AM/FM Cassette radio with CD player.
Overview

1. PWR button
   --Press the button to turn on/off the radio

2. Audio and time Settings: Rotary / push knob
   --volume control: turn the knob to raise or lower the sound level
   --sound setting: press this knob to change the sound settings (see below)
   --time control: turn this knob to adjust the time in time setting mode

   Sound Settings
   Press and adjust as required by pressing and then turning the knob:
   --Treble setting (TRE)
   --Bass setting (BAS)
   --Balance setting (BAL)
   --Fader setting (FAD)

3. Auto-Seek button
Overview

--Radio mode: seek tuning up/down.
--CD mode: Select track up/down, or long press, fast forward/rewind.

4. Mute and DSP function
Mute function
--Radio mode: mute function on/off.
--CD/CDC/TP mode: pause function and DSP (Digital Signal Processing) function
This button can select FLAT, JAZZ, POP, CLASS, ROCK, VOCAL, DSP off.

5. Manual Setting
--Radio mode: Manual tuning up/down
--CDC mode: Select Disc up/down

6. AMS and T/F button
AMS function
--If pressed briefly, the radio will Scan the memory preset stations
--If pressed for more than 2 seconds, the radio will auto-Store the six strong stations into preset memory.

T/F function
--frequency and clock convert, To enter clock setting mode, press for more than 2 seconds and then select hour or minutes with the audio settings knob.

7. Preset button 1
--Radio mode: press briefly to recall the preset station or press for two seconds to memorize the current station frequency. The radio can store 12 AM, 18 FM
--CD/CDC mode: track repeat play.
--CDC mode: track or whole disc repeat play.

8. Preset button 2
--Radio mode: press briefly to recall the preset station or press for two seconds to memorize.
--CDC mode: track or whole disc scan play
--CD mode: track scan play

9. preset button 3
--Radio mode: press briefly to recall the preset station or press for two seconds to memorize.
--CDC mode: track or whole disc shuffle play
--CD mode: track shuffle play.

10. Preset button 4
--Radio mode: press briefly to recall the preset station or press for two seconds to memorize.
--CDC/CD mode: Program track memory

11. Preset button 5
--Radio mode: press briefly to recall the preset station or press for two seconds to memorize.
--CDC/CD mode: Program play

12. Preset button 6
--Radio mode: press briefly to recall the preset station or press for two seconds to memorize.
--CDC/CD mode: Program clear.

13. Source selection buttons
The individual sources or memory levels can be selected by briefly pressing the button.
--BAND button (VHF and MW)
--WB button (Weather Band selected)
--CD button (CD & CDC operation / EAS on/off)
--AUX button (AUX mode selected)

14. Eject button for Disc
Eject CD

15. CD slot
Insert CD into CD slot with the label surface upward. When inserted, the CD will play automatically.

16. Eject button for Cassette
Eject Cassette

17. Fast rewind button

18. Fast forward button

19. Cassette Slot

Important notes
Operating the radio while driving can be dangerous. Traffic conditions can demand the constant attention of the vehicle operator.

Warning
Please concentrate on your driving above all!

Operating Instructions
1. PWR button
Press the button to turn on or off radio.

2. Rotary / Push knob
The knob serves:
- Sound setting
- Volume control
- Clock control

Sound setting
Press the button repeatedly to select
Treble setting (TRE)
Bass setting (BAS)
Balance setting (BAL)
Fader setting (FAD)

Volume Control
Turn the knob to the desired position.
Clockwise: Increase volume
Counterclockwise: Decrease volume

Note: Please adjust volume in moderate position so you can hear traffic sounds.

Clock control
With the time displayed, select any one: HOUR MINUTE
The scale value in the display can be set by turning the knob. (see 6)

Sound setting
Press the knob to select TRE/BAS setting
---Set the required value by turning the button to the left or right.
Bass: +7 0 -7
Treble: +7 0 -7

Balance control
Fader control

3. Auto-seek tuning button

Radio operation seek tuning
It is possible to seek tuning backwards and forwards by pressing either the up or the down hand side of the switch. Search station in the direction selected in both AM and FM mode.

CD/CDC operation
Search track
Select track up/down in the direction selected by briefly pressing the switch. Fast forward and reverse. The switch is used for audible fast forward and reverse of a track during CD/CDC operation by pressing the switch for more than 2 seconds.

4. Mute and DSP button

Mute function (  
Radio operation: The radio enters into mute state by pressing the up of the rock switch ( volume for 0, "MUTE" displaying) ; Press again, return to the normal play state.

Tape operation: Press the up of the rock switch; current play pause; the word "PAUSE" appears in the display. Press again to cancel PAUSE function. Cassette play from the pause position. Changing the mode in pause state can cancel the state.

CD/CDC operation: in CD play state, press the button to pause play and the word "PAUSE" appears in the display. Press again to cancel PAUSE function. CD play from the pause position. Changing mode in pause state can cancel the state.

DSP function
5. Manual Setting

Manual tuning
Briefly press the button and start to tune in the required direction. During tuning, sound is muted. Hold the button, tuning changes rapidly in the required direction.

CDC operation: Disc selection
Select disc forward or reward in the desired direction.

6. AMS and T/F button

Preset scan / Auto Store station
Preset scan
Briefly pressing can scan preset station rang 1 to 6 in desired band.
Auto-store station
Hold button down and the 6 stations with the strongest signals can be stored automatically in the desired band. If less than 6 stations, other settings don’t change. Or if no station found, the radio automatically tunes to the former station.

Frequency/Time
Briefly press button to alter between frequency and clock. In time state, hold button down and the hour digit flashes. The hour digit can be adjusted by turning the knob(2); Press again, minute can be adjusted as well. If no alternation within 5 seconds, radio exits the time state.

7. Preset button 1

The button serves:
--Store station and Play stored station
--In CDC mode, repeat track or disc play.
--In CD mode, repeat track play

Store station
--Select desired waveband

Note: When the new station stored, the old station stored can be replaced.

Play preset station
--Select desired waveband
--Briefly press button and emit the stored station.
--The band, frequency and preset digit appear in the display.

CD/CDC repeat play
--In CD/CDC mode, briefly press button, repeat current track to play.
--In CDC mode, press long for approximately 2 seconds, and repeat the track of current disc to play.
--Press again to cancel the function of repeating play.

8. Preset button 2

The button serves:
--Store station and Play stored station
--Scan play in CD/CDC mode

Store station/ Play stored station, repeat the steps as 7

CD/CDC Scan play
--In CD mode, all tracks can be played for 10 seconds by pressing the SCAN button.
--In CDC mode, the tracks of all the CDs in the CD changer can be played for 10 seconds by pressing SCAN button.
--Press again to exit the SCAN function.

9. Preset button 3

The button serves:
Store station and Play stored station
--Shuffle play in CD/CDC mode

Store station/Play stored station, repeat the steps as 7

CD/CDC shuffle play
--In CD mode, play the tracks of one CD in a random order by pressing button briefly.
--In CDC mode, play all tracks of all CDs in the changer in a random order by pressing button.
--Cancel the SHUFFLE function by pressing the button again and the radio return the normal play.

10. Preset button 4
The button serves:
--Store station and Play stored station
--Program memory in CD/CDC mode

Store station/Play stored station, repeat the steps as 7

CD/CDC program memory
--In CD mode, one program track can be stored by pressing button for 2 seconds; the word "P.XX"(XX from 1-10) Appears in the display and flashes for 5 seconds; during the 5 seconds, press again to verify the program track being stored. The next program track repeats the steps above. Return normal play state after completing verification.
--After the disc for program memory exited, program memory can be clear automatically.

11. Preset button 5
The button serves:
--Store station and Play stored station
--Program play in CD/CDC mode

Store station/Play stored station, repeat the steps as 7

CD/CDC

--In CD/CDC mode, if the program track existed, program memory track will start to play from P1 by pressing the button.
--Select the next program track by pressing in the desired direction.
--Cancel program play function by pressing the button again.

12. Preset button 6
The button serves:
--Store station and Play stored station
--Program clear in CD/CDC mode

Store station/Play stored station, repeat the steps as 7
In CD/CDC mode, clear all program tracks by pressing the button for 2 seconds. The word "CLR" appears and flashes in the displays. During the time, verify the clearance action by pressing the button again. Return the normal play.

13. Sources selector button
BAND button
The button select
--FM1
--FM2
--FM3
--AM1
--AM2
Press BAND button to select band among FM1, FM2, FM3, AM1, AM2.

WB button
Press WB button to select weather Band.

TP button
Cassette operation is selected with this button once a cassette has been inserted.

Note:
Full insert cassette into slot with exposed side of tape facing to the right. Then play tape. If have tape in slot, play tape by pressing butt-
OPERATING INSTRUCTIONS

on. The word "PLAY" appears in the display. If no tape in slot, the button doesn't function.

CD button
Press this button can select CD and CDC mode directly, long press in CD mode is to change EAS on/off. In other modes, press this key it will Enter to CD mode, if there is a disc in CD slot otherwise it will go to CDC mode. If no CD in slot and CDC changer not connecting this button doesn't function.

AUX button
Press AUX button can enter AUX mode directly.

14. Eject Disc button
CD is ejected by pressing button

15. CD slot
Full insert CD with the data facing downward. Then automatically play CD.

16. Eject Cassette button
Tape is ejected by pressing button.

17. Fast rewind button for cassette
Press the button to lock in rapid winding. The fast rewind mode is indicated by "FAST" in the display. Rapid winding is canceled by pressing the button again. At the end of tape, automatically switches to the other side and begins play-back (auto-reverse)

18. Fast forward button
Press the button to lock in rapid winding. The fast forward mode is indicated by "FAST" in the display. Rapid winding is canceled by pressing the button again. At the end of tape, automatically switches to the other side and begins play-back (auto-reverse)

Auto-reverse: During playback, press both buttons simultaneously. The radio will switch over and play the other side of Cassette.

19. Cassette slot
Full insert cassette with exposed side of cassette facing to the right until cassette is fixed by machine setting and is loaded in desired position. Then cassette is played.

Note:
It is recommended that the recording time of tapes used not exceed 90 minutes (C90 cassettes). sixty minute cassettes (C60) are well suited for use.

Advise to use high quality cassettes. The cassette is ejected when not using preventing it or head from being destroyed. If cassette is loose, this may be remedied by winding the tape backwards and forwards a few times on using pencil or other thing.

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.

Cassette maintenance
After cassette is used for long time, the head can collect dirt. This can impede clear sound.
--Clean dirt with a cleaning tape at fixed intervals.
--Protect tapes from direct exposure to sunlight and high temperature to prevent distortion.

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 solution 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.
--Never insert anything other than a 5" (12CM) compact disc into the player as the mechanism can be damaged by foreign objects.
HANDLING COMPACT DISCS

--Do not attempt to use 3"(8cm) 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 warped discs 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.

AM AND FM RECEPTION IN A MOBILE ENVIRONMENT

Although you may be familiar with both AM and FM reception in your home, you will experience notable differences in reception while driving your vehicle.
Both AM and FM provide excellent listening enjoyment and supply the diversified entertainment while in your vehicle. FM reception provides a different listening experience compared to that of AM. The few reception inconveniences common to FM are compensated by the rich sound quality of its wide frequency response and stereo effect.
Your new AM/FM radio has been built to the strictest engineering standards available today and through quality under all conditions. A few minutes reading this section will enable you to obtain the most from the unit and answer your questions about the differences between mobile AM and FM reception.

SOME FACTS ABOUT AM AND FM RECEPTION

1. RECEPTION IN TUNNELS: Although you will lose AM reception when driving through tunnels and large bridges, it is common to continue to receive FM reception under the same conditions.
2. THE NUMBER OF STATIONS IN YOUR AREA: Depending on your location, you may find that you can receive a greater number of AM stations in your area than FM stations. In most urban and suburban areas, the numbers of AM and FM stations are comparable.
3. RECEPTION DURING STORMS: Local electrical thunderstorm activity often produces sharp static sound when listening to AM stations although you will find that FM is unaffected.
4. ELECTRICAL INTERFERENCE: When listening to AM stations, you may experience some buzzing sounds or static when passing roadside electric power lines which do not interfere with FM reception. Conversely, FM reception may be affected by electrical noise from passing cars and trucks while AM reception is not affected.
5. FM RECEPTION RANGE: FM reception range is usually limited to about 50 miles from the broadcast station. FM signals radiate straight out from the broadcast antenna. They do not follow the earth's curve and are not reflected back to the earth by the atmosphere resulting in "line-of-sight" reception range.
6. AM RECEPTION RANGE: AM stations can often be received hundreds of miles from the broadcast station. AM signals follow the earth's curve and are easily reflected back to earth by the atmosphere.
Therefore, an AM signal may be more easily received far from the broadcast station antenna than an FM signal.

**FM RECEPTION WHILE YOU ARE DRIVING**

Since FM signals become weaker as you drive further from the broadcast station, you may experience flutter, noisy reception and fading in the poor signal fringe areas. Through the use of advanced circuitry in this radio, this "Fringe Area" has been greatly reduced, providing a large reception range. Even with this improved circuitry however, eventually the FM signal will be come too weak to provide quality reception. When this occurs, it is best change to a stronger local FM station. Although FM signals are not reflected by the atmosphere, they are easily reflected by solid objects. This characteristic of FM signals can produce two different reception possibilities. First, an FM signals can "bounce" between tall buildings resulting in reception in areas where AM reception is not possible. Second, the same effect can result in the loss of building is located between you and the FM broadcasting antenna so that it blocks the signals. In such cases, it is possible to have poor FM reception even if you are not far from the broadcasting station.

**SPECIFICATIONS**

- **Size:** 3.54"H x 7.01"W x 6.18"D
  90mm x 178mm x 157mm
- **Operating Voltage:** 12 Volts DC. Negative Ground
- **Output Power:** 100 Watts Maximum
  (25 Watts x 4 Channels)
- **Output wiring:** Floating-Ground Type Designed for Use with 4 Speakers (Front and Rear Channels Cannot be Combined (Bridged) for use with 2 Speakers)
- **Tuning Range:** AM: 520-1720 kHz (10kHz Steps)
  FM: 87.5-107.9MHz (200kHz Steps)
- **Sensitivity:** AM: 32dB
  FM: 10dB
- **Signal-to Noise Ratio:** 60dB
- **FM Stereo Separation:** 25dB
- **IF Rejection:**
  - FM: 75dBuV
  - AM: 100dBuV
- **Image Rejection:**
  - FM: 55dBuV
  - AM: 100dBuV
- **Bass Control:** ±10dB @ 100Hz
- **Treble Control:** ±10dB @ 10KHz
- **CD/CDC Frequency Response:** 30-18Khz. ±2dB
- **CD/CDC Signal/Noise Ratio:** ≥70dB
- **CD/CDC Channel Separation:** ≥50dB
- **CD/CDC Distortion:** 0.3%
WARRANTY

90 DAY / 12 MONTH LIMITED WARRANTY

AUDIOVOX SPECIALIZED APPLICATION, LLC (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 90 days from the date of original purchase, such defect(s) will be repaired or replaced (at the Company’s option) without charge for parts and repair labor. After the initial 90-day period and for a period of 12 months from the date of original purchase, the Company will supply at no charge a replacement for any defective part(s), but will charge for the labor to repair the product.

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 an approved warranty station, or the Company at the address shown below.

This warranty does not extend to the elimination of externally generated static or noise, to the correction of antenna problems, to costs incurred for removal or reinstallation of the product, or to damage to any tapes, speakers, accessories, or electrical systems.

This warranty does not apply to any product or part thereof which, in the opinion of the Company, has been damaged through alteration, improper installation, mishandling, misuse, neglect, or accident. 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 THE 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 WARRANTY. ANY ACTION FOR BREECH OF ANY WARRANTY HEREUNDER INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY MUST BE BROUGHT WITHIN A PERIOD OF 30 DAYS FROM THE DATE OF ORIGINAL PURCHASE. IN NO CASE SHALL THE COMPANY BE LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES FOR BREECH OF THIS OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, WHATSOEVER. No person or representative is authorized to assume for the Company any liability other that 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 damages 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.

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