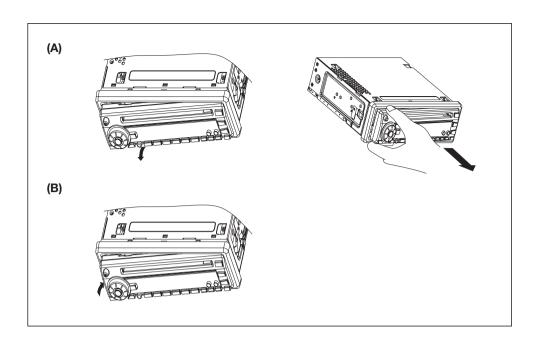
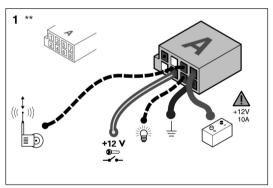
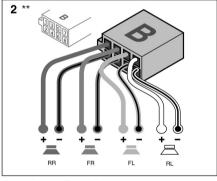


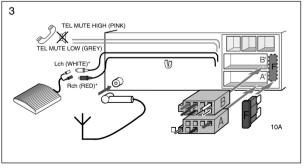
- 1. Detachable front release button
- Volume rotary/MP3 character selection button
- 3. Power ON/OFF button
- 4. Display button
- 5. CD slot
- 6. LCD display
- 7. AST/P.SCAN/MODE button
- 8. LOUD/BAND/ENTER button
- 9. CD eject button
- 10. TUNE/TRACK up/forward button
- 11. TUNE/TRACK down/backward button
- 12. SOURCE/Illumination button
- 13. AF button
- 14. TA button
- 15. PTY button

- Radio preset 6/MP3 10 steps advance button
- Radio preset 5/MP3 10 steps reverse button
- 18. Radio preset 4/CD SHUFFLE button
- 19. Radio preset 3/CD REPEAT button
- 20. Radio preset 2/CD SCAN button
- 21. Radio preset 1/CD PAUSE button
- 22. SEL (to set Vol., Bass, Treble, Balance & Fader)/MP3 O.K button
- SOUND button (to select Flat, Classics, Pop, Rock & DSP OFF)
- 24. Mute button
- 25. Blinking LED
- 26. Reset button
- 27. Detachable unit connector









For this accessory, contact your dealer

\* For CD 139 model only

# **BEFORE YOU START...**

Thank you for purchasing this VDO product which has been designed and manufactured to the highest standards and subjected to rigorous testing.

Kindly familiarise yourself with the product by reading this user manual. Keep this manual handy in your car for future reference.

This manual covers the following models: CD 139 MP3

# **IMPORTANT**

This device has been designed and produced according to applicable Safety Regulations. Please read carefully the instruction manual and use the device as intended

# **CONTENTS**

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# HINTS FOR CORRECT AND SAFE OPERATION

This unit is designed to be operated only +12 volt DC negative ground systems. The unit cannot be used on +24 volt or positive ground systems.

The unit may not operate correctly in extremely hot or cold temperatures. The unit is equipped with a built in self-protection circuit. When the temperature reaches factory preset level, the protection circuit halts all unit operation. If this happen, let the unit settles to the car ambient temperature before it get back to normal operation.

# INSTALLATION

# Notes:

- Choose the mounting location where the unit will not interfere with the normal driving function of the driver.
- Before finally installing the unit, connect the wiring temporarily and make sure the unit and the system work properly.
- Use only the parts included with the unit to ensure proper installation. The use of unauthorized parts can cause malfunctions.
- Consult your nearest dealer if installation requires drilling of holes or other modifications of the vehicle.
- Install the unit where it does not get in the driver's way and cannot injure the passenger if there is a sudden stop, like an emergency stop.
- If the installation angle exceeds 30° from horizontal, the unit might not give its optimum performance.
- If for any reason, the fuse is blown, only replace with an automotive blade fuse of the same rating.
- Avoid installing the unit where it would be subject to high temperature, such as from direct sunlight, or from hot air, from the heater, or where it would be subject to dust, dirt or excessive vibration.

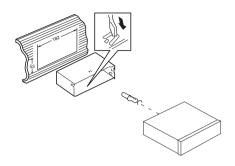
# DIN FRONT/REAR-MOUNT

This unit can be properly installed either from "Front" (conventional DIN Front-mount) or "Rear" (JIN or Japanese) mounting. For details, refer to the following illustrated installation methods.

# **DIN FRONT-MOUNT (Method A)**

Installation of the unit

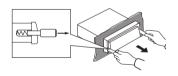
screwdriver



# Metal Sleeve Install the metal sleeve in the dashboard. For optimal performance of the CD player, the metal sleeve should be positioned horizontally (between –10 and +30). Fix metal sleeve into place by

pressing the metal tags outwards using

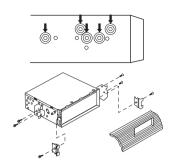
Front Mounting
 Slide the radio into the metal sleeve until
 the springs at either side of the radio
 snap into the openings of the sleeve.



Removing Radio
 Insert the levers supplied with the unit into the grooves at both sides of the unit until they lock. Pull the levers toward you makes it possible to remove the unit from the dashboard.

# JIN REAR-MOUNT (Method B)

Installation using the screw holes on the sides of the unit.



Remove the outer rim around the front panel and the side springs. Select a position where the screw holes of the mounting bracket and the screw holes of the radio become aligned and tighten the screws at 2 places on each side.

# HOW TO REMOVE AND INSTALL THE FRONT PANEL

See details at the back of the cover page for remove (figure A) and install (figure B) the front panel.

- Press the release button and pull-off the front panel. Keep front panel into the case.
- To install the front panel, insert the panel into the housing, slide in to the right hand side and push in till locked.
- Make sure the panel is properly installed. Otherwise, abnormalities occurs on the display or some keys will not function properly.

# SECURITY IDENTIFICATION NUMBER

- A security identification number is stated on the "Security Card". Show this card as a proof of ownership, when the set is stolen, when the detachable front is lost or when requesting service.
- Do not keep the "Security Card" in your car.

# **GENERAL OPERATION**

# ON/OFF

Switch on the unit by pressing any button, except **REL** button (1) and the **CD eject** button (9). When system is on, press **POWER** button (3) to turn off the unit.

# VOLUME/BASS/TREBLE/BALANCE/ FADER ADJUSTMENT

Press **SEL** button (22) to select the desired adjustment mode.

The adjustment mode will change in the following order:

By turning **AUDIO ADJUST** button (2), different setting levels can be adjusted. **Note:** Bass/Treble selections are only active when the DSP (Digital Sound Processor) is switched off. Press **SEL** button (22) for 2 seconds, it will trigger a series of Advanced RDS setting. Refer to RDS (Radio Data System) operation section for details.

# SOUND

Press **SOUND** button (23) to turn on sound DSP function (Digital Sound Processor) and to select desired audio mode.

There are five kinds of mode as below:

Activating the DSP overrides the prior selected Bass/Treble settings.

# LOUDNESS

Press **LOUD** button (8) for 2 seconds to reinforce the bass output and display will show "**LOUD**". Press it for 2 seconds again to release this function.

# MUTE

Press **MUTE** button (24) to silence the receiver. Press it again to resume listening.

# • FLASHING LED

If the front panel is removed from the unit, the **LED** (25) will be flashing.

# SOURCE

Press **SOURCE** button (12) to switch between CD and Radio.

# ILLUMINATION COLOR

Press the button (12) for 2 seconds to change the color of LCD.

# RESET

**RESET** button (26) is placed on the front panel and must be activated with either a ball point pen or thin hard object.
The **RESET** button (26) is to be activated

The **RESET** button (26) is to be activated for the following reasons:

- Initial installation of the unit when all wiring is completed.
- All the function buttons do not operate.
- Error symbol on the display.

**Note:** Pressing the **RESET** button (26) will erase your stored stations in the memory.

# RDS CLOCK

Press **DISP** button (4) to view RDS clock time from the received RDS station.

# **RADIO OPERATION**

# BAND SELECTION

At tuner mode, press **BAND** button (8) shortly to select the desired band. The reception band will change in the following order:

# STATION SELECTION

Press TUNE/TRACK buttons (10) or (11) shortly to activate automatic seek function. Press for 2 seconds until "MANUAL" appeared on the display, the manual tuning mode is selected. If both buttons have not pressed for several seconds, they will retune to seek tuning mode and "AUTO" appeared on the display.

# AUTOSTORE

Automatic Memory Storing
 Press AST button (7) for 2 seconds.

 The radio searches for 6 strongest
 stations and stores them into the
 presets of the currently selected band.

 Note: Any stations that were previously
 stored in this memory bank are replaced
 by the new stations.

Program Scanning
 Press P.SCAN button (7) shortly to scan all preset stations throughout the entire band.

# STATION STORE AND RECALL

Press any one of the preset button for 2 seconds to store the current tuned frequency in this memory.

Previously stored information in this button will be lost. Press any one of the preset buttons briefly (1 to 6) to recall a station, which had been stored in the memory.

# **RDS (RADIO DATA SYSTEM) OPERATION**

The RDS data are the PI, PS, TP, PTY, TA and AF data.

PI: Program Identification Code Code for identifying program

PS: Program Service Name Broadcast station name data expressed in alphanumerically character

TP: Traffic Program Identification Identification data for traffic information broadcasting station

TA: Traffic Announcement Identification Identification data showing traffic information is being transmitted or not

AF: Alternative Frequencies
Frequency list of broadcasting station
transmitting the same program

# **Setting AF Mode**

- Press AF button (13) briefly to switch on/off AF mode.
- Whenever AF is switched on, symbol "AF" appears on the display.
- The tuner will return to Alternative Frequencies whenever the reception signals getting worse.
- "ALARM" will be displayed when an emergency broadcasting is received; meanwhile sound output level will be adjusted to the preset output level automatically when the volume control is set at minimum.

# **Regional Program Operation**

- Press **AF** button (13) for 2 seconds to switch on or off regional mode.

 When region is on, the current listening program remains unchanged.
 When region is off, it allows the reception moves to the regional station.

# **Using PTY to Select Program**

The PTY function allows you to search for stations with a particular Program Type. To select your program type, press the **PTY** button (15):

►PTY music group --> PTY speech group --> PTY off-

Now you can select the music type or speech type using preset keys 1 - 6 for your selection as listed in below table:

Preset number	PTY MUSIC group
1 2 3 4 5 6	POP M, ROCK M EASY M, LIGHT M CLASSICS, OTHER M JAZZ, COUNTRY NATION M, OLDIES FOLK M

Preset number	PTY SPEECH group
1 2	NEWS, AFFAIRS, INFO SPORT, EDUCATE, DRAMA
3	CULTURE, SCIENCE,
4	VARIED WEATHER, FINANCE, CHILDREN
5	SOCIAL, RELIGION, PHONE IN
6	TRAVEL, LEISURE, DOCUMENT

While selecting PTY engagement, its selection is implemented by preset button as described in notes.

When PTY is selected, the radio starts to search corresponding PTY information, and stops of the corresponding PTY information is detected.

If corresponding PTY information is not found, normal radio reception is resumed.

# **Listening to Traffic Announcement**

Traffic announcement can interrupt CD play or radio listening when broadcast.

Briefly press the **TA** button (14) to select the TA mode on or off.

When TA mode is on, you will hear the Traffic Announcement when broadcast. During traffic announcement, you can interrupt it by short press of **TA** button (14), without switching off the TA mode. By doing so, the set will return to the previous operating mode.

Long press on **TA** button (14) allows ON/OFF selection of TA LOCAL/TA DISTANT mode.

TA LOCAL will only allow traffic announcement from strong station to come through.

TA DISTANT ("RDS TA DX") selection will allow all received announcements to interrupt CD play or radio listening.

# **ADVANCED RDS SETTINGS**

Press the **SEL** button (22) for 2 seconds to enter the advanced RDS settings menu.

# a) TA SEEK or TA ALARM

- TA SEEK mode:

When TP information gets lost at the current station for retune time which is set by RETUNE SHORT (30sec.) or RETUNE LONG (90sec.), the radio start to retune to next same PI station.

 TA ALARM mode: When TP information gets lost at the current station, beeps will be heard.

# b) PI SOUND or PI MUTE In some countries, there is a possibility of having 2 different stations with same frequencies but different PI. If PI SOUND is selected, radio will switch to the new PI station for few seconds before switch back to current PI station. If PI MUTE is selected, radio will mute when a new PI station is received.

- c) RETUNE L or RETUNE S
  When PI information is not caught for retune time, the radio start to retune to next same PI station.
  - RETUNE I mode:

Retune time selected as 90 seconds.

- RETUNE S mode: Retune time selected as 30 seconds.

# d) MASK DPI or MASK ALL

 MASK DPI mode: Masked only the AF which has different PI.

# - MASK ALL mode:

Masked the AF which has different PI and any other interfering non PI station which having the same transmitting frequency.

# e) Option for Beep level

- Beep OFF:

No beep will be heard when pressing of any buttons.

- Beep 2ND:

Beep sound will be heard with any long press function.

- Beep ALL:

Beep will be heard when pressing any button.

# **CD OPERATION**

Insert discs, autoplay track and time display.

# SELECT TRACKS

During CD operation, press **TUNE/TRACK** buttons (10) or (11) to advance or reverse to the previous track. Track number is shown on display. During CD operation, hold **TUNE/TRACK** buttons (10) or (11) to fast forward or fast reverse. CD play resume when you release the button.

# PAUSE

Press **PAUSE** button (21) to pause CD player. Press it again to resume play.

# • REPEAT THE SAME TRACK

During CD operation, press **REPEAT** button (19) to continuously repeat the same track. Press again to stop repeat.

# TRACK SCAN

The scan function enables you to listen to the first few seconds of each track. Press **SCAN** button (20) to activate/ de-activate scan track.

# PLAY ALL TRACKS IN RANDOM ORDER During CD operation, press SHUFFLE button (18) to play all tracks on the disc in random order. Press again to cancel the function.

# EJECT

Press button (9) to stop CD playing and eject the disc from the disc slot (5).

# Playing a CD-R

Depending on the type of CD-R CD, surface condition of the disc, as well as the performance and condition of the CD writer, certain CD-R CD may not operate normally on this unit.

# Playing a "copy protected" nonconforming audio CD

Due to use of copy protection schemes of some audio CDs which are non conformance to international audio CDs standards (Red Book), these type of copy protected disc(s) may not play on this unit.

# **MP3 OPERATION**

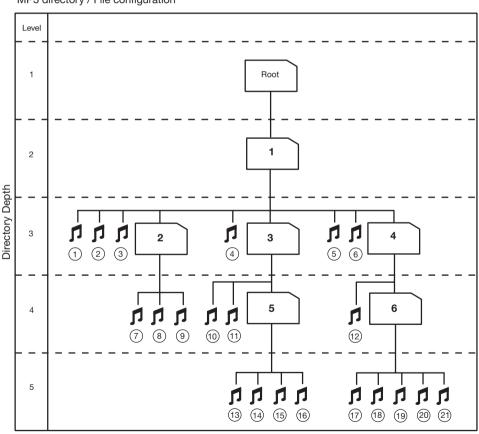
# HOW ARE MP3 FILES RECORDED AND PLAYED BACK?

MP3 files (song) can be recorded in directory (album). During recording, the files and directories can be arranged in the way similar to arranging files and directories of computer data.

"Root" is similar to the root of a tree. Every file and directory can be linked to and be accessed from the root.

In compliance with ISO9660, the maximum allowable depth of directories is eight (

MP3 directory / File configuration



N

- Directories / Albums search order



- MP3 files, search and playback order.

inclusive of root directory)
Playback, file search and directory search orders on a disc are determined by writing (encoding) application. Therefore, playback order may be different from the sequence of recording the directories and files.

Refer to the table for how MP3 files are recorded, search and playback.

# PLAYING A MP3 DISC

You are able to play MP3 files that conform to MPEG1-Layer 3 file-coding scheme burned on a CD-R disc in ISO9660 format. To listen to MP3 song, insert the MP3 disc in the headunit, playback starts automatically.

# SELECT SONG

In MP3 operation, there are four ways to select the song

- Single step selection:
   Press TUNE/TRACK button (10) or (11) to advance or reverse the previous song in single step
- Select in steps of 10:
   Press PRESET button 6 (16) or PRESET button 5 (17) to advance or reverse the songs in step of 10
- Select by album / song title:
   Press MODE button (7) one time. Now you can enter text-string of up to 16 characters of the desired song title by using
  - encoder rotary knob (2), to select the characters A to Z, 1 to 0, blank, +, -, \_ or apostrophe ( ' )
  - press **OK** button (22) to confirm entry of each characters.
  - press **ENTER** button (8) to start the title search.

The display will list all characters related song titles from disc, select the wanted title by encoder rotary knob (2). Press **ENTER** button (8) to confirm and start the play.

N.B.: In case the selected title is an album name, display will show ('').

- Use encoder rotary knob (2) to list all songs under this album and select the title
- Press ENTER button (8) to confirm and start the play.
- Repeat the above steps if the newly selected title is again an album.
- Select by Directory or Album:
  Press MODE button (7) two times,
  display will list all available albums and
  songs. Select the desired album/songs
  by using encoder rotary knob (2) and
  ENTER button (8) to confirm.
  If the selected title is a song, it starts to
  play.

If the selected title is an album name, display will show (''), then

- Use encoder rotary knob (2) to list all songs under this album and select the title
- Press ENTER button (8) to confirm and start the play.
- Repeat the above steps if the newly selected title is again an album.

N.B.: The headunit able to play multi-level directory/album .

# • ENTER & RETURN OF DIRECTORY /ALBUM

Whenever the display show ( ' '), press **ENTER** button (8) allow user to exit or return to the previous directory level .

# PAUSE

Press **PAUSE** button (21) to pause MP3 player. Press it again to resume play.

# • REPEAT THE SAME SONG

Press **REPEAT** button (19) to continuously repeat the same song. Press again to cancel repeat function.

# SCAN

The scan function enables you to listen to the first few seconds of the song. Press **SCAN** button (20) to activate / de-activate scan function.

# PLAY SONG IN RANDOM ORDER

During MP3 operation, press **SHUFFLE** button (18) to play songs in random order. Press again to cancel the function.

# EJECT

Press button (9) to stop MP3 function and eject the disc from disc slot (5).

# DISPLAY INFORMATION

Press **DISP** button (4), following information are shown in sequence:

Clock → ID3 TAG (if available : song title, directory name, artist name, other contents...) → Radio frequency → PTY.

# Notes on MP3

- The unit cannot read an MP3 file that has a file extension other than ".MP3".
- The display only support English language characters A to Z, 0 to 9, +, -, and apostrophe (').
- The unit can play up to maximum 256 tracks and support maximum 128 directories per disc.
- The unit can display the directory/album name of maximum 16 characters and file/song name of maximum 28 characters.
- The unit plays only the first session of the disc ( can be CD audio or MP3 ) if the disc contains both CD audio tracks and MP3 files.
- Make sure that MP3 CD is burned in format as a data disc and NOT as an audio disc.
- To enjoy high quality sound. It is recommended to convert the MP3 files with a sampling frequency of 44.1KHz and fixed bit rate of 128kbps or higher

**MAINTENANCE** 

The following suggestions help you care for the product so that you can enjoy it for years.

- Keep the product dry. If it does get wet, wipe it dry immediately. Liquids might contain minerals that can corrode the electronic circuits.
- Keep the product away from dust and dirt, which can cause premature wear of part.
- Handle the product gently and carefully. Dropping it can damage circuit boards and cases, and can cause the product to work improperly.
- 4. Wipe the product with a dampened cloth occasionally to keep it looking new. Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the product.
- Use and store the product only in normal temperature environment.
   High temperature can shorten the life of electronic devices and distort or melt plastic parts.

# For CD Player

As dust tends to accumulate in the CD slot, clean it every once in a while. Your CDs can get scratched if you put them in a dusty CD slot.

# Care of Discs

Playing a CD that is dirty, scratched or warped can cause the sound to skip and the unit to operate incorrectly, resulting in worsened sound quality. Take the following precautions to prevent your CDs from getting scratched or damaged.

- 1. Avoid making fingerprint on the disc when handling it.
- 2. Put the disc back in the box immediately after eject.
- 3. Do not expose the disc to heat and direct sunlight.
- Clean the CD frequently with commercially available cleaning cloth or soft cotton cloth.

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# **SPECIFICATION**

# **GENERAL**

Power Supply Requirements : DC 12 Volts, Negative Ground

Chassis Dimensions : 180 (W) x 155 (D) x 50 (H)

Tone Controls

- Bass (at 100 Hz) : + 10 dB / - 10 dB - Treble (at 10 KHz) : + 10 dB / - 10 dB

Maximum Output Power : 4 x 50W

- Set Illumination : Switchable Orange/Green

- Safety fuse : 10 Ampere (max.)

# **CD PLAYER**

Signal to Noise Ratio : More than 85 dB Channel Separation : More than 70 dB Frequency Response : 20 Hz - 20 KHz

# **RADIO**

# FM

Frequency Coverage : 87.5 to 108 MHz

 $\begin{array}{lll} \text{IF} & : & 10.7 \text{ MHz} \\ \text{Sensitivity (S/N = 30 dB)} & : & 3 \, \mu\text{V} \\ \end{array}$ 

Sensitivity (S/N = 30 dB) :  $3 \mu V$ Stereo Separation : > 30 dB

# MW

Frequency Coverage : 522 to 1620 KHz

IF : 450 KHz Sensitivity (S/N = 20 dB) : 32 dBu

# LW

Frequency Coverage : 144 to 288 KHz

IF : 450 KHz Sensitivity (S/N = 20 dB) : 35 dBu

# **TROUBLE SHOOTING**

Before going through the check list, check wiring connection. If any of the problems persist after check list has been made, consult your nearest service dealer.

Symptom	Cause	Solution
No power.	The car ignition is not on.	If the power supply is properly connected to the car accessory terminal, switch the ignition key to "ACC".
	The fuse is blown.	Replace the fuse.
Disc cannot be loaded or ejected.	Presence of CD disc inside the player.	Remove the disc in the player, then put a new one.
	Inserting the disc in reverse direction.	Insert the compact disc with the label facing upward.
	Compact disc is extremely dirty or defective disc.	Clean the disc or try to play a new one.
	Temperature inside the car is too high.	Cool off or wait until the ambient temperature return to normal.
	Condensation.	Leave the player off for an hour, then try again.
No sound.	Volume is in minimum.	Adjust volume to a desired level.
	Wiring is not properly connected due to telephone mute.	Check wiring connection. Ensure your phone MUTE is correctly connected.
Sound skips.	The installation angle is not more than 30 degrees.	Adjust the installation angle to less than 30 degrees.
	The disc is extremely dirty or defective.	Clean the compact disc. Then try to play a new one.
The operation keys do not work.	The built-in microcomputer is not operating properly due to noise.	Press the RESET button. Front panel is not properly fixed into its place. Contacts between front and main unit are dirty. Clean contacts with a cotton bud soaked in isopropyl alcohol.
The radio does not work. The radio station automatic selection does not work.	The antenna cable is not connected.	Insert the antenna cable firmly.
	The signals are too weak.	Select a station manually.