2005 CATALOG (FALL)





2005 Fall Mobile Entertainment Catalog





# Music Driving On

To make driving a better and more enjoyable experience. That's always been ECLIPSE's mission since we started crafting mobile electronics over half a century ago. We focus on creating products that communicate the passion and emotion in music. Today ECLIPSE also manufactures in-car visual entertainment along with multichannel sound to create extraordinary in-car theater products. And combined with technologies such as navigation and internet-based system customization, the latest generation of products undeniably enhance the total driving experience.

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# 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 highspeed graphics processing. The optional DCU105 5.1 ch. 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.



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

ELLIPSE

Mard

LESE CONSTRUCTION

(

ALIFORNIA

OFFE Map View Route

2001

ESN WMA M3 E CONTACT C



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

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

- . . . . . .
- Multiple search modesSplit 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.

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

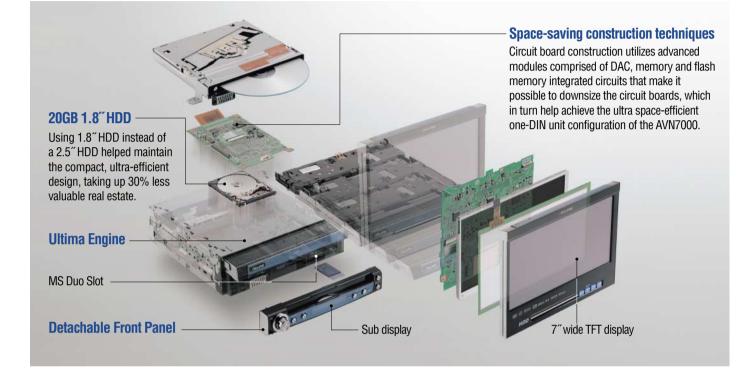
#### HD Radio-ready

# 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 **5.1ch. 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.



#### **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.



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.



## **Ultima Engine**

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



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

Over 32,000 map colors



## Antialiasing

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



7

# Navigation



#### Address search

#### An address is all that is needed.



Input a street name and number will initiate a search.

#### **City search**

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

	Last 5 Cities
Search Area	TORRANCE, CA
Input City Name	LOS ANGELES, CA
Nearest 5 Cities	LAKEWOOD, CA
Any City	SANTA MONICA, CA
	LONG BEACH, CA

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.

#### **POI Name**

#### Convenient presets for general inquiries save time.

🏦 POI Name	•
famy STATUE OF LB	8 7
	9000

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

#### Memory Points

#### Presets for instant accessing a location.

Sort	Nemory Points	
	MATIONAL ZOOLOGICAL PAR	ĸ
	d CORCORAN GALLERY OF ART	
	🗊 GUGGENHEIM MUSEUM SOHO	
	MADISON SQUARE GARDEN	
E	NEW JERSEY STATE AQUARIU	м

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

#### **POI Category**

#### Making it simple to find locations.

📑 POI Categor H 🛯 🖬 📽 🛣	у 🗈
11 Restaurants	🖉 Leisure
🛐 Shopping	🛛 🐻 Community
🚨 Automobile	Travel
💐 Hotels	📔 Other
List All Categories	List

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

#### **Previous Points**

#### Where the car has been.

Sor	Previous Points	5
	1 NATIONAL ZOOLOGICAL PARK	
	2 TIMES SQUARE	
	3 METROPOLITAN OPERA HOUSE	
	4 CENTRAL PARK	
	Previous Start Point	

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

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

#### 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.

#### **Phone Number**

#### Alternately, a telephone number will result in a search.

Input phon	e numiter		1.1
	2 ABC	3 DEF	+
4 GHI	5 JKL	6 MNO	
7 PQRS	8 TUV	9 WXYZ	
1			

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**

📔 😁 Allow Freeway	🚺 🎥 Allow Toll Road
Allow Time Restricted Road	Allow Season Restricted Road
Allow Ferry	

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



#### **Enroute stopping points**

Choose when and where to take breaks.



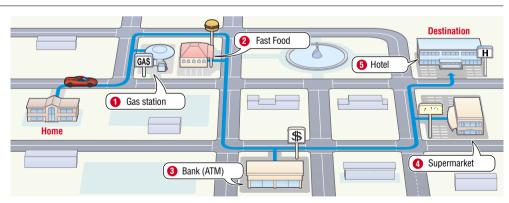
Before the final destination, any 5 locations can be programmed into the route such as a supermarket, gas station, and ATM.

#### Detours





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.



# area to avoid

#### **Route preview**



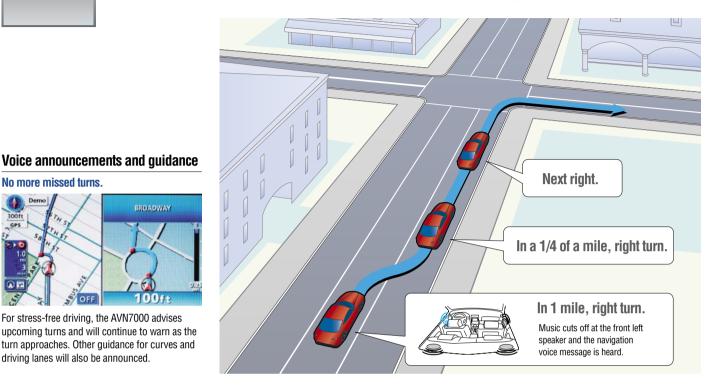
Any selected route can be conveniently previewed in its entirety to get familiarized with it.

# Navigation

#### Assistance

No more missed turns.

# Comprehensive help features make driving enjoyable.



OF

For stress-free driving, the AVN7000 advises

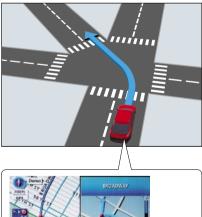
BROADWAY

000

Display zooms up just when needed.

Intersection zooming

driving lanes will also be announced.

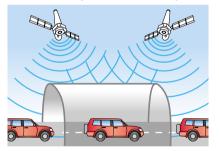




When approaching an intersection where a turn is required, the display automatically splits into two screens to show a more close-up view with details such as landmarks.

#### Map and positional updating

Constant tracking maintains accurate position.



The AVN7000 constantly tracks the car even where it cannot receive satellite signals. A gvro 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 feaiures

# 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.



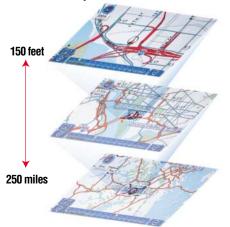
# Driving distance and arrival time displays

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

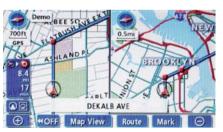


#### Versatile zooming

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



#### 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.

#### 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.

#### **Time zones**



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

#### **Mapping coverage**



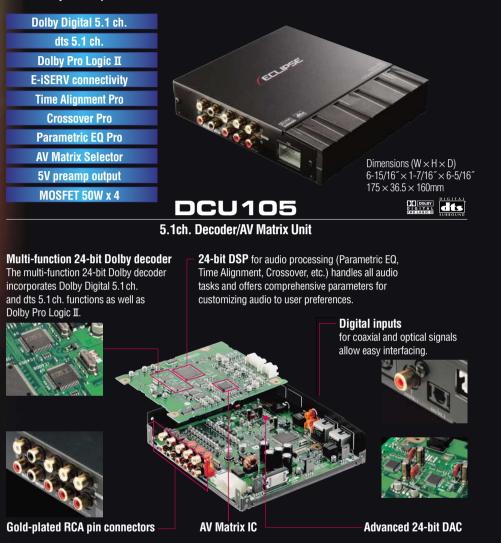
Navigation database now includes Hawaii and Canada (partial).

# Transport yourself into a theater environment.



# **DCU105 Audio Video Matrix**

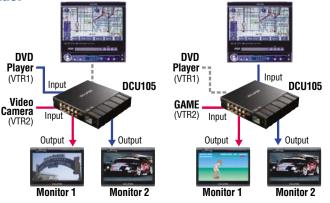
ECLIPSE designed the powerful Audio Video Matrix unit that can be used with various ECLIPSE products. Because it is a dedicated unit, the addition of the DCU105 elevates the performance of unit it is connected to significantly for audio as well as video. It offers system control and response that would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



#### 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.





#### High-end performance comparable to dedicated components.

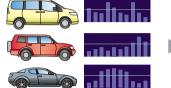
#### AVN7000 + DCU105—Precision tonal contouring for accurate sound.

#### **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.

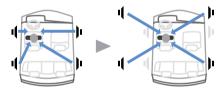


To suit preferences and music genres, up to five sets of user-configured PEQ settings can be preset and stored in memory for instant recall.

# AVN7000 + 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.



Midtow 0.5m 0.5m 0.5m 0.5m 0.5m 0.5m Complex to perform manually, optimal delay settings can be adjusted automatically for the unique percentage

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

#### **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

#### **Time Alignment**

CAR TYPE	COMPACE	SEDAN	WAGO
	MINIVAN	SUV	SMALL
TWEETER	NONE	DASH	DOOR
REAR SPEAKER	DOOF	3 0	THERS

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.

#### Enables optimal listening. ()) POSITION

#### 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.



Mid

Integrating the sound from different speakers

into an organic, whole sound that's more

natural and lifelike.

Hiah

N-OVER	VOL 40 BACK		
PHASE NORMAL CREVERSE			
LEVEL	SLOPE 24 dB/oct		
+3	FRONT HIE REAR		
FREQUENCY	FRONT MID CENTER		
2.5kHz	FRONT MID-L WOOFER		

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

# 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.

#### 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.

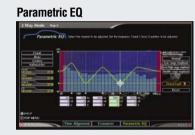


# E-iSERV (AVN7000 + DCU105)



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.

#### E-iSERV



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

Pink noise is fed into the system and the system's

response is downloaded to a Memory Stick Duo.

test microphone measures the response. The



Crossover



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

#### **Time Alignment**

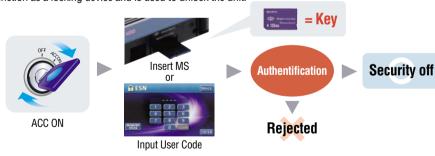


E-iSERV makes it possible to achieve that same high level of audio customization for Time Alignment and Crossover settings. Together, the E-iSERV-optimized settings allow a user to enjoy a customized overall response.

# **Twin Security System**

## ESN

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**



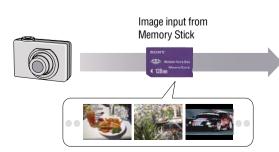
The front panel detaches and is compact enough to be very portable, allowing users another level of security and deterrence.

## **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 guality 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-readv**

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 ( $W \times H \times D$ )

5-15/16" × 1-3/16" × 4-3/16" 150 × 30 × 105.2mm

## More convenience at hand.



**RMC105** Wireless Remote

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





#### **CD** Changer-readv

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.

#### Get the most from terrestrial broadcasting.



Dimensions (W  $\times$  H  $\times$  D) 6-15/16" × 1-7/16" × 6-5/16"  $175 \times 36.5 \times 160$  mm

#### Take the hassle out of backing up.



SIRIUS

SIR-ECL1

ECLIPSE COMPATIBLE

Dimensions ( $W \times H \times D$ )

 $125 \times 35 \times 105$  mm

4-15/16" × 1-7/16" × 4-3/16"



#### Rear view camera-readv

The BEC104 optional rear camera can be connected to the AVN units to facilitate parking.

#### Enjoy the immense content satellite radio provides.





#### Features List

Media		
HDD	1.8″ 20GB	
DVD	0	
CD	O*1	
Memory Stick Duo	O*2	
Navigation		
Navi Device		
HDD Navigation	0	
Ultima Engine	0	
Displaying		
Display	7″EGA	
Map colors	32,768 colors	
Split screen	0	
Street name	0	
Point-of-Interest (POI)	3,999,442 points	
Landmark	22,767 points	
Operation		
Touch panel control	0	
Searching		
Address search	0	
POI Name	0	
POI Category	0	
Emergency search	Hospital/Police	
Memory search	100 points	
Previous search	100 points	
Map search	0	
Intersection search	0	
Freeway search (ENTER/EXIT)	0	
Coordinates search	0	
Telephone number search	0	
Home search	0	
Quick access point search	5 points	
Routing		
3 routes information	0	
Detours	10 areas	
Enroute stopping points	5 points	
Route preview	0	
Assistance		
Voice announcement	English/French	
Voice announce switch L/R	0	
Voice announce volume control	8 steps	
Intersection zooming	0	
Freeway guidance	0	
Auto rerouting	0	
Estimated arrival time	0	
Entertainment		
Preset wallpaper (still images/moving images)	5 patterns/5 patterns	
Pic-CLIP	100 images <sup>*3</sup>	
Welcome screen	0	
Security		
ECLIPSE Security Network	0	
Detachable front panel	0	
Other		
Select User	3 persons	

AV17000 only         DCU105 connected           DVD         Front-1 way system         Front-3 way system           DVD-R/RW, DVD-R/RW'4         ○ (Single/Dual Layer)         ○           Dolby Digital 5.1 ch.         —         ○           dits 5.1 ch.         —         ○           Dolby Pro Logic II         —         ○           CD         ○         ○           MWA         ○         ○           MWA         ○         ○           MWA         ○         ○           MWB         ○         ○           Time Alignment         Cartype: 6types. Speaker position: Rear SP         Front (L/R), Rear (L/R), Center, Subwoofer         F-Hit (L/R), F-Mid (L/R), (HFFL, P), F-Mid (HFPL/F)           Imathibar         Front/Parametrise         Parametrise         Parametrise			Deutos	connected
DVD     OVD     O(Single/Dual Layer)       DVD-R/RW, DVD-R/RW '4     ○ (Single/Dual Layer)       Dolby Digital 5.1 ch.     —		AVN7000 only		
DVD-Video       ○ (Single/Dual Layer)         DVD-FRW, DVD-FRW ''4       ○ (Single/Dual Layer)         Dolby Digital 5.1 ch.          dts 5.1 ch.          Dolby Drot Logic II          CD       ○         CD       ○         CD       ○         CD       ○         CD       ○         MP3       ○         WMA       ○         MS       AttrAC3         AttrAC3       ○ (Magic Gate Memory Stick Duo)         Audio function       Car type: 6 types, Speaker position: Tweeter         Time Alignment       Car type: 6 types, Speaker position: Tweeter         Rear SP       Front (L/R), Rear (L/R), Center, Subwoofer         Crossover       C (HPF)/CR (HPF)/         Parametric EQ       7 bands         Crossover       F (HPF)/R (HPF)/         WIti-Harmonizer       MP3/WMA/ATRAC3         Listening Position selector       FR, FL, F, R, OF         Non Fader Level/Phase control       ○         Woofer output       Stereo/Mono         E-ISERV Connectivity       —         Audio device       ○         MDSFL amplifier       SOW × 4         Advanced 24-Bit Δ∑ D			Front- I way system	Front-5 way system
DVD-R/RW, VDD-R/RW <sup>-4</sup> ○ (Single/Dual Layer)           Dolby Digital 5.1 ch.         —         ○           Dolby Pro Logic II         —         ○           Dolby Pro Logic II         —         ○           CO         ○         ○           CD         ○         ○           CD - RW         ○         ○           MP3         ○         ○           WMA         ○         ○           MS         ○         ○           Audio function         ○         ○           Time Alignment         Car type: 6 types, Speaker position: Tweeler Rear SP         Front (L/R), Rear (L/R), Center, Subwoofer           Parametric EQ         7 bands         F/R/C: independent 5 bands, SW: 1 band         Frort (L/PF)/R (HPF)/F CH/PF)/R, HPF)/R, CHPF/P, R/HPF), SW (LPF)           Multi-Harmonizer         MP3/WMA/ATRAC3         Stereo/Mono         E-StERV Connectivity         —         Audio customize           Audia device         WOSFET amplifier         SOW × 4         Addanced 24-Bit Δ∑ DAC         ○         ○           Francet Level/Phase control         ○         ○         ○         ○         ○           Mosfer amplifier         SOW × 4         Addanced 24-Bit Δ∑ DAC         ○         ○         ○<				
Dolby Digital 5.1 ch.          O           dts 5.1 ch.          O           Dolby Pro Logic II          O           CD          O           MTAC          O           MITA         O         Madio function           Time Alignment         Car type: 6 types, Tweeter         Front (L/R), Rear (L/R), Center, Subwoofer           Parametric EQ         7 bands         F/R/C: Independent 5 bands, SW: 1 band           Crossover          Arti(HPF), F-Mid (HPF)/PR           Multi-Harmonizer         MP3/WMA/ATRAC3         Field (HPF)/PR           No Fader Level/Phase centrol         O            Wooler output         Stereo/Mono         E     <				
dts 5.1 ch.         —         ○           Dolty Pro Logic II         —         ○           C0         ○         ○           CD         ○         ○           CD         ○         ○           CD         ○         ○           WMA         ○         ○           MS         ○         ✓           Atdio function         ○         ✓           Time Alignment         Car type: 6 types, Speaker position: Tweeler Rear SP         Front (U/R), Rear (U/R), Center, Subwoofer           Parametric EQ         7 bands         Fr/R/C: independent 5 bands, SW: 1 band           Crossover         ○         Fr/R/C: (HPF)/R         F-Hi (U/R), F-Mid (U/R), Center, Subwoofer           Muti-Harmonizer         MP3/WMA/ATRAC3         E-Hi (U/F), F-Mid (U/F), C (HFF)/SW (U/F)         F-Hi (U/F), F-Mid (U/F), C (HFF)/SW (U/F)           Muti-Harmonizer         MP3/WMA/ATRAC3         External Position selector         F-Hi (U/F), S-Mid (U/F), C (HFF)/S, F-Mid (U/F), C (HFF)/SW (U/F)           Muti-Harmonizer         Madio extered         ○         O         External Value (U/F), C (HFF)/SW (U/F)           Muti-Harmonizer         Muti-Stered/Madio extered         <				<u>^</u>
Dolby Pro Logic II     —     O       CD     O       CD     O       CD-R/RW     O       MY3     O       MYA     O       MS     O       ATTAC3     O (Magic Gate Memory Stick Duo)       Audio function     O       Time Alignment     Car type: 6 types, Speaker position: Tweeter Rear SP       Parametric EQ     7 bands       F/R/C: Independent 5 bands, SW: 1 band       Crossover     F (HPF)/R (HPF)/ C (HPF)/SW (LPF)       Multi-Harmonizer     MP3/WMA/ATRAC3       Istening Position selector     FR, FL, FR, OFF       Mon Fader Level/Phase control     O       Woofer output     Stereo/Mono       E-ISERV Connectivity     —       MoSFET amplifier     SOW × 4       MQSFET amplifier     SOW × 4       MV Output     1 pair       O     Pairs       Digital Input (Coaxial)     —       O     O       Digital Input (Coaxial)     —       O     SIRIUS radio-ready       O     Sisten-ready       O     O       Birdio-ready     O       Digital Input (Optical)     —       HD radio-ready     O       Digital Input (Optical)     —       HD radio-ready <th></th> <th></th> <th></th> <th></th>				
CD       ○         CD-R/RW       ○         MP3       ○         WMA       ○         MS       ○         AtfRAC3       ○ (Magic Gate Memory Stick Duo)         Audio function       ○         Time Alignment       Car type: 6 types, Speaker position: Tweeter       Front (L/R), Rear (L/R), Center, Subwoofer       F-HI (L/R), F-Mid (L/R), F-ML (L/R), F-Mid (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-Mid (HPF/LPF),				
CD       ○         CD-RWW       ○         MP3       ○         WMA       ○         MR3       ○         MWA       ○         MR3       ○         MWA       ○         MR3       ○         MR4       ○         MR3       ○         MR3       ○         MM4       ○         MR3       ○         ATRAC3       ○ (Magic Gate Memory Stick Duo)         Audio function       Car type: 6 types, Speaker position: Iweeter       Front (L/R), Rear (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-Mid (HPF.LPF), R (HPF).PSW (LPF)         Multi-Harmonizer       MP3/WMA/ATRAC3       Istening Position selector       FR, FL, F, R, OFF         Mon acter Level/Phase control       ○       ○       O         Woofer output       Stereo/Mono       E-ISERV Connectivity       —       Audio customize         Audio device        ○       ○       O       O         MOSFET amplifier       50W × 4       Advaneed 24-Bit Δ∑ DAC       ○       ○<				0
CD-R/RW       O         MP3       O         WMA       O         MS       O         ArtRAC3       O (Magic Gate Memory Stick Duo)         Audio function       Front (L/R), Rear (L/R), Speaker position: Tweeter       Front (L/R), Rear (L/R), Center, Subwoofer       F-Hi (L/R), F-Mid (L/R), F-ML (L/R), Rear (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-Mid (HPF/LPF)         Mutti-Harmonizer       MP3/WMA/ATRAC3         Listening Position selector       FR, FL, F, R, OFF         No fader Level/Phase control       O         Woofer output       Stereo/Mono         E-ISERV Connectivity       —         Advanced 24-Bit Δ2 DAC       O         Pre Amp Output       F/R/NF, 2V       Front/Rear/Center/Subwoofer, 5V         AV Unput       1 pair       2 pairs         Digital Input (Coaxial)       —       O         Bits andio-ready       O       O         SIRUS radio-ready       <				
MP3       O         WMA       O         MS       ATRAC3       O (Magic Gate Memory Stick Duo)         Audio function       Car type: 6 types, Speaker position: Tweeter Rear SP       Front (L/R), Rear (L/R), F-Mil (L/R), F-Mil (L/R), F-Mil (L/R), Rear (L/R), Center, Subwoofer         Parametric EQ       7 bands       F/R/C: independent 5 bands, SW: 1 band         Crossover       O       F (HPF)/R (HPF)/ C (HPF)/SW (LPF)       F-Hi (HPF), F-Mil (HPF/LPF, R(HPF), SW (LPF))         Mutit-Harmonizer       MP3/WMA/ATRAC3       FH (HPF), F-Mil (HPF/LPF, R(HPF), SW (LPF))         Mutit-Harmonizer       MP3/WMA/ATRAC3         Listening Position selector       FR, R_L, F, R, OFF         Non Fader Level/Phase control       O         Wolfer output       Stereo/Mono         E-ISERV Connectivity       —         Audio device       O         MOSFET amplifier       50W × 4         Advanced 24-Bit Δ∑ DAC       O         Pre Amp Output       1 pair       2 pairs         AV Input       1 pair       2 pairs         Digital Input (Coaxial)       —       O         Digital Input (Optical)       —       O         MM       AM: 6       O         OPTIONAL       O       O	*-			
WMA       O         MS       O (Magic Gate Memory Stick Duo)         AtTRAC3       O (Magic Gate Memory Stick Duo)         Audio function       Front (L/R), Rear (L/R), Center, Subwoofer         Time Alignment       Car type: 6 types, Speaker position: Tweeter Rear SP         Parametric EQ       7 bands         Crossover       F/R/C: independent 5 bands, SW: 1 band         Crossover       F (HPF)/R (HPF)/         Multi-Harmonizer       MP3/WMA/ATRAC3         Listening Position selector       FR, R., R, OFF         Non Fader Level/Phase control       O         Woofer output       Stereo/Mono         E-isERV Connectivity       —         Addio device       O         MOSFET amplifier       50W × 4         Advanced 24-Bit Δ_S DAC       O         Pre Amp Output       F/R/NF, 2V         Front/Rear/Center/Subwoofer, 5V       AV Output         AV Input       1 pair       2 pairs         Digital Input (Coaxial)       —       O         Digital Input (Coaxial)       O       O      C			-	
MS       O (Magic Gate Memory Stick Duo)         Audio function       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       O       F (HPF)/R (HPF)/ C (HPF)/SW (LPF)       F-Hi (HPF), F-Mid (HPF)/EDF, F-ML (HPF)/ R (HPF), SW (LPF)         Multi-Harmonizer       MP3/WMA/ATRAC3       FR (HPF)/R (HPF)/ R (HPF), SW (LPF)       FH (HPF), SW (LPF)         Multi-Harmonizer       MP3/WMA/ATRAC3       O       O         More routput       Stereo/Mono       FR       FH (HPF), SW (LPF)         More routput       Stereo/Mono       E-ISERV Connectivity       —       Audio device         MOSFET amplifier       50W × 4       Advanced 24-Bit Δ2 DAC       O       O         Pre Amp Output       F/R/NF, 2V       Front/Rear/Center/Subwoofer, 5V       AV         AV Input       1 pair       2 pairs       O         Digital Input (Coaxial)       —       O       O         Priodoure to type       O       O       O       O         BAIL Output (Coaxial)       —       O       O       O         Digital Input (Coaxial)       —       O <th>-</th> <th></th> <th></th> <th></th>	-			
ATRAC3       O (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), Genter, Subwoofer         Parametric EQ       7 bands       F/R/C: independent 5 bands, SW: 1 band         Crossover       O       F (HPF)/R (HPF)/ C (HPF)/SW (LPF)       F-Hi (HPF), F-Mid (HPF/LPF, R(HPF), SW (LPF)         Multi-Harmonizer       MP3/WMA/ATRAC3       F.Hi (HPF), F-Mid (HPF/LPF, R(HPF), SW (LPF)       F.Hi (HPF), F-Mid (HPF/LPF, R(HPF), SW (LPF)         Multi-Harmonizer       MP3/WMA/ATRAC3       Stereo/Mono       E-SERV Connectivity       -         Advise de 24-Bit ΔS DAC       O       O       Woofer output       Stereo/Mono         E-ISERV Connectivity       -       Audio customize       -       -         Advanced 24-Bit ΔS DAC       O       O       -       -         Pre Amp Output       1 pair       2 pairs       -       -         Digital louput (Coaxial)       -       O       -       -         Digital louput (Coaxial)       -       O       -       -       -       -         Digital louput (Coaxial)       -       O       O       -       -       -       -       -       -			0	
Audio function       Car type: 6 types, Speaker operation: 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       O       F (HPF)/R (HPF)/         O       F (HPF)/R (HPF)/       F-Hi (HPF), F-Mid (HPF)/EP), F-Mid (HPF)/EP), F-Mid (HPF)/SW (LPF)         Multi-Harmonizer       MP3/WMA/ATRAC3         Listening Position selector       FR, FL, F, R, OFF         Non Fader Level/Phase control       O         Woofer output       Stereo/Mono         E-ISERV Connectivity       —         Audio device       MOSFET amplifier         Stereo/Mono       Stereo/Mono         F/R/NF, 2V       Front/Rear/Center/Subwoofer, 5V         Av Output       1 pair       2 pairs         Digital Output (Coaxial)       —       O         Digital Input (Coaxial)       —       O         Digital Input (Optical)       —       O         FM       FM1: 6, FM2: 6, FM3: 6       AM         AMALOGUE RADIO TUNER       O       O         FM       FM1: 6, FM2: 6, FM3: 6       AM         AMAL GOLIPER-ready       O       O         SIRUS radio-rea	-	-		<u> </u>
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-Mid (HPF/LPF), F-Mid (HPF/LPF), F-Mid (HPF/LPF), F-Mid (HPF/LPF), F-Mid (HPF/LPF), F-Mid (HPF/LPF), F-Mid (HPF/LPF), F-Mid (HPF/LPF), F-Mid (HPF/LPF), F-Mid (HPF/LPF), F-Mid (HPF/LPF), F-Mid (HPF/LPF), F-Mid (HPF/LPF), F-Mid (HPF/LPF), F-Hid (HPF/LPF), F		(	) (Magic Gate Memory Stick	(Duo)
Speaker position: Tweeter Rear SP     Center, Subwoofer     F-ML (LR), R (LR), Center, Subwoofer       Parametric EQ     7 bands     F/R/C: independent 5 bands, SW: 1 band       Crossover     O     F (HPF)/R (HPF)/ C (HPF)/SW (LPF)     F-Hi (HPF), F-Mid (HPF,LPF), F-Mid (HPF,LPF), 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 device     ○       MOSFET amplifier     50W × 4       Advanced 24-Bit Δ∑ DAC     ○       Pre Amp Output     1 pair     2 pairs       AV Input     1 pair     2 pairs       Digital Input (Coaxial)     —     ○       Digital Input (Optical)     —     ○       ANALOGUE RADIO TUNER     FM     AN: 6       POTIONAL     O     ○       HD radio-ready     ○     ○       SIRIUS radio-ready     ○     ○       Rear Monitor Input     1     2				1
Parametric EQ     7 bands     F/R/C: independent 5 bands, SW: 1 band       Crossover     F (HPF)/ (HPF)/     F+Hi (HPF), F-Mid (HPF)/P, F-Mid (HPF)/PF, F-Mid (HPF)/PF, F-Mid (HPF)/PF, F-Mid (HPF)/PF, F-Mid (HPF)/PF, F-Mid (HPF), SW (LPF)       Multi-Harmonizer     MP3/WMA/ATRAC3       Listening Position selector     FR, FL, F, R, OFF       Non Fader Level/Phase control     O       Woofer output     Stereo/Mono       E-ISERV Connectivity     —       Addia device     Stereo/Mono       F/R/NF, 2V     Front/Rear/Center/Subwoofer, 5V       AV Output     1 pair     2 pairs       Digital Input (Coaxial)     —     O       Digital Input (Coaxial)     —     O       FM     FM1: 6, FM2: 6, FM3: 6       AM     AM: 6       OPTIONAL     O       HD radio-ready     Q       ISIRUS radio-ready     O       Truer ready     O       Rear Monitor Input     1     2	Time Alignment			
Rear SP         Center, Subwoother           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-Mid (HPF/LPF) R (HPF), SW (LPF)           Multi-Harmonizer         MP3/WIMA/ATRAC3           Listening Position selector         FR, FL, F, R, OFF           Non Fader Level/Phase control         ○           Woofer output         Stereo/Mono           E-ISERV Connectivity         —           Addio device         O           MOSFET amplifier         50W × 4           Advanced 24-Bit Δ∑ DAC         ○           Pre Amp Output         F/R/NF, 2V           Pre Amp Output         1 pair         2 pairs           Digital Input (Coaxial)         —         ○           Digital Input (Coaxial)         —         ○           MALOGUE RADIO TUNER         FM1: 6, FM2: 6, FM3: 6         AM           FM         AM1: 6         O           OPTIONAL         ○         ○         ○           SIRIUS radio-ready         ○         ○         ○           Changer-ready         ○         ○         ○           Rear Monitor Input         1         2         <			Center, Subwoofer	
Parametric EQ       7 bands       F/R/C: independent 5 bands, SW: 1 band         Crossover				Center, Subwoofer
O       C (HPF)/SW (LPF)       (HPF/LPF), FML (HPF/LPF, R (HPF), SW (LPF))         Multi-Harmonizer       MP3/WMA/ATRAC3         Listening Position selector       FR, FL, F, R, OFF         Non Fader Level/Phase control       O         Woofer output       Stereo/Mono         E-ISERV Connectivity       —         Audio device       Audio customize         MOSFET amplifier       50W × 4         Advanced 24-Bit Δ∑ DAC       O         Pre Amp Output       F/R/NF, 2V         Pre Amp Output       1 pair         2 pairs       O         Digital loutput (Coaxial)       —         Digital Input (Coaxial)       —         MALOGUE RADIO TUNER       —         FM       FM1: 6, FM2: 6, FM3: 6         AM       AM1: 6         OPTIONAL       O         HD radio-ready       O         SIRIUS radio-ready       O         CD Changer-ready       O         Rear Niew Camera-ready       O         Rear Niew Camera-ready       O         Rear Niew Camera-ready       O         Rear Niew Input       1       2	Parametric EQ		F/R/C: independent	5 bands, SW: 1 band
O       C (HPF)/SW (LPF)       (HPF)/LPF)       R(HPF)/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 Δ∑ DAC       ○         Pre Amp Output       F/R/NF, 2V       Front/Rear/Center/Subwoofer, 5V         AV Unput       1 pair       2 pairs         AV Unput       1 pair       2 pairs         Digital lnput (Coaxial)       ○       ○         Digital Input (Optical)       —       ○         ANALOGUE RADIO TUNER       FM       FM1: 6, FM2: 6, FM3: 6         FM       FM1: 6, FM2: 6, FM3: 6       ○         SIRIUS radio-ready       ○       ○         CD Changer-ready       ○       ○         Rear View Camera-ready       ○       ○         Rear Monitor Input       1       2         External device Input       1       2	Crossover		E (HPE)/B (HPE)/	F-Hi (HPF) F-Mid
Image: Control (Citry Citry C		0		
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 Δ∑ DAC       ○         Pre Amp Output       F/R/NF, 2V       Front/Rear/Center/Subwoofer, 5V         AV Output       1 pair       2 pairs         Digital Output (Coaxial)       ○       ○         Digital Input (Coaxial)       —       ○         MANLOGUE RADIO TUNER       FM1: 6, FM2: 6, FM3: 6       AM         FM       AMI (6       ○         OPTIONAL       ○       ○       ○         HD radio-ready       ○       ○       ○         SIRIUS radio-ready       ○       ○       ○         SIRUS radio-ready       ○       ○       ○         Rear Nenitor Input       1       2       ○         Rear Monitor Input       1       2       ○		Ú	0 (IIFI)/3W (LFI)	
Non Fader Level/Phase control       O         Woofer output       Stereo/Mono         E-ISERV Connectivity       —       Audio customize         Audio device       —       Audio customize         MOSFET amplifier       50W × 4         Advanced 24-Bit Δ∑ DAC	Multi-Harmonizer			
Non Fader Level/Phase control       O         Woofer output       Stereo/Mono         E-ISERV Connectivity       —       Audio customize         Audio device       —       Audio customize         MOSFET amplifier       50W × 4         Advanced 24-Bit Δ∑ DAC	Listening Position selector			
Woofer output     Stereo/Mono       E-iSERV Connectivity     —     Audio customize       Aduio device     50W × 4       MOSFET amplifier     50W × 4       Advanced 24-Bit Δ∑ 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 (Optical)     —     ○       ANALOGUE RADIO TUNER     FM1: 6, FM2: 6, FM3: 6       FM     FM1: 6, FM2: 6, FM3: 6       AM     ○       OPTIONAL     ○       HD radio-ready     ○       CD Changer-ready     ○       Rear View Camera-ready     ○       TV-Tuner ready     ○       Rear Monitor Input     1     2	V			
E-iSERV Connectivity     —     Audio customize       Audio device     50W × 4       MOSFET amplifier     50W × 4       Advanced 24-Bit Δ∑ 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 (Optical)     —     ○       ANALOGUE RADIO TUNER     FM1: 6, FM2: 6, FM3: 6       FM     FM1: 6, FM2: 6, FM3: 6       AM     ○       OPTIONAL     ○       HD radio-ready     ○       CD Changer-ready     ○       Rear View Camera-ready     ○       TV-Tuner ready     ○       Rear Monitor Input     1     2	Woofer output		<u> </u>	
Audio device       50W × 4         MOSFET amplifier       50W × 4         Advanced 24-Bit Δ∑ 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)       ○       ○         ANALOGUE RADIO TUNER       ●       ○         FM       FM1: 6, FM2: 6, FM3: 6       AM         AM       △       AM1: 6         OPTIONAL       ○       ○         HD radio-ready       ○       ○         CD Changer-ready       ○       ○         Rear View Camera-ready       ○       ○         TV-Tuner ready       ○       ○         Rear Monitor Input       1       2		_	Audio c	ustomize
MOSFET amplifier $50W \times 4$ Advanced 24-Bit $\Delta \Sigma$ DAC $\bigcirc$ Pre Amp OutputF/R/NF, 2VFront/Rear/Center/Subwoofer, 5VAV Output1 pair2 pairsAV Input1 pair2 pairsDigital Output (Coaxial) $\bigcirc$ Digital Input (Coaxial) $\bigcirc$ Digital Input (Coaxial) $\bigcirc$ ANLOGUE RADIO TUNERFM1: 6, FM2: 6, FM3: 6FMFM1: 6, FM2: 6, FM3: 6AMAM: 6OPTIONAL $\bigcirc$ HD radio-ready $\bigcirc$ SIRIUS radio-ready $\bigcirc$ TV-Tuner ready $\bigcirc$ TV-Tuner ready $\bigcirc$ Rear New Camera-ready $\bigcirc$ Rear Monitor Input122	Audio device			
Advanced 24-Bit Δ∑ 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 (Coaxial)       ─       ○         ANALOGUE RADIO TUNER       FM1: 6, FM2: 6, FM3: 6       AM         FM       FM1: 6, FM2: 6, FM3: 6       AM: 6         OPTIONAL       ○       ○       ○         HD radio-ready       ○       ○       ○         SIRIUS radio-ready       ○       ○       ○         TV-Tuner ready       ○       ○       ○         Rear Monitor Input       1       2       ○         Rear Monitor Input       1       2       ○		50W × 4		
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)     -     O       Digital Input (Coaxial)     -     O       Digital Input (Coaxial)     -     O       ANALOGUE RADIO TUNER     -     O       FM     FM1: 6, FM2: 6, FM3: 6     AM.       AMM     -     AM.       OPTIONAL     O     O       BIRIUS radio-ready     O     O       CD Changer-ready     O     O       TV-Tuner ready     O     O       Rear View Camera-ready     O     O       Rear Monitor Input     1     2       External device Input     1     2			0	
AV Output     1 pair     2 pairs       AV Input     1 pair     2 pairs       Digital Output (Coaxial)     O       Digital Input (Coaxial)     O       Digital Input (Optical)     O       ANALOGUE RADIO TUNER     O       FM     FM1: 6, FM2: 6, FM3: 6       AM     AMI: 6       OPTIONAL     O       HD radio-ready     O       CD Changer-ready     O       TV-Tuner ready     O       TV-Tuner ready     O       Rear View Camera-ready     O       Tv-Tuner ready     O       Tuber Tube		F/R/NF. 2V	0	
AV Input     1 pair     2 pairs       Digital Output (Coaxial)     O     O       Digital Input (Coaxial)     O     O       Digital Input (Optical)     O     O       ANALOGUE RADIO TUNER     FM1: 6, FM2: 6, FM3: 6     AM       FM     FM1: 6, FM2: 6, FM3: 6     AM: 6       OPTIONAL     O     O       HD radio-ready     O     O       SIRIUS radio-ready     O     O       CD Changer-ready     Q     O       TV-Tuner ready     O     O       Rear View Camera-ready     O     O       Tv-Tuner ready     O     O       Rear Kiew Camera-ready     O     O       Texternal device Input     1     2		,		
Digital Output (Coaxial)     O       Digital Input (Coaxial)     —     O       Digital Input (Optical)     —     O       ANALOGUE RADIO TUNER     —     O       FM     FM1: 6, FM2: 6, FM3: 6       AM     AM1: 6       OPTIONAL     —       HD radio-ready     O       SIRIUS radio-ready     O       CD Changer-ready     2 (daisy chain)       Rear View Camera-ready     O       TV-Tuner ready     O       Rear Monitor Input     1     2       External device Input     1     2	· · · · · · · · · · · · · · · · · · ·			
Digital Input (Coaxial)     —     O       Digital Input (Optical)     —     O       ANALOGUE RADIO TUNER     —     O       FM     FM1: 6, FM2: 6, FM3: 6     AM       AM     AMC     AMC       OPTIONAL				
Digital Input (Optical)     —     O       ANALOGUE RADIO TUNER		_		
ANALOGUE RADIO TUNER FM FM FM1: 6, FM2: 6, FM3: 6 AM AM: 6 OPTIONAL HD radio-ready O SIRIUS radio-ready O CD Changer-ready 2 (daisy chain) Rear View Camera-ready O TV-Tuner ready O Rear Monitor Input 1 2 External device Input 1 2		_		
FM     FM1: 6, FM2: 6, FM3: 6       AM     AM: 6       OPTIONAL     O       HD radio-ready     O       SIRIUS radio-ready     O       CD Changer-ready     O       Rear View Camera-ready     O       TV-Tuner ready     O       Rear Monitor Input     1     2       External device Input     1     2				<u> </u>
AM     AM: 6       OPTIONAL     OPTIONAL       HD radio-ready     O       SIRIUS radio-ready     O       CD Changer-ready     2 (daisy chain)       Rear View Camera-ready     O       TV-Tuner ready     O       Rear Nonitor Input     1     2       External device Input     1     2			EM1: 6 EM2: 6 EM3: 6	
OPTIONAL     OPTIONAL       HD radio-ready     O       SIRIUS radio-ready     O       CD Changer-ready     2 (daisy chain)       Rear View Camera-ready     O       TV-Tuner ready     O       Rear Monitor Input     1     2       External device Input     1     2				
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			7.000	
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			0	
CD Changer-ready     2 (daisy chain)       Rear View Camera-ready     O       TV-Tuner ready     O       Rear Monitor Input     1     2       External device Input     1     2				
Rear View Camera-ready     O       TV-Tuner ready     O       Rear Monitor Input     1     2       External device Input     1     2		, in the second s		
TV-Tuner ready     O       Rear Monitor Input     1     2       External device Input     1     2				
Rear Monitor Input12External device Input12			_	
External device Input 1 2	·	1		
	•			
	*1 Ripping not available	1		

1 Ripping not available
 2 Memory Stick Duo is sold separately and compatible with 128MB or under.
 3 100 images can be stored, leach image should be below 2 MB in MS Duo. Only JPEG files are available
 4 Please refer to Note and Precautions.

#### **Specifications**

Specifications	* Meets CEA2006 guidelines
NAME	AVN7000
GENERAL	
Power output	$50W \times 4$ (MAX)
RMS power output*	$13W \times 4$ (1kHz, 1%THD 4 $\Omega$ )
Dimensions (W $\times$ H $\times$ 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	

# Double-DIN AVN

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

#### 5 PRE-OUT



#### ESN E5 6.5" Wide TFT Touch-Panel Display CD/DVD/MS Multi-Source Receiver with HDD Navigation

The AVN5495's large capacity 30GB HDD holds the navigation database as well as the Music Juke feature which automatically stores up to 3,000 tracks from CDs to create a music library. With the on-board HDD, the AVN5495 is able to manage navigation as well as provide DVD-Video or CD entertainment at the same time without any interruption.

#### Navigation

30GB HDD	
6 5" wide TET display with touc	h

6.5" wide TFT display with touch control

# Audio/Visual —

Auuio/ Visuai
CD/CD-R/RW, MP3
DVD-Video, DVD-R/RW and DVD+R/RW
Dual zone operation
MOSFET 50W x 4
Circle Surround II
3,000 track Music Juke
CDDR-onabled

- FM/AM tuner
- Advanced 24-bit  $\Delta\Sigma$  DAC

Multiple search modes

• Map scale from 150 feet to 250 miles

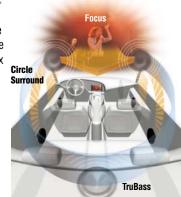
• Voice announcements and guidance

· Split screen displays

- High-performance DSP:
   5-mode soundfield control
   9-band EQ
- Listening position selector
- 5V preamp output
- CD Changer-ready (2 units)
- Memory Stick-ready
- Rear view camera-ready
  Video output for rear monitor
- E-LAN data link system
- MS ESN security

#### Circle Surround II (AVN5495) SRS ()\*

Circle Surround II is an ideal multi-feature audio enhancement technology for mobile environments. **Circle Surround** will upmix any program material to create surround sound on conventional 4-speaker systems. **Focus** raises the stereo soundfield and makes it sound as if the sound was being generated from in front of the listeners. **TruBass** allows small speakers to be perceived as putting out impressive low frequencies.



5 PRE-OUT



# AVN5435

#### ESN E5 6.5" Wide TFT Touch-Panel Display CD/DVD Multi-Source Receiver with DVD Navigation

Providing all the most in-demand AVN features in a twin CD and DVD deck mechanism configuration, the AVN5435 can navigate and entertain at the same time without interruption. The AVN5435 offers top-of-the-line AVN performance at an attractive price.

#### Navigation -

2 de	eck mechanisms	
6.5″ wide TF	T display with touch	control

- Multiple search modes
- Split screen displays
  - Map scale from 150 feet to 250 miles
  - Voice announcements and guidance

#### Audio/Visual

CD/CD-R/RW, MP3
DVD-Video, DVD-R/RW and DVD+R/RW
MOSFET 50W x 4
SIRIUS Satellite Radio-ready
HD Radio-ready

Music Juke (AVN5495)

inserted into the AVN5495 is

storage capacity is reached.

azing life

"th

Low

Don't make ne sac

Key of success

Having a 30GB HDD allows incorporating

Music Juke that automatically creates an

onboard music library of approximately

3,000 songs. Every song on every disc

automatically ripped until the maximum

13 5'17'

ANNE CHAT WE CHAT WE AND FUNC

- FM/AM tuner
- Advanced 24-bit  $\Delta \Sigma$  DAC
- High-performance DSP:
   5-mode soundfield control
- 9-band EQListening position selector
- 5V preamp output
- CD Changer-ready (2 units)
- Rear view camera-ready
- Video output for rear monitor
- E-LAN data link system
- ESN security

#### CDDB-enabled (AVN5495)



As Music Juke is Gracenote CDDBenabled.

each track of a CD that is being played is matched to the CDDB database to allow relevant track information to be displayed.

18

#### Options

#### HD Radio-ready AVN5435

AVN5435 will deliver all the potential of HD Radio-enhanced broadcasts simply by connecting the optional HDR105 HD Radio Tuner.





SIRIUS Satellite Radio-ready AvN5435 The AVN5435 is able to take advantage of all the benefits of satellite broadcasting. The optional ECLIPSE SIR-ECL1 satellite radio tuner can be easily connected for

enjoying this exciting new entertainment.



SIR-ECL1 ECLIPSE COMPATIBLE SIRIUS SATELLITE RADIO TUNER

#### **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.



#### Rear view camera-ready The BEC104 optional rear Rear View Camera

The BEC104 optional rear camera can be connected to the AVN units to facilitate parking.

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



10

Rear monitor-ready Allows rear passengers to enjoy movies.

	AVN5495	AVN5435
Audio		
CD	•	•
CD-R/RW	•	•
MP3	•	•
Output voltage and impedance	5V, 55Ω	5V, 55Ω
Amplification	•	•
Power Output (Max.)	50W×4	50W×4
Music Juke	3000 tracks w/CDDB	_
All digital circuitry	•	•
Advabced 24-bit $\Delta \Sigma$ DAC	•	•
Source Volume Control (SVC)	•	•
Circle Surround II	•	_
Tone controls	•	•
Graphic EQ	9 band	9 band
Soundfield Control	5 mode	5 mode
Preamp outputs	3 pairs (F, R, NF)	3 pairs (F, R, NF)
FM/AM	•	•
Visual		
DVD-Video	•	•
DVD-R/RW	•	•
Display	6.5″	6.5″
Aspect Ratio	4-types	4-types
Resolution	280.800 dots	280.800 dots
Video system	NTSC	NTSC
Others		
ESN	MS	CD
SIRIUS Radio-/HD Radio-ready	-	•
Rear View Camera-ready	BEC104	BEC104
CD Changer-ready	2 (daisy chain)	2 (daisy chain)

Specifications		* Meets CEA2006 guidelines
14.4V Power Supply	AVN5495	AVN5435
Max. Power Output	50W	/×4
RMS Power Output*	15W×4 (1k	Hz, 1%, 4Ω)
Display	6.5" wide (16:9)	, low-glare panel
Display Resolution	280,800 dots (	400 × 234 × 3)
Screen Aspect Ratio	4 types	
FM Frequency Range	87.75 — 107.9MHz (200kHz step)	
Usable Sensitivity	12dBf	
AM Frequency Range	530 — 1710kHz (10kHz step)	
Usable Sensitivity	22μV	
CD Frequency Response	20 — 20,000Hz, ±1dB	
Total Harmonic Distortion	0.01% (0dB, 1kHz)	
Graphic Equalizer	63Hz — 12kHz ±10dB	
Dimensions (W $\times$ H $\times$ D)	7"×4"×6-1/2" (180×100×165mm)	
Weight (approx.)	3.6kg 3.7kg	

#### Feature List

	AVN5495	AVN5435
Navigation	•	•
HDD	•	_
Database	Jun.04	-
Size	30GB	-
DVD	_	•
Database	_	Dec. 03
Size	_	8.5GB
Searching		
Address search	•	•
Map search	•	•
Emergency	•	•
Point-of-Interest (POI)	•	•
POI near search	•	_
Memory search	•	•
Previous search	•	•
Intersection search	•	•
Freeway search	•	•
Coordinates search	•	•
Home search	•	•
Telephone number search	•	_
Routing/Guidance		
3 routes	•	•
Must travel	•	•
Detour Input	•	•
Enroute stopping points	•	•
Route preview	•	•
Auto rerouting	•	•
Voice announcements	•	•
Freeway interchanges	•	_
Exit displays	•	_
Landmark/POI displays	•	•
Split screen function	•	•
Zoomina		•

# AVX Series

For the ultimate in mobile entertainment, the AVX Series offers various configurations and features to select from depending on user requirements. Each offers a brilliant combination of audio and visual technologies that demonstrate ECLIPSE's commitment to enjoyable driving.



## 

SRSCE () ESN WMA 163 🕮 🎇 DIDITAL TAS 🚓 H)Radio SIRIUS

CD/CD-R/RW, MP3, WMA
DVD-Video, DVD-R/RW and DVD+R/RW
Circle Surround II
Memory Stick Duo
MOSFET 50W x 4
5.1 ch. surround sound (with DCU105)
E-iSERV connectivity
TV Tuner-ready
SIRIUS Satellite Radio-ready

#### 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
- Picture lock
- DVD dual play
- Wallpaper
   Twin appuritue
- Twin security system

#### Designed to deliver the best from any entertainment medium.

The AVX5000 delivers all the features and functions that raise the quality of entertainment, whether music or visual. It makes generous use of audiophile grade circuits and components that make an audible difference in sound quality. Its already high level of performance goes up an entire evel when partnered with the optional DCU105 Audio Video Matrix that adds full surround sound features as well as providing versatile signal routing capabilities that make it easy to expand a system.

# Elegantly integrates into any car's cockpit design.

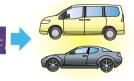
The design of the AVX5000 makes it complement any interior design. Its matte black finish along with translucent acrylic panel and silver design accents creates an understated, sophisticated look.

# NEW Area Shot

The Area Shot feature has been newly refined to offer more assistance for travel routes. Now map displays are in full-color and up to 5 POIs can be shown. Location displays can now conveniently be viewed with 3-step zoom in ability.

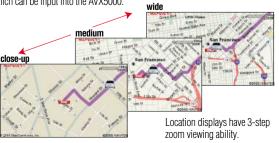






Routes can be set by accessing ECLIPSE's E-iSERV server. Map data is then downloaded onto a Memory Stick Duo which can be input into the AVX5000.





Note: Area Shot is convenient for reviewing the route. However, the car must not be in motion when using Area Shot. GPS option for AVX5000 allows current position to be displayed. NAVTEQ ON BORAD is a trademark of NAVTEQ.

# High-performance audio functions and features

# DCU105 Audio Video Matrix

Partners the AVX5000 to provide 5.1 ch. surround sound for surround-encoded material as well as upmixing 2-channel sources to surround as well as expanding connectivity and flexible routing of multiple program sources.

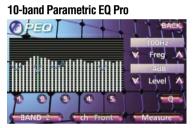


Dolby Digital 5.1 ch.	
dts 5.1 ch.	
Dolby Pro Logic II	
Time Alignment Pro	
Crossover Pro	
Parametric EQ Pro	
AV Matrix Selector	
5V preamp output	
MOSFET 50W x 4	

**DCU105** 

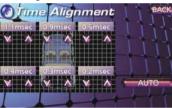
5.1ch. Decoder/AV Matrix Unit

#### AVX5000 + DCU105—Comprehensive audio customization



Professional equalization to capably optimize a vehicle's interior, removing troublesome frequency peaks and dips to create a flat frequency response.

#### **Time Alignment Pro**



Adjusts time delay so sound from all speakers reaches the listener simultaneously for more natural sound. Easy AUTO mode for one-touch adjustment.

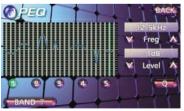
#### **Crossover Pro**



Allows precisely blending speaker-to-speaker response by setting frequency crossover points and adjusting rolloff, creating a better-balanced system response with better sound.

#### AVX5000—Standard operations

#### 7-Band Parametric EQ



Simpler but effective PEQ method allows guickly creating a satisfactory acoustic environment to suit program material.

#### **Time Alianment**



Easy preset parameter groupings can be selected and adjusted for a time-aligned system response that results in better sound quality.

#### Crossover

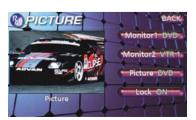


Makes it simple to optimize setting up a subwoofer with a 4-speaker system to extend the system's frequency bandwidth.

#### **Others**

#### Picture lock function

The DCU105 allows the AVX5000 to be playing a CD with the front display in music mode and show visual content from an external program source being input into the DCU105.



#### **DVD** dual play

While radio broadcasting can be enjoyed on the AVX5000 with sound from all speakers, the AVX5000 can also be playing a DVD-Video for rear seat passengers who can listen to it through headphones connected to the rear displays.





Incorporating a 20GB HDD for immense music file storage as well as a brilliant VGA display, the AVX2494 offers the best of entertainment for

#### Audio/Visual

audio and visual.

CD/CD-R/RW, MP3
DVD-Video
6.5" TFT VGA display with touch control
20GB HDD
3,000 track Music Juke
CDDB-enabled
40W x 4

- · Memory Stick-ready
- FM/AM tuner
- High-performance DSP:
- 5-mode soundfield control • 9-band EQ
- · Listening position selector
- CD Changer-ready (2 units)
- Rear view camera-ready
- E-LAN data link system

# AVX2404

#### Hi-Power CD/DVD/MS Receiver with 5.8" Touch-Panel TFT Display and MP3/5.1 Decoder

An incredible performer, the AVX2404 is ready to offer any entertainment required. The most popular audio-dedicated formats as well as DVD-Video combine with 5.1 ch. surround sound for satisfying any desire.

#### Audio/Visual

CD/CD-R/RW, MP3
DVD-Video
5.8" TFT display with touch control
MOSFET 50W x 4
5.1 ch. surround sound
Multi window

- Memory Stick-ready
- FM/AM tuner
- Advanced 24-bit  $\Delta \Sigma$  DAC
- High-performance DSP:
- 5-mode soundfield control • 7-band EQ
- · Listening position selector
- CD Changer-ready
- Video input/output
- Wallpaper selectable
- · Rear view camera-ready
- E-LAN data link system

#### Music Juke AVX2494

Holding up to 3,000 song files, Music Juke automatically starts creating a music library. adding songs every time a CD is played. Perfect for enjoying your favorite music on long road trips.

DSP	MUSIC INVSELECT MODE Set Edit	PLAYLIST RPT
<b>1.</b> ] 1	3 0'07"	ALL RAND
ĒQ	Anter Key of success Autom	PLAVLIST SCAN
-	Amazing life nise: Dont make me sad.	RPT
POS	GUTS	RAND
10:18		SCAN

#### **CDDB-enabled** AVX2494

Each CD track automatically displays the track information such gracenote cddb as song title and artist thanks to the Gracenote CDDB feature which contains a database of approximately 230,000 songs.

#### Stunning VGA display AVX2494

The Video Graphics Array (VGA) display has image quality that satisfies the most discerning viewers. Visibly superior to EGA displays, VGA displays are often used in demanding computer applications. Dedicated high speed graphics processing is also used for improved performance. With a resolution of 1,152,000 dots, the AVX2494's display is capable of true high-resolution and image definition.



#### 5.1 Multichannel Sound Avx2404

Featuring a 5.1 decoder for dts 5.1 ch. and **Dolby** Digital 5.1 ch. encoded material so as to deliver true theater-quality multichannel surround sound, the AVX2404 delivers all the audio content of surround-encoded program material, making sure DVD-Video program sources are heard the way they were meant to. All spatial cues and sound effects are accurately reproduced with dialog that is crisp and easily heard.



AV3424

ESN E3 7<sup>--</sup> Wide TFT "Touch Panel" Display DVD Multi-Source Receiver with MP3 Decoder

The full-featured AVX3424 offers more value and versatility than most conventional entertainment-focused head units. In particular, its DVD-Audio playback capability allows these high-resolution audio discs with their outstanding sound quality to be enjoyed.

#### Audio/Visual

- CD/CD-R/RW, MP3 DVD-Video, DVD-Audio 7" TFT display with touch control 2.7V preamp output
- FM/AM tuner
- CD Changer-ready
- Rear view camera-ready
- E-LAN data link system
- ESN security

#### Options

**TV Tuner unit-ready** Simply add the TVR105 to be able to watch all terrestrial TV broadcasts. Optional for: AVX5000

**GPS unit-ready** Connects to compatible AVX unit for use with Area Shot to enhance its features. Optional for: AVX5000

TVR 105 TV Tuner Unit

ble AVX unit ot to enhance GPS 105 GPS Unit

HDR105 HDRadio Tuner Unit Optional for: AVX5000

#### CD Changer-ready

CH3083 8-Disc CD Changer

with Magazine Unit

#### **Rear view camera-ready**



SIR-ECL1 ECLIPSE COMPATIBLE SIRIUS SATELLITE RADIO TUNER Optional for: AVX5000

#### **Remote control-ready**



RMC 105 Wireless Remote

#### AEX403 Extension code (4 meter)

Optional for: AV3423/AV3424/AV8533 For use when an extra-long cable is required for installations.

\* Meets CEA2006 guidelines

#### Specifications

operincations				Weets GEA2000 guidelines			
14.4V Power Supply	AVX5000	AVX2494 AVX2404		AV3424			
Max. Power Output	50W × 4	40W × 4	50W	50W × 4			
RMS Power Output*	15W × 4 (1kHz, 1% THD, 4Ω)	12W $\times$ 4 (1kHz, 1% THD, 4 $\Omega$ )	14W×4 (1kHz	z, 1% THD, 4Ω)			
Display	7" wide (16:9), low-glare panel	6.5" wide (16:9), low-glare panel	5.8" wide (16:9), low-glare panel	7" wide (16:9), low-glare panel			
Display Resolution	336,960 dots (480 × 234 × 3)	1,152,000 dots (800 × 480 × 3)					
Screen Aspect Ratio	4 ty	pes 3 types 4 types					
FM Frequency Range		87.75 — 107.9MHz (200kHz step)					
Usable Sensitivity	15dBf	13dBf					
AM Frequency Range		530 — 1710ki	530 — 1710kHz (10kHz step)				
Usable Sensitivity	24µV	22	²μV	28μV			
CD Frequency Response	20 — 20,000Hz, -2±2dB — 0±2dB		20 — 20,000Hz, 1dB				
Total Harmonic Distortion	0.03% (0dB, 1kHz)	0.03% (0	)dB, 1kHz)	0.02% (0dB, 1kHz)			
Equalizer	Parametric: 63Hz — 16kHz±10dB, (25points)	Graphic: 63Hz — 12kHz, ±10dB —					
Dimensions (W $\times$ H $\times$ D)	7"×2"×6-1/2" (180×50×165mm)	$7'' \times 4'' \times 6 - 1/2'' (180 \times 100 \times 165 \text{mm})  7'' \times 2'' \times 6 - 1/2'' (180 \times 50 \times 165 \text{mm})$					
Weight	2.2kg	3.1kg	2.8kg	2.4kg			

# Priority on music. Refining audio performance to the maximum.

M

:00

ECLIPSE

TEMP

ECLIPSE CD Receivers have earned excellent reputations since their introduction. Fully selfcontained with 4-channel power amplification and designed to provide the maximum performance from optical disc sources, the series has been constantly refined with new technologies and important new features.

EAR CAD

A/C

MODE

St OFF

AUTO

# The new CD Receiver line delivers outstanding audio performance across the board for each model.

#### **Circle Surround II**

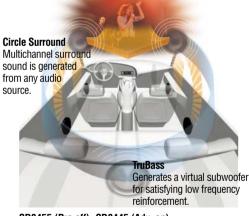


This technology enhances in-car listening enjoyment with a powerful combination of three functions. **Circle Surround** generates surround sound from any audio source such as CDs, MP3s, WMA files and radio broadcasts with just four speakers. **Focus** raises the stereo soundfield, making the sound appear to be coming from directly in front at ear level. Its use complements surround sound to create a rich, enveloping soundfield. **TruBass** is technology based on psychoacoustics and scientific knowledge of the human hearing system to generate bass sounds extending lower than a small speaker's response so that a subwoofer is not required.



#### Focus

Generates virtual speakers that create a front-firing, higher-positioned soundfield.



CD8455 (Pro off), CD8445 (Adv. on)

#### High voltage and low impedance output

High-end audio products usually are engineered to have preamp outputs that have high voltages along with low impedances. These characteristics are desirable from an audio electronics point of view as they enable driving downstream amplifiers optimally to reap other benefits such as a higher signal-to-noise ratio and increased dynamics. Each CD receiver ensures any connected external amplifier will deliver optimal performance. CD8455/8445: 8V at 55 $\Omega$ CD5435/5425/5415/5405: 5V at 55 $\Omega$ 

#### Advanced 24-bit $\Delta \Sigma$ D/A converter

Digital circuits benefit from signals staying in the digital domain as long as possible, helping to minimize distortion and noise. All signal processing in the CD Receivers remains entirely in the digital domain until the last stage prior to power amplification. The final level of audio performance also relies on highperformance digital to analog conversion. As this process greatly influences final sound quality, a proprietary DAC is utilized so distortion is minimized and S/N ratio stays high.



CD8455/8445

#### **High-performance DSP**

Featured in the CD8455 and CD8445, this single sophisticated chip contains the Parametric EQ, Multi-Harmonizer, Time Alignment and Crossover functions as well as level.

#### **Parametric EQ**

This sophisticated equalization method is the best for achieving a smooth, well-balanced incar system frequency response that overcomes the frequency peaks and dips often encountered in automobile environments due to the combination of hard, reflective surfaces and soft, absorbing surfaces. Parametric EQ allows selecting a frequency band as well as bandwidth for an even system response.



CD8455, CD8445 (Adv. on)

#### **3-band Graphic EQ**

An additional EQ method to adjust the tonal characteristics of program material to suit user preferences. **CD5435/5425/5415/5405** 



#### **Time Alignment**

Electronic delay lines make sure the sounds from all the speaker units arrive at the listener's ears simultaneously for a much more natural sound with improved imaging. CD8455, CD8445 (Adv. on)

#### Crossover

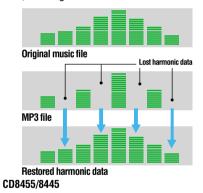
To create a smoother system response in a multi speaker system, the frequency point and slope can be tweaked for each speaker.



#### CD8455/8445/5435/5425

#### **Multi-Harmonizer**

Digital music files in formats such as MP3, WMA and ATRAC3 lose harmonic data during encoding because compression is applied. Multi-Harmonizer restores the lost harmonic data, allowing files to sound much better.



# MOSFET 50W × 4 power amplification

MOSFET devices are used for power amplification due to their desirable characteristics — drawing less current and requiring less power — as well as providing a more natural sound. All Units

#### **AUX Input**

When connecting external sources, the AUX input has adjustable sensitivity for perfect matching to cut extraneous noise and improve S/N ratios.

CD8455/8445/5435,CD5425 (optional)

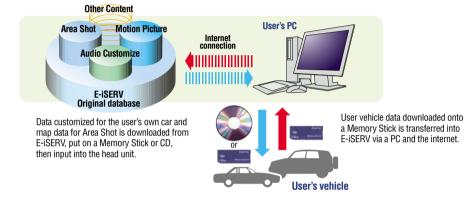
# E-iSERV



## E-iSERV advances

ECLIPSE's E-iSERV has raised user customization to a new level that many thought could not be done. By using the internet and a personal computer, the user can access

functions and features that can optimize in-car system response and provide map guidance, along with customizing displays and enhanced control abilities.



# **Motion Picture**

Customization for the display panel in the CD8455 and CD8445 is possible. The proprietary "cutting board" application can be downloaded and up to 100 favorite images can be put together to create an up to 10 sec. animated sequence.



#### **Area Shot**

At home

Adding value to CD Receivers with map viewing and route assistance, this feature allows searching for a destination and downloading the

route to get there. Once the data has been input into the CD Receiver, it can be viewed to confirm the route.



Input start point and destination

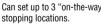


View the map(s) and confirm the route.





Can set up to 3 "on-the-way"

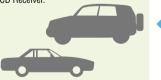






Access E-iSERV from

a personal computer.







Download the completed route data onto: Memory Stick: CD8455, CD8445 CD-R: CD8455, CD8445 CD5435, CD5425





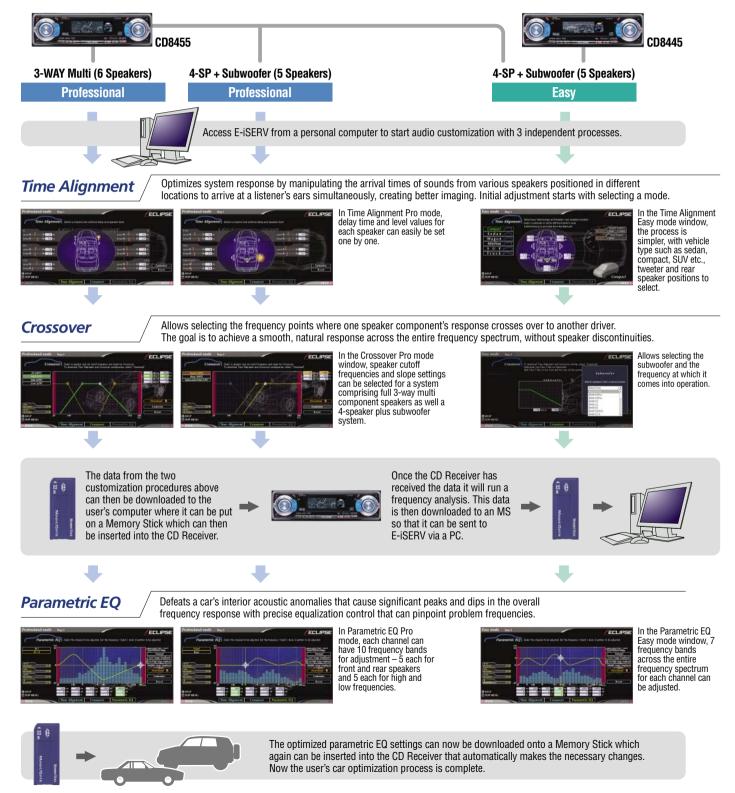
Start Area Shot to display first map.



After the required number of Area Shots, the destination will be reached.

Note: Area Shot is convenient for reviewing the route. However, the car must not be in motion when using Area Shot. GPS option for CD8455 and CD8445 allows current position to be displayed.

## **Audio Customize**



# CD Receivers

#### Catering to dedicated audio-only requirements, ECLIPSE's CD Receivers have been redesigned to offer a significantly higher level of performance along with new and upgraded features.

The CD8455 and CD8445 have all the features and performance to satisfy the most discerning music lover. Able to extract the best performance from CD, CD-R/RW, WMA and MP3 music files, both units demonstrate exceptional audio quality and user convenience. FCI IPSE's innovative interactive F-iSERV can be accessed to achieve results that previously required trained technicians with test equipment.



ESN WMA 143 🚭 🖽 H) Radio SIRIUS



ESN WMA 143 🛥 🕮 H) Radio SIRIUS

ESN E8 High-Power "Customize" CD/MS Receiver with MP3/WMA Decoder and Remote

NEW

#### **CD8455** MOSFET 50W × 4 (max.)

#### ESN E8 High-Power "Pro Customize" CD/MS Receiver with MP3/WMA Decoder and Remote

CD/CD-R/RW, MP3, WMA
Circle Surround II
E-iSERV connectivity
Area Shot (basic map, arrow and text
5-pattern illumination
Motion Picture
SIRIUS Satellite Radio-ready

- Advanced 2-mode Sound Control DSP: • Parametric EQ : 10 band (pro mode on)
- 7 band (pro mode off)
- Time Alignment
- Crossover
- Listening Position Selector

- Multi-Harmonizer
- Source Volume Control
- · Memory Stick-ready
- Advanced 24-bit  $\Delta \Sigma$  DAC High 8V preamp output
- HD Radio-readv
- · GPS unit-ready
- FM/AM tuner
- MOSFET power amplification
- 8-step full dot VF display MS/CD ESN security
- Digital input
- 3 prs. pre outputs Aux input
- Remote control

## CD/CD-R/RW, MP3, WMA Circle Surround II E-iSERV connectivity Area Shot (basic map, arrow and text) 5-pattern illumination

## **Motion Picture**

- SIRIUS Satellite Radio-ready
- Advanced 2-mode Sound Control DSP: • 7-band Parametric EQ (advanced mode on)
- Time Alignment

NEW

- Crossover
- Listening Position Selector

Multi-Harmonizer

**CD8445** MOSFET 50W × 4 (max.)

- Source Volume Control
- Memory Stick-ready
- Advanced 24-bit  $\Delta \Sigma$  DAC
- High 8V preamp output
- HD Radio-readv
- · GPS unit-ready
- FM/AM tuner
- MOSFET power amplification
- 8-step full dot VF display
- MS/CD ESN security
- 3 prs. pre outputs
- Aux input
- Remote control

Others

## 5-pattern illumination

ECLIPSE has added the ability to change a CD Receiver's illuminated colors, allowing the user to select a color combination that complements the car interior or just to vary the color as desired. Illumination can be instantly switched between Blue+Red, Blue+Amber, Blue+Green, All Green and All Red.

CD8455/8445/5435







Blue+Green



All Red









Vary the CD Receiver's illumination color to enhance the car's interior appearance.



The difficult task of providing the most in-demand features of a head unit in terms of performance and convenience has been met in a spectacular manner with the CD5435 and CD5425 units. Well ahead of any other head units in their class, the CD5435 and CD5425 offer superior performance for handling just about any form of audio optical disc. The CD5435 will also accommodate WMA files.



#### 8-step full dot VF display

The top models in the CD Receivers line incorporate full dot vacuum fluorescent displays with highly legible alphanumeric characters. There are also eight levels of adjustment to suit user preferences as well as a Bright & Dimmer control for more adjustment.

#### CD8455/8445



ECLIPSE's proven theft-deterrent measure uses a user-designated CD or a Memory Stick depending on the CD receiver model to control system activation. The selected media can be set to be a key device that the system must "see" before it will activate. Without the key device, the system remains locked and will not operate. **All units** 

#### E-LAN data link system

ECLIPSE's E-LAN only requires a single cable that carries control signals as well as transmission signals to connect components of a mobile entertainment system. E-LAN also ensures upstream compatibility with future ECLIPSE products.

#### CD8455/8445/5435/5425/5415

#### SVC (Source Volume Control)

The fully digital circuitry featured in the new CD Receivers makes it possible to offer functions such as Source Volume Control that can automatically level the volume settings of all sources, eliminating the annoying differences in volume experienced when switching from radio to CD.

#### CD8455/8445/5435/5425

These two CD Receivers overturn preconceived ideas of entry level receivers. Designed to deliver the best from the two most popular sources of music today, CDs and MP3s, the CD5415 will please anyone who enjoys listening to music. The CD5405 is more focused on CDs.





#### Feature List

	CDa	8455	CD8	445	CD5435	CD5425	CD5415	CD5405
CONTROL								
Remote Control		•	(	•	•	Optional	Optional	Optional
CD Changer Control		•	•		•	•	•	—
CD-R/CD-RW		•	•		•	•	•	•
WMA		•	(	•	•	—	—	—
MP3		•	(	•	•	•	•	—
Digital Servo System (DSS)		•	•		•	•	•	•
TUNER								
FM / AM		•	(		•	•	•	•
Station Name Input		•	(		—	_	—	_
AUDIO								
Output Voltage and Impedance	8V/	55Ω	8V/	55Ω	5V/55Ω	5V/55Ω	5V/55Ω	5V/55Ω
MOSFET Amplification		•	(		•	•	•	•
Advanced 24-bit $\Delta \Sigma$ DAC		•	(		_	_	_	_
Source Volume Control (SVC)		•	(		•	•	_	_
Sound Control Mode	Profe	essional	Adva	inced	_	_	_	_
	On	Off	On	Off	_	_	_	_
3-band Graphic EQ	_	-	—	_	•	•	•	•
Circle Surround II	_			_	—	_	_	_
Bass/Mid/Treble Control	•	-	—	•	•	•	•	•
Time Alignment	•		•	_	_	_	_	_
Parametric EQ	10-band	7-band	7-band	_	_	_	_	_
Multi-Harmonizer (MP3/WMA/ATRAC3)	•		•	•	_	_	_	_
Listening Position Selector	•		•	•	_	_	_	_
Crossover	•		•	•	•	•	_	_
Non Fader Level / Phase Control	•		•	•	•	•	•	•
SFC	_	- 1	_	•	_	_	_	_
Frequency Response Analysis	•	•	•	_	_	_	_	_
Dual Pre Outputs		•			•	•	•	Selectable (Rear)
Non-Fader Pre Outputs		•	(		•	•	•	Selectable (Rear)
Digital Input		•	-	_	_	_	_	
AŬX In		•	(		•	Optional	_	_
GENERAL		-		-				1
5-pattern illumination		•		)	•	_	_	_
Dimmer Control		•				_	_	_
ATRAC3 Decoder/Encoder		•			_	<u> </u>	_	
E-iSERV Connection	MS/	CD-R	MS/	CD-R	CD-R	CD-R	_	_
ESN security		S/CD		/CD	CD	CD	CD	CD
Display		ep VF	-	p VF	LCD	LCD	LCD	LCD
Full Face Tilt				••••	•	•		
E-LAN data link system				-	•	•	•	_

14.4V Powe	er Supply	CD8455	CD8445	CD5435	CD5425	CD5415	CD5405		
Max. Powe	r Output		50W×4						
RMS Power	r Output*		14W×4 (20 — 20,000Hz, 1% THD, 4Ω)						
Lineout Out	put Level/Impedance	8V(0c	8V(0dB)/55Ω 5V(0dB)/55Ω						
Tone	Bass/Mid/Treble		·	±12dB at 80Hz/±12dB	at 630Hz/±12dB at 10kHz	2			
Control	Loudness		+10dB at 100Hz/+6.5dB at 10kHz						
FM	Frequency Range		USA: 87.75 - 107.9	MHz (0.2MHz step) La	tin America: 87.75 — 10	7.9 MHz (0.1MHz step)			
	Usable Sensitivity		13dBf						
	50dB Quieting Sensitivity	14dBf							
	Frequency Response		30 — 15,000Hz ±3dB						
	Stereo Separation		38dB (1kHz)						
AM	Frequency Range		USA: 530 — 1,710kHz (10kHz step) Latin America: 530 — 1,710kHz (10kHz step)						
	Usable Sensitivity		20μV						
CD	Frequency Response	20 — 20,000Hz, ±3dB							
	S/N Ratio (A-weighted)	10	0dB	95dB					
	Total Harmonic Distortion	0.008%							
	Stereo Separation		85dB	80dB					
MS	Frequency Response	20 - 20,0	00Hz, ±3dB	_					
	S/N Ratio (A-weighted)	10	0dB	-					
	Total Harmonic Distortion	0.0	08%						
Dimensions	$(W \times H \times D)$			7"×2"×6-1/8" (*	178 × 50 × 155mm)				

## Cassette Tuner

# **DVD** Player



#### 4502

#### ESN E5 Cassette Tuner with CDC/DSP Control and Remote

Allowing those with extensive tape libraries to continue enjoying their favorite music with better performance • FM/AM tuner than before, the 4502 is an ideal solution because it easily connects to an ECLIPSE CD Changer as well.

ESN

- DSP EQ
- Full logic Hybrideck tape mechanism
- Large 13-segment LCD
- 5V preamp output with low  $55\Omega$  impedance
- 3 prs. pre outputs
- CD Changer-ready (2 units)
- E-LAN data link system
- · ESN security with CD changer



#### Hide-Away DVD Player with Remote Controller

Features and functions that offer the user more value and convenience while achieving higher performance.

- Plays back DVD-Videos (Dolby Digital and dts format)
- Built-in soundfield control
- Dynamic Range Control
- Digital and analog outputs
- Installs easily

# Equalizers



#### 30-Band 1/3 Octave Competition Equalizer

An EQ tool for professional applications Stereo configured unit where systems require precision tonal

contouring at a 1/3 octave level, the

sophisticated EQ parameters when

used with an RTA and pink noise,

resulting in smooth band-to-band

frequency transitions.

EQ2102 offers ease-of-use over

- 30 frequency bands
- Input level control
- EQ defeat
- Boost cut selectable ±6/12dB
- · Switchable subwoofer crossover
- Summed channel line output
- · LED overload indicators





#### 5-Band Graphic/1-Band Parametric Equalizer/Crossover

This parametric equalizer/crossover allows a system to achieve a wellbalanced response for smooth, accurate sound.

- Master gain and defeat switch
- Input level and selector
- Front/rear fader
- 5-band Graphic EQ
- Low frequency-dedicated 1-band parametric EQ
- Subsonic and low/high pass filters
- Dedicated subwoofer crossover control
- · Adjustable 0 to 4 second turn-on delay protection

# CD Changer



#### CH3083

#### 8-Disc CD Changer with Magazine Unit

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.

- CD and CD-R/RW discs8 disc magazine
- Coaxial digital output
- Multiple unit connectivity (2 units)
- Precision optical pickup
- "No disc contact" transport
- Reinforced high-rigidity chassis

# Digital radio options





Use this convenient option to connect to any of the compatible head units to take advantage of the digital broadcast content offered by a growing number of commercial radio stations.



#### HD Radio Tuner Unit

Optional for: AVN7000, AVN5435, AVX5000 CD8455, CD8445, CD5435, CD5425, CD5415

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

# **Power Amplifiers**

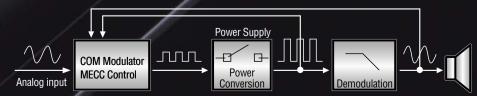
ECLIPSE power amplifiers feature advanced digital and analog circuit topologies to achieve maximum performance over a range of different power ratings.

# **ice**

# ICEpower® technology revitalizes the amplifier line.

ECLIPSE's latest power amplifiers feature new ICEpower® technology. Seeing increasing use even in ultra high-end audiophile equipment, ICEpower® advantages include superior audio quality, compactness and reduced energy demand as well as reliability. Employing ICEpower® analog technology in ECLIPSE power amplifiers enable them to deliver stunning results in terms of linearity and reduced THD, increased dynamic range and high power stage efficiency.

UNE REAR



In an ICEpower<sup>®</sup> analog circuit the analog signal is modulated into a PWM (Pulse Width Modulation) signal with the Controlled Oscillation Modulator (COM). Then after the power stage, this PWM signal feeds back into the Multivariable Enhanced Cascade Control (MECC) where it is compared to the original input signal and any differences are compensated for to eliminate power stageinduced distortion. The post output filter analog signal also feeds back into the MECC that compensates for output filter load dependent characteristics. The end result is superb sound quality free from conventional Class D limitations.

# Power Amplifier Series

Joining the acclaimed EA Series is a brand new generation of power amplifiers, ECLIPSE's XA Series which utilize analog ICEpower® technology to create optimal amplification for the mobile environment.

#### **Premium Digital Amplifier Series**

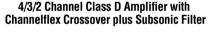
ECLIPSE's Premium Digital Amplifier Series utilize the latest advancements in digital amplification topologies to create superior sounding amplifiers dedicated for the mobile environment. The Premium Digital Amplifier Series features high sound quality and is also extraordinarily energyconscious.

- ICEpower<sup>®</sup> full-range Class D operation.
- Attractive design for practicality and ease of use with all controls such as level, crossover, low frequency boost and high/low pass filter adjustments mounted on the top panel.
- Output terminals conveniently located to allow multiple inline unit installations.
- Bright LED indicators also mounted on the top assist in setting system levels to prevent amplifier clipping.
- Very high efficiency rate with low current draw.



5/4/3 Channel Class D Amplifier with Channelflex Crossover plus Subsonic Filter

Designed to offer an ideal amplification solution for powering a full speaker setup that uses four speakers plus subwoofer. Includes high and low pass filters plus subsonic filters as well as a variable bass boost that can be used to best effect with a dedicated subwoofer control.



Adaptable four channel amplifier that can be bridged to configure a more powerful two channel unit that provides 350W per channel. Subsonic filter and variable bass boost are provided as well as high and low pass filters.



#### 2/1 Channel Class D Amplifier with Channelflex Crossover plus Subsonic Filter

This versatile and powerful amplifier is ideal for powering a four speaker plus subwoofer system and can also be bridged to function as a 300W single channel amplifier for ultimate systems.



**1** Channel Class D Subwoofer Amplifier

Designed for use in the most demanding systems as a dedicated high-performance subwoofer amplifier.

# **Integrated Amplifier Series**



Specifications
----------------

specifications						* Me	ets CEA2006 guidelines			
14.4V Power Supply		XA5000	XA4000	XA2000	XA1000	EA4000	EA2000	DA7232	DA7122	DA6213
Channel		5/4/3	4/3/2	2/1	1	4/3/2	2/1	2	1	2
Power Output (max.)	, <b>10% THD 2</b> Ω	900W	840W	360W	640W	400W (4Ω)	180W (4Ω)	950W×2	1200W×1	500W×2
	<b>2</b> Ω	75W × 4 + 450W	175W×4	150W×2	480W	_	_	850W×2	950W×1	400W×2
Power Output*	4Ω	50W × 4	125W×4	100W×2	_	75W×4	60W×2	620W×2	650W×1	250W×2
1% THD	$4\Omega$ Sub Chnl.	300W × 1	_	_	320W×1	_	_	620W×2	650W×1	-
	4 $\Omega$ Bridged	150W×2	350W×2	300W×1	_	150W×2	175W×1	_	_	850W×1
THD @ Rated	@ <b>2</b> Ω	_	_	_	_	_	_		<1.0%	
Power	<b>@4</b> Ω		0.05%		_	0.	05%		<1.0%	
	@4 $\Omega$ Sub Chnl.	0.25%	_	_	0.25%	_		<1	.0%	
S/N Ratio <sup>*</sup> , 1W out			>90dB					>12	20dB	>80dB
Frequency Response	, 1W out	20 — 20,000Hz (stereo)				20-2	20,000Hz	4 — 200Hz,	±1dB @4Ω	20 — 30,000Hz/ ±1dB @4Ω
Amp Crossovers	Hi-Pass 18dB/oct.		30 — 500Hz		_	30 —	- 500Hz	_		_
	Lo-Pass 18dB/oct.			50 —	50 — 500Hz			50 — 200Hz		
	Subsonic 18dB/oct. 18Hz				Defeat 1 — 60Hz					
Pre-Amp Output Lo-Pass 18dB/oct.		_	No Filter	No Filter	_	No Filter	No Filter		50 — 200Hz	
Dimensions (W × H >	< D)	15-3/4"×2-5/16"× 10-3/16" 400×59×259mm	15-3/4" × 2-5/16" × 10-3/16" 400 × 59 × 259mm	9-13/16"×2-5/16"× 10-3/16" 250×59×259mm	9-13/16"×2-5/16"× 10-3/16" 250×59×259mm	13-3/8″×2-5/16″× 10-3/16″ 340×59×259mm	9-13/16"×2-5/16"× 10-3/16" 250×59×259mm	21″×2″×11-1/16″ 533×52×300mm	15-3/4" × 2" × 11-1/16 400 × 52 × 300mm	15-3/4″×2″×11-1/16″ 400×52×300mm



Designed to provide dynamic and accurate sound over a wide frequency range, ECLIPSE speakers are available in different product series to suit various applications.



# Subwoofers

SW9100 Titanium DVC Pro Series SW9100 Titanium DVC Series

The SW9100 Titanium Double Voice Coil (DVC) series subwoofers were developed to meet the need for subwoofers that combine quick response, efficiency and very high SPL performance. These demanding specifications required the development of the radical new technologies used in engineering and building the Titanium series subwoofers.

# QCA (Quick Change Assembly)



ECLIPSE QCA exclusive technology has designed the speaker to instantly allow its two sections to separate in the event that the speaker cone gets physically damaged. Simply unlock the two sections with one allen key, twist off the speaker assembly (QCA) and replace with another.



# Performance that's a revelation

Apart from delivering prodigious amounts of low frequencies, truly excellent subwoofers show what they're made of by the quality of the low frequencies they produce. Along with moving lots of air, the ability to define the pitch of the low notes is important and to preserve transients is crucial. To do that, subwoofer cones have to be able accelerate fast. The ability of the low-mass high X-max 15" to move faster than a typical 8" woofer but provide bass like an 18" cone is what make the SW9100 Titanium DVC Series deliver such exceptional performance.

# Solid titanium cone

The solid titanium cone adds the best of this metal's properties to the subwoofer: very high tensile strength, high stiffness to mass ratio, excellent heat dispersion and corrosion resistance. At high power levels, the titanium cone resists the cone flex that causes coloration and distortion, moving air efficiently throughout the full power handling range.

# 2-inch surround

The surrounds are two inches wide to accommodate speaker travel of 3.5 inches peak to peak excursion. Made of special polyether foam that is resistant to ultraviolet radiation and moisture, the surrounds have superior mechanical properties and the low mass needed to produce extremely high excursions.

# Aluminum voice coil

The voice coil former is made of 8/1000" thick aluminum, much thicker than industry standard, to handle the stresses of the high power motor at large displacements. The voice coil wire is a high-temperature aluminum wire, used to minimize mass and maximize thermal radiation. Since the bond between cone and former is thermally conductive, the voice coil heat is quickly dissipated throughout the entire titanium cone. The superior conductivity combined with unparalleled heat dissipation of this voice coil and former assembly means more power transfer into the cone movement instead of wasted heat.

# Dual symmetrically arranged spiders

Two spiders designed with special non-linear Finite Element Analysis (FEA) software are spaced precisely apart to keep the voice coil centered in the motor structure. The woven-in tinsel lead wires are the ultimate in durability and power transfer. The synthetic fabric used to manufacture the spiders is four times stronger than conventional material used in most subwoofers.

# High force motor structure

The motor structure was designed to maximize the force versus displacement curve of high excursion drivers. The motor has a unique shape that results in 20% more force from the same magnets than is normally achieved. The magnetic field is very symmetrical above and below the magnetic gap, contributing to a low distortion and audibly superior driver.

# **Cast aluminum frame**

The aluminum frame forms the skeleton of the high performance Titanium series subwoofers. Venting below the spiders accommodates the enormous amounts of air that are moved during operation, as well as keeping the motor assembly free of any excess heat. The cast frame also acts as a heatsink to dissipate any additional heat produced from the subwoofers.

# **Triple-stacked magnet**

ECLIPSE Titanium subwoofers feature a extra-long magnet and pole piece to accurately control woofer travel and enable high-power performance.

# One-piece machined back plate and pole piece

The back plate and pole pieces of a Titanium series subwoofer are machined from a single block of low-carbon steel. This expensive process yields a component part of unparalleled precision and results in a highly efficient magnetic circuit.

# Aero-vented pole

The pole piece of the subwoofer is aero-vented both outside and inside to facilitate the laminar flow of air into and out of the voice coil area for superior motor cooling. Aero-venting also reduces vent noise in high driver travel conditions.

# The Advantage of Dual Voice Coil (DVC)

Dual Voice Coil speakers are designed to maximize space for more flexibility during installation. A dual-voice coil speaker is essentially two speakers in one: two separate voice coils are connected to the amplifier. Depending on the impedance of each voice coil, the two can be combined in a parallel or series configuration to match the impedance ability of the amplifier. The dual voice coil design does not sacrifice system power handling or SPLs.



SW9182 Pro **18**" Subwoofer ( $\mathbf{1}\Omega \times \mathbf{4}$ )



SW9152 Pro 15" Subwoofer (1 $\Omega \times 4$ )

- Premium foam surround
- Titanium cone
- Asymmetrically mirrored spiders
  Aluminum voice coil former
- · FEA-CAD designed
- Aero-vented pole piece
  Proprietary diecast aluminum frame (patented large excursion, high dissipation frame)
- Triple-stacked magnet
- Sealed box enclosure recommended
  Continuous power handling: 3000W
  Music power handling: 5000W

- Dual voice coils
- · 350oz. magnet motor
- 4" diameter voice coils



**SW9152** 15" Subwoofer  $(4\Omega + 4\Omega)$ 



- · Polyether foam surround
- Solid titanium cone
- Dual mirror-image spiders
- Aluminum voice coil former
- · "Bottomless" design
- Aero-vented pole piece
- Cast aluminum frame
- · Triple-stacked magnet
- Continuous power handling: 750W
- Music power handling: 1500W
- · Dual voice coil
- QCA (Quick Change Assembly) technology
- 3" diameter voice coil
- 250oz. magnet motor



**SW9122** 12" Subwoofer  $(4\Omega + 4\Omega)$ 



SW9102 10" Subwoofer  $(4\Omega + 4\Omega)$ 

## Speaker Protective Bars (for 12" speakers)



#### PT1287 12" Subwoofer Protector

#### Fits models: SW9122/SW7124DVC-T2/T4 SW7324DVP/SW7524DVC/.8/.4

These protective bars were specially designed to offer additional protection to the above-mentioned speakers. As well as enhancing the appearance of ECLIPSE highperformance speakers, the strong, rigid bars mount easily on the speakers and protect them when installed for heavyduty applications.

	SW9182Pro	SW9152Pro	SW9152	SW9122	SW9102
Size	18″	15″	15″	12″	10″
Fs	24Hz	27Hz	22Hz	22Hz	26Hz
Qts	0.17	0.15	0.39	0.30	0.47
DCR	$1\Omega \times 4$	$1\Omega \times 4$	$4.0\Omega + 4.0\Omega$	$4.0\Omega + 4.0\Omega$	$4.0\Omega + 4.0\Omega$
Vas	5.7 Cuft	2.0 Cuft	6.10 Cuft	3.20 Cuft	2.10 Cuft
Xmax (one way)	3.5" peak-to-peak (max: 4")	3.5" peak-to-peak (max: 4")	1.75″	1.50″	1.50″
Continuous Power Handling	3000W	3000W	750W	750W	750W
Maxmum Power Handling	5000W	5000W	1500W	1500W	1500W

The SW7100 Series distinguishes itself by its use of an ECLIPSE proprietary speaker technology — Vortex Thruster Technology that enhances performance. The Series is also designed with a strong show-tech style that makes sure each speaker installation has a clean, show quality look and feel to it.

# **Vortex Thruster Technology**

This exclusive technology uses metal spikes that are stalagmite-shaped in a configuration that affects the surrounding air by intaking air from the speaker perimeter to the center section that has more heat. The air travels in a spiral-like flow and creates a vortex that increases the pumping of air and enhances dissipation. Structural developments create a better flow of heated air to a wheel-style heat sink which is vented in order to force or thrust the hot air to the vents.

## **One location terminal block**

The SW7100 Series positions all terminals in a neat one-row block which allows easy series or parallel installation (jumpers provided) that meets demanding show-tech competition requirements.



# $\begin{array}{l} {\rm SW7124DVC-T2} \\ {\rm 12^{''} \ Subwoofer \ (2\Omega+2\Omega)} \\ {\rm SW7124DVC-T4} \\ {\rm 12^{''} \ Subwoofer \ (4\Omega+4\Omega)} \end{array}$

12" Solid aluminum cone
Diecast aluminum basket with Vortex Thruster Technology

- Continuous power handling: 450W
- Maximum power handling: 900W
- Screw mounting hole cover plugs
- 4-terminal array
- Series/parallel jumpers
- Self display giftbox



## **SW7104DVC-T2** 10<sup>°</sup> Subwoofer $(2\Omega + 2\Omega)$ **SW7104DVC-T4** 10<sup>°</sup> Subwoofer $(4\Omega + 4\Omega)$

T2: Dual  $2\Omega$ 

T4: Dual 4Ω

- 10<sup>~</sup> Solid aluminum cone Diecast aluminum basket with Vortex
- Thruster Technology • Continuous power handling: 400W
- Maximum power handling: 800W
- Screw mounting hole cover plugs
- 4-terminal array

T2: Dual  $2\Omega$ 

T4: Dual  $4\Omega$ 

- Series/parallel jumpers
- Self display giftbox





	SW7124DVC-T2	SW7124DVC-T4	SW7104DVC-T2	SW7104DVC-T4
Size	12″	12″	10″	10″
Fs	25Hz	27Hz	33Hz	32Hz
Qts	0.42	0.52	0.5	0.58
DCR	$1.8\Omega + 1.8\Omega$	$3.8\Omega + 3.8\Omega$	$1.8\Omega + 1.8\Omega$	$3.8\Omega + 3.8\Omega$
Vas	2.23 Cuft	2.24 Cuft	0.70 Cuft	0.85 Cuft
Xmax (one way)	1.4″	1.2″	1.4″	1.2″
Continuous Power Handling	450W	450W	400W	400W
Maximum Power Handling	900W	900W	800W	800W

# SW7300 Aluminum Series

The SW7300 Series incorporates a smaller, precision voice coil and magnet that allow producing 450W without strain. ECLIPSE's low distortion/high excursion speaker cone design philosophy lets the speaker travel 1.4 inches, which is the most in its class.



Side view of SW7300DVP Series



**SW7324DVP** 12<sup>%</sup> Subwoofer ( $4\Omega + 4\Omega$ )

• 12" Solid aluminum cone

Diecast aluminum basket with patented technology

- Continuous power handling: 450W
- Maximum power handling: 900W
- 2" voice coil



**SW7304DVP** 10<sup>"''</sup> Subwoofer ( $4\Omega + 4\Omega$ )</sup>

- 10" Solid aluminum cone
- · Diecast aluminum basket with patented technology
- Continuous power handling: 400W
- Maximum power handling: 800W
- 2" voice coil

# SW7500 Hybrid Series

The SW7500 Series makes use of hybrid cone materials with a proprietary combination of laminate materials. The end result is a distinctive and attractive cone appearance that also delivers 300W of solid bass. Contributing to its impressive looks is the neat one-row terminal block in one position on the basket for easier and neater installations.





 $\begin{array}{l} \text{SW7524DVC} \\ 12^{''} \ \text{Subwooter} \ (4\Omega + 4\Omega) \\ \text{SW7524.8} \ 12^{''} \ \text{Subwooter} \ (8\Omega) \\ \text{SW7524.4} \ 12^{''} \ \text{Subwooter} \ (4\Omega) \\ \end{array}$ 

- 12" hybrid cone
- Diecast aluminum basket
- Continuous power handling: 300W
- Maximum power handling: 600W
- Show-tech styling



# $\begin{array}{l} \mbox{SW7504DVC} \\ \mbox{10" Subwoofer (4\Omega + 4\Omega)} \\ \mbox{SW7504.8 10" Subwoofer (8\Omega)} \\ \mbox{SW7504.4 10" Subwoofer (4\Omega)} \end{array}$

- 10" hybrid cone
- Diecast aluminum basket
- · Continuous power handling: 300W
- Maximum power handling: 600W
- Show-tech styling

	SW7324DVP	SW7304DVP	SW7524DVC	SW7524.8	SW7524.4	SW7504DVC	SW7504.8	SW7504.4
Size	12″	10″	12″	12″	12″	10″	10″	10″
Fs	31Hz	31Hz	36Hz	36Hz	36Hz	38Hz	38Hz	38Hz
Qts	0.56	0.7	0.50	0.52	0.44	0.53	0.48	0.42
DCR	$4\Omega + 4\Omega$	$4\Omega + 4\Omega$	$3.6\Omega + 3.6\Omega$	7.2Ω	3.6 <b>Ω</b>	$3.6\Omega + 3.6\Omega$	7.2Ω	$3.6\Omega$
Vas	3.32 Cuft	1.39 Cuft	2.43 Cuft	2.39 Cuft	2.12 Cuft	0.97 Cuft	1.16 Cuft	1.06 Cuft
Xmax (one way)	1.25″	1.2″	0.73″	0.73″	0.73″	0.73″	0.73″	0.73″
Continuous Power Handling	450W	400W	300W	300W	300W	300W	300W	300W
Maximum Power Handling	900W	800W	600W	600W	600W	600W	600W	600W

# Subwoofers

SW6100 DVC / SW6100 Series

The SW6100 Series combines the most demanded features in a subwoofer. The hybrid aluminum cone uses a proprietary combination of laminate materials for extraordinary dimensional stability. Offering double the cone excursion at 1.17" of any other speaker in its class, the SW6100 delivers a healthy output of 250W. In addition, a stamped chrome speaker basket sets off the speaker in any installation.

- Composite Alloy Cone
- 3/4-inch wide santoprene surround
- Chrome Airovent Basket
- Long-throw bottomless motor structure
- Rubber Magnet Boot
- CONEX<sup>®</sup> spider
- Spider woven tinsel leads
- Small sealed box enclosures
- Concave inverted dust cap
- Double-stacked magnets
- Chrome push speaker terminals (accepts 10 AWG cable)



 $\begin{array}{l} \textbf{SW6123DVC} \\ \textbf{12'' Dual Voice Coil Subwoofer} (\textbf{4}\Omega + \textbf{4}\Omega) \\ \textbf{SW6123.4} \quad \textbf{12'' Subwoofer} (\textbf{4}\Omega) \end{array}$ 

Continuous power handling: 250W

Maximum power handling: 500W



Continuous power handling: 200W

Maximum power handling: 400W





Both SW6100 DVC & SW6100 Series employ CONEX® spider santoprene surrounds, double-stacked magnet and long-throw bottomless motor structure.

	SW6123DVC	SW6123.4	SW6103DVC	SW6103.4
Size	12"	12"	10"	10"
Fs	29Hz	29Hz	34Hz	34Hz
Qts	0.78	0.78	0.83	0.78
DCR	$3.6\Omega + 3.6\Omega$	3.6Ω	$3.6\Omega + 3.6\Omega$	3.6Ω
Vas	2.52 Cuft	2.4 Cuft	1.14 Cuft	1.31 Cuft
Xmax (one way)	0.78″	0.81″	0.78″	0.81″
Continuous Power Handling	250W	250W	200W	200W
Maximum Power Handling	500W	500W	400W	400W

The new SW4000 Series of subwoofers offer an extraordinary performance for an entry-level series. ECLIPSE engineers were able to achieve a performance level comparable to subwoofers in a higher class. Through tests and listening evaluations, it was determined that a proprietary Kevlar composite cone material would provide an ideal solution with extended low frequency response, pitch definition and transient response. Featuring a distinctive and attractive grill design, the SW4000 Series is available in the two most popular subwoofer sizes.

- Kevlar composite cone
- Integrated grill assembly
- Stamped basket
- •Foam surround
- Polycarbonate spider
- Magnet (SW4000:30oz, SW4200:43oz)
- •4-layer aluminum single voice coil
- Air vent cooling system
- Screw type terminals

# A new approach for a dynamic subwoofer solution.



• Continuous power handling: 200W Maximum power handling: 600W



Maximum power handling: 750W

	SW4200	SW4000
Size	12"	10"
Fs	32Hz	38Hz
Qts	0.56	0.60
DCR	3.6Ω	3.6Ω
Vas	2.75 Cuft	1.25 Cuft
Xmax (one way)	0.27″	0.27″
Continuous Power Handling	250W	200W
Maximum Power Handling	750W	600W

# Subwoofers

SYSTEMS

Available in several configurations to optimally match user vehicles from trucks and SUVs to cars, these subwoofer systems are constructed from sturdy wood, carefully assembled and well-damped for a tight bass. Finished in attractive and durable vinyl, these subwoofer systems are ready for final installation. ECLIPSE subwoofer systems add a new dimension to the sound, providing a solid foundation for a dynamic full bandwidth sound system.

Featuring a configuration specifically designed for the installation space requirements of trucks, SUVs and similar vehicles, the SW5124BX incorporates a special low-profile bass driver that saves space and still delivers a massive low frequency sound.



SW5124BX 12<sup>°′</sup> Truck-box Subwoofer System

Continuous power handling: 125W
Maximum power handling: 250W



Cutaway view of the SW5124 Lo-Profile Custom Application Woofer shows the significantly reduced depth of this speaker that makes it an ideal choice to install in a truck-box enclosure.





SW6124BXD 12<sup>°</sup>×2 Subwoofer System SW6104BXD

 $10 \times 2$  Subwoofer System

Continuous power handling: 500W/400W

Maximum power handling: 1000W/800W





### SW6124BX 12" Subwoofer System SW6104BX 10" Subwoofer System

Continuous power handling: 250W/200W
Maximum power handling: 500W/400W



SW6102.4BX

• Continuous power handling: 200W

Maximum power handling: 300W

	SW6124BXD	SW6104BXD	SW6124BX	SW6104BX	SW5124BX	SW6102.4BX
Subwoofer Driver	SW6124×2	SW6104×2	SW6124	SW6104	SW5124	SW6102.4
Frequency Response	28 — 250Hz	35 — 250Hz	28 — 250Hz	35 — 250Hz	35 — 250Hz	30 — 150Hz
Sensitivity 1W/m SPL	88dB	86dB	85dB	83dB	88dB	88dB
Normal Impedance	$8\Omega + 8\Omega$ Parallel	$8\Omega + 8\Omega$ Parallel	4Ω	4Ω	4Ω	4Ω
Dimensions (W $\times$ H $\times$ D)	27.6 <sup>~</sup> ×13.8 <sup>~</sup> ×15.3 <sup>~</sup> 701×350×389mm	23.6" × 12.7" × 15.3" 600 × 323 × 389mm	14.7" × 13.9" × 15.3" 373 × 353 × 389mm	13.5″×12.7″×15.3″ 343×323×389mm	18.9″×15″× 8″ 480×381×203mm	22"×12.6"×15.3" 701×350×389mm
Weight (Gross)	51.8lbs (23.5kg)	46.8lbs (21.3kg)	30.8lbs (14kg)	21.2lbs (9.6kg)	26lbs (11.8kg)	40lbs (18.2kg)
Weight (Net)	51.3lbs (23.3kg)	46.4lbs (21kg)	30.5lbs (13.9kg)	20.9lbs (9.6kg)	25.5lbs (11.6kg)	36.1lbs (16.4kg)
Finish	Grey & Black Vinyl	Grey & Black Vinyl	Grey & Black Vinyl	Grey & Black Vinyl	Grey & Black Vinyl	Vehicle grade gray carpet.
Continuous Power Handling	500W	400W	250W	200W	125W	200W
Maximum Power Handling	1000W	800W	500W	400W	250W	300W

# Component Series Speakers

NEW

When size limitations are a factor for speaker installations, ECLIPSE Component Series Speakers are an ideal choice. These are complete two- and three-way speaker systems with different components and crossovers designed to synergistically work together in perfect balance right from the start.



SC8365 6-1/2" Component 3-Way Speaker System

- · Continuous power handling: 100W
- Maximum power handling: 300W
- Sensitivity (1Watt/meter) SPL: 88dB
- Crossover frequencies: woofer/midrange 1400Hz, midrange/tweeter 5kHz
- Mounting Depth: 2-7/8"



## SC8355 5-1/4" Component 3-Way Speaker System

- · Continuous power handling: 85W
- Maximum power handling: 250W
  Sensitivity (1Watt/meter) SPL: 87dB
- Crossover frequencies: woofer/midrange 1400Hz, midrange/tweeter 5kHz
- Mounting Depth: 2-5/8"

#### Woofer driver

- solid aluminum cone (SC8365: 6-1/2") (SC8355: 5-1/4")
- Aluminum diecast baskets
- Santoprene surround
- · Porous flat spider
- · Aluminum voice coil former
- · Very narrow voice coil gaps
- Vented pole piece

#### Midrange driver

- 1-1/2<sup>-</sup> solid aluminum hard dome
- Neodymium magnet
- Aluminum voice coil former
- · Ferro-fluid cooled
- · Flush-mounting kit

#### Tweeter

NEW

- 3/4" solid aluminum hard dome
- · Neodymium magnet
- Aluminum voice coil former
- · Ferro-fluid cooling
- Flush-mounting kit

#### Crossover

- Audiophile-grade, speaker-specific matched component passive crossover with clear lexan cover • 12dB/octave high-pass, 6dB/octave low-pass
- Butterworth Optimum Q crossover filters
- OFC wirewound air core inductors and metallized polypropylene capacitors
- Tweeter protection circuit
- Variable tweeter sensitivity (-3/0/+3dB)

#### Woofer driver

- Metalized Mica PP
- 8-spoke, diecast vented aluminum basket frame
- Santoprene surround
- Symmetrical Low Distortion Spider
- High porous spider material
- 1-1/4" voice coil
- · Aluminum voice coil former
- Narrow gap coil design
- Chromed vented air-cooled pole piece
- Gold-plated input terminals
- · Grills included

# **High Frequency Driver**

- 1" aluminum tweeter
- · Neodymium magnet
- 1" aluminum hard dome tweeter cone
- · Ferro-fluid cooling
- · Flush and angle mounting kits included

#### Crossover

- · Passive 2-way optimized component-specific crossover network
- · Compact, low-profile crossover with clear plexiglass cover
- 12dB/octave hi- and low-pass Butterworth filters
- Tweeter protection circuit
- Air/iron core inductors
- ECLIPSE HQ capacitors
- Variable tweeter sensitivity (-3/0/+3dB)
- · Gold-plated input/output terminals



**SC8264** 6-1/2" 2-Way System Driver with 1" Aluminum Tweeter

- · Continuous Power Handling: 85W
- Music Power Handling: 250W
- Mounting Depth: 2-7/82



SC8254 5-1/4" 2-Way System Driver with 1" Aluminum Tweeter

- Continuous Power Handling: 75W
- Music Power Handling: 220W
- Mounting Depth: 2-3/8"

# 3-Way SA-Series with CTA (Compound Tweeter Array)

ECLIPSE SA-Series speakers are point source 3-way speaker systems with the woofer, midrange and high-frequency components all in the same axis for focused sound dispersion. The addition of time alignment enhances all the advantages of a true point source.

# Enhanced clarity with the Compound Tweeter Array (CTA)

The Compound Tweeter Array (CTA) comprises a large diameter soft dome midrange/tweeter driver that crosses over from the woofer at 3kHz or 3.5kHz (depending on the SA-Series model) and handles frequencies up to 8kHz. A Super Tweeter takes over with a high-frequency response that goes all the way out past 40kHz. This makes for increased clarity but without extra brightness or glare. The CTA also enables better high frequency energy dispersion and substantially improves the speaker's off-axis response characteristics

# Improved imaging with Time Alianment.

A time-aligned speaker exhibits precise imaging with excellent phase coherency. SA speaker units position the woofer and soft dome midrange diaphragms axially on the same plane for symmetrical time and distance alignment. The woofer cone and midrange dome are also mechanically aligned for optimal phase coherency and imaging. The super tweeter is on a mount directly above the midrange dome that also acts as a phase plug.

# Perfect for system expansion.

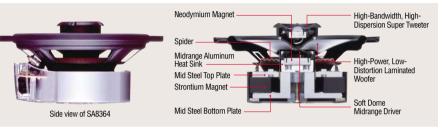
The SA Series is ideal for use alone as highperformance replacement speakers that instantly upgrade any in-car system. They are also perfect for use with other components to create extraordinary systems. Additional low frequency augmentation is easy using any of ECLIPSE's various subwoofers powered by dedicated subwoofer amplifiers.

- · Easily fits stock speaker footprints
- Simple installation
- 3-Way time aligned point source design
- Aluminum voice coil former
- CTA (Compound Tweeter Array) for response to 40kHz • 12dB/octave crossover
- · Midrange/tweeter protective circuit • Wide frequency response
- · Protective grille

# **Crossover network**

Each SA-Series speaker incorporates a computeroptimized crossover designed to maximize sonic purity and allow greater power handling with less distortion. ECLIPSE proprietary capacitors and quality components are utilized to ensure the three drivers produce a smooth, seamless sound.







SA8394  $6 \times 9$ <sup>"</sup>3-Way Point Source with CTA

- · Continuous Power Handling: 85W
- Music Power Handling: 250W



SA8374  $5 \times 7^{\prime\prime}$  3-Way Point Source with CTA

- Continuous Power Handling: 50W
- Music Power Handling: 150W



SA8364 6-1/2" 3-Way Point Source with CTA

- · Continuous Power Handling: 50W
- Music Power Handling: 150W

	SA8394	SA8374	SA8364
Size	6×9″	5×7″	6-1/2″
Frequency Response	40 — 40,000Hz	52 — 40,000Hz	82 — 40,000Hz
Santoprene Surround	•	•	•
Laminated Mica-filled Polypropylene Cones	•	•	•
Ferro-Fluid Cooled Soft Dome Midrange Driver	•	•	•
Ferro-Fluid Cooled Super Tweeter	•	•	•
Midrange/Tweeter Protection	•	•	•
Mounting Depth	3-3/8″	2-9/16″	2-1/4″
Grill or Adaptor	Grill + Spacer	Grill + Spacer	Grill + Spacer

# 2-Way SP-Series

ECLIPSE's 2-Way Point Source Series can instantly improve a system's total sound quality. The point source configuration of these speakers helps realize accurate imaging and a wide, expansive soundstage. Positioning the high frequency driver concentrically in the center of the low frequency's voice coil dramatically improves phase and imaging characteristics because the high and low frequencies are correctly aligned.

#### Concentrically-mounted tweeter.

Mounting the high frequency driver unit in the center of the low frequency unit voice coil allows point source speakers to approach an acoustic ideal, that is, all frequencies both high and low radiating from a single point.

## Computer-optimized crossover networks.

High quality parts are used to create efficient and crossover networks that minimize distortion and allow for smooth transitions between drivers. The crossovers are securely mounted directly to the woofers for ease of installation.



SP8994 6×9<sup>°</sup> 2-Way Point Source

- Continuous Power Handling: 85W
- Music Power Handling: 250W



**SP8974** 5×7" 2-Way Point Source

- Continuous Power Handling: 50W
- Music Power Handling: 150W



# SP8964 6-1/2" 2-Way Point Source

- Continuous Power Handling: 50W
- Music Power Handling: 150W



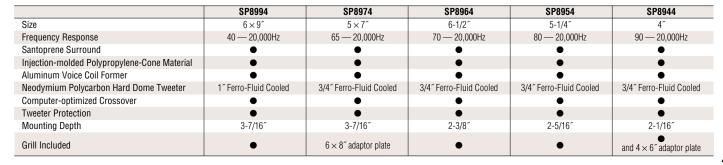
SP8954 5-1/4" 2-Way Point Source

- Continuous Power Handling: 40W
- Music Power Handling: 120W



SP8944 4" 2-Way Point Source

- Continuous Power Handling: 40W
- Music Power Handling: 120W



ECLIPSE Integrated Series speakers are integrated concentric units that are designed to replace factory speakers for significantly better music fidelity.

# Hybrid Mica PP Cone Woofer

The ECLIPSE speaker cone is hybrid mica PP for rigidity under intense power, ensuring distortion-free performance.

## **Butyl rubber surround**

The butyl rubber surround allows linear cone excursion and dampens cone resonance for undistorted dynamic peaks and clarity at all levels.

# Kapton voice coil former

Handles a large amount of heat without deforming.

# **Tweeter protection**

A solid state device protects the speaker system from power overloads. This device will momentarily shut down the tweeter circuit, and will automatically reset when the condition normalizes.

## Super tweeter (for SE8495, SE8375, SE8365, SE8355, SE8405 only)

To accommodate the extended high frequency response of DVD-Audio discs and to provide superior treble reproduction, the 3-way units incorporate a newly developed super tweeter that goes all the way out to 40kHz (typically 50kHz).

# Small neodymium tweeter

The use of a neodymium magnet improves speaker efficiency.





• Continuous Power Handling: 75W

Music Power Handling: 220W



SE8375 5×7~3-Way

- Continuous Power Handling: 40W
- Music Power Handling: 120W

NEW

NEW



# SE8355 5-1/2"3-Way

- Continuous Power Handling: 30W
- Music Power Handling: 90W



NEW

SE8405 4×10"3-Way

- Continuous Power Handling: 35W
- Music Power Handling: 100W

	SE8495	SE8375	SE8465A
Size	6 × 9″ 4-Way	5 × 7″ 3-Way	4×6~2-Way
Frequency Response	50 — 40,000Hz	85 — 40,000Hz	105 — 40,000Hz
Sensitivity	93dB	90dB	87dB
Hybrid Mica PP Cone	•	•	•
Rubber Surround	•	•	•
Kapton Voice Coil Former	•	•	•
Midrange Dome	•		—
Mylar Tweeter Dome	•	•	•
Super-Tweeter Dome	•	•	•
Neodymium Tweeter Magnet	•	•	•
Ferrite Woofer Magnet	•	•	•
Mounting Depth	3-1/16″	2-1/8″	1-3/4″



SE8465A 4×6<sup>2</sup>-Way

- Continuous Power Handling: 30W
- Music Power Handling: 90W



SE8465E 4×6<sup>2</sup>-Way

NEW

NEW

• Continuous Power Handling: 30W

NEW

NEW

Music Power Handling: 90W



SE8365 6-1/2"3-Way

NEW

• Continuous Power Handling: 40W Music Power Handling: 120W



# SE8245 4<sup>~</sup>2-Way

- Continuous Power Handling: 25WMusic Power Handling: 75W



SE8235 3-1/2<sup>2</sup> 2-Way

- Continuous Power Handling: 20WMusic Power Handling: 60W

# **Marine Loudspeaker**

ECLIPSE introduces a high-performance speaker that is impervious to the elements and specifically designed for excellent response in an open-air environment such as on a boat.



# SM8263 Marine Loudspeaker

Waterproof full-range speaker					
Sensitivity	85dB				
Woofer Cone	6-1/2″				
	(UV Solar-Protected)				
Tweeter	20mm Aluminum Hard Dome				
	(UV Solar-Protected)				
Basket	Oen Piece Cast Powder Coated				
	Aluminum				
Grille	Polycarbonite Plastic				
	(UV Solar-Protected )				
Woofer Magnet	Ferrite				
Tweeter Magnet	Neodymium				
Mounting Depth	3-1/2″				

SE8465E	SE8365	SE8355	SE8405	SE8245	SE8235
4×6″2-Way	6-1/2″ 3-Way	5-1/2″ 3-Way	4×10″3-Way	4″ 2-Way	3-1/2~2-Way
105 — 40,000Hz	90 — 40,000Hz	90 — 40,000Hz	65 — 40,000Hz	105 — 40,000Hz	120 — 40,000Hz
87dB	90dB	89dB	91dB	89dB	87dB
•	•	•	•	•	•
•	•	•	•	•	•
•	•	•	•	•	•
-	—	—	•	—	—
•	•	•	•	•	•
•	•	•	•	•	•
•	•	•	•	•	•
•	•	•	•	•	•
1-3/4″	1-7/8″	1-7/8″	2-3/8″	1-5/8″	1-1/2″

## 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 installatiion 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.

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- "dts" and "dts Digital Out" is a trademark of Digital Theater System, Inc.
- HD Radio is a trademark of iBiguity 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.
  NAVTEQ ON BOARD is a trademark of NAVTEQ.
- ICEpower<sup>®</sup> is a registered trademark of Bang & Olufsen ICEpower a/s.

#### 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 Gatecompatible 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-snecific

- 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.

#### AVX/CD Receivers-specific

- · Use map data while being aware of actual road conditions and obeying traffic rules.
- Some E-iSERV graphic examples may be from pre-release software and may vary slightly from the final version.
- Copying, publishing and the use of maps in electronic media or form are only possible when express written consent has been obtained prior to usage.



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