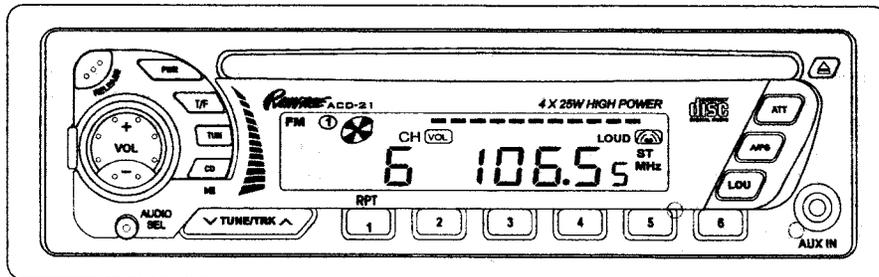


RAMPAGE
BY AUDIOVOX

OWNER'S MANUAL



ACD-21

**AM/FM/MPX RADIO
WITH DETACHABLE FRONT PANEL,
COMPACT DISC PLAYER
AND QUARTZ CLOCK**

INSTALLATION INSTRUCTIONS

This unit is designed for installation in cars, trucks, and vans with an existing radio opening. In many cases, a special installation kit will be required to mount the radio to the dashboard. These kits are available at electronics supply stores and car stereo specialist shops. Always check the kit application before purchasing to make sure the kit works with your vehicle. If you need a kit but cannot find it available, call our toll-free "HELP" line (1-800-645-4994).

UNIVERSAL INSTALLATION PROCEDURE USING MOUNTING SLEEVE

1. Remove the detachable front panel, if it is attached to the chassis, by pushing the RELEASE button. Slide the mounting sleeve off of the chassis. If it is locked into position, use the removal tools (supplied) to disengage it.
2. Check the dashboard opening size by sliding the mounting sleeve into it. If the opening is not large enough, carefully cut or file as necessary until the sleeve easily slides into the opening. Do not force the sleeve into the opening or cause it to bend or bow. Check that there will be sufficient space behind the dashboard for the radio chassis.
3. Locate the series of bend tabs along the top, bottom, and sides of the mounting sleeve. With the sleeve fully inserted into the dashboard opening, bend as many of the tabs outward as necessary so that the sleeve is firmly secured to the dashboard.
4. Place the radio in front of the dashboard opening so that the wiring can be brought through the mounting sleeve. Follow the wiring diagram carefully and make certain all connections of the wiring harness are secure and insulated with wire nuts or electrical tape to insure proper operation of the unit. After completing the wiring connections, attach the front panel and turn the unit on to confirm operation (ignition switch must be "on"). If unit does not operate, re-check all wiring until problem is corrected. Once proper operation is achieved, turn off the ignition switch and proceed with final mounting of the chassis.
5. Carefully slide the radio into the mounting sleeve making sure it is right-side-up until it is fully seated and the spring clips lock it into place.
6. Attach one end of the perforated support strap (supplied) to the screw stud on the rear of the chassis using the hex nut provided. Fasten the other end of the perforated strap to a secure part of the dashboard either above or below the radio using the screw and hex nut provided. Bend the strap to position it as necessary.

CAUTION: The rear of the radio must be supported with the strap to prevent damage to the dashboard from the weight of the radio or improper operation due to vibration.

7. Re-attach the front panel to the chassis and test radio operation by referring to the Operating Instructions for the unit.

INSTALLATION USING KITS

1. If your vehicle requires the use of an installation kit to mount this radio, follow the instructions included with the installation kit to attach the radio to the mounting plate supplied with the kit.
2. Wire and test the radio as described in Step 4 above.
3. Install the radio/mounting plate assembly to the sub-dashboard according to the instructions of the installation kit.
4. Attach the support strap to the radio and dashboard as described in Step 6 above.
5. Replace the dashboard trim panel.

ISO INSTALLATION PROCEDURE

This unit has threaded holes in the chassis side panels which may be used with the original factory mounting brackets of some Toyota, Nissan, Mitsubishi, Isuzu, Hyundai and Honda vehicles to mount the radio to the dashboard. Please consult with your local car stereo specialist shop for assistance on this type of installation.

1. Remove the existing factory radio from its dashboard or center console mounting. Save all hardware and brackets as they will be used to mount the new radio.
2. Carefully un-snap the plastic frame from the front of the new radio chassis. Remove and discard the frame.
3. Remove the factory mounting brackets and hardware from the existing radio and attach them to the new radio.

CAUTION: DO NOT EXCEED M5 X 8 MM MAXIMUM SCREW SIZE.

LONGER SCREWS MAY TOUCH AND DAMAGE COMPONENTS INSIDE THE CHASSIS.

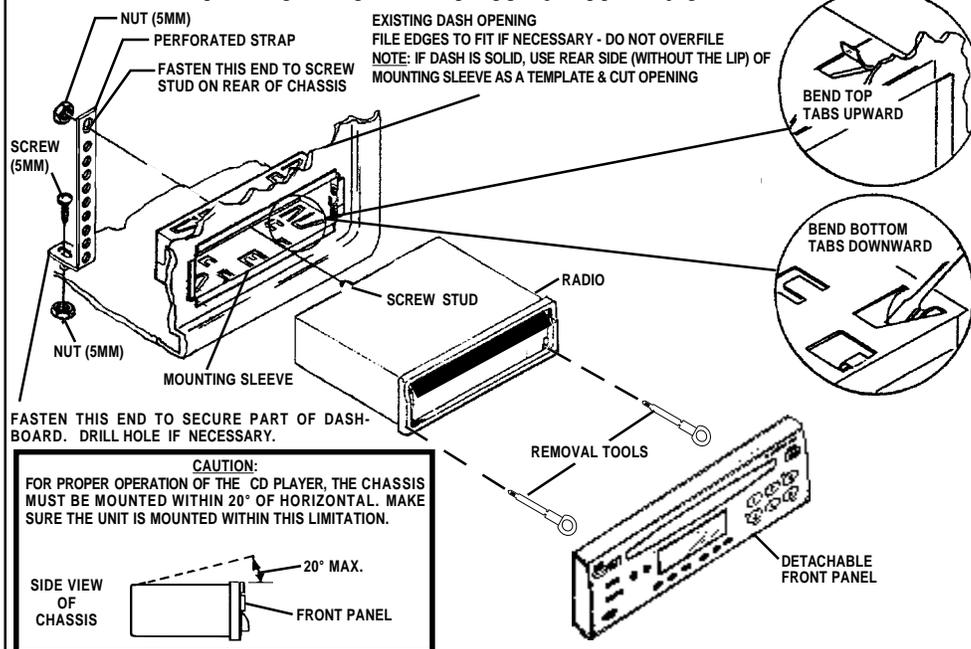
4. Wire the new radio to the vehicle as per step 4 above.
5. Mount the new radio assembly to the dashboard or center console using the reverse procedure of step 1.

TOLL-FREE INSTALLATION ASSISTANCE

The installation and wiring connections for this unit are so simple, we doubt you'll need our help, but, if you do, we're here to help you. Just call our toll-free telephone assistance line at **1-800-645-4994** during the days and hours shown (U.S.A. and Canada only).

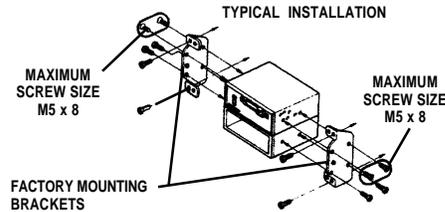
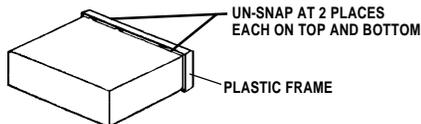
DAY	TIME ZONE			
	PACIFIC	MOUNTAIN	CENTRAL	EASTERN
MON. - FRI.	5:30AM - 4PM	6:30AM - 5PM	7:30AM - 6PM	8:30AM - 7PM
SATURDAY	6AM - 2PM	7AM - 3PM	8AM - 4PM	9AM - 5PM

UNIVERSAL INSTALLATION USING MOUNTING SLEEVE



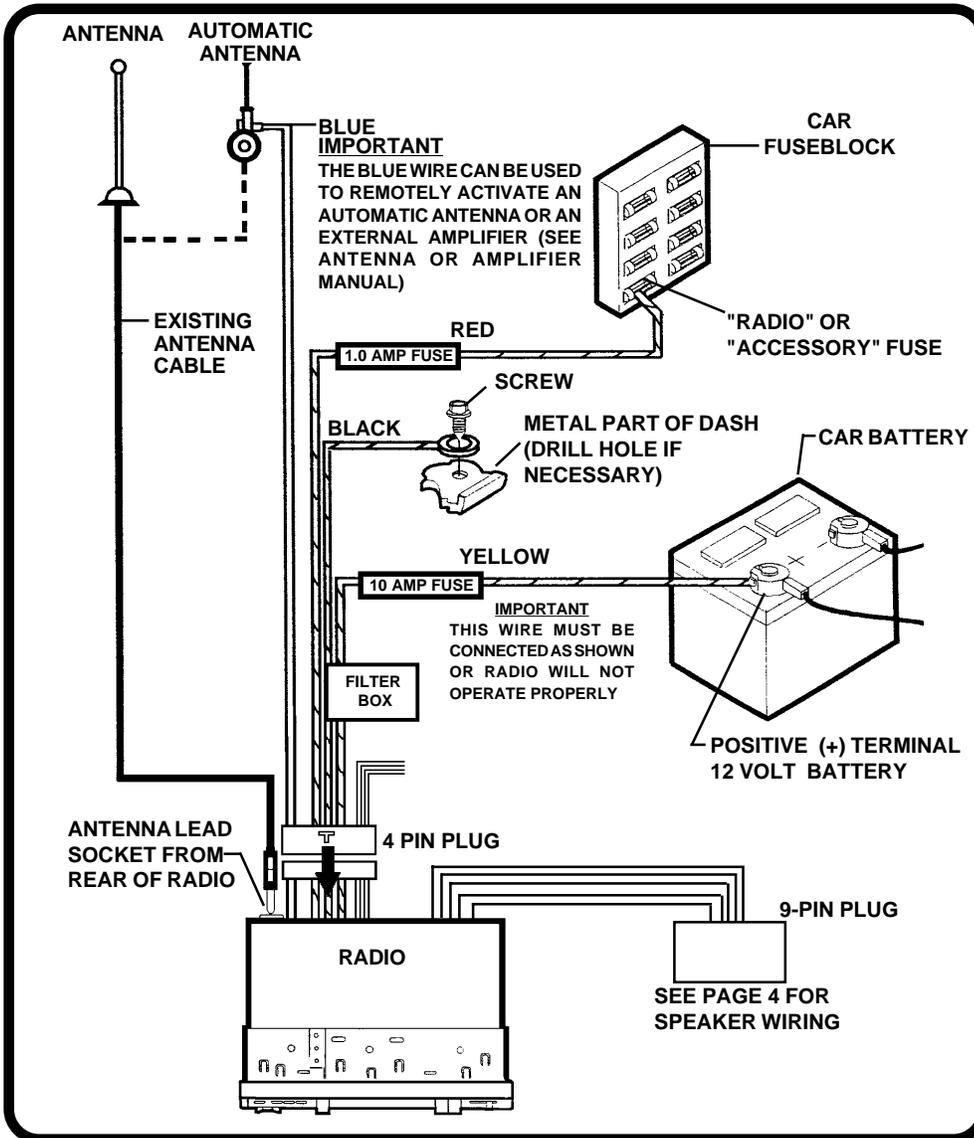
ISO INSTALLATION

REMOVE THE PLASTIC FRAME FROM THE FRONT OF THE CHASSIS BY CAREFULLY UN-SNAPPING IT.



RADIO WIRING

REFER TO PAGE 4 FOR SPEAKER WIRING

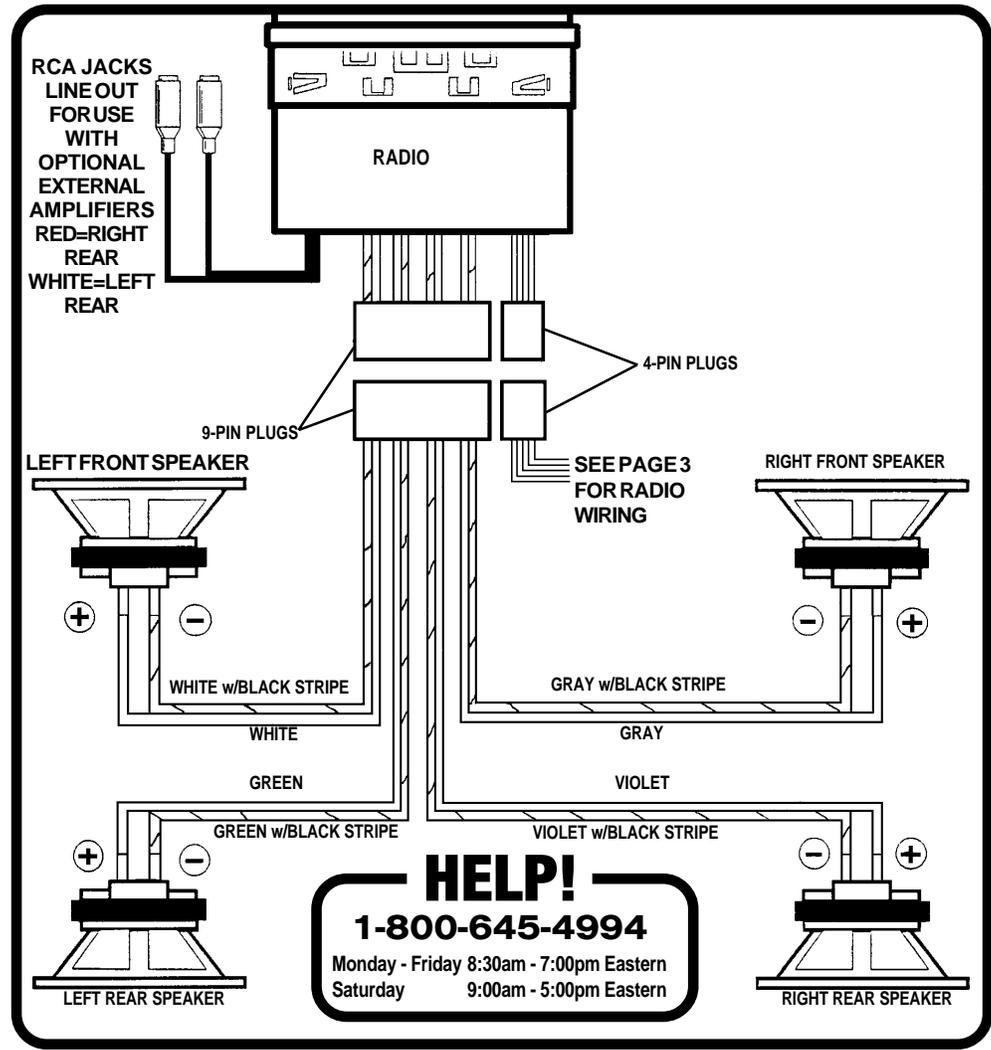


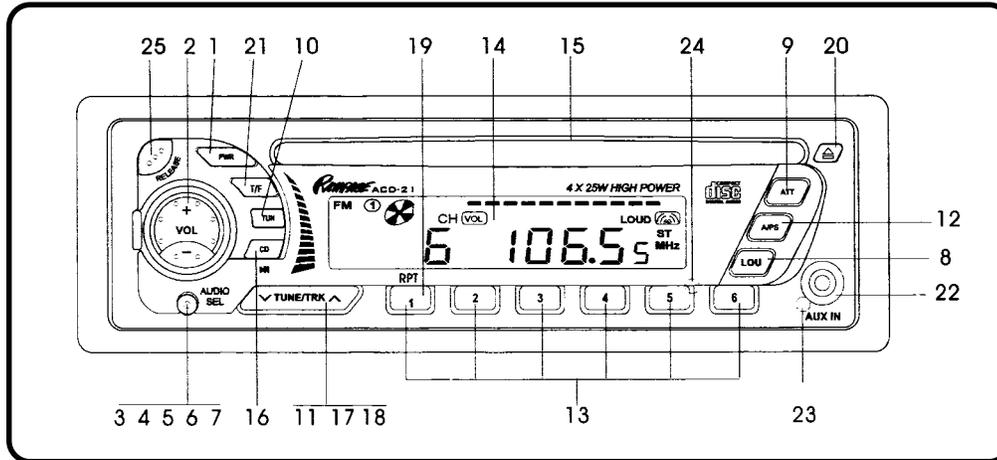
SPEAKER WIRING

REFER TO PAGE 3 FOR RADIO WIRING

WARNING!

- THE AMPLIFIERS IN THIS RADIO ARE **ONLY** DESIGNED FOR USE WITH 4 SPEAKERS.
- **NEVER** COMBINE (BRIDGE) OUTPUTS FOR USE WITH 2 SPEAKERS.
- **NEVER** GROUND NEGATIVE SPEAKER LEADS TO CHASSIS GROUND.
- FAILURE TO WIRE EXACTLY AS SHOWN BELOW MAY CAUSE ELECTRICAL DAMAGE TO THE RADIO.





① PWR BUTTON

Press this button to turn the unit on and off. When the ignition switch is on and the radio is off, inserting a disc in the player will automatically turn on the radio, and the disc will begin playing. When the radio is turned on, the volume level will start at the level at which it was set when the unit was turned off.

② VOLUME +/- LEVEL CONTROL

The volume level (**VOL**) is always displayed: it is symbolized by a bar graph across the top of the display from left to right, up to a maximum of 10. (Minimum bar display for **VOLUME** is 1.) To increase the volume level, press the + side of the button. The volume will increase and the level will be shown on the display panel from a minimum of 1 bar to a maximum of 10 bars. To increase the volume quickly, keep the button pressed. To decrease the volume level, press the - side of the button. Keep the button pressed to decrease the volume quickly. The display will automatically return to the normal **VOL** indication 5 seconds after the last volume adjustment or when another function is activated. These controls are also used

in conjunction with the AUDIO SELECT button ③ to adjust the bass, treble, balance and fader levels as described in ④, ⑤, ⑥ and ⑦.

③ AUDIO SELECT BUTTON (AUDIO SEL)

This button is used to select the audio function (bass, treble, balance, fade or volume) to be adjusted using the Volume +/- Level Control ②. Pressing the AUDIO SEL button once will set the unit for bass adjustment (**BAS** will appear on the display panel), treble adjustment (**TRE**), balance (**BAL**), fader (**FAD**) and volume (**VOL**). The display will return to the normal **VOL** indication 5 seconds after the last adjustment or when another function is activated. All of these functions are symbolized in bar graph form, in a manner similar to volume.

④ BASS CONTROL

To adjust the bass level, first select the Bass mode by pressing the AUDIO SEL button ③ until the **BAS** indication appears on the display panel. Within 5 seconds of choosing the Bass mode, press the + or - buttons of the Volume +/- Level Control ② to adjust the bass response as

desired. The bass level will be shown on the display panel from a minimum of -5 bars to a maximum of +5 bars with respect to center (**BAS** = to a single bar represents flat response). The display will automatically return to the normal indication 5 seconds after the last adjustment or when another function is activated.

⑤ TREBLE CONTROL

To adjust the treble level, first select the Treble mode by pressing the AUDIO SEL button ③ until the **TRE** indication appears on the display panel. Within 5 seconds of choosing the Treble mode, press the + or - buttons of the Volume +/- Level Control ② to adjust the treble response as desired. The treble level will be shown on the display panel from a minimum of **TRE** = -5 bars to a maximum of **TRE** = +5 bars with respect to center (**TRE** = to a single bar represents flat response). The display will automatically return to the normal indication 5 seconds after the last adjustment or when another function is activated.

⑥ LEFT/RIGHT BALANCE CONTROL

To adjust the left-right speaker balance, first select the Balance mode by pressing the AUDIO SEL button ③ until the **BAL** indication appears on the display panel. Within 5 seconds of choosing the Balance mode, press the - button of the Volume +/- Level Control ② to adjust the stereo balance to the left channel speakers or the + button of the control to adjust it to the right channel speakers. The **BAL** position will be shown on the display panel from a minimum of -5 bars (full left) to a maximum of +5 bars (full right) with respect to center. When the volume level between the left and right speakers is equal, a single bar will be shown on the display panel. The display will automatically return to the normal indication 5 seconds after the last adjustment or when another function is activated.

⑦ FRONT/REAR FADER CONTROL

To adjust the front-rear speaker balance, first select the Fader mode by pressing the AUDIO SEL button ③ until the **FAD** indication appears on the display panel. Within 5 seconds of choosing the Fader mode, press the + or the - buttons of the Volume +/- Level Control ② to adjust the front-rear speaker levels as desired. The **FAD** position will be shown on the display panel from minimum of -5 bars (full rear) to a maximum of +5 bars (full front) with respect to center. When the volume level between the front and rear speakers is equal, a single bar will be shown on the display panel. The display will automatically return to the normal indication 5 seconds after the last adjustment or when another function is activated.

⑧ LOUDNESS CONTOUR (LOU)

When listening to music at low volume levels, this feature will boost the bass and treble ranges to compensate for the characteristics of human hearing. Press the LOU button to activate this feature as indicated by **LOUD** on the display panel. Pressing the button again will de-activate the function and **LOUD** will disappear from the display.

⑨ AUDIO ATTENUATION (ATT)

The audio mute function is performed using the ATT (attenuator) button. This control is used to mute the volume from the system. When the ATT button is pressed, the indication **ATT** appears on the display panel and the volume will be muted. Pressing the ATT button again, or activating the VOL +/- function of the unit, will return to the volume level setting in use before the mute function was activated.

⑩ TUNER, AM/FM BAND SELECTOR (TUNER)

During radio play, each time the TUNER button is pressed, the radio band changes. The

indications **AM 1**, **AM 2**, **FM 1**, **FM 2** and **FM 3** will appear on the display panel according to your selection. During FM operation, when the station is broadcasting in stereo, the stereo icon appears on the display, together with an ST indication. During AM operation, no indications are displayed, except the AM band.

During CD play, pressing this button will change to radio operation without ejecting the disc.

⑪ MANUAL UP/DOWN TUNING (∧/∨), STATION SEEK AND TRACK SELECTION

Each time the Up Tuning side of the button (∧) is pressed, the radio will tune one frequency step higher. Similarly, each press of the Down Tuning side of the button (∨) will tune one frequency step lower. To manually tune in a station, press the appropriate directional side of the button until the desired frequency is reached.

Pressing and holding either side of the button for longer than 0.5 second will cause the radio to continue tuning rapidly in the selected direction until the button is released, at which point it will seek the next available station and stop.

During CD play operation, momentarily pressing and releasing either side of the button will increase or decrease CD track selection in sequence. Pressing and holding either side of the button for longer than 0.5 second, will cause the elapsed time of the current track in play to increase or decrease accordingly.

⑫ AUTO-STORE TUNING (A/PS) PRE-SET SCAN TUNING

Press the A/PS button momentarily to scan the 6 stations in the pre-set memories of the

band in use. The unit will stop at each pre-set station for 5 seconds before continuing to the next pre-set station (the frequency on the display panel will flash during Pre-Set Scan operation). Press the button again momentarily to stop Pre-Set Scan operation and remain on the selected frequency.

Pressing the button for longer than 2 seconds will activate the Auto-Store Tuning feature. The radio will automatically scan the band in use and enter strong stations into the pre-set memory positions for that band. If you have already set the pre-set memories of that band to your favorite stations, activating the Auto-Store Tuning feature will erase those stations and enter the new strong stations. This feature is most useful when traveling in a new area where you are not familiar with the local stations.

⑬ STATION PRE-SET MEMORIES

To set any of the 6 pre-set memory buttons, use the following procedure:

1. Turn the unit on and select the desired band.
2. Select the first station to be pre-set using the Manual Up/Down or Up/Down Seek Tuning functions ⑪.
3. Press the pre-set button to be set and continue to hold the button in. The pre-set number will appear on the display panel. The station is now set into the memory of that pre-set button and can be re-called at any-time by momentarily pressing that button.
4. Repeat the above procedure for the remaining 5 pre-sets on the band in use and for the other 4 bands of the unit.

⑭ LIQUID CRYSTAL DISPLAY PANEL

The Liquid Crystal Display (LCD) panel displays the frequency, time, and activated functions.

NOTE: It is a characteristic of LCD panels that, if subjected to cold temperatures for

an extended period of time, they may take longer to illuminate than under normal conditions. In addition, the visibility of the numbers on the LCD may slightly decrease. The LCD read-out will return to normal when the temperature increases to a normal range.

15 DISC SLOT

With the label surface facing up, gently insert the disc into the slot until the soft-loading mechanism engages and disc play begins. The  indication and track number will appear on the display panel.

NOTE: This unit is designed for play of standard 5" (12cm) Compact Discs ONLY. Do not attempt to use 3" (8cm) CD-Singles in this unit, either with or without an adaptor, as damage to the player and/or disc can occur. Such damage will not be covered by the Warranty on this product.

16 CD MODE SELECTOR (CD) AND PLAY/PAUSE (CD/▶II)

When listening to radio with a disc loaded in the unit ( on the display panel), press this button to return to disc play mode from the beginning of the last track in play.

During disc play, press this button to temporarily stop play of the disc. Disc elapsed time will stop and flash on the display panel. Press the button again to resume play from the point at which it was stopped. Pause mode will also be canceled by activating any other disc function.

17 TRACK SELECT (∧/∨)

During disc play, the Track Select functions are used to quickly access the beginning of a particular track. Each time the Forward Track Select (∧) side of the button is pressed, the

next higher track number will be selected as shown on the display panel. Similarly, each time the Backward Track Select (∨) side of the button is pressed, the next lower track number will be selected as shown on the display panel.

18 CUE/REVIEW FUNCTIONS (∧/∨)

During disc play, high-speed audible search to any section of the disc can be made by the Cue and Review functions. Press and hold the Cue side of the button (∧) to advance rapidly in the forward direction, or the Review button (∨) to advance rapidly in the backward direction. During either function, the elapsed time within each track will automatically be shown on the display panel.

19 TRACK REPEAT PLAY SELECTOR (RPT)

During disc play, press this button to repeat the play of the selected track (**REPEAT** will appear on the display panel). Play of the track will continue to repeat until the button is pressed again and the **REPEAT** indication disappears from the display panel. Repeat Play mode will also be canceled by activating the TUNER function.

20 DISC EJECT (▲)

Disc play is stopped, the disc is ejected and the disc symbol () begins to flash when this button is pressed. The unit will then change to radio operation. Reload the disc if desired, or remove it from the unit to prevent damage (the  symbol will disappear from the display panel).

21 TIME/FREQUENCY DISPLAY SELECTOR (T/F)

A momentary press of the T/F button will call the time display on the incorporated quartz clock. The time display will persist for approximately

5 seconds, after which the frequency display will automatically return, unless the button is pressed again prior to the 5-second time-out.

②② AUXILIARY (AUX IN) JACK

The radio is equipped with an auxiliary audio input jack which can be interfaced to an external audio source. The jack is compatible with most CD and cassette players or an MP3 digital audio playback unit. When the external source is connected, only that audio media is played by the radio.

NOTE: If the external audio jack is used while the CD player is operational, the sound from the CD Player will be muted. However, the CD disc will continue to spin. We recommend that when the external audio jack function is used, either the radio be in the tuner mode, or the Compact Disc be ejected from the player.

②③ THEFT-DETERRENT LED

Located on the chassis behind the front panel, a light-emitting diode (LED) will flash when the panel is removed. The flashing light serves as a visual warning to the would-be

thief that the unit has been disabled by removal of the front panel.

②④ RESET BUTTON

A RESET button is located on the front of the chassis (front panel must be removed to access the button). The re-set circuitry is provided to protect the microprocessor circuitry and should only be activated under the following circumstances:

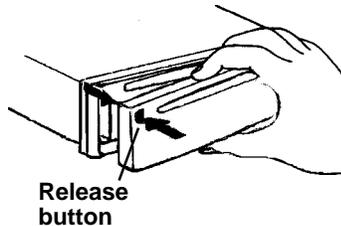
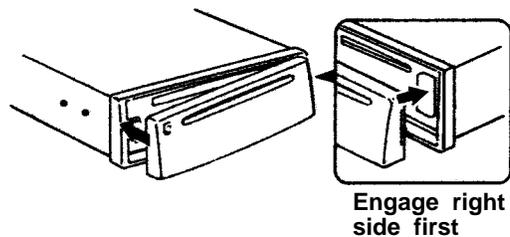
1. Upon initial installation after all wiring is completed.
2. If there is a malfunction of any of the switches on the unit or the CD player, pressing the RESET button may clear the system and return to normal operation.

②⑤ FRONT PANEL RELEASE BUTTON (RELEASE)

This button is used to release the mechanism that holds the front panel to the chassis. To detach the front panel, press the button so that the left side of the panel is released. Grasp the released side and pull it off of the chassis. To re-attach the panel, position the right side of the panel in place first and then press the left side of the panel until the mechanism locks it into place.

NOTES ON USE OF FRONT PANEL

1. Make sure the front panel is right-side-up when attaching it to the chassis as it cannot be attached when up-side down.
2. Do not press very hard on the front panel when attaching it to the chassis. No more than light to moderate pressure should be needed.
3. When attaching the front panel, make sure the right side is correctly engaged before pressing the left side to lock it into position.
4. When taking the front panel with you, please use the supplied carrying case to protect the panel from dirt and damage.

DETACHING THE FRONT PANEL**ATTACHING THE FRONT PANEL**

SETTING THE CLOCK

1. Switch the vehicle ignition on and turn on the radio (radio frequency or disc track number will be shown on the display panel).
2. Press and hold the T/F button until the time display begins flashing. Release the T/F button.
3. Press the Up Tuning button (∧) to adjust the hours and the **AM/PM** indication, and the Down Tuning button (∨) to adjust the minutes to the correct time.
4. When the correct time is shown on the display panel, press and release the T/F button again and the time is displayed steadily; then wait 5 seconds for the display to return to the normal indication.

SPECIFICATIONS

Size:	7" W x 2" H x 6-1/4" D 178 mm x 50 mm x 150 mm
Operating Voltage:	12 volts DC, negative ground
Output Power:	100 watts maximum (25 watts x 4 channels)
Output Wiring:	Floating-ground type designed for 4 speaker use. Front and rear channels CANNOT be combined (bridged) for use with 2 speakers. RCA low-level outputs (rear channels).
Output Impedance:	Compatible with 4-8 ohm speakers.
Low-Level Output:	350 mV.
Tuning Range:	AM: 520-1,710 kHz. (10 kHz. step) FM: 87.5-107.9 MHz. (200 kHz. step)
Sensitivity:	AM: 20 uv. FM: 3.0 uv.
FM Stereo Separation:	30 dB
CD Frequency Response:	5-20,000 Hz. +1 dB
CD Signal/Noise Ratio:	70 dB
CD Channel Separation:	60 dB
CD Distortion:	0.2%

*Specifications are subject to change without notice.

CARE AND MAINTENANCE

The radio section of your new sound system does not require any maintenance. We recommend that you keep this manual for reference on the many features found in this unit as well as how to set the clock.

The compact disc player section also requires no routine maintenance, but proper understanding of its use and handling will help you obtain maximum enjoyment of its capabilities. The following points should be observed:

- When cleaning the interior of the vehicle, do not get water or cleaning fluids on the unit.
- The CD player is a precision instrument and will not operate properly in extreme heat or cold. In case of such conditions, wait until the interior temperature of the vehicle reaches a normal temperature before using the player.
- If the temperature inside the player gets too hot, a protective circuit will automatically stop play of the disc. In this case, allow the unit to cool off before operating the player again.
- Never insert anything other than a 5" (12 cm) compact disc into the player as the mechanism can be damaged by foreign objects.
- Do not attempt to use 3" (8 cm) CD-Single discs in this unit, either with or without an adaptor, as damage to the player and/or disc may occur. Such damage will not be covered by the Warranty on this product.
- When not using the disc player, always remove the compact disc. Do not leave an ejected disc sitting in the disc slot as this can expose it to sunlight and other causes of damage.
- Do not attempt to open the unit chassis. There are no user serviceable parts or adjustments inside.
- When the vehicle warms up during cold weather or under damp conditions, moisture may condense on the lens of the disc player. Should this occur, the player will not operate properly until the moisture has evaporated.
- The unit is designed with a vibration dampening CD mechanism to minimize interruption of disc play due to normal vibration in a moving vehicle. When driving on very rough roads, however, occasional sound skips may occur. This will not scratch or damage the disc and normal play will resume when the rough conditions cease.

HANDLING COMPACT DISCS

Dirt, dust, scratches, and warpage can cause skips in the playback and deterioration of sound quality. Please follow these guidelines to take care of your compact discs:

- Use only compact discs with the mark .
- Fingerprints, dust, and dirt should be carefully wiped off the disc's playing surface (shiny side) with a soft cloth. Wipe in a straight motion from the inside to the outside of the disc.
- Never use chemicals such as record sprays, household cleaners or thinner to clean compact discs. Such chemicals can irreparably damage the disc's surface.
- Discs should be kept in their storage cases when not in use.
- Do not expose discs to direct sunlight, high temperatures or high humidity for extended periods.
- Do not stick paper, tape, or labels on the disc surfaces nor write on them with any type of marker.

12 MONTH LIMITED WARRANTY

AUDIOVOX CORPORATION (the Company) warrants to the original retail purchaser of this product that should this product or any part thereof, under normal use and conditions, be proven defective in material or workmanship within 12 months from the date of original purchase, such defect(s) will be repaired or replaced with new or reconditioned product (at the Company's option) without charge for parts and repair labor.

To obtain repair or replacement within the terms of this Warranty, the product is to be delivered with proof of warranty coverage (e.g. dated bill of sale), specification of defect(s), transportation prepaid, to the warranty center at the address shown below.

This Warranty does not extend to the elimination of car static or motor noise, to correction of antenna problems, to costs incurred for installation, removal, or reinstallation of the product, or damage to tapes, compact discs, speakers, accessories, or vehicle electrical systems.

This Warranty does not apply to any product or part thereof which, in the opinion of the Company, has suffered or been damaged through alteration, improper installation, mishandling, misuse, neglect, accident, or by removal or defacement of the factory serial number/bar code label(s). THE EXTENT OF THE COMPANY'S LIABILITY UNDER THIS WARRANTY IS LIMITED TO THE REPAIR OR REPLACEMENT PROVIDED ABOVE AND, IN NO EVENT, SHALL THE COMPANY'S LIABILITY EXCEED THE PURCHASE PRICE PAID BY PURCHASER FOR THE PRODUCT.

This Warranty is in lieu of all other express warranties or liabilities. ANY IMPLIED WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY, SHALL BE LIMITED TO THE DURATION OF THIS WRITTEN WARRANTY. ANY ACTION FOR BREACH OF ANY WARRANTY HEREUNDER INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY MUST BE BROUGHT WITHIN A PERIOD OF 30 MONTHS FROM DATE OF ORIGINAL PURCHASE. IN NO CASE SHALL THE COMPANY BE LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES FOR BREACH OF THIS OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, WHATSOEVER. No person or representative is authorized to assume for the Company any liability other than expressed herein in connection with the sale of this product.

Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damage so the above limitations or exclusions may not apply to you. This Warranty gives you specific legal rights and you may also have other rights which vary from state to state.

U.S.A.: AUDIOVOX CORPORATION, 150 MARCUS BLVD., HAUPPAUGE, NEW YORK 11788 • 1-800-645-4994
CANADA: CALL 1-800-645-4994 FOR LOCATION OF WARRANTY STATION SERVING YOUR AREA

Form No. 128-4270E



For Customer Service
Visit Our Website At
www.audiovox.com
Product Information, Photos,
FAQ's, Owner's Manuals