Operating Instructions
Radio

VR100, VR200, VR300, VR400

VOLVO
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System Overview

Four models of the radio are available:

- AM/FM/Mechanical Cassette – Model VR 100
- AM/FM/Logic cassette with external CD changer capability – Model VR 200
- 1-Din AM/FM/CD player with external CD changer capability – Model VR 300
- 2-Din AM/FM/Logic Cassette/CD player with external CD changer capability – Model VR 400

In addition to the front panel controls for these radios, most models can also be controlled using an optional remote wireless control or optional steering wheel-mounted controls.
2 Using the Radio

Using the Radio

Notice: Before using the manual, check to see what radio model is in your vehicle. Some system features described may not apply to your radio.

Security Code

Your radio is protected by a security code. The security code can be found on a label delivered with the radio. The security code cannot be changed.

Note: Certain vehicles have optional electronic devices that will automatically enter the security code if power is interrupted.

Note: Contact your local dealer regarding your security code if lost.

When the radio power is first turned on after power has been interrupted, “ID CHECK” and then “LOCK” is displayed for 3 seconds. Then “0000” is displayed. To unlock the radio, enter the four-digit security code found on the removable label by doing the following:

If the code is entered correctly, the radio will switch to the last active mode (i.e. FM, CD, etc.) and is ready to use.

If the code is entered incorrectly, you can try 2 more times. After 3 incorrect entries, the radio will display “LOCK.” You must turn the radio off, while leaving the ignition and battery on, for 1 continuous hour before attempting to unlock the radio again.

Power On/Off

Press to turn ON/OFF.
Using the Radio

Language
To select the desired Radio Data System (RDS) Program Type Function (PTY) display language, turn the radio off,

1. TP
   Press and hold for 2 seconds.

2. SELECT
   Turn to scroll through available languages.

(English, French, and Spanish in US-selected frequency bands, or English, French, German, Italian, and Spanish in European-selected frequency bands).

After the desired language is displayed for 5 seconds, the setting is saved and the display returns to the default.

Country Frequency Selection
Different countries broadcast on different sets of radio frequencies. You can select from several different country-specific radio frequency bands.

To select a country frequency band,

1. DISP
   Press and hold for 3 seconds.

until the current country frequency band is displayed.

2. MODE
   Press to scroll through available bands.

AMERICAS > EUROPE > AUSTRALIA > JAPAN > ARGENTINA > SAUDI

The selected band will be saved after 5 seconds.

Note: When a new country is selected, all preset stations from the previous country are erased.

Display Illumination
All of the radio controls are illuminated for nighttime viewing. Dimming the vehicle interior lights will also dim the radio controls.
4 Clock

Clock

Displaying the Time

When the ignition is on, the time of day is displayed, even when the radio is off. When the ignition is off, you can display the time for 5 seconds.

Note: When the European frequency is selected, 24-hour format is selected automatically; however, it can be changed by following the previous steps. Likewise, when Non-European frequency is selected, the 12-hour format is selected automatically, but can also be changed as described above.

Setting Time of Day

To change the time of day:

1. Press and hold for 3 seconds.
2. Turn to display TIMESET, then press.
3. Turn to correct hour. Press until minutes flash.
4. Press until minutes flash.
5. Turn to correct minutes.

After 5 seconds, the setting is saved and the display returns to the default.

Setting the clock

12- or 24-Hour Format

You can select either a 12-hour or 24-hour style time display.

To change the time format,

until “12/24” is displayed. The number shown after “12/24” indicates which format is selected (12-hour or 24-hour). To change this number, press the SELECT knob. After 5 seconds, the setting is saved and the display returns to default.
Clock 5

Alarm Clock and Timer (Except Model VR 100)

Setting the Alarm Clock
To set the alarm clock,

1. Press and hold the SELECT knob for 3 seconds.
2. Turn to display ASET.
3. Turn to correct hour.
4. Turn to change hour.
5. Press until minutes flash.
6. Turn to change minutes.

After 5 seconds, the setting is saved and the display returns to the default.

Note: If the radio is in the 12-hour format, be sure the setting correctly shows AM or PM.

Alarm Clock On / Off / Snooze
To turn the alarm on or off, press and hold the SELECT knob for 3 seconds until “12/24” is displayed, then turn the SELECT knob until “ALARM” is displayed. Press the SELECT knob to choose between “Y” (On) or “N” (Off). After 5 seconds, the setting is saved and the display returns to the default. When the alarm is set, the alarm icon \[ALARM\] is displayed.

If the radio is on when the alarm time is reached, a beeping alarm sounds and the alarm time is shown. If the radio is off when the alarm time is reached, the last radio mode turns on.

In either case, if you press any of the radio buttons while the alarm is going off, the alarm “snoozes” for 9 minutes. After 9 minutes, the alarm turns on again and remains on until snooze is activated or the alarm is turned off, as described above.

Note: If the alarm is not turned off or the snooze mode is not activated, the alarm will stop after 18 minutes to avoid discharging the battery.

Alarm Volume
You can adjust the volume of the alarm by pressing and holding the SELECT knob for 3 seconds until “12/24” is displayed. Then turn the SELECT knob until “AL VOL” is displayed and turn the VOLUME knob to increase or decrease the volume of the alarm.

After 5 seconds, the setting is saved and the display returns to the default.
6 Clock

One-Hour Timer
You can set the radio to play for one hour and then automatically turn off.

To turn the radio on for another hour, with the ignition off, press the VOLUME knob. After 1 hour of play, the radio will turn off. To turn the radio on for another hour, press the VOLUME knob again.
Audio Controls

The bass and treble audio settings apply to all radio modes (AM/FM, LW or WX, cassette and CD). A separate set of the following audio adjustments can be stored for each mode.

Note: LW (longwave) is available only on European models. WX (weather) is available only on U.S. models.

Volume Control

While listening in any mode,

If you are currently adjusting the sound quality of the radio, (e.g., BASS, TREB, BAL, FADE), push the AUD button until “VOL” is displayed, then turn the VOLUME knob as described above.

Dynamic Distortion Limiting

Dynamic Distortion Limiting automatically limits the audio distortion level caused by playing the radio too loud. You do not need to set or adjust this feature.

Balance Control

To adjust the left/right balance,

After 5 seconds, the display returns to the default.

Fade Control

After 5 seconds, the display returns to default.
8 Audio Controls

**Treble Control**

1. Press AUD repeatedly to display TREB.
2. Turn VOLUME to adjust TREBLE.
   
   OR
   
2. Turn SELECT to adjust TREBLE.

After 5 seconds, the display returns to the default.

**Bass Control**

1. Press AUD repeatedly to display BASS.
2. Turn VOLUME to adjust BASS.
   
   OR
   
2. Turn SELECT to adjust BASS.

After 5 seconds, the display returns to the default.

**Midrange Control**

(Model VR 400 only)

1. Press AUD repeatedly to display MID.
2. Turn VOLUME to adjust MIDRANGE.
   
   OR
   
2. Turn SELECT to adjust MIDRANGE.

After 5 seconds, the display returns to the default.

**Loudness**

The Loudness feature boosts the low (bass) frequency response at low volume levels, improving the sound quality. The amount of boost automatically decreases as volume is increased. On the Model VR 100,

- Press to LOUDNESS on.
- Press again to turn off.

The “LOUD” icon will be displayed.

All other Models have an Auto-Loudness function. The feature cannot be turned on or off.
2- or 4-Speaker Select

Depending on the radio speaker installation in your vehicle, 2- or 4-speaker output can be selected. To change this selection,

When the 2-speaker option is chosen, the rear speakers are disabled and the fade adjust setting is not available.

After 5 seconds, the setting is saved and the display returns to the default.

Room Simulation
(Model VR 400 Only)

You can select one of 5 acoustic settings, simulating different listening environments and providing a variety of sound qualities:

**TALK**: This mode limits the frequency response and delays audio from the rear speakers compared to the front speakers. This effect is very useful on AM talk radio because it filters much of the noise and moves the audio image forward.

**LIVE**: Simulates the acoustics of live musical performance in a larger room.

**AUDITORIUM**: The same effect as LIVE, but more pronounced, giving the feeling of an even larger room.

**ARENA**: Creates the effect of being in a large arena.

**DRIVER L or DRIVER R**: The sound from the driver side front speaker is delayed with respect to the passenger side front speaker, creating the effect of shifting or moving the audio image (for left hand and right hand drive vehicles).

To select a Room Simulation,
10 Audio Controls

To change the degree of effect for the selected simulation from 0 (minimum) to 15 (maximum).

After 5 seconds, the setting is saved and the display returns to default as indicated on the display.

Speed-Dependent Volume (Model VR 400 only)

The Model VR 400 can automatically adjust the volume based on your vehicle’s speed, turning the volume up as you travel faster and down as you travel slower. This adjustment helps the radio to be heard over vehicle and road noise.

To turn on Speed-Dependent Volume,

change to “N” (off), “1” (low setting), “2” (medium setting) or “3” (high setting).

Note: The volume change is heard only while the vehicle is moving, but may not be noticeable due to the changes in road noise.
Tuning the Radio

Band Select

You can select from several bands of entertainment and information radio services:

U.S. models: AM, FM, WX

European models: FM, AM_MW, AM_LW

To select a band, (AM, FM, WX):

1. **MODE**
   - Press MODE to display desired band.

To select AM_LW with the European model, first select AM_MW.

**EUROPEAN MODELS**

1. **MODE**
   - First press and hold MODE for 3 seconds until beep to select AM_MW.

2. **MODE**
   - Press MODE to display AM_MW.

Weather Band

The National Oceanic and Atmospheric Administration (NOAA) of the U.S. Department of Commerce provides continuous broadcasts of taped weather messages. These messages are repeated every 4 to 6 minutes and routinely updated every 1 to 3 hours. Updates are more frequent during severe weather. Most NOAA weather stations broadcast 24 hours a day.

NOAA broadcasts on 7 channels. In some areas, more than one broadcast may be available. Select the broadcast location closest to your location for the best reception.

**Note:** The Weather Band option is only available when the country chosen is “Americas.” See the Country Frequency Selection section.

**Note:** Severe weather condition broadcasts are not automatically broadcasted by these radios. You must have the weather band selected to hear weather condition information.

When the Weather band is selected, the radio will display “WX” and a channel number. The WX icon will also be illuminated.

Longwave Band

The longwave frequency band is a European AM broadcast in the frequency range of 153 to 279 kHz. It is only available when the European frequency band has been selected.

Tune

In any tuner mode (AM, FM, WX or LW)

1. **TUNE**
   - Press TUNE
2. **SELECT**
   - Turn to manually tune.

If you reach the end of a frequency band, the radio will rollover or “wrap” to the opposite end of the band and continue through the band.
12 Tuning the Radio

If the select knob is not rotated within 5 seconds, the manual tune function is cancelled and the SELECT returns to its default function.

Seek

The radio can automatically seek stations, finding and stopping on the next station that exceeds the sensitivity level set.

To seek for a station in any tuner mode (AM, FM, WX, LW):

1. Briefly press up or down to SEEK.

the next higher or lower station on the current band. The radio mutes as it searches for the next station with a strong signal. When it finds a station, the radio stops seeking and the audio returns to the original volume.

2. Press again for next station.

Seek Sensitivity - FM and AM (U.S. Frequency bands only)

In FM and AM tuner modes, the sensitivity of the Seek function can be adjusted to stop at stations with weaker or stronger signals. To adjust this sensitivity,

After selecting SEEK, you can also rotate the VOLUME knob to scroll between the settings.

After 5 seconds, the setting is saved and the display returns to the default. The “-2” setting will stop only on very strong signals. The “+2” setting will stop on weaker signals.

Scan

You can also scan for stations. During a Scan, the radio searches for the next station, pauses on it for a few seconds, and then searches again for the next station.

To scan while in any tuner mode (AM, FM, WX or LW), press and hold the UP/DOWN rocker button to search for the next higher or lower station on the current band. The radio displays
“SCAN” and the audio mutes. The radio searches for and stops on the next station with a strong signal and the audio returns to the original volume. After 5 seconds, the audio mutes again and the radio continues the scan. To stop the scan, press the UP/DOWN rocker button.

If no station is found in 2 passes through the band, the scan will stop at the starting frequency.

**RDS (Radio Data System) Features**

RDS transmits additional information encoded on an FM station’s regular signal. The RDS feature works only with FM broadcast stations transmitting this encoded information. RDS broadcast is widely available in Europe, but less common in North America.

RDS features include:
- Alternate Frequency switching
- Traffic Program announcements
- Program Type selections
- Radio Text

**Alternate Frequency Switching (AF)**

With the AF feature, the radio automatically switches to another station or frequency, if available, that is broadcasting the identical program materials as the original station, when the original station begins to fade. With AF turned on, you can drive across a country or continent while listening to the same program, without retuning your radio.

To turn the AF feature on,

1. Press TUNE.

While in FM Mode, press and hold TUNE for 3 seconds to display AF-ON.

To turn AF off,

2. Press TUNE.

Press and hold TUNE for 3 seconds to display AF-OFF.

OR

3. Press UP/DOWN rocker button.

**Note:** AF networks are common in Europe, but rare in the US.

**Setting FM Memory (European programmed radio frequencies only)**

You can help the radio make faster Seeks and AF switches to new frequencies by using the FM Memory function. This function searches for and stores the frequencies of local RDS and non-RDS FM stations in memory. The radio uses this information so it can more quickly find and switch to a stronger station when the currently tuned station begins to fade or a stronger signal becomes available.

**Note:** The stations stored using the FM Memory function are separate from stored FM Presets.

To manually activate the FM Memory function and store local radio frequency information, press and hold the AUTO
14 Tuning the Radio

button for 5 seconds while in FM mode. The radio also will automatically start an FM Memory search any time you Seek a TP station when AF is off, or Seek a TP station when the radio is not tuned to an RDS station.

Note: You can’t start an FM Memory search while the radio is receiving a TP broadcast.

The radio displays “MEMORY” and the audio mutes as it seeks for and stores FM station information.

Note: If TP is turned on when you start the FM Memory function, the radio display will indicate “SEARCH” instead of “MEMORY”.

The FM memory process typically takes less than 30 seconds, but can take up to several minutes, depending on the number and type of stations available. You can cancel the FM memory search by turning AF off or pressing and holding the AUTO button.

To keep the stored FM Memory information current, you should occasionally repeat the FM Memory search to update the information about local frequencies. FM Memory information remains stored until another FM Memory store function occurs.

Traffic Program (TP)

When the Traffic Program feature is turned on and a traffic announcement is received, the radio will automatically interrupt the current mode to broadcast traffic condition announcements that are provided by some stations or networks.

Note: TP cannot be turned on in AM, WX or LW mode.

If TP is turned on and the radio is not tuned to a station broadcasting traffic announcements, it will begin to SEEK a station that broadcasts announcements. The radio will display “SEARCH”.

During a Traffic Announcement, the radio display shows “TRAFFIC”.

There are 3 TP icons that may be displayed:

TP – Current station can broadcast traffic announcements, the function is not enabled.

| TP | Flashing – Current station can broadcast traffic announcements, the function is enabled.

|   | – The function is enabled, but there are no stations/networks being received that broadcast traffic information. This can also occur if the TP function is enabled but the radio travels out of the broadcast area for the station/network that was broadcasting the traffic information.
Tuning the Radio 15

Traffic Announcement Volume
You can adjust the volume of all Traffic Announcements by adjusting the volume while an announcement is being heard. When the next announcement is received, the volume will automatically increase to this volume. When the announcement is over, the radio will return to the previous volume setting of whatever radio mode was playing.

The Traffic Announcement volume setting will be saved for all future announcements until it is adjusted again.

Program Type Function
(PTY)
To select a particular type of music programming (Jazz, Sports, Country, etc.),

1. Press to display <PTY> icon.
2. Turn to scroll through available selections.
3. Press to SEEK or SCAN.

If a selection is not made within 10 seconds, no PTY will be saved and the radio will return to the default.
16 Tuning the Radio

European Program Type List
The PTY listing is shown below:

<table>
<thead>
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<th>TYPE</th>
<th>ENGLISH</th>
<th>FRENCH</th>
<th>GERMAN</th>
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<tbody>
<tr>
<td>*</td>
<td>NO TYPE</td>
<td>NO PTY</td>
<td>RIEN TPY</td>
<td>KEIN PTY</td>
</tr>
<tr>
<td>1</td>
<td>NEWS</td>
<td>NEWS</td>
<td>INFOS</td>
<td>NACHRIC</td>
</tr>
<tr>
<td>2</td>
<td>CURRENT AFFAIRS</td>
<td>AFFAIRS</td>
<td>MAGAZINE</td>
<td>AKTUELL</td>
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<td>3</td>
<td>INFORMATION</td>
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<td>ROCK M</td>
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<td>EASY LISTENING MUSIC</td>
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<td>CHANSONS</td>
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<td>LIGHT CLASSICAL</td>
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<td>CHILDREN</td>
<td>ENFANTS</td>
<td>KINDER</td>
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<td>L OUVERT</td>
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### European PTY Listing (continued)

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<td>30</td>
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<td>ALARM!</td>
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### Italian & Spanish PTY Listings

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<td>NOTICIAS</td>
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<td>2</td>
<td>CURRENT AFFAIRS</td>
<td>AFFARI</td>
<td>TOPICOS</td>
</tr>
<tr>
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<td>INFORMATION</td>
<td>INFORM</td>
<td>INFORMAC</td>
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<td>SPORTS</td>
<td>SPORT</td>
<td>DEPORTES</td>
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<td>EDUCAZ.</td>
<td>EDUC.</td>
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<td>CULTURA</td>
<td>CULTURA</td>
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<td>SCIENZA</td>
<td>CIENCIAS</td>
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<td>POP</td>
<td>M. POP</td>
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<td>ROCK MUSIC</td>
<td>ROCK</td>
<td>M. ROCK</td>
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<td>12</td>
<td>EASY LISTENING MUSIC</td>
<td>EASY _M</td>
<td>G-EXITOS</td>
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<td>OTRA M</td>
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<td>INFANCIA</td>
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# 18 Tuning the Radio

## ITALIAN & SPANISH PTY Listings (continued)

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<td>M. NCNAL</td>
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<td>ALARM TEST</td>
<td>TEST</td>
<td>PRUEBA</td>
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<td>ALARM</td>
<td>ALLARME</td>
<td>ALARMA!</td>
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<td>ANY TYPE</td>
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<tr>
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## North American PTY Listing:

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<td>NINGUNO</td>
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<td>DEPORTES</td>
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<td>TALK</td>
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<td>CHARLA</td>
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<td>ADLT_HIT</td>
<td>CONTEMP</td>
<td>HIT_ADTO</td>
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<td>SOFT_RCK</td>
<td>SOFT_RCK</td>
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<td>MUS_SUAV</td>
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<td>BIG_BAND</td>
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<td>CLASICOS</td>
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<td>CONTMPOR</td>
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<td>SOFT R&amp;B</td>
<td>SOFT R B</td>
<td>SOFT R B</td>
<td>CONT_SUA</td>
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</tbody>
</table>
Tuning the Radio

Program Type Interrupt
Program Type Interrupt (PTY) will interrupt all other modes (cassette, CD, etc.) if a radio station begins to broadcast the chosen PTY program.

To designate an interrupt, follow the previous instructions to choose the desired program type, then press and hold the PTY button for 2 seconds while the desired PTY is selected, until "*" is displayed and the chosen PTY icon is enclosed in <brackets>.

To cancel the interrupt, press the PTY button and then rotate the SELECT knob to display the PTY designated by the "*". Press and hold the PTY button for 2 seconds until "*" is no longer displayed.

Note: An RDS interrupt can’t interrupt another RDS interrupt. The first interrupt received will be played and any others received during the playback of the first interrupt will be ignored.

Program Type Seek
If PTY is not active, press the PTY button. Then press the UP/DOWN rocker button to Seek for the currently selected program type.

Program Type Scan
If PTY is not active, press the PTY button. Then press and hold the UP/DOWN rocker button until a beep is heard and the radio begins to scan for the currently selected program type.

Variants/Region Function
With this function turned on, the radio will seek or scan for AF network stations that have the same programming with only slight differences, like different commercials. With this function off, the radio will not switch to a network with similar programming.

NORTH AMERICAN PTY LISTING (continued)

<table>
<thead>
<tr>
<th>CODE</th>
<th>TYPE</th>
<th>ENGLISH</th>
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<td>EMERGENCY ALERT</td>
<td>ALERT!</td>
<td>ALERTE</td>
<td>ALARMA!</td>
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</table>

* NOTE: PTYs marked with * cannot be used for a PTY SEEK, but can (only) be shown in the display.
20 Tuning the Radio

To turn this function on or off, press and hold the SELECT knob until “12/24” is displayed. Then turn the SELECT knob until “ACPT VAR” is displayed. You can choose from the following options:

- To look for identical and similar stations, choose “ACPT VAR” (in US) or “REG OFF” (in Europe).
- To look for only identical stations choose “RJCT VAR” (in US) or “REG ON” (in Europe).

Press the SELECT knob to choose the desired option.

After the desired choice is displayed for 5 seconds, the setting is saved and the display returns to the default.

Radio Text (RT) (Except Model VR 100)
The Radio Text function allows you to read any text messages transmitted by the currently tuned radio station on your radio display. These messages could include song title and artist, station slogans, contest information, etc.

Messages are available when the RT icon [RT] is displayed. To view the messages, press the DISP button until “TEXT” is displayed. After 3 seconds, the first line of the message is displayed.

After 2 seconds, the next line of the message is automatically shown. To scroll through the message at a faster pace, press the DISP button. Three seconds after the last line of text is displayed, or when the DISP button is pressed, the default display returns.

NEWS Program Button (Model VR 400 only)
When this feature is active, the radio will automatically interrupt the current programming to broadcast news programming.

To enable a news interrupt, while in FM mode,

1. Press to enable a news interrupt.
2. Press to SEEK news programming.
3. Press again to turn off.
Presets

You can enter presets for your favorite radio stations on each of the radio’s different bands.

Model VR 100 has 12 FM, 12 AM and 6 WX preset channels (U.S. models only) or 6 LW preset channels (European models only). All other models have 18 FM, 12 AM and 6 WX preset channels (U.S. models only) or 6 LW preset channels (European models only).

Storing Preset Stations

To store a station as a preset:

1. Tune to the desired station.
   
   “STORE” is cleared from the display and the preset number stops flashing.

   The audio returns to the original volume.

   Note: If no preset is stored, the radio will return to the previous mode.

Accessing the Preset Stations

To access a preset:

1. Press MODE until desired band is displayed (AM, FM, WX or LW).
2. Turn SELECT to choose preset station.
   
   Note: If currently tuned to the desired band, you only need to turn the SELECT knob.

Preset Scan (Except Model VR 100)

You can Scan through each of the preset stations in each of the bands.

To Scan through your presets,

1. Press SCN to display PSCN and begin scanning presets.
22 Presets

While scanning, the radio pauses for approximately 5 seconds on each preset.

To stop the scan,

![Image]

The scan continues until it is stopped.

**Note:** When scanning through presets, the radio will only stop on presets where the station strength is strong enough.

**Auto-Store Presets**

To automatically store the strongest 18 stations available (12 stations for Model VR 100) as presets, (AM, FM, WX or LW):

![Image]

The radio displays [AS] and “AUTO” as the radio searches for and stores stations.

Auto-Store will stop after 18 stations (12 for Model VR 100) are found and stored. If there are not enough strong stations to fill the presets, the stations discovered will be duplicated until all memory locations are filled. If no stations are found, Auto-Store will automatically cancel.

Press the AUTO button at any time to cancel the Auto-Store function.

**Note:** When Auto-Store is turned off, the presets that were saved will be lost and the radio will return to the presets stored before Auto-Store was enabled.

**Emergency Broadcast (Alert/Alarm)**

The feature will interrupt the current mode and switch to an emergency radio broadcast. The radio will display “ALERT” (U.S. models) or “ALARM” (European models).

![Image]

**Emergency Broadcast Volume**

You can adjust the volume of all Emergency Broadcasts while a broadcast is being heard. When the next Emergency Broadcast is received, the volume will automatically increase to this volume. When the broadcast is over, the radio will return to the previous volume setting of whatever radio mode was playing.

The Emergency Broadcast volume setting will be saved for all future announcements until it is adjusted again.

**Note:** You will not be able to adjust the volume lower than the minimum preset alert/alarm volume.

You can cancel an alert/alarm by selecting any mode (AM, FM, CASS, CD, etc.).
Using the Cassette Player

Cassette Select

Model VR 100
Insert a cassette into the radio and it will automatically begin to play. “TAPE_A” or “TAPE_B” is displayed, depending on which side of the tape is playing.

Model VR 200 and VR 400
With a cassette inserted, press the MODE button until “CASS” is displayed. “TAPE_A” or “TAPE_B” is displayed, depending on which side of the tape is playing. If no cassette is loaded when pressing the MODE button, the radio will display “NO TAPE” and return to FM mode.

Cassette Tightening and Error Detection (Except Model VR100)

Each time a cassette is inserted into the radio, the player automatically checks for a loosely wound tape and tightens it before playing. The player also detects tapes that are too tightly wound or broken. If a tightly wound or bad tape is detected, “BAD TAPE” is displayed and the tape is ejected.

The Cassette Tightening and Error Detection feature may prevent cleaning cassettes from working properly. To use cleaning cassettes, you can override the error detection.

1. TUNE
   If a cleaning tape is rejected, press and hold TUNE for 5 seconds (while the radio is OFF and the ignition is ON) until BAD TAPE and DETECT OFF display. Then insert cleaning tape.

   After “BAD TAPE” and “DETECT OFF” are displayed, insert the cleaning tape.

2. TUNE
   To turn CASSETTE TIGHTENING and ERROR DETECTION back on, press and hold TUNE until BAD TAPE DETECTION is displayed.

Change Cassette Side

Model VR 100
To play the opposite side of a playing cassette, press the RW and FF buttons at the same time.

Model VR 200 and VR 400
To play the opposite side of a playing cassette,

Note: For all models, the cassette is automatically reversed when it reaches the end of a side.
24 Using the Cassette Player

Stop and Eject

Model VR 100
To eject the cassette, press the EJECT button [ ]. The tape is ejected and radio mode is activated. Tapes can be ejected even while the ignition is off.

Model VR 200 and VR 400
To stop play, press the EJECT button [ ]. The radio will return to the last selected mode.

Press the EJECT button [ ] again to eject the cassette.

To eject the cassette when the radio is in another mode, press the EJECT button [ ].

Pause
(Model VR 100 only)
To pause a playing cassette, press the SELECT knob until “MUTE” is displayed. To begin playing the cassette again, press the SELECT knob again.

Fast Forward and Rewind

Model VR 100
To activate Fast Forward or Rewind, press the Fast Forward [ ] or Rewind [ ] button.

To cancel the Fast Forward or Rewind, press the opposite button, [ ] or [ ].

Model VR 200 and VR 400
To activate Fast Forward, press the Fast Forward [ ] button until “FWD >>” is displayed.

To activate Rewind, press the Rewind [ ] button until “<< REV” is displayed. To cancel Fast Forward or Rewind, press the same button again.

Note: If Radio Monitor (following section) is on, you may seek a different station while the cassette is in Fast Forward or Rewind mode. While seeking, the display shows “FWD” or “REV” and the frequency number.

Radio Monitor Function

The Radio Monitor function allows the radio to be heard while fast forwarding or rewinding a cassette. To turn Radio Monitor on or off,

1. Press for 3 seconds to display 12/14.
2. Turn to display MONI.
3. Press to change between ON and OFF.

After 5 seconds the selection is saved and the display returns to the default.
Using the Cassette Player 25

Next Music Search (except Model VR 100)

Most cassettes have blank space between each selection. You can use Next Music Search to find these pauses, allowing you to find the beginning of the next selection.

To fast forward to the next blank space on the cassette,

1

Press to display NEXT>1.

To fast forward past several blank spaces,

2

Press repeatedly to pass several blank spots.

The number on the display shows how many blank spaces will be skipped.

If the end of the side is reached during a Next Music Search, the cassette direction changes and begins to play the opposite side.

Previous Music Search (except Model VR 100)

To rewind to the previous blank space on the cassette,

1

Press to display <PREV 1.

2

Press repeatedly to pass several blank spots.

If the beginning of the side is reached during a Previous Music Search, the cassette begins to play at the beginning of the current side.

Note: If the current selection has been playing for less than 8 seconds, pressing the UP/DOWN rocker button will fast rewind to the blank space before the previous selection.

Canceling a Next/Previous Music Search

To cancel a music search,

Press until NEXT>1/<PREV 1 display is 0.
26 Using the Cassette Player

Dolby Noise Reduction (Models VR 200 and VR 400)

Enabling the Dolby B-type noise reduction function during cassette playback will reduce background noise on tapes that were recorded with this technology.

To turn on or turn off Dolby B-type noise reduction, press the button with the double-D logo. The double-D icon will display while the noise reduction is on.

Manufactured under a license from Dolby Laboratories. Dolby and the double-D symbol are trademarks of Dolby Laboratories.

Tape Player Care

The tape player must be cleaned after every 35 hours of use.

Caution: Not cleaning the tape player can cause reduced sound quality and may ruin your cassettes or damage the player.

Clean the player with a scrubbing-action, non-abrasive cleaning cassette. These cassettes have a bottle of cleaning liquid that is applied to cleaning pads and scrubs the tape heads. To properly clean your tape player, follow the instructions with the cleaning cassette. Cleaning cassettes should be replaced regularly.

Note: The cleaning cassette is not included with your radio and must be purchased separately.

Never touch the cassette head with magnetic or hard objects.

Do not lubricate the player mechanism.

Do not use cassettes that are longer than 90 minutes (C-90). Longer cassettes, like C-120, tend to have thinner tape that may stretch or break and may damage your player.

Cassette Tape Care

Do not use cassettes that are deformed, dirty or contaminated.

Cassette tapes that are not properly stored in their plastic cases away from contaminants, direct sunlight and extreme heat may not operate properly and may damage your tape player.

Cassette tapes are subject to wear and the sound quality may degrade over time. Always verify the cassette tape is in good condition before use.

Cassette Clean Indicator

The tape player will alert you that it should be cleaned by displaying the message “TP CLEAN”. After the player is cleaned,

Press AUD for 5 seconds to clear display.

CLN RST will display for 3 seconds.

Then the display returns to the default.
Using the Cassette Player 27

**Note:** Do not release the AUD button before “CLN RST” is displayed to reset the clean condition.

If you experience poor sound quality from your cassette player, try playing a different cassette tape to see if the tape or tape player is at fault. If the second cassette tape also has poor sound quality, try cleaning the tape player, regardless of when the player was last cleaned.
28 Compact Disc (CD) Player

Compact Disc (CD) Player

CD Select

Insert a CD in the radio’s CD slot and it will automatically begin to play. The track number and the CD icon are displayed.

If the radio is in another mode and a CD is already in the player,

1 Press MODE until CD is displayed.

CD Eject

Press the EJECT button to eject a CD from the player. CDs can be ejected even when the ignition is off.

If a CD is ejected but not removed within approximately 15 seconds, the CD automatically reloads but does not begin to play. The automatic reload feature helps protect the CD from possible damage.

Next Track

To skip forward to higher track numbers,

Turn clockwise to skip forward.

Continue to hold the knob and the player will continue to move forward through following tracks. The player will move through the tracks more quickly if the knob is turned further clockwise. Once the last track is reached, the player starts over at track 1 and continues to go up.

Previous Track

To skip backward to the beginning of the current track,

Turn counter clockwise to skip backward.

Continue to turn the knob and the player will continue to move backward through previous tracks. Once track 1 is reached, the player skips to the last (highest numbered) track and continues to go down.

Note: If the track has played for less than 8 seconds when the SELECT knob is turned, the player skips backward to the beginning of the previous track.
Compact Disc (CD) Player 29

Fast Forward
To activate Fast Forward,

After 3 seconds, the CD begins to fast forward until the rocker button is released. The elapsed time is displayed while the CD fast forwards.

Note: Because the audio disc is played at a faster rate when fast forwarding, you will be able to hear the audio but the quality will not be normal.

Fast Reverse
To activate Fast Reverse,

After 3 seconds, the CD begins to fast reverse until the rocker button is released. The elapsed time is displayed while the CD reverses.

Note: Because the audio disc is played at a faster rate when fast reversing, you will be able to hear the audio but the quality will not be normal.

Repeat Play Function
To repeat the current track,

Random Play Function
To play chosen tracks randomly,
30 Compact Disc (CD) Player

Scan Tracks Function
(CD Player)

The Scan Tracks function plays the first 10 seconds of each track in order. To activate this function,

1. Press until SCN T# is displayed to scan tracks.

To cancel the scan,

2. Press and hold to cancel scan.

OR
2. Press SELECT.

OR
2. Press MODE.

OR
2. Press and hold.
Using the CD Changer 31

Using the CD Changer (CDX)
(CDX not compatible with Radio Model VR100)

CD Changer Select

Press MODE until CDX is displayed.

CD Changer Select

The last selected CD in the changer begins to play. The track number, and CD number are displayed.

If there is no CD in the cartridge or a cartridge has not been inserted into the changer, the radio will display “NO CDX” and return to the previous mode.

CD Select

To select a CD in the changer

Press MODE until CDX is displayed.

Press UP/DOWN rocker button.

The CD number on the display changes to match the number of the CD selected and the CD begins playing.

Repeat Track Function

To replay the current track,

Press RPT once to REPEAT current track.

Press RPT twice to cancel REPEAT.

OR

Press D.SCN to cancel REPEAT.

OR

Press SCN to cancel REPEAT.

OR

Press MODE to cancel REPEAT.

Repeat CD Function

To replay the current CD,

Press RPT twice to repeat CD.

The RPT icon and the flashing CDX icon are displayed.

Press RPT once to cancel REPEAT.

OR

Press D.SCN to cancel REPEAT.

OR

Press SCN to cancel REPEAT.

OR

Press MODE to cancel REPEAT.
32 Using the CD Changer

Random Track Function
To play chosen tracks randomly on the current CD,

1. Press SELECT
2. Turn to display RND.
3. Press to choose 1. After 5 seconds the selection is saved.
4. Press RND to activate function.

The RND icon [RND] is displayed.

To cancel this function,

5. Press RND again to cancel function.
6. Press RPT to cancel.

OR
5. Press D.SCN to cancel.
6. Press D.SCN to cancel.

Random CD/Track Function
To play chosen tracks randomly from all CDs,

1. Press and hold SELECT until 12/24 displayed.
2. Turn to display RND.
3. Press to choose 6. After 5 seconds the selection is saved.
4. Press RND to activate function.

The RND icon [RND] is displayed.

To cancel this function,

5. Press RND again to cancel function.
6. Press MODE to cancel.
Using the CD Changer 33

Scan Tracks Function

The Scan Tracks function plays the first 10 seconds of each track on the current CD. To activate this function,

1. Press RND SCN
   Press until SCN T# is displayed to scan tracks.

To cancel this function,

2. Press and hold.

OR

SELECT
Press SELECT.

OR

MODE
Press MODE.

OR

UP/DOWN
Press and hold UP/DOWN rocker button.

Scan CDs Function

The Scan CDs function plays the first 10 seconds of the first track of each CD in the changer. To activate this function,

1. Press D SCN
   Press and hold until DISCSCAN.

To cancel this function,

2. Press and hold.

OR

D SCN
Press and hold.

OR

Hope this helps!
34 Infrared Remote

Infrared Remote (Accessory)

The infrared remote can be used to control all models except Model VR 100.

Power On/Off

Press the POWER button to turn the receiver on or off. The vehicle must be turned on.

Volume

Press the “+” button to raise the volume or press the “-” button to lower the volume. “VOL” is displayed with the number that represents the volume level.

Mute

Press the MUTE button to mute any mode. “MUTE” is displayed. To cancel the mute, press the MUTE button again. While muted, CDs and cassettes continue to advance.

Radio Select

Press the MODE button to change from a playback mode (cassette, CD, CD changer) to the radio mode. The radio plays the last selected band and station. To choose a different band, press the MODE button until the desired band is displayed.

Radio Tune

Press and hold the top or bottom of the SEEK button to slowly move through the frequencies on the current band. Continue to hold the SEEK button to activate a fast tune. Release the button to stop the tune.

Radio Seek

Press the top or bottom of the SEEK button to seek the next station. The audio mutes as the radio searches for and stops on the next station with a strong signal. After finding a station, the audio returns to the original volume.

Note: Seek will cancel if no signal is strong enough for the radio to recognize it.

Radio Presets

To listen to the preset stations, choose the desired band by pressing the MODE button. Then repeatedly press the P.SET button until the desired preset number is displayed.
Cassette Select
Press the cassette/CD button until “CASS” is displayed. “TAPE_A” or “TAPE_B” is displayed, depending on which side of the tape is playing.

CD Select
(Single, integrated CD)
Press the cassette/CD button until “CD” is displayed. The CD begins to play where it left off, and the track number and time elapsed are displayed.

Track Select
While in CD or CDX mode, rotate the SELECT knob to choose the desired track. The track number on the display increases or decreases depending on how many times the button is pressed.

CD Changer Select
Press the CD changer button until the CD changer symbol and track number are displayed. The last selected CD and track begin to play and the track number, DISC icon, and the CD number are displayed.

CD Select
To choose another CD, press the CD changer button until the desired CD number is displayed. You can also press and hold the CD changer button to quickly advance through the CDs in the changer. Release the button to stop on the currently displayed CD number.
36 Steering Wheel Controls

Steering Wheel Controls

The Steering Wheel Controls allow you to keep your hands on the wheel while controlling many radio functions. Steering Wheel Controls are not available with Model VR 100.

Volume

Press the “+” button to raise the volume or press the “−” button to lower the volume. “VOL” is displayed with the number that represents the volume level.

Radio Manual Tune

While in the radio mode, press the “►” or “◄” button for 1 second to activate a slow tune. Press the “►” or “◄” button for 3 seconds to activate a fast tune.

Radio Seek

Press the “►” or “◄” button for less than 1 second to activate a Seek. The audio mutes. The radio searches and stops on the next station with a strong signal, and the audio returns to the original volume. The scan continues until a strong signal is found, but will cancel the Seek after passing through the band without finding a strong signal.

Cassette Fast Forward/Rewind

While in cassette mode, press the “►” button to fast forward the cassette or press the “◄” button to fast rewind the cassette. To stop the fast forward or rewind, press the same button (“►” or “◄”).

CD Track Select

While in CD mode, press the “►” or “◄” button to choose the desired track. The track number on the display will increase or decrease depending on how many times the button is pressed.

CD Select

While in CDX changer mode, press and hold the “►” and “◄” buttons at the same time until the desired CD number is displayed. The numbers will increase without stopping until the button is released.
Additional Inputs/Outputs

Note: The features below are applicable only with certain optional equipment. See an authorized Volvo dealer for details.

Switched Auxiliary Outputs
Switched Auxiliary Outputs (SAOs) are available to power or control external devices such as a power antenna, external amplifier or rear seat audio. Model VR 100 has a single SAO. All other Models have 3 SAOs.

Low-Level Audio Outputs
All radios except Model VR 100 have single-ended connections for low level audio outputs for the right front, left front, right rear and left rear audio signals. An optional amplifier is typically used with low-level outputs.

Auxiliary Audio Input
All radios except Model VR 100 have 2 monaural external audio inputs. Input #1 can be used for applications like navigation while input #2 is useful as a telephone input. The auxiliary audio source is automatically selected by the telephone or navigation unit when properly connected through the control lines.

When either external audio source is selected, the radio will display “EX AUDIO” along with any appropriate icons. The radio’s audio functions can be adjusted in the same way as they are in other modes.

To override Auxiliary Audio mode,

Press and hold for at least 5 seconds.

The radio will return to the previous operating mode.

Selecting Speakers for Auxiliary Audio
Navigation audio can be directed to the left or right front speaker. To select the speaker for Navigation audio, press and hold the SELECT knob for more than 3 seconds. The display will show “12/24_XX.” Then rotate the SELECT knob through the various options until the display shows “Nav. X,” where X is either “L” for left or “R” for the right speaker. To change between the left and right speaker selection, press the SELECT knob.

Phone audio can be directed to either the front or all 4 speakers. To select the speakers for phone audio, press and hold the SELECT knob for phone audio, press and hold the SELECT knob for more than 3 seconds. The display will show “12/24_XX.” Then rotate the SELECT knob through the various options until the display shows “PH_ X,” where X is either “FRONT” or “ALL.” To change between the front or all speaker selection, press the SELECT knob.

Cell Phone Mute
When equipped with the required optional equipment and properly connected, the radio will automatically mute audio and the display indicates “VOL 0” each time a call is made or received.
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