



Model No.

PJ-4605T

Thank you for purchasing this **Clarion** product.

- Please read this owner's manual in its entirety before operating this equipment.
- 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

1. FEATURES	3
Expanding Systems	3
2. PRECAUTIONS	4
Operational Panel	6
4. OPERATIONS	9
Basic Operations	9
Sound Setup	11
System Setup	13
Radio Operations	15
CD/MP3/WMA Operations	16
USB Operations	18
Bluetooth Operations	19
AUX Operations	21
5. TROUBLESHOOTING	22
6. ERROR DISPLAYS	25
7. SPECIFICATIONS	26

1. FEATURES

 Intelligent Tune

 Bluetooth®

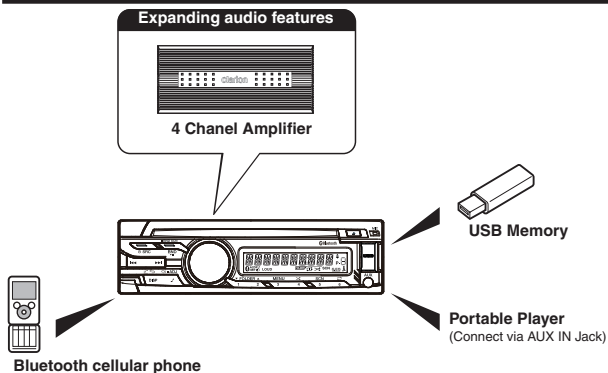


MP3/WMA

USB

- Built in Bluetooth® handsfree (HFP) and audio streaming (A2DP & AVRCP)
- Sound Quality Correction by Intelligent Tune

Expanding Systems



Note:

- The items listed only show connectivity options and are not included with the unit.

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.

INFORMATION FOR USERS:

This unit is applicable for on-road 4 wheel vehicle purpose only. Use for tractor, fork truck, bulldozer, off road vehicle, 2 or 3 wheel motor bicycle, marine boat or other special purpose vehicle is not appropriate.

CHANGES OR MODIFICATIONS TO THIS PRODUCT NOT APPROVED BY THE MANUFACTURER WILL VOID THE WARRANTY.

- Do not cover ventilation openings, this equipment is not intended to be used on soft support.

Handling Compact Discs

- Compared to ordinary music CDs, CD-R and CD-RW discs are both easily affected by high temperature and humidity and some of CD-R and CD-RW discs may not be played. Therefore, do not leave them for a long time in the car.
- Never stick labels on the surface of the compact disc or mark the surface with a pencil or pen.

Display Screen

In extremely cold, the screen movement may slow down and the screen may darken, but this is normal. The screen will recover when it returns to normal temperature.

Operating environment

- Storage conditions:
Temperature from -40°C to 85°C , humidity from 0% to 100%.
- Operating conditions:
Temperature from -30°C to 80°C ,
Operating temperature of CD section from -20°C to 70°C humidity from 0% to 100%.
- Service life: 10 years

About the registered marks, etc.

- The Bluetooth[®] word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Clarion Co., Ltd. is under license. Other trademarks and trade names are those of their respective owners.

USB Connector

- 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, sold separately).
- 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.

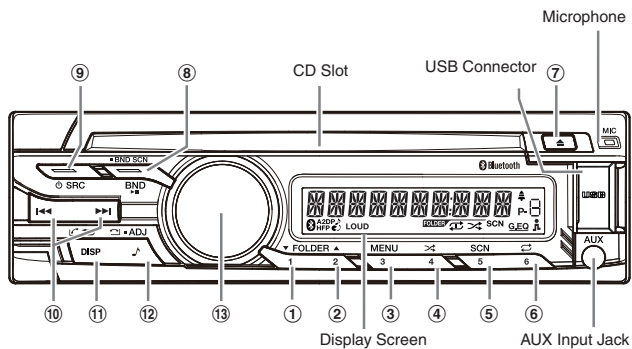
When affected by static electricity or electric noise.

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

Connecting with the computer is not covered.

3. CONTROLS

Operational Panel



Names of Buttons

No.	Name	Functions	
①~⑥	[1]~[6]	Short press	Radio -Preset station 1~6
		Long Press	Radio -Store stations in memory
①~②	[1]~[2]	Short press	MP3/WMA/USB -Folder up/ Folder down
③	[3]	Short press	MP3/WMA/USB - Browsing function
④	[4]	Short press	CD/MP3/WMA/USB -Random play
⑤	[5]	Short press	CD/MP3/WMA/USB -Scan play
⑥	[6]	Short press	CD/MP3/WMA/USB -Repeat play
⑦	▲	Short press	Eject disc
		Long Press	Full eject disc
⑧	[BND]	Short press	Radio -Change bands. CD/MP3/WMA/USB/BT Audio -Play/pause
		Long Press	Radio -Band scan
⑨	[SRC]	Short press	Switch source mode
		Long Press	Power off
⑩	⏮ ⏭	Short press	Items switching Radio -Tune up/down CD/MP3/WMA/USB/BT Audio -Track up/down
		Long Press	Items switching Radio -Auto seek up/down CD/MP3/WMA/USB/BT Audio -Fast-forward / fast-reverse
⑪	[DISP]	Short press	Back to the previous layer CD/MP3/WMA/USB/BT Audio -Switch display TEL interrupt -Answer a call
⑫	🎵	Short press	Sound setup TEL interrupt -Reject a call
		Long Press	System setup
⑬	[ROTARY]	Rotate	Adjust volume Items switching
		Short Press	Mute on/off
		Long Press	Confirm selection

4. OPERATIONS

Notes:

- Be sure to read this chapter referring to the front diagrams of chapter "Operational panel" on page 5.
- If the sound becomes distorted it will be the result of the selected combination of sound adjustment settings such as, Virtual Bass, Sound Restorer, Dynamic Beat Enhancer, Bass/Treble and Graphic Equalizer. In such an event please lower the level of effect.

Basic Operations

⚠ CAUTION

Be sure to lower the volume before switching off the unit power or the ignition key. The unit remembers its last volume setting.

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 battery too far, you may not be able to start the engine and this can reduce the service life of the battery.

1. Press any button (except [▲] button) to turn on the power.
2. Long press [SRC] button to turn off the power.

Selecting a source mode

1. Press [SRC] button to change the operation mode.

**TUNER → DISC* → USB* → BT AUDIO
→ BT-TEL* → AUX → TUNER...**

- * When disc is not loaded, USB device is not connected, or Bluetooth device is not paired, the related source mode will be skipped.

Adjusting the Volume

1. Turning [ROTARY] knob to adjust the volume.

- * The volume level is from 0 to 40.

Mute

1. Press [ROTARY] knob to turn mute on or off.

Title Scroll

1. Long press [DISP] button while in title display.
The title will scroll 1 time.

Back Function

You can press [DISP] button to return to the previous layer while in menu operations.

Clock Setup

1. Press [DISP] button to switch to the clock display.
2. Press and hold [DISP] button.
3. Turn [ROTARY] knob to select the item "SET CLOCK", and press [ROTARY] knob.
SET CLOCK ↔ SET ALARM
4. Press [◀◀] or [▶▶] button to select hour or minute.
5. Turn [ROTARY] knob to set the correct time.
* The clock is displayed in 12-hour format.
6. Press [ROTARY] knob to complete setting.

Note:

- You cannot set the clock when it is displayed with only the ignition on. If you drain or remove the car's battery or take out this unit, the clock is reset. While setting the clock, if another button or operation is selected, the clock setup mode is canceled.

Basic Operations

Alarm Setup

1. Press **[DISP]** button to switch to the clock display.
2. Press and hold **[DISP]** button.
3. Then press **[◀◀]** or **[▶▶]** button to select the item "**SET ALARM**", and press **[ROTARY]** knob.
SET CLOCK ↔ SET ALARM
4. Turn **[ROTARY]** knob to switch between "**ON**" and "**OFF**".
ON: Turn on the alarm.
OFF: Turn off the alarm.
If you want to set alarm, you should switch to "**ON**" and press **[ROTARY]** knob. Then do the next operations.
5. Press **[◀◀]** or **[▶▶]** button to select hour or minute.
6. Turn **[ROTARY]** knob to set the correct time.
* The clock is displayed in 12-hour format.
7. Press **[ROTARY]** knob to complete setting.

Sound Setup

You can adjust a sound effect or tone quality to your preference.

1. Press [**↵**] button.
2. Then press [**⏮**] or [**⏭**] button to select the sound setup item:

G-EQ *1 ※↔ **BASS** *2 ↔ **TREB** *2
↔ **BAL** ↔ **FAD** ↔ **INTEL-TUNE** ※↔
LOUD

Notes:

- *1 This item can be performed only when the system item "EQ-SELECT" is set to "G EQ"(page 11).
 - *2 These items can be performed only when the system item "EQ-SELECT" is set to "BASS/TREB"(page 11).
 - ※ You should press [**ROTARY**] knob to adjust the setting for these items.
 - **G-EQ (Graphic Equalizer)**: select the desired audio effect in preset memory
 - **BAL (Balance)**: balance of the right and left speakers
 - **FAD (Fader)**: balance of the rear and front speakers
 - **INTEL-TUNE (Intelligent Tune)**: Clarion's sound technology developed for turning the car interior into a wonderful listening environment
 - **LOUD (Loudness)**: bass or treble emphasized
3. Turn [**ROTARY**] knob to adjust the value.
 - **G-EQ**: detailed operations are below
 - **BASS / TREB**: -15 ~ +15 (default: 0)
 - **BAL**: L7 ~ R7 (default: 0)
 - **FAD**: R7 ~ F7 (default: 0)
 - **INTEL-TUNE**: detailed operations are below
 - **LOUD**: ON/OFF (default: OFF)
 4. After completing settings, press [**↵**] button to return to the previous mode.

Notes:

- During "BASS/TREB/BAL/FAD" setup, if no operation is performed for more than

10 seconds, this mode can be stored in memory and return to previous mode.

Setting Graphic Equalizer

This unit is provided with 9 types of sound quality effects stored in memory.

Select the one you prefer.

* The factory default setting is "OFF".

1. Select "G-EQ" in audio items, and press [**ROTARY**] knob.
2. Turn [**ROTARY**] knob, select a tone effect.

OFF ↔ **CUSTOM** ↔ **BASS BOOST** ↔
HIGH BOOST ↔ **VOCAL** ↔ **IMPACT**
↔ **NATURAL** ↔ **USER 1** ↔ **USER 2** ↔
USER 3

- **OFF**: flat
- **CUSTOM**: user custom temporarily
- **BASS BOOST**: bass emphasized
- **HIGH BOOST**: mid and treble emphasized
- **VOCAL**: mid emphasized
- **IMPACT**: bass and treble emphasized
- **NATURAL**: calm and moist
- **USER 1/2/3**: user custom

Setting preferred sound quality effects

1. Select "BASS BOOST/HIGH BOOST/VOCAL/IMPACT/NATURAL/USER 1/USER 2/USER 3", and press [**ROTARY**] knob.
2. Press [**⏮**] or [**⏭**] button to select a frequency.
3. Turn [**ROTARY**] knob to change the setting: -6 ~ +6
4. Long press [**1**]-[**3**] button to store the setting into "USER 1" ~ "USER 3" memory.

Note:

- If you do not perform storing as step 4 when you select "BASS BOOST/HIGH BOOST/VOCAL/IMPACT/NATURAL", the setting will be stored in "CUSTOM" temporarily.

Sound Setup

Setting Intelligent Tune

1. Select "INTEL-TUNE" in audio items, and press [ROTARY] knob.

2. Press [◀◀] or [▶▶] button, the tone effect changes.

S-RESTORER ↔ V-BASS ↔ D-BEAT

- **S-RESTORER (Sound Restorer):**
full quality sound reproduction of compressed audio data (default: OFF)
- **V-BASS (Virtual Bass):** delivers powerful lows just like an add-on subwoofer (default: OFF)
- **D-BEAT (Dynamic Beat Enhancer):**
(default: OFF)

3. Press [ROTARY] knob.

4. Turn [ROTARY] knob to adjust the value.

S-RESTORER/V-BASS/D-BEAT: OFF/
LOW/MID/HIGH.

System Setup

1. Long press [**^**] button.
2. Then press [**◀◀**] or [**▶▶**] button to select the system setup items:
AUTO STORE *↔ **DX/LO** *↔
AUX SENS *↔ **BT SELECT** ↔
BT DELETE ↔ **BT DISCON** ↔
A-ANSWER ↔ **A-CONNECT** ↔
TEL MEMORY ↔ **PIN CODE** ↔
DIMMER ↔ **BEEP** ↔ **EQ-SELECT** ↔
RESET
 - **BT SELECT**: select paired device to connect
 - **BT DELETE**: delete paired device
 - **BT DISCON**: disconnect device
 - **A-ANSWER**: auto answer
 - **A-CONNECT**: auto connect
 - **TEL MEMORY**: priority for phonebook download
 - **DIMMER**: dimmer control
 - **BEEP**: button beep sound
 - **EQ-SELECT**: select rear or subwoofer
 - **RESET**: memory reset
3. Turn [**ROTARY**] knob to adjust the setting.
 - **BT SELECT/BT DELETE/BT DISCON/A-ANSWER/A-CONNECT**: detailed operations are below
 - **DIMMER**: ON/OFF (default: ON)
 - **BEEP**: TYPE-A/TYP-E-B/OFF (default: TYPE-A)
 - **EQ-SELECT**: G-EQ, BASS/TREBLE (default: G-EQ)
 - **RESET**: detailed operations are below
4. After completing settings, press [**DISP**] button to return to the previous mode.

Note:

- You can press [**DISP**] button to return to the previous layer during operations.

Select Paired Device

This is a setting for user to select one of the paired mobile phones to connect.

1. Select "**BT SELECT**" in system setup items.
2. Turn the [**ROTARY**] knob to choose one of the paired devices.
3. Press the [**ROTARY**] knob to connect.

Delete Paired Device

This is a setting for user to delete one of the paired device from the list.

1. Select "**BT DELETE**" in system setup items.
2. The paired device appears in the display, then turn [**ROTARY**] knob to choose one of the paired devices.
3. Press [**ROTARY**] knob.
4. Turn [**ROTARY**] knob to select "**CANCEL**" or "**ARE U SURE**", and press [**ROTARY**] knob.

CANCEL: cancel deleting the paired device.

ARE U SURE: confirm to delete the paired device.

Notes:

- Deleted paired device will not automatically rearrange in the paired device list.
- After deleting the device, the phone book and the call history records will be deleted too.

Disconnect Device

This option is used to disconnect the currently connected device.

1. Select "**BT DISCON**" in system setup items, and press [**ROTARY**] knob.
2. Press and turn the [**ROTARY**] knob to select "**ARE U SURE**" or "**CANCEL**".
ARE U SURE: confirm to disconnect the paired device.
CANCEL: cancel disconnecting the paired device.
3. Press the [**ROTARY**] knob to confirm.

System Setup

Auto Answer

This is a setting to determine whether any incoming call will be automatically or manually answered.

* The factory default setting is "OFF".

1. Select "**A-ANSWER**" in system setup items.
2. Turn [**ROTARY**] knob to select "**ON**" or "**OFF**".

ON: Any incoming call is automatically answered in 5 seconds.

OFF: User needs to manually answer the call.

Auto Connect

This function allows the Bluetooth to be connected automatically with previously connected device. Connection can be established at any source mode.

* The factory default setting is "ON".

1. Select "**A-CONNECT**" in system setup items.
2. Turn [**ROTARY**] knob to select "**ON**" or "**OFF**".

Priority for Phonebook Download

Setting the priority for the phonebook download automatically while pairing.

* The factory default setting is "DEVICE".

1. Select "**TEL MEMORY**" in system setup items.
2. Turn [**ROTARY**] knob to select the setting: **DEVICE/SIM**.

DEVICE: Phonebook download from device firstly.

SIM: Phonebook download from SIM card firstly.

Pin Code Setting

This pin code is used during pairing. A maximum of 10 digits can be changed through this unit.

* The factory default pass key is "1234".

1. Select "**PIN CODE**" in system setup items.
2. Press [**ROTARY**] knob.
3. Press [**◀◀**] or [**▶▶**] button to move the cursor.
4. Turn [**ROTARY**] knob to select the desired digits.
5. Long press [**ROTARY**] knob to store in memory.

Performing Memory Reset

Reset various settings in the memory.

Note:

- The settings will remain in the memory even if you turn the power off.

1. Select "**RESET**" in system setup items, and press [**ROTARY**] knob.
2. Turn [**ROTARY**] knob to select "**CANCEL**" or "**ARE U SURE**", and press [**ROTARY**] knob.

CANCEL: cancel resetting

ARE U SURE: "CLEARED" appears in the display, and the memory will be cleared.

Radio Operations

Listening to the radio

1. Press [**SRC**] button and select the radio mode.
2. Press [**BND**] button and select the radio band in the following order:
FM1 → FM2 → FM3 → AM1 → AM2 → FM1...

Switching display

Press the [**DISP**] button to change the display.

Manual tuning

Press [**◀◀**] or [**▶▶**] button to manually tune a station.

Seek mode setting

2 types of seek tuning: DX SEEK and LOCAL SEEK.

DX SEEK can automatically tune in to receivable broadcast stations; LOCAL SEEK can tune in to only broadcast stations with a good reception sensitivity.

* The factory default setting is "DX".

1. Select "DX/LO" in system setup items.
2. Turn [**ROTARY**] knob to select a seek mode.

Seek tuning

1. Long press [**◀◀**] or [**▶▶**] button to automatically seek a station.

Recalling a preset station

A total of 30 preset positions (6-FM1, 6-FM2, 6-FM3, 6-AM1, 6-AM2) exists to store individual radio stations in memory. Press the corresponding [1]~[6] button to recall the stored radio frequency automatically.

Manual store

1. Long press [1]~[6] button to store the current station into preset memory.

Band scan

Band scan is searching for good reception stations from current frequency to higher frequency repeatedly. When a good reception stations is searched, it will be listened in 7s. And then it continues scan.

1. Press [**BND**] button to select a band.
2. Long press [**BND**] button.

Auto store

Auto store is a function for storing up to 6stations that are automatically tuned insequentially. If 6 receivable stations cannot be received, a previously stored station remains unover written at the memory position.

1. Select "AUTO STORE" in system setup items (page 11).
2. Long press [**ROTARY**] knob.
The stations with good reception are stored automatically to the preset channels.

* If auto store is performed in the FM bands, the stations are stored in FM3.
If auto store is performed in the AM bands, the stations are stored in AM2.

CD/MP3/WMA Operations

This unit can play back MP3/WMA files

Note:

- If you play a file with DRM (Digital Rights Management) for WMA remaining ON, no audio is output. Instead, “- -: -” will blink for 5s in the play time, and then go to the next track to play.

To disable DRM (Digital Rights Management)

When using Windows Media Player 9/10/11, click on TOOL → OPTIONS → MUSIC RECORD tab, then under Recording settings, unclick the Check box for RECORD PROTECTED MUSIC. Then, reconstruct files.

Personally constructed WMA files are used at your own responsibility.

Precautions when creating MP3/WMA file

Usable sampling rates and bit rates

1. MP3: Sampling rate 8 kHz-48 kHz,
Bit rate 32 kbps-384 kbps/VBR
2. WMA: Sampling rate 22.05 kHz-48 kHz, Bit rate 32 kbps-320 kbps/VBR.

File extensions

1. Always add a file extension “.MP3” or “.WMA” to MP3 or WMA file by using single byte letters. If you add a file extension other than specified or forget to add the file extension, the file cannot be played.
2. Files without MP3/WMA data will extension “.MP3” or “.WMA” will not play. Instead, “- -: -” will blink in the play time.

- * When MP3/WMA files are played, a little no sound part is caused between tunes.

Logical format (File system)

1. When writing MP3/WMA file on a CD-R disc or CD-RW disc, please select “ISO9660 level 1, 2 or JOLIET or Romeo” or APPLE ISO as the writing software format. Normal play may not be possible if the disc is recorded on

another format.

2. The folder name and file name can be displayed as the title during MP3/WMA play but the title must be within 64 single byte alphabetical letters and numerals (including an extension).
3. Do not affix a name to a file inside a folder having the same name.

Folder structure

A disc with a folder having more than 8 hierarchical levels will be impossible.

Number of files or folders

1. Up to 255 files can be recognized per folder Up to 255 files can be played.
2. Tracks are played in the order that they were recorded onto a disc. (Tracks might not always be played in the order displayed on the PC.)
3. Some noise may occur depending on the type of encoder software used while recording.

Backup Eject function

Just pressing the [▲] button, ejects the disc even if ACC OFF.

Notes:

- If you force a CD into before auto reloading, this can damage the CD.
- If a CD (12 cm) is left in the ejected position for 10 seconds, the CD is automatically reloaded (Auto reload).
- If you long press [▲] button to eject the disc (full eject), it can not be automatically reloaded.

Listening to a disc already loaded in the unit


Press the [SRC] button to select “DISC” mode.

Loading a CD

1. Insert a CD into the center of the CD SLOT with the labeled side facing up. The CD plays automatically after loading.

CD/MP3/WMA Operations

Notes:

- Never insert foreign objects into the CD SLOT.
- If the CD is not inserted easily, there may be another CD in the mechanism or the unit may require service.
- Discs not bearing the  mark and CD-ROMs cannot be played by this unit.
- Some CDs recorded in CD-R/CD-RW mode may not be usable.

Pausing play

1. Press the [▶||] button to pause play.
2. To resume CD play, press the [▶||] button again.

Switching display

This unit can display title data. Each time you press the [DISP] button to change the display.

CD-DA disc

Track No./Playtime → Clock → Disc name
→ Track name → Artist name → Album name
→ Track No./Playtime ...

MP3/WMA disc

Track No./Playtime → Folder No./Track No.
→ Clock → Folder name → File name →
Track name → Artist name → Album name
→ Track No./Playtime ...

Note:

- Characters can be displayed: ISO8859-1, ISO646/ASCII, UTF-16 (BOM/BE/LE), UTF-8, Shift_JIS.

Track up/down

1. Press [▶▶] button to the next track.
2. Press [◀◀] button to the previous track if the playtime is within 1s; otherwise it will move ahead to the beginning of the current track.

Fast-forward/Fast-reverse

1. Long press the [▶▶▶] button to fast-forward.
2. Long press the [◀◀◀] button to fast-reverse.

Folder up/down

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

1. Press [1] button to previous folder.
2. Press [2] button to next folder.

Browsing function

This function allows you search a file while playing MP3/WMA disc.

1. Press [3] button to enter folder search mode, then press [ROTARY] knob. The folder list appears.
2. Similar operations are repeated until the track list is displayed.
3. Turn [ROTARY] knob to switch between tracks, then press [ROTARY] knob to confirm selecting.
4. Press [ROTARY] knob to play.
 - * You can press [3] button to cancel the browsing mode during operations.
 - * You can press [DISP] button to return to the previous layer during operations.

Play mode setting

Scan play

- **CD-DA disc** - Play the first 10 seconds of all the tracks recorded on a disc.
 - **MP3/WMA disc** - Play the first 10 seconds of the first track of all the folders on an MP3/WMA disc.
1. Each time you press [5] button:
Scan disc → Scan off

CD/MP3/WMA Operations

Repeat play

1. Each time you press [6] button:

CD-DA disc - Repeat one → Repeat all

MP3/WMA disc - Repeat one →

Repeat folder → Repeat all

Repeat one - Play the current track repeatedly.

Repeat folder - Play all the tracks of the current folder repeatedly.

Repeat all - Play all the tracks of the disc repeatedly.

Random play

1. Each time you press [4] button:

CD-DA disc - Random all → Random off

MP3/WMA disc - Random folder → Random all → Random off

Random all - Play all the tracks of an disc in a random order.

Random folder - Play all the tracks of the current folders in a random order.

USB Operations

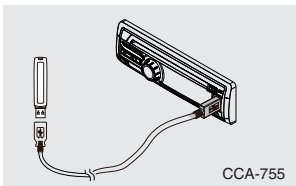
1. Open the cover of the USB connector on the right. Insert a USB device into the USB connector.

If 1m extension is necessary, please purchase the optional CCA-755.

When connecting a USB device, the unit will read the files automatically.

2. 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 to the left.

3. Operations are the same as for MP3/WMA disc operations.



Note:

- Please do not add music files other than ".MP3" or ".WMA" in the USB memory.

Bluetooth Operations

Mobile phones and audio devices that support Bluetooth can be connected for use on the unit.

Notes:

- *This system will not operate or may operate improperly with some Bluetooth audio players and Bluetooth mobile phones.*
- *Browse the Clarion website to confirm mobile phone compatibility list.*

Bluetooth Pairing

Please pair this unit from your Bluetooth device.

Up to a maximum of 3 Bluetooth devices can be paired.

1. Search for this unit on your device Bluetooth setup menu.
2. Select "**Bluetooth_Audio**" from the pairing list on your Bluetooth device.

For the Device (BT Ver.2.1 Above)

1. Please do operation to pair this unit on your Bluetooth device.

For the Device (BT Ver.2.1 Below)

1. Please enter the pin code on your Bluetooth device to pair this unit.

Notes:

- *After paired successfully, there is a prompt on your Bluetooth telephone asking whether allow to download the phone book and thee call histories into this unit.*
- *Up to a maximum of 500 telephone numbers can be registered.*

Bluetooth Audio Operations

The following operations are the same as for CD mode:

- **Pausing Play**
- **Selecting a track**
- **Fast-forward/Fast-reverse**

Switch to Bluetooth Audio Mode

Press the [SRC] button to switch to "BT AUDIO" mode.

Switching Display

Each time you press the [DISP] button to change the display.

BT Device name → Clock → Title name → Artist name → Album name → BT Device name ...

Bluetooth Operations

Bluetooth Telephone Operations

Switch to Bluetooth Telephone Mode

Press the [SRC] button to switch to "BT -TEL" mode.

Make Outgoing Call

There are 3 ways to make outgoing call.

- You can press [M] button to hang up during calling.
- You can press [ROTARY] knob during calling, the mic will be muted. Press it again will cancel mute.

• Call from Phonebook

User can search the contact name in the phonebook and make call. Alternatively, user can call from mobile phone.

1. Press [BND] button.
2. Press [◀◀] or [▶▶] button to select "PHONE BOOK".
3. Press [ROTARY] knob to enter the contact name list (in this case, you can turn [ROTARY] knob to select the desired contact name).
4. Press [ROTARY] knob to enter the phone number list.
5. If there are more than one phone No. of the contact name, press [◀◀] or [▶▶] button to select a phone No.
6. Press the [ROTARY] knob to call the mobile phone No.

• Dialed&Missed Call History

You can search the latest 10 dialed&missed call history.

1. Press the [BND] button.
2. Press [◀◀] or [▶▶] button to select "REDIALS"
3. Press [ROTARY] knob to enter the dialed&missed call list.
4. Turn [ROTARY] knob to select a call history.
5. If the phonebook has been downloaded, you should press [ROTARY] knob to display the phone No.
6. Press [ROTARY] knob to call the mobile phone No.

• Received Call History

You can search the latest 10 received call history.

1. Press the [BND] button
2. Press [◀◀] or [▶▶] button to select to select "RECEIVED".
3. Press [ROTARY] knob to enter the received call list.
4. Turn [ROTARY] knob to select a call history.
5. If the phonebook has been downloaded, you should press [ROTARY] knob to display the phone No.
6. Press [ROTARY] knob to call the mobile phone No.

Answering a call

You can answer an incoming call by pressing [DISP] button.

- * Press the [M] button to reject an incoming call.

Switch to the secret call

Press the [BND] button to switch to the secret call mode.

- * When you switch to the secret call mode, you will not hear the call from this unit and only can hear it from your mobile phone.

AUX Operations

AUX function

This system has an external input jack on the front panel so you can listen to sounds and music from external devices connected to this unit.

Selecting AUX IN sensitivity

Make the following settings to select the sensitivity when sounds from external devices connected to this unit are difficult to hear even after adjusting the volume.

* The factory default setting is "MID".

1. Select "**AUX SENS**" in system setup items (page 11).
2. Turn the [**ROTARY**] knob to select "**HIGH**", "**MID**" or "**LOW**".

5. TROUBLESHOOTING

General

Problem	Cause	Measure
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.
No sound output when operating the unit with amplifiers or power antenna attached.	Power antenna lead is shorted to ground or excessive current is required for remote-on the amplifiers or power antenna.	<ol style="list-style-type: none"> 1. Turn the unit off. 2. Remove all wires attached to the power antenna lead. Check each wire for a possible short to ground using an ohm meter. 3. Turn the unit back on. 4. Reconnect each amplifier remote wire to the power antenna lead one by one. If the amplifiers turn off before all wires are attached, use an external relay to provide remote-on voltage (excessive current required).
Nothing happens when buttons are pressed. Display is not accurate.	DCP or main unit connectors are dirty.	Wipe the dirt off with a soft cloth moistened with cleaning alcohol.
No sound heard	The speaker protection circuit is operating.	<ol style="list-style-type: none"> 1. 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). 2. If the sound is muted again, consult our service department.

Disc Player

Problem	Cause	Measure
No sound heard	MP3/WMA files are absent in a disc.	Write MP3/WMA files onto the disc properly.
	Files are not recognized as an MP3/WMA file.	Use MP3/WMA files encoded properly.
	File system is not correct.	Use ISO9660 level 1, 2 or JOLIET or Romeo or APPLE ISO file system.
Sound skips or is noisy.	Compact disc is dirty.	Clean the compact disc with a soft cloth.
	Compact disc is heavily scratched or warped.	Replace with a compact disc with no scratches.
Sound is cut or skipped.	MP3/WMA files are not encoded properly.	Use MP3/WMA files encoded properly.
Sound is bad directly after power is turned on.	Water droplets may form on the internal lens when the car is parked in a humid place.	Let dry for about 1 hour with the power on.
Wrong filename	File system is not correct.	Use ISO9660 level 1, 2 or JOLIET or Romeo or APPLE ISO file system.

USB Devices

Problem	Cause	Measure
No sound heard	The device contains no MP3/WMA files.	Record MP3/WMA files properly to the device.
	The files are not proper MP3/WMA format.	Use only properly encoded MP3/WMA files.
Sound is interrupted or has noise.	The MP3/WMA files are improperly encoded.	Use only properly encoded MP3/WMA files.
The device isn't recognized.	The device is damaged.	Disconnect the device and reconnect. If the device is still not recognized, try replacing with a different device.
	Connectors are loose.	
Can't insert the device.	The device has been inserted improperly.	Try reversing the connection direction of the device (usually the brand name surface should be facing left).
	The connector is broken.	Replace with a new device.

Bluetooth

Problem	Cause	Measure
Cannot pair the Bluetooth enabled device with the car audio system.	The device does not support the profiles required for the system.	Use another device to pair.
	The Bluetooth function of the device is not enabled.	Refer to the user manual of the device for how to enable the function.
	The Bluetooth information does not match.	Delete the paired device on your bluetooth device and the car audio system, and then pair them again.
The Bluetooth hands-free audio quality is not improved after connection with a Bluetooth-enabled device.	The external microphone is not set correctly nor properly positioned.	Adjust the gain and position of the external microphone. For example, stick the microphone onto the dashboard so it is close to the driver.

6. ERROR DISPLAYS

If an error occurs, one of the following displays is displayed.
Take the measures described below to eliminate the problem.

	Error Display	Cause	Measure
Disc Play	CD MECHA ERROR	This is a failure of CD deck's mechanism.	Eject the disc then reload it.
	DISC ERROR	A CD cannot be played due to scratches, etc.	Replace with a non-scratched, non-warped-disc.
		A CD is loaded upside-down inside the CD deck and does not play.	Eject the disc then reload it properly.
	NO FILE	No MP3/WMA file is recorded in the device.	Record MP3/WMA files in the device.
USB	USB ERROR	Protocol or File system is not correct.	Replace with a USB device in correct protocol or file system.
	NO DEVICE	No connection or the connection is loose.	Reconnect the device.
	NO FILE	No MP3/WMA file is stored in the device.	Store MP3/WMA files in the device.
	HUB NOT SUPPORT	The HUB devices are not supported.	Do not use the HUB devices.
	DEVICE NOT SUPPORT	The connected USB is not supported.	Connect the other supported device.

If an error display other than the ones described above appears, restart this unit. If the problem persists, turn off the power and consult your store of purchase.

7. SPECIFICATIONS

Radio section

Receiving Frequencies:

FM : 87.90 to 107.90 MHz (0.2 MHz steps)

AM : 530 to 1,710 kHz (10 kHz steps)

CD player section

System: Compact disc digital audio system

Frequency Response :

17 Hz to 20 kHz (± 3 dB)

Signal to Noise Ratio:

more than 65 dB (1 kHz)

Distortion : less than 0.4%

MP3/WMA

MP3: Sampling rate 8 kHz-48 kHz,

Bit rate 32 kbps-384 kbps / VBR

WMA: Sampling rate 22.05 kHz-48 kHz,

Bit rate 32 kbps-320 kbps / VBR

Logical format:

ISO9660 level 1, 2 Joliet file system

USB

Specification: USB 2.0

Playable audio format:

MP3(.MP3): MPEG 1/2/2.5 Audio Layer-3

MPEG 1/2 Audio Layer-2

WMA(.wma): Ver 9.2

Bluetooth

Specification:

Bluetooth Ver. 5.0

Frequency Band: 2.402GHz ~ 2.480GHz

RF TX Power: 7dBm

Profile:

HFP (Hands-Free Profile): Ver. 1.7

A2DP (Advanced Audio Distribution

Profile): Ver. 1.3

AVRCP (Audio/Video Remote Control

Profile): Ver. 1.6

PBAP (Phone Book Access Profile)

General

Output Power : 12W X 4 (+B=26.4V)

Power Supply Voltage :

24V DC , negative ground

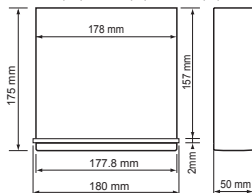
Power Consumption: Less than 15 A

Speaker Impedance : 8-16 Ω

Weight of Main unit : 1.09 kg

Dimensions of Main unit:

180 (W) X 50 (H) X 175 (D) mm



Note:

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

Warning: 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.

NOTE: 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.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Shielded cables must be used with this unit to ensure compliance with the Class B FCC limits.

The device must not be co-located or operating in conjunction with any other antenna or transmitter.

FCC RF Radiation Exposure Statement Caution: To maintain compliance with the FCC's RF exposure guidelines, place the product at least 20cm from nearby persons.