

ECLIPSE



AVN
AUDIO VISUAL NAVIGATION



In a class all its own.



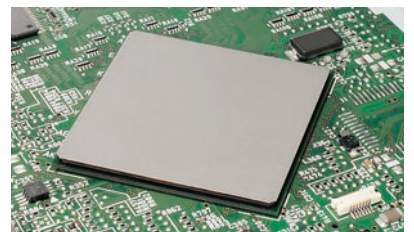
Usability

Emphasizing the ease of use that distinguishes ECLIPSE products, the attractive interface reduces the number of controls, intelligently assigning all operations to a few for easier, intuitive operation for any navigation or audio/visual task.



Originality

Only ECLIPSE offers the internet-accessible E-iSERV that provides the most comprehensive user customization and tweaking options for a specific system without the need for test equipment and professional expertise.



Quality

For uncompromised navigation and entertainment performance, the AVN7000 incorporates the Ultima Engine for sophisticated navigation with high-speed graphics processing. The optional DCU105 5.1ch. Decoder/AV Matrix Unit allows any program source to be enjoyed in surround sound.



Introducing a system that delivers audio, visual and navigation in an elegant all-in-one design. It integrates easily into any car's interior—there is simply no other product like it.

AVN7000

HDD Navigation System with 7" Wide TFT Display and DVD/MS Multi-Source Receiver



AVN is the innovative ECLIPSE concept that integrates audio, visual and navigation into a clean, stylish design that graces any car interior.



Integrating elegantly into the center console to enhance a car's interior.

Navigation

Ultima Engine
20GB 1.8" HDD
7" wide TFT display with touch control
over 32,000 map colors
approx. 20,000 landmarks
approx. 4 million POIs

- Multiple search modes
- Split screen displays
- Map scale from 150 feet to 250 miles
- Voice announcements and guidance
- Time zones (7 areas)

Advanced navigation with outstanding ease of use.

The AVN7000 is the culmination of ECLIPSE's advanced mobile technologies that conquer space limitations to offer extraordinary navigation performance. Featuring the **Ultima Engine** for increased speed and navigation-related task processing as well as upgraded navigational features, the AVN7000 shows just how much is possible in mobile navigation today.

Audio/Visual

CD/CD-R/RW, MP3, WMA
DVD-Video, DVD-R/RW and DVD+R/RW
Dual zone operation
MOSFET 50W x 4
5.1 ch. surround sound (with DCU105)
E-iSERV connectivity (with DCU105)
Dual color illumination
TV Tuner-ready
SIRIUS Satellite Radio-ready

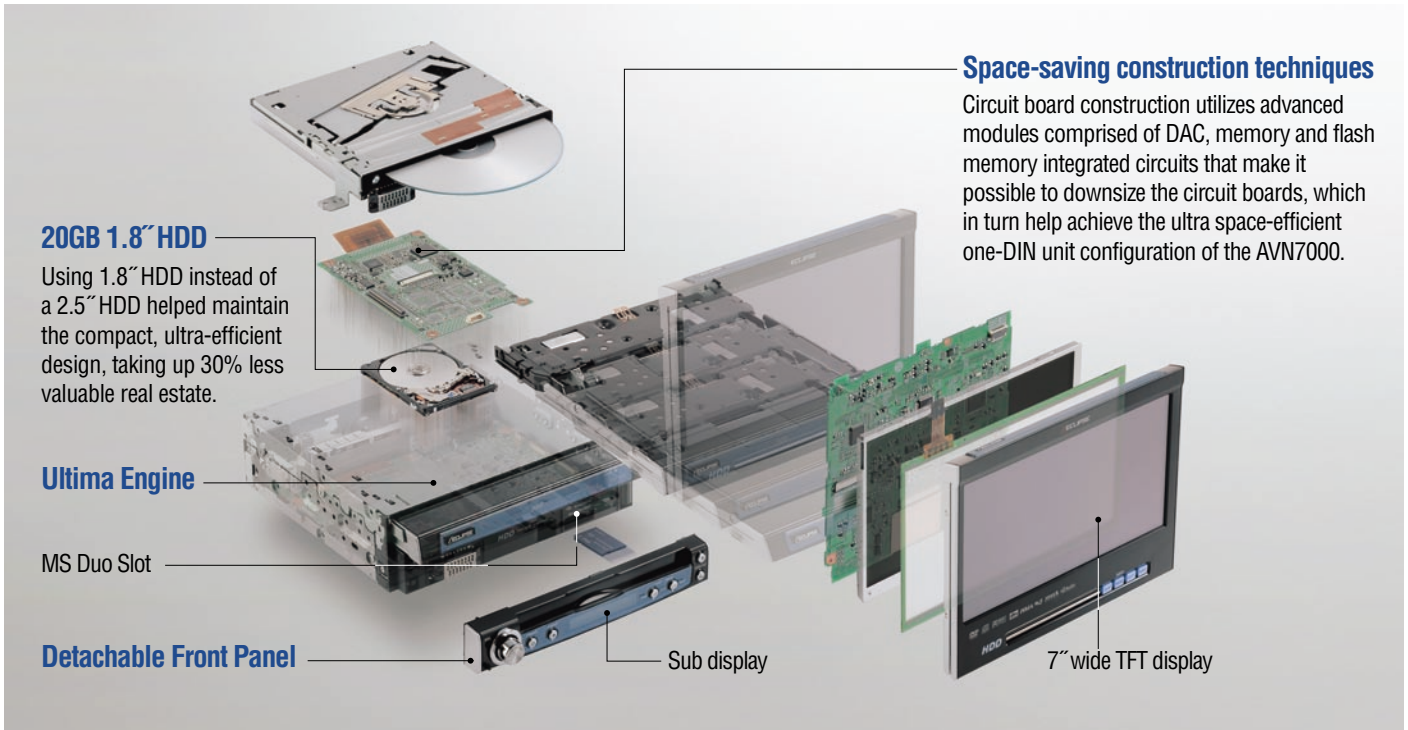
- Memory Stick Duo
- FM/AM tuner
- Advanced 24-bit $\Delta\Sigma$ DAC
- High-performance DSP:
 - Parametric equalizer
 - Time alignment
 - Crossover
 - Listening Position Selector
- 5V preamp output (with DCU105)
- CD Changer-ready (2 units)
- HD Radio-ready

Comprehensive features that enhance any audio and visual entertainment.

Having a **hard disk** allows the AVN7000 to handle navigation tasks as well as entertainment such as DVD-Video and CD to be ongoing at the same time without any interruption. Offering **5.1 ch. surround sound (with DCU105)** for surround-encoded program material as well as upmixing two channel material, the AVN7000 offers the most from any program source. Utilizing **audiophile grade circuits and components**, audio and visual performances are simply stunning.

The technology inside

ECLIPSE managed to fit all the technology to handle navigation and entertainment into a one-DIN enclosure without compromising performance.



20GB 1.8" HDD
Using 1.8" HDD instead of a 2.5" HDD helped maintain the compact, ultra-efficient design, taking up 30% less valuable real estate.

Ultima Engine

MS Duo Slot

Detachable Front Panel

Sub display

7" wide TFT display

Space-saving construction techniques

Circuit board construction utilizes advanced modules comprised of DAC, memory and flash memory integrated circuits that make it possible to downsize the circuit boards, which in turn help achieve the ultra space-efficient one-DIN unit configuration of the AVN7000.

Proximity layout

Important circuit components such as the DAC and MOSFET devices are closely positioned next to the output terminals for the most effective signal transmission and to cancel any potential noise pickup. This adds up to delivering better audio performance.

DAC → MOSFETs → OUTPUT

The culminating effect of all these efforts allows the AVN7000 to be free from noise and provide a performance that impresses.

Design accents

Chrome and silver style highlights

The stylish silver strip accents the pushbuttons on the side while the control knob and other buttons are finished in chrome for an elegant touch of contrast with the piano-black finish of the unit.



Brilliant mirror coating

Adding a style-conscious design accent is a special mirror finish that allows the unit's precision-cut edges to attractively refract light in brilliant colors.

Dual color illumination

To suit user preferences and car interiors, the switches offer a choice of color illumination.



BLUE

RED

Ultima Engine

This computing engine combines navigation and graphics processing integrated chips in one monolithic configuration for accelerated data processing.



Over 32,000 map colors

Screen translucency

On-screen information now "floats" above a map display so it's easier to see and less distracting.



Antialiasing

The Ultima Navigation Engine allows many more colors to be simultaneously used without "jaggies" and greater resolution.



Navigation

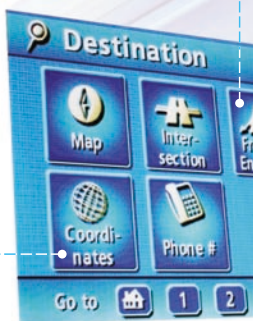
Searching

Offering the most convenient ways to find your destination.

Freeway search

Simplifies highway travel.

Just input the name of a freeway and the entrance/exit you want.



Coordinates search

Searches by latitude and longitude.



Define search area

Conveniently focuses on a general region for more efficient searching.

All searching starts with selecting the general area the destination is in.

Quick Access Points

5 buttons can be preset to any desired destination for instant recall.

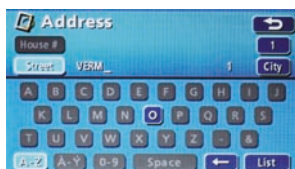
Home search

This always guides the car home, no matter where it is.

Once a home address is registered, it is easy to return from anywhere.

Address search

An address is all that is needed.



Input a street name and number will initiate a search.

POI Name

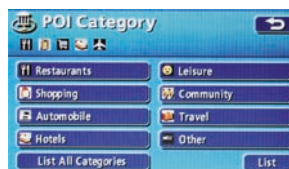
Convenient presets for general inquiries save time.



For a particular type of location such as a mall, restaurant or other, AVN7000 brings up listings. Touch one and see more details.

POI Category

Making it simple to find locations.



Shows all the closest-to-get-to POIs from the car's current location.

Map search

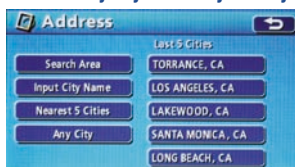
No more wasting time looking for a map.



Another easy method is to directly access a map of the search area and zoom in or out as desired.

City search

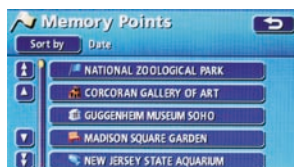
A speed search that can be activated by city or nearby vicinity.



Offers a route to the input city's central area. Up to 5 favorite cities can be conveniently grouped together. A 20 mile vicinity of the city can also be shown.

Memory Points

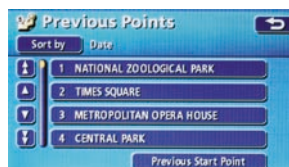
Preset for instant accessing a location.



100 useful locations are preset for quickly scrolling through and selecting. Favorite locations can have sound tags assigned even with directivity.

Previous Points

Where the car has been.



Conveniently, the last 100 locations can be instantly displayed for selecting.

Phone Number

Alternately, a telephone number will result in a search.

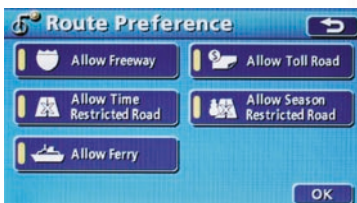


If only the phone number is known, the address corresponding to the telephone number will be shown.

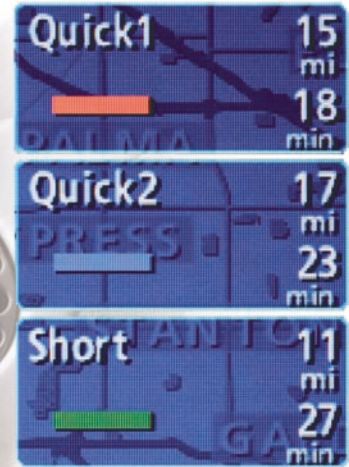
Routing

Always a useful selection of routes for the user to choose from.

Route preference



Preset travel method preferences such as expressways and toll roads are factored into the routes the user can choose from.



3 routes

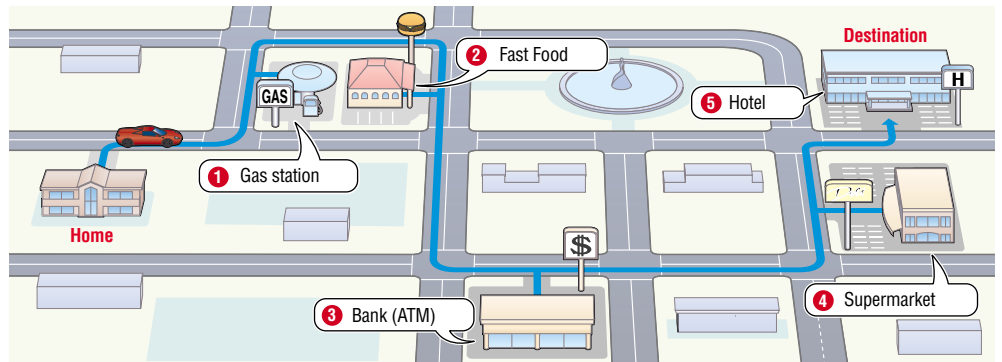
Instantly sets 3. For any destination, a choice of Quick 1, Quick 2 and Short routes to suit personal preferences adds flexibility.

Enroute stopping points

Choose when and where to take breaks.



Before the final destination, any 5 locations can be programmed into the route such as a supermarket, gas station, and ATM.

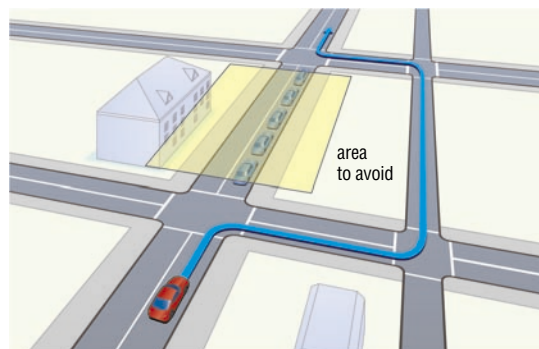


Detours

Program locations prone to problems.



Now it is easy to avoid up to 10 chronically congested and problem areas. Simply select an onscreen area, drag to resize it up or down as desired and the best detours are presented.



Route preview



Any selected route can be conveniently previewed in its entirety to get familiarized with it.

Navigation

Assistance

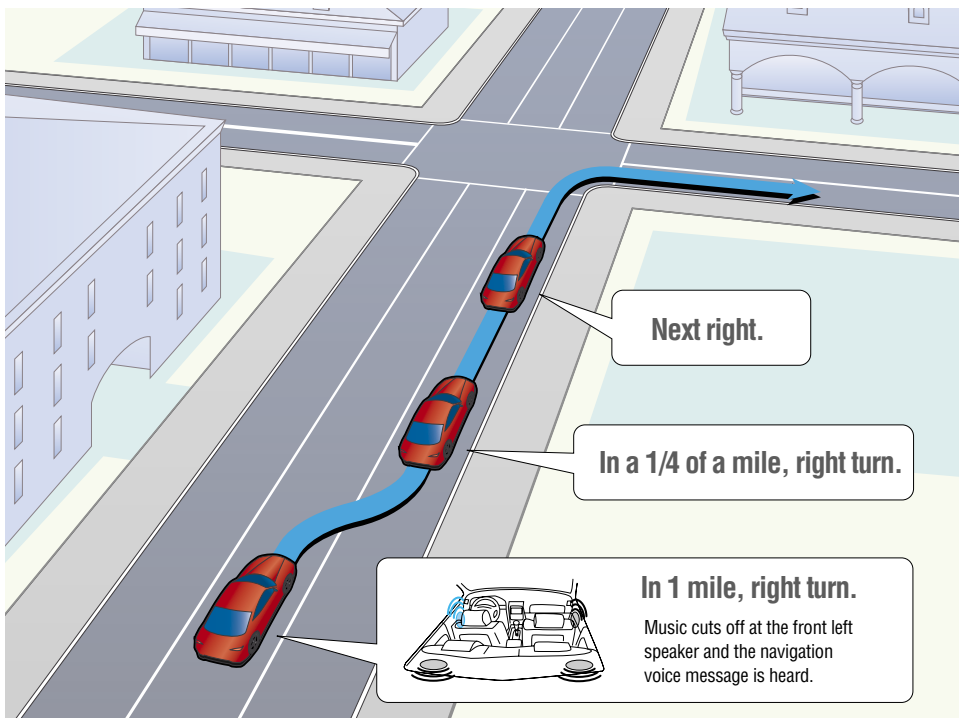
Comprehensive help features make driving enjoyable.

Voice announcements and guidance

No more missed turns.

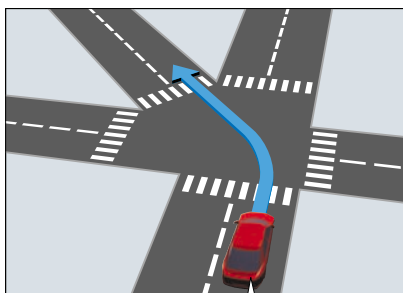


For stress-free driving, the AVN7000 advises upcoming turns and will continue to warn as the turn approaches. Other guidance for curves and driving lanes will also be announced.



Intersection zooming

Display zooms up just when needed.

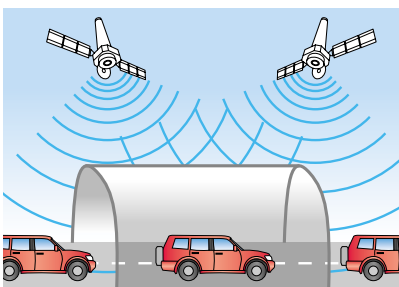


Display automatically splits as an intersection is approached.

When approaching an intersection where a turn is required, the display automatically splits into two screens to show a more close-up view with details such as landmarks.

Map and positional updating

Constant tracking maintains accurate position.

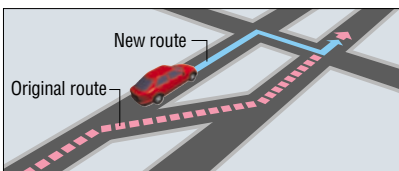


The AVN7000 constantly tracks the car even where it cannot receive satellite signals. A gyro sensor and auto speed pulse help correlate the car's travel with the onscreen map so that car's position is always accurate.

Auto rerouting

Instant response ensures no wasted time.

Wrong turns and missed streets are no longer a problem because the AVN7000 instantly reroutes to put the user right back on track.



Freeway assistance

Entrance displays.



Guidance is provided when approaching a freeway entrance with the entrance name also displayed.

Freeway interchanges



Untangling the most complex interchanges is easy with the 3D views and correct lane views the AVN7000 displays.

Exit displays



No more worries about missing the right exit because it is shown in a 3D view along with name and other useful information.

Special display features

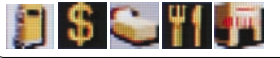
Making navigation easier than ever.

Gas stations, restaurants, ATMs and other useful locations show up onscreen as POI displays, each category distinguishable by a unique icon. Press an icon and more information about that location will be displayed.

POI displays (approx. 4 million points)



POI genres simultaneously onscreen: 5



Total landmarks: 22,767

For recognizing destinations and navigation points quicker and easier, the AVN7000 has created convenient categories.



Information regarding a POI also appears on the display.



Driving distance and arrival time displays

Useful information regarding distance to the destination as well as the estimated time of arrival can be seen.



Split screen function



This convenient function can be activated as desired to combine zoom in and out displays, maps of different scales and other combinations of various modes as desired.

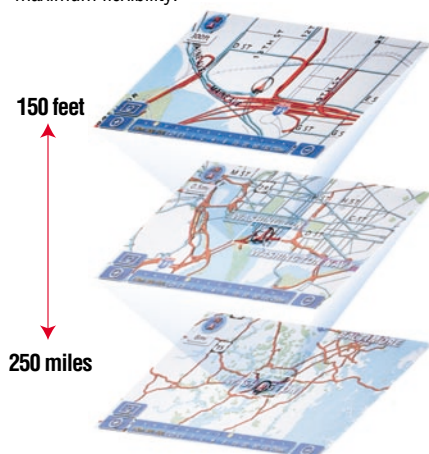
Time zones



When traveling across time zones, the AVN7000 automatically adjusts the time correctly.

Versatile zooming

Map scale can be quickly controlled by shifting magnification values. Seamless zooming is broader, covering 150 feet to 250 miles for maximum flexibility.



Smooth multi-directional scrolling



Just a light fingertip touch is all that is needed on the touch control screen for the map to scroll by smoothly and accurately following the fingertip.

Mapping coverage



Navigation database now includes Hawaii and Canada (partial).

***Transport yourself into
a theater environment.***



DCU105 Audio Video Matrix

ECLIPSE designed the powerful Audio Video Matrix unit that can be used with various ECLIPSE products. Because it is a dedicated unit, the addition of the DCU105 elevates the performance of unit it is connected to significantly for audio as well as video. It offers system control and response that would ordinarily require technicians and test equipment to achieve. It also offers many advanced system expansion choices for audio as well as video.

- Dolby Digital 5.1 ch.
- dts 5.1 ch.
- Dolby Pro Logic II
- E-iSERV connectivity
- Time Alignment Pro
- Crossover Pro
- Parametric EQ Pro
- AV Matrix Selector
- 5V preamp output
- MOSFET 50W x 4



Dimensions (W x H x D)
6-15/16" x 1-7/16" x 6-5/16"
175 x 36.5 x 160mm

DCU105



5.1ch. Decoder/AV Matrix Unit

Multi-function 24-bit Dolby decoder

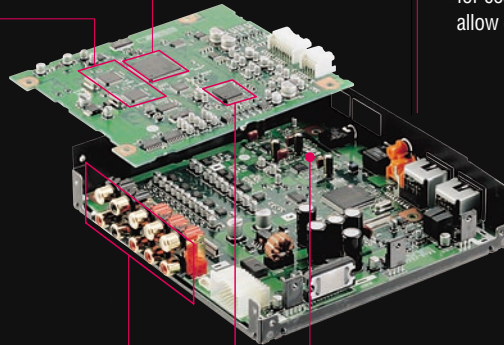
The multi-function 24-bit Dolby decoder incorporates Dolby Digital 5.1ch. and dts 5.1ch. functions as well as Dolby Pro Logic II.

24-bit DSP for audio processing

(Parametric EQ, Time Alignment, Crossover, etc.) handles all audio tasks and offers comprehensive parameters for customizing audio to user preferences.

Digital inputs

for coaxial and optical signals allow easy interfacing.



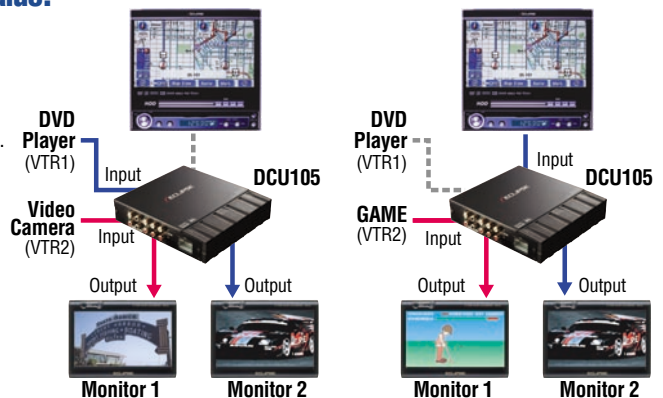
Gold-plated RCA pin connectors

AV Matrix IC

Advanced 24-bit DAC

Versatility increases entertainment value.

When the AVN7000 is used with the DCU105, different program sources can be viewed simultaneously for dual zone operation. With navigation on in front, DVD-Video can be playing for one rear passenger while another can watch video playback from a video camera or play a game. The same DVD-Video can be enjoyed in the front and rear with the other passenger enjoying another program source. The optional TV Tuner can also be added.



Audio

High-end performance comparable to dedicated components.

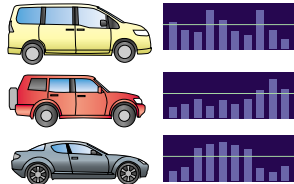
AVN7000 + DCU105—Precision tonal contouring for accurate sound.

Parametric EQ Pro

The professional EQ method for tuning a system's frequency response because of its absolute versatility and precision control. It smoothes out system response, eliminating troublesome frequency peaks and dips.



Test microphone picks up the system's frequency response.



Each vehicle type has its own acoustic environment. System frequency response is precisely adjusted manually for an ideal flat frequency response.



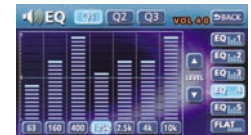
To suit preferences and music genres, up to five sets of user-configured PEQ settings can be preset and stored in memory for instant recall.

AVN7000

Normal Mode

Perform easy audio customization using the AVN7000 by itself.

7-band Parametric EQ

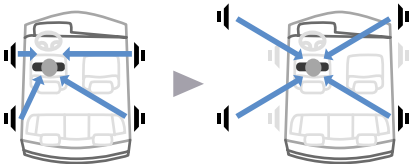


Simpler parametric equalization function can adjust the "Q," i.e. bandwidth, of each of the 7 center frequencies from wide to narrow in 3 steps.

AVN7000 + DCU105—Optimizing for the best audio performance.

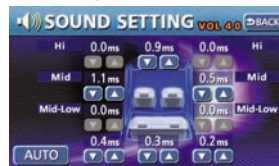
Time Alignment Pro

If sound from all the speakers arrives at the ears simultaneously, it is more natural sounding. Time delay can be adjusted to achieve identical arrival times.



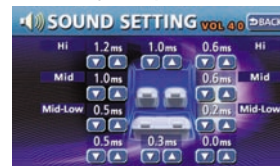
Sound from speakers in different locations arrive at the listener's ears at all different times. Speakers are electronically processed with varying time delays to ensure all the sound is heard at the same time no matter how the speakers are positioned.

Front 1-way example



Fullrange speakers can be time-aligned automatically with the AUTO setting. One single push is all that's needed for the whole process.

Front 3-way example



Complex to perform manually, optimal delay settings can be adjusted automatically for the various speakers in the system for true time alignment. For experienced users, more tweaking is possible in the manual mode.

AVN7000

Time Alignment

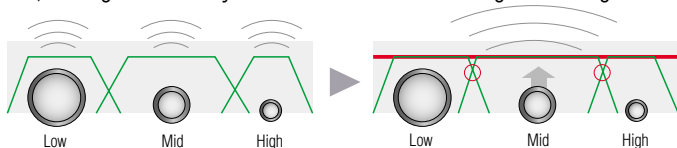


A simpler time alignment performed by selecting the car type and speaker positions, then adjusting each speaker level. Delay parameters are then adjusted for a time-aligned response.

AVN7000 + DCU105—Wide-bandwidth, perfectly balanced sound.

Crossover Pro

Multiple speakers are necessary for wide bandwidth sound since each speaker covers a limited frequency range. A speaker must smoothly 'crossover' to the next speaker, making the overall system sound as if it was coming from a single source.



Discontinuities between speaker units can be heard.

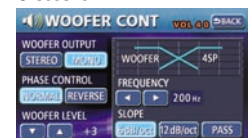
Integrating the sound from different speakers into an organic, whole sound that's more natural and lifelike.



Adjusting a crossover point's frequency, rolloff using "slopes" from bandpass to 6/12/18/24dB/octave and level settings.

AVN7000

Crossover



The crossover point for the subwoofer response can be switched in/out of phase to blend better with the rest of the speaker system.

Enables optimal listening.

Listening Position Selector

This function compensates for any seating position, optimizing system response for that position as if it was in the perfect sweet spot for listening as in a home audio system.



For adjusting the overall system-wide balance.

Fader and Balance

Easy directional controls and a visual indicator make it easy to set system-wide balance in any direction to suit user preferences.



E-iSERV (AVN7000 + DCU105)



This is where E-iSERV starts!
www.eclipse-web.com

ECLIPSE allows users to access the E-iSERV server online and optimize the system response for a specific vehicle and allow precise audio customization over parameters.



Pink noise is fed into the system and the system's test microphone measures the response. The response is downloaded to a Memory Stick Duo.




E-iSERV is accessed with a PC and the data on the MS is input into E-iSERV.



When the MS Duo is again inserted into the AVN7000, the new settings result in an ideal system response.

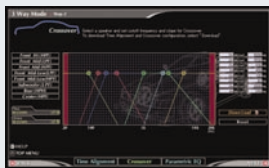
E-iSERV

Parametric EQ




E-iSERV examines all available data and automatically creates an optimum parametric EQ setting which is again downloaded onto the MS Duo.

Crossover



Time Alignment

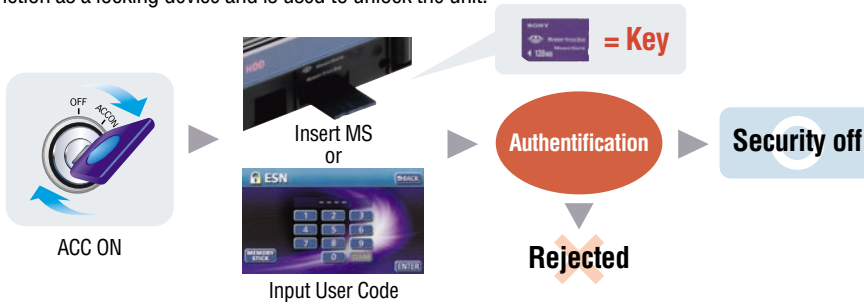


E-iSERV makes it possible to achieve that same high level of audio customization for Time Alignment and Crossover settings. Together, the E-iSERV-optimized settings allow a user to enjoy a customized overall response.

Twin Security System



With the engine switched off, ESN can be activated to deter AVN7000 tampering and flashes as a deterrent warning ESN is operating. A Memory Stick Duo can be designated to function as a locking device and is used to unlock the unit.



Detachable front panel

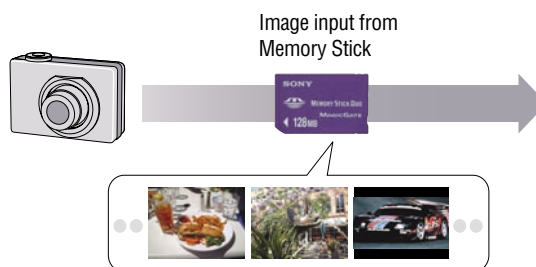


The front panel detaches and is compact enough to be very portable, allowing users another level of security and deterrence.

Other customization features

Pic-Clip

This function allows changing the default image as well as selecting custom images.



Direct image data reading from DCIM folder.

Full-featured entertainment technology that satisfies.

Whatever you choose to make driving more enjoyable, music or video, the AVN7000 offers the specialized functions and features that make sure you get the best performance.

Versatile 7" wide display

Responsive to a fingertip touch, the sharp TFT display provides high resolution viewing optimized for navigation as well as DVD-Video. For entertainment viewing, the aspect ratio can be switched to any of four settings as desired.



DVD/CD player

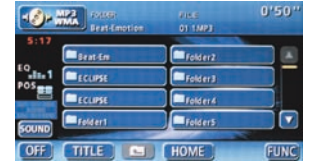
ECLIPSE's DVD/CD-compatible mechanism is optimized for the mobile environment, featuring rugged construction, extensive damping and a large memory buffer along with precision tracking. With the addition of the DCU105 AV Matrix, DVD enjoyment becomes genuine theater quality with 5.1 ch. surround sound. Even non-multichannel programs and CDs can be upmixed for 5.1 ch. surround sound.

DVD dual play

While radio broadcasting or music from connected external sources such as a CD changer or memory stick can be enjoyed on the AVN7000 with sound from all speakers, the AVN7000 can also be playing a DVD-Video for rear seat passengers who can listen to it through headphones connected to the rear displays.

MP3 and WMA files

All the convenience of digital music files can be enjoyed with the AVN7000. A Multi-Harmonizer function makes sure these files always sound their best by restoring harmonic data lost during the encoding process.



FM/AM tuner

ECLIPSE's long-proven tuner section provides outstanding performance for terrestrial broadcasting sources with excellent reception even in problem areas.

Optional TV tuner

The TVR105 is available for enjoying all terrestrial television broadcasting channels, featuring excellent reception. The clarity of the display and excellent sound of the AVN7000 make in-car TV watching highly enjoyable.

Rear monitor-ready

The AVN7000 can handle the demands of providing different program material so that adding rear monitors becomes a worthwhile option for offering more entertainment for everybody in the vehicle.

Options that increase AVN7000 enjoyment.

Watch your favorite programs.



TVR105
TV Tuner Unit

Simply add the TVR105 to be able to watch all terrestrial TV broadcasts.

Dimensions (W x H x D)
5-15/16" x 1-3/16" x 4-3/16"
150 x 30 x 105.2mm

Create a mobile music library.



CH3083
8-Disc CD Changer
with Magazine Unit

CD Changer-ready

Functioning as an immense mobile jukebox with storage for 8 CDs, the CH3083 is ideal for increasing music content as it is also compatible with CD-R/RW discs.

Take the hassle out of backing up.



BEC105
Rear View Camera

Rear view camera-ready

The BEC105 optional rear camera can be connected to the AVN units to facilitate parking.

More convenience at hand.



RMC105
Wireless Remote

Remote control-ready
Optional new ergonomic design remote enhances operation.

Get the most from terrestrial broadcasting.



HDR105
HD Radio Tuner Unit

Dimensions (W x H x D)
6-15/16" x 1-7/16" x 6-5/16"
175 x 36.5 x 160mm



Enjoy the immense content satellite radio provides.



SIR-ECL1
ECLIPSE COMPATIBLE
SIRIUS SATELLITE RADIO TUNER

Dimensions (W x H x D)
4-15/16" x 1-7/16" x 4-3/16"
125 x 35 x 105mm



Features List

Media	
HDD	1.8" 20GB
DVD	○
CD	○ ^{*1}
Memory Stick Duo	○ ^{*2}
Navigation	
Navi Device	
HDD Navigation	○
Ultima Engine	○
Displaying	
Display	7" EGA
Map colors	32,768 colors
Split screen	○
Street name	○
Point-of-Interest (POI)	3,999,442 points
Landmark	22,767 points
Operation	
Touch panel control	○
Searching	
Address search	○
POI Name	○
POI Category	○
Emergency search	Hospital/Police
Memory search	100 points
Previous search	100 points
Map search	○
Intersection search	○
Freeway search (ENTER/EXIT)	○
Coordinates search	○
Telephone number search	○
Home search	○
Quick access point search	5 points
Routing	
3 routes information	○
Detours	10 areas
Enroute stopping points	5 points
Route preview	○
Assistance	
Voice announcement	English/French
Voice announce switch L/R	○
Voice announce volume control	8 steps
Intersection zooming	○
Freeway guidance	○
Auto rerouting	○
Estimated arrival time	○
Entertainment	
Preset wallpaper (still images/moving images)	5 patterns/5 patterns
Pic-CLIP	100 images ^{*3}
Welcome screen	○
Security	
ECLIPSE Security Network	○
Detachable front panel	○
Other	
Select User	3 persons

AUDIO	AVN7000 only	DCU105 connected	
		Front-1 way system	Front-3 way system
DVD			
DVD-Video		○ (Single/Dual Layer)	
DVD-R/RW, DVD+R/RW ^{*4}		○ (Single/Dual Layer)	
Dolby Digital 5.1 ch.	—	○	
dts 5.1 ch.	—	○	
Dolby Pro Logic II	—	○	
CD			
CD		○	
CD-R/RW		○	
MP3		○	
WMA		○	
MS			
ATRAC3		○ (Magic Gate Memory Stick Duo)	
Audio function			
Time Alignment	Car type: 6 types, Speaker position: Tweeter Rear SP	Front (L/R), Rear (L/R), Center, Subwoofer	F-Hi (L/R), F-Mid (L/R), F-ML (L/R), R (L/R), Center, Subwoofer
Parametric EQ	7 bands	F/R/C: independent 5 bands, SW: 1 band	
Crossover	○	F (HPF)/R (HPF)/ C (HPF)/SW (LPF)	F-Hi (HPF), F-Mid (HPF/LPF), F-ML (HPF/LPF), R (HPF), SW (LPF)
Multi-Harmonizer		MP3/WMA/ATRAC3	
Listening Position selector		FR, FL, F, R, OFF	
Non Fader Level/Phase control		○	
Woofer output		Stereo/Mono	
E-iSERV Connectivity	—	Audio customize	
Audio device			
MOSFET amplifier		50W × 4	
Advanced 24-Bit $\Delta\Sigma$ DAC		○	
Pre Amp Output	F/R/NF, 2V	Front/Rear/Center/Subwoofer, 5V	
AV Output	1 pair	2 pairs	
AV Input	1 pair	2 pairs	
Digital Output (Coaxial)		○	
Digital Input (Coaxial)	—	○	
Digital Input (Optical)	—	○	
ANALOGUE RADIO TUNER			
FM		FM1: 6, FM2: 6, FM3: 6	
AM		AM: 6	
OPTIONAL			
HD radio-ready		○	
SIRIUS radio-ready		○	
CD Changer-ready		2 (daisy chain)	
Rear View Camera-ready		○	
TV-Tuner ready		○	
Rear Monitor Input	1	2	
External device Input	1	2	

^{*1} Ripping not available

^{*2} Memory Stick Duo is sold separately and compatible with 128MB or under.

^{*3} 100 images can be stored. (each image should be below 2 MB in MS Duo. Only JPEG files are available)

^{*4} Please refer to Note and Precautions.

Specifications

* Meets CEA2006 guidelines

NAME	AVN7000
GENERAL	
Power output	50W × 4 (MAX)
RMS power output*	13W × 4 (1kHz, 1%THD 4 Ω)
Dimensions (W × H × D)	7" × 2" × 6-1/2" (180 × 50 × 165mm)
Weight	2.3kg
DISPLAY	
Display	7" wide (16:9), low-glare panel
Resolution	336,960 dots (480 × 234 × 3)
Screen aspect ratio	4 types
FM TUNER	
Frequency range	87.75 — 107.9MHz (200kHz step)
Usable sensitivity	19dBf (98.1MHz)

AM TUNER	
Frequency range	530 — 1.710kHz (10kHz step)
Usable sensitivity	22μV
CD SECTION	
Frequency response	20 — 20,000Hz ±3dB
Total harmonic distortion	0.04% (0dB 1kHz)
MS SECTION	
Frequency response	20 — 20,000Hz ±3dB
Total harmonic distortion	0.04% (0dB 1kHz)
EQUALIZER SECTION	
Parametric equalizer	63Hz — 16kHz (25 points) ±10dB
HDD SECTION	
Operating temperature range	-10 — 65°C
Storage temperature range	-40 — 85°C

Notes and Precautions

Product safety notice

- To ensure the safe operation of ECLIPSE products, please read the owner's manuals carefully prior to using.
- ECLIPSE is not responsible for any accident or damage due to improper installation, connections or products modified in any way.

Warning

- All products are intended for DC 12-Volt operation in negative grounded vehicles only. Never use them in 24-Volt vehicles such as heavy trucks or diesel cars with cold-region specification, aircraft or marine environments unless specifically rated to handle these conditions.
- Do not adjust controls while driving. To adjust the controls, stop the car in a safe location.

Caution

- Installation of products requires experience and knowledge. Ask your ECLIPSE retailer for proper installation.
- ECLIPSE cannot guarantee that every product it manufactures will be able to be installed in every vehicle model or make. To be sure, please consult your ECLIPSE retailer.
- In some cases due to installation-related considerations, additional connecting cables may need to be purchased for an ECLIPSE product.
- The rear view camera is a parking aid. It must be used only to supplement your vehicle's side view and rearview mirrors. It is not a substitute for mirrors and careful driving.
- Do not remove the HDD from the head unit. ECLIPSE is not responsible for any loss of data, damage or malfunction to the disk drive mechanism resulting from unauthorized removal or tampering with the HDD.
- Please be sure to follow instructions provided in the installation manual for correct procedures as incorrect installation may affect driving-related operation and/or airbag operation.
- Please make sure only the official parts supplied with the unit are used. Do not substitute other parts as it may affect operation or compromise unit build integrity.
- Optimal MP3 and WMA file reproduction quality depends greatly on the original encoding process. Depending on the original encoding, files may sometimes not play back properly.
- The ECLIPSE navigation system requires its dedicated database for optimal performance. Do not insert other database DVDs that may cause the unit to malfunction or not respond.

General

- Product design and specifications are subject to change without prior notice or obligation as ECLIPSE reserves the right to constantly seek to improve its products.
- Due to characteristics and properties of various photography and printing processes, the color(s) of the actual product may slightly differ from those shown on these pages.
- Some screen images shown are simulated.
- Some graphic examples of ECLIPSE Web services may be from pre-release software and could vary slightly from the final version.

Licensing and Trademarks

- AVN is a registered trademark of FUJITSU TEN LIMITED.
- "Dolby", "Pro Logic" and the double D symbol **DD** are trademarks of Dolby Laboratories and the Dolby Laboratories Licensing Corporation.
- "dts" and "dts Digital Out" is a trademark of Digital Theater System, Inc.
- HD Radio is a trademark of iBiquity Digital Corporation.
- SIRIUS SATELLITE RADIO is a trademark of SIRIUS Satellite Radio Inc.
- Memory Stick is a registered trademark of Sony Corp.
- Magic Gate is a registered trademark of Sony Corp.

Others

- Some recent audio discs may resemble conventional music CDs but are technically not Compact Discs (CD Red Book format) because of the copy protection technology employed. ECLIPSE cannot guarantee operation and performance if these discs are used.
- DVD-R/RW and DVD+R/RW playback is possible only for discs formatted for video mode.
- VR (Video Recording) mode-recorded discs and discs not finalized will not play in the unit.
- Some PC-authored discs may not play due to software application settings during authoring.
- DVD-R/RW, DVD+R/RW and CD-R/RW playback quality may be affected by disk surface condition and disc format initialization process.
- DVD-R/RW, DVD+R/RW, CD and CD-R/RW discs may not operate perfectly on unit due to disc imperfections.
- DVD-R/RW, DVD+R/RW, CD and CD-R/RW disc performance may suffer if a disc exhibits excessive wear, dirt and scratching
- ATRAC3 is an efficient compression codec for digital music files, allowing files to take up just 1/10 their uncompressed size without degrading audio quality.

- Playback of song data is only possible on Magic Gate-compatible memory stick devices.
- Memory Sticks up to 128MB can be used. Initialization must be executed with Windows 2000 or later.
- ECLIPSE is not responsible for any data loss on a Memory Stick or HDD due to unit failure or malfunction.
- Recorded using ATRAC3 compression, an effective compression codec with minimal negative effect on sound quality.
- Song storage can be less than the representative number of song files depending on each song's bit rate and sampling frequency.

Operation notes

- DVD-Video compatible units are only compatible with NTSC standards and Region-1 DVD-Video discs.
- DVD-Video is disabled when the vehicle is in motion. Inserting a DVD-Video will only allow the audio to be heard.
- The Global Positioning System or GPS was developed in the United States. It is a system that pinpoints a current position making use precisely of radio waves transmitted to earth from 3 or 4 GPS satellites.
- GPS data can sometimes be unavailable due to circumstances such as:
 - Interrupted GPS satellite radio waves because of geographical interference factors such as buildings, tunnels, elevated roads and similar conditions.
 - Unsatisfactory reception due to objects being on or in the near vicinity of the GPS antenna.
 - Interrupted transmission service may sometimes result from periodic maintenance or upgrades being performed by the US-based GPS tracking control system.
 - Transmission can be interrupted or degraded when a digital cellular operating on a 1.5GHz frequency rate is being used in the vicinity of the GPS-enabled unit.

AVN-specific

- AVN7000 map data compiled as of October 2004.
- Do not follow a navigation route if it could place you in an illegal, unsafe, or dangerous situation.
- Navigation controls cannot be operated in a moving vehicle.
- Please do keep in mind however that since emergency service providers sometimes change locations and services, a phone call should be made first to verify current availability before proceeding to the destination.

FUJITSU TEN LIMITED

Contact: FUJITSU TEN CORP. OF AMERICA
19600 So. Vermont Avenue, Torrance, CA 90502
Call: 1-800-55-ECLIPSE (Dealer Locator)
1-800-233-2216 (Information)

www.eclipse-web.com