

Introduction to the

# Electronic Stereo Cassette Radio

The Electronic Stereo Cassette Radio offers full electronic tuning, soft-touch controls, auto-reverse cassette deck and Dolby B noise reduction...all the features you're looking for in a quality audio system.

Be sure to read about some new and unique features on this radio, including:

- The multi-function "AUDIO" button, which controls several features of the radio (refer to pages 27 and 28).
- The "AMS" (Automatic Music Search) feature, which functions with both radio and cassette tape player (refer to pages 38 and 39).
- "Remote Radio Controls" (volume, seek and memory seek) on the instrument panel — Taurus/Sable only (refer to page 43).

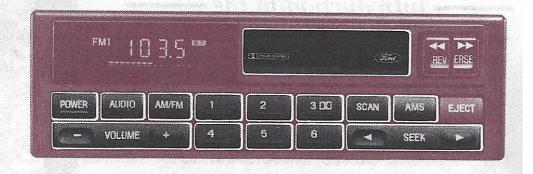
To get the most out of your new system, be sure to read **all** of the following operating instructions.

•	Radio Controls	38
•	Cassette Controls	39
•	Tips On Caring For Your Cassette Player and Tapes	42
	Remote Radio Instrument Panel Controls (Taurus/Sable only)	43

Also check pages 56-58 for common radio reception conditions.

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**NOTE:** Several of the controls on this radio function the same as those previously described. For operating instructions on the following controls, refer to page numbers shown.

How to turn the radio on and off — refer to page 4.

How to adjust the volume - refer to page 4.

Selecting the AM or FM frequency band — refer to page 4.

Using the "AUDIO" button to adjust the tone balance and speaker output (adjusting bass, treble, balance and fade functions) — refer to page 27.

#### ow to tune radio stations

There are four ways for you to tune in to a particular station. You can manually locate the station by using the Automatic Music Search ("AMS") button, "SEEK" the station, "SCAN" to the station or select the station by using the memory buttons, which you can set to any desired frequency.

#### Using the "AMS" function to manually tune your radio

You can change the frequency up or down one increment at a time by first pressing the "AMS" button, then pressing and releasing either the right

( ▶ ) or left ( ◀ ) side of the "SEEK" button. To change frequencies quickly, press and **hold down** either the right or left side of the "SEEK" button.

Manual tuning adjusts your radio to any allowable broadcast frequency, whether or not a station is present on that frequency. (See **All About Radio Frequencies** on page 58.)

Using the "SEEK" function — refer to page 23.

**NOTE:** Also see page 43 if your vehicle is equipped with remote radio controls on the instrument panel.

#### Using the "SCAN" function

Press the "SCAN" button to enter the scan mode. The radio will begin scanning up the frequency band, stopping on each listenable station for a five-second sampling. This continues until you press the "SCAN" button a second time. The display flashes "AM" or "FM."

Setting the Station Memory Preset buttons — refer to page 24 steps 1-4.

**NOTE:** If the vehicle's battery is disconnected, the Station Memory Preset buttons will need to be reset.

#### ow to insert a tape

**NOTE:** Radio power must be on to use the cassette tape player.

Insert a cassette (with the **open edge to the right**) firmly into the tape door opening, making sure the cassette is completely in and "seated." Play will begin when you insert a tape if the radio power is on.



#### ow to locate a desired track on the tape

NOTE: Depending on your vehicle, the display of your radio may show arrows ( ◀◀ or ▶▶ ) or numerals ("1" or "2") to indicate the direction of tape travel. In either case, at the end of the tape, the direction automatically reverses and plays the other track of the tape.

#### Using the Automatic Music Search ("AMS") function with cassette tape player (if your display shows arrows)

Press and hold the "AMS" button. Then, push the appropriate fast-wind button, depending upon the direction of the tape travel arrow in the display. For example, if the tape travel arrow is pointing to the left, push the right (>>>) button to rewind to the beginning of the current selection. If the tape travel arrow is pointing to the right, press the right (>>>) button to fast forward to the beginning of the next selection.

#### Fast forwarding the tape (if your display shows arrows)

To fast forward the tape, press the fast-wind button with the arrows pointing in the same direction as indicated in the display. For example, if the tape travel arrow in the display is pointing to the left, press the left ( ) button to fast forward the tape.

To return to the play mode, press the opposite fastwind button momentarily, until fast forward stops.

#### Rewinding the tape (if your display shows arrows)

To rewind the tape, press the fast-wind button with the arrows pointing in the opposite direction as indicated in the display. For example, if the tape travel arrow in the display is pointing to the left, press the right (>>>) button to rewind the tape. To return to the play mode, press the opposite fast-wind button momentarily, until rewind stops.

#### Using the Automatic Music Search ("AMS") function with cassette tape player (if your display shows numerals)

Press and hold the "AMS" button. Then, push the left ( ) button to rewind to the beginning of the current selection or press the right ( ) button to fast forward to the beginning of the next selection.

#### Fast forwarding the tape (if your display shows numerals)

Push the right (▶▶) button to fast forward the tape.

#### Rewinding the tape (if your display shows numerals)

Push the left (◀◀) button to rewind the tape.

#### How to play the other side of the tape

The alternate track (reverse side) of the tape can be selected at any time by pushing both fast-wind buttons at the same time.

#### ow to eject the tape

To stop the tape and eject the cassette, press the "EJECT" button. The radio will resume playing.



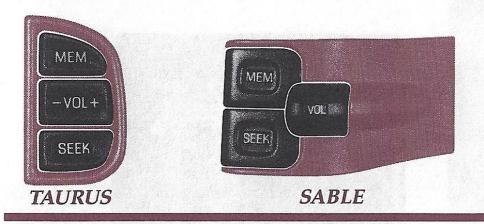
#### T sing the Dolby B noise reduction feature

Your cassette tape player is equipped to let you enjoy your tapes to their fullest potential. Some tapes are recorded with Dolby B noise reduction and should be played in the Dolby B noise reduction mode for best sound reproduction. Push station memory button 3 to activate.

NOTE: Noise reduction system manufactured under license from Dolby Labs Licensing Corporation. "Dolby" and double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.

Automatic bass/loudness — refer to page 32.

Tips on caring for your cassette player and tapes — refer to page 34.



#### T sing the remote radio controls on your instrument panel

#### Available on Taurus and Sable vehicles only.

Your vehicle is equipped with remote radio controls on the instrument panel which are located just to the right of the instrument cluster. These controls duplicate three radio functions you are likely to use most: Memory ("MEM"), Volume ("VOL") and Seek ("SEEK").

Memory ("MEM") — Push this button to access the station you have set into memory button 1 on the face of your radio. Successively pushing this button will access, numerically, all stations you have set into the Station Memory Preset buttons (1 through 6).

**Volume** ("**VOL**") — On Taurus vehicles, press the right (+) side of this rocker switch to increase volume, and push the left (-) side to decrease volume. On Sable vehicles, press the volume rocker switch up to increase volume, and push it down to decrease volume.

Seek ("SEEK") — Push this button to automatically select listenable stations up the frequency band. By holding the button down, listenable stations can be passed over to reach the desired station.

NOTE: Remote radio controls are also included with the Electronic Stereo Radio.



- Introduction to the -

# ECTRONIC STEREO RADIO

## Electronic Stereo Radio

The Electronic Stereo Radio offers full electronic tuning with a new soft-touch feel.

Be sure to read about some new and unique features on this radio, including:

- The multi-function "AUDIO" button, which controls several features of the radio (refer to pages 27 and 28).
- Remote Radio Controls (volume, seek and memory seek) on the instrument panel — Taurus/Sable only (refer to page 43).

To get the most out of your new system, be sure to read **all** of the following operating instructions.

Also check pages 56-58 for common radio reception conditions.



**NOTE:** Several of the controls on this radio function the same as those previously described. For operating instructions on the following controls, refer to the page numbers shown.

How to turn the radio on and off — refer to page 4.

How to adjust the volume — refer to page 4.

Selecting the AM or FM frequency band — refer to page 4.

#### ow to tune radio stations

There are three ways for you to tune in to a particular station. You can manually locate the station by using the "TUNE" button, "SEEK" the station or select the station by using the memory buttons, which you can set to any desired frequency.

#### Using the "TUNE" function

You can change the frequency up or down one increment at a time by pressing and releasing either the right (+) or left (-) side of the "TUNE" button. To change frequencies quickly, press and hold down either the right or left side of the "TUNE" button.

The "TUNE" control adjusts your radio to any allowable broadcast frequency, whether or not a station is present on that frequency. (See **All About Radio Frequencies** on page 58.)

Using the "SEEK" function — refer to page 23.

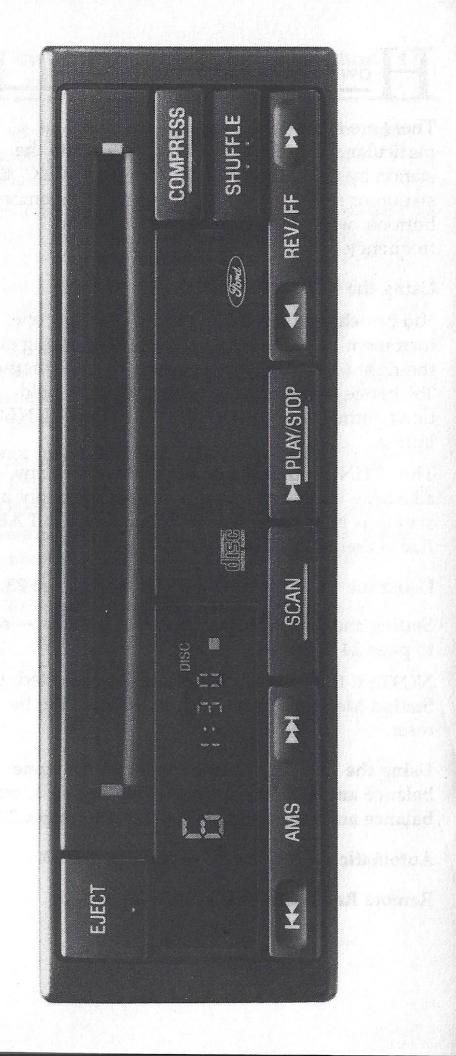
Setting the Station Memory Preset buttons — refer to page 24 steps 1-4.

**NOTE:** If the vehicle's battery is disconnected, the Station Memory Preset buttons will need to be reset.

Using the "AUDIO" button to adjust the tone balance and speaker output (adjusting bass, treble, balance and fade functions) — refer to pages 27-28.

Automatic bass/loudness — refer to page 32.

Remote Radio Controls — refer to page 43.



#### - Introduction to the -

#### FORD CD PLAYER

Welcome to digital sound reproduction at its finest. The Ford CD Player (available on Taurus/Sable only) brings you audio capability that will astound you.

Be sure to read **all** of the following operating instructions and care guidelines to get the most out of this system.

•	CD Player Controls	50
•	Compression and Shuffle Features	53
0	Taking Care of Your CD Player	
	and Discs	55
•	Common Operating Conditions	55



#### T sing the controls on your new compact disc player

The Ford Compact Disc Player operates when the FORD JBL Audio System is on and a disc is inserted (label side up). Handle the disc by its edge only. (Be sure to read and follow all of the care and cleaning instructions under How to take care of and clean your CD player and discs on pages 17 and 18.)

The digital display on your CD player shows the track (selection) number and the elapsed time. Indicators for play ( ▶ ), stop ( ■ ), compression on ("COMP") and shuffle on ("SHUF") are also in the display. (These features are described later.)

Once a disc is inserted, operation of the CD player will override that of the cassette player or radio.

**NOTE:** The volume, bass, treble, balance and fader controls on the radio are also used with the CD player. Refer to pages 22-28 for operating instructions on these controls.

#### ow to insert a disc and begin play

Insert one disc, label side up, into the disc opening. When inserted, the disc automatically loads into the unit and play starts at the beginning

of the first track (selection). The play indicator ( ▶ ) lights up and the number "1" (track) and "0:00" (elapsed time) are shown in the digital display.

When the disc reaches the end, the disc player automatically returns to the beginning of the disc and resumes playing.

**NOTE:** Once a disc is inserted, the disc opening is secured to prevent the accidental insertion of a second disc.

NOTE: The CD player has heat protection circuitry to protect the laser diode. If the internal temperature of the player reaches 167°F (75°C), the heat detection circuit will shut off the player and "HOT" will appear in the display. When the temperature is within normal operating range, the "HOT" indicator will turn off and the CD player will again be operational.

#### ow to stop and restart the CD player

When a disc is loaded, the unit automatically enters the play mode and the play indicator ( ▶ ) illuminates. To stop temporarily, press the "PLAY/STOP" button. The stop indicator ( ■ ) in the display illuminates and operation returns to the radio or tape mode. To resume CD play, press this button once again or press any other function button (except "EJECT" or "COMPRESS" buttons).

NOTE: If the ignition key is turned OFF during play and then is set to the ON or ACCESSORY position, the CD player will resume playing in the mode it was in when ignition was turned off.



#### player using "AMS"

An "AMS" (Automatic Music Search) control on your CD player allows you to quickly find a particular selection on the disc. Press the left (►) side of the "AMS" control to locate a previous selection or the right (►►) side of the "AMS" control to locate a later selection.

#### Tow to fast forward or reverse your CD player

To quickly search for a particular point in a selection, press the right (▶▶) side of the "REV/FF" button (to fast forward) or the left (◄◄) side (to reverse). While either side of the button is pressed, the disc goes forward or backward at two different speeds depending on how long the button is held down. (Pressing the button for more than a couple seconds will speed up the process.) Release the button at the desired point (found by watching the elapsed playing time in the display or by listening to the sound during fast forward or reverse).

When you have reached the end of the disc by keeping the fast forward (▶▶) side of the button pressed, the display will show the end time of the last track and the sound will be muted. When the fast forward (▶▶) side of the button is released, the player resumes play at the beginning of the first track.

A "1" and "0:00" will appear in the display when the beginning of the disc is reached by pressing the reverse (◄◄) side of the button.

#### sing the "SCAN" function

Press the "SCAN" button to enter the scan mode. The CD player will begin scanning the disc, stopping on each listenable track for an eight-second sampling. This continues until you press the "SCAN" button a second time or eject the disc. While in the scan mode, the display flashes "SCAN."

#### S pecial features of your CD player

#### Compression

Because of the wide dynamic range of the Ford Compact Disc Player, soft passages may be difficult to hear under certain driving conditions while maintaining a reasonable volume level in the louder passages. The compression feature will bring these soft and loud passages closer together for a more consistent listening level.

To turn the compression on, press the "COMPRESS" button. When on, the compression indicator ("COMP") will appear in the display. Press the button again to turn off.



#### Special features of your CD player (cont'd)

#### Shuffle

The shuffle feature on your CD player allows you to listen to your disc selections in a different order. When this feature is activated, your CD player will randomly select and play tracks on the disc.

Press the "SHUFFLE" button to turn on, press it again to turn off. When on, the shuffle indicator ("SHUF") will appear in the display. When the player is between selections, the display will show a moving dash ("-") around the perimeter of the display.

#### Shuffle and Scan

Both the shuffle and scan features can be activated simultaneously. In this mode, the player will randomly pick a selection and play the first eight seconds. This process is continued until either the "SCAN" button or "SHUFFLE" button is pressed a second time.

#### **Automatic Disc Storage**

If the disc is ejected from the CD player but is not removed from the disc opening within 15 seconds, the player will automatically reload the disc for storage.

#### ow to eject the disc

Push the "EJECT" button in the upper left corner of your CD player to stop play, eject the disc and resume radio or tape operation of your audio system.

How to take care of and clean your CD player and discs — refer to pages 17-18.

Common operating conditions of your CD player — refer to page 19.

## Common Radio Reception Conditions

Several conditions affect FM reception and can result in noise or interference in the reception. These are:

#### Distance/Strength

The strength of the FM signal is directly related to the distance the signal must travel. The listenable range of an average FM signal is approximately 25 miles (40 km). Beyond this distance, the radio is operating in a "fringe" area and the signal becomes weaker. Also, "Signal Modulation" is used by some stations to increase their "loudness" relative to other stations. The difference in loudness can be a result of signal modulation as well as signal strength.

#### Terrain

The terrain (hills, mountains, tall buildings) of the area over which the signal travels may prevent the FM signal from being noise-free. The most common noise problems created by terrain are **Flutter** and **Multi-path Cancellation**, described below.

**Flutter** is repeated pops and hisses which are heard during an otherwise clear broadcast. While this is generally experienced in the station's fringe area, it can also occur near the station because of the "line of sight" characteristic of FM radio waves.

If there is a building or large structure between the antenna and station, some of the signal "bends" around the building, but certain spots receive almost no signal. Moving out of the "shadow" of the structure will allow the station to return to normal.

# CEPTION/WARRANTY AND RADIO RE(

Multi-path Cancellation creates noise similar to flutter with the addition of distortion in the program. This condition exists when the radio waves are reflected off objects or structures. The reflected signal cancels the normal signal, causing the antenna to pick up noise and distortion. Cancellation effects are most prominent in metropolitan areas, but also can become quite severe in hilly terrain and depressed roadways.

To minimize the effects of these conditions, a stereo/mono blend circuit has been incorporated into this system. This feature automatically switches a weak stereo signal to a clearer monaural signal, which improves the quality of reception.

Several sources of static are normal conditions on AM frequencies. These can be caused by power lines, electric fences, traffic lights and thunderstorms.

Another reception phenomenon is **Strong Signal Capture and Overload**. This can occur when listening to a weak station and when passing another broadcast tower. The close station may capture the more distant station, although the displayed frequency does not change. While passing the tower, the station may switch back and forth a few times before returning to the original station.

When several broadcast towers are present (common in metropolitan areas) several stations may overload the receiver, resulting in considerable station changing, mixing and distortion.

Automatic gain control circuitry for both AM and FM bands has been incorporated into this system to reduce strong signal capture and overload.

#### A Il About Radio Frequencies

The Federal Communications Commission (FCC) establishes the frequencies that AM and FM radio stations may use for their broadcasts. The allowable frequencies are: AM: 530, 540...1700, 1710 kHz in 10 kHz steps; FM: 87.9, 88.1...107.7, 107.9 MHz in 0.2 MHz steps.

Not all frequencies will be assigned to a given area. This radio will tune to each of these frequencies using manual tuning and no fine tuning is necessary as radio stations may not use other frequencies.

Some FM radio stations advertise a "rounded-off" frequency which is not the frequency on which they actually broadcast. For example, a radio station that is assigned a frequency of 98.7 MHz may call itself "Radio 99" even though 99.0 MHz is not an allowable FM broadcast frequency.

# IMPORTANT WARRANTY AND SERVICE INFORMATION

#### bout your warranty

Your sound system is warranted for three years. Consult your vehicle warranty booklet for further information.

Ask your dealer for a copy of this limited warranty.

#### Servicing your audio system

At Ford Audio, we stand behind our audio systems with a comprehensive service and repair program. If anything should go wrong with your Ford Audio System, return to your dealer for service. There is a nationwide network of qualified Ford authorized repair centers to service your problem.

Ford Motor Company reserves the right to discontinue models or options or change specifications, equipment or design at any time without notice and without incurring obligation.





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