

clarion®

Owner's manual, Installation manual & Warranty card

Owner's manual, Installation manual & Warranty card

Mode d'emploi, Manuel d'installation et Carte de garantie

Manuel d'utilisation, Manuel d'installation et Carte de garantie

Manual de instrucciones, manual de instalación y Tarjeta de garantía

Manual del propietario, Manual de instalación y Tarjeta de garantía

Bedienungssanleitung, Installationsanleitung und Garantiekarte

Manuale dell'utente, manuale di installazione e Certificato di garanzia

Gebruikershandleiding, Installatiehandleiding & Garantie kaart

Bruksanvisning, Installationshandbok och Garantikort

Instrukcja użytkownika, Instrukcja montażu i Karta gwarancyjna

Εγχειρίδιο κατόχου, Εγχειρίδιο εγκατάστασης και Η Κάρτα εγγύησης

Uživatelská příručka, Instalační příručka a Záruční list

Руководство пользователя, Инструкция по установке и Гарантийный талон

取付・取扱説明書(保証書付)

Z3

Full Digital Sound Processor with Tweeter

Full Digital Sound Processor with Tweeter

Processeur de son numérique avec haut-parleur d'aigus

Processeur sonore entièrement numérique avec haut-parleur d'aigus

Procesador de sonido digital completo con tweeter

Procesador de audio completamente digital con Tweeter

Voll digitaler Sound-Prozessor mit Tweeter

Processore audio interamente digitale con tweeter

Volledig digitale geluidsprocessor met tweeter

Komplett digital ljudprocessor med diskanthögtalare

Pełny cyfrowy procesor sygnałowy z głośnikiem wysokotonowym

Πλήρως ψηφιακός επεξεργαστής ήχου με Tweeter

Plně digitální zvukový procesor s výškovým reproduktorem

Цифровой звуковой процессор с высокочастотным динамиком

フルデジタルサウンドプロセッサー(ツイーター付)

Thank you for purchasing this Clarion product.

- Please read this owner's manual in its entirety before operating this device.
- After reading this manual, be sure to keep it in a handy place (e.g., glove compartment).
- Check the contents of the enclosed warranty card and keep it carefully with this manual.

Contents

PRECAUTIONS	1
COMMANDER OPERATIONS	2
Sound Settings	3
Additional Settings	4
Error Messages	5
Troubleshooting	5
Specifications	5
APPLICATION USAGE	6
Before Using	6
Sound Settings	7

PRECAUTIONS

⚠ WARNING

- For your safety, the driver should not operate the controls while driving.
- Also, while driving, keep the volume to a level at which external sounds can be heard.

The device can set sound effects through the configured commander or download the “Z-tune” application to take sound settings from your smartphone or tablet.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

INFORMATION FOR USERS:

Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Do not use benzene or paint thinner, car cleaner, polish spray, or similar fluids.

- Use of these fluids inside the vehicle will, for example, cause inflammable gas to ignite and cause fire.
- Also, use of these for daily care of this product will deform material or cause paint to peel off.

About the registered marks, etc.

Made for

iPhone iPad

“Made for iPhone” and “Made for iPad” mean that an electronic accessory has been designed to connect specifically to iPhone or iPad, respectively, and has been certified by the developer to meet Apple performance standards. Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards. Please note that the use of this accessory with iPhone or iPad may affect wireless performance.

iPhone, iPad and Lightning are trademarks of Apple Inc., registered in the U.S. and other countries. iPad Air and iPad mini are trademarks of Apple Inc.

App Store is a service mark of Apple Inc., registered in the U.S. and other countries.

The trademark “iPhone” is used with a license from Aiphone K.K.

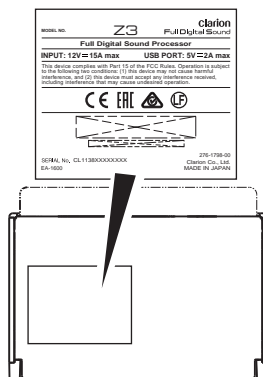
IOS is a trademark or registered trademark of Cisco in the U.S. and other countries and is used under license.

- Google, Android™ and GooglePlay™ are a trademark or registered trademark of Google Inc.

• Dnote

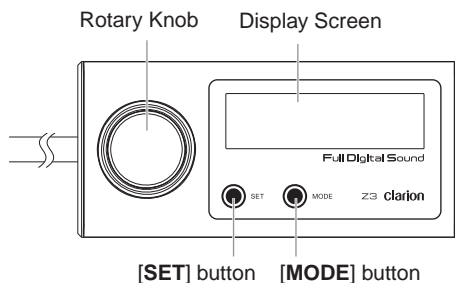
Trigence Semiconductor's Dnote technology is used for digital signal processing.

Dnote is a registered trademark of Trigence Semiconductor, Inc.



Bottom View of Main Unit

OPERATIONS



Sound Settings

1. Press **[MODE]** button, and setting item will start flashing. Then rotate the knob, the sound setting is switched according to the following sequences.

Main VOL ⇄ **SW VOL** ⇄ **Memory select**
 * ⇄ **Intelligent Tune** * ⇄ **Intelligent Tune Detail Setting** * ⇄ **Balance** ⇄ **Fader** ⇄
Source ⇄ **Audio Sense** ⇄ **Brightness** ⇄
Beep

- **Main VOL:** Adjust master volume. The master volume of each source is independent of each other.
- **SW VOL:** Adjust subwoofer volume. The subwoofer volume of each source is independent of each other.
- **Memory select:** Switch application "Z-tune" saved sound effect Custom Memory (→ Page 7 "Various kinds of settings of Custom Memory")
- **Intelligent Tune Detail Setting:** Intelligent Tune detailed setting. It can only be displayed when the Intelligent Tune setting is "ON".
- **Intelligent Tune:** Turn on/off Intelligent Tune sound effect.
- **Balance:** Adjust volume balance of left and right speakers.
- **Fader:** Adjust volume balance of front and rear speakers.
- **Source:** Switch the input source of the device.
- **Audio Sense:** Adjust the input gain of analog input.
- **Brightness:** Display brightness adjustment.
- **Beep:** Beep sound ON/OFF.

Note:

* These items will not be displayed when you use "Z-tune" application when connecting your smartphone or tablet.

2. Press **[SET]** button, and then rotate the knob or press **[SET]** button to adjust the setting value.

Note:

When the setting value is "ON/OFF", please press **[SET]** button to switch ON/OFF.

- **Main VOL:** -00 dB ~ -99 dB, 1dB/step (default: -40 dB)
- **SW VOL:** -10.0 ~ +10.0, 0.5/1step (default: 00.0)
- **Memory select:** Custom memory 1 ~ 4 (default: Custom memory 1)
- **Intelligent Tune:** ON / OFF (default: ON)
- **Intelligent Tune Detail Setting:** Sound Restorer / Virtual Bass / Tone Filter / Reverb Control (Detailed operation is described in subsequent part additionally)
- **Balance:** Left 12 ~ Center ~ Right 12 (default: Center)
- **Fader:** Rear 12 ~ Center ~ Front 12 (default: Center)
- **Source:** Digital optical / Digital coaxial / Analog / USB (default: Digital optical)
 USB: Smartphone or tablet supporting USB audio function. USB flash disk and SD card are not supported.

If you want to enjoy the music of an Android smartphone or tablet, please connect the smartphone or tablet to the main unit through the USB cables included with this device. (Figure 1)

Note:

Please refer the Clarion website to check the compatible Android smartphones and tablets.

Sound Setting

- **Audio Sense:** Low / Mid / High (default: Low)
- **Brightness:** OFF / Level 01 ~ Level 10 (default: Level 05)
- **Beep:** ON / OFF (default: ON)

- ① USB cable (Included with this device)
- ② USB - micro USB cable (Sold separately)
- ③ OTG cable (Sold separately)

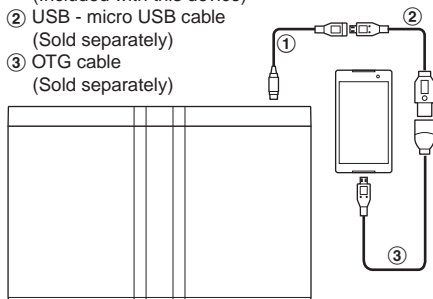


Figure 1

3. Press **[SET]** button to complete setting.

Note:

After completing the settings it will revert back to "Main VOL" setting automatically if you don't press **[MODE]** button or rotate the knob. Press **[MODE]** button to go back to the previous setting item.

Intelligent Tune Detail Setting

1. Press **[MODE]** button and then rotate the knob to select sound item "Intelligent Tune Detail Setting".

Additional Settings

1. Press **[MODE]** button and **[SET]** button simultaneously, maintaining for more than 3s. When the setting item is flashing, rotate the knob to switch the setting item.

Initialize ⇄ **Firmware update** ⇄ **Navi mix** ⇄ **Auto Dimmer** ⇄ **Software Ver.**

- **Initialize:** User setting initialisation.
- **Firmware update:** If you want to update the firmware, please consult your dealer.
- **Navi mix:** When smartphone/tablet and navigation unit are connected simultaneously, you can choose if the navigation guide sounds will be mixed or not.

Note:

The volume of the navigation voice can not be adjusted by this unit. The volume of navigation voice depends on which source it outputs from, such as Analog, Coaxial or Optical.

2. Press **[SET]** button, then rotate the knob to switch the Intelligent Tune sound according to the following sequences.

Sound Restorer ⇄ **Virtual Bass** ⇄ **Tone Filter** ⇄ **Reverb Control**

- **Sound Restorer:** Full quality sound reproduction of compressed audio data.
- **Virtual Bass:** To deliver powerful bass just like an additional subwoofer.
- **Tone Filter:** Control the attack and the reverberation of sound source (instrument sounds etc.).
- **Reverb Control:** Reproduce the natural reverberation in the car by controlling the reverberation included in the sound source.

3. Press **[SET]** button and rotate knob to switch setting value.

• **Sound Restorer / Virtual Bass / Reverb Control :** OFF / Low/ Mid / High (default: OFF)

• **Tone Filter:** Vivid+2 / Vivid+1 / OFF / Vintage+1 / Vintage+2 (default: OFF)

4. Press **[SET]** button to complete setting.

Mute

Press the knob to turn mute ON/OFF.

- **Auto Dimmer:** Automatic dimmer ON/OFF.
- **Software Ver:** Display the version of software.

2. Press **[SET]** button and rotate the knob or press **[SET]** button to switch setting value.

Note:

When the setting value is "ON/OFF", please press **[SET]** button to switch ON/OFF.

- **Initialize:** Start?/Cancel? Start? - Start initialisation. Cancel? - Cancel initialisation.
- **Firmware update:** Start?/Cancel? Start? - Start update. Cancel? - Cancel update.
- **Navi mix:** Coaxial/Optical/Analog/OFF (default: OFF)
- **Auto Dimmer:** ON/OFF (default: ON)

3. Press **[SET]** button to start operation.

Error Messages

If an error occurs, one of the following messages will be displayed. Take the measures described below to eliminate the problem.

Error Message	Cause	Resolution
USB Device not responding	USB device cannot be identified.	Please unplug the connected device.
USB Hub not supported	This device does not support USB Hub.	
USB Device not supported	Non-supported device is connected.	
USB Error Check port	Over-current protection.	Please unplug the connected device and then ACC OFF.

If an error display other than the ones described above appears, restart this device. If the problem persists, turn off the power and consult your dealer.

Troubleshooting

Problem	Cause	Resolution
Power cannot be turned on.	Fuse is blown.	Replace with a fuse of the same amperage. If the fuse blows again, consult your dealer.
	Incorrect wiring.	Consult your dealer.
Nothing happens when buttons are pressed. Display is not accurate.	Main unit connectors are dirty.	Wipe the dirt off with a soft cloth moistened with cleaning alcohol.
No sound can be heard	The speaker protection circuit is operating.	Turn down sound volume. Function can also be restored by turning the power off and on again. (Speaker volume is reduced automatically when the speaker protection circuit operates). If the sound is muted again, consult our service department.

Specifications

Tweeter Output:

Maximum Power: 9W (4.5W x 2 Driver) x 2ch

Rated Power: 6W (3W x 2 Driver) x 2ch

Speaker Impedance: 6 Ω x 2ch

Analog Output: 4Vrms (vol 0dB)

Signal to Noise Ratio: 110dB (A-Weighted)

Distortion: 0.01%

Analogue Input: RCA input / Power input

Audio Sense:

Low: RCA-in=4Vrms/power-in=8Vrms

Mid: RCA-in=2Vrms/power-in=4Vrms

High: RCA-in=1Vrms/power-in=2Vrms

Digital Coaxial Input: 0.5Vp-p/75 Ω

Digital Optical: Max 96kHz/24Bit/PCM

Power Supply Voltage: 10.8~15.6V DC, negative ground

Power Consumption: Less than 15 A

Weight : 0.66 kg (Main unit)

0.385 kg (Commander)

Dimensions / Main unit:

7" (Width) x 1-4/9" (Height) x 4-7/12" (Depth)

180 (W) x 37 (H) x 116 (D) mm

Dimensions / Commander:

3-14/15" (Width) x 1" (Height) x 1-4/5" (Depth)

100 (W) x 26.9 (H) x 46 (D) mm (Commander)

Note:


Specifications and design are subject to change without notice for further improvement.

APPLICATION USAGE

Adjust the system sound quality through the application. It can be more intuitive and convenient for use.

Before Using

1. Through personal smartphone or tablet (iOS or Android system), search and install

"**Z-tune**"  application from the App Store® or the Google Play™ store.

Note:

Please refer the Clarion website to check the compatible smartphones and tablets.

2. After launching "**Z-tune**" the application, please connect the smartphone or tablet with installed "**Z-tune**" application to the main unit through the USB cable included with this device. (Figure 2)
3. After the smartphone or tablet is connected to the main unit successfully, the following prompt screen will be displayed. If the connection is unsuccessful, please confirm

whether the smartphone or tablet is connected correctly or clear the tasks other than "**Z-tune**" on your smartphone or tablet.

Touch "**Yes**", if you would like to copy the Custom Memory saved in the main unit. The Custom Memory on your application will be replaced.

Touch "**No**", if you would like to keep the Custom Memory on your application.

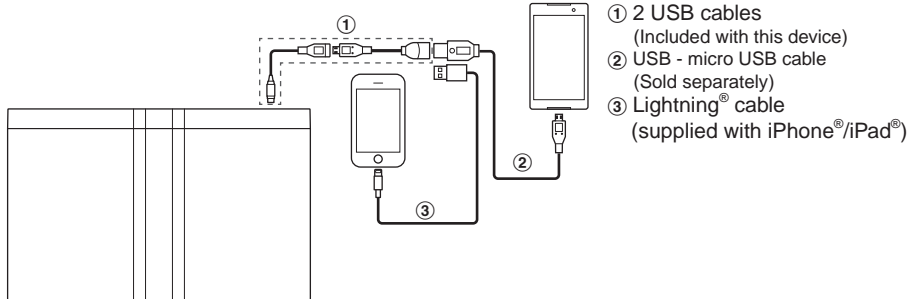


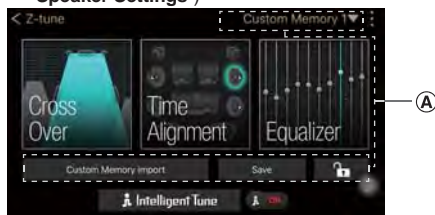
Figure 2

Sound Settings

1. Start **"Z-tune"** application.
2. Enter into precautions prompt screen after initial start-up.
3. After reading the precautions carefully, touch **OK** and enter into main menu screen of sound settings.

Note:

The first time you launch the application, it will display the Speaker Settings. (→ Page 9 "Speaker Settings")



- **< Z Tune**: Close "Z-tune" application.
- **⋮**: Other setting.
- **A**: Various kinds of settings of Custom Memory.
- **Cross Over**: Cross Over setting.
- **Time Alignment**: Time Alignment setting.
- **Equalizer**: Equalizer setting.
- **Intelligent Tune**: Turn on/off Intelligent Tune sound effect. After being turned off, it cannot set Intelligent Tune.
- **Intelligent Tune**: Intelligent Tune setting.

Various Kinds of Setting of Custom Memory

Save the set sound effect (Cross Over, Time Alignment and Equalizer). Then you can select the sound effect settings through the commander. (→ Page 3 setting item "Memory Select").

On the main menu screen, set the Custom Memory through the following operation.

- **Custom Memory 1**: Select Custom Memory to be saved in pull-down menu.
- **Custom Memory import**: Import other Custom Memory's sound setting (Cross Over, Time Alignment and Equalizer) into current Custom Memory.

- **Save**: After all setting items are adjusted, go back to main screen and touch the button to save the settings in currently selected Custom Memory.

Note:

It may need 3s for saving to complete. During the saving period, the application cannot be operated. Don't disconnect the smartphone or tablet connection and also don't turn off ACC or power. Otherwise, it may cause the set contents not to be saved.

- **Lock**: Lock the currently selected Custom Memory. After being locked, adjustment items (Cross Over, Time Alignment and Equalizer), Custom Memory import and Save function in Custom Memory cannot be applied.

Cross Over Settings

Adjust the frequency and gain of each speaker.

1. Touch **Cross Over** on the main menu screen and enter into Cross Over setting screen.

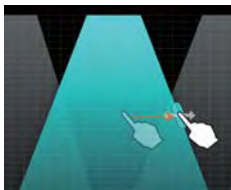


- **SP FL**: Select the speaker to be taken Cross Over setting. Or touch other trapezoid to switch to other speakers. 4 graphs mean 4 kinds of speakers.
- On the screen, make free adjustments for Cross Over through finger.

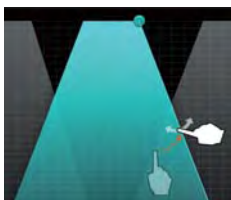


- **Frequency adjustment**: Click on the point of left or right hypotenuses and drag two hypotenuses to adjust the frequency according to the arrow direction.

Sound settings




- Slope adjustment: Click on the point of left-up corner or right-up corner, and drag left and right hypotenuses to adjust the slope according to the arrow direction.







- Gain adjustments: Click on the point on the top, and drag the top side to adjust the gain according to the arrow direction.



2. Touch , and enter into detailed adjustment screen.



-  /  /  /  : Adjust setting value.
- **NOR** / **REV** : Set the phase setting as normal phase or reverse phase.
- **Initialize**: Reset Cross Over setting (Frequency, Slope, Gain and Phase) to initial values.


Note:

Only the settings of currently selected speaker are reset to the initial values.




- **Copy to XX XX**: Copy the current speaker setting value (Gain and Phase) to right or left speaker.

Time Alignment Settings

Set the distance between each speaker and the listening point.

1. On the main menu screen, touch , and enter into Time Alignment setting screen.




-  /  : Decrease or increase the distance of all speakers from the listening point. Continuous touching can make continuous adjustments.
- Dragging adjustment: Touch and select a speaker to be adjusted and drag the . It can increase or decrease the distance of currently selected speaker from listening point.
- Mute setting: Touch speaker icon to turn ON/OFF each speaker's sound output.
- **cm** / **inch** : Switch cm/inch.
- **Initialize**: Reset Time Alignment settings (distance/ mute setting) to the initial values.

Note:

Only the settings of currently selected speaker are reset to initial values.

Equalizer Settings

Increase or decrease the gain of frequency band to adjust the sound quality.

1. On the main menu screen, touch , and enter into equalizer setting screen.

Sound settings



- **TW L**: Select the speaker to be taken to the Equalizer setting.
- Free adjustment: Draw a line with your finger to adjust the gain.
- Adjust each frequency: Touch one frequency and drag the slider up and down to adjust the gain.
- **< / >**: Select frequency. Touch one frequency and touch the button to select adjustment.
- **✓ / ✗**: Adjust gain. Touch one frequency in selection graph, and touch the button to select frequency.
- **Sync LR**: Sync the setting value (frequency and gain) to left or right speaker (the object is currently selected speaker).
- **Flat**: Reset the Equalizer setting to initial values.
- Zoom: Double tap the frequency, and the screen is zoomed-in/out.

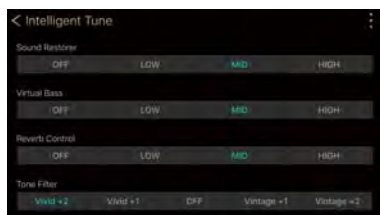
Note:

In the zoomed-in screen, it cannot be adjusted by drawing a line. It can be adjusted only by dragging the slider on the selected frequency.

Intelligent Tune Settings

Change various kinds of sound characteristics.

1. On the main menu screen, touch **Intelligent Tune**, and enter into Intelligent Tune setting screen.



2. Choose the items on the menu to change the settings.

Additional Settings

1. Touch **⋮** the top right of any screen to display the pull-down menu.



- **Help**: Display related operation prompts on each screen and touch **⊗** on the top left of screen to turn off the prompt screen.

Notes:

When application is initially installed, some screens will display operation prompts automatically.

Help is grayed-out and there are no prompts on some screens.

- **Speaker Setting**: Select the speaker configuration setting corresponding to each system.
- **Notice**: Display precautions.
- **Equalizer Pro**: Set the flat equalizer value. (Detailed operation is in following description.)

Speaker Settings

Select corresponding setting according to the speaker configuration of vehicle, and set Cross Over, Time Alignment and Equalizer values.

1. Select **"Speaker Setting"** in pull-down menu of **"Additional Settings"** and enter into speaker setting screen.

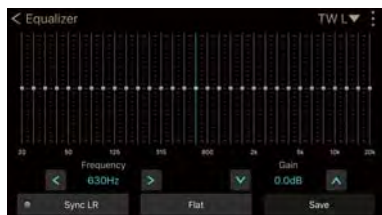


2. According to the speaker configuration, select the corresponding setting. Then select the corresponding subwoofer configuration.
3. After the setting is completed, touch **Set** and go back to previous screen.

Sound settings

Flat Equalizer Settings Values

1. Select **"Equalizer Pro"** in pull-down menu of **"Other Settings"** and enter into initial value setting screen.



See **"Equalizer settings"** (Page 8) for detailed operation.

2. After the setting is completed, touch **Save** and select **"Yes"** to save the settings. The main unit will automatically restart after saving.