19\frac{13}{16} \times 7\frac{7}{8}$ Inches (190 × 504 × 200 mm)

Weight 19.5 lb. (8.9 kg)

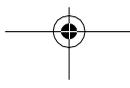
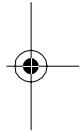
Included Accessories Remote Control,
Power Cord

Specifications are typical; individual units might vary. Specifications are subject to change and improvement without notice.





NOTES

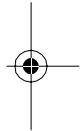




Limited Ninety-Day Warranty

This product is warranted by RadioShack against manufacturing defects in material and workmanship under normal use for ninety (90) days from the date of purchase from RadioShack company-owned stores and authorized RadioShack franchisees and dealers. In the event of a product defect during the warranty period, take the product and the RadioShack sales receipt as proof of purchase date to any RadioShack store. RadioShack will, at its option, unless otherwise provided by law: (a) correct the defect by product repair without charge for parts and labor; (b) replace the product with one of the same or similar design; or (c) refund the purchase price. All replaced parts and products, and products on which a refund is made, become the property of RadioShack. New or reconditioned parts and products may be used in the performance of warranty service. Repaired or replaced parts and products are warranted for the remainder of the original warranty period. You will be charged for repair or replacement of the product made after the expiration of the warranty period.

This warranty does not cover: (a) damage or failure caused by or attributable to acts of God, abuse, accident, misuse, improper or abnormal usage, failure to follow instructions, improper installation or maintenance, alteration, lightning or other incidence of excess voltage or current; (b) any repairs other than those provided by a RadioShack Authorized Service Facility; (c) consumables such as fuses or batteries; (d) cosmetic damage; (e) transportation, shipping or insurance



RadioShack
A Division of Tandy Corporation
Fort Worth, Texas 76102

88-09006-42A
Printed in Hong Kong

5A7

