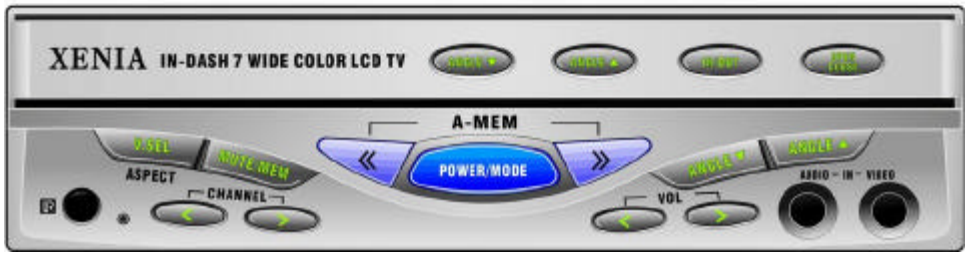
Appendix 8. User Manual

Refer to the following pages

DAV-2000

XENIA



INSTRCTION MANUAL

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BEFORE USING

About This Product

This product is compatible with the NTSC system only. When connecting other components to this product, be sure components are compatible with the same video systems. If it is not, images will not be correctly reproduced.

Precaution:

This unit is incompatible with the PAL system.

To Ensure Safe Driving

WARNING

To avoid the risk of accident and the potential violation of applicable laws, this product is not for use with a video screen that is visible to the driver.

In some countries or states the viewing of images on a display inside a vehicle even by persons other than the driver may be illegal. Where such regulations apply, they must be obeyed.

To ensure safe vehicle operation, complicated functions are not operable during driving. If any of these complicated functions are selected while driving, "WARNING<NOT PARKING>" is displayed on the display. To use these functions, please stop your vehicle and engage the parking brake.

Key Finder

SELECT BUTTON

V.SEL(MODE) BUTTON

VOLUME UP/DOWN BUTTON

AUTO STORE/MUTE BUTTON

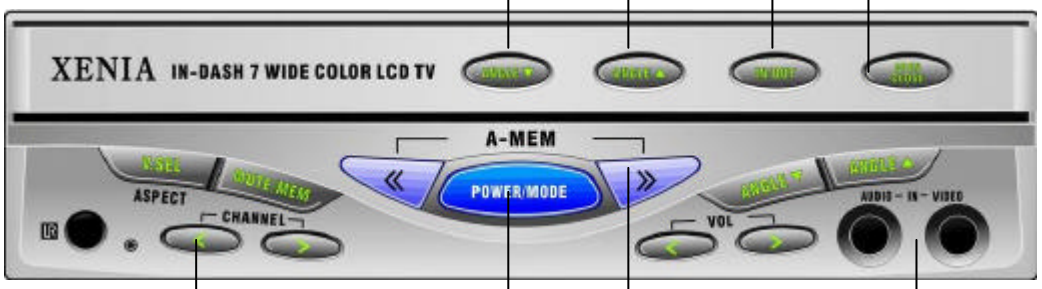
ENTER BUTTON

MENU BUTTON

IN/OUT BUTTON

ANGLE UP/DOWN BUTTON

OPEN/CLOSE BUTTON



POWER BUTTON

PRESET BUTTON

CHANNEL UP/DOEN BUTTON

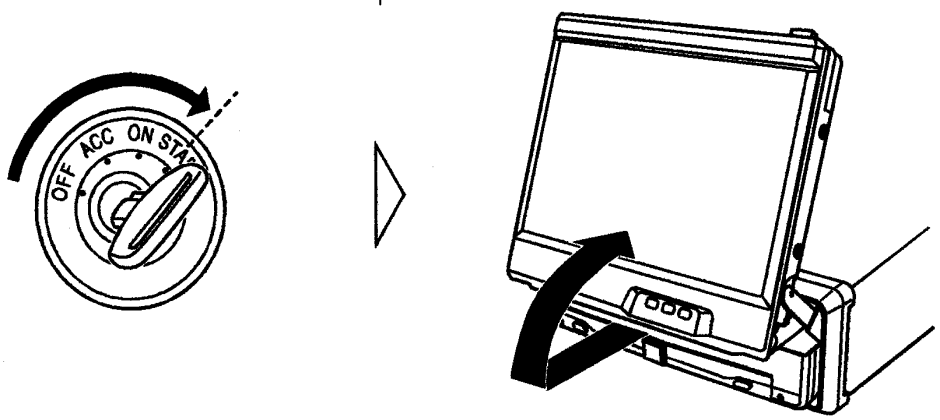
AV INPUT(AV3)

Remote Control

Operation of the Display

Deploying the Display

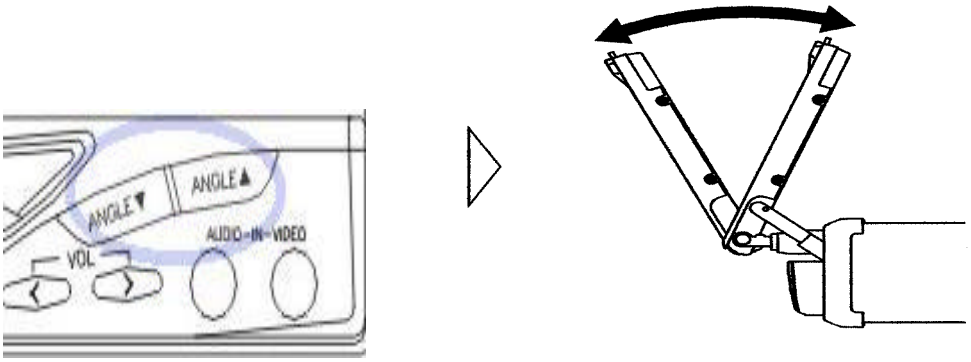
- Turn your vehicle's ON.



Turning the ignition switch ON will not deploy the display. Pressing the OPEN/CLOSE button will deploy the display. The display will automatically switch on the TV mode after the display is deployed.

Screen Angle Adjustment

The angle of this product's screen continues changing as long as you keep pressing the ANGLE button.



Precaution:

If you hear the display knocking against your vehicle's console or dashboard, press the ANGLE button on the (▽) side to move the screen a little forward.

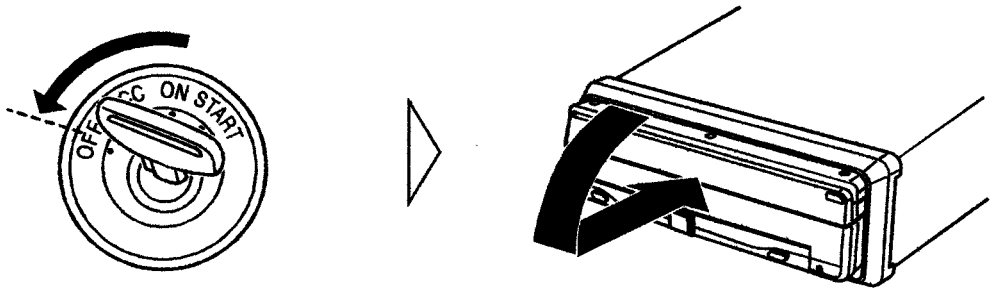
Note:

When adjusting the angle, be sure to press the ANGLE button. Forcible adjusting of the display by hand may damage it.

The adjusted angle of the display will be memorized and automatically returned to the next time the display is deployed.

Closing the Display

- Turn the vehicle's engine OFF.



The display will be automatically closed by the automatic close/open mode. If the display does not close automatically, press the OPEN/CLOSE button.

Note:
When closing the display, check to make sure that it has closed completely. If the display has stopped halfway, leaving it like could result in damage to it.
The automatic close/open model will operate the display as follows.

. When the ignition switch is turned OFF while the display is deployed, the display will be closed.

. When the ignition switch is turned ON again (or turned to ACC) before closing completely, the display will be deployed automatically. But if it was closed completely, it will not deploy. Press the OPEN/CLOSE button again.

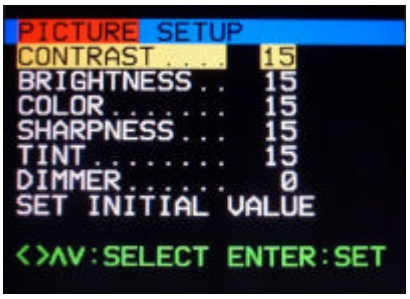
SETTING THE DISPLAY

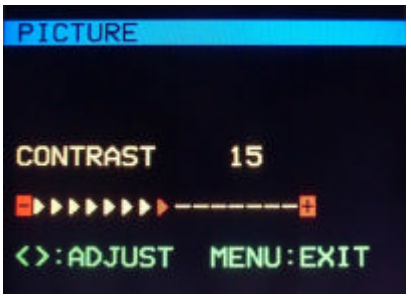
Operating the Setting Menu

Perform display and picture setting with this menu.

Adjusting the Contrast

1. Press the MENU button and select the Contrast mode in the display setting menu.
2. Adjust the Contrast





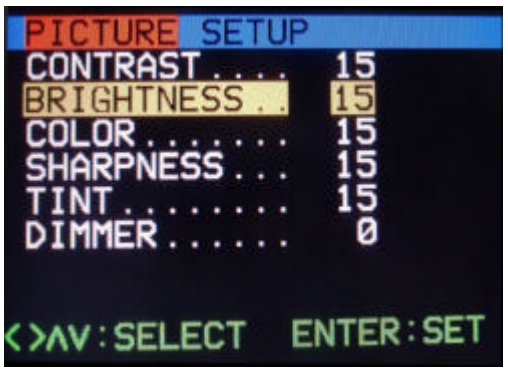
Note:

. It can be adjusted within the range of “0” to “30”.

. The adjustment values are recorded separately for the TV, AV1, AV2, AV3 & NAVI mode.

Adjusting the Brightness

1. Press the MENU button and select the Bright mode in the display setting menu.
2. Adjust the Bright



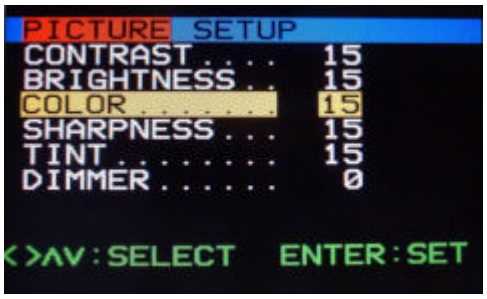
. The density of the display black can be adjusted within the range of “0” to “30”.

. The adjustment values are recorded separately for the TV, AV1, AV2, AV3 & NAVI mode.

Adjusting the Color

1.Press the MENU button and select the Color mode in the display setting menu.

2.Adjust the Color

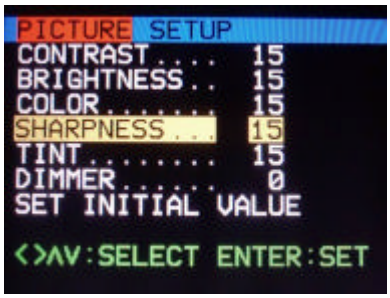


. “0” to “30” is displayed as it shifts from light color to dark color.

. The adjustment values are recorded separately for the TV, AV1, AV2, AV3 & NAVI mode.

Adjusting the Sharpness

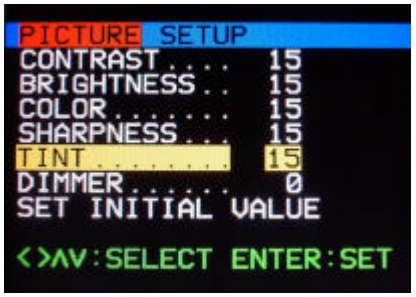
1.Press the MENU button and select the Sharpness mode in the display setting menu.
2.Adjust the Sharpness.

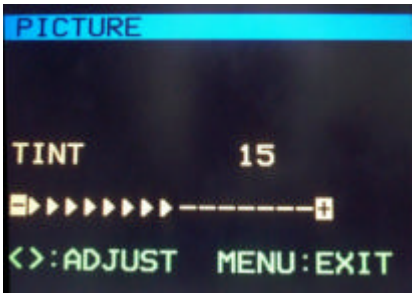


. It can be adjusted within the range of “0” to “30”.
. The adjustment values are recorded separately for the TV, AV1, AV2, AV3 & NAVI mode.

Adjusting the Tint

1.Press the MENU button and select the Tint mode in the display setting menu.
2.Adjust the Tint.

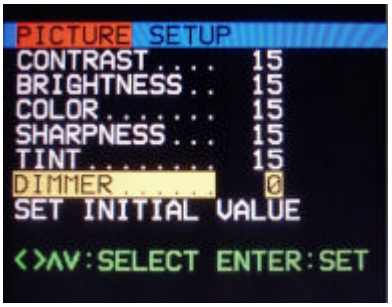


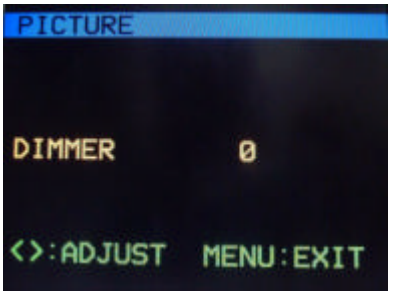


. It can be adjusted within the range of “0” to “30”.
. The adjustment values are recorded separately for the TV, AV1, AV2, AV3 & NAVI mode.

Adjusting the Dimmer

1.Press the MENU button and select the Dimmer mode in the display setting menu.
2.Adjust the Dimmer.

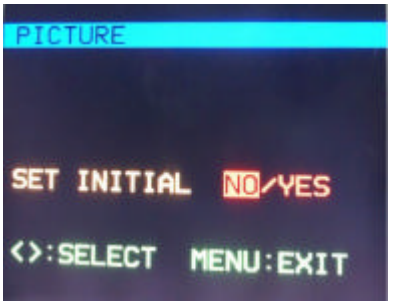




The back lighting of the LCD screen can be adjusted within the range of “0” to “4”.
The adjusted value is memorized when the setting screen disappears.

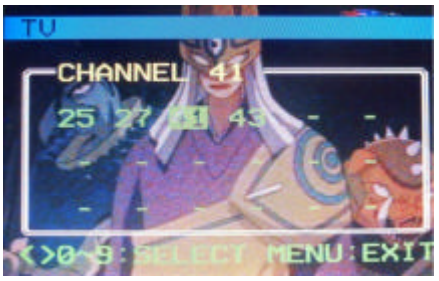
Set Initial Value

1. To back to the Set Initial Value, press the MENU button and select the Set Initial Value mode in the display setting menu.
2. Select the Yes.



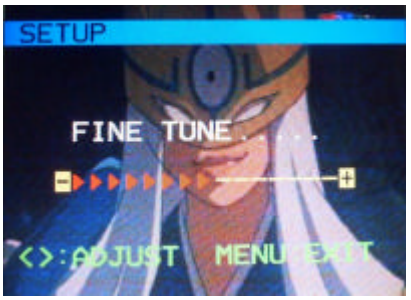
Manual Store

1. Press the MENU button.
2. Select the Manual Store mode and press the Enter.
3. Select a Preset number to store a station.
4. Press the Channel button and select a desired station.
5. Continue (Up to 18 stations) for all desired station.



Fine Tune

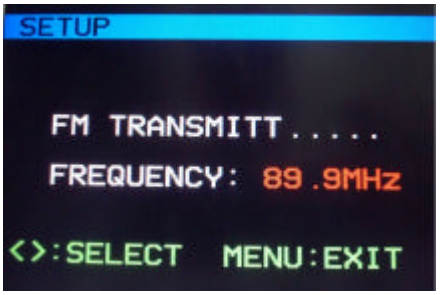
1.Press the MENU button and select the Fine Tune mode in the Setup menu.
2.Adjust the audio frequency to enhance the audio level.



FM Transmitter

1.Press the MENU button and select the FM Transmitter mode in the Setup menu.

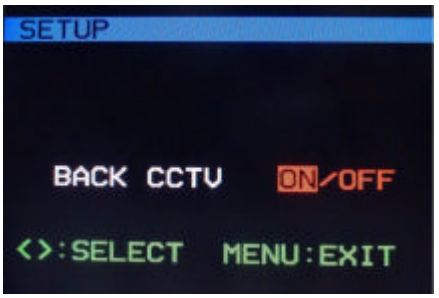
2.You can select the FM Frequency from 88.1MHz to 91.9MHz at 200KHz step among 20Channels. Also, you must select the same frequency for the FM receiver to hear the audio.



Back CCTV

1.Press the MENU button and select the BACK CCTV mode in the Setup menu.

2.Select ON to connect the CCTV to back side of the car and select OFF to disconnect it.



※ How to install the Back CCTV

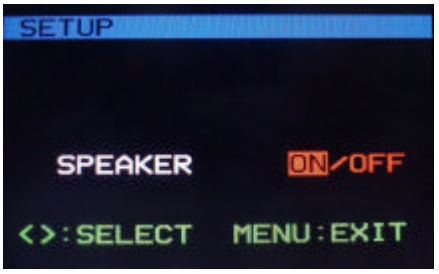
1. Connect a CCTV to AV1.
2. Connect the reverse wire (Violet) to the back lighting wire (+12v) of Car.
3. If the car moves to back, it displays the AV1 mode automatically.

Caution:

1. Do not connect the reverse wire if you will not connect the back CCTV.
2. If you connect the reverse wire, select OFF the BACK CCTV of setup menu.

Speaker

1.Press the MENU button and select the Speaker mode in the Setup menu.
2.Select ON to use the built-in speaker or otherwise OFF.



Aspect

You can switch the Aspect through FULL, WIDE, CINEMA & NORMAL. Press the MENU button and select the Aspect mode in the Setup menu.

FULL

Display 4:3 image long sideways.

WIDE

Display perfect circle around center better than Full screen mode.

CINEMA

Display 16:9 images.

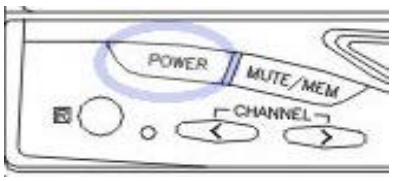
NORMAL

Display perfect circle all around the screen. Both edge screens can be masked with SWV.

Basic Operation

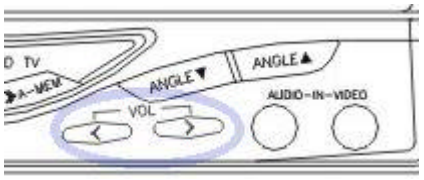
Power On/Off

Press PWR button to turn the unit on. Press PWR again to turn it off.



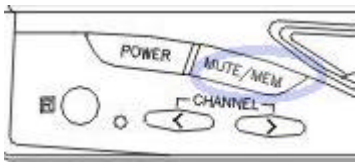
Volume

Adjust volume by pressing < vol or > vol button.



Mute

Press MUTE button to silence the receiver. Press again to resume listening.



Switching the Video Source

You can switch the Video Source by pressing the V.SEL(Mode) button. Press the V.SEL button to move display through TV, AV1, AV2, AV3 and NAVI functions.

TV -> AV1 -> AV2 -> AV3 -> NAVI ->

** If you will use the CCTV to back, you must connect it with AV1. Other video sources will not operate the CCTV function.

TV Operation

Watching TV

Notes:

For your safety, this unit has a safety function which turns off the picture when the car is moving, so only the audio can be heard. The picture can only be watched when the car is stopped and the parking break is applied.

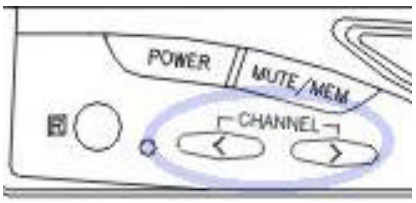
Select TV

Press the V.SEL(Mode) button and select the TV mode.

Select a Station

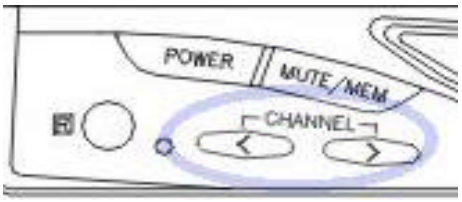
Manual tuning

Touch a < or > button for less than one second to move TV frequency number up or down one step.



Seek Tuning

Hold a < or > button for more than one second and release to move next station automatically.

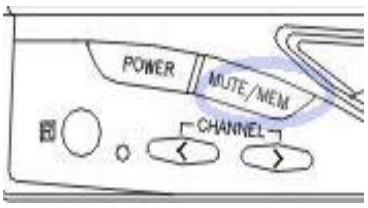


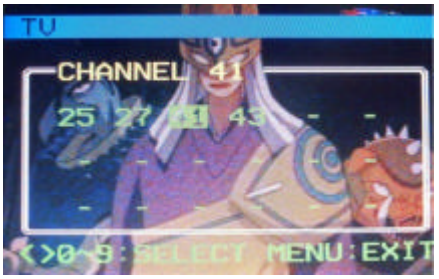
Preset Stations

18 stations can be stored and recalled.

Store a station:

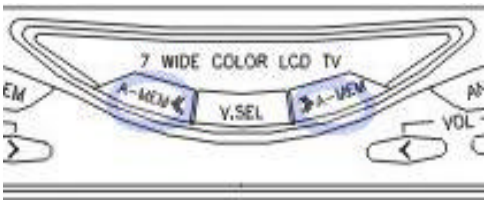
1. Press the MENU button.
2. Select the Set up menu.
3. Select the Manual store and press the Enter button.
4. Select a Preset number to store a station.
5. Press the Channel button and select a desired station.
6. Continue (Up to 18 stations) for all desired station.





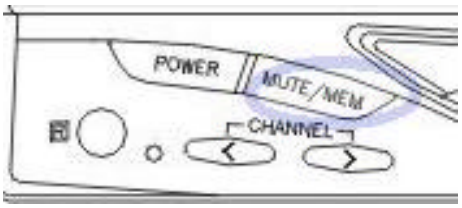
Recall a station:

Press the A.MEM << or >> button to select stored station.



Automatically Store Stations

Press the MEM button and hold for more than one second. The new stations replace stations already stored in that band.



CARE and MAINTENENCE

Using the Display Correctly

CAUTION

If moisture or foreign matter should get inside the products, turn OFF the power immediately and consult your dealer or authorized Service Station. Using the product in this condition may result in a fire or electric shock or other failure.

If you notice smoke, a strange noise or smell, or any other abnormal signs from the display, turn OFF the power immediately and consult your dealer. Using the products in this condition may result in failure of the system.

Do not remove the rear cover of the display, as there are high-voltage components inside which may cause an electric shock. Because sure to consult your dealer for internal inspection, adjustments or repairs.

Handling the Display

When the display is subjected to direct sunlight for a long period of time, it will become very hot resulting in possible damage to the LCD screen. When not using this product, close the display and avoid exposing it to direct sunlight as much as possible.

The display should be used within the temperature ranges shown below.
Operating temperature range: -30 to +80' C
Storage temperature range: -30 to +85' C
At temperatures higher or lower than the operating temperature range the display may not operate normally.

The LCD screen of this product is exposed in order to increase its visibility within the vehicle. Please do not press strongly on it as this may damage it.

Do not place anything on the display when it is deployed. Also, do not attempt to carry out angle adjustment, or opening/closing of the display by hand. Applying strong force to the display may damage it.

Do not touch the LCD screen as this may scratch it or dirty it.

Be careful not to place anything between the display and the main body when the display is opening or closing. If an object gets between the display and main body, the display may stop working.

About the Liquid Crystal Display (LCD) Screen

If the display is near the vent of an air conditioner when it is deployed, make sure that air from the air conditioner is not blowing on it. Heat from the heater may break the LCD screen, and cool air from the cooler may cause moisture to form inside the display resulting in possible damage. Also, if the display is cooled down by the cooler, the screen may become dark, or the life span of the small fluorescent tube used inside the display may be shortened.

Small black dots or white dots(bright dots) may appear on the LCD screen. These are due to the characteristics of the LCD screen and do not indicate a problem with the display

At low temperatures, the LCD screen may be dark for a while after the power is turned ON.

The LCD screen will be difficult to see if it is exposed to direct sunlight.

Keeping the Display in Good Condition

When removing dust from the screen or cleaning the display, first turn the system power OFF, then wipe with a soft dry cloth.

When wiping the screen, take care not to scratch the surface. Do not use harsh or abrasive chemical cleaners.

INSTALLATION

Before you Begin Installation

Tools and Supplies Needed

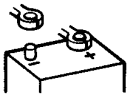
- Torx type, Flat and Phillips screwdrivers
- Wire cutters and strippers
- Tools to remove existing radio (screw driver, socket wrench set or other tools)
- Radio removal tool for Ford cars (early 1980s models and newer)
- Electrical tape
- Crimping tool
- Volt meter/Test light
- Crimp connections
- 18 gauge wire for power connections
- 16-18 gauge speaker wire

Speaker Requirements

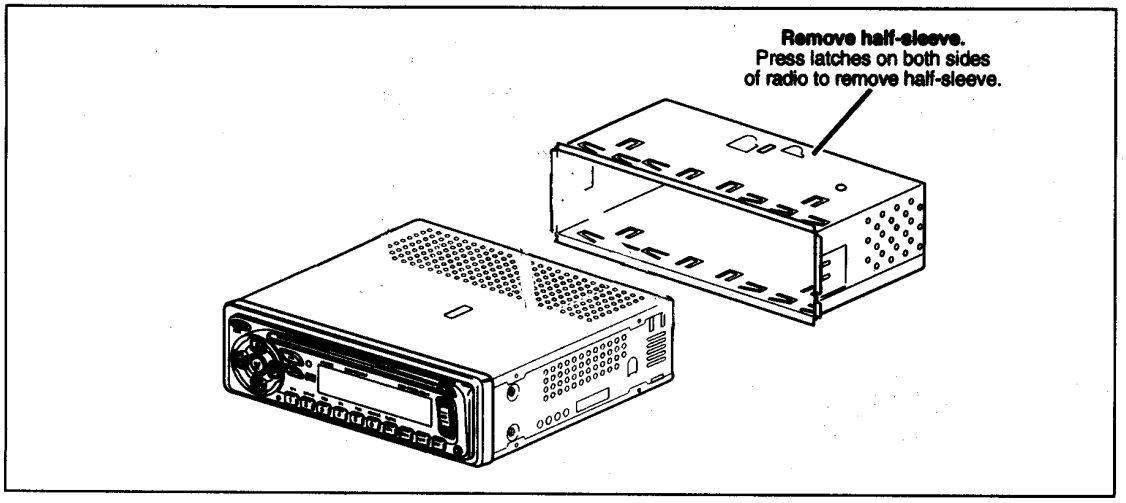
Only connect the unit to speakers rated in the load impedance range of 2 to 8 ohms. Speakers with a load impedance less than 2 ohms could damage the unit

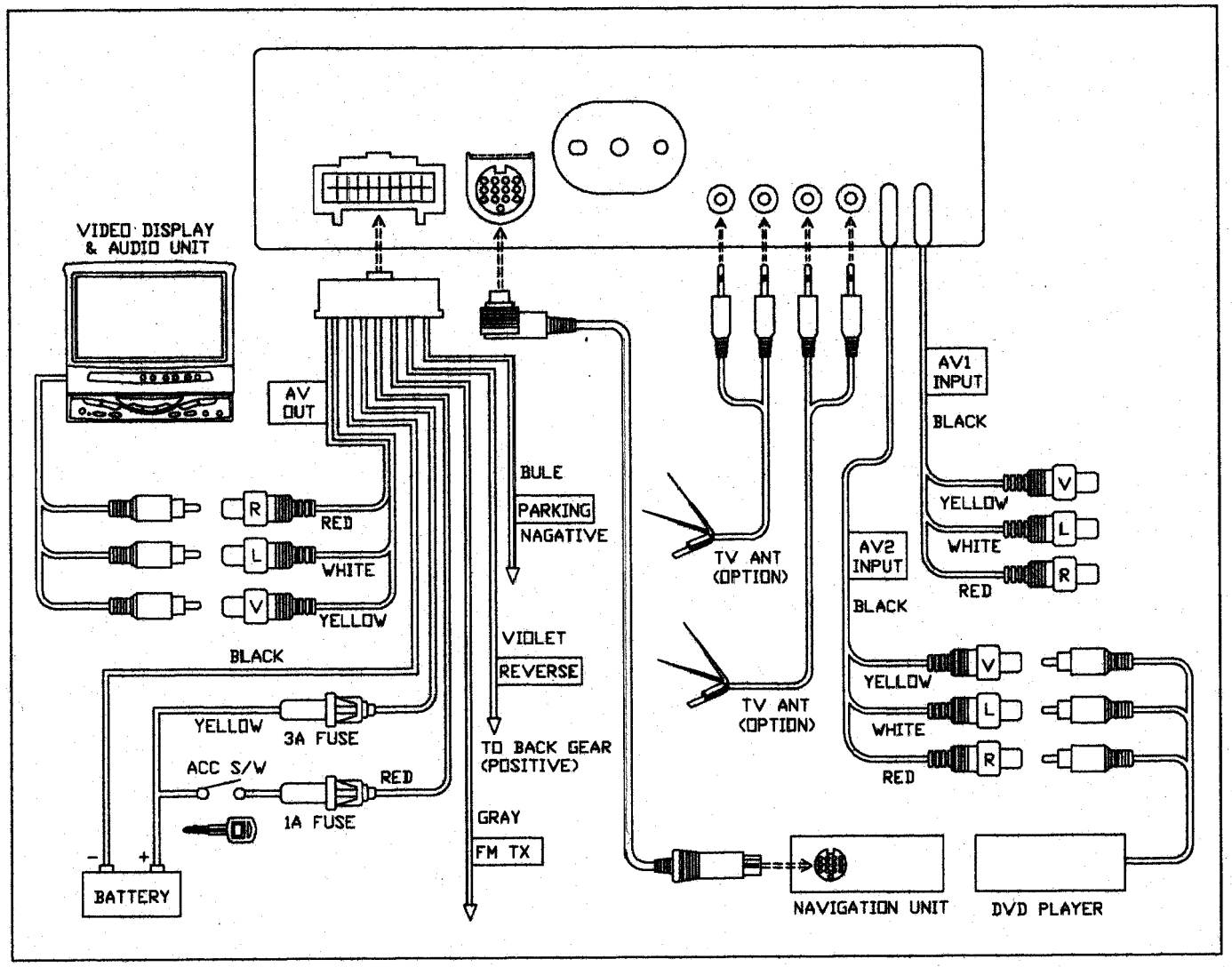
Disconnect Battery

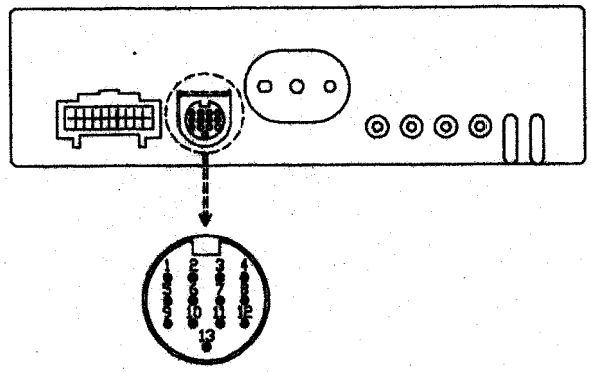
Before you begin, always disconnect the battery negative terminal.



Preparation



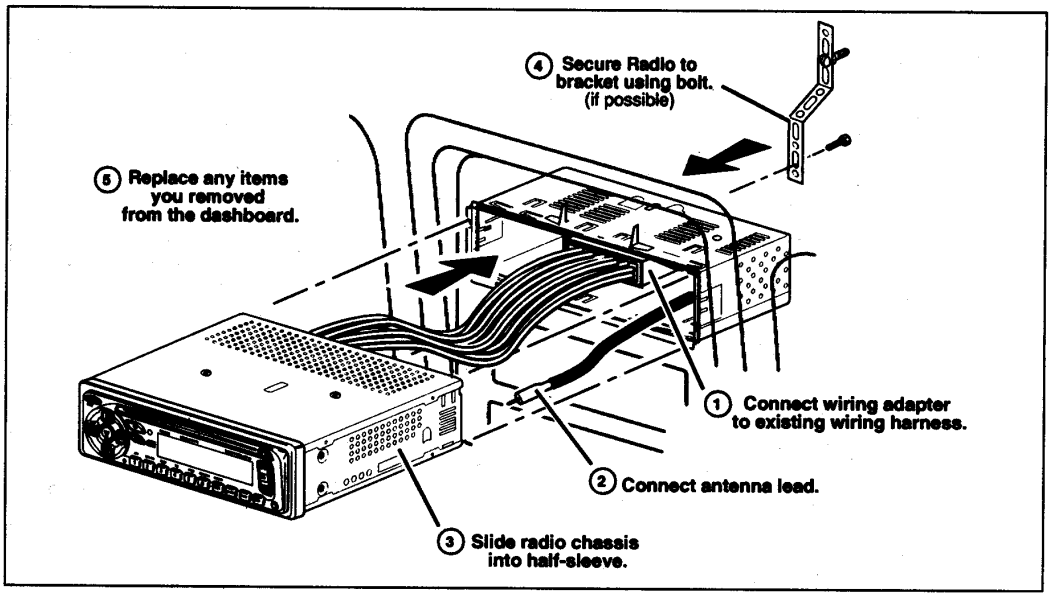




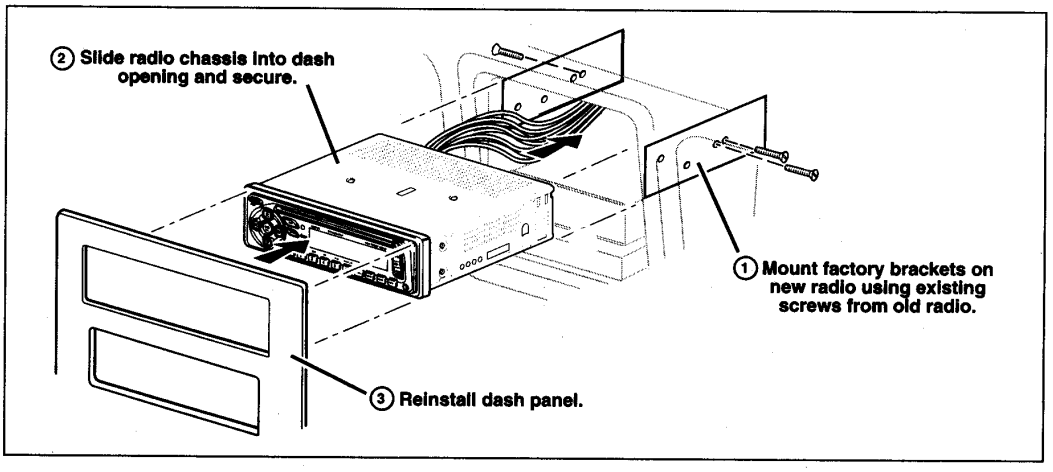
(DISCRIPTION)

1. GND
2. G(RGB)
3. SYNC
4. GND
5. R(RGB)
6. AUDIO
7. B(RGB)
8. NC
9. NAVI ON
10. NC
11. NC
12. NC
13. NC

Final Installation



Final Installation–ISO-DIN



TROUBLE SHOUTING

Symptom	Cause	Remedy
The power switch does not work. No functions come on.	Cables or connectors are not correctly connected.	Check whether the cables are plugged in correctly and firmly.
	The fuse is broken.	Remove the cause of the breaking of the fuse, then replace the fuse. Be very sure the same rated proper fuse is installed.
The remote control does not work.	The battery power is running out.	Replace the battery.
No sounds are heard.	No select speaker ON.	Select speaker ON. (See page 16.)
No images come on.	The parking brake is not connected.	Connect the parking brake cord and engage the parking brake.
	The parking brake is not engaged.	

Specifications

General

Power source ..... 14.4V DC, Negative ground
Max current consumption ..... 3 A
Dimensions ..... 180(W) x 50(H) x 160(D)
Weight 1.7KGS

Display

Screen sized/Aspect ratio ..... 7 inch wide /16:9
(Effective display area: 154 x 87 mm)
Pixels ..... 336,960(480 x RGB(W) x 234)
Type ..... TFT active matrix, transmissive type
Color system ..... NTSC compatible
Operating temperature range ..... -20 to +60' C
Storage temperature range ..... -30 to +85' C
Angle Adjustment ..... 55 --- 110' C

TV Tuner

TV system ..... NTSC compatible
VHF-Low ..... 02-06(55.25-83.25MHz)
VHF-High ..... 07-13(175.25-801.25MHz)
UHF ..... 14-69(471.25–801.25MHz)
Antenna ..... 75 Ohm unbalanced
PIF 45.75MHz
SIF 41.25MHz

NOTICES TO USER

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC WARNING

This equipment generates or uses radio frequency energy. Changes or modifications to this equipment may cause harmful interference unless the modifications are expressly approved in the instruction manual. The user could lose the authority to operate this equipment if an unauthorized change or modification is made.

INFORMATION TO THE USER

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.
These limits are designed to provide reasonable protection against harmful interference in a residential installation.
This equipment generates, uses and can generate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that the interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- *Reorient or relocate the receiving antenna.*
- *Increase the separation between the equipment and receiver.*
- *Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.*
- *Consult the dealer for technical assistance.*