

Part 1

OPERATION OF INSTRUMENTS AND CONTROLS—

Chapter 1-7

Car audio system and Air conditioning system

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Car audio system operating tips

You can listen to the car audio system when the ignition key is at “ON” or “ACC”. However, if the engine is not running, the key must be in the “ACC” position.

ILLUMINATION CONTROL LOGIC

On some audio-units, when the instrument panel lights are on, the letters on operable buttons of the mode in current use light up together with the mode selection and eject buttons.

RADIO

FM reception tips

Most of us are not aware that a vehicle is not an ideal place to listen to a radio. Because it moves, reception conditions change continuously. Buildings, terrain, signal distance and noise from other vehicles are all working against good reception. Some FM reception conditions may appear to be problems even though they are normal.

The following characteristics are normal for a given reception area, and they do not indicate any problem with the radio itself.

- **Fading and Drifting:** On the average, the broadcast range of FM stations is limited to about 40 km (25 miles), except for some high power stations.

If a vehicle is moving away from the desired station's transmitter, the signal will tend to fade and/or drift. This phenomenon is more noticeable with FM than with AM, and is accompanied by distortion.

Fading and drifting can be minimized to a certain degree by fine tuning, or you should tune in to a stronger signal.

- **Static and Fluttering:** When the line-of-sight path between a transmitter and vehicle is blocked by large buildings or the like, static or fluttering may occur because of the characteristic of FM. In a similar effect, a fluttering noise is sometimes heard when driving along a tree-lined road.

This static and fluttering can be reduced by adjusting the tone control for greater bass response until the disturbance has passed.

- **Multipath:** Because of the reflection characteristics of FM, direct and reflected signals may reach the antenna at the same time (a phenomenon called multipath reception) and cancel each other out. As a vehicle moves through these electronic dead spots, the listener may hear a momentary flutter or lose reception.

- **Station swapping:** When two FM stations are close to each other, and an electronic dead spot, such as is caused by static or multipath reception, interrupts the original signal, sometimes the stronger second signal is picked up automatically until the original one returns. This swapping can also occur as you drive away from the selected station and approach another station with a stronger signal.

On models with a power antenna, the antenna automatically extends to its full height when the radio and ignition are turned on.

To lower the power antenna, turn off the audio system by pushing "PWR.VOL", or turn the ignition key to "LOCK".

On some models, the power antenna automatically retracts when the radio mode is switched off to turn on the cassette tape player.

Before extending the power antenna, confirm that no one is close enough to get injured by it.

NOTICE

To prevent damage to the antenna, make sure it is retracted before driving your vehicle through an automatic car wash.

CASSETTE TAPE PLAYER

Use only undamaged cassette tapes of good quality. Avoid using tapes with a total playing time longer than 90 minutes.

Using damaged tapes will cause trouble with the tape player. Longer tapes are not recommended because of their thinness.

Before inserting a cassette, make sure the tape is not slack and that the label is firmly stuck on the shell.

Wind the tape firmly by turning the hub with a pencil or the like.

Be careful not to touch the exposed tape surface.

When not in use, take the cassette out of the player, put it back into its case and store it away from dust, magnets and direct sunlight.

Leaving cassettes on the dashboard in the sun could damage your tapes.

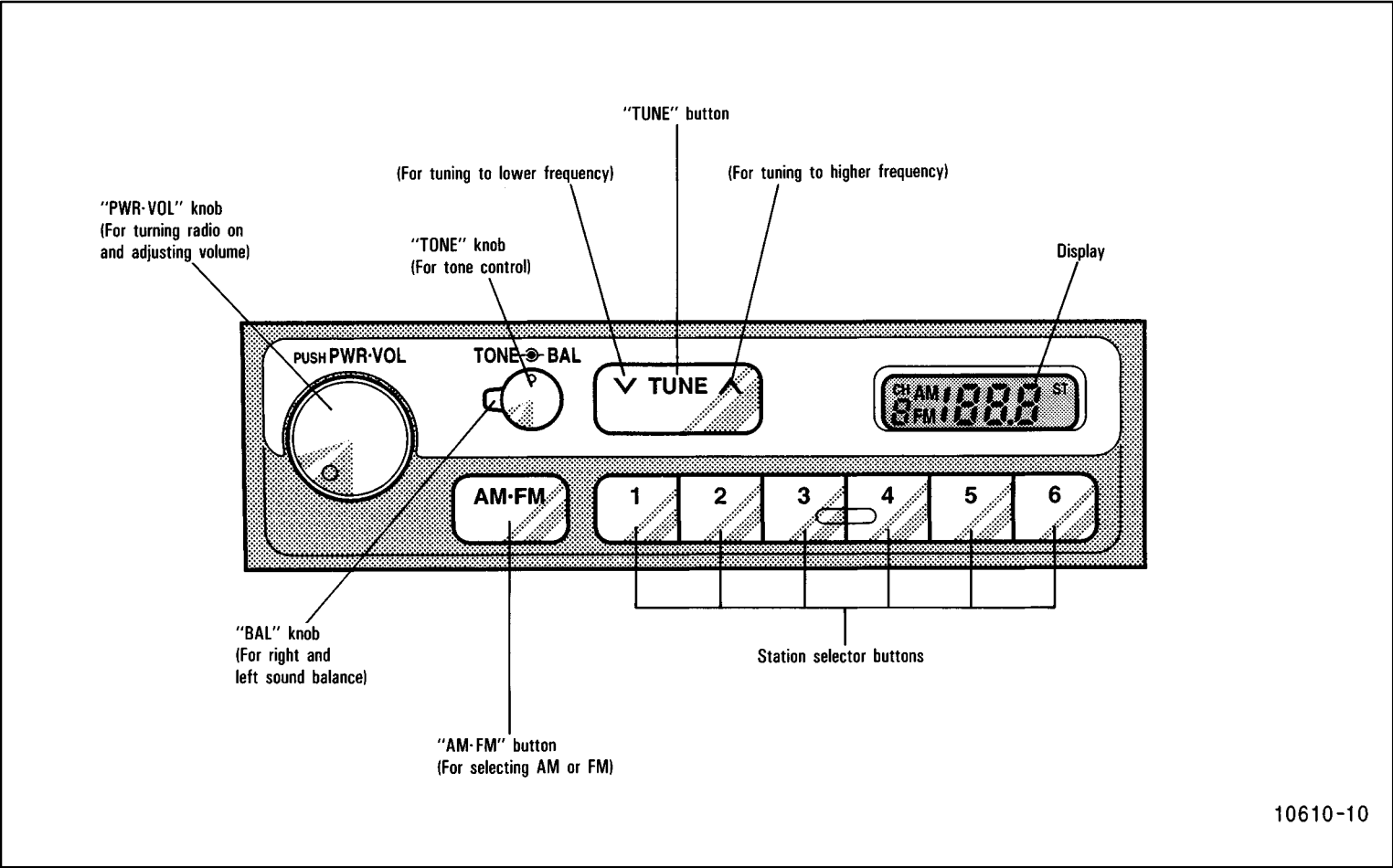
Keep the playback head, capstan and pinch roller clean.

Remove tape coating residue accumulated on the head, capstan and pinch roller once or twice a month. A cleaning tape is available on the market.

NOTICE

Do not oil any part of the player and do not insert anything other than cassette tapes into the slot, or the tape player may be damaged.

AM•FM radio with electronic tuner (type A)



(a) Listening to the radio

1. Push the "PWR•VOL" knob to turn the radio on.
2. Turn the "PWR•VOL" knob to adjust the volume.
3. Tune in the desired station. (See "(b) Selecting a station" and "(c) Presetting a station".)

The radio will change automatically to stereo reception when an FM stereo broadcast is being received. At the same time, "ST" will appear on the display. When the receiving signal gets weak, the channel separation will automatically be reduced for the lowest noise. If the signal becomes extremely weak, the radio will switch over to monaural reception.

4. Adjust the tone and sound balance. (See "(d) Adjusting the tone" and "(e) Adjusting the sound balance".)
5. To turn the radio off, push the "PWR•VOL" knob once again.

(b) Selecting a station

1. Push the "AM•FM" button to select either an AM or FM broadcast. "AM" or "FM" will appear on the display.
2. Tune in the desired station using one of the following methods. The frequency will appear on the display.

Preset tuning: Use for tuning-in to a desired preset station.

Push the station selector button which has been preset to the desired station. The radio will tune in to the station and the button number will appear on the display. (See "(c) Presetting a station".)

Seek tuning: Use for automatic station search and stop.

Push either side of the "TUNE" button and hold it until a beep is heard. The radio will begin seeking up or down for a station of the nearest frequency and will stop on reception. Each time you push the button, stations will be sought out one after another.

Manual tuning

Push either side of the "TUNE" button for less than 0.5 second. Each time you push the button, the radio will step up or down to another frequency where stations could exist.

(c) Presetting a station

1. Tune in the desired station. (See "(b) Selecting a station".)
2. Push one of the station selector buttons and hold it until a beep is heard. This sets the station to the button and the button number will appear on the display.

Each button can store one AM station and one FM station. To change the preset station to a different one, follow the same procedure.

The preset station will be cancelled when the power source is severed (battery disconnected, burnt fuse, etc.).

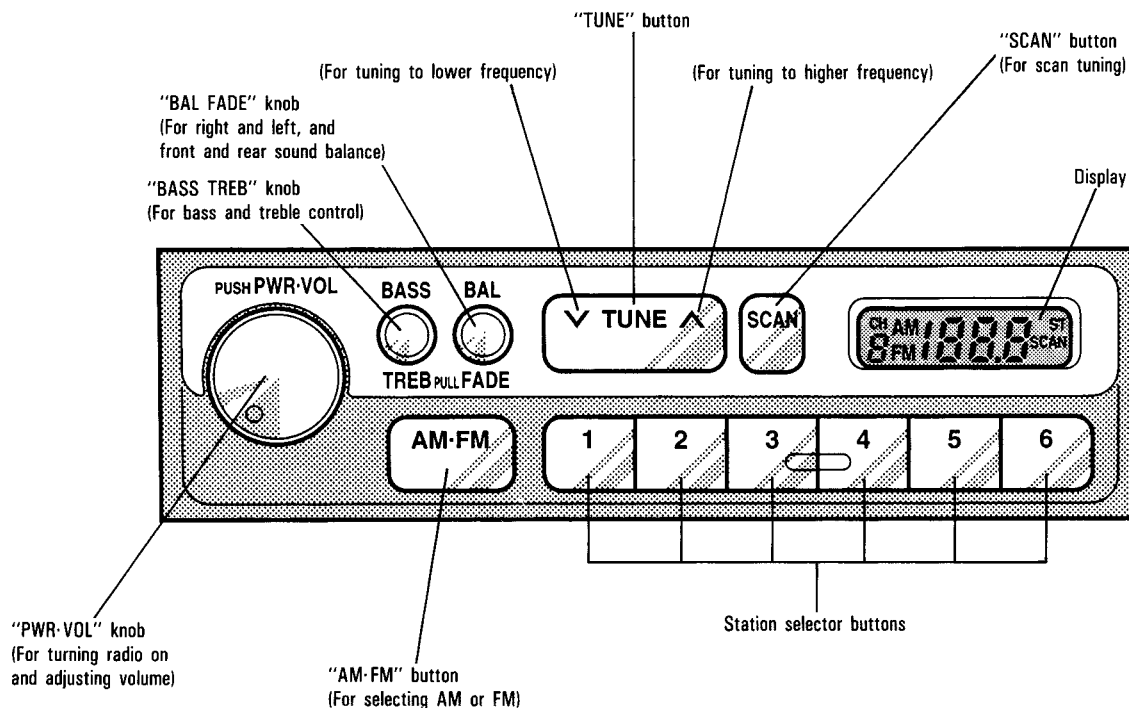
(d) Adjusting the tone

Turn the "TONE" knob.

(e) Adjusting the sound balance

Turn the "BAL" knob.

AM•FM radio with electronic tuner (type B)



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(a) Listening to the radio

1. Push the "PWR•VOL" knob to turn the radio on.
2. Turn the "PWR•VOL" knob to adjust the volume.
3. Tune in the desired station. (See "(b) Selecting a station" and "(c) Presetting a station".)

The radio will change automatically to stereo reception when an FM stereo broadcast is being received. At the same time, "ST" will appear on the display. When the receiving signal gets weak, the channel separation will automatically be reduced for the lowest noise. If the signal becomes extremely weak, the radio will switch over to monaural reception.

4. Adjust the tone and sound balance. (See "(d) Adjusting the tone" and "(e) Adjusting the sound balance".)
5. To turn the radio off, push the "PWR•VOL" knob once again.

(b) Selecting a station

1. Push the "AM•FM" button to select either an AM or FM broadcast. "AM" or "FM" will appear on the display.
2. Tune in the desired station using one of the following methods. The frequency will appear on the display.

Preset tuning: Use for tuning-in to a desired preset station.

Push the station selector button which has been preset to the desired station. The radio will tune in to the station and the button number will appear on the display. (See "(c) Presetting a station".)

Seek tuning: Use for automatic station search and stop.

Push either side of the "TUNE" button and hold it until a beep is heard. The radio will begin seeking up or down for a station of the nearest frequency and will stop on reception. Each time you push the button, stations will be sought out one after another.

Scan tuning: Use for station-to-station scanning.

Push the "SCAN" button. With "SCAN" on the display, the radio will automatically seek out a station of a higher frequency, hold it for 5 seconds and scan to the next. To continue listening to the broadcast of your choice, simply push the "SCAN" button once again.

Manual tuning

Push either side of the "TUNE" button for less than 0.5 second. Each time you push the button, the radio will step up or down to another frequency where stations could exist.

(c) Presetting a station

1. Tune in the desired station. (See "(b) Selecting a station".)
2. Push one of the station selector buttons and hold it until a beep is heard. This sets the station to the button and the button number will appear on the display. Each button can store one AM station and one FM station. To change the preset station to a different one, follow the same procedure.

The preset station will be cancelled when the power source is severed (battery disconnected, burnt fuse, etc.).

(d) Adjusting the tone

To adjust a low-pitched tone, push the "BASS TREB" knob (if pushed in) and turn it.

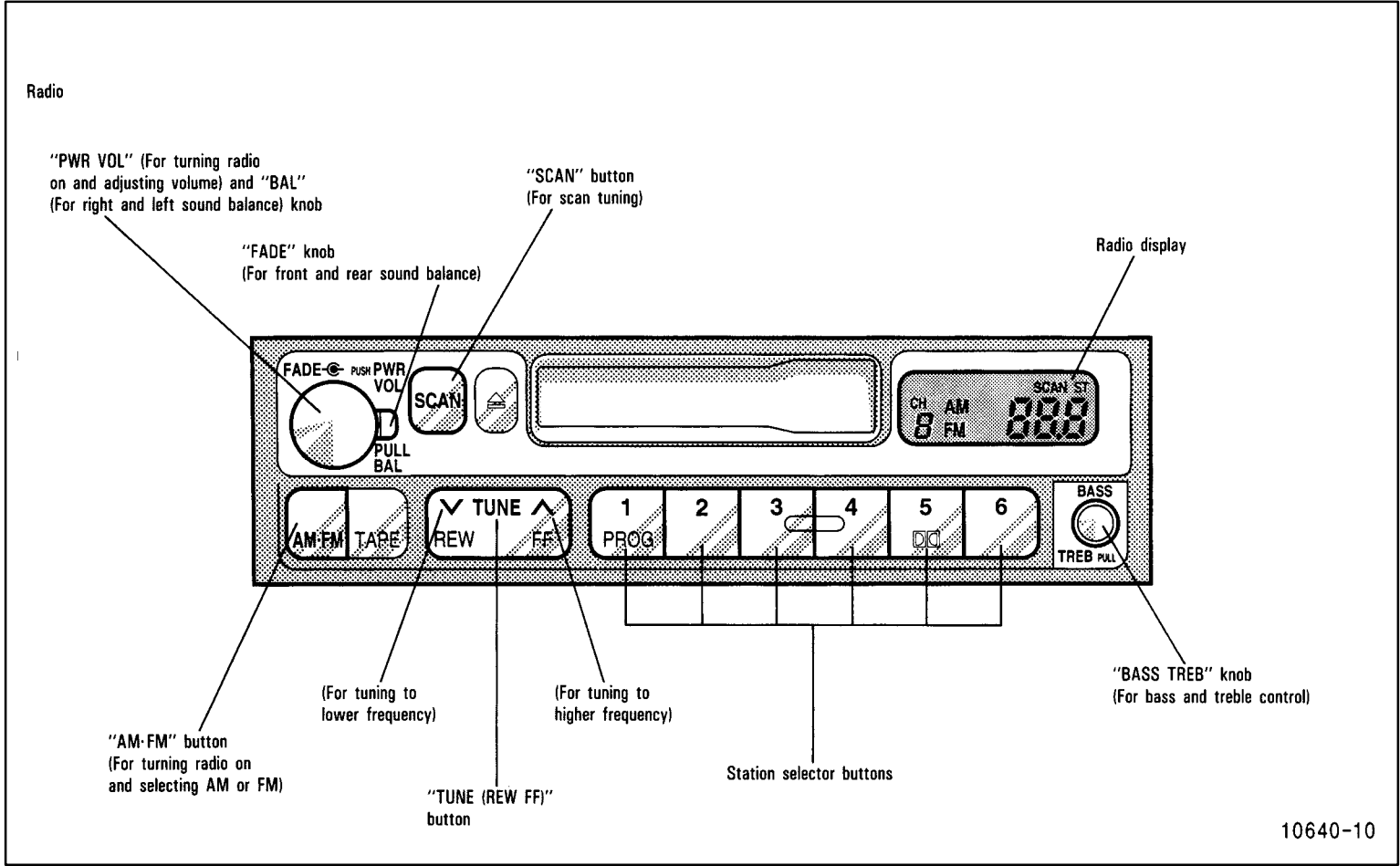
To adjust a high-pitched tone, push the "BASS TREB" knob (if pushed in), pull it fully out and turn it.

(e) Adjusting the sound balance

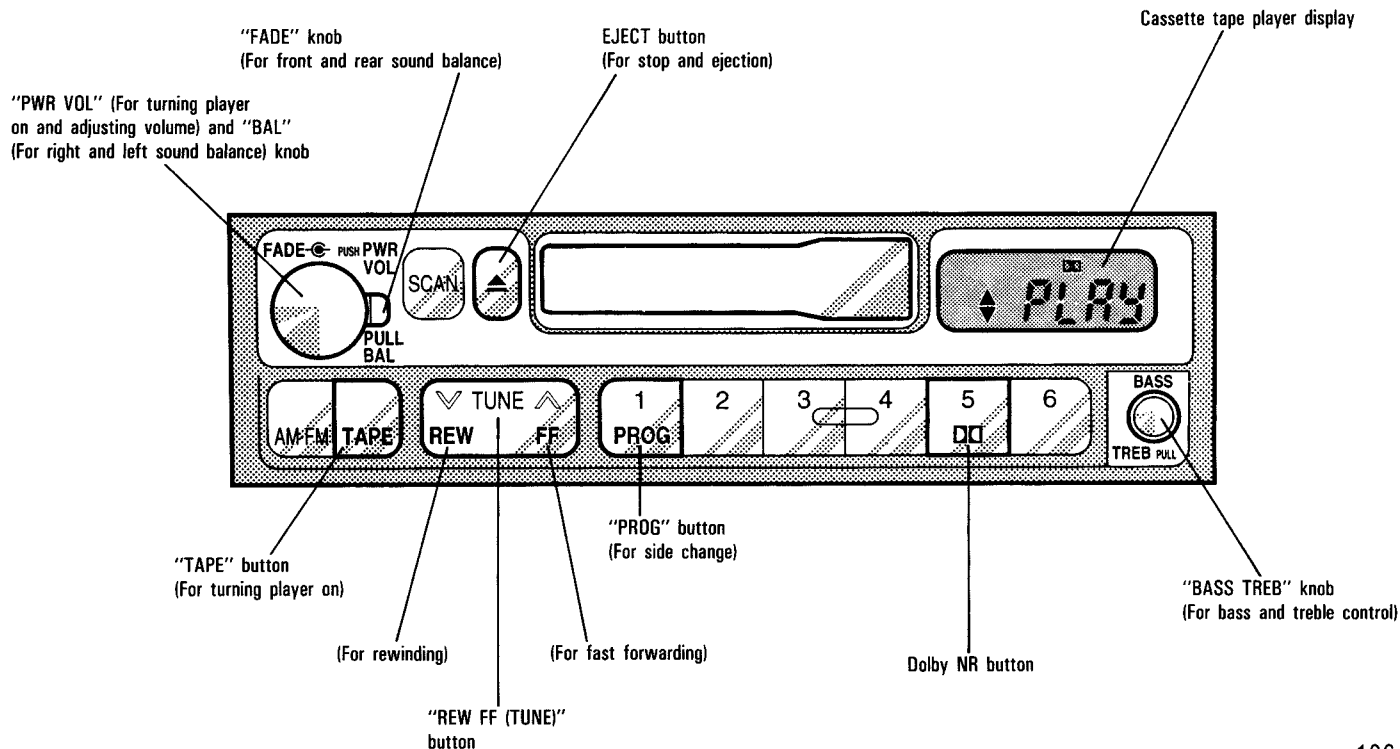
To balance the sound between the right and left speakers, push the "BAL FADE" knob (if pushed in) and turn it.

To balance the sound between the front and rear speakers, push the "BAL FADE" knob (if pushed in), pull it fully out and turn it.

AM•FM radio with electronic tuner and cassette tape player



Cassette tape player



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(a) Listening to the radio

1. Push the “AM•FM” button to turn the radio on and select either an AM or FM broadcast.

“AM” or “FM” will appear on the display.

The radio can also be turned on by pushing the “PWR VOL” knob if the radio was on when the system was turned off.

2. Turn the “PWR VOL” knob to adjust the volume.

3. Tune in the desired station. (See “(b) Selecting a station” and “(c) Presetting a station”.)

The radio will change automatically to stereo reception when an FM stereo broadcast is being received. At the same time, “ST” will appear on the display. When the receiving signal gets weak, the channel separation will automatically be reduced for the lowest noise. If the signal becomes extremely weak, the radio will switch over to monaural reception.

4. Adjust the tone and sound balance. (See “(d) Adjusting the tone” and “(e) Adjusting the sound balance”.)

5. To turn the radio off, push the “PWR VOL” knob.

(b) Selecting a station

Tune in the desired station using one of the following methods. The frequency will appear on the display.

Preset tuning: Use for tuning-in to a desired preset station. (See “(c) Presetting a station”.)

Push the station selector button which has been preset to the desired station. The radio will tune in to the station and the button number will appear on the display.

Seek tuning: Use for automatic station search and stop.

Push the “TUNE (REW FF)” button on either side and hold it until a beep is heard. The radio will begin seeking up or down for a station of the nearest frequency and will stop on reception. Each time you push the button, stations will be sought out one after another.

Scan tuning: Use for station-to-station scanning.

Scanning for all frequencies—Push the “SCAN” button and hold it until a beep is heard. With “SCAN” on the display, the radio will automatically seek out a station of a higher frequency, hold it for 5 seconds and scan to the next. To continue listening to the broadcast of your choice, simply push the “SCAN” button once again.

If the radio scans over all frequencies without stop because the signals are too weak or just because you leave it going, the radio will begin scanning again with sensitivity boosted for searching out weak stations.

Scanning for preset stations—Push the “SCAN” button within 2 seconds. With “SCAN” on the display, the radio will automatically seek out a preset station, hold it for 5 seconds and scan to the next. To continue listening to the station of your choice, simply push the “SCAN” button once again.

Manual tuning

Push the “TUNE (REW FF)” button on either side for less than 0.5 second. Each time you push the button, the radio will step up or down to another frequency where stations could exist.

(c) Presetting a station

1. Tune in the desired station. (See “(b) Selecting a station”.)

2. Push one of the station selector buttons and hold it until a beep is heard. This sets the station to the button and the button number will appear on the display.

Each button can store one AM station and one FM station. To change the preset station to a different one, follow the same procedure.

The preset station will be cancelled when the power source is severed (battery disconnected, burnt fuse, etc.).

(d) Adjusting the tone

To adjust a low-pitched tone, push the “BASS TREB” knob (if pushed in) and turn it.

To adjust a high-pitched tone, push the “BASS TREB” knob (if pushed in), pull it fully out and turn it.

(e) Adjusting the sound balance

To balance the sound between the right and left speakers, pull the “BAL” knob and turn it.

To balance the sound between the front and rear speakers, turn the “FADE” knob.

(f) Listening to the cassette tape

1. Put the cassette into the slot, with the tape side to the right and lightly push it in. The tape player will grab the cassette and slide it into place to play it. If the radio is on when inserting the cassette, the radio will automatically turn off.

If the cassette is already in the slot, push the “TAPE” button.

At this time, “PLAY” will appear on the display.

The tape player can also be turned on by pushing the “PWR VOL” knob if the tape player was playing when the system was turned off by pushing the knob.

2. If using a tape recorded with Dolby® NR*, push the button marked with the double-D symbol. The display will indicate that the Dolby noise reduction system is on.

The Dolby NR mode reduces tape noise by about 10 dB. For best sound reproduction, play your tapes with the Dolby® NR* on or off according to the mode used for recording the tape.

To play a tape recorded without Dolby® NR*, push the button again to turn off the Dolby® NR*.

*: Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation. “DOLBY” and the double-D symbol (D) are trademarks of Dolby Laboratories Licensing Corporation.

3. Turn the “PWR VOL” knob to adjust the volume.

4. Select your program. (See “(g) Selecting a program”.)

5. Adjust the tone and sound balance. (See “(d) Adjusting the tone” and “(e) Adjusting the sound balance”.)

6. To turn the player off, push the “PWR VOL” knob.

7. To eject the cassette, push the EJECT button. As this is done, the player will turn off. If the radio was on when the cassette tape was inserted, it will automatically turn on again.

You can eject the cassette only once after the system is turned off.

(g) Selecting a program

1. Push the “PROG” button to select a side to play. The tape operation indicator display shows you which side is being played.

The player will automatically reverse directions at the end of the tape to play the other side.

2. Push the “REW FF (TUNE)” button on either side to fast forward or rewind the tape. At this time, “FF” or “REW” will appear on the display. To stop the tape while it is fast forwarding, push “FF” or “TAPE”; to stop the tape while it is rewinding, push “REW” or “TAPE”. The tape will immediately begin to play.