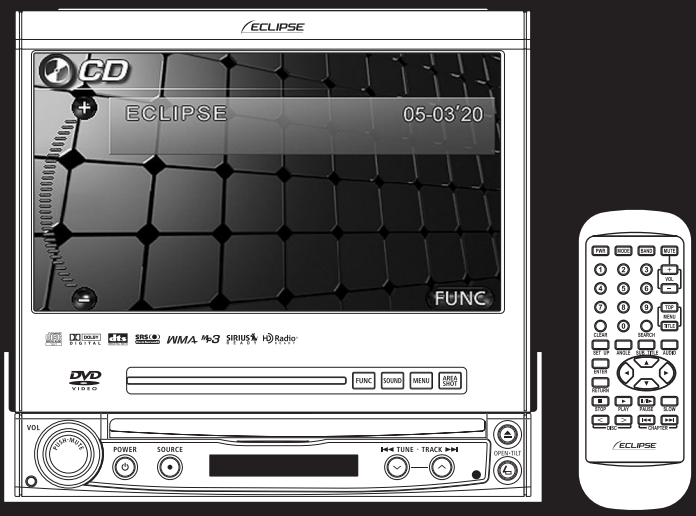
ECLIPSE

OWNER'S MANUAL



AVX5000

"DVD/MS Multi-Source Receiver with 7" Wide TFT Display"

We appreciate your purchase of this receiver.
Please read through this manual for correct operation.
We suggest that after reading it you keep this manual
in a safe place for future reference.

FUJITSU TEN

Warnings and cautions signs, illustrated below, are posted throughout this manual as well as on the device itself. They show safe and correct ways to handle the product so as to prevent personal injury to you and others, and to avoid damage to property. Before reading through the manual, take time to read through and learn the important information listed in this section.

Cautions for use

* The images appearing on the screen may differ from those shown in this manual depending on the type of database used and when it was created.

Warning

This sign indicates a situation in which incorrect handling through disregard of a sign might result in death or serious personal injury.

Caution

This sign indicates a situation in which incorrect handling through disregard of a sign might result in personal injury or may result solely in damage to property.

The symbol shown below indicates important instructions or helpful information to keep in mind.

A point it will be helpful to remember.
Important points.

- Please read all materials that come with the product, such as manuals and warranties.

  Eclipse will not be liability for unsatisfactory product performance due to failure to follow these instructions.

- Changes in product specifications may result in differences between the content of the manual and actual product features.

Please use care in handling the manual.

Forcefully spreading or pulling on pages may result in their falling out of the binding.
Use the manual carefully.

Warning

- Do not modify this system for use other than that specified herein. Also, do not deviate from the installation procedures described herein; Eclipse will not be held liable for damages including, but not limited to serious injury, death or property damage resulting from installations that enable unintended operation.
- This equipment requires 12V DC and should only be installed in a vehicle with a 12V negative ground electrical system. Any other installation may cause a fire or other severe damage to the equipment and the vehicle.
- Never install this equipment where it will interfere with safe operation of the vehicle. Never block the drivers' view. Do not install equipment where it may interfere with operation of the brakes, the steering or any safety equipment, including seat belts and air bags.
- Before to drilling holes in a vehicle for installation, you must confirm the locations of pipes, tanks, electrical wiring, and other vehicle systems and components to ensure that there will be no interference or contact. In addition, addition, it is necessary apply rust prevention and leak prevention measures at the drilling area. Otherwise, fire or electric shock could occur.
- When installing equipment do not remove or alter existing vehicle fasteners, including nuts, bolts, screws, clips, and fittings. Never detach, move or alter existing vehicle wiring, including electrical grounds and straps. Alteration of existing vehicle components may make vehicle unsafe to operate.
- Before installation, remove the negative (-) battery terminal to prevent shocks, electrical arcing, fires, and damage to vehicle wiring and the equipment you are installing.
- Secure wiring with tape or plastic ties so that wires do not interfere with vehicle operation, including brake pedal, gear shifter and steering. Position wires so that they will not be rubbed, abraded, or damaged by moving vehicle components, including power seats.
- To avoid equipment and vehicle damage, including fire, never supply power to installed equipment in a way which will overload the capacity of an existing vehicle circuit. Never leave a power supply wire or connection uninsulated. Always install supplied fuses, circuit breakers, and relays.
- Air bags are vital safety equipment. Never install equipment in a way which will alter air bag wiring or interfere with air bag deployment. Air bags must function properly in the event of an accident.
- When installation is complete, test all vehicle electrical systems for proper operation, including lights, horn, brake lights, and emergency flashers.
- For your protection, never use a power drill without safety glasses or goggles. Debris or broken drill bits may cause severe eye injuries, including blindness.
- Use electrical tape to insulate the ends of all wires, even if not used. Proper insulation prevents arcs, shocks and fires.

Warning

- Do not damage the camera cable. Any holes in the camera will provide a point of entry for moisture and water, which may cause malfunctions, fire or electric shock.
- Some equipment uses batteries. Never install equipment where young children can get access to batteries. If a battery is swallowed, seek medical attention immediately.
- When vehicle is moving, never take your eyes off the road to make adjustments to the equipment. You must pay attention to the road to avoid accidents, do not let the operation or adjustment of the equipment distract you from proper vehicle operation.
- The driver should never watch video or television while driving. Displays and screens should never be used or installed where they can be seen by and possibly distract the driver. It is against the law in many places to have video or television screens used where they can be seen by the driver. Driving and watching video or television is an extremely dangerous thing to do.
- The driver should not look at the screen while driving. Accidents may result if you are not paying attention to the forward direction.
- DO NOT look at the monitor screen while reversing the vehicle. The rear monitor is merely to assist in confirming the locations of obstacles, and therefore there is a limit to the visual range that it provides. Be sure to visually check for safety while reversing the vehicle. Otherwise, you may hit a person or object in the blind spot of the camera, resulting in a serious accident.
- Drive slowly while reversing the vehicle. The rear monitor uses a wide angle lens, and the actual distance is different than how it appears. If you reverse the vehicle at high speed, you may hit a person or object, resulting in a serious accident.
- Do not put foreign objects in the loading slot of Memory Stick Duo or disc. Fires or shocks may result.
- Do not disassemble or alter this equipment. Accidents, fires or shocks may result.
- Do not let water, dust or foreign objects enter the internal parts of this equipment. Smoke, fires or shocks may result.
- Pay attention to where the remote control is left. Traffic accidents or problems with driving may result if the remote control makes its way under the foot pedals etc. when the vehicle is stopped or when it goes around a corner.
- Do not use when it is broken (the screen is not lit or no sound comes out). Accidents, fires or shocks may result.

Warning

- Always replace fuses with fuses of identical capacity and characteristics. Never use a high capacity fuse than the original. Using the wrong type of fuse may cause a fire or severe damage.
- If foreign objects or water enters the equipment, smoke comes out, or there is a strange odor, stop using it immediately, and contact your dealer. Accidents, fires, or shocks may result if you continue to use it in these conditions.
- The driver should not change the Memory Stick Duo or CD while driving. As accidents may result if you are not paying attention to the forward direction, first stop the car at a safe location and then proceed.
- Plastic bags and wrappings may cause suffocation and death. Keep away from babies and children. Never put bag over your head or mouth.

Caution

- Wiring and installing this equipment requires expertise and experience. Professional installation is recommended. Consult with your dealer or a professional installer. Incorrect wiring may damage the equipment or interfere with safe vehicle operation.
- Use only the accessory parts as specified. Using other parts may cause damage to the equipment or cause parts to fall or fly off the equipment.
- Do not install the unit in places where it may get dew condensation on (around the air conditioning hose, etc.), come in contact with water, or in condition of high moisture, dust or oily smoke. If water, moisture, dust or oily smoke enters this unit, smoke, fires or malfunctions may result.
- Avoid installing in places where it cannot be fastened securely or where there are strong vibrations. Also, if you installed the unit with double-sided tape, first wipe away dirt and wax from the installation area. Otherwise, the unit may come loose due to vibration while driving, causing problems for driving and resulting in traffic accidents or injuries.
- Do not install in places with direct sunlight or where it will be hit directly by hot air from the heater. This may increase the temperature of the interior of this equipment, resulting in fires and malfunctions.
- Chose the installation location carefully so that the unit is not installed so that it can contact pedestrians and injure them.
- Do not install the television antenna in hard-to-install, unstable places, or on easily peeled surfaces that have been treated with fluorine resin or water repellent. Accidents may result if the antenna comes off while the can is traveling, falls or makes contact with pedestrians.

Caution

- When installing a TV antenna on the trunk or similar location, be careful of the tip of the TV antenna when opening and closing the trunk. Otherwise, it could cause injury to eyes, etc.
- Tighten the fasteners for the antenna securely so that it will not vibrate loose and injure a pedestrian or cause an accident.
- Occasionally check the camera installation screws, and tighten any that are loose. If a screw falls out, it could come into contact with a pedestrian or cause an accident.
- Be careful when driving into parking garages, under elevated structures, etc. when the television antenna extends above vehicle height. Accidents may result if the television antenna makes contact with the elevated structure, breaks off and falls or makes contact with pedestrians.
- Be careful of the tip of the antenna when opening and closing the trunk if the television antenna is installed on the trunk. Eye damage or other injuries may result.
- Do not block the fan, heat sink or vents of this unit. When fan, heat sink or vent is blocked, the interior overheats, and fires may result.
- Carry out the wiring such that cords are not pinched by movable parts such as seat rails, and screw parts of the vehicle body. Accidents, fires and shocks may result from disconnection and electrical shorts.
- Carry out the wiring such that the cord does not make contact with metal parts. The cord maybe be damaged by contact with metal parts, resulting in fire and shocks.
- Avoid hot surfaces when wiring equipment. High temperatures may damage wiring, causing shorts, arcing and fires.
- Seal the antenna lead and other wires into the vehicle body to prevent rain and water from entering the vehicle. Water leaks may cause shorts and fires.

Caution

- When changing the installation location for this equipment, please consult the dealer where you bought it for safety reasons. Expertise is necessary for removal and installation.
- Keep volume to a reasonable level so that you can hear sounds from outside the vehicle, including warning sounds, voices, and sirens. Failure to do so may cause an accident.
- Be careful that hands and fingers are not pinched when adjusting the tilting angle or closing display. Injuries may result.
- Do not put your hands or fingers into the loading slot of Memory Stick Duo or disc. Injuries may result.
- Do not touch the heat dissipating part of the amp. Burns may result from the heat of this part.
- Avoid immersing the camera in water or passing it through automated (high pressure) car washing machines. Otherwise, water will get inside the camera or the camera may fall off, resulting in an accident.
- Do not recharge dry batteries. Dry batteries may rupture, resulting in injuries.
- Do not use batteries other than those specified. Also, do not mix old and new batteries. Injuries or pollution to the surroundings may result from battery ruptures and leakage.
- When inserting batteries into the equipment, be careful with the polarity (positive/negative), and insert them as indicated. If the battery polarities are incorrect, injuries and pollution to the surroundings may result from battery ruptures and leakage.
- Replace used batteries as soon as possible; they may leak and damage equipment. Battery leakage can burn your skin or your eyes. Wash hands after handling.
- If alkaline solution from alkaline dry batteries makes contact with your skin or clothes, flush with clean water. If any of the solution gets in your eyes, also flush clean with water and then seek medical attention.
- When disposing of lithium dry batteries, affix insulating tape to the positive and negative terminals, and after they are insulated, dispose of them according to the "Local municipal ordinances". Shorts, fires and ruptures may result from disposal when coming contact with other electrically conductive objects such as metal parts, etc.
- Do not short, disassemble or heat the batteries, or place them in fire or water. Fire and injuries may result from battery rupture and leakage.
- Store the remote control in a place away from direct sunlight, high temperatures, and high moisture levels. The case may change shape, and the batteries may rupture and leak.

Caution

- Do not use this equipment except for in-vehicle use. Shocks or injuries may result.
- Be careful of the position of the volume when turning the power source ON. Hearing damage may result if very loud noise is emitted when the power is turned ON.
- The image from the rear monitor is the same image from the rearview mirror and side mirrors, with the left and right sides reversed. In addition, the view is different depending upon the type of vehicle. Pay careful attention.
- Do not operate under abnormal conditions such as when the sound is broken or distorted. Fires may result.
- This equipment uses invisible laser light. Do not disassemble or alter this equipment. If trouble occurs, contact the dealer where you bought the equipment.
  Altering this equipment may cause exposure to laser emissions (worsening eyesight), or result in accidents, fires or shocks.
- If the equipment is dropped or the cosmetics appear broken, turn off the power to the main unit and contact your dealer. If used in this condition, fires or shocks may result.

MEMO

Table of Contents

Introduction	*24*	I
Basic operation	*40*	II
How to operate the tuner	*80*	III
How to operate the CD player	*87*	IV
How to operate the MP3/WMA player	*92*	V
How to operate the optional CD changer	*103*	VI
How to operate the DVD player	*106*	VII
How to operate the video CD player (Asia only)	*129*	VIII
How to operate the Area Shot function (U.S.A./CANADA only)	*134*	IX
ESN security operating procedure	*149*	X
How to use the remote control	*165*	XI
How to operate the optional 5.1ch decoder & AV selector unit	*170*	XII
How to operate the optional HD radio tuner (U.S.A. only)	*202*	XIII
How to operate the optional SIRIUS satellite radio tuner (U.S.A. only)	*208*	XIV
How to operate the optional TV tuner (U.S.A./CANADA/KOREA/TAIWAN only).	*214*	XV
How to operate the VTR	*219*	XVI
How to operate the Back-eye Camera	*222*	XVII
For reference	*226*	XVIII
Before installation	*247*	XIX
Mounting instruction	*248*	XX

Introduction

How to use this manual 24

Features 26

Before using the deck 29

About discs 31
About supported disc types 31
About handling discs 32
About new discs 33
About rental discs 33
About specially shaped discs 33
About disc accessories 33
About the “Memory Stick Duo” 34
About supported “Memory Stick Duo” types 34
About handling the “Memory Stick Duo” 35
About the LCD panel 35
About TV (U.S.A./CANADA/KOREA/TAIWAN only) 36

Name of controls and parts 37

Panel buttons 37
Touch switches 38
Remote control 39

Basic operation

How to turn the power ON or OFF 40

Turning the power on and off 40

Display open/tilt/close 41

Opening the display 41
Adjusting the angle of the display 42
Switching the display’s pull-out positions 43
Closing the display 44
Setting the display AUTO CLOSE function 45

Inserting/Ejecting the disc or “Memory Stick Duo” 46

How to insert disc (CD/DVD) and “Memory Stick Duo” 46
Inserting disc (CD/DVD) or “Memory Stick Duo” 46

How to eject disc (CD/DVD) or “Memory Stick Duo” 48

Switching source 49

Switching the source 49
Switching source using panel buttons 49
Switching source using touch switches 50

Operational screen for each source 51

Adjusting the volume 52

Adjusting the main volume 52
Adjusting main volume using touch switches 52
Adjusting main volume using panel buttons. 52

Adjusting sound quality 53

Displaying the sound adjustment screen 53
Setting Circle Surround II 55
Setting CS II TruBass 55
Adjusting PEQ (parametric equalizer) 56
Adjusting/Saving a PEQ 56
Selecting a PEQ pattern from memory 57
Adjusting POS (Positioning selector) 58
Setting the balance 59
Setting LOUDNESS 60
Setting the harmonizer 60
Simplified time alignment settings (Time Alignment) 61
Selecting the type of vehicle (Car Type) 61
Tweeter settings (Tweeter) 62
Rear speaker position selection (Rear SP) 62
Setting sub woofer. 63
Phase selection (NON-F Phase) 63
Woofer output setting 64
Crossover adjustment (X-Over) 64
Woofer output level adjustment 65

Setting background screen 66

Setting the Background. 66
Importing Background. 66

Adjusting/setting the screen 69

Switching the FUNCTION switch display. 69
Changing the clock settings 70

Setting the clock display 70
Adjusting the time 70
Adjusting image quality 71
Switching screen mode 72

Others 74

Setting the steering switch function 74
Reading steering switch data 75
Compatibility with various switches 76
Setting the Guide tone 77
Displaying Amplifer Status (E-AMP) 78
Screen lock settings 79

How to operate the tuner

How to use the AM/FM radio 80

Listening to the AM/FM radio 80
Listening to the radio using touch switches 80
Listening to the radio using panel button 80
Switching the band 80
Selecting radio stations 81
Manual selection 81
Automatic selection 81
Selection using preset switches 81
Saving radio stations 82
Saving manually 82
Saving with ASM 82
Changing stations saved by ASM 82
Checking preset stations 83
Creating a station name 84
Deleting a previously created station name 85
Turning off the radio 86

How to operate the CD player

How to use the CD player 87

Listening to a CD 87
Listening to a CD using the touch switches 87
Listening to a CD using the panel buttons 87

Selecting a track 88
Fast-forwarding/rewinding 88
Repeating a track 88
Playing tracks in random order 88
Creating a title for a CD 89
Deleting a previously created title 90
Displaying CD TEXT by scrolling 91
Turning off the CD player 91

How to use the MP3/WMA player

How to use the MP3/WMA player 92

Playing MP3/WMA 93
Playing MP3/WMA using the touch switches 93
Playing MP3/WMA using the panel buttons 93
Selecting a music file 94
Selecting with file change switches 94
Selecting with TUNE/TRACK button 94
Selecting a folder 94
Fast-forwarding/rewinding 95
Changing display of the current level 95
Displaying the current level 95
Repeating the same music file or folder 96
Repeating the same music file 96
Repeating the same folder 96
Playing music files in random order 97
Playing music files on folder in random order 97
Playing music files on CD in random order 97
Turning off the MP3/WMA player 97
About MP3/WMAs 98
Playable MP3 file standards 98
Playable WMA file standards 98
ID3/WMA tags 99
Media 99
Format of discs 100
File names 101
Multi-sessions 101
Playing MP3 101
MP3/WMA playing time display 101
Display order of MP3 file/folder names 101
Making and playing MP3/WMA files 102

Downloading MP3/WMA music from internet 102
Converting CD music to MP3/WMA files 102
When writing to CD-R/RW 102
When playing back CD-R/RW 102

How to operate the optional CD changer

How to use the CD changer 103

Listening to a CD 103
Listening to a CD using the touch switches 103
Listening to a CD using the panel buttons 103
Selecting a track. 104
Fast-forwarding/rewinding 104
Selecting a CD 104
Repeating a track or CD 104
Repeating the current track 104
Repeating the current CD 104
Playing tracks in random order 105
Playing tracks on current CD in random order 105
Playing tracks on all CDs in random order 105
Creating a title for a CD 105
Deleting a previously created title 105
Turning off the CD changer. 105

How to operate the DVD player

Before using the DVD player 106

DVD video characteristics. 106
About multiple languages 106
About multiple angles 106
About subtitles. 107
About discs. 107
About playable discs 107
About region codes of playable discs 108
About marks displayed on discs 108
About DVD disc structures 109

How to use the DVD player 110

Watching a DVD 110
Watching a DVD using the touch switches 110

Watching a DVD using the panel buttons 111
Waching a DVD using the remote control 111
Operating the video 112
Playing the video 112
Playing the video using the touch switches 112
Playing the video using the remote control. 112
Fast-forwarding/rewinding 112
Fast-forwarding/rewinding using the panel buttons 112
Fast-forwarding/rewinding using the touch switches 112
Fast-forwarding/rewinding using the remote control 113
Repeating a chapter. 114
Pausing the video 114
Pausing the video using the touch switches. 114
Pausing the video using the remote control 114
Playing back in slow motion 114
Stopping the video. 115
Stopping the video using the touch switches 115
Stopping the video using the remote control 115
Operating the disc menu 116
Operating disc menu using the touch switches 116
Operating disc menu using the remote control 116
Turning off the DVD 117
Turning off the DVD using the panel buttons 117
Turning off the DVD using the remote control 117
Searching for a desired chapter 118
Searching by chapter 118
Serching by chapter using the panel buttons 118
Switching screen display/audio 118
Changing the angle 118
Switching subtitle language 119
Switching dubbed audio language. 119
Setting the DVD player 120
Setting the audio language 121
Inputting a code 121
Setting subtitle language 122
Inputting a code 122
Setting menu language 123
Inputting a code 123
Setting display of multi-angle mark (angle selection mark) 124
Setting viewer restriction 125

Changing video output 126
Switching dual play 127
Table of language codes 128

How to operate the video CD player (Asia only)

How to use the video CD player 129

Watching a video CD 129
Watching a video CD using the touch switch 129
Watching a video CD using the panel buttons 130
Watching a video CD using the remote control 130
Using the menu screen 130
Displaying menu screen 130
Selecting menu list 130
Advancing to the next scene or returning to the beginning of the scene being played 131
Using panel buttons 131
Using remote control 131
Fast-forwarding/rewinding 131
Using panel buttons 131
Using remote control 131
Specifying a track to playback 132
Pausing/Advancing the video 132
Stopping playback 132
Using slow motion 133
Turning off the video CD 133
Turning off the video CD using the panel buttons . . . 133
Turning off the video CD using the remote control . . 133

How to operate the Area Shot function (U.S.A./CANADA only)

Before using the Area Shot 134

About the Area Shot 134
To use the Area Shot function 135
Map data 136
GPS (Global Positioning System) 136

How to use the Area Shot function 137

Displaying ePID 137
Reading Area Shot data. 138
Changing Area Shot screen 140
How to view the Area Shot screen 141
Displaying touch switch 142
Switching the map reduction scale 143
Displaying the all-route map 143
Switching guidance points 144
Switching text information 145
Re-scrolling through text information 145
Displaying POI vicinity 146
Selecting POI category 146
Displaying POI vicinity information 147
When an optional GPS unit is connected 148
To end Area Shot 148

ESN security operating procedure

ESN security operating procedure 149

About ESN 149
How to switch the security type (Key CD security/"Memory Stick" security). 150
How to operate the ESN (Key CD) security 151
How to program the Key CD 151
How to cancel the Key CD. 152
How to change the Key CD 153
How to resume normal operation (ESN security lock out) 153
What happens if an incorrect CD is inserted? 154
How to operate the ESN (“Memory Stick”) security 155
How to record a security code 155
How to cancel the “Memory Stick” security 157
Canceling the security function by entering the security code 157
Canceling the security function using a “Memory Stick Duo” 158
How to change the “Memory Stick Duo” 159
How to resume normal operation (ESN security lock out) 159

Canceling ESN security lock out using security code entry 159
Canceling ESN security lock using "Memory Stick Duo" 160
What happens if a "Memory Stick Duo" or security code is incorrect? 162
How to operate the ACC security 163
How to turn the security indicator on/off 164
How to read the Electronic Serial Number 164

How to use the remote control

Before using remote control 165

How to use the remote control 166

Turning the power on/off 166
Adjusting the audio volume 166
Muting the volume 166
Switching playback modes 166
How to select the tuner 167
Selecting the FM/AM band 167
How to play back CDs 168
Switching disc modes 168
Replacing the battery 169

How to operate the optional 5.1ch decoder & AV selector unit

Sound quality information 170

Functions of the optional 5.1 ch decoder & AV selector unit is connected 170
About parametric EQ 171
About time alignment 173
About crossover 174
About E-iSERV sound effect customizations 175
About automatic parametic equalizer 175

Adjusting sound quality 176

Displaying the sound adjustment screen 176
Adjusting PEQ (Parametric equalizer) 178

Adjusting/Saving a PEQ 179
Selecting a PEQ pattern from memory 181
Measuring/Displaying frequency characteristics 181
To avoid writing measurement results to the "Memory Stick Duo" 181
To write measurement results to a "Memory Stick Duo" 182
Adjusting POS (Positioning selector) 183
Setting the balance 184
Setting LOUDNESS 185
Setting the harmonizer 185
Setting/Adjusting surround system 186
Setting the Dolby Pro Logic II 186
Setting the Center Level 187
Setting the Rear Level 187
Setting the Center Width 187
Setting the Compression 188
Setting/Adjusting speakers 189
Adjusting time alignment 189
Manual adjustment 189
Automatic adjustment 191
Adjusting X-Over 191
Adjusting sub-woofer output level 193
Setting phase control 194
Adjusting speaker level 195
Adjusting speaker size 196
Importing sound data 198

Setting display 201

Screen settings of the optional 5.1 ch decoder & AV selector unit 201
External monitor image settings 201

How to operate the optional HD radio tuner (U.S.A. only)

How to use the HD radio 202

About HD Radio 202
Listening to the HD radio 202
Listening to the HD radio using the touch switches 202

Listening to the HD radio using the panel buttons 202
Switching the band 203
Selecting radio stations 203
Manual selection 203
Automatic selection 203
Selection when using preset switches 203
Saving radio stations 204
Saving manually 204
Saving with ASM 204
Changing stations saved by ASM 204
Checking preset stations 205
HD radio information screen display 206
HD radio reception settings 207
Turning off the radio 207

How to operate the optional SIRIUS satellite radio tuner (U.S.A. only)

How to use the SIRIUS satellite radio 208

About SIRIUS satellite radio 208
Listening to the SIRIUS satellite radio 209
Listening to SIRIUS satellite radio using the touch switches 209
Listening to SIRIUS satellite radio using the panel buttons 209
Selecting SIRIUS channels 210
Manual selection 210
Automatic selection 210
Selection using preset switches 210
Category selection 211
Direct Channel selection 212
Saving SIRIUS channels 213
SIRIUS satellite radio information screen display 213
Turning off the radio 213

How to operate the optional TV tuner (U.S.A./CANADA/KOREA/TAIWAN only)

How to use the TV 214

Watching TV 214
Watching TV using the touch switches 214
Watching TV using the panel buttons. 214
Selecting channel. 215
Manual selection 215
Automatic selection. 215
Selection when using preset switches 215
Saving channels. 216
Saving manually. 216
Saving with AUTO.P 216
Changing stations saved by AUTO.P. 216
Checking preset stations 218
Switching to TV/VTR mode 218
To end TV mode 218

How to operate the VTR

How to use the VTR 219

Viewing the VTR. 219
Viewing the VTR using the touch switches 219
Viewing the VTR using the panel switches 219
Switching to the TV/VTR 220
Turning off the VTR mode. 221

How to operate the Back-eye Camera

Back-eye Camera operations. 222

Back-eye Camera image 224
Automatic back-eye camera image display setting 224

For reference

Important Points 226

If one of these messages appears 226
Before asking for repairs. 228

Other 230

Products equipped with Dolby Digital 230
Products equipped with Macrovision 230

Glossary. 231

About care and maintenance. 233

About care and maintenance - main unit. 233

Topic index 234

About screen and sound adjustment. 234
About using AM/FM radio 235
About using the CD player and CD changer 235
About using the MP3/WMA player 236
About using the DVD player 237
About video CD player (Asia only) 238
About Area Shot (U.S.A./CANADA only) 238
About ESN security 239
About optional 5.1ch decoder & AV selector unit. 239
About optional HD radio (U.S.A. only) 240
About optional SIRIUS satellite radio (U.S.A. only) 240
About optional TV (U.S.A./CANADA/KOREA/TAIWAN only) 241
About optional Back-eye Camera. 241
When something isn't clear. 241

Index. 242

Specifications 243

Display 243
Radio tuner. 243
CD 243
DVD 243
Common component. 244

How to contact customer service 245

Before installation

Before installation 247

Components 247
Installation preparation 247

Mounting instruction

Mounting instruction 248

Mounting the main unit 248
Names and function of terminals 252
Connecting the parking-brake signal and the reverse signal . . . 254
System connection example 256

The Topic Index simplifies searches for explanations about individual features. When confused by an operation, use the Topic Index to search for information about the operation.

How to use this manual

Item title

A title is assigned to each item.

Section title

A title is assigned to each section.

asic operation

Adjusting/setting the screen

Operation title

A title is assigned to each operation.

Changing the clock settings

Touch switches not frequently used are not displayed in the audio operation screens and DVD screens. These switches can be displayed as follows.

1 Press **FUNC** for less than 1 second.

- The FUNC screen will appear.

Detailed operation title

A title is assigned to each detailed operation.

Setting the clock display

This turns the clock display on or off.

1 Touch **Clock** .

- The clock display turns on and off each time **Clock** is touched.
  When the clock display is on, the touch switch display color changes to the selected switch.

Adjusting the time

This adjusts the time.

Operation procedure

Describes the operation. Proceed with the operation according to the numerical order.

1 Touch ∧ or ∨ for adjust each item.

Attention

Additional points regarding operation are given here.

ATTENTION

To set the clock to 0 minutes (an exact hour), touch the touch switch.
For example:
At 3:29: Touch **SET** returns to 3:00.
At 3:30: Touch **SET** advances to 4:00.

70

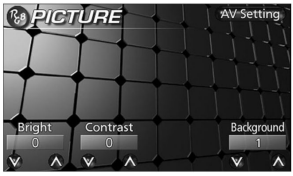
Quality adjustments can be made for images as with the audio operation screen and DVD or VTR (optional).

Adjusting image quality

Contrast, brightness and other picture settings can be adjusted to match preferences for viewing DVD video or the audio operation screen.

1 Press and hold **FUNC** until you hear a beep.

● The PICTURE screen will appear.



●When adjusting audio operation screen

●When adjusting DVD/VTR screen

■ Bright

1 Touch ∧ to increase brightness, or ∨ to decrease brightness.

■ Contrast

2 Touch ∧ to increase contrast, or ∨ to decrease contrast.

■ Color (for DVD/VTR screen only)

3 Touch ∧ to increase red, or ∨ to increase green.

■ Tint (for DVD/VTR screen only)

4 Touch ∧ for a darker color, or ∨ for a lighter color.

II

Section side heading

The side heading for the current section.

Operation screen

A screen showing the operation.

Features

DVD player with sharp video and dynamic sound (Page 106)

Plays DVD videos recorded with high image and sound quality.

(DVD media is able to record a movie with high quality video and digital sound that exceeds the quality of CD media.)

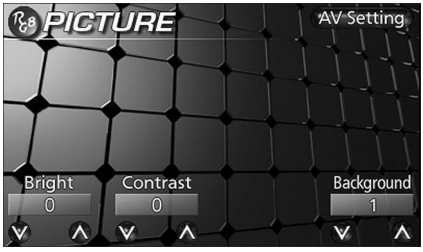
MP3 player that plays back the equivalent of several albums of music recorded on a single music disc (Page 92)

MP3 audio compression technology compresses audio data to one-tenth the original size. CD-R/RW with recorded MP3s can be played.

Selection and display of favorite wallpaper (screen backgrounds) (Page 66)

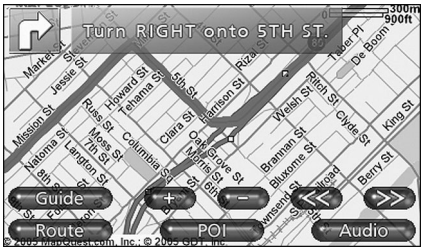
Wallpaper of your choice can be switched and displayed for use as the background of the information screen and audio operation screens.

The screen from a navigation unit can also be linked and selected.



Area Shot for displaying map (U.S.A./CANADA only) (Page 134)

Using Area Shot, maps to destinations and guidance information can be displayed on your unit if you have set route using E-iSERV (web site).



System upgrade

● **CD changer (Page 103)**

A CD changer enables non-stop playing of multiple discs, for long drive convenience.

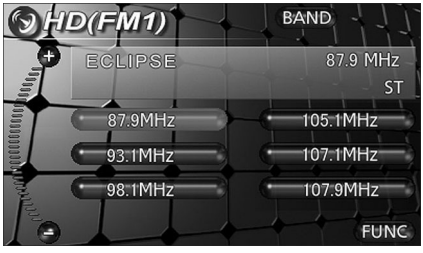
Playing and selecting songs among the discs can be done with ease.

● **VTR (Page 219)**

Videos can be watched if a VTR deck is connected.

● **HD Radio tuner (Page 202)**

Terrestrial digital broadcasts can be received if the optional HD Radio tuner unit is connected.



Features

● **SIRIUS satellite radio tuner (Page 208)**

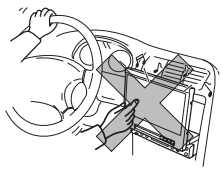
Satellite radio broadcast can be received if the optional SIRIUS satellite radio tuner unit is connected.

● **5.1ch decoder & AV selector unit (Page 170)**

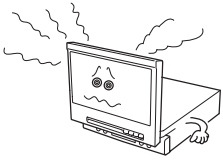
Fine audio adjustments can be performed by connecting an optional 5.1ch decoder & AV selector unit.

Before using the deck

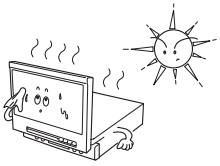
Caution



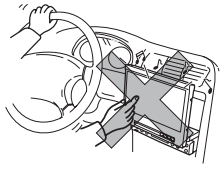
●Be very careful and pay close attention to safety when operating the audio controls while driving and set the volume level so that you can still adequately hear sounds outside the vehicle.
Otherwise accidents may occur.



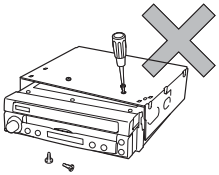
●Never continue to use the system if it is malfunctioning in any way. If smoke, abnormal noises or abnormal odors are noticed, turn off the power immediately.



●Exercise caution when experiencing not weather or high temperature. The temperature inside the vehicle can increase during hot weather. Wait for the temperature inside the vehicle to drop before using the unit.
Otherwise damage to equipment may occur.



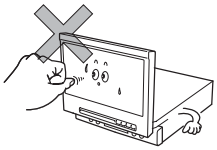
●Drivers should not operate the DVD while driving. The volume level should be set to so that you can still adequately hear sounds outside the vehicle.
Otherwise damage may occur.



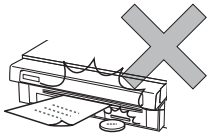
●Do not disassemble or modify the deck.
This equipment is designed with a very precise structure. Contact the store of purchase in the event of any unsatisfactory performance.

Before using the deck

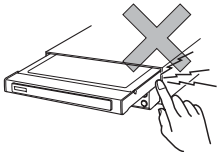
Caution



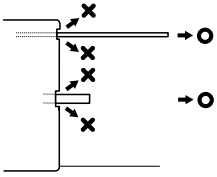
● Do not apply excessive force to the monitor, or damage to the equipment may occur.



● Do not insert any objects other than discs or “Memory Stick Duos” into their respected slots.
Otherwise damage may occur.



● Be careful not to get fingers or other objects caught in the monitor when it is being extended or retracted into place.
Interference can cause an injury or damage the equipment.



● When removing a disc or “Memory Stick Duo” from the deck, do so in a horizontal direction.
Do not forcibly pull up or press down when removing them.
Improper removal can scratch the disc, cause deck noise or damage the “Memory Stick Duo”.

About discs

ATTENTION

- Water droplets (condensation) can form on the inside of the unit during cold or rainy weather in the same way car windows can fog up. If this occurs, there may be a drop in the performance of the equipment. To help reduce this performance variation, ventilate or dehumidify the vehicle for a short time prior operating the equipment.
- To safeguard the components of the equipment, this equipment will automatically stop the player if a malfunction is detected. If the player does not resume normal operation, it is possible that the unit has been damaged. Contact the store of purchase.
- It is possible that the sound may seem to skip or cuts out if the vehicle experiences violent motion on rough roads.

About supported disc types

- An audio or DVD video disc bearing one of the marks shown below can be played. Only DVD-R/RW (DVD-Recordable/ReWritable) and DVD+R/RW (DVD+Recordable/ReWritable) discs recorded in Video mode can be played. Discs recorded in Video mode (VR) cannot be played.
- Depending on the type of disc used, playback may not be possible.

- Supports Dolby Digital. Discs bearing the following mark can be used.

Manufactured under license from Dolby Laboratories, Inc. Dolby and the double-D symbol are registered trademarks of Dolby Laboratories.

- It is possible that a CD-R (CD-Recordable) or CD-RW (CD-ReWritable) disc will not play on the unit due to special disc characteristics, scratches, dirt or deterioration caused by long storage in the vehicle. In addition, an unfinalized CD-R or CD-RW disc written in CD-R, CD-RW or UDF format will not play in this equipment.
- It is possible that a DVD-R/RW (DVD-Recordable/ReWritable) or DVD+R/RW (DVD+Recordable/ReWritable) disc will not play on the unit due to special disc characteristics, scratches, or dirt or deterioration caused by long storage in the vehicle. In addition, an unfinalized DVD-R or DVD-RW disc will not play in this equipment. It is possible that discs recorded using a computer may not play in this equipment depending on the environment and/or settings of applications.
- The CD-TEXT function requires commercially available CDs which support CD-TEXT. It is possible that characters in CD-R and CD-RW data may not be displayed correctly.

Before using the deck

ATTENTION

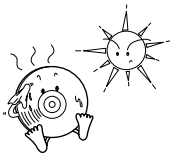
- Do not use discs with transparent or semi-transparent portions within the recording area, or see through discs, since they cause the equipment to operate improperly.
- Super Audio CDs cannot be played.

SUPER AUDIO CD Hybrid

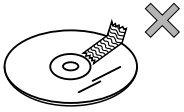
- CCCDs (Copy Control CD) do not conform to official CD standards and are not supported.
- CD-EXTRA discs can be played as audio CDs.
- Voice tracks on Mixed Mode CDs cannot be played. Only music tracks will be played.
- Video-CDs can be played. (Asia only)

COPY CONTROL CD

About handling discs



- Be sure to store discs in their cases and keep them out of direct sunlight. Discs can warp and become unusable.



- Do not apply paper-based tape to either the recording side or label side of a disc. Otherwise damage to the disc or equipment may occur.

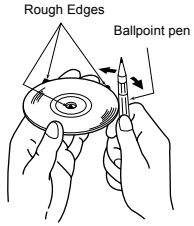
- Do not use discs where cracks and/or large warps in the disc are present. Otherwise damage to the disc or equipment may occur.

- Do not touch the recorded side of a disc when handling it. (Iridescent side of the CD) The disc may become dirty causing skipping type effect to occur.

- Using a disc that has become dirty can scratch the disc and result in sound having a skipping type effect. Use a commercially available compact disc cleaner to clean the CD, wiping lightly from the center to the edge.

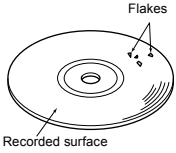
ATTENTION

About new discs



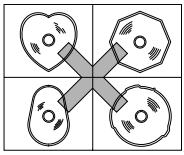
- You may notice that some brand new discs are rough around the center hole or outside edge. Remove the rough edges with the side of a ballpoint pen, etc. Rough edges may prevent proper loading in the unit. Flakes from the rough edges may also stick to the recorded surface, interfere with playback, and/or damage the disc or equipment.

About rental discs



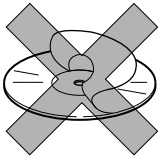
- Do not use CD discs with attached cellophane tape, rental CD discs with glue protruding from labels or discs with the residue of peeled adhesives. Using discs with those conditions can prevent the player from proper operation and cause damege to the disc or equipment.

About specially shaped discs

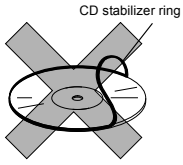


- Specially-shaped CDs cannot be played. Do not attempt to play them, even with an adapter, since they may damage the player.
- Please do not use a commercially available lens cleaner, because it may cause damage to the pickup of the player.

About disc accessories



- Do not use accessories (stabilizers, protective seals, laser lens cleaners, etc.) sold for “improving sound performance” or “protecting CDs.” The changes in CD thickness or outside dimensions made by these accessories may cause problems in the player.



- Do NOT attach any ring-shape protector (or other accessory) to your discs. Those protectors are commercially available and said to protect discs and to improve sound quality (and anti vibration effect), but they can do more harm than good during regular use. The most common problems are insert/eject related problems and “No playback” problems due to the protector ring coming off in the disc mechanism.

Before using the deck

About the “Memory Stick Duo”

ATTENTION

- Do not leave the “Memory Stick Duo” in places exposed to static electricity or electrical noise. Otherwise, data may be lost.
- To safeguard the components of the player, this equipment will automatically stop the player if a malfunction is detected. If the player does not resume normal operation, it is possible that the unit has been damaged. Contact the store of purchase.
- After uploading of data to the hard drive is complete, promptly remove the “Memory Stick Duo”.
- Do not remove the “Memory Stick Duo” while it is being used to upload data to the this unit. Otherwise, data may be lost. Please be aware that Eclipse will not be held responsible for lost data.

About supported “Memory Stick Duo” types

- “Memory Stick Duos” with a capacity of up to 128MB are supported.
- “Memory Stick Duo” PRO is not supported.
- “Memory Stick Duos” labeled with the following marks can only be used when registering a pass code in database update or Eclipse Security Network (ESN).

“Memory Stick Duo” are registered trademarks of Sony Corporation.

- The “Memory Stick Duo” cannot be used on this equipment if it has been formatted using a device other than the dedicated device.

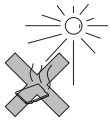
ATTENTION

About handling the "Memory Stick Duo"

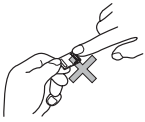
- Regularly wipe clean any dust or dirt from the surface of the cartridge with a dry cloth.

- Do not use "Memory Stick Duos" with tape or peeling labels.

- Store in a dry place, out of direct sunlight. Otherwise, it may become impossible to use the "Memory Stick Duo".



- Always place in the case provided when transporting or storing.
- Do not touch terminals with metal objects or your bare hands.



About the LCD panel

ATTENTION

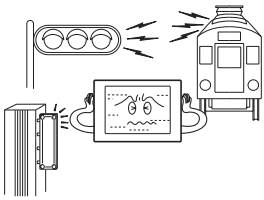
- The LCD panel can appear to be white or black when seen from certain angles.
- The screen will be difficult to read when external light source (bright lights, sunlight) falls sunlight falls on the display.

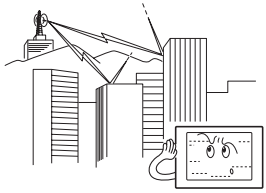
Before using the deck

About TV (U.S.A./CANADA/KOREA/TAIWAN only)

ATTENTION

- When the loss of power is lost due to vehicle battery replacement, replacing fuses, etc., all preset channels will be erased.
- It may be difficult for the TV to maintain optimal reception due to variation in signal strength or interference from other objects. The main causes of interference are listed below.
  - Visual or audio static may result when in close proximity to overhead train wires, high-tension wires, traffic signals, neon signs, etc.
  - Depending on the signal, buildings and mountains may adversely affect reception.
  - Visual or audio static may result when in close proximity to radio broadcasting or ham radio antennas.
  - Signal reception will become extremely weak when driving through a tunnel.
  - Signal reception will become weak when traveling at a great distance from the broadcasting station.
  - In some areas, visual or audio static may result when in close proximity to TV or radio towers. This is due to the influence of electro-magnetic waves outside of the reception range.



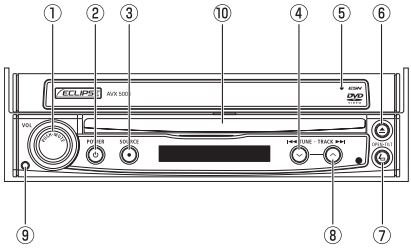


Name of controls and parts

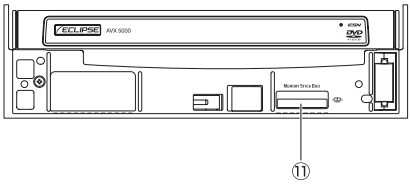
The unit can be operated by pressing buttons on the detachable panel (panel buttons) and by touching buttons displayed on the screen (touch switches).

Panel buttons

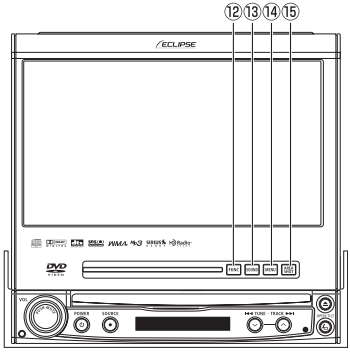
With display retracted



Control panel detached



With display opened



①	VOL button	Turn to adjust volume.
②	PWR button	Press to turn deck power ON/OFF
③	SOURCE button	Press to switch source modes.
④	∨ button	Press to select radio stations, CD audio tracks and DVD chapters.
⑤	Security indicator	Flashes when the ESN security system is in operation.
⑥	EJECT button	Press to eject DISC.
⑦	OPEN·TILT button	Press to open the display panel.
⑧	∧ button	Press to select radio stations, CD audio tracks and DVD chapters.
⑨	Detach panel release button	Press to detach the control panel.
⑩	DISC slot	Disc insertion and removal slot
⑪	“Memory Stick Duo” slot	Inserts and ejects “Memory Stick Duo”.
⑫	FUNC button	Press to switch to function mode and display adjustment mode.
⑬	SOUND button	Press to switch to sound adjustment mode.
⑭	MENU button	Press to display the audio menu screen that enables the switching of audio modes.
⑮	Area Shot button	Press to switch to Area Shot screen.

Name of controls and parts

Touch switches

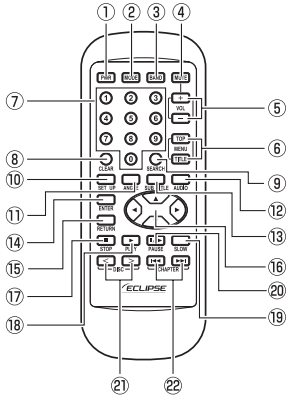
Unit can be operated by touching switches on the screen.

[About the operation of touch switch]

- Touch the switches until you hear a beep.
- Touch the switches lightly to prevent damage to the screen.
- If a switch does not respond, remove your finger and touch it again.
- Unavailable switches are shaded.
- When a function for a switch is active, the color of that switch will change.

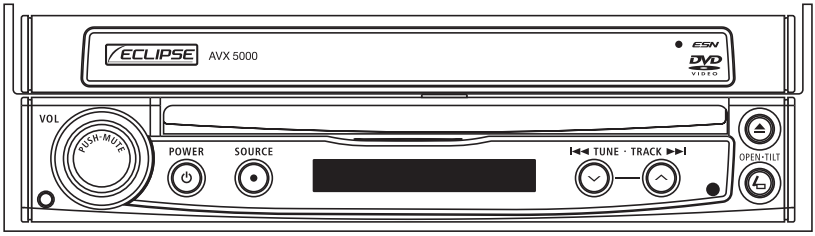
Caution	Touch these switches with your fingers. Using a pen, pencil or object with a hard or sharp tip to touch the screen may cause damage to the unit.

Remote control



①	PWR button	Press to turn unit power ON/OFF.
②	MODE button	Press to switch SOURCE modes.
③	BAND button	Press to switch radio band.
④	MUTE button	Press to mute audio and cancels mute.
⑤	VOL button	Turn to adjust volume.
⑥	MENU button	Press to display DVD menu and title menu.
⑦	NUMBER button	Press to search for video track.
⑧	CLEAR button	Press to clear numbers currently being input.
⑨	SEARCH button	Press to switch between search for DVD chapters and DVD title.
⑩	SET UP button	Press to display DVD operation screen.
⑪	ANGLE button	Press to switch angle of the DVD.
⑫	AUDIO button	Press to switch voices during DVD playback.
⑬	SUB TITLE button	Press to switch during DVD playback.
⑭	ENTER button	Press to set the content for each setting.
⑮	RETURN button	Press to return to previous screen.
⑯	△ (cursor) button	Press to move the cursor during operation of DVD menu.
⑰	STOP button	Press to stop video playback.
⑱	PLAY button	Press to start (restart) video playback.
⑲	SLOW button	Press to activates slow-motion video playback.
⑳	PAUSE button	Press to pauses video playback.
㉑	< DISC > button	Press to select disc in CD changer or select radio preset channels.
㉒	I◀◀CHAPTER▶▶I button	Press to select DVD chapter and disc track.

How to turn the power ON or OFF



Turning the power on and off

When the power is turned on, the last state or mode used prior to power turning off will be restored.

1 When power is OFF, press the ⏻ .

- The power will come ON.

2 When power is ON, press the ⏻ .

- The power will go OFF.

ATTENTION

The display can be set to automatically open and close when the power is switched ON or OFF. (See **"Setting the display AUTO CLOSE function"** on page 45)

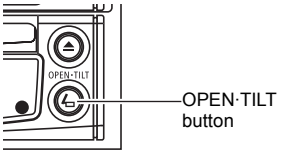
Display open/tilt/close

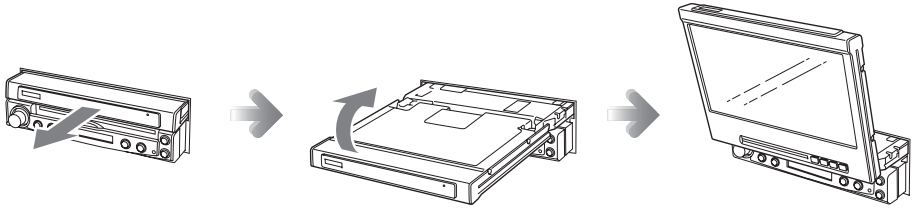
Opening the display

1 Turn the ignition switch ON.

2 Press **OPEN·TILT** .

● Opens the display.





Caution	Do not force the display to open manually. Applying excessive force to the display could damage it.

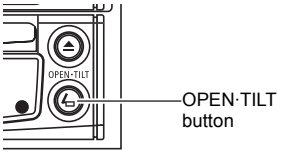
ATTENTION	The display can be set to automatically open when the ignition switch is turned ON. (See **"Setting the display AUTO CLOSE function"** on page 45)

Display open/tilt/close

Adjusting the angle of the display

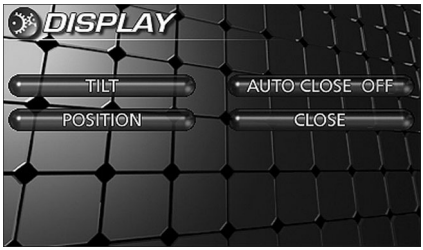
1 With the display open, press **OPEN·TILT** for less than 1 second.

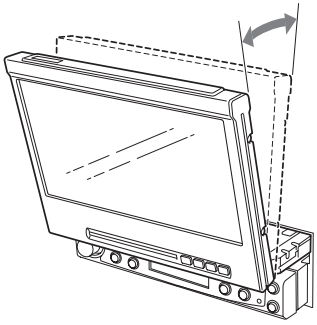
- The display setting screen will appear.



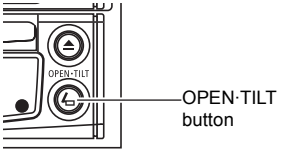
2 Touch **TILT** .

- The display will tilt upwards by one step (5°). Each touch of switch tilts the panel by another step.
- The display can be adjusted to 7 different tilt positions. (Front Position) (Rear Position: 5 tilt positions)





3 After completing the adjustment, press **OPEN·TILT** .



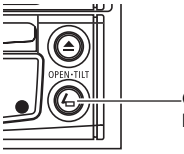
Caution	Do not attempt to manually adjust the display. Applying excessive force to the display could damage it.

ATTENTION	The adjusted display angle will be saved. When reopened, the display will automatically return to this angle.

Switching the display's pull-out positions

1 With the display open, press **OPEN·TILT** for less than 1 second.

- The display setting screen will appear.



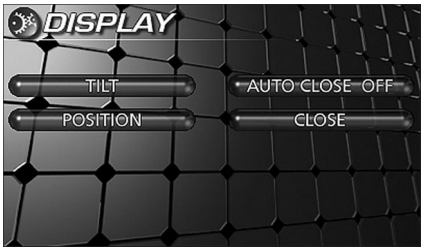
OPEN·TILT button

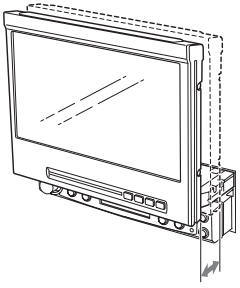
2 Touch **POSITION** .

- Each time the switch is touched, the display pull out positions will be changed in the following order shown below.

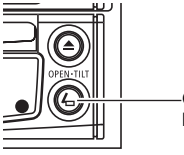
Rear position (toward the dashboad)
↕
*Front position (toward the viewer)

*: The front position cannot be adjusted when the screen is in the 6th or 7th tilt position.





3 When adjustment is complete, press **OPEN·TILT** .



OPEN·TILT button

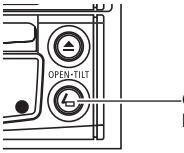
Caution	Do not attempt to manually adjust the pull-out display. Applying excessive force to the display could damage it.

ATTENTION	The pull-out position of the display will be saved once it has been adjusted. The display will then automatically return to this position when it is reopened.

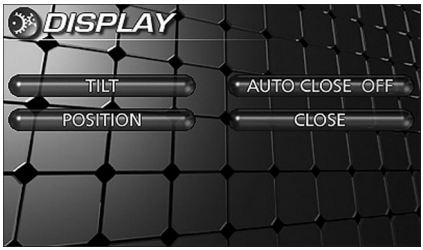
Display open/tilt/close

Closing the display

1 With the display open, press **OPEN·TILT** for less than 1 second.



2 Touch **CLOSE** .



Caution

- Do not attempt to close the display manually. Applying excessive force to the display could damage it.
- When closing the display, check to make sure it has retracted completely. The display could be damaged if left in a partially closed position.

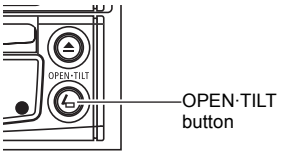
ATTENTION

- The display can be closed by pressing the **OPEN·TILT** button until a beep noise is heard (after approx. 1 second).
- If the ignition switch is turned OFF while the display is open, the display can still be closed if the **OPEN·TILT** button is pressed before a beep noise is heard (within approx. 1 second).

Setting the display AUTO CLOSE function

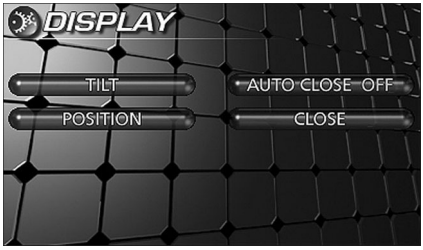
The display can be set to automatically open when the ignition switch is turned ON, and automatically close when it is turned OFF.

1 With the display open, press **OPEN·TILT** for less than 1 second.

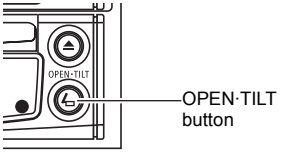


2 Touch **AUTO CLOSE** .

- Touching the switch toggles between ON and OFF.



3 When adjustment is complete, press **OPEN·TILT**



Caution

Do not enable the AUTO CLOSE function if the display interferes with the shift lever position (P range) when it is opening and/or closing.

ATTENTION

If the display is closed before the ignition switch is turned OFF, the display will not automatically open when the ignition switch is turned ON again. Press **OPEN·TILT** to open the display.

Inserting/Ejecting the disc or “Memory Stick Duo”

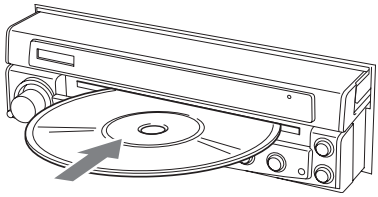
How to insert disc (CD/DVD) and “Memory Stick Duo”

When you want to listen to music, insert a CD into the disc slot. When playing a DVD video, insert a DVD video disc into the disc slot. When reading data (ESN recorded data and sound quality data etc.), insert the “Memory Stick Duo” into the “Memory Stick” slot.

Inserting disc (CD/DVD) or “Memory Stick Duo”

■When inserting a DVD or CD

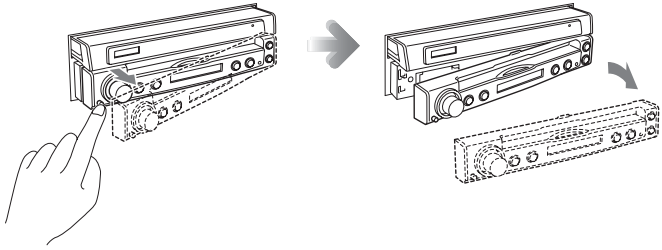
1 Insert a DVD or CD by holding it label up with one finger on the center rim and another finger on the edge.



- CD or MP3 playback starts as soon as a CD is inserted.
- Playback starts as soon as a DVD is inserted.

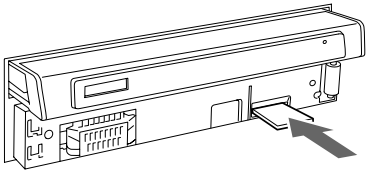
■When inserting a “Memory Stick Duo”

1 Press the detach panel release button and remove the control panel.

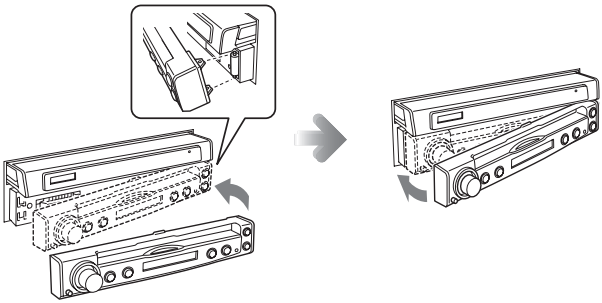


2 Insert the “Memory Stick Duo” in the direction on the ▶ mark until a click is heard.

- Once the “Memory Stick Duo” meets the back stopper, do not continue to apply force. (Once fully inserted, the “Memory Stick Duo” should still protrude a few millimeters.)



3 Install the control panel.



II

Caution

- DVDs and CDs are inserted into the same slot. Only one type of disc can be inserted at any time.
- Do not remove the “Memory Stick Duo” while reading data. Otherwise, data may be lost. Please be aware that Eclipse will not be hold responsible for lost data.

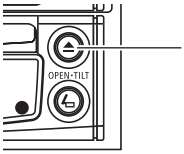
Inserting/Ejecting the disc or “Memory Stick Duo”

How to eject disc (CD/DVD) or “Memory Stick Duo”

■When ejecting a DVD or CD

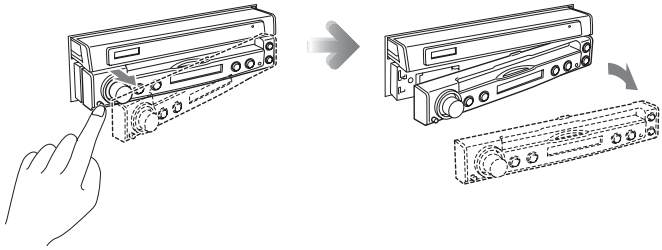
1 Press ⏏ .

- The disc is automatically ejected.
- If the disc does not eject (is not released from the internal mechanism), press and hold ⏏ for at least five seconds.



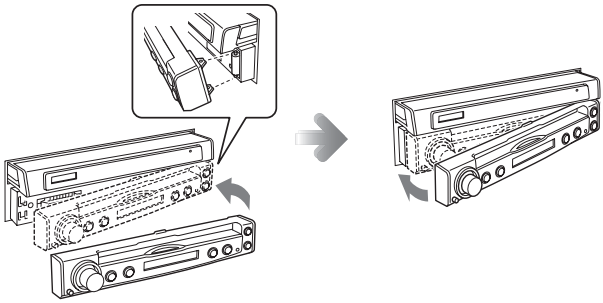
■When ejecting a “Memory Stick Duo”

1 Press the detach panel release button and remove the control panel.



2 Lightly press the “Memory Stick Duo” (once) to eject.

3 Install the control panel.



Switching source

The unit can be used when the vehicle's ignition switch is on or in the ACC position.

- This unit supports the use of a remote control. A DVD remote control is included. See page 165 for instructions on operation of the remote control.

Switching the source

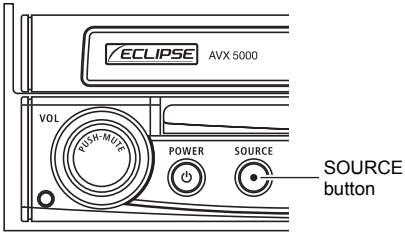
Switching source using panel buttons

1 Press **SOURCE** .

- Each time the button is pressed, the source will be changed in the order shown below.

FM → AM → SIRIUS → DISC (DVD/CD/MP3·WMA) → CDCH → TV → VTR → FM

- Sources which are not connected to the unit will be skipped.

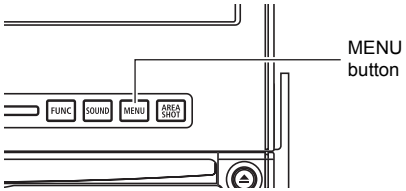


Switching source

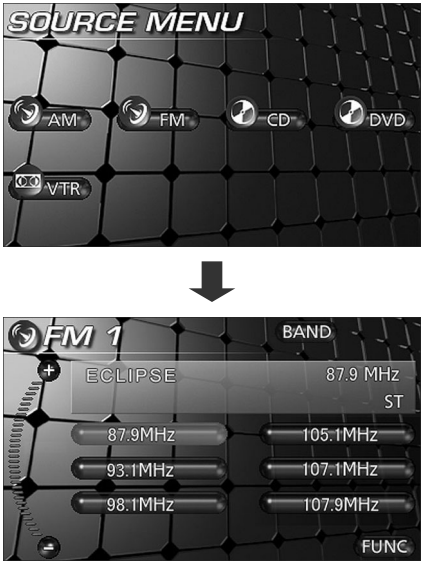
Switching source using touch switches

1 Press **MENU** .

- The SOURCE MENU screen will appear.



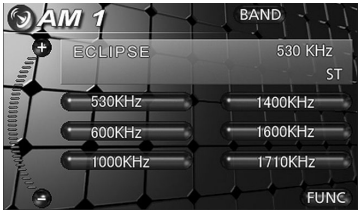
2 When the SOURCE MENU switch is touched, the operation screen for the available sources is displayed.



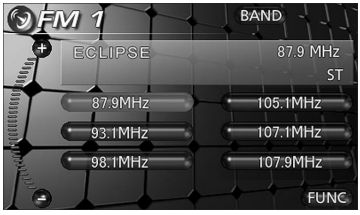
Operational screen for each source

The operation screen for each source will appear as shown below.

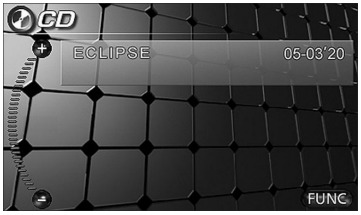
●AM radio operation screen



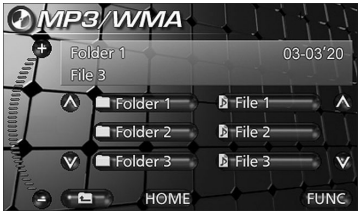
●FM radio operation screen



●CD player operation screen



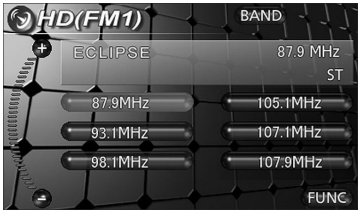
●MP3/WMA player operation screen



●DVD player operation screen

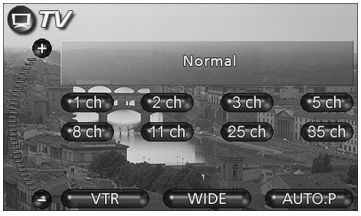
●CD changer operation screen (optional)

●HD radio operation screen (optional: U.S.A. only)



● SIRIUS satellite radio operation screen (optional: U.S.A. only)

● TV operation screen (optional: U.S.A./CANADA/KOREA/TAIWAN only)



●VTR operation screen (optional)

When the operation screen for the DVD, TV or VTR has not been operated for 6 seconds or more, it will automatically be canceled.

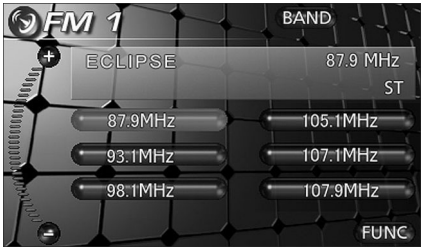
Adjusting the volume

Adjusting the main volume

Adjusting main volume using touch switches

1 Touch + or − .

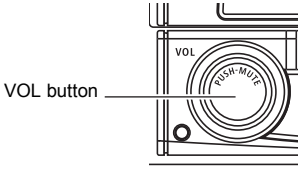
- + : Volume UP (louder)
  − : Volume DOWN (quieter)



Adjusting main volume using panel buttons

1 Turn the VOL button.

- Adjustment levels from 0 to 80 are available.
  Turn to the right : Volume UP (louder)
  Turn to the left : Volume DOWN (quieter)
- Press the VOL button to cut or mute the volume or restore it instantly. Press the VOL button again or turn it to the right to turn the sound ON.



Adjusting sound quality

By adjusting the equalizer and the volume balance you can simulate a custom sound environment within the vehicle.

Displaying the sound adjustment screen

1 Press **SOUND** .

- The sound adjustment screen will appear.
- Touch any of the following buttons on the sound adjustment screen to display the corresponding adjustment screen.

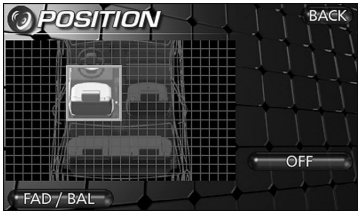
●Sound adjustment screen

PEQ

●Parametric equalizer adjustment screen

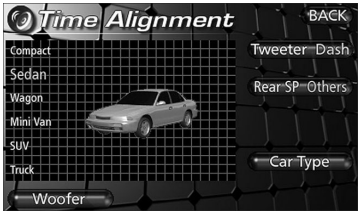
POS

●Position setting screen



SETTING

●Time alignment adjustment screen



Adjusting sound quality

The following settings/adjustments can be made in the operation screens and setting screens.

Touch switch/item	Function	Page
PEQ	The parametric equalizer adjusts 7 frequency bands.	56
Circle Surround II	Circle surround can easily be simulated using the existing speaker system in your vehicle (when the vehicle has 4 speakers).	55
TruBass	Deep bass sounds can be heard even if a subwoofer is not connected.	55
POS	Sound localization can be adjusted according to the number and position of passengers in order to obtain optimum acoustic effects.	58
FADER BALANCE	The left/right/front/rear balance can be adjusted.	59
LOUDNESS	To emphasize bass/treble when listening at low volume.	60
HARMONIZER	To set the harmonizer level so that compressed data is played back with a sound quality corrected to a level as close as possible to that of the original data.	60
Time Aligment	This function corrects the positional characteristics and frequency characteristics in order to delay the signals being output from the various speakers so that the signals from each speaker reach the listening position at the same time.	61
Woofer	The sub woofer output can be adjusted.	63

Setting Circle Surround II

The Circle Surround II function enables surround sound and boosts bass even if the center speaker and sub woofer are not connected. It can also be applied to dialog data when listening to the radio.

1 Touch **CS II** in the sound adjustment screen.

- Each time the switch is touched, the CS II setting will be changed in the following order shown below.

OFF → High → Low

- High : High re-creation effect
  Low : Low re-creation effect
  OFF : The function is disabled.

Setting CS II TruBass

CS II TruBass allows for deep bass sounds without the aid of a subwoofer.

1 Touch **TruBass** in the sound adjustment screen.

- Touching the switch toggles between ON and OFF.
- When CS II is High or Low, TruBass can be turned ON/OFF.

ATTENTION

- You cannot set Circle Surround II at the same time as POS, or LOUDNESS.
- Circle Surround II, CS II TruBass, SRS, and the (●) symbol are trademarks of SRS Labs, Inc.
- Circle Surround II technology is manufactured under license from SRS Labs, Inc.

Adjusting sound quality

Adjusting PEQ (parametric equalizer)

The parametric equalizer adjusts 7 frequency bands.

Adjusting/Saving a PEQ

1 Touch the **PEQ** in the sound adjustment screen.

2 Touch the **BAND** to select the band to be adjusted.

- Each time the switch is touched, the band will be changed in the following order shown below.

Band1 → Band2 → Band3 → Band4 → Band5 → Band6 → Band7

3 Touch **∧** or **∨** to select the frequency to be adjusted.

- **∧** : Increase frequency.
  ∨ : Decrease frequency.
- Each band can be set to the following frequencies:

Band	Frequency (Hz)
1	63, 80, 100
2	125, 160, 200
3	250, 315, 400, 500
4	630, 800, 1k, 1.25k
5	1.6k, 2k, 2.5k, 3.15k
6	4k, 5k, 6.3k, 8k
7	10k, 12.5k, 16k

4 Touch **∧** or **∨** to adjust the frequency level.

- **∧** : Increase level
  ∨ : Decrease level

5 Touch the **Q** to select the Q curve pattern.

- Each time the switch is touched, the Q curve pattern will be changed in the following order shown below.

NORMAL → SLOW → SHARP

6 Repeat the operations in step 2 to 5 to change the setting for each channel and band.

- The frequencies that have been adjusted for either the channel or band cannot be selected.

7 Touch the switch you want to use to save (**1** to **5**) until you hear a beep.

- The saved PEQ setting can be selected for further customization.
- Touch **BACK** after making changes. The PEQ mode adjustments will be saved and system will return to the previous operation screen.

Selecting a PEQ pattern from memory

1 Touch the **1** to **5**.

- The preset pattern stored in memory will be retrieved.
- Touch **BACK** after making changes. The PEQ mode adjustments will be saved and system will return to the previous operation screen.

II

Adjusting sound quality

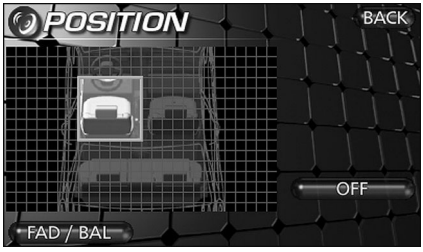
Adjusting POS (Positioning selector)

Sound localization can be adjusted according to the number and position of passengers in order to obtain optimum acoustic effects.
A seat's sound localization can be adjusted simply by touching the switch.

1 Touch **POS** in the sound adjustment screen.

2 Touch each seat image displayed in the POSITION setting screen to switch the sound localization for that seat.

- The selected position will appear in a green frame. Touch the seat again to cancel the selection. The four positions shown by the table below can be set.
- Touch **OFF** to cancel all settings.
- Touch **BACK** after making changes. The position will be saved and the system will return to the previous operation screen.



Touch switch	Function	Touch switch	Function
	Acoustics optimized for driver's seat		Acoustics optimized for both front seats
	Acoustics optimized for passenger's seat		Acoustics optimized for rear seats

ATTENTION

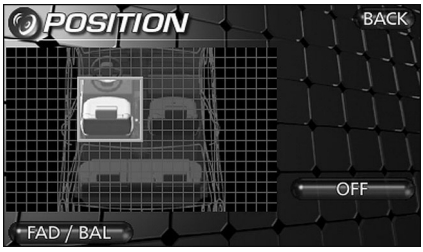
If the positioning selector has been set (to a setting other OFF), the FAD/BAL (Fader/Balance) settings cancelled (next page).

Setting the balance

The left/right/front/rear balance can be adjusted so that sound from all speakers arrives at the listener's ears at the same time.

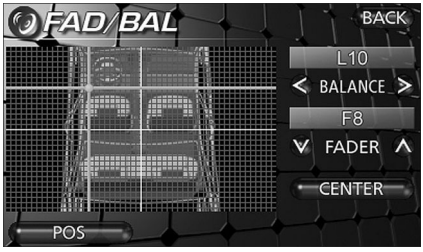
II

1 Touch **FAD/BAL** in the POSITION setting screen to display the volume balance adjustment screen.



2 Touch ∧ , ∨ , < or > .

- The adjustment level can be set to one of 15 levels between F (front) and R (rear).
- The adjustment level can be set to one of 15 levels between L (left) and R (right).
- Touch **CENTER** to set the volume balance to the center position.
- Touch **BACK** after making changes. The set volume balance will be saved and the system will return to the previous operation screen.
- To set the position again, touch **POS** and repeat the steps above.



ATTENTION

- If the balance has been set (to a setting other CENTER), the positioning selector setting will be cancelled (previous page).
- Touch and hold ∧ , ∨ , < or > while making fine adjustments to adjust values continuously. Adjustment will lock when it reaches the center value, and < , > , ∧ or ∨ must be touched again to continue adjustment.

Adjusting sound quality

Setting LOUDNESS

Audio can be modulated to correct for insufficient bass and treble when listening at low volume.

1 Touch **LOUDNESS** in the sound adjustment screen.

- Touching the switch toggles between ON and OFF.

Setting the harmonizer

It is possible to set the sound quality boost level to automatically regenerate harmonics such as reverberation, depth, and tone lost in compression, producing a much clearer sound.

1 Touch **Harmonizer** in the sound adjustment screen.

- Each time the switch is touched, the Harmonizer settings will be changed in the following order shown below.

OFF → Hi → Low

- **LOW** : Low level of correction
  HI : High level of correction
  OFF : No correction

ATTENTION

You cannot set LOUDNESS while using Circle Surround II.

Simplified time alignment settings (Time Alignment)

This function corrects the position characteristics and frequency characteristics in order to delay the signals being output from the various speakers so that the signals from each speaker reach the listening position at the same time.

1 Touch **SETTING** .

- The Time Alignment screen will appear.

Selecting the type of vehicle (Car Type)

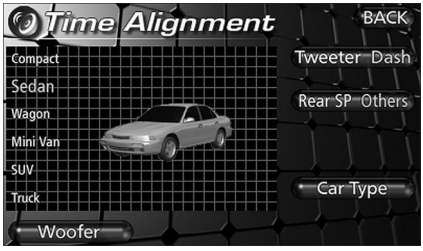
You can select the time alignment settings to match your vehicle from a range of preset settings for different types of vehicles, allowing you to select the optimum time alignment settings automatically.

1 Touch **Car Type** .

- Each time a car selection is touched, the Car Type will be changed in the following order shown below.

  → Compact → Sedan → Wagon →
  ← Truck ← SUV ← Mini Van ←

- Touch **BACK** after making changes. The time alignment settings will be saved and system will return to the previous operation screen.



ATTENTION

- Time Alignment cannot be operated when the CSII is ON.
- Before selecting a position, make sure that CSII is OFF. (For details about turning CSII ON/OFF, see page 55.)

Adjusting sound quality

Tweeter settings (Tweeter)

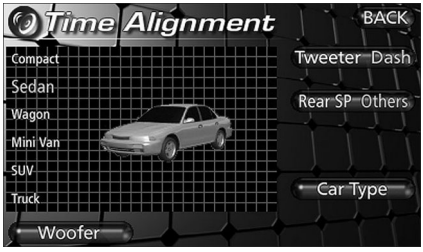
You can select the tweeter installation location and whether or not a tweeter is being used or not, allowing you to select the optimum time alignment settings automatically.

1 Touch **Tweeter** .

- Each time the switch is touched, the tweeter settings will be changed in the following order shown below.

  NO → Dash → Door

- Touch **BACK** after making changes. The time alignment settings will be saved and system will return to the previous operation screen.



Rear speaker position selection (Rear SP)

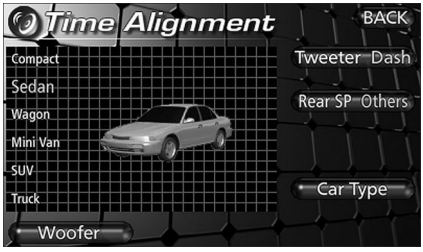
You can select the rear speaker installation location, allowing you to select the optimum time alignment settings automatically.

1 Touch **Rear SP** .

- Each time the switch is touched, the rear speaker position settings will be changed in the following order shown below.

  Door ↔ Others

- Touch **BACK** after making changes. The time alignment settings will be saved and system will return to the previous operation screen.



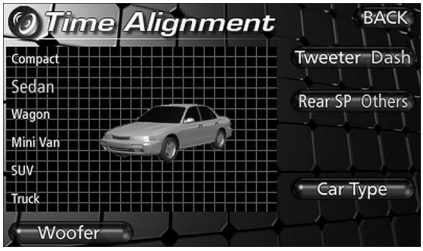
ATTENTION

If the front speakers have been installed to the dash panel, you can set the tweeter setting to “Dash” even if no tweeter has been installed.

Setting sub woofer

When a sub woofer is connected, the preferred output level for the audio can be set.

1 Touch **Woofer** in the Time Alignment screen.



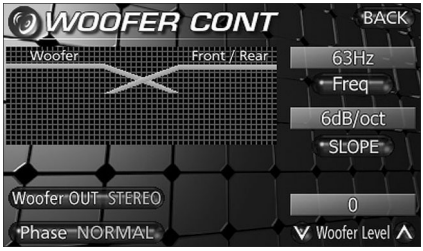
Phase selection (NON-F Phase)

The merging of sound between the front and rear speakers and the woofer can be improved by selecting the phase.

Switch to a phase which lets the speakers combine without any disharmony.

1 Touch **Phase** to select NORMAL or REVERSE.

- NORMAL: Normal phase
  REVERSE: Reverse phase
- Touch **BACK** after making changes. The phase selection will be saved and system will return to the previous operation screen.



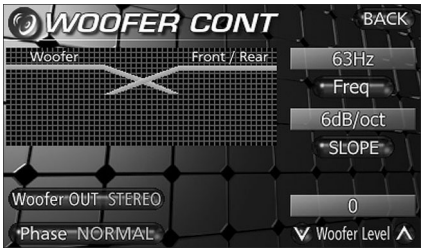
Adjusting sound quality

Woofer output setting

Woofer Output can be stereo or mono. Select the method that matches the output method for the sub-woofer system that is connected to the unit.

1 Touch **Woofer OUT** to select STEREO or MONO.

- Touch **BACK** after making changes. The woofer output setting will be saved and system will return to the previous operation screen.



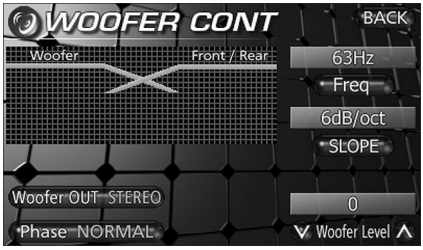
Crossover adjustment (X-Over)

The frequencies for the front and rear speaker high-pass filter (HPF) and woofer low-pass filter (LPF) can be set within a range of 63 to 200 Hz. (This is the same as the HPF and LPF cutoff frequencies.)

1 Touch **Freq** to select the cut-off frequency.

- Each time the switch is touched, the frequency will be changed in the following order shown below.

63Hz→80Hz→100Hz→125Hz→160Hz→200Hz



2 Touch **SLOPE**.

- Each time this switch is touched, the slope will be changed in the following order shown below.

PASS → 6 dB/oct → 12 dB/oct
↑ ↓
24 dB/oct ← 18 dB/oct

- Touch **BACK** after making changes. The crossover setting will be saved and system will return to the previous operation screen.

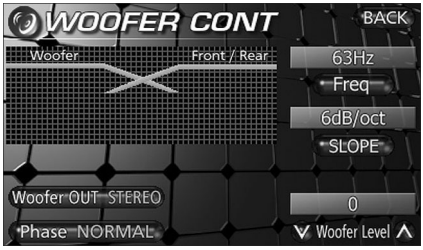
II

Woofer output level adjustment

The output level of the woofer can be adjusted.

1 Touch the ∧ or ∨ .

- The adjustment level has 6 “+” steps and 6 “-” steps.
  ∧ : Increase level.
  ∨ : Decrease level.
- Touch **BACK** after making changes. The woofer output level adjustment will be saved and system will return to the previous operation screen.



ATTENTION

If no woofer has been connected, set the slope adjustment to “PASS”. (If slope is set to a setting other than PASS, the low frequency range will not be outptted from the speakers.)

Setting background screen

The background for the audio operation screen can be changed to a preferred wallpaper.

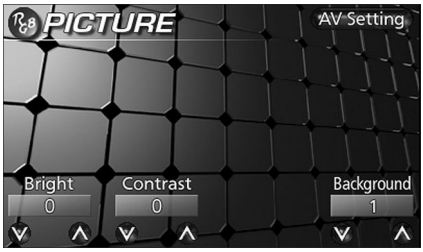
Setting the Background

1 Press and hold **FUNC** until you hear a beep.

2 Touch ∧ or ∨ for Background.

- Each time switch is touched, the Background screen will be changed in following order shown below.

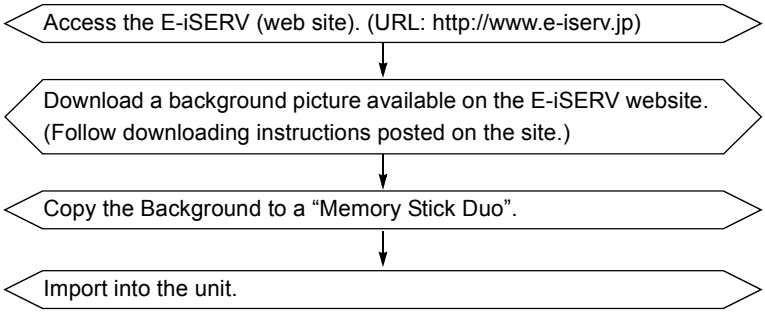
  1 ↔ 2 ↔ 3



Importing Background

Background provided by the E-iSERV (website) can be downloaded and used instead of the pre-set Background. To download Background follow the E-iSERV (website) instructions.

After downloading the data to your PC, copy the data to a “Memory Stick Duo” and import the data into the deck. (URL: http://www.e-iserv.jp)



1 Insert the “Memory Stick Duo” containing the images to be saved.

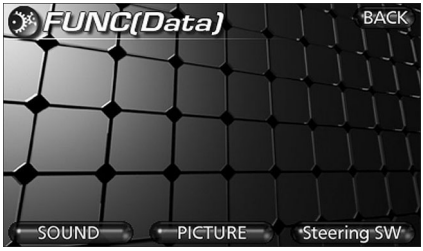
2 Press **FUNC** for less than one second.

● The mode will change to function mode.
If you press the **FUNC** button once more, function mode will be exited.

3 Touch **DATA** .

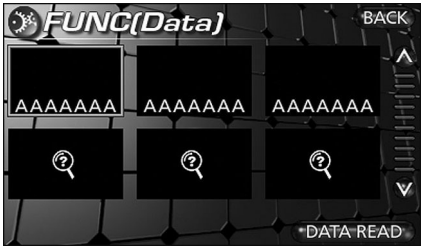
● The display will change to the menu screen for data management mode.

4 Touch **PICTURE** .



5 Touch the image file to be read and saved.

● The image for the selected file will be displayed.
If there are more than 7 files on the media, touch ∧ or ∨ to search through the list of image files for the files you would like to read and save.



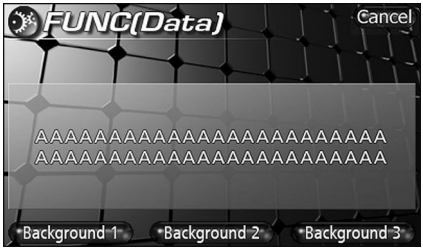
6 Touch **DATA READ** .

II

Setting background screen

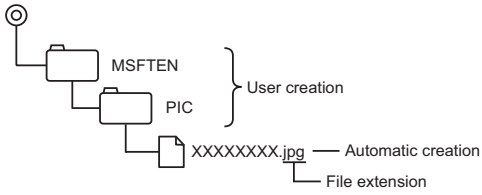
7 Touch **Background 1** , **Background 2** or **Background 3** .

- The image file that was selected in step 5 above will then be saved. If an image file has already been saved, it will be overwritten.
- Touch the **Cancel** to cancel data saving.



ATTENTION

- Do not eject the “Memory Stick Duo” while a file is saved. Otherwise the file data may become corrupted.
- Data downloaded from the E-iSERV (web site) can be saved in folders on the “Memory Stick Duo” as follows:



- Files that can be imported into the unit are created automatically when downloaded from the E-iSERV (web site).
- The file name can be changed using 8 alphameric characters (adding a space for a character cannot be used).

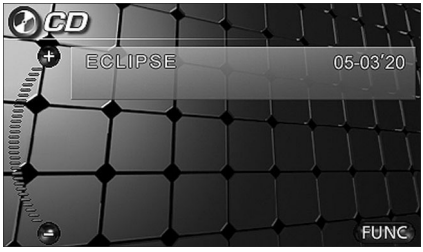
Adjusting/setting the screen

Switching the FUNCTION switch display

Touch switches not frequently used are not displayed in the audio operation screens and DVD screens. These switches can be displayed as follows.

1 Touch **FUNC** .

- The FUNCTION switches appear.
- The FUNCTION switches are different in each audio mode.



- The FUNCTION switches can be hidden by touching **CLOSE** .
- If the FUNCTION switches are displayed, operations corresponding to other switches cannot be performed. Hide the FUNCTION switches, then try the operation again.

Adjusting/setting the screen

Changing the clock settings

Touch switches not frequently used are not displayed in the audio operation screens and DVD screens. These switches can be displayed as follows.

1 Press **FUNC** for less than 1 second.

- The FUNC screen will appear.

Setting the clock display

This turns the clock display on or off.

1 Touch **Clock** .

- The clock display turns on and off each time **Clock** is touched.
  When the clock display is on, the touch switch display color changes to the selected switch.

Adjusting the time

This adjusts the time.

1 Touch ∧ or ∨ for adjust each item.

ATTENTION

To set the clock to 0 minutes (an exact hour), touch the touch switch.
For example:
At 3:29: Touch **SET** returns to 3:00.
At 3:30: Touch **SET** advances to 4:00.

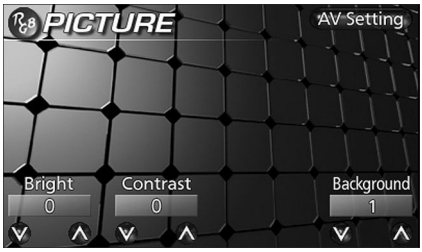
Quality adjustments can be made for images as with the audio operation screen and DVD or VTR (optional).

Adjusting image quality

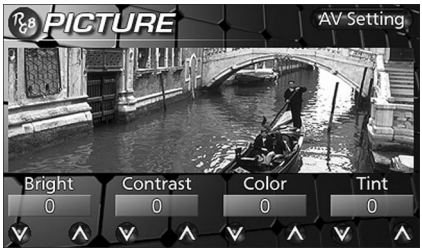
Contrast, brightness and other picture settings can be adjusted to match preferences for viewing DVD video or the audio operation screen.

1 Press and hold **FUNC** until you hear a beep.

● The PICTURE screen will appear.



●When adjusting audio operation screen



●When adjusting DVD/VTR screen

■ Bright

1 Touch ∧ to increase brightness, or ∨ to decrease brightness.

■ Contrast

2 Touch ∧ to increase contrast, or ∨ to decrease contrast.

■ Color (for DVD/VTR screen only)

3 Touch ∧ to increase red, or ∨ to increase green.

■ Tint (for DVD/VTR screen only)

4 Touch ∧ for a darker color, or ∨ for a lighter color.

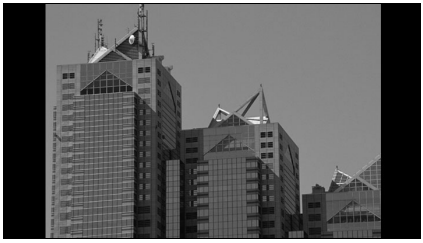
Adjusting/setting the screen

Switching screen mode

1 Touch **WIDE** .

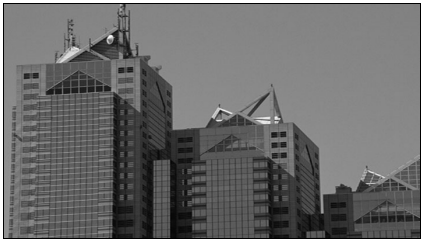
2 Touch **NORMAL** , **WIDE1** , **WIDE2** or **WIDE3** .

● This selects the wide mode.



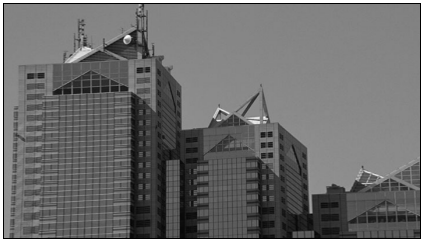
■ NORMAL mode

The screen is shown with a vertical to horizontal ratio of 3 to 4. The side edges are black.



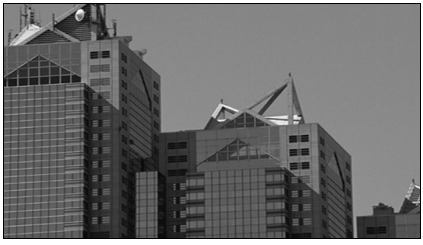
■ WIDE 1 mode

The screen is shown with a vertical to horizontal ratio of 3 to 4 and is expanded in the left and right directions. A wide screen effect can be displayed without any image loss.



■ WIDE 2 mode

Only the left and right edges of the screen are stretched out. However, the vertical to horizontal ratio of 3 to 4 is maintained at the center of the screen to provide a comfortable wide screen image.



■ WIDE 3 mode

The screen is expanded in both the vertical and horizontal directions by the same ratio. The image is clipped slightly at the top and bottom edges.

Caution

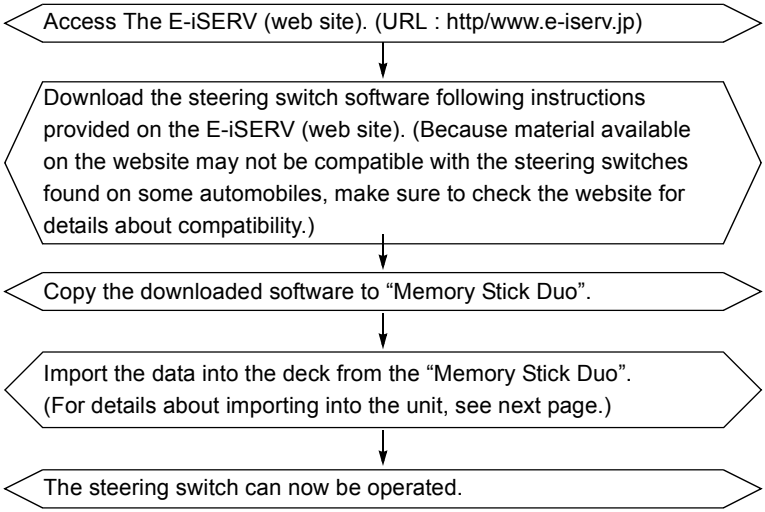
Viewing of wide screen modes is permitted when limited to the personal entertainment of the user, but exercise caution when using technologies such as image compression and expansion for the purpose of commercial benefit or public presentation. This may infringe upon the rights of the copyright holder protected by applicable copyright law.

Others

Setting the steering switch function

The vehicle's factory loaded steering switch becomes inoperable when the this unit is installed. The E-iSERV (web site) provides software that enables steering switch operation. Import this software into this unit.
For details, contact the store from which you purchased your unit. Depending on your vehicle's make and model, material downloaded from the website may not be compatible with your steering switch.

Software for the steering switch can be downloaded and imported into the deck as follows:



Caution

Consult the store from which you purchased this unit about compatibility and set-up procedures.

Reading steering switch data

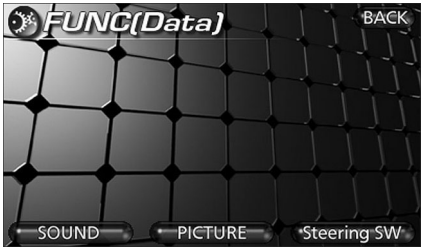
The steering switch data that has been downloaded from E-iSERV (web site) to a “Memory Stick Duo” can be loaded in the this unit.

1 Insert the “Memory Stick Duo” containing the steering switch data to be saved.

2 Press **FUNC** for less than 1 second.

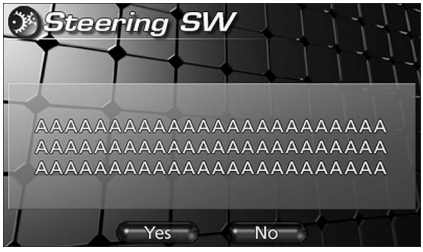
3 Touch **DATA** .

4 Touch **Steering SW** .



5 A message will appear to confirm the data transfer.

- Touch **Yes** to update the data.
- Touch **No** to return to the screen in step 3 .



Others

Compatibility with various switches

The compatibility of the deck's various modes and the steering switches installed on your vehicle are as follows:

Source / Switch*	Radio TV	CD	DVD
MODE	Change source	Change source	Change source
Tune UP	Tune UP (Short tap)	TRACK UP (Short tap)	Chapter UP
	SEEK UP (Hold)	FAST UP (Hold)	
Tune DOWN	Tune DOWN (Short tap)	TRACK DOWN (Short tap)	Chapter DOWN
	SEEK DOWN (Hold)	FAST DOWN (Hold)	
VOL UP	VOL UP	VOL UP	VOL UP
VOL DOWN	VOL DOWN	VOL DOWN	VOL DOWN

Source / Switch*	MP3/WMA	Others
MODE	Change source	Change source
Tune UP	FILE UP (Short tap)	–
	FAST UP (Hold)	
Tune DOWN	FILE DOWN (Short tap)	–
	FAST DOWN (Hold)	
VOL UP	VOL UP	VOL UP
VOL DOWN	VOL DOWN	VOL DOWN

*: Switch names may change depending on vehicle make and models.

Setting the Guide tone

The guide tone that is emitted when touching a panel switch or touch switch can be set.

1 Press **FUNC** for less than 1 second.

2 Touch **Guide Tone** in the FUNCTION screen.

- Touching the switch toggles between ON and OFF.

ATTENTION

- Set the volume at a level which will not adversely affect safety while driving.
- The volume level may change after switching sources. Adjust the volume to match the source being used.
- A volume adjustment made during DVD playback will not affect other sources. The volume will return to the level set for the source used prior to the DVD.

Others

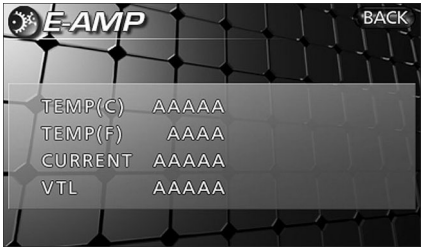
Displaying Amplifer Status (E-AMP)

If a DSP Amp is connected, the status of the DSP amp will be displayed.

1 Press **FUNC** for less than 1 second.

2 Touch **E-AMP** .

- The DSP Amp status screen will appear.



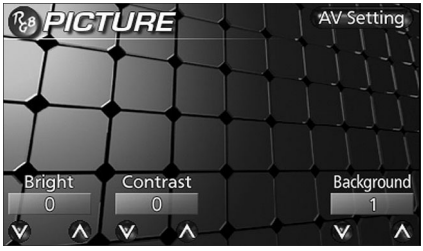
Screen lock settings

Screen lock enables the unit to switch to a separate audio source such as radio or CD while continuing to display a DVD or TV image.

Select the screen lock image settings.

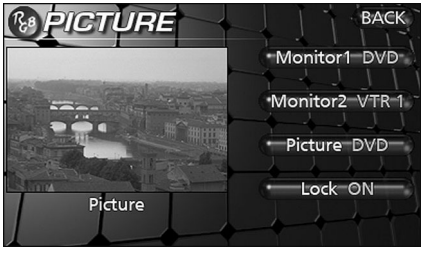
1 Press **FUNC** until you hear a beep.

2 Touch **AV Setting** .



3 Touch **Lock** to select Lock ON/OFF.

- Touching the switch toggles between ON and OFF.
- Touch **BACK** after making settings. The screen lock settings will be saved and system will return to the previous operation screen.

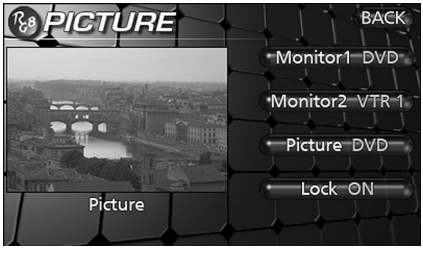


4 Touch **Picture** to select an image.

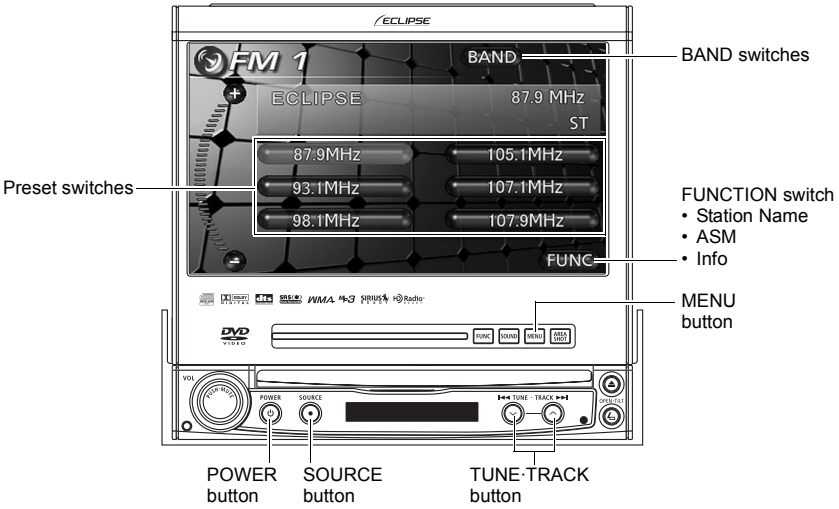
- Each time the switch is touched, the image is changed in the following order shown below.

DVD → VTR1 (TV) → VTR2 (TV)

- The selected image will appear on the left side of the screen.
- Touch **BACK** after making changes. The screen lock settings will to save and system will return to the previous operation screen.



How to use the AM/FM radio



Listening to the AM/FM radio

Listening to the radio using touch switches

1 Press **MENU** .

2 Touch **AM** for AM radio, or **FM** for FM radio.

Listening to the radio using panel button

1 Press the **SOURCE** to select the AM or FM.

Switching the band

1 Touch **BAND** .

● Each time the switch is touched, the radio bands will be changed in the following order.

FM1 → FM2 → FM3 → AM

ATTENTION

When an optional HD Radio tuner unit is connected, digital broadcasts have reception priority. (U.S.A. only)

Selecting radio stations

Manual selection

1 Press ∧ or ∨ .

- Pressing the switch once moves the frequency one step up or down.
- ∧ (up) : Raises the frequency
  ∨ (down) : Lowers the frequency

Automatic selection

1 Press and hold ∧ or ∨ until you hear a beep.

- The station that is closest to the current frequency will be searched for automatically, and searching will stop when the station is received. To stop the search before a station is found, press the button again.

Selection using preset switches

1 Touch a preset switch that already has a station recorded.

- See **"Saving radio stations"** on next page for more information.

ATTENTION

If the reception for a particular station is weak in the area you are in, the automatic selection may not work.

How to use the AM/FM radio

Saving radio stations

There are two modes for saving radio stations, manual and ASM. These modes operate independently.

Saving manually

1 Use manual tuning or automatic tuning to select the station to be saved.

2 Choose a preset switch and touch it until you hear a beep.

- The radio station (frequency) is set. Touch the preset switch to tune in the selected station.

Saving with ASM

1 Touch **FUNC** .

2 Touch **ASM** until you hear a beep.

- The ASM function will activate and start automatically selecting stations. You will hear a beep when the automatic selection of stations is completed. Touch **ASM** again to switch the display back to the broadcast station originally saved.

Changing stations saved by ASM

1 Use manual tuning or automatic tuning to select the station to be saved.

2 Touch the preferred preset switch until you hear a beep.

ATTENTION

- ASM may not automatically receive stations if radio waves in the surrounding area are weak.
- A frequency saved with the tuning switch may not match the frequency saved with ASM even though the signal is received from the same station.
- Due to conditions for receiving radio waves, saved stations may differ even when the ASM switch is operated repeatedly in the same location.
- Up to six stations with good signal reception are automatically saved in order of frequency (low to high).
- When less than six stations capable of reception are found, nothing is saved for the remaining preset switches.

Checking preset stations

This recalls all the stations that have been preset either automatically or manually and plays them each for 5 seconds.

1 Touch **FUNC** .

2 Touch **ASM** for less than 1 second.

- "P.SCAN" will be displayed, and the preset stations will each be played back for 5 seconds.

3 Touch **ASM** for less than one second.

- The station that was being played when the switch was touched will then be played continuously.

How to use the AM/FM radio

Creating a station name

A station name can be created and displayed.

1 Touch **FUNC** .

2 Touch **Station Name** for less than 1 second.

- The screen will switch to the station name setting mode. Default character type is upper-case alphabet.

3 Touch one of the switch **ABC** , **abc** , **123** , **!"#** .

- **ABC** : Upper-case alphabet
  abc :Lower-case alphabet
  123 :Numerical
  !"# :Symbol

4 Touch the character touch switch.

ATTENTION

- Touch the **RTN** to delete the character that was just entered.
- A maximum of 16 characters may be entered per title.
- The station name entered may not be displayed when an optional HD radio tuner unit is connected.

Upper case characters,
alphabet characters

Lower case characters,
alphabet characters

Numerical character

Symbol

5 Touch the **ENTER** touch switch to enter station name setting mode.

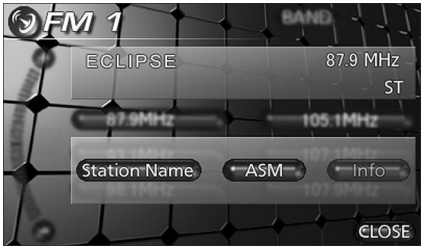
The station name is now memorized.

Deleting a previously created station name

1 Touch **FUNC** .

2 Press and hold **Station Name** until you hear 2 beeps in succession.

- The station name has now been deleted.



III

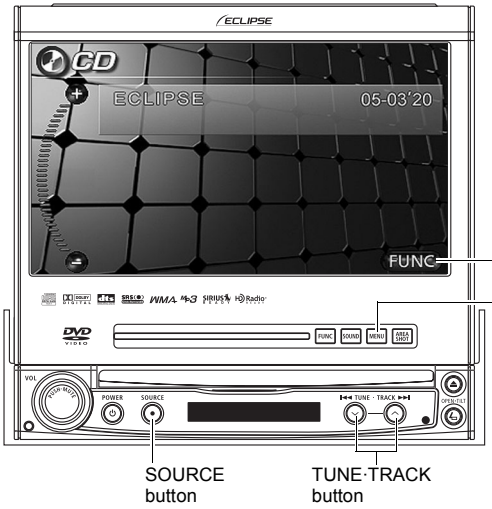
How to use the AM/FM radio

Turning off the radio

1 Press ⏻ .

- Press ⏻ again to turn on the radio and to resume the radio station received prior to turning power off.

How to use the CD player



Listening to a CD

Playback starts when a CD is inserted into the disc slot.

Listening to a CD using the touch switches

1 Press **MENU** when a CD has been inserted.

2 Touch **CD** .

● Playback will begin.

Listening to a CD using the panel buttons

1 Press the **SOURCE** to select the CD source when a CD has been inserted.

ATTENTION

- Titles and track names can be displayed when they are recorded on a CD. Up to 16 characters can be shown in the display.
- Only characters recorded by ASCII code can be shown on the CD-TEXT display.
- The CD-TEXT display may not be able to show characters for discs recorded with many title characters.
- There may be occasions when CD-R/RW CD-TEXT cannot be displayed.

How to use the CD player

Selecting a track

You can jump to the opening of a track you want to hear.

1 Press ∧ or ∨ .

- ∧ (up) : Selects next track
  ∨ (down) : Selects previous track

Fast-forwarding/rewinding

It is possible to fast-forward/rewind the track being played.

1 Press and hold ∧ or ∨ until you hear a beep.

- ∧ (up) : Fast-forward
  ∨ (down) : Rewind
  If you hear a beep while rewinding (fast-forwarding), the unit has switched to fast-forward (rewind) mode and will continue until you remove your finger from the button.

Repeating a track

1 Touch **FUNC** .

2 Touch **REPEAT** .

- Repeats the current track.
- The track will repeat until the function is canceled. Touch **REPEAT** again to cancel.

Playing tracks in random order

1 Touch **FUNC** .

2 Touch **RANDOM** .

- Plays tracks in random order.
- Random playback will continue until the function is canceled. Touch **RANDOM** again to cancel.
- At the end of each track the system arbitrarily chooses which track to play next. As a result, it is possible for the same track to be played multiple times in a row.

Creating a title for a CD

A CD title can be created and displayed.

1 Touch **FUNC** .

2 Touch **TITLE** for less than 1 second.

- The screen will switch to the disc title setting mode. Default character type is upper-case alphabet.

3 Touch one of the switch **ABC** , **abc** , **123** , **!"#** .

- **ABC** : Upper-case alphabet
  abc :Lower-case alphabet
  123 :Numerical
  !"# :Default character type is symbol

4 Touch the character touch switch.

ATTENTION

- Touch the **RTN** to delete the character that was just entered.
- A maximum of 16 characters may be entered per title.
- No CD text disc can be set.

How to use the CD player

Upper case characters, alphabet characters

Lower case characters, alphabet characters

Numerical character

Symbol

5 Touch the **ENTER** touch switch to exist disc title setting mode.

The disc title is now memorized.

Deleting a previously created title

1 Touch **FUNC** .

2 Press and hold **TITLE** until you hear 2 beeps in succession.

- The title has now been deleted.

Displaying CD TEXT by scrolling

CD TEXT (such as disc titles and track titles) stored in the memory can be displayed. A maximum of 16 characters are displayed on the display area at one time. When the CD TEXT exceeds 16 characters, it is displayed by scrolling.
After the disc title is displayed by scrolling, track titles are displayed by scrolling.
The title display will be fixed after track titles are scrolled.

1 Touch **FUNC** .

2 Touch **TEXT** .

IV

Turning off the CD player

1 Press ⏻ .

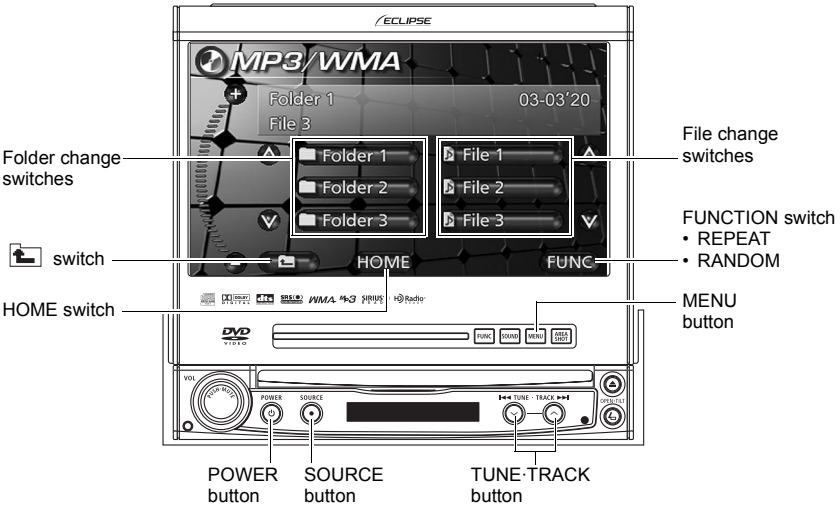
● Press again to resume playback.

ATTENTION

- This function cannot be used when no CD titles or track titles are displayed on the display screen of this unit.
- Depending on the equipment used for entering titles, the titles may not be displayed properly.
- Some title characters may not be displayed for some discs.

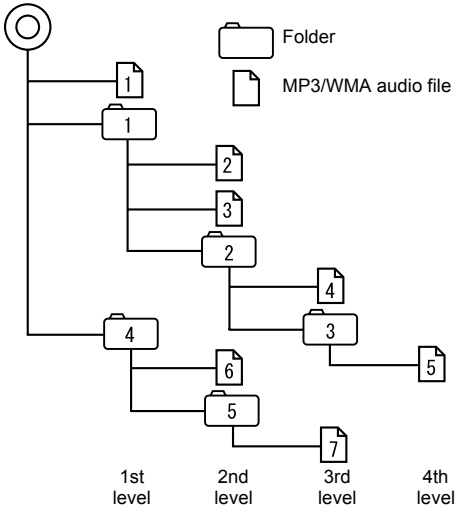
How to use the MP3/WMA player

For safety considerations, some functions are disabled while the vehicle is in motion.



Example of MP3/WMA file structure

Explanations are based on this example of MP3/WMA file structure.



ATTENTION

It is not possible to playback WMA files protected by a DRM (Digital Rights Management) system or protected recordings (licensed).

Playing MP3/WMA

Playback starts automatically when a CD is inserted into the disc slot.

Playing MP3/WMA using the touch switches.

1 Press **MENU** when a disc has been inserted.

2 Touch **CD** .

- Playback will begin.
- The CD player screen will be shown for about 2 seconds as the system checks whether the inserted CD is a music CD or an MP3/WMA.
- Normally, tracks are played back in the order 1 → 2 → 3 → 4 → 5 → 6 → 7.
- When multiple MP3/WMA files and folders are on the same level, they are played in ascending order by folder and file names.

Playing MP3/WMA using the panel buttons

1 Press the **SOURCE** to select the CD source when CD has been inserted.

How to use the MP3/WMA player

Selecting a music file

A music file located within a folder can be selected.

Selecting with file change switches

1 Touch the music file.

- The currently selected file name and folder name will be shown in the display.
- When 4 or more music files are located in the same folder, touch ∧ or ∨ to show data not currently displayed. (This function is not available when the vehicle is in motion)

Selecting with TUNE/TRACK button

When several music files are located in the same folder, the next music file or previous music file can be selected with the track selection (track start point).

1 Press ∧ or ∨.

- ∧ (up): Selects next music file
  ∨ (down): Selects previous music file

Selecting a folder

A folder located within a disc can be selected.

1 Touch the folder.

- The currently selected folder name will be shown in the display.
- When 4 or more folder are located in the disc, touch ∧ or ∨ to show data not currently displayed. (This function is not available when the vehicle is in motion)

ATTENTION

If music data and MP3/WMA data have been recorded on the same disc, playback is not possible.

Fast-forwarding/rewinding

It is possible to fast-forward/rewind within the current file.

1 Press and hold ∧ or ∨ until you hear a beep.

- ∧ (up) : Fast-forward
  ∨ (down): Rewind
  If you hear a beep while rewinding (fast-forwarding), the deck has switched to the fast-forward (rewind) mode and will continue until you remove your finger from the button.

Changing display of the current level

V

The folder level can be switched and displayed.

1 Touch or **HOME** .

- : Displays the next folder level up.
- **HOME** : Displays the level of the file currently being played.

Displaying the current level

Displays the file currently being played.

1 Touch **HOME** .

How to use the MP3/WMA player

Repeating the same music file or folder

Repeating the same music file

1 Touch **FUNC** .

2 Touch **REPEAT** for less than one second.

- Repeats the current file.
- The file will repeat until the function is canceled. Touch **REPEAT** again to cancel.

Repeating the same folder

1 Touch **FUNC** .

2 Touch **REPEAT** until you hear a beep.

- Repeats the current file.
- The file will repeat until the function is canceled. Touch **REPEAT** again to cancel.

Playing music files in random order

Playing music files on folder in random order

1 Touch **FUNC** .

2 Touch **RANDOM** for less than one second.

- Files will be randomly selected from among all files at the folder currently being played.
- Plays files in random order.
- Random playback will continue until canceled. Touch **RANDOM** again to cancel.
- Touch **REPEAT** during random playback to repeat the file currently being played. Touch **REPEAT** again to return to random playback.
- At the end of each file, the system arbitrarily chooses which file to play next. As a result, it is possible for the same file to be played multiple times in a row.

Playing music files on CD in random order

1 Touch **FUNC** .

2 Touch **RANDOM** until you hear a beep.

- Randomly selects and plays files using all files on the disc.
- Plays files in random order.
- Random playback will continue until canceled. Touch **RANDOM** again to cancel.
- Touch **REPEAT** during random playback to repeat the file currently being played. Touch **REPEAT** again to return to random playback.
- At the end of each file, the system arbitrarily chooses which file to play next. As a result, it is possible for the same file to be played multiple times in a row.

Turning off the MP3/WMA player

1 Press ⏻ .

- Press ⏻ again to resume playback.

ATTENTION

See page 92 for an example MP3/WMA file structure.
If 4 of the third level is being played and the display shows the folder and files of the second level (2 3 , and 2), touch **HOME** to display the folder and file of the third level (4 and 3).

How to use the MP3/WMA player

About MP3/WMAs

MP3 (MPEG Audio Layer III) is a standard format for audio compression technology. By using MP3 a file can be compressed to one-tenth the size of the original.
WMA (Windows Media™ Audio) is format for audio compression technology. WMA files can be compressed to a size smaller than MP3 files. This unit has limitations on MP3/WMA file standards and recorded media and formats that can be used.

Playable MP3 file standards

- Supported standards : MPEG1 Audio Layer III
- Supported sampling frequencies: 44.1, 48 (kHz)
- Supported bit rates : 64, 80, 96, 112, 128, 160, 192, 224, 256, 320 (kbps)
  * Supports VBR.
  * Does not support free format.
  * Bit rates vary for MPEG-1 and MPEG-2.
- Supported channel modes : stereo

Playable WMA file standards

- Supported standards: WMA Ver. 7
  WMA Ver. 8
  WMA Ver. 9
- Supported sampling frequencies: 32, 44.1, 48 (kHz)
- Supported bit rate: 48, 64, 80, 96, 128, 160, 192, 256, 320 (kbps)
  * Supports VBR (48~192 kbps).
  * Does not support lossless compression.
  * Does not support WMA files recorded at a frequency of 48 kHz with a bit rate of 48 kbps.

Use 128 kbps or lower for the MP3 bit rate. If the bit rate exceeds 128 kbps, there may be a skipping type effect during MP3 playback.

ID3/WMA tags

MP3/WMA files have an “ID3/WMA Tag” that allows input of information so that data such as song title and artist can be saved. This unit supports ID3v. 1.0, 1.1 and WMA tags.

Media

Media capable of playing MP3 include CD-ROM, CD-R and CD-RW discs.

Compared to CD-ROM media commonly used for music discs, CD-R discs are fragile in high temperature/high humidity environments and sections of the CD-R may become incapable of playback. Fingerprints or scratches on the disc may prevent playback or cause skipping.

Sections of a CD-R may deteriorate if left inside a vehicle for long periods of time.

It is also recommended that CD-R discs be kept in a light-blocking case because the discs are vulnerable to ultra-violet light.

How to use the MP3/WMA player

Format of discs

The format of discs to be used must be ISO9660 Level 1 or Level 2. Also, be sure to record in “MODE 1”. Discs recorded in “MODE 2” are not supported.

MP3 files recorded in formats other than those outlined above may result in files that cannot be played normally and file names and folder names that do not display properly.

The following additional limitations apply:

- Maximum directory layers : 8 levels
- Maximum characters for folder names/file names : 31 (including “.” and the 3 letters of the file extension)
- Allowable characters for folder names/file names : A-Z, 0-9, _ (underscore), all ASCII characters
- Number of files/folders possible in a single folder : 512*

*: Each file is counted as one file, even if it is not an MP3/WMA file (i.e. files with extensions other than “.MP3/.WMA”).

File names

Only files with the MP3/WMA file extension ".mp3", ".wma" can be recognized as MP3/WMA and played. Be sure to save MP3 files with the ".mp3" file extension. Be sure to save WMA files with the ".wma" file extension. The "MP" or "WMA" letters of the file extension will be recognized whether entered as uppercase letters or lowercase letters.

Multi-sessions

Multi-sessions are supported, and playing of CD-R and CD-RW discs with annotated MP3/WMA files is possible. However, when "Track at once" has been written, close the session or process the warning message. Standardize the format of each session without changing the format.

Playing MP3

When a disc with recorded MP3/WMA files is inserted, the deck first checks all the files on the disc. No sound is output while the deck is checking the files on the disc. It is recommended that the disc be recorded without files other than MP3/WMA files and without unnecessary folders in order to speed up the checking of disc files by the deck.

MP3/WMA playing time display

It is possible that playing time will not be correct, depending on the writing condition of the MP3/WMA file.

* It is possible that playing time will not be correct when VBR Fast Up/Down is operated.

Display order of MP3 file/folder names

Names of MP3 folders and files within the same level are displayed in the following order.

1. MP3 files displayed first, by ascending order of numbers, letters.
2. Folders displayed next, by ascending order of numbers, letters.

If the ".mp3", ".wma" file extension is attached to a file other than an MP3/WMA file, that file will be mistakenly recognized by the unit as an MP3/WMA file and played, resulting in noise and static that can damage the speakers. Do not attach the ".mp3", ".wma" extension to any non-MP3/WMA files.

How to use the MP3/WMA player

Making and playing MP3/WMA files

MP3/WMA files created by recording broadcasts, records, audio recordings, video recordings or live performances cannot be used for purposes other than personal entertainment without permission of the copyright holder as set forth in copyright law.

Downloading MP3/WMA music from internet

There are many kinds of sites that distribute MP3/WMA files on the Internet, such as “pay per download” online shopping sites, “try before you buy” listening sites and free download sites. Follow the rules for each site (such as paying fees) and download according to site instructions.

Converting CD music to MP3/WMA files

Prepare a computer with commercially available MP3/WMA encoding software (conversion software). (Some encoding programs available on the Internet do not require payment.) Music data files in MP3/WMA format can be made by inserting the music CD into the CD-ROM drive of the computer and following the procedures of the MP3/WMA encoding software to compress the songs of the music CD. A 12cm music CD (having a maximum of 74 minutes of recording/650MB of data) can be compressed to 65MB (about 1/10 of the original size).

When writing to CD-R/RW

MP3/WMA files can be recorded on CD-R/RW by using a CD-R/RW drive connected to a computer. Record by setting the recording format of the recording software to ISO9660 level 1 or level 2 (not including extension format).

Select CD-ROM (mode 1) for the disc format. Discs recorded with CD-ROM xA (mode 2) cannot be played on this deck.

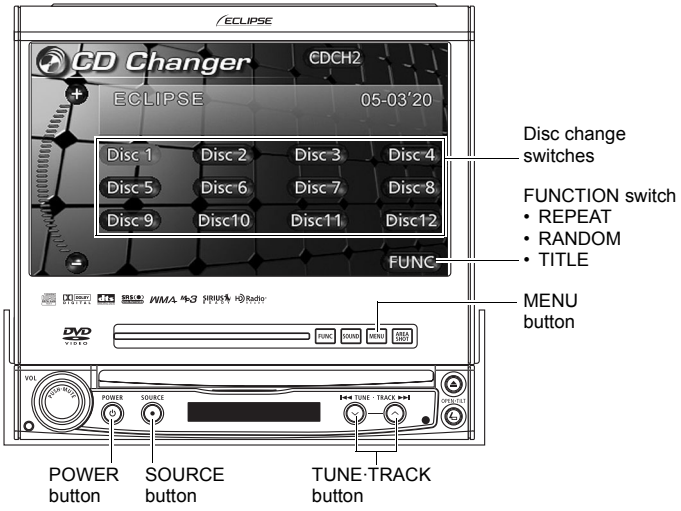
When playing back CD-R/RW

Insert a CD-R/RW containing recorded MP3/WMA files. The system will automatically determine whether the disc is a music CD or a CD-R/RW with MP3/WMA files and begin playing the disc. A music CD recorded onto a CD-R/RW can also be played. However, depending on the type of disc being used, playback may not be possible.

- A fixed bit rate of 128kbps and sampling frequency of 44.1kHz is recommended for obtaining stable audio quality at playback.
- Depending on the characteristics of a disc, the system may not be able to read CD-R and CD-RW discs.
- Because there are many types of MP3/WMA encoding software available, including commercial and freeware programs, audio quality may deteriorate, noise may be generated when playing starts and some recordings may not play, depending on the condition of the encoder and the file format.
- When files other than MP3/WMA files are recorded on a disc, the system may take some time to recognize the disc or it may not play.

How to use the CD changer

An optional CD changer can be connected and used.



Listening to a CD

Listening to a CD using the touch switches

1 Press **MENU** .

2 Touch **CDCH** .

Listening to a CD using the panel buttons

1 Press **SOURCE** to select the CD changer source when optional CD changer has been connected.

ATTENTION

When two CD changers are connected, **CDCH ✳** (✳: number) is displayed on the CD changer operation screen. Touch **CDCH ✳** (✳: number) to switch to the second disc changer.

How to use the CD changer

Selecting a track

See **"How to use the CD player"** (Page 88).

Fast-forwarding/rewinding

See **"How to use the CD player"** (Page 88).

Selecting a CD

A CD can be selected from among all the discs in the changer.

1 Touch one of the disc change switches.

- The number for the selected CD will change color.

Repeating a track or CD

Repeating the current track

See **"How to use the CD player"** (Page 88).

Repeating the current CD

1 Touch **FUNC** .

2 Touch **REPEAT** until you hear a beep.

- Touch once to continue repeating the CD. Repeat will continue until canceled. Touch **REPEAT** again to cancel.

ATTENTION

- A disc change switch is displayed for each disc tray in the changer but only the disc change switches that correspond to a currently loaded tray can be selected.
- No operation is possible when there are no discs loaded into the CD changer.

Playing tracks in random order

Playing tracks on current CD in random order

See **"How to use the CD player"** (Page 88).

Playing tracks on all CDs in random order

1 Touch **FUNC** .

2 Touch **RANDOM** until you hear a beep.

- Setting once will start random playback which will not stop until the function is canceled. Touch **RANDOM** again to cancel.
- At the end of each track the system arbitrarily chooses which track to play next. As a result, it is possible for the same track to be played multiple times in a row.

Creating a title for a CD

See **"How to use the CD player"** (Page 89).

Deleting a previously created title

See **"How to use the CD player"** (Page 90).

Turning off the CD changer

1 Press ⏻ .

- Press ⏻ again to resume playback.

Before using the DVD player

This unit can output the high quality images and high quality digital sound of DVD videos. It is also possible to switch between different languages recorded on the DVD video (dubbing, subtitles, etc.), and with videos having several angles of the same scene recorded, the preferred angle can be selected and played.

DVD video characteristics

About multiple languages

Some DVD discs have dialog recorded in several different languages, and the language can be switched during playback in the same way as multilingual TV broadcasts.

This river, which runs through the center of the town is...

Cette riviere, laquelle court au travers le centre de la ville est...

About multiple angles

Some DVD discs have a single scene recorded from several different angles (multiple angle), and the preferred angle can be switched during playback.

* Depending on the disc, multiple angles may not be recorded.

The angle of the image is changed.

Caution

This unit includes copyright protection technology used in accordance with US patents and other intellectual property rights owned by Macrovision Corporation and other entities. Use of this copyright protected technology requires approval from Macrovision Corporation and the technology must not be used for audiovisual purposes aside from general household use without special approval from Macrovision Corporation. Modification and disassembly of this technology is prohibited.

About subtitles

Some DVD discs have subtitles recorded in several different languages, and the subtitles can be switched during playback. The video can also be played without any subtitles displayed.

About discs

About playable discs

This unit conforms to NTSC color television methods, so please use discs that display “NTSC” on the disc or package.

Playable disc types and their marks	Size/Playing surface	Maximum playing time
DVD VIDEO	12cm/single-sided single-layer double-layer	<MPEG2> 133 min. 242 min.
DVD VIDEO	12cm/double-sided single-layer double-layer	 266 min. 484 min.

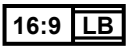
Before using the DVD player

About region codes of playable discs

Some DVD discs display a (“Region Code”). This mark (a number) shows the geographical region where the disc can be played. This unit can only play discs with region codes “1” (North America), “3” (Asia) “4” (Australia) or “ALL”. If you play discs with any region code other than those shown above, a “This disc cannot be played” message is displayed. It is possible that discs bearing no region code can not be played as a result of geographical restrictions.

About marks displayed on discs

The following marks may be displayed on a DVD disc or its package.

Mark		Meaning
		Shows number of voice tracks.
		Shows number of subtitle languages.
		Shows number of filmed angles.
		Shows available aspect ratio (television screen horizontal to vertical ratio). ●“16 : 9” is wide screen, “4 : 3” is standard screen.
		Shows playable region code. ●ALL indicates worldwide. A number indicates a specific region code. “1” is the region number for North America. “3” is the region number for Asia. “4” is the region number for Australia.

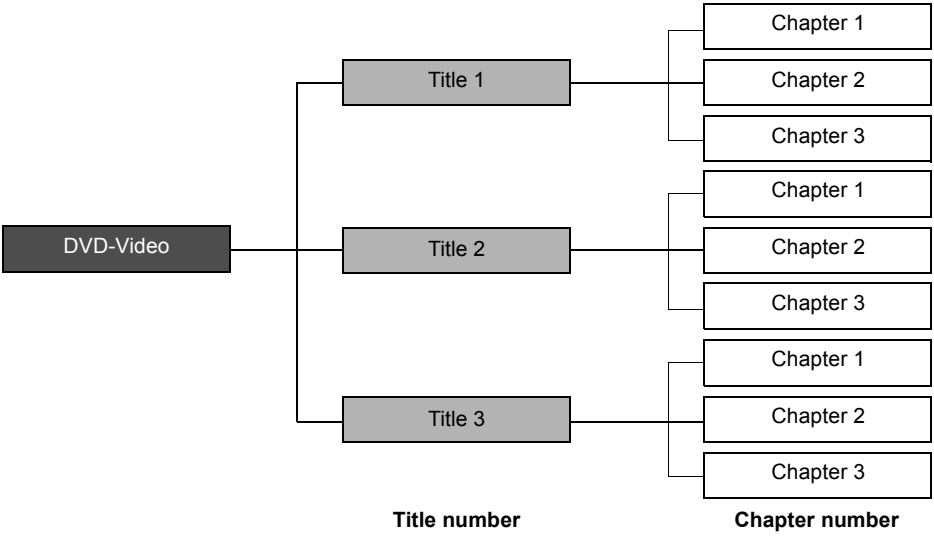
ATTENTION

The playing condition is determined by the creator of the DVD/software. Some functions may not perform during operation because the unit is playing the disc according to content specifications intended by the software creator. Be sure to consult the explanatory material provided with the disc to be played.

About DVD disc structures

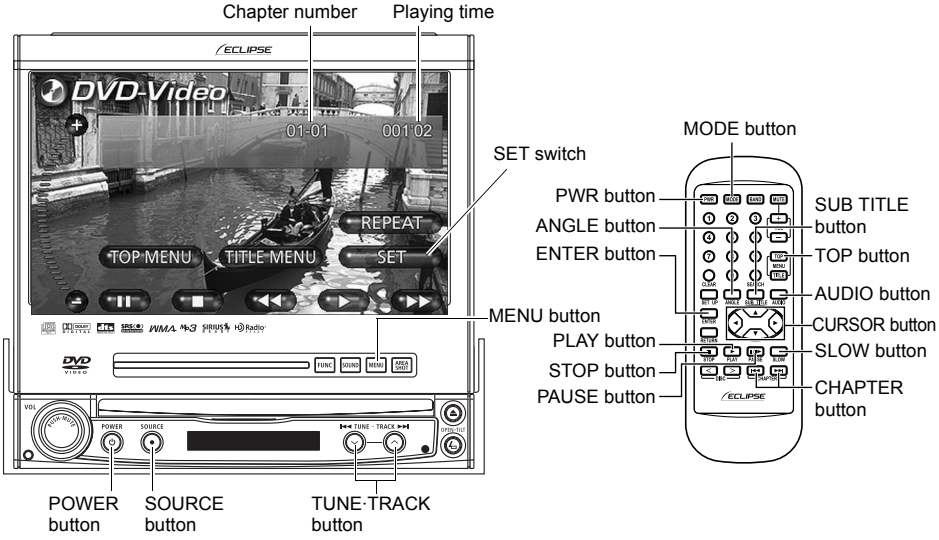
Videos and tracks recorded on a DVD are divided into many segments.

Large segments are called “titles”, and each title has a number (“title number”). Title segments are further divided into smaller segments called “chapters”, and each chapter has a number (“chapter number”).



How to use the DVD player

For safety reasons, DVDs can only be played when the ignition is switched to ON or ACC and the vehicle is completely stopped with the parking brake applied. (Only sound is output if a DVD is played while the car is in motion.)



Watching a DVD

Playback starts automatically when a DVD is inserted into the disc slot.

Watching a DVD using the touch switches

1 Press **MENU** when a DVD has been inserted.

2 Touch **DVD** .

- Playback will begin.
- To display the operation switches (touch switches), touch the screen.

Watching a DVD using the panel buttons

1 Press **SOURCE** to select DVD source when a DVD has been inserted.

Waching a DVD using the remote control

1 Press **MODE** to select DVD source when a DVD has been inserted.

ATTENTION

- Information for items such as touch switches will be displayed for about 6 seconds. Touch the screen to display again.
- Depending on the disc, automatic playback or playback may not function unless a menu recorded on the disc is selected. (See **"Operating the disc menu"** on page 116)

How to use the DVD player

Operating the video

Playing the video

Playing the video using the touch switches

1 Touch ► .

Playing the video using the remote control

1 Press ► (PLAY) on the remote control.

Fast-forwarding/rewinding

It is possible to fast-forward or rewind through the video being played.

Fast-forwarding/rewinding using the panel buttons

1 Press and hold ∧ or ∨ until you hear a beep.

- ∧ (up) : Fast-forward
  ∨ (down) : Rewind
  If you hear a beep while rewinding (fast-forwarding), the deck has switched to the fast-forward (rewind) mode and will continue until you remove your finger from the button.

Fast-forwarding/rewinding using the touch switches

1 Touch ◄◄ or ►► .

- If you hear a beep while rewinding (fast-forwarding), the deck has switched to the fast-forward (rewind) mode and will continue until you remove your finger from the switch.

Fast-forwarding/rewinding using the remote control

1 Press ⏮ CHAPTER ⏭ until you hear a beep.

⏭ : When pressed and released immediately, the picture moves to the next chapter or track.
When pressed and held (for 1 second or more), the pictures or track are fast-forwarded.

⏮ : RewindWhen pressed and released immediately, the picture moves to the beginning of the current chapter or track.
When pressed and held (for 1 second or more), the pictures or track are rewound.

How to use the DVD player

Repeating a chapter

1 Touch **REPEAT** .

- Repeat the current chapter.
- The chapter will repeat untill the function is canceled.
  Touch **REPEAT** again to cancel.

Pausing the video

Pausing the video using the touch switches

1 Touch **II** .

Pausing the video using the remote control

1 Press II/II► (PAUSE) on the remote control.

- The picture playback will pause.
- To return to normal playback, press ► (PLAY) .

Playing back in slow motion

1 Press SLOW on the remote control.

- The picture is played in slow motion.
- To play back in normal mode, press ► (PLAY) .

Stopping the video

Stopping the video using the touch switches

1 Touch ■.

Stopping the video using the remote control

1 Press ■(STOP) on the remote control.

● If you then press ►(PLAY) playback will resume from the point where it was stopped.

How to use the DVD player

Operating the disc menu

It is possible to use the menu recorded on the disc.

Operating disc menu using the touch switches

1 Touch **TITLE MENU** or **TOP MENU** .

2 Touch ↑ , ↓ , ← , or → to select the video you want to play.

3 Touch **ENTER** .

Operating disc menu using the remote control

1 Press **TOP** button on the remote control.

● The DVD menu will turn on and off each time the button is pressed.

2 Use the **CURSOR** buttons to select an item, and then press the **ENTER** button on the remote control.

Turning off the DVD

Turning off the DVD using the panel buttons

1 Press ⏻ .

● Press ⏻ again to resume playback.

Turning off the DVD using the remote control

1 Press **PWR** on the remote control.

VII

ATTENTION

Recorded menu items will differ by disc. The disc is played according to its content so all functions may not be available.

How to use the DVD player

Searching for a desired chapter

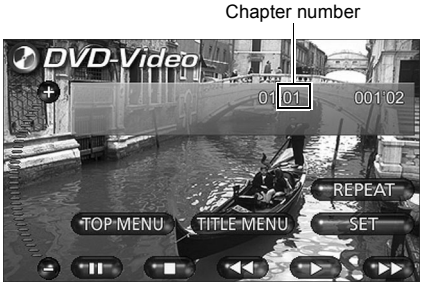
It is possible to search for a particular video segment by title and chapter or by menu number (number for divided segments).

Searching by chapter

Serching by chapter using the panel buttons

1 Press ∧ or ∨ .

- ∧ (up) : Selects next chapter
  ∨ (down) : Selects previous chapter



Switching screen display/audio

It is possible to change the language for subtitles and audio, as well as, the display angle for the video being played.

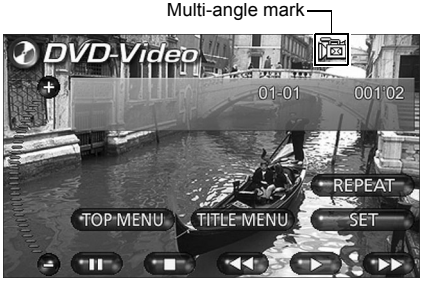
This function can only be performed with the special remote control.

Changing the angle

When several angles of a scene are recorded on a disc, the angle can be switched.

1 Press **ANGLE** on the remote control when the multiple angle mark is displayed.

- The angle number will be displayed.



ATTENTION

Each time **ANGLE** is pressed, the angle will change in order from among the angles recorded on the disc.

Switching subtitle language

When subtitles in several languages are recorded on a disc, the subtitles can be switched.

1 Press **SUB TITLE** on the remote control.

- The subtitle number will be displayed.

Switching dubbed audio language

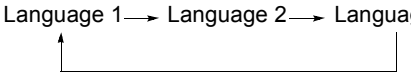
If several audio languages are recorded on a disc, the languages can be switched.

1 Press **AUDIO** on the remote control.

- The audio number and language will be displayed.

ATTENTION

- Each time **SUB TITLE** is pressed, the subtitle language will change in order from among the subtitles recorded on the disc.
- Depending on the disc, it may only be possible to change subtitles in the top menu.
- Each time **AUDIO** is pressed, the audio language will change in order from among the languages recorded on the disc.



- Depending on the disc, it may only be possible to change audio languages in the top menu.
- The dts format is not supported by this deck, so no audio will be emitted if “dts audio” is selected on a disc that enable it. In this case, select “Dolby Digital audio”, which should also be recorded on the DVD video.
- dts is a registered trademark of the US company Digital Theater Systems, Inc.

How to use the DVD player

Setting the DVD player

The language preferences for voices, subtitles and menu display used during DVD playback can be set in advance. Optional display of the multiple angle mark, viewer restriction and other functions can also be set.

1 Touch **SET** .

2 Touch the appropriate touch switch to progress to the next page and perform settings.

Touch switch	Function	Page
Audio Language	Sets the voice language for video playback.	See below
Sub Title	Sets the subtitle language for video playback.	Next page
Menu Language	Sets the language of displayed menus.	page 123
Angle Indicator	Sets display/non-display of multiple angle mark.	page 124
Parental Setting	Restricts the types of DVD videos that can be played.	page 125
Monitor	Sets screen size.	page 126

Setting the audio language

The preferred language for video playback can be selected.

1 Touch **Audio Language** in the FUNC DVD SETTING screen.

2 Touch the preferred language.

- Touch **OTHER** to set a language other than those displayed on the screen.

Inputting a code

1 Touch **OTHER** in the AUDIO LANGUAGE setting screen.

2 Input a language code.

- For language codes see **"Table of language codes"** on page 128.

3 Touch **ENTER** .

ATTENTION

After changing settings in the SET UP screen, the DVD will stop if you press one of the buttons that switch screens (**SOURCE** or **MENU**) without touching **ENTER** . Touch ► in the operation screen to start playback again. (See page 112)

How to use the DVD player

Setting subtitle language

The preferred subtitles for the video playback can be selected.

1 Touch **Sub Title** in the FUNC DVD SETTING screen.

2 Touch the preferred language.

- Touch **OTHER** to set a language other than those displayed on the screen.

Inputting a code

1 Touch **OTHER** in the SUB TITLE setting screen.

2 Input a language code.

- For language codes see **"Table of language codes"** on page 128.

3 Touch **ENTER** .

ATTENTION

Language switching cannot be performed if the selected language is not recorded on the disc.

Setting menu language

Allows selection of a preferred menu language from those recorded on the disc.

1 Touch **Menu Language** in the FUNC DVD SETTING screen.

2 Touch the preferred language.

- Touch **OTHER** to set a language other than those displayed on the screen.

Inputting a code

1 Touch **OTHER** in the MENU LANGUAGE setting screen.

2 Input a language code.

- For language codes see **"Table of language codes"** on page 128.

3 Touch **ENTER** .

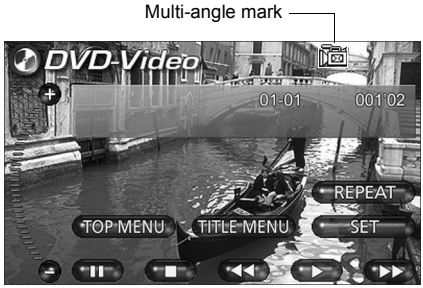
ATTENTION

Language switching cannot be performed if the selected language is not recorded on the disc.

How to use the DVD player

Setting display of multi-angle mark (angle selection mark)

The multi-angle mark can be set to display/not display during video playback.



1 Touch **Angle Indicator** in the FUNC DVD SETTING screen.

- Touching the switch toggles between "ON" and "OFF" mode.

2 Touch **ENTER** .

ATTENTION

Setting the multi-angle mark display to "ON" will display the multi-angle mark in the upper right corner of the screen when multiple angles are available on the disc.

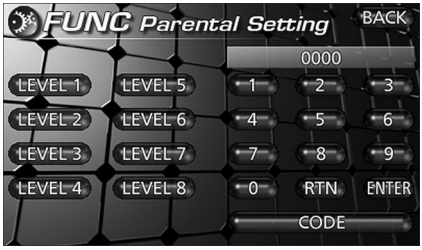
Setting viewer restriction

This function allows viewing restriction to be set so that discs with adult content or violence will not be available to children. Viewer restriction can be set at different levels to match restriction ratings.

1 Touch **Parental Setting** in the FUNC DVD SETTING screen.

2 Enter a pass code (4-digits) by touching one number at a time.

3 Touch **ENTER** .



4 Touch the preferred restriction level.

5 Touch **ENTER** .

ATTENTION

- Restriction cannot be set for discs that do not have a viewer restriction level recorded.
- Be sure to enter a pass code number. If a number is not entered, setting viewer restriction will not be possible.
- The pin code shown in the upper section will be displayed as [----] when a pin code has not yet been set.
- Once the pass code has been set, the pass code will be required for subsequent use of this function. Please do not forget the pass code. If you forget your pass code, the default setting (no pass code set) can be restored by touching **RTN** 10 times.
- Viewer restriction levels are classified in 3 types.

Level 1 . . . . . Plays only DVD software intended for children. (Playing of DVD software intended for general audiences or adult audiences is prohibited.)

Levels 2 - 7 . . . Plays only DVD software intended for children or general audiences. (Playing of DVD software intended for adult audiences is prohibited.)

Level 8 . . . . . Plays all DVD software. (Factory setting)

How to use the DVD player

Changing video output

1 Touch **Monitor** in the FUNC DVD SETTING screen.

- Each time the switch is touched, the screen size changes in the order shown below.

16 : 9 WIDE → 4 : 3 PS → 4 : 3 LB → (back to 16 : 9 WIDE)

- **16 : 9 (WIDE)**
  The video is displayed at normal width. DVD software recorded in 4 : 3 size will be displayed with black left and right edges or will be expanded to the left and right.
- **4 : 3 (PS)**
  The video is displayed with right and left edges cut off. DVD software recorded in 4 : 3 size will be displayed exactly at screen size (4 : 3).
- **4 : 3 (LB)**
  The video is displayed with black upper and lower edges.
  DVD software recorded in 4 : 3 size will be displayed exactly at screen size (4 : 3).

2 Touch **BACK** .

Caution

There are no problems with using this function as long as the customer views images privately in wide-screen format. However, if the images are compressed or enlarged for viewing for any commercial or public purpose, it may infringe upon the rights of the copyright holder under applicable copyright laws.

ATTENTION

When another monitor such as a rear seat monitor is being used, the size of the video being displayed in the rear seat monitor will differ according to the video output size set by the deck (front).

Switching dual play

When an optional rear monitor is connected, use this function to switch to sources other than the DVD, such as the Area Shot screen.

1 Touch **Dual Play** in the FUNC DVD SETTING screen.

- Touching the switch toggles between ON and OFF.

How to use the DVD player

Table of language codes

These codes are used to specify the language for audio tracks, subtitles and on-screen menu displays.

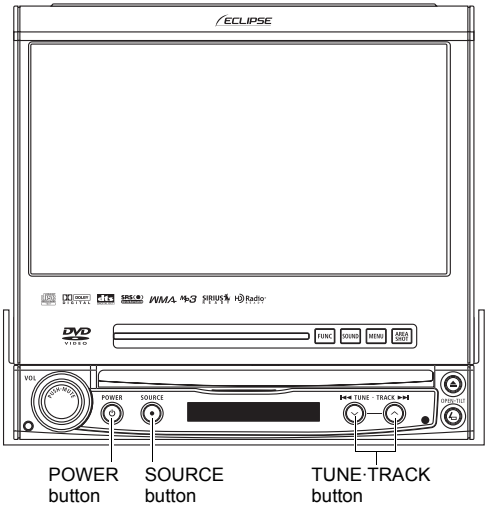
Input code	Language
1001	Japanese
0514	English
0618	French
0405	German
0920	Italian
0519	Spanish
1412	Dutch
1821	Russian
2608	Chinese
1115	Korean
0512	Greek
0101	Afar
0102	Abkhazian
0106	Afrikaans
0113	Amharic
0118	Arabic
0119	Assamese
0125	Aymara
0126	Azerbaijani
0201	Bashkir
0205	Byelorussian
0207	Bulgarian
0208	Bihari
0209	Bislama
0214	Bengali
0215	Tibetan
0218	Breton
0301	Catalan
0315	Corsican
0319	Czech
0325	Welsh
0401	Danish
0426	Bhutani
0515	Esperanto
0520	Estonian
0521	Basque
0601	Persian
0609	Finnish
0610	Fiji
0615	Faroese
0625	Frisian
0701	Irish
0704	Scots- Gaelic
0712	Galician
0714	Guarani
0721	Gujarati

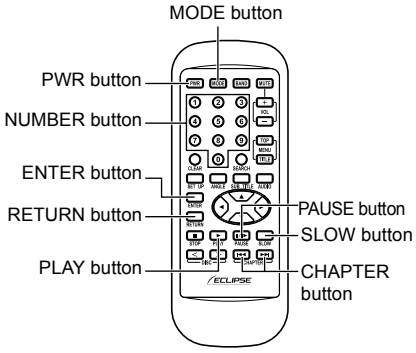
Input code	Language
0801	Hausa
0809	Hindi
0818	Croatian
0821	Hungarian
0825	Armenian
0901	Interlingua
0905	Interlingue
0911	Inupiak
0914	Indonesian
0919	Icelandic
0923	Hebrew
1009	Yiddish
1023	Javanese
1101	Georgian
1111	Kazakh
1112	Greenlandic
1113	Cambodian
1114	Kannada
1119	Kashmiri
1121	Kurdish
1125	Kirghiz
1201	Latin
1214	Lingala
1215	Laothian
1220	Lithuanian
1222	Latvian
1307	Malagasy
1309	Maori
1311	Macedonian
1312	Malayalam
1314	Mongolian
1315	Moldavian
1318	Marathi
1319	Malay
1320	Maltese
1325	Burmese
1401	Nauru
1405	Nepali
1415	Norwegian
1503	Occitan
1513	Oromo
1518	Oriya
1601	Panjabi
1612	Polish
1619	Pashto
1620	Portuguese

Input code	Language
1721	Quechua
1813	Rhaeto-Romance
1814	Kirundi
1815	Romanian
1823	Kinyarwanda
1901	Sanskrit
1904	Sindhi
1907	Sangho
1908	Serbo-Croatian
1909	Sinhalese
1911	Slovak
1912	Slovenian
1913	Samoan
1914	Shona
1915	Somali
1917	Albanian
1918	Serbian
1919	Siswati
1920	Sesotho
1921	Sundanese
1922	Swedish
1923	Swahili
2001	Tamil
2005	Telugu
2007	Tajik
2008	Thai
2009	Tigrinya
2011	Turkmen
2012	Tagalog
2014	Setswana
2015	Tonga
2018	Turkish
2019	Tsonga
2020	Tatar
2023	Twi
2111	Ukrainian
2118	Urdu
2126	Uzbek
2209	Vietnamese
2215	Volapuk
2315	Wolof
2408	Xhosa
2515	Yoruba
2621	Zulu

How to use the video CD player

A video CD recorded with Video-CD ver. 2.0 can be played on this unit.
A video CD can be watched only if the vehicle is completely stopped in a safe location with the parking brake set and ignition switch turned ON or ACC. (Only sound can be heard if a video CD is played while the car is in motion.)





VIII

Watching a video CD

Playback starts automatically when video CD is inserted into the disc slot.

Watching a video CD using the touch switch

1 Press **MENU** when video CD has been inserted.

2 Touch **DVD/VCD** .

● Playback will begin.

ATTENTION

Video CD will be play as designed by producer, and may not be played as operated.

How to use the video CD player

Watching a video CD using the panel buttons

1 Press **SOURCE** to select DVD/CD source when video CD has been inserted.

Watching a video CD using the remote control

1 Press **MODE** to select DVD/CD source when video CD has been inserted.

Using the menu screen

When a video CD featuring PBC (Play Back Control) function is played, the menu screen will be displayed. With the PBC function, original menu items of a disc can be displayed and operated while PBC disc is played.

Displaying menu screen

The menu screen can be displayed while a video CD featuring the PBC function is played.

1 Press **RETURN** on the remote control.

- Switches display to the menu screen.
- When a CD contains more than 1 page of the menu screen, the display can be switched by pressing ∧ or ∨ of the panel switch or by pressing the ⏮ CHAPTER ⏭ on the remote control.

Selecting menu list

1 Enter a menu number with the **0** to **9** number button.

- Entered numbers can be retracted with each pressing of the **CLEAR** .

2 Press **ENTER** .

- Begins playing the selected menu.

Advancing to the next scene or returning to the beginning of the scene being played

The image can be controlled during playback.
This function can be operated by using either the panel buttons or remote control.

Using panel buttons

1 Press ∧ or ∨ for less than 1 second.

- ∧ (up) : Advances to next track.
  ∨ (down) : Return to previous track.
- The currently selected track number will be shown on the display.

Using remote control

1 Press ⏮ CHAPTER ⏭ for less than 1 second.

- ⏭ : Advances to next track.
  ⏮ : Return to previous track.
- The currently selected track number will be shown on the display.

Fast-forwarding/rewinding

Using panel buttons

1 Press ∧ or ∨ until you hear a beep.

- ∧ : Fast-forward.
  ∨ : Rewinds.
- The fast-forward/rewind will continue while ∧ or ∨ is held. The fast-forward/rewind action will stop when button is released.

Using remote control

1 Press ⏮ CHAPTER ⏭ until you hear a beep.

- ⏭ : Fast-forward.
  ⏮ : Rewinds
- The fast-forward/rewind will continue while ⏮ CHAPTER ⏭ is held. The fast-forward/rewind action will stop when button is released.

How to use the video CD player

Specifying a track to playback

A track of your choice is directly selectable.
This function can only be performed with the remote control.

1 Enter a menu number with the **0** to **9** number button during video CD playback.

- Entered number can be retracted with each pressing of the **CLEAR** .

2 Press **ENTER** .

- Begins playing the selected track

Pausing/Advancing the video

This function can only be performed with the remote control.

1 Press II/II► (PAUSE) during video CD playback.

- The video will pause.
- The video will advance each time II/II► (PAUSE) is pressed while paused.

2 Press ► (PLAY) .

- Restarts playback.

Stopping playback

This function can only be performed with the remote control.

1 Press II/II► (PAUSE) during video CD playback.

2 Press ► (PLAY) .

- Restarts playback.

Using slow motion

This function can only be performed with the remote control.

1 Press **SLOW** during video CD playback.

2 Press ► (PLAY) .

● Restarts playback.

Turning off the video CD

Turning off the video CD using the panel buttons

1 Press ⏻ .

● Press ⏻ again to resume playback.

Turning off the video CD using the remote control

1 Press **PWR** .

Before using the Area Shot

About the Area Shot

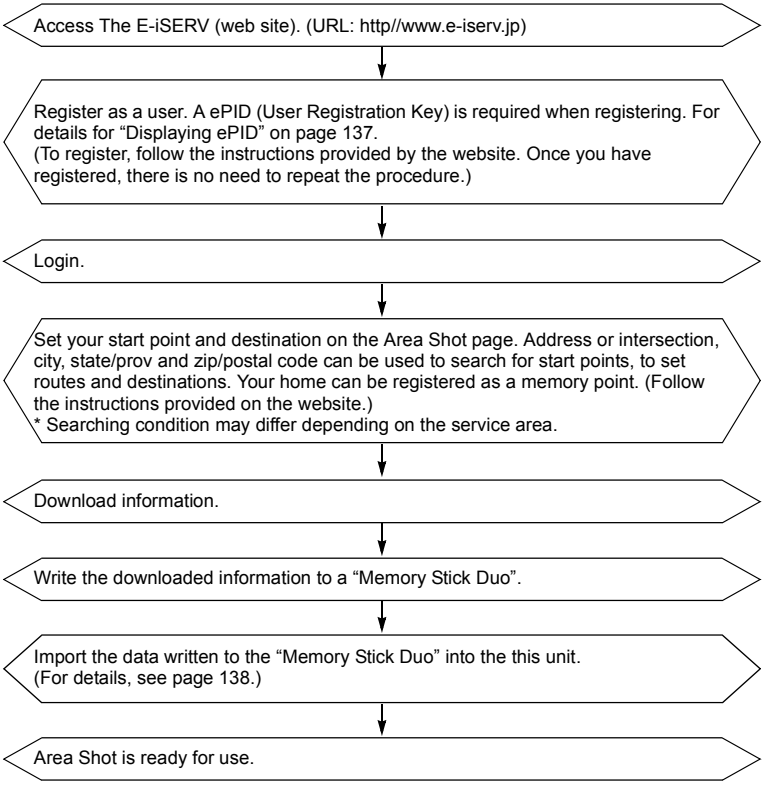
Using Area Shot function, maps to destinations and guidance information can be displayed on your unit if you have set route using the E-iSERV (web site). Current vehicle position can also be displayed on the map if an optional GPS unit is connected.

The display in this manual may differ from that of the actual product.

To use the Area Shot function

In order to use Area Shot, driving instructions such as the direction of travel and the street names of turn intersections must be downloaded from the E-iSERV (web site) and imported into the unit.

The process is as follows:



Before using the Area Shot

Map data

When using the map data, be aware of actual road conditions and obey traffic rules.

Copying, publishing, or using maps in electronic media without the expressed written consent is forbidden.

GPS (Global Positioning System)

Developed and operated in the United States, GPS (Global Positioning System), is a system that locates current position (longitude and latitude) using radio waves beamed to earth from 3 or 4 GPS satellites.

GPS information may not be available under the following circumstances:

- When GPS satellite radio waves are interrupted by buildings, tunnels, elevated roads, etc.
- When radio waves are interrupted by objects on or near the GPS antenna.
- In some instances, wave transmission is interrupted by the U.S. tracking control center during maintenance or upgrades.
- When a digital cellular phone (1.5 GHz) is used near a GPS antenna.

Warning

- Be sure to obey all traffic rules and regulations while driving.
- Driving while strictly following guidance instructions may lead to traffic violations and accidents, due to possible discrepancies between actual road conditions and map guidance.
- Do not modify this system for use other than that specified herein. Also, do not deviate from the installation procedures described herein, ECLIPSE will not be held liable for damages including, but not limited to serious injury, death or property damage resulting from installations that enable unintended operation.

How to use the Area Shot function

Displaying ePID

ePID is your unit's unique ID. In order to use the E-iSERV (web site), a 16-digit ePID is necessary.

1 Press **FUNC** to display the FUNCTION screen.

2 Touch **Area Shot** .

- If an Area Shot route is already selected, ePID can be displayed even if **AREA SHOT** is pressed.

- The ePID will appear.

ATTENTION

Your ePID is a 16-digit ID composed of number (0-9) and letters (A-F).

How to use the Area Shot function

Reading Area Shot data

The Area Shot data that has been downloaded from E-iSERV (web site) to a “Memory Stick Duo” can be loaded in the the unit and saved there.

1 Insert the “Memory Stick Duo”.

2 Press **FUNC** to display the FUNC screen.

3 Touch **Area Shot** .

4 Touch **Route Select** .

Caution

Do not turn the power or ignition switch off while the “Memory Stick Duo” is reading. Interrupting this reading process may corrupt the data.

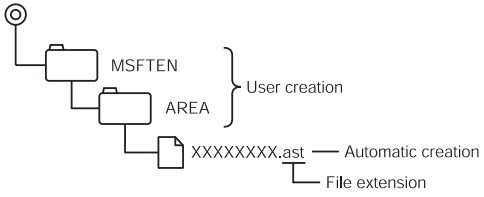
5 Touch file name switch to select the route.

- Touch the ∧ , ∨ to move the list.
- The selected route will be read.
- Touch **BACK** return to the previous screen.

IX

ATTENTION

- Data downloaded from the E-iSERV (web site) is saved to folders created in the "Memory Stick Duo" as shown below.



- Files that can be imported into your unit are created automatically when downloaded from E-iSERV (web site)
- All of the searched route maps, guidance information, and POI are stored in these automatically created files.
- The file name can be changed using 8 alphameric characters (adding a space for a character cannot be used).

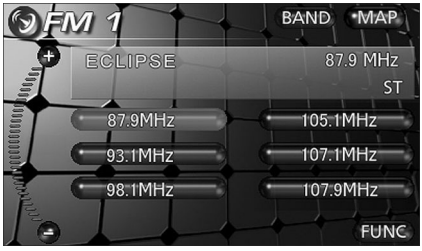
How to use the Area Shot function

Changing Area Shot screen

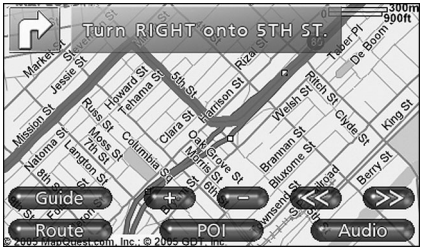
Once Area Shot data has been acquired, a **MAP** switch is displayed on the various audio operation screens.

1 Touch **MAP** .

- The Area Shot screen will appear.

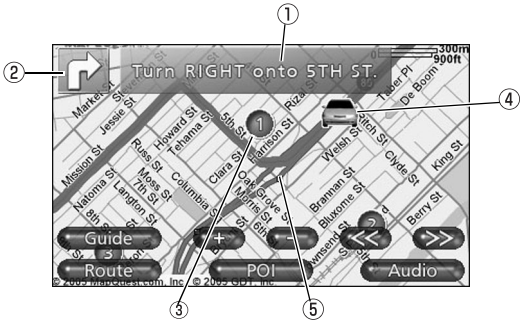


- Touch **Audio** to switch to the audio operation screen.



How to view the Area Shot screen

A map screen like the one shown will appear when the Area Shot screen has been selected. The map is oriented with north at the top.



① Guidance information:

Information about guidance points are (traveling direction, street names) displayed as a text.

② Arrows:

Indicates the direction to the guidance point.

③ POI mark:

Up to 5 POI points in the vicinity of the guidance point can be displayed.

④ Vehicle position mark:

If an optional GPS unit is connected, your vehicle position will be displayed. The vehicle position mark will move on the map in accordance to your vehicle's movement.

⑤ Guidance points:

The guidance point is shown at the center of the map.

Caution	The display in this manual may differ from that of the what is actually displayed.

How to use the Area Shot function

Displaying touch switch

The touch switches displayed on the Area Shot screen will disappear if they are not operated for approximately 6 seconds. Perform the following to redisplay the switches.

1 Touch screen.

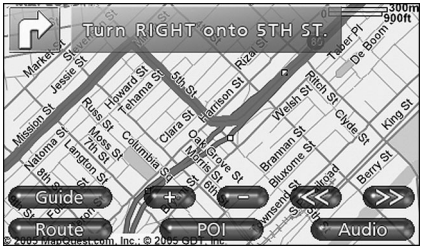
- The touch switches will reappear.

Switching the map reduction scale

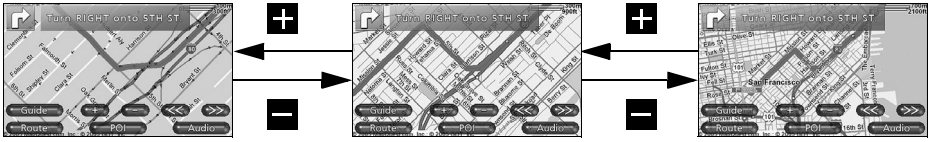
When the Area Shot data is downloaded from E-iSERV, three maps of different scales for each guidance point are downloaded. Any one of the three (small-scale, standard, or large-scale) can be displayed.

1 Touch + or − on the standard map screen.

- The map will switch to the following:
  + : large-scale map
  − : small-scale map
- Touch − while the large-scale map is displayed to return to the standard map.
- Touch + while the small-scale map is displayed to return to the standard map.



●Large-scale map ●Standard map ●Small-scale map

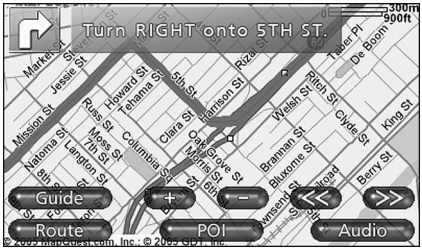


Displaying the all-route map

A map showing the entire route from starting point to destination can be displayed.

1 Touch the **Route** .

- The all-route map is displayed.



How to use the Area Shot function

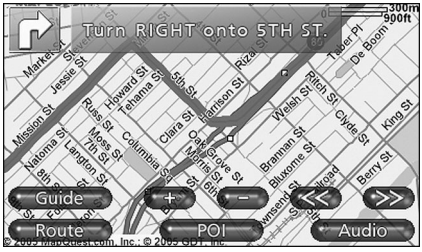
● Touch **Guide·P** to return to the previous map screen.

Switching guidance points

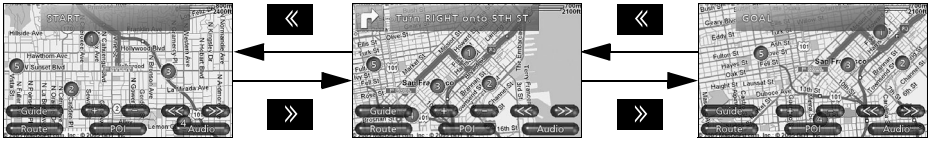
After passing each location described in the guidance, it is necessary to switch manually to the next guidance screen. The previous screen can also be accessed manually and confirmed.

1 Touch « or » .

● » : To switch to next guidance point.
« : To switch to the previous guidance point.



● Start point ● Intersections, etc. ● Destination

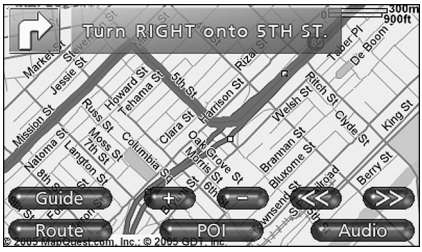


Switching text information

The text information display can be switched ON and OFF.

1 Touch **Guide** .

- This removes the displayed text information.
- Touch **Guide** again to redisplay text information.

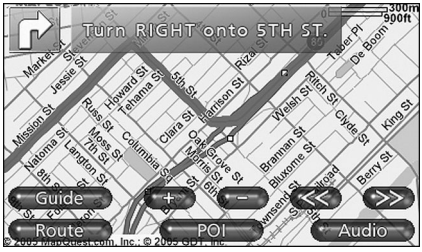


Re-scrolling through text information

Text information including intersection, street names, and turn directions can be scrolled across the screen by switching through the guidance points. A maximum of 32 characters are scrolled on the display. When scrolling is complete, the first 32 characters are once more displayed on the screen. To re-scroll, perform the following operation:

1 Touch **Guide** until you hear a beep.

- Guidance information can be re-scrolled.



IX

How to use the Area Shot function

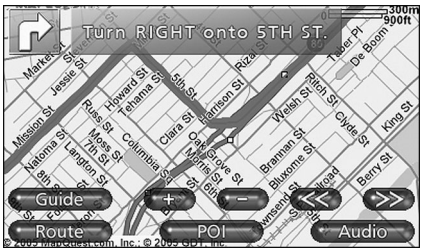
Displaying POI vicinity

POI vicinity information can be displayed on the maps for various guidance points. A single POI category, such as restaurants or shopping, can be set to be display.

A maximum of 5 POI marks can be displayed in the vicinity of a guidance point. The points are numbered 1 through 5 beginning with the closest POI to the guidance point.

Selecting POI category

1 Touch **POI** .



2 Touch **SET** .

3 Touch POI category.

- Touch ∧ , ∨ to move the list.
- Touch **OFF** to turn the POI vicinity display OFF.

4 Touch **ENTER** .

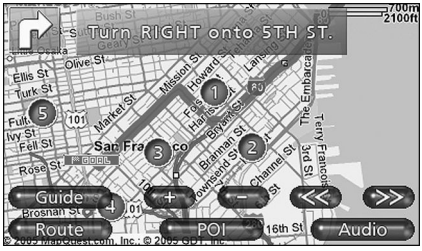
- POIs from the selected category are displayed when you return to the map display screen.
- Press **BACK** to return to the previous screen.

Displaying POI vicinity information

POI vicinity information can be displayed as text on the Area Shot screen. The information is displayed as follows:

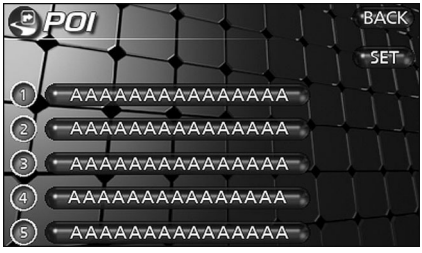
- Name
- ZIP code
- Address
- Telephone number

1 Touch **POI** .



2 Touch the POI you wish to display.

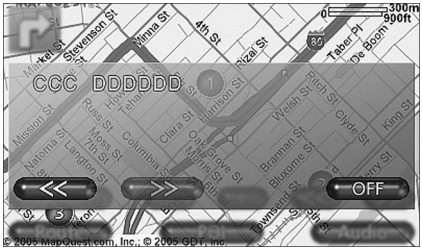
- The selected POI vicinity information will be displayed.



How to use the Area Shot function

- Touch « or » to switch among text information for the displayed next page or previous page.
- « : Displays POI vicinity information for the next page
  » : Displays POI vicinity information for the previous page

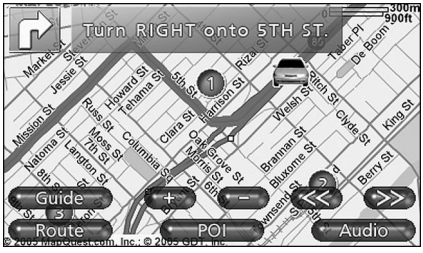
- Touch **OFF** to cancel the POI vicinity display.



When an optional GPS unit is connected

When an optional GPS unit is connected, the following operations are available.

- When your vehicle enters the display/map range of the guidance point, a blinking mark will appear to indicate the position of your vehicle.



- When the vehicle position mark goes outside of the map display area, a map with the vehicle position mark is no longer displayed. When this happens, switch to the next guidance point. For details, see **"Switching guidance points"** on page 144.

To end Area Shot

1 Press **AREA SHOT** .

- The Area Shot can be ended by ejecting the "Memory Stick Duo".

ESN security operating procedure

About ESN

This unit is equipped with ESN (ECLIPSE Security Network). A preregistered music CD (Key CD), four-digit security code, or a “Memory Stick Duo” on which all unit functions will not operate, even by turning the ignition switch to the ACC, ON position, reconnecting the battery after turning the ignition switch off, or disconnecting the battery during maintenance.

ESN can be set or cancelled using any of the following methods:

- **Key CD security (See page 151)**

  You can record a specific CD that you have as a “key CD” with the unit, and this CD can then be used to set and cancel the security settings.

- **“Memory Stick” security (See page 155)**

  You can record a secret code (security code) to “Memory Stick Duo”. This “Memory Stick Duo” or secret code (security code) with the unit, and this “Memory Stick Duo” or secret code (security code) can then be matched with the unit to set and cancel the security settings.

- **ACC security (See page 163)**

  This method can only be used when “Memory Stick” security has already been set. When ACC security is set, button operations are disabled when the ignition switch is turned to OFF and then back to ACC.

ESN security operating procedure

How to switch the security type (Key CD security/ "Memory Stick" security)

You can switch the type of security being used (Key CD security or “Memory Stick” security). The initial setting is for “Memory Stick” security.

1 Press **FUNC** for less than 1 second.

2 Touch **SEC** .

- The security setting screen will appear.

3 Touch **SEC** .

- Security type will switch from Key CD security (DISC) ↔ “Memory Stick” security (MS) in order each time the switch is touched.

ATTENTION

If a security is activated, switching the security type is not available.

How to operate the ESN (Key CD) security

How to program the Key CD

1 Press **FUNC** for less than 1 second.

2 Touch **SEC** .

- The security setting screen will appear.

3 Touch **SET** .

- "Please insert disc." will appear.

4 Insert the CD into the slot.

- "SECURITY" will appear then the Key CD is ejected.

X

ATTENTION

- If a CD has already been inserted, a message appears, and then the front panel opens and the CD is ejected.
- If security is activated, programming the Key CD is not available.
- If there is a problem with the inserted CD, an "ERROR" message will appear for two seconds and the CD will be ejected. Reinsert the ejected CD.
- If a CD causes the "ERROR" message to appear twice in a row, a "Please exchange discs." message will appear for two seconds. Try another CD.
- Copy Protected CD and MP3/WMA CD-ROM cannot be programmed for Key CD security.
- The Security indicator will flash whenever the vehicle's ignition is switched off.

ESN security operating procedure

How to cancel the Key CD

1 Press **FUNC** for less than 1 second.

2 Touch **SEC** .

- The security setting screen will appear.

3 Touch **CANCEL** .

- “Please insert disc.” will appear.

4 Insert your Key CD into the slot.

- A “The key disc was cancelled” message appears, then the Key CD is ejected.
  The Key CD is cancelled.

ATTENTION

- If a CD has already been inserted, a message appears, and the CD is ejected.
- This process cancels the protection for the ESN protection.
- If the CD other than the Key CD is inserted, ESN protection will not cancel and the CD is ejected.

How to change the Key CD

1 First, cancel the existing Key CD.

- Refer to “How to cancel the key CD”.

2 Next, program a new Key CD.

- Refer to “How to program the Key CD”.

How to resume normal operation (ESN security lock out)

If power is disconnected while ESN security is active (a Key CD was programmed), operation is disabled until power is restored and the unit unlocked. Follow this procedure to resume normal operation.

1 When the power is turned on after disconnecting the battery power, a “SECURITY” message will appear for 2 seconds.

2 Insert your Key CD.

- If the correct CD is inserted, “The security lock was unlocked.” message will appear for two seconds and the CD will begin playing.

ATTENTION

- If the incorrect CD is inserted, an “ERROR” (“ERROR” and error number) message will appear for 2 seconds, after which the CD will be ejected.
- If “ERROR5” (the 5th time an error has occurred) appears, “HELP” will appear, after which the CD will be ejected. When “HELP” appears, carry out the operations for an ESN security lock out by following the procedure in “What happens if an incorrect CD is inserted?” on next page.
- You must be use the same CD used for Key CD programming; a duplicate CD may not work properly.

ESN security operating procedure

What happens if an incorrect CD is inserted?

1 After the 5th incorrect attempt, the display reads “HELP” for 5 seconds.

- After the “HELP” message appears for 5 seconds, serial number will then appear.

2 Press the **FUNC** , then **SOUND** , and hold them for 5 seconds.

- After the “SEC” message will appears for 2 seconds, the rolling code (six digit) will appear.

3 Press the **FUNC** .

- A “DISC” message appears.
  You will have 5 more attempts the to insert the correct disc.

4 Insert the key CD into the slot.

- If the correct CD is inserted, an “OK” message will appear for 2 seconds and the CD will be ejected.

ATTENTION

- After the 5th try and the correct Key CD is not inserted, the display reads “CALL800”; the unit must be returned to Eclipse to be reset. In this case, please contact your Eclipse dealer for assistance. For country-specific customer service information, refer to “How to contact customer service” on page 245.
  Your Key CD can be easily forgotten. Write the album name in a reminder note.
- If an incorrect CD is inserted, an “ERR_” (“ERR” and error number) message will appear for 2 seconds, after which the CD will be ejected.
- This process cancels the protection for ESN deck.

How to operate the ESN (“Memory Stick”) security

How to record a security code

1 Press **FUNC** for less than 1 second.

2 Touch **SEC** .

- The security setting screen will appear.

3 Touch **SET** .

- The security code entry screen will appear.

4 Insert the “Memory Stick Duo” into the slot.

5 Input a security code by touching switches.

- Enter a four-digit security code using digits 0 to 9, A to F.

6 Press and hold **ENTER** .

- The security code is registered in the unit and security is set. The registered security code is encrypted and then written to “Memory Stick Duo”.

X

ESN security operating procedure

7 Eject the “Memory Stick Duo”.

● Refer to “How to eject disc (CD/DVD) or “Memory Stick Duo”” on page 48.

ATTENTION

- If a “Memory Stick Duo” has already been inserted, a “MS EJECT” message appears. In this case, eject the “Memory Stick Duo” and insert it again. (Refer to “How to eject disc (CD/DVD) or “Memory Stick Duo”” on page 48 for details on ejection of the “Memory Stick Duo”.)
- If the security is already activated, recording the security code function is not available.
- When the security code is registered using a “Memory Stick Duo” that contains several kinds of data, such as music, etc., be careful not to clear the recorded data by formatting the “Memory Stick Duo”.

How to cancel the “Memory Stick” security

The security function can be canceled when the security code that has been recorded with the deck is entered and verified.
Canceling the security function can be done by entering the security code into the unit, or by using the “Memory Stick Duo”.

Canceling the security function by entering the security code

1 Press **FUNC** for less than 1 second.

2 Touch **SEC** .

- The security setting screen will appear.

3 Touch **CANCEL** .

- The security code entry screen will appear.

4 A security code is entered by touching switches.

- Enter a four-digit security code using digits 0 to 9, A to F.

5 Press and hold **ENTER** .

- If a security code is entered and the unit verifies that it is correct, the security function will be canceled.

X

ESN security operating procedure

Canceling the security function using a “Memory Stick Duo”

1 Press **FUNC** for less than 1 second.

2 Touch **SEC** .

- The security setting screen will appear.

3 Touch **CANCEL** .

- The security code entry screen will appear.

4 Press **FUNC** .

5 Insert the “Memory Stick Duo”.

- The recorded data will be read from the “Memory Stick Duo”.

6 If the contents recorded in the “Memory Stick Duo” match the information recorded by the unit, “The security lock was unlocked.” will appear on the display.

- The security function will be canceled and the deck will return to normal operation.

7 Eject the “Memory Stick Duo”.

- Refer to “How to eject disc (CD/DVD) or “Memory Stick Duo”” on page 48.

ATTENTION

- If the security code that is entered does not match the code that is recorded by the unit, “ERROR” will appear on the display for 2 seconds and operation will continue as normal without the security function being canceled.
- If a “Memory Stick” has already been inserted, a “MS EJECT” message appears. In this case, eject the “Memory Stick Duo” and insert it again. (Refer to “How to eject disc (CD/DVD) or “Memory Stick Duo”” on page 48 for details on ejection of the “Memory Stick Duo”.)
- If a reading error occurs or if an incorrect “Memory Stick Duo” is inserted, “ERROR” will appear on the display for 2 seconds, and then the display will change to “EJECT”. If this happens, eject the “Memory Stick Duo” and try again.
- Security setting cannot be canceled by this procedure if the “Memory Stick Duo” containing the security code is formatted.

How to change the “Memory Stick Duo”

You can change the “Memory Stick Duo” and security code that have been recorded by the unit to a different “Memory Stick Duo” and security code.

1 Cancel the security code that has been recorded with the deck.

- Refer to “How to cancel the “Memory Stick” security” on page 157.

2 Re-record the new “Memory Stick Duo” and security code that you would like to use.

- Refer to “How to record a security code” on page 155.

How to resume normal operation (ESN security lock out)

If power is disconnected while ESN security is active (a security code was recorded), operation is disabled until power is restored and the unit unlocked. Follow this procedure to resume normal operation.

ESN security lock can be canceled by directly entering the security code into the unit, or by using the “Memory Stick Duo” that was being used when the security code was recorded.

Canceling ESN security lock out using security code entry

1 When the power is turned on after disconnecting the battery power, a “SECURITY” message will appear for 2 seconds. Thereafter, the security code entry screen will appear.

2 A security code is entered by touching switches.

- Enter a four-digit security code using digits 0 to 9, A to F.

X

ESN security operating procedure

3 Press and hold **ENTER** .

- If the security code matches the code recorded by the unit, “Security lock was unlocked.” will appear on the display and the security function will be canceled.

Canceling ESN security lock using “Memory Stick Duo”

1 After the battery is connected and the unit’s power is turned on, “SECURITY” will appear on the display for 2 seconds. After this, the security code entry screen will appear.

2 Press **FUNC** .

3 Insert the “Memory Stick Duo” that has been recorded, and then close the front panel.

- The recorded data will be read from the “Memory Stick Duo”.

4 If the contents recorded in the “Memory Stick Duo” match the information recorded by the deck, “Security lock was unlocked.” will appear on the display for 2 seconds, and then the deck will return to normal operation.

ATTENTION

- If the security code does not match the information recorded by the unit, “ERROR_” (ERROR and the error number) will appear on the display for two seconds, and then “- - - -” (security code entry display) will appear. If this happens, check the security code and repeat the procedure from step 2.
- If “ERROR5” (the 5th time an error has occurred) appears, “HELP” will appear. When “HELP” appears, carry out the operations for an ESN security lock out by following the procedure in “What happens if a “Memory Stick Duo” or security code is incorrect?” on next page.
- If a “Memory Stick” has already been inserted, a “MS EJECT” message appears. In this case, eject the “Memory Stick” and insert it again. (Refer to “How to eject disc (CD/DVD) or “Memory Stick Duo”” on page 48 for details on ejection of the “Memory Stick Duo”.)
- If the contents recorded in the “Memory Stick Duo” do not match the information recorded by the unit, “ERROR_” (ERROR and the error number) will appear on the display for 2 seconds, and then “- - - -” (security code entry display) will appear. If this happens, check the “Memory Stick” and repeat the procedure from step 2.
- ESN security lock cannot be canceled by this procedure if the “Memory Stick Duo” containing the security code was formatted.

ESN security operating procedure

What happens if a “Memory Stick Duo” or security code is incorrect?

1 After the 5th incorrect attempt, the display reads “HELP” for 5 seconds.

- After the “HELP” message was displayed for 5 seconds, the serial number will appear. You will only get 5 unsuccessful unlock code entries. After the 5th attempt, you will be asked to insert the DISC (Key CD). At this point, please contact your local Eclipse dealer or Eclipse Customer Service for procedure on unlocking the unit.

ATTENTION

For country-specific customer service information, refer to “How to contact customer service” on page 245.
Your security code and “Memory Stick Duo” can be easily forgotten. Write the security code and “Memory Stick Duo” title in a reminder note.

How to operate the ACC security

ACC security involves using “Memory Stick” security to record a security code, and then when the ignition switch is turned to OFF and back to ACC, the operation of all buttons is disabled.

1 Press **FUNC** for less than 1 second.

2 Touch **SEC** .

- The security setting screen will appear.

3 Touch **ACC** .

- Touching the this switch toggles between ON and OFF.

X

ATTENTION

- If the vehicle's battery is disconnected at times such as during servicing, ACC security will be canceled.
- When ignition switch is turned OFF and back to ACC, the operation all button is disabled. If this happen, resume normal operation. (Refer to “How to resume normal operation (ESN security lock out)” on page 159.)

ESN security operating procedure

How to turn the security indicator on/off

Once ESN security is activated, the indicator flashes whenever the vehicle's ignition switch is turned off, warning potential thieves that the unit is protected. However, if do not want this visible deterrent, it may be turned off.

1 Press **FUNC** for less than 1 second.

2 Touch **SEC** .

- The security setting screen will appear.

3 Touch **INDICATOR** .

- Touching the this switch toggles between ON and OFF.

"ON" means the security indicator will flash when the vehicle's ignition switch is off, and "OFF" means it will not.

Repeat the above steps to reactivate the flash mode.

How to read the Electronic Serial Number

1 Press **FUNC** for less than 1 second.

2 Touch **SEC** .

- The security setting screen will appear.
- An 8-digit number appears on display.

Before using remote control

Warning

- Be sure to properly store the remote control when not in use. An improperly stored remote control could shift during braking or cornering and interfere with driving operation (for example, by becoming lodged under the brake pedal) and cause an accident.
- Do not expose the remote control to extreme heat or direct sunlight, especially when it is in the vehicle. Doing so could cause a fire.

Caution

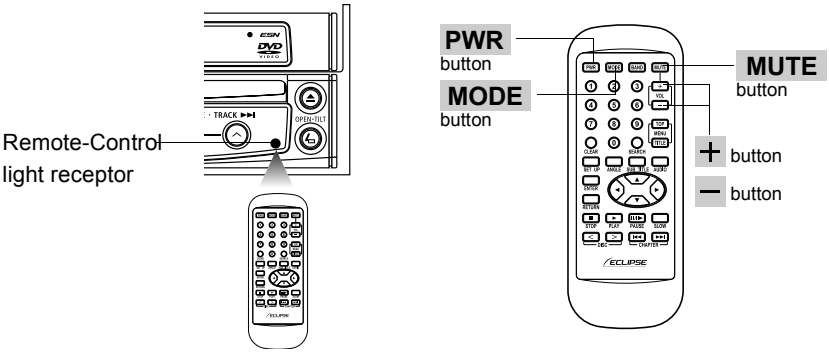
Precautions when using the remote control

- Be careful when handling the remote control, especially because it is small and light. Dropping or striking it may damage it, wear out the battery or cause a malfunction.
- Keep the remote control free of moisture, dust and water. Do not subject it to shock.
- Do not place the remote control unit where it will get hot, such as on the dashboard or near a heater vent. Allowing the remote control unit to overheat may warp its case or cause other problems.
- Do not operate the remote control unit while driving because doing so could cause an accident.
- When using the remote control, point it directly at the remote control light receptor.
- The light receptor may not operate correctly if it is exposed to bright light such as direct sunlight.
- Remove the batteries from the remote control unit whenever it is not to be used for a long time.
- Store the remote control away from direct sunlight, extreme heat, and high pressure. Exposure to these elements could result in warping of the casing, battery rupture, or battery leakage.

Cleaning the remote control

- Use a dry cloth to keep the unit clean. If the remote control unit gets extremely dirty, clean it with a cloth moistened in a diluted liquid detergent. Do not use alcohol or thinner; these compounds may damage the finish.
- In no event should benzine or thinner be used. These substances will damage the case or finish.

How to use the remote control



Turning the power on/off

When the power is turned on, the last mode prior to turning off the power such as CD and tuner playing is restored.

1 Press **PWR** .

- The power turns on or off each time the button is pressed.

Adjusting the audio volume

1 Press + or − .

- + button: Increases the volume.
  − button: Decreases the volume.

Muting the volume

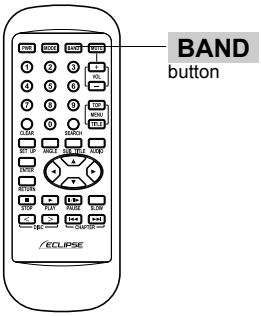
Press **MUTE** to cut or mute the volume or restore it instantly.

Switching playback modes

1 Press **MODE** .

- Tap the button to switch modes in the following sequence:

Tuner → DVD (CD) → CDCH → VTR



How to select the tuner

Select the tuner mode first.

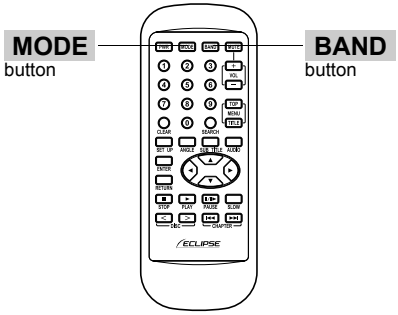
Selecting the FM/AM band

1 Press the **BAND** .

● Each tap will switch tuner modes from FM1 → FM2 → FM3 → AM.

XI

How to use the remote control



How to play back CDs

Select the disc mode first.

Switching disc modes

1. Press the **MODE** button to switch DVD (CD) player or CD changer.
2. When two CD changers are connected, press the **BAND** button to change between CD changer 1 and CD changer 2.

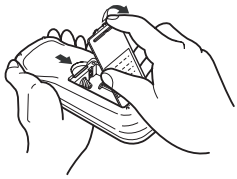
Replacing the battery

Warning

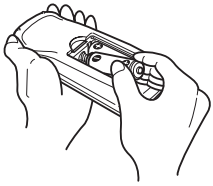
To prevent accidents, store batteries out of the reach of children. If a child has swallowed one, consult a doctor immediately.

Use two AA-size batteries.

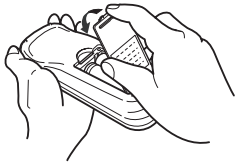
1 Remove the back cover of the remote control by gently pressing and sliding it in the direction indicated by the arrow.



2 Install the two batteries provided into the compartment as illustrated inside the compartment.



3 Return the back cover into place by sliding it in the direction indicated by the arrow.



Caution

- Be extremely careful not to swallow the battery.
- The battery life is approximately one year. If the remote control unit does not operate correctly or if the button lamp gets dim, replace the batteries.
- Be sure to orient the batteries correctly so that the positive and negative poles match the diagram.
- Do not use one new battery and one old one; use two new batteries.
- Use only two of the same kind of battery.
- If any liquid is seen leaking from the batteries, remove both batteries and dispose of them properly. Thoroughly clean the battery compartment with a dry cloth. Then install new batteries.

Sound quality information

Functions of the optional 5.1 ch decoder & AV selector unit is connected

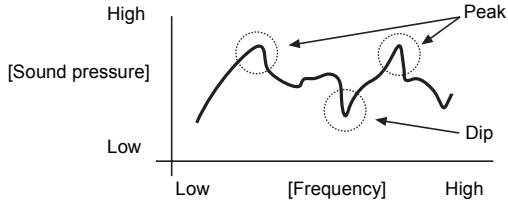
The following table shows the finer audio adjustments that can be performed when the optional 5.1 ch decoder & AV selector unit is connected.

Item		Function	Page
Parametric EQ		Perform a 5-band parametric equalizer adjustment on each channel (front, rear, center) and a 1-band adjustment on the woofer for a total of a 16-band adjustment.	178
POSITION		Sound localization can be adjusted according to the number and position of passengers in order to obtain optimum acoustic effects.	183
FADER/BALANCE		The left/right/front/rear balance can be adjusted.	184
Speaker Settings	Time Alighnment	The delay time and level of the sound from each speaker can be adjusted in order to correct any phase mismatches in the sound resulting from the listening position.	189
	Crossover	Allocate specified frequency bands to each speaker for improved sound integration.	191
	Non-fader level	When a sub-woofer is connected, the preferred output level for the audio can be set.	193
	Non-fader phase	The merging of sound between the front and rear speakers and the sub-woofer can be improved by selecting the phase. Switch to a phase which lets the speakers combine without any disharmony.	194
	Speaker Level	Adjust the frequency band output to fit the size of the speakers connected to the unit.	195
	Speaker Size	Set the speaker size.	196
Surround System Settings	Dolby Pro Logic II	Achieve surround sound by moving from 2 channel stereo to 5.1 channel sound.	186
	COMPRESSION	Set the dynamic range (difference between the lowest and highest audio signal).	188
	Center Width	When Dolby Pro Logic II is set to Music and the center speaker is set to LARGE or SMALL, sound from the center speaker is distributed to the left and right front speakers.	187
	Center Level	Adjust the output level of the center speaker.	187
	Rear Level	Adjust the output level of the rear speakers.	187

Item	Function	Page
Harmonizer	When original sounds are converted to a MP3/WMA format, frequency ranges that are not normally audible to the human ear are compressed. The harmonizer can be used to play back these compressed sounds at as close to their original form as possible so that clear and powerful sound can be enjoyed.	185
Loudness	The loudness control may be turned on the emphasize low and high frequencies at low volume levels. Loudness compensates for the apparent weakness of low and high frequencies at low volume by boosting the bass and treble levels.	185
E-iSERV Sound Effect Customizations	Download sound adjustment data from the ECLIPSE website (E-iSERV) that matches the vehicle's interior and store it in the unit.	175

About parametric EQ

A variety of materials are used inside a vehicle to manufacture the seats and windows, and because these materials absorb and reflect sound in different ways, the parametric equalizer lets you adjust the peaks and dips of the frequency characteristics inside the vehicle to compensate for this.

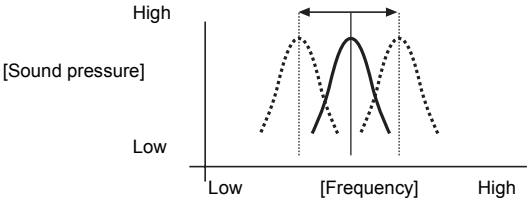


An “equalizer” is a function that corrects these peaks and dips in order to flatten the frequency characteristics. However with a normal graphic equalizer, the median frequency and the Q (sharpness and band width) are fixed, so that when neighboring bands are corrected, there is a limit to the amount by which distortion in the peak and dip characteristics can be corrected. A “parametric equalizer” lets you adjust the median frequency, Q (sharpness and band width) and gain to variable levels, so that you can make fine adjustments to spot areas of the frequency band.

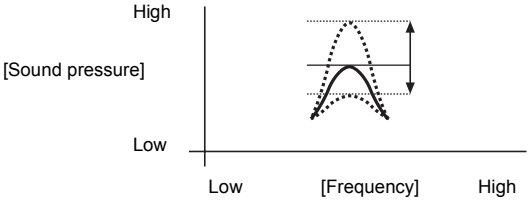
Sound quality information

[Parametric equalizer characteristics]

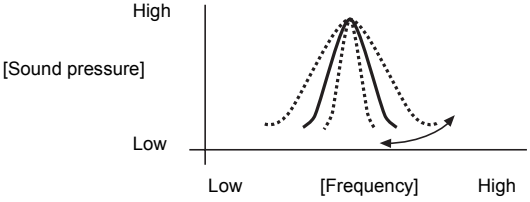
1. Median frequency can be varied.



2. Gain can be varied.



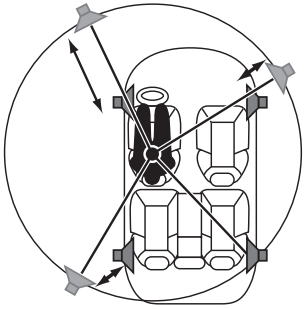
3. Q (sharpness/band width) can be varied.



About time alignment

With vehicle audio systems, the installation position of the speakers and the position of the listener mean that the distances from the listener to the left and right speakers are almost always different. These differences in the distance from the listener to each speaker in turn means that the time taken for the sound to reach the listener is different for each speaker. The result of this is that the phases of each speaker (biases) become mismatched and the sound becomes unnatural, as though the sound stage is not wide enough. The “time alignment” function corrects the time taken for the sound waves to reach the listener in order to set the optimum phase for the listening position so that the sound becomes more expansive as though it is being listened to from a sound stage.

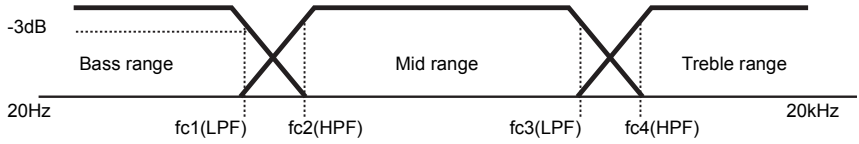
The basic adjustment method involves measuring the actual distances to each speaker and calculating the differences in distance relative to the most distant speaker in order to derive the delay time for the sound from each speaker.



Sound quality information

About crossover

The frequency band that is stored by audio media such as CDs is a fairly wide range from 20 Hz to 20 kHz, and it is difficult for a single speaker to be able to play back all frequencies in such a wide range.
Because of this, several speakers can be used, with different frequency bands (such as treble, medium and bass) allotted to each speaker so that wide frequency ranges can be played back. The “Crossover” function is used to allot the frequency ranges that are to be played back by each speaker in accordance to the installed speaker units and the layout of the speakers, in order to obtain the maximum level of performance from the speakers and to provide the most stable frequency characteristics.
The crossover function includes a high-pass filter (HPF) for playing back treble sounds, and a low-pass filter (LPF) for playing back bass sounds. In addition, the HPF and LPF are used in combination in order to play back sounds in the mid range.



fc*: Cutoff frequency

For example, when adjusting the HPF, frequencies that are lower than the specified frequency are progressively dampened, rather than simply not being played back at all. The “slope” adjustment function is the function that is used to adjust these dampening characteristics. The slope characteristics of a filter are such that with larger slope values (for example 12 dB/oct), the slope becomes steeper, and so the amount of sound mixing in with neighboring bands becomes less so that only the target band is played back. However, it also causes the merging of sound between speakers to become poorer and can result in greater distortion.

- The crossover function is a filter that allocates specified frequency bands.
- A high-pass filter (HPF) is a filter that cuts out frequencies that are lower than the specified frequency (bass range) and allows higher frequencies (treble range) to pass through.
- A low-pass filter (LPF) is a filter that cuts out frequencies that are higher than the specified frequency (treble range) and allows lower frequencies (bass range) to pass through.
- The slope is the signal level at which frequencies that are one octave higher or one octave lower are dampened.

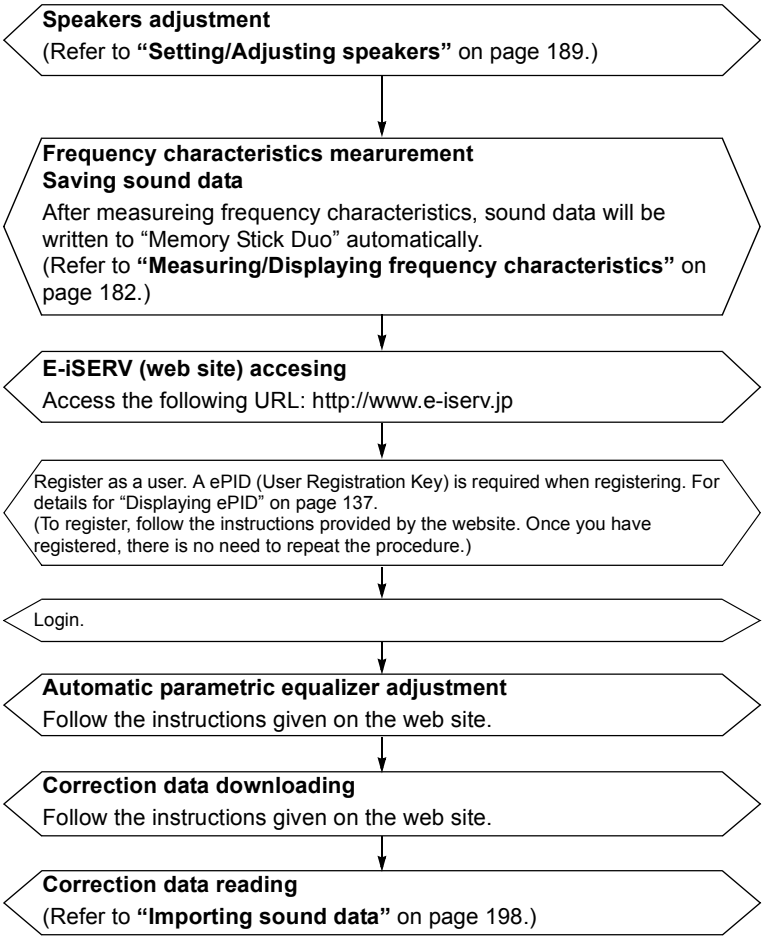
The larger the slope value, the greater the slope. In addition, when “PASS” is selected, the slope is eliminated (sound does not pass through the filters), so that the crossover function has no effect.

About E-iSERV sound effect customizations

The parametric equalizer, time alignment and crossover setting can be adjusted using this unit, or through the E-iSERV (web site).

About automatic parametic equalizer

This can be used to automatically correct distortion in frequency characteristics (peaks and dips) based on the results of measuring the frequency characteristics inside the vehicle. Automatic parametric equalizer correction is carried out in the following steps.



Adjusting sound quality

Displaying the sound adjustment screen

1 Press **SOUND** .

- The sound adjustment screen will appear.

- Touch any of the following buttons on the sound adjustment screen to display the corresponding adjustment screen.

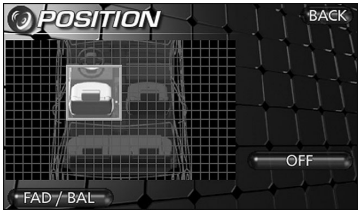
●Sound adjustment screen

PEQ

●Parametric equalizer adjustment screen

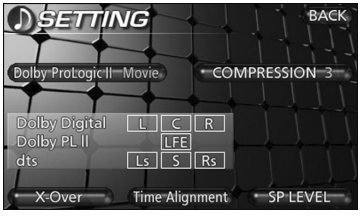
POS

●Position setting screen

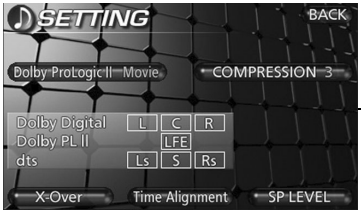


SETTING

●Setting screen

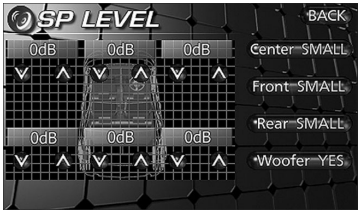


●Setting screen



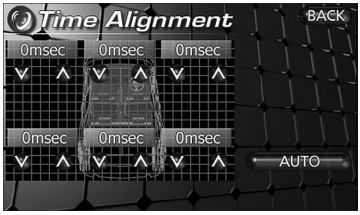
SP Level

●Speaker Level setting screen



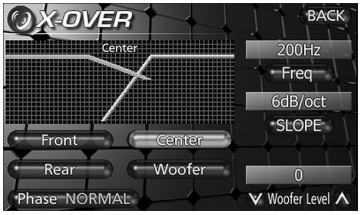
Time Alignment

●Time alignment adjustment screen



X-Over

●X-over setting screen



XII

Adjusting sound quality

Adjusting PEQ (Parametric equalizer)

If the optional 5.1 ch AV selector unit is connected, the parametric equalizer can be used for a 5-band adjustment of each of the front, center, and rear channels, and a 1-band adjustment of the woofer for a total of a 16-band adjustment. Each band can be set to the following median frequencies:

Channel	Band	Adjustable frequency (Hz)
Front Center Rear	1 to 5	20, 25, 31.5, 40, 50, 100, 125, 160, 200, 250, 315, 400, 500, 630, 800, 1k, 1.25k, 1.6k, 2k, 2.5k, 3.15k, 4k, 5k, 6.3k, 8k, 10k, 12.5k, 16k, 20k
WOOFER	1	20, 25, 31.5, 40, 50, 63, 80, 100, 125, 160, 200, 250

Each band is initially set to the following median frequency:

● **Front, Rear and Center channel**

Band1: 100 Hz
Band2: 200 Hz
Band3: 400 Hz
Band4: 800 Hz
Band5: 1.6 kHz

● **WOOFER channel**

63 Hz

ATTENTION

It is not possible to set more than one band in the same channel and median frequency. Either change the median frequency of the current band, or change the median frequency of another band.

Adjusting/Saving a PEQ

1 Touch **PEQ** in the sound adjustment screen.

2 Touch **ch** to select the channel to be adjusted.

- Each time the switch is touched, the channel will be changed in the following order shown below.

Front → Rear → Center → Woofer

3 Touch **BAND** to select the band to be adjusted.

- Each time the switch is touched, the band will be changed in the following order shown below.

Band1 → Band2 → Band3 → Band4 → Band5 →

4 Touch ∧ or ∨ for Freq to select the frequency to be adjusted.

- ∧ : Increase frequency
  ∨ : Decrease frequency

5 Touch ∧ or ∨ for Level to adjust the frequency lelvel.

- ∧ : Increase level
  ∨ : Decrease level

Adjusting sound quality

6 Touch **Q** to select the Q curve pattern.

- Each time this switch is touched, Q curve pattern will be changed in the following order shown below.

SHARP → MIDDLE SHARP → NORMAL → MIDDLE SLOW → SLOW

7 Repeat the operations in step 2 to 6 to change the setting for each channel and band.

8 Press and hold the switch you want to use to save (**1** to **5**) until you hear a beep.

- Save the PEQ setting so they can be used for other settings.
- Touch **BACK** after making settings. The PEQ mode adjustments will be saved and system will return to the previous operation screen.

Selecting a PEQ pattern from memory

1 Touch **1** to **5**.

- The preset pattern stored in memory will be retrieved.
- Touch **BACK** after making settings. The PEQ mode adjustments will be saved and system will return to the previous operation screen.

Measuring/Displaying frequency characteristics

Frequency characteristics inside the vehicle can be measured and displayed on the display. The measurement result can be referred to when adjusting parametric equalizer. This is also necessary to automatically correct parametric equalizer setting using E-iSERV sound effect customizations.

1 Connect the accessory microphone with an optional 5.1ch decoder & AV selector unit.

- Align the microphone with the actual ear position and attach it to the headrest or another appropriate fixture. (Attach the microphone using tape or string.)

To avoid writing measurement results to the "Memory Stick Duo"

2 Touch **Measure** for less than 1 second.

- After touching the switch, a 10-second count down begins. Leave the vehicle during that time.
- Pink noise will be outputted from the speakers and measurement of the frequency characteristics will start.
- When measurement is complete, the measurement results of the front channel will appear on the display.

Adjusting sound quality

● Touch **STOP** to cancel measurement.

To write measurement results to a "Memory Stick Duo"

2 Insert the "Memory Stick Duo".

3 Press and hold the **Measure** switch until you hear a beep.

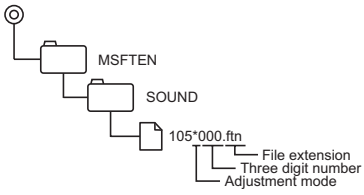
- After touching the switch, a 10-second count down begins. Leave the vehicle during that time.
- Pink noise will be outputted from the speakers and measurement of the frequency characteristics will start.
- When measurement is complete, the measurement results of the front channel will appear on the display.
- Measurements can be written to a "Memory Stick Duo" and corrected automatically using E-iSERV web site.
- Touch **STOP** to cancel measurement.

Caution

Slight errors may occur in the measurement data under some circumstances when this function is used. In addition, it is not equivalent to the precise measurements that can be made by professional measuring devices.

ATTENTION

- Close all doors and windows while measurement is in progress.
- Sound quality data is written to "Memory Stick Duo" as follows.



- The folders and files that are required for E-iSERV sound effect customizations are created automatically when the data is written to the "Memory Stick Duo".
- Select a file in MSFTEN – SOUND when uploading sound quality data to the E-iSERV (web site).

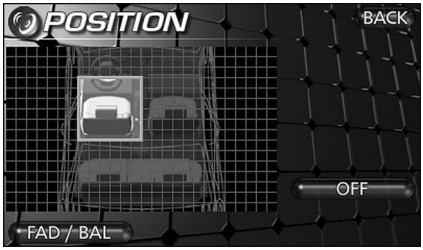
Adjusting POS (Positioning selector)

Sound localization can be adjusted according to the number and position of passengers in order to obtain optimum acoustic effects.
A seat's sound localization can be adjusted simply by touching the switch.

1 Touch **POS** in the sound adjustment screen.

2 Touch each seat image displayed in the POSITION setting screen to switch the sound localization for that seat.

- The selected position will appear in a green frame. Touch the seat again to cancel the selection. The four positions shown by the table below can be set.
- Touch **OFF** to cancel all settings.
- Touch **BACK** after making settings. The position will be saved and the system will return to the previous operation screen.



Touch switch	Function	Touch switch	Function
	Acoustics optimized for driver's seat		Acoustics optimized for both front seats
	Acoustics optimized for passenger's seat		Acoustics optimized for rear seats

ATTENTION

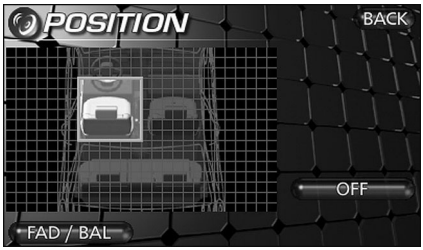
If the positioning selector has been set (to a setting other OFF), the FAD/BAL (Fader/Balance) settings cancelled (next page).

Adjusting sound quality

Setting the balance

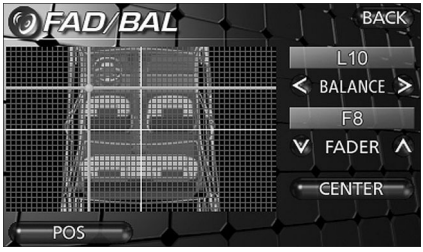
The left/right/front/rear balance can be adjusted so that sound from all speakers arrives at the listener's ears at the same time.

1 Touch **FAD/BAL** in the POSITION setting screen to display the volume balance adjustment screen.



2 Touch ∧ , ∨ , < or > .

- The adjustment level can be set to one of 15 levels between F (front) and R (rear).
- The adjustment level can be set to one of 15 levels between L (left) and R (right).
- Touch **CENTER** to set the volume balance to the center position.
- Touch **BACK** after making settings. The set volume balance will be saved and the system will return to the previous operation screen.
- To set the position again, touch **POS** and repeat the steps above.



ATTENTION

- If the balance has been set (to a setting other CENTER), the positioning selector setting will be cancelled (previous page).
- Touch and hold ∧ , ∨ , < or > while making fine adjustments to adjust values continuously. Adjustment will lock when it reaches the center value, and ∧ , ∨ , < or > must be touched again to continue adjustment.

Setting LOUDNESS

Audio can be modulated to correct for insufficient bass and treble when listening at low volume.

1 Touch **LOUDNESS** .

- Touching the switch toggles between ON and OFF.

Setting the harmonizer

It is possible to set the sound quality boost level to automatically regenerate harmonics such as reverberation, depth, and tone lost in compression, producing a much clearer sound.

1 Touch **Harmonizer** .

- Each touch the switch is touched, the Harmonizer setting will be changed in the following order shown below.

  Low → Hi → OFF

- **LOW** : Low level of correction
  HI : High level of correction
  OFF : No correction

Adjusting sound quality

Setting/Adjusting surround system

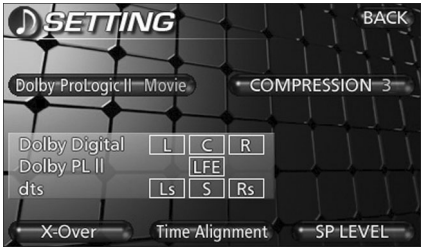
Dolby Digital (5.1 ch), DTS (5.1ch), LPCM, and Dolby Pro Logic are supported when the optional 5.1 ch AV selector unit is connected. Playing discs recorded using these technologies allows the listener to enjoy theater-quality sound within a limited space.

Setting the Dolby Pro Logic II

Dolby Pro Logic II expands sound recorded in stereo (2 ch) for a rich listening experience. Different modes may be selected for different media types.

1 Touch **SETTING** in the sound adjustment screen.

2 Touch **Dolby Pro Logic II** in the setting screen.



- Each time the switch is touched, the modes will be changed in the following order shown below.

  Movie → Music → 4chST → OFF

- Touch **BACK** after making settings. The time setting mode adjustments will be saved and system will return to the previous operation screen.

Item	Effectiveness
Movie	Select when playing a DVD or VTR recorded in stereo (2 ch).
Music	Select when playing an audio CD.
4ch ST	Select when stereo (2ch) sound is played through 4 speakers (4 ch).
OFF	Turns Dolby Pro Logic II OFF.

Setting the Center Level

Adjusts the dialog and music output level heard from center speaker.

1 Touch < or > for Center Level.

- The center level can be adjusted within -10 to 10 (in units of 1 step).

< : Increase the level.
> : Decrease the level.

Setting the Rear Level

Adjusts the dialog and music output level heard from rear speaker.

1 Touch ∧ or ∨ for Rear Level.

- The rear level can be adjusted within -10 to 10 (in units of 1 step).

∧ : Increase the level.
∨ : Decrease the level.

XII

Setting the Center Width

When Dolby Pro Logic II is set to Music and the center speaker is set to LARGE or SMALL, sound from the center speaker is distributed to the left and right front speakers.

1 Touch < or > for Center Width.

- The center width level can be adjusted within 0 to 7 (in units of 1 step).

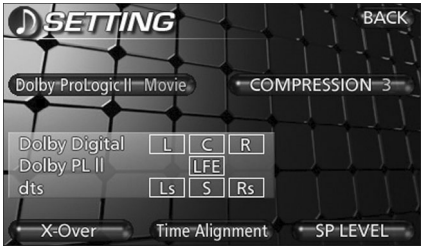
< : Increase the level.
> : Decrease the level.

Adjusting sound quality

Setting the Compression

Adjusts the sound sensation range (difference between maximum and minimum when playing a DVD with Dolby Digital (5.1 ch) or DTS (5.1 ch). Raising the numerical value of the compression level will narrow the sound range so that dialog and voice will be easier to hear even when background sounds are intense.

1 Touch **SETTING** in the sound adjustment screen.



2 Touch **Compression** in the setting screen.

- Each time this switch is touched, compression setting will be changed in the following order shown below.

0 → 1 → 2 → 3 → 4 → 5
8 ← 7 ← 6

- Touch **BACK** after making settings. The compression setting mode adjustments will be saved and system will return to the previous operation screen.

Adjustment Level	Function
0	Compression function effect is off.
1 to 7	Compression function effect can be adjusted in a middle range.
8	Compression function effect is at maximum.

Setting/Adjusting speakers

Settings and adjustments can be made to fit the speakers connected to the unit.

The following settings and adjustments can be performed when the optional 5.1 ch AV selector unit is connected.

- Time alignment
- X-Over
- Speaker size
- Speaker level

Adjusting time alignment

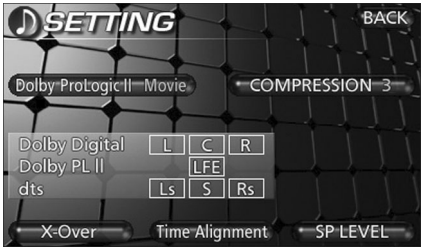
The delay time and level of the sound from each speaker can be adjusted in order to correct any phase mismatches in the sound resulting from the listening position.

In addition, the optional 5.1 AV selector unit has a function for automatically correcting time alignment.

Manual adjustment

1 Touch **SETTING** in the sound adjustment screen.

2 Touch **Time Alignment** in the setting screen.



Adjusting sound quality

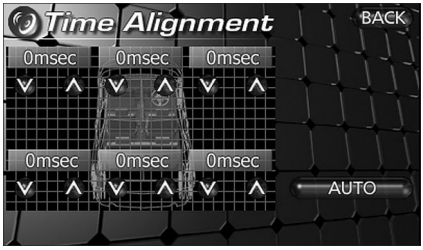
3 Touch ∧ or ∨ for each speaker to adjust the delay time.

- The delay time can be adjusted within 0.0 to 10.0 ms (in units of 0.1 ms).

∧ : Increase the time

∨ : Decrease the time

- Touch **BACK** after making settings. The time alignment mode adjustments will be saved and system will return to the previous operation screen.



ATTENTION

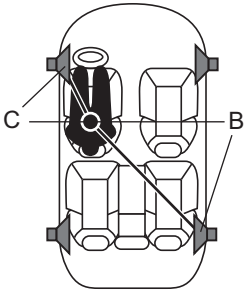
- Refer to the following for the method of calculating the delay time.

A=(B-C)/34

A: Delay time (ms)

B: Distance from listening position to furthest speaker (cm)

C: Distance from listening position to the speaker to be adjusted (cm)



<Example>

Listening position: Driver's seat (left)

B: 200 (cm)

C: 50 (cm)

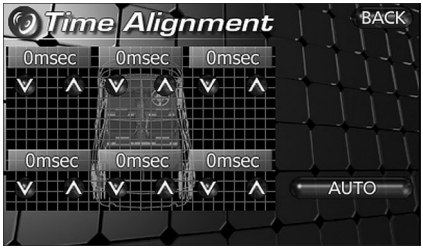
Delay time=[200 (cm) - 50 (cm)]/34 =Approx. 4.4 ms

Automatic adjustment

1 Connect the microphone accessory with an optional 5.1ch decoder & AV selector unit.

- Align the microphone with the actual ear position and attach it to the headrest or another appropriate fixture. (Attach the microphone using tape or string.)

2 Touch **AUTO** .



- After touching the switch, a 10-second count down begins. Leave the vehicle during that time.
- Pink noise will be outputted from the speakers and setting of the time alignment will start.
- Touch **STOP** to cancel setting.
- Touch **BACK** after making settings. The time alignment mode adjustments will be saved and system will return to the previous operation screen.

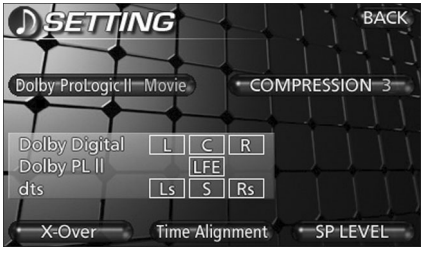
XII

Adjusting X-Over

Allocate specified frequency bands to each speaker for improved sound integration.

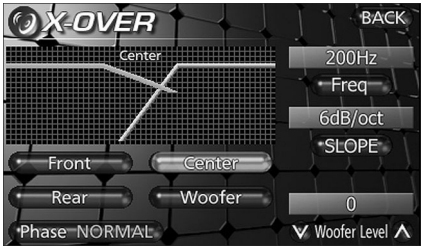
1 Touch **SETTING** in the sound adjustment screen.

2 Touch **X-Over** in the setting screen.



Adjusting sound quality

3 Touch **Front** , **Center** , **Rear** , or **Woofer** to select the speaker to be adjusted.

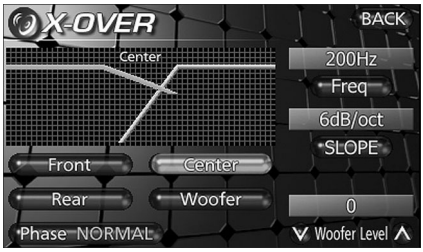


4 Touch **Freq** to select the cut-off frequency.

- Each time this switch is touched, the cut-off frequency will be changed in the following order shown below.

Front/Center/ Rear (Hz):
100 → 125 → 160 → 200 → 250 → 315 → 400 → 500 → 630 → 800 → 1k → 1.25k → 1.6k → 2k → 2.5k → 3.15k → 4k → 5k → 6.3k → 8k → 10k → 12.5k → 16k → 20k →

Woofer (Hz):
20 → 25 → 31.5 → 40 → 50 → 63 → 80 → 100 → 125 → 160 → 200 → 250 →

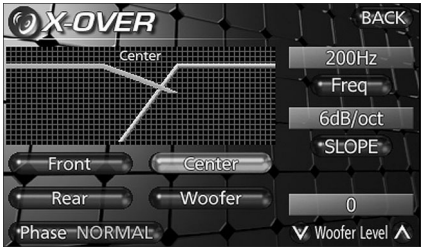


5 Touch **SLOPE** to select the slope.

- Each time this switch is touched, the slope will be changed in the following order shown below.

PASS → 6 dB/oct → 12 dB/oct→ 18 dB/oct → 24 dB/oct→

- Touch **BACK** after making settings. The X-Over mode adjustments will be saved and system will return to the previous operation screen.



ATTENTION

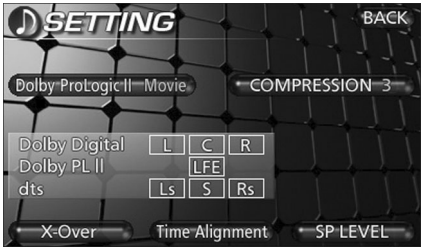
If no woofer has been connected, set the slope adjustment to “PASS”. (If slope is set to a setting other than PASS, the low frequency range will not be outputted from the speakers.

Adjusting sub-woofer output level

When a sub-woofer is connected, the preferred output level for the audio can be set.

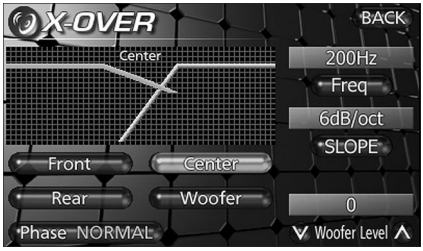
1 Touch **SETTING** in the sound adjustment screen.

2 Touch **X-Over** in the setting screen.



3 Touch ∧ or ∨ for level to adjust the Woofer Level.

- ∧ : Increase the level
  ∨ : Decrease the level
- Touch **BACK** after making settings. The sub-woofer output level mode adjustments will be saved and system will return to the previous operation screen.



XII

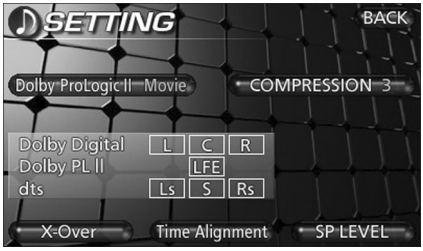
Adjusting sound quality

Setting phase control

The merging of sound between the front and rear speakers and the sub-woofer can be improved by selecting the phase. Switch to a phase which lets the speakers combine without any disharmony.

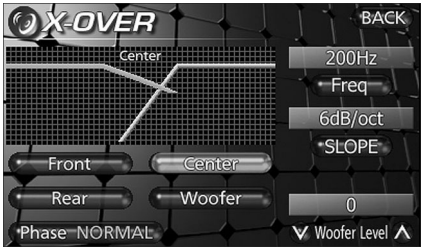
1 Touch **SETTING** in the sound adjustment screen.

2 Touch **X-Over** in the setting screen.



3 Touch **Phase** to select the NORMAL or REVERSE.

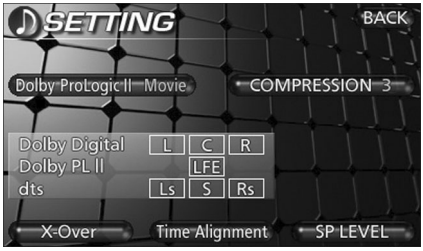
- Touch **BACK** after making settings. The phase control adjustments will be saved and system will return to the previous operation screen.



Adjusting speaker level

1 Touch **SETTING** in the sound adjustment screen.

2 Touch **SP LEVEL** in the setting screen.

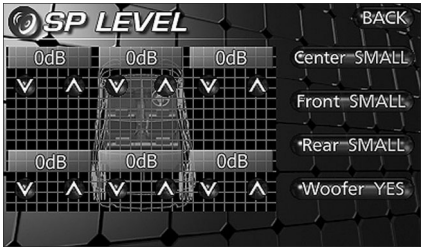


3 Touch **∧** or **∨** for each speaker to adjust the speaker level.

- The speaker level can be adjusted within -10 to 10 dB (in units of 0.1 dB).

∧ : Increase the level.
∨ : Decrease the level.

- Touch **BACK** after making settings. The speaker level mode adjustments will be saved and system will return to the previous operation screen.

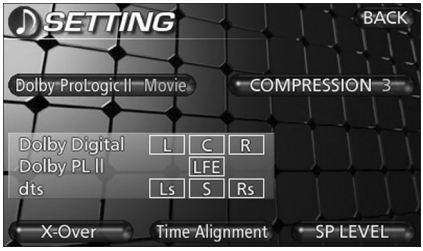


XII

Adjusting sound quality

Adjusting speaker size

1 Touch **SETTING** in the sound adjustment screen.



2 Touch **SP LEVEL** in the setting screen.

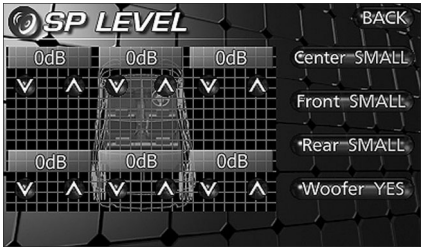
3 Touch **Center** , **Front** , **Rear** , and **Woofer** to set the speaker size.

- Each time this switch is touched, the speaker size will be changed in the following order shown below.

Center/Rear:
LARGE → SMALL → NONE

Front:
LARGE ↔ SMALL

Woofer:
Yes ↔ No



■Speaker settings and functions

Speaker	Size	Function
Center	NONE	Distributes output to the center speaker to the front left and right speakers.
	SMALL	This setting is used when the speakers connected to the unit are unable to output frequencies lower than 100Hz. (Frequencies lower than 100 Hz will not be output.)
	LARGE	This setting is used when the speakers connected to the unit are able to output frequencies lower than 100 Hz.
Front	SMALL	This setting is used when the speakers connected to the unit are unable to output frequencies lower than 100 Hz. (Frequencies lower than 100 Hz will not be output.)
	LARGE	This setting is used when the speakers connected to the unit are able to output frequencies lower than 100Hz.
Rear	NONE	Distributes output to the center speaker to the front left and right speakers.
	SMALL	This setting is used when the speakers connected to the unit are unable to output frequencies lower than 100 Hz. (Frequencies lower than 100 Hz will not be output.)
	LARGE	This setting is used when the speakers connected to the unit are able to output frequencies lower than 100 Hz.
Woofer	YES	Outputs sound from the sub-woofer.
	NO	Does not output sound from the sub-woofer.

Adjusting sound quality

Importing sound data

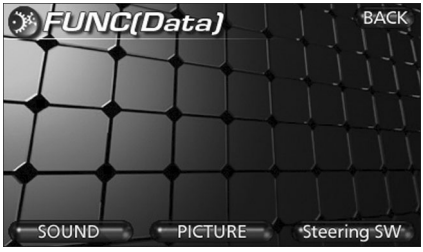
Sound data adjusted by the E-iSERV (web site) can be downloaded to a “Memory Stick Duo” and imported into the unit.

1 Insert the “Memory Stick Duo” to be used for the sound data.

2 Press **FUNC** to display the FUNC screen.

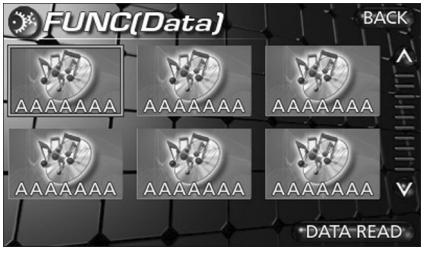
3 Touch **DATA** .

4 Touch **SOUND** .

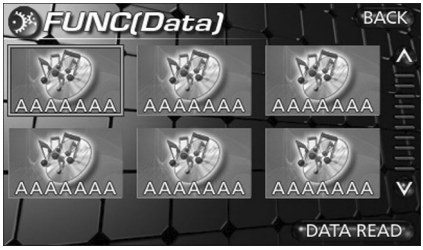


5 Touch the file name to select the correct file.

- Touch ∧ , ∨ to move the list.

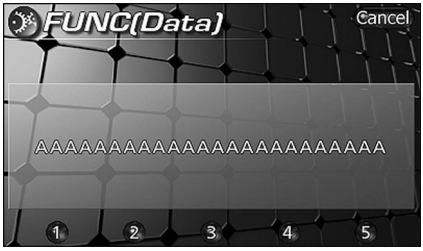


6 Touch **DATA READ** .



7 Select a preset switch **1** through **5** .

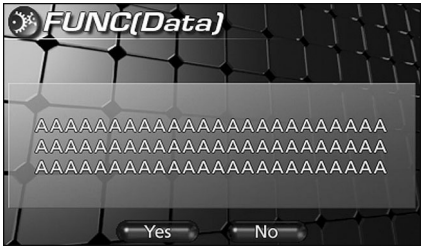
- Sound data will be recorded for the selected switch.
- Touch the **Cancel** to cancel data saving.



XII

Adjusting sound quality

- If the selected switch already contains stored data, a message will be displayed.
- Select **Yes** to overwrite the data.

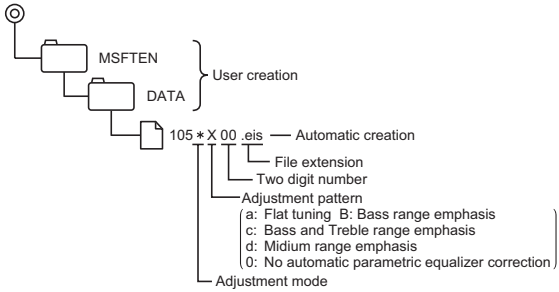


Caution

Do not turn the power or ignition switch off while reading. Interrupting the reading process may corrupt the data.

ATTENTION

- Data downloaded from the E-iSERV (web site) is saved to folders created in the "Memory Stick Duo" as shown below.



- Files that can be imported into your unit are created automatically when downloaded from E-iSERV (web site)

Setting display

Screen settings of the optional 5.1 ch decoder & AV selector unit

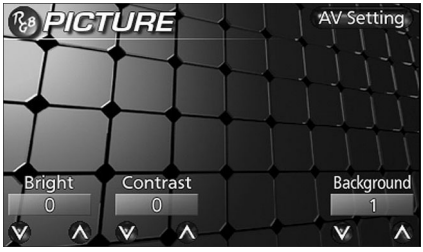
Up to two external monitors can be connected when the 5.1 ch decoder & AV selector unit is connected. Separate images can be displayed on each external monitor.

External monitor image settings

Select the image to be displayed on the external monitors.

1 Press and hold **FUNC** until you hear a beep.

2 Touch **AV Setting** .



3 Touch **Monitor 1** or **Monitor 2** and select an image.

- Each time the switch is touched, the image is changed in the following order shown below.

DVD → VTR1 → VTR2

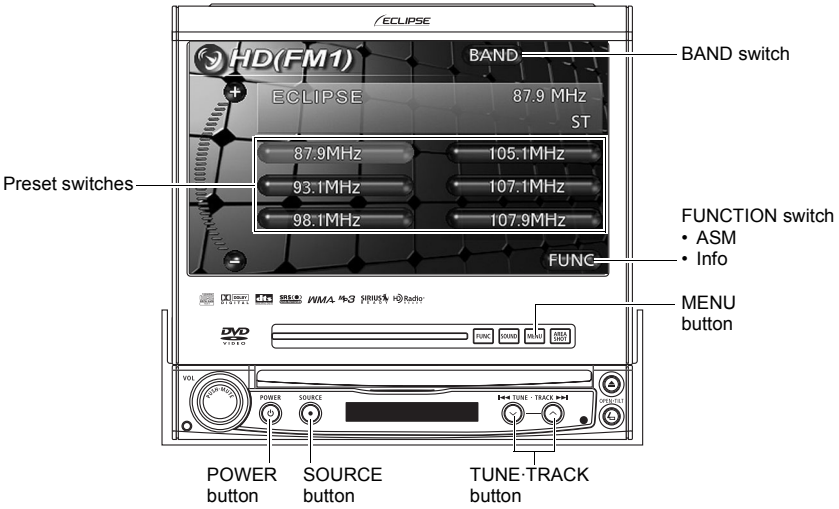
- The selected image will appear on the left side of the screen.
- Touch **BACK** after making settings. The picture setting mode adjustments will be saved and system will return to the previous operation screen.

XII

ATTENTION

If a VTR or DVD player is not connected to the 5.1 ch decoder & AV selector unit, no image will be displayed.

How to use the HD radio



About HD Radio

If the optional HD Radio (High Definition Radio) tuner unit is connected, terrestrial digital broadcasts can be received. When terrestrial digital broadcasts are received, FM reception has the same quality as a CD, and AM reception has the same quality as conventional FM sound. Depending on the reception status, HD Radio can also receive analog broadcasts, which means reception is still possible in regions with no digital coverage.

Listening to the HD radio

Listening to the HD radio using the touch switches

1 Press **MENU** .

2 Touch **AM** or **FM** .

Listening to the HD radio using the panel buttons

1 Touch **SOURCE** to select the AM or FM.

Switching the band

1 Touch **BAND** .

- Each time the switch is touched, the band will be changed in the following order shown below.

HD (FM)→HD (FM2)→HD (FM3)→HD (AM)

Selecting radio stations

Manual selection

1 Press ∧ or ∨ .

- Pressing the switch once moves the frequency one step up or down.
- ∧ (up) : Raises the frequency
  ∨ (down) : Lowers the frequency

Automatic selection

1 Press and hold ∧ or ∨ until you hear a beep.

- The station that is closest to the current frequency will be searched for automatically, and searching will stop when the station is received. To stop the search before a station is found, press the button again.

Selection when using preset switches

1 Touch a preset switch that already has a station recorded.

- See **"Saving radio stations"** on next page for more information.

ATTENTION

If the reception for a particular station is weak in the area you are in, the automatic selection may not work.

How to use the HD radio

Saving radio stations

There are two modes for saving radio stations, manual and ASM. These modes operate independently.

Saving manually

1 Use manual tuning or automatic tuning to select the station to be saved.

2 Choose a preset switch and press and hold it until you hear a beep.

- The radio station (frequency) is set. Touch the preset switch to tune in the selected station.

Saving with ASM

1 Touch **FUNC** .

2 Press and hold **ASM** until you hear 2 beeps in succession.

- The ASM function will activate and start automatically selecting stations. You will hear a beep when the automatic selection of stations is completed. Touch **ASM** again to switch the display back to the broadcast stations originally saved.

Changing stations saved by ASM

1 Use manual tuning or automatic tuning to select the station to be saved.

2 Press and hold the preferred preset switch until you hear a beep.

ATTENTION

- ASM may not automatically receive stations if radio waves in the surrounding area are weak.
- A frequency saved with the tuning switch may not match the frequency saved with ASM even though the signal is received from the same station.
- Due to conditions for receiving radio waves, saved stations may differ even when the ASM switch is operated repeatedly in the same location.
- Up to six stations with good signal reception are automatically saved in order of frequency (low to high).
- When less than six stations capable of reception are found, nothing is saved for the remaining preset switches.

Checking preset stations

This recalls all the stations that have been preset either automatically or manually and plays them each for 5 seconds.

1 Touch **FUNC** .

2 Touch **ASM** touch switch for less than 1 second.

- "P.SCAN" will be displayed, and the preset stations will each be played back for 5 seconds.

3 Touch **ASM** touch switch for less than 1 second once more.

- The station that was being played when the switch was touched will then be played continuously.

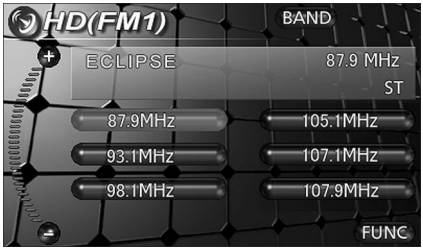
How to use the HD radio

HD radio information screen display

Displays the HD radio station name and other information.

1 Touch **FUNC** .

● The function mode is activated.



2 Touch **Info** .

● The HD radio information screen will appear.

HD radio reception settings

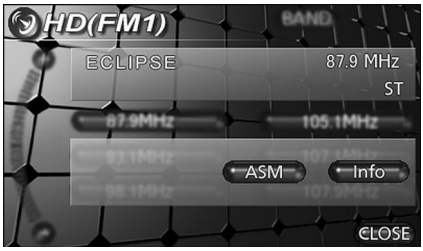
The HD radio reception method can be selected. When the HD Radio tuner is connected to this deck for the first time, it will be set at “AUTO” (automatic digital/analog selection).

1 Touch **FUNC** .

- The function mode is activated.

2 Touch **Info** .

- The information mode is activated.



3 Touch **Mode** .

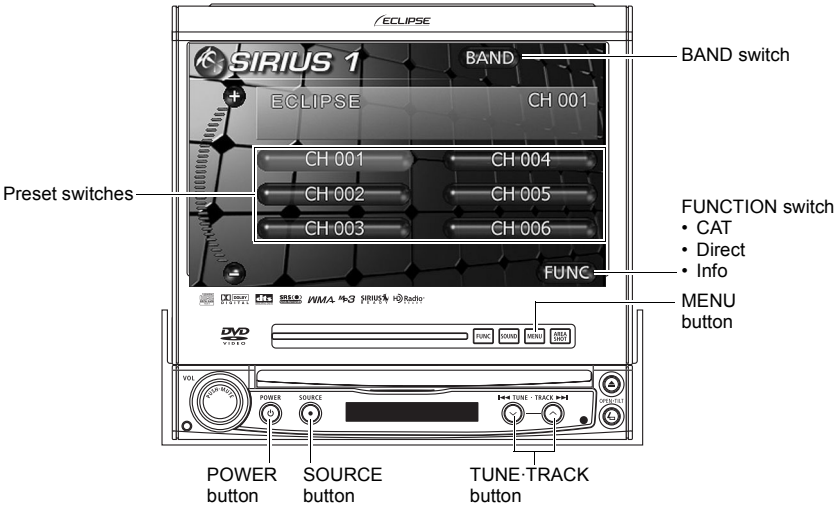
- In the “AUTO” setting, the selection is switched between digital and analog reception automatically. In areas where digital reception is not possible, reception is automatically switched to analog to avoid loss of reception. During digital reception, “DIGITAL” is shown on the display. “DIGITAL” will be removed from the display during analog reception.
- In the “OFF” setting, reception is always analog.

Turning off the radio

1 Press ⏻ .

- Press ⏻ again to turn on the radio and resume reception of the radio station (frequency) received before power was turned off.

How to use the SIRIUS satellite radio



About SIRIUS satellite radio

If the optional SIRIUS satellite radio tuner unit is connected, satellite radio broadcast can be received.

With SIRIUS satellite radio, over 100 channels are available including music, sports, news, and entertainment programs.

A channel can be selected from categories such as POP and ROCK, or by selecting individual channels manually.

Reception of SIRIUS satellite radio is fee based; you have to subscribe to it.

It is possible to subscribe through the SIRIUS radio website.

URL: http://cdn.sirius.com

Listening to the SIRIUS satellite radio

Listening to SIRIUS satellite radio using the touch switches

1 Press **MENU** .

2 Touch **SIRIUS** .

Listening to SIRIUS satellite radio using the panel buttons

1 Press **SOURCE** to select the SIRIUS mode.

ATTENTION

For information about the operation and set-up of the SIRIUS satellite radio tuner unit, see the SIRIUS satellite radio unit's owner's manual.

How to use the SIRIUS satellite radio

Selecting SIRIUS channels

Manual selection

1 Press ∧ or ∨ .

- Pressing the switch once moves the channel one step up or down.
- ∧ (up) : Raises the channel
  ∨ (down) : Lowers the channel

Automatic selection

1 Press and hold ∧ or ∨ until you hear a beep.

- The station that is closest to the current frequency will be searched for automatically, and searching will stop when the station is received. To stop the search before a station is found, press the button again.

Selection using preset switches

1 Touch a preset switch that already has a channel recorded.

- See **"Saving SIRIUS channels"** on next page for more information.

ATTENTION

If the reception for a particular station is weak in the area you are in, the automatic selection may not work.

Category selection

The channel can be selected from among categories such as POP and ROCK.
Consult the SIRIUS website for details of categories.

1 Touch **FUNC** .

2 Touch **Category** .

- The category selection screen will appear.

3 Touch a category.

- Touch **NEXT** to switch to the next screen.

How to use the SIRIUS satellite radio

Direct Channel selection

The channel can be selected by inputting the channel directly.

1 Touch **FUNC** .

● The function mode is activated.

2 Touch **Direct** .

● The direct channel selection screen will appear

3 Enter the number of the desired channel.

● Touch **CLEAR** to delete one number at a time.

4 Touch **ENTER** .

Saving SIRIUS channels

1 Use manual tuning or automatic tuning to select the channel to be saved.

2 Choose a preset switch and press and hold it until you hear a beep.

- The radio SIRIUS channel is set. Touch the preset switch to tune in the selected station.

SIRIUS satellite radio information screen display

Displays the SIRIUS satellite radio station name, current track name, artist, category, and SIRIUS ID.

1 Touch **FUNC** .

- The function mode is activated.

2 Touch **Info** .

- The SIRIUS satellite radio information screen will appear.
- The SIRIUS ID is necessary when subscribing to programs, etc.

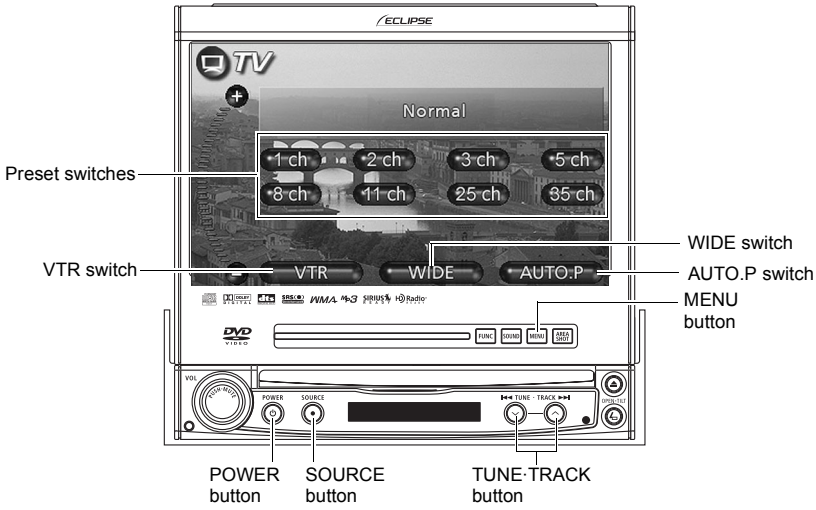
Turning off the radio

1 Press ⏻ .

- Press ⏻ again to turn on the radio and to resume the SIRIUS channel received prior to turning power off.

How to use the TV

The unit can be used as a TV if a TV tuner (sold separately) is connected to the unit. The vehicle must be safely parked with the parking brake engaged and the ignition switch in ON or ACC before the TV can be viewed. If TV mode is selected while the vehicle is in motion, or while the display is closed, only sound will be outputted.



Watching TV

Watching TV using the touch switches

1 Press **MENU** .

2 Touch **TV** .

Watching TV using the panel buttons.

1 Press **SOURCE** to select the TV source.

Selecting channel

Manual selection

1 Press ∧ or ∨ .

- Pressing the switch once moves the channel one step up or down.

  ∧ (up): Raises the channel

  ∨ (down): Lowers the channel

Automatic selection

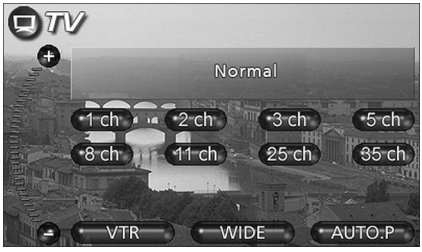
1 Press and hold ∧ or ∨ until you hear a beep.

- The station that is closest to the current channel will be searched for automatically, and searching will stop when the station is received. To stop the search before a station is found, press the button again.

Selection when using preset switches

1 Touch a preset switch that already has a station recorded.

- See **"Saving TV channels"** on next page for more information.



ATTENTION

After switching to the TV operation screen, touch switches will be displayed for about 6 seconds. Touch the screen to display them again.

How to use the TV

Saving channels

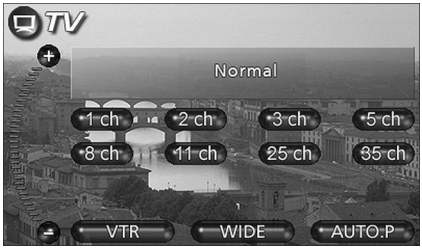
There are two modes for saving channel, manual and AUTO.P.

Saving manually

1 Use manual tuning or automatic tuning to select the channel to be saved.

2 Choose a preset switch and press and hold it until you hear a beep.

- The channel is set. Touch the preset switch to tune in the selected channel.



Saving with AUTO.P

1 Press and hold **AUTO.P** until you hear 2 beeps in succession.

- The AUTO.P function will activate and start automatically selecting channels. You will hear a beep when the automatic selection of channels is completed. Touch **AUTO.P** again to switch the display back to the channel originally saved.

Changing stations saved by AUTO.P

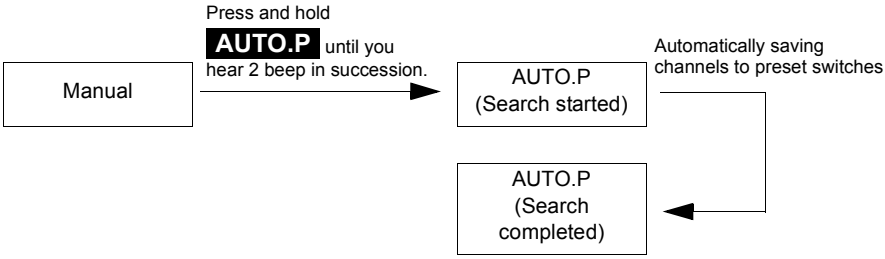
1 Use manual tuning or automatic tuning to select the channel to be saved.

2 Press and hold the preferred preset switch until you hear a beep.

About AUTO.P

Because the AUTO.P function can be used to temporarily save channels for the preset switches, channels saved manually will remain in memory even if AUTO.P is used. Manually saving channels that are used regularly allows them to be restored even after AUTO.P has been used, such as after traveling.

Touching **AUTO.P** while AUTO.P is operating or after it has been used will return the preset memories to their previous settings. (The channel saved with AUTO.P will be deleted.)



ATTENTION

- AUTO.P may not automatically receive channels if TV waves in the surrounding area are weak.
- A channel saved with the tuning switch may not match the channel saved with AUTO.P even though the signal is received from the same station.
- Due to conditions for receiving TV waves, saved channel may differ even when the AUTO.P switch is operated repeatedly in the same location.
- Up to eight channels with good signal reception are automatically saved in order of channel (low to high).
- When less than eight channels capable of reception are found, nothing is saved for the remaining preset switches.

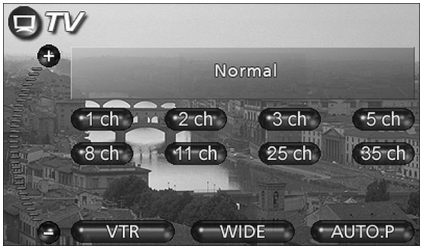
How to use the TV

Checking preset stations

This recalls all the stations that have been preset either automatically or manually and plays them each for 5 seconds.

1 Touch **AUTO.P** for less than 1 second.

- "P.SCAN" will be displayed, and the preset stations will each be played back for 5 seconds.



1 Touch **AUTO.P** for less than 1 second once more.

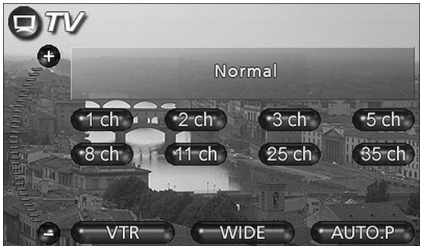
- The station that was being played when the switch was touched will then be played continuously.

Switching to TV/VTR mode

It is possible to switch to VTR mode from TV mode when a VTR device is connected.

1 Touch **VTR** .

- Touching **TV** will switch the display to the TV operation screen.



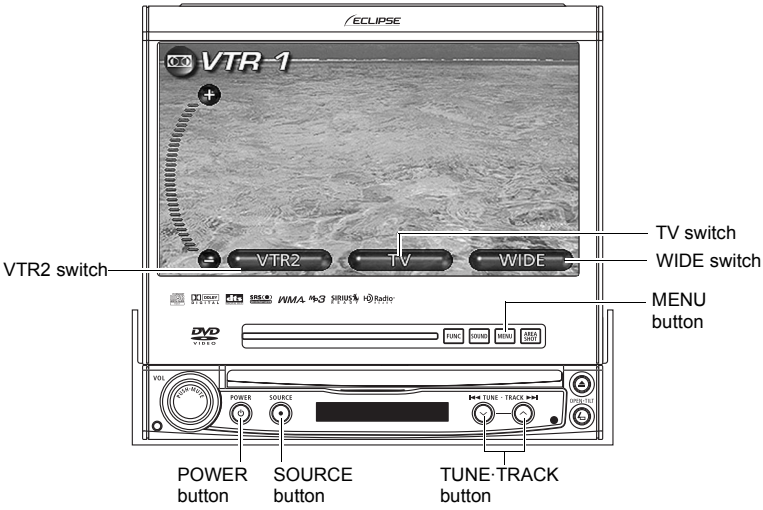
To end TV mode

1 Press ⏻ .

- Press ⏻ again to turn on the TV and resume reception of the channel received before power was turned off.

How to use the VTR

Video tapes can be played by connecting a commercially available VTR deck. For safety reasons, videos can be played only when the ignition is switched to ON or ACC and the vehicle is completely stopped with the parking brake set. (If the VTR mode is activated while the vehicle is in motion, only the audio will be played.)



Viewing the VTR

Viewing the VTR using the touch switches

1 Press **MENU** .

2 Touch **VTR** .

- The VTR screen will be displayed.
- Touch the screen to display the VTR operation screen.

Viewing the VTR using the panel switches

1 Press **SOURCE** to select the VTR source when VTR device has been connected.

How to use the VTR

Switching to the TV/VTR

It is possible to switch to VTR mode from TV mode when the optional TV tuner is connected.

1 Touch **VTR** in the TV screen.

● Touch **TV** to return to the TV operation screen.

ATTENTION

- When two VTR devices are connected, **VTR2** appears on the VTR operation screen. Touch **VTR2** to switch to the second VTR device.
- After switching to the VTR operation screen, touch switches will be displayed for about 6 seconds. Touching the screen will display them again.
- The VTR operation screen can be displayed by touching the screen, even when the VTR is playing.
- It is possible that the image may not be displayed correctly depending on the connected devices.

Turning off the VTR mode

1 Press ⏻ .

- Press ⏻ again to resume playback.
- Press **MENU** and then touch **VTR** to resume playback of the video that was being played before the power was turned off.

Back-eye Camera operations

When the optional Back-eye Camera is installed, the rear view image can be displayed on the monitor screen.

Caution

- Do not rely too heavily on the Back-eye Camera.
- Please use the Back-eye Camera as a backup means to check for obstructions behind the vehicle.
- Raindrops or other natural phenomena may blur the camera's image.
- Do not backup your vehicle looking only at the monitor. Use the rear view mirror and both side mirrors to check for any obstructions behind or around your vehicle.
- Do not use the Back-eye Camera in the following situations:
  - On frozen, slippery or snowbound roads
  - With the trunk opened
  - When using tire chains or a spare tire
  - On a slope or any uneven road
- When the external air temperature is low, the image may darken or become faint. Images of moving objects in particular may be distorted, or they may not be visible on the screen, so the driver must directly confirm safety around the vehicle visually.

ATTENTION

- The actual position and distance of people or objects may vary depending on the features of the camera lens.
- Do not expose the camera to strong shocks such as hitting it or knocking it into other objects. The Back-eye Camera may not function properly if the position of the camera or its mounting angle is incorrect.
- The camera is waterproof. Do not uninstall, dismantle or reconfigure the unit. Otherwise, the Back-eye Camera may not function properly.
- If the camera cover is rubbed strongly or a hard brush or abrasive is used to clean it, the camera may get scratched, adversely affecting the image quality.
- The camera cover is made of plastic. Do not apply organic solvent, body wax, oil remover, glass coating, etc. to it. If any of the above have been applied, wipe off immediately.
- Pouring hot water on the Back-eye Camera to deice it in cold weather can lead to a drastic change in temperature that may render normal operation impossible.
- The Back-eye Camera may not operate normally if the camera is damaged as a result of it being hit. Immediately bring it to your local retailer for an inspection.
- Do not leave the unit in direct sunlight for long periods of time. Otherwise, a printed image phenomenon may result.
- The range appearing on the monitor screen varies depending on the vehicle model.
- The instant the vehicle is put in reverse, part of the monitor will appear white then gradually stabilize.
- A white vertical band will appear when the camera is struck by light from the sun, headlights or any other strong light beam source (Smear effect).
- After having used the Back-eye Camera for a long time, white scratches and vertical lines may appear due to a rise in temperature, depending on the features of the CCD.
- The 50 Hz power source range fluorescent light may cause flickering in the screen. This is not a malfunction.
- Because the Back-eye Camera uses a special lens, the image and distance appearing on the screen differs from the actual image and distance.

Back-eye Camera operations

Back-eye Camera image

1 Press **FUNC** for less than 1 second.

2 Touch **CAMERA SCREEN** .

- The rear image appears on the monitor screen.

Automatic back-eye camera image display setting

The Back-eye Camera image can be set to automatically display when the ignition switch is ON and the vehicle is shifted into reverse.

1 Press **FUNC** for less than 1 second.

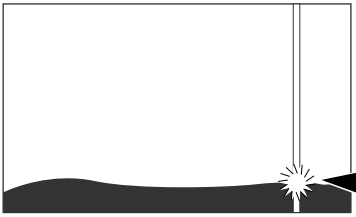
2 Touch **CAMERA SETTING** .

- Touching the switch toggles between AUTO and MANUAL.

ATTENTION

- The range of the image may vary depending on the vehicle and the road conditions.
- There is a limit to the range of the camera. Objects near the ends of the bumper and under the bumper cannot be seen.
- The rear image color may vary from that of the actual objects.
- In the following situations, the screen may be difficult to view but they do not constitute a malfunction:
  - In a dark area (such as at night)
  - The temperature near the camera is high or low
  - Raindrops are on the camera lens or the humidity is high (when raining)
  - A foreign object is near the camera (such as mud)
  - When the sun or a beam from headlights strikes the camera lens directly
  - When a high-luminance point strikes the camera (such as the reflection of the sun's rays on the chassis), a Smear effect* typical of CCD cameras may occur.

[Screen condition]



*Smear effect: A phenomenon where a vertical line appears from a high-luminance point striking the camera (such as the reflection of the sun's rays on the chassis).

Important Points

If one of these messages appears

If any of the following messages are displayed, check the unit while referring to the cause and corrective action columns.

Messages	Cause	Corrective action
CD SEEK	The CD changer is searching for discs when a magazine has been inserted in the CD changer.	Wait until the unit has finished identifying the type of disc.
CD DOOR OPEN	The door of the CD changer is open.	Close the door of the CD changer.
CHECK DISC	The CD/MP3/DVD is dirty or has been inserted upside down.	Clean the disc if it is dirty. Insert the disc correctly if it is upside down.
NO DISC NO CD	There is no disc in the CD/MP3/DVD player or CD changer.	Load a music disc.
CD ERROR DVD ERROR DISC ERROR	The CD/MP3/DVD player or CD changer will not play for some reason.	Eject the disc. *1
	The temperature of the CD/MP3/DVD player or CD changer has become unusually high.	Wait a moment for the unit to cool down. Do not perform any other operations. *2
NO CD MAGAZINE	There is no magazine in the CD changer.	Load a magazine.
CD OO CHECK	The OO spot in the CD changer has a CD that cannot be read.	Check for a properly loaded music CD.
PASS CODE INCORRECT	Displayed when the pass code has been entered incorrectly.	Enter the correct pass code.
This “Memory Stick” is not available.	The inserted “Memory Stick Duo” type is not supported.	Check that the “Memory Stick Duo” is a type supported by this unit. (See page 34)
No “Memory Stick”.	An “Memory Stick Duo” has not been inserted.	Insert an “Memory Stick Duo”.
Checking “Memory Stick”.	The “Memory Stick Duo” is being checked.	Checking the “Memory Stick Duo” may take a short while. Wait a moment for the message to disappear before using.
Please check “Memory Stick”.	The “Memory Stick Duo” cannot be played because of static electricity.	Wait a moment then re-insert and attempt to play again.
This “Memory Stick” is not available.	You have tried to save data to the this unit from a “Memory Stick Duo” not supported by this unit.	Check that the “Memory Stick Duo” is a type supported by this unit. (See page 34)

*1 If the unit still will not work after the disc is ejected, contact your local retailer.

*2 If this error occurs, wait a moment for the changer to cool down. When the temperature inside the unit returns to normal, the message will disappear and playback will start. If the message does not disappear after waiting for a long period, contact your local retailer.

Messages	Cause	Corrective action
PARENTAL LOCK ENABLED	Viewing restrictions are enabled.	Change the setting for viewing restrictions and start again. (See page 125)
THIS FUNCTION IS CURRENTLY DISABLED	A function that has been disabled was selected with the menu.	Follow the directions on the screen and start again.
	A function that cannot be used while the vehicle is in motion was selected.	Stop the vehicle.
INVALID CODE	A number not supported was input for selecting a language code.	Input a valid language code.
REGION CODE ERROR	The region code (controlled region for playback) of the disc isn't acceptable.	Check that the DVD is a type supported by this unit. (See page 108)
ANTENNA	The SIRIUS antenna is disconnected.	Check the connection of the SIRIUS antenna.
ACQUIRING	Displayed when the signal is lost (during access).	Try receiving the signal again in the place where there are no obstacles.
CALL888-539-SIRIUS	You are tuned to a valid channel but you are not subscribed to that channel.	Subscribe to SIRIUS. Or, check/ change your subscription plan.
SUB UPDATED	Displayed when your channel subscription has been accepted and your status is being updated to allow you to receive the channels.	After this message is displayed, the channels for which you do have a subscription can be received.
INVALID	Displayed when you are tuned to a channel that you cannot receive.	Tune to channels that you can receive.
UPDATING	Displayed while the channel map is being updated.	After this message is displayed, subscribe to SIRIUS. The channels for which you do have a subscription can be received.

Important Points

Before asking for repairs

Slight differences in operation can sometimes be mistaken for malfunctions, so check the following table before requesting any repairs.

If the following fail to solve the problem, contact your local retailer.

Symptom	Possible reason	Corrective action
The screen is dark for a brief period when the power is turned on at low temperatures.	This is a characteristic of LCDs.	This is not a malfunction. Wait for a brief period.
The display is distorted for a brief period after the power is turned on.	This is a characteristic of LCD backlighting.	This is not a malfunction. The display will stabilize after a brief period.
No sound comes out.	Volume is poorly adjusted.	Press the volume switch and check volume.
Sound comes out of only one side (left or right, front or back).	A speaker wire is disconnected.	Check the connections of the speaker wires.
	Volume is poorly adjusted.	Check the left/right volume adjustments.
Sound quality does not change even after making adjustments.	The adjusted audio quality is not included in the radio broadcast or disc.	Check by changing the radio station or disc.
A CD/DVD will not go into the deck.	Power is not turned on.	Turn the vehicle's ignition switch to [ACC] or [ON].
	A disc is already inserted and you are trying to insert a second disc.	Eject the previously inserted CD/DVD and insert the preferred CD/DVD.
A CD/DVD cannot be played.	There is water condensation in the deck.	Do not use the deck for a while and then try using it again. (See page 31)
	There is a large scratch or warp in the CD/DVD.	Insert a different CD/DVD.
	The CD/DVD is very dirty.	Clean the CD/DVD. (See page 32)
	The CD/DVD is upside down.	Insert the CD/DVD the correct way. (See page 32)
	The inserted CD/DVD type is not supported.	Insert a CD/DVD that is supported by the unit. (See page 31, page 32)
CDCH not displayed on the screen.	The CD changer is not completely connected.	Check the connections to the CD changer.
Audio is outputted, but not TV or DVD video. (With vehicle stopped.)	The parking brake has not be set.	Set the parking brake.
Neither video nor audio is output.	The vehicle ignition switch has not been turned on.	Turn the vehicle ignition switch to [ACC] or [ON].
	The connection wires/cables is not completely connected.	Check all connections.
TV image nor audio is outputted.	VTR mode is activated.	Touch **TV** and select the channel.

Symptom	Possible reason	Corrective action
There is a point of light on the display.	At least 99. 99% of the pixels on the LCD panel are effective, but it is possible that 0. 01% of the pixels may not light or may stay lighted.	This is not a defect, so please use the deck in this condition.
The Audio screen is distorted by electrical noise.	Are electrical devices that generate electrical noise being used in the vicinity of the unit? For example, devices generating high voltage (such as those that generate negative icons) or high frequency electromagnetic waves (cell phones or two-way radios)	Use such equipment as far away from the unit as possible. If such equipment continues to affect the unit, even from a distance, refrain from using such equipment while the unit is in operation.

Other

Products equipped with Dolby Digital

Manufactured under license from Dolby Laboratories.

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Products equipped with Macrovision

This unit includes copyright protection technology used in accordance with US patents and other intellectual property rights owned by Macrovision Corporation and other entities. Use of this copyright protection technology requires approval from Macrovision Corporation and the technology must not be used for audiovisual purposes aside from general household use without special approval from Macrovision Corporation. Modification and disassembly of this technology is prohibited.

Glossary

CD-R
(Compact Disc Recordable)
This is a disc that can only be recorded once. Recorded data cannot be deleted. There are two types of CD-R, one having a capacity of 650MB (74 minutes of music), the same as a regular CD, and the other having a capacity of 700MB (80 minutes of music).

CD-DA
(Compact Disc Digital Audio)
This disc is the standard for recording and playing of music data. One track is recorded with one song, and a maximum of 74 minutes can be used with the CD.

CD-RW
(Compact Disc ReWritable)
This disc uses a phase transformation method that enables recording and deleting of data as many times needed. The capacity is 700MB (80 minutes of music).

EQ (Equalizer)
This enables setting of emphasis on certain sounds in the bass-treble range to achieve the preferred tonal profile. Levels can be adjusted to personal preference, enhancing enjoyment of the music.

MP3
(MPEG-1 Audio Layer-3)
MP3 stands for MPEG Audio Layer III, the standard format for audio compression technology. MP3 can compress files to one-tenth the original size because they compress inaudible sounds found in areas of the spectrum beyond human hearing.

LPCM
(Linear PCM)
This is an abbreviation for Linear Pulse Code Modulation, a signal recording method used with music CDs. A music CD is recorded at 44.1kHz/16 bit, but a DVD is recorded at 48kHz/16 bit ~ 96kHz/24 bit, enabling a DVD to be played with higher sound quality than a music CD.

MPEG
This is an abbreviation for Moving Picture Experts Group and is pronounced “empeg”. It is the international standard for moving image compression. With DVDs, this method is also used to compress and record digital audio.

Copy Control CD
This is a CD that has controls for preventing computers from copying and ripping (taking audio information recorded on a compact disc and using it as data to create a file).

UDF
(Universal Disc Format)
This is one format for use with optical discs not reliant on the OS. It is used with media such as DVD and CD-RW.

Glossary

Track

The single division for a song on a music CD is called a track.

Viewing Restriction

This is a DVD video function that “Restricts playing of discs that support viewing restrictions, in accordance with the regulated levels of each country.” Restrictions differ by DVD video and may completely prevent playing of the video or may skip or insert alternate scenes for extreme scenes.

Title

This is the largest unit for divisions of video or songs recorded on a DVD video. Usually a single movie is treated as a title by video software and a single album (or song) is treated as a single title by music software. The consecutive numbers attached to titles are called title numbers.

Chapter

This is a unit for divisions of video or songs recorded on a DVD video, but it is a smaller unit than a title. A single title is made up of several chapters, and the consecutive numbers attached to chapters are called chapter numbers.

Multi-Angle

This is one feature of DVD video, where viewpoints of the same scene are changed by recording from several different angles (camera positions), allowing the viewer to select the preferred angle.

Multi-Language

This is one feature of DVD video, where the same scene is recorded with several different languages and subtitles, allowing the viewer to select the preferred language.

Region code

(Region code)

DVD players and DVD discs have a region code that enables playing by geographic marketing regions, and a disc cannot be played if the number recorded on the disc is not included in the region codes of the player. See page 108 for details on region codes.

About care and maintenance

About care and maintenance - main unit

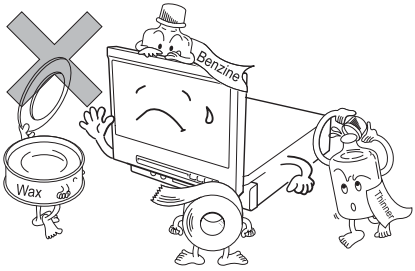
● Use a soft cloth (silicon cloth) to remove dirt from the main unit.

If the unit is very dirty, soak a cloth in diluted kitchen detergent, wring dry, then use it to wipe the unit clean. Finally, wipe down with a dry cloth.

Take care when cleaning the touch panel as it is easily scratched.

Use any cloths made from artificial fibers in accordance with the relevant cautionary instructions.

● Do not use volatile chemicals such as benzine or thinner.



Otherwise, the unit may be damaged or the coating may peel.

Topic index

About screen and sound adjustment

[Regarding screen adjustment]

■ To make the audio operation screen or DVD·TV·VTR screen easier to see

"Adjusting image quality" P71

■ To change the wallpaper

"Setting the Background" P66

■ To set the screen to wide mode

"Switching screen mode". P72

[Regarding audio adjustment]

■ To change the volume

"Adjusting the main volume". P52

■ To turn on/off the guide tone used at switch operation

"Setting the Guide tone" P77

■ To adjust sound quality

● To simulate Multichannel

"Setting Circle Surround II" P55

● To adjust parametric equalizer

"Adjusting PEQ (parametric equalizer)" P56

● To switch the sound image localization to match the position of passengers

"Adjusting POS (Positioning selector)" P58

● To adjust the left/right/front/rear balance

"Setting the balance" P59

● To adjust the MP3/WMA sound

"Setting the harmonizer" P60

● To add sharpness when listening at low/high volumes

"Setting LOUDNESS" P60

● To adjust time alignment

"Simplified time alignment settings (Time Alignment)" P61

● To change the sub woofer settings

"Setting sub woofer" P63

About using AM/FM radio

■ To play the radio

"Listening to the AM/FM radio" P80

■ To search for a radio station

"Selecting radio stations" P81

■ To save radio stations

"Saving radio stations" P82

■ To check preset stations

"Checking preset stations" P83

■ To create station name

"Creating a station name" P84

About using the CD player and CD changer

■ To play a CD

"Listening to a CD" P87

■ To select a song or CD

"Selecting a track" P88

"Selecting a CD" P104

■ To repeat the song or CD currently being played

"Repeating a track" P88

"Repeating a track or CD" P104

■ To play songs in a different order

"Playing tracks in random order" P88, 105

■ To fast-forward or rewind

"Fast-forwarding/rewinding" P88

Topic index

About using the MP3/WMA player

■ To play an MP3/WMA file

"Playing MP3/WMA" P93

■ To select a music file or folder to listen to

"Selecting a music file" P94

■ When you want to return to a level or don't know the current level

"Changing display of the current level" P95

■ To repeat the same music file

"Repeating the same music file or folder" P96

■ To play songs in a different order

"Playing music files in random order" P97

■ To learn about MP3/WMA

"About MP3/WMAs" P98

■ To learn about making MP3/WMA files

"Making and playing MP3/WMA files" P102

About using the DVD player

■ To play a DVD video

"Watching a DVD" P110

■ To learn about discs

● To learn about the marks displayed on discs and packages

"About marks displayed on discs" P108

● To learn about discs that can be played

"About playable discs" P107

● To learn about disc structures

"About DVD disc structures" P109

■ To operate the menu recorded on a disc

"Operating the disc menu" P116

■ To operate the video being played

"Operating the video" P112

■ To select/search for a video

"Searching by chapter" P118

■ To change subtitles, audio or the video angle

"Changing the angle" P118
"Switching subtitle language" P119
"Switching dubbed audio language" P119

Topic index

■ To set the player

"Setting the audio language" P121
"Setting subtitle language" P122
"Setting menu language" P123
"Setting display of multi-angle mark (angle selection mark)" P124
"Setting viewer restriction" P125
"Changing video output" P126

■ To use the VTR

"How to use the VTR" P219

About video CD player (Asia only)

■ To play a video CD

"Watching a video CD" P129

■ To operate the menu recorded on a disc

"Using the menu screen" P130

■ To select a track

"Advancing to the next scene or returning to the beginning of the scene being played" P131

About Area Shot (U.S.A./CANADA only)

■ To use Area Shot function

"To use the Area Shot function" P135

■ To read Area Shot data

"Reading Area Shot data" P138

■ To change Area Shot screen

"Changing Area Shot screen" P140

■ To learn about Area Shot screen

"How to view the Area Shot screen" P141

■ To switch map reduction scale

"Switching the map reduction scale" P143

■ To switch guidance points

"Switching guidance points" P144

■ To display POI vicinity

"Displaying POI vicinity" P146

About ESN security

■ To learn about ESN

"About ESN" P149

■ To switch security type

"How to switch the security type (Key CD security/"Memory Stick" security)" P150

■ To set security function

"How to program the Key CD" P151
"How to record a security code" P155

■ To cancel security function

"How to cancel the Key CD" P152
"How to cancel the "Memory Stick" security" P157

■ To resume normal operation

"How to resume normal operation (ESN security lock out)" . . . P153, 159

■ To operate ACC security

"How to operate the ACC security" P163

About optional 5.1ch decoder & AV selector unit

■ To adjust sound quality

● To adjust parametric equalizer

"Adjusting PEQ (Parametric equalizer)" P178

● To measure frequency characteristics

"Measuring/Displaying frequency characteristics" P181

● To switch the sound image localization to match the position of passengers

"Adjusting POS (Positioning selector)" P183

● To adjust the left/right/front/rear balance

"Setting the balance" P184

● To adjust the MP3/WMA sound

"Setting the harmonizer" P185

● To add sharpness when listening at low/high volume

"Setting LOUDNESS" P185

● To adjust the surround system

"Setting/Adjusting surround system" P186

Topic index

● To set speakers

"Setting/Adjusting speakers" P189

● To import sound quality data

"Importing sound data" P198

■ To set display

● To set external monitor image

"External monitor image settings" P201

About optional HD radio (U.S.A. only)

■ To play radio

"Listening to the HD radio" P202

■ To search for a radio station

"Selecting radio stations" P203

■ To save radio stations

"Saving radio stations" P204

■ To check preset stations

"Checking preset stations" P205

■ To display information screen

"HD radio information screen display" P206

■ To set reception

"HD radio reception settings" P207

About optional SIRIUS satellite radio (U.S.A. only)

■ To play radio

"Listening to the SIRIUS satellite radio" P209

■ To search for a radio station

"Selecting SIRIUS channels" P210

■ To save radio stations

"Saving SIRIUS channels" P213

■ To display information screen

"SIRIUS satellite radio information screen display" P213

About optional TV (U.S.A./CANADA/KOREA/ TAIWAN only)

■ To watch radio

"Watching TV" P214

■ To search for channel

"Selecting channel" P215

■ To save channels

"Saving channels" P216

About optional Back-eye Camera

■ To operate Back-eye Camera

"Back-eye Camera image" P224

When something isn't clear

■ When you don't understand a screen message

"If one of these messages appears" P226

■ When you think the deck may have a problem

"Before asking for repairs" P228

Index

A

Adjusting the main volume 52
Adjusting sound quality 53
ANGLE 118
AUTO.P 82

B

BRIGHT 71

C

CD-R (CD-Recordable) 31
CD-RW (CD-ReWritable) 31
Circle Surround II 55
COLOR 71
CONTRAST 71

H

HOME 95
How to use the remote control 165
How to use the AM/FM radio 80
How to use the Area Shot function 137
How to use the CD changer 103
How to use the CD player 87
How to use the DVD player 110
How to use the HD radio 202
How to use the MP3/WMA player 92
How to use the SIRIUS satellite radio ... 208
How to use the TV 214
How to use the video CD player 129
How to use the VTR 219

M

Multi-angle mark 118

N

NORMAL mode 73

P

POS (position selector) 58

R

RANDOM 88, 97, 105
REPEAT 88, 96, 104

S

Saving radio stations 82
Setting LOUDNESS 60
Setting the BEEP tone 77
Switching dubbed audio language 119
Switching subtitle languages 119

T

TINT 71

V

Volume balance 59
VOL button 52

W

Wallpaper (background) 66
WIDE 1 mode 73
WIDE 2 mode 73
WIDE 3 mode 73
Woofer 63

Specifications

Display

Liquid crystal panel	7” type wide low reflection panel
Screen dimensions	154.08 mm (W) x 87.048 mm (H)
Pixel count	336,960 pixels (480 (H) x3 x 234 (V))
Active pixel rate	Over 99.99%
Display format	Transmissive color filter format
Drive system	TFT (thin membrane transistor) active matrix format
Usage temperature range	-20 to +65°C (-4 to +149°F)
Storage temperature range	-40 to +85°C (-40 to +185°F)

Radio tuner

Reception frequency	● U.S.A./CANADA:	AM530 to 1710 kHz FM87.75 to 107.9 MHz
	● Asia:	AM522 to 1629 kHz FM87.5 to 108.0 MHz
	● Australia:	AM522 to 1710 kHz FM 87.5 to 108.0 MHz
Practical speed	● AM22μV (S/N20dB) ● FM13dBf (new IHF)	
Frequency characteristic	30 to 15,000Hz (FM)	
Stereo separation	38dB (1kHz)	

CD

Wow & flutter	Below measurement limit
Higher harmonic distortion rate	0.03% (0dB, 1kHz)
Frequency characteristic	20 to 20,000Hz
S/N ratio	88dB (1kHz)
Dynamic range	85dB

DVD

Total harmonic distortion	0.3% (1kHz, 0dB, 0.5W output)
Frequency characteristic	20 to 20,000Hz
S/N ratio	85dB (1kHz)

Specifications

Common component

Rated output	15W x 4 (1kHz, 1%4Ω) (EIAJ)
Maximum output	50W x 4 (test voltage 14.4V)
Suitable load impedance	4Ω (each channel)
Power source voltage	DC13.2V (11-16V) Grounded
Power consumption	0.5W x4 output time about 3.5A About 15A max
Exterior dimensions	180mm (W), 50mm (H), 165mm (D)
Weight	About 3.6kg

How to contact customer service

Should the product require service, please contact your nearest Eclipse dealer.

<U.S.A./CANADA>

Fujitsu Ten Corp. of America
19600 South Vermont Avenue, Torrance, CA 90502
Phone: (310) 327-2151

<AUSTRALIA>

Fujitsu Ten (Australia) PTY LTD.
89 Cook Street Port Melbourne, Victoria 3207, Australia
Phone: 1800 211 411

<MALAYSIA>

CSE Automotive Technologies Sdn. Bhd.
Level 5, Axis Plaza, Jalan U1/44, Glenmarie, 40150 Shah Alam,
Selangor D.E., Malaysia.
Phone: 03-5569-4200
Fax: 03-5569-4201

<SINGAPORE>

Cobra Singapore Pte Ltd
#07-02 King's Centre 390, Havelock Road Singapore 169662
Phone: 6737 2568
Fax : 6737 9538

How to contact customer service

<KOREA>

Transpectra Co., LTD.
115-16 nonhyun dong kangnam ku Seoul, Korea.
Phone: 02-540-4595
Fax: 02-2-540-4666

<TAIWAN>

Sentrek Taiwan, LTD.
1, 9F, Lane 155, Section 3, Peishen RD., Shenkeng, Taipei Hsien, 222
Taiwan, R.O.C.
Phone: 02-2662-8110
Fax: 02-2662-8117

<THAILAND>

Sho-Ten Co., Ltd.
114/9 Soi Suwansawadi, Thungmahamek, Rama 4 Rd., Sathorn,
Bangkok 10120, Thailand.
Phone: 02-671-9610-12
Fax: 02-671-9614

Before installation

● *Note* ●

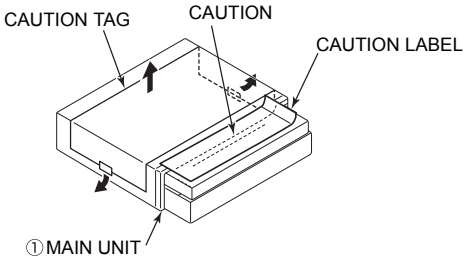
Be sure to disconnect the vehicle battery's negative terminal before installing the main unit.

Components

No.	Item	Q'ty
1	Main unit	1
2	Mounting sleeve	1
3	Side bracket	2
4	Bezel	1
5	Bushing	1
6	Thin flat screw (4 x 5 mm)	4
7	Flat head screw (4 x 6 mm)	4
8	Interconnecting cable (16P)	1
9	Interconnecting cable (20P)	1
10	Splicing connector	2
11	Remote control	1
12	Pan screw with washer (Blue: 4 x 3 mm)	4
13	Battery	2
14	Antenna extension cable	1
15	Case (For detachable panel)	1

Installation preparation

Before the main unit installation, be sure to remove the caution tag and the caution label.



● *Note* ●

In the event that the main unit requires shipping, re-attach the caution label to help prevent potential damage that may be caused by shipping.

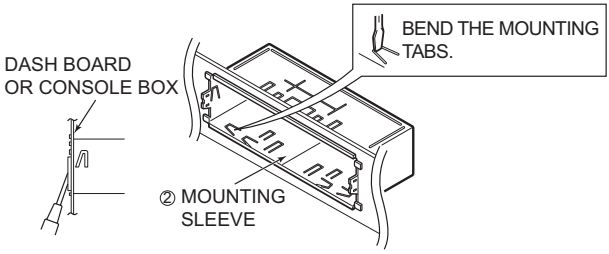
Mounting instruction

Mounting the main unit

-If installing the main unit by the mounting sleeve-

1 Insert the mounting sleeve into the opening in the vehicle dash board or console box.

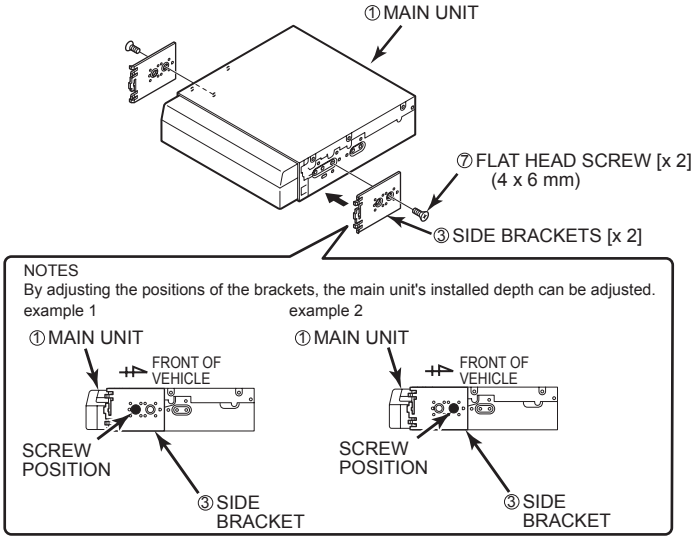
2 Use a screwdriver or a similar tool to bend the tabs in the mounting sleeve to secure the mounting sleeve.



3 Attach the side brackets to the main unit using flat head screws.

● *Note* ●

- Connect all cables before installing the main unit.
- Be sure to use the accessory mounting screws (M4 x 6) as the mounting screws. If any other screws are used, they may damage the inside of the unit.

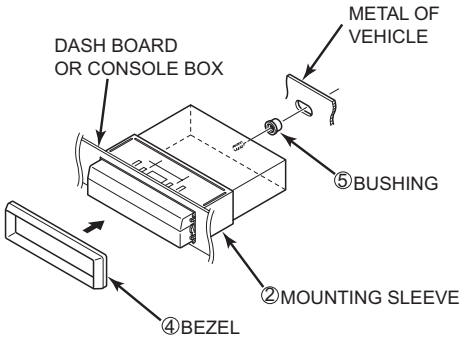


Mounting instruction

4 Mount the stud bolt to the main unit.

5 Insert the main unit into the mounting sleeve until it locks in place.

6 Install the bezel on the main unit.



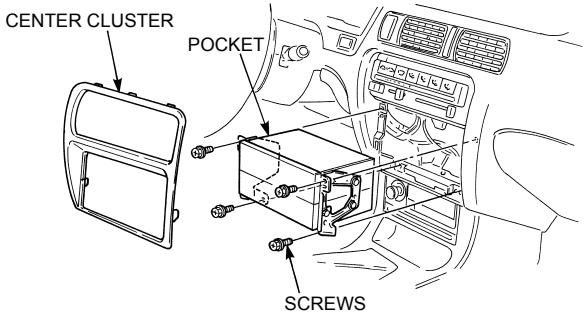
-If installing the main unit using the side brackets of the vehicle-

● *Note* ●

Connect all cables before installing the main unit.

1 Remove the pockets and any other accessories from the center cluster to make room for the main unit.

2 Remove the mounting side brackets for the pocket.



3 Attach the side brackets to the main unit.

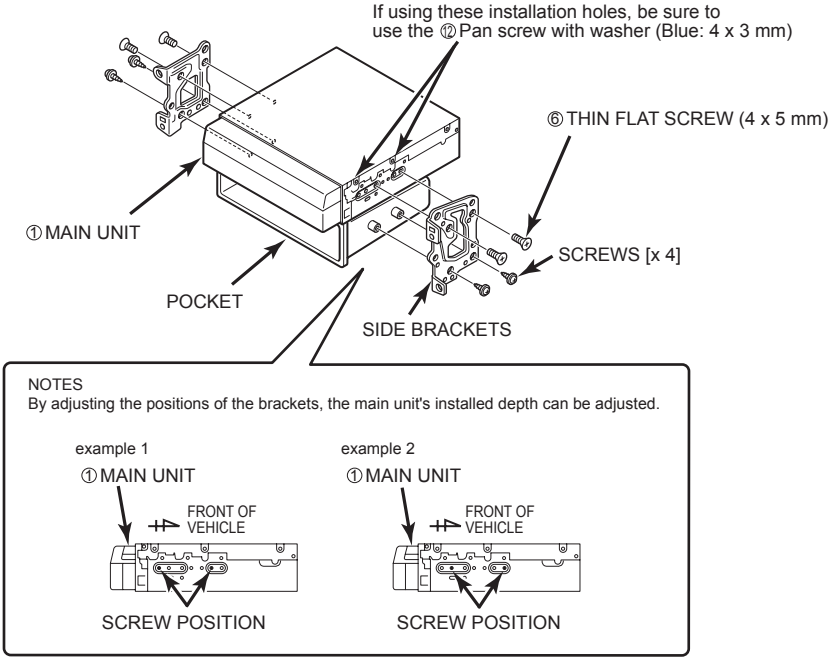
● *Note* ●

Be sure to use the accessory mounting screws (M4 x 6) as the mounting screws. If any other screws are used, they may damage the inside of the unit.

4 Install the main unit in the vehicle.

● *Note* ●

Be careful not to push the main unit display or the buttons too strongly when installing the main unit to the vehicle, otherwise the main unit and buttons may become damaged.



● *Caution* ●

When installing the main unit, be sure to the supplied mounting hardware. If parts other than those supplied are used, the main unit may be damaged internally.

Mounting instruction

Names and function of terminals

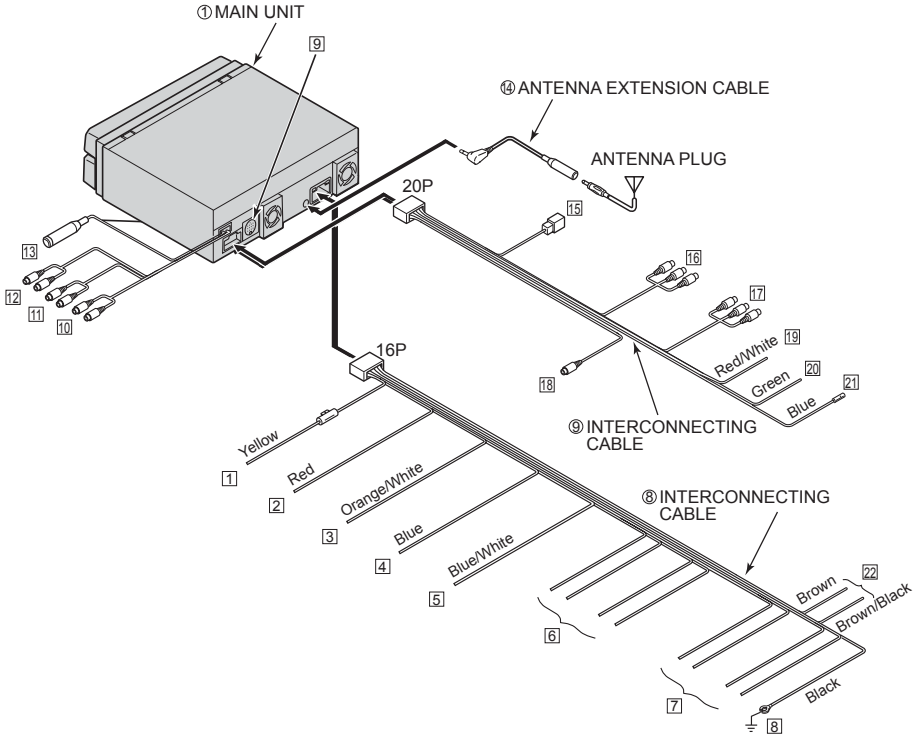
● *Caution* ●

Never connect the power supply to the speaker leads, otherwise it causes damage to the main unit.

● *Note* ●

To prevent unconnected leads from shorting out, insulate them by wrapping their tips with electrical tape. Similarly, insulate all the connected leads.

If an external amplifier is to be connected to the main unit, be sure to ground its outside chassis to the vehicle body (a metal part).



● *Caution* ●

Installation is not possible for vehicles without ACC.

No.	Name	Wire color	Destination
1	B+	Yellow	Connect where the power is constantly available, regardless of the ignition switch's position.
2	ACC	Red	Connect where the power comes on when the ignition is in the ACC position.
3	Illumination power supply	Orange/white	Connect to where power comes on when the vehicle light switch is turned on.
4	Antenna power supply	Blue	Connect to the automatic antenna control terminal of the vehicle.
5	External amp turn on	Blue/white	Connect to the control terminal for the external amp turn on.
6	Speaker output leads (Front)		Connect to the front speakers. White: Left +, White/Black: Left - Gray: Right +, Gray/Black: Right -
7	Speaker output leads (Rear)		Connect to the rear speakers. Green: Left +, Green/Black: Left - Purple: Right +, Purple/Black: Right -
8	Ground	Black	Connect where good body grounding is available.
9	E-LAN terminal (13P)		Connect to the E-LAN terminal of the CD changer, etc.
10	Front line-out terminals		Connect to the RCA connector of an external amplifier.
11	Rear line-out terminals		Connect to the RCA connector of an external amplifier.
12	Line-out terminals (Non-fader)		Connect to the RCA input connectors of a EQ, or the RCA input connectors of a woofer amplifier.
13	GPS antenna terminal (8P)		Connect to the GPS unit.
14	Radio antenna receptacle		Connect to the radio antenna of the vehicle.
15	Back-eye camera external input terminal (4P)		Connect when using a back-eye camera (sold separately) with the system.
16	VTR input terminals		Connect to the output cable of external video equipment such as a VTR. Yellow: Video signal, White: Audio (left) signal Red: Audio (right) signal
17	VTR output terminals		Connect to the monitor with video input. Yellow: Video signal, White: Audio (left) signal Red: Audio (right) signal
18	Digital output terminal		Connect to the digital input connectors of an auxiliary unit.
19	Parking brake signal	Red/white	Connect to the parking brake signal terminal.
20	Reverse signal	Green	Connect the reverse signal output of the vehicle to this terminal when connecting a back-eye camera.
21	DVD-MUTE output	Blue	Connect to the DVD-MUTE input terminal.
22	Steering remote control terminal		Connect to the vehicle steering remote control. *** Compatible vehicle models for installation : Vehicle with voltage detection-type steering remote control. Ask your dealer for details.**

Mounting instruction

Connecting the parking-brake signal and the reverse signal

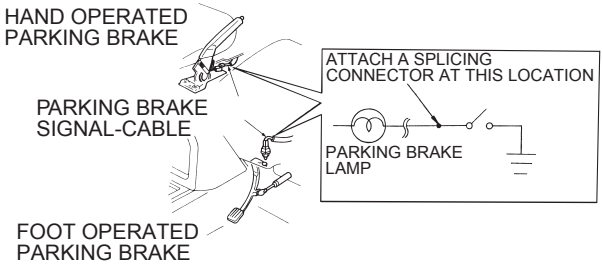
●*Warning*●

Verify the parking-brake signal and the reverse signal before making the signal connection. Using the wrong wires may cause accidents or malfunctions.

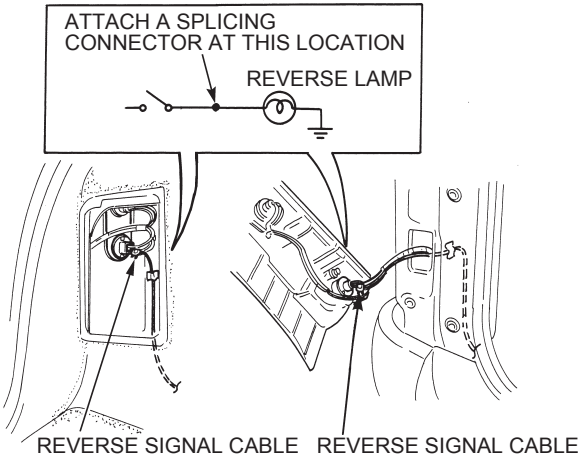
●*Note*●

The connecting point for the parking-brake signal and the reverse signal may vary with models and grades. Check with your nearest car dealer regarding remove details.

A connecting point for the parking-brake signal (example)



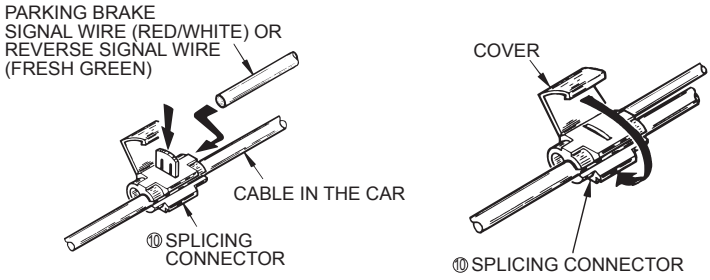
A connecting point for the reverse signal (example)



1 Insert the connection wire [parking brake signal wire (red/white), reverse signal wire (fresh green)] of the main unit and the vehicle's wire into the splicing connector.

2 Push in the terminal (the metal part) of the splicing connector using a pair of pliers.

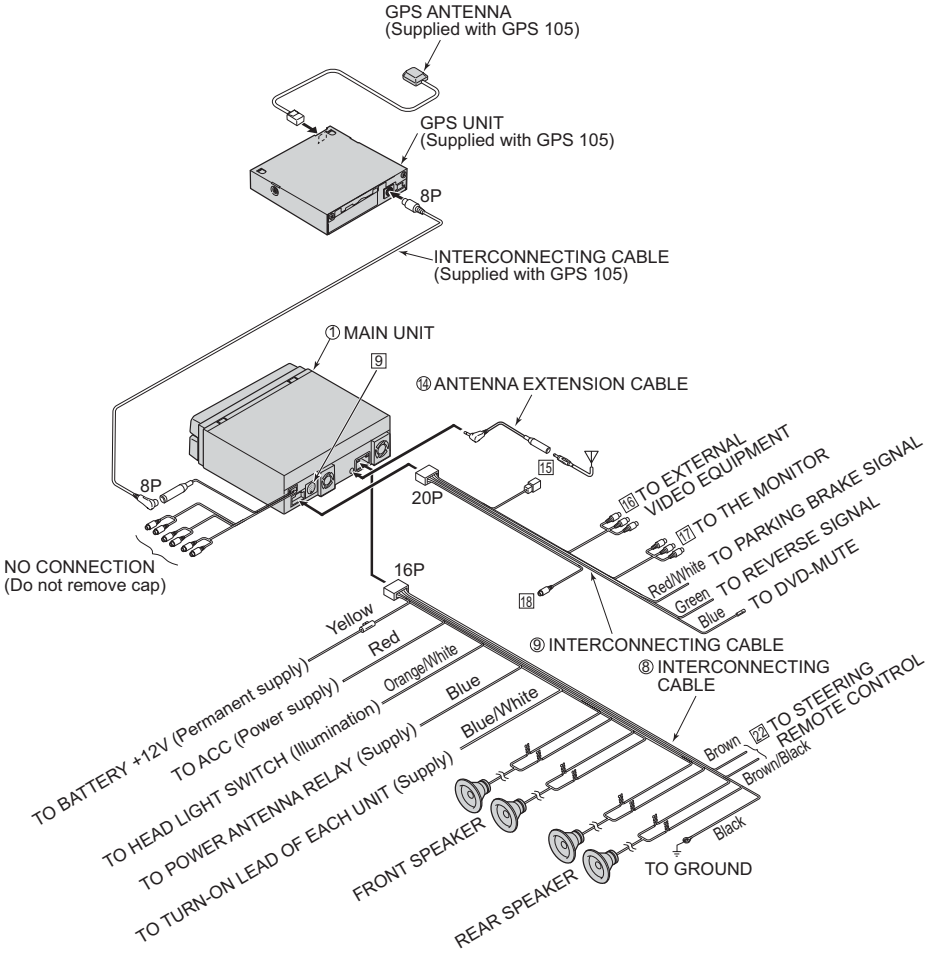
3 Press down the cover of the splicing connector and squeeze it until it locks.



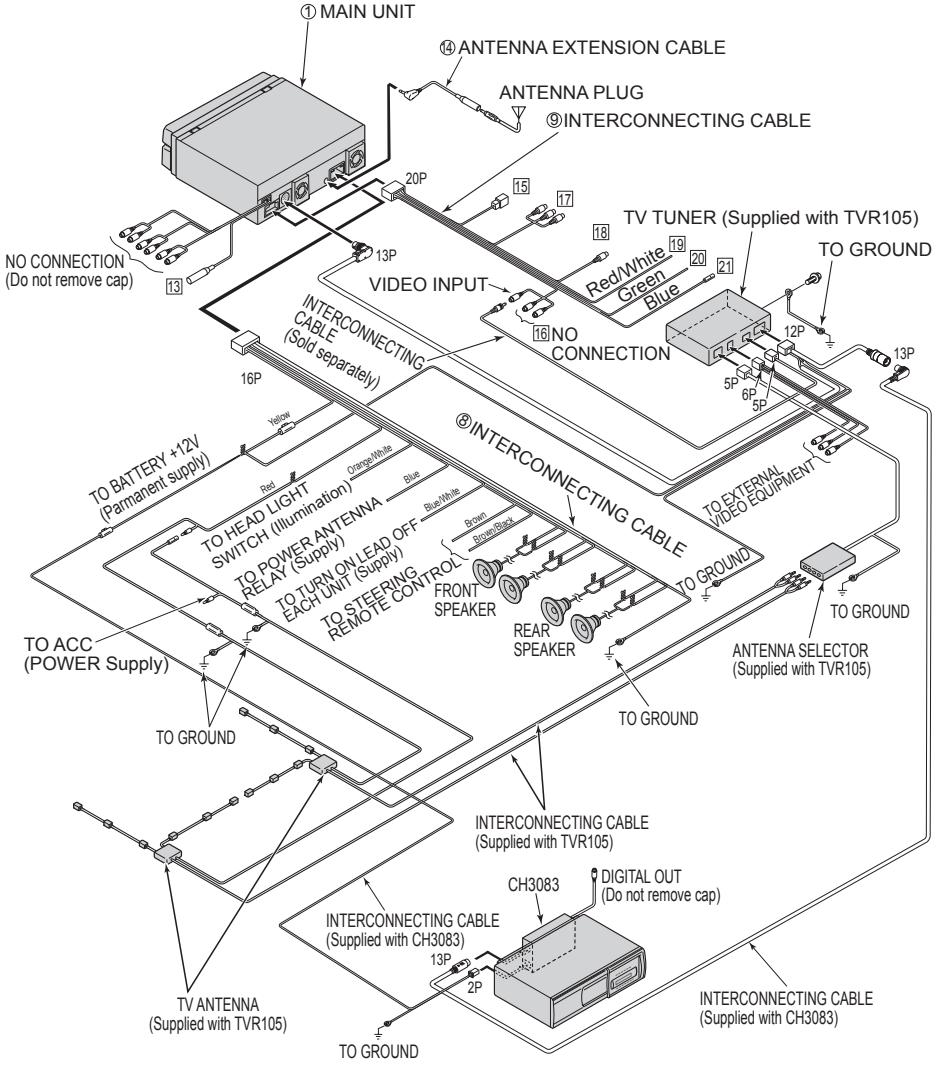
Mounting instruction

System connection example

1) AVX5000 + GPS105

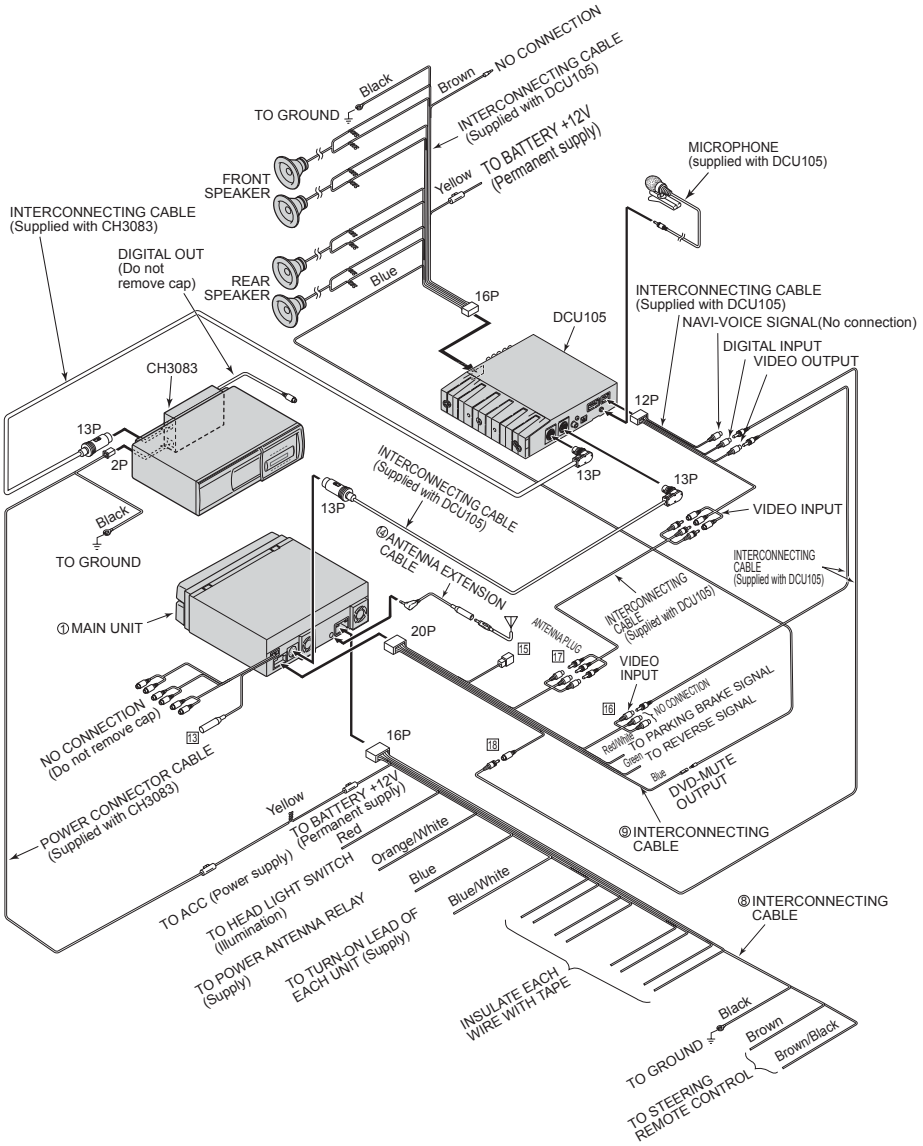


2) AVX5000 + TVR105 + CH3083

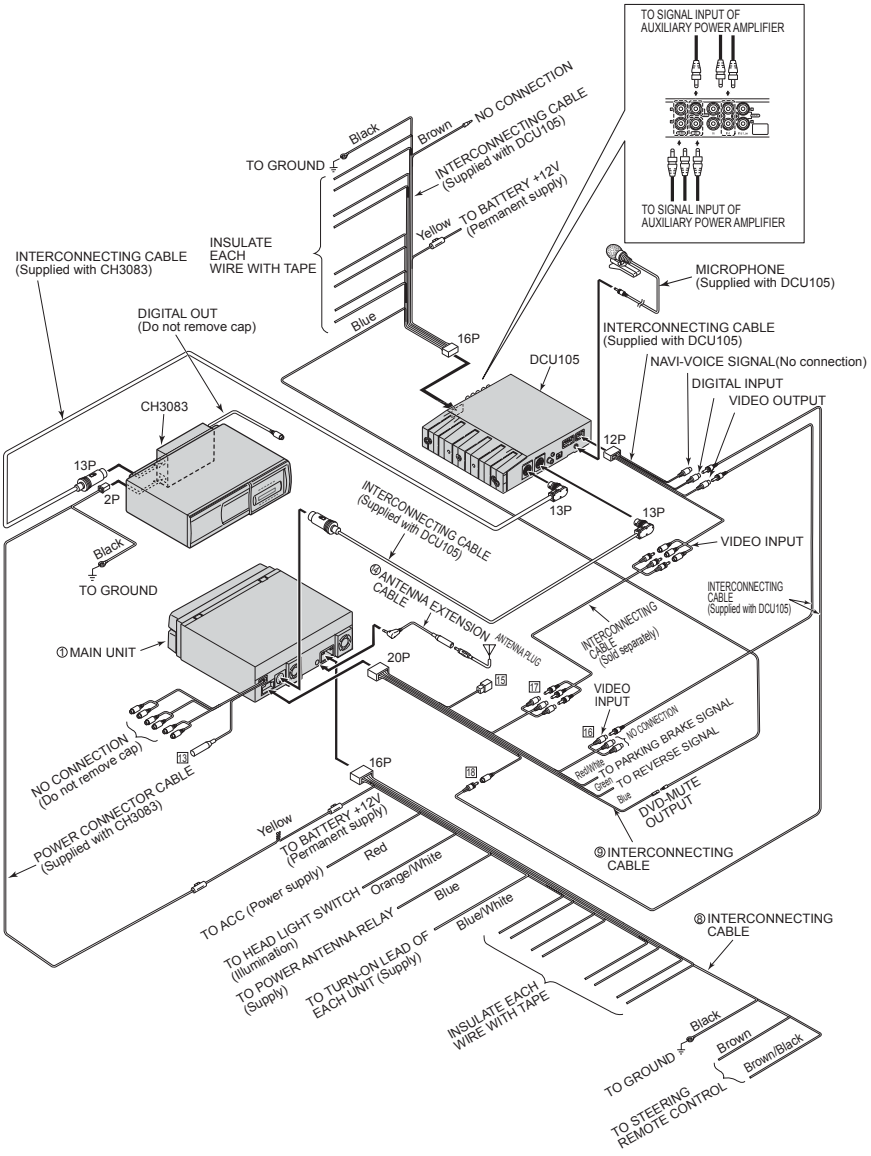


Mounting instruction

3) AVX5000 + DCU105 + CH3083



4) AVX5000 + DCU105 + CH3083 + Power Amplifier (for 5.1ch system)



MEMO

This device complies with part 15
of the FCC Rules. Operation is subject
to the condition that this device
does not cause harmful interference.

CUSTOMER NOTICE

Please retain this booklet and write in the serial number
of your AVX5000 for identification.
The serial number is labeled or stamped on the chassis.

Serial No.

FUJITSU TEN LIMITED
Contact:FUJITSU TEN CORP. OF AMERICA
19600 So. Vermont Avenue, Torrance, CA 90502
Call:800-233-ECLIPSE

www.eclipse-web.com

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