

# MAIN UNITS

## Driven by next-generation technology

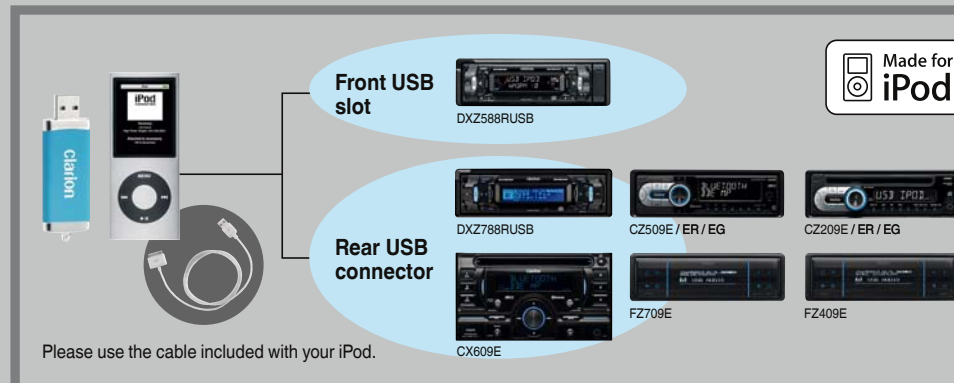
Clarion's expertise in in-vehicle audio and acoustical technologies enables the development of next-generation solutions that offer a new level of satisfaction. From superior sound performance to seamless integration with the newest media, Clarion main units bring major benefits into your car, at high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

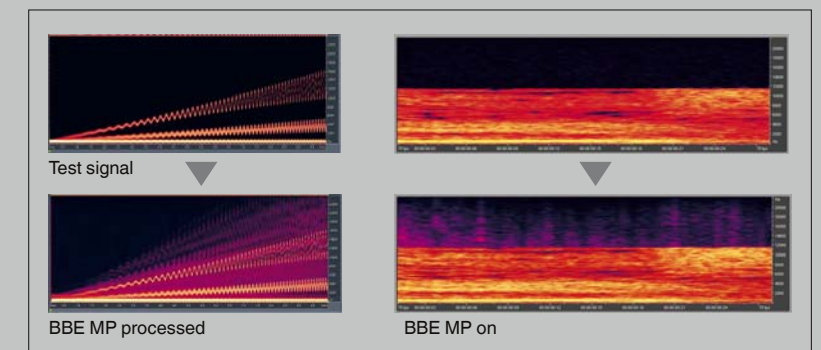


### BBE® MP for better sounding MP3/WMA/AAC files

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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### 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



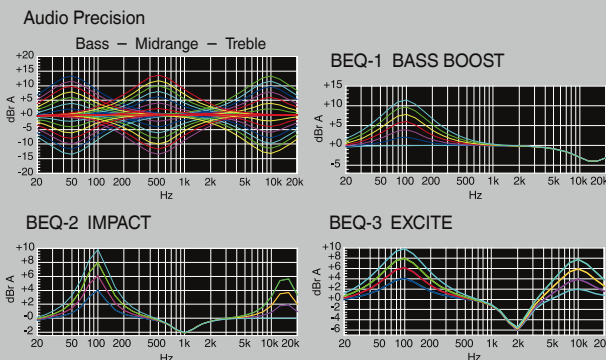
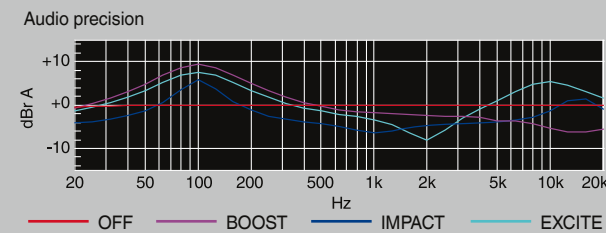
### Perfect balance of form and functionality

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

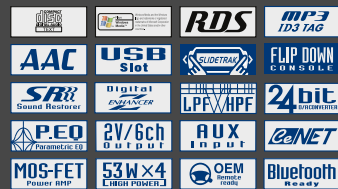


- CD-R/RW ready • MP3, WMA and iTunes® AAC compatible • Rear USB connector
- 18 FM, 6 MW/LW radio station presets • RDS-EON DSP tuner with variable bandwidth and Radio Text display • iPod direct control via USB • 6-volt / 6-channel audio pre-out
- Subwoofer level control • 24-bit D/A converter • Sound 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.

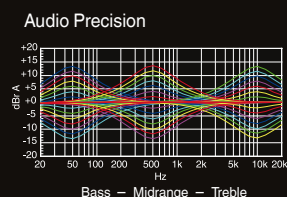
**BBE® MP for better sounding MP3/WMA/AAC files**  
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**Beat EQ for user customisable sound**  
In addition to providing 3 preset equalisation patterns — BASS BOOST, IMPACT, and EXCITE — Clarion's Beat EQ even lets you freely customise the level and 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
  - ALBUMS
  - GENRES
  - ARTISTS
  - SONGS
  - 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



DCP



CZ109ER



CZ109EG



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)

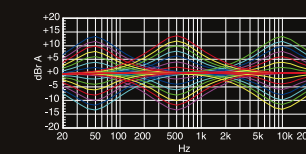
**Built-in Bluetooth hands-free**

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

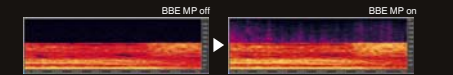


728-variable colour illumination

**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**



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- 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.

MAIN UNITS

MAIN UNITS



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

**CZ209E / CZ109E FEATURES**

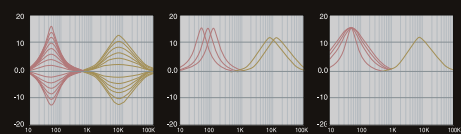
- CD-R/RW ready • MP3 and WMA compatible with ID3-TAG display • 18 FM, 6 MW/LW radio station presets • RDS-EON tuner • iPod direct control via USB (only for CZ209E) • Rear USB connector (only for CZ209E) • Front panel auxiliary input with level control • Z-Enhancer Plus sound customisation • MAGNA BASS 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.

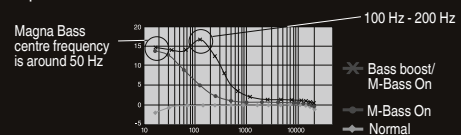
**Z-Enhancer Plus**

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.

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



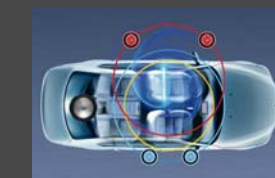
**WXZ468RMP**  
2-DIN 6-DISC CD/MP3/WMA RECEIVER WITH CeNET CONTROL

**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.



## 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

Microphone



**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.

### 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.

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#### Beat EQ for user customisable sound

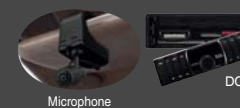
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Built-in Bluetooth hands-free Built-in Bluetooth audio streaming Rear USB enables connection of an iPod and USB memory devices. 6-channel audio pre-out

#### 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





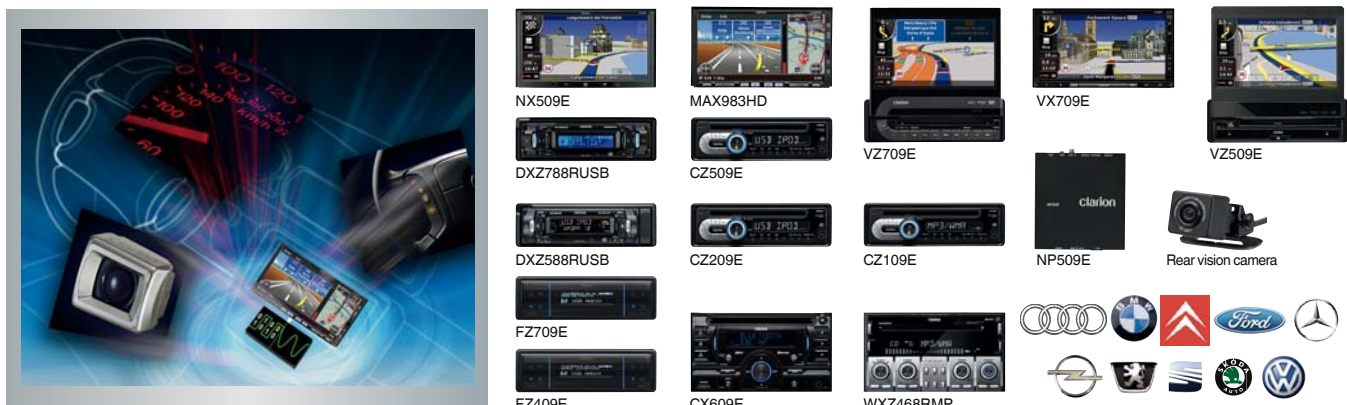
CIP (Clarion Installer Programme) offers the most professional fitting accessories to connect your Clarion device simply and safely to more than 200 different car models.

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

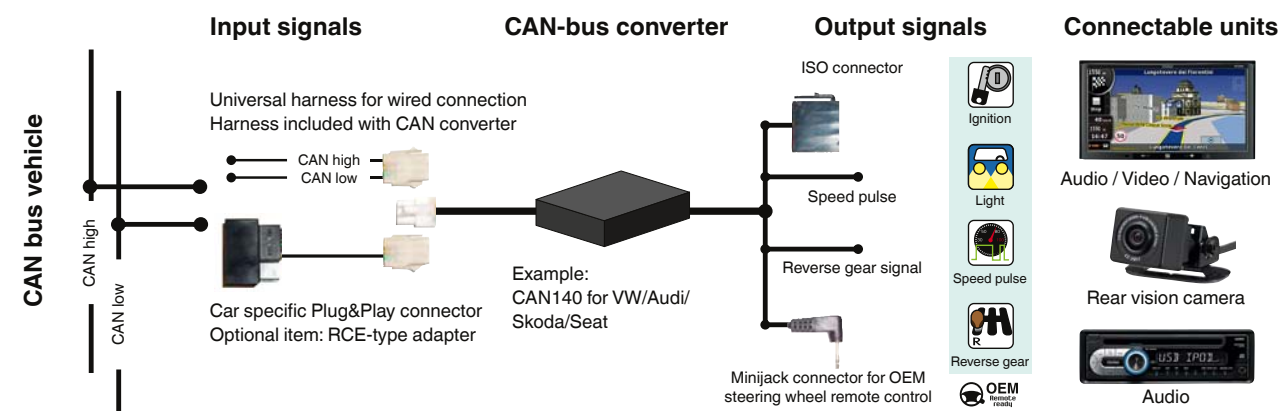
Please visit [www.clarion.com/cip](http://www.clarion.com/cip) to see the latest range of professional Clarion installation accessories online.

## 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)