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**WEEE** (Waste Electrical and Electronic Equipment Directive)

If at any time in the future you should need to dispose of this product please note that: Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your Local Authority or retailer for recycling advice.

## **Disposing of the battery / batteries**

Please check local regulations for disposal of batteries or call your local city office or your household waste disposal service or the shop where you purchased the product.

The battery / batteries should never be placed in municipal waste. Use a battery disposal facility in your neighborhood or community, if available.

## Dear Customer,

We thank you for purchasing the GM-7300Navi. We wish you many pleasant hours of listening to your favorite music and watching your favorite movies. Personal Safety has been taken in consideration in the design and manufacturing this product; however any improper use or operation may result in an electrical shock, fire and/or any other hazards. To prevent these hazards it is strongly recommended to read this manual thoroughly and adhere to the following precautions and safety instructions:

## **IMPORTANT PRECAUTIONS**

## SAFETY PRECAUTIONS

- Please read all of these instructions regarding your unit and retain them for future reference and keep this manual handy as a reference for operating procedures and safety information.
- Pay close attention to all warnings in this manual and follow the instructions carefully.
- Do not allow other persons to use this system until they have read and understood the operating instructions
- Do not install the display where it may (i) obstruct the driver's vision, (ii) impair the performance of any of the vehicle's operating systems or safety features, including air bags, hazard lamp buttons or (iii) impair the driver's ability to safely operate the vehicle.
- Do not operate this display if doing so in any way will divert your attention from the safe operation of your vehicle. Always observe safe driving rules and follow all existing traffic regulations. If you experience difficulty in operating the unit or reading the display, park your vehicle in a safe location and make necessary adjustments.
- To prevent an electrical shock, do not attempt to install or service this unit or display by yourself. Installation or servicing of the unit or display by persons without training and experience in electronic equipment and automotive accessories may be dangerous and could expose you to the risk of electric shock or other hazards.
- Do not expose to any rain and moisture or spill any liquid onto or in the unit and do not operate the product when your hands are wet, in a humid environment, near places of water to prevent any electrical shock or shortage.
- Never operate the product if it is moved from a cold environment to a warm one and vice versa. Moisture may form inside of the unit and as a result it may not operate properly. In this case, turn on the power, take out the disc and wait at least 60-90 minutes for the moisture to evaporate.
- This device is a CLASS 1 Laser product and uses a visible laser beam which could cause hazardous radiation exposure, be sure to operate the player correctly as instructed. To prevent hazardous exposure to the laser beam, do not place your eyes close to the openings to look into the inside of this player.
- Never put any foreign objects in the disc loader of the player and never put any foreign objects into any other openings of the unit, to prevent any damage or electrical shock.
- In any case of malfunctioning, only have the product serviced by an approved and qualified service centre. Do not open the housing yourself.
- Do not clean with alcohol; clean the unit with a soft and dry cloth and only when the unit is disconnected from the power source.
- For safe driving, keep the volume low or moderate in order to concentrate on traffic and road conditions. Never set the volume so high that you cannot hear outside traffic and emergency vehicles
- Never use headphones while driving.

## GM-7300Navi

- **Warning!** To promote safety, certain functions are disabled unless the parking brake is on. The Unit is designed to detect parked status and must be connected to the power supply side of the parking brake switch. Improper connection or use of his connection may violate applicable law and may result in serious injury or damage. To avoid the risk of damage and injury and the potential violation of applicable laws, this unit is not for use with a video screen that is visible to the driver.
- To avoid the risk of accident and the potential violation of applicable laws, the front Video image feature should never be used while the vehicle is being driven. Also, other video displays should not be in a location where it is a visible distraction to the driver. In some countries or states the viewing of images on a display inside a vehicle even by persons other than the driver may be illegal. Where such regulations apply, they must be obeyed and this unit's DVD features should not be used.
- Please remember to wear your seat belt at all times while operating your vehicle. If you are ever in an accident, your injuries can be considerably more severe if your seat belt is not properly buckled.
- The supplier waves any and all liability when these warnings are not followed.

## **OPERATION PRECAUTIONS**

- Only connect to a 12Vdc battery and negative grounding.
- Avoid parking the car or placing the product in direct sunlight, in areas with high levels of dust, high temperatures (over 40°C) or high humidity (over 90%). In case of high temperatures, cool down the car interior by means of ventilation or airconditioning.
- Do not replace the fuse on the power cable without professional guidance. Using an improper fuse may cause damage to the unit or even cause fire.
- Do not turn on or off the product in short intervals. When turning the unit off, wait for at least 10 seconds prior to turning the unit on again.
- Do not operate the player with scratched, bended or broken discs and when a disc is not loaded properly, do not force it into the player.
- The IR remote control operation may be hindered when the monitor is in its open position. In this case, use the remote control at the similar level as the IR remote receiver on the front of the unit.

## <u>NOTE</u>

- All On Screen Displays (OSD) and Pictures will be based on the English version.
- Design and Specifications may vary in the manual from the actual product in use.

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## **PREPARATION BEFORE USING THE GM-7300Navi**

## Unpacking and checking the contents

Please check if the following items and accessories are included in the received package:







1x UNIT IR-Remote Control and 1x Dual Zone IR-Remote control. Both with one CR2025 3Volt cell battery. GM-7300Navi (open and closed)

1x Mounting Bracket 1x Assemble Bar 1x Screw B15x16 4x Bolt M5 1x Nut M5 1x Flat washer 1x Spring washer

2x Unit ejection ba





1x ISO cable. (may vary from the picture above)

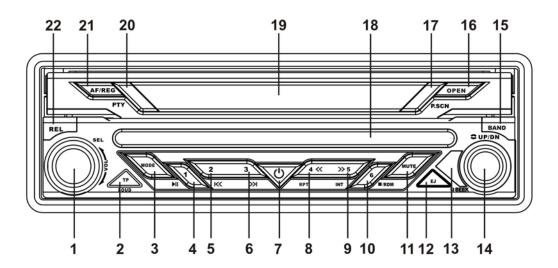
1x front panel protection sleeve

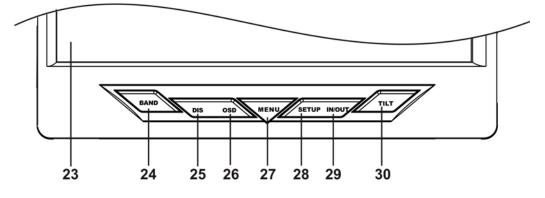


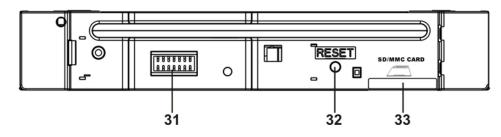
This User Manual.

## **CONTROL REFERENCE GUIDE**

## The GM-7300Navi control button description





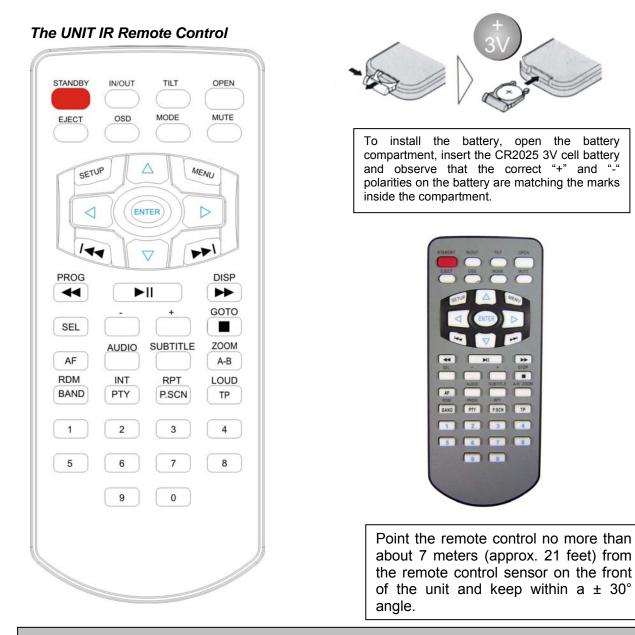


- 1. Volume/Push Select /Second Menu
- 2. TP / Loudness
- 3. Mode
- 4. Preset 1 / Play-Pause
- 5. Preset 2 / Step Forward
- 6. Preset 3 / Step Backward
- 7. Power Button
- 8. Preset 4 / Stop / Repeat
- 9. Preset 5 / Fast Backward / Intro
- 10. Preset 6 / Fast Forward / Random
- 11. Mute
- 12. Eject
- 13. IR Remote Sensor Open
- 14. Joystick
- Up/Down/Seek Up/Down/Enter
- 15. Band (AM/FM)
- 16. Open / Close LCD

- 17. Preset Scan
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- 19. Information LCD Display
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- 22. Release button
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- 25. Dis (Display)
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- 27. Menu
- 28. Setup
- 29. In/Out
- 30. Tilt Level Adjustment
- 31. Contacts
- 32. Reset
- 33. SD/MMC card slot

## GM-7300Navi

## ENGLISH



#### Note:

- The distance may vary according to the brightness of ambient light.
- If the remote is not used for an extended period of time, remove the battery to prevent possible damage from battery leakage and corrosion.
- Do not place any objects between the remote control unit and the sensor on the unit.
- Do not drop the remote control onto the floor; it will damage it beyond repair.
- Do not use the remote control unit, while simultaneously operating the remote control unit of any other equipment; they may interfere resulting in improper operation.
- The battery normally last for about one year although depending how often the remote control is used. If the remote control unit isn't working even when it is operated near the unit, replace the battery with a new battery of the same make and use only a lithium cell battery type: CR2025 (3V).
- Dispose empty batteries in accordance with your local governmental regulations.
- Do not short-circuit, disassemble, heat or dispose of into fire or flames the battery.
- Keep the battery out of reach of children, should the battery be swallowed, immediately consult a doctor.

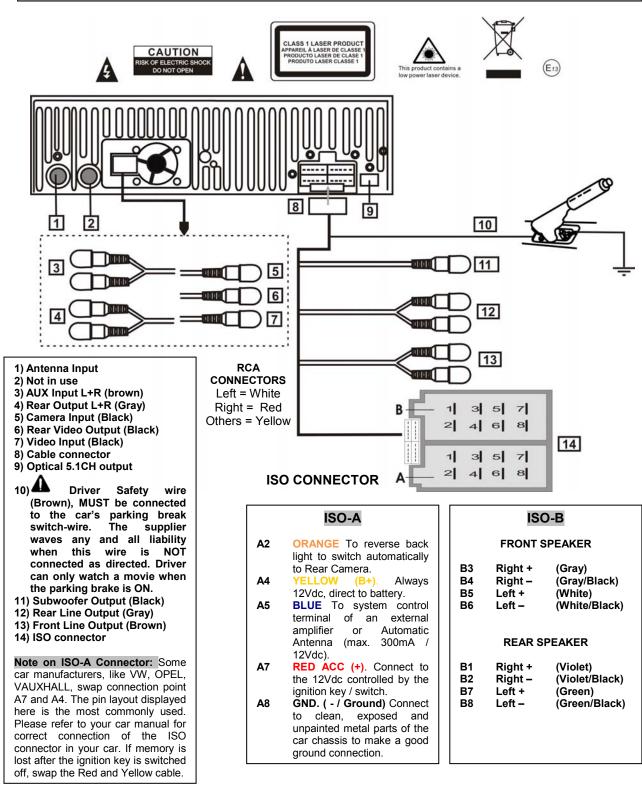
## GM-7300Navi

## **ENGLISH**

## WIREDIAGRAM OF THE GM-7300Navi

The GM-7300Navi comes complete with an ISO connector and installation brackets and is easily fitted into your car. Here under you will find the diagram of the ISO connection, which is used in the majority of the cars. If your vehicle is not fitted with an ISO connection, you can optionally use the separate wires and connect the wires according the description of the ISO connector.

**Note:** Never connect cables to the system while it is connected to the battery power. Whenever the unit is disconnected from the battery, the preset memory will be erased and the unit will go back to its factory defaults.



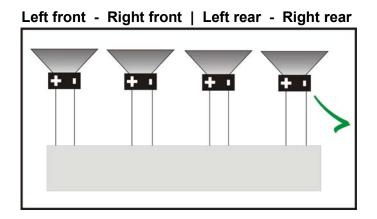
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#### Note:

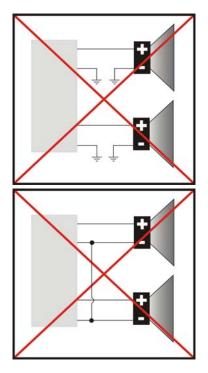
- Only use groundless loudspeakers.
- Use only loudspeakers of minimal 40Watt, using fewer watts may result in damaging your loudspeakers at higher volumes.
- Use  $4\sim 8 \Omega$  (Ohm impedance) loudspeakers only; using higher or lesser impedance may damage the unit.
- Do not use 3-cable loudspeakers and do not connect the loudspeakers minus to the car body (GND). The GM-7300Navi is using a BTL circuit and each loudspeaker must be connected with insulated cables according the diagram.
- Loudspeaker cables and/or optional external power amplifiers must always be about 30cm away from the antenna and/or antenna extension parts.

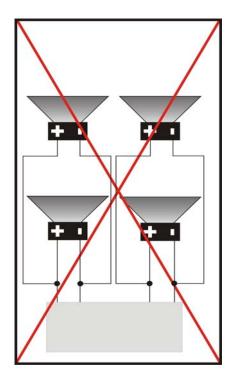
Connect the speakers according the following diagram, incorrect connections will damage the unit or your loudspeakers

#### **Correct connection**



#### Incorrect connections

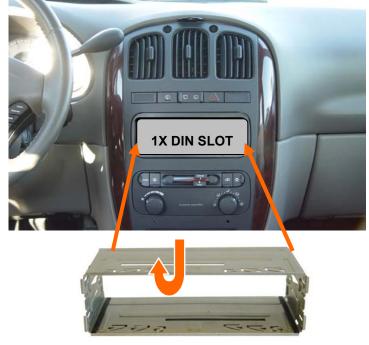




## **INSTALLATION IN DASHBOARD**

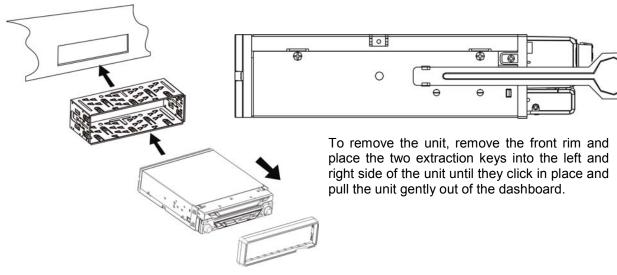
If your car is fitted with a one (1x) DIN size opening for a car audio system, you can install the GM-7300Navi according these steps.

Note: Unit should be installed horizontally in an angle less than 30°.



- 1) Insert the mounting bracket into the 1X DIN opening of your dashboard
- 2) Bend the mounting tabs outwards with a screwdriver, to tighten and fix the mounting bracket in its place
- 3) Connect the M5 Bolt to the rear of the unit
- Check electrical connections as described earlier (either an ISO connection or separate wiring)
- 5) Insert the ISO connector into the unit
- 6) Push the unit into the mounting bracket until you hear a click
- 7) Move the assemble bar (metal strip with holes) over the M5 bolt and use the M5 nut to tighten the assemble bar.
- 8) Use the screw Bt5x16 to fix the other side of the assemble bar to the car body
- 9) Place the front rim over the unit to finish the installation.

Note: Step 7 and 8 are only possible when you can reach the back of the unit inside the dashboard.



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## **BASIC OPERATIONS**

## Power button (STANDBY Button on Remote Control)

Press the power button to switch the unit ON or OFF.

When the TILT function is set to AUTO and the monitor is opened, power-off will automatically close the monitor. When the TILT function is set to MANUAL, power-off will not close the monitor automatically and the monitor will remain opened.

\* RESET: In case the unit malfunctions or needs to be set to factory default setting, press and hold the POWER button for about 10 seconds, then the unit will reset to the factory defaults.

#### Button [4-5-6] ~ [8-9-10] Radio Station Preset Button, Disc Play-mode Control

MODE	Button No:	Button No:	Button No:	Button No:	Button No:	Button No:
Radio	[4][5][6][8][9][10]dioPress the button for tuning to the pre-memorized channel (preset channel) Press and hold pressed the button to store the current frequency channel into memory					nannel)
CD	Play, Pause	Move to previous chapter or track	Move to next chapter or track	Fast backward for Audio disc. (Speed min 2x to 32x) Press long to select repeat mode ⇔ Repeat One ⇔ Repeat all ⇔ Repeart off	Fast forward for Audio disc (Speed min 2x to 32x) Press long for intro track mode	Stop playing. Press long to select Random play mode (Shuffle)
MP3 and SD/MMC	Play, Pause	Move to previous chapter or track	Move to next chapter or track	Fast backward (Speed min 2x to 32x) Press long to Select repeat mode: folder => repeat one => repeat folder	Fast forward (Speed min 2x to 32x) Press long for intro track mode	Stop playing. Press long to change from folder to Random play mode (Shuffle)
DVD	Play, Pause	Move to previous chapter or track	Move to next chapter or track		Fast backward for DVD Audio disc. Slow backward for video title. (Speed min 2x to 32x) Press long for intro track mode	Fast forward for DVD Audio disc. Slow forward for video title. (Speed min 2x to 32x) Press long for random play mode

## Mute Button

Press the Mute button to mute the volume. Please note that the volume will be muted on all audio output connectors. The MUTE icon will be seen on the information display. To resume playing, press mute again.

#### Mode Button

Press the Mode button to toggle between the available sources in the following sequence: TUNER  $\rightarrow$  DVD  $\rightarrow$  SD  $\rightarrow$  REAR CAM  $\rightarrow$  AUX  $\rightarrow$  TUNER

#### Eject button

Press this button and the unit will eject the disc. If the disc is not removed for about 10 seconds after eject is pressed, the disc is reinserted automatically and starts to play again. Gently load a disc inside the unit and do not apply any force to the disc, it will automatically be loaded.

#### Volume knob / Bass / Treble / Balance / Fader

Increase or decrease the volume by turning the knob clockwise or counterclockwise.

When in Tuner mode (radio), push the knob to select one of the Audio functions in the following sequence:

#### $\textbf{VOLUME} \rightarrow \textbf{BASS} \rightarrow \textbf{TREBLE} \rightarrow \textbf{BALANCE} \rightarrow \textbf{FADER} \rightarrow \textbf{EXIT}$

When in DVD or AUX mode, push the knob to select one of the Audio functions in the following sequence:

# $\begin{array}{l} \text{VOLUME} \rightarrow \text{BASS} \rightarrow \text{TREBLE} \rightarrow \text{BALANCE} \rightarrow \text{FADER} \rightarrow \text{BRIGHT} \rightarrow \text{CONTRAST} \rightarrow \text{COLOR} \rightarrow \text{SHARP} \rightarrow \text{EXIT} \end{array}$

When **BASS** or **TREBLE** is selected, rotate the **volume** knob clockwise to boost Bass or Treble, rotate the **volume** knob counterclockwise to decrease Bass or Treble.

When **BALANCE** is selected, rotate the **volume** knob clockwise to boost the volume to the right (R), rotate the **volume** knob counterclockwise to boost the volume to the left (L).

When **FADER** is selected, rotate the **volume** knob clockwise to boost the volume to the front (F), rotate the **volume** knob counterclockwise to boost the volume to the rear (R).

While in TUNER mode, press the Volume knob for over 2 seconds to enter the second setup menu (LOC  $\rightarrow$  LOUD  $\rightarrow$  STEREO/MONO  $\rightarrow$  TIME  $\rightarrow$  TAVOL  $\rightarrow$  EON  $\rightarrow$ DUAL ZONE  $\rightarrow$  EXIT)

While in DVD or AUX mode press, the Volume knob for over 2 seconds to enter the second setup menu (LOUD  $\rightarrow$  STEREO/MONO  $\rightarrow$  TIME  $\rightarrow$  TAVOL  $\rightarrow$  EON  $\rightarrow$  DUAL ZONE  $\rightarrow$ EXIT)

When **LOC** is selected, rotate the **volume** knob to select ON or OFF. ON to select the short distance or local radio station mode (LOC) or select OFF for long distance radio stations.

When **LOUD** is selected, rotate the **volume** knob to select Loudness ON or OFF.

When **STEREO/MONO** is selected, rotate the **volume** knob to select Stereo or Mono.

When **TIME** (clock) is selected, rotate the volume knob clockwise to increase the time, rotate the volume knob counterclockwise to decrease the time.

When **TAVOL** is selected, rotate the **volume** knob clockwise to boost the TA volume, rotate the **volume** knob counterclockwise to decrease the TA volume. (from 0 - 45) Default is 16.

When **EON** is selected (ON is default), rotate the **volume** knob clockwise to select **EON OFF**, rotate the **volume** knob counterclockwise to select **EON ON**.

When **Dual Zone** is selected, rotate the **volume** knob to select **DVD/SD Card/AUX or OFF**.

Note: After 5 seconds of non operation the display will return to the default of the selected mode.

#### Remote Sensor

IR Remote control signal receiving window. Please do not block this window, else you cannot control the unit with the remote control. IR remote control operation may be hindered by the monitor when the monitor is open. In this case, use the remote control at the similar level of the remote control receiver window.

#### **OPEN & CLOSE Button**

#### **OPENING THE MONITOR**

When the power is off, press the **OPEN** button and the unit will turn on and open the monitor automatically. If the movement of the monitor is hindered by any obstacle, it returns to its original position automatically.

## **CLOSING THE MONITOR**

If there is any obstacle hindering the closing movement of the monitor, the monitor stops the closing movement sequence. Press the button again to continue the closing sequence after removing any obstacle. The monitor should be in the center position for the closing, sequence otherwise it will not close and a warning message will be displayed on the screen.

An option can be selected for monitor automatic-closing or manual-closing by pressing:

**OSD**  $\rightarrow$  **SETUP**  $\rightarrow$  **SYSTEM**  $\rightarrow$  **TILT** and to select with the joystick button or by touching the icon, either AUTO or MANUAL.

If AUTO is selected and the monitor is opened, the monitor will automatically close when the power is switched off. If MANUAL is selected and the monitor is opened, the monitor will not close when the power is switched off.

#### PRESET SCAN

In TUNER mode long press this button to search stations automatically. The frequency search will stop when a station is found or when the button is pressed again. Press the button shortly, then a few seconds of each stored Preset channels (1 - 6) will be heard. The unit will scan the preset channels until the button is pressed again.

## ΡΤΥ

Press the PTY button in the TUNER mode to enable or disable Program Type. Default status is off. When PTY is enabled (on) and the selected program type matches, the PTY information is displayed. If the PTY information is different or not available the PTY icon blinks. Press any button to stop the PTY search. (see more under RDS operation)

## Band

In TUNER mode press the Band button to select your frequency band of choice in the following sequence:

## $FM \ 1 \rightarrow FM \ 2 \ \rightarrow FM \ 3 \rightarrow MW1 \rightarrow MW2 \rightarrow FM \ 1$

When a new frequency band is selected, the last chosen frequency / station of that frequency band will be heard.

## 5 WAY JOYSTICK Controller (Up / Down / Left / Right / Enter)

While playing a DVD Movie, use the JOYSTICK key to choose the DVD Title Menu and press the JOYSTICK to ENTER the selected menu.

While playing a CD or SD/MMC, use the JOYSTICK UP / DOWN key to select a track, use the JOYSTICK LEFT / RIGHT to show the next frame (each frame shows 6 tracks). Press the JOYSTICK to ENTER and play the selected track.

While in TUNER/RADIO mode, long press the JOYSTICK to activate MANUAL or AUTO seek of radio frequencies. Use the JOYSTICK LEFT / RIGHT to seek radio frequencies increasing or decreasing in frequency. Long press the JOYSTICK to select STEREO or MONO.

While in the SETUP MENU mode, use the JOYSTICK UP / DOWN / LEFT / RIGHT to choose a menu item and press the JOYSTICK to ENTER a selection.

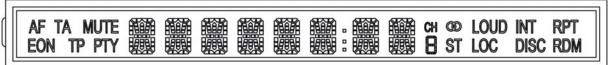
## AF / REG Button (Alternate Frequency / Regional)

Press the Alternative Frequency / Regional AF/REG button in the TUNER mode to enable or disable AF. Default status is On. When AF is enabled (on) and available with the current radio station, the AF icon will be visible on the screen, if it is not available the AF icon will blink. Press the Alternative Frequency / Regional AF/REG button in the TUNER mode for longer than 2 seconds to enable or disable REGIONAL. Default status is off. When REG is enabled (on) the REG icon will be on and the unit will accept regional variants of the tuned station / frequency. When REG is disabled the unit will ignore regional variants. (see more under RDS operation)

## **TP / LOUD Button**

Press the TP / LOUD button in the TUNER mode to enable or disable Travel Announcement / Travel Program. The default status is off. When there is a TA or TP signal available from the radio station that is tuned-in, the TP icon will be shown on the screen. When TA/TP is enabled (on), but no travel announcement is transmitted, the TA icon is off. When a travel announcement is transmitted the TA icon is on. In case TA/TP is enabled (on) but no RDS signal is present, the TP icon will blink. (see more under RDS operation). Press this button for longer than 3 seconds to switch Loudness ON or OFF.

## Mini LCD Display



When the monitor of the GM-7300NAvi is closed, you will see basic Radio, CD or DVD information on this display as well if AF, EON, TA, TP, MUTE, PTY, RPT (repeat), RDM (Random), INT (intro scan), ST () (Stereo), LOC (local) or LOUD (Loudness) is ON or OFF. CH and a number will be ON to show which Preset station is in use. When the feature is in use, it will be shown in the display, else it will be dim.

## **Disc Loading Slot**

- Load one disc with the label side facing upwards and make sure you do not touch the data side with your fingers.
- Press the **EJECT** button in case there is already a disc inside the unit.
- Gently slide the disc into the Slot, the unit will automatically load the disc.
- Once the disc is loaded, the unit will automatically start reading the disk and it will take a few seconds to download the disc initial data, thereafter the unit will start playing the disc.



### Note:

- Finger prints and dust on the disc surface can affect the sound quality. Clean the discs regularly with a soft cotton cloth from the disc center to the outside of the disc but do not clean in circular motions.
- Do not use any kind of solvent, such as diluting agent, gasoline, liquid detergent, gasoline liquid detergent antistatic aerosol used for vinyl, this may cause serious disc damage.
- Keep discs away from direct sunlight or any heat source.
- Do not stick any paper or stickers on a disc.
- Only use 12cm and round discs, do not insert any other type or size of discs.
- Do not apply force to the disc to load it into the unit.

## TILT Button

With this button the monitor tilt angle can be adjusted. The tilt adjustment angle can be adjusted from level 3 to level 5. To setup the tilt level, press **MENU** and select **SYSTEM**  $\rightarrow$  **TILT RANGE** and use the JOYSTICK UP / DOWN / LEFT / RIGHT to choose a level (1, 2, 3, 4 or AUTO [level 5]) and press the JOYSTICK to ENTER the selection.

## IN / OUT Button

With this button the monitor can be adjusted more towards the dashboard (IN) or away from the dashboard (OUT). The adjustment is a 3 step-levels sequential cycle: **NORMAL**  $\rightarrow$  **IN/OUT 1**  $\rightarrow$  **IN/OUT 2**  $\rightarrow$  **IN/OUT 3**  $\rightarrow$  **NORMAL** 

To setup a fixed IN/OUT level, press **MENU** and select **SYSTEM**  $\rightarrow$  **IN/OUT FIX** and use the JOYSTICK UP / DOWN / LEFT / RIGHT to choose a level (1,2 or 3) and press the JOYSTICK to ENTER the selection.

#### **REL Button**

Press this button to release the front button panel to access the SD/MMC card slot or to store it away for safety, when the GM-7300Navi is not in use. The unit will power off automatically when the front button panel is removed for more than 20 seconds.

## **DIS Button**

When playing a disc or a SD/MMC card, press this button to show the duration and the name of a song.

## **OSD Button**

With this button the general settings of the unit can be configured. Press the **OSD** button and browse through the On Screen Icons to configure the unit or to select an item.

MENU	DESCRIPTION	
RADIO	Change mode to Radio	
DVD	Change mode to DVD or CD	
SD CARD	When a SD/MMC card is inserted and present, change mode to SD card	
TV Mode	Not available (grayed out)	
CAMERA	Change mode to Rear Camera (When a car is put in reverse transmission, the TFT display will change to Camera MODE automatically).	RADIO MODE DVD MODE SD CARD
GPS	Not available (grayed out)	
AUX IN	Change mode to AUX Input	
DUAL	Choose DUAL to enter DUAL ZONE MENU.	DUAL ZONE SET UP TV MODE
SETUP	Choose SETUP to enter SETUP MENU.	

## SOURCE MENU

## DUAL ZONE MENU

MENU	DESCRIPTION	
DVD	Set Dual Zone mode to DVD (or CD)	
SD/MMC	When a SD/MMC card is inserted and present, Set Dual Zone mode to SD card	
TV	Not available (grayed out)	DVD MODE SD CARD TV
AUX IN	Select Dual Zone mode to AUX Input	
OFF	Set Dual Zone mode OFF.	AUX IN DUAL OFF

## SETUP MENU

MENU	DESCRIPTION	
AUDIO	Choose AUDIO to enter the AUDIO MENU.	
VIDEO	Choose VIDEO to enter the VIDEO MENU.	
RDS	Choose RDS to enter the RDS MENU.	AUDIO VIDEO SYSTEM
TV	Not available (grayed out)	AUDIO VIDEO SYSTEM
SYSTEM	Choose SYSTEM to enter the SYSTEM MENU.	
SCREEN	Choose SCREEN to enter the touch screen calibration menu	RDS TV CALIBRATION

## AUDIO MENU

MENU	DESCRIPTION			
BASS	Adjustable in 15 levels. Default level is 0.			
TREBLE	Adjustable in 15 levels. Default level is 0.			
BALANCE	Adjustable in 8 levels for each left and right channel. Default is left equal to right.			
FADER	Adjustable in 8 levels for each front and rear channel. Default is front equal to rear.	AUDIO MENU		
S.WOOFER	Sub-woofer ON / OFF			
S.VOLUME	Maximum Start Volume. Use this menu to setup the starting-volume level. The volume level ranges from 0 to 45 and the Default level is 17. When the volume level is below 17 and the unit is switched off, it will memorize the last volume setting when it is switched on again. When the volume level is higher than 17, the unit will default set the volume at 17 the next time it is switched on.	BASS CE TREDER CE BALANCE LR FADER FR S.WOOFER OFF S.WOL 17 BASS (4 ( SCROLL BAR ) ))		

## VIDEO MENU

MENU	DESCRIPTION	
BRIGHT	Adjust level of screen brightness.	VIDEO MENU
	Adjustable in 40 levels. Default level is 20.	VIDEO MENU
CONTRAST	Adjust level of screen contrast. Adjustable	
	in 40 levels. Default level is 20	BRIGHT 17 CONTRAST 20
COLOR	Adjust level of screen color. Adjustable in	COLOR 20 SHARP 20
	40 levels. Default level is 20.	
SHARP	Adjust level of screen sharpness.	SCREEN 16-9
	Adjustable in 6 levels. Default level is 3.	
SCREEN	(Only in DVD MODE). Choose the	
	preferred TFT display mode: 16:9 or 4:3	

## **RDS MENU**

MENU	DESCRIPTION	
AF	AF ON or OFF	DDS
REGION	REGION ON or OFF	RDS MENU
TP	TP ON or OFF	A F OFF REGION OFF
EON	EON ON or OFF	
PTY	PTY ON or OFF	DFF EON OFF
TA VOL	Choose TA Volume level from 0 to 45. Default level is 16.	TRUCL 25 44 PF

## SYSTEM MENU

MENU	DESCRIPTION			
BEEP	Beep Sound ON / OFF (When set to ON, a beep is heard after every Button pressed)			
TILT	Select AUTO or MANUAL monitor close. When the TILT function is set to AUTO and the monitor is opened, power-off will automatically close the monitor. When the TILT function is set to MANUAL, power–off will not close the monitor automatically and the monitor will remain opened.	SYSTEM MENU		
TILT RANGE	Monitor Angle adjustment AUTO: 1-5 levels can be adjusted by pressing the TILT button sequentially Level 1: Tilt level 1 = 3 steps Level 2: Tilt level 2 = 4 steps Level 3: Tilt level 3 = 5 steps Level 4: Tilt level 4 = 6 steps Level 5: Tilt level 5 = 7 steps	BEEP ON TILT MANUAL TILT RANGE NORMAL IN/OUT FIX NONE TIME SET AMIO.45 (4 )> GPS DUAL SOUND ON		
IN/OUT FIX	Adjust the monitor inwards or outwards. Level None: Monitor Can be moved from position 1 to position 3 by pressing the IN/OUT button sequentially. Level 1: Fixed position 1; Level 2: Fixed position 2; Level 3: Fixed position 3.			
TIME SET	Adjust and Set the clock time			
GPS DUAL SOUND	Not available (grayed out)			

## **MENU Button**

With this button the information of the unit will be displayed, depending in which mode the unit is used.



## RADIO DISPLAY

(1) Displays current Frequency Band and current memorized station and RDS information on the bottom. (touch with your finger or with a stylus pen on the icons to select them)

- (2) Contents of current Frequency Band
  - Current Tuned-in memory Position is highlighted.

## (3) STATUS display

- MEM: Displays the current memory. If there is no stored memory, MEM 0 is displayed
- Play status display
  - a. AUTO: auto seek mode
  - b. MANUAL: manual seek mode
- c. P.SCAN: preset scanning mode
- d. A.SAVE: auto save mode.
- VOL: Volume level display
- STEREO / MONO display (KMO)
- LOC: only displays if the local radio station mode is ON

(4) RDS display (see description on RDS later in this manual)

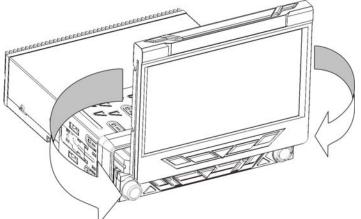
- AF ON or OFF TA ON or OFF
  - F EON ON or OFF
- TP ON or OFF - PTY ON or OFF

## SYSTEM DISPLAY

In DVD and AUX modes, no picture is shown on screen and a warning message is displayed, when the parking break is not ON. *WARNING ENJOY SOUND ONLY WHILE DRIVING* 

(2) Monitor Error Display

The Monitor can be swiveled manually 30° degrees to the left or the right for passenger viewing.



If the monitor is turned into the left or right position, the monitor cannot close automatically when the CLOSE button is pressed and a warning message is displayed: *ERROR MONITOR* **NOT CENTERED** 

Center the monitor manually and press CLOSE again to continue the closing sequence.

#### Reverse Camera Display

If the on the ISO cable pin A2 the connection is made to the Reverse lamp and the car is put into its reverse gear, the unit will automatically switch to the Rear Camera (if installed in your car, the reverse camera is an optional item). In case the display is closed and the car is put in its reverse gear, then the display will open automatically and the image of the Rear Camera will be shown. When the car is put into another gear, the unit will resume in its previous playing mode.

## RESET Button

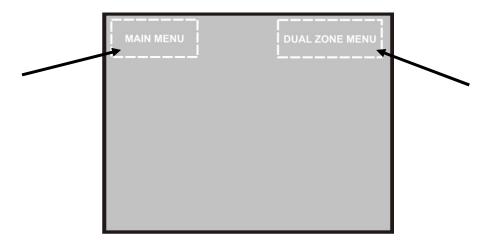
If a error was caused by a faulty setting or when the unit does not respond to any key press of IR commands, press the RESET button with a small pin to return to the factory default settings.

## SD/MMC card slot

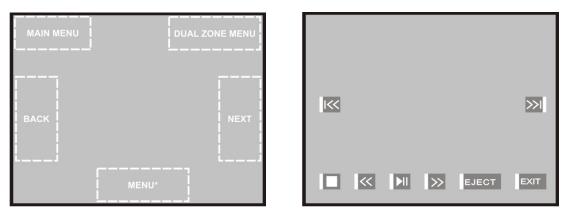
To insert a SD/MMC card (support up till 2Gb cards), remove the front panel first, insert the SD card and replace the front panel within 20 seconds, else the unit will switch off automatically. Please insert the SD card with the contact pins downwards.

#### Invisible Touch screen commands

The touch screen has in any mode invisible functions. Touch with a finger or a stylus pen any point in the left upper corner of the screen to enter the Main Menu. Touch with a finger or a stylus pen any point in the right upper corner of the screen to enter the Dual Zone Menu.



In DVD or SD/MMC card mode the below shown hidden buttons are present. Touch with a finger or a stylus pen any point in the left upper corner of the screen to enter the Main Menu. Touch with a finger or a stylus pen any point in the right upper corner of the screen to enter the Dual Zone Menu. Touch with a finger or a stylus pen any point in the left side middle section to go one track backwards. Touch with a finger or a stylus pen any point in the right side middle section to go one track forwards. Touch with a finger or a stylus pen any point in the right side middle section to go one track forwards. Touch with a finger or a stylus pen any point in the right side middle section to enter the DVD menu (if available on the disc).



## DVD/SD hidden menu

DVD hidden menu

#### SETUP Button

Press this button to enter the DVD player setup menu to setup the DVD player operation settings.

## GM-7300Navi

## **ENGLISH**

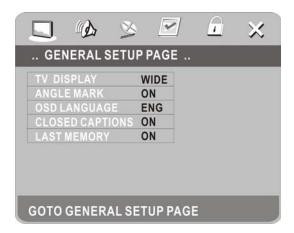
## **GENERAL SYSTEM SETTINGS**

Press **[SETUP]** to enter into the system settings main menu; press the **LEFT** or **RIGHT** arrow buttons to move to the highlighted menu item and select one of the Setup Pages:

- General Setup Page
- Audio Setup Page
- Video Setup Page
- Preference Setup Page
- Password Setup Page

#### General Setup Page

Press **[SETUP]** and then **[ENTER]** to enter into the "General setup" page. (as shown below)



On the Remote Control, press either the ▲ UP or ► DOWN or < LEFT or ▶ RIGHT arrow buttons to move to the desired menu item and press [ENTER] to select the menu item.

## TV Display

#### Set TFT screen mode to the correct ratio:

- Press the ➤ **RIGHT** arrow button to enter the sub-menu. If you want to set the screen to another setting, press the ➤ **DOWN** arrow to move to your selection and press [ENTER].
- Press [SETUP] to exit these system settings

**Note:** Four screen ratio modes are available, 4:3 Pan Scan, 4:3 Letterbox and WIDE (16:9) and Wide Squeeze. Different disc formats will display different images depending this setting and the screen size used. Hereunder is an example of the different choices and the relation between the disc format and screen ratio. The default for this unit is 16:9 as this is the ratio of the TFT LCD screen.



**4:3 Letterbox** Allow you to see movies in their original aspect ratio. The entire frame of the movie will be displayed.



**WIDE (16:9)** Allow you to see movies in their original aspect ratio. The entire frame of the movie will be displayed.



**4:3 PAN SCAN** The movie will be shown full screen without any black margins, but parts of the image will be cut of from the right and left side.



**16:9 Note:** depending the DVD screen format (e.g. 2.35:1), the widescreen setting may still have black margins above and below the picture.

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### Angle Mark

When playing a DVD disc and you have selected **ON**, then the screen will show the angle mark. This will give you the possibility to view multi angle DVD's. (whether this functions works, depends on the disc type in use.) When you have selected **OFF**, no angle mark will be shown on the screen.

#### OSD Language

To select the language for your On Screen Display (OSD). This menu item has multiple languages available.

#### Captions

For NTSC-Discs, this option can display or hide the caption on the disc with CLOSED CAPTION ability.

**ON**: To display captions. (Subtitles) **OFF**: Captions will not be displayed. (No Subtitles)

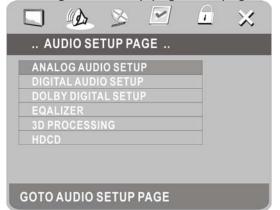
#### Last memory

**ON**: Each time when you turn off the player, it will memorize the last play time. So if you turn on the player the next time and the same disc is played, it will resume play from the last memory point.

**OFF** : Disable the last memory function

#### Audio Setup page

Press **[ENTER]** to enter the Analog Audio setup page. The page hereunder will be shown:



Select the Speaker Setup option and enter into the Speaker Setup Page.

#### ANALOG AUDIO SETUP - DOWN MIX output mode:

- press the **RIGHT** arrow to enter the sub-menu. If you want analog stereo signals, set the sound mode to "STEREO"
- If you want to have Dolby Pro Logic stereo (the decoded signal will create a 2ch reality simulating effect), select "LT/RT"
- Select "3D SURROUND" for listening to virtual surround sound effect.

## DIGITAL AUDIO SETUP - SPDIF Setup

To Select the correct SPDIF Output (Sony Philips Digital Interface) setting for the optical digital audio transmissions, enter the SPDIF Setup Page.

#### SPDIF Output

If you want to use the Optical terminal output for AC3 Dolby Digital Audio, you need to set the audio output to "ALL" (for DTS 5.1 / AC3) or "PCM" (for 2 channel [stereo] Digital mode). Select OFF when you do not want any data on the Optical terminal.

#### LPCM Output

Linear PCM is a signal recording format used on CDs. While CDs are recorded in 44.1kHz/16bit sound streams, DVDs are recorded in 48kHz/16bit up to 96kHz/24bit sound streams. Select either "48K" or "96K" (standard).

#### **Dolby Digital Setup**

To setup the Dolby Digital settings enter the Dolby Digital Setup Page.

#### Dual Mono (R+L)

Select the type of output of the Left and Right audio output connectors. Stereo is normal Stereo, L-Mono is all sound on the Left Audio output, R-Mono is all sound on the Right channel. The "Mix-Mono" function only works when a DVD is being played in DTS 5.1 mode.

#### Dynamic

This function is to adjust the linear compression rate to obtain the different compression results of the signals. Standard set to "OFF". When FULL is selected, the difference between Treble and Bass is more blurred, indefinite and indistinctive.

#### Equalizer

In the equalizer page you can select different preprogrammed EQ types, like Rock, Pop, Live etc. to adjust the audio signal to your best liking. You can select one of the Bass, Super Bass and Treble modes to adjust the Bass and Treble signal to your best liking. ON will switch the selected mode on and OFF will switch it back to normal Audio playback. **Note:** Please be advised that sometimes the BASS on an Audio CD or DVD is already very low, using the Bass Boost or Super Bass can overload your subwoofer resulting in poor sound quality.

#### 3D Processing

Select this menu item to set up your preferred 3D audio mode and enter into the 3D Processing page.

#### **REVERB MODE**

Select this menu item to set up your preferred Audio mode for a better surround effect. You can select different preprogrammed Reverb types, like Concert, Living Room, and Hall etc. to adjust the audio signal to your best liking.

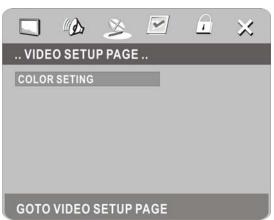
## HDCD

Select this menu item to set up your preferred Audio mode for HDCD, Select the HDCD Setup page to set up your preferred filter mode for HDCD (default is off = CD sampling format)

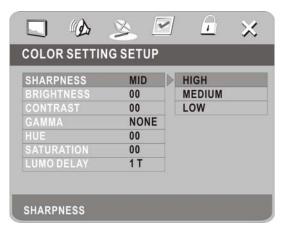
GM-7300Navi

**ENGLISH** 

#### Video Setup Page



Select this menu item to set up your preferred Video output modes.



#### **Color Setting Setup**

Select this menu item to set up your Video Quality modes.

#### Sharpness

You can set the picture sharpness to these choices. If a video image is light, select the **LOW** option. If a video image is dark, select the **HIGH** option.

#### Brightness

You can set the Brightness to your liking. Press the **RIGHT** arrow to enter the brightness control, then press the **UP** or **DOWN** arrow to adjust the image. Press the **LEFT** arrow to go back to the menu.

#### Contrast

You can set the Contrast to your liking. Press the **RIGHT** arrow to enter the Contrast control, then press the **UP** or **DOWN** arrow to adjust the image. Press the **LEFT** arrow to go back to the menu.

#### Gamma

Gamma refers to the exponent between video or pixel values and the displayed brightness. You can set the Gamma to these choices and your liking. (Default is "None")

#### Hue

You can set the Hue (for NTSC) to your liking. Press the **RIGHT** arrow to enter the Hue control, then press the **UP** or **DOWN** arrow to adjust the image. Press the **LEFT** arrow to go back to the menu.

### Saturation

You can set the Saturation to your liking. Press the **RIGHT** arrow to enter the Saturation control, then press the **UP** or **DOWN** arrow to adjust the image. Press the **LEFT** arrow to go back to the menu.

#### Luma Delay

You can adjust the luminance delay by selecting one of these choices to best suit the brightness of your TV. Default is 1T for DVD formats, other formats may require setting 0T.

#### Preference Page

PREFERE	NCE PAGE	
Τν τγρε	PAL	
PBC	ON	
AUDIO	ENG	
SUBTITLE	ENG	
DISC MENU	ENG	
PARENTAL	1 KID SAF	
DEFAULT	RESET	

Select this menu item to set up your preferred options.

#### TV Type

Select this menu item to set up your preferred video output format. PAL is commonly used in Europe and NTSC is commonly used in the USA and Japan. Select **MULTI** only if your external (TFT) monitor supports both formats, the output signal will follow automatically the video format on the DVD disc.

#### PBC

For VCD and SVCD, this selection turns **ON** or **OFF** the Playback Control (PBC) function. VCD or SVCD media have PBC menu's that contains the track list. The default PBC state is set to **ON**. In **OFF** mode, no tracks can be selected.

#### AUDIO

With this option you can select the preferred language for the audio output. When the selected language is recorded on the disc (not all discs have multiple languages recorded) then this language will automatically be played. If not, the first language recorded on the disc is played.

#### SUBTITLE

With this option you can select the preferred language for the subtitles. When the selected language is recorded on the disc then this language will automatically be shown. If not, the first language recorded on the disc is displayed.

#### **DISC MENU**

With this option you can select the preferred language for the disc menu. When the selected language is recorded on the disc this will automatically be selected. If not, the first language recorded on the disc is displayed.

### PARENTAL

#### Set age control grade:

For DVD discs with a rating system programmed (for example: the North American CARA) parents can prohibit watching content that might be inadvisable for children. Press the **RIGHT** arrow to enter the submenu. If you want to change the age control grade press either the **UP** or **DOWN** arrow to scroll to the available selections.

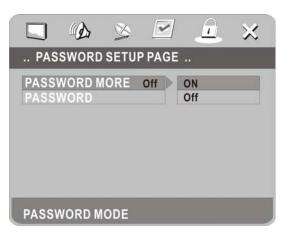
- Selection 1 is Kid safe
- **Selection 2** is some guidance advisable
- **Selection 3** is PG (Parental guidance suggested, some material may not be suitable for children)
- **Selection** 4 is PG13 (Parents strongly cautioned, some material may be inappropriate for children under 13)
- Selection 5 is PG-R (Restricted, under 17 requires accompanying parent or adult guardian)
- Selection 6 is Restricted viewing,
- **Selection 7** is NC-17 (No one 17 and under admitted)
- **Selection 8** is for Adult Entertainment or X rated movies and NO PARRENTAL is for General Audiences (All Ages).

Hereafter a screen will indicate to enter a password, if the ex-factory password has never been modified, you can use **[136900]** by pressing the according number buttons on the remote control. Select "YES" or "NO" with either the left or the right arrow key and press **[ENTER]** to confirm.

## DEFAULT

With this option you can select to reset to the factory preset values.

## Password Setup Page



#### PASSWORD MODE

With this option you can select to set your password protection ON or OFF.

#### PASSWORD

With this option you can select to change your password. Use this menu to change the factory set password **[136900]** 

## GM-7300Navi

## ENGLISH

Old Password New Password Confirm PWD	
	DK

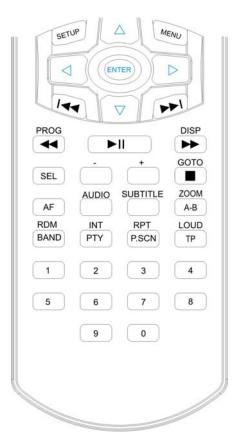
Enter the numbers with the number buttons of the remote control and press **[ENTER]**, enter the new password and press **[ENTER]** again, confirm your new password and press **[ENTER]** again.

*Important:* Do not forget the newly entered password; there is no way to retrieve the (newly) entered password.

## EXIT

With this selection  $\mathbf{X}$  you exit the system setup and return to normal viewing of the video.

## ADDITIONAL REMOTE CONTROL OPERATIONS



## UNIT REMOTE

## NUMBER BUTTONS

While playing a DVD, VCD or CD, press a number button 0 - 9 to direct select the desired track. For example: to select the 8<sup>th</sup> track, press number button 8. To select track numbers beyond 10, first press the 1 button, followed by a single digit number button 0 - 9 For example: To select the 12<sup>th</sup> song, press button 1 and then press button 2.

## AUDIO button

When playing DVD discs, the **AUDIO** button is used to select the desired audio language. This is only applicable if the disc has a different language functions incorporated. Press the **AUDIO** button to select a different language. For Example and only for reference, press the **AUDIO** button once for the English language, press it again for the French language, press it again for the Spanish Language etc. etc. **Note:** Whether this function works depends on the disc type in use.

## SUBTITLE button

Press the **SUBTITLE** button to select the caption language e.g. English, Dutch, Spanish, etc. Press the **SUBTITLE** button various times until you have selected

the desired language available. **Note:** Whether this function works depends on the disc type in use.

## A-B REPEAT / ZOOM button

When playing a disc, you can repeatedly play a desired part of that disc with the repeat A - B function, which can be set as following:

Set the starting point A by pressing the  $\mathbf{A} - \mathbf{B}$  button then set the finishing point B by pressing the  $\mathbf{A} - \mathbf{B}$  button again. The player will repeatedly play the part between A and B. To cancel A–B repeated play, press the  $\mathbf{A} - \mathbf{B}$  button again.

## ZOOM

While playing a Movie disc, press and hold the button for 2 second to enter into the ZOOM function. The ZOOM function is used to zoom-in and zoom-out the video image of the motion pictures or still images when playing DVD discs. There are 3 levels of zoom-in or zoom-out available, pressing the **ZOOM** button several times to increase the zoom factor in the following sequence:  $2x \rightarrow 3x \rightarrow 4x \rightarrow 1/2x \rightarrow 1/3x \rightarrow 1/4x \rightarrow Normal screen$ 

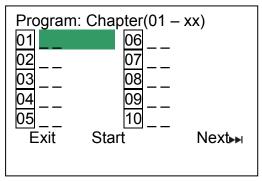
## **PROG** button

When PBC is switched off and the disc is not playing (stop) press the **PROG** button. The screen will display something similar to the screens hereunder:

## GM-7300Navi

## ENGLISH

#### When playing DVD discs:



Program	: track(01 – xx)	
01	06	
02	07	
03	08	
04	09	
05	10	
Exit	Start	Next

When playing CD discs:

**Note:** When playing a DVD disc and there is only one title, then the program menu will be similar to the menu of the CD.

Press one or more of the **NUMBER 0..9**, buttons to enter the chapter or track number, e.g. when you want to see chapter 3, 6 and 12 first press the **3** button then the **6** button an then the **1**, **2** buttons.

Select **START** and press the **[ENTER]** button to start playing your programmed selection.

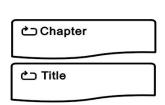
Press the **STOP** button two times to cancel the program function.

Press the **PROG** button to exit the program function.

#### **RPT Button (Repeat)**

While a disc is playing press the **REPEAT** button to select one of the available repeat modes.

- 1) For DVD discs;
  - a. press **REPEAT** to repeat a chapter
  - b. press **REPEAT** again to repeat a title
  - c. press **REPEAT** again repeat all
  - d. press **REPEAT** again to exit the repeat mode.
- 2) For non-DVD discs and when PBC is switched off;
  - a. press **REPEAT** to repeat a track
  - b. press **REPEAT** again to repeat the whole disc
  - c. press **REPEAT** again to exit the repeat mode



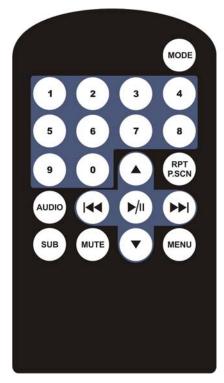


Trackے	

C	כ	A	Ш	

REP	EAT	OFF	

### Remote For the Dual Zone rear seat monitor



This remote control is specially made for the rear seat passengers. With this remote control they can control the unit while it is playing in the Dual Zone mode without hindering the driver.

## **MODE** button

Press this button to select the source to watch or listen on the rear seat monitor. Selection is DVD – SD/MMC card – AUX INPUT – DUAL ZONE OFF.

#### **MUTE** button

Press this button to mute the sound on the rear seat monitor. When in Dual Zone mode and MUTE is ON, on the head unit TFT screen upper right corner, the Dual Zone Icon turns red. When MUTE is pressed again sound is resumed and the Dual Zone icon changes to yellow.

## PLAY / PAUSE button

Press this button shortly to play or to pause. Press for 2 seconds to ENTER (confirm) a selection.

## AUDIO, SUB(title), RPT (Repeat), MENU, P(reset) SCAN

and number keys have the same functions as described earlier with the unit buttons and the Unit IR buttons.

## DUAL ZONE ICONS

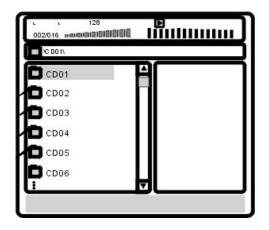
When Dual Zone is active a small icon is seen on the head unit TFT screen upper right corner. The following modes will show the following lcons:

#### MODE

Dual Zone DVD Mode Dual Zone SD Mode Dual Zone AUX Mode Dual Zone OFF *ICON* [D-D] [D-S] [D-A] No Icon

## MP3 - WMA - PLAYBACK

The unit is able to play discs (CD-R / CD-RW) recorded with MP3 / WMA audio files. When a disc with MP3 files (including multiple directories) is loaded in the system the following screen is displayed:



To go to the preferred music directory, press the  $\checkmark$  arrows to scroll to your selection and confirm your choice by pressing the **[ENTER]** button. To select your preferred song or video title, press the  $\checkmark$  arrows to scroll to your selection and confirm your choice by pressing the **[ENTER]** button. Your selected song will now be played.

## Play mode

There are four kinds of play modes available when playing MP3 / MPEG4 recorded discs: When the disc is playing, press **REPEAT** to select your repeat mode, the screen will show:

. 128 002/016	
CD01\	
<b>D</b>	$\mathbf{P}$
MP3 TRACK001	
MP3 TRACK002	
TRACK003	
TRACK004	
TRACK005	HI I
REPEAT FOLDER	

1) SINGLE

2) REPEAT ONE (T

(All the songs / videos will be played only once)

- T ONE (The current playing song / video will be repeated)
  - (Only the songs / videos of the current folder will be repeated)
- REPEAT FOLDER
  FOLDER

(Only all the songs / videos of this folder will be played once)

5) SHUFFLE / RANDOM (The songs / videos will be played in random order)

## Other functions

Functions such as MUTE, VOLUME, PAUSE, PREVIOUS, NEXT, etc. are also available for MP3 / MPEG4 recorded discs. These operations are the same as playing an Audio CD.

## **PICTURE (JPG) OPERATIONS**

This function is similar to the MP3 playback operation. Upon loading a Picture (JPEG) disk (from a.o. Kodak, Fujifilm or your own recorded CD-R / CD-RW with JPEG image files [.JPG extension]), the screen will show an image similar to the screen at MP3 playback.

#### View picture

Press the - arrows to scroll to your selection and confirm your choice by pressing the **ENTER** button. Your picture will now be displayed.

#### Rotate picture

By pressing one of the **I** arrow buttons, you can rotate the picture to your desired position, clockwise and counterclockwise

#### Mirror picture

By pressing one of the **v** A arrow buttons, you can mirror horizontally (A) and vertically  $(\frown)$  the picture to your desired position.

## Previous and Next selection

By pressing the **M PREVIOUS** or **M NEXT** buttons, you can manually skip to the next or previous picture.

#### Zoom IN/OUT

By pressing **ZOOM** and the **H REV** or **H FWD** buttons, you can manually zoom the picture in or out.

#### **TILE Image Selection**

If the disc contains more than one picture file, the player can display up to nine (9) small pictures for your selection. While the disc is playing, press the **STOP** button, 9 small pictures will appear on screen and the first image will have colored selection around the image.

By pressing the **M PREVIOUS** or the **M NEXT** buttons, you will go to the next or previous 9 small pictures.

To go to the preferred photo / picture, press the arrow buttons **v i i b** to scroll to your selection and confirm your choice by pressing the **ENTER** button. Your selected photo will now be displayed.

When no selection is made press the **STOP** button again to resume to normal playback mode.

#### Slideshow

If the disc contains more than one picture file, the player can play the files automatically in 16 different Slideshow modes. When the disc is playing, press **PROGRAM** to change the current slideshow mode.

1) Wipe top 5) Diagonal wipe left top 2) Wipe bottom 6) Diagonal wipe right top 7) Diagonal wipe left bottom 3) Wipe left

9) Extended from center Vertical

13) Window Horizontal

10) Extended from center Horizontal 14) Window Vertical 11) Compress to center Vertical

15) Wipe from edge

16) Normal view

4) Wipe right

8) Diagonal wipe right bottom 12) Compress to center Horizontal

Other functions

Functions such as PAUSE, PREVIOUS, NEXT, REPEAT ALL, REPEAT SINGLE, etc. are also available for picture discs.

### **RDS OPERATION AND DESCRIPTION**

Radio Data System (RDS) enables you to make the best use of your RDS equipped unit. RDS allow radio stations to transmit data that will make use easier. The radio stations can send short messages on RDS and provide additional information about the programs being transmitted, weather, general information, traffic jams, the title of a record or a 'phone-in number, etc. RDS information is transmitted with many radio stations that broadcast on the FM band.

#### **PS** (Program Service Name)

The unit is supplied with a character display that will show the name of the selected radio station. When you program your favorite radio stations into the preset station numbers, it is not just the frequency that is stored, but also the station's identification. If you have set RADIO-ONE to be on button number one, then pressing this button will always give you RADIO-ONE wherever you are in the country.

#### **AF** (Alternative Frequency) Automatic Tuning

The unit receives information about the frequencies of nearby transmitters. This enables it to choose the strongest FM signal for the selected station. This is particularly useful and safe for you as a driver, you no longer have to re-tune when driving between different transmitter coverage areas.

#### Regional Links (REG On/Off)

Many local radio stations only have a couple of different frequencies, and their coverage area is limited. Some local stations are linked together according to their region, so that if the signal from a local radio station becomes weak, the unit can switch to another local station in the same region. If you wish the radio to stay tuned to the same local station regardless of the signal strength or quality, then you should turn the Regional facility ON, as described in the previous pages.

## **TA and TP** (Travel Announcements / Travel Program Identification)

When a local radio station broadcasts a traffic report, the unit is informed. This information can be used to provide you with travel information without having to listen to that particular radio station all of the time. When the travel announcement is broadcast the unit will interrupt the AUX / Compact Disc / USB / SD-MMC that is playing and will automatically switch to the announcement. At the end of the announcement the unit returns to its former state by switching back to the CD, AUX, USB or SD-MMC.

For this to work, the travel announcement function must be switched on. The unit will only allow you to tune to a station which is capable of sending the relevant RDS travel announcement information.

If the signal of the selected radio station becomes weak, the unit should re-tune itself to another station that has the RDS travel information. The TP symbol will ignite on the information display, when a TP station is found or selected.

#### **EON** (Enhanced Other Networks)

The unit is equipped with the Enhanced Other Network (EON) function, and can switch from a national Network station (eg RADIO ONE) to a Local Radio travel announcement, and then back to the national station at the end of the announcement. For example, the unit is tuned to RADIO FOUR, and the TA Travel function is switched on. You may be listening to RADIO FOUR or to a CD, or you could have the volume turned down. When a nearby local radio station, such as RADIO LOCAL, is about to make a travel announcement, an RDS signal transmitted on RADIO FOUR tells the unit to tune to RADIO LOCAL for the announcement. The unit will already know the frequency of RADIO LOACAL in that area. The unit will first

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check that it can receive RADIO LOCAL satisfactorily and, if so, will switch from RADIO FOUR, turn up the volume, or interrupt the playback for the duration of the announcement. At the end of the announcement the unit returns to its previous state ready for the next announcement. With EON, the unit is told about the frequencies of other radio stations in the area, both local and national. If you change stations, the unit will know immediately which frequencies to try first.

### **PTY** (Program Type)

Many radio stations give codes to individual programs according to their type. The unit allow you to select the type of program required, and will search for a station broadcasting that type of program. The following program types are available: Speech, News, Current Affairs, Information, Sport, Education, Drama, Culture, Science, Varied Speech (quizzes/comedy), Pop Music, Rock Music, M.O.R.M. Easy Listening, Classical, Other Music types, Weather, Finance, Children, Social, Religion, Phone in, Travel, Leisure, Jazz, Country, National, Oldies, Folk Music and Documentations.

To switch PTY ON, press PTY button for more than a second on the unit or remote control. The current selected PTY type will be shown on the information display. When no special type is selected NO PTY will be shown. To switch PTY OFF, press the PTY button again. Default PTY is "News".

Turn the Volume knob of the unit up or down or press the Volume buttons on the remote control to scroll through the available PTY types, and then press the BAND/ENTER button on either the remote control or the unit to automatically start searching for a radio station with the selected PTY code. You can also press one of the six preset buttons on the unit or the remote control to quickly chose from pre-selected PTY types: 1= News, 2= Speech, 3= Sport, 4= Pop M, 5= Classical, 6= Music.

When you want to store a PTY under one of the preset numbers, first select the preferred PTY type, then press and hold one of the **Preset** buttons on the unit. The sound will briefly be muted; thereafter the PTY type will be displayed. Your favorite PTY type is now stored.

**Note:** After 5 seconds of non operation the display will return to the default of the selected function and will exit the manual station / frequency search mode.

#### Time and Date (CT-Clock Time)

Part of the RDS data is used to transmit the current time and date. The clock on the unit never has to be adjusted, and will automatically set itself for summer and winter time changes. It will also take account of leap years and, if traveling in a foreign country, will adjust between different time zones.

**Note:** Under whatever mode, the unit will receive automatically urgent news and **ALARM!** will be on the Information Display. RDS operation is not possible during AUX mode.

#### **TECHNICAL SPECIFICATIONS**

#### GM-7300Navi

#### Enjoy listening to your music, or watch a movie.

An outstanding stylish designed Automotive 1x DIN DVD, CD, SD/MMC player with AM-FM RDS Radio and Dual Zone functionality. The driver can listen to the radio while the rear seat passengers can enjoy watching a DVD or alike. This easy to install system comes complete with a motorized fully automatic 7 Inch TFT color LCD. The excellent mechanical Anti-Vibration and Electronic Shock Protection (ESP) guarantees a clear reproduction of DVD's and CD's. The built-in 4x40 Watt Power Amplifier is offering brilliant HiFi sound characteristics. Operating information and station information obtained from the RDS function is shown on the 7 inch color display. As much as 18 FM and 12 AM radio stations can be programmed as preset channels. Operation is easy with the user-friendly access buttons, Touch Screen Graphical User Interface or with the included Infra Red remote controls.

General		AUDIO	
Operation Voltage:	12V DC	Audio Output Impedance:	600Ω
Operation Voltage Range:	10-16.0V DC	Audio Output Level:	≥2.5 Vrms
Maximum Operation Current:	10A	(under normal audio input level at maximum output volume)	
Grounding System:	Car Bat. Neg. Pole		
Installation Dimension (W x H x D mm)	178x50x(165+25)	VIDEO	
Installation Angle:	Vertically 0°~+30°	Normal Video Input Level:	1.0±0.2V (CVBS)
	Horizontally ±15°	Video Input Impedance:	75Ω
Net Weight:	2.5Kg	Video Output Impedance:	75Ω
Radio Preset Channels:	30 (18FM / 12AM)	Video Output Level:	1.0±0.2V
Composite Video Input:	1x	(under normal video in	put level)
Composite Video output:	1x		
Camera Input	1x	TFT Monitor	
Audio input (aux L+R)	1x	Video system:	PAL/NTSC
Audio output rear (L+R)	1x	Screen Diagonal:	7 inch
Line output (aux L+R)	2x (front / rear)	Usable Display Area:	154.1(W) x 87.0(H)
Subwoofer output	1x	Resolution:	1440(W) x 234(H)
Optical SPDIF output	1x	Brightness:	400cd/m
		(measure the center brightness	
FM RADIO		Contrast:	60 (minimum)
Signal Noise Ratio:	60 dB	Response Time:	Rise = 30ms,
Useable Sensitivity (S/N 30 dB):	10 Db		Decline = 50ms
Frequency Response (± 3 dB):	40Hz~ 12.5Khz	Viewing Angle:	From Top $= 65''$
Station Seeking Level:	20~30 dBuV	0 0	From bottom $=$ 40"
Distortion:	1.5%	Backlight:	LED
Stereo Separation (1 Khz):	30 dB	LCD Life Cycle:	100.000hours (at 25°C)
Antenna Impedance:	7.5Ω		
		Environment	
	00.15	Operating Temperature:	-20℃~+60℃
Usable Sensitivity (S/N 20 dB):	30 dB	(Built-in cooling fan too cool the unit internally)	
Distortion:	1.5%	Storing Temperature:	-30°C~+80°C
DVD Player	00 -10	Operating Humidity:	45%~80%RH
Signal / Noise Ratio:	90 dB	Storing Humidity:	30%~90%RH
Dynamic Range:	90 dB		
Distortion (line out):	0.1%	Disc Playback Support	
Frequency Range (± 3 dB):	20Hz~ 20KHz	DVD, DVD-R, DVD-RW, DVD+R, DVD+RW, CD, CD-R, CD-	
Maximum Output Power:	40Wx4	RW, VCD, SVCD, MP3, WMA, OGG Vorbis and JPG picture	
Loaded Impedance:	4Ω	disks.	
AUX IN			
Distortion:	0.5%	SD/MMC card support	
	0.5% 1 Vrms	Up to 2GB cards, MP3, WMA, MPEG1,	2,4 & JPEG
Audio Input Level:	1 vrms 20Hz~ 20KHz		
Frequency Response (± 3 dB):			

#### **ADDITIONAL IMPORTANT PRECAUTION NOTES**

#### • ALWAYS CONNECT THE DRIVER SAFTY WIRE

- Do not install the unit in the vehicle where the operation can hinder safe driving.
- Install the unit where it does not get in the driver's way and cannot injure the passenger in case there is a sudden emergency stop.
- Do not open the monitor manually; it will damage the monitor mechanism.
- The TFT color LCD is made of glass and liquid, do not apply high pressure on the screen to prevent breakage, scratches and poor image quality.
- Do not scratch the screen surface with hard materials and only clean with a soft dry cloth and special TFT LCD cleaning liquid.
- Do not use the unit for a long time without running the vehicle's engine, it will drain the battery preventing a correct start of the engine and it will reduce the lifecycle of the battery.
- Parking the car under direct sunlight will increase the temperature inside the car and the unit may become overheated and not function properly. Cool down the interior of your car to ensure proper operation of the unit.
- Ask qualified professionals to install the unit.
- Before final installation of the unit into the 1x DIN size opening of your dashboard, connect the wiring and make sure everything is connected and is working properly.
- Use only the parts included with the unit to ensure proper installation. The use of unauthorized parts may and can cause malfunctions.
- Consult your nearest car dealer if the installation requires to drill holes or other modifications need to be made to your car.
- This unit is for vehicles with a 12-volt battery and negative grounding. Before installing it in a recreational vehicle, truck, or bus, check the battery voltage.
- To avoid shorts in the electrical system, be sure to disconnect the battery cable before beginning any installation.
- Refer to this manual for details on connecting the power amp and other units.
- Secure the wiring with cable clamps or adhesive tape. To protect the wiring, wrap adhesive tape around them where they lie against metal parts.
- Route and secure all wiring so it cannot touch any moving parts, such as the gear shift, handbrake and seat rails.
- Do not route wiring in places that get hot ,such as near the heater outlet, if the insulation of the wiring melts or gets torn, there is a danger of the wiring short-circuiting to the vehicle body.
- Don't pass the yellow lead through a hole into the engine compartment to connect to the battery this will damage the lead insulation and cause a very dangerous short.
- Do not shorten any leads. if you do ,the protection circuit may fail to work when it should.
- Never feed power to other equipment by cutting the insulation of the power supply lead of the unit and tapping into the lead. The current capacity of the lead will be exceeded, causing overheating
- When replacing fuse, be sure to use only fuse of the same rating prescribed on this unit.
- Speakers connected to this unit must be high-power types with minimum rating of 40W and impedance of 4-8 ohms. Connecting speakers with output and/or impedance values other than those noted here, may result in the speakers catching fire, emitting smoke, or becoming damaged.
- When this product's source is switched ON, a control signal is output through the blue lead. Connect to an external power amp's system remote control or the car's Auto-antenna relay control terminal (max.300 mA 12 Vdc). If the car features a glass antenna, connect to the antenna booster power supply terminal.
- When an external power amplifier is being used with this system, be sure not to connect the blue lead to the amplifiers power terminal. Likewise, do not connect the blue lead to the power terminal of the auto-antenna. Such connection could cause excessive current drain and malfunction.
- To avoid short-circuiting, cover the disconnected lead with insulating tape. Especially insulate the unused speaker leads without failure. There is a possibility of short -circuiting if the leads are not insulated.
- Dirt or condensation on the lens inside this unit may prevent playback.
- Playback of discs recorded with a PC using the correct format is possible but depending on the application software, environmental settings and other factors playback may not be possible (For details, inquire at the store or dealer where you purchased the application software.)
- CD-Extra discs can be played back as music CDs.
- Normal playback of CD-R/CD-RW discs other than those recorded with a music CD recorder may not be possible.
- Playback of music CD-R/CD-RW discs even those recorded with a music CD recorder may not be possible with this unit due to disc characteristics, irregular shape or dirt on the disc. Dirt or condensation on the lens inside this unit may also prevent playback.
- Titles and other text information recorded on CD-R/CD-RW discs (ID3TAG) can be displayed by this unit.
- If you insert a CD-RW disc into this unit time to playback will be longer than when you insert a conventional CD or CD-R disc. Read the precautions with the CD-R/CD-RW discs before using.
- Some SD/MMC cards (like very High Speed) may not play back correctly

NOTES