Memorex®

CD GRAPHIC KARAOKE RECORDER WITH DUAL CASSETTE PLAYER

MODEL : MKS 5001

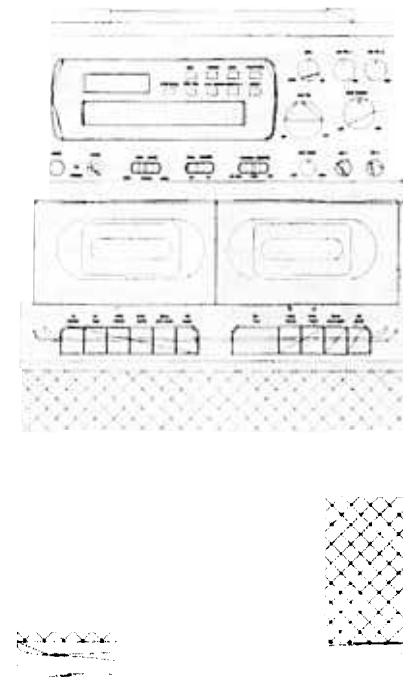**BEFORE OPERATING THIS PRODUCT
PLEASE READ THESE INSTRUCTION COMPLETELY**

THE FCC WANTS YOU TO KNOW

This music 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 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 system and the radio or TV
>
> Use outlets on different electrical circuits for the system and the radio or TV

Consult your local store if the problem still exists.

You must use shielded interface cables with this system.

FEATURES

Your **Memorex** CD-G / Dual Cassette Karaoke System is one of the most versatile karaoke systems available. It lets you be the "star" as you sing along with your favorite recordings on a CD, a CDG (a compact disc with a graphic track), a cassette tape, or a video tape, and hear your voice with the music through the powerful built-in speaker.

The karaoke system's CDG capability is the latest advancement in karaoke technology. It lets you connect the karaoke system to a TV or monitor and read the lyrics of your favorite tunes as they scroll by in front of a still video graphic, such as a picture or drawing related to the music.

You can sing along without video graphics using special karaoke audio cassette tapes (such as the one we have included to get you started) that let you balance the volume of the original singer's voice and the music tracks. Or, you can sing along with a regular prerecorded cassette tape or CD (not Supplied).

You can also connect another audio source to the karaoke system, such as a stereo VCR, and play a karaoke video cassette (not supplied).

Plus, your karaoke system can be used as a small PA system for speaking at parties or other gatherings - just plug in the microphone and turn on the power!

Your karaoke system's features include:

CD/CD+G Player - lets you play regular or karaoke CDs, or special CD+Gs so you can experience digital images the latest in karaoke fun! Plus, the player's 16 bit D/A converter and 8 times oversampling produce high quality sound.

5 Watts Output Power - lets you sing along and listen through one of the biggest amps offered in a karaoke system, including a 5 inches woofer and 3 inches tweeter

Analog Echo Control - lets you add an echo to the sound for a concert hall effect.

TROUBLESHOOTING

If you have problems operating your CD/DualCassette Karaoke System, try these suggestions. If you still have problems, contact your local store for assistance.

Problem	Possible Cause	Solution
The karaoke system does not work.	No Power	Make sure the power cord is properly plugged into an AC outlet.
A CD is loaded, But the CD/CD+G player does not start.	The CD/CD+G is loaded upside-down.	Reload the CD/CD+G, label side up.
	The CD/CD+G is dirty Or defective.	Clean the CD/CD+G and Reload it, or try a different CD/CD+G.
The CD/CD+G Sound Skips.	The CD/CD+G is dirty or defective	Clean the CD/CD+G and reload it, or try a different CD/CD+G.
	Moisture has condensed on the pickup lens.	Unplug the system and wait 1 hour for the moisture to evaporate.

Customer Service   1-800-919-3647

CONTENTS

RECORDING A CASSETTE TAPE

You can become a recording star! The system lets you record your voice on a blank or reusable tape as record from an external audio source, or dud from one cassette tape to another.

Recording Tips:

Tape quality greatly affects the quality of the recording. We recommend Extended Range or Low-Noise **Type 1** tape. 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 tape you are using has its erase-proection tabs in place. See "Preventing Accidental Erasure" on Page 23.

Recording automatically stops when the tape in **TAPE 1** reaches the end. To record on the other side, turn over the tape.

RECORDING YOUR VOICE WITH MUSIC

Follow these steps to record your voice along with music from a tape in TAPE 2, a CD/CD+G, or an audio source connected to the system's AUX INPUT jacks.

1. Load a blank tape, or one that you want to record over, into TAPE 1, with the side you want to record on facing out, and the full reel to the left.

2. Follow Steps 1-11 in "Singing with a CD/CD+G or Cassette Tape" on Page 10-11 or Sets 1-6 in "With Another Audio Source." on Page 12.

3. Press **RECORD** on **TAPE 1** to begin recording. **RECORD** and **PLAY** both lock down.
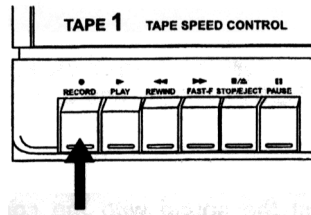
Note: Press **PAUSE** on **TAPE 1** to temporarily stop recording. Press **PAUSE** again to resume recording.

4. Press **STOP/EJECT** on **TAPE 1** to stop recording. **RECORD** and **PLAY** release.

5. Press **STOP/EJECT** on **TAPE 2** or stop the audio source.

CONNECTIONS

Caution: To avoid electrical shock, do not connect the system to AC power until all other connections are complete.
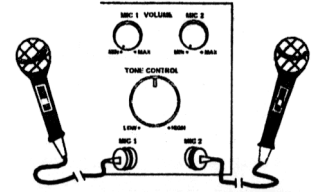
CONNECTING MICROPHONES

The system has two microphone jacks so you can use the supplied microphone to sing along to your favorite recordings, and connect an additional microphone (not supplied) for duets or lead and background vocals.

For the best performance, the additional microphone should be a unidirectional 600-ohm dynamic microphone with a 1/4inch (6.35-mm) plug and an ON/OFF switch.

Before you connect a microphone, always turn VOLUME to MIN on MIC 1, (and MIC 2 if you are connecting an additional microphone).
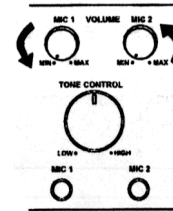
If you are connecting only one microphone, plug it into MIC 1. If you are adding a second microphone, plug it into MIC 2.


The system has built-in microphone holders on either side of the system. To use a holder, pull it down from the side of the system, and place the microphone in the holder's grip.

CONNECTING OTHER AUDIO COMPONENTS

You can connect an external audio source or component to the karaoke system, so you can sing along with other audio formats or videos, or hear the karaoke's sound from another speaker or a PA system. To make the connection, you need optional audio patch cables.

4. Use a cotton swab dipped in denatured alcohol or tape head cleaning solution to clean the record/play heads, pinch rollers, capstans, tape guides, and erase heads.

Tape Guides

'Erase Head

Record/Playback Head

Cotton Swab
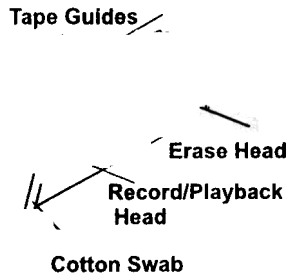
5. When you finish cleaning, press **STOP/EJECT** on **TAPE 1** and **TAPE 2** and close the cassette compartment doors. Then reconnect power.

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

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, them completely rewind it. Then loosen the tpe 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.

CONNECTING TO A TV

You can connect the CD/CD+G karaoke system to a TV or monitor and see the words and images produced by a special karaoke video cassette or CD/CD+G. Plug one end of the supplied cable into **VIDEO OUT** and the other end into your TV's video in jack.
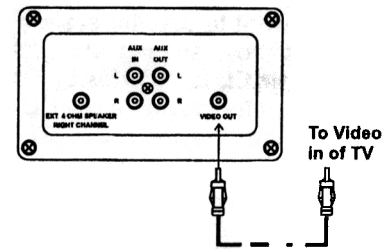
To Video
in of TV

Note: For TVs that do not have an audio/video input jack, use a video therefore modulator. Connect the RF modulator to **VIDEO OUT** and to the TV's 75-Ohm VHF input terminal, following the instructions in the modulator's owner's manual.

CONNECTING POWER

When you have made all other connections, plug your system's power cord into a standard AC outlet. Make sure the supply voltage of your home corresponds with the voltage rating of this unit (AC 120 V / 60 Hz).
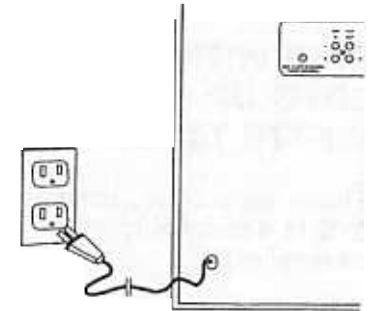
Caution: The supplied power cord has a polarized plug that fits into the outlet only one way. If the plug does not fit properly, turn it over and try again. Do not force it.

Notes:

To temporarily stop play, press **PLAY/PAUSE**. , and the track number appear and the elapsed time stops and flashes. To resume play, press **PLAY/PAUSE** again.

During playback, if the system is subject to a sudden shock or jolt, the speed of rotation might change, or some noise might be produced. This is not a malfunction.
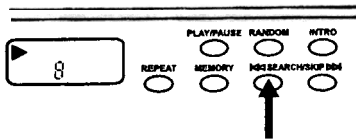
SPECIAL CD/CD+G PLAYER FEATURES

Automatic Search

The automatic search feature lets you quickly locate the beginning of any track on a CD/CD+G, including the track currently playing,. You can use automatic search when a CD/CD+G is playing or stopped.

If a CD/CD+G is playing:

Press **SEARCH** once to skip back to the beginning of the current track.

Repeatedly press **SEARCH** to search backward to the beginning of the desired track.

If the CD/CD+G is stopped or paused, repeatedly press **SEARCH** until the system displays the number of the track you want to play, the press **PLAY/ PAUSE**. The CD/CD+G player starts playing the selected track.

Intro Scan

You can set the system to play the first 10 seconds of each track on the CD/CD+G so you can quickly find the one you want.

To begin scanning, press **INTRO**. **INTRO** appears on the display and the CD/CD+G player play the first 10 seconds of each track, beginning with the first track, then stops.
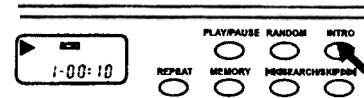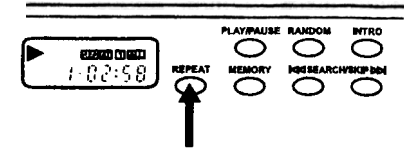

You can also use repeat play and search during intro play.

To cancel intro play during or after play, press **INTRO**. If you cancel INTRO scan during play, the CD/CD+G player begins normal play.

Repeat Play

You can repeat a single track, all the tracks on a CD/CD+G, or an entire programmed sequence. See **"Programmed Play"** on Page 18.


To continuously repeat a single track, press **REPEAT** once while the desired track is playing. **REPEAT 1** appears.

To continuously repeat all tracks on the CD/CD+G, press **REPEAT**, **REPEAT ALL** appears.

To repeat a programmed sequence, press **REPEAT** until **REPEAT 1 or ALL** appears with **PROG.** on the display.

To cancel repeat play during or after play, press **REPEAT**, **REPEAT** disappears. If you cancel repeat play during play the CD/CD+G player resumes normal play.
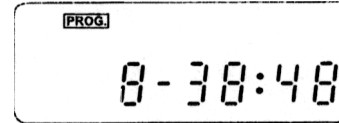
ECHO - You can adjust **ECHO** to add an echo effect to your voice while you sing. Turn **ECHO** toward **MIN** or **MAX** for the desired effect.
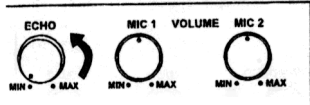
TONE - You can adjust **TONE** toward **LOW** or **HIGH** for your desired sound.
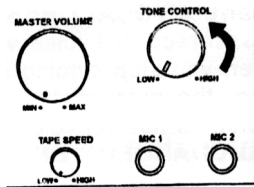
4. Press **PROGRAM** to store the selected track. The cumulative time from the programmed tracks appears, while **PROG** and the track number continue to flash.

Note: If you enter the wrong track number, you can erase the sequence and start over. See "Erasing a Programmed Sequence" on Page 19.

5. Repeat Steps 3 and 4 to program up to 20 tracks.

Note: You cannot store more than 20-tracks. If you try to program a 21st track, the system does not store it and the total number of tracks and the total playing time appear on the display.

6. Press **PLAY/PAUSE** to play the programmed tracks. The first track number appears on the display with the elapsed time of the track in play.

Notes:

You cannot use random play to play a programmed sequence.

You can repeat or search through programmed tracks. To repeat the programmed sequence, see "Repeat Play" on Page 17.

7. Programmed play automatically stops at the end of the last programmed track. To stop the CD/CD+G's total number of tracks and playing time appear.

Reviewing/Replacing a Programmed Sequence

While play is stopped, repeatedly press **PROGRAM** to review the programmed sequence.

To replace a programmed track, press **PROGRAM** until the position number of the track you want to replace appears. Then repeat Steps 3 and 4 to select and store the new track.

Erasing a Programmed Sequence

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

Press **OPEN/CLOSE** before or after programmed play.

Press **POWER**. The **POWER** indicator off.

WITH ANOTHER AUDIO SOURCE

If you connect another audio source, follow these steps to sing along with that audio source.

1. Set **FUNCTION SELECTOR** to **AUX**.

2. Press **POWER** to turn on the system. The **POWER** indicator turns on.

3. Turn on the audio source.

4. Adjust the sound with the controls explained in "Adjusting the Sound" on Page 13.

5. Set each connected microphone's **ON/OFF** switch to **ON**. Sing directly into the microphone along with the music.

6. Use **MIC 1 VOLUME** and/or **MIC 2 VOLUME** to adjust your voice's volume.

7. When you finish, set each microphone's **ON/OFF** switch to **OFF**, press **POWER** to turn off the system, then turn off the audio source.

## THROUGH ANOTHER AUDIO COMPONENT

If you connected another audio component, follow the steps in "With Another Audio Source" so you can hear your voice another component, Except in Step 3, turn on the audio component, and be sure to turn off the component (Step 7) when you finish.

CASSETTE DECK OPERATION

You can play a cassette tape in either cassette deck, and you can record tapes in **TAPE 1**.
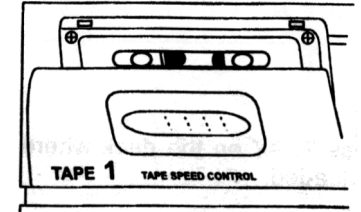
LOADING A TAPE

1. Take up any slack in the tape by turning the cassette's hub with a pencil or your finger. If you do not remove excess slack, the tape might become tangled in the record/playback mechanism. Avoid touching the tape.
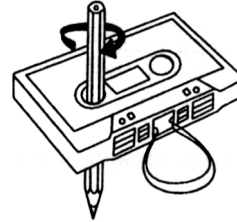
2. Press **STOP/EJECT** to open the cassette compartment.
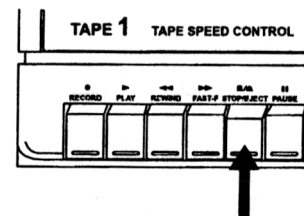
3. Load the cassette tape with its open edge facing down, the side you want to play or record on facing out, and the full reel to the left.

4. Close the compartment door.

PLAYING A TAPE

You can play a cassette tape in either **TAPE 1** or **TAPE 2**, or you can load cassette tapes in both decks and play one side of each consecutively.
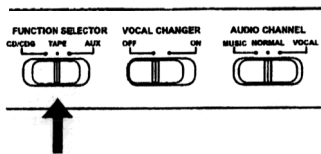
Warning: To protect your hearing, set **MASTER VOLUME** to **MIN** before you play a cassette tape.
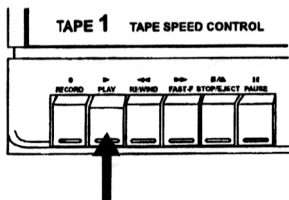
Normal Play

Follow these steps to play a cassette tape in **TAPE 1** or **TAPE 2**.

1. Load a cassette tape on **TAPE 1** or **TAPE 2**.

2. Press **POWER** (if necessary) to turn on the system. The **POWER** standby indicator turns on.

3. Set **FUNCTION SELECTOR** to **TAPE**.

4. Press **PLAY** on the deck where the tape is loaded.

5. Adjust the sound with the controls explained in "Adjusting the Sound" on Page 13.

6. Press **STOP/EJECT** to stop the tape. Press **STOP/EJECT** again to open the cassette compartment, then remove the cassette tape.
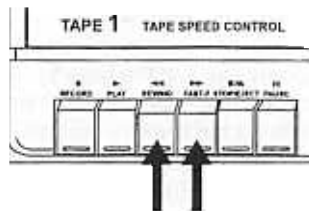
Turn the tape over and press **PLAY** to play the other side.

Notes:

To temporarily stop play, press **PAUSE**. Press **PAUSE** again to resume play.
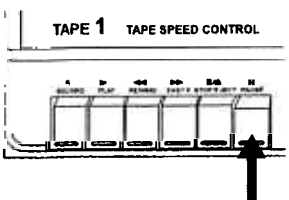
To rapidly wind the tape forward or backward, press **FAST-F** or **REWIND**. Press **STOP/EJECT** when you reach the desired section.
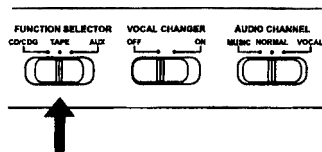

Consecutive Play

Follow these steps to play one side of a tape loaded in **TAPE 2**, the play one side of tape loaded in **TAPE 1**.

1. Load a cassette tape in **TAPE 1** and **TAPE 2**.

2. Press **POWER** (if necessary) to turn on the system. The **POWER** standby indicator turns on.

3. Set **FUNCTION SELECTOR** to **TAPE**.

4. Press **PLAY** on **TAPE 2**.

5. Press **PAUSE** then **PLAY** on **TAPE 1**.

The tape in **TAPE 2** plays to the side's end. Then **PAUSE** releases on **TAPE 1** and it plays to its side's end.

Set it to **MUSIC**, to enjoy the music without the original singer's voice, so you can sing alone.

Set it to **VOCAL**, to enjoy both the original voice and music with low volume. You can sing following along with the original voice.

Set it to **NORMAL**, to enjoy a stereo effect with the music.

4. Set **VOCAL CHANGER** to on and set **AUDIO CHANNEL** at **VOCAL**, to enjoy both the music and original singer's voice. Whenever you sing along, the original singer's voice is cancelled.
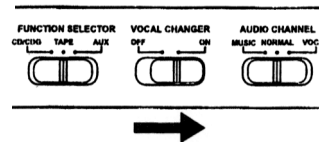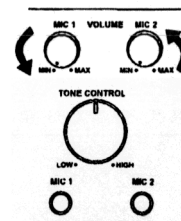

5. Press **PLAY/PAUSE** , or **PLAY** on the tape deck you are using, to start play.

6. Adjust the sound with **MASTER VOLUME** See "Adjusting the Sound" on Page 13 .

7. Set each connected microphone's **ON/OFF** switch to **ON**. Sing directly into the microphone along with the music.

8. Use **MIC 1 VOLUME** and/or **MIC 2 VOLUME** to adjust the volume of each Microphone.

9. Adjust **ECHO** for the desired reverberation and pitch. See "Adjusting the Sound" on Page 13.

10. Adjust **TAPE SPEED** (if you are playing a tape). See "Adjusting the Sound on Page 13.

11. If you are using a karaoke cassette tape, adjust **VOCAL CANCEL** for the desired effect. See "Adjusting the Sound" on Page 13.

Note: With a regular (non-karaoke) prerecorded cassette tape, you cannot adjust the volume of the prerecorded original singer's voice in relation to the music.

12. When you finish, press **STOP** on the CD/CD+G. Then press **OPEN/CLOSE** to open the compartment door and remove the CD.

13. To stop a tape, press **STOP/EJECT** on the deck you are using. Press **STOP/EJECT** again to open the cassette compartment door and remove the tape.

14. Set each microphone's **ON/OFF** switch to **OFF**, then press **POWER** to turn off the system.

CD/CD+G CARE TIPS

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

- Keep the CD/CD+G in its protective case or sleeve when you are not playing it.

- Keep the CD/CD+G clean. Your local store sells a suitable CD cleaner kit.

- Do not write on either side of the CD/CD+G, particularly the non-label side.

- Do not store CD/CD+Gs in high-temperature, high-humidity locations. They might warp.

  Keep CD/CD+Gs dry. A water drop can act as a lens and affect the laser beam's focus.
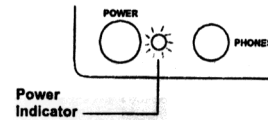
  Always handle a CD/CD+G by the edges to avoid fingerprints. Fingerprints and scratches on the CD/CD+G's scratches on the CD/CD+G's surface can prevent the laser beam from correctly reading the digital information.

- If a CD/CD+G skips during play, it might be scratched. Your local store sells a Scratch'n Fix kit that might stop the skip. Also, see "Troubleshooting" on Page 28.
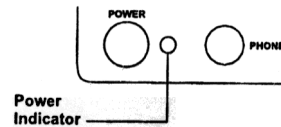
TURNING THE SYSTEM ON/OFF

To turn on the system, press **POWER**. The **POWER** indicator turns light.

To turn off the system, press **POWER**. The **POWER** indicator off.

ADJUSTING THE SOUND

Use these controls to get the system's sound just right.

MASTER VOLUME - Control the volume from the system's speaker by truing the **MASTER VOLUME** toward **MIN** or **MAX**.

TAPE SPEED - To slow down or speed up the pace of the music as you sing along, turn **TAPE SPEED** toward **LOW** or **HIGH**. For normal tape speed, leave it set to the middle position.
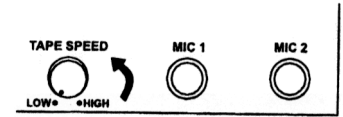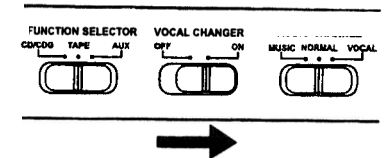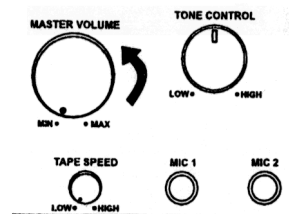

VOCAL CHANGER - While your play a karaoke audio cassette tape or CD-G disc, you can use **VOCAL CHANGER** to replace the prerecorded voice with your voice. When you stop singing into the microphone, the prerecorded singer's voice returns. To turn on voice control, turn **VOCAL CHANGER** to **ON**.

To turn off the voice control when you finish using it, turn **VOCAL CHANGER** to **OFF**.

Random Play

To set the system to play all tracks on a loaded CD/CD+G in random order before or during play press **RANDOM**. RANDOM and the first randomly selected track number appear. Press PLAY/PAUSE, briefly flashes, then the track begins to play and its elapsed play time appears. The system plays all tracks in random order, then automatically stops.
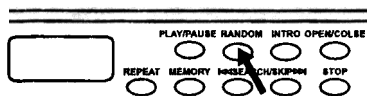
Notes:
To replay the current track, press **SEARCH(◄◄)**.

To play the next random track, press **SEARCH(►►)**.

To stop the CD player at any time during random play, press **STOP**. The CD/CD+G's total number of tracks and playing time appear. When you press **PLAY/PAUSE** again, random play resume.

To cancel random play and resume normal play, press **RANDOM** disappears and the CD/CD+G player resumes normal play.
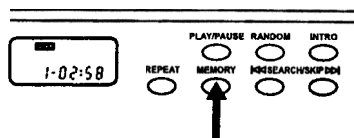
PROGRAMMED PLAY

You can program the CD/CD+G player during normal or karaoke mode to play up to 20 tracks in any order you choose, and you can program the same track to play more than once.
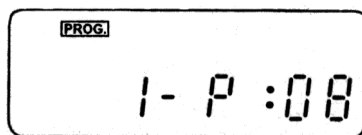
Programming and Playing a Sequence of Tracks.

1. Repeatedly press **STOP** until the system displays the total number of tracks and the total playing time.

2. Press **MEMORY**.

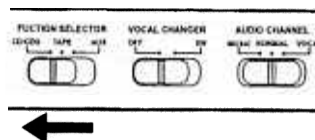**PROG** flashes at the top of the display along with the track number also appears.

Note: PROG remains on the top left corner of the display until you erase the programmed sequence.

3. Press **SEARCH (◄◄)** or **(►►)** to select the desired track.

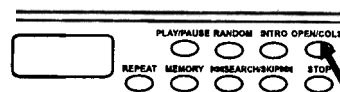## PLAYING A CD/CD+G

1. Press **POWER** to turn on the system. The POWER standby indicator turns on.
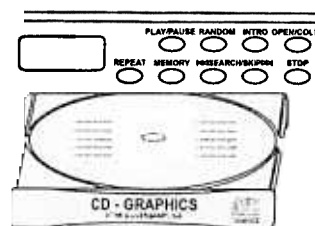
2. Set **FUNCTION SELECTOR** to **CD/CDG**.

3. Press **OPEN/CLOSE** to open the CD/CD+G compartment.

4. Place a CD/CD+G in the compartment tray over the center hub, label side up.

5. Press **OPEN/CLOSE** again to close the CD/CD+G's total number of tracks and total playing time.
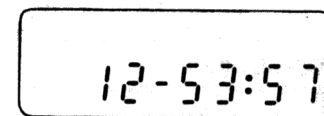
6. Press **PLAY/PAUSE**. The CD/CD+G begins to play from Track 1 and the track's elapsed play time appears.

7. Adjust the sound with the controls explained in "Adjusting the Sound" on Page 13.

Note: To sing along see "Singing Along/Quick Start" on Page 10.

8. The system automatically stops play at the end of the CD/CD+G's last track. To stop it sooner press **STOP**. The CD/CD+G's total number of tracks and playing time appear.

The instructions in this section provide a quick reference to help you get started singing along with your karaoke CD/CD+G system. For details on using the system's various features such as the CD/CD+G player, cassette decks, or optional sound sources and components, see that feature's section in this Manual.

## SINGING WITH A CD/CD+G OR A CASSETTE TAPE

Follow these steps to sing along with a CD/CD+G or a cassette tape (such as the ones supplied).

1. Press **POWER** (if necessary) to turn on the system. The **POWER** indicator turns on.


Power Indicator
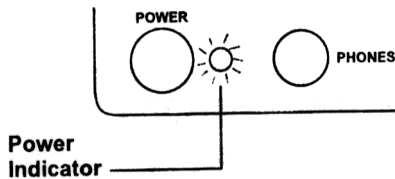
2. Load a CD/CD+G in the CD compartment. Or, if you want to sing along with a prerecorded tape, load it in TAPE 1 or TAPE 2.

3. Set **FUNCTION SELECTOR** to **CD/CDG** or **TAPE**.
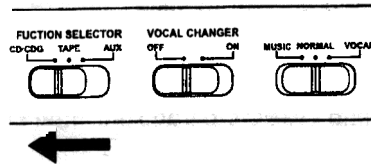
Note: If you want to use the system to play music without singing along, set **AUDIO CHANNEL** to **NORMAL**. Then follow the steps for playing a CD/CD+G or cassette. See "Playing a CD/CD+G" on Page 15 or "Playing a tape" on Page 21.
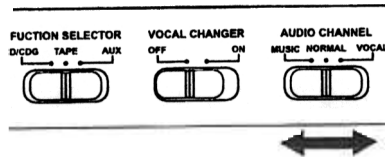

TAPE CARE TIPS

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, use a screwdriver to remove one or both of the cassette tape's erase-protection Tabs.

Side A Tab
Side B Tab
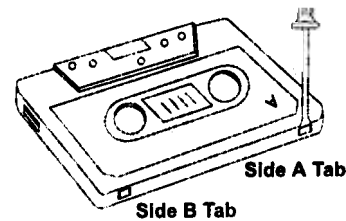
If you want to record on a tape side after you have removed the erase protection tab, place a piece of strong plastic tape over that side's erase protection hole.

Side A
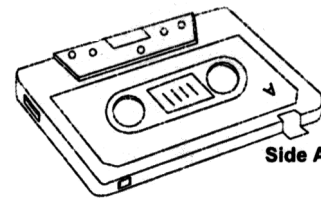
Notes:

Be sure you cover only the hole that was originally covered by the erase-protection tab.

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

Erasing a Cassette Tape

If you no longer want a recording, you can record over it or erase it.

To erase a previously recorded section of a tape, simply record over it.

To erase the entire cassette tape, record silence by setting **FUNCTION SELECTOR** to **TAPE** and recording with no tape in **TAPE 2**.

You can quickly erase both sides of a cassette tape using a bulk tape eraser, available at your local store.

Cleaning the Tape-Handling Parts

Dirt, dust or particles of the tape's coating can accumulate on the tape heads and other parts that the tape touches. This can greatly reduce the performance of the cassette player. After every 20 hours of tape player operation, use a cassette deck cleaning kit or follow these steps to clean the tape-handling parts.

1. Disconnect the AC power cord.

2. Open the cassette compartment doors on **TAPE 1** and **TAPE 2**.

3. Press **PLAY** on **TAPE 1** and **TAPE 2** to expose the tape-handling parts.

Connecting an External Audio Source for Input

You can connect another audio source, such as a stereo VCR or another CD player, so you can sing along with the audio source's sound. Connect the source's stereo audio output jacks to the system's AUX IN R and L jacks.

To Audio Out of VCR or CD Player
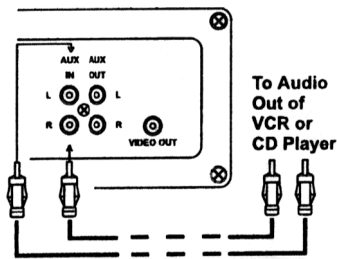
**Note**: If your audio source does not have AUX OUT R and L jacks, but has only a headphone or line out jack (such as on a portable tape or CD player), use a shielded Y-adapter cord with phono jacks on each end. Connect the single plug end to the audio source's headphone or line out jack, and connect the other end's two phono plugs to the system's AUX IN R and L jacks.

Reaw View of Amplifier

AUDIO INPUT SOURCE
HEADPHONE TAPE CD/VCR
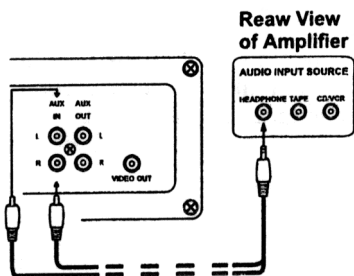
Connecting an External Audio Component for Output

You can broadcast the karaoke system's sound through an external audio component such as a PA system amplifier. Connect the external audio component's audio input jacks to the karaoke system's **AUX OUT R** and **L** jacks.

To Audio In of PA System Amplifier
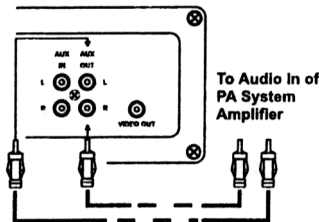
Connecting an External Speaker

You can connect an external 5-watts stereo speaker with 4-ohm impedance to the system for a stereo effect. Plug the speaker's phono plug into **EXT.4 OHM SPEAKER / RIGHT CHANNEL** on the system.

To External Speaker
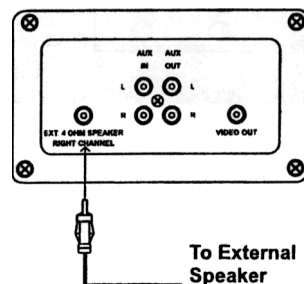
Warning: To protect your hearing and prevent damage to the karaoke system, an audio source and/or and audio component, always set their volume controls to the lowest settings before turning them on.

LISTENING TO ANOTHER AUDIO SOURCE

If you connected another audio source, follow these steps to listen to that source through your karaoke system.

1. Set **FUNCTION SELECTOR** to **AUX**.
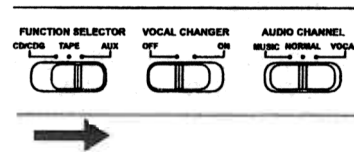
2. Press **POWER** to turn on the system. The **POWER** standby indicator turns on.

3. Turn on the audio source.

4. Adjust the sound with the controls explained in "Adjusting the Sound" on Page 13.

5. To turn off the system, press **POWER**. The **POWER** standby indicator lights turn off. Then turn off the audio source.

LISTENING THROUGH ANOTHER AUDIO COMPONENT

If you connected an audio component (such as PA system) follow these steps to listen to the karaoke system's sound through that component.

1. Set **FUNCTION SELECTOR** to **AUX**.
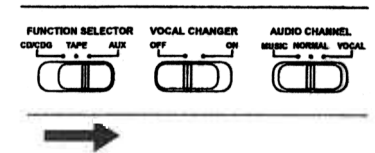
2. Press **POWER** to turn on the system. The **POWER** standby indicator turns on.

3. Turn on the audio component.

4. Play a cassette, CD, or CD+G in the karaoke system.

5. Adjust the sound with the controls explained in "Adjusting the Sound" on Page 13.

6. To turn off the system, press **POWER**. The **POWER** standby indicator lights turn off. Then turn off the audio component.

DUBBING A CASSETTE TAPE

You can dub (copy) any cassette tape on the karaoke system's dual cassette decks using a source tape with the music or sound you want to copy and a blank or reusable tape to record on.

Follow these steps to dub from one cassette tape to another.

1. Set **FUNCTION SELECTOR** to **TAPE**.

2. Load the cassette you want to copy into **TAPE 2** with the side you want to record from facing out.

3. Load a blank cassette (or one you want to record over) into **TAPE 1** with the side you want to record on facing out.

4. Press **PAUSE** then **RECORD** on **TAPE 1**. Pause then **RECORD** and **PLAY** both lock down.

5. Press **PLAY** on **TAPE 2** to begin recording. **PAUSE** on **TAPE 1** automatically releases.

Note: You can listen to the tape playing in **TAPE 2** as you copy it. Set **MASTER VOLUME** to a comfortable level. The volume setting does not affect the recording level.

6. Press **STOP/EJECT** on **TAPE 1** to stop recording. **RECORD** and **PLAY** release.

7. Press **STOP/EJECT** on **TAPE 2** to stop playing the tape.

Vocal Cancel - lets you replace the prerecorded original singer's voice with your voice when you use a karaoke tape, so you can sing solo.

Dual-Cassette Decks - lets you play two cassette tapes in a row, or dub from one tape to another.

Auto-Stop - automatically stops a tape when it finishes playing or recording, to protect the tape and tape-handling parts.

20-Track Programmable Memory - lets you pace your own performance by programming up to 20 CD tracks in the order you want to hear them.

5-Watt External Speaker Jack - so you can connect an external speaker for stereo effects.

Auxiliary Output Jacks - for connecting another audio component, such as an booster or a PA system.

Automatic Search - lets you quickly locate and play any track on the loaded CD/CD+G.

Intro Scan - lets you play the first 10 seconds of each track on a CD/CD+G to help you locate a certain track.

Repeat Play - repeats a single track or a programmed sequence of tracks.

Random Play - lets you play all the tracks in random order.

Audio Select - lets you choose between singing along to the music with or without the original singer's voice or with a stereo effect.

Supplied Karaoke CD+G - lets you sing along with the music and adjust the volume of the prerecorded voice and music.

Dual Microphone Jacks - let you use the supplied microphone simultaneously to sing duets or for lead and background vocals.

Recording - lets you record your voice as you sing along with a tape or CD/CD+G or external audio source connected to the system.

Tape Speed Control - lets you adjust the tape speed to match your voice pitch.

CARE AND MAINTENANCE

You CD/Dual Cassette Karaoke System is an example of superior design and craftsmanship. The following suggestions will help you care for your karaoke system so you can enjoy it for years.

Keep the karaoke system dry. If it gets wet, wipe it dry immediately. Liquids might contain minerals that can corrode the electronic circuits.

Use and store the karaoke system only in normal temperature environments. Temperature extremes can shorten the life of electronic devices, and distort or melt plastic parts.

Keep the karaoke system away from dust and dirt, which can cause premature wear of parts.

Handle the karaoke system gently and carefully. Dropping it can damage circuit boards and cases and can cause the karaoke system's to work improperly.

Wipe the karaoke system with a damp cloth occasionally to keep it ooking new. Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the karaoke system.

Modifying or tampering with the karaoke system's internal components can cause a malfunction and might invalidate its warranty.

This CD player is made and tested to meet exacting safety standards. It meets FCC requirements and complies with safety performance standards of the U. S. Department of Health and Human Services.

Warnings:

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.

The use of controls, adjustments, or procedures other than those specified herein might result in hazardous radiation exposure.

Note: Most material on compact discs and prerecorded tapes is copyrighted. Unauthorized duplication of copyrighted material is a violation of U. S. Copyright laws for a consumer to use an audio recording device to duplicate musical recordings for noncommercial (personal) use.

SPECIFICATIONS

Power Output (at 10% THD)	5 Watts per channel
Track System	4 Track, Two Channel Stereo
Tape Speed	1.875 ips
Record System	DC Bias
Erasing System	Magnet
Wow and Flutter (WRMS)	Less Than 0.35%
Record/Play Frequency Response (at +/- 3 dB)	125-8000 Hz
Signal To Noise	40-60 dB
Dynamic Range	More Than 80 dB
Speaker	5-Inch Woofer/3-Inch Tweeter (4 Ohms)
Microphone (Monaural) Impedance	600 Ohm
Power Source	AC 120 V, 60 Hz, 60 W
Dimensions (HWD)	20.9 x 9.1 x 12.3 Inches (530 x 230 x 310 mm)
Weight	27 lbs (12.5 Kg)
Included Accessories	Microphone, RCA Plug Cable, CD+G Karaoke Disc

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