



USER MANUAL



ACT500

**DVD/SVCD/VCD/CD/MP3/MP4/RADIO/MIC Player
with USB Input**

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BEFORE YOU BEGIN

PRECAUTIONS:

USE OF CONTROLS OR ADJUSTMENT OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

THE USE OF OPTICAL INSTRUMENTS WITH THIS PRODUCT WILL INCREASE EYE HAZARD.

- Keep this manual handy as a reference for operating procedures and precautions.
- Always keep the volume low enough so you can hear sounds outside of the car.
- Protect this product from moisture.
- If the battery is disconnected or discharged, the preset memory will be erased and must be reprogrammed.

1. MAIN FEATURES

DUAL ZONE with extremely easy interface concept

The equipment can reproduce different sources into two different areas, passenger (PSG) and driver (DRV) *.

DVD video playback

It is possible to play back DVD video, DVD+-R, DVD+-RW and DVD+-DL.

Video CDs featuring PBC compatibility

It is possible to play back Video CDs featuring PBC (playback control).

CD playback

Music CD/CD-R/CD-RW playback is possible.

MPEG4 / MP3 file playback

It is possible to play back MPEG4 and MP3 files recorded on CD-ROM/CD-R/CD-RW or USB pen drives.

RDS RADIO Function

It is possible to scan, memorize or select Radio stations and use the RDS main functions.

Microphone for GUIDE or DRIVER auto selectable

Two microphones can be plugged into the equipment: GUIDE and DRIVER. The MIC source is auto selected when the microphone switch is on. Only one can be used at time having priority the DRIVER MIC over the GUIDE MIC.

PAL-BG/NTSC compatibility

This unit is PAL-BG/NTSC system compatible.

Individual Audio Line output for the DISK or USB source

There is an exclusively audio line output for the DISK or USB source which is continuously working independent of the selections on DRV or PSG areas.

Individual Audio Line output for RADIO source

There is an exclusively audio line output for the RADIO source which is continuously working independent of the selections on DRV or PSG areas.

Save LOGO

This function enables the customer to save its own LOGO as the start-up screen.

AUTOPLAY function

Allows the automatic playback of DVD movies without waiting the set up on the DVD menu.

CAN2.0B interface*

The product is equipped with CAN2.0B interface which allows it to be connected and commanded by external devices such as steering wheel keys, dashboard controls, etc.

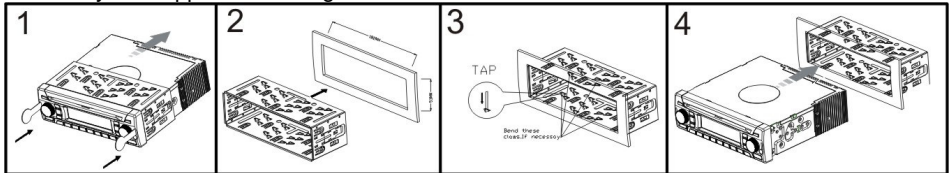
* DISK and USB sources cannot be used simultaneously in both areas.

* For future use together with ACTIA products.

2. INSTALLATION

2.1. PRECAUTIONS

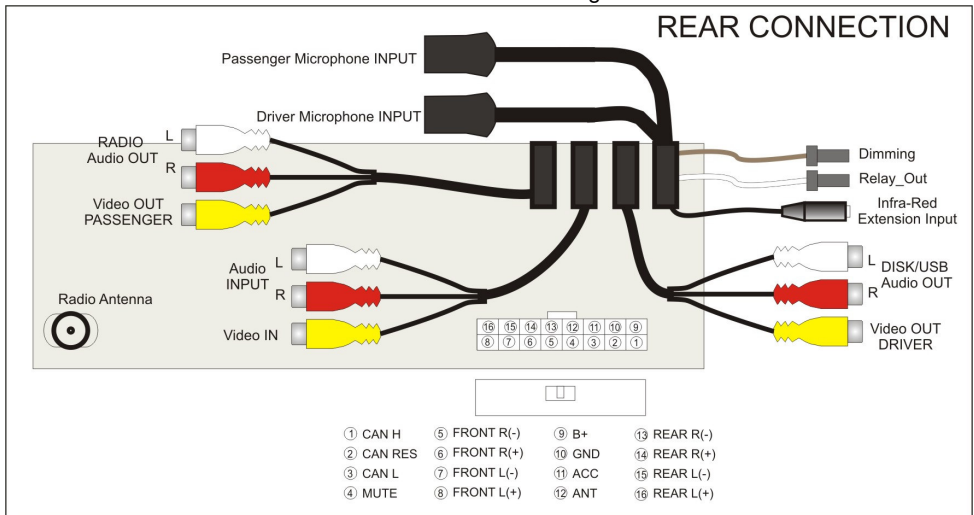
- Choose the mounting location carefully so that the unit will not interfere with the normal driving functions of the driver.
- Avoid installing the unit where it would be subject to high temperatures, such as from direct sunlight or hot air from the heater, or where it would be subject to dust, dirt or excessive vibration.
- Use only the supplied mounting hardware for a safe and secure installation.



NOTE: Keep the release key in the safe place as you may need it in future to remove the unit from the vehicle.

2.2. ELECTRICAL CONNECTIONS

- The rear electrical connections are detailed in the drawing below



NOTE: ACC (Red) must be connected by car ignition key in order to avoid that car battery becomes weak when the car will be not used for long period.

Maintenance

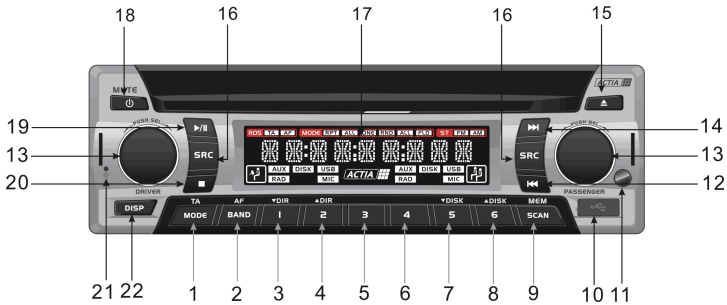
FUSE REPLACEMENT

If the fuse blows, check the power connection and replace the fuse. If the fuse blows again after the replacement, there may be an internal malfunction. In this case, consult your nearest repairing center.

Warning

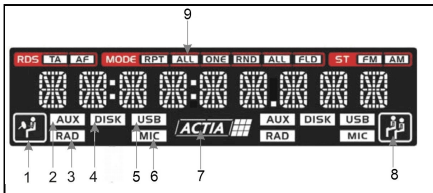
Use the specified amperage fuse for each lead. Use of a higher amperage fuse may cause serious damage.

Locations of Parts (Main unit)



- | | |
|-------------------------|---|
| 1 TA / MODE | Select the play MODE and Activate TA function for RDS |
| 2 AF / BAND | Select the frequency band and Activate AF for RDS |
| 3 1/▼DIR | Memorize a new station and Select lower directory |
| 4 2/▲DIR | Memorize a new station and Select upper directory |
| 5 3 | Memorize a new station and select the memorize station |
| 6 4 | Memorize a new station and select the memorize station |
| 7 5/▼DISK | Memorize a new station / Arrow Down during menu |
| 8 6/▲DISK | Memorize a new station / Arrow Up during menu |
| 9 SCAN / MEM | Scan & Auto-memorization for radio station and Preview music file |
| 10 USB PORT | Insert the USB pen drive |
| 11 Remote Sensor | Receive the infra-red signal from the remote controller |
| 12 ►► | Fast advance/Next track/file |
| 13 PUSH SEL | Adjust volume and setup audio (Passenger or Driver) |
| 14 ◀◀ | Fast rearward/Previous track/file |
| 15 0 | Eject/Reinsert the disk |
| 16 SRC | Select the audio source for the respective side (PSG or DRV) |
| 17 LCD Display | Display info about the current state of equipment |
| 18 POWER/MUTE | Turn the power on/off when held for 2s; Mute when pushed |
| 19 B | Play/pause the reproduction |
| 20 ■ | Stop the reproduction |
| 21 RESET | Reset the unit by hardware |
| 22 DISP | Change the info that displayed on LCD/Monitor |

Locations of Parts (LCD Display)



- | | |
|----------------------|--------------------------------------|
| 1 Driver ICON | Indicate DRIVER as selected area |
| 2 AUX ICON | Indicate the selection of AUX |
| 3 RAD ICON | Indicate the selection of RADIO |
| 4 DISK ICON | Indicate the selection of DISK |
| 5 USB ICON | Indicate the selection of USB |
| 6 MIC ICON | Indicate the selection of Microphone |

7 ACTIA LOGO Displays animation when

loading the disc

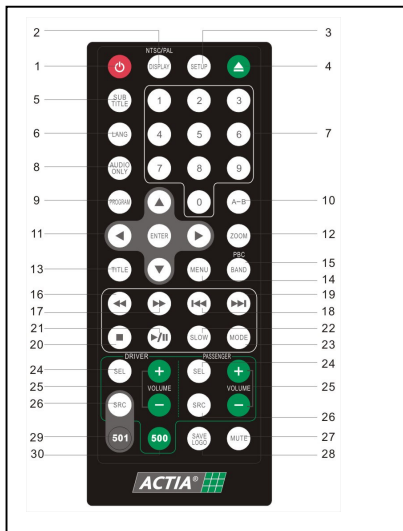
8 Passenger ICON

Indicate PASSENGER as selected area

9 MODE ICON

Indicate the playback selected MODE (repeat / random)

Locations of Parts (Remote Control)



1 POWER	Turn on/off the equipment
2 NTSC/PAL	Use to choose broadcasting methods
DISPLAY	Shows the information about title, chapter of the disc under play
3 SETUP	Access the configuration menu
4 0	Use to eject or insert disc
5 SUBTITLE	Use to choose subtitle
6 LANG	Use to choose audio language
7 0 to 9 keys	Use when making a selection on menu screen
8 AUDIO ONLY	Use this button to switch off the Video Outputs and only the Audio plays
9 PROGRAM	Use this button to choose the track you want to play
10 A-B	Repeats the selected segment
11 ◀▶▲▼& ENTER	Navigation keys
12 ZOOM	Zooms in/out the movie or picture
13 TITLE	Displays the titles on the disc under play

14 MENU	Shows the menu of the disc under play
15 BAND	Selects the radio band range (FM1, FM2, FM3, AM1, AM2) / Long push activates PCB
16 ◀◀	Fast Rearward key
17 ▶▶	Fast Forward key
18 ▶▶	Moves to the previous chapter or track
19 ◀◀	Moves to the next chapter or track
20 ■	Stop playback
21 B	Play or pause playback
22 SLOW	Forward Slow Motion through the disc (multiple pushes change the slow rate)
23 MODE	Use this button to choose playback mode
24 SEL	Selection of area / Setup for area's audio (BAL, BASS, TREBLE, etc)
25 VOLUME +/-	Adjust volume in the respective area
26 SRC	Choose the audio source (AUX,DISK,USB,RADIO, MIC) on respective area
27 MUTE	Silence the volume on both areas
28 SAVE LOGO	Save the dynamic images (from DVD media) as start-up screen
29 501	Product selection ACT501 (the remote control will only work on ACT501 player)
30 500	Product selection ACT500 (the remote control will only work on ACT500 player).

IMPORTANT

- The remote control is a dual-frequency type, which will only work with the selected product (ACT501 or ACT500) by using the keys "500" or "501".

2.3. REMOTE CONTROL

Installing the battery

Slide the tray out on the back of the remote control and insert the battery with the (+) and minus (-) poles pointing in the proper direction.

- When use for the first time, pull out the film protruding the tray.

CAUTIONS



- Remove the battery if the remote control is not used for a month or longer.
- Do not recharge, disassemble, heat or dispose the battery on fire.
- Do not store the battery with metallic materials.
- In the event of battery leakage, wipe the remote control completely clean and install a new battery
- When disposing of used batteries, please comply with government regulations or environmental public institution's rule that apply in your country/area.
- Always check carefully that you are loading the battery with plus (+) and minus (-) poles facing the proper directions.

Using the remote control



Point the remote control in the direction of the front panel to operate.

IMPORTANT

- Do not store the remote control in high temperatures or direct sunlight.
- Do not let the remote control fall onto the floor, where it may become jammed under the brake or accelerator pedal.

3. GENERAL OPERATIONS

Dual ZONE concept operation

- The equipment can operate simultaneously on two different areas, these are DRIVER (DRV) and PASSENGER (PSG)
- Each AREA has its own volume rotary button, source selection key (SCR) and respective icons. All the rest of the front panel keys is shared for the two areas.
- Once one area is selected, the respective icon  (DRV) or  (PSG) will light on and from then on all the operations on the other keys will only affect this area.
- To select permanently some area, the rotary volume button should be pushed.
- To change volume, audio settings or source of any area it is just necessary to access directly the corresponding keys. Once the parameters are set, the previous area will be re-selected automatically.

Turning the unit ON/OFF/Mute (A)

- Head Unit: Press A to turn on the unit. To turn off, long press this button again.
- Remote Control: Press A button to turn on the unit. To turn off, press this button again.

Mute Button

- Head Unit: Press the A button to mute the sound at once. Press again to return to previous volume level.
- Remote Control: Press MUTE button to mute the sound at once. Press again to return to previous volume level.

Selecting an area permanently

- By pushing the [VOL KEY_PSG] the PSG area is selected permanently
- By pushing the [VOL KEY_DRV] the DRV area is selected permanently

Adjust Volume and Sound Setup for each AREA

- Adjust Volume: By turning [VOL KEY_PSG] or [VOL KEY_DRV] the volume is adjusted on the respective area
- Sound Setup: by pushing sequentially the [VOL KEY] and turning it, the following parameters can be configured for the respective area:
 - [BALANCE] - varies from L10 to R10 (Left100% to Right100%)
 - [BASS] - varies from -10 to +10

- **[TREBLE]** - varies from -10 to +10
- **[LOUDNESS]** - switch ON of OFF
- **[EQUALIZER]** - ROCK / OPERA / POP / VOICE / FLAT

Adjust of Beep/ Radio Region/ Radio RDS

- By holding **[VOL KEY_PSG]** or **[VOL KEY_DRV]** for 5s, the special menu of configuration appears and the following items can be configured:

Beep

- BEEP ALL : Whenever a key is pushed or held in the front panel it will sound a short beep
- BEEP 2ND: Only when holding key function is activated it will sound a short beep
- BEEP OFF: No beep will be played.

Band region

The radio band range can be adjusted according to the current region ASIA/EUROPE/AMERICAS.

RDS ON/OFF

The RDS function can ENABLED/DISABLED. The respective icon **RDS** will indicate it.

Selecting a source (SRC)

- Press SRC in the respective area to switch between AUX, DISK, USB, RADIO and MIC sources.

Loading a Disc

Insert a disc into the disc loading slot

Ejecting a Disc (0)

Press the 0 button to eject disc

NTSC /PAL System

Press **NTSC /PAL** button to switch between PAL, NTSC, AUTO system.

Reset

Reset button is placed on the left of front panel.

The reset button is to be activated for the following reason:

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

3.1. AUXILIARY SOURCE (AUX)

Source selection

Push the SCR key until **AUX** icon is selected and the AUX input broadcast will be reproduced.

Audio By-pass function

1. When the product is switched off but power supply is still present (cable B+ still connected to battery) the A/V AUX inputs are switched to the A/V Output, allowing to watch and listen to the AUXILIARY source without necessity to change the electrical installation on the vehicle.
2. This functionality can be enable/disable by performing a long press on "**DISP**" key, when AUX source is selected, until it is displayed the message "AVBP ON" or "AVBP OFF" on LCD, then press "▼DIR" or "▲DIR" to select the function.

3.2. DISK SOURCE (DISK) / USB SOURCE (USB)

Source selection

Push the SCR key until **DISK** icon is selected, in order to play the content of CD or DVD.

Plug the USB stick in the designated port and push SRC key until **USB** icon is selected in order

to play the content of the USB pendrive.

Note:

- *it may occur some small delay to skip from DISK to USB sources, this is a normal behaviour due to the required loading process.)*

Display (DISP)

When this key is pushed, it is showed different information according to the display mode as follow.

CD PLAYER MODE

TIME OF TRACK –TIME TO FINISH TRACK

MP3 PLAYER MODE

TIME OF FILE –TIME TO FINISH FILE

DVD PLAYER MODE

CHAPTER AND TIME –TIME TO FINISH CHAPTER—TIME TO FINISH TITLE

- The information regarding the time of the movie or file has the following format:

HH:MM:SS.TCC or **HH:MM:SS.FFF** Ex: 01:22:03.102

H=hours ; M=minutes ; S=seconds ; TCC= Title and chapter number ; FFF= file number

- For MP3 files and folders the information displayed can be:

FFF/TTT Ex: 011/020 ;

FFF = folder number TTT= track number

3.2.1. LISTENING TO CD/MP3

Basic operation of CD/MP3

1. To perform fast rearward or forward, press and hold **◀◀** or **▶▶** on the head unit or press **◀◀** or **▶▶** on remote control. To resume normal playback at a desired point, just release holding **◀◀** or **▶▶** on the head unit or press **B** on remote control.
2. To skip back or forward to another track, press **◀◀** or **▶▶**.
3. To pause playback, press **B** on head unit, press **B** button again to resume or press **B** to pause on remote control. Press it again to resume.
4. To stop playback, press **■**.

Note:

- *When MP3 disc is inserted, all track file names will be displayed on the monitor screen with their corresponding track number.*
- *You can use the **ARROW** and **ENTER** keypads on the remote control to access the file. To play selected file, simply press **ENTER**.*

Searching for particular track

During playback, you can simply press the corresponding track number using the number pad on the remote control.

Note:

- *To select 3, press 0, 3.*
- *To select 13, press 1, 3.*
- *To select 23, press 2, 3.*

Play Mode

1. Press **MODE** on the head unit or remote control during playback.

2. Every time you press this button, the unit switches to the following settings:

- **MODE** **RPT** **ONE** - Repeat the current track.
- **MODE** **RPT** **ALL** - Repeat all the tracks in the current disk/pen drive
- **MODE** **RND** **FLD** - Play randomly the files inside the current folder
- **MODE** **RND** **ALL** - Play randomly the files inside the current disk/pendrive
- **MODE** - No mode selected.

Program Playback

You can set which tracks to play according to your desired sequence using the program function.

1. Press **PROGRAM** button on the remote control.
2. Enter the track number besides the memory location. Up to 16 tracks can be stored.
3. When all tracks have been programmed, select **PLAY** and press **ENTER**. Program playback will start.
4. Press **■** button to exit program playback.

3.2.2. PLAYING USB MUSIC/MOVIES

This unit supports playback of music or MPEG4 movies files stored in a USB memory stick. The operations described on item 3.2.1 apply for the USB content also.

3.2.3. PLAYING DVD VIDEO

Basic operation of DVD Video

1. Insert a DVD disc. Press the **SRC** button to choose the DISK mode then unit automatically loads the disc. When the DVD offers a menu, the menu is displayed.
2. Use the remote control navigation buttons to choose desired features displayed on the menu. Press **ENTER** to select.
3. To perform fast rearward or forward, press and hold **◀◀** or **▶▶**. Once in faster mode each time the keys **◀◀** or **▶▶** are pressed and held the speed is increased. To resume normal playback at a desired point, B key.
4. To skip back or forward to another chapter, press **◀◀** or **▶▶**.
5. To pause playback, press **II** on head unit, press **▶** button again to resume or press B to pause on remote control. Press it again to resume.
6. To stop playback, press **■**. When you stop DVD playback, that location on the disc is memorized enabling playback from that point when you play the disc again. To resume playback, press B key.

Specifying Title/Chapter

Press NUMBER corresponding to a desired title/chapter number during playback. The number is displayed and playback starts from the selected title.

- To select 3, press 0, 3.
- To select 13, press 1, 3.
- To select 23, press 2, 3.

Changing audio language during playback (Multi-audio)

DVDs can provide audio playback with different languages and different systems. With DVDs featuring multi-audio recordings, you can switch between languages/audio systems during playback.

To choose different audio, simply press **LANG** on remote control or [**▼DISK**] on the head unit.

Note:

- With some DVDs, switching between languages/audio systems may only be possible using a menu display.
- You can also switch between languages/audio systems using **SETUP MENU**.

Changing the subtitle language during playback (Multi-subtitle)

With DVDs featuring multi-subtitle recordings, you can switch between subtitle languages during playback.

Press **SUB TITLE** on the remote control or [**▲DISK**] on the head unit during playback. Press repeatedly until the supported desired subtitle appears.

Note:

- With some DVDs, switching between subtitles may only be possible using a menu display.
- You can also switch between subtitles using **SETUP MENU**.

Slow motion playback

This feature lets you slow down playback.

1. Press **Slow** on the remote control during playback or press B PAUSE on the head unit, then long press **▶▶** to enter in slow selection mode.
2. Pressing it repeatedly will switch you to the following steps: 1/2 - 1/3 - 1/4 - 1/5 - 1/6 - 1/7.

Note:

- To resume normal playback, press B key.
- There is no sound during slow motion playback.
- With some disc, slow motion may be unclear during slow motion playback.

Step playback mode

This feature lets you show step by step to playback.

1. Press B and then press **▶▶** to step by step to playback.
2. To resume normal playback, press B key.

Fast rearward/ forward

1. Press and hold **◀◀** (rearward) or **▶▶** (forward) button
2. Short press **◀◀** or **▶▶** button and the speed of the search will increase by x2, x4, x8, and x20.
3. To resume normal playback at desired point, press B key.

Play Mode

1. Press **MODE** on the head unit or remote control during playback.
2. Every time you press this button, the unit switches to the following settings:
 - **MODE** **RPT** **ONE** - Repeat the current chapter.
 - **MODE** **RPT** **ALL** - Repeat the title in the current disk
 - **MODE** **RND** **ALL** - Play randomly the chapters inside the current disk
 - **MODE** **[]** - No mode selected.

Zooming during playback

You can zoom into the picture during playback.

1. Press **ZOOM** on the remote control during playback.
2. Every time you press this button, the unit will zoom **2, 3, 4, 1/2, 1/3, 1/4** times and **OFF**.

Go back to Main Menu

You can go back to Main Menu of the DVD anytime during playback.

Press **TITLE** on the remote control during playback

Displaying information

During playback, you can see all DVD disc information and current play settings. Display will show related playback time, elapse time, title number, chapter number, angle, audio settings, and subtitle.

1. Press **DISP** on head unit or **DISPLAY** on the remote control once. Unit will display the play time and the disc elapse time.
2. Press it twice and other settings information will be displayed.

3.2.4. PLAYING VCD/SVCD

Basic operation of Video CD

Refer to "PLAYING DVD VIDEO" chapter.

Turning PBC ON/OFF

PBC (Playback Control) is a feature found on VCD 2.0 and SVCD 1.0. PBC allows control of the playback of play items and the possibility of interaction with the user through the remote control or

some other input device available. If PCB is ON, the player won't auto start after inserting the disc because it will take time to select program on disc; if PCB is OFF, the player will auto play the program on disc one by one.

- To turn ON PBC function, press **MENU** key on the remote control. To turn OFF, press the button again.

Note: *Not all VCD/SVCD disc have PBC functions.*

Specifying Track

Press NUMBER corresponding to a desired track number during playback. The number is displayed and playback starts from the selected track.

1. Make sure to turn off PBC feature first.
2. Using the number pad on the remote control, enter the desired track number.

Note:

- To select 3, press 0, 3.
- To select 13, press 1, 3.
- To select 23, press 2, 3.

Changing audio language during playback

VCDs can provide audio playback with different languages. It is usually separated into 2 channels (left and right). With VCDs featuring multi-audio recordings, you can switch between languages/audio systems during playback.

- To choose different audio, simply press **LANG** on remote control repeatedly.

Slow motion playback / Step playback mode / Fast rearward-forward / Zooming

Refer to "PLAYING DVD VIDEO" chapter.

Selecting Play Mode / Program Playback

Refer to CD/MP3 chapter.

3.3. RADIO SOURCE (RAD)

Source selection

Push the SCR key until **RAD** icon is selected

BAND sel

Select the desired BAND RANGE by pressing [BAND/AF] key. Indications [FM1> FM2> FM3> AM1> AM2] are successively displayed on the screen.

Selecting and Memorizing a RADIO station

Manual Memorization

- By pushing **◀** or **▶** the device change the frequency step by step (STEP process); If any of the keys **◀** or **▶** is HOLD more then 1,5s, the frequency jumps automatically to next detected station (SEEK process)
- In the Remote Control
 - **◀** and **▶** → will do STEP DOWN and STEP UP respectively
 - **◀** and **▶** → will do SEEK DOWN and SEEK UP respectively
- The station is memorized by HOLDING [1] to [6] numeric keys more then 3s

Automatic Memorization

- By holding [SCAN/MEN] key for more then 3s the radio starts the process of AUTO MEMORIZATION. Be careful since this will erase all the current stored stations and record in the channels 1 to 6 the most powerful signals detected.

Scanning radio stations

- By pressing [SCAN/MEM] a sweep of the frequency starts and then each radio station detected is played for 8s

- The sweep can be performed decreasing or increasing the frequencies, depending on the last manual search performed
- If no button is pressed the frequency sweep continuous
- If [SCAN/MEM] key is pressed again the current frequency is selected
- If RDS is ON, only RDS stations can be detected during the SCAN or SEEK process

Select a memorized RADIO station

- Selection of the memorized station is performed by pushing [1] to [6] keys

Clock

- By pushing [DISP] key the information [CLOCK] or [RADIO FREQ] are displayed .
- Clock can only be adjusted by holding [DISP] key more than 3s, the message [RDS CLOCK ON/OFF] appears:
 - if ON, the RDS system will automatically store the time information.
 - if OFF, each field (HH, MM, SS) will blink each time [DISP] key is pushed. The adjusted is performed by turning the VOL key.

RDS TA Mode

- Traffic Announcement system: this function will search for a station which is transmitting TA messages. While this station is not found, the radio will still keeps searching.
- To enable/disable the TA function push [MODE/TA] key till you see the icon turns on/off on the LCD.

RDS AF Mode

- Alternative Frequency: this function will search for a radio station alternative frequency when the current frequency can no longer be tuned. If no alternative frequency is found, the radio will stop searching after a while.
- To enable/disable the TA function hold [BAND/AF] key for 3s till you see the icon turns on/off on the LCD.

3.4. MICROPHONE SOURCE (MIC)

Source selection

The **MIC** audio source is automatically selected for both PASSENGER and DRIVER when the ACTIA MICROPHONE pin is switched on. When the pin is switched off, the equipment comes back to the previous selected source.

Auto Pause/Play

If in the moment of the MIC selection there was a song or movie being played, this playback will be temporally paused and will return to previous status when the MIC is switched off.

Auto Power on equipment

If equipment is on stand-by and microphone pin is switched on, the equipment powers on automatically and select directly the MIC audio source for both areas. If no other action is performed and the mic pin is switched off, the equipment comes back to stand-by status.

Volume Adjust

The microphone volume is independent from the General volume of the remaining sources and also individual for DRV and PSG areas. So that once you configure the adequate level you don't need to be disturbed to adjust it again for each time you use the microphone.

Mic DRIVER and GUIDE Priority

Only one microphone can be used at time, having priority the DRIVER MIC over the GUIDE MIC.

4. OSD SETUP MENU

Important

1. Load no disc into the unit before you can access the settings.
2. Press **SETUP** on the remote control.
3. Use the **ARROW** key and press **ENTER** to setup the DVD player.

Note: Depending on the type of disc inserted, some features may not be available.

ITEM	SUB-MENU	OPTION	Default
GENERAL SETUP PAGE	AUTO PLAY	ON/OFF	ON
	ANGLE MARK	ON/OFF	ON
	OSD LANG	ENGLISH/ FRENCH/ GERMAN SPANISH/ ITALIAN/ PORTUGUESE/ THAI/ RUSSIAN	ENGLISH
	CAPTIONS	ON/OFF	OFF
	SCREEN SAVER	ON/OFF	ON
	LOGO TYPE	DEFAULT / CAPTURED	DEF
VIDEO SETUP PAGE	BRIGHTNESS	-20 to 20	0
	CONTRAST	-20 to 20	0
	SATURATION	-20 to 20	0
	HUE	-20 to 20	0
SPEAKER SETUP PAGE	DOWNMIX	LT / RT / STEREO	STEREO
	DUAL MONO	STEREO / MONO L / MONO R/ MIX MONO	MIX MONO
	DYNAMIC RANGE		OFF
PREFERENCE PAGE	TV DISPLAY	NORMAL/PS , NORMAL/LB , WIDE	WIDE
	TV TYPE	NTSC /PAL / MULTI	NTSC
	AUDIO	ENGLISH/ FRENCH/ GERMAN SPANISH/ ITALIAN PORTUGUESE/ THAI/ RUSSIAN	ENGLISH
	SUBTITLE	ENGLISH/ FRENCH/ GERMAN SPANISH/ITALIAN PORTUGUESE/THAI/RUSSIAN	ENGLISH
	DISC MENU	ENGLISH/ FRENCH/ GERMAN SPANISH / ITALIAN PORTUGUESE/ THAI/ RUSSIAN	ENGLISH
	PARENTAL	1 KID SAFE/2 G/3 PG/4 PG13/ 5 PG-R/ 6 R/7 NC-17/8 ADULT	8 ADULT
	PASSWORD	CHANGE(default "0000")	
	DEFAULT	RESET	

Parental Rating

This function limits the genre of movies that the equipment can play.

- 8-ADULT rating - allows all the genres to be played
- 1- KID SAFE rating - allows only infantile movies to be played

To change the Parental Rating it is necessary to input the current password.

The default password is "0000", it is possible to change it at anytime as long as the current password is inputted first.

Note:

- To reset password, enter the old password to unlock first and then enter new password.

AUTO PLAY function

Allows the automatic playback of DVD movies without waiting for the set up on the DVD menu. The configuration of SUBTITLE and AUDIO LANGUAGE stored on the SETUP MENU shall also be automatically activated during the playback of some movies*.

(*wrong behavior may occur for different DVD movies since their subtitle and audio content may differ from the standard).

Save LOGO

This function enables the customer to save its own LOGO as the start-up screen. The new logo can only be saved with images from DVD source. To save a logo during DVD reproduction it is necessary to push the "SAVE LOGO" key on remote control and configure the SETUP menu with Logo Type = "CAPTURED".

New logos can be saved over the previous one or the original ACTIA logo can be restored by selecting Logo Type = "DEFAULT" on SETUP menu.

AUDIO-ONLY function

This function disables the video output allowing only the audio to be listened. This function can be set by pushing "AUDIO ONLY" key on remote control.

CAN2.0B interface

The product is equipped with CAN2.0B interface which allows it to be connected and commanded by external devices such as steering wheel keys, dashboard controls, etc. Those are products under development by Actia Group. Consult Actia technical assistance for further information.

Double function front panel keys (NAVIGATION/SUBTITLE/AUDIO LANGUAGE)

Some special functions can be accessed directly by the front panel depending on the context, in order to make easier the navigation thru DVD Menu and the configuration of language and subtitle. Those keys are described below:

Status	Double function keys
During the time the DVD Disk is on the DVD MENU	<ul style="list-style-type: none"> [◀] key → changes to ARROW LEFT (◀, the same as remote control) [▶] key → changes to ARROW RIGHT (▶, the same as remote control) [▲DISK] key → changes to ARROW UP (▲, the same as remote control) [▼DISK] key → changes to ARROW DOWN (▼, the same as remote control) [B]key → changes to ENTER (the same as remote control)
During the DVD playback	<ul style="list-style-type: none"> [▲DISK] key → changes the subtitle [▼DISK] key → changes the audio language
During the MP3 menu	<ul style="list-style-type: none"> [B]key → changes to ENTER (the same as remote control) [▲DISK] key → changes to ARROW UP (▲, the same as remote control) [▼DISK] key → changes to ARROW DOWN (▼, the same as remote control)

5. TECHNICAL SPECIFICATIONS

VIDEO PERFORMANCE:

- Composite video Output: $1V_{pp} / Z_{out}=75\Omega$
- Horizontal Resolution:..... 480 lines (NTSC)/ 576 lines (PAL)
- Video Signal to Noise Ratio: $\geq 60dB$
- Aux Video Input: from $0.8V_{pp}$ to $1.2V_{pp} / Z_{in}=75\Omega$

POWER SUPPLY:

- Operating Voltage Range: 11Vdc to 30Vdc
- Maximum Current Consumption: $\leq 10A @28Vdc / \leq 8A @12Vdc$
- Stand-by Current Consumption:..... $\leq 15mA$ (ACC pin not connected)

MUTE PIN:

- Nominal Activation Level..... 0Vdc (*when active only DRV area is muted)
- Maximum Withstanding Voltage..... the same value as power supply
- Consumption..... $\leq 1mA$

RELAY OUT

- Open Collector Transistor Activated when Any of the VIDEO Outputs has video signal
* The output is kept active during equipment
STAND_BY in case "Audio By-Pass function"
(page 8) is enabled.
- Open Collector Transistor Disabled when RADIO is selected in both zones
- Maximum withdraw current $200mA_{dc}$

DIMMING:

- Nominal Activation Voltage 14Vdc or $28Vdc > 5V_{dc}$
- Maximum Withstanding Voltage..... the same value as power supply
- Consumption..... $\leq 5mA$

AUDIO PERFORMANCE:

AUX AUDIO LINE INPUT (stereo)

- Input Level: $\leq 3V_{pp} / Z_{in}=27k\Omega$
- Frequency Response:..... 20Hz to 20KHz $\pm 3dB$

DISK/USB LINE OUTPUT (stereo)

- Output Level: DVD 2Vrms into 10K Ω Load
CD 0.7Vrms into 10K Ω Load
- Output impedance: 600 Ω
- THD+ Noise:..... $\leq 0.5\%$

- Signal to Noise Ratio (A-weighted): $\geq 80\text{dB}$
- Frequency Response:..... $20\text{Hz to } 20\text{KHz } \pm 3\text{dB}$
- Channel Output Difference: 3dB Max

RADIO LINE OUTPUT (stereo)

- Output Level: $0.5\text{Vrms into } 10\text{K}\Omega \text{ Load}$
- Output impedance: 600Ω
- THD+ Noise:..... $\leq 0.5\%$
- Signal to Noise Ratio (A-weighted): $\geq 80\text{dB}$
- Frequency Response:..... $50\text{Hz to } 3.5\text{KHz } \pm 3\text{dB}$

POWER AUDIO OUTPUT (4ch – rear L&R/ front L&R)

- Nominal Load (speaker)..... $4\Omega (\geq 4\Omega \text{ allowed})$
- Recommended Operating Power output $\leq 4 \times 15\text{W RMS THD}1\% @4\Omega \ \& \ 28\text{V}$
- Max Power output..... $4 \times 20\text{W RMS THD}10\% @4\Omega \ \& \ 28\text{V}$
 $4 \times 10\text{W RMS THD}10\% @4\Omega \ \& \ 14\text{V}$
- R-L Channel separation (crosstalk)..... $\geq 60\text{dB}$
- Tone controls:
 - o Bass: freq 100Hz Gain $\pm 10\text{dB}$
 - o Treble: freq 10kHz Gain $\pm 10\text{dB}$
 - o Loudness: Gain $\pm 7\text{dB}$

RADIO PERFORMANCE:

- Regions: **ASIA/EUROPE**
 FM range $87.50\text{MHz to } 108.00\text{MHz} / \text{step } 0.05\text{MHz}$
 AM range $522 \text{ KHz to } 1620\text{KHz} \quad / \text{step } 9\text{KHz}$
- AMERICAS**
 FM range $87.50\text{MHz to } 108.00\text{MHz} \quad / \text{step } 0.10\text{MHz}$
 AM range $520 \text{ KHz to } 1710\text{KHz} \quad / \text{step } 10\text{KHz}$

FM TUNER

- Signal to Noise Ratio (IEC-A network): 55dB
- Usable Sensitivity: $13\text{dB}\mu\text{V} (4.4\mu\text{V}/75\Omega \text{ mono, S/N: } 30\text{dB})$

AM TUNER

- Signal to Noise Ratio (IEC-A network): 53dB
- Usable Sensitivity: $29\text{dB}\mu\text{V} (S/N: } 20\text{dB})$

ANTENNA VOLTAGE OUTPUT

- The equipment has a voltage output to connect to amplified radio antennas
- Output voltage: $13\text{V}\pm 0.5\text{V}$
- Power supply capability: $\leq 300\text{mA}$

MICROPHONE:

- Two microphone inputs, DRIVER and GUIDE.
- *Only one can be used at time, they cannot work simultaneously.

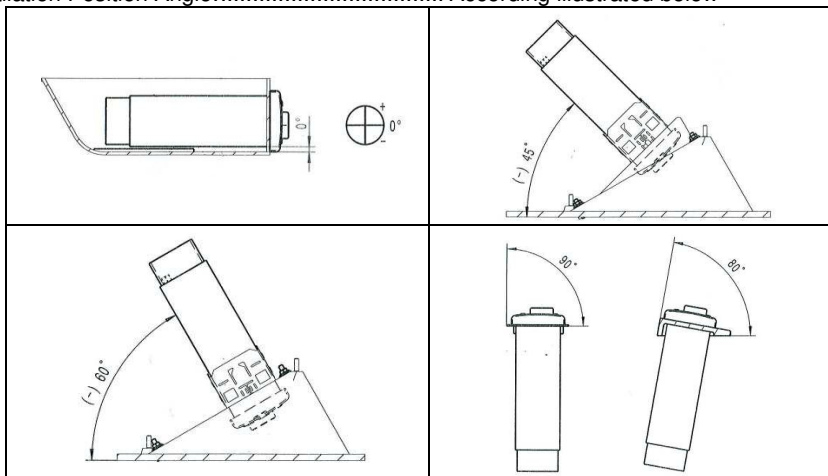
- Nominal Voltage Input..... 5.5mV
 - Input impedance 2k Ω
 - Bandwidth..... 350KHz to ~12KHz \pm 3dB
- *the actual bandwidth depends on the microphone

ENVIRONMENTAL:

- Operating Temperature Range: -20°C to +70°C
- Vibration in accordance with IEC 68-2-6 test Fc

MECHANICAL:

- External dimensions (W x H x D): 178mm x 55mm x160 mm (ISO/DIN)
- Weight (only ACT500)..... ~1.8Kg
- Installation Position Angle:..... According illustrated below



Installation angles allowed

DVD/CD PLAYER:

- Compact Disks..... CD-R/CD-RW
- DVD Disks DVD (-R/ +R/ -RW/ +RW / +R DL)

USB PORT:

- Memory read capacity..... there is no limit for the memory of the device, the limit is the quantity of files and folders stored.
- Number of files (read capacity) Max. 3000 files
- Number of folders (read capacity)..... Max. 254 folders
- Format FAT32
- Power supply maximum capacity 5V/400mA
- Portable HD drives compatibility In case this kind of device is used, an external power supply should be adopted.

TYPES OF MEDIA:

The product should be able to play the following list of formats:

	File type	File extension	Supported edition / Details
VIDEO	MPEG1(VCD)	.DAT	VCD1.0, VCD1.1, VCD2.0, SVCD
	MPEG2 (DVD)	.DAT,.VOB	
	MPEG4	.AVI .MP4 .DIV .DIVX	Divx3.11, Divx4.12, Divx5.0, 5.02, 5.03, 5.04, 5.05, 5.1, 5.11, 5.2, 5.21, DivxPRO Xvid1.00, 1.01, 1.02, 1.03, 1.10-beta1, 1.10-beta2 Subtitles: .srt, .sml, .ssa, .sub
CONTAINER	AVI	.AVI (DIVX, XVID, etc.)	AVI v1.x
	ASF	.ASF,.WMA,.OGG	ASF v1.x *Plays only audio part
	Quick Time	.MP4 .M4A	Should have "Full support" on: 1.Nero Recoder recorded mp4bitstreams. (Nero Digital->ver1.5~1.6) 2.iTune converted AAC Audio bitstreams. Should have "Possible support" on: 3.QuickTime.ISO 14496-1 mpeg4 file format.
AUDIO	CD		CD-DA,HDCCD,CD-G,
	AAC	.M4A	
	MP3	.MP3	
	WMA	.WMA	WMA7,WMA8,WMA9* (*some exceptions)
IMAGE	JPEG Image	.JPEG	

Note: Specification and the design are subject to possible modification without notice.