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## Clarion

Human Music Interface Media

Introducing Moray — the concept car designed to reflect Clarion's H.M.I. This is the world in which Jay Kay lives. A place where mobile, music, media and style mesh seamlessly. Let Clarion take you to a new level of excitement and satisfaction — to the world of Clarion Azzurro.



DVD MULTIMEDIA STATION
WITH CENET & 7-INCH TOUCH PANEL CONTROL

HDD NAVIGATION & DVD MULTIMEDIA STATION WITH TOUCH PANEL CONTROL

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ITALDESIGN-GIUGIARO GILIGIARO

"Moray", the Clarion H.M.I. concept car created in Italy by GIUGIARO, one of the world's top industrial design firms.

Jay Kay (Jamiroquai) "Jay Kay", vocalist in the world-famous jazz funk band Jamiroquai. Mobile
Human Music Interface
Media Clarion HMI

## Reaching Higher for the Next-Generation H.M.I.

Clarion will continue to tackle tough challenges with a spirit that will never die.

Trends dramatically evolve, user needs diversify, and new technologies are born one after the other... but no matter how much the environment and conditions that affect your motoring lifestyle change, we will be up to the task with an aggressive development stance pursuing fresh ideas and new technologies that defy conventional thinking and bring out the highest performance and usability. Experience superior sound and high-resolution images infused with Clarion's leading-edge technology and a hands-free environment that brings safety to your car. Savour revolutionary design that responds immediately to the driver's will and senses. We do not follow trends, we make them. Clarion's H.M.I., always new as it continues to evolve climbing to new heights for the benefit of its users.

## Emotion and performance infused



## Transform your motoring lifestyle with performance that responds to the driver's senses and high-performance CPU-based car navigation.

Our powerful AV-N (Audio Visual & Navigation) line-up is comprised of 3 models, including the AV-N integrated top model MAX973HD with a 30 GB hard disk to support the Navigation engine's highspeed processing, as well as the Black Box-wired VRX878RVD and MAX678RVD that allow smooth system upgrading to the HDD Navigation System NAX973HD. The map data covering 30 countries contained in the 30 GB hard disk, voice guidance in 9 languages, voice recognition in 6 languages, and a high-performance CPU-based engine all combine to provide high-performance navigation. Compatibility with various compressed digital media including DVD/CD/MP3, interfaces that enable seamless connection with hands-free Bluetooth® telephony, and the quality sound that comes from Clarion's accumulated technology, such as 2-Zone, create a world of high-definition sound and images. All of this, condensed into a single interface... that is the idea behind the Multimedia Station. Clarion is a master on integrated solutions that meet your needs. Three new Portable Navigation models are introduced in 2007, they combine not only high-performing navigation, but also Picture Viewer, an MP3/WMA player, as well as Bluetooth in the MAP770 and MAP670. Beyond enjoyment of images and sound, the convergence of Navigation functions that support comfortable and safe driving will bring about new possibilities as the mainstream of the

## SUPERBSOUND

#### with integrated flexibility

#### Supporting a wide variety of digital formats and reproduces them with the highest quality sound.

Digital technology, evolving at light-speed, has enabled the data storage capacity of musical media to increase dramatically while decreasing the physical size. What's more, with the increasing interface connectivity of various equipment, it is now possible to seamlessly link your car's interior with the outside world. Clarion, in the field of digital technology, has developed the Sound Restorer to reproduce sound that is infinitely close to the original. It achieves sound perfection by correcting and compensating for compressed music data like MP3/WMA/AAC on media such as DVD±R/RW, and portable media players such as iPod®, as well as USB and SD Memory cards. You can enjoy the portability of digital media while marvelling at the superb sound. Bring the music you were listening to outside, right into your car and continue enjoying it without a second thought. At Clarion, we have always acknowledged the importance of sound in the continuing evolution of digital technology, so you won't have to sacrifice quality for portability, or vice versa.



## Taking safety to new extremes with



#### Changing your in-car communication with safety that's a cut above.

Talk on your mobile phone while keeping a firm grip on the steering wheel, and hear the person you're talking to through your car's speakers. Thanks to wireless connection via Bluetooth®, the safety of your motoring lifestyle has evolved another step. Clarion has extended its 2007 source unit line-up with Bluetooth receivers featuring the next-generation wireless standard, known for its superiority against obstacles and providing communication at 1Mbps. By using a Bluetooth compatible mobile phone, you can link your car to the outside world seamlessly, for streamlined, safe communication. Also, you can integrate a Bluetooth compatible iPod® and control it from the source unit. A USB memory stick containing music files can be directly connected at the front of several 2007 Clarion products. Many devices can also be connected to the auxiliary input on the back. We wish to create a new style of communication that will resonate with drivers of the IT generation and to pursue an interface that boosts the safety of the mobile environment. Clarion's H.M.I. concept which is the harbinger of a new driving era, will cushion your car with an added sense of safety.

## that defies conventional thinking

#### The ultimate human-machine interface design that throws conventionality out the window.

A 3-dimensional form that casts off the stereotypical car interior, simple and stylish lines that suggest modern art, stand-out personality and individuality that break the traditional mould and a human-machine interface that is fully attuned to the operations of the driver. With the DXZ778RUSB and DXZ578RUSB, our high-class source unit models feature the SLIDETRAK sliding face on the left and right where you can perform various operations. What's more, with a variety of functional and attractive designs, including our FB278RBT model featuring a futuristic metal shark gill-like design, as well as the DUB278RMP source unit which imports the concept of modern living into your car, Clarion's H.M.I. continues to evolve and breathe fresh excitement into the mobile environment.

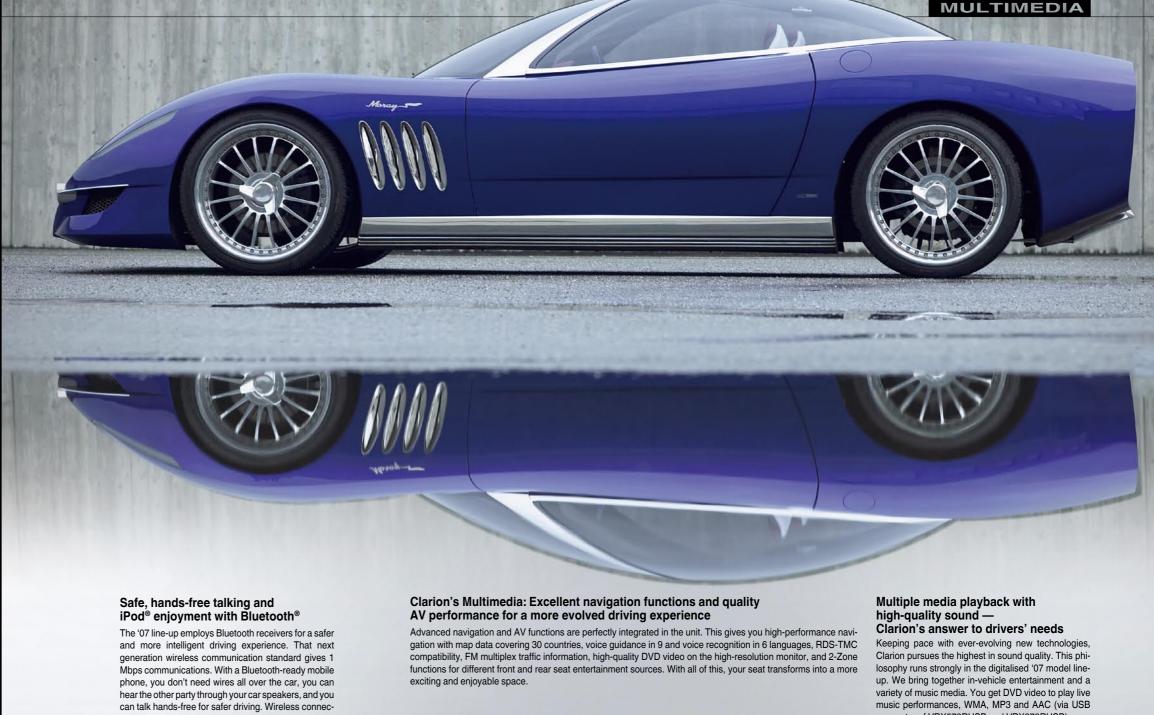


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## **MULTIMEDIA**

## MUSIC, VIDEO AND INFOR-MATION... THE LIFE-YOU SEEK IS **ALL THERE**

Clarion has a unit to suit your car multimedia lifestyle in the '07 lineup boasting units from navigation to powerful AV devices. Topping these is the MAX973HD AV & Navigation integrated unit, which presents a new page in the story of Clarion's line of main units, featuring advanced technologies and unique features. A new style of AV awaits with highly accurate navigation, simple and speedy performance from the powerful navigation engine, seamless connection of a wide range of media, and compatibility with upgrades for 2-Zone and USB connection.



tions to Bluetooth-ready portable music players mean seamless music enjoyment in and out of the car.



#### A choice of built-in or connectable hard disk for AV & navigation units

Choose the system that best fits your needs with integration of navigation and AV functions and expandability. MAX973HD, running Windows Automotive 5.0, integrates AV & navigation and has a powerful navigation engine and a huge 30 GB HDD. VRX878RVD offers great flexibility and expandability through to HDD navigation



connectability and 2-Zone functions, MAX678RVD has a 7-inch wide monitor screen for rich expression even with its compactness and offers high-resolution maps and a DVD display.

#### Your choice of AV-units with wide format capability and USB connections

VRX578RUSB features a flip-out motorised 7-inch monitor for maximum performance in confined car spaces. It gives you finger-tip control of operations on the touch panel, iPod control and playback of MP3, WMA, AAC and other compressed media. VRX378RUSB has a 3.5 inch monitor and plays impressive video imagery despite





its compactness. Both are equipped with USB slots to connect to various devices and are ready for an optional Bluetooth interface for hands- free conversation

connector of VRX578RUSB and VRX378RUSB) compressed audio on CD-Rs and RWs in addition to music



CDs, and iPod control

The Clarion H.M.I. ideal is writing a new page in history with the MAX973HD. Video and sound are powerful. Map data displays quickly on the high-performance navigation system. Everything is amassed in our flagship all-in-one 30 GB hard disk drive-equipped AV-N model with 2-Zone expansibility, Bluetooth® linkage to peripheral equipment such as mobile phones, iPod® and more

The fusion of high-end video and sound and high-performance navigation opens the door to next-generation motoring life.



MAX973HD HDD NAVIGATION & DVD MULTIMEDIA : WITH 7-INCH TOUCH PANEL CONTROL **HDD NAVIGATION & DVD MULTIMEDIA STATION** 



\*iTMC, V-Trafic and TMC-Pro are trademarks of ITIS,

- Motorised sloping control panel with 7-inch QVGA TFT colour LCD monitor • Touch screen operation and quick access to Short Cut Menu • 400 MHz CPU • 30 GB hard disk drive
- Built-in RDS-TMC tuner for traffic information
- Built-in 2D gyro sensor 1 video and 2channel audio AUX input • 1 video line-out and 2-channel audio pre-out for 2-Zone entertainment • Microphone for voice recognition • CeNET control of: TV tuner and Bluetooth interface adapter BLT573 • DVD±R/DVD±RW/CD-R/CD-RW ready • MP3 and WMA compatible with ID3-TAG display • 18 FM. 6 MW/LW station presets • RDS-
- EON tuner with variable bandwidth 24-bit D/A converter • SD Card slot for MP3/WMA playback and data installation using "Clarion NAVI manager" with PC application • Builtin "Music Catcher" with Gracenote® music recognition service (Ripping speed: Maximum 8 times, Storage capacity: maximum 4,000 songs) CeNET Bluetooth interface adapter BLT573 ready for handsfree interface; supported profile: HFP (Hands Free Profile) and HSP (Head Set Profile) • 3-band parametric equaliser • MAGNA BASS EX dynamic bass enhancement • 4channnel × 53 watts of MOS-FET amplification OEM steering wheel remote wired interface capability • iPod direct connection and control • CCD camera input
- Map coverage: [Western Europe] Austria, Belgium, Denmark, Finland, France, Andorra, Monaco, Germany, Ireland, Italian, San Marino, the Vatican, Luxemburg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Liechtenstein, UK [Eastern Europe] Croatia, Czech Republic, Hungary, Poland, Slovakia, Slovenia, Estonia, Latvia, Lithuania • Voice recognition and Text to speech: German, French, UK English, Italian, Spanish, Dutch

- · Voice guidance and Screen text: English, German, French, Italian, Dutch, Spanish, Portuguese, Swedish, Danish • 3D display mode with adjustable angle • Map scale: 25m/50m/100m/200m/500m/1km/2km/ 4km/16km/64km/256km • Day/Night map colour change: automatic and manual • High resolution motorway signboard graphic on interchange with split screen mode • Address search function including postal code search, house number search, POI name search, category search and nearby search.
- 3D menu: user's favourite and frequent list · Multiple route calculation: shortest, fastest, minimise motorways and more detail setting (toll road, time restriction, avoid area, ferry)
- Route information: next manoeuvre, traffic information, guidance information, repeat quidance and display destination
- Auto-reroute Route calculation using traffic information • Pop-up traffic information
- · Route guidance: estimated time of arrival, road name of next manoeuvre, manoeuvre display, crossing zoom • Turn list mode • Store location and edit location: maximum 200 points • User profile function: adjusted items can be stored for 4 different users • RDS-TMC display: Pay TMC, Icons on map, Text information, Pop-up traffic events, Recommend reroute pop-up, event list, TMC event filtering

For more detailed information concerning installation possibilities, please refer to the CIP (Clarion Installer Programme) on page 32-33.

and Turning setting

#### Music Catcher: High speed recording and large storage capacity

Music Catcher is a function which enables listeners to store favourite tunes and albums on the built-in hard disk. You can enjoy music from the hard disk by making your own "favourite collection" of music. Ripping speed: Maximum 8 times recording Storage capacity: Maximum 4,000 songs Ripping format: High quality Atrac3 / 132Kbs





#### "Clarion NAVI Manager" PC application

The Music Catcher of MAX973HD is able to update the CD title information for each song automatically after ripping the song on the hard disk. In case the database doesn't have your title information available, the NAVI manager software can synchronise the data with the Gracenote website on the Internet and update the title information on your hard disk. Moreover, the software can also show your favourite picture or the album cover on the screen





"Clarion NAVI Manager" with

#### **DVD Video-ready**

A high resolution monitor is employed, which can

#### Ready for CCD rear view camera

A CCD rear view camera can be connected and rear views from the camera can be monitored on the TV screen in the car. This broadens the view from the cockpit and promotes safety when reversing thanks to a detailed view of what's behind the car.

#### Changeable skin design

Icons and background patterns of the navigation system and audio & visual sources can be customised to suit your taste and the image of your car.



SD card slot for MP3/WMA playback and data installation with PC olication Clarion Navi Manager

#### An Integrated AV-N Unit

MAX973HD is an integrated AV & Navigation unit with a huge 30 GB hard disk. It integrates sophisticated navigation functions, such as graphic display of map data, destination search and route calculation/guidance, with impressive entertainment options, eg. high-quality reproduction of audio and visual media and 2-Zone playback.





#### Ready for iPod Audio/Video

By connecting an iPod Video, you can access its video library and enjoy playback of music photos and videos on the wide monitor screen. The connected iPod is automatically recognised and can be fully controlled via the main unit display



#### Hands-free phone conversation via Bluetooth receiver promotes safe driving

The optional Bluetooth interface adapter connects your main unit to Bluetooth-ready mobile phones without wires enabling you to talk hands-free on your phone. When a call is received, music is interrupted and

the voice of the caller is heard through the speakers of the car audio system. There is no need to hold the phone, simply talk into the supplied microphone

#### **BLT573**

#### CeNET Bluetooth INTERFACE ADAPTER

· Compatible with MAX973HD · Headset and hands-free profile • Controls cellular phone book directly from touch screen: 500 persons, 5 numbers per person\* Displaysname/callingnumber/outgoingcalls/missedcalls\* · Automatic receive function\* · Redial function\* · Voice recognition control\* • On-screen information of battery level, tel. reception signal strength\*

\*depends on telephone

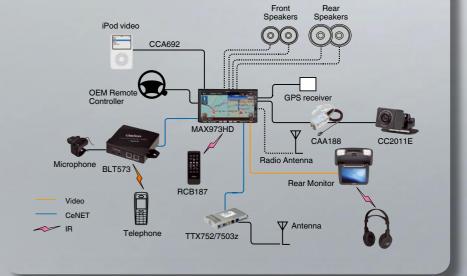




reproduce high quality video images from such sources as DVD videos. The system has been upgraded to 2-Zone functionality to offer different entertainment sources in the front and rear seats. For instance, the driver can enjoy music while receiving navigation guidance on the dash-mounted unit. while rear passengers can enjoy DVD videos on separate



#### **MAX973HD System Example**



#### High-level user function and usability guide the driver to the destination assuringly.

#### ▶ 3D menu display with new concept



The menu display builds on a new design concept derived from Clarion's H.M.I. philosophy. The 3D display of menus is arranged in a circle enabling quick and intuitive selection of the desired function.

#### **▶** Guidance screen



An automatic crossing zoom screen guides you through crossings, roundabouts and intersections. The intersection illustration uses a 3D display with clear directions. Furthermore, "turn lists" and a smart "turn-by-turn mode" smoothly guide you all the way to your destination

\*Graphics for motorway signboards are available for the following countries: Austria, Belgium, Denmark, France, Germany, Italy, Luxemburg, Portugal, Spain, Sweden, Switzerland, the Netherlands and the

#### ► Change of map display and split screens



Display screens can be selected from 2D display, 3D display for enhanced recognition, or split-screen displays of 2D + 2D or 2D + 3D. Intelligent guidance is realised by means of showing your car's position on a sub-display with intersection illustrations and signs.

#### **▶** Built-in RDS-TMC tuner



An RDS-TMC tuner is built in. This provides you with timely traffic information provided by various authorities and delivered via the traffic messenger channel.



#### ► Smart, simple and direct control on touch-panel display



City Centre

0-9 Symbols

Smart touch-panel controls enable you to access information at the touch of a fingertip. Layouts are devised to enable instantaneous display of desired information, while detailed information easily can be called up with a touch of your

A destination can be searched for in various ways and shown on the screen quickly. Searches are possible by known address, either by narrowing down from a country-by-country display or simply by entering the destination with letters and numbers on the address input screen.

#### ► Changeable skin design





This skin is an original creation for Clarion, by Giugiaro Design (Italy). To upgrade your HDD navigation layout, you can download different skin files from www.clarion.com. Icons and background patterns can be customised to suit the taste and image of your car.

GIUGIARO

#### ► Map data included <30 countries> Andorra / Austria / Belgium / Croatia / Czech Republic / Denmark / Estonia / Finland / France / Germany / Hungary / Ireland / Italy / Latvia / Liechtenstein/ Lithuania / Luxemburg / Monaco / Norway / Poland / Portugal / San Marino / Slovakia / Slovenia / Spain / Sweden / Switzerland the Netherlands / the Vatican / UK

#### Clarion HDD navigation available with 3 models: integrated AV & Navigation unit or a hideway unit

Choose from 3 great models: the flagship unit MAX973HD, an integrated AV & Navigation unit with 30 GB HDD and high-speed navigation calculations or the VRX878RVD or MAX678RVD which connects to discrete, hideaway naviga-



HDD NAVIGATION & DVD MUL-TIMEDIA STATION WITH TOUCH PANEL CONTROL



MAX678RVD 2-DIN DVD MULTIMEDIA STATION WITH TOUCH PANEL CONTROL (works with NAX973HD)



DVD MULTIMEDIA STATION
WITH TOUCH PANEL CONTROL
(works with NAX973HD)

Navigate stress-free with advanced search functions, clear graphics, and ultra high-speed processing that provides a quick response that you can only expect from an HDD (Hard Disk Drive) based car navigation system. Any destination, wherever it may be in Europe, is calculated in less than a few seconds! Needless to say, once navigation along a given route has started, calculating changes or diversions is even quicker. The system will never let you wait when you have to choose between two - or more - new possible routes while driving. And since it's a hide-away unit that's only 29 mm thick, you can mount it under a seat or wherever it will fit in the car and The VRX878RVD demonstrates maximum performance in limited vehicle space, delivering powerful video and sound in an amazingly compact size. This is a 1-DIN unit that provides maximum entertainment in minimum space. Navigation connectivity (to an HDD system) makes the VRX878RVD one of the most complete products in this category on the market. It truly represents the realisation of Clarion's dream of creating a Multimedia Station. What's more, just like many audio main units, the VRX878RVD also has a detachable control panel for security purposes. Take the panel with you when you leave the car in the safe wisdom that nobody will mess with

# **Reach your destination** with precision and comfort

NAX973HD HDD NAVIGATION SYSTEM

\*iTMC, V-Trafic and TMC-Pro are trademarks of ITIS, Mediamobile and T-System, respectively.

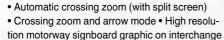
- Hide-away type HDD navigation 30 GB hard disk drive • 12-channel GPS receiver • Builtin gyro sensor and RDS-TMC tuner for traffic information • Vehicle speed pulse input • USB interface for back-up of user data and change of wallpapers • Easy operation with touch panel control by VRX878RVD/MAX678RVD
- Map coverage (30 countries): Western Europe -

Andorra, Austria, Belgium, Denmark, England, Finland, France, Germany, Ireland, Italy, Liechtenstein, Luxemburg, Monaco, the Netherlands, Norway, Portugal, San Marino, Spain, Sweden, Switzerland, the Vatican Eastern Europe -

Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia, Slovenia

- · Voice recognition and Text to speech: English, German, French, Dutch, Italian, Spanish
- Voice guidance and Screen text: English, German, French, Dutch, Italian, Spanish, Portuguese, Swedish, Danish • 2D and 3D view
- Map scale: 25m/50m/100m/200m/500m/1km/ 2km/4km/16km/64km/256km
- Day/Night map colour change: automatic and manual

An installation friendly GPS antenna



- with split screen mode · Address search function including house number searching, POI searching, Category search, Telephone number search, Nearby search and Postal code search
- Routing condition: Fastest, Shortest distance, Minimise toll roads, Minimise motorways
- Detour range: 2/5/10km Detailed POI (point of interest) database • Route simulation and Turn list can be displayed • 3D Menu: User's Favourite and Frequent list
- · Multiple route calculation: Shortest, Fastest and more detail setting (Toll Road, Time Restriction, Avoid Area, Ferry) • Route Information: Next manoeuvre, Traffic information, Guidance information and Repeat guidance
- Automatic re-route calculation using traffic
- Route Guidance: Estimated time of arrival, Road name of next Manoeuvre and Entrance of motorway • Turn List mode display
- Store location and edit location: maximum
- RDS-TMC display: Pay TMC, Icons on map, Text information, Pop-up traffic events, Recommend reroute pop-up, event list, TMC event filtering and Turning setting

For more detailed information concerning navigation functionality, please refer to page 10-11.

#### INCLUDED IN THE PACKAGE

• GPS antenna • NAVTEQ map data on hard disk drive (with 30 countries) • Microphone for voice recognition and text to speech • CeNET cable and RGB cable • TMC antenna DIMENSIONS

• 205(W) × 29(H) × 160(D)mm

#### High-capacity hard disk drive and high-speed

The SH-Navi1 LSI chip provides rapid route calculation, together with the high-speed graphics rendering IC, collectively assuring a highly accurate and comfortable car navigation experience. The system supports Windows Automotive 5.0 for upgradeability and is able to handle full map data thanks to the high capacity of the hard disk drive.



#### Advanced H.M.I. using touch panel and 3D menus

Smart touch panel control and an innovative interface means easy and intuitive operation even of advanced features. The unique 3D menu uses a 3D graphic engine to enable you to create a "Favourite" or "Frequent" list with your own destinations to further simplify navigation opera-

	NAX973HD	NAX963HD
VRX878RVD	•	•
MAX678RVD	•	•
VRX578RUSB		
VRX378RUSB		
VRX868RVD	•	•
MAX668RVD	•	•

### Tremendous future potential hidden within a compact body



**DVD MULTIMEDIA STATION** VRX878RVD WITH CENET & 7-INCH TOUCH PANEL CONTROL





Now iPod Video Ready

- DVD±R/DVD±RW/CD-R/CD-RW ready MP3/WMA compatible with ID3-TAG display • 18 FM, 6 MW/LW station presets • RDS-EON DSP tuner with variable bandwidth and Radio text • iPod direct connection and control • 2-Zone entertainment: front and rear separate source control • 24-bit D/A converter • 3-band parametric equaliser • 4-channel × 50 watts built-in MOS-FET amplifier • Fully motorised 7-inch QVGA colour LCD monitor • Touch panel control with soil-resistant finishing • Adjustable display brightness • Phone mute • 1 AUX AV input (2-channel audio + video) • 1 video line-out and 2-channel audio pre-out for 2-Zone entertainment • 6-channel audio pre-out • CeNET Control of: HDD blackbox navigation, TV tuner and 6-disc CD changer • AUX Bluetooth® audio/mobile-phone transceiver BLT373 ready
- OEM steering wheel remote wired interface capability CCD camera input via Video line-in with reverse gear connection

For more detailed information concerning installation possibilities, please refer to the CIP (Clarion Installer Programme) on page 32-33.

#### Function display screens for full system information

Clarion's in-dash, 7-inch monitor is the source for all media and function information, allowing quick access to a host of features with a simple touch of the on-screen menu. The menu is laid out in an easy-to understand fashion by displaying all actions related to the selected media source. Through its changeable background colour, your car interior can be smoothly adapted to your personal taste and preferences.

#### Navigation control supported

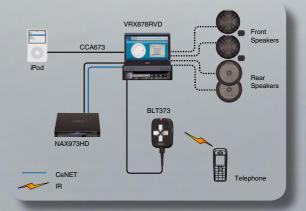
When you connect the HDD Navigation System (NAX973HD), the VRX878RVD can be used as both a navigation monitor and a control unit. By simply touching the screen you can perform all kinds of functions, such as displaying a map in a large, easy-to-view size on the wide screen, searching for routes, and selecting menu items. Thus, a car navigation system has been implemented without sacrificing space.

Clarion's 2-Zone feature offers more flexibility when it comes to mobile entertainment. Now, owners of Clarion's VRX878RVD get more frontseat listening options while rear-seat passengers can watch and listen to a DVD via wireless headphones. So, plug in an iPod, listen to a CD, the radio, or any CeNET-equipped audio source. This is versatility where you need it most in the car.

#### Ready for iPod Audio / Video

When connecting an iPod video, you can access its video library and enjoy music and video playback on the wide monitor screen. The iPod is automatically recognised when you connect it, and you can control it from the main unit display. You can even set the wallpaper on the main unit display to change to that of the iPod





Create a high-quality entertainment area in the limited space of your car. A highly accurate navigation system backs you up with coverage through 30 countries. And the MAX678RVD flexibly provides diverse expandability, such as 2-Zone system expansibility, hands-free communication with Bluetooth® iPod® connectivity, and navigation linkage with the HDD navigation unit NAX973HD. This all comes together in Clarion's ideal form for a multimedia station.

#### The multimedia station opens up new horizons of motoring life with diverse linkage and expandability.



#### MAX678RVD 2-DIN DVD MULTIMEDIA STATION WITH CENET & 7-INCH TOUCH PANEL CONTROL

VIDEO	D I G I T A L	disc	disc	The State of
<b>⊘</b> R <sub>i</sub> D <sub>i</sub> S <sub>i</sub>	MP3 ID3 TAG	TOUCH彩 PANEL	SLOPE CONSOLE	M-BASSEX
24 bit	P.EQ	ZZONE	6ch	AUX
CeNET	MOS-FET	50 W×4	OEM Remote readu	Bluetooth

- DVD±R/DVD±RW/CD-R/CD-RW readv MP3/WMA compatible with ID3/WMA-TAG display • 18 FM, 6 MW/LW station presets
- RDS-EON DSP tuner with variable bandwidth and Radio Text • iPod direct connection and control • 2-Zone entertainment: front and rear separate source control • 24-bit D/A converter
- 3-band parametric equaliser 4-channel × 50 watts built-in MOS-FET amplifier • Fully motorised 7-inch QVGA colour LCD monitor
- Touch panel control with soil-resistant

finishing • Adjustable display brightness

- Phone mute 1 AUX AV input (2-channel audio + video) • 1 video line-out and 2-channel audio pre-out for 2-Zone entertainment
- 6-channel audio pre-out CCD camera input • CeNET Control of: HDD blackbox navigation, TV tuner and 6-disc CD changer
- AUX Bluetooth audio/mobile-phone transceiver BLT373 ready • OEM steering wheel remote wired interface capability

For more detailed information concerning installation possibilities, please refer to the CIP (Clarion Installer Programme) on page 32-33.



Hands-free conversations on Bluetooth-ready mobile phones, promote safe driving. This is possible via wireless connection of the phones to the vehicle audio systems. With the A2DP Audio Distribution Profile, you can enjoy music reproduction from many new mobile phones or portable media players and control them via AVRCP (Audio Video Remote Control Profile).

#### Ready for iPod Audio / Video



By connecting an iPod Video, you can access its video library and enjoy playback of music on the wide monitor screen. The connected iPod is automatically recognised and can be controlled via the main unit display, while the wallpaper on the main display can be changed to that of the iPod.

#### **Navigation Control with NAX973HD**



An up-to-date, information database covering 30 European countries integrated with a high-speed CPU. Easy to read 3D menus combined with convenient icon displays and intuitive operation for ease of use. This is smart navigation that promotes comfort and enhances safety while driving.

#### 2-Zone entertainment



The enjoyment of different sources for front and rear passengers, without interfering with each other, is possible with Clarion's 2-Zone entertainment system. A new driving experience is brought about in which the driver and front passenger can listen to music and watch navigation information on a dashmounted unit while rear passengers can enjoy DVD on rear-mounted screens

#### Soft in-dash integration

Through its changeable background colour, feeling of your car interior can be smoothly adapted to your own taste and preferences, by harmonizing the colour design of the display and keys with your car dashboard illumination.

#### 24-bit DAC

Noise generated by conventional DAC IC's are distributed randomly throughout the spectrum, including the audible range. To circumvent this, Clarion adopts a high-performance 24-bit DAC normally only found in expensive home audio systems. Not only does it cancel out unwanted noise well into the non-audible high frequency range, but it also extends the S/N ratio for clearer. more realistic sound.



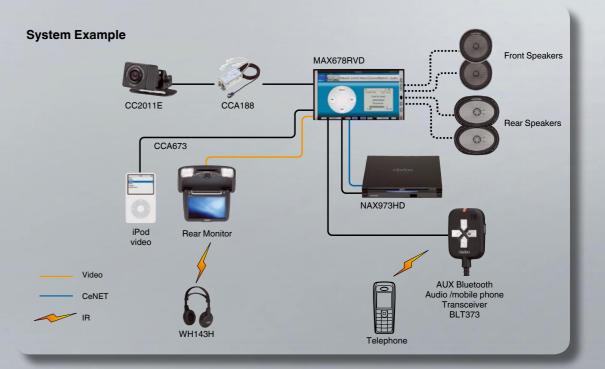
#### Theft prevention system with personal code

When the ignition is switched off, an LED lamp blinks to warn against intruders. If the set for any reason is disconnected from the battery, the Multimedia Station cannot be reactivated without your PIN code. Theft prevention functions and LED blinking are user

#### Ready for rear view camera

Install a CCD camera on the back of the car and see what's behind the vehicle when you put the car in reverse. The CCD camera can be linked to the MAX678RVD with the CAA188 adapter for a clear view of what's behind you. Great for parking in tight

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Made for iPod

Now iPod Video Ready

DEG STATE

The VRX578RUSB takes high-end multimedia to the masses. Equipped with our industry leading iPod® user interface with video playback, a USB slot, 2-Zone entertainment and compatibility with the Clarion BLT373 Bluetooth® interface, the VRX578RUSB provides you with functionality like you'd never Clarion understands the needs of mobile entertainment enthusiasts are ever changing. To keep up with these needs, we introduce the VRX378RUSB. This 1-DIN unit offers features like 2-Zone entertainment, iPod control and a USB port for the ultimate in in-dash performance. Integrate the VRX378RUSB into your car with our OEM Steering Wheel control input or add a rear-view camera to make reverse parking easier and safer than ever. The VRX378RUSB puts multimedia and convenience where you'd never expect it.



#### Nobody knows H.M.I. like Clarion.

That's why we outfitted the VRX578RUSB with a control panel that's intuitive and easy to use, even while your eyes are safely on the road.



• DVD±R/DVD±RW ready • CD-R/RW ready • MP3, WMA and iTunes® AAC (only USB) Compatible with ID3-TAG display • Official DivX® Certified product • Plays all versions of DivX® video (including DivX® 6) with standard playback

of DivX® media files • Rear USB connector

**Entertainment delivered like** 

VRX378RUSB

**DVD MULTIMEDIA STATION** WITH 3.5-INCH MONITOR

never before

• 18 FM/12 MW/LW station presets • iPod direct connection and control • Shock proof memory • 24-bit D/A converter • Subwoofer volume control • 2-Zone entertainment: front and rear separate source control • Z-Enhancer Plus sound customisation • 2-band parametric equaliser

• MAGNA BASS EX dynamic bass enhancement • Built-in High-pass filter & Low-pass filter • Built-in amplifier canceller • 4 channel × 50 watts of MOS-FET amplification • Motorised sloping control panel with 3.5-inch TFT colour LCD monitor

• Adjustable display brightness • Phone mute

M-BRSSEX 24 bit PEO LPF HPF AMP 6ch AUX MOS-FET 50W×4 Remote ready Bluetooth

ID3 TAG AAC USB SLOPE

- 1 AUX AV input (2-channel audio +video) • 6-channel audio pre-out • AUX Bluetooth audio /mobile-phone transceiver BLT373 ready
- OEM steering wheel remote interface capability • CCD camera input via video line-in with reverse gear connection
- Detachable control panel

DOLBY

For more detailed information concerning installation possibilities, please refer to the CIP (Clarion Installer Programme) on page 32-33.

#### VRX578RUSB DVD MULTIMEDIA STATION WITH 7-INCH TOUCH PANEL CONTROL

VIDEO	DIGITAL	OSC COMPACT	The State of the S	CO RIDISI
MP3 ID3 TAG	AAC	USB	TOUCH彩 PANEL	Z-Enhancer Plus
M-BASS EX	24 bit	P.EQ	LPFXHPF	ZONE
A M P Canceller	6ch output	AUX	MOS-FET	50 W×4
OEM Remote ready	Bluetooth			

- DVD±R/DVD±RW ready CD-R/RW ready
- MP3 and WMA and iTunes® AAC (only USB) Compatible with ID3-TAG display • Official DivX® Certified product • Plays all versions of DivX® video (including DivX® 6) with standard playback of DivX® media files • Rear USB connector
- •18 FM/12 MW/LW station presets •iPod direct connection and control • Shock proof memory
- 24-bit D/A converter Subwoofer volume control
- •2-Zone entertainment: front and rear separate

source control • Z-Enhancer Plus sound customisation • 2-band parametric equaliser • MAGNA BASS EX dynamic bass enhancement • Built-in High-pass filter & Low-pass filter • Built-in amplifier canceller • 4 channel × 50 watts of MOS-FET amplification • Fully motorised 7-inch TFT colour LCD monitor • Touch panel control • Adjustable display brightness • Phone mute • 1 AUX AV input

- (2-channel audio +video) 6-channel audio pre-out • AUX Bluetooth audio/ mobile-phone transceiver BLT373 ready •OEM steering wheel remote interface capability • CCD camera input via video
- Detachable control panel

For more detailed information concerning installation possibilities, please refer to the CIP (Clarion Installer Programme) on page 32-33.

line-in with reverse gear connection



#### iPod Audio and Video playback

The iPod has revolutionised the portable media industry like nothing before. Clarion's dedication to integration with the iPod is unsurpassed. It features both iPod audio control and iPod Video playback.

#### DivX® □v×

Both Clarion multimedia stations play DivX files. DivX has become the world's most popular video compression format, allowing you to bring videos with you whenever and wherever you wish.



#### Rear USB terminal

Plug in a USB key in your VRX578RUSB or VRX378RUSB to access up to 15,000 tracks of MP3, WMA or AAC files from iTunes®. You can also enjoy ID3 tag data, giving you album, artist and track information. The maximum number of folders. supported is 255 with up to 15,000 track per folder

#### 2-Zone entertainment

Keen everyone entertained with 2-7one entertainment: listen to your favourite radio station while your rear seat passengers enjoy a DVD movie via any of Clarion's

fine rear seat entertainment products.



#### DVD±R/DVD±RW playable

Both units are compatible with MP3/WMA/DivX® on DVD±R/DVD±RW media formats. To enjoy hundreds of hours of your favourite music you can burn up to 3.000 tracks on your DVD split into 255 folders with maximum 3.000 tracks per folder

#### High-pass/Low-pass filter

You can set the frequency range of the audio signal that's output to each channel to best match the acoustic characteristics of the subwoofer, front and

rear speakers. Clarion's built-in 24-bit D/A converter recreates the natural nuances and expressions lost during the sound reproduction process.

#### **Multimedia station**

Clarion knows connectivity and so does the VRX378RUSB. We've equipped the VRX378RUSB with a USB slot for easy access to your music collection, Bluetooth compatibility via the BLT373, an OEM Steering Wheel control interface input and a rear view camera input. Combine this with MP3/WMA and iTunes AAC file format decoding, iPod audio and video connectivity and



2-Zone entertainment. Clarion offers everything you ever

16 www.clarion.com www.clarion.com | 17 You can enjoy DVD video by installing monitors in the car. Once connected to the main unit, watching a DVD video becomes a pleasure. Set them up as stand-alone rear seat monitors, or use them in a 2-Zone system where the front and rear are in separate zones. The diverse line-up of monitors lets you choose what is best for your kind of motoring life.

Easy to use navigation right at your fingertips. Here is a car navigation unit that goes a step beyond - and out of the car. It can be used for driving, cycling or even walking. When mounted in the car, the built-in handsfree Bluetooth interface supports safe driving. It even doubles as a portable music player thanks to an SD/MMC slot; no cable is required as it is battery powered.

#### Choose high-quality monitors that meet your needs for stand-alone and 2-Zone systems

#### *VS1078HM*

DVD EXTENSION MODULE FOR OHM1073



- DVD±R/DVD±RW, CD-R/RW compatible
- DiVX(5.x)/MPEG4/AVI compatible
- MP3/WMA (CD/DVD) compatible • Official DivX® Certified product • Plays all
- versions of DivX® video (including DivX® 6) with standard playback of DivX® media files
- Dimensions: 350.7(W) × 280.8(H)
- × 42.4(D) mm



#### **VS778HM**

DVD EXTENSION MODULE FOR OHM773



- DVD±R/DVD±RW, CD-R/RW compatible
- DiVX(5.x)/MPEG4/AVI compatible • MP3/WMA (CD/DVD) compatible • Official DivX® Certified product • Plays all versions of DivX® video (including DivX® 6) with standard playback of DivX® media files
- Dimensions: 260.8(W) × 255.9(H) ×

#### OHM 1073 10.2" OVERHEAD

#### **FLIP-DOWN MONITOR**

- Ready for optional DVD extension module VS1078HM • IR audio output trasmitter for WH143H • Front/rear IR remote sensor • 2 A/V inputs (pigtail lead & rear panel direct line-in)
- 1 A/V output 2 dome lights with auto/on/off control • Mini jack headphone output • Remote controller included On screen display • Picture control for contrast, brightness and colour
- Dimensions: 331.4 (W) × 261.6 (H)



#### *OHM773*

#### 7" OVERHEAD **FLIP-DOWN MONITOR**

 Ready for optional DVD extension module VS778HM • IR audio output transmitter for WH143H • Front/rear IR remote sensor • 2 A/V inputs (pigtail lead & rear panel direct line-in) • 1A/V output • 2 dome lights with AUTO/on/off control • Mini jack headphone output • Remote controller included • On screen display • Picture control for

contrast, brightness and colour • Dimensions 247.7 (W) × 211.6 (H) × 33.9 (D) mm



#### VMA773

#### 7"/16:9 HEADREST/STAND-ALONE MONITOR

- 2 A/V inputs (line-out from pigtail and minijack input on the front panel) • Dual channel IR audio output transmitter for WH253H
- Headrest mounting bracket included minijack headphone output . Ultra compact housing for easy headrest installation (192.7 (W) × 133.5 (H)  $\times$  32.5 (D) mm) • Dimensions: 177.8 (W)  $\times$  118.5  $(H) \times 27.5 (D) mm$

CeNET



#### VMA573

#### 5.6"/16:9 HEADREST/STAND-ALONE MONITOR

• 2 A/V inputs (line-out from pigtail and minijack input on the front panel) • Dual channel IR audio output transmitter for WH253H • Headrest mounting bracket included • minijack headphone output . Ultra compact housing for easy headrest installation (160.8 (W) × 111.8 (H) × 27 (D) mm)

Dimensions: 150 (W) × 101 (H) × 27 (D) mm

• DivX, DivX Certified, and associated logos are trademarks of DivX, Inc. and are used under license.
• The LCD panel uses the latest high-tech components and boasts an effective pixel rate of 99.9%. However, be aware that 0.01% or less of the pixels may be defective.
• There is no guarantee that all units in this catalogue can play CCDL (Copy Control CDI, Pytriof SACD (Super Audio CD), CD-R/RW and DVD\_R/DVD\_R/BW.

#### VA463

#### **VIDEO DISTRIBUTION AMPLIFIER**

• TTX752 for PAL, TTX7503z for PAL/SECAM CeNET controlled • Diversity reception tuner system
 A/V input with optional CCA389 cable • 1 Camera input • Dimensions: 178 (W) × 100 (D) × 25 (H) mm (TTX752)

*TTX752 TTX7503z* 

**CeNET TV TUNER** 

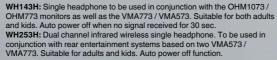
• 1 RCA video input • 7 buffered RCA video outputs • Stable video signal for up to 7 LCD monitors • 1 DC output for connection of additional VA463 • Dimensions: 128.5 (W)  $\times$  87 (D)  $\times$  26.5 (H) mm



#### SINGLE HEADPHONE WH253H

**INFRARED WIRELESS** 

**DUAL CHANNEL INFRARED** WIRELESS SINGLE HEADPHONE



#### High performance in a compact body provides navigation in many situations.



#### MAP770/670 SERIES

#### PORTABLE NAVIGATION SYSTEM

- 4.3" wide colour LCD with Touch Panel control: 65,536 brilliant colours, excellent contrast, anti-reflection screen for sunlight protection • 2 GB (MAP770) / 512 MB (MAP670) Nand Flash ROM • 400 MHz CPU • Built-in RDS-TMC tuner for traffic information • Built-in Bluetooth 2.0 Interface for handsfree operation • Microphone included • SiRF III GPS Module with 20-channel receiver • SD / MMC slot • MP3 / WMA playback via SD / MMC card (in navigation mode)
- Picture Viewer via SD / MMC card 3.5 mm external headphone connector . Built-in loudspeaker • USB1.1 connection for updating and charging • Rechargeable battery with up to 4.5 hours of full-power operation • Compact size: 130 (W) × 90 (H) × 20 (D) mm • Low weight: 200g • Microsoft Windows CE .Net 5.0 core version

Software features: • Multi-language voice guidance and screen text • Postal code search

- Speed limit information Rear-view camera compatible\* • Interactive 2D and 3D map view
- Smart zoom technology

MAP770 map coverage (28 countries): Andorra, Austria, Belgium, Czech Rep, Denmark, Finland, France, Germany, Gibraltar, Greece, Hungary, Italy, Ireland, Liechtenstein, Luxemburg, Monaco, Norway, the Netherlands, Portugal, Poland, San Marino, Slovakia, Spain, Sweden, Switzerland, Turkey, United Kingdom, the Vatican



#### TWIS! TELE ATLAS # 100 mm 55

- Speed limit information Rear-view camera compatible
- Interactive 2D & 3D map view Smart zoom technology
- Extremely fast routing 3D real time mapping Cross border routing, 50 POI categories Extremely fast route calculation and rerouting





• Compatible with JPEG & BMP files on SD/MMC cards • Handles SD/MMC cards up to 2 GB • Pictures from a PC can be transferred to the main unit's flash memory by using ActiveSync • Thumbnail views and Slideshow playback

Bluetooth wireless connection supports safe handsfree calls. This ensures safer driving and transforms the in-car environment to a more amenity-rich environment. Connect your mobile phone to the MAP770/MAP670 and see phone information on the screen to manage calls and dial numbers

• Compatible with MP3/WMA files on SD/MMC cards

Handles SD/MMC cards up to 2 GB • MP3/WMA files from

a PC can be transferred to the main unit's flash memory by

using ActiveSync • Graphic equaliser setting with 12 presets

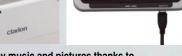
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#### Smart zoom technology

Smart Zoom technology based on an awarded 3D engine with mobile computer games orientation. Smart zoom while navigating: When approaching a turn, it will zoom in and raise the view angle to let you easily recognise the manoeuvre at the next junction, if there is some distance before the next turn, it will zoom out and lower the view angle to flat so you can see the road in front of you, or it can even switch to a 2D overview mode to let you follow you position on the man

Smart zoom will zoom in if you drive slowly and zoom out



#### Enjoy music and pictures thanks to an SD Memory Card slot and a USB port

An SD Memory Card slot is built in for smooth playback of music data. Use the mini USB port for battery charging.

#### MAP370 SERIES

- 3.5" colour LCD with Touch Panel control Touch panel control with Resistive film and sunlight protection. • 512 MB Nand Flash ROM • 300 MHz CPU • Supports optional RDS-TMC receiver unit (FM9) • SiRF III GPS Module with 20-channel receiver • SD / MMC slot • MP3 playback via SD / MMC card • Picture Viewer via
- SD / MMC card 3.5 mm external headphone connector • Built-in loudspeaker • USB1.1 connection for updating and charging • Rechargeable Battery with up to 4.5 hours of full-power operation • Compact size: 113(W) × 79(H) × 25(D) • Low weight 180 g Microsoft Windows CF NFT 4.2 core version

Software features: • Multi-language voice guidance and screen text . Postal code search . Speed limit information • Rear-view camera compatible\* • Interactive 2D and 3D map views

#### Line-up & Map coverage

-							
MAP670 Series	MAP670NOR	MAP670UKI	MAP670DEU	MAP670FRA	MAP670ITA	MAP670IBE	MAP670EEU
MAP370 Series	MAP370NOR	MAP370UKI	MAP370DEU	MAP370FRA		MAP370IBE	MAP370EEU
MAP Coverage	Norway, Sweden, Finland, Denmark, + major roads in Europe	United Kingdom, Ireland, + major roads in Europe	Germany, Austria, the Netherlands, + major roads in Europe	France, Belgium, Luxemburg, the Netherlands, + major roads in Europe	Italy, Switzerland, Austria, + major roads in Europe	Spain, Portugal, Gibraltar, Andorra + major roads in Europe	Poland,Czech Rep, Hungary,Slovakia Turkey,Greece + major roads in Europe

Navigation voice guidance & screen texts in 23 languages: Belgian, Catalan, Croatian, Czech, Danish, Dutch, English, Finnish, French, German, Greek, Hebrew, Hungarian, Italian, Norwegian, Polish, Portuguese, Romanian, Russian, Slovak, Spanish, Swedish, Turkish.

hay be illegal or prohibited depending on the country. Your mobile navigation unit may be considered as a speed trap warn-

## MAIN UNITS

# THE LINK BETWEEN YOU AND YOUR MUSIC

Music - we all move to different beats whether it's hip-hop, reggae, jazz or disco. Clarion has adopted an 'Any Source, Any Time' way of thinking. With provisions for USB memory devices, SD card slots, front panel auxiliary inputs and easy-to-use iPod® interfaces, there's no portable device you can't enjoy through your audio system.

#### Front AUX input terminal for quick connection of portable music players



Plug it in and turn up! Connect any audio and video portable device. The front panel auxiliary input featured on several source units provides connectivity with

#### USB terminal to increase connectivity to a variety of peripheral devices



Drag and drop - that's all you have to do to copy your entire music collection onto a USB memory stick. Then simply plug it in to your Clarion USB-enabled head unit and listen to countless hours of your favourite music. For 2007, Clarion USB-enabled radios will allow you to access more than 65,000 songs from a single USB device, and view ID3 tag information so you know what you're listening to.



#### Control of iPods on the main unit

#### Now, playing that music is just as easy. Clarion has

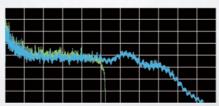
media and compression formats

Support of wide variety of digital era

added Apple iTunes® AAC file support to our existing MP3 and WMA compressed digital audio compatibil-

#### Sound Restorer complements sound content lost during compression

When audio files are compressed into MP3, WMA, or AAC format, every attempt is made to remove information which is not easily heard. This is called perceptual encoding. The drawback is that frequencies over 10 kHz are often lost or distorted. Clarion's exclusive "Sound Restorer" processing recreates those subtle nuances and harmonics back into the recording. Compressed music files simply won't sound like compressed music any longer.





Original track (CD)



Compressed track (MP3)



#### Sound Restorer ON

#### **SLIDETRAK sideways control**



Clarion takes H.M.I. to the next level with SLIDE-TRAK for precise control of key features on the head unit. Simply swipe your fingertip to easily adjust the volume. Preset radio station and CD track controls are also incorporated into the multifunctional display, so you can navigate through preset stations or select your favourite music track by sliding your finger to either side of the display. SLIDETRAK also maximises available space on the head unit to create a large, easy-to-read display. This promotes safe driving, as you can now operate the stereo while keeping the eves on the road.

#### SHOOTING STAR: Buttons put together could be associated with the image of shooting stars



Advances in H.M.I. design takes many forms. The new DB178RMP through to DXZ378RMP feature our new Shooting Star control panel design. Shooting Star puts all the controls as close as possible to the driver and allows for a larger, easier to read LC display that contains more information. A centrally located rotary volume knob underscores this advanced design.

#### FB278RBT - Cool design, totally different from units in the past





bined with our 'Metal Shark Gill' design which makes this deck stand out in the crowd. Unconventional materials, indirect lighting and aggressive styling combine to make a source unit that will attract attention, even before you turn it on.

#### DUB278RMP — A modern living room for cars



Clarion designers thrive on creativity. The result DUB278RMP This unit incorporates a simple and stylish design, one that is

smooth and clean. The H.M.I. interface is clear and effective, adding to the uncluttered look. Add unique features like front-panel auxilliary input and USB with variable colour illumination, and DUB278RMP stands out in the crowd.



The DX7778RUSB has more source connections and format capabilities than any before. A 728-colour motorised detachable control panel with "SLIDETRAK" control serves as your interface to USB and Bluetooth® connectivity. If your music is digital, the DXZ778RUSB is ready with MP3/WMA and AAC playback capabilities from CD-R/W or a USB memory stick. It joins together a 3-way crossover network, 6-volt/6-channel audio pre-out, 24-bit D/A converter and digital time alignment control with dynamic sound to enable flexible sound customisation and awesome sound in your car.



THE STATE OF THE S USB 728c (SLIDETRAY) SLOPE SRILL

LPF HPF 24.bit PEO 6V/6Ch AUX CONET MOS-FET 53W×4 COEM

 CD-R/RW ready ● MP3, WMA and iTunes® AAC compatible with ID3-TAG display ● USB connector Maximum track capacity: 65,025

(255 tracks in 255 folders) ● 18 FM, 6 MW/LW station presets RDS-EON tuner with variable bandwidth and Radio Text display

• iPod® control capability via optional EA1276 • Subwoofer level control • 24-bit D/A converter • Sound Restorer • Digital Z-

Enhancer sound customisation • Digital time

alignment control • 3-way active crossover • 3-band parametric equaliser • Built-in Highpass filter & Low-pass filter . Built-in amplifier canceller ● 4-channel × 53 watts of MOS-FET amplification • Motorised sloping console

• 728-variable colour display and illuminated keys • Full dot display with Screensavers • "SLIDETRAK" for dynamic operation

 Cellular input and Phone mute
 Auxilliary input with level control • 6-volt / 6-channel audio pre-out • CeNET control of: TV tuner, 6-disc CD changer and iPod® • AUX Bluetooth transceiver BLT373 ready

• OEM steering wheel remote wired interface capability . Detachable control panel

Clarion takes H.M.I. to yet another level with the introduction of SLIDETRAK. With a simple swipe of the fingertip, it provides precise control of the key features on the head unit. In addition, SLIDETRAK



maximises the available space on the head unit's face to create a large easy-to-read display. SLIDETRAK allows an increase in button size for easy identification of buttons. This way, you can keep your eyes on the road while operating the source unit. This promotes safer driving.

#### 728 variable colours



Colour-tuning the look of your audio system is easy. Clarion also lets you fine-tune the look of your source unit with 728colour illumination. Choose from 13 different preset colours to let the DXZ778RUSB slowly morph through the entire spectrum or fine tune the Red. Green and Blue levels to match your dash perfectly.

#### MP3/WMA/iTunes® AAC compatible with ID3-TAG display

These days formats like MP3 & WMA are standard; AAC with its higher compression ratio are supported. This way you can listen to music data downloaded from music stores on the internet in your car. The ID3-Tag display feature simplifies ease of use for all three formats.

#### iPod interface EA1276 control

Connecting an iPod ensures you enjoy all tunes in your iPod library through your car audio system. As the unit recognises the connection automatically, it is possible to fully operate the iPod as if it is a part of your system.

#### Sound technology

#### **Time Alignment**

To achieve optimum sound positioning, ideally each speaker should be located equidistantly from the listener. However, it is almost impossible to realise this within the environment of a car. Digital Time Alignment works to virtually change speaker distances, thus creating a seemingly optimal sound field. Adjustment is possible from 0 to 501.4 cm in 2.3 cm steps

#### 6-volt/6-channel output



Hear your music the way it was meant to be heard.

Clarion's Sound Restorer recreates the high frequency

information that is lost during compression. The result is

A key component in the transfer of digital data from a CD

into analogue sound is Clarion's 24-bit D/A converter.

Because the digital realm is made up of unnaturally square

sound waves, as opposed to the smoothly undulating

sound waves characteristic of the real-world environment.

Clarion's embedded 24-bit D/A converter recreates the natural nuances and expressions lost during the sound

clear and detailed sound.

24-bit D/A converter

reproduction process.

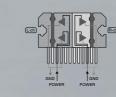
outputs for reproduction of sources with high sound quality. Together ith crossover settings, it can be used to output to various speaker

Equipped with 6V/6ch

systems like Front 2ch + Rear 2ch + Subwoofer 2ch.

#### 212 watts MOS-FET power amplifier

There's only one way for Clarion's DXZ778RUSB to deliver 4-channel × 53 watts of unyielding power output and superior linearity: MOS-FET amplification, or, otherwise known as Metal Oxide Semiconductor Field Effect Transmitter amplification. Smaller and more efficient than conventional power supplies, this MOS-FET amplification circuitry delivers power with less distortion and zero On/Off switching noise. So turn it up, or down for easy listening. MOS-FET amplification — your music has never sounded



#### **Digital Z-Enhancer**

Clarion's Digital-Z Enhancer controls P-EQ, HPF, and LPF through the DSP, allowing you to select from three equalising patterns that emphasise the range of tones in the treble and bass regions respectively while maintaining perfect acoustic balance. Furthermore, by adding gain adjustment (HI, MID, LOW) to the 3 equalising patterns, it is now possible to choose from 9 different equalising patterns to customise the sound quality pattern so that it matches your speaker system or selected music source perfectly.



Separates the sound spectrum into different bands so you can minimise peaking and phase cancellation which can result in muddy sound when using a 2-way or 3-way speaker system X-over circuitry

also optimises each output range, resulting in more natural and smoother transitions between ranges. And since it's built-in, it requires no additional equipment or expertise. The cut-off frequency, filter, slope and phase can be adjusted for each band, enabling precise sound tuning. You can also set a Time Alignment value for each speaker for optimal sound matched to the vehicle's acoustics.

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The DXZ578RUSB offers features and connectivity second to none. This unit integrates an incredibly convenient front-panel USB slot with our new "SLIDETRAK" control for an interface that's unrivalled in performance. Clarion's advanced development team has fitted this source unit with a 24-bit DAC for pure, detailed sonic reproduction and our Digital Z-Enhancer and Sound Restorer signal processing. The result is a source unit that offers all the features you want combined with stunning sonic performance.



**DXZ578RUSB** CD/USB/MP3/WMA/AAC RECEIVER with CENET CONTROL

SUBSTANCE OF STANCE OF STA

• CD-R/RW ready • MP3, WMA and iTunes® AAC compatible with ID3-TAG display

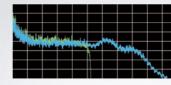
• Front USB slot • Maximum track capacity: 65,025 (255 tracks in 255 folders) • 18 FM, 6 MW/LW station presets • RDS-EON tuner with variable bandwidth and Radio Text display • iPod® control capability via optional EA1276 • Subwoofer level control • 24-bit D/A converter • Sound Restorer • Digital Z-Enhancer sound customisation • 2-band parametric equaliser • MAGNA BASS EX dynamic bass enhancement • Built-in Highpass filter & Low-pass filter • Built-in amplifier canceller • 4-channel × 53 watts of MOS-

FET amplification • Flip-down console • High visibility 2-line display with Screensavers

"SLIDETRAK" for dynamic operation
 Cellular input and Phone mute • Auxilliary input with level control • 6-channel audio pre-out • CeNET control of: TV tuner, 6-disc CD changer and iPod® • AUX Bluetooth transceiver BLT373 ready • OEM steering wheel remote wired interface capability

Detachable control panel

#### **Sound Restorer**



SR off SR of

Compression formats like MP3, WMA and AAC achieve more efficient compression by sacrificing the high frequency range above 10 kHz. "Sound Restorer" complements this lost content by way of extracting harmonic overtone elements from the compressed data. Reproduction, quasi equal to the original sound, can be realised.

#### **Digital Z-Enhancer sound customisation**

The Digital Z-Enhancer lets you choose from 3 equalisation patterns to restore tonal balance by freely accentuating each of the high and low frequency ranges. Thanks to 6-step gain adjustment of 3 separate preset patterns, tailoring the sound to your system speakers and the selected audio source is now possible.

#### 24-bit D/A converter

A key component in the transfer of digital data from a CD into analogue sound is Clarion's 24-bit D/A converter. Because the digital realm is made up of unnaturally square sound waves, as opposed to the smoothly undulating sound waves characteristic of the real-world environment, Clarion's embedded 24-bit D/A converter recreates the natural nuances and expressions lost during the sound reproduction process.

## January International Control of the Control of the

#### High-pass/Low-pass filter

You can set the frequency range of the audio signal that's output to each channel, to best match the acoustic characteristics of the front, rear and subwoofer. This is also possible even if you decide to connect your original speakers directly to your head unit without an external amplifier. The high-pass filter is also available to cut off frequencies below 50, 80 or 120 kHz.

#### 13-segment 2-line display



The 13-segment 2-line display enables display of a multitude of information. As a visual interface between you and the source unit, it offers clear display of what's playing with numerous setting and selection possibilities.



## Equipped with a USB port for extended musical style and expression





#### DB568RUSB

CD/USB/MP3/WMA RECEIVER



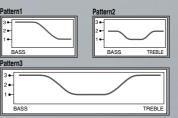
- USB slot on front Z-Enhancer sound customisation 18 FM, 6 MW/LW station presets
- RDS-EON tuner 4-channel × 50 watts of MOS-FET amplification MP3 and WMA compatible with ID3-TAG display CD-R/RW ready High contrast white negative display (13 × 8 digits) with Screensavers
- 4-channel audio pre-out 2-channel AUX input OEM steering wheel remote wired interface capability Cellular input and Phone mute

#### **USB** interfac

You can now connect all kinds of peripheral equipment using the common USB (Universal Serial Bus) standard interface. By connecting a mobile audio player directly to the USB connector, you can enjoy all of your MP3/WMA format music files through the car audio system. The system supports a maximum of 255 files, 255 folders, 28 character file names and 16-character folder names.

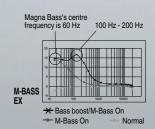
#### Z-Enhance

Three types of sound quality patterns are pre-set for easy selection. Boost the bass only, the treble or both, with the level of boost adjustable by the user.



#### Magna Bass EX

Clarion's Magna Bass boosts bass in a band centred at 60 Hz—lower than that of ordinary loudness circuits at around 100 Hz—to provide extra low-frequency impact. Clarion's new Magna Bass EX boosts the bass by nearly 10 dB at



even lower frequencies around 60 Hz. It automatically compensates for the volume level to ensure well-balanced dynamic bass at any level.

24 www.clarion.com

iPod® interface EA1276 control

By connecting your iPod to the main unit, you can

listen to favourite tunes from your iPod library in your

car using the Clarion system. iPod control is done on

the main unit screen, and as the unit recognises the

connection automatically, operation of your iPod is

smoothly integrated as part of your Clarion system.

wide range of devices and USB memory media carrying up to 65,025 The new DXZ378RMP and DB178RMP feature Clarion's new Shooting Star DCP design. We've gathered all the frequently used controls and put them as close as possible to the driver for ease of operation, thus allowing for a large easy to read display. This enables the driver to see station or track information with minimal distraction from the road. Additionally, a precision rotary volume control knob is centrally located for optimum control from either the driver's or passenger seat. Clarion combines form, functionality, and style with this "Shooting Star" design.

Here is innovative design that goes beyond traditional concepts: a fusion of radical design and state-of-the-art technology culminating in a unit with a "shark gill" look and subtle lighting reminiscent of contemporary interior designs. The simplistic design with its hi-tech appearance will complement your car's interior and impress not only with its looks, but also with fantastic sound and innovative features.

#### Your music never looked so good





DXZ378RMP CD/MP3/WMA RECEIVER with CeNET CONTROL

dist	The State of	O RIDISI	ID3 TAG	FLIP DOWN
ENHANCER	M-BASSEX	4ch	FRONT AUX Input	Ce/NET
50 W×4	OEM Remote ready			

• CD-R/RW ready • MP3 and WMA compatible with ID3-TAG display • 18 FM, 6 MW/LW station presets • iPod control capability via optional

EA1276 • Z-Enhancer sound customisation • MAGNA BASS EX

dynamic bass enhancement • Built-in amplifier canceller • 4-channel × 50 watts • Flip-down console • High visibility 2-line display with Screensavers • Rotary volume control • Phone mute • Cellular input through minijack • Front-panel auxilliary input with level control • 4-channel audio pre-out • CeNET control of: TV tuner, 6-disc CD changer and iPod® • OEM steering wheel remote wired interface capability • Detachable control panel





#### Front AUX input terminal for quick connection of portable music players

Plug it in and crank it up! Connect any audio and video portable device. The front panel auxiliary input featured on these source units provides connectivity

·	D, IIII 0, II	IIII O, IIIIA NEGENTEN					
disc.	The second section of the se	MP3 ID3 TAG	CO RIDISI	ENHANCER			
M-BASSE/	2ch	FRONT AUX Input	50 W × 4	OEM Remoke reads			

• CD-R/RW ready • MP3 and WMA compatible with ID3-TAG display • 18 FM, 6 MW/LW station presets • Z-Enhancer sound customisation • MAGNA BASS EX dynamic bass enhancement • 4-channel × 50 watts • High visibility single line display with



Screensavers • Rotary volume control

- Phone mute Cellular input through minijack
- Front-panel auxilliary input with level control
- 2-channel audio pre-out OEM steering wheel remote interface capability
- Detachable control panel

#### The fusion of innovative form and technology heralding the coming of a new age









55	O RIDISI	MP3 ID3 TAG	728c
FLIP DOWN	2ch	<b>AUX</b>	50 W×4

- SD slot for music playback MP3 compatible with ID3-TAG display . Built-in Bluetooth wireless technology for: headset and handsfree profile / audio-streaming and remote-control • 18 FM station presets • RDS-EON tuner • 4-channel x 50 watts of amplification ● Flip-down control panel • 728-variable colour illuminated design
- Auxilliary input 2-channel audio pre-out
- External microphone included

Floating interface created

by display lighting

#### The next-generation source unit

- Built-in Bluetooth audio streaming (A2DP & AVRCP)
- Built-in Bluetooth Handsfree (HFP & HSP)
- MP3 playback via SD card slot



#### Advanced functions such as handsfree calling and enhanced media links are combined.

The built-in Bluetooth receiver allows you to enjoy handsfree calls with a mobile phone using the 3.5 mm connector for commercially available microphones. Furthermore, a

> built-in SD slot makes playing music the ID3-TAG Display offers simple manipulation of compressed musical formats such as MP3. In addition, the 728-variable colour illuminated keys



SD memory card playback with no mechanical



The next evolution in mobile audio - no moving parts. The FB278RBT features an SD card slot behind the folding control panel. Simply copy your favourite songs from your PC to an SD card, and you're ready to go with hours of music. You can also connect your Bluetooth enabled cellular phone, PDA or iPod (with the optional Bluetooth transmitter) for even more music choices. The revolution is here and its name is FB278RBT

Indirect lighting on the FB278RBT makes each of the arched buttons appear to float, adding to the mystique of the Metal Shark design. A mirror finish surrounds the bottom half of the illuminated rotary volume control.

26 www.clarion.com www.clarion.com 27 The perfect product to round out your car's interior awaits you. Clarion's WXZ468RMP features quality audio components. Its bold, brushed metal faceplate is divided into five sections for a control layout offering superior usability. It also sports a double-sized design as more cars offer large dashboard spaces for audio components. ;add the graphics from the 23-band spectrum analyser for a finishing touch on this powerful in-dash 6-CD unit.

Clarion's product designers worked hard to minimise the number of buttons on the DUB278RMP while maximising its functionality. The result is a source unit that is simple and stylish in design, while offering leading edge technology, connectivity and performance. The DUB278RMP is a stylish 2-DIN AM/FM CD/USB source unit with a look like no other

#### The essence of audio is alive in its design

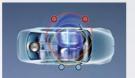


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#### **Digital Z-Enhancer**

Clarion's Digital-Z Enhancer controls P-EQ, HPF, and LPF through the DSP. Select from three equalising patterns that emphasise the range of tones in the treble and bass regions while maintaining perfect acoustic balance. And adding gain adjustment (HI, MID, LOW) to the three equalising patterns lets you choose from nine equalising patterns to customise the sound quality pattern to match your speakers or music source.

#### LPO (Listening Position Optimiser)



Listening Position Optimiser uses digital processing to virtually adjust the speaker distance, enabling sound stage settings

The WXZ468RMP's

that accommodate a wide variety of different vehicles. No matter what type of car you drive, you can count on Clarion to drive your sound with high precision and realistic pres-

		Setting		Right		Left	
	Setting			Distance	Sample	Distance	Sample
	LPO 1 for compact car		R	10cm	13	40cm	52
1 1,	LPO I for compact car	L	40cm	52	10cm	13	
	Seat position	LPO 2 for sedan	R	10cm	13	80cm	104
			L	80cm	104	10cm	13
			R	10cm	13	160cm	208
		LPO 3 for estate car		160cm	208	10cm	13

#### WXZ468RMP

2-DIN 6-DISC CD/MP3/WMA RECEIVER with CeNET CON-

disc	Page 1 September 1	MP3 ID3 TAG	O RIDISI	6-CD
Bigital ENHANCER	(G-EQ))	LPO ((6)) Listening Position Optimizer	4ch	AUX
CeNET	MOS-FET	50 W×4	OEM Remote	

- 18 FM. 6 MW/LW station presets RDS-EON tuner with variable bandwidth
- 4-channel × 50 watts of MOS-FET amplification • MP3 and WMA compatible with ID3-TAG display • CD-R/RW ready
- VF display with Spectrum analyser and Screensavers • 9-band graphic equaliser
- CATS: Theft prevention system with personal code • CeNET control of: TV tuner, 6-disc CD changer and iPod • 4-channel audio pre-out • 2-channel AUX input with level control • OEM steering wheel remote wired interface capability • Cellular input and Phone mute • CeNET iPod interface compatible (EA1251 is required)

Built-in 6-disc CD changer & MP3/WMA file playback



You can load up to 6 discs in the unit's internal CD changer. In addition to music CDs and MP3 files, the changer also supports WMA files, which offer superior compression while maintaining high quality, making it possible to fit the equivalent of a full CD library on a single CD-R at comparable quality. ID3/WMA tags are supported for display of a wide range of information on the tunes being played.

#### 23-band spectrum analyser with 9-band **Graphic Equaliser**





The 9-band Graphic Equaliser offers detailed customisation of the frequency curve to adapt the sound character to the speakers used and the acoustic properties in the car. The spectrum analyser visually displays the subtle expressions and nuances of the music. It provides a detailed graphical portray of 23 different frequency bands with instantaneous display of current band levels of the music being played. Additionally, you can choose between nine types of graphic display patterns to match the music and your mood.

#### Ce/VET 6-DISC CD CeNET CHANGER • CD-R/RW ready • CD text CeNFT • -15° to 105° mounting angle • Dimensions: 225 (W) × 167 (D) × 63 (H) mm

#### Clean, Simple and Elegant — a new concept for your car



#### DUB278RMP

disc	Security Sec	O RIDISI	MP3 ID3 TAG	USB Slot
CZ28c	ENHANCER	M-BASS EX	4ch	FRONT AUX Input
MOS-FET	50W×4	OEM Remote ready		

• CD-R/RW ready • MP3 and WMA compatible with ID3-TAG display • Front USB slot (supports max, 255 folders and max, 15,000 files in the folders) • 18 FM / 6 MW/LW station presets • RDS-EON tuner • Z-Enhancer sound customisation • MAGNA BASS EX dynamic bass enhancement • 4-channel × 50 watts of MOSFET amplification • High visibility single line display with Screensavers • 728variable colour display and illuminated keys

- Front-panel audio input with level control
- 4-channel audio pre-out OEM Steering wheel remote wired interface capability

#### USB input for compressed digital audio

This source unit can handle 15,000 digital audio files. File names can be up to 28 characters long, and folder names can be up to 16 characters long.





Front USB slot & AUX input



#### 4 x 50 W MOS-FET power amplifier



MOS-FET amplification is the only way for Clarion's DUB278RMP to deliver 4channel × 50 Watts of unvielding power output and superior linearity. Smaller and more

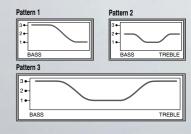
efficient than conventional power supplies, this MOS-FET amplification circuit delivers power with less distortion and no switching noise. So crank it up, or turn it down for easy

#### **Multicolour buttons**

The DUB278RMP allows precise adjustment of the RGB levels to cosmetically harmonise the look of the set with the illumination colour of the vehicle's dashboard and instrument panel. Choose from 728 colour possibilities.

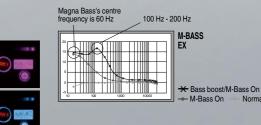
#### Z-Enhancer changes the tonal balance

Want more bass, more treble, or more of both? No problem. 7-Enhancer has three pre-set equalisation curves to choose from... and the amount of boost is adjustable.



#### Magna Bass EX for dynamic bass enhancement

Clarion's Magna Bass boosts bass in a band centred at 60 Hz - lower than that of ordinary loudness circuits at around 100 Hz - to provide extra low-frequency impact. Now, Clarion's new Magna Bass EX boosts the bass by nearly 10 dB at even lower frequencies around 60 Hz. It even automatically compensates the volume level to ensure well-balanced dynamic bass at any level.



possibilities, please refer to the CIP (Clarion Installer Programme) on page 32-33.

For more detailed information concerning installation possibilities, please refer to the CIP (Clarion Installer Programme) on page 32-33.

A safer and more amenity-rich communication and music environment begins its metamorphosis in your in-car space. Bluetooth technology wirelessly connects mobile phones and the head unit, enabling hands-free use. Just speak with your hands firmly on the wheel and the other party will hear you. And you, likewise, can hear the person you are talking to from your car's speakers. What's more, you can listen to the music on your iPod through your stereo system without a cable connection.

#### iPod and Clarion: the perfect combination for mobility, safety, integration and ultimate quality.



Now iPod Video Ready

#### **Direct iPod connection**





CCA692



MAX678RVD



CCA673



**CCA670** 

iPod® & Bluetooth®



VRX878RVD



CCA673



CCA670 iPod Connecting cable (audio only)



VRX578RUSB



CCA691



CCA691 iPod video Connecting cable

#### **CeNET - iPod Interface**

Interfaces to enjoy iPods full operation



EA1276

iPod connection unit for '07 CeNET models DXZ778RUSB, DXZ578RUSB. DXZ378RMP, DXZ379RMP, CMD5

Interfaces to enjoy iPods with simple operation as with CD changers



EA1251

The line-up features iPod cradles to match a diverse range of iPods including

iPod nano, iPod mini, and iPod with video. Just slide the iPod into the iPod cradle and set up the iPod dongle that emits a Bluetooth signal and you're

ready to listen to music from your iPod through your car's stereo.

iPod connection unit for WXZ468RMP, compatible with '06 or older CeNET Models



#### Bluetooth technology enhances your motoring life



#### CeNET Blutooth INTERFACE ADAPTER

• Compatible with MAX973HD • Headset and hands-free profile • Controls mobile phone book directly from touch screen: 500 persons, 5 numbers per person can be transfered to BLT573\* • Displays name / number for incoming / outgoing calls / missed calls\*

• Automatic receive function\* • Redial function\* • Voice recognition control\* • On-screen information of battery level, tel. reception signal strength\*

\*depending on telephones

Connection available for the MAX973HD with touch-panel operation.



**AUX Bluetooth interface with Handsfree and** Audio-Streaming capability.

**MOBILE-PHONE TRANSCEIVER FOR AUX INPUT** 

- · Headset and hands-free profile
- Bluetooth Audio-Streaming and Remote-Control capability (A2DP and AVRCP) • Bluetooth audio transmitter DGL373 ready • Built-in microphone for hands-free use



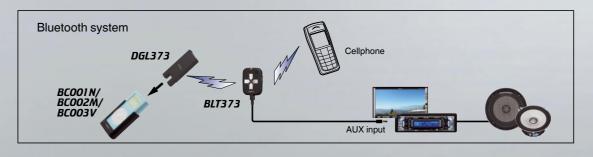






DXZ578RUSE







Bluetooth AUDIO TRANSMITTER



Cradle Docking cradle for Bluetooth audio transmitter DGL373. Available for iPod Nano "BC001N", Mini "BC002M" & Video "BC003V"

BCOO1 N/BCOO2M/BCOO3V CRADLE FOR iPod nano/mini/Video

\*Please refer to page 48 for iPod connection.

Note: The Bluetooth trademark and logo\* are owned by Bluetooth\* SIG, Inc., and use of these trademarks by Clarion is carried out under license Other trademarks and commercial names are the property of their respective owners.



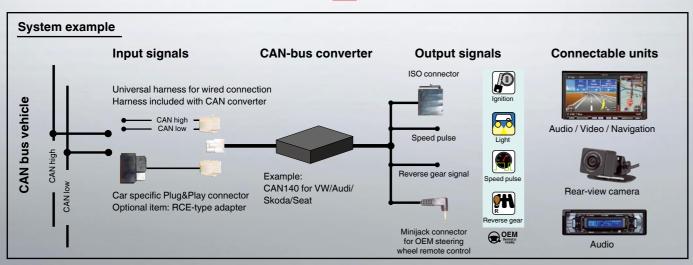
The new CIP — Clarion Installer Programme offers the most professional fitting accessories to connect your Clarion device simply and safely to more than 200 different car models.

Please visit www.clarion.com/cip to see the latest range of professional Clarion installation accessories online.

#### **CAN-bus converter**

New cars increasingly rely on proprietary data bus techniques that are not compatible with commercial audio products. Clarion's development division specialised in finding solutions to adapt such digital communications system with our line of products. Our CAN converter interfaces can customise CAN-bus equipped cars with a superior Clarion audio system.





Upgrade your CAN-equipped car with the latest Navigation technologies from Clarion by installating a compatible CAN-converter to handle all the required signals or simply to enable enhanced use of Clarion multimedia products with the convenient steering wheel controls in your car.

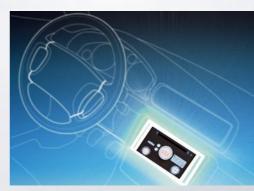
To see which cars are supported for converting digital CAN data into analogue signals, please refer to our website at www.clarion.com/cip.

#### www.clarion.com/cip

#### 2-DIN installation bracket

More than 60% of all new vehicles sold in Europe offer a larger installation space for car entertainment products in the dashboard than the standard 1-DIN size. The use of 2-DIN units gives the customer the advantage of more advanced features and added functionality in a single source unit.

In order to offer professional fitting and seamless integration of Clarion components in a 2-DIN spaced slot, Clarion has developed a wide range of car-specific mounting brackets. To help the installer, all brackets are supplied with detailed mounting instructions and diagrams for each car. All fixing materials are included with each bracket.











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To see which car models are ready for a 2-DIN Clarion main unit, please refer to our website at www.clarion.com/cip

#### **OEM steering wheel remote control**

More and more cars are sold with original car radios that can be operated from convenient controls on the steering wheel. Clarion has introduced a series of interfaces that allow connection of Clarion products to the steering wheel controls in your car. This way, you get the best of both worlds: continued use of the handy steering wheel controls and a top-performing Clarion system in your car.



#### Adaptor with wire connection

Compatible with all Clarion models with minijack steering wheel remote control input.











#### Adaptor with infrared connection

Compatible with all previous Clarion models with infrared sensor.



To see which car models can control a Clarion main unit from the steering wheel, please refer to our website at www.clarion.com/cip

www.clarion.com 33 32 www.clarion.com

#### AMPLIFIERS SUBWOOFERS SPEAKERS

## POWERED TO PERFORM, CREATED TO OVER-WHELM

Your amplifier and speaker system is literally the interface between audio signals and listening.

So the quality of your components will have a direct impact on the quality of sound you hear.

From crystalline highs to thundering lows, Clarion amps and speakers deliver the sound of satisfaction.





#### Power amplifiers that deliver the punch

Whether you only listen to background music or operate a fully-fledged mobile DVD theatre, the performance of the power amp will make a spectacular difference in the sound you hear. So regardless of the type of system you build, go ahead and fill your car with sound that is pure pleasure to listen to. Clarion gives you all you've ever wanted in an amp.



#### Subwoofers that make the earth move

Turn up the power full blast, and count on these subwoofers to deliver. Clarion offers a selection of subwoofers including active subwoofers to meet and surpass your demands for groundpounding bass, featuring tough and high-performance cone materials, die-cast frames and powerful voice coils that can really take the heat.



#### Speakers that span the entire spectrum

Although bass gets a lot of attention, great sound does not consist of bass only. Clarion's line-up of high-performance speakers is your assurance that you and your audience will be listening to the highest quality audio, whether you're listening to a CD or your iPod, or watching a DVD. Enjoy the entire spectrum of sound, and experience complete in-car

Upgrade your system with polished circuit designs and unwavering power to a level of sound excellence that leaves no one in doubt. Digital circuitry renders tones and reverberations that have been inaudible until now to their fullest. The overdimensioned power supply in Clarion amps has sufficient reserves to deliver non-stop sound that's always a class above — even when playing the most demanding digital sources. And by using only the highest quality components in its power amps, Clarion can create sophisticated designs that maximise heat dissipation and achieve exceptional power in the limited vehicle interior.

## Overwhelming performance for an unrivalled soundscape.



4/3/2ch 640W

MOS-FET BASS Extender LPF HPF

- 4/3/2 channels bridgeable mode operation
- Maximum power output: 640 W (4 × 160 W into 4 ohms) Continuous average power output: 320 W (4 × 80 W into 4 ohms) Typical bridged power output:
- 2 x 230 W @ 0.2% THD Typical 2-ohm stereo power output: 4
- × 115 W @ 0.2% THD Bass Extender: 0/+15 dB @ 45 Hz Independent front/rear adjustable crossover frequencies (HP/LP): 55 ~ 550 Hz or 550 ~ 5,500 Hz Adjustable line level input: 200 mV up to 6 V Speaker level inputs to allow easy interfacing with factory-mounted car stereos Soft mute On/Off circuitry Gold plated isolated massive speaker and power supply connectors

#### Circuit design achieves high quality sound

Encompassing a host of high quality components, Clarion's amplifiers take your music to a whole new level. Featuring uncompromising resistance to magnetic noise, the circuit design used by Clarion's amplifiers



allows for easy subwoofer system configurations using its embedded high-pass and low-pass filters. What's more, Clarion's high-grade, gold-plated block terminals offer low electrical and contact resistance for crystal clear sound. These amps also boast 2-ohm stability for increased power and reliability when connected to speakers with 2-ohm loads. Put simply, Clarion offers a line of amplifiers that boast superior power and versatility.

#### APA2160

2 × 160W BRIDGEABLE POWER AMPLIFIER

2/1ch MAX
320W MOS-FET BASS
Extender I.PF./HPF

- 2/1 channels bridgeable mode operation Maximum power output: 320 W (2  $\times$  160 W into 4 ohms) Continuous average power output: 160 W (2  $\times$  80 W into 4 ohms) Typical bridged power output: 1  $\times$  250 W @ 0.2% THD Typical 2-ohm stereo power output: 2  $\times$  125 W @ 0.2% THD Bass Extender: 0/+15 dB @ 45 Hz
- Adjustable crossover frequency (HP/LP): 55 ~ 550 Hz or 550 ~ 5,500 Hz
- Adjustable line level input: 200 mV up to 6 V Speaker level inputs to allow easy
  interfacing with factory-mounted car stereos Soft mute On/Off circuitry Gold plated
  isolated massive speaker and power supply connectors



Cathedra Hast Jack Co. Feather Shirting		and alternative and	gott hall	ngga pari	, gid	je aliat		WATO, REF	
4044220		Continuate Do	Mad. Johner Oo	Fiedher Liber	S/Maio atmi	Power consum.	Weight Wei	Dinesistre 14.	
APA4320 4 x 80 W (4-ch.operation) 4 x 160 W 10 to 50,000 (±1 dB) 100 dB 37 A 3.9 165 x 56 x 409	APA4320	4 × 80 W (4-ch.operation)	4 × 160 W	10 to 50,000 (±1 dB)	100 dB	37 A	3.9	165 × 56 × 409	
APA2160         2 x 80 W (2-ch.operation)         2 x 160 W         10 to 50,000 (±1 dB)         100 dB         19 A         2.7         165 x 56 x 287	APA2160	2 × 80 W (2-ch.operation)	2 × 160 W	10 to 50,000 (±1 dB)	100 dB	19 A	2.7	165 × 56 × 287	

Clarion's HX Series boasts dynamic looks and dynamite sound. Our super tweeters can reproduce sound up to an amazing 120 kHz, expanding the dynamics to breathtaking levels far beyond the perceivable audible range of humans. The fibreglass woofer cone offers improved internal loss and sound propagation to accommodate the broader dynamic range of digital sources. And HX series subwoofers feature a Parabolic Metallised Injected Polypropylene cone with long stroke X-Max structure and rubber surround for increased cone movement as well as an aluminium die-cast frame for added stiffness.

#### HX series: A difference you can hear and see

#### Subwoofer technology

#### Die-cast aluminium frame

An aluminium die-cast frame is employed for the toughness and vibration damping properties it provides. Aluminium suppresses noise from resonance and energy loss to achieve linear movement for cones and voice coils.

#### **Gold-plated push terminals**

Terminals that can accept large gauge cables are employed to suppress loss in signal transfer to an absolute minimum, contributing to playback that is true to the source. Generous use of gold plating also reduces contact loss.

#### **Dual strontium magnets**

Two strontium magnets are installed, allowing for a high flux density gap, thus enabling quick response as well as stable output at high output levels.

#### Woofer technology

#### Fibreglass cone

Shaping by careful vertical and horizontal interweaving of strong fibreglass greatly increases rigidity. There is little distortion from settling and creeping even in amplitude motion for large inputs, thus enabling constant crisp playing of music.

#### Tweeter technology

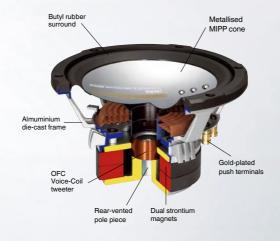
#### 120 kHz-playback tweeters

Special tweeters that employ a silk dome and dual neodymium magnets were developed in pursuit of rich harmonic elements. With industry-pioneering 120 kHz playback, the performance fully supports DVD audio, SADC, and other next-generation media with sound that reaches far into the inaudible frequency range. These wide-range properties have room to spare to also let you enjoy stable treble when playing back regular CDs.

#### Variable angles

Tweeters are compatible with a two-way setup thanks to removable bases that allow installation on either the dashboard or in doors. Their variable angle structure that enables the facing and angle to be freely adjusted gives you the ability to put them in the direction that best fits your car and seating position.





#### • SRM3093HX

30 CM (12") HX SERIES SUBWOOFER



- surround Double-stacked powerful strontium magnet
- Seamless parabolic cone structure for dynamic bass

				/mm	response • Aluminium die-cast frame and cooling spacer for high power handling • Rear-vented pole piece
	Politicis de la companya de la compa	folds for the little stated	Reported with Dai Robert Half Country Bernard	Partition of the state of the s	Spirite Chiefer Chiefe
SRS1752HX	2-way component system	165 mm 20 mm	• • •	• • •	● 120 kHz 300 55 25 ~ 120,000 91 50 0.67 15.6
SRH292HX	Dome tweeter	20 mm	• •		120 kHz 250 50 2,000 ~ 120,000 90
<i>SRM3093HX</i>	Subwoofer	300 mm	•	Single	• 1,200 300 15~1,500 93 29 0.55 135.6





• SRS 1752HX

16.5 CM (6-1/2") 2-WAY COMPONENT SYSTEM



- power handling and reduced distortion Powerful strontium magnet for dynamic bass response
   2 cm (¾") pure silk dome tweeter with dual-neodymium magnet 2-way mounting tweeter (variable
- angle flush mounting/surface mounting) Extremely high frequency reproduction /120 kHz
- High-grade -12 dB/oct, 2-way crossover network with level attenuator (0.-3 dB)













#### • SRH292HX

2 CM (3/4") SILK DOME TWEETER



• 2 cm (3/4") pure silk dome tweeter with dual neodymium magnet • 2-way mounting (variable angle flush mounting/ surface mounting) • Extremely high frequency reproduction of/120 kHz • Includes -6 dB/oct. in-line network with level attenuator (0, -6 dB, -12 dB)



www.clarion.com 37 36 www.clarion.com

Clarion subwoofers are designed to handle large amounts of power for groundpounding bass. For lesser bass needs, there are our active subwoofers which fit into a compact footprint. Turn up the power full blast, and count on these subwoofers to deliver.

Unlike conventional 2-way speakers, these feature a tweeter that is mounted on the same axis and the same plane as the woofer diaphragm. The sound waves emanating from the tweeter are in-phase with the woofer, delivering frequency response that is flatter throughout the sound spectrum including the crossover frequencies, as well as a dramatic reduction in phase distortion. The tweeter guard is designed to protect the tweeter dome while minimising interference.

#### **Subwoofers & Active Subwoofers**



30 CM (12") SINGLE VOICE COIL SUBWOOFER

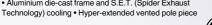
• Metallised MIPP cone woofer with rubber surround • Large strontium ferrite magnet • Seamless parabolic cone structure for dynamic bass response • Stamped steel frame • Rear-

#### PFW1051

25 CM (10") SINGLE VOICE COIL SUBWOOFÉR



- 75 mm pointing depth Polypropylene electrolytic spun aluminium coated cone woofer with co-polymer composite high
- excursion surround Dual strontium ferrite magnet · Seamless parabolic cone structure for dynamic bass response
- Aluminium die-cast frame and S.E.T. (Spider Exhaust)







#### *SW2511*

25 CM (10") SINGLE VOCE COIL SUBWOOFER



 Metallised MIPP cone woofer with rubber surround • Large strontium ferrite magnet • Seamless parabolic cone structure for dynamic bass response • Stamped steel frame • Rearvented pole piece



SLIM DESIGN 17 CM (6-1/2") ACTIVE SUBWOOFER



MIPPONS Counter have Countersian Value out

• Dual-Voice coil • 120 W high power amplifier with low pass filter • Maxx Bass ciruit for virtual bass enhancer • 17 cm (6-1/2") counter drive woofer with dual-neodymium magnet • Air compression structure with aluminium die-cast enclosure

• Remote control for gain control /low-pass filter (selectable 50/75/100/120 Hz)/phase select • Blue LED power indicator • Audio line level input/Speaker high level input

\*"Maxx Bass" is a patent of KS-Waves. "Maxx Bass" is a registered trademark of KS-Waves.



#### **SRV202** 20 CM (8") ACTIVE SUBWOOFER

MIPPO PICTURE COMPRESSION VOICE COM





• 120 W high power amplifier with low-pass filter • Dual voice coil woofer with strontium magnet • Air compression structure for dynamic bass response . Subwoofer level control for gain control/low-pass filter (55 ~ 130 Hz)/phase select controls • Leather finished MDF enclosure • RCA line level input/ speaker level input



#### **SRH206** 2.5 CM (1") BALANCED-

DRIVE TWEETER

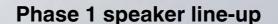
PEID NeoMed Hit Incent | Variable | Input MRX 200W • 2.5 cm(1") metallised PEI balanced-drive tweeter • 2-way

mounting (variable angle flush mounting/surface mounting) • Powerful neodymium magnet • In-line-6 dB/oct. crossove

#### In-Phase coaxial 2-way



Clarion's Phase 1 speaker series is synonymous with high performance. As before, they use MIPP (Mica Injection Polypropylene) cones, with a molecular structure that radiates from the inside outward, to attain the lightness and rigidity necessary to create speakers with superior response even to the fast transients of digital sources. Our tweeters use a balanced dome PEI (Poly Ether Imide) design for superior high frequency sound reproduction and off-axis response when mounted in the door speaker location. Powerful Neodymium magnets are used for increased imaging accuracy.



2-way component system





SRS1326

13 CM (5-1/4") 2-WAY COMPONENT SYSTEM







	Retiducions	Fibre glass	Thatium medaling Pure	Styrium medise	JEEL SWAYIN	Junims Real-went	led pile	In digity at	Powerfulston	Se hrine od	Extrem.	Misic	Seak Dovin	Jous Politic	Ote T	125/1	requency re	şsx
SRX6985	In-phase coaxial 2-way	150×230 mm	25 m	nm				•	•	8	0 kHz	350	50	45	0.59	29.6	25 ~ 80,000	
SRX 1 785	In-phase coaxial 2-way	165 mm	20 m	nm				•	•	12	20 kHz	250	45	75	0.93	4.2	28 ~ 120,000	ī
SRX 1 385	In-phase coaxial 2-way	130 mm	20 m	nm				•	•	12	20 kHz	200	40	90	0.86	3.3	35 ~ 120,000	
SRS 1726	2-way component system		165 mm	25 mm	•	•	•		•	•		250	40	60	0.66	25.5	28 ~ 35,000	
SRS1326	2-way component system		130 mm	25 mm	•	•	•		•	•		200	40	80	0.66	6.4	40 ~ 35,000	

SW3011 250 30~2,500 *SW2511* 600 200 30~1,000 PFW1051 600 300 SRV313 Active Powered Subwoofe • 120 60 30~200 **SRV202** Active Powered Subwoofer 120 60 20~200 **SRH206** Balanced-drive Tweeter ● • • 200 40 2,500 ~ 35,000 90

38 www.clarion.com

#### PHASE 1

Multiaxial 3-way

SRR2036 20 CM (8") MULTIAXIAL 3-WAY















 $15 \times 23$  CM  $(6" \times 9")$ MULTIAXIAL 3WAY











13 CM (5-1/4") MULTIAXIAL 3-WAY





#### Coaxial 2-way

**SRR6926** 15 × 23 CM (6" × 9") COAXIAL 2-WAY

SRR1326 13 CM (5-1/4")

COAXIAL 2-WAY





















NessMass Input Hax 140W	ø156 ø134 /mm	21.5 46 25 25 25 25 35 35 35 35 35 35 35 35 35 35 35 35 35		THIP PED
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	Republición.	Tiguith.	Melalise	Metallised PC	MetallsedPic	MetalisedP	Westinge.	<b>Sometin</b>	Dasa	8gk fr	JOJE PHZ		Vasilina	Frequencyle	Efficiency data
	<b>Pedig</b>	Thu die	Merele	Melan	Metall	Metalli	Weinde	60 Mgg.	MISIC	Cours	te sha	. die	182/	Fiedly	Efficie
SRR2036	Multiaxial 3-way	200 mm		66 mm	16 mm			•	350	50	55	0.58	25.6	25 ~ 32,000	92
SRR1736	Multiaxial 3-way	165 mm			8 mm		30 mm	•	230	40	75	0.77	10.7	28 ~ 32,000	91
SRR6936	Multiaxial 3-way	150 × 230 mm		66 mm	16 mm			•	300	40	60	0.74	30.0	28 ~ 32,000	92
SRR1336	Multiaxial 3-way	130 mm			8 mm		25 mm	•	170	30	90	0.60	4.3	40 ~ 32,000	91
SRR6926	Coaxial 2-way	150 × 230 mm				66 mm		•	250	40	60	0.74	30.0	28 ~ 30,000	92
SRR1726	Coaxial 2-way	165 mm	30 mm					•	200	40	75	0.77	10.7	28 ~ 30,000	91
SRR1326	Coaxial 2-way	130 mm	25 mm					•	140	30	90	0.60	4.3	40 ~ 30,000	91
SRR 1028	Coaxial 2-way	100 mm	25 mm					•	120	30	120	0.70	1.5	45 ~ 30,000	90

Clarion's Sound Explorer series of custom-fit 2-way coaxial speakers provides an ideal match for digital sound sources. Their soft dome tweeters use pure silk-cloth diaphragms to achieve excellent dynamics with the ability to reproduce highs of 80 kHz, and they offer superior responsiveness to recreate subtle nuances, as well as much wider sound dispersion over conventional cone diaphragms. Tweeter voice coils are wound around heat-resistant polyimide bobbins to handle high-powered input signals over prolonged periods of time.

#### **Sound Explorer**



16.5 CM (6-1/2") CUSTOM-FIT COAXIAL 2-WAY







13 CM (5-1/4") CUSTOM-FIT COAXIAL 2-WAY





10 CM (4") CUSTOM-FIT COAXIAL 2-WAY

Cone BIHHZ NeeMan Sil Dune Tweeter Fowerful 120 W



10 CM (4") CUSTOM-FIT COAXIAL 2-WAY





SRC4673

10 × 15 CM (4" × 6") CUSTOM-FIT COAXIAL 2-WAY

Cone BOHHZ NEWMSS WEET TWEETER POWERFUL 120 W

#### **Custom-fit**



SRC1715 16.5 CM (6-1/2") CUSTOM-FIT

COAXIAL 2-WAY MIPPOPER PLANT THE PROPERTY OF THE PROPERTY OF



COAXIAL 2-WAY





**SRC1315** 

13 CM (5-1/4") CUSTOM-FIT COAXIAL 2-WAY

PEI) NeoMas Powerful 120 W



**SRC4616** 10 × 15 CM (4" × 6") CUSTOM-FIT

COAXIAL 2-WAY MIPPON PET NESST INDUCTION IN THE POWERFUL TO THE POWERFUL TO



**SRC1016** 

10 CM (4") CUSTOM-FIT COAXIAL 2-WAY

MIPPUS PED NEOMED ST 100 W





13 × 18 CM (5" × 7") CUSTOM-FIT COAXIAL 2-WAY

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	<b>Republic Set</b>	Filleda Edite V	MIR core mod	Pue sitt done	Medied of the state of the stat	Poweril stor	Designed of	Soundtriff	Sugar Ratio	etallour de la	Misc	Deat Portini	ts/H	<i>Q</i> <sub>12</sub>	Vasline	Fietherchies	these lahum)
SRC1773	Custom-fit coaxial 2-way	165 mm		20 mm		•	•	•	•	80 kHz	200	45	60	0.76	10.9	28 ~ 80,000	91
SRC1373	Custom-fit coaxial 2-way	130 mm		20 mm		•	•	•	•	80 kHz	160	35	85	1.14	3.1	40 ~ 80,000	91
SRC1074	Custom-fit coaxial 2-way	100 mm	11 -	20 mm		•	•	•	•	80 kHz	120	30	105	0.93	1.4	40 ~ 80,000	90
SRC1073	Custom-fit coaxial 2-way	100 mm		20 mm		•	•	•	•	80 kHz	120	30	105	0.93	1.4	40 ~ 80,000	90
SRC4673	Custom-fit coaxial 2-way	100 × 150 mm		20 mm		•	•	•	•	80 kHz	120	30	80	1.14	3.0	40 ~ 80,000	91
SRC1715	Custom-fit coaxial 2-way		165 mm		25 mm	•	•	•			140	30	70	1.40	12.3	30 ~ 30,000	91
SRC1315	Custom-fit coaxial 2-way		130 mm		25 mm	•	•	•			120	30	90	1.11	3.7	40 ~ 30,000	90
SRC 1016	Custom-fit coaxial 2-way		100 mm		25 mm	•	•	•		1400	100	25	115	1.00	1.4	45 ~ 30,000	90
SRC 1015	Custom-fit coaxial 2-way		100 mm		25 mm	•	•	•			100	25	115	1.00	1.4	45 ~ 30,000	90
SRC4616	Custom-fit coaxial 2-way	1	100 × 150 mm		25 mm	•	•	•			100	25	125	1.56	1.9	45 ~ 30,000	90
SRC5715	Custom-fit coaxial 2-way	1	130 × 180 mm		25 mm	•	•	•			140	35	75	1.49	26.2	35 ~ 30,000	91

Iris function (backlight

compensation function)

and therefore easier to see. (CJ981E)

Clarion makes your drive more enjoyable, and safer. Choose from the full selection of CCD cameras and monitor units to meet your specific needs.

Take the quesswork out of reversing into tight spaces and drive and park with confidence instead.

#### Made for safer driving **REAR-VIEW CAMERAS** & MONITOR SYSTEMS



CJ5600E 5.Ginch 5.6" COLOUR LCD

• Two camera direct inputs (no power box required) • Two signal connections for indicator lights or reverse gear • True / Mirror image switching • Manual dimmer (Zoom / Iris / Distance markers

are not available) • 12V/24V compatible

CC2001E

(MIRROR IMAGE)

**MONITOR** 

**HEAVY-DUTY CAMERAS** Designed for industrial operation



6.5" COLOUR LCD MONITOR

 Zoom / Iris / Distance markers • AUX video input (NTSC / PAL) • Auto / Manual dimmer • Optional power box is required (EA1246A or EA1232A)



#### **POWER BOX FOR CJ981E**

**CC2000E** 

(MIRROR IMAGE)

(MIRROR IMAGE)

• Three camera direct inputs • Three signal connections for indicator lights and reverse gear • Compatible wired remote controller for Iris & Zoom function (RCB174) • AUX video input (NTSC /PAL) • 12V/24V compatible

#### POWER BOX FOR CJ981E • One camera direct input • Signal connection for indicator lights or reverse gear • Includes wired remote controller for Iris & Zoom settings • AUX video input (NTSC /PAL)



EA1232A

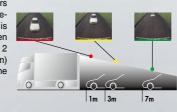
CC2003E

(TRUE IMAGE)



#### On-screen distance markers

On-screen markers are displayed at 1, 3, 5 and 7 metres for reference as rear proximity verification (CJ981E). The markers are designed in 7 patterns that correspond to the height at which the camera is installed on the vehicle. There are 7 screen marker patterns ranging from a height of 2 to approx. 3.5 metres (in steps of 25 cm) Furthermore, vertical and horizontal fine adjustment is possible.



#### Improved low-light visibility

The system delivers even brighter, clearer images than black-and-white cameras, enabling reliable rearview monitorinng in low light situations.

#### New low-distortion lens

The distortion typical of wide-angle lenses has been corrected in this ultra-wide-angle lens to provide a wider, more natural view. (CC2000 series)

#### 1.4x digital zoom function

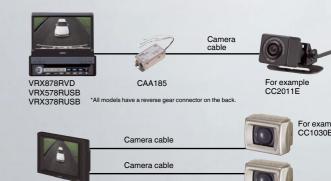
Switch to a magnified centre area view with just the touch of a button. The digital zoom delivers a detailed view when you need it for extra safety. (CC2000 series)



#### **OSYSTEM EXAMPLES**







Power box for CCD camera • 8-pin mini-DIN output for MAX973HD/ Manual on/off switch • 12V compatible

**TRAILER ACCESSORIES** 

Power box for CCD camera • NTSC video line-out with reverse gear connection for VRX878RVD, VRX578RUSB and VRX378RUSB NTSC video line-out for all other LCD monitors. with NTSC input •12V compatible

**ACCESSORIES** 



#### RCB174 Wired remote control for EA1246A



#### **HEAVY DUTY CAMERA CABLES**

For CC2000E, CC2001E & CC2003E

CCA416 (5 m/16 ft) CCA392 (7 m/23 ft) CCA393 (10 m/33 ft) CCA435 (13 m/42 ft) CCA394 (15 m/49 ft) CCA436 (18 m/59 ft) CCA395 (20 m/65 ft) CCA437 (23 m/75 ft)



#### • Trailer "break point" to camera cable CCA452 (20 m/65 ft)

CCA453 (15 m/49 ft) CCA451 (5 m/16 ft)





#### **COMPACT CAMERA CABLES**

For CC2011E & CC1030E

 Connecting cables for compact cameras

CCA532 (7 m/23 ft) CCA533 (10 m/33 ft) CCA534 (15 m/49 ft)



#### **COMPACT CAMERAS** Minimum dimensions with maximum performance



HEAVY-DUTY COLOUR CCD CAMERA

WITH SHUTTER (MIRROR IMAGE)



HEAVY-DUTY COLOUR CCD CAMERA



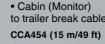
HEAVY-DUTY COLOUR CCD CAMERA

#### **CAMERA EXTENSION CABLES**

For heavy duty cameras

CCA439 (0.9 m/3 ft) CCA391 (5 m/16 ft) CCA415 (10 m/33 ft)









42 www.clarion.com www.clarion.com 43 Clarion's 2007 marine audio product line takes our dedication to reliable and innovative products to a new level. A new watertight source unit chassis integrates our expertise in UV and salt fog exposure resistance while offering improved connectivity to iPod®s and other portable music devices. This further strengthens Clarion's position as the benchmark for marine audio.

#### From the innovator of marine audio products, Clarion marine audio gets better for 2007





When it comes to water, Clarion cuts no corners. Our CMD5 AM/FM CD/MP3/WMA Receiver offers IPX5 tested and certified water intrusion protection to keep playing no matter what you throw at it. It features a rubber gasket behind the flip down front panel and water drainage channels to keep water out. So stay with the leader in marine audio products - nobody knows it better.



#### CMD5 WATERTIGHT MARINE CD/MP3/WMA RECEIVER with CeNET CONTROL

OISC BESTEL MARIO	The second section of the second section sec	ID3 TAG	FLIP DOWN	6ch
AUX	CeNET	50 W×4	Bluetooth	

- CD-R/RW ready MP3 and WMA compatible with ID3-TAG display • 18 FM/6 AM presets
- iPod control capability via optional EA1276 • Built-in Amplifier canceller • 4-channel × 50
- watts of amplification Flip-down control panel • High visibility 2-line display • Rotary volume control • Audio auxiliary input with level control



Sealed stainless steel chassis



You take pride in your boat. So, wouldn't you want the best audio equipment available for it? For 2007, Clarion introduces a new stainless steel chassis. This new chassis, combined with a drip shield over the wire connections ensures things stay dry even with water behind the radio. And the main circuit boards feature silicone coating to resist the effects of humidity.



#### CM1682A

16.5 CM (6 1/2") MARINE-USE 2-WAY COAXIAL SPEAKERS



- Waterproof 165 mm polypropylene cone woofer 19 mm PEI dome tweeter • Magnetically shielded enclosure • Non-oxidising (in salt water) and UV radiation resistant cone
- Special speaker cover made from ABS synthetics • Frequency response: 30 ~ 20,000 Hz • Efficiency: 89



#### CM1680A

16.5 CM (6 1/2") MARINE-USE **DUAL-CONE SPEAKERS** 



• Waterproof 165 mm dual polypropylene cone speaker • Magnetically shielded enclosure • Non-oxidising (in salt water) and UV radiation resistant cone • Special speaker cover made from ABS synthetics • Frequency response: 30 ~ 18,000 Hz • Efficiency: 89 dB/W/m



EXTENSION CABLE FOR MARINE CONTROLLER (M301RCE)



MULTILINK Y-CABLE FOR MARINE CONTROLLER (M301RCE)

#### **NAVIGATION ACCESSORIES**



#### **CAA380**

(for vehicles without speed-pulse

#### iPod AUDIO/VIDEO CONNECTING CABLE

#### **CCA670**

iPod connecting cable for VRX878RVD and MAX678RVD

iPod video connecting cable

#### **CCA673**

for VRX878RVD and MAX678RVD

#### CCA692

iPod video connecting cable for MAX973HD

#### CCA691

iPod video connecting cable for VRX578RUSB and VRX378RUSB



#### **CABLES**



#### **CCA389**

AV adapter cable, 2,5m 8-pin ↔ RCA (1 video / 2 audio) For VRX848RVD / VRX743R A/V input

#### CCA519 Multilink Y-cable for CeNET

changers

CeNET extension cable, 2.5 m CCA521



FM863

#### **TV ANTENNAS**



TV antenna



**ZCA407** 



**ZCP100** 



#### **CD MAGAZINE**



CAA397 zine for DC7628 DC628 and VCZ628



stick remote control



**REMOTE CONTROLS** 

RCB176



**RCB187** Infrared AV remote control for MAX973HD

#### Multimedia stations - Feature comparisons

		MAX973HD	VRX878RVD	MAX678RVD	VRX578RUSB	VRX378RUSB
MEDIA		INFACT ON D	TIMOTOTIVE	III AND TOTAL	TIMOTORIOSS	TINOTORIOGE
MEDIA  DVD±R/DVD±RW/CD-R/CD-RW ready	DVD VIDEO	•	•	•	•	_
DVD±n/DVD±nW/CD-n/CD-nW leauy	DivX (CD/DVD)	•	•	•	•	•
Compressed audio media via disc slot	MP3 (CD/DVD)	•	•	•	•	•
	WMA (CD/DVD)	•	•	•	•	•
USB connector	MP3				•	•
	WMA				•	•
	AAC				•	•
SD slot	MP3	•				
	WMA	•				
NEW FEATURES		_				
Wallpaper customisation		(Skin change)	(8-colour select)	(8-colour select)		
		Ripping speed: maximum 8 times,		+	+	
Built-in Music Catcher		Storage capacyty: maximum 4,000 songs				
TUNER						
Built-in RDS-TMC tuner for traffic informa	ition	•				
Bands		FM3/L,M1	FM3/L,M1	FM3/L,M1	FM3/AM2	FM3/AM2
Number of presets		18/6	18/6	18/6	18/12	18/12
RDS-EON DSP tuner		(with radio text)	(with radio text)	(with radio text)	•	•
Variable bandwidth  AUDIO		•	•	•		
Subwoofer level control			•	•	•	•
2-Zone entertainment:					•	•
front and rear separate source control		<ul> <li>(only visual source)</li> </ul>	•	•	(only video)	(only video)
D/A converter quality		24-bit	24-bit	24-bit	24-bit	24-bit
Z-Enhancer Plus sound customisation					•	•
Parametric equaliser		3 bands	3 bands	3 bands	2 bands	2 bands
Built-in HPF					120 Hz/THROUGH	120 Hz/THROUGH
Built-in LPF	,				50 Hz/80 Hz/120 Hz/THROUGH	50 Hz/80 Hz/120 Hz/THROUGH
MAGNA BASS EX		•	•	•	•	•
Built-in amplifier canceller					•	•
Shock proof memory			•	•	•	•
High power		MOS-FET 4 × 53W	MOS-FET 4 × 50W			
Rated power output (DIN4532, +B=14.4\	)	4 x 31w (DIN4532,+B=14.4V)	4 x 27w (DIN4532,+B=14.4V)	4 × 27w (DIN4532,+B=14.4V)	4 x 25w (DIN4532,+B=14.4V)	4 x 25w (DIN4532,+B=14.4V)
APPEARANCE			, , , ,			
Full-loading / Motorised sloping console		Motorised sloping console	Full-loading	Motorised sloping console	Full-loading	Motorised sloping console
Tilt		•	•	•	•	•
Touch panel control		•	•	•	•	
Display size		7" LCD	7" LCD	7" LCD	7" LCD	3.5" LCD
Character display		WQVGA	WQVGA	WQVGA	WQVGA	WQVGA
Adjustable display colour/brightness		•	•	•	•	•
Dimmer CONNECT		•	•	•	•	•
Phone mute				•	•	•
Video line-in		1	1	1	1	1
Video line-out		1	1	1	1	1
Auxiliary audio input		2ch	2ch	2ch	2ch	2ch
		•	•	•	•	•
Audio input sense		(LOW/MID/HI)	(LOW/MID/HI)	(LOW/MID/HI)	(LOW/MID/HI)	(LOW/MID/HI)
Audio pre-out voltage			2 V	2 V	2 V	2 V
Audio pre-out			F2ch + R2ch + SW2ch			
Audio pre-out for 2-ZONE		2ch	2ch	2ch	2ch	2ch
CCD camera input		• (8-pin connector)	• (Video in)	• (8-pin connector)	● (Video in)	• (Video in)
iPod direct connecter		(CCA692)	(CCA673/670)	(CCA673/670)	(CCA691)	(CCA691)
Cellular input		(55/1002)				
(autmatic switch to AUX input)			•	•	•	•
EXTENSION						
CeNET CD changer control (DCZ628)	(7500.)		•	•		
CeNET TV tuner control (TTX752z & TT)	(7503z)	•	•	•	-	
CeNET navigation control	70 rood:	_	•	•	1	
CeNET Bluetooth interface adapter BLT5  AUX Bluetooth audio/mobile-phone transce		•		_	_	
OTHERS	iver DL13/3 ready		•	•	•	•
Remote controller included		(optional RCB187)	•	•	•	•
Remote control sensor		(optional NCB167)	•	•	•	•
Built-in hard disk drive		30 GB			_	<b>—</b>
CPU CPU		400 MHz			<u> </u>	
OEM steering wheel remote wired interfa	ce capability	•	•	•	•	•
Detachable control panel	- ту	1 -	•	1	•	•
CATS anti-theft system		•		•		<u> </u>
Ortio and their dystem			<u> </u>	<u> </u>	<u> </u>	<u> </u>

#### Main units - Feature comparisons

		DVZZZODUCD	DVZEZODIJED	DESCRIPTION	DVZ2Z0DMD	DRIZORMA	DUDOZODMO	FROZORRI	WY74CODMD
		DXZ778RUSB	DXZ578RUSB	DB568RUSB	DXZ378RMP	DB178RMP	DUB278RMP	FB278RBT	WXZ468RMP
MEDIA	· · ·								
CD-R/RW ready	CD-R/CD-RW		•	•	•	•	•		•
Compressive audio media (MP3/WMA/AAC)	MP3	•	•	•	•	•	•		•
via disk slot	WMA	•	•	•	•	•	•		•
	AAC	•	•						
USB connector/slot	MP3 WMA	•	•	•			•		
USB CUITIECIUI/SIUI	AAC	•	•				•		
SD slot	MP3	_	_					•	
Built-in Bluetooth	IMILO								
Headset and Handsfree profile								•	
Audio-streaming amd Remote-control (A2	DP & AVRCP)							•	
TUNER									
Bands		FM3/L,M1	FM3/L,M 1	FM3/L,M1	FM3/L,M 1	FM3/L,M 1	FM3/L,M1	FM3	FM3/L,M1
Number of presets		18/6	18/6	18/6	18/6	18/6	18/6	18	18/6
RDS-EON tuner		•	•	•	•	•	•	•	•
		(with radio text)	(with radio text)						_
Variable bandwidth		•	•						
AUDIO									
Subwoofer level control		04 DIT	04 DIT	4 kis	1 64	4 64	1 64	4 64	4 14 14
D/A converter quality		24-BIT	24-BIT	1-bit	1-bit	1-bit	1-bit	1-bit	1-bit
Sound Restorer  Z-Enhancer sound customisation		•	•	•	•	•	•		
Z-Enhancer sound customisation  Digital Z-Enhancer sound customisation		_	•	_	_ •		_ •		_
Digital 2-Ennancer sound customisation  Digital time alignment control		•	_						(LPO)
		•						-	(11.0)
X-over		(2-way or 3-way)							
Parametric equaliser		3 bands	2 bands						
MAGNA BASS EX (50 Hz, 10 dB BOOST)	)		•	•	•	•	•		(9 band G-EQ)
depends volume level			-	•					(9 band G-LQ)
Built-in HPF		THROUGH/50 Hz/80 Hz/ 120 Hz [NORMAL] or 2WAY/3WAY X-OVER[MULTI]	50 Hz/80 Hz/ 120 Hz/THROUGH (available for pre-out and internal AMP)						
Built-in LPF		THROUGH/16 Hz-250 Hz	50 Hz/80 Hz/						
		1/3oct STEP	120 Hz/THROUGH						
Built-in amplifier canceller		•	•		•				
High power		MOS-FET 4 × 53 W	MOS-FET 4 × 53 W	MOS-FET 4 × 50 W	4 × 50 W	4 × 50 W	MOS-FET 4 × 50 W	4 × 50 W	4 × 50 W
Rated power (DIN45324, +B=14.4V)		4 x 25 W (DIN45324, +B=14.4V)	4 × 25 W (DIN45324, +B=14.4V)	4 x 25 W (DIN45324, +B=14.4V)	4 x 25 W (DIN45324, +B=14.4V)	4 x 25 W (DIN45324, +B=14.4V)	4 x 25 W (DIN45324, +B=14.4V)	4 x 25 W (DIN45324, +B=14.4V)	4 × 27 W (DIN45324, +B=14.4V)
APPEARANCE				, , ,					,
Motorised sloping console/Flip-down cons	sole	Motorised sloping console	Flip-down console		Flip-down console			Flip-down console	
Display and button illumination colour		728 variable	White	White	White	White	728 variable	728 variable	
								(face panel)	
Character display		full dot	13 seg × 10 × 2-line	13 seg × 8	13 seg × 10 × 2-line	13 seg × 8	13 seg x 8	Dot Matrix	(VFD)
Contrast adjustment		•	•	_	•			•	
Screensaver		•	•	•	•	•	•		•
Message information		•	•		•				•
Dimmer (Display / buttons)		•	•	•	(Display)	(Display)	•	•	•
Rotary volume control				•	( <i>Display</i> )	(D.Op.ii)	•		•
SLIDETRAK for dynamic operation		•	•	_					_
CONNECTIONS		_	_						
Phone mute		•	•		•	•	•		•
Auxiliary input		Rear 2ch	Rear 2ch	Rear 2ch	Front	Front	Front	Rear 2ch	Rear 2ch
		•	•		•	•	•		•
Audio input sense		(LOW/MID/HI)	(LOW/MID/HI)		(LOW/MID/HI)	(LOW/MID/HI)	(LOW/MID/HI)		(LOW/MID/HI)
Audio pre-out voltage		6 V	2 V	2 V	2 V	2 V	2 V	2 V	2 V
Audio pre-out		F2ch+R2ch+SW2ch(gold) [NORMAL] HI2ch+MID2ch+SW2ch [3-way] HI2ch+MID2ch+Rear2ch [2way]	F2ch + R2ch + SW2ch	F2ch + R2ch	F2ch + R2ch	R2ch	F2ch + R2ch	R2ch	F2ch + R2ch
EXTENSION									
CeNET CD changer control (DCZ628)		•	•		•				•
CeNET TV tuner control (TTX752z & TTX	7503z)	•	•		•				•
CeNET iPod interface EA1276 control		•	•		•				(EA1251)
AUX Bluetooth unit BLT373 ready		•	•						
Cellular input (automatic switch to AUX inp	out)	•	•						● (TEL or AUX)
OTHERS									
Remote controller included		•	•	•	•		•		
-		(RCB176)	(RCB176)	(RCB176)	(RCB176)				
Remote control sensor		•	•	•	•		•		•
OEM steering wheel remote wired interface capability		•	•	•	•	•	•		•
Detachable control panel		•	•	•	•	•		•	
CATS anti-theft system		_	_	_	_	_		_	•
Blinking LED		•	•		•				
									l

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#### MP3/WMA/AAC features

			D)	KZ778I DXZ77	RUSB. 8RUSE	,DXZ5 3, DXZ5	78RUS 75USE	В,	DXZ37	78RMP	DB17	8RMP		DB568 DUB2	RUSE 78RMI	3,	FB 278RBT		MAXS	73HD		VRX87 MAX6	78RVD, 78RVD	VRX5	78RU	SB, VF	RX378F	RUSB
			WMA	CD MP3	AAC	WMA	USB MP3	AAC		MP3		MP3	WMA	MP3		SB MP3	SD MP3	CD/I			MP3	CD/ WMA		CD/		WMA	USB MP3	AAC
TEM	ISO9660	LEVEL1 LEVEL2		•						•	-	•	_															
FILE SYSTEM	IS09660 EXTENSION	LEVEL3		64 bytes	<b>3</b>				64 b	pytes		• •		ytes				32 b	ytes			32 b	pytes	32 b	ytes			
	OTHERS	일 PLAY FILE NAME APPLE ISO		64 bytes	5			$\setminus$	64 b	ytes		-		ytes				32 b										$\neq$
	FAT	FAT12 FAT16		-			•				-	-			(	•	•				•					•		•
핑	.mp3/ .MP .Mp3/ .Mp3			•			•			•		•		•	_	•	•		•		•		•		•	•	•	•
FILE	.wma .WMA		•			•			•		•		•		•	Ĭ	Ŭ	•		•		•		•		•		•
DES	.rmp .AAC/Igno	ore case																										•
9.5	.m4a MPEG1			•	•		•	•		•		•		•		•	•		•		•		•		•		•	•
MPEG	MPEG2 MPEG2.5			•			•			•		•		•		•	•				•		•		•		•	•
EQUENCY	MPEG1			48,44.1, 32,24, 22.05, 16,12, 11.025, 8 (kHz)			48,44.1, 32,24, 22.05, 16,12, 11.025, 8 (kHz)			48,44.1, 32,24, 22.05, 16,12, 11.025, 8 (kHz)		32, 44.1. 48		32, 44.1. 48		32, 44.1. 48	32, 44.1. 48		48, 44.1, 32		48, 44.1, 32		48,44.1, 32,24, 22.05, 16,12, 11.025,8		48,44.1, 32,24, 22.05, 16,12, 11.025,8		48, 44.1, 32	
SAMPLING FREQUENCY	MPEG2			48,44.1, 32,24, 22.05, 16,12, 11.025, 8 (kHz)			48,44.1, 32,24, 22.05, 16,12, 11.025, 8 (kHz)			48,44.1, 32,24, 22.05, 16,12, 11.025, 8 (kHz)		16, 22.05, 24		16, 22.05, 24		16, 22.05, 24	16, 22.05, 24				16, 22.05, 24		48, 44.1, 32		48, 44.1, 32		16, 22.05, 24	
W	MPEG2.5			48,44.1, 32,24, 22.05, 16,12, 11.025, 8 (kHz)			48,44.1, 32,24, 22.05, 16,12, 11.025, 8(kHz)			48,44.1, 32,24, 22.05, 16,12, 11.025, 8 (kHz)		8, 11.025	i	8, 12		8, 12	11.025, 44.1						48,44.1, 32,24, 22.05, 16,12, 11.025,8		48,44.1, 32,24, 22.05, 16,12, 11.025,8		8, 12	
	WMA		Fs= 22.05 -44.1 kHz	O (KFIZ)		Fs= 22.05 -44.1 kHz	O(N12)		Fs= 22.05 -44.1 kHz	O (KFIZ)	32, 44, 48.1 kHz		8- 44.1 kHz		8- 44.1 kHz			48, 44.1, 32		48, 44.1, 32		22.05 /32 44.1 /48 kHz		22.05 /32 44.1 /48 kHz		8-44.	1 kHz	
	AAC MPEG1			8-320kbps			8-320kbps			8-320kbps		32-320		32-320		32-320	32-320		32-320		32-320		8-320		8-320		32-320	7.3K~64K
BITRATE	MPEG2 MPEG2.5			8-320kbps 8-320kbps	_		8-320kbps 8-320kbps			8-320kbps 8-320kbps		8-160 8-160		8-160 8-160		8-160 8-160	8-160 8-160				8-160	_	64-912 8-3520		64-912 8-3520		8-160 8-160	<u> </u>
<u>e</u>	WMA		48, 64, 80, 96, 128, 160, 192 kbps			8kbps ~ 320 kbps			48, 64, 80, 96, 128, 160, 192 kbps		32 ~ 192 kbps		48, 64, 80, 96, 128, 160, 192		48, 64, 80, 96, 128, 160, 192		-	22.05 ~ 192		22.05 ~ 192		32 ~ 192 kbps		32 ~ 192 kbps		48, 64, 80, 96, 128, 160, 192		
	AAC							8 kbps~ 320 kbps (iTunes ver5)									-											8 kbps~ 320 kbps (Tunes ver5)
ERS		RY DEPTH	- 8	8-320kbp	os	_	MAX. 8		8-320		<del>                                     </del>	X. 8	MA			MAX. 8	MAX. 8	MAX		_	X. 8	_	X. 8	MA		MAX. 8		
OTHERS		E LENGTH LE MUMBER	$\vdash$	64 bytes 512		64 bytes	128 bytes 65,025		64 b	ytes 12		oytes 54	28 t	-	255(DB5	bytes 68RUSB)	30 chars 255	64 b		60 bytes 5			bytes 12	32 b		28 bytes 15,000		
		DER NUMBER		255			255		_	55	<del>                                     </del>	28	-	55		<u>JB278RMP)</u> 55	255	25		2		_	55	25		255		
	FILE NUMBE	ER via FOLDER		255			255			55	2	54	2	55	255(DB5	68RUSB) JB278RMP)	255		12	9	9	5	12	3,0	000	15,000		
		ver.1.x ver.2.x		•			•			•		•		•		•	•		•		•		V2.3		V2.3		•	
	ID3 TAG	TITLE ARTIST		•			•			•		•		•		•	•		•		•		•		•		•	
	14/14	ALBUM TITLE	•	•		•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	$\vdash$
	WMA TAG	ARTIST ALBUM	•			•			•		•		•		•			•		•		•		•		•		
		TITLE																										•
	AAC TAG	ARTIST ALBUM																										•
	Support for highest qualit	· VBR ty (240-355 kbps)	•	•	•	•	•	•	•	•		•		•		•	•	•	•	•	•						•	

 $<sup>^{\</sup>star}$  When a USB memory device is composed of two or more drives, only one of the drives will be detected.

#### iPod connecting list

		iPod Video (2006~)	iPod nano Full-Remix (audio only)	iPod Video (2005)	iPod nano	iPod Photo	iPod (click wheel)	iPod mini
CCA692	MAX973HD	Υ	Υ	Υ	Υ	Y (audio only)	Υ	Υ
CCA673	MAX678RVD/VRX878RVD	Υ	Υ	Υ	Υ	Y (audio only)	Y	Υ
CCA691	VRX575RUSB/VRX375RUSB	Υ	Υ	Υ	Υ	Y (audio only)	Υ	Υ
CCA670	MAX678RVD/VRX878RVD	Y (audio only)	Υ	Y (audio only)	Υ	Y (audio only)	Υ	Υ
EA1276	07 CeNET audio	Y (audio only)	Y	Y (audio only)	Υ	Y (audio only)	Y	Υ
EA1251*	06 or older CeNET audio	Y (audio only)	Υ	Y (audio only)	Υ	Y (audio only)	Υ	Υ
BC001N	BLT373/FB278RBT				Υ			
BC002M	BLT373/FB278RBT							Υ
BC003V	BI T373/FB278BBT			Υ				

#### Multimedia stations - Specifications

	MAX973HD	MAX678RVD	VRX878RVD	VRX578RUSB	VRX378RUSB
MONITOR SECTION	IIIAKO TOTIB	MASSOTOTES	VIIXOTOTIVE	TINGTOTICOS	VIIXOTOTICOD
Screen Size (W × H), mm	154.0 × 87.0 (7 inch)	154.0 × 87.0 (7 inch)	154.0 × 87.0 (7 inch)	154 × 87 (7 inch)	77 × 43 (3.5 inch)
Aspect Ratio	1-	-	-	16:9	16:9
Display Type	Transparent-type TN liquid crystal display	Transparent-type TN liquid crystal display	Transparent-type TN liquid crystal display	Trasparent-type TN liquid crystal display	Trasparent-type TN liquid crystal display
Drive Principle	TFT (Thin Transistor) active matrix display	TFT (Thin Transistor) active matrix display	TFT (Thin Transistor) active matrix display	TFT (Thin Transistor) active matrix display	TFT (Thin Transistor) active matrix display
Number of Pixels	336.960	336.960	336.960	336.960	336.960
RCA Video Input	1.0±0.2 Vp-p (input impedance 75Ω)	1.0 ± 0.2 Vp-p (input impedance 75 Ω)	1.0 ± 0.2 Vp-p (input impedance 75 Ω)	1.0 ± 0.2 Vp-p (input impedance 75 Ω)	1.0 ± 0.2 Vp-p (input impedance 75 Ω)
RCA Audio Input	130±60 mVrms (input impedance 10kΩ or more)	130 ± 60 mVrms (input impedance 10 kΩ or more)	130 ± 60 Vrms (input impedance 10 kΩ or more)	2.0 V, 1.3 V, 0.65 V	2.0 V, 1.3 V, 0.65 V
TUNER SECTION		( )			
Frequency Bands	i		1		
FM; (MHz) 0.05 MHz steps	87.5 to 108	87.0 to 108	87.0 to 108	87.5 to 108	87.5 to 108
MW: (kHz) 9 kHz steps	531 to 1.602	531 to 1,629	531 to 1.629	531 to 1.602	531 to 1,602
LW: (kHz) 3 kHz steps	153 to 279	153 to 279	153 to 279	153 to 279	153 to 279
FM Usable Sensitivity (dBf)	9	9	9	9	9
FM 50 dB Quieting Sensitivity (dBf)	15	15	15	T_	-
FM Alternate Channel Selectivity	70	70	70	1_	_
FM Stereo Separation @ 1kHz (dB)	32	32	35	30	30
FM Stereo Freq. Resp.@ ±3 dB (Hz)	30 to 15.000	30 to 15.000	30 to 15.000	30 to 15.000	30 to 15.000
DVD SECTION	00.10.10,000	00 10 10,000	00 10 10,000	00.10.10,000	00 10 10,000
Useable Discs	DVD video / DVD±R/RW	DVD video / DVD±R/RW	DVD video / DVD±R/RW	DVD video / DVD±R/RW	DVD video / DVD±R/RW
Frequency Response (Hz)	20 to 20,000 (48 kHz) (+1 dB, -2 dB) @ speaker	20 to 20.000 (48 kHz) (+1 dB1 dB)	20 to 20.000 (48 kHz) (+1 dB1 dB)	20 to 20.000 (+1 dB, -3 dB)	20 to 20.000 (+1 dB3 dB)
Video Frequency Response	_	=	=	0 to 4 MHz(-1 dB,-3 dB)	0 to 4 MHz(-1 dB,-3 dB)
Video output level	1_	_	1_	1.0 Vp-p (75 Ω)	1.0 Vp-p (75 Ω)
Region code	2	2	2	2	2
Distortion (%)	0.05 @ speaker	0.006	0.01	1_	-
CD SECTION	ores & speaker	0.000	0.01		
Wow/Flutter (WRMS)	Below measurable limit	Below measurable limit	Below measurable limit	1-	-
S/N Ratio (dB) 1 kHz	80 @ speaker	100	100	1_	1_
Frequency Response (Hz)	20 to 20,000 (+1 dB, -2 dB) @ speaker	20 to 20,000 (+1 dB, -1 dB)	20 to 20,000 (+1 dB, -1 dB)	20 to 20,000 (+1 dB, -3 dB)	20 to 20,000 (+1 dB, -3 dB)
Dynamic Range (dB) 1 kHz	80 @ speaker	100	100	1-	-
Harmonic Distortion (%)	0.05 @ speaker	0.006	0.01	-	_
AUDIO SECTION	İ				
Power Output (DIN45324, +B = 14.4 V)	4×31 W	4×27 W	4×27 W	4 × 25 W	4×25 W
GENERAL					
Dimensions (W × H × D), mm	178 × 100 × 162	178 × 100 × 165	178 × 50 ×165	178 × 50 × 160	178 × 50 × 160
Weight (kg)	3.0	2.4	2.4	2.4	2.1
Power Consumption	4.3 A (at 1 W)	4.0 A (at 1 W)	4.0 A (at 1W)	4.0 A (at 1W)	4.0 A (at 1W)
Power Requirement	14.4V DC (10.8 ~ 15.6 V)	14.4 V DC (10.8 ~ 15.6 V)	14.4 V DC (10.8 ~ 15.6 V)	14.4 V DC (10.8 ~ 15.6 V)	14.4 V DC (10.8 ~ 15.6 V)
Speaker Impedance	4 Ω (4 Ω to 8 Ω allowable)	4 Ω (4 Ω to 8 Ω allowable)	$4 \Omega (4 \Omega \text{ to } 8 \Omega \text{ allowable})$	$4 \Omega (4 \Omega \text{ to } 8 \Omega \text{ allowable})$	$4 \Omega (4 \Omega \text{ to } 8 \Omega \text{ allowable})$

#### Main units - Specifications

	DXZ778RUSB	DXZ578RUSB	DB568RUSB	DXZ378RMP	DB178RMP	WXZ468RMP	DUB278RMP	FB278RBT
TUNER SECTION								
Frequency Bands								
FM: (MHz) 0.05 MHz steps	87.5 to 108	87.5 to 108	87.5 to 108	87.9 to 107.9	87.5 to 108	87.5 to 108	87.5 to 109	87.5 to 108
MW: (kHz) 9 kHz steps	531 to 1,602	531 to 1,602	531 to 1,602	530 to 1,710	531 to 1,602	531 to 1,602	532 to 1,602	
LW: (kHz) 3 kHz steps	153 to 279	153 to 279	153 to 279	153 to 279	153 to 279	153 to 279	154 to 279	
FM Usable Sensitivity (dBf)	9	9	11	10	11	9	11	11
FM 50 dB Quieting Sensitivity (dBf)	17	17	17	17	17	15	17	17
FM Alternate Channel Selectivity (dBf)	75	75	70	75	75	70	75	75
FM Stereo Separation @1 kHz (dB)	25	25	35	25	35	35	35	25
FM Stereo Freq. Resp. @ ±3 dB (Hz)	30 to 15,000	30 to 15,000	30 to 15,000	30 to 15,000	30 to 15,000	30 to 15,000	31 to 15,000	30 to 15,000
CD SECTION								
S/N Ratio (dB)	100	100	100	95	85	90	86	
Frequency Response (Hz)	5 to 20,000	5 to 20,000	5 to 20,000	5 to 20,000	10 to 20,000	10 to 20,000	11 to 20,000	
Dynamic Range (dB)	95	95	93	90	87	90	88	
Harmonic Distortion (%)	0.01	0.01	0.03	0.01	0.01	0.01	0.03	
AUDIO SECTION								
Power Output (DIN45324, +B = 14.4 V)	4×25 W	4×25 W	4×25 W	4×25 W	4×25 W	4×27 W	4×25 W	4×25 W
GENERAL								
Dimensions (W × H × D), mm	178 × 50 × 158	178 × 50 × 158	178 × 50 × 155	178 × 50 × 158	178 × 50 × 152	178 × 100 × 167	178 × 100 × 155	178 × 50 × 152
Remote Control (W×H×D), mm	44×113×11	44×113×11	44 × 113 × 13	44×113×11		44×113×13	114 × 44 × 12	
Weight (kg)	1.6	1.6	1.3	1.3	1.1	2.2	1.8	0.6
Power Consumption: less than	15 A	15 A	15 A	15 A	15 A	15 A	15 A	15 A
Speaker Impedance	$4\Omega$ (4 $\Omega$ to 8 $\Omega$ allowable)	$4\Omega~(4~\Omega~to~8~\Omega$ allowable)	$4 \Omega (4 \Omega \text{ to } 8 \Omega \text{ allowable})$	$4\Omega$ (4 $\Omega$ to 8 $\Omega$ allowable)	$4\Omega$ (4 $\Omega$ to 8 $\Omega$ allowable)	$4 \Omega (4 \Omega \text{ to } 8 \Omega \text{ allowable})$	$4\Omega$ (4 $\Omega$ to 8 $\Omega$ allowable)	$4\Omega$ (4 $\Omega$ to $8\Omega$ allowable)

#### Rear-view cameras - Specifications

	CC2011E	CC2003E	CC2001E	CC2000E	CC1030E
Pick-Up Element	1/4" Colour CCD 250,000 pixels				
Cover Angle	Horizontal 130° Vertical 97°	Horizontal 118° Vertical 97°	Horizontal 118° Vertical 97°	Horizontal 118° Vertical 97°	Horizontal 115° Vertical 88°
Sensitivity (Approx.)	3 Lux	1 Lux	1 Lux	1 Lux	3 Lux
Power Requirements	9 V (powered from monitor)				
Operational Temperature	-20°C to +60°C				
Shock Resistance	6.8 G	10 G	10 G	10 G	10 G
Weight (Approx.)	72 g	260 g	300 g	260 g	100 g
Dimensions (W x H x D), mm	27 × 25 × 28.3	80 × 40.5 × 53	80 × 40.5 × 58	80 × 40.5 × 53	48 × 35 × 32.5

\* control via CD changer mode

<sup>\*</sup> USB memory devices with security functions cannot be played.

\* Do not connect your iPod directly to the USB slot on Clarion products. A special adapter (sold separately) is required for the iPod connection. Please refer to the "iPod connecting list" below. For more details concerning USB slot connections, please refer to our website at www.clarion.com.

\* Playback is not possible with some USB devices depending on their type and configuration.

#### **FEATURE ICONS**

#### Multimedia/Main units



2-Zone entertainment

Function that allows people in the front and back seats to enjoy separate visual or audio entertainment sources.



#### 24-bit D/A converter

This sophisticated Digital-to-Analogue converter converts the 16-bit digital data on compact discs to a full 24-bit format for the utmost in resolution and clarity. It combines the qualities of the 1-bit D/A converter with wider dynamics and extremely low noise. opening up a whole new world of three-dimensional sound rich in musical nuances and instrumental harmonics.







#### 5.1-channel Dolby Digital / dts surround With the arrival of DVD, 5.1-channel surround sound, which is

already a must for home theatre systems, is rapidly becoming the entertainment format of choice in motor vehicles. Dolby Digital and dts provide three channels of front sound (left, right, centre) together with two rear audio channels (left, right) and a dedicated low-frequency channel for a subwoofer. This combination, as satisfied home theatre enthusiasts well know, is able to reproduce the dynamic sound field of a cinema in a relatively small space. So take the show on the road; let Clarion bring full 5.1-channel performance into your car.



#### 6-disc CD changer

The built-in 6-disc CD changer lets you enjoy your favourite music for long periods of time without the need for switching CDs. So now on long drives, you can listen to your favourite music albu to your heart's content.



#### Amplifier canceller

When using an external amplifier, the power supply to the built-in amplifier can be switched off in order to prevent spurious radiation entering the signal and this way ensuring audio output of the



6V/6ch 4V/6ch 6ch

4ch



#### Audio pre-out

RCA output terminals for connecting with external amplifiers. With external amplifiers, you can build up a system with more powerful output and higher sound quality. Especially 6V or 4V output can drive amplifiers powerfully and helps to get pure sound.



AAC is an abbreviation for Advanced Audio Coding, a next-generation compression format. It boasts a high compression ratio
1.4 times that of MP3, while achieving sound quality that almost rivals that of commercial music CDs.



#### AUX input

External RCA audio inputs. They can be connected to equipment, such as a video game or portable player, with full control of the sound from



#### Bluetooth

Bluetooth compatibility provides the ability to wirelessly connect a variety of peripheral equipment. It allows for handsfree mobile phone communication and linking of an iPod with your car's audio system



#### CD

This symbol shows compatibility with compact discs.



#### CD text

When a CD text compatible CD is played, text information such as artist name or music title is shown on the display



#### CeNFT

Original bus system developed by Clarion, which enables highspeed data transfer and high quality sound transmission. Your system can be upgraded with optional devices such as a CD changer, TV tuner, DAB tuner, DSP, iPod interface and so or

#### Bigital ENHANCER

#### Digital Z-Enhancer

3 equalising patterns can be selected from the DSP to boost either the bass or the treble separately, or both together. Also, 3 additional gain adjustment patterns provide a total of 9 equalising patterns that you can change to suit your favourite music.



#### DVD video

The unit is compatible with the DVD video format so you can watch DVD software in your car.



#### Flip-down console

Clarion has designed the CD insertion slot to sit behind the front panel in order to leave sufficient space for a large, easy-to-read display. Depending on the model, the front panel slides down at the press of a button or can be released and folded down



#### Front AUX input

What could be easier? The front jack lets you easily connect the line outputs on portable audio players or other devices to your Clarion system for high-quality sound reproduction.



#### MOS-FFT

MOS-FET (Metal Oxide Semiconductor Field Effect Transistor), well known as a superior electronic transistor in audio systems, is used in the final stage of the amplifier. Since MOS-FET is a highly efficient element with a linear operation curve, it drama cally improves S/N in the high frequency range, which is especially susceptible to noise. This results in smooth and rich expressive capabilities, and sound reproduction infinitely close to the original



#### Low-pass and high-pass filters

Filters that allow signals to pass below a crossover frequency (LPF) or above a crossover frequency (HPF). This optimises the audio signal for high or low frequency reproduction when a subwoofer or tweeters are part of the system



#### LPO (Listening Position Optimiser)

The WXZ468RMP's Listening Position Optimiser uses digital processing to virtually adjust the speaker distance, enabling sound stage settings to accommodate a wide variety of different types of vehicles. So no matter what type of car you drive, you can count on Clarion to drive your sound with high precision and



#### Magna Bass EX

This bass enhancer is designed to boost ultra-low frequencies around 60 Hz compared to conventional loudness circuits operating around 100 Hz. The amount of boost depends on the volume



You can enter your own greeting of up to 30 characters that will be shown on the display when the unit is switched on and off



#### OEM remote ready

This mark indicates the unit is ready to connect to a Clarion OEM steering wheel remote control interface. Thanks to the interface. you can still use the radio switches mounted on the steering whee of your car to control most audio parameters. Two types of interfaces - direct connection and infrared - are available depending on the type of main unit.



#### Parametric FQ

Allows equalising control of the frequency curve for customisation of the sound character according to the speakers used and the acoustic properties in the car.



An enhanced receiver for the Radio Data System, which is in wide use throughout Europe. The symbol shows compatibility with the system, however the available services depend on the local radio



Provides instant road condition updates from local traffic control centres via RDS-TMC (Traffic Message Channel). Additionally, the re-route feature lets you avoid traffic jams by choosing other



This novel interface breaks away from traditional controlling done by turning knobs, allowing for intuitive operation. Almost all system operations can be made with the SLIDETRACK.



Sloping console
The face panel of the sloping console slides down gracefully to reveal the CD loading slot. The smooth operation of the console presents a



#### Sound Restorer

The Sound Restorer extracts the harmonic component from compressed data such as MP3, WMA, and AAC, complementing the skipped and reduced sound components to achieve almost the same acoustic expression during playback as the original



Lets you easily adjust the time delay among the speakers to best suit your interior simply by choosing the car type (sedan, mini-



#### Touch panel control

Based on pure H.M.I., it provides an intuitive and easy-to-use alternative to conventional buttons and knobs. Convenient onetouch menus make it easy to operate complex multimedia functions and control connected components. Call up programmes, select stations, input titles or control audio and video output - all with just the touch of a finger.



#### USB Memory Slot

The USB port enables playback of WMA/MP3 or even AAC s (depending on the source unit) stored on a connected USB memory card or USB-compatible player.



#### Variable colour display

This LCD display lets you mix the RGB (Red/Green/Blue) level to create the background colour. The control buttons on the faceplate automatically change colours to match the



#### Video CD

This symbol shows compatibility with Video CD.



#### Z-Enhancer

Three types of sound quality patterns are pre-set for easy selection. Boost the bass only, the treble only, or both, with the level of boost adjustable by the user



#### WMA/MP3

With decoders for both MP3 and WMA (Windows Media Audio), you can play either type of ripped or downloaded audio files. Also supports ID3 tags for display of meta file information. With digital compression, these formats enable up to 12 hours of music to be condensed onto a single CD-R/RW while delivering CD-level quality.

MP3



#### 7-Enhancer Plus

Same functions as standard Z-Enhancer, but in addition, all units with "Z-Enhancer Plus" are designed for 2-band para-

#### Amplifiers/Subwoofers/Speakers



Air compression The exhaust back pressure is compressed once inside the cabinet to boost the bass sound.



#### Aluminium-coated Polypropylene cone

High-rigidity, lightweight polypropylene is used as the cone material.



#### Bass Extender

A low-range sound reinforcement circuit that boosts the bass according to the volume level, making it easier to perceive by the human ear



#### Counter drive

This ingenious mount design enables a large calibre 20 cm woofer to fit inside a slim and compact speaker housing.



#### Dual voice coil

Dual voice coils deliver perfect playback of large-amplitude bass. These coils also provide high sensitivity and excellent performance for large



#### Neodymium magnet

mium magnets feature high magnetic energy, which helps to minimise magnetic distortion when used in speaker drivers.



#### Full OFC wire

99.995% pure oxygen free copper is used for wiring in order to secure



#### Fibreglass cone

Fibreglass is adopted as a cone material, which enables quick response during sound reproduction.



HX series The HX series was derived from Clarion's perpetual quest for perfection These speakers deliver breath-taking sound that takes the car listening experience to new heights.



#### In-line network

A separate crossover network is not required for the installation since it is built-in.



These speakers have been designed to accommodate a tweeter and woofer on the same axis, which as a result conveys crisp treble and vibrant bass to the listener's ears simultaneously



#### Metallised MIPP cone

The metallised MIPP cone provides superior rigidity while maintaining lightness for high dynamic response



Mica polypropylene mixed injection cone Polypropylene with mica particles blended in is used in injection-moulded diaphragms to attain superior response.



#### Metallised PEI cone

The metallised PEI (polyetherimide) cone is impervious to heat and other ambient conditions prevalent in the car environment. Thanks to its ultra-light weight diaphragm, it is highly efficient and provides very fast



#### PEI balanced drive

Integrated PEI diaphragm and voice coil bobbin, which reduces the mass and provides optimum induction conditions in the magnetic gap. This dramatically improves the dynamic range.



#### Powerful strontium magnet

A high-conductivity magnet is used in Clarion's speaker systems to obtain an air gap magnetic flux density significantly higher than that



Rear-vented pole piece To prevent pressure from building up inside the centre cap and causing increased amplitude distortion, a vent is provided on the rear of the



#### Rubber surrounds

The rolled edge of the diaphragm provides superior response, while its butyl material is highly durable and moisture resistant



#### Silk-cloth soft dome tweeter

Clarion's high-end tweeters use silk, strengthened by the lamination layer to provide natural, finely detailed sound.



#### TM MIPP (Titanium Metallised MIPP) Cone

MIPP (Mica Injected Polypropylene) cones with blended titanium offer superior lightness and rigidity for an excellent response even with the fast transients typical of digital sound sources



Variable angle tweeter

#### The angle of the tweeter is adjustable according to the installation.

80HHZ 120HHZ

to 80 kHz or 120 kHz for crystalline highs.

Wide-range 80 kHz / 120 kHz silk dome tweeter These super tweeters use soft silk dome diaphragms and high-power magnets to achieve rich expressiveness. They offer reproduction up



Wired remote control Stick-type remote for control of a powered subwoofer from the driver's seat. When installed on the dashboard, it offers comfortable control of the low-pass filters, gain and phase switching within easy reach.

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