



# XDVD8281

## INSTALLATION/OWNER'S MANUAL

DVD Multimedia Receiver with 6.5" Touch Screen Display



### Safety Notes:

The DVD video display of the in-dash unit will not operate while the vehicle is moving. This is a safety feature to prevent driver distraction. In-dash DVD video functions will only operate when vehicle is in Park and the parking brake is engaged. It is illegal in most states for the driver to view video while the vehicle is in motion.

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## DVD Region Management

Some DVD discs can be played only in certain playback modes according to the intentions of the software. As the XDVD8281 plays discs according to their intentions, some functions may not work as intended. Please be sure to read the instructions provided with each disc. This player has been designed to play back DVD software that has been encoded for specific region areas. It cannot play back DVD software encoded for other region areas than the region areas for which it has been designed.

The XDVD8281 will play discs labeled "Region 1" or "All".

### DVD region codes:

- 1 - USA, Canada
- 2 - Japan, Europe, South Africa, Middle East
- 3 - Rep. of Korea, Taiwan, Hong Kong, Parts of Southeast Asia
- 4 - Australia, New Zealand, Mexico, South America
- 5 - Eastern Europe, Russia, India, Africa
- 6 - China





## **XDVD8281 PREPARATION**

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### **⚠ WARNING ⚠**

Upon installation of this Monitor/DVD player (“unit”) into a vehicle, the driver of the vehicle must not operate this unit by watching videos or playing video games while driving. Failure to follow this instruction could lead to driver distraction which could result in serious injury or death to the vehicle’s occupants or persons outside the vehicle and/or property damage.

Several states prohibit the installation of monitors/DVD players if the screen is visible from the driver’s seat. If you reside in a jurisdiction which has enacted such a law, this unit must not be installed so that the screen is visible from the driver’s seat. When installing this unit in the front console/dashboard, the unit must be positioned so that it is facing the front passenger seat only. Failure to follow this instruction could lead to driver distraction which could result in serious injury or death to the vehicle’s occupants or persons outside the vehicle and/or property damage.

This unit is designed so that it may be operated only when the vehicle is in “Park” and the parking brake is fully engaged. To this end, this unit includes a parking brake lock-out feature which prohibits the unit from operating if the vehicle is not in “Park” and/or the parking brake is not fully engaged. When installing this unit, the installer must connect the parking brake detect wire (“Yellow-Blue Lead”) to the parking brake mechanism in order to make the parking brake lock-out feature operable. **DO NOT** simply ground the parking brake detect wire to a metal portion of the vehicle. Failure to properly install the parking brake lock-out feature could lead to driver distraction which could result in serious injury or death to the driver’s occupants or persons outside the vehicle and/or property damage.

Once the parking brake lock-out feature is installed, the owner/user must not attempt to disrupt/neutralize the parking brake lock-out feature by (a) partially engaging the parking brake and/or (b) purchasing/using any device or unit designed to send necessary brake signals to the unit. Failure to follow these instructions could lead to driver distraction which could result in serious injury or death to the driver’s occupants or persons outside the vehicle and/or property damage.

When operating this unit, keep the unit’s volume level low enough so that the vehicle’s occupants can hear traffic-related sounds such as police and emergency vehicles. Failure to follow this instruction could lead to driver distraction which could result in serious injury or death to the vehicle’s occupants or persons outside the vehicle and/or property damage.

## Safety Information

**Please read all instructions carefully before attempting to install or operate.**

Due to its technical nature, it is highly recommended that your DUAL XDVD8281 is installed by a professional installer or an authorized dealer. This product is only for use in vehicles with 12VDC negative ground only.

### **Safety Notes:**

The DVD video display of the in-dash unit will not operate while the vehicle is moving. This is a safety feature to prevent driver distraction. In-dash DVD video functions will only operate when vehicle is in Park and the parking brake is engaged. It is illegal in most states for the driver to view video while the vehicle is in motion.

### **To prevent damage or injury:**

1. Make sure to ground the unit securely to the vehicle chassis ground.
2. Do not remove the top or bottom covers of the unit.
3. Do not install the unit in a spot exposed to direct sunlight or excessive heat or the possibility of water splashing.
4. Do not subject the unit to excessive shock.
5. When replacing a fuse, only use a new one with the prescribed rating. Using a fuse with the wrong rating may cause the unit to malfunction.
6. To prevent short circuits when replacing a fuse, disconnect the wiring harness first.
7. Use only the provided hardware and wire harness.
8. You cannot view video while the vehicle is moving. Find a safe place to park and engage the parking brake.
9. If you experience problems during installation, consult your nearest DUAL dealer.
10. If the unit malfunctions, reset the unit as described on page 12 first. If the problem still persists, consult your nearest DUAL dealer or call tech assistance @ 1-866-382-5476.
11. To clean the monitor, wipe only with a dry silicone cloth or soft cloth. Do not use a stiff cloth, or volatile solvents such as paint thinner and alcohol. They can scratch the surface of the panel and/or remove the printing.
12. When the temperature of the unit falls (as in winter), the liquid crystal inside the screen will become darker than usual. Normal brightness will return after using the monitor for a while.

### **Additional Notes:**

1. When extending the ignition, battery or ground cables, make sure to use automotive-grade cables or other cables with an area of 0.75mm (AWG 18) or more to prevent voltage drops.
2. Do not touch the liquid crystal fluid if the LCD is damaged or broken. The liquid crystal fluid may be hazardous to your health or fatal. If the liquid crystal fluid from the LCD contacts your body or clothing, wash it off with soap immediately.

This device complies with part 15 of the FCC rules and regulations.

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.

## Preparation

Please read entire manual before installation.

### Before You Start

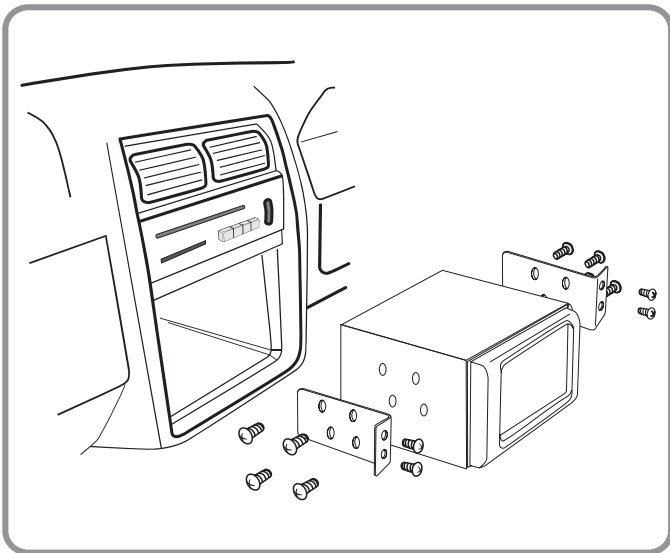
- Disconnect negative battery terminal. Consult a qualified technician for instructions.
- Avoid installing the unit where it would be subject to high temperatures, such as from direct sunlight, or where it would be subject to dust, dirt or excessive vibration.

### Getting Started

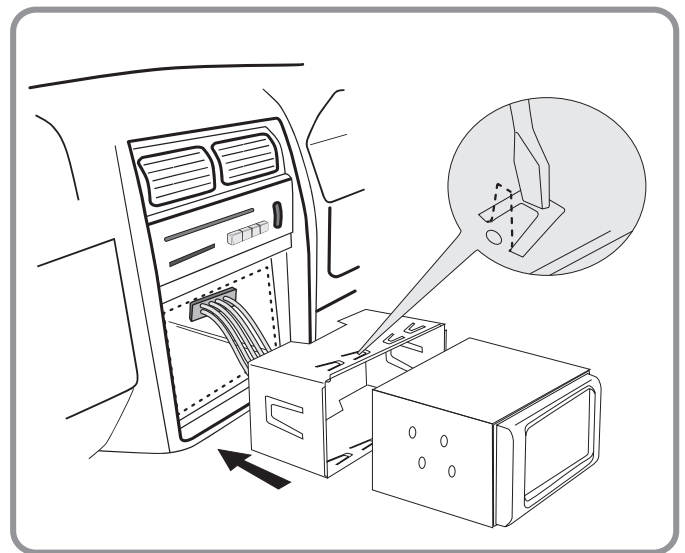
- Insert the supplied keys between the radio and the sleeve at the left and right sides, and slide the unit out of the mounting sleeve.

### Mounting Options

1. Rear ISO-DIN (using OEM factory radio mounting brackets):
  - Remove factory radio mounting brackets and attach to the left and right sides of the XDVD8281 chassis.
  - See diagram below.
2. Front load (using mounting sleeve):
  - Install mounting sleeve into opening, bending tabs to secure.
  - Connect wiring harness and antenna as shown on page 6. Consult a qualified technician if you are unsure.
  - Certain vehicles may require an installation kit and/or wiring harness adapter (sold separately).
  - Test for correct operation and mount according your application.
  - If required, snap desired trim ring into place.
  - Mount the iplug™ adapter to any smooth clean surface using the supplied double-sided tape or Phillips head screws.

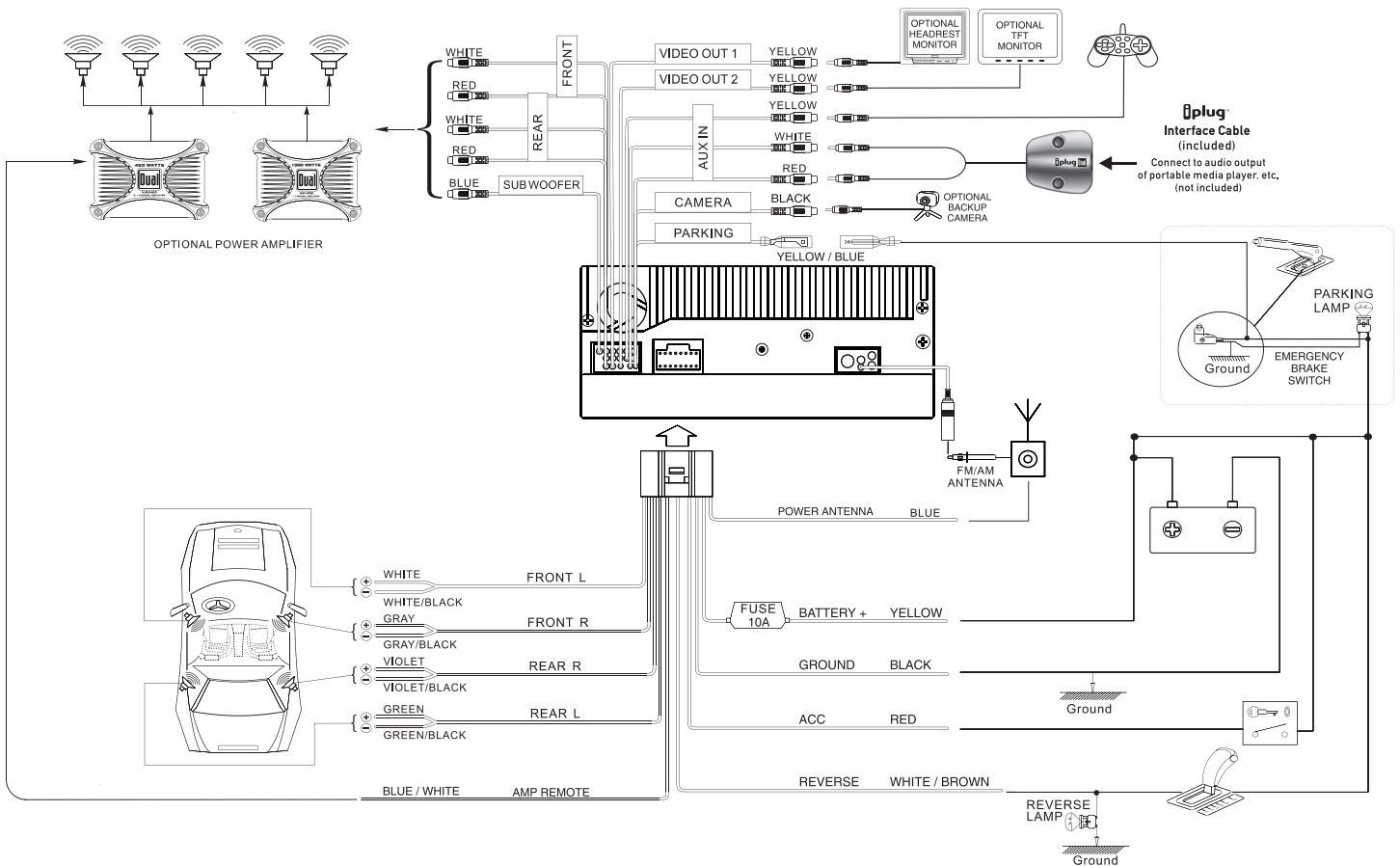


**Mounting the XDVD8281 using OEM factory mounting brackets.**



**Mounting the XDVD8281 using mounting sleeve (front load).**

# Expanded Wiring Diagram - Inputs/Outputs



**Wiring Notes:**

**Subwoofer output**

The **SUBWOOFER** audio output (Blue RCA) is active in all audio modes and must be connected to an external amplifier.

**Rear view camera**

A rear view camera (not included) can be used with **CAMERA** input.

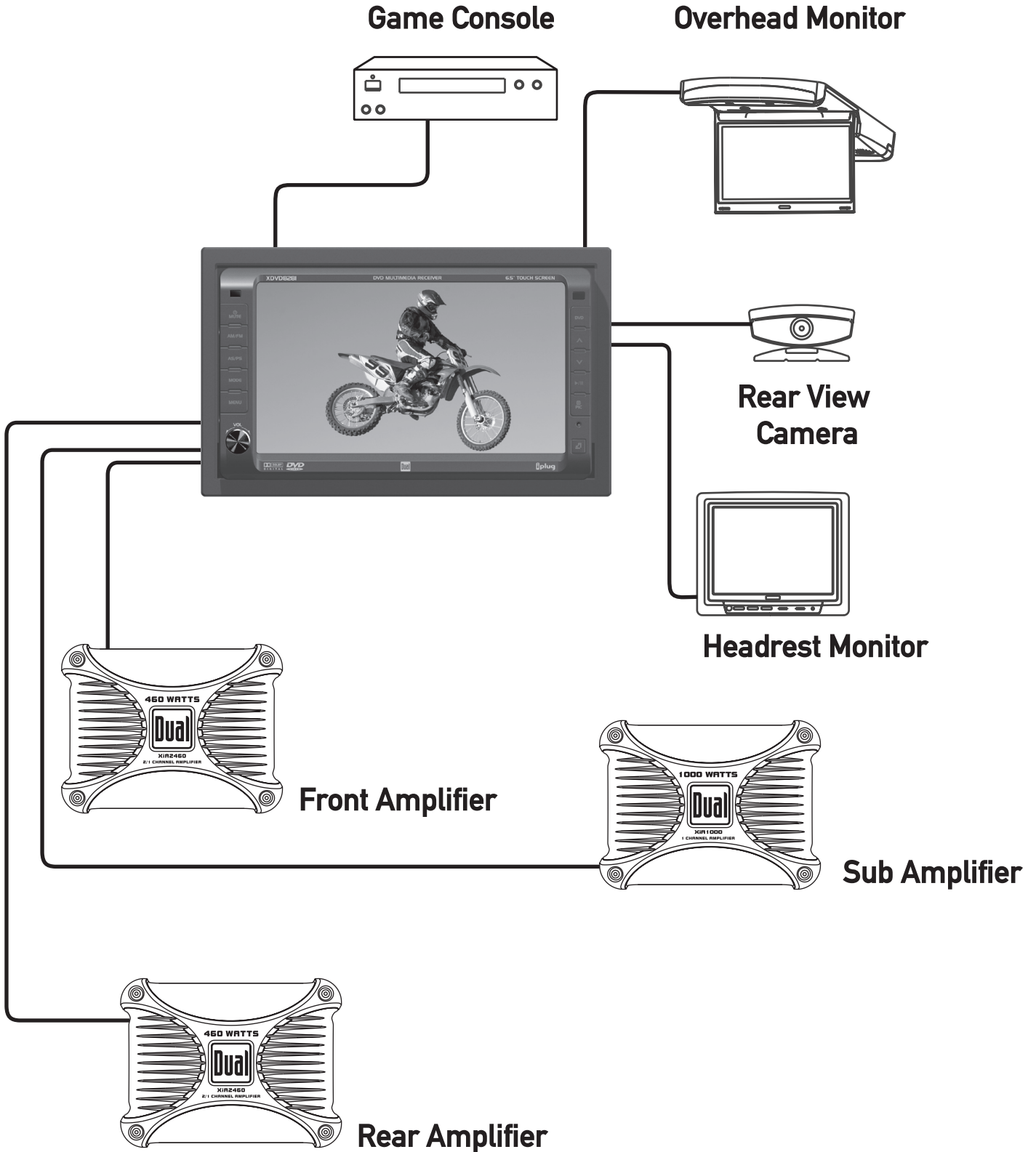
**NEED HELP??**

Call our Technical Service Hotline, 1-866-382-5476

**Safety Notes:**

The DVD video display of the in-dash unit will not operate while the vehicle is moving. This is a safety feature to prevent driver distraction. In-dash DVD video functions will only operate when vehicle is in Park and the parking brake is engaged. It is illegal in most states for the driver to view video while the vehicle is in motion. Altering or defeating this safety feature is a violation of law and is prohibited.

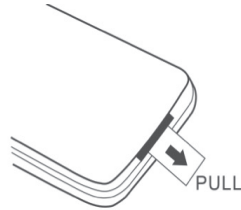
# Wiring Diagram - Optional A/V Connections





# IR Remote Preparation

To first use the IR Remote control, you must first pull the battery insulation tape out

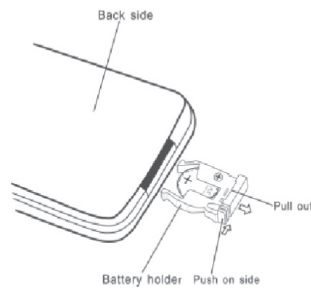


**Notes:**

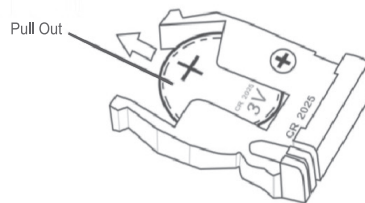
- Remove the battery if the remote will not be used for a month or longer
- Remove and dispose of battery properly

Insert or replacing the Battery:

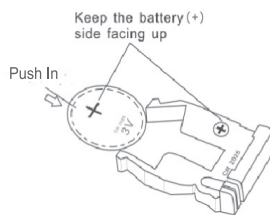
Remove the battery holder



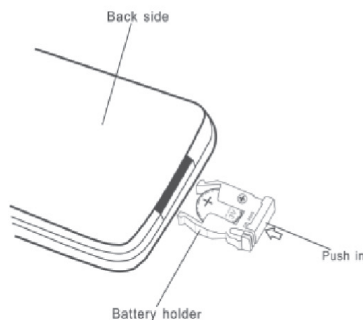
Remove the battery from the battery holder



Install the new battery  
Make sure to keep the (+) side up



Insert the battery holder



**CAUTION!!!**

- Do not store battery with metallic objects or materials

## Control Locations - Monitor Closed






- |                        |                                   |
|------------------------|-----------------------------------|
| ① Power/Mute           | ⑧ Channel/Chapter/Track Up        |
| ② AM/FM Mode - Hotkey  | ⑨ Channel/Chapter/Track Down      |
| ③ Auto Store/Prescan   | ⑩ Play/Pause                      |
| ④ Mode                 | ⑪ Info/Picture                    |
| ⑤ Menu                 | ⑫ Reset                           |
| ⑥ Rotary Encoder/Enter | ⑬ Open/Close Monitor/Angle Adjust |
| ⑦ DVD Mode - Hotkey    |                                   |

### Monitor Notes:

- This model incorporates a motorized moving monitor. Before final installation, make sure the monitor will not obstruct the dash, shifter or any other controls.
- Upon installation, do not attempt to move the monitor by hand. Use the button on the front panel only or the **OPEN** button on the remote control.
- The unit will stop if it encounters any obstacles during the open/close sequence. If this occurs, remove the obstacle and press or **OPEN** again to resume the monitor open/close sequence.










## Control Functions - Monitor Closed

<b>Power On/Off Mute</b>	Press  to turn the unit on. Hold for 3 seconds to turn the unit off. Press <b>MUTE</b> to silence the audio;  00 will appear in the OSD (On Screen Display). Press <b>MUTE</b> again to cancel.
<b>AM/FM Mode - Hotkey</b>	Press <b>AM/FM</b> to select radio tuner mode. If the unit is already in tuner mode, press <b>AM/FM</b> to select between FM1, FM2, FM3, and AM bands.
<b>AS/PS</b>	Press <b>AS/PS</b> momentarily to start station <b>PRESET SCAN</b> function. Press <b>AS/PS</b> for 2 seconds to start <b>AUTO STORE</b> station preset function in current <b>BAND</b> .
<b>Mode</b>	Press <b>MODE</b> to select between the unit's available modes, such as: Tuner, DVD (which includes CD and MP3/WMA playback), Aux AV in and Camera inputs. Each time the <b>MODE</b> button is pressed the next mode is chosen. Modes of operation are indicated on the OSD.
<b>Menu</b>	Press <b>MENU</b> to display the main menu, along with the setup sub-menus. Press <b>MENU</b> again to return to the current mode.
<b>Rapid Dial Rotary Encoder</b>	Press to toggle between the Volume and Select functions. When idle, push and hold for 3 seconds to enter the Audio Setup Menu.
<b>Volume</b>	<p>Normally, the rotary controls the volume, which is visible as a number from 0 to 40, to the right of the volume icon ) displayed on the screen. When the icon is not displayed, turn the rotary to display the volume level. Turning the rotary while the volume is muted will cancel the mute function.</p> <p><b>Note:</b> To program the default volume level when the unit is turned on: turn the rotary to the desired level, then push and hold the rotary for 3 seconds to program the current volume level.</p>
<b>Select</b>	Turning the rotary while it's in select mode will allow you to perform various functions and settings depending on the mode/screen displayed. Generally, turning the rotary will let you move through the choices and pushing the rotary will select the highlighted choice.
<b>DVD Mode - Hotkey</b>	Press <b>DVD</b> to select Disc mode.

**Notes:**


- Depending on the type of disc loaded, the Disc mode can be CD, MP3/WMA or DVD.
- This button is not active when there is no disc loaded.

## Control Functions - Monitor Closed

<b>Up Arrow</b>	This button performs different functions depending on the current mode. A detailed description of the  button can be found in each individual section.
<b>Down Arrow</b>	This button performs different functions depending on the current mode. A detailed description of the  button can be found in each individual section.
<b>Play/Pause</b>	Press  to pause or continue playback of an audio or video track.
<b>Info/Picture</b>	Press to display DVD disc information in DVD mode. Holding this button for 3 seconds brings up the Brightness setting, which can be controlled by the rotary encoder or by pressing the  /  buttons on the main remote control.
<b>Monitor Open/Close Angle Position</b>	Press  momentarily to toggle between fully open and the current angle. Hold  for more than 1 second to adjust the view angle up and down and release to keep desired viewing angle.
<b>Reset</b>	<p>If you experience abnormal operation or, your unit is inoperable, press the <b>RESET</b> button located on the front bottom-right corner of the unit. After a system reset, the unit resets the main processor (but not the default settings).</p> <p><b>Notes:</b> Use the tip of a pen to access the reset button. To restore the factory default settings, refer to page 19.</p> <p><b>Monitor Notes:</b></p> <ul style="list-style-type: none"><li>• The angle can also be manually selected via the screen setup menu.</li><li>• The color of the LCD monitor varies between viewing angles. Select the angle with the most optimum view for your location.</li><li>• The last position of the monitor can be saved in memory. When “TFT Auto Open” is selected in the General Setup Menu, the monitor will return to its last position automatically the next time the unit is turned on.</li></ul>
<b>Caution</b>	<ul style="list-style-type: none"><li>• Due to its highly technological design, the XDVD8281 faceplate is <b>NOT</b> removable. Do not attempt to remove the faceplate.</li><li>• Upon installation, do not attempt to move the monitor by hand. Use the  button on the front panel only or the <b>OPEN</b> button on the remote control.</li><li>• The unit will stop if it encounters any obstacles during the open/close sequence. If this occurs, remove the obstacle and press  or <b>OPEN</b> again to resume the monitor open/close sequence.</li></ul>

## Control Locations and Functions - Monitor Open

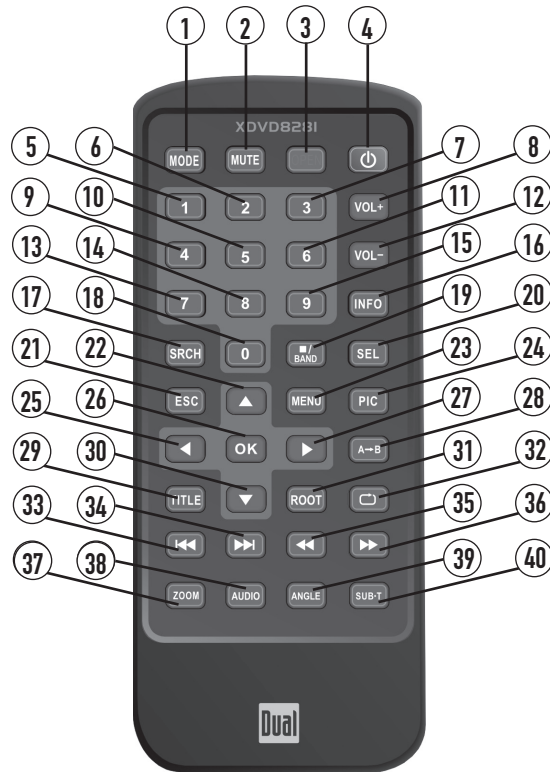


- ① Disc slot
- ② Disc-in indicator  
Red = Disc inserted  
Blue = No disc inserted
- ③ When the panel is fully open, press  to eject the disc.

### Safety Notes:

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## Control Locations - Remote



- |               |             |                 |                 |                 |                |                      |
|---------------|-------------|-----------------|-----------------|-----------------|----------------|----------------------|
| ① Mode        | ⑩ Key #5    | ⑲ Band/Stop     | ⑳ Audio Select  | ⑳ Info          | ⑳ Search       | ⑳ Root               |
| ② Mute        | ⑪ Key #6    | ㉑ Escape        | ㉒ 4-Way - Up    | ㉑ Search        | ㉒ Key #0       | ㉑ Repeat             |
| ③ Open/Close  | ⑫ Volume Up | ㉓ 4-Way - Left  | ㉔ OK/Play/Pause | ㉓ Menu          | ㉔ Audio Select | ㉓ Chapter/Track Down |
| ④ Power       | ⑬ Key #7    | ㉕ 4-Way - Right | ㉖ Repeat A-B    | ㉔ Picture       | ㉕ Audio Select | ㉔ Chapter/Track Up   |
| ⑤ Key #1      | ⑭ Key #8    | ㉗ Title Menu    | ㉗ Title Menu    | ㉕ 4-Way - Left  | ㉖ Repeat A-B   | ㉕ Fast Reverse       |
| ⑥ Key #2      | ⑮ Key #9    | ㉘ 4-Way - Down  | ㉘ 4-Way - Down  | ㉖ OK/Play/Pause | ㉗ Repeat A-B   | ㉖ Fast Forward       |
| ⑦ Key #3      |             |                 |                 | ㉗ Menu          | ㉘ Repeat A-B   | ㉗ Zoom               |
| ⑧ Volume Up   |             |                 |                 | ㉘ Picture       | ㉙ Title Menu   | ㉘ Audio              |
| ⑨ Key #4      |             |                 |                 | ㉙ 4-Way - Left  | ㉚ 4-Way - Down | ㉙ Angle              |
| ⑩ Key #5      |             |                 |                 | ㉚ OK/Play/Pause |                | ㉚ Sub-Title          |
| ⑪ Key #6      |             |                 |                 | ㉛ 4-Way - Right |                |                      |
| ⑫ Volume Down |             |                 |                 | ㉜ Repeat A-B    |                |                      |
| ⑬ Key #7      |             |                 |                 | ㉝ Title Menu    |                |                      |
| ⑭ Key #8      |             |                 |                 | ㉞ 4-Way - Down  |                |                      |
| ⑮ Key #9      |             |                 |                 |                 |                |                      |

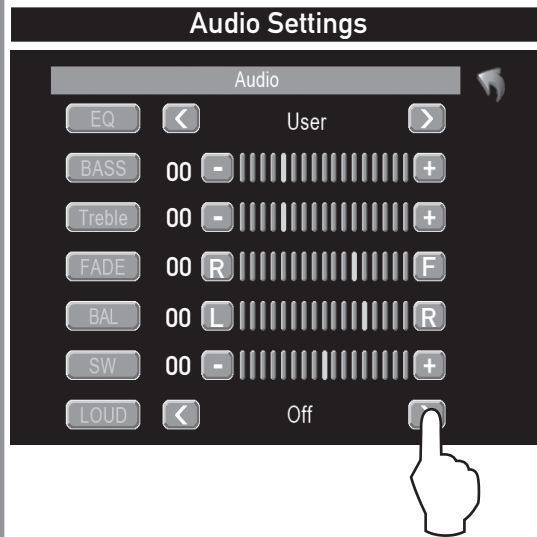
\* The remote control uses one 3 volt Lithium CR2025 battery. For best performance, replace only with CR2025 or equivalent.

## Control Functions - Remote

Mode	Press once to incrementally select desired source.
Mute	Press once to <b>MUTE</b> audio, press again to return audio.
Open/Close	Press once to open monitor, press again to close the monitor.
Power	Press once to turn the unit on, press again to turn unit off.
Keys 0-9	Direct access chapter/track/preset station for current <b>BAND</b> .
Volume Up	Increase <b>VOLUME</b> .
Volume Down	Decrease <b>VOLUME</b> .
Info	Displays DVD information.
Search	Search function in the DVD mode.
Band/Stop	Press to increment <b>BAND</b> , or <b>STOP</b> while in DVD/MP3 mode.
Audio Select	Enter <b>AUDIO</b> Setup mode.
Escape	Exit current menu.
4-Way-Up/Down/Left/Right	Navigating system and DVD menus.
Menu	Enter the <b>MAIN</b> system menu.
Picture	<b>BRIGHTNESS</b> parameter setting for TFT.
OK	Starts/pauses playback or confirm settings.
Repeat A-B	Repeat playback from time frame A to time frame B.
Title Menu	Enters the title menu on DVD.
Root Menu	Enters the main menu of the DVD.
Repeat	Repeats playback of current chapter/track or folder.
Chapter/Track Down	Selects the previous chapter/track for playback.
Chapter/Track Up	Selects the next chapter/track for playback.
Fast Reverse	Fast reverses the disc content.
Fast Forward	Fast forwards the disc content.
Zoom	Zooming in/out on an image from DVD disc.
Audio	Change the audio language for DVD disc playback.
Angle	Selects between different angles (when available) for a scene.
Sub-Title	Language selection for subtitle.

## General Operation

- Power On/Off** Press to turn the unit on. Hold for 3 seconds to turn the unit off.
- Mute** Press **MUTE** to silence the audio; 00 will appear in the OSD (On Screen Display). Press **MUTE** again to cancel.
- Mode** Press **MODE** to select between Tuner, Disc, Aux AV input and Camera. Modes of operation are indicated in the **OSD** (On Screen Display).
- Optional Mode Selection** Press the top left corner of the screen to display the **OSD** menu bar. Press Tuner, Disc, Aux AV input or Camera input in the **MAIN** menu page to select the desired source.
- Volume** Adjust **VOLUME** using rotary encoder or the **VOL +/-** buttons (00-40).
- Audio Adjustment (from front panel)** Press rotary knob for 3 seconds, then release. Press rotary momentarily to advance to desired parameter to be changed. Turn rotary or to adjust to desired level. Press rotary to advance to next selection, and press and hold to exit.



ITEM	RANGE	
EQ	USER	FLAT
	JAZZ	POP
	CLASSIC	ROCK
	NEWS	URBAN
	RAVE	MOVIE
	TECHNO	
BASS	-7	+7
TREBLE	-7	+7
FADE	-9	+9
BALANCE	-9	+9
SUB	-7	+7
LOUD	OFF	ON

- Audio Adjustment (from remote)** Press the **SEL** button. Press the or buttons on the remote to select an item to be adjusted. Press or to adjust the desired setting. Press the **ESC** button on the remote control to exit the audio control menu.

**Notes:** The Bass and Treble levels are only adjustable when EQ is set to "User" mode. The Loud function compensates for deficiencies in sound ranges at low levels. When the Loud function is on, LOUD is displayed in the OSD.



# General Operation

**INFO/PIC** Press **PIC** momentarily to display DVD disc information.

**Monitor Brightness** Press and hold **PIC** for 2 seconds to change monitor **BRIGHTNESS**: Press **▲** to increase, **▼** to decrease, or turn the rotary to adjust the level up or down. (0 minimum/20 maximum) 10 is default.

**CVBS Screen Controls** While in **Aux** or **Camera** mode: Press and hold **PIC** for 2 seconds to access **PICTURE MENU**. Press **PIC** momentarily to step to next selection:



**Sharpness** Press **▲** or **▼** to adjust the sharpness (0 minimum/+20 maximum).

**Color** Press **▲** or **▼** to adjust the color (0 minimum/+20 maximum).

**Contrast** Press **▲** or **▼** to adjust the contrast (0 minimum/+20 maximum).

**Brightness** Press **▲** or **▼** to adjust the brightness (0 minimum/+20 maximum).

**Tint** Press **▲** or **▼** to adjust the tint (0 minimum/+20 maximum).

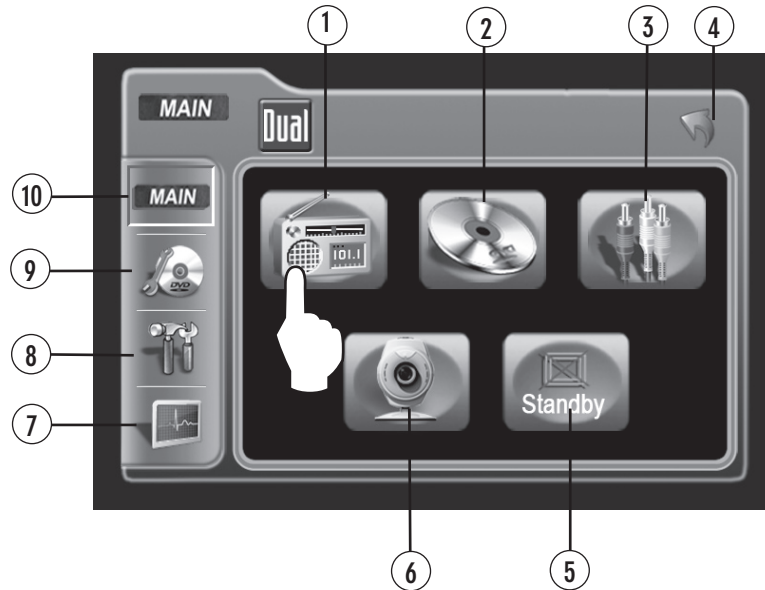
**Note:** Adjustments to Sharpness, Color, Contrast, Brightness, or Tint are only possible while in either Aux or Camera mode.

# General Operation - Main Menu

## Main Menu Access

There are three methods to access the MAIN menu:

- Press MENU button on the front panel.
- Press MENU button on the remote control.
- Touch the upper left corner of the touch screen.



## Touch Access Buttons

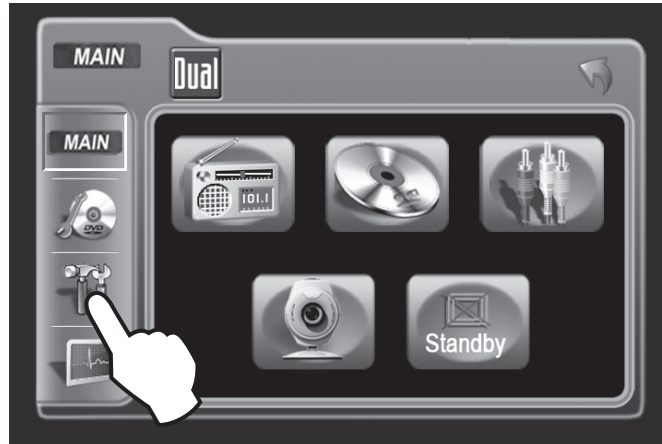
- 1) Touch to access **AM/FM TUNER** mode.
- 2) Touch to access **CD/DVD** mode, (CD/DVD must be inserted).
- 3) Touch to access **AUXILIARY A/V INPUT** mode.
- 4) Touch to **RETURN** to previous screen.
- 5) Touch to enter **STANDBY** mode, touch screen again or any button to resume normal operation.  
**Note: VOLUME** level can be controlled in **STANDBY** mode.
- 6) Touch to access **CAMERA** mode, if optional camera isn't connected then "No Video Signal" will be displayed.
- 7) Touch to access **SCREEN SETUP** menu.
- 8) Touch to access **GENERAL SETUP** menu.
- 9) Touch to access **CD/DVD SETUP** menu, (CD/DVD must be inserted to function).
- 10) Touch to access **MAIN** source menu.

## Rapid Dial Rotary Encoder

The rotary encoder can also control touch screen functions from the main menu.

- Select desired function rotating clockwise or counter-clockwise.
- Press to confirm/ENTER.

# GENERAL Setup - Menu



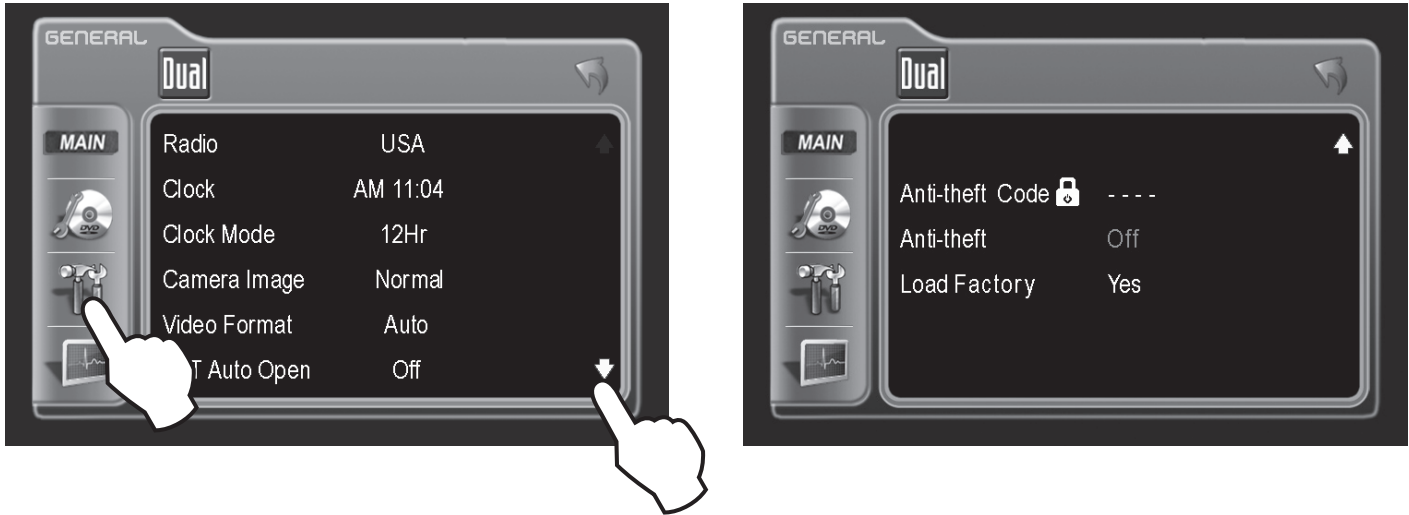
### General Setup Menu

- Press GENERAL icon to access the GENERAL setup mode.
- Select desired parameter you wish to change.
- Page will return back to previous screen after 15 seconds of inactivity or by pressing the RETURN button.

GENERAL Setup Menu matrix - page 1

Settings	Default	Options	Function
Radio	USA	USA	Set to appropriate setting for your country
		S-Amer1	
		S-Amer2	
		Europe	
Clock adjust	AM	00:00	See adjusting the clock on page 22 for more details
Clock Mode	12Hr	12Hr	PM 6:00
		24Hr	18:00
Camera Image	Normal	Normal	Normal Image
		Reverse	Mirror camera input image 180 degrees
Video Format	Auto	Auto	System will auto detect NTSC or PAL
		NTSC	For NTSC compatibility
		PAL	For PAL compatibility
TFT Auto Open	Off	On	TFT panel will automatically open when IGN is turned on
		Off	TFT panel will not auto open when IGN is turned on
		Manual	TFT will only open/close when  button is pressed

## GENERAL Setup - Menu



### General Setup Menu

- Press GENERAL icon to access the GENERAL setup mode.
- Press PAGE icon in the lower right corner.
- Select desired parameter you wish to change.
- Page will return back to previous screen after 15 seconds of inactivity or by pressing the RETURN button.

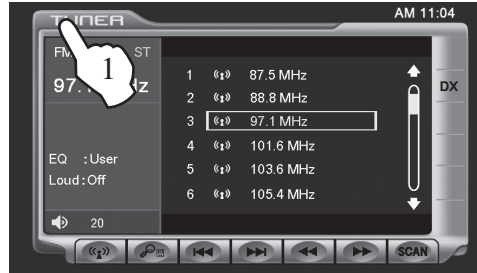
GENERAL Setup Menu matrix - page 2

Settings	Default	Options	Function
Anti-theft Code	0000	----	Must enter password to turn anti-theft on or off
Anti-theft active	Off	On	System will require a password if main battery power is removed for more than 40 seconds
		Off	No password will be required if power is removed
Load Factory defaults	Yes	Are you sure? Yes/Cancel	Load all factory parameters to their original settings. <b>Notes:</b> This will not reset the anti-theft password. Default anti-theft password is 0000.

# GENERAL Setup - Adjusting RADIO Frequency

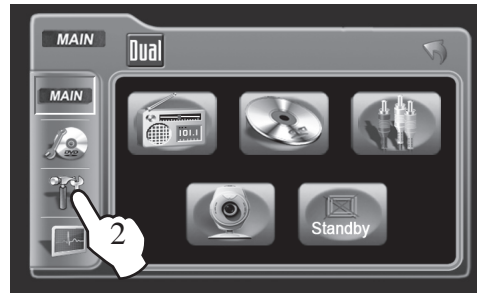
## Adjusting RADIO Frequency

Step 1



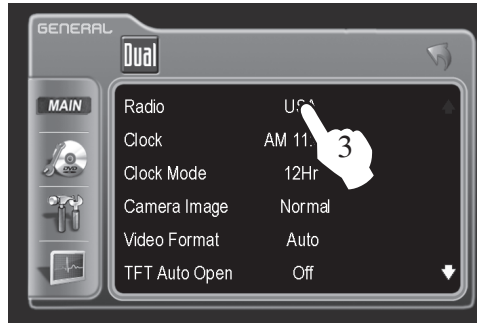
1) Touch top left corner of screen.

Step 2



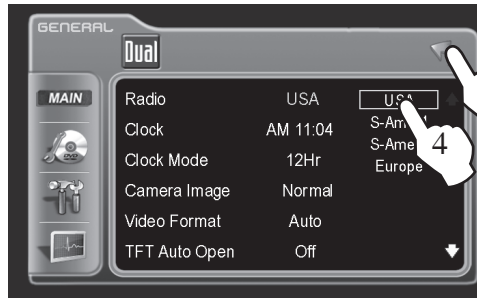
2) Touch GENERAL icon.

Step 3



3) Touch USA.

Step 4



4) Touch the setting for your region.

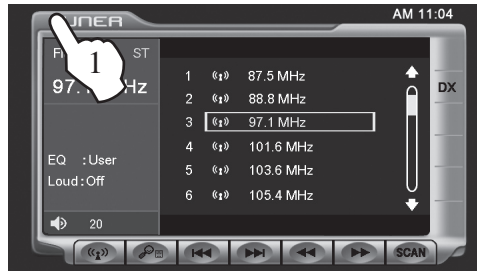
Step 5

Touch RETURN to exit.

## GENERAL Setup - Adjusting the Clock

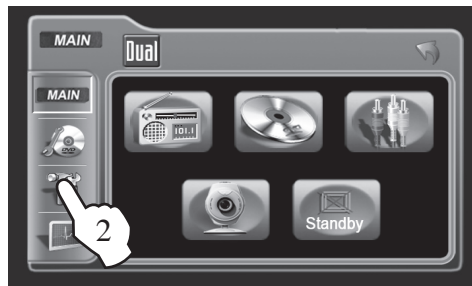
12Hr Clock Mode

Step 1



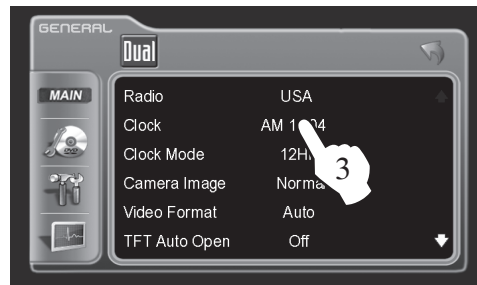
1) Touch top left corner of screen.

Step 2



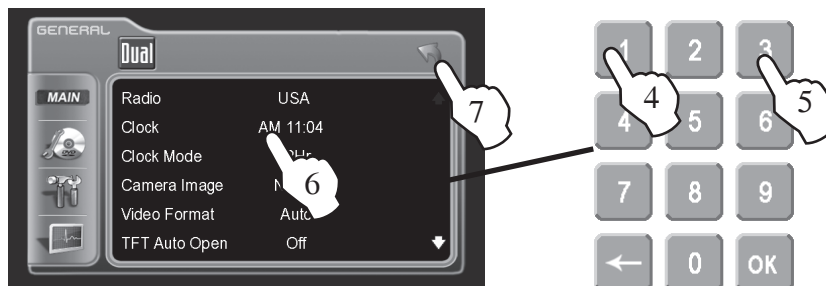
2) Touch GENERAL icon.

Step 3



3) Touch 00:00 area in the CLOCK row.

Step 4, 5, 6 & 7



4) Keypad will appear, enter HOUR, touch OK.

5) Enter MINUTES, touch OK.

6) Touch AM or PM to set.

7) Touch RETURN to exit.

24Hr Clock Mode

For 24Hr format, select 24Hr from CLOCK MODE, then follow steps 1-7.

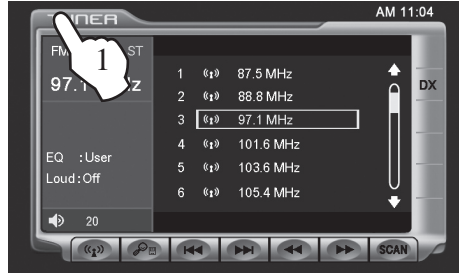
# GENERAL Setup - Setting the Anti-theft code

Default Anti-theft password is 0000 and is turned off. To turn this feature on, follow the steps below.

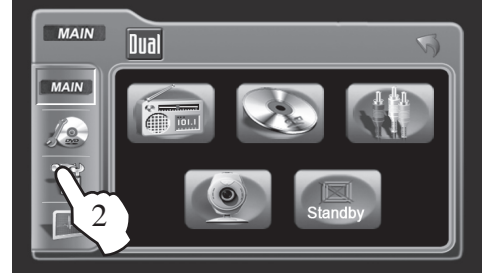
**CAUTION!!**

This will lock your unit from operating if battery power is disconnected for more than 5 minutes.

Step 1 & 2

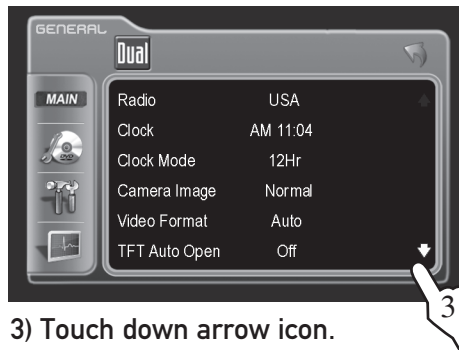


1) Touch top left corner of screen.

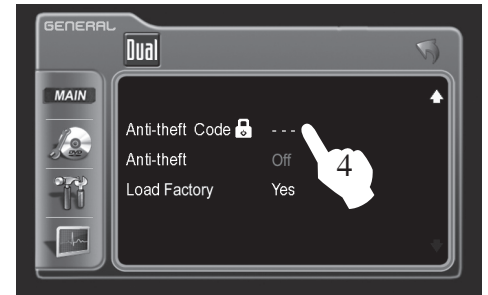


2) Touch GENERAL icon.

Step 3 & 4



3) Touch down arrow icon.

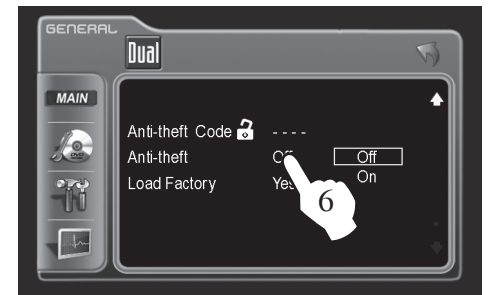


4) Touch ----.

Step 5 & 6

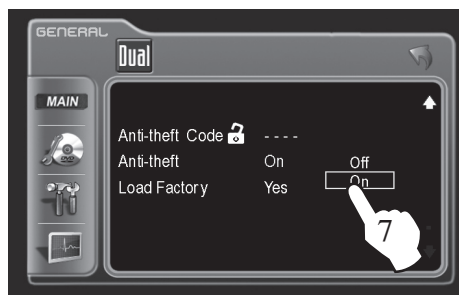


5) Enter 0000, then press OK.



6) Touch Off.

Step 7 & 8



7) Touch On.



8) Touch ---- again.

**Note:** it is recommended that you choose your own 4-digit password carefully, write it down somewhere and keep in a safe location. In the event you ever lose or forget your password, call our tech hot line for support on how to unlock your system.

Step 9 & 10

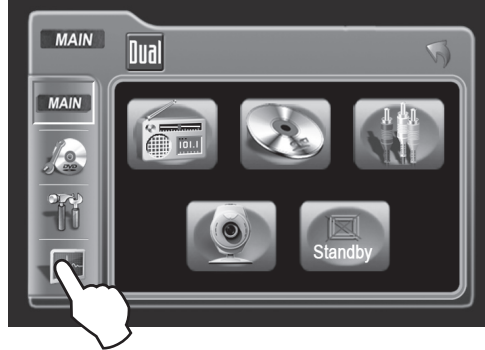


9) Enter your new 4-digit password, then press OK.

10) Touch RETURN to exit.

## SCREEN Setup - Menu

### Screen Setup Menu

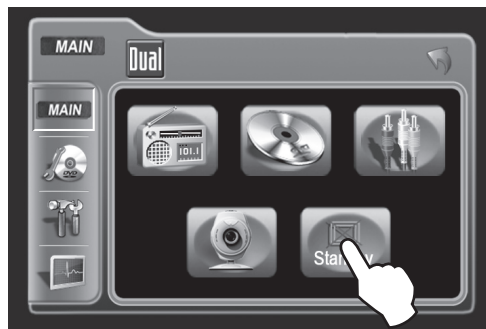


- Press SCREEN icon to access the SCREEN setup mode.
- Select desired parameter you wish to change.
- Page will return back to previous screen after 15 seconds of inactivity or by pressing the RETURN button.

### SCREEN Setup Menu matrix

Settings	Default	Options	Function
Brightness	10	0 - 20	Press ◀ or ▶ on the remote or press the rotary once and rotate clockwise/counter-clockwise to adjust the Brightness to the desired setting
Screen Tilt	4	1 - 6	Select 1 to 6 to adjust the default tilt angle of the screen
Screen Saver	On	Off	Select On to activate the screen saver, Off to deactivate
		On	
TS Calibrate	No	No	Touch Yes to enter the Touch Screen calibration mode
		Yes	
Version			Software version of unit

### System Standby



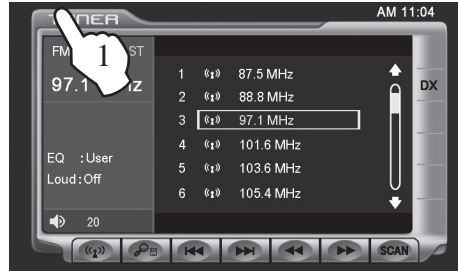
To conserve the LCD backlight lifespan and eliminate glare while night driving, press STANDBY. The TFT screen will turn off (black out), however all other operations continue to operate. Press any button except **VOLUME**, or touch the screen again to return to normal viewing.



# SCREEN Setup - Setting TFT Brightness

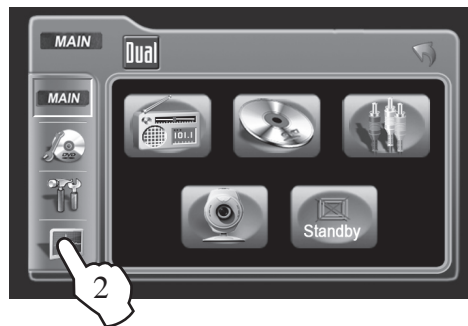
This will set the default setting for the TFT display brightness.  
 This can also be set by pressing the INFO button on the front TFT panel.

Step 1



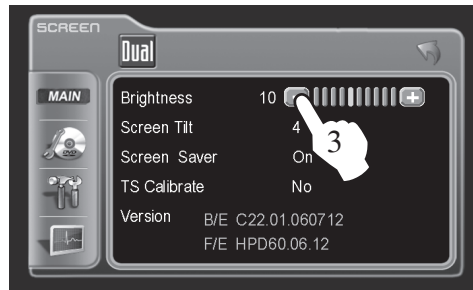
1) Touch top left corner of screen.

Step 2



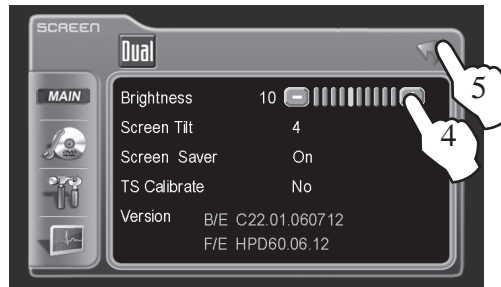
2) Touch SCREEN icon.

Step 3



3) Touch [-] to reduce brightness.

Step 4



4) Touch [+] to increase brightness.

0 - 20 is possible  
 Default = 10

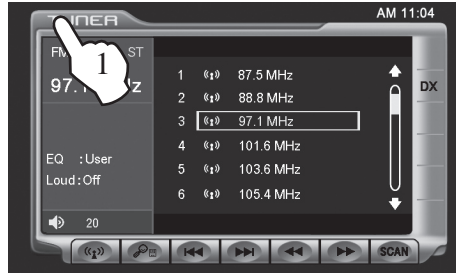
Step 5

5) Touch RETURN to exit.

## SCREEN Setup - Setting TFT Angle

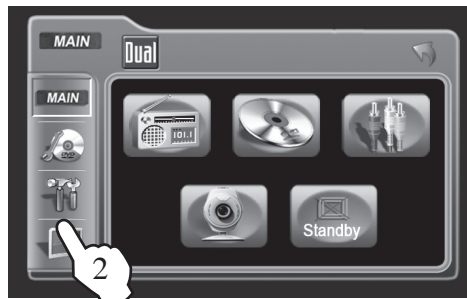
Set for best viewing angle in your vehicle

Step 1



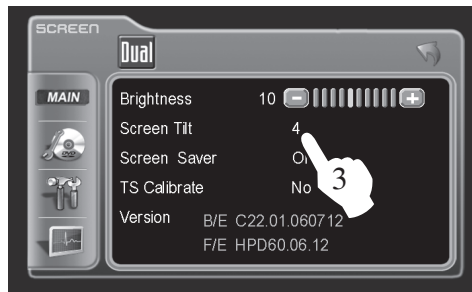
1) Touch top left corner of screen.

Step 2



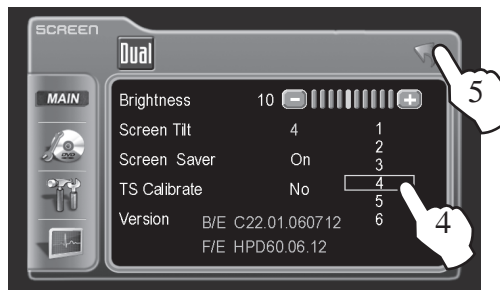
2) Touch SCREEN icon.

Step 3



3) Touch a number displayed in SCREEN TILT row.

Step 4



4) Touch desired angle for best viewing angle.

1 -6 is possible  
Default = 4

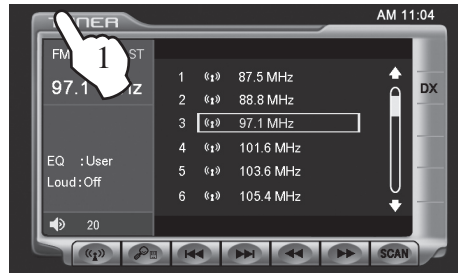
Step 5

5) Touch RETURN to exit.

# SCREEN Setup - Touch Screen Calibration

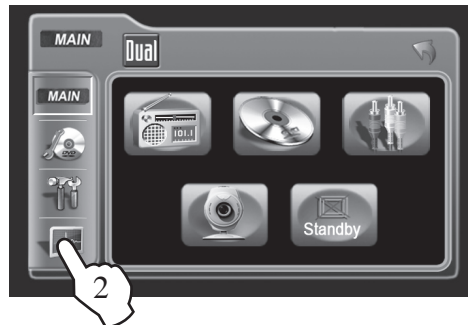
Upon initial installation or occasionally, the touch screen may have to be calibrated. Follow these steps as described.

Step 1



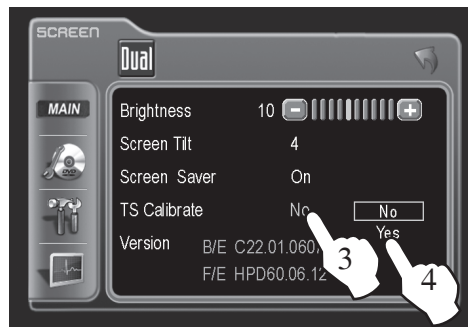
1) Touch top left corner of screen.

Step 2



2) Touch SCREEN icon.

Step 3 & 4



3) Touch No in TS Calibration row.

4) Then touch Yes.

Step 5 & 6

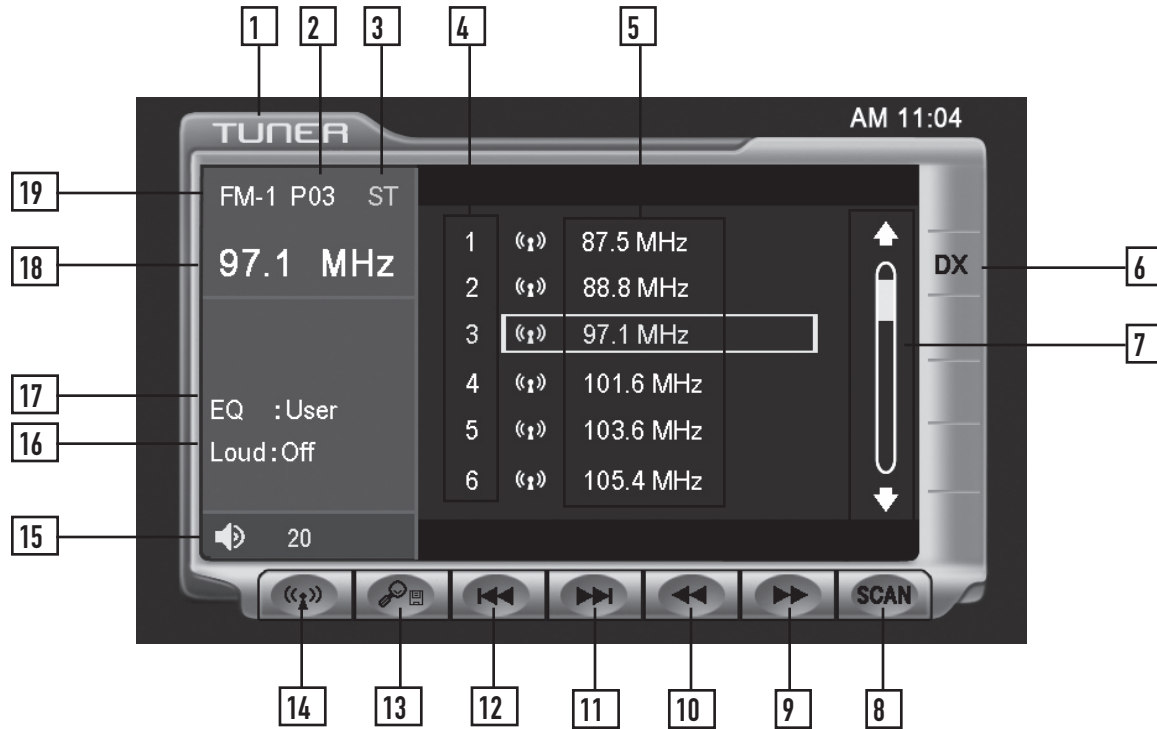


5) Touch and hold the pointers as indicated on the screen for 2 seconds each.

6) Screen will automatically return to MAIN MENU, touch EXIT to return.

**Notes:** For proper calibration you must touch each pointer for 2 seconds. If pointers are not touched properly, the calibration sequence will start over until the calibration is done correctly.

## AM/FM Tuner Operation - OSD Overview



- |                   |  |
|-------------------|--|
| <b>Tuner Mode</b> | From the main menu, touch TUNER icon on the screen, or press the AM/FM button to select AM/FM Tuner mode.  |
| 1                 | <b>Current Source Indicator</b><br>Displays source currently playing.  |
| 2                 | <b>Preset Number Indicator</b><br>Shows what preset has been selected.   |
| 3                 | <b>Stereo Indicator</b><br>Shows that the frequency selected is received in stereo.  |
| 4                 | <b>Preset Number List Display</b><br>Shows the preset list by preset number.   |
| 5                 | <b>Preset Station List Display</b><br>Shows the preset station list by frequency. Touch frequency to select a preset. Touch and hold frequency to store presets. |
| 6                 | <b>Local / DX Tuning Mode</b><br>Shows when local or distance tuning is on.  |
| 7                 | <b>Preset Display Scroll Bar</b><br>Allows scrolling of preset list.   |
| 8                 | <b>Tuner Scan</b><br>Touching this icon will scan through all available stations in the current band.  |



















## AM/ FM Tuner Operation - OSD Overview

- 9** Tune Frequency - Up  
Touching this icon will tune the radio to a higher frequency by one frequency step.
- 10** Tune Frequency - Down  
Touching this icon will tune the radio to a lower frequency by one frequency step.
- 11** Seek Next Station - Up  
Touching this icon will tune to the next strong station at a higher frequency. (This function can also be performed by pressing ▲.)
- 12** Seek Next Station - Down  
Touching this icon will tune to the next strong station at a lower frequency. (This function can also be performed by pressing ▼.)
- 13** Preset Scan/Auto Station Tune  
Touching this icon will scan through all presets in the current band. (This function can also be performed by pressing the **AS/PS** button.) Holding this button for more than 2 seconds will automatically program the 12 strongest stations available into the presets in the current band. (This function can also be performed by holding the **AS/PS** button.)
- 14** Band  
Touch band icon repeatedly until the desired band is displayed, FM-1, FM-2, FM-3, or AM. (This function can also be performed by pressing **AM/FM** button.)
- 15** Volume Indicator  
Indicates current volume level, controlled by rotary encoder.
- 16** Loudness Indicator  
Touch screen here to enter Audio Setup Menu.
- 17** EQ Indicator  
Touch screen here to enter Audio Setup Menu.
- 18** Current Station Indicator  
Indicates current frequency.
- 19** Band Indicator  
Shows which band the radio is tuned to, FM-1, FM-2, FM-3, or AM.

## AM/FM Tuner Operation



<b>AM/FM Tuner Mode</b>	<p>From the main menu, touch TUNER icon to select AM/FM Tuner mode.</p> <p>Press the <b>AM/FM</b> button.</p> <p>From the remote control or the front panel: Press <b>MODE</b> until TUNER is displayed on the screen.</p>
<b>Band</b>	<p>Touch  on the screen repeatedly until the desired band is displayed, FM-1, FM-2, FM-3, or AM.</p> <p>Press the <b>AM/FM</b> button to switch between bands, FM-1, FM-2, FM-3, AM.</p> <p>From the remote control: Press the <b>BAND</b> button.</p>
<b>Manual Tuning</b>	<p>Touch  on the screen to tune to the next higher frequency step. Touch  on the screen to tune to the next lower frequency step.</p> <p>Touch and hold either  or  on the screen to continue tuning across multiple stations.</p> <p>From the remote control: Touch  or  to perform manual tuning.</p>
<b>Seek Tuning</b>	<p>Touch  to tune to the next higher strong station. Touch  to tune to the next lower strong station.</p> <p>Press  to tune to the next higher strong station. Press  to tune to the next lower strong station.</p> <p>From the remote control: Press  or  to tune to the next higher strong station. Press  or  to tune to the next lower strong station.</p>
<b>Storing Presets</b>	<p>There are 36 FM and 12 AM presets available in 4 bands. After finding a frequency that you would like to store in memory, touch and hold the screen on any of the frequencies in the preset station list until it turns yellow.</p>
<b>Auto Store Presets</b>	<p>Touch and hold the  icon to automatically program the 12 strongest stations available into the presets in the current band.</p> <p>Press and hold the <b>AS/PS</b> button for more than 2 seconds.</p>



# AM/ FM Tuner Operation

**Preset Scan** Touching the button will scan through all tunable presets in the current band and play them for 10 seconds each.

Press the **AS/PS** button momentarily.

**Direct Preset Tuning** To select a desired station from the preset station list, touch any of the displayed station frequencies from the list.

Use Rapid Dial by pressing in on the rotary, turn clockwise or counter-clockwise, and pressing in again to select the highlighted channel.

Use the up and down arrows on screen to scroll through the presets. Once highlighted, simply touch the screen at the appropriate preset.

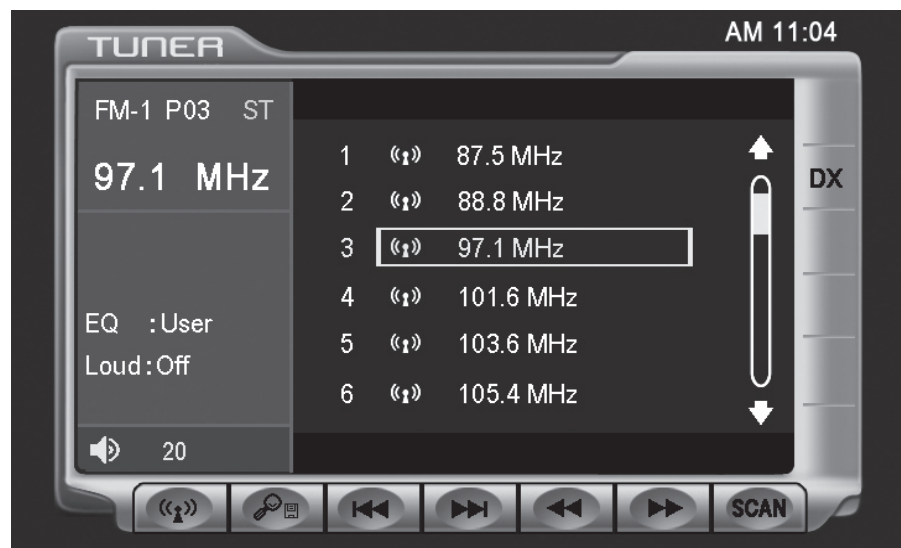
From the remote control:

Press **▲** or **▼** to scroll through the presets. When the correct preset is highlighted press **OK**.

Use the numeric keypad to enter the desired preset number.

**Scan Tuning** Touch **SCAN** on the screen and it will tune you to all stations available with good reception for 10 seconds at a time. Touch **SCAN** again to disable.

**Local Tuning** Local tuning lets you tune in radio stations with sufficiently strong signals for good reception. In areas that reception is poor, you can switch from local to distance tuning by touching the **LOC** button on the screen.





### **⚠ WARNING ⚠**

**Upon installation of this Monitor/DVD player (“unit”) into a vehicle, the driver of the vehicle must not operate this unit by watching videos or playing video games while driving. Failure to follow this instruction could lead to driver distraction which could result in serious injury or death to the vehicle’s occupants or persons outside the vehicle and/or property damage.**

**Several states prohibit the installation of monitors/DVD players if the screen is visible from the driver’s seat. If you reside in a jurisdiction which has enacted such a law, this unit must not be installed so that the screen is visible from the driver’s seat. When installing this unit in the front console/dashboard, the unit must be positioned so that it is facing the front passenger seat only. Failure to follow this instruction could lead to driver distraction which could result in serious injury or death to the vehicle’s occupants or persons outside the vehicle and/or property damage.**

**This unit is designed so that it may be operated only when the vehicle is in “Park” and the parking brake is fully engaged. To this end, this unit includes a parking brake lock-out feature which prohibits the unit from operating if the vehicle is not in “Park” and/or the parking brake is not fully engaged. When installing this unit, the installer must connect the parking brake detect wire (“Yellow-Blue Lead”) to the parking brake mechanism in order to make the parking brake lock-out feature operable. DO NOT simply ground the parking brake detect wire to a metal portion of the vehicle. Failure to properly install the parking brake lock-out feature could lead to driver distraction which could result in serious injury or death to the driver’s occupants or persons outside the vehicle and/or property damage.**

**Once the parking brake lock-out feature is installed, the owner/user must not attempt to disrupt/neutralize the parking brake lock-out feature by (a) partially engaging the parking brake and/or (b) purchasing/using any device or unit designed to send necessary brake signals to the unit. Failure to follow these instructions could lead to driver distraction which could result in serious injury or death to the driver’s occupants or persons outside the vehicle and/or property damage.**

**When operating this unit, keep the unit’s volume level low enough so that the vehicle’s occupants can hear traffic-related sounds such as police and emergency vehicles. Failure to follow this instruction could lead to driver distraction which could result in serious injury or death to the vehicle’s occupants or persons outside the vehicle and/or property damage.**



# DVD Operation - Parking Brake Initialization



**CAUTION !!!**  
IT'S UNLAWFUL TO OPERATE  
A VEHICLE WHILE VIDEO IS  
DISPLAY IN THE DRIVERS  
VIEWING AREA

ENGAGE EMERGENCY BRAKE  
TO ENJOY VIDEO

## SAFETY WARNING



- The video display of the in-dash unit will not operate while the vehicle is moving. This is a safety feature to prevent driver distraction. In-dash video functions will only operate when vehicle is in Park and the **PARKING BRAKE** is engaged. It is illegal in most states for the driver to view video while the vehicle is in motion. Refer to local laws in your area.
- The vehicle must be in park and the parking brake applied to view video on the in-dash monitor.
- As a safety feature, "**ENGAGE PARKING BRAKE**" blue screen will show on the display when the vehicle's parking brake is not engaged. Video display on the front monitor isn't allowed until the **PARKING BRAKE** is engaged. By connecting the yellow/blue **PARKING BRAKE** wire to brake switch circuit as described below, DVD and AUX AV audio can be heard while the vehicle is in motion without engaging the parking brake.

### Front Monitor Video Initialization

Follow these two initialization procedures carefully to allow video playback on the XDVD8281 TFT:

There are two situations that start the **PARKING BRAKE** sequence.

### Parking Brake Initialization Situation 1

#### First situation is while driving:

- 1) Stop vehicle, put in Park, make sure **PARKING BRAKE** is off/released.
- 2) Depress **PARKING BRAKE** for 1 second.
- 3) Release **PARKING BRAKE** for 1 second.
- 4) Depress **PARKING BRAKE** permanently.

#### Note:

Once above procedure 1-4 is completed, video will display in about 6 seconds.

### Parking Brake Initialization Situation 2

#### Second situation is while already parked and the **PARKING BRAKE** is already applied:

- 1) Keep vehicle in Park, **PARKING BRAKE** should be on.
- 2) Release **PARKING BRAKE** for 1 second.
- 3) Depress **PARKING BRAKE** for 1 second.
- 4) Release **PARKING BRAKE** for 1 second.
- 5) Depress **PARKING BRAKE** permanently.

#### Notes:

Once 2nd procedure 1-5 is completed, video will display in approx. 6 seconds. The transition time must be less than 2 seconds between depress and release. This procedure will have to repeated when the IGN is turned off.



## DVD Operation



### DVD Region Management

Some DVD discs can be played only in certain playback modes according to the intentions of the software. As the XDVD8281 plays discs according to their intentions, some functions may not work as intended. Please be sure to read the instructions provided with each disc. This player has been designed to play back DVD software that has been encoded for specific region areas. It cannot play back DVD software encoded for other region areas than the region areas for which it has been designed.

The XDVD8281 will play discs labeled "Region 1" or "All".

### DVD region codes:

- 1 - USA, Canada
- 2 - Japan, Europe, South Africa, Middle East
- 3 - Rep. of Korea, Taiwan, Hong Kong, Parts of Southeast Asia
- 4 - Australia, New Zealand, Mexico, South America
- 5 - Eastern Europe, Russia, India, Africa
- 6 - China



### DVD Disc Symbols

Symbol	12cm Disc Properties	Max Play Time
	Single side single layer (DVD-5) Single side double layer (DVD-9) Double side single layer (DVD-10) Double side double layer (DVD-18)	(MPEG 2 Method) 133 minutes 242 minutes 266 minutes 484 minutes
	Single side single layer (VCD)	(MPEG 1 Method) 74 minutes
	Single side single layer	74 minutes

Symbol	Meaning
	Number of voice languages recorded. The number inside the icon indicates the number languages on the disc (maximum of 8).
	Number of subtitle languages available on the disc (maximum of 32).
	Number of angles provided (maximum of 9).
	Aspect ratios available. "LB" stands for Letter Box and "PS" stands for Pan/Scan. In the example on the left, the 16:9 video can be converted to Letter Box video.
	Indicates the region code where the disc can be played. <ul style="list-style-type: none"> <li>· Region 1: USA, Canada, East Pacific Ocean Islands</li> <li>· Region 2: Japan, Western Europe, Northern Europe, Egypt, South Africa, Middle East</li> <li>· Region 3: Taiwan, Hong Kong, South Korea, Thailand, Indonesia, South-East Asia</li> <li>· Region 4: Australia, New Zealand, Middle and South America, South Pacific Ocean Islands/ Oceania</li> <li>· Region 5: Russia, Mongolia, India, Middle Asia, Eastern Europe, North Korea, North Africa, North-West Asia</li> </ul>

### Notes:

Some DVD discs can be played only in certain playback modes according to the intentions of the software. As the XDVD8281 plays discs according to their intentions, some functions may not work as intended. Please be sure to read the instructions provided with each disc.




## DVD Operation - Inserting a Disc



Insert CD/DVD with label facing upwards

### Inserting a Disc

Open panel to reveal disc slot by pressing . With the label facing up, insert a standard size disc into the slot. The panel will close and the disc will automatically begin playback. Other sub-menus may have to be pressed to access the DVD movie/music content. Read the directions of your specific DVD disc for other features.

**Note:** If PARENTAL Lock is activated and the disc inserted is not authorized, a 4-digit code must be entered and/or the disc be authorized. See "RATING MENU" on page 43.

**Note:** Only one disc can be inserted at a time.

### Ejecting the Disc

Press the EJECT button.

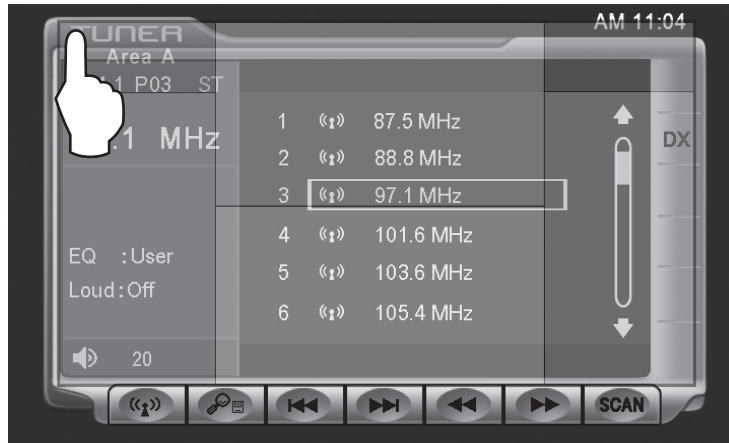
# DVD Operation - Touch Screen Controls



**Hidden Touch Screen area while in TUNER mode**

There are several hidden **TOUCH SCREEN** areas as outlined below:

"A" area can be used in any mode to access **MAIN** menu.



**Hidden Touch Screen areas while in DVD mode**

"A-F" areas can be used in **DVD** mode to access:

- A - Displays **MAIN** menu
- B - Displays **DVD** disc information
- C - Selects **PREVIOUS** chapter
- D - Selects **NEXT** chapter
- E - Displays the full **DVD** transport controls
- F - Displays **GOTO** search menu



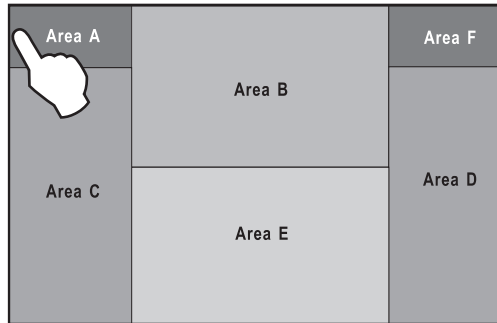


# DVD Operation - Touch Screen Controls

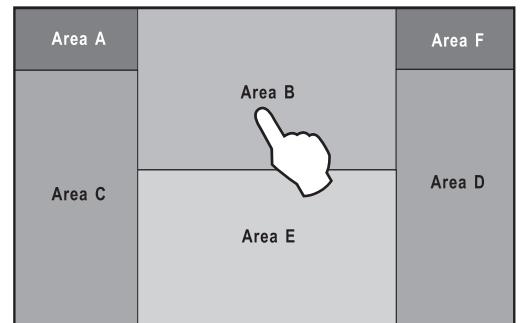
## Using the hidden Touch Screen Controls

- A - Displays **MAIN** menu
- B - Displays **DVD** disc information
- C - Selects **PREVIOUS** chapter
- D - Select **NEXT** chapter
- E - Displays the full **DVD** transport controls
- F - **GOTO** search menu

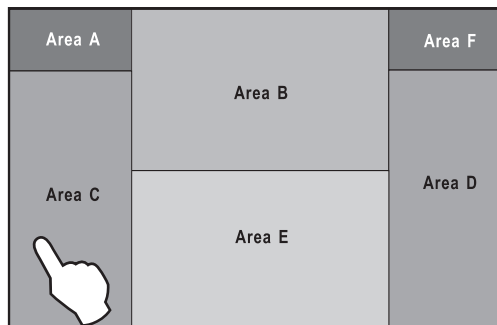
**Note:**  
A DVD disc must be inserted to access these functions and features.



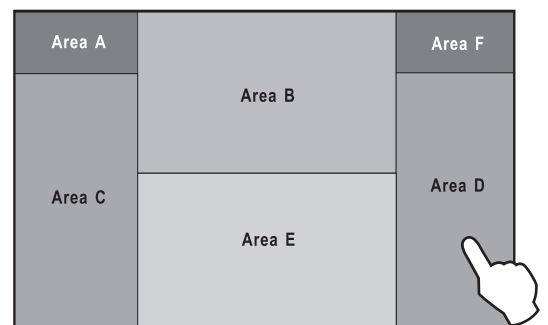
**AREA A**  
Access MAIN Menu



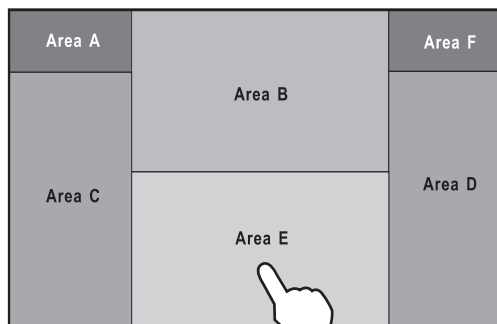
**AREA B**  
Displays Disc Information



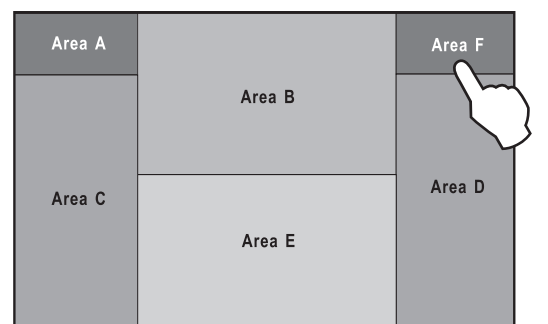
**AREA C**  
Selects PREVIOUS Track



**AREA D**  
Selects NEXT Track



**AREA E**  
Displays DVD Transport Controls



**AREA F**  
DVD Search

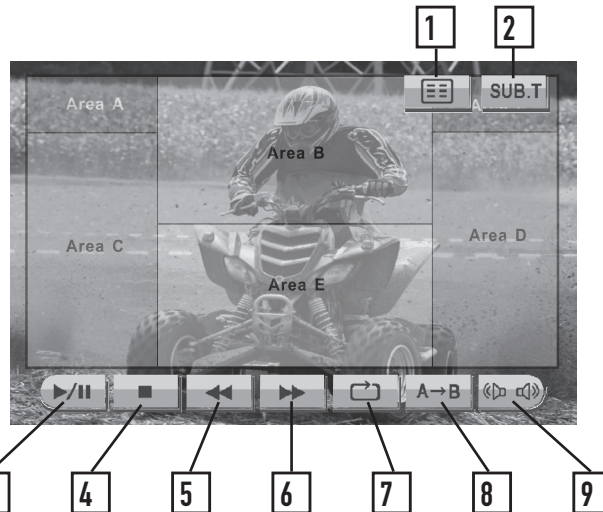
## DVD Operation - Touch Screen Controls



Using the hidden Touch Screen Controls

Touch AREA E

DVD Mode



1

**Title Menu**  
Jumps to the DVD Title menu.

2

**Sub-Title Mode**  
Activates sub-titles and cycles between multiple sub-title languages.

3

**Play/Pause**  
Touch the ►/|| icon to temporarily stop or resume playback.

4

**Stop**  
Touch the ■ icon to stop the chapter where it is.

5

**Fast Reverse**  
Touch the ◀◀ icon to fast reverse at 2x speed.  
Each touch changes speed from 2x to 4x to 8x to 20x then back to 1x play.

6

**Fast Forward**  
Touch the ▶▶ icon to fast forward at 2x speed.  
Each touch changes speed from 2x to 4x to 8x to 20x then back to 1x play.

7

**Repeat**  
Touch the ↺ icon to repeat the current chapter or title. This icon will remain highlighted until touched a third time to disable.

8

**Repeat A-B**  
Touch the A→B icon once to select a start point. Touch it a second time to select an end point. The A→B icon will illuminate and the DVD will then loop from the start point to the end point until touched a third time.

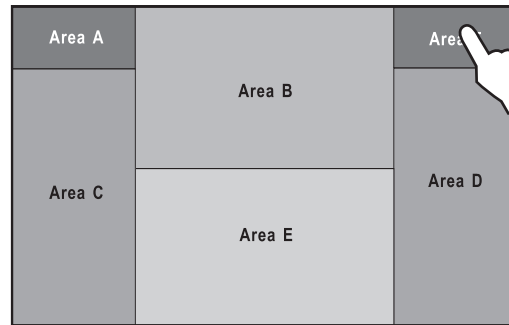
9

**Audio Mode**  
Touch this icon to activate alternate audio modes on DVD's that have alternate audio streams.



## DVD Operation - Searching a DVD

### Searching a DVD



Search  
 Time --:--:--  
 Title/Chapter --- / ---



### Searching by Time, Title or Chapter

Touch Area F to bring up the Search Window. The Search Window allows a search for a specific time, title or chapter.

### Search by TIME example

To search for a specific time, touch the ---:---:-- area and an on-screen keyboard will pop up. Use the keyboard to enter a time and touch **OK**. (For example, to skip to 1 hour, 12 minutes and 19 seconds into the DVD, touch: 1 1 2 1 9 **OK**.)

To search for a specific title and/or chapter, touch the --- / --- area and an on screen keyboard will pop up. Use the keyboard to enter a title and chapter and touch **OK**. This can be used to select a specific chapter in the current title, a new title or a specific chapter in a new title. (For example, to skip to a specific chapter within the current title, touch the --- on the right and use the keyboard to enter a chapter number, then touch **OK**.)

To skip to a different title and start from the beginning, touch the --- on the left and the keyboard to enter a title number, then touch **OK**. To skip to a specific chapter in a new title: touch the left --- and use the keyboard to enter a title number, **DO NOT** touch **OK**, then touch the right --- and use the keyboard to enter a chapter number, Then touch **OK**.)

From the remote control:

Press **SRCH** to bring up the search window, then use the arrows to highlight either the time, title or chapter field and use the numeric keypad to enter the appropriate information and press **OK**.

#### Notes:

Some DVD discs can be played only in certain playback modes according to the intentions of the software. As the XDVD8281 plays discs according to their intentions, some functions may not work as intended. Please be sure to read the instructions provided with each disc.

## DVD Operation



<b>Playback Control</b>	<p>Touch Area E to bring up the on-screen buttons. Touch ►► to fast forward or ◀◀ to fast reverse. Each subsequent press of the button will change the speed from normal to 2x to 4x to 8x to 20x and back to 1x.</p> <p>Hold the ▲ button to fast forward. Hold the ▼ button to fast reverse.</p> <p>From the remote control: Press ►► to fast forward. Press ◀◀ to fast reverse.</p>
<b>Repeat Mode</b>	<p>Touch the Repeat button to repeat either a chapter or title. The first touch activates <b>Repeat Chapter</b> mode and a second touch activates <b>Repeat Title</b> mode. When either mode is active, the Repeat button will be illuminated, and touching it a third time will disable <b>Repeat Mode</b>.</p> <p>From the remote control: Press ↻ to select Repeat Chapter, Repeat Title and Repeat Off modes.</p> <p><b>Note:</b> The <b>Repeat Mode</b> can only be changed while the DVD is playing.</p>
<b>Repeat A-&gt;B</b>	<p>Touch the A → B icon once to select a start point. Touch it a second time to select and end point. The A → B icon will illuminate and the DVD will then loop from the start point to the end point until touched a third time.</p> <p>From the remote control: Press A → B to select a start point and stop point. Press a third time to deactivate.</p>
<b>Play/Pause</b>	<p>Touching Play/Pause will temporarily stop playback of the DVD. Touching it again will resume playback.</p> <p>Press the <b>PLAY/PAUSE</b> button to pause or resume the DVD.</p> <p>From the remote control: Press <b>OK</b> to temporarily stop and resume playback.</p>
<b>Stop</b>	<p>Touch Stop to stop playback. Pressing Play at this point will resume playback. If Stop is touched a second time, then playback stops completely and will restart from the beginning of the disc.</p> <p>From the remote control: Press ■ to stop playback of the current chapter.</p>





## DVD Operation

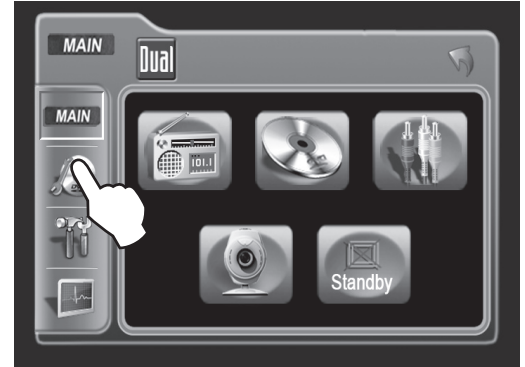
<b>Sub-Titles</b>	<p>Touch the <b>SUB.T</b> button to activate <b>Sub-Title</b> mode and select a sub-title language. Each touch will cycle the mode from off to language 1, language 2, etc., and back to off.</p> <p>From the remote control: Press the <b>SUB-T</b> button to control <b>Sub-Title</b> mode.</p> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>• Not all DVDs have sub-titles and when they do, some will only have 1 language. Therefore this function may be disabled or limited.</li> <li>• The <b>Sub-Title Mode</b> can only be changed while the DVD is playing.</li> </ul>
<b>Audio Mode</b>	<p>Touch the <b>Audio Mode</b> icon to change the audio stream. Each touch will cycle the language.</p> <p>From the remote control: Press the <b>AUDIO</b> button to control the <b>Audio Mode</b>.</p> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>• Not all DVDs have multiple languages, therefore this function may be disabled or limited.</li> <li>• The <b>Audio Mode</b> can only be changed while the DVD is playing.</li> </ul>
<b>DVD Disc Information</b>	<p>Touch Area B to bring up the <b>DVD Disc Information</b>, which includes: Current/Total Titles and Chapters, elapsed time for current title, EQ Mode and Loudness setting and current time.</p> <p>Press the <b>PIC</b> button to bring up the <b>DVD Disc Information</b>.</p> <p>From the remote control: Press the <b>INFO</b> button to bring up the <b>DVD Disc Information</b>.</p>
<b>Zoom Mode</b>	<p>From the remote control: Press the <b>ZOOM</b> button to activate <b>Zoom Mode</b>. Each subsequent press of the button will change the magnification from normal to 1 to 2 to 3 to 4 and back to normal. When <b>Zoom Mode</b> is active, the arrows on the remote will pan the screen up, down, right and left.</p>
<b>DVD Title Menu</b>	<p>Touch the Title Menu icon to return to the DVD's main menu.</p> <p>From the remote control: Press <b>TITLE</b> to return to the DVD's main menu. Press <b>ROOT</b> to move up one level on the DVD's menus. (For example, when viewing bonus materials, the <b>ROOT</b> button will return to the bonus menu instead of the main menu.) Pressing <b>ROOT</b> again will usually return to the current chapter.</p> <p><b>Note:</b> On some DVD's the <b>TITLE</b> and <b>ROOT</b> buttons may be reversed.</p>

## DVD Setup Menu - Language

### LANGUAGE Setup Menu

**Note:**  
A DVD disc must be inserted to access these functions and features.

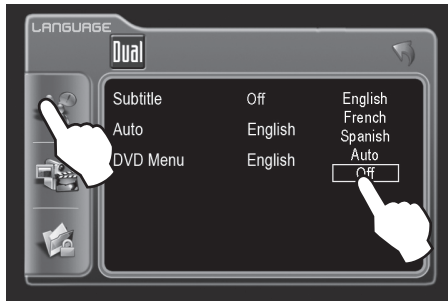
With the unit in DVD mode, press AREA A (top left screen) to display the MAIN menu. Press **DVD Setup** to access the DVD setup menu.



Press the **LANGUAGE** icon to select **LANGUAGE** setup page.

### Disc Subtitle

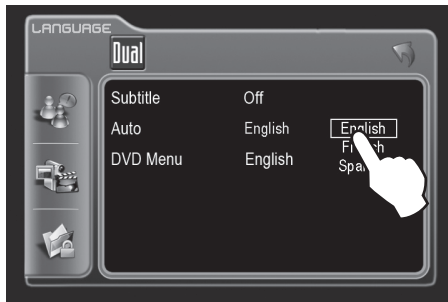
Press to select desired disc subtitle language.



- English
- French
- Spanish
- Auto
- Off = DEFAULT

### Audio Language

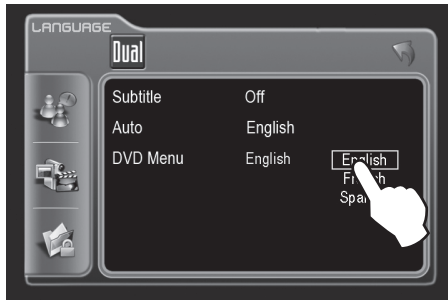
Press to select desired disc audio language.



- English = DEFAULT
- French
- Spanish

### DVD Menu

Press to select desired disc menu language.



- English = DEFAULT
- French
- Spanish

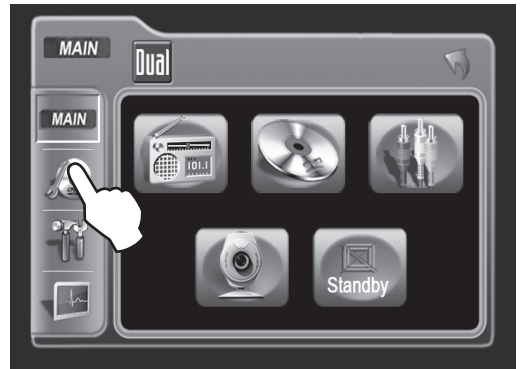
# DVD Setup Menu - Video

## Video Setup Menu

**Note:**

A DVD disc must be inserted to access these functions and features.

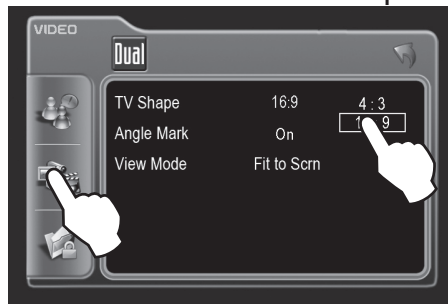
With the unit in DVD mode, press AREA A (top left screen) to display the MAIN menu. Press **DVD Setup** to access the DVD setup menu.



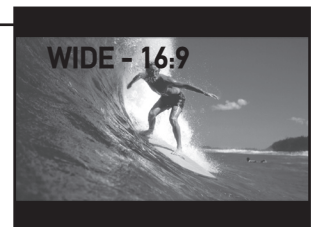
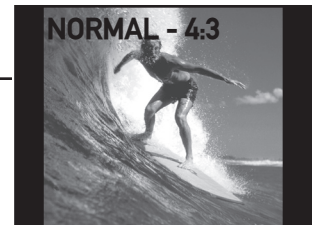
Press the **VIDEO** icon to select from the following menus:

### TV Shape

Press to select desired TV shape.

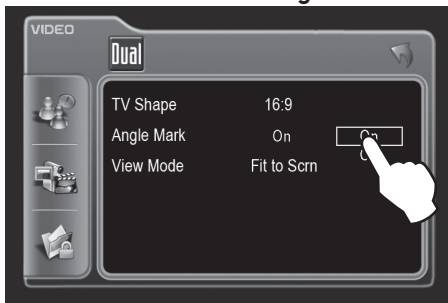


4:3  
16:9 = DEFAULT



### Angle Mark

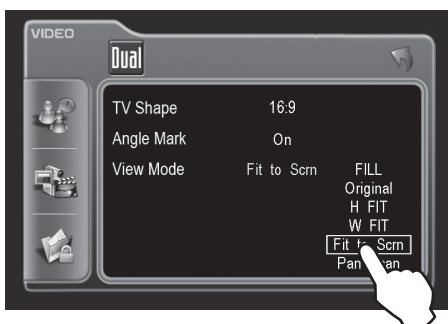
Select On to activate angle mark.



On = DEFAULT  
Off

### View Mode

Press to select desired view mode.



FILL  
Original  
H FIT  
W FIT  
FIT to Scrn = DEFAULT  
Pan Scan

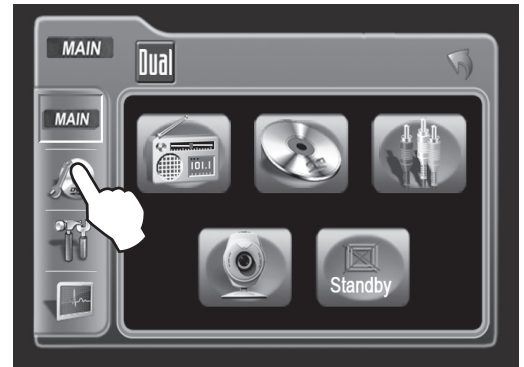
## DVD Setup Menu - Rating

### Rating Setup Menu

**Note:**

A DVD disc must be inserted to access these functions and features.

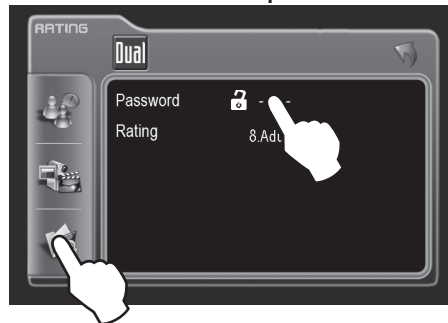
With the unit in DVD mode, press AREA A (top left screen) to display the MAIN menu. Press **DVD Setup** to access the DVD setup menu.



Press the **RATING** icon to select from the following menus:

### Enable Parental Lock Password

Press ---- to enter a password.

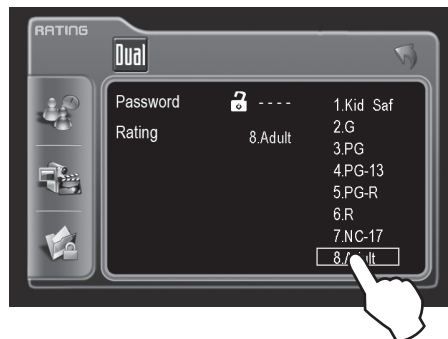


### Setting Parental Lock Password

1. Enter a 4-digit code
2. Write the code down
3. Save in a safe place

### Rating Setting

When unlock symbol is displayed, select desired rating.



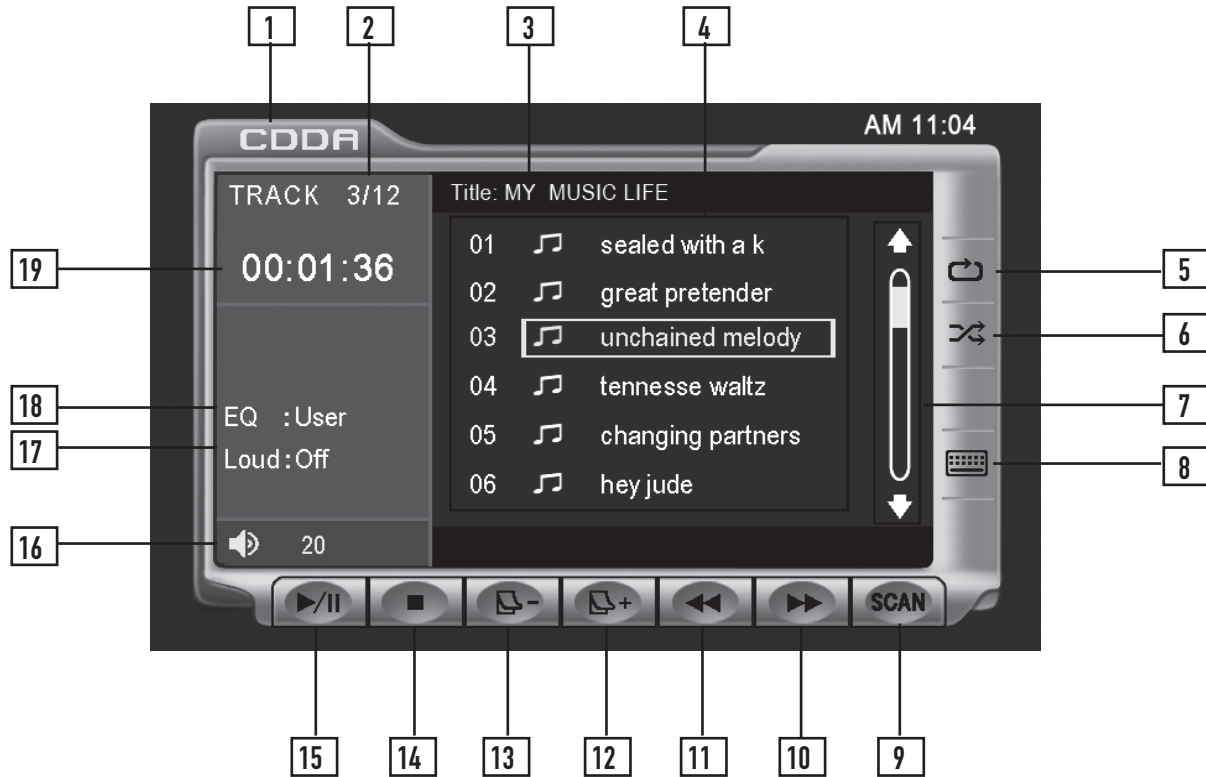
1. Kid Safe
2. G
3. PG
4. PG-13
5. PG-R
6. R
7. NC-17
8. Adult = DEFAULT

### Parental Password Override

In the event you forget or lose your **PARENTAL LOCK** password, enter 9991.










# CD Operation - OSD Overview



- |                |  |
|----------------|--|
| <b>CD Mode</b> | From the main menu, touch the <b>DISC</b> icon on the screen, or press the <b>DVD</b> button to select CD mode.                  |
| 1              | <b>Current Source Indicator</b><br>Displays Source Currently Playing.  |
| 2              | <b>Track Number Indicator</b><br>Displays current track number and total number of tracks on the disc.                           |
| 3              | <b>Disc Title Indicator</b><br>Displays current disc title when available.   |
| 4              | <b>Track Title List</b><br>Displays up to 6 tracks on the disc in order, with track title, when available.                       |
| 5              | <b>Repeat</b><br>Touch the  icon to repeat current track. This icon will remain highlighted until touched to disable.            |
| 6              | <b>Shuffle</b><br>Touch the  icon to shuffle all tracks on the disc. This icon will remain highlighted until touched to disable. |

## CD Operation - OSD Overview



- 7** Scroll bar  
Allows scrolling of track list.
- 8** Direct Select Keyboard  
Touch the  icon to display a numeric keyboard. Enter desired track number and touch **OK** to select it.
- 9** Track Scan  
Touch the **SCAN** icon to listen to 10 seconds of each track in order. This icon will remain highlighted until touched to disable.
- 10** Fast Forward  
Touch the  icon to fast forward at 2x speed. Each touch changes speed from 2x to 4x to 8x to 20x then to 1x play.
- 11** Fast Reverse  
Touch the  icon to fast reverse at 2x speed. Each touch changes speed from 2x to 4x to 8x to 20x then to 1x play.
- 12** Page Up  
Touch the + icon to see the next 6 tracks on the disc.
- 13** Page Down  
Touch the - icon to see the previous 6 tracks on the disc.
- 14** Stop  
Touch the  icon to stop the song where it is.
- 15** Play/Pause  
Touch the  icon to temporarily stop or resume playback.
- 16** Volume Indicator  
Indicates current volume level, controlled by rotary encoder.
- 17** Loudness Indicator  
Touch screen here to enter Audio Setup Menu.
- 18** EQ Indicator  
Touch screen here to enter Audio Setup Menu.
- 19** Track Time Indicator  
Shows how much time has elapsed in the current track.



# CD Operation

## Playing CD-DA discs

After inserting a CD disc, files will play in numerical order in the directory.



## Selecting by Keypad

Touch to display keypad. Enter desired track number and press OK.



## Selecting by Direct Track Access

Touch desired track for DIRECT TRACK access.




## Previous/Next Page

Touch to view UP/DOWN pages of available tracks.

## CD Operation





<b>Page Up/Down</b>	<p>The Page Up and Page Down on-screen buttons can be used to see the rest of the tracks on the CD. Use the Direct Select method to play a desired track.</p> <p>From the remote control: Press ► to display the next page. Press ◀ to display the previous page.</p>
<b>Track Select</b>	<p>Press ▲ button to skip to the next track. Press ▼ button to skip to the previous track.</p> <p>From the remote control: Press ►► to skip to the next track. Press ◀◀ to skip to the previous track.</p> <p><b>Note:</b> Press ◀◀ or ▼ button once will return to the beginning of the current track. Press it a second time to skip to the previous track.</p>
<b>Direct Select</b>	<p>To select a desired track from the track title list, touch any track on the list.</p> <p>Use the up and down arrows on screen to scroll through the tracks. Once highlighted, simply touch the screen at the appropriate track.</p> <p>Press Rapid Dial rotary encoder once.</p> <ul style="list-style-type: none"><li>• Select desired track by rotating clockwise or counter-clockwise.</li><li>• Press to confirm/ENTER.</li></ul> <p>From the remote control: Press ▲ or ▼ to scroll through the tracks. When the correct track is highlighted press OK.</p>
<b>Direct Track Entry</b>	<p>Touch the  icon to display a numeric keyboard. Enter desired track number and touch OK to select it.</p> <p>From the remote control: Use the numeric keypad to enter the desired track number.</p>
<b>Play Control</b>	<p>You can use the Fast Forward or Fast Reverse on-screen buttons to speed up the playback of a track. Each subsequent press of the button will change the speed from normal to 2x to 4x to 8x to 20x and back to 1x.</p> <p>Hold the ▲ button to fast forward. Hold the ▼ button to fast reverse.</p> <p>From the remote control: Press ►► to fast forward. Press ◀◀ to fast reverse.</p>

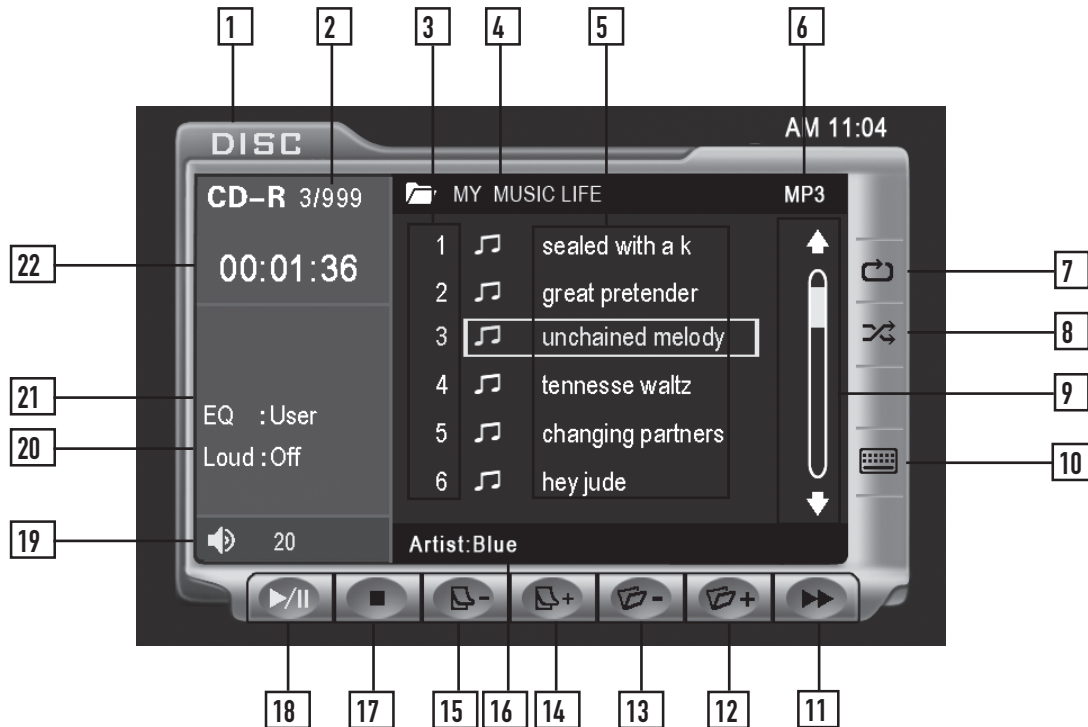




## CD Operation

<b>Shuffle Mode</b>	<p>Touch the Shuffle button to shuffle all of the tracks on the CD. The Shuffle button will be illuminated while <b>Shuffle Mode</b> is active. When the button is illuminated, touching it a second time will disable <b>Shuffle Mode</b>.</p> <p><b>Notes:</b> The shuffled order of the songs is fixed, therefore the Track Select operations will continue to operate properly within the shuffled order. Therefore using <b>Next Track</b> will move to the next shuffled track, while <b>Previous Track</b> will return to the start of the current track and then a second press will return to the previously played track.</p>
<b>Repeat Mode</b>	<p>Touch the Repeat button to repeat a track. When <b>Repeat Mode</b> is active, the Repeat button will be illuminated, and touching it again will disable <b>Repeat Mode</b>.</p> <p>From the remote control: Press  to select Repeat. Press it a second time to disable Repeat.</p> <p><b>Note:</b> <b>Shuffle</b> and <b>Repeat</b> modes can not be used simultaneously and engaging one mode will cancel the other mode (if active.)</p>
<b>Scan Mode</b>	<p>Touch <b>SCAN</b> on the screen to listen to all tracks on the CD for 10 seconds at a time, starting from the first track on the CD. The Scan button will be illuminated while <b>Scan Mode</b> is active. When the button is illuminated, touching it a second time will disable <b>Scan Mode</b>.</p> <p>From the remote control: Press <b>TITLE</b> to activate and disable <b>Scan Mode</b>.</p>
<b>Play/Pause</b>	<p>Touching Play/Pause will temporarily stop playback of the current track. Touching it again will resume playback.</p> <p>Press <b>PLAY/PAUSE</b> to pause or resume the song.</p> <p>From the remote control: Press <b>OK</b> to temporarily stop and resume playback.</p>
<b>Stop</b>	<p>Touch Stop to stop playback of the current track. Pressing Play at this point will resume playback. If Stop is touched a second time, then playback stops completely and will restart from the beginning of the CD.</p> <p>From the remote control: Press  to stop playback of the current song.</p>

## MP3/WMA Operation - OSD Overview









### MP3/WMA Mode

From the main menu, touch the **DISC** icon on the screen, or press the **DVD** button to select MP3/WMA mode.

- 1** Current Source Indicator  
Displays source currently playing.
- 2** Song Number Indicator  
Displays current song number and total number of songs on the disc.
- 3** Master Song Number List  
Shows the number of the song relative to the entire disc.
- 4** Folder  
Displays the name of the currently selected folder.
- 5** Filename List  
Displays up to 6 songs in the current folder in order, with filename.
- 6** File Type Indicator  
Displays type of song file, either **MP3** or **WMA**.
- 7** Repeat  
Touch icon to repeat current song or folder. This icon will remain highlighted until touched a third time to disable.
- 8** Shuffle  
Touch icon to shuffle all songs on the disc. This icon will remain highlighted until touched to disable.




## MP3/WMA Operation - OSD Overview

- 9 Scroll bar  
Allows scrolling of song list.
- 10 Direct Select Keyboard  
Touch the  icon to display a numeric keyboard. Enter desired song number and touch OK to select it.
- 11 Fast Forward  
Touch  icon to fast forward at 2x speed.  
Each touch changes speed from 2x to 4x to 8x to 20x then to 1x play.
- 12 Next Folder  
Pressing this button will select the next available folder.
- 13 Previous Folder  
Pressing this button will select the previous available channel.
- 14 Page Up  
Touch the + icon to see the next 6 songs in the folder.
- 15 Page Down  
Touch the - icon to see the previous 6 songs in the folder.
- 16 Information  
Displays available information for the current song.
- 17 Stop  
Touch  icon to stop the song where it is.
- 18 Play / Pause  
Touch  icon to temporarily stop or resume playback.
- 19 Volume Indicator  
Indicates current volume level, controlled by rotary encoder.
- 20 Loudness Indicator  
Touch screen here to enter the Audio Setup Menu.
- 21 EQ indicator  
Touch screen here to enter the Audio Setup Menu.
- 22 Elapsed Time Indicator  
Shows the elapsed time of the current song.

## MP3/WMA Operation



<b>Folder Select</b>	<p>From the remote control: Press ► to display the next page. Press ◀ to display the previous page.</p>
<b>Page Up/Down</b>	<p><b>Note:</b> Continued operation of the Page Up and Page Down buttons will display the next and previous folders, respectively once the songs in the current folder have all been displayed.</p> <p>Note that the Folder Select and Page Up/Down buttons will not select a song, but simply display more songs on the disc, and if another song is not selected within 5 seconds of the last press then the screen will return to the currently playing song/folder.</p>
<b>Song Select</b>	<p>Press ▲ button to skip to the next song. Press ▼ button to skip to the previous song.</p> <p>From the remote control: Press ►► to skip to the next song. Press ◀◀ to skip to the previous song.</p> <p><b>Note:</b> Pressing the ◀◀ or ▲ button once will return to the beginning of the current song. Pressing it a second time will skip to the previous song.</p>
<b>Direct Select</b>	<p>To select a desired song from the filename list, touch any of the displayed filenames from the list.</p> <p>Use the up and down arrows on screen to scroll through the songs. Once highlighted, simply touch the screen at the appropriate name.</p> <p>Press Rapid Dial rotary encoder once.</p> <ul style="list-style-type: none"><li>• Select desired track by rotating clockwise or counter-clockwise.</li><li>• Press to confirm/ENTER.</li></ul> <p>From the remote control: Press ▲ or ▼ to scroll through the songs. When the correct song is highlighted press OK.</p>
<b>Direct Song Entry</b>	<p>Touch the  icon to display a numeric keyboard. Enter desired song number and touch OK to select it.</p> <p>From the remote control: Use the numeric keypad to enter the desired song number.</p>



## MP3/WMA Operation

### Song Control

You can use the Fast Forward on-screen button to speed up the playback of a song. Each subsequent press of the button will change the speed from normal to 2x to 4x to 8x to 20x and back to 1x.

Hold the ▲ button to fast forward.  
Hold the ▼ button to fast reverse.

From the remote control:  
Press ►► to fast forward.  
Press ◀◀ to fast reverse.

**Note:** Song control only works for MP3 type files and there is no audio output while song control is active.

### Shuffle Mode

Touch the Shuffle button to shuffle all of the songs on the disc. The Shuffle button will be illuminated while **Shuffle Mode** is active. When the button is illuminated, touching it a second time will disable **Shuffle Mode**.

**Note:** The shuffled order of the songs is fixed, therefore the Song Select operations will continue to operate properly within the shuffled order. Therefore using **Next Song** will move to the next shuffled song, while **Previous Song** will return to the start of the current song and then a second press will return to the previously played song.

### Repeat Mode

Touch the Repeat button to repeat either a song or folder. The first touch activates **Song Repeat** mode and a second touch activates **Folder Repeat** mode. When either mode is active, the Repeat button will be illuminated, and touching it a third time will disable **Repeat Mode**.

From the remote control:  
Press ⇄ to select Song Repeat, Folder Repeat and Repeat Off modes.

**Note:** **Shuffle** and **Repeat** modes can not be used simultaneously and engaging one mode will cancel the other mode (if active.)

### Play/Pause

Touching Play/Pause will temporarily stop playback of the current song. Touching it again will resume playback.

From the remote control:  
Press OK to temporarily stop and resume playback.

### Stop

Touch Stop to stop playback of the current song. Pressing Play at this point will resume or restart playback from the beginning of the current song. If Stop is touched a second time, then playback stops completely and will restart from the beginning of the disc.

From the remote control:  
Press ■ to stop playback of the current song.



## Media Compatibility

### Media Compatibility

The following types of discs/files are compatible:

- CD-ROM (ISO), CD-R, CD-RW, DVD+R/RW, DVD-R/RW
- CD-DA, DVD Video
- MP3 data
- WMA data

The following types of discs/files are not compatible:

- WMA files that are protected by DRM (Digital Rights Management)
- WMA lossless format
- Discs recorded with Track At Once or packet writing
- MP3 PRO format
- MP3 playlists
- WAV format
- WMV format
- JPG format
- DivX format
- AVI format
- MPG format

Some recordable DVDs and CDs may be incompatible with this unit, depending on media type and recording method.

### Playback Order

MP3/WMA playback sequence is based on recorded order of files and begins in the root folder of the disc. Any empty folders or folders that do not include MP3/WMA files are skipped. This unit may not play files in the order they were recorded in. Refer to your recording software's user's manual for more information.

### Compatible Recording Formats

- ISO9660 level 1
- ISO9660 level 2
- Yellow Book MODE 1
- Yellow Book MODE 2 FORM 1
- Multi session
- Maximum files - 1500
- Maximum folder levels - 8
- MPEG-1/2 Audio Layer-3

ISO9660 standards:

- Maximum nested folder depth is 8 (including the root folder).
- Valid characters for folder/file names are letters A-Z (all caps), numbers 0-9, and "\_" (underscore). Some characters may not be displayed correctly, depending on the character type.
- This device can play back discs in Joliet and other standards that conform to ISO9660. MP3/WMA written in the formats other than the above may not play and/or their file names or folder names may not be displayed properly.

## Media Compatibility

### Additional MP3/WMA Information

An internal buffer provides ESP (Electronic Skip Protection) to virtually eliminate skipping.

When playing a disc recorded with regular audio files (CD-DA or .WAV) and MP3/WMA files, the unit will play the MP3/WMA files only.

Only MP3 files with filename extension (.mp3) can be played.  
Only WMA files with filename extension (.wma) can be played.

Do not attempt to play discs which contain non-MP3/WMA files with the MP3/WMA extension.

### Sampling Frequency Rates

**MP3** 32kHz ~ 48kHz

**WMA** 32kHz ~ 48kHz

### Transfer Bit rates

**MP3** 40kbps ~ 320kbps constant  
Variable bit rates

**WMA** 40kbps ~ 192kbps constant  
Variable bit rates

#### Note:

Some files may not play or be displayed correctly, depending on sampling rates and bit rates.

### Recommended Settings

For best results, use the following settings when burning an MP3 disc:  
128kbps or higher constant bit rate  
44.1kHz or higher sampling frequency

For best results, use the following settings when burning a WMA disc:  
64kbps or higher constant bit rate  
44kHz or higher sampling frequency



## Limited One Year Warranty

This warranty gives you specific legal rights. You may also have other rights which vary from state to state.

Dual Electronics Corp. warrants this product to the original purchaser to be free from defects in material and workmanship for a period of one year from the date of the original purchase.

Dual Electronics Corp. agrees, at our option, during the warranty period, to repair any defect in material or workmanship or to furnish an equal new, renewed or comparable product (whichever is deemed necessary) in exchange without charges, subject to verification of the defect or malfunction and proof of the date of purchase. Subsequent replacement products are warranted for the balance of the original warranty period.

**Who is covered?** This warranty is extended to the original retail purchaser for products purchased and used in the U.S.A.

**What is covered?** This warranty covers all defects in material and workmanship in this product. The following are not covered: installation/removal costs, damage resulting from accident, misuse, abuse, neglect, product modification, improper installation, incorrect line voltage, unauthorized repair or failure to follow instructions supplied with the product, or damage occurring during return shipment of the product.


### What to do?

1. Before you call for service, check the troubleshooting guide in your owner's manual. A slight adjustment of any custom controls may save you a service call.
2. If you require service during the warranty period, you must carefully pack the product (preferably in the original package) and ship it by prepaid transportation with a copy of the original receipt from the retailer to an authorized service center.
3. Please describe your problem in writing and include your name, a return UPS shipping address (P.O. Box not acceptable), and a daytime phone number with your shipment.
4. For more information and for the location of the nearest authorized service center please contact us by one of the following methods:
  - Call us toll-free at 1-866-382-5476
  - E-mail us at [cs@dualav.com](mailto:cs@dualav.com)

**Exclusion of Certain Damages:** This warranty is exclusive and in lieu of any and all other warranties, expressed or implied, including without limitation the implied warranties of merchantability and fitness for a particular purpose and any obligation, liability, right, claim or remedy in contract or tort, whether or not arising from the company's negligence, actual or imputed. No person or representative is authorized to assume for the company any other liability in connection with the sale of this product. In no event shall the company be liable for indirect, incidental or consequential damages.



## Troubleshooting

Problem	Cause	Action
Unit will not turn on (no power)	Yellow wire not connected or incorrect voltage Red wire not connected or incorrect voltage	Check connections for proper voltage (11~16VDC)
	Black wire not connected	Check connection to ground
	Fuse blown	Replace fuse
Unit has power (but no sound)	Speaker wires not connected	Check connections at speakers
	One or more speaker wires touching each other or touching chassis ground	Insulate all bare speaker wires from each other and chassis ground
Unit blows fuse	Yellow or red wire touching chassis ground	Check for pinched wire
	Speaker wires touching chassis ground	Check for pinched wire
	Incorrect fuse rating	Use fuse with correct rating
Unit has audio (but no video)	Parking brake safety circuit not connected Parking brake not applied	Check connections at parking brake Apply parking brake as described on page 33
No video display (when in reverse)	Reverse circuit not connected Vehicle is not in reverse	Check connections at reverse lamp Select reverse gear
DVD does not start playback	Physical defect in media Wrong region	Check media for scratches Use discs labeled "Region 1" or "All" only.
IR remote does not work	Dead battery	Replace battery
Excessive skipping	Unit is not mounted correctly	Check mounting sleeve
	Physical defect in media	Check media for scratches
Bad Disc appears on display	Focus error or disc is in upside down	Press eject or RESET
Incorrect Region Code appears on display	Region code error	Use only DVDs labeled "Region 1" or "All" only.
Front panel will not open/close	Front panel obstructed	Remove the obstacle and press  to resume the monitor open/close sequence.



## Specifications

<b>DVD Player</b>	Frequency response: <b>10Hz-20kHz</b> Channel separation @ 1kHz: <b>&gt;65dB</b> D/A converter: <b>24 Bit</b>
<b>FM Tuner</b>	Tuning range: <b>87.5MHz-107.9MHz</b> Usable sensitivity: <b>8.5dBf</b> 50dB quieting sensitivity: <b>10dBf</b> Stereo separation @ 1kHz: <b>40dB</b> Frequency response: <b>30Hz-13kHz</b>
<b>AM Tuner</b>	Tuning range: <b>530kHz-1710kHz</b> Usable sensitivity: <b>22uV</b> Frequency response: <b>30Hz-2.2kHz</b>
<b>Monitor</b>	Panel size: <b>6.5" (165.1 mm) diagonal measurement</b> View angle (up/down/left/right): <b>40/55/60/60</b> Resolution: <b>400 W x 234 H</b> Brightness (cd/m <sup>2</sup> ): <b>350</b> Contrast ratio: <b>350:1</b> Elements: <b>280,800</b>
<b>General</b>	Operating voltage: <b>11-16 VDC, negative ground</b> Speaker output impedance: <b>4~8 ohms</b> Line output voltage: <b>2 Volts</b> Line output impedance: <b>200 ohms</b> Chassis dimensions: <b>7" x 6.3" x 3.9"</b> <b>(178 x 160 x 99 mm)</b> Faceplate dimensions: <b>6.6" x .7" x 3.8"</b> <b>(167 x 18 x 97 mm)</b> Sleeve dimensions: <b>7.1" x 3.9" x 4.4"</b> <b>(180 x 99 x 112 mm)</b>  Design and specifications subject to change without notice.



CEA-2006 Power Standard Specifications  
(reference: 14.4VDC +/- 0.2V, 20Hz~20kHz)

Power Output: 17 Watts RMS x 4 channels at 4 ohms and  $\leq 1\%$  THD+N  
Signal to Noise Ratio: 80dB (reference: 1 watt into 4 ohms)



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**Notes**

Dual Electronics Corp.  
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[www.dualav.com](http://www.dualav.com)

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