

# Owner's manual & Installation manual

Pedoman Pemilik & Pemasangan 사용설명서 및 설치설명서 使用说明书 & 安装手册 คู่มือใช้งานและคู่มือการติดตั้ง



USB/MP3/WMA DIGITAL MEDIA RECEIVER PENERIMA MEDIA DIGITAL USB/MP3/WMA USB/MP3/WMA 디지털 미디어 수신기 USB/MP3/WMA 数字媒体接收机 เครื่องรับสัญญาณสื่อดิจิตอล USB/MP3/WMA

# Contents

Thank you for purchasing this Clarion product.

- Please fully read this owner's manual before operating this equipment.
  Check the contents of the enclosed warranty card and store it in a safe place with this manual.

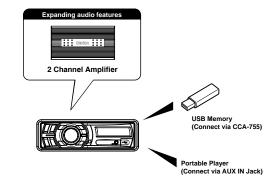
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# 1. FEATURES

- Front USB Input and Front Panel Auxiliary Input
- MP3/WMA Compatible with ID3-TAG Display
- 2ch RCA Output



# **Expanding Systems**



#### Note:

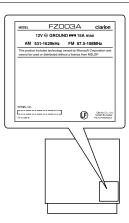
- The items listed outside of the frames are the commercial products generally sold-
- CCA-755: Sold by separately-

# 2. 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.

1. This unit uses precision parts and components for its operation. In the event that trouble arises, never open the case, disassemble the unit, or lubricate the rotating parts. Contact your Clarion dealer or service center.



# Front Panel / Generalities

For a longer service life, be sure to read the following cautions.

- . Do not allow any liquids on the unit from drinks, umbrellas, etc. Doing so may damage the internal circuitry.
- · Do not disassemble or modify the unit in any way. Doing so may result in damage.
- · Do not let cigarettes burn the display. Doing so may damage or deform the body.
- · If a problem should occur, have the unit inspected at your store of purchase.

#### Cleaning the body

- . Use a soft, dry cloth and gently wipe off the any dirt or dust.
- · For tough dirt, apply some neutral detergent diluted in water to a soft cloth, wipe off the dirt gently, then wipe again with a dry cloth.
- · Do not use benzene, thinner, car cleaner, etc., as these substances may damage the body or cause the paint to peel. Also, leaving rubber or plastic products in contact with the body for long periods of time may cause stains.

# **USB Port**

- · The USB memory stick may stick out when inserted, so it may cause danger during driving. When connect USB memory stick to the main unit, please use a USB extension cable(CCA-755).
- · The USB memory sticks must be recognized as "USB mass storage class" to work properly. Some models may not operate correctly.

#### When the memorized data is lost or damaged by any chance, Clarion shall not be liable for any damage.

When using the USB memory stick, we recommend that you backup your data stored on it before using a personal computer etc.

· Data files may be broken when using USB memory sticks in the following situation: When disconnecting the USB memory stick or turning the power off during reading data.

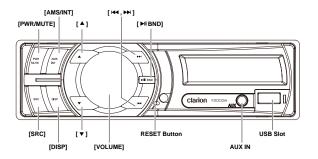
When affected static electricity or electric

Connect/disconnect the USB memory stick when it is not accessed.

Connecting with the computer is not covered.

# 3. CONTROLS

# **Operational Panel**



#### [PWR/MUTE] button

- Press to POWER on;
- . When on, press to MUTE:
- · Long press to POWER off.

#### [AMS/INT] button

- Radio mode Scan preset stations, long press to search and store strongest stations in the memory automatically.
- USB mode Press to intro play, long press to enter TRACK NUM SEARCH

#### [SRC] button

· Select playback source

#### [DISP] button

· Display switch, long press to adjust time.

#### [ A ] button

- Radio mode Press to select next preset station. In manual store mode, press to select a preset position.
- USB mode Press to select repeat play, long press to enter next folder.

#### [▼] button

- Radio mode Press to select previous preset station. In manual store mode, press to select a preset position.
- USB mode Press to random play, long press to enter previous folder.

#### [VOLUME] knob

- · Rotate to adjust the volume level.
- Press to set sound effect.
- · Long press to enter setting menu.

#### [ Idd , ▶ → ] button

- Radio mode Press to tune manually.
   Long press to tune automatically.
- USB mode Press to goto previous track, long press to fast-reverse/forward.

#### [ ► BND] button

- Radio mode Press to switch BAND, In manual tuning mode, long press to store station.
- USB mode Press to play/pause, long press to back to the first track.

# Remote Control (RCX009: Sold Separately)

#### [ 0 ] Button

· Power on / off

#### [ ▲ , ▼ ] Buttons

- Volume up / down
- . In setting menu, move the cursor.

#### [MUTE] Button

Mute the volume

#### [SEL] Button

- Sound effect setting
- · System setting (long press)

#### **[LOUD]** Button

Loudness on / off

#### [ST/MO] Button

· FM stereo / mono

#### [1~6] Buttons

- [1] Button: Preset station 1
  - Play/pause
- [2] Button: Preset station 2 Intro play
- [3] Button: Preset station 3
- Repeat play

   [4] Button: Preset station 4
- Random play
- [5] Button: Preset station 5
   Previous folder
- [6] Button: Preset station 6
- Next folder

#### [ H◄, ►► ] Buttons

- · Preset station up / down
- · Previous / next track
- Search (long press)

#### [SRC] Button

· Toggle the audio source

#### [AMS] Button

- · Preset scan
- · Track search
- · Auto memory store (long press)

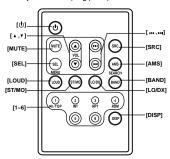
#### [BAND] Button

· Select tuner band

#### [LO/DX] Button

· Radio local / distant

- [DISP] Button
   Display switch
- · Adjust the clock(long press)



# Notes of remote control using

# Replacing the lithium battery of remote control unit.

When the range of the operation of the card remote control becomes short or no functions while operating. Replace the battery with a new lithium battery. Make sure the battery polarity replacement is correct.

- 1. Pull out the battery holder while pressing the stopper.
- Insert the button-type battery with the stamped(+) mark facing upward.

  Insert the battery holder into the remote control.





# 4. OPERATIONS

# **Basic Operations**

#### Note:

 Refer to the diagrams in "3. CONTROLS" when reading this chapter.

## **▲** CAUTION

When the unit is turned on, starting and stopping the engine with its volume raised to the maximum level may harm your hearings.

Be careful about adjusting the volume.

#### Power on / off

#### Notes:

- . Start the engine before using this unit.
- Be careful about using this unit for a long time without running the engine. If you drain the car's battery too far, you may not be able to start the engine and this can reduce the service life of the battery.
- Start the engine. The power button / knob illumination on the unit will light up.



Engine ON position

- Press the [PWR/MUTE] button on the front panel or [ 0 ] Button on the remote control to turn on the power under standby mode. The unit goes back to the last status after power on.
- Press and hold the [PWR/MUTE] button on the front panel or press [ Φ ] Button on the remote control to turn off the power.

#### Mute

Press the [PWR/MUTE] button on the front panel to mute the volume from the unit.

#### Note:

Doing the operation above again or adjusting volume will release muting.

#### Volume adjustment

Turn the **[VOLUME]** knob on the front panel. The adjustable range of volume is 0 to 47.

# **▲** CAUTION

While driving, keep the volume level at which external sounds can be heard.

#### Playing source selection

Press [SRC] button on the front panel or [SRC] button on the remote control repeatedly to choose desired playing source.

#### Note:

 Playing source selection means selecting work mode, such as RADIO mode and AUX mode, etc.

## Display system time

Press the [DISP] button on the front panel or the remote control to switch the display information from clock, station information (RADIO mode), or track information (USB mode).

#### RESET

If you have below problems, please press [RESET] button.

- Unit can not power on
- · Nothing happens when buttons are pressed
- · Display is not accurate
- By pressing [RESET] button, the memories don't be initialized.



RESET Button

# System Setup

In any mode, press and hold [VOLUME] knob to enter system setup. Press the knob briefly to select options, rotate the knob to adjust.

#### SOUND mode

Rotate the [VOLUME] knob to change the sound effect in this order:
POP -> ROCK -> CLASSIC -> FLAT -> SOUND

#### LOUD ON/OFF

Rotate the [VOLUME] knob to choose loudness on or off.

#### BEEP: ON/OFF

Rotate the [VOLUME] knob to choose button beep sound ON or OFF.

#### STEREO/MONO mode (in Radio mode)

Rotate the [VOLUME] knob to choose FM stereo or mono.

# DX/LO (in Radio mode)

Rotate the [VOLUME] knob to choose radio local or distant at radio mode.

- LO: Only stations with strong signal can be received.
- DX: Stations with strong and weak signals can be received.

#### VOL mode

Rotate the [VOLUME] knob to choose volume last/adjust mode.

- V-LAST: The turn-on volume level is the volume of latest power off.
- V-ADJ: Press the knob to enter Volume Adjust mode, rotate the knob to set the turn-on volume level.

#### 12/24H

Rotate the [VOLUME] knob to choose time format: 12 or 24 hours.

# **Audio Setup**

Press the [VOLUME] knob to select USER preset including: VOL(volume) -> BAL(balance) -> FAD(fader), rotate the [VOLUME] knob to select a value.

- VOL: 0 47
- BAS: (-7) (+7) (the option is available when select DSP in system menu)
- TRE: (-7) (+7) (the option is available when select DSP in system menu)
- BAL: 9L-1L -> 0(Centre)-9R
- . FADER: FADER: 9R-1R -> 0(Centre)-9F

# Radio Operations

## Select tuner as playing source

Press [SRC] button on the panel or the remote control once or more to enter RADIO mode.

# Selecting the radio band

Press the [ NI BND] button on the panel or [BAND] button on the remote control to select one radio band among FM1, FM2, FM3 and AM.

#### Manual tuning

During manual tuning, the frequency will be changed in steps.

Press the [I<] or [>>] button on the panel or the remote control to tune in a higher / lower station.

#### Auto tuning

Press and hold the [ [◄◄] or [ ▶▶I] button on the panel or the remote control to seek a higher / lower station.

To stop searching, repeat the operation above or press other buttons having radio functions.

#### Note:

When a station is received, searching stops and the station is played.

#### Preset scan

Preset scan receives the stations stored in preset memory in order. This function is useful when searching for a desired station in memory.

- Press the [AMS/INT] button on the panel or [AMS] button on the remote control.
- When a desired station is tuned in, press the [AMS/INT] button on the panel or [AMS] button on the remote control again to continue receiving that station.

#### Note:

Be careful not to press and hold the [AMS/INT] button on the panel or [AMS] button on the remote control for 1 second or longer, otherwise the auto store function will begin and the unit starts storing stations.

#### Auto store

Only stations with sufficient signal strength will be detected and stored in the memory.

Press and hold the [AMS/INT] button on the

Press and hold the [AMS/INT] button on the panel or [AMS] button on the remote control (1 sec.) to start automatic station search.

To stop auto store, press other buttons having radio functions.

Notes:

- After auto store, the previous stored stations will be overwritten.
- The unit has 4 bands, such as FM1, FM2, FM3 and AM. Each band can store 6 stations, FZ003A can store 24 stations in total.

#### Manual store

When one expected radio station has been detected, press and hold the  $[\blacktriangleright l BND]$  button on the panel, then press the  $[\blacktriangledown]$  or  $[\blacktriangle]$  button to select a preset position, press the knob to confirm.

Or when one expected radio station has been detected, press and hold the number button 1–6 on the remote control to store it in the memory.

#### Recall the stored stations

To recall the preset station, press [ $\blacktriangledown$ ] or [ $\blacktriangle$ ] button repeatedly.

#### Local seeking

When LOCAL seeking is ON, only those radio stations with strong radio signal could be received.

To select LOCAL function, press and hold the [VOLUME] knob on the front panel, then press [VOLUME] knob repeatedly until LOCAL or DX displays on the screen, and rotate the [VOLUME] knob to select Local or Distant mode.

#### Note:

The number of radio stations that can be received will decrease after the local seeking mode is ON

# MP3/WMA Operations

# Using the USB

- Open the cover of the USB connector to the right. Insert the USB cable (CCA-755) into the USB slot. Insert the USB device into the USB cable.
- When connecting the USB device, the unit will read the files automatically.
- To remove the USB device, you should first select another source or turn off the power, in order to avoid damaging the USB device. Then take off the USB device. Close the cover of USB connector.

# Pausing play

 Press the [ NI BND] button on the front panel or [1] button on the remote control to pause play.

"PAUSE" appears in the display.

 To resume MP3/WMA play, press the [NI BND] button on the front panel or [1] button on the remote control again.

# Selecting a track

#### Track-up

- Press the [►►] button on the panel or the remote control to move ahead to the beginning of the next track.
- Each time you press the [►►] button, the track advances ahead to the beginning of the next track.

#### Track-down

- Press the [ → ] button on the panel or the remote control to move back to the beginning of the current track.
- Press the [ ⋈◄] button twice to move back to the beginning of the previous track.

# Fast-forward/Fast-reverse Fast-forward

Press and hold the [ ] button .

Fast-reverse

Press and hold the [ | 44 ] button.



# Folder Select

This function allows you to select a folder containing MP3/WMA files and start playing from the first track in the folder.

Press the [  $\blacktriangle$  ] button (1 sec.) to move to the next folder. Press the [  $\blacktriangledown$  ] button to move to the previous folder.

#### Search Function

- Press and hold the [AMS/INT] button to enable direct track searching.
- Press the [VOLUME] knob to confirm.
- 3. Rotate the knob to select a number.
- Repeat steps 2-3 to enter the other digits, if necessary. You can press [ |◄◄ ], [ ▶►] buttons to select digit position.
   NOTE: The unit will only allow the
  - NOTE: The unit will only allow the selection of digits that correspond with the number of files on the media you are searching.
- Once the track number appears on the screen, long press the knob to play the selected song/file.

# Other various play functions

# Scan play

This function allows you to locate and play the first 10 seconds of all the tracks recorded on a disc.

Press the [AMS/INT] button on the panel or [2] button on the remote control to perform scan play.

# MP3/WMA Operations

#### Repeat play

This function allows you to play the current track repeatedly or play a track currently being played in the MP3/WMA folder repeatedly.

- Press the [ A ] button on the panel or [ 3 ] button on the remote control once or more until "ONE" appears on the display to perform current track repeat play, and "RPT" segment lights on.
- Press [ ▲ ] button repeatedly until "FOLD" appears on the display for folder repeat play.
- Press [ ▲ ] button repeatedly until "ALL" appears on the display for all tracks repeat play
- Press [ ▲ ] button repeatedly until "OFF" appears on the display to cancel repeat playback, and "RPT" segment goes off.

#### Random play

This function allows you to play all tracks recorded on a disc in a random order. Press the [ v ] button on the panel or [ 4 ] button on the remote control to perform random play.

# **AUX Operations**

Press the [SRC] button on the panel or the remote control once or more to select "AUX". AUX is just for audio content with 3.5mm Jack connector plugged into audio-in socket on the front panel on the left of USB slot.

# 5. TROUBLE SHOOTING

#### GENERAL

Problem	Cause	Measure
Unit can not power on.	Unit fuse blown.	Replace with new fuse of correct rating.
	Car battery fuse blown.	Replace with new fuse of correct rating.
Unit can not power on. Nothing happens when buttons are pressed. Display is not accurate.	The microprocessor has malfunctioned due to noise, etc.	Turn off the power. Press the [RESET] button with a thin rod. Note: When the [RESET] button is pressed, turn off the ACC power.*
No/low audio output.	Improper audio output connection.	Check wiring and correct.
	Volume set too low.	Increase volume level.
	Speakers damaged.	Replace speakers.
	Heavily biased volume balance.	Adjust the channel balance to center position.
	Speaker wiring is in contact with metal part of car.	Insulate all speaker wiring connections.
Poor sound quality or distortion.	Speaker power rating does not match unit.	Replace speakers.
	Wrong connections.	Check wiring and correct.
	Speaker is shorted.	Check wiring and correct.
Unit resets itself when engine is off.	Incorrect connection between ACC and Battery.	Check wiring and correct.

#### **USB Devices**

Problem	Cause	Measure
USB device cannot be inserted.	The USB device has been inserted with wrong direction.	Reversing the connection direction of the USB device, try it again.
	The USB connector is broken.	Replace with a new USB device.
USB device is not recognized.	The USB device is damaged.	Disconnect the USB device and reconnect.
	Connectors are loose.	If the device is still not recognized, try replacing with a different USB device.
No sound heard with the display "No File" shown.	No MP3/WMA file is stored in the USB device.	Store these files properly in the USB device.
Sound skips or is noisy.	MP3/WMA files are not encoded properly.	Use MP3/WMA files encoded properly.

# 6. SPECIFICATIONS

#### FM Tuner

Frequency range: 87.5-108.0MHz Usable sensitivity: 8dBµ Frequency response: 30Hz-15kHz Stereo separation: 30dB(1kHz) Signal/noise ratio: >55dB

#### AM Tuner

Frequency range: 531-1629kHz Usable sensitivity (S/N=20dB): 30dBµ

## MP3/WMA mode

MP3 sampling rate: 8 kHz to 48 kHz MP3 bit rate: 8 kbps to 320 kbps / VBR WMA bit rate: 8 kbps to 320 kbps Logical format: ISO9660 level 1,2 Joliet file system

#### USB

Specification: USB 1.0/2.0 Playable audio format: MP3(.mp3): MPEG 1/2/Audio Layer-3 WMA(.wma): Ver 7/8/9.1/9.2

# Audio Amplifier

Maximum power output: 180W (45W x 4) Speaker impedance:  $4\Omega$  (4 to  $8\Omega$  allowable)

# Input

Aux-in level: ≤2V

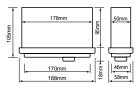
#### General

Power supply voltage: 14.4VDC (10.8 to 15.6V allowable), negative ground Pre-Amp output voltage:

2.0V (USB play mode: 1kHz, 0dB, 10k $\Omega$  load) Fuse: 15A

Dimensions of the Main Unit:

188mm Width  $\times$  58mm Height  $\times$  95mm Depth Weight of the Main Unit: 0.6kg



#### Note:

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

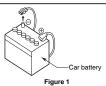
# 7. INSTALLATION / WIRE CONNECTION GUIDE

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# 1) Before Starting

- 1. This set is exclusively for use in cars with a negative ground 12 V power supply.
- 2. Read these instructions carefully.
- Be sure to disconnect the battery "terminal" before starting. This is to prevent short circuits during installation. (Figure 1)



# 2) Package Contents

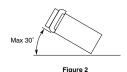
Source unit1	Wire connector
Trim ring 1	Owner's manual
Mounting bracket 1	Strap
Screws M5x6 mm 4	
L-kev	

# 3) General Cautions

- Do not open the case. There are no user serviceable parts inside. If you drop anything into the unit during installation, consult your dealer or an authorized Clarion service center.
- Use a soft, dry cloth to clean the case. Never use a rough cloth, thinner, benzine, or alcohol etc. For tough dirt, apply a little cold or warm water to a soft cloth and wipe off the dirt gently.

## 4) Cautions on Installation

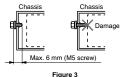
- Prepare all articles necessary for installing the source unit before starting.
- 2. Install the unit within 30° of the horizontal plane. (Figure 2)
- If you have to do any work on the car body, such as drilling holes, consult



your car dealer beforehand.
4. Use the enclosed screws for

installation

Using other screws can cause damage. (Figure 3)



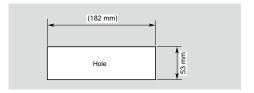
5) Installing the Source Unit

- Place the mounting bracket into the instrument panel, use a screwdriver to bend each stopper of the mounting bracket inward, then secure the stopper.
- 2. Wire as shown in Section 7).
- 3. Insert the source unit into the mounting bracket until it locks.
- Take care of the top and bottom of the trim ring and mount it so that all the hooks are locked.

#### Notes:

- Some car models require special mounting kits for proper installation. Consult your Clarion dealer for details.
- 2. Fasten the front stopper securely to prevent the source unit from coming loose.

# Console opening dimensions

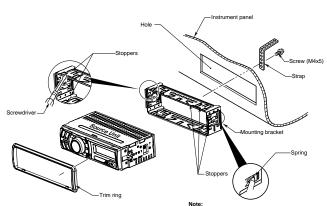


#### Notes of installation

- 1. Before installation, please make sure proper connections are conducted and the unit operates normally. Improper connection may result in damage to the
- 2. Use only accessories designed and manufactured for this unit and other unauthorized accessories may result in damage to the unit.
- 3. Before installation, please fasten all power cables.
- 4. Install the unit horizontally. Installing the unit more than 30 degree vertically may result in worse performance.
- To prevent electric spark, connect the positive pole first and then the negative pole.
- 6. DO NOT block the cooling fan exit to ensure sufficient heating dissipation of this unit, or it may result in damage to this unit.

#### Unit installation Method A

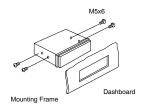
- 1. Insert mounting bracket into dash board, choose appropriate mounting tab according to the gap width, bending the mounting tab outwards with a screwdriver to fix the mounting bracket in place.
- 2. Slide the unit into the bracket until you hear a click sound.



Before attaching the mounting bracket, slightly bend the spring toward the inside with your fingers and attach it to the side of car.

#### Method B





- 1. Insert this unit directly to the opening of the dashboard
- 2. Place M5×6 cylindrical screw through the holes of the mounting frame located inside the opening to holes of the unit and fasten the screws to left & right.

# Trim ring installation

Attach the trim ring around the front panel.



## 6) Removing the Source Unit

# Disassemble trim ring

1. Push the trim ring to right and pull out the right part.



2. Push the trim ring to left and pull out the left part.

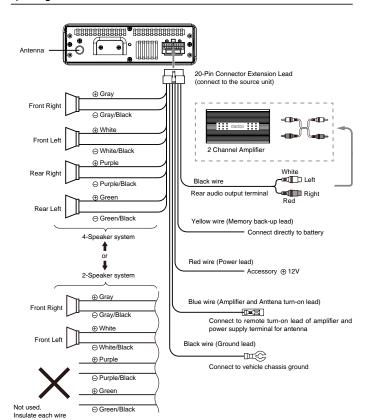


#### Disassemble the unit

- 1. Switch off the power.
- 2. Remove the trim ring.
- 3. Insert the removal keys straight back until they lock, then pull the unit out.
- 4. Disconnect all the wires.



# 7) Wiring and Connections



# 8) Connecting the accessories

# . Connecting to the external amplifier

External amplifiers can be connected to the 2 channel RCA output connections. Ensure that the connectors are not grounded or shorted to prevent damage to the

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