

**BULGARIA**  
 IMPAS 56 Ltd.  
 67 Cherni Vrah Blvd.  
 1407 Sofia  
 Tel.: +(359 2) 862 47 17  
 Fax: +(359 2) 868 95 70  
 e-mail: info@impas56.com

**CYPRUS**  
 ANGELOS RADIO CO., LTD.  
 80, Digenis Akritia Avenue,  
 1061 Nicosia  
 Tel.: +357 22765487 / 22460099  
 Fax: +357 22757664  
 e-mail: angelosradio@cytanet.com.cy

**LITHUANIA**  
 ALTAS SECURITY CORP.   
 Kalnieciu 104  
 50184 Kaunas  
 Tel.: +370 69 803 830  
 Fax: +370 37 797 705  
 e-mail: clarion@clarion.lt

**MACEDONIA**  
 FPS DOOEL  
 Lerinska 55b  
 Skopje 1000  
 Tel.: +389 22040618  
 Fax: +389 2 2040618  
 e-mail: petrovaska@mol.net.mk

**MALAYSIA**  
 Clarion (Malaysia) Sdn., Bhd.  
 Phase 3, Free Industrial Zone,  
 11900 Bayan Lepas, Penang,  
 Tel.: +60 4 6148400  
 Fax: +60 4 6439108, +60 4 6438763  
 www.clarion.com/my

**MALTA**  
 DOUBLESIN & ZAMMIT LTD.   
 53, Nicolo Isouard Street  
 Sliema, SLM 2084  
 Tel.: +356 21 331294  
 Fax: +356 21 319576  
 e-mail: info@doublesinandzammit.com

**PORTUGAL**  
 ORNAIMPOR, LDA.  
 Av. João Crisóstomo, 16-A  
 1000-179 Lisboa  
 Tel.: +351 21 315 07 13/14  
 Fax: +351 21 352 01 72  
 e-mail: geral@ornaimpor.pt

**CLARION EUROPA GmbH**  
 Hessenring 19-21  
 64546 Mörfelden-Walldorf  
**GERMANY**  
 Tel.: +49 6105/977-0  
 Fax: +49 6105/977-200

# clarion



Your Clarion dealer can tell you more.

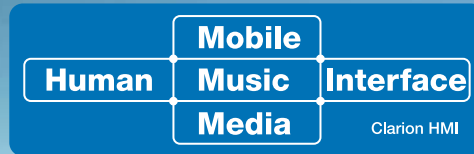
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www.clarion.com

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# Clarion



## Imagination becomes reality

Ideas and thoughts are made truly meaningful when they are given shape and form.

At Clarion, we specialise in visualising the most innovative, human-friendly concepts for in-vehicle entertainment, turning them into tangible solutions that will seamlessly transform your driving experience. Interfacing humans with music and media in a mobile environment — with Clarion H.M.I., you are the ultimate destination.



ITALDESIGN-GIUGIARO  
"QUARANTA", the Clarion H.M.I. concept car created by Italian designer GIUGIARO, one of the world's top industrial design firms.

Jamiroquai



Jay Kay (Jamiroquai)  
"Jay Kay", vocalist for the world-famous jazz funk band Jamiroquai.



# See your entertainment grow, seamlessly.

Clarion's H.M.I. concept is the driving force behind our relentless pursuit of the ultimate human-machine interface. The goal is to bring music and information to people in mobile environments for seamless enjoyment of high-quality entertainment. With Clarion, your car is transformed into the ultimate personal theatre – a front-row concert seat – with broad compatibility that tears down the barriers to the outside world.



## Exciting operation

Clarion H.M.I. makes operation more exciting and interactive. Touch panel keys provide an intuitive way of accessing a multitude of functions with state-of-the-art looks while minimising the surface area necessary for buttons. Touch it, and let the excitement begin.

## Advanced technology

ClarionMiND brings advanced navigation and Internet access into your car. Cutting-edge audio technologies like BBE® MP to improve compressed digital audio sound and Beat EQ's 3-band parametric equaliser are present throughout most of the line-up. Support of DivX® files helps broaden the scope of your entertainment. Advanced graphics technologies contribute to stress-free viewing.

## Comprehensive connectivity

Clarion's superior iPod connectivity enables full search and complete control of your iPod's audio and video libraries. Bluetooth® for safe hands-free calling and audio streaming. USB and AUX connections to access music on portable devices. Together these create an in-car environment where you're assured of seamless enjoyment of the music you love.



# MULTIMEDIA

## Master the road, maximise your pleasure.

Clarion's multimedia line-up includes flexible car navigation solutions complemented by a wide array of audio visual capabilities, so the road to your destination will be entertaining. Internet access and wireless connectivity help to create a seamless information and entertainment environment for the road. Come and experience a higher level of digitally driven satisfaction.

**Audio** *Superb sound*

**Visual** *Exceptional entertainment*

**Navigation** *Quality navigation*

**Internet** *Seamless environment*

### More choices to match your style

From dedicated car navigation and AV/navigation units, to entertainment-oriented multimedia stations, Clarion offers a diverse line-up to meet the unique needs of your automotive lifestyle.

	Navigation			Multimedia station			Mobile internet navigation device
	NX509E	MAX983HD	MAP790/690	VX709E	VZ709E	VZ509E	ClarionMIND
Navigation	Built-in 4 GB Flash memory	Built-in HDD 40 GB memory	Built-in 2 GB memory	Requires optional NP509E navigation unit	Requires optional NP509E navigation unit	Requires optional NP509E navigation unit	Built-in 4 GB Flash memory Built-in 8 GB Flash memory (only 3G model)
SD card	Map updates	Music & "Clarion NAVI manager" PC application	Movie, Music & Pictures	—	—	—	Movie, Music & Pictures
iPod	Via USB *	(With optional CCA692)	—	Via USB *	Via USB *	Via USB *	—
USB memory	Rear USB connection	—	—	Rear USB connection	Rear USB connection	Rear USB connection	2 USB ports (standard / mini)
Bluetooth®	With optional BLT373	With optional BLT583	Built-in Bluetooth	Built-in Bluetooth	Built-in Bluetooth	With optional BLT373	Built-in Bluetooth
AUX input	•	•	—	•	•	•	—
Rear vision camera	•	•	—	•	•	•	—
OEM Remote control	•	•	—	•	•	•	—

\* For video playback, optional CCA723 cable required.

## Design

Simplified and sophisticated, Clarion's new design features a minimal number of physical keys and a graphical user interface with optimally laid-out on-screen controls. Buttons are thus larger and more ergonomic, while on-screen displays offer the information you need clearly, intuitively and with a touch of style.

## Navigation

Clarion's car navigation line-up includes everything from a hide-away memory navigation unit and portable navigation devices, to all-in-one AV/navigation systems. The latest navigation engine with maps stored on 2 GB- 4 GB flash memory, provide a perfect balance of performance and convenience.

## Entertainment

Keep your audience smiling. Certain select models feature visual output for 2-zone entertainment, so rear seat and front seat passengers can view different content during the journey. And with DivX® playback support, you'll be able to enjoy a wider variety of compressed video programmes such as movies.

## Sound

Sculpt the sound to match your preference or environment. With Clarion you get great audio features like Beat EQ's 3-band parametric equaliser, BBE® MP to improve the sound of compressed digital audio and Magna Bass EX to boost ultra-low frequencies for a richer sound with more impact - and that's just for starters.

## Connectivity

The music you love and carry with you can be enjoyed seamlessly in your car. iPod connectivity gives you full control and complete search functions. Use the USB and AUX connections to access music on portable devices and other external equipment.

## Internet

ClarionMIND is a next-generation in-vehicle device that combines GPS navigation with Internet-based entertainment. It enables a whole new style of driving, such as importing navigation destinations directly from Google Maps. Wi-Fi, 3G and Bluetooth® connectivity combines with a touch-panel interface to provide a seamless entertainment and infotainment environment.





# Always with you. Navigate your life.

ClarionMiND is a completely new type of mobile internet device created by the car audio and navigation expert Clarion. As a Next Generation Navigation plus Internet-based entertainment device, it provides GPS navigation and Internet access when used in conjunction with a Wi-Fi and Bluetooth-enabled cellphone, or a 3G communication device.

The inbuilt web browser enables full desktop interaction with the Internet, anytime and anywhere.

ClarionMiND has a revolutionary interface that allows you to navigate the real world and the unlimited possibilities of the Internet by simple touch.

The possibilities for ClarionMiND are endless.

## Powering ClarionMiND: the mighty Intel® Atom™ Processor

ClarionMiND is powered by Intel's smallest processor – the Intel® Atom™ Processor – which packs an astonishing 47 million transistors. Despite its small size, it is powerful enough to deliver a full range of Internet services and many useful applications.



# ClarionMiND



Who says you can't have the best of all worlds? Now you can, in a device containing all the media programmes you need that can be taken with you and used anywhere. Whether it's the Internet, navigation, music, video, photographs or file management, ClarionMiND works for you – anywhere. The information world just got a whole lot bigger. Your world just expanded with ClarionMiND. The dream of a super-mobile multimedia device is now a reality.

## ALL-IN-ONE DEVICE

### Navigation

- Fully fledged navigation
- Europe maps included (42 countries)
- Google based POI search

### Communication

- Email
- Full Internet
- Virtual keyboard

### Entertainment

- Direct access to YouTube
- Real Player for audio & video
- Photo browser



### Mobile

- Powerful but compact
- Light device
- High-visibility WVGA screen

### My Life

- Direct access to MySpace
- Weather information
- Newsreader

### Digital Television

- Enjoy free TV with DVB-T technology

## Connect your life

Today's intensive lifestyle often requires frequent interaction with colleagues, friends and relatives. Everybody shares information not only for business use, but also personal data, such as photos, links to personal web sites and other community-related networks. ClarionMiND opens doors to this new way of life, of staying connected all the time. Using a Wi-Fi and Bluetooth-enabled mobile phone, or a 3G communication device, it connects you to the world around you, day and night, at home and abroad.



Choose the way to access your digital world.



Black (NR1EB/NH1EB)

### NR1E

The NR1E enables Wi-Fi reception whenever you are located in a hotspot area.



White (NR1EW/NH1EW)

### NH1E (3G model)

The NH1E has a built-in 3G communication device to enjoy permanent Internet access.



Red (NR1ER/NH1ER)

## Full Internet experience



### Browser

Using the Firefox-based Web browser, you can navigate the Web. Find where you want to go, such as restaurants, concert venues and shops, by checking the information on the Internet.



Full-Internet Browser

### YouTube

The YouTube icon on the Home Screen gives you one-touch access to one of the world's most popular Websites without activating the browser. Now you can enjoy videos both inside and outside your home via the YouTube portal, which is easy to view and operate.



YouTube

### Email

With the virtual keyboard, you can send and receive emails quickly and safely wherever and whenever you wish - just like at home or in the office.

### MySpace

Use the MySpace icon to go directly to this popular social networking website. You can receive emails or blog update messages anytime, allowing you to stay connected with your friends.



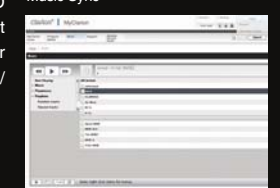
MySpace

### Music Sync

Clarion's Music Sync function is an extremely convenient way to access your music library from any location in the world. This audio streaming and download utility allows you to securely store favourite albums on a remote off-board server for later use - known as, Music Locker ClarionMiND Edition. This web-based music management player allows you to stream playlists to your ClarionMiND or to download albums to the SSD/microSD cards or USB memory.



Music Sync



Music Locker ClarionMiND Edition

<http://my.clarion.com>

User Portal

Upgrade, get software and more at "MyClarion"



One of the best features of ClarionMiND is that you can continually upgrade and extend its capabilities. Just use the Internet connection to go to the Clarion portal site, "MyClarion." This information hub is packed full of great contents like software updates, music downloads, partner site links and more!



## Next-generation navigation

### Unprecedented integration of Internet and navigation

The Internet is a boundless source of information. ClarionMiND integrates Internet-based point-of-interest information with GPS-based car navigation in a single, seamless system. Cyberspace merges with the road ahead — take the express lane to the future with ClarionMiND.



#### Navigation

ClarionMiND is a fully-fledged navigation system that guides you accurately to your destination. It offers ease of operation along with a highly visible display that only a leading expert of mobile navigation and entertainment products can provide. Let ClarionMiND navigate you to your destination and provide a stress-free driving experience.



The next turn direction and distance to the junction are displayed in the top left section of the screen. When you approach an intersection, the top of the screen shows the street name while voice guidance provides clear instructions in your choice of language.

#### Map data included

##### Map coverage:

Albania, Andorra, Austria, Belarus, Belgium, Bosnia-Herzegovina, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Gibraltar, Great Britain, Greece, Hungary, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Macedonia, Moldova, Monaco, Montenegro, the Netherlands, Norway, Poland, Portugal, Romania, Russia, San Marino, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland

##### Navigation languages (text messages):

Czech, Danish, Dutch, English (UK), English (US), Finnish, French, French (Canadian), German, Hungarian, Italian, Norwegian, Polish, Portuguese, Spanish, Spanish (Mexican), Swedish, Turkish

#### Google Maps

##### Send POIs from Google Maps

Use your ClarionMiND to find the optimum route to destinations you set using Google Maps. Once you have obtained necessary site information from Google, send it to ClarionMiND, then navigate directly to your destination.



##### Local Search from Google Maps

You can search the huge Google Maps database for POIs near your current location, your targeted destination, or in any specified area. This gives you access to more POIs, making trips more interesting and fun.



##### Voice guidance:

Czech, Danish, Dutch, English (UK), English (US), Finnish, French, French (Canadian), German, Greek, Hungarian, Italian, Norwegian, Polish, Portuguese, Russian, Spanish, Spanish (Mexican), Swedish, Turkish

\*As of December 2008; subject to change without notice.

## User interface



The ClarionMiND brings a whole new concept to the mobile multimedia world. Clarion dubs its compact new device as "HMMM" (Human Mobile Music Media Interface) with ClarionMiND extending the boundaries of mobile media devices to a more sophisticated, multi-dimensional level. The ClarionMiND makes it possible to navigate your way home and plunge into a richer world of entertainment, the Internet and mobile computing.

ClarionMiND provides an intuitive H.M.I. (Human Machine Interface). The graphics for the buttons and layout, map design and menus are designed to provide excellent visibility to allow safe operation of the touch screen.

#### Mobile mode

The icon layout can be switched between Slide View and Carousel View, and the icon arrangement order and categories can be changed as well. Enjoy faster access by grouping and displaying the function icons used most often.



Slide view



Carousel view

#### Car mode

The special Car Mode interface was designed specifically for safety whilst driving. Installing the standard cradle (included) or Car Dock (sold separately) allows the navigation to start up automatically and switch to a screen that only focuses on features which are needed while the vehicle is moving.



## ClarionMiND in detail



#### ClarionMiND basics

- 4.8-inch WVGA (800 x 480) LCD display with touch screen
- Intel®Atom™ processor • 800 MHz clock speed
- 512 MB DRAM • 4 GB Solid State Drive flash memory (only for NR1EB/R/W) • Built-in Wi-Fi (b/g)
- Built-in Bluetooth® 2.0 + EDR • Built-in 32-channel GPS receiver • Rechargeable battery lasts up to 1.5 hours (up to 4.5 hours with optional Large Battery)
- Headphone jack • 2 USB ports (standard / mini)
- microSD card slot • One-touch keys

- Docking station connector
- Built-in DVB-T receiver (Digital TV - MPEG2)
- Integrated TV antenna
- Stylus pen included
- Dimensions: 167.8 (W) x 96.0 (H) x 26.45 (D) mm
- Weight: 325 g (with standard battery)

- Only for 3G model (NH1EW/R/B)
- 3G communication module
- 8 GB Solid State Drive flash memory
- Bluetooth hands-free telephone



## Car Dock for full car navigation functionality



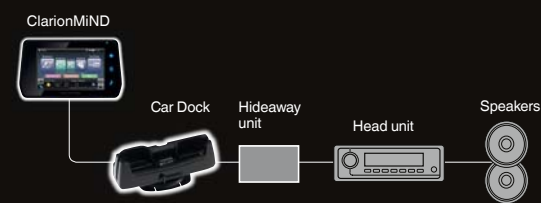
#### Portable and Dockable

ClarionMiND is a portable device you can use in the home, office or car. Placing it in the optional Car Dock instantly engages the navigation mode so it's ready to guide you to your next destination. The Car Dock also provides RDS-TMC to help you navigate around congested traffic.

#### Car Dock + Hideaway interface unit

##### NK1E Car Dock

- Integrated RDS-TMC real time traffic information
- Audio output to car radio
- Navigation voice prompt interrupt
- Easy docking with lock
- Automatic day/night illumination change
- Automatic power on/off linked to the vehicle ignition key position



For more information, see our website at <http://my.clarion.com>

#### Colour variations



#### Package contents



#### Accessories

##### NK1E Car Dock

With ClarionMiND docked into the NK1E, you can receive traffic information via the RDS-TMC channel, hear voice guidance from your car speakers and get automatic day/night screen switching.



##### PQE-166 Large Battery

This optional Large Battery extends operating time up to 4.5 hours.\*

\*While LCD backlight is at minimum brightness





## More than a navigator: a leader



**MAP790/MAP690**  
PORTABLE NAVIGATION



COMPACT SIZE (mm): 127.2 (W) x 82.2 (H) x 20 (D)

- **GENERAL:** • High Definition 4.3" non-reflective LCD display for crystal clear viewing • Built-in RDS-TMC tuner for traffic information • Built-in Bluetooth® interface for Hands-free and Audio Streaming (A2DP) • Sirf III GPS module with 20-channel receiver • External GPS antenna capable • 400 MHz CPU • 2 GB flash memory • SD card slot with up to 8 GB capacity • Lithium ion rechargeable battery • Equipped with postcode search (handles 5-digit & 8-digit codes for UK)
- **PACKAGE CONTENT:** AC adapter, Car charger, USB cable, Vibration-free mounting kit, TMC antenna, Stylus, Backup DVD, Quick start guide
- **NAVIGATION:** • 360° 3D display mode for: 3D city maps, 3D landmarks, 3D terrain • Simple mode or Advanced mode operation • Free TMC traffic information • Signpost information • Lane indicator • Spoken street and city names • Rich POI database • Trip computer • Speed limit information • Speed camera compatible • Navigation programme languages: 32 • Voice guidance languages: 38 • TTS voice languages: 11

\*Speed camera warning may be prohibited in some countries. \*\*3D information is not available everywhere. \*\*\*Only 18 languages available for Setting and Bluetooth menu. \*\*\*\*Toll-Free Traffic Information is not available in all countries.



The stand installs in seconds, with a large suction cup that affixes firmly on the dash. Accommodates virtually any make of car (dashboard disc is optional).



Enjoy music, pictures and videos thanks to an SD/SDHC Memory Card slot and a mini USB port

## NAVIGATION

### Navigation menu



Roads, junctions and bridges with elevations

\*Illustration of bridge with shadow underneath

### Trip Computer



### Text to Speech



While streets are displayed on the screen, the voice guidance tells you their actual name. Also, the system is able to tell you the direction to take, so when driving in Paris you would hear "... After 100m, turn left onto Rue Washington..."

## ENTERTAINMENT

### Movie Player



Enjoy portable cinema function anywhere with popular movie formats saved on MMC or SD cards up to 8 GB.

### Music Player



Transform your MAP navigation system instantly into a handy touch screen MP3/WMA compatible music player.

### Photo browser



Create your own personal photo album and share it with friends wherever you go.

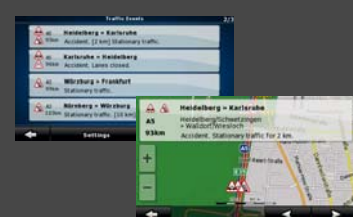
## COMMUNICATION

### Bluetooth®



Built-in enhanced Bluetooth functionality lets you fully enjoy the MAP790 / MAP690. Safe driving does not demand that you compromise on powerful communication. Phone book management • POP message for incoming SMS • Audio Streaming (A2DP) • Audio Video Remote Control Profile (AVRCP)

### RDS-TMC



Receive instant traffic information through the built-in TMC receiver. The MAP790 / MAP690 can receive toll-free traffic information (TMC). You are always informed whenever new information is broadcast.

\*Toll-Free Traffic Information is not available in all countries.

### 360° 3D Realistic View



3D Buildings



3D Landmarks

Comfort and clear instructions promote safe driving. This is the reason why Clarion considers it so important to provide high quality graphics in its navigation systems, offering route guidance with detailed and realistic map views. Many cities are represented with 3D buildings, landmarks and monuments, shown in their actual shapes in great detail.

### Elevation Modelling Terrain



Topographical view



Modelling Terrain in 3D

While driving, hills and mountains are rendered in 3D to better represent your real-world driving environment. 3D landmark data is integrated seamlessly into the graphical rendering in 3D mode and does not block the view of POIs and other useful information.

### Lane Indicator and Motorway Signposts



Lane Indicator



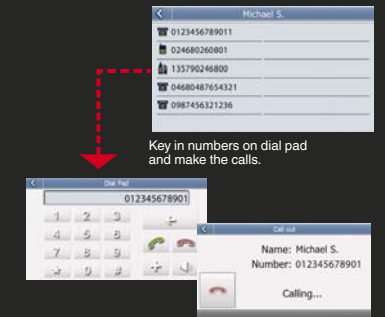
Signposts

The system shows which lanes allow you to exit and which ones continue ahead. All lanes on the same road segment are rendered, with the lane you need to take highlighted. On the motorway, this information is enhanced by an extremely clear representation of actual signposts on the road.

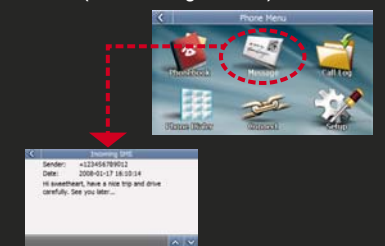


### Make a call from the touch screen

Just touch the name on the phonebook screen to initiate and place a call. If your entry has multiple stored phone numbers, you can select which one to call. Of course, you can also manually key in the phone number.



### SMS (Short Message Service)



Popup appears for incoming SMS messages, and you can save downloaded docs in a designated file. Messages can be imported automatically right after connection, or manually.

## MAP COVERAGE

MAP790 with preinstalled map data for 44 countries. The complete solution for all of Europe.

Albania, Andorra, Austria, Belarus, Belgium, Bosnia-Herzegovina, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Malta, Monaco, Macedonia, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Moldova, the Netherlands, Norway, Poland, Portugal, Romania, San Marino, Serbia, Montenegro, Slovakia, Slovenia, Spain, Gibraltar, Sweden, Switzerland, Liechtenstein, Turkey, Ukraine, United Kingdom, the Vatican

## MAP690 and SD card with map data. Your flexible way to navigate

MAP690EEU	MAP690RUS	MAP690TRK
Eastern Europe package contains MAP690 + SD690EEU	Russia package contains MAP690 + SD690RUS	Truck package contains MAP690 + SD690TRK
<ul style="list-style-type: none"> <li>• TeleAtlas maps and local map data provider for more detailed coverage</li> <li>• Rich POI database</li> <li>• 3D landmarks and petrol stations</li> <li>• 3D city maps (Hungary only)</li> <li>• Cross border routing in Eastern Europe</li> <li>• Major road network for Western Europe</li> </ul>	<ul style="list-style-type: none"> <li>• Up-to-date TeleAtlas coverage for Russia</li> <li>• 3D landmarks</li> <li>• 3D petrol stations</li> <li>• Lane indicator</li> </ul>	<ul style="list-style-type: none"> <li>• Software supports vehicle specification (height, weight, length, hazardous goods)</li> <li>• Route calculation respects physical and legal restriction for trucks</li> <li>• Truck-specific Points of Interest</li> </ul>

## PORTABLE NAVIGATION ACCESSORIES

<p><b>CMK002</b> Vibration-free mounting bracket including self-adhesive disc connector MAP790, 690, 780, 680, 770, 670, 370, 560, 360</p>	<p><b>PBK431</b> PND socket for CMK002 For MAP790, 690</p>	<p><b>PNC432</b> Protection case For MAP790, 690</p>	<p><b>PCC001</b> Car charger For MAP790, 690, 780, 680, 770, 670, 370, 560, 360</p>	<p><b>GPA001</b> External GPS antenna For MAP790, 690, 780, 680, 770, 670, 370, 560, 360</p>	<p><b>BKE502</b> Waterproof protection case For MAP780, 680</p>
<p><b>PBK430</b> PND socket for CMK002 For MAP780, 680, 770, 670</p>	<p><b>PBK350</b> PND socket for CMK002 For MAP560, 370, 360</p>	<p><b>PNC431</b> Protection case For MAP780, 680, 770, 670</p>	<p><b>FM9</b> External TMC receiver For MAP560, 370, 360</p>	<p><b>NAVIGATION MAP UPDATE</b> Please see our website for the latest available map updates</p>	
		<p><b>PNC350</b> Protection case For MAP560, 370, 360</p>	<p><b>BMK001</b> Bicycle mount kit For MAP780, 680, 770, 670, 370, 560, 360</p>		



Precise navigation and premier entertainment provide a well-balanced drive



**NX509E**  
2-DIN MULTIMEDIA STATION WITH  
7-INCH TOUCH PANEL CONTROL &  
BUILT-IN NAVIGATION



**Navigation**

- 3D display mode for: 3D city maps, 3D landmarks, 3D petrol stations, 3D elevation map • Simple mode / Advanced mode • Free TMC traffic information
- Signpost information • Lane information • Rich POI database • Trip computer • Speed limit information
- Safety camera compatible • 32 programme languages
- Pre-recorded voices for voice guidance: 38 Languages
- TTS Voices: 11 Languages /21 voices

\*Speed camera warning systems may be prohibited in some countries.  
\*3D information is not available everywhere.



iPod USB Direct for playback through the USB cable provided with your iPod.



USB connector even supports playback of WMA/MP3/AAC files.

**NX509E FEATURES**

- DVD-Video/DVD±R/DVD±RW/CD-R/RW ready
- Built-in navigation on 4 GB flash memory • SD card slot for navigation map updates • Built-in RDS-TMC tuner • MP3/WMA/AAC 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 • 18 FM, 12 MW/LW radio station presets • iPod direct control via USB (requires optional CCA723 cable for iPod video playback) • Rear USB connector • 2 AV inputs • Rear vision camera RCA input, NTSC / PAL compatible • Subwoofer volume control • 24-bit D/A converter • BBE® MP (only for USB function) • Beat EQ for sound adjustment • MAGNA BASS EX • Built-in High Pass Filter & Low Pass Filter • 2-Zone entertainment • Touch panel control • Fully motorised 7-inch QVGA colour LCD monitor • Adjustable display brightness • 6-channel audio pre-out (Front / Rear / Subwoofer) and 2-channel audio output for 2-Zone • 4 x 50 Watt internal amplifier • Bluetooth® interface ready (optional BLT373) • OEM steering wheel remote wired interface capability

**New GUI (Graphical User Interface)**

The Clarion H.M.I. concept takes a unique form in the NX509E's touch-panel graphical user interface with high-resolution on-screen display. A wide variety of functions, ranging from car navigation to AV entertainment, are consolidated into this intuitive user-interface so there are only 3 physical buttons present on the front panel, contributing to the clean looks of this model. No steep learning curves, so you can fulfill your enjoyment from day one.



**Built-in car navigation functions**

There's no need to install anything else. With Clarion's NX509E, convenient navigation functions with turn-by-turn instructions are built into the main unit.



**SD card for updates**

In addition to the built-in data, new maps or updates are made easy to upload through the dedicated SD slot.



**Digital media ready (DivX®)**

DivX is a common media language that delivers a pure digital experience. Clarion has provided DivX playback on most AV products since 2008. DivX enriched video files deliver superior video quality and allow more information on a single disc. With Clarion you get a whole new experience, full of awesome features and digital delight.

**Superior iPod connectivity**

**iPod direct control via USB**

Just connect the USB cable that came with your iPod to the NX509E's rear USB input to control your iPod. Using the optional CCA723 cable will even let you watch iPod Video on the big screen. This same terminal can be used to play digital music stored on any USB memory device.



\* To connect an iPod, please use the USB cable provided with your iPod.  
\* For video playback, optional CCA723 cable required.  
\* Please see our website for iPod models that can be connected.

**iPod ABC search & simple control mode**

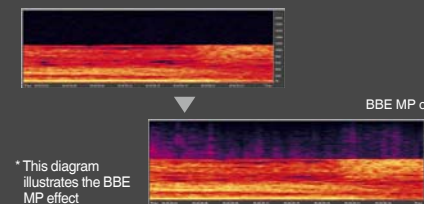
In addition to genre/album/song title browsing, complete iPod ABC Search convenience is provided. Operation is not only limited to the touch panel of your main unit, but you can also use the iPod control wheel to call up music tracks.

iPod ABC search  
Press and hold the [DISP] button (1 sec.).



Operations are possible from both the iPod and the main unit.

**BBE MP Process**



\* This diagram illustrates the BBE MP effect

**BBE® MP for better sounding MP3/WMA/AAC files**

BBE MP (Minimised Polynomial Non-Linear Saturation) process improves digitally compressed sound such as MP3/WMA/AAC by restoring the harmonics that are lost through compression, thereby reproducing the warmth, details and nuances that you would otherwise miss. BBE MP enhanced harmonics even serve to make regular CDs sound better.

• Manufactured under license from BBE Sound, Inc.  
• Licensed by BBE Sound, Inc. under one or more of the following US patents: 5510752, 5736897. BBE and BBE symbol are registered trademarks of BBE Sound, Inc.

**Beat EQ with parametric equalisation**

In addition to providing 3 preset equalisation patterns, Beat EQ even lets you freely customise the level and range of the bass, midrange and treble portions of each pattern with a 3-band parametric equaliser.

**Built-in High Pass Filters and Low Pass Filters**

The internal High Pass and Low Pass Filters allow your music to be played at the precise levels that they are meant to be heard. Enjoy bass with more muscle and highs with more clarity.

**24-Bit D/A converter**

Fully enjoy the sonic impact of DVD movie soundtracks and music videos. 24-bit technology actually oversamples the digital signal, providing excellent results that just weren't possible with older 16-bit systems.



**Magna Bass EX**

Clarion's renowned Magna Bass EX boosts the bass by nearly 10 dB at even lower frequencies around 50 Hz —lower than that of ordinary loudness circuits at around 100 Hz — to provide extra low frequency impact. It even automatically compensates the volume level to ensure well-balanced dynamic bass at any level.



**2-Zone entertainment**

This separates the in-car environment into two discrete zones, allowing rear seat passengers to enjoy a DVD movie or iPod Video while the front seat passengers can enjoy their favourite radio station or music from a USB memory device.

\* USB and iPod cannot be played back at the same time.

**Dedicated rear vision camera cinch input**

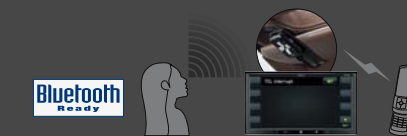
A dedicated rear vision camera input is equipped, so that you may install an optional camera enabling you to see the area behind your vehicle. The increased view encourages and facilitates safer driving. (optional CCA185 required)

**OEM steering wheel remote control compatible**

Many cars are sold with car radios that can be operated using your car's convenient steering wheel controls. Clarion's adaptors enable you to upgrade your factory-installed radio by installing a new sleek Clarion system in your car and control it with the existing steering wheel controls.

**Bluetooth® ready with BLT373**

Hands-free conversations (HSP/HFP) on Bluetooth ready mobile phones promote safe driving. This is possible via wireless connection of the phones to your vehicle's audio system. With the A2DP, Advanced 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).

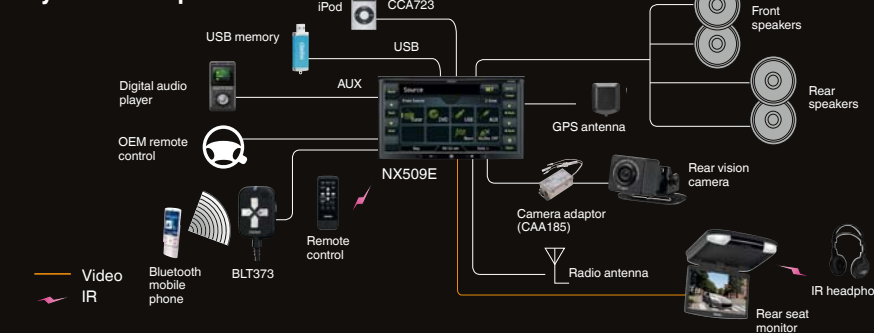


**6-channel audio pre-out**

The pre-out lets you freely add external power amplifiers to create a more powerful, sophisticated audio system.



**System example**





## Navigate your way with an enhanced sense of reality

Clarion car navigation appeals to your senses to provide more effective guidance. Visually the 3D rendered graphics help place you in the real-world driving environment more effectively. Aurally the text-to-speech function offers voice assistance so even first-time users will have an easy time reaching their destinations.



## Sophisticated and efficient navigation graphics

Elevation information on the road network is used to draw roads and bridges in a realistic way, so you won't get "lost" at complex intersections. When travelling on a motorway, the system shows which lanes allow you to exit and which ones continue ahead, so you won't miss an exit road. Buildings close to you are drawn as transparent objects to avoid obstructing the next intersection, while buildings further away are textured and easily recognisable.



Roads, junctions and bridges with elevations



Lane information



Signposts information

## Elevation modelling and 3D rendering for a realistic view



Topographical view



Modelling terrain in 3D

Comprehensive digital elevation model data is used to draw height and depth features for a realistic landscape at all levels of zoom. While driving, hills and mountains are rendered in 3D to better represent your real world driving environment. 3D landmark data is integrated seamlessly into the graphical rendering in 3D mode, and it does not block the view of POIs and other useful information on the map.



3D landmarks

## Fully customisable



View height and angle is completely adjustable to user preference



The system is completely flexible to any user preference. Not only scale or day/night illumination, but also 2D/3D, elevation, route information, display of POIs icons, route details and many others are easily adjustable.

## 44 countries map coverage for NX509E / NP509E

Albania, Andorra, Austria, Belarus, Belgium, Bosnia-Herzegovina, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Macedonia, Malta, Moldova, Monaco, the Netherlands, Norway, Portugal, Poland, Romania, San Marino, Serbia, Montenegro, Slovakia, Slovenia, Spain, Gibraltar, Sweden, Switzerland, Liechtenstein, Turkey, Ukraine, United Kingdom, the Vatican

## Clarion's line of car navigation solutions meets a wide range of requirements

### NP509E HIDE-AWAY MEMORY NAVIGATION SYSTEM



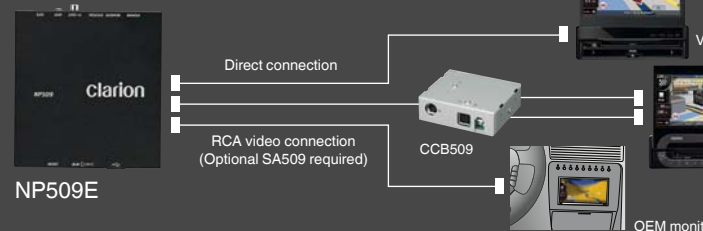
- Direct connection with VZ509E
- VX709E/VZ709E requires CCB509 interface
- System integration: Touch screen operation, AV interruption, navigation voice guidance and audio mix
- Stand-alone mode available (optional SA509 required)
- Stand-alone mode optimised user interface with drop down menu for remote control operation
- Built-in 4GB flash memory for navigation
- SD card slot for map updating
- SIRF III GPS module with 20-channel receiver
- Built-in RDS-TMC tuner
- No speed pulse connection required
- Navigation: please refer to the navigation features for NX509E

### SA509 STAND-ALONE ACCESSORY KIT FOR NP509E

- IR remote control and remote eye
- External speaker for voice guidance
- RCA video cable



### Navigation system example



### CCB509 CeNET CONVERTER FOR NP509E



CeNET converter box to connect NP509E with VX709E, VZ709E, VRX888RBT, MAX688RBT, VRX878RVD, MAX678RVD, VRX868RVD, MAX668RVD

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



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 can easily be called up with a light touch.

## Text to speech



One step closer to clear and safe driving. While streets are displayed on the screen, the voice guidance tells you their actual name. Also, the system is able to tell you the direction to take, exactly like a passenger would do! For example, if you drive in Paris, you would hear "... After 100 m, turn left onto Rue Washington..."

## Rich POI database



The POI content database offers access to just about any point of interest in your surroundings. In addition to petrol stations and tourist information offices, you can look up the closest ATM, swimming pools, specific business areas and much, much more... Needless to say, you can also search for any POI by its name. Last but not least, you can use "My POI" zone to create your own POI favourites file.

## RDS-TMC traffic information



Receive instant traffic information updates through the built-in TMC receiver. The NX509E / NP509E can receive toll-free traffic information (TMC). You are always informed whenever new information is broadcast.



# MAX983HD

HDD NAVIGATION & DVD MULTIMEDIA STATION WITH 7-inch TOUCH PANEL CONTROL



- DVD±R/DVD±RW/CD-R/RW ready • MP3/WMA compatible
- 18 FM, 6 MW/LW radio station presets • RDS-EON DSP tuner with variable bandwidth • 24-bit D/A converter • Motorised sloping control panel with 7-inch QVGA TFT colour LCD monitor
- Touch screen operation • 400 MHz CPU • 40 GB hard disk drive • 1 AV input • 1 Video output and 2-channel audio output for 2-Zone • External microphone for voice recognition • CeNET control of TV tuner and Bluetooth interface with optional BLT583
- SD Card slot for MP3/WMA playback and data installation with "Clarion NAVI manager" PC application • Built-in "Music Catcher" with Gracenote® music recognition service • 3-band parametric equaliser • MAGNA BASS EX • 4 x 53 Watt internal MOS-FET amplifier • OEM steering wheel remote wired interface capability • iPod direct connection and control (requires optional cable CCA692) • Rear vision camera input

Clarion's fusion of high-end video and sound with high-performance navigation opens the door to a new era of motoring.



## MAP COVERAGE

**Western Europe:** Andorra, Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, Liechtenstein, Luxembourg, Monaco, the Netherlands, Norway, Portugal, San Marino, Spain, Sweden, Switzerland, UK, the Vatican  
**Eastern Europe:** Bulgaria, Croatia, Czech Republic, Estonia, Greece, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, Slovenia

## NAVIGATION

- **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
- **Map scale:** 25m/50m/100m/200m/500m/1km/2km/4km/16km/64km/256km
- **Day/Night map colour change:** automatic and manual • Highway interchange zoom with split screen
- Address search function including house number search, POI search by name, category, nearby POIs, and Full postcode search
- **3D menu:** user's favourite location, frequent location and recent album list.
- **Multiple route calculation:** shortest, fastest, minimise motorways and more detailed settings (toll road, time restriction, avoid area, ferry)
- **Route information:** next manoeuvre, traffic information, guidance information, repeat guidance and display destination • Auto-reroute • Route calculation using traffic information • Pop-up traffic information (Premium TMC service supported) • Speed limit information • Safety camera compatible • Extra POI compatible • 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:** items can be stored for 4 different users

## Touch screen operation



\*MAX983HD is compatible with MP3/WMA on DVD±R/DVD±RW CD-R/RW media formats. Maximum track capacity: 512 tracks (255 folders with max. 512 tracks per folder) • There is no guarantee that all units in this catalogue can play CCDD (Copy Control CD), Hybrid SACD (Super Audio CD), CD-R/RW and DVD±R/RW • Please visit our website for iPod compatibility information • Playlists of mixed music and movie files cannot be played on iPod video compatible units.

## Register up to 16 icons for each of the three spinning rings.

This new style of 3D menu features three genres of menu rings: Favourite, Frequent, and Recent Album. Call up the contents you want or destinations from the menu rings floating in a graphical 3D space.

- Favourite List** - Customise and register destinations from the Frequent menu.
- Frequent List** - Places you often visit are automatically registered.
- Recent Album** - Songs you have recently listened to are automatically registered.

Touch the icon on the menu screen to display the menu ring screen.

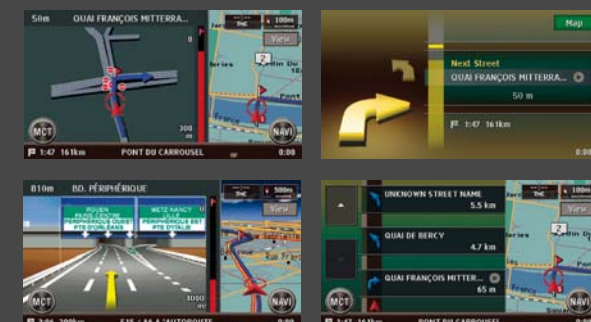


Touch the camera icon to switch to the base screen (overview screen) display.



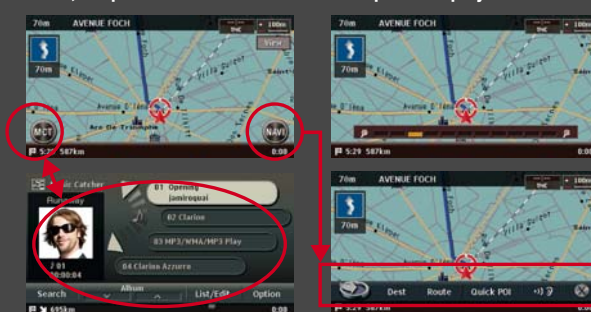
Edit the Favourite List menu by dragging and dropping the spots you may visit again from the locations automatically registered in the history.

## Guidance screen



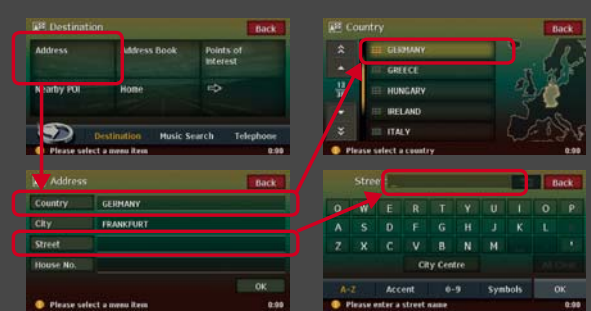
You can programme the screen to automatically zoom in at crossings, roundabouts and intersections where it is easy to get lost. The intersection illustration uses a 3D display that mirrors the road layout and information signs ahead, which gives the user ultra clear direction. Furthermore, "turn lists" and "turn-by-turn mode" smoothly guide you all the way to your destination.

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



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

## Search screen



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.

## Ready for iPod Audio/Video



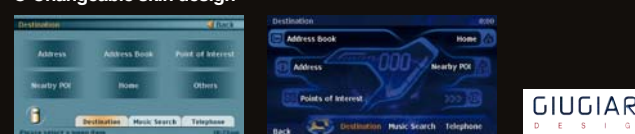
## Ready for CCD rear vision camera



## 3-band parametric EQ & Magna Bass EX



## Changeable skin design



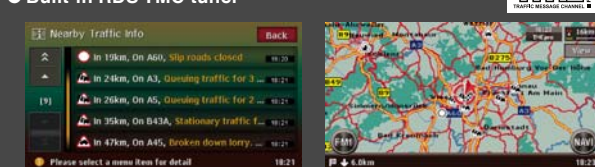
Icons and background patterns can be customised to suit the taste and image of your car. This skin is an original creation for Clarion by Giugiaro Design (Italy). To upgrade your HDD navigation layout, you can download different skin files from www.clarion.com.

## Change of map display and split screens



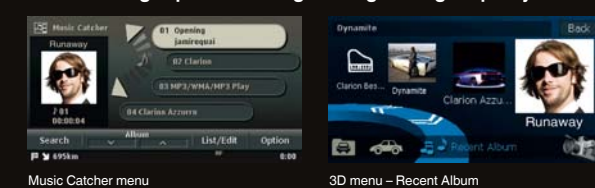
Display screens can be selected from 2D display, 3D display for enhanced recognition, or split-screen displays of 2D + 2D or 2D + 3D. Intelligent guidance is realised by means of showing your car's position on a sub-display with intersection illustrations and signs.

## Built-in RDS-TMC tuner



An RDS-TMC tuner is built in. This provides you with timely traffic information collected by the local police, municipalities, etc. and broadcast via the Traffic Message Channel.

## 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 songs. • Ripping speed: Maximum 8 times recording • Storage capacity: Maximum 4,000 songs • Ripping format: High quality Atrac 3 / 132 Kbs

## Bluetooth® Interface



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

The optional Bluetooth interface adapter connects your source 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.

## BLT583 CeNET BLUETOOTH INTERFACE ADAPTER

- Compatible with MAX983HD, DXZ788RUSB, and DXZ588RUSB • Headset, hands-free profile and object push profile • Controls mobile phone book directly from touch screen: 500 persons, 5 numbers per person\* • Displays name / calling number / outgoing calls / missed calls\* • Automatic receive function\* • Redial function\* • Voice recognition control\* • On-screen information of battery level, signal strength\*

\* Depends on telephone







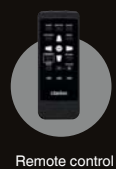
Sophistication is fused with functionality to enhance your mobile experience

**VZ709E**  
DVD MULTIMEDIA STATION WITH 7-inch TOUCH PANEL CONTROL



Entertainment-intensive with intuitive interface and 2-DIN format

**VX709E**  
2-DIN DVD MULTIMEDIA STATION WITH 7-inch TOUCH PANEL CONTROL



**VZ709E / VX709E FEATURES**

- DVD-Video/DVD±R/DVD±RW/CD/CD-R/RW ready
- Built-in Bluetooth® hands-free (HFP & OPP) and audio streaming (A2DP & AVRCP) • MP3/WMA/AAC 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 • 24 FM, 16 MW/LW radio station presets
- RDS-EON DSP tuner with variable bandwidth and radio text • Rear USB connector • iPod direct control (optional CCA723 cable required for iPod video playback) • AV input • Dedicated rear vision camera RCA input (NTSC) • Subwoofer volume control
- 3-band parametric equaliser • 24-bit D/A converter
- MAGNA BASS EX dynamic bass enhancement
- Built-in High Pass Filter & Low Pass Filter • Fully

- motorised 7-inch QVGA colour LCD monitor (VZ709E)
- Motorised sloping control panel with 7-inch QVGA colour LCD monitor (VX709E) • Navigation touch panel control (optional NP509E & CCB509 required)
- 6-channel audio pre-out and 2-channel audio pre-out for 2-Zone • 2-Zone entertainment: front and rear separate source control • 4 x 50 Watt internal amplifier
- OEM steering wheel remote interface capability
- Built-in IR Eye (RCB198 remote included) • 4 preset wallpaper designs

\*VZ709E / VX709E is compatible with MP3/WMA/AAC/DivX on DVD±R/DVD±RW/CD-R/RW media formats. Maximum track capacity: 999 tracks (255 folders with max. 255 tracks per folder) \*VZ709E / VX709E is compatible with MP3/WMA/AAC on USB. Maximum track capacity: 130,560 tracks (512 folders with max. 255 tracks per folder) \*Playlists of mixed music and movie files cannot be played on iPod video compatible units.



**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.

**2-Zone entertainment**

Clarion's 2-Zone entertainment system divides the in-car spatial environment into discrete front and rear zones. As a result, it is possible for the front and rear seat passengers to enjoy different entertainment sources without interfering with each other.

**Built-in High Pass/Low Pass Filter**

The internal High Pass and Low Pass Filters allow you to set the frequency range of the audio signal that's output to each channel to best match the acoustic characteristics of the front and rear speakers and the subwoofer.

**3-band parametric equaliser**

The entire sound spectrum is separated into high, medium and low ranges. The level of each can be adjusted separately. Customise the sound to suit your taste and your car.

**6-channel audio pre-out**

Equipped with 6-channel outputs for Front 2 channels + Rear 2 channels + Subwoofer 2 channels and crossover settings for high sound quality reproduction.

**24-bit D/A converter for superb sound reproduction**

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. That is why Clarion's 24-bit D/A (Digital-to-Analogue) converter over-samples the digital signal to recreate the natural nuances and expressions lost during the sound reproduction process.

**4 preset wallpaper designs**

Background patterns of the navigation system and audio & video sources can be customised to suit your taste or your car's colour scheme.

**Dedicated rear vision camera RCA input**

A dedicated rear vision camera input is fitted, so that you may install an optional camera enabling you to see the area behind your vehicle. The increased view encourages and facilitates safer driving.

**CeNET for hide-away navigation connection**  
The CeNET interface enables connection of the NP509E flash memory navigation system (via optional CCB509 CeNET converter) to the source unit for fully integrated and interactive car navigation.

**Built-in Bluetooth® hands-free**

With a Bluetooth compatible head unit, you can wirelessly connect your Bluetooth capable mobile phone to listen to calls through your car's audio system. HFP/OPP/A2DP/AVRCP protocols are supported. The mobile phone contacts list can be synchronized with the head unit\*. Then you can directly dial the phone number from the multimedia station.

\* depends on mobile phone

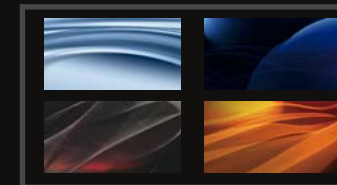
**DivX® compatible**

DivX is a common media language that delivers a pure digital experience. DivX enriched video files deliver superior video quality and enables storage of more information on a single disc. DivX compatibility in a source unit means that DivX encoded files burned using a PC can be viewed and enjoyed in your car, just like you'd be able to at home.

**iPod direct control via USB**

By connecting an iPod to the source unit's USB input using the USB cable provided with your iPod, it will be possible to control the iPod. The same USB terminal can also be used to connect a USB memory device with digital music files stored on it.

\* To connect an iPod, please use the USB cable included with your iPod.  
\* For video playback, optional CCA723 cable required.  
\* Please see our website for iPod models that can be connected.



**Accessories**



**RCB199**  
OPTIONAL EXTERNAL MICROPHONE  
For VRX888RBT, VRX888RBT, NX509E, VZ509E, VZ709E, VX709E, FZ709E & FZ409E

**CCA723**  
iPod VIDEO CONNECTING CABLE  
For MAX688RBT, VRX888RBT, NX509E, VZ509E, VZ709E, VX709E, FZ709E & FZ409E

**Add car navigation functionality any time**

Enjoy all the benefits of in-dash car navigation: Programme your destination via the main unit's touch screen, listen to voice guidance via your vehicle's speakers and see your high-resolution map on a huge 7" screen, plus much more.

**Navigation control**



RGB cable included with CCB509

CeNET cable included with CCB509

**CCB509**  
CeNET converter

System cable included with NP509E

**NP509E**

Hide-away memory navigation system



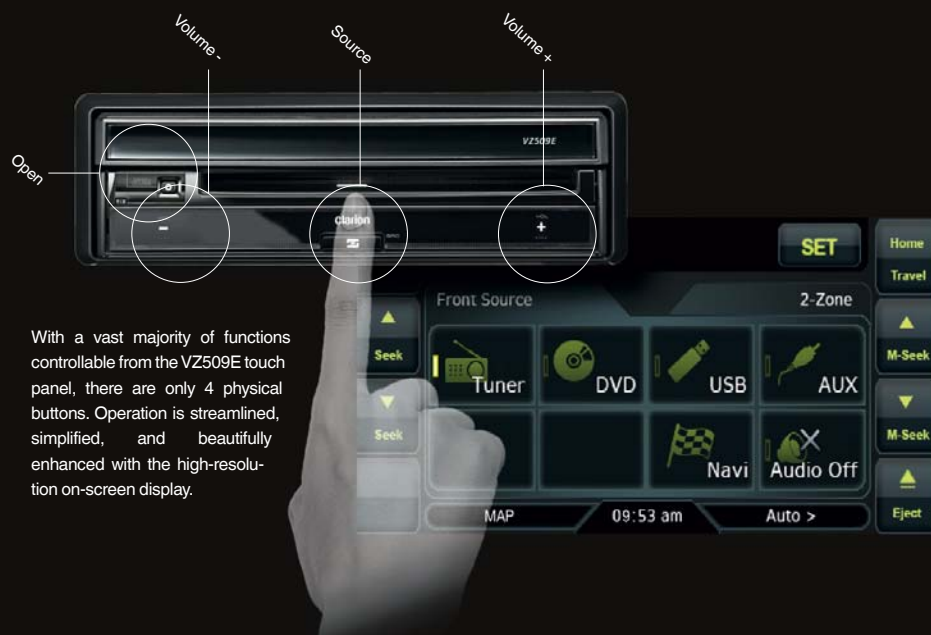
Simplified, streamlined, and yet more functionality



**VZ509E**  
DVD MULTIMEDIA  
STATION WITH 7-inch  
TOUCH PANEL CONTROL



**New sophisticated GUI (Graphical User Interface)**



With a vast majority of functions controllable from the VZ509E touch panel, there are only 4 physical buttons. Operation is streamlined, simplified, and beautifully enhanced with the high-resolution on-screen display.

**Navigation touch panel operation**

The NP509E hide-away navigation system can be connected to the VZ509E directly via a system cable and controlled through its touch panel with high precision. So with this multimedia station, you can upgrade to a car navigation system simply. Count on voice guidance messages and high-resolution map displays to get you safely to your destination.

**VZ509E FEATURES**

- DVD-Video/DVD±R/DVD±RW/CD/CD-R/RW ready
- MP3/WMA/AAC 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 • 18 FM, 12 MW/LW radio station presets
- iPod direct control (optional CCA723 required for iPod video playback) • Rear USB connector
- Navigation touch panel control (optional NP509E required) • 2 AV inputs • Rear vision camera RCA input, compatible with NTSC and PAL format • Subwoofer volume control • 24-bit D/A converter • BBE® MP for compressed audio sound improvement (only for USB mode) • Beat EQ for sound adjustment • MAGNA BASS EX dynamic bass enhancement • Built-in High Pass Filter & Low Pass Filter • 2-Zone entertainment: front and rear separate source control • Touch panel control (on-screen display) • Fully motorised 7-inch TFT colour LCD monitor • Adjustable display brightness • 6-channel audio pre-out (Front/ Rear/ Subwoofer) and 2-channel audio pre-out for 2-Zone • 4 x 50 Watt internal amplifier • Bluetooth® interface ready (optional BLT373) • OEM steering wheel remote interface capability

**Add direct car navigation functionality**

Connect the hide-away navigation unit directly to VZ509E and you'll have a car navigation system with total integration including touch panel control and voice guidance announcements.



**New graphic IC**

By incorporating an integrated video IC, on-screen graphics switch more quickly and smoothly, and usability has been enhanced by allowing touch panel operation even while a video image is being shown in a small window.

**Digital media ready (DivX®)**

DivX is a common media language that delivers a pure digital experience, Clarion has provided DivX playback on most AV products since 2008. DivX enriched video files deliver superior video quality and allow more information on a single disc. Once again Clarion delivers the features you expect.

**Wide-ranging format compatibility**

Enjoy a vast selection of movies and music with support of DVD, DivX, as well as MP3, WMA and iTunes AAC data stored on CD or DVD discs.

**2-Zone entertainment**

This separates the in-car environment into two discrete zones, allowing rear seat passengers to enjoy a DVD movie or iPod video while the driver and front seat passenger can listen to favourite radio stations or music from a USB memory device.

\* USB and iPod can not be played back at the same time.

**Direct USB iPod control**

Just connect the USB cable that's included with your iPod to the Clarion unit's USB input and you get complete control over your favourite music including iPod ABC Search. Depending on your preference, either use the convenient touch screen panel of VZ509E or operate your iPod with the iPod's control wheel. By connecting the iPod to VZ509E via the optional CCA723 cable, it is possible to enjoy iPod Video on the VZ509E's monitor.

\* To connect an iPod, please use the USB cable provided with your iPod.  
\* For video playback, optional CCA723 cable required.  
\* Please see our website for iPod compatibility information.



New graphic IC



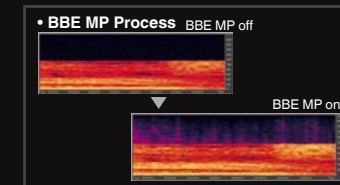
2-Zone entertainment



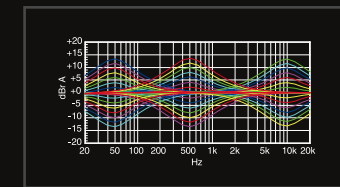
iPod USB direct for playback through USB cable provided with your iPod.



USB connector even supports playback of WMA/MP3/AAC files.



BBE MP Process  
\* This diagram illustrates the BBE MP effect



Beat EQ



6-channel audio pre-out



Get wirelessly connected using optional BLT373 Bluetooth® transceiver.

**BBE® MP for better sounding**

**MP3/WMA/AAC files**

BBE MP (Minimised Polynomial Non-Linear Saturation) process improves digitally compressed sound such as MP3/WMA/AAC by restoring the harmonics that are lost through compression, thereby reproducing the warmth, details and nuances that you would otherwise miss. BBE MP enhanced harmonics even serve to make regular CDs sound better.

• Manufactured under license from BBE Sound, Inc.  
• Licensed by BBE Sound, Inc. under one or more of the following US patents: 5510752, 5736897. BBE and BBE symbol are registered trademarks of BBE Sound, Inc.

**Beat EQ for user customisable sound**

In addition to providing 3 preset equalisation patterns — BASS BOOST, IMPACT, and EXCITE — Clarion's Beat EQ even lets you freely customise the level and range of the bass, midrange and treble portions of each pattern. Depending on your mood and the type of music, you can tune the sound exactly to your liking for a more fulfilling listening experience.

**Built-in High Pass Filter & Low Pass Filter**

The internal High Pass and Low Pass filters allow you to set the frequency range of the audio signal that's output to each channel to best match the acoustic characteristics of the front and rear speakers and the subwoofer.

**24-bit D/A converter**

Noise generated by conventional DAC ICs is distributed randomly throughout the frequency 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 range, but it also extends the S/N ratio for clearer, more realistic sound.

**Magna Bass EX**

Clarion's Magna Bass EX boosts the bass by nearly 10 dB at even lower frequencies around 50 Hz — lower than that of ordinary loudness circuits at around 100 Hz — to provide extra-low frequency impact. It even automatically compensates the volume level to ensure well-balanced dynamic bass at any level.

**Dedicated rear vision camera RCA input**

A dedicated rear vision camera input is equipped, so that you may install an optional camera enabling you to see the area behind your vehicle. The increased view encourages and facilitates safer driving (optional CAA185 required).

**6-channel audio pre-out**

Equipped with 2 channels for Front (L/R), 2 channels for Rear (L/R), and 2 channels for subwoofers, the full set of RCA line outputs allows upgrading to a full-scale AV system with plenty of support for future system expansions.

For more detailed information concerning installation possibilities, please refer to the CIP (Clarion Installer Programme) on page 34-35





## Enjoy home theatre presence in your car

Offering a variety of overhead monitors ranging from 8-inch to 15-inch, with built-in DVD players and wireless headphone transmitters, Clarion can make even your long journeys a pleasure-filled experience.



**OHM1088VD**  
10.2" OVERHEAD MONITOR  
WITH DVD PLAYER AND  
TWO IR HEADPHONES INCLUDED



- Universal slim profile • MPEG 1/2/4, MP3 and WMA playback • Adjustable display modes: Wide/Normal
- Infrared remote control with on-screen display • 2 Audio/Video inputs for external devices • 1 Audio/Video output for multiple monitor applications • Built-in LED dome light
- 2 sets of headphones are supplied with the OHM1558VD and OHM1088VD, 1 headphone set is supplied with the OHM888VD.



**OHM888VD**  
8" OVERHEAD MONITOR  
WITH DVD PLAYER AND  
ONE IR HEADPHONE INCLUDED



**OHM1588VD**  
15.4" OVERHEAD MONITOR  
WITH DVD PLAYER AND  
TWO IR HEADPHONES INCLUDED

## "In flight" entertainment for back seat passengers

Clarion also offers a selection of compact monitors that can be installed into the back of the headrest or used as stand-alones, to keep passengers entertained from A to Z and everywhere in between.



**VMA773**  
7"/16.9 HEADREST/  
STAND-ALONE MONITOR

- Ultra compact housing for easy headrest installation
- Outside dimension of bracket: 192.7 (W) x 133.5 (H) x 32.5 (D) mm • Dimension of monitor: 177.8 (W) x 118.5 (H) x 27.5 (D) mm



**VMA573**  
5.6"/16.9 HEADREST/  
STAND-ALONE MONITOR

- 2 A/V inputs (line-in from rear pigtail and front mini-jack input) • Dual channel IR audio output transmitter for WH253H • Headrest mounting bracket included
- Minijack headphone output

- Ultra compact housing for easy headrest installation • Outside dimension of bracket: 160.8 (W) x 111.8 (H) x 32.5 (D) mm • Dimension of monitor: 150 (W) x 101 (H) x 27 (D) mm

## ACCESSORIES

### VA700

VIDEO DISTRIBUTION AMPLIFIER

- 1 composite video input • 7 buffered 75-ohm composite video outputs • Stable video signal for up to 7 LCD monitors



### WH143H INFRARED WIRELESS SINGLE HEADPHONE

### WH253H DUAL CHANNEL INFRARED WIRELESS SINGLE HEADPHONE

WH143H: Single headphone to be used in conjunction with one headrest monitor. Suitable for both adults and children. Auto power off when no signal received for 30 sec.  
WH253H: Dual channel infrared wireless single headphone. To be used in conjunction with rear entertainment systems based on one overhead monitor or two headrest monitors. Suitable for adults and children. Auto power off function.



**TTX752 / TTX7503z**  
CeNET ANALOGUE TV TUNER

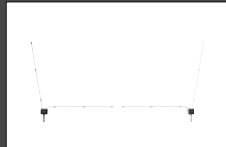
- TTX752 for PAL, TTX7503z for PAL / SECAM • CeNET controlled • Diversity reception tuner system • A/V input with optional CCA389 cable • 1 Camera input • 2 Video outputs • Dimensions: 178 (W) x 25 (H) x 100 (D) mm (TTX752)

### RCB199

OPTIONAL EXTERNAL MICROPHONE  
For VRX888RBT, MAX688RBT, VZ709E & VX709E



**ZCP104**  
4-WAY WINDSCREEN  
FILM TV ANTENNA



**ZCA407**  
4-WAY ACTIVE WINDSCREEN  
TV ANTENNA



**ZCP100**  
MONO-POLE TV  
ANTENNA

## Bluetooth® technology enhances your motoring life

Get safer and a more amenity-rich communication from the music environment in your car. Clarion® Bluetooth technology will wirelessly connect your mobile phone to the main unit, enabling hands-free telephone conversation. Just speak with your hands firmly on and the other party will hear you. The voice of the person you are talking to is clearly reproduced via your car's speakers.

### BLT583 CeNET BLUETOOTH INTERFACE ADAPTER

- Compatible with MAX983HD, DXZ788RUSB and DXZ588RUSB • Headset, hands-free profile and object push profile • Controls mobile phone book directly from touch screen: 500 persons, 5 numbers per person\*
- Displays name / calling number / outgoing calls / missed calls\* • Automatic receive function\* • Redial function\* • Voice recognition control\* • On-screen information of battery level, signal strength\*

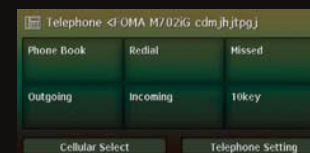
\*Depends on mobile phone. For more compatibility information, please refer to the Clarion website.



**COMPATIBILITY:** Hard key control with DXZ788RUSB, DXZ588RUSB, & DUZ388RMP



**COMPATIBILITY:** Touch screen control with MAX983HD



## AUX Bluetooth interface with hands-free and audio streaming capability

### BLT373 BLUETOOTH AUDIO STREAMING AND HANDS-FREE INTERFACE FOR AUX INPUT

- Headset and hands-free profile (HSP and HFP) • Bluetooth audio streaming and remote control capability (A2DP and AVRCP) • Built-in microphone for hands-free use



## AUX Bluetooth audio/mobile phone transceiver BLT373 ready



NX509E  
VZ509E  
CZ209E  
CZ109E  
FZ409E

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



### Direct iPod connection

<p><b>CCA692</b> iPod AUDIO AND VIDEO CONNECTING CABLE For MAX983HD &amp; MAX973HD</p>	<p><b>CCA691</b> iPod AUDIO AND VIDEO CONNECTING CABLE For VRX588RUSB &amp; VRX578RUSB</p>
<p><b>CCA673</b> iPod AUDIO AND VIDEO CONNECTING CABLE For MAX678RVD, VRX878RVD, MAX668RVD &amp; VRX868RVD</p>	<p><b>CCA723</b> iPod VIDEO CONNECTING CABLE For MAX688RBT, VRX888RBT, NX509E, VZ509E, VZ709E, VX709E, FZ709E &amp; FZ409E</p>

### CeNET iPod interfaces

<p>Interfaces to enjoy iPods with full operation</p> <p><b>EA1276E</b> iPod CONNECTION INTERFACE For '07 CeNET models to enjoy iPods with full operation. DXZ778RUSB, DXZ578RUSB, DXZ378RMP, DXZ379RMP &amp; CMD5</p>	<p>Interfaces to enjoy iPods with simple operation as with CD changers</p> <p><b>EA1251E</b> iPod CONNECTION INTERFACE For WXZ468RMP and all older CeNET models to enjoy iPods with simple operation as with CD changers.</p>
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## ACCESSORIES

Cables		
<p><b>CCA389</b> AV ADAPTER CABLE, 2.5M 8-PIN ↔ RCA (1 VIDEO / 2 AUDIO) For VRX848RVD, VRX743R &amp; CeNET TV TUNER A/V INPUT</p>	<p><b>CCA519</b> MULTILINK Y-CABLE For CeNET CHANGERS</p>	<p><b>CCA521</b> CeNET EXTENSION CABLE, 0.6 M</p> <p><b>CCA520</b> CeNET CABLE, 2.5 M</p>
Navigation accessories	CD magazine	FM modulator
<p><b>CAA380</b> SPEED PULSE GENERATOR (For vehicles without speed pulse signal)</p>	<p><b>CAA397</b> 6-DISC MAGAZINE For DCZ628, DC628 &amp; VCZ628</p>	<p><b>FM863</b> 8-CHANNEL FM MODULATOR</p>
Remote controls		
<p><b>RCB187</b> INFRARED AV REMOTE CONTROL For MAX973HD &amp; MAX983HD</p>	<p><b>RCB176</b> INFRARED REMOTE CONTROL For audio model</p>	<p><b>RCB147</b> INFRARED JOYSTICK REMOTE CONTROL</p>



# MAIN UNITS

## Driven by next-generation technology

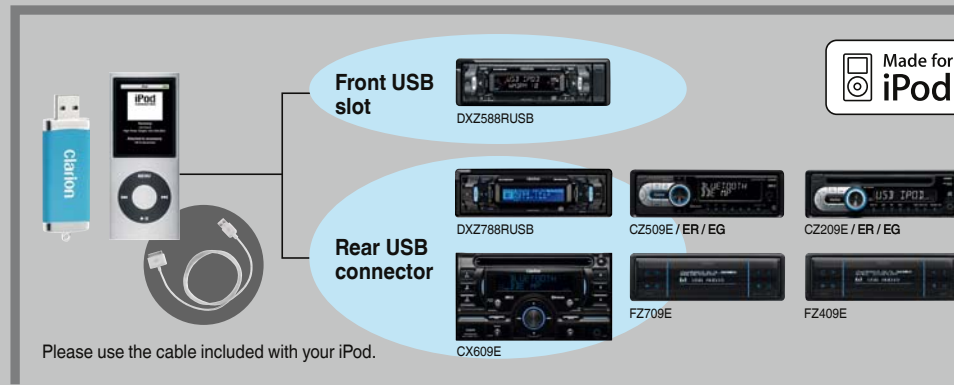
Clarion's expertise in in-vehicle audio and acoustical technologies enables the development of next-generation solutions that offer a new level of satisfaction. From superior sound performance to seamless integration with the newest media, Clarion main units bring major benefits into your car, at high speed.



### Direct USB iPod control

No adapter box required. Just connect the USB cable that's included with your iPod to the Clarion main unit's USB input and you get complete control of your iPod including genre/album/song title search using your iPod's control wheel. And if you ever find you've reached a particular menu by mistake, this unique interface will easily let you back out of the current menu to quickly get you back on track. FZ709E / FZ409E even support iPod Video\* playback using the optional CCA-723 and external universal monitor.

\* Please visit our website for iPod models that can be connected.

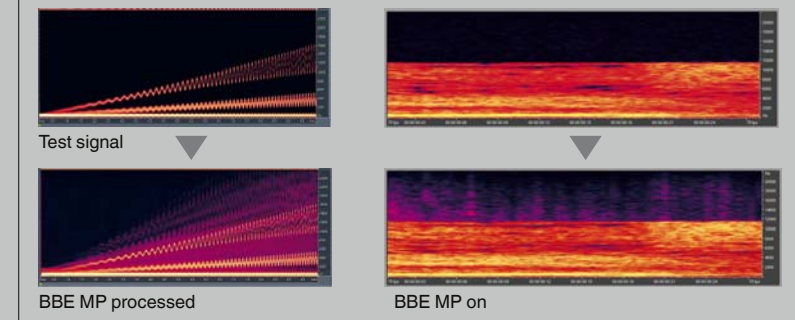


### BBE® MP for better sounding MP3/WMA/AAC files

The BBE MP (Minimised Polynomial Non-Linear Saturation) process improves digitally compressed MP3/WMA/AAC sound tracks by restoring the harmonics that are lost through compression, thereby reproducing the warmth, details and nuances that you would otherwise miss. BBE MP enhanced harmonics even serve to make regular CDs sound better. (CX609E/CZ509E/CZ509ER/CZ509EG/FZ709E/FZ409E/CMV1/CMD6)

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• Licensed by BBE Sound, Inc. under one or more of the following US patents: 5510752, 5736897. BBE and BBE symbol are registered trademarks of BBE Sound, Inc.

### BBE MP Process



\* This diagram illustrates the BBE MP effect

### Built-in Bluetooth® interface

Connect with various devices such as mobile phones, PDAs and MP3 players via the unit's built-in wireless Bluetooth interface. Supports popular Bluetooth profiles including A2DP/AVRCP for audio streaming and HFP/OPP for hands-free operation, so you can easily communicate and transfer your favourite digital music to your vehicle's audio system. A wired microphone is supplied for products with built-in Bluetooth. With certain main units, Bluetooth is also available using optional BLT373\* or BLT583\*\*.

\* DXZ788RUSB / DXZ588RUSB / CZ209E (EG / ER) / CZ109E (EG / ER) / FZ409E  
\*\* DXZ788RUSB / DXZ588RUSB



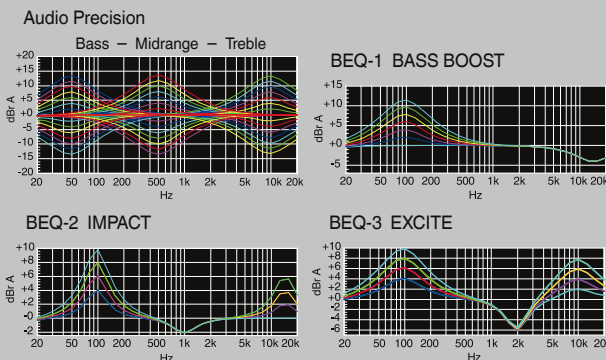
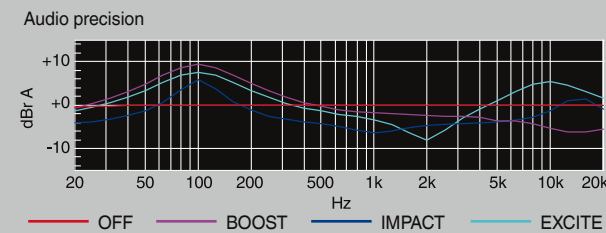
### Perfect balance of form and functionality

The easy-to-use volume control and intuitive design found on many of Clarion's 1-DIN main units offer precise control over audio system operations, with an illuminated inner rim for sure handling even during night-time drives. A U-shaped control button layout is a prominent design feature of the CZ models. It clusters important controls close to the volume ring to minimise hand movement and also contributes to safe driving. The predominant design feature of our 2-DIN units is the symmetrical layout, with the rotary volume control positioned at the centre. This provides equally easy access to all functions from the driver's and passenger's sides, and adds an air of simplified sophistication to the dashboard.



### Beat EQ for user customisable sound

In addition to providing 3 preset equalisation patterns — BASS BOOST, IMPACT, and EXCITE — Clarion's Beat EQ even lets you freely customise the level and range of the bass, midrange and treble portions of each pattern. Depending on your mood and the type of music, you can tune the sound exactly to your liking for a more fulfilling listening experience. (CX609E/CZ509E/CZ509ER/CZ509EG/FZ709E/FZ409E)



### Next-generation function and form

FZ709E/FZ409E both represent Clarion's flair in design and performance. The OEL display incorporates a unique capacitive sensor operation that provides an advanced user interface, which is a direct result of our continuous quest for the ideal H.M.I. (Human Machine Interface). And when it comes to sound and connectivity, there's never a compromise.





Digital technology with awesome sound quality

**DXZ788RUSB**  
HIGH-END CD/USB/MP3/WMA/  
AAC RECEIVER WITH CeNET  
CONTROL



728-variable colour



6-volt / 6-channel audio pre-out



Remote control



DCP

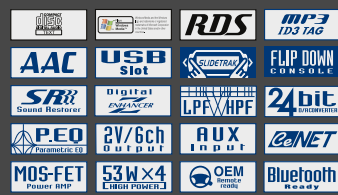


- CD-R/RW ready • MP3, WMA and iTunes® AAC compatible • Rear USB connector
- 18 FM, 6 MW/LW radio station presets • RDS-EON DSP tuner with variable bandwidth and Radio Text display • iPod direct control via USB • 6-volt / 6-channel audio pre-out
- Subwoofer level control • 24-bit D/A converter • Sound Restorer • Digital Z-Enhancer
- Digital time alignment • 3-way active crossover • 3-band parametric equaliser • Built-in High Pass Filter & Low Pass Filter • Built-in amplifier canceller • 4 x 53 Watt internal MOS-FET amplifier • Motorised sloping console • 728-variable colour display and

- illuminated keys • Full dot display with screensavers • "SLIDETRAK" for dynamic operation
- Cellular input and Phone mute • Auxiliary input with level control • CeNET control of Bluetooth® interface adapter BLT583 ready for hands-free • OEM steering wheel remote wired interface capability

Next-generation main units combine connectivity with superb audio performance

**DXZ588RUSB**  
CD/USB/MP3/WMA/AAC RECEIVER  
WITH CeNET CONTROL



Remote control



DCP



24-bit D/A converter for superb sound reproduction



- CD-R/RW ready • MP3, WMA and iTunes® AAC compatible • Front USB slot • 18 FM, 6 MW/LW radio station presets • RDS-EON DSP tuner with variable bandwidth and Radio Text display • iPod direct control via USB • Subwoofer level control • 24-bit D/A converter
- Sound Restorer • Digital Z-Enhancer • 3-band parametric equaliser • Built-in High Pass Filter & Low Pass Filter • 4 x 53 Watt internal MOS-FET amplifier • Flip-down console
- High visibility 2-line display with screensavers • "SLIDETRAK" for dynamic operation

- Cellular input and Phone mute • Auxiliary input with level control • 6-channel audio pre-out
- CeNET control of Bluetooth interface adapter BLT583 ready for hands-free • OEM steering wheel remote wired interface capability



**SLIDETRAK control**  
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.

**USB for direct iPod control**  
You no longer need an expensive adapter box or interface cable to connect your iPod to your source unit. Simply choose Clarion and connect the USB cable included with the iPod to the USB input for battery charging and complete control of your iPod.

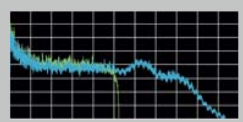


\* To connect an iPod, please use the USB cable included with your iPod.  
\* Please see our website for iPod models that can be connected.

**Digital Z-Enhancer**  
By using a digital equaliser, there is more flexibility in tailoring your music to sound the way you want it. The Digital Z-Enhancer

employs digital signal processing offering three preset equalisation curves each adjustable to LOW, MID and HIGH. You can choose from 9 custom EQ curves, each tailored to specific types of speakers.

**Sound Restorer**  
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 clear and detailed sound.



**Digital time alignment with 3-way crossover (DXZ788RUSB)**  
Digital time alignment digitally delays the sound from each speaker so that the sounds emanating from them reach the listener at the same time. The 3-way crossover separates the audio spectrum into different bands to optimise each speaker's frequency response and minimise phase cancellation.

Delivering more of your favourite music with better sounding results



**CZ509E**  
BLUETOOTH CD/USB/MP3/  
WMA/AAC RECEIVER



- CD-R/RW ready • Built-in Bluetooth® hands-free (HFP & OPP) and audio streaming (A2DP & AVRCP)
- MP3, WMA and iTunes® AAC compatible with ID3-TAG display • 18 FM, 6 MW/LW radio station presets
- RDS-EON tuner • iPod direct control via USB
- Front-panel auxiliary input with level control
- Subwoofer level control • BBE® MP for compressed audio sound improvement • Beat EQ for sound adjustment • Built-in High Pass Filter & Low Pass

- Filter • Flip-down control panel • (13 x 10) 2-line high visibility LCD • Large and easy to operate rotary volume control • 6-channel audio pre-out • 4 x 50 Watt internal amplifier • OEM steering wheel remote wired interface capability • Hands-free microphone included

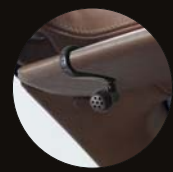


CZ509ER



CZ509EG

**Built-in Bluetooth hands-free**  
Connect with various devices such as mobile phones, PDAs and MP3 Players via the CZ509E's built-in wireless Bluetooth interface. Supports popular Bluetooth profiles such as A2DP/AVRCP for audio streaming and HFP/OPP for hands-free operation. The mobile phone contacts list can be also synchronised with the CZ509E\*. Then you can directly dial the phone number from your head unit. A high quality wired microphone is supplied for clearer handsfree telephony.



Microphone

\* depends on mobile phone

**USB for direct iPod control**  
Just connect the USB cable that's included with your iPod to the CZ509E rear USB input and you get complete control of your iPod including genre/album/song title browsing, with iPod ABC Search. Depending on your preference, either use the convenient operation of CZ509E or operate your iPod with the iPod's control wheel. The tunes you love to carry with you can now be enjoyed seamlessly in your car.

\* To connect an iPod, please use the USB cable included with your iPod.  
\* Please see our website for iPod models that can be connected.

**BBE® MP for better sounding MP3/WMA/AAC files**  
The BBE MP (Minimised Polynomial Non-Linear Saturation) process improves digitally compressed sound such as MP3/WMA/AAC by restoring the harmonics that are lost through compression, thereby reproducing the warmth, details and nuances that you would otherwise miss. BBE MP enhanced harmonics even serve to make regular CDs sound better.

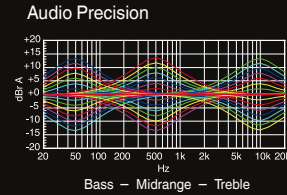
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**Beat EQ for user customisable sound**  
In addition to providing 3 preset equalisation patterns — BASS BOOST, IMPACT, and EXCITE — Clarion's Beat EQ even lets you freely customise the level and range of the bass, midrange and treble portions of each pattern. Depending on your mood and the type of music, you can tune the sound exactly to your liking for a more fulfilling listening experience.



Operations are possible from both the iPod and the main unit.

- Categories
- PLAYLISTS ● ARTISTS
  - ALBUMS ● SONGS
  - GENRES ● COMPOSERS



Built-in Bluetooth for hands-free calling and music streaming.  
iPod USB direct for playback through the USB cable provided with your iPod.  
Front AUX input for connection of portable audio player or other equipment.  
USB connector even supports playback of WMA/MP3/AAC files.  
6-channel audio pre-out for system expandability and versatility.  
U-curved design with smartly clustered controls for functionality and style.



Access a wide range of musical sources, even USB Audio from your iPod.



**CZ209E**  
CD/USB/MP3/WMA RECEIVER



CZ209ER



CZ209EG



Rear USB enables connection of iPod and USB memory devices.



4-channel audio pre-out



Front panel auxiliary input

Multi-compatibility for enjoyment of a broad selection of musical media

**CZ109E**  
CD/MP3/WMA RECEIVER



CZ109ER



CZ109EG



DCP



• USB / 2V/4 ch output: only for CZ209E • 2 ch output: only for CZ109E

**CZ209E / CZ109E FEATURES**

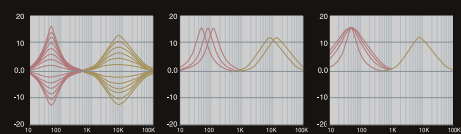
- CD-R/RW ready • MP3 and WMA compatible with ID3-TAG display • 18 FM, 6 MW/LW radio station presets • RDS-EON tuner • iPod direct control via USB (only for CZ209E) • Rear USB connector (only for CZ209E) • Front panel auxiliary input with level control • Z-Enhancer Plus sound customisation • MAGNA BASS EX dynamic bass enhancement • High visibility single line display with screensavers • Easy to operate rotary volume control • Non fader volume control (only for CZ209E) • 4-channel audio pre-out (Front+Non fader) (only for CZ209E) • 2-channel audio pre-out (only for CZ109E) • 4 x 50 Watt internal amplifier • OEM steering wheel remote wired interface capability • AUX Bluetooth® transceiver BLT 373 ready • Detachable control panel

**Rotary volume control and U-curved design**

Blending ergonomics, styling and functionality, the rotary volume control offers precise control of your audio system, with an illuminated inner rim for sure handling and great looks. This is augmented by the U-shaped control button layout that clusters important controls close to the volume ring to minimise hand movement.

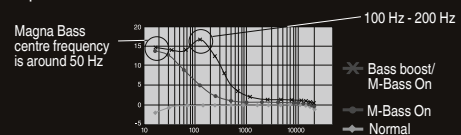
**Z-Enhancer Plus**

This sound-sculpting function allows you to select from three performance patterns: B-BOOST, IMPACT, EXCITE. The gain and Q (steepness) of each performance pattern can also be adjusted, making it possible to emphasise the power and responsiveness of each band. Simply touch the control keys to customise the sound inside your car to better suit your favourite music genre.



**Magna Bass EX**

This circuit boosts bass at an ultra-low frequency of about 50 Hz, creating a rich, deep, defined bass rather than the muddy, booming low range of a standard loudness control. What's more, boost levels are dependent on the system volume, resulting in balanced system response and dynamic bass reproduction.



**Front panel auxiliary input**

The CZ209E and CZ109E feature a front panel auxiliary input. Plug in your portable music player and enjoy the music wherever you go.

**13-segment 8-character display**

The 13-segment display allows numbers and characters to be displayed clearly in all lighting conditions. From what song is playing on MP3, to knowing what time it is, the display will show you the information with clarity.



Remote control (Optional)

**CX609E**  
2-DIN BLUETOOTH CD/USB/MP3/WMA/AAC RECEIVER



**Bluetooth**



- CD-R/RW ready • Built-in Bluetooth® hands-free (HFP & OPP) and audio streaming (A2DP & AVRCP) • MP3, WMA and iTunes® AAC compatible with ID3-TAG display • 18 FM, 6 MW/LW radio station presets • RDS-EON tuner • iPod direct control via USB • Front-panel auxiliary input with level control • Subwoofer volume control • BBE MP for compressed audio sound improvement • Beat EQ for sound adjustment • Built-in High Pass Filter & Low Pass Filter • 728-variable colour display & illuminated keys • (13 x 10) 2-Line High Visibility LCD • 4-channel audio pre-out (Front + Rear/Subwoofer) • 4 x 50 Watt internal amplifier • OEM steering wheel remote wired interface capability • Hands-free microphone included • Optional remote ready (RCB176)

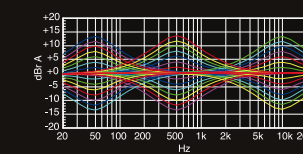
**Built-in Bluetooth hands-free**

For wireless connection with mobile phones, PDAs and MP3 Players. Supports Bluetooth profiles A2DP/AVRCP for audio streaming and HFP/OPP for hands-free operation, so you can easily communicate and transfer digital music to your vehicle's audio system. A wired microphone is also supplied.

**Beat EQ with parametric equalisation**

In addition to providing 3 preset equalisation patterns, Beat EQ even lets you freely customise the level and range of the bass, midrange and treble portions of each pattern with a 3-band parametric equaliser.

Audio Precision (Bass Midrange Treble)



Advanced entertainment and communication with next-generation compatibility

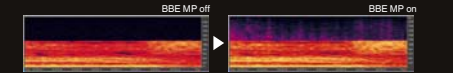


728-variable colour illumination

**BBE® MP**

(Minimised Polynomial Non-Linear Saturation) By restoring the harmonics that are lost during digital compression of MP3 and WMA audio files, BBE MP reproduces the warmth, details and nuances of the sound that you would otherwise miss. Effective for digital audio files and CDs.

**BBE MP Process**



- Manufactured under license from BBE Sound, Inc.
- Licensed by BBE Sound, Inc. under one or more of the following US patents: 5510752, 5736897. BBE and BBE symbol are registered trademarks of BBE Sound, Inc.
- This diagram illustrates the BBE MP effect

**Rear USB for direct iPod control**

Just connect the USB cable that's included with your iPod to the rear USB input to control your iPod from the main unit. The CX609E then enables convenient genre/album/song title search using the iPod's control wheel.

- \* To connect an iPod, please use the USB cable included with your iPod.
- \* Please see our website for iPod models that can be connected.



Built-in Bluetooth for hands-free calling and music streaming



iPod USB direct for playback through the USB cable provided with your iPod



USB connector even supports playback of WMA/MP3/AAC files



Front-panel auxiliary input for connection of portable audio player or other equipment

Comprehensive audio entertainment with 6-disc changer and 23-band spectrum analyser



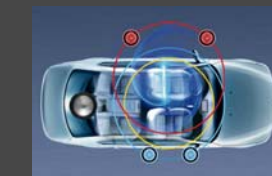
**WXZ468RMP**  
2-DIN 6-DISC CD/MP3/WMA RECEIVER WITH CeNET CONTROL

**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 your speakers and the acoustic properties of your car. The 23-band spectrum analyser visually displays the subtle expressions and nuances of the music. Additionally, you can choose between nine types of graphic display patterns to match the music and your mood.

**LPO (Listening Position Optimiser)**

The WXZ468RMP's Listening Position Optimiser uses digital processing to virtually adjust the speaker distance, enabling sound stage settings that accommodate a wide variety of different vehicles.



Setting	Seat position						
	LPO 1 for compact car		LPO 2 for sedan		LPO 3 for estate car		
	R	L	R	L	R	L	
Right	Distance	10 cm	40 cm	10 cm	80 cm	10 cm	16 cm
	Sample	52	13	13	104	13	208
Left	Distance	10 cm	40 cm	80 cm	10 cm	160 cm	10 cm
	Sample	13	52	104	13	208	13



# IN THE WORLD OF PHYSICS SUDDENLY LESS MEANS MORE

Clarion again succeeds in fitting more value into less space. The innovative mechanism-free design of FZ709E/FZ409E gives them superior vibration resistance and durability in the harsh physical environment of the car, leaving plenty of room for Bluetooth® and many other features.



MAIN UNITS

## 1 Mechanism-free design

The absence of any disc drive or other moving mechanical parts associated with it means the main unit is able to offer superior resistance to shocks and vibrations, and will suffer less wear over time. This reliability and durability makes it ideal for the punishing physical environment of the car, and more than ready to perform as a main unit in advanced in-vehicle entertainment systems.

## 2 Intuitive design and H.M.I.

The FZ709E and FZ409E simplify operation so that now it is just a matter of touching a few iconised illuminated capacitive sensor buttons. This is an example of the intuitive H.M.I. design that minimises the number of buttons while maximising functionality. Since only relevant button icons appear for the task at hand, button-hunting is eliminated and access is more direct and responsive.

## 3 Unique concept for cutting-edge style

The FZ709E and FZ409E are a crystallisation of some of the most advanced technologies in car entertainment today. The screen uses an OEL (Organic Electro Luminescence) display to deliver images smooth as silk while saving space. Combined with advanced design, this technology is one of the ways that Clarion is taking car entertainment to the next generation.

## 4 Connectivity and functions

The FZ709E/FZ409E provides USB connectivity with your iPod for audio as well as video.\* In addition to listening to your favourite tunes stored on the iPod, your passengers can enjoy watching any video content you may have. To allow these main units to integrate into a wide range of systems, they are also equipped with 6-channel pre-outs.

\* iPod Video can be viewed by connecting FZ709E/FZ409E to an external universal monitor with RCA video input and connecting a suitable iPod via the optional CCA723 cable.



## Advanced entertainment and communication with next-generation compatibility



Remote control

### Built-in Bluetooth® (FZ709E)

Connect with various devices such as mobile phones, PDAs and MP3 Players via the unit's built-in wireless Bluetooth interface. Supported Bluetooth profiles include A2DP/AVRCP for audio streaming and HFP/OPP for hands-free operation. A wired microphone is supplied for crystal clear telephony.



Microphone

### FZ709E BLUETOOTH USB/MP3/WMA/AAC RECEIVER



Touch sensor operation



Full dot OEL display



Remote control (Optional)

### FZ409E USB/MP3/WMA/AAC RECEIVER

#### FZ709E / FZ409E FEATURES

- Built-in Bluetooth hands-free (HFP & OPP) and audio streaming (A2DP & AVRCP) (only for FZ709E) • MP3, WMA and iTunes® AAC compatible with ID3-TAG display
- 18 FM, 6 MW/LW radio station presets • RDS-EON tuner
- iPod direct control via USB • Auxiliary input with level control (Rear mini jack) • Subwoofer level control
- 24-bit D/A converter • BBE MP for compressed audio sound improvement • Beat EQ for sound adjustment
- Built-in High Pass Filter & Low Pass Filter • Touch sensor operation • Full dot OEL display • 4-volt / 6-channel audio

- pre-out (only for FZ709E) • 2-volt / 6-channel audio pre-out (only for FZ409E) • 4 x 50 Watt internal amplifier
- OEM steering wheel remote wired interface capability
- Remote control included (only for FZ709E / optional for FZ409E) • iPod video ready (optional CCA723 cable and universal monitor required) • External microphone included (only for FZ709E) • Bluetooth Interface ready (only for FZ409E)



• 4V/6 ch output: only for FZ709E  
• 6 ch output: only for FZ409E  
• Bluetooth interface ready: only for FZ409E



#### Direct USB iPod control

No adapter box required. Just connect the USB cable that's included with your iPod to the Clarion source unit's rear USB input and you get complete control of your iPod including genre/album/song title search using the iPod's control wheel, with high quality sound reproduction through the car speakers. The same connection can also be used to play back audio files stored on USB memory.

\* To connect an iPod, please use the USB cable included with your iPod.  
\* Please see our website for iPod models that can be connected.

#### BBE® MP (Minimised Polynomial Non-Linear Saturation)

By restoring the harmonics that are lost during digital compression of MP3 and WMA audio files, BBE MP reproduces the warmth, details and nuances of the sound that you would otherwise miss. Effective for digital audio files and CDs.

• Manufactured under license from BBE Sound, Inc.  
• Licensed by BBE Sound, Inc. under one or more of the following US patents: 5510752, 5736897, BBE and BBE symbol are registered trademarks of BBE Sound, Inc.

#### Beat EQ for user customisable sound

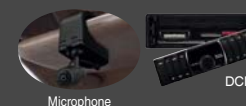
In addition to providing 3 preset equalisation patterns — BASS BOOST, IMPACT, and EXCITE — Clarion's Beat EQ even lets you freely customise the level and range of the bass, midrange and treble portions of each pattern. Depending on your mood and the type of music, you can tune the sound exactly to your liking for a more fulfilling listening experience.



Built-in Bluetooth hands-free Built-in Bluetooth audio streaming Rear USB enables connection of an iPod and USB memory devices. 6-channel audio pre-out

## Comprehensive connectivity and PC-friendliness plus mechanism-free reliability

### FB289RBT / FB288RBT BLUETOOTH SD/MP3 RECEIVER



Microphone

DCP



FB288RBT



FB289RBT

- SD slot for music playback (up to 2 GB)
- MP3 compatible with ID3-TAG display
- Built-in Bluetooth wireless technology for hands-free / audio streaming and remote control (HFP/A2DP/AVRCP)

- 18 FM radio station presets
- RDS-EON tuner
- 4 x 50 Watt internal amplifier
- Flip-down control panel
- 728-variable colour illuminated face panel

- Auxiliary input
- 2-channel audio pre-out
- External microphone included

MAIN UNITS





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.

[www.clarion.com/cip](http://www.clarion.com/cip)

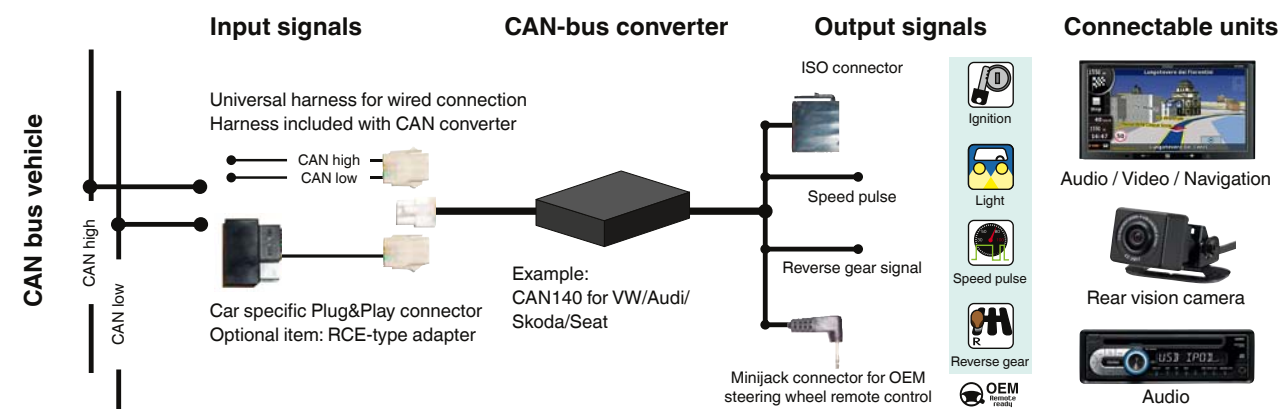
Please visit [www.clarion.com/cip](http://www.clarion.com/cip) to see the latest range of professional Clarion installation accessories online.

## CAN-bus converter

New cars increasingly rely upon proprietary data bus techniques that are not compatible with commercial audio products. Clarion, however, has with its unprecedented expertise developed an extensive range of solutions that effectively overcomes such complications. Our CAN converter interfaces can enable the use of a superior Clarion audio system within CAN-bus equipped cars.



System example

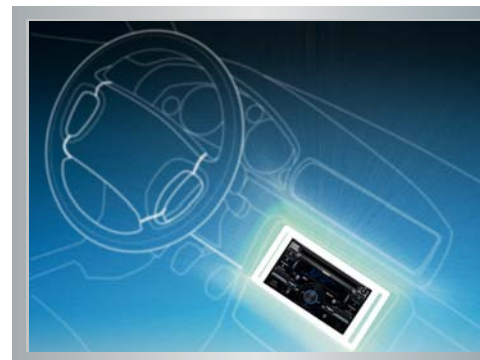


Upgrading your CAN-equipped car has never been so easy. Whether it's your desire to incorporate one of our advanced navigation or multimedia systems or simply to use those handy steering wheel controls in conjunction with one of our amazing source units, Clarion makes this task effortless by means of its comprehensive range of CAN-converters.

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

## 2-DIN installation bracket

More than 60% of all new vehicles sold in Europe have an extra large installation space in the dashboard for mobile entertainment products, known as 2-DIN. This space allows the owner to quickly and easily upgrade the original fitted equipment without compromise to the integrated feel of the dash. In order to preserve the dashboard's original allure, Clarion has developed an impressive range of car-specific mounting brackets to achieve this goal. Each bracket comes complete with instructions, diagrams and fixing materials.



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

## OEM steering wheel remote control

More and more new cars are sold with a radio that can be operated from convenient controls located on the vehicle's steering wheel. Clarion has successfully introduced interfaces that enable its range of products to deliver the exact same control and safety.



### ● 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](http://www.clarion.com/cip)



# AMPLIFIERS SUBWOOFERS SPEAKERS

## Experience the audio-acoustical expertise

Each amplifier, subwoofer and speaker is a culmination of the unrivalled expertise Clarion holds in the field of car audio. Rely on them to deliver the power, presence and quality that you demand.

### ► SUBWOOFER SERIES ◀



#### SW SERIES

Developed especially to deliver stunning bass performance in your car with a relatively small investment.



#### PFW SUBWOOFER

Delivers powerful bass performance in a unique shallow-mount design for flexible installation in any vehicle.



#### HX SUBWOOFER

Big bass in sound and form. Seamless parabolic design and double-stacked magnets deliver extreme performance.



#### SRV SERIES

Active subwoofers with dual voice coils and air-compression structure for high quality low frequency sound reproduction.

### ► AMPLIFIER SERIES ◀



#### APA SERIES

Multi-channel amplifiers with high wattage and superior heat dissipation in a space-saving design



#### APX SERIES

Mono and multi-channel amplifiers that make it easy to equip any system with thundering sound.

### ► SPEAKER SERIES ◀



#### ULTRA SERIES

Harnessing the highest grade materials for high power handling, superior response, and stately looks.



#### PLATINUM SERIES

Separate woofers and tweeters that let you choose the exact solution for upgrading your car's speakers.



#### QUALITY SERIES

Multiaxial speakers combining design and performance to faithfully reproduce the full spectrum of sound.



#### IN-PHASE SERIES

Designed with the tweeter on the same axis and plane as the woofer, for flat response throughout the audio spectrum.



#### CUSTOM-FIT SERIES

High quality coupled with versatile design offering custom-fit speakers for all popular passenger cars.



# DYNAMIC AMPLIFIERS

Clarion's dynamic amplifiers supply the power to drive a wide variety of in-car entertainment systems. Whether your main interest is ultimate quality, extreme looks, or system expansion and flexibility, you are sure to find the ideal solution with Clarion.



**APA2180**  
360 W 2/1-CHANNEL HIGH SOUND  
QUALITY POWER AMPLIFIER

### CLASS AB AMPLIFIERS

- ✓ High-Fidelity sound performance
- ✓ Full featured crossover settings



**APA4360**  
720 W 4/3/2-CHANNEL HIGH SOUND  
QUALITY POWER AMPLIFIER

### CLASS AB AMPLIFIERS

- ✓ High maximum music power
- ✓ Selectable bass boost



**APX1301E**  
420 W MONO POWER  
AMPLIFIER



**APX4241E**  
400 W 4/3/2-CHANNEL  
POWER AMPLIFIER



**APX2121E**  
200 W 2/1-CHANNEL POWER AMPLIFIER

APA SERIES / APX SERIES FEATURES & SPECIFICATIONS	APA4360	APA2180	APX4241E	APX2121E	APX1301E
Number of channels	4/3/2	2/1	4/3/2	2/1	1
Maximum power output (W)	720	360	400	200	420
MOS-FET power supply	●	●	●	●	●
into 4 ohms (RMS power)	4x90W	2x90W	4x60W	2x60W	1x300W
into 2 ohms (RMS power)	4x130W	2x130W	4x80W	2x80W	1x400W
Bridged	2x260W	1x260W	2x100W	1x100W	—
Bass Extender: 0 ~ +15 dB @ 45 Hz	●	●	—	—	—
Independent front / rear adjustable crossover frequencies (HP/LP): 55 ~ 550 Hz or 550 ~ 5,500 Hz	●	—	—	—	—
Adjustable crossover frequency (HP/LP): 55 ~ 550Hz or 550 ~ 5,500Hz	—	●	—	—	—
Independent front / rear adjustable -12 dB/oct. High/Low Pass Crossover, 50 ~ 300 Hz	—	—	●	—	—
Selectable bass boost: 0/6/12 dB @ 50 Hz	—	—	●	●	●
Adjustable line level input: 200 mV up to 6 V	●	●	—	—	—
Adjustable -12 dB/oct. High/Low Pass Crossover, 50 ~ 300 Hz	—	—	—	●	—
Adjustable Low Pass Crossover @ 30 ~ 300 Hz	—	—	—	—	●
2-ohm stable	—	—	—	●	●
2-ohm mono stable	—	—	—	—	●
Variable bass boost control	●	●	—	—	—
Gold-plated connections	●	●	●	●	●
Speaker level input	●	●	●	●	●
Soft mute On/ Off circuitry	●	●	—	—	—
Dimensions (W x H x D)(mm)	165 x 56 x 407	165 x 56 x 285	280 x 55 x 300	280 x 55 x 180	280 x 55 x 300



## HX SUBWOOFER



### SRM3093HX

30 CM (12") SINGLE 4-OHM VOICE COIL HIGH-CLASS SUBWOOFER

- ✓ Double-stacked powerful strontium magnets
- ✓ 30 cm TM-MIPP cone with rubber surround

• 30 cm titanium metallised MIPP cone woofer with rubber surround • Double-stacked powerful strontium magnets • Seamless parabolic cone structure for dynamic bass response • Aluminium die-cast frame and cooling spacer for high power handling • OFC wiring • Single 4-ohm heat resistant voice coil • Rear-vented pole piece • Music peak power: 1,200 W • Continuous power: 300 W • Frequency response: 15 ~ 1,500 Hz • Efficiency: 93 dB/W/m • Fs: 29 Hz • Qts: 0.55 • Vas: 135.6 litres

## PFW SUBWOOFER



### PFW1051

25 CM (10") SINGLE 4-OHM VOICE COIL SLIM-LINE SUBWOOFER

- ✓ Dual strontium ferrite magnets
- ✓ S.E.T. (Spider Exhaust Technology) cooling

• 76 mm mounting depth • 600 watts of maximum music power • 300 watts RMS • Single 4-ohm heat resistant voice coil • Polypropylene electrolytic spun aluminium coated dust cap design • Kevlar/paper composite cone design • Co-polymer composite high excursion surround • Dual strontium ferrite magnet motor assembly • Hyper-extended vented pole piece • Dual gold-plated block terminals • Linear poly-cotton spider with integrated tinsel leads • S.E.T. (Spider Exhaust Technology) cooling • Custom designed die-cast aluminium frame • Hidden screw mounting gasket • Music peak power: 600 W • Continuous power: 300 W

## SW SERIES

### Stellar bass performance

Clarion offers subwoofers for those who require great bass and won't settle for second best. Features such as a durable die-cast aluminium frame with powerful damping and dual strontium ferrite magnet motor assembly, provide an unprecedented sense of bass. Real world tested Spider Exhaust Technology provides advanced thermal cooling to ensure extended woofer life, and helps maintain peak performance at all times.



### SW3012

30 CM (12") SINGLE 4-OHM VOICE COIL SUBWOOFER



### SW3013B

30 CM (12") SUBWOOFER WITH BASS-REFLEX BOX



### SW2512

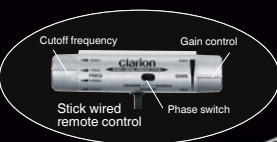
25 CM (10") SINGLE 4-OHM VOICE COIL SUBWOOFER



### SW2513B

25 CM (10") SUBWOOFER WITH BASS-REFLEX BOX

## SRV SRV SERIES



### SRV313

SLIM DESIGN 17 CM (6-3/4") COUNTER DRIVE ACTIVE SUBWOOFER

- ✓ Dual voice coil counter drive woofer with dual-neodymium magnet
- ✓ 120 W high power amplifier with low pass filter

• Dual voice coil • 120 W high power amplifier with Low Pass Filter • Maxx Bass circuit for virtual bass enhancer • 17 cm (6-3/4") 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 • RCA line level input/speaker level input • Music peak power: 120 W • Continuous power: 60 W • Frequency response: 30 ~ 200 Hz

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

### SRV202

20 CM (8") ACTIVE SUBWOOFER

- ✓ Dual voice coil woofer with powerful strontium magnet
- ✓ 120 W high power amplifier with low pass filter

• Dual voice coil woofer with strontium magnet • 120 W high power amplifier with Low Pass Filter • Air compression structure for dynamic bass response • Subwoofer level control for gain control / Low Pass Filter (55 ~ 130 Hz) / phase select • Leather finished MDF enclosure • RCA line level input/speaker level input • Music peak power: 120 W • Continuous power: 60 W • Frequency response: 20 ~ 200 Hz

## SUBWOOFER TECHNOLOGY

(PFW1051 / SW3012 / SW2512 / SW3013B / SW2513B)

### • Dual strontium ferrite magnets

Dual strontium ferrite magnets are used in the voice coil to maximise power, while high temperature voice coil formers take the forefront in the battle against heat building up in the voice coil.

### • S.E.T. (Spider Exhaust Technology) cooling

Heat is the number one enemy of a subwoofer. Clarion's Spider Exhaust Technology allows hot air to escape from the outside of the voice coil assembly. And vented pole pieces allow airflow.

• **Die-cast aluminium frame (PFW1051)**  
An aluminium die-cast frame is employed for its toughness and the vibration damping properties it provides. Aluminium suppresses noise from resonance and energy loss to achieve linear movement for cones and voice coils.

### • Dual gold-plated terminal blocks

The terminal blocks are gold-plated to ensure minimum contact loss and maximum signal purity. This is a must for systems where high quality audio reproduction is required, and it shows that you're serious about your sound.

### • 4-ohm voice coil

The voice coil is rated at 4 ohms, allowing the subwoofer to be integrated into most car audio systems. You can therefore enjoy the benefits of powerful bass reproduction, without having to invest in an 8-ohm amplifier.

• **Hyper-extended vented pole pieces**  
Hyper-extended vented pole pieces allow airflow through the centre of the drive structure to further improve power handling.

### • Air compression

The SRV313 and the SRV202 employ an air compression structure where the acoustic pressure is compressed within the cabinet and released from the rear duct. This makes it possible to reproduce dynamic deep bass with impressive sharpness. (SRV313 / SRV202)

### • Easy mounting bass-reflex design (SW3013B / SW2513B)

The powerful bass performance of the speaker driver itself is augmented by the bass-reflex system's resonance box and duct design. Count on earth-shaking bass performance from these subwoofer units, while enjoying the relatively easy and flexible installation possibilities they offer.



FEATURES & SPECIFICATIONS				
Subwoofer	Subwoofer	Bass-Reflex Subwoofer	Bass-Reflex Subwoofer	Reproduction system
311	263	311	263	Speaker size (mm)
Single	Single	Single	Single	4-ohm voice coil
•	•	•	•	Polypropylene electronic spun aluminium dust cap
•	•	•	•	Fibreglass / paper cone design
•	•	•	•	Nitrile butadiene rubber high excursion surround
•	•	•	•	Dual strontium ferrite magnets
•	•	•	•	Hyper-extended vented pole piece
•	•	•	•	Spider Exhaust Technology (S.E.T.) cooling
•	•	•	•	Dual gold-plated terminal blocks
•	•	•	•	Linear cotton spider with integrated tinsel leads
•	•	•	•	Custom stamped steel powder coated chassis
•	•	•	•	Impedance: 3.6 Ω ± 5 %
700	600	700	600	Music peak power (W)
350	300	350	300	Continuous power (W)
30 ~ 1 k	32 ~ 1 k	30 ~ 1 k	32 ~ 1 k	Frequency response (Hz)
89	87	89	87	Efficiency (dB/W/m)
4.25	4.1	—	—	Total weight (kg)
—	—	480 x 385 x 415	435 x 325 x 365	Box dimensions (W x H x D) (mm)



Experience the epitome of sound. Clarion's Ultra Series speakers use the highest grade materials for the perfect combination of high power handling, superior response, and stately looks.

Flexible solutions for your sound environment. Clarion's Platinum Series with separate woofers and tweeters lets you choose the exact solution for upgrading your car's speakers.



**SRU1720S** 400 W Max.  
16.5 CM (6-1/2") 2-WAY COMPONENT SYSTEM



- Wide frequency range: 25 ~ 80,000 Hz
- Titanium-plated fibreglass cone woofer with powerful strontium magnet

**SRU310H** 300 W Max.  
2.5 CM (1") SILK DOME TWEETER



- High frequency range: 2,000 ~ 80,000 Hz
- Titanium-plated silk dome tweeter with neodymium magnet

**SRP1720S** 350 W Max.  
16.5 CM (6-1/2") 2-WAY COMPONENT SYSTEM



- Wide frequency range: 25 ~ 50,000 Hz
- Fibreglass cone woofer with powerful strontium magnet

**SRP1320S** 300 W Max.  
13 CM (5-1/4") 2-WAY COMPONENT SYSTEM



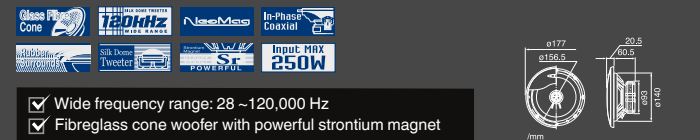
- Wide frequency range: 40 ~ 50,000 Hz
- Fibreglass cone woofer with powerful strontium magnet

**IN-PHASE**  
IN-PHASE SERIES

Flat response throughout the audio spectrum. Designed so that the tweeter is on the same axis and plane as the woofer, assuring tweeter and woofer sounds are always in-phase with each other.



**SRX1785** 250 W Max.  
16.5 CM (6-1/2") IN-PHASE COAXIAL 2-WAY



- Wide frequency range: 28 ~ 120,000 Hz
- Fibreglass cone woofer with powerful strontium magnet

**SRX1385** 200 W Max.  
13 CM (5-1/4") IN-PHASE COAXIAL 2-WAY



- Wide frequency range: 35 ~ 120,000 Hz
- Fibreglass cone woofer with powerful strontium magnet

**SRX6985** 350 W Max.  
15 CM x 23 CM (6" x 9") IN-PHASE COAXIAL 2-WAY



- Wide frequency range: 25 ~ 80,000 Hz
- Fibreglass cone woofer with powerful strontium magnet

**SPEAKER TECHNOLOGY**

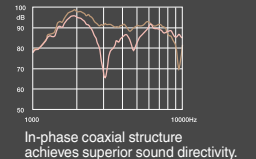
- TP-GF woofer cone (ULTRA SERIES)**  
Designed to offer max. 400 W power handling, this woofer uses a fibreglass cone with a vapour-deposited titanium coating to increase rigidity and response speed for tight bass with low distortion.
- Powerful strontium magnet for dynamic bass**  
Strontium magnets have a magnetic flux density that is far higher than conventional ferrite magnets, enabling reproduction of dynamic bass sounds from a relatively small voice coil.

- Rear-vented pole piece (2-WAY COMPONENT SYSTEM)**  
To prevent pressure from building up inside the centre cap and causing increased amplitude distortion, a vent is provided on the rear of the pole piece, resulting in smooth cone movement, which contributes to the open, airy sound of the speakers.

- Multiaxial 3-way system (QUALITY SERIES)**  
By arranging the woofer, midrange and tweeter into a 3-way multiaxial design, this type of speaker offers an extremely wide frequency response from low 28 Hz bass sounds up to the super-extended register of 35 kHz for crystalline highs. (e.g. SRQ1730R)

- TP silk dome tweeter (ULTRA SERIES)**  
Titanium particles have been vapour-deposited onto the pure silk dome to increase rigidity, contributing to smooth response from the mid- to high-frequency range, up to an amazing 80 kHz.
- Aluminium die-cast frame (ULTRA SERIES)**  
The speaker uses an aluminium die-cast frame for added stiffness, thereby minimising unwanted resonance and vibration.

- In-phase coaxial design (IN-PHASE SERIES)**  
A key component to experiencing natural sound imaging and staging is Clarion's IN-PHASE Series speaker design. The tweeter's "In-phase" placement minimises the phase differential between the woofer and tweeter, thereby preventing time lag between high and low frequency sounds for optimum sound reproduction.



SRU1720S		SRU310H		ULTRA SERIES FEATURES & SPECIFICATIONS	
2-way component system	Dome tweeter	Reproduction system			
165 mm	—	High-quality titanium-plated fibreglass cone woofer with rubber surround			
25 mm	25 mm	Titanium-plated silk dome tweeter with neodymium magnet			
●	—	Aluminium die-cast frame for higher power handling and reduced distortion			
●	—	Rear vented pole piece			
●	—	Powerful strontium magnet for dynamic bass response			
●	●	2-way mounting tweeter (flush mounting / surface mounting)			
●	—	High-grade -12 dB/oct. 2-way crossover network with level attenuator (tweeter level adjust: 0 dB, -3 dB)			
—	●	High-grade -12 dB/oct crossover network with level attenuator (tweeter level adjust: 0dB, -3 dB, -6 dB)			
80 kHz	80 kHz	Extremely high frequency reproduction			
400	300	Music peak power (W)			
60	90	Continuous power (W)			
65	—	Fs (Hz)			
0.71	—	Qts			
23.8	—	Vas (litres)			
25 ~ 80,000	2,000 ~ 80,000	Frequency response (Hz)			
91	90	Efficiency (dB/W/m)			

SRP1720S		SRP1320S		SRX6985		SRX1785		SRX1385		PLATINUM/IN-PHASE SERIES FEATURES & SPECIFICATIONS	
2-way Component System	2-way Component System	In-phase coaxial 2-way	In-phase coaxial 2-way	In-phase coaxial 2-way	Reproduction system						
165	130	150 x 230	165	130	Fibreglass cone woofer with rubber surround (mm)						
25	25	25	20	20	Pure silk dome tweeter with neodymium magnet (mm)						
●	●	●	●	●	Powerful strontium magnet for dynamic bass response						
—	—	●	●	●	In-phase coaxial design for best sound quality and imaging						
●	—	—	—	—	2-way mounting tweeter (flush mounting / surface mounting)						
●	●	—	—	—	Custom-fit tweeter bracket included (for Renault, Peugeot, Citroën)						
●	●	—	—	—	High-grade -12 dB/oct 2-way crossover network with level attenuator (Tweeter level adjust: 0 dB, -3 dB)						
50	50	80	120	120	Extremely high frequency reproduction (kHz)						
350	300	350	250	200	Music peak power (W)						
55	50	50	45	40	Continuous power (W)						
65	75	45	75	90	Fs (Hz)						
0.43	0.97	0.59	0.93	0.86	Qts						
17.7	4.8	29.6	4.2	3.3	Vas (litres)						
25 ~ 50,000	40 ~ 50,000	25 ~ 80,000	28 ~ 120,000	35 ~ 120,000	Frequency response (Hz)						
91	90	92	91	90	Efficiency (dB/W/m)						



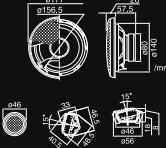
**QUALITY SERIES – 2-way**

**QUALITY SERIES – 3-way**



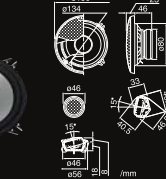
**SRQ1720S 300 W Max.**  
16.5 CM (6-1/2") 2-WAY COMPONENT SYSTEM

- ✓ Frequency range: 28 ~ 35,000 Hz
- ✓ 20 mm pure silk dome tweeter with neodymium magnet



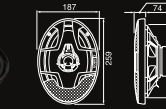
**SRQ1320S 200 W Max.**  
13 CM (5-1/4") 2-WAY COMPONENT SYSTEM

- ✓ Frequency range: 40 ~ 35,000 Hz
- ✓ 20 mm pure silk dome tweeter with neodymium magnet



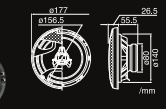
**SRQ6920R 300 W Max.**  
15 CM x 23 CM (6" x 9") COAXIAL 2-WAY

- ✓ Frequency range: 28 ~ 32,000 Hz
- ✓ 25 mm pure silk dome tweeter with neodymium magnet



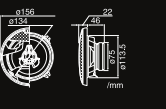
**SRQ1720R 200 W Max.**  
16.5 CM (6-1/2") COAXIAL 2-WAY

- ✓ Frequency range: 28 ~ 32,000 Hz
- ✓ 20 mm pure silk dome tweeter with neodymium magnet



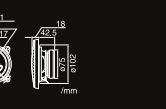
**SRQ1320R 150 W Max.**  
13 CM (5-1/4") COAXIAL 2-WAY

- ✓ Frequency range: 40 ~ 32,000 Hz
- ✓ 20 mm pure silk dome tweeter with neodymium magnet



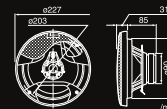
**SRQ1020R 140 W Max.**  
10 CM (4") COAXIAL 2-WAY

- ✓ Frequency range: 45 ~ 32,000 Hz
- ✓ 20 mm pure silk dome tweeter with neodymium magnet



**SRQ2030R 400 W Max.**  
20 CM (8") MULTIAXIAL 3-WAY

- ✓ Frequency range: 25 ~ 35,000 Hz
- ✓ 25 mm pure silk dome midrange with neodymium magnet and 8 mm pure silk dome tweeter



**SRQ6931R 350 W Max.**  
15 CM x 23 CM (6" x 9") MULTIAXIAL 3-WAY

- ✓ Frequency range: 28 ~ 35,000 Hz
- ✓ 25 mm pure silk dome midrange with neodymium magnet and 8 mm pure silk dome tweeter



**SRQ1730R 250 W Max.**  
16.5 CM (6-1/2") MULTIAXIAL 3-WAY

- ✓ Frequency range: 28 ~ 35,000 Hz
- ✓ 20 mm pure silk dome midrange with neodymium magnet and 8 mm pure silk dome tweeter



**SRQ1330R 200 W Max.**  
13 CM (5-1/4") MULTIAXIAL 3-WAY

- ✓ Frequency range: 40 ~ 35,000 Hz
- ✓ 20 mm pure silk dome midrange with neodymium magnet and 8 mm pure silk dome tweeter



**QUALITY SERIES – Tweeter**

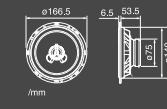
**SRQ210H 200 W Max.**  
2 CM (3/4") DOME TWEETER

- ✓ Frequency range: 2,500 ~ 35,000 Hz
- ✓ 20 mm pure silk dome tweeter with neodymium magnet



**SRC1715 140 W Max.**  
16.5 CM (6-1/2") CUSTOM-FIT COAXIAL 2-WAY

- ✓ Frequency range: 30 ~ 30,000 Hz
- ✓ MIPP cone woofer with powerful strontium magnet



**SRC1315 120 W Max.**  
13 CM (5-1/4") CUSTOM-FIT COAXIAL 2-WAY

- ✓ Frequency range: 40 ~ 30,000 Hz
- ✓ MIPP cone woofer with powerful strontium magnet



**SRC1016 100 W Max.**  
10 CM (4") CUSTOM-FIT COAXIAL 2-WAY

- ✓ Frequency range: 45 ~ 30,000 Hz
- ✓ MIPP cone woofer with powerful strontium magnet



**SRC1015 100 W Max.**  
10 CM (4") CUSTOM-FIT COAXIAL 2-WAY

- ✓ Frequency range: 45 ~ 30,000 Hz
- ✓ MIPP cone woofer with powerful strontium magnet



**SRC5715 140 W Max.**  
13 CM x 18 CM (5" x 7") CUSTOM-FIT COAXIAL 2-WAY

- ✓ Frequency range: 35 ~ 30,000 Hz
- ✓ MIPP cone woofer with powerful strontium magnet



**SRC4616 100 W Max.**  
10 CM x 15 CM (4" x 6") CUSTOM-FIT COAXIAL 2-WAY

- ✓ Frequency range: 45 ~ 30,000 Hz
- ✓ MIPP cone woofer with powerful strontium magnet



	SRQ1720S	SRQ1320S	SRQ6920R	SRQ1720R	SRQ1320R	SRQ1020R	QUALITY SERIES 2-WAY FEATURES & SPECIFICATIONS
2-way Component System	2-way Component System	Coaxial 2-way	Coaxial 2-way	Coaxial 2-way	Coaxial 2-way		Reproduction system
165	130	150 x 230	165	130	100		TM-MIPP cone woofer (mm)
20	20	25	20	20	20		Pure silk dome tweeter with neodymium magnet (mm)
•	•	—	—	—	—		2-way mounting tweeter (variable angle flush mounting / surface mounting)
•	•	—	—	—	—		Custom-fit tweeter bracket included (for Renault, Peugeot, Citroën)
•	•	•	•	•	•		Powerful strontium magnet for dynamic bass response
•	•	—	—	—	—		In-line -6 dB/oct. crossover network
•	•	—	—	—	—		Variable angle tweeter
•	•	—	—	—	—		Designed for direct OEM replacement
300	200	300	200	150	140		Music peak power (W)
45	45	50	40	30	30		Continuous power (W)
75	85	65	70	80	120		Fs (Hz)
0.66	0.66	0.89	1.11	0.79	0.73		Qts
8.7	7.3	23.5	12.3	5.2	1.9		Vas (litres)
28-35,000	40-35,000	28-32,000	28-32,000	40-32,000	45-32,000		Frequency response (Hz)
92	91	92	91	91	90		Efficiency (dB/W/m)

	SRQ2030R	SRQ6931R	SRQ1730R	SRQ1330R	SRQ210H	QUALITY SERIES 3-WAY FEATURES & SPECIFICATIONS
Multiaxial 3-way	Multiaxial 3-way	Multiaxial 3-way	Multiaxial 3-way	Dome Tweeter		Reproduction system
200	150 x 230	165	130	—		TM-MIPP cone woofer (mm)
—	—	—	—	20		Pure silk dome tweeter with neodymium magnet (mm)
25	25	20	20	—		Pure silk dome midrange with neodymium magnet (mm)
8	8	8	8	—		Pure silk dome tweeter (mm)
—	—	—	—	•		2-way mounting tweeter (variable angle flush mounting / surface mounting)
—	—	—	—	—		Custom-fit tweeter bracket included (for Renault, Peugeot, Citroën)
•	•	•	•	—		Powerful strontium magnet for dynamic bass response
—	—	—	—	•		In-line -6 dB/oct. crossover network
—	—	—	—	•		Variable angle tweeter
—	—	—	—	—		Designed for direct OEM replacement
400	350	250	200	200		Music peak power (W)
60	55	45	35	45		Continuous power (W)
65	65	75	80	—		Fs (Hz)
0.80	0.89	1.11	0.79	—		Qts
22.3	23.5	10.8	5.2	—		Vas (litres)
25-35,000	28-35,000	28-35,000	40-35,000	2,500-35,000		Frequency response (Hz)
92	92	91	91	90		Efficiency (dB/W/m)

	SRC1715	SRC1315	SRC1016	SRC1015	SRC5715	SRC4616	CUSTOM-FIT SERIES FEATURES & SPECIFICATIONS
Custom-fit Coaxial 2-way	Custom-fit Coaxial 2-way	Custom-fit Coaxial 2-way	Custom-fit Coaxial 2-way	Custom-fit Coaxial 2-way	Custom-fit Coaxial 2-way		Reproduction system
165	130	100	100	130 x 180	100 x 150		MIPP cone woofer (mm)
25	25	25	25	25	25		Metallised PEI balanced-drive tweeter (mm)
•	•	•	•	•	•		Powerful strontium magnet for dynamic bass response
•	•	•	•	•	•		Designed for direct OEM replacement
•	•	•	•	•	•		Sound tuning for European cars
140	120	100	100	140	100		Music peak power (W)
30	30	25	25	35	25		Continuous power (W)
70	90	115	115	75	125		Fs (Hz)
1.40	1.11	1.00	1.00	1.49	1.56		Qts
12.3	3.7	1.4	1.4	26.2	1.9		Vas (litres)
30-30,000	40-30,000	45-30,000	45-30,000	35-30,000	45-30,000		Frequency response (Hz)
91	90	90	90	91	90		Efficiency (dB/W/m)



Made for safer driving

# REAR VISION CAMERAS & MONITOR SYSTEMS

Clarion makes your drive more enjoyable, and safer. Choose from the full selection of rear vision cameras and monitor units to meet your specific needs. Take the guesswork out of reversing into tight spaces. Drive and park with confidence instead.

## LCD COLOUR MONITORS

### CJ7000E 7" WIDE COLOUR LCD MONITOR

- Camera power supplies are built-in • Automatic video switching with reverse gear and turn signal link • Convenient true/mirror image switching function • Manual dimmer function
- Composite video input & audio input • Seven language display selection • Wireless remote control is included



### CJ7100E 7" WIDE COLOUR LCD MONITOR

- Camera shutter independent control function when switching between CAM1 and CAM2 • All other functions are identical with CJ7000E



### CJ5600E 5.6" COLOUR LCD MONITOR

- Camera power supplies are built-in • Automatic video switching with reverse gear and turn signal link • True/mirror image switching function • Manual dimmer function • Seven language display selection

Zoom/Iris/Distance markers are not available with CJ7000E/CJ7100E/CJ5600E



### CJ981E 6.5" WIDE COLOUR LCD MONITOR

- On-screen distance markers • 1.4x digital zoom function • Iris function • AUX video input (NTSC/PAL) • Auto / Manual dimmer • Optional power box is required (EA1246A or EA1232A) • Up to three cameras can be connected with EA1246A
- Timer function to automatically switch the power OFF in manual mode

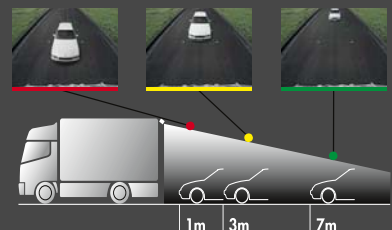
### Iris function (backlight compensation function)

Even during the daytime, in particularly strongly back-lit conditions some parts of an image may be lost in the shadow. In this situation, you can use the Iris button to correct the camera's exposure. The Iris function makes the dark sections lighter and therefore easier to see. (CJ981E)



### On-screen distance markers

Displayed at 1, 3, 5 and 7 metres for reference as rear proximity verification (CJ981E), with 7 screen marker patterns ranging from 2 to approx. 3.5 metres in height.



### 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)

## HEAVY DUTY COLOUR CCD CAMERAS

Designed for commercial vehicles

**CC2001F**  
HEAVY DUTY COLOUR CCD CAMERA WITH SHUTTER (WIDE-ANGLE / MIRROR IMAGE)

Wide-angle  
Mirror image

- Clarion's flagship CCD camera delivers both high image quality and high durability no matter what the operating conditions are • Front gate shutter prevents visibility from being obstructed by mud, grit, water, etc., ensuring you always have a clear view
- Dual housing design keeps any moisture or water that may leak from the harness from getting inside the camera • Sturdy aluminium die-cast external housing ensures the durability of the camera body

**CC2002E**  
HEAVY DUTY COLOUR CCD CAMERA (NARROW-ANGLE / TRUE IMAGE)

Narrow-angle  
Mirror image

**CC2000E**  
HEAVY DUTY COLOUR CCD CAMERA (WIDE-ANGLE / MIRROR IMAGE)

Wide-angle  
Mirror image

**CC2003E**  
HEAVY DUTY COLOUR CCD CAMERA (WIDE-ANGLE / TRUE IMAGE)

Wide-angle  
True image

## IR ILLUMINATED COLOUR CCD CAMERA

Combines best cost performance and multi-functionality

**CC3000E**  
IR ILLUMINATED COLOUR CCD CAMERA

Wide-angle  
Mirror image

- Combines best cost performance and multi-functionality • Illumination is provided by the camera's infrared LED light, making it especially convenient when reversing at night • Built-in microphone so you can hear any noise behind your Vehicle\* • Built-in pre-heater ensures the camera is ready for use at all times

\* Microphone function is available only in combination with the CJ7000E/CJ7100E



## ULTRA COMPACT COLOUR CCD CAMERAS

Minimum dimensions with maximum performance

**CC2011E**  
ULTRA COMPACT COLOUR CCD CAMERA (WIDE-ANGLE / MIRROR IMAGE)

Wide-angle  
Mirror image

**CC2012E**  
ULTRA COMPACT COLOUR CCD CAMERA (WIDE-ANGLE / TRUE IMAGE)

Wide-angle  
True image

- Wide 130° viewing angle provides the field of view you need even at low mounting positions • Small, light design allows for easy mounting

**CC2015E**  
ULTRA COMPACT COLOUR CCD CAMERA WITH STAINLESS BRACKET (WIDE-ANGLE / MIRROR IMAGE)

Wide-angle  
Mirror image

**CC1030E**  
COMPACT COLOUR CCD CAMERA (MIRROR IMAGE)

Mirror image

- Heavy duty version of the CC2011E with strengthened mounting bracket and metal shroud

- Compact size and light weight
- Wide-angle view

## POWER BOX

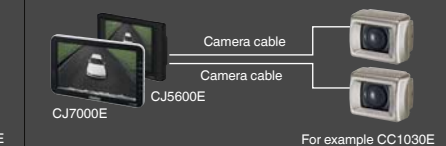
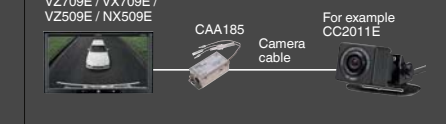
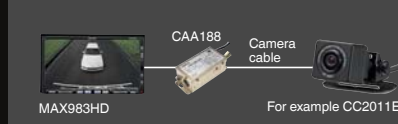
### EA1246A POWER BOX FOR CJ981E

- Three camera inputs • Three signal connections for indicator lights and reverse gear • Wired remote control is an optional extra (RCB-174) • AUX video input (NTSC/PAL) • 12V/24V compatible

### EA1232A POWER BOX FOR CJ981E

- One camera input • Signal connection for indicator lights or reverse gear • Includes wired remote controller for Iris & Zoom settings • AUX video input (NTSC/PAL) • 12V/24V compatible

## System examples



## ACCESSORIES

**CAA188**  
POWER BOX FOR CCD CAMERA

- 8-pin mini-DIN output for MAX983HD
- Reverse gear connection
- Manual on/off switch • 12V compatible

**CAA185**  
POWER BOX FOR CCD CAMERA

- NTSC video line-out for VZ709E, VX709E, VZ509E, NX509E
- NTSC video line-out for all other LCD monitors with NTSC input • 12V compatible

**RCB174**  
WIRED REMOTE CONTROL FOR EA1246A

**POE033**  
OPTIONAL COVER FOR CC2011E/CC2012E

**TRAILER ACCESSORIES**

**TRAILER "BREAK POINT" TO CAMERA CABLE**

CCA453 (15 m/49 ft)  
CCA452 (20 m/65 ft)

### HEAVY-DUTY CAMERA CABLES

For CC2001F, CC2000E, CC2003E and CC2002E

- 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)



### COMPACT CAMERA CABLES

For CC2011 SERIES and CC1030E CAMERAS

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



### CAMERA EXTENSION CABLES

FOR HEAVY DUTY CAMERAS

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



### CAMERA CABLES FOR CC3000E

CCA728 (20 m/65 ft) For connecting CJ981E

- CCA729 (20 m/65 ft) For connecting CJ5600E/CJ7000E/CJ7100E



- CCA730 For connecting general-purpose AV monitor with video input terminal • Only for 12V vehicles

### CABIN (MONITOR) TO TRAILER BREAK CABLE

- CCA454 (15 m/49 ft)





# MARINE AUDIO SYSTEMS



■ MARINE MAIN UNIT ■ REMOTE CONTROL ■ SUBWOOFER ■ SPEAKER



## Engineered for the marine environment

Clarion's marine entertainment has been specifically designed to resist the adverse effects of salt water spray and as you might expect, our innovative design and functionality will certainly keep your boat rocking.

### 3.5-inch monitor for comfortable viewing

The large 3.5-inch monitor allows easy viewing of a variety of digital audio/video sources. Playback and enjoy DVDs, DivX encoded discs, as well as iPod Video\*. Enjoy the latest wave in marine entertainment — the same digital sources you like to enjoy on land!

### Comprehensive audio and video entertainment

CMV1 is Clarion's first model in the marine category to offer visual entertainment capabilities. It is compatible with a wide array of formats such as DVD and DivX for audio visual, and WMA/AAC and MP3 for your audio pleasure. It's able to offer a comprehensive AV entertainment experience.

### BBE® MP for better sounding MP3/WMA/AAC files

BBE MP (Minimised Polynomial Non-Linear Saturation) Process improves digitally compressed sound such as MP3/WMA/AAC by restoring the harmonics that are lost through compression, thereby reproducing the warmth, details and nuances that you would otherwise miss. BBE MP enhanced harmonics even serve to make regular CDs sound better.

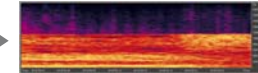
\* This function is only available for USB mode.  
 • Manufactured under license from BBE Sound, Inc.  
 • Licensed by BBE Sound, Inc. under one or more of the following US patents: 5510752, 5736897. BBE and BBE symbol are registered trademarks of BBE Sound, Inc.

### •BBE MP Process

BBE MP off



BBE MP on



• This diagram illustrates the BBE MP effect

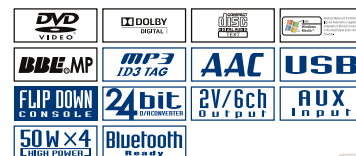
### 24-bit D/A converter for richer natural sound

Whereas the digital realm is made up of unnaturally square sound waves, Clarion's 24-bit D/A converter takes digital signals and recreates the smoothly undulating sound waves characteristic of the real-world environment.

### Bluetooth® interface

Keep your mobile phone or Bluetooth Audio enabled playback device safe and sound in your pocket while enjoying crystal-clear sound through the optional BLT373 Bluetooth transceiver.

## CMV1 WATERTIGHT MARINE DVD/CD/ USB RECEIVER



- DVD-Video/DVD±R/DVD±RW/CD/CD-R/RW and DivX® ready • MP3, WMA and iTunes® AAC 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
- Switchable tuner for Europe / USA 24 stations memory (18 FM/6 AM) • USB audio for iPod (Rear) • 24-bit D/A converter
- BBE MP for compressed audio sound improvement (only for USB mode)
- Watertight flip-down control panel with 3.5-inch TFT colour LCD monitor • 6-channel audio pre-out and 2-channel video output
- 2-channel fixed audio pre-out • RCA video input • 4 X 50 Watt internal amplifier • Built-in IR Eye • Bluetooth Interface ready (optional BLT373) • Meets ASTM B117 <Salt/Fog exposure> • Meets ASTM D4329 <UV exposure> • Humiseal coated PCB • Sealed stainless steel chassis • iPod video control (optional CCA723) • New wired remote control (optional MW1/2) ready

\* To connect an iPod, please use the USB cable included with your iPod.  
 \* Please see the Clarion website for iPod models that can be connected.



Watertight flip-down face reveals loading slot for CD and DVD playback. Rear USB connector with iPod control. Rear USB connector even supports playback of WMA/MP3/AAC files. 6-channel audio pre-out for system expansion.

## Engineered to withstand water and salt

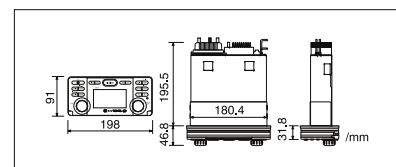
Water is a marine main unit's worst enemy, and salt can be a nightmare. Our CMV1/CMD6 main units have been IPX5 tested and certified to offer the highest water intrusion protection and salt resistance. Rubber gaskets stop water in its tracks, with integrated drainage channels to keep water.



## Stainless steel chassis for toughness on the inside

Should any water get behind the panel, the stainless steel chassis, along with an integrated drip shield over the main harness connector, helps protect internal circuitry from the effects of moisture, corrosion and mildew.

### CMV1 Dimensions



Digital audio visual entertainment,  
built for onboard excellence.





Set sail while staying connected to your music.

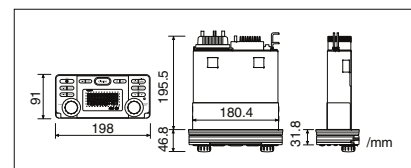


Remote control

MARINE AUDIO SYSTEMS

**CMD6**

WATERTIGHT MARINE CD/USB RECEIVER



- CD-R/RW ready • MP3, WMA and iTunes® AAC compatible with ID3-TAG display • Switchable tuner for Europe / USA • 24 radio station presets (18 FM/6 AM)
- USB audio for iPod • Rear USB connector • BBE® MP for compressed audio improvement • Watertight flip-down control panel • (13 x 10) 2-line high visibility LCD
- 6-channel audio pre-out • 2 sets of 2-channel auxiliary inputs with level control • 2-channel fixed audio pre-out • 4 x 50 Watt internal amplifier • Built-in IR Eye
- Bluetooth interface ready (with optional BLT373)
- Meets ASTM B117 <Salt/Fog exposure> • Meets ASTM D4329 <UV exposure> • Humiseal coated PCB
- Sealed stainless steel chassis • New wired remote control (MW1/2) ready



Flip-down panel and CD/MP3/WMA/AAC playback



**Salt, fog and UV resistance**

Clarion's CMD6 main unit meets and exceeds the ASTM B117 and D4329 requirements for resistance to salt/fog and UV exposure. Beyond what is merely required, this unit features rubber gaskets and integrated drainage channels to keep water out, as well as corrosion resistant circuitry and chassis to safeguard against the effects of moisture.

**Direct USB iPod control**

The smart USB connection enables you to continue enjoying your favourite tunes offshore. Just connect your iPod's USB cable to the CMD6's rear USB input and you get complete control of your iPod including genre/album/song title search, and you can even use your iPod's control wheel (Simple control mode).

\* To connect an iPod, please use the USB cable included with your iPod. \* Please see our website for iPod models that can be connected.

**Rear AUX inputs**

With two sets of AUX inputs on the rear panel, you can connect to other external audio sources and enjoy your favourite music.



With the CMD6, you can fully control your USB-connected iPod via wired marine remote control (optional).



USB connector even supports playback of WMA/MP3/AAC files.



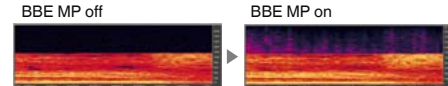
6-channel audio pre-out for system expansion

**BBE® MP for better sounding MP3/WMA/AAC files**

The BBE MP (Minimised Polynomial Non-Linear Saturation) Process improves digitally compressed sound such as MP3/WMA/AAC by restoring the harmonics that are lost through compression, thereby reproducing the warmth, details and nuances that you would otherwise miss. BBE MP enhanced harmonics even serve to make regular CDs sound better.

- Manufactured under license from BBE Sound, Inc.
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**• BBE MP Process**



\* This diagram illustrates the BBE MP effect

**Bluetooth® interface**

Keep your cell phone or Bluetooth Audio enabled playback device safe and sound in your pocket or purse while enjoying crystal-clear sound through the optional BLT373 Bluetooth transceiver.

**6-channel audio pre-out for system expansion**

Equipped with 6 channel pre-out for reproduction of sources with high sound quality. Together with adjustable crossover settings, the sound can be output to different speaker systems like Front 2 channels + Rear 2 channels + Subwoofer 2 channels.

● PERFORMANCE SUBWOOFER



Input MAX 300W

**CMQ2510W**  
25 CM (10") WATER RESISTANT PERFORMANCE SERIES SUBWOOFER

● PERFORMANCE SPEAKERS



Input MAX 100W

**CMQ1620R**  
16.5 CM (6 1/2") WATER RESISTANT PERFORMANCE SERIES COAXIAL SPEAKER



Input MAX 120W

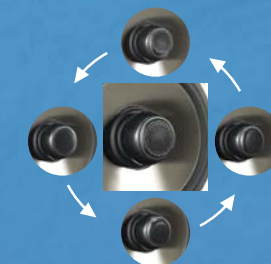
**CMQ1720R**  
17 CM (7") WATER RESISTANT PERFORMANCE SERIES COAXIAL SPEAKER

	CMQ1620R	CMQ1720R	CMQ2510W	FEATURES & SPECIFICATIONS
Speaker size (mm)	165	170	250	
Max. input (W)	100	120	300	
RMS input (W)	50	60	140	
Impedance (Ohms)	4	4	4	
Salt spray exposure (meets ASTM B117)	●	●	●	
UV exposure (meets ASTM D4329)	●	●	●	
Grille included	●	●	●	
Design	Coaxial	Coaxial	Free-air subwoofer	
PEI black tweeter (mm)	25.4	25.4	—	
PP injection cone woofer	●	●	●	
Stainless steel mounting screws	●	●	●	
Santoprene™ rubber surround edge	●	●	●	
Gold plated terminals	●	●	●	
Integrated into basket integrated magnetic shielding	●	●	●	
Ferrous oxide	●	●	●	
Frequency response (Hz)	60-20k	55-20k	30-600	
Sensitivity (dB)	88	88	85	

**QUALITY SPEAKER TECHNOLOGY**

**Variable angle tweeters**

Being on the water is no excuse for second-rate sound. That's why Clarion offers high-performance marine speakers that offer the water-resistance and durability you need, plus audiophile-pleasing features such as variable-angle tweeters. With the tweeter angle freely adjustable, you can more precisely create the soundscape you want in a wider variety of on-board installations. Unlike the insular, restricted space of a car, the boat has an open-air environment with special requirements. Clarion has you covered with advanced materials and design.



● WHITE SPEAKER



**CM1625**  
16.5 CM (6 1/2") COAXIAL 2-WAY WATER RESISTANT SPEAKER

- 100 Watt maximum music power • 16.5 cm (6-1/2") Mica-injection polypropylene woofer cone • Santoprene rubber surround • 1.9 cm (3/4") titanium-coated dome tweeter • Meets salt/fog and UV exposure standards (ASTM B117/D4329) • High impact centre 814 grille / frame • Liquid drainage system • Rubber insulated tinsel leads • Gold plated speaker terminals • Stainless steel mounting hardware • Rubber mounting gasket

**MW1**  
WATERTIGHT STAINLESS STEEL BLACK MARINE REMOTE CONTROL WITH LCD FOR CMV1 / CMD6



**CCA AUX**  
RCA / 3.5 mm AUX INPUT CABLE



**CMRC2-BSS**  
WATERTIGHT ROUND-SHAPED MARINE REMOTE CONTROL



**M101RXC**  
EXTENSION CABLE FOR CMRC2-BSS



**MW2**  
WATERTIGHT STAINLESS STEEL BLACK MARINE REMOTE CONTROL FOR CMV1 / CMD6



**CCA USB**  
USB EXTENSION CABLE



**M101CCA**  
MARINE REMOTE CONTROL INTERFACE CABLE

- Connect any Clarion head unit (with mini jack input) to a watertight marine remote control • Designed for CMRC2-BSS





## MULTIMEDIA/MAIN UNITS



**2-Zone entertainment**  
Function that allows people in the front and back seats to enjoy separate visual and 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.



**Dolby Digital**  
Technology used in DVDs for encoding and reproducing 5.1-channel surround sound. Main units that support this technology are capable of reproducing 5.1 surround through an appropriately equipped car speaker system, for cinematic sound enjoyment when viewing movies and other content.



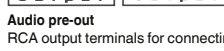
**6-disc CD changer**  
The built-in 6-disc CD changer lets you enjoy your favourite music for long periods of time without the need for switching CDs. So now on long drives, you can listen to your favourite music albums to your heart's content.



**AAC**  
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.



**AMP Cancellor**  
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 finest quality.



**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.



**AUX input**  
External audio inputs. They can be connected to equipment, such as a video game or portable player, with full control of the sound from your car audio system.



**BBE® MP (Minimised Polynomial Non-Linear Saturation)**  
Restores the harmonics that are lost during compression of digital audio files, thereby reproducing the warmth, details and nuances of the original source. Effective for CD playback too.  
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**Beat EQ**  
Provides 3 preset equalisation patterns (BASS BOOST, IMPACT, and EXCITE) and lets the user customise the steepness and range of the bass, midrange and treble portions of each pattern.



**Bluetooth® ready**  
Bluetooth compatibility provides the ability to wirelessly connect a variety of peripheral equipment including mobile phones. Main units offering this feature allow for hands-free mobile phone communication as well as audio streaming of files stored in the phone's memory, listenable through 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.



**CeNET**  
Original bus system developed by Clarion, which enables high-speed data transfer and high quality sound transmission. Your system can be upgraded with optional devices such as a CD changer, iPod interface and so on.



**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 mechanically.



**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-FET**  
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 dramatically improves the S/N ratio 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 source.



**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 realistic presence.



**Magna Bass EX**  
This bass enhancer is designed to boost ultra-low frequencies around 50 Hz compared to conventional loudness circuits operating around 100 Hz. The amount of boost depends on the volume level.



**OEL display**  
By using an OEL (Organic Electro Luminescence) display driven by film transistors, this front panel display can deliver images that are smoother than conventional LCDs, making it possible to show high quality graphics.



**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 wheel 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 EQ**  
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.



**RDS-EON tuner**  
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 stations.



**RDS-TMC tuner**  
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 roads.



**SLIDETRAK**  
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 SLIDETRAK.



**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 serenely elegant driving scene.



**Sound Restorer**  
The Sound Restorer extracts the harmonic components 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 source.



**Time Alignment control**  
Lets you easily adjust the time delay among the speakers to best suit your interior simply by choosing the car type (sedan, mini-van, etc.)



**Touch panel control**  
Based on pure H.M.I., it provides an intuitive and easy-to-use alternative to conventional buttons and knobs. Convenient one-touch 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.



**Touch sensor operation**  
Electrostatic operation buttons on the screen itself provide an advanced user interface, where touch functions are changed to coincide with the graphically displayed function icons. Hard-wired buttons are minimised.



**USB memory slot**  
The USB port enables playback of WMA/MP3 or even AAC files (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 colour to match the display.



**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.



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

## 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 17 cm (6-3/4") 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 input sounds.



**Neodymium magnet**  
Neodymium magnets feature high magnetic energy, which helps 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 pure sound.



**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.



**In-phase coaxial**  
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.



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



**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 obtained from ferrite magnets.



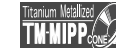
**Rear-vented pole piece**  
To prevent pressure from building up inside the centre cap and causing increased amplitude distortion, a vent is provided on the rear of the pole piece.



**Rubber surrounds**  
The rolled edge of the cone 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.



**TP-GF (Titanium-plated Glass Fibre) cone**  
Designed to offer max. 400 W power handling capability, the woofer uses a fibreglass cone with a vapour-deposited titanium coating to increase rigidity and response speed for tight bass with low distortion.



**Variable angle tweeter**  
The angle of the tweeter is adjustable according to the installation.



**Wide-range 50/80/120 kHz silk dome tweeter**  
These super tweeters use soft silk dome diaphragms and high-power magnets to achieve rich expressiveness. They offer reproduction up to 50 kHz, 80 kHz or 120 kHz for crystalline highs.



**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.