

News Release

May 10, 2016

Pioneer Introduces New *Carrozzeria CYBER NAVI* with Fully Renewed Navigation Function and AV Capabilities

Achieves Advanced Car Life with Cutting-edge Technology and Network Connectivity



【AVIC-CL900-M】

Pioneer’s *Carrozzeria CYBER NAVI* has been completely renewed—using the latest cutting-edge technology and network connectivity—not only in terms of hardware, but also everything from its user interface and navigation function to AV and driving support capabilities.

In addition to adopting a new user interface that improves operability, new *CYBER NAVI* also includes the dedicated controller, “Smart Commander” that enables easy operation by drivers while driving. As well, it supports the “Rear Smart Commander”^{*1} app, which enables passengers sitting in the rear seat to operate it via smartphone.

It is also equipped with various advanced features that take advantage of its network connectivity^{*2}. Such features are “Live Info”^{*3}, which notifies the driver of latest information such as changes in traffic conditions and weather; “Super Route Finder”^{*4}, which searches for optimal routes by utilizing our probe data accumulated over years; “Music Cruise Channel”^{*5}, music streaming feature that recommends channels according to the location and time of day.

The newly developed “Multi Drive Assist Unit” supports every aspect of the car life, from driving to parking; with advanced driving assistance functions, which employs sophisticated image recognition technology; “Live Car Security”^{*6}, which notifies the driver of abnormalities with the car; and a diverse range of other features. Pioneer has also newly added a dedicated custom-fit 10” wide screen main unit to its lineup, for specific vehicle types.

The new *CYBER NAVI* also features sound effects produced by the internationally-active Japanese music producer Yasutaka Nakata, who has produced songs for Perfume and Kyary Pamyu Pamyu, Japanese pop singers, and soundtrack music for movies both in Japan and overseas.



【AVIC-CL900】



【AVIC-CW900】



【AVIC-CZ900】

Product	Model	Recommended retail price	Release Date
■ LS (large size display) main unit type			
8" wide screen XGA terrestrial digital TV / DVD-V / CD / Bluetooth / USB / SD / tuner, DSP AV all-in-one memory navigation, and multi drive assist unit set	AVIC-CL900-M	Open price	September
8" wide screen XGA terrestrial digital TV / DVD-V / CD / Bluetooth / USB / SD / tuner, DSP AV all-in-one memory navigation	AVIC-CL900	Open price	June
■ 200mm wide main unit type			
7" wide screen VGA terrestrial digital TV / DVD-V / CD / Bluetooth / USB / SD / tuner, DSP AV all-in-one memory navigation, multi drive assist unit set	AVIC-CW900-M	Open price	September
7" wide screen VGA terrestrial digital TV / DVD-V / CD / Bluetooth / USB / SD / tuner, DSP AV all-in-one memory navigation	AVIC-CW900	Open price	June
■ 2D main unit type			
7" wide screen VGA terrestrial digital TV / DVD-V / CD / Bluetooth / USB / SD / tuner, DSP AV all-in-one memory navigation, and multi drive assist unit set	AVIC-CZ900-M	Open price	September
7" wide screen VGA terrestrial digital TV / DVD-V / CD / Bluetooth / USB / SD / tuner, DSP AV all-in-one memory navigation	AVIC-CZ900	Open price	June

Key features:

1) New user interface facilitating improved, more comfortable operability

- The new *CYBER NAVI* enables stress-free operation, with a processing capability over three times more than previous models. It also supports a diverse range of operation methods, including pinch-in and pinch-out zoom operations.
- Newly designed “Home” and “Menu” screens that enable the user to freely change the size and layout of on-screen icons
- “Live Info”^{**3} that notifies the driver of the latest information via on-screen and voice messages in response to changes in traffic/driving conditions
- “Multi-layer Map Feature” that enables new information acquired by telecommunication, control keys and other information to be displayed as map overlays
- “Instant Menu Feature” that allows frequently used functions (such as route check and view change) to be called instantly from the map screen
- Startup sounds and other sound effects produced by music producer Yasutaka Tanaka
- Includes dedicated “Smart Commander” that enables the driver to control the *CYBER NAVI* easily and reliably, even when driving
- Also supports the “Rear Smart Commander”^{**1} app, which enables passengers sitting in the rear of the car to operate the main unit via smartphone



2) Enhanced navigational, AV and driving support capabilities through network connectivity, etc.

<Navigation capabilities>

- Features a new LCD panel, capable of expressing approximately 70 times more color tone/gradation than previous models, and a new map data format, offering an easy-to-see display even at locations where roads overlap
- Employs the newly developed “Regulus” dedicated positional accuracy system and “6-axis 3D Hybrid Sensor systems”, and supports simultaneous signal receipt from three different types of satellite (GPS, GLONASS and Michibiki/QZSS) and SBAS GPS corrective augmentation data, offering further improved vehicle positioning accuracy
- Supports the “Super Route Finder”^{**4}, which uses high-speed server-based processing of probe data accumulated over

many years via *Smart Loop*, which is our service to share data in a real time, to calculate optimal routes that consider time, distance, tolls and even driving efficiency. Also supports ETC toll charge discounts depending on the time of day

- Equipped with a database of locations with a high frequency of sudden braking, etc., compiled based on probe data accumulated over many years via *Smart Loop*. Displays such locations on the map as near-miss spots and alerts the driver by voice message when giving route guidance and before passing such points
- Supports VICS WIDE, which instantly displays emergency warnings issued by the Japan Meteorological Agency and displays the area over which the warnings apply on the map. Enables route guidance considering more traffic congestion information finding than with conventional FM multiple broadcasting



Sky View display



Near-miss spots are displayed on the on-screen map



The "Regulus" system increases car positioning accuracy

<AV capabilities>

- High audio-quality design that thoroughly eliminates noise through an independent circuit board configuration that separates audio and car navigation circuitry, and optimizes the signal transmission and electrical power supply patterns
- Adopts selected high-quality audio components, such as our own high-performance 48bit dual core DSP
- Equipped with "Network Mode" for making speaker adjustments, enabling natural sound
- Includes features such as the "Music Cruise Channel"*5 music streaming function; the "Live Recommendations Feature"*5, which recommends channels to match driving conditions such as the time of day, destination and current car location; and "MCC Library Mode"*5, which enables playback of songs stored on the user's smartphone
- Supports "Rear Separate Mode"*7, mirroring of the *CYBER NAVI*'s navigation screen or independent playback of AV sources on a rear monitor



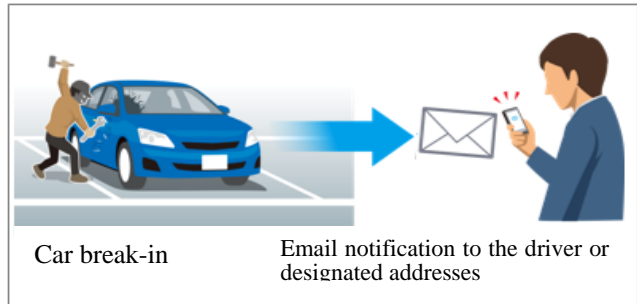
"Live Recommendations Feature" suggests music channels to match the current driving situation

<Driving support capabilities>

Equipped with features that support every aspect of the car life, working in tandem with the newly developed "Multi Drive Assist Unit"; such as advanced driving assistance functions which use sophisticated image recognition technology to alert the driver when the car gets too close to the car in front, and "Live Car Security"*6 which detects abnormalities of the car and notifies the driver of with. It also supports the newly developed compact "Floor Camera Unit", which is equipped with an infrared LED that enables the camera to operate and shoot even at night.



“Advanced Driving Assistance Functions”
use image recognition technology



“Live Car Security” records abnormalities of the
car and notifies the driver via e-mail

■ While driving

- “Front Car Proximity Alert”: estimates arrival time to the car in front and warns the driver via sounds and on-screen messages when there is danger of collision
- “Accidental Start Warning”: warns the driver via sounds and on screen messages to prevent a rear-end collision when the driver’s car advances before the car in front starts moving
- “Following Start Detection During Right Turn”: warns the driver who has stopped at a right-turn intersection when starting off after the car in front
- “Keeping Lane Support”: alerts the driver via sounds and on-screen messages when the car has continuously veered to one side of the lane when driving on both expressways and ordinary roads
- “Drive Recorder”: constantly records and stores the driving situation in high-quality video
- “Event Video Recording”: saves video footage from 20 seconds prior to detection and 10 second after when an impact to the car is detected
- “Accident Info”^{*6}: determines the risk level according to an original algorithm when “Event Video Recording“ is activated, and sends a still image and positional information to the designated email addresses

■ When parked

- “Security Video and Still Image Recording”: automatically records and stores video and still images when abnormalities of the car are detected
- “Security Info”^{*6}: sends a still image and positional information to the designated email addresses when abnormalities of the car are detected

3) Dedicated custom fit 10” wide screen main units (for specific car types)

- Features a 10” Excel Lumina HD wide screen XGA panel that enables sophisticated high-luminosity, high-contrast image reproduction
- Uses static electricity sensor keys and texture gradation processing of key-illumination areas to present an advanced, high-quality console display. Also supports a dedicated floor camera unit^{*8} mounted on the unit.
- Includes a dedicated attachment holder for the “Smart Commander” accessory^{*9}
- Loaded with High-quality Audio Expert Tuning Data, custom-tuned for specific car types
- Loaded with Dedicated Custom Setting Data that enables immediate use in an optimal state, immediately after installation

4) Full support for version upgrades

- Version upgrades are possible for up to three years from the month of commencing usage, at no additional charge^{*10}
- Supports “Smartphone Update (incremental updates)”, which allows version upgrades via mobile devices such as smartphones by using the dedicated “Smart Update for Carrozzeria” app^{*11}
- Supports “Full Data Updates”, which allow version upgrades from PCs via SD memory cards (sold separately, requires storage capacity of 16GB capacity or more) ^{*12}
- Includes a special service voucher that allows up to one-year’s free trial use of new membership-based “MapFan Smart Members” service, which is designed to support the driving experience of *CYBER NAVI* users^{*13}

- *1: The free “Rear Smart Commander” app, free of charge can be used on mobile devices running iOS9.0 or higher, or AndroidOS5.0 or higher. Details of devices for which normal operation has been verified will be displayed on the *Carrozzeria* website as and when such information becomes available.
 - *2: Use of communications functions requires the dedicated ND-DC2 data transfer communications module (option), or a smartphone, etc., which supports Wi-Fi or Bluetooth (PAN profile) connectivity. Connection via a smartphone requires signing of a tethering contract and configuration of tethering settings.
 - *3: Some functions of the “Live Info” can be used without a network connection. Support for certain Live Info-related functions, such as parking space availability information and “Smart Loop eye” is scheduled to run from the end of June 2016 onwards. A version upgrade to the *CYBER NAVI* unit will be necessary in order to use these features.
 - *4: Support for “Super Route Finder” is scheduled to run from fall 2016 onwards. A version upgrade to the *CYBER NAVI unit* will be necessary in order to use this feature.
 - *5: Using “Music Cruise Channel” requires subscription to the replay music streaming service (subscription ¥3,600 per year excl. tax; registration includes usage rights for one year, allowing one year’s free use of this feature from the date of initial use without incurring subscription charges) operated by RecoChoku Co, Ltd.; and a smartphone or other mobile device installed with the dedicated “Music Cruise Channel 2” app (free; supports devices running iOS9.0 or higher, or AndroidOS4.4 or higher) for *CYBER NAVI* 2016 models, which supports “Music Cruise Channel”. Support for the “Live Recommendations” and “MCC Library Mode” are scheduled to run from fall 2016 onwards. A version upgrade to the *CYBER NAVI* unit will be necessary in order to use these features.
 - *6: The “Security Info” can only be used when the dedicated ND-DC2 data transfer communications module, which is sold separately, is connected to the “Multi Drive Assist Unit”.
 - *7: “Rear Separate Mode” cannot be used when Network Mode is activated.
 - *8: The dedicated large size screen model (CE900 Series) “Multi Drive Assist Unit” set model includes a dedicated “Floor Camera Unit”.
 - *9: The AVIC-CE900AL/CE900AL-M/CE900VE/CE900VE-M models include two types of holder, which can be chosen to fit the shape of the car console.
 - *10: Where the communication features are unused, the 3-year Version Upgrade period shall be effective until April 30, 2019 (or October 31, 2019). Where the communication features are used, the upgrade period shall be effective until April 30, 2020 (or October 31, 2020).
 - *11: Requires a smartphone or similar device installed with the Smart Update for *Carrozzeria* app (free; can be used on devices running iOS9.0 or higher, or AndroidOS4.4 or higher). Details of devices for which normal operation has been verified will be displayed on the MapFan and *Carrozzeria* websites as and when such information becomes available.
 - *12: Operating system support for Windows 10/8.1/7 and MacOSX10.9.2 or higher.
 - *13: “MapFan Smart Members” and “Smart Update for *Carrozzeria*” are operated by Increment P Corporation.
- * “replay” is a trademark of RecoChoku Co, Ltd. (application for registration pending).
- * Other company names and product names mentioned are trademarks or registered trademarks of their respective companies.