

clarion®

Owner's manual & Installation manual

CZ105BT

**Bluetooth® CD/USB/SD/MP3/WMA DIGITAL
MEDIA RECEIVER**

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1. FEATURES

- AM/FM Radio
- Front USB Port
- MP3/WMA Compatible with ID3-TAG display
- Front 3.5mm AUX Input
- 45W x 4 Built-in Amplifier
- IR Remote Control
- Built-in Bluetooth®
- Compatible with iPod® / iPhone®


USB

MP3/WMA


2. PRECAUTIONS

⚠ WARNING

For your safety, while boating, keep the volume to a level at which external sounds can be heard.

1. This unit has precision parts inside. Even in the event that trouble arises, never open the case, disassemble the unit, or lubricate the parts.
2. FCC STATEMENT
 - 2.1. 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.
 - (2) This device must accept any interference received, including interference that may cause undesired operation.
 - 2.2. Changes or modifications 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.

FCC Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body

IC Caution.

- English:

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference, and
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

- French:

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

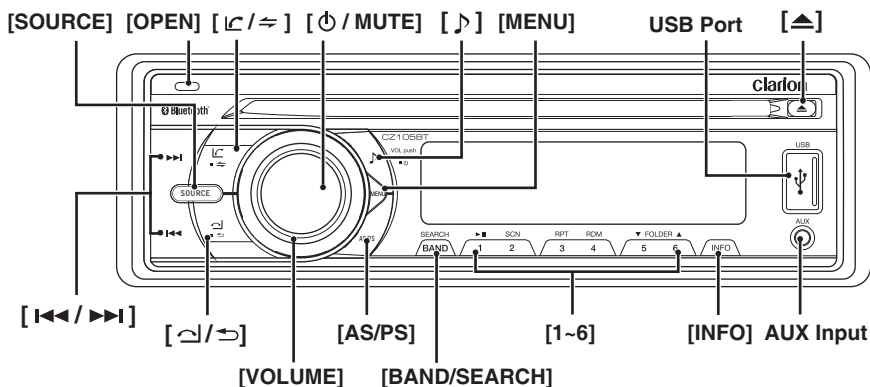
MODEL:		CZ105BT		Clarlon	
PIN	WIRE COLOR	FUNCTION/LABEL	U.S.A:		
CLARLON			AM 530-1710kHz,		
A4	YELLOW	BATTERY(+)	FM 87.9-107.9MHz,		
A6	ORANGE/WHITE	COMMON	Europe:		
A7	RED	(IGNITION)ACCD	AM 522-1620kHz,		
A8	BLACK	GROUND	FM 87.5-108.0MHz.		
B1	VIOLET	RIGHT REAR SPEAKER (+)	Auss:		
B2	VIOLET/BLACK	RIGHT REAR SPEAKER (-)	AM 522-1620kHz,		
B3	GREY	RIGHT FRONT SPEAKER (+)	FM 87.5-108.0MHz.		
B4	GREY/BLACK	RIGHT FRONT SPEAKER (-)	Latin:		
B5	WHITE	LEFT FRONT SPEAKER (+)	AM530-1710kHz,		
B6	WHITE/BLACK	LEFT FRONT SPEAKER (-)	FM 87.5-108.0MHz.		
B7	GREEN	LEFT REAR SPEAKER (+)	CONSUMPTION/CONSUMO:13A		
B8	GREEN/BLACK	LEFT REAR SPEAKER (-)	POWER/POTENCIA:40Wx4		
			VOLTAJE/VOLTAJE:12VDC		
			NEGATIVE GROUND/NEGATIVO A TIERRA		
Blue/White Wire/Blue/White Wire for Amplifier Turn-ON and should provide 12v output when the radio is ON and in any source.					
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.					
ELECTRONICA CLARLON S. DE C. V. VALENZIA NUEVE OPIENTE NO. 3 ZONA IND. VALLE DE ORO, SAN JUAN DEL RIO, QUINTANA ROO, MEXICO, C.P. 76803					
MANUFACTURED:					
MANUFACTURER:		SMX			
SERIAL NO.					
IFETEL ID: XXXXXXXXXXXXX					
				FCC ID: S8B9Y-CZ105BT IC: 1236A-CZ105BT	
		MADE IN HONGKONG/EN CHINA			

3. CAUTIONS ON HANDLING

- Protect from high temperature. Expose to direct sunlight for an extended period of time can produce very high temperature in your vehicle. Cool down the interior before starting the playback.

4. CONTROLS

Operational Panel



Name of Buttons and their Functions

[SOURCE] Button

- Press **SOURCE** button to toggle the audio source

[OPEN] Button

- Unlock the front panel

[L/R] Button

- Dial / Answer / Transfer call / Press and hold to Redial

[MUTE] Button

- Press this button to turn power On or Off.
- Press this button to mute the audio output, press it again to unmute the audio output.
- Press to confirm the selection.

[EQ] Button

- Press to adjust the sound effect setting:
EQ -> XBS(iXBass) -> BAL(balance)->FAD (fader)->SUBW(Subwoofer)

[MENU] Button

- Press access into the system menu mode.

[EJECT] Button

- Press to eject disc

[REVERSE] Button

- Use these buttons for tuning up and down in Tuner mode, Disc mode, USB mode.
- Press and hold momentarily to Fast Forward/Backward in Disc mode, USB mode.

[REVERSE] Button

- Terminate call
- Press this button to quick return to previous menu or mode.

[VOLUME] Button

- Rotate to adjust the volume level.

[AS/PS] Button

- Scan play / Preset scan
- Press and hold enter Auto memory store mode

[BAND/SEARCH] Button

- Press to select tuner band in Tuner mode.
- Press to activate the MP3 file searching mode, then use the volume to select / search by file number in USB mode.

[1-6] Buttons

- **[1]** Button: Play / Pause / Preset station 1
- **[2]** Button: Scan play / Preset station 2
- **[3]** Button: Repeat play / Preset station 3
- **[4]** Button: Random play / Preset station 4
- **[5]** Button: Previous folder / Preset station 5
- **[6]** Button: Next folder / Preset station 6

[INFO] Button

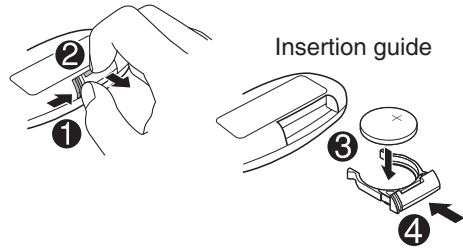
- Press to view the Clock
- Press to change the display indication.

Notes for use of Optional Remote Control

1. Aim the remote control at the remote sensor on the unit.
2. Remove the battery from the remote control or insert a battery insulator if the battery has not been used for a month or longer.
3. **DO NOT** store the remote control under direct sunlight or in high temperature environment, or it may not function properly.
4. Use "button shaped" lithium battery "CR2025" (3V) only.
5. **DO NOT** subject battery to recharge, disassemble, heat or dispose in fire or water.
6. Insert the battery in proper direction according to the (+) and (-) polarities.
7. Store the battery in a place where children can not reach to avoid the risk of accident.

Inserting the Battery

1. Slide remote control units rear cover in the direction shown.
2. Insert battery (Cr2025) into insertion guides with printed side (+) up.
3. Press battery into compartment as shown.
4. Replace and slide cover until it clicks into place.



Remote Control

[Mute] Button

- Mute or Unmute the audio output

[VOL +] [VOL -] Button

- Press $\overset{\text{VOL}}{+}$ button to increase the volume.
- Press $\overset{\text{VOL}}{-}$ button to decrease the volume.

[Preset Station] Button

- Preset station up/down
- Previous / next track
- Press and hold for Fast Forward / Backward

[SRC] Button

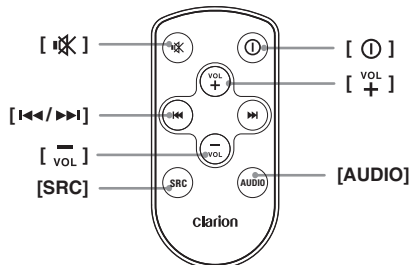
- Toggle the audio source

[Power] Button

- Press the button to turn power on or off.

[AUDIO] Button

- Press the button to enter the Audio Menu mode.



5. OPERATIONS

Basic Operation

Note: Be sure to read this chapter referring to the chapter "4.CONTROLS"

CAUTION

When the unit is turned on, starting and stopping the engine with its volume raised to the maximum level it may cause hearing damage. Be careful about adjusting the volume.

◆ Setting The Clock

1. Press [MENU] button to enter System Menu.
2. Press [◀◀] or [▶▶] button to select the Clock.
3. Rotate the [VOLUME] knob to set clock, rotating the [VOLUME] clockwise to adjust the minutes and counterclockwise to adjust the hours.

◆ Power On/Off

Note:

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

1. Start the engine. The power button / knob illumination on the unit will light up.



Engine ON
position

2. Press the [⏻ / MUTE] button to turn the power On or Off .

◆ Selecting a mode

1. Press the [SOURCE] button to display source menu.
* External equipment not connected to this unit is not displayed.

◆ Adjusting the volume

1. Rotating the [VOLUME] to increase/decrease the volume.
The adjustable range of volume is 0 to 46.

◆ Mute

Press the [MUTE] button to turn the mute On and Off.

◆ Display System information

press the [INFO] button on the front panel to switch the display information, system time and playing source.

System Menu

In any mode, press [**MENU**] button to enter System Menu. Press [**I◀◀**] or [**▶▶I**] button to select options, rotate the [**VOLUME**] knob to adjust a value / option.

◆ CLOCK

Rotate the [**VOLUME**] knob to set the hour, press the [**MUTE**] button to confirm, and then rotate the [**VOLUME**] knob to set the minutes.

◆ 12/24H

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

◆ BEEP ON/OFF

Rotate the [**VOLUME**] knob to choose button Beep sound On or Off.

◆ DX/LO

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.

◆ DIMMER

Rotate the [**VOLUME**] knob to choose the Dimmer On or Off.

- **ON**: LCD dimmer is active when small light of vehicle is turned ON.
- **OFF**: LCD always maximum brightness regardless of the vehicle small light.

◆ BT CONNE / BT DISCO

Disconnect / Re-connect currently connected mobile phone.

Press the [**MUTE**] button to disconnect / Re-connect.

◆ TUNE AREA

Rotate the [**VOLUME**] knob to select suitable country region:

- U.S.A (United States)
- LATIN (Latin America)
- EUROPE (Eastern/Western Europe)
- ASIA (Asia Pacific)

◆ DEFAULT VOL

Rotate the [**VOLUME**] knob to adjust the default volume.

Audio Menu

Press [**♪**] button to enter sound effect setting mode. Press [**I◀◀**] or [**▶▶I**] button to select options, rotate the [**VOLUME**] knob to adjust a value / option.

◆ EQ (Preset Equalizer Setting)

Rotate the [**VOLUME**] knob to change EQ:
Flat->Jazz->Pop->Classic->Rock->News->Urban->Rave->Movie->Techno->User

When the [**USER**] is appera, press the [**MUTE**] button to enter into below option and rotate the [**VOLUME**] knob to adjust a value:

- **BASS**(bass): range -7 to +7
- **MID**(middle): range -7 to +7
- **TREB**(treble): range -7 to +7

◆ XBS On/Off

Rotate the [**VOLUME**] knob to turn On or Off the X-BASS booster function.

◆ SUBW On/Off

Rotate the [**VOLUME**] knob to select subwoofer between ON and OFF

◆ SUBW LPF

Rotate [**VOLUME**] knob to adjust the subwoofer Low Pass Filter range: 80HZ/120HZ/160HZ

◆ SUBW GAIN

Rotate the [**VOLUME**] knob to adjust the subwoofer gain range: 0 to 12

◆ BAL (Balance)

Rotate the [**VOLUME**] knob to adjust adjust the Balance between the right and left speakers from 12R (full right) to 12L (full left).

◆ FAD (Fader)

Rotate the [**VOLUME**] knob to adjust adjust the Fader between the front and rear speakers from 12R (full rear) to 12F (full front).

Radio Operation

◆ Select Radio As Playing Source

Press the [**SOURCE**] button to select the RADIO mode.

◆ Selecting The Radio Band

Press the [**BAND / SEARCH**] button on the front panel to select one Radio band among F1, F2, F3 ,AM.

◆ [**▶▶▶**] Tuning Up / [**◀◀◀**] Tuning Down Buttons

1. Press the [**▶▶▶**] / [**◀◀◀**] button change intervals step by step.
2. Press and hold the [**▶▶▶**] / [**◀◀◀**] button to seek to the next strongest station.

◆ Presets Scan

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

1. Press the [**AS/PS**] button.
2. When a desired station is tuned in, press the [**AS/PS**] button again to continue receiving that station.

◆ Auto Store

Only stations with sufficient signal strength will be detected and stored in the memory. Press and hold the [**AS/PS**] button to start automatically select six strong stations and store them into six presets. The new stations replace any stations already stored in the band.

◆ Manual Store

when one expected radio station has been detected, press and hold number button 1-6 to store it in the memory.

◆ Recall The Stored Stations

Press one numeric button among 1 to 6 on the front panel to select the corresponding stored stations.

◆ Local Seeking

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

To select LOCAL function, press the [**MENU**] button on the front panel, then press the [**▶▶▶**] / [**◀◀◀**] button repeatedly until LO or DX display on the LCD, rotate the [**VOLUME**] knob to select local or distant mode.

◆ Area Set

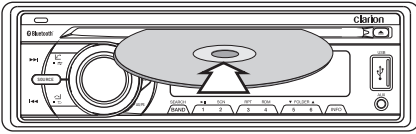
This option allows you to select the appropriate frequency spacing for your area.

1. Press the [**MENU**] button.
2. Press the [**▶▶▶** / **◀◀◀**] button to select "AREA"
3. Rotate the [**VOLUME**] knob to select: "U.S.A", "LATIN", "EUROPE", "ASIA"
4. Press the [**MUTE**] button to confirm.

Disc Operation

◆ Insert a Disc

Insert the disc into the Disc Slot with label side facing up, the unit will play starts automatically.



◆ Eject Function

Press the [▲] on front panel to take out the Disc. When the Disc is ejected, the unit switches to the previous source, if still connected. Otherwise, the unit switches to radio mode automatically.

◆ Selecting a Track

1. Press the [▶▶▶] button to advance to the next track/song.
Press the [◀◀◀] button to go to previous track/song.
2. Press and Hold in the [▶▶▶] button to fast forward through the track/song.
Press and Hold in the [◀◀◀] button to fast backward through the track/song.

◆ Play / Pause

Press the [▶|||] button to pause the track/song that is currently playing.

Press the [▶|||] button to resume playing the track/song that has been paused.

◆ 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 [▼ 5 / ▲ 6] button to select a folder.

◆ Search Function


1. Press the [BAND / SEARCH] button on front panel access the MP3 / WMA file search mode.
2. Rotate the [VOLUME] knob to search through all folders on the device then press [⏻ / MUTE] to make your selection.
3. Rotate the [VOLUME] knob to select the desired track within the previously selected folder and press [⏻ / MUTE] to start playing.

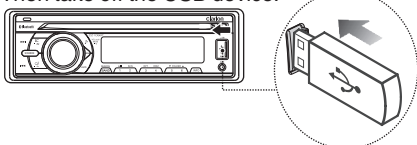
◆ Display Function

During playback, pressing the [INFO] button will automatically cycle through the following information on the file being played on the LCD:
**FOLDER NAME->FILE NAME->ALBUM->TITLE
 ->ARTIST**

Media (USB/SD) Playback Mode Operation

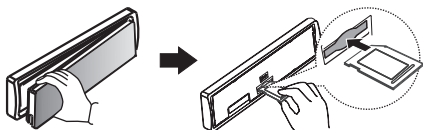
◆ Insert the USB Device

1. Slide the USB socket cover  to right.
2. Insert the USB device into the USB socket. The unit starts playing from the USB device.
3. 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.



◆ Insert the SD Card

1. Press the [OPEN] button to unlock the front panel.
2. Hold the left hand side of the panel & pull forward to disengage it from the chassis.
3. Insert the SD Card into the slot with label facing left until a "CLICK" sounds is heard.
4. Replace the front panel and the unit will start playing files from the card automatically.



◆ Selecting a Track

1. Press the [▶▶] button to advance to the next track/song.
Press the [◀◀] button to go to previous track/song.
2. Press and Hold in the [▶▶] button to fast forward through the track/song.
Press and Hold in the [◀◀] button to fast backward through the track/song.

◆ Play / Pause

Press the [▶||] button to pause the track/song that is currently playing.
Press the [▶||] button to resume playing the track/song that has been paused.

◆ 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 [▼ 5 / ▲ 6] button to select a folder.

◆ Search Function

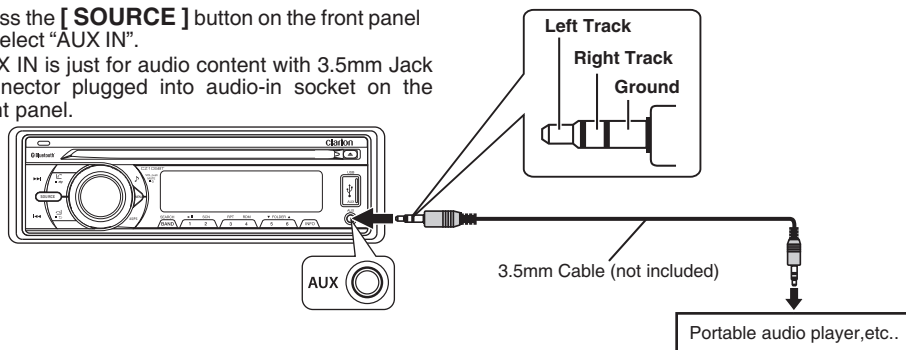
1. Press the [BAND / SEARCH] button on front panel access the MP3 / WMA file search mode.
2. Rotate the [VOLUME] knob to search through all folders on the device then press [⏻ / MUTE] to make your selection.
3. Rotate the [VOLUME] knob to select the desired track within the previously selected folder and press [⏻ / MUTE] to start playing.

◆ Display Function

During playback, pressing the [INFO] button will automatically cycle through the following information on the file being played on the LCD:
**FOLDER NAME->FILE NAME->ALBUM->TITLE
->ARTIST**

AUX Mode Operation

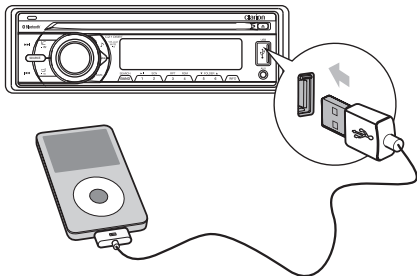
Press the [SOURCE] button on the front panel to select "AUX IN".
AUX IN is just for audio content with 3.5mm Jack connector plugged into audio-in socket on the front panel.



iPod/iPhone Mode Operation

◆ Connect

Connect an iPod/iPhone to the USB socket on front panel. When connecting a device, the unit will read the files automatically. The track information displays on the screen once playback start.



◆ Compatible iPod/iPhone

You can connect the following iPod/iPhone:

- iPod nano (6G)
- iPod nano (7G)
- iPod touch (4G)
- iPod touch (5G)
- iPhone 3GS
- Minimum iOS 5.0 or higher
- iPhone 4
- iPhone 4S
- iPhone 5
- iPhone 5C
- iPhone 5S

◆ iPod/iPhone Control Music Playback Mode

Press and hold the [⏪/⏩] button on front panel to switch between the two control modes:

- **iPod control mode:** Use the iPod/iPhone to operates the music control.
- **Unit control mode:** Use the head unit to operates the music control.

Note:

Please make sure the iPod/iPhone cable is connected correctly. And please only use original iPod/iPhone cable.

◆ Selecting a Track

1. Press the [▶▶] button to advance to the next track/song.
Press the [◀◀] button to go to previous track/song.
2. Press and hold the [▶▶] button to fast forward through the track/song.
Press and hold the [◀◀] button to fast backward through the track/song.

◆ Play / Pause

Press the [▶||] button to pause the track/song that is currently playing.

Press the [▶||] button to resume playing the track/song that has been paused.

◆ iPod Menu Alphabet Search

This function searches the subfolders for desired alphabetical letters.

1. Press the [BAND/SEARCH] button to select the iPod menu mode.
2. Rotate the [VOLUME] knob to switch between categories.
PLAYLISTS, ARTIST, ALBUM, SONGS, GENRE, COMPOSER, AUDIOBOOK
3. Press [⏻/MUTE] button to confirm selection.
4. Press the [AS/PS] button (3 seg.)
5. Rotate the [VOLUME] knob to select the desired letter to search.
6. Press the [⏻/MUTE] button to confirm (On that moment the LCD show SEARCH)
7. Rotate the [VOLUME] knob to choose the desired song to hear.
8. Press the [⏻/MUTE] button to confirm selection and then you will hear the chosen song.

◆ Display Function

During playback, pressing the [INFO] button will automatically cycle through the following information on the file being played on the LCD: **ALBUM -> SONGS -> ARTIST -> CLOCK**

Bluetooth Operation

◆ Pairing the Bluetooth Device

1. From your Bluetooth enabled device, turn the Bluetooth ON and search for Bluetooth devices.
2. When a list of available Bluetooth devices appear on your Bluetooth device, select "**CLARION**".
3. "**CONNECTED**" will appear on the display.
4. The unit will automatically enter the BT Audio source and you can now start streaming audio from your Bluetooth enabled device.

Note: If the mobile phone doesn't support SSP (Simple Secure Pairing) Profile, please enter the pass code of "0000".

◆ Making a Call

You can dial number through the mobile phone.

1. Use the Mobile Phone to dial and make an outgoing call.
2. Once completed the dialing [CALLING] is displayed

◆ Redial

You can call last dialed number.

1. Press the [L / ⇌] on front panel to redial.
2. Once completed the dialing [CALLING] is displayed

◆ Answering a Call

1. You can answer an incoming call by pressing the [L / ⇌] button.
2. Press the [↵/↶] button to reject an incoming call.

◆ Call Transfer

You can switch Handsfree call and mobile phone call. Press the [L / ⇌] button during call.

◆ BT CONNE / BT DISCO

1. Press and hold the [MENU] button to enter System menu.
2. Press the [◀/▶] button until "BT CONNE" or "BT DISCO" is displayed.
3. Press [⏻/⏮] button to confirm the selection.

◆ Audio Streaming Operations What is audio streaming?

Audio streaming is a technique for transferring audio data such that it can be processed as a steady and continuous stream. Users can stream music from their external audio player to their audio system wirelessly and listen to the tracks through the boat's speakers. Please consult your nearest Clarion dealer for more information on the product of wireless audio streaming transmitter offered.

⚠ CAUTION

Please avoid operating your connected mobile phone while audio streaming as this may cause noise or sound choppy on the song playback. Audio streaming may or may not resume after telephone interrupt as this is dependent on mobile phone.

◆ Search Function

1. Press the [BAND/SEARCH] button on front panel access the search mode.
2. Rotate the [VOLUME] knob to switch between categories.
PLAYLISTS->ARTIST->ALBUMS->GENRES->SONGS->COMPOSERS->AUDIOBOOK->PODCASTS
3. Press [⏻/MUTE] button to confirm the selecting.
4. When display the desired Playlist or Artist or Album or Genres or Songs or Composers or Audiobook or Podcasts, press [⏻/MUTE] button then the music file will be displayed.
5. Rotate the [VOLUME] knob to select File.
6. Press [⏻/MUTE] button to confirm wanted file to play.

Note:

The search feature requires the paired and connected device that the minimum Bluetooth AVRCP1.4 be incorporated to function.

◆ Play / Pause

Press the [▶||] button to pause the track/song that is currently playing.

Press the [▶||] button to resume playing the track/song that has been paused.

◆ Selecting a Track

1. Press the [▶▶] button to advance to the next track/song.
Press the [◀◀] button to go to previous track/song.
2. Press and hold the [▶▶] button to fast forward through the track/song.
Press and hold the [◀◀] button to fast backward through the track/song.

Note:

Playing order will depend on Bluetooth audio player. When [◀◀] button is pressed, some A2DP devices will restart the current track depends on the duration of playback. During music streaming playback "A2DP" will be shown on the display. When A2DP and HFP device is disconnect, "BLUETOOTH DISCONNECT" will be shown on the display and return to previously selected audio source. Some Bluetooth audio players may not have play / pause synchronized with this unit. Please make sure both device and main unit are in the same play / pause status in BT MUSIC mode.

◆ ID3 Display

During music streaming playback, press [INFO] to view the ID3 display information:

ALBUM -> SONGS -> ARTIST -> CLOCK

6. TROUBLESHOOTING

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.
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.
Poor sound quality or distortion.	Speaker wiring is in contact with metal part of car.	Insulate all speaker wiring connections.
	Speaker power rating does not match unit.	Replace speakers.
	Wrong connections.	Check wiring and correct.
Unit resets itself when engine is off.	Speaker is shorted.	Check wiring and correct.
	Incorrect connection between ACC and Battery.	Check the wiring and correct.

Disc Player

Problem	Cause	Measure
Disc cannot be loaded.	Another disc is already loaded.	Eject the disc before loading the new one.
	There is an object install installed the unit.	Remove the object inside the unit.
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 bad when power is first turned on.	Condensation may form on the internal lens when the boat is parked in a humid place.	Let dry for about 1 hour with power on.

USB

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. If the device is still not recognized, try replacing with a different USB device.
	Connectors are loose.	
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.

Bluetooth

Problem	Cause	Measure
Cannot pair the Bluetooth enabled device with the audio system.	The device does not support the profiles required for the system.	Use another device to connect.
	The Bluetooth function of the device is not enabled.	Refer to the user manual of the device for how to enable the function.
The audio quality is poor after connection with a Bluetooth-enabled device.	The Bluetooth reception is poor.	Move the device closer to the audio system or remove any obstacle between the device and the system.

7. SPECIFICATIONS

FM Tuner

Frequency Range: 87.9 - 107.9MHz
 Usable Sensitivity: Less than 10dB at S/N30dB
 Stereo Separation: >30dB(1kHz)
 Signal/noise ratio: >55dB

AM Tuner

Frequency Range: 530 -1710KHz
 Usable Sensitivity: Less than 40dB

CD/MP3/WMA mode

Disc Player System: Disc digital audio system
 MP3 sampling rate: 32kHz, 44.1kHz, 48kHz
 MP3 bit rate: 8~320kbps and variable bit rate
 WMA bit rate: 8~320kbps
 Logical format: ISO9660, Joliet
 Number of file: Maximum 999
 Max directory depth: 10
 Sorting Method: Tree sorting
 Max File/Directory Name: 64Byte
 ID3 tag: V2.0 or later

USB

USB Host: Host 1.1 compatibles 2.0

Bluetooth

Specification: Bluetooth Version. 2.1+EDR (Enhanced Data Rate)
 Supported Profiles: A2DP (Advanced Audio Distribution Profile)
 AVRCP 1.4 (Audio/Video Remote Control Profile)
 SSP (Simple Secure Pairing)
 Send/Receive Sensitivity: Class 2

General

Power Supply Voltage: 12V DC (10.8 to 15.6V), Negative Ground
 Fuse: 15A
 Speaker Impedance: 4-8 ohms per channel
 Power output: 45W x 4 channels
 Aux-in level: $\geq 650\text{mV}$

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

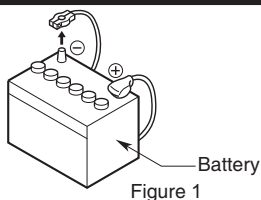
Power Output:
 20W x 4 Channels at 4 Ω
 and 1% THD+N
 Signal to Noise Ratio:
 74dB (reference: LPF 1 W into 4 Ω)



INSTALLATION AND WIRE CONNECTION

1. Before Starting

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

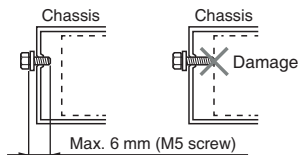
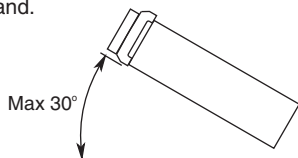


2. General Cautions

1. 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.
2. Use a soft, dry cloth to clean the case. Never use a rough cloth, thinner, benzene, or alcohol etc. For tough dirt, apply a little cold or warm water to a soft cloth and wipe off the dirt gently.

3. Cautions on Installation

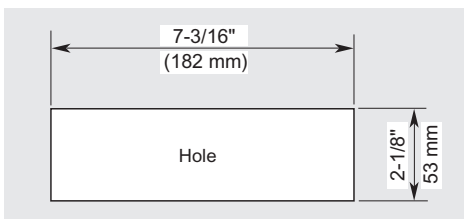
1. Prepare all articles necessary for installing the source unit before starting.
2. Install the unit within 30° of the horizontal plane. (Figure 2)
3. If you have to do any work on the car body, such as drilling holes, consult your car dealer beforehand.
4. Use the enclosed screws for installation. Using other screws can cause damage. (Figure 3)



4. Installation the Source Unit

1. Place the mounting bracket into the instrument panel, use a crewdriver 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.
4. Take care of the top and bottom of the trim ring and mount it so that all the hooks are locked.

● Console opening dimensions



Note: 1. Some car models require special mounting kits for proper installation. Consult your **Clarion** dealer for details.

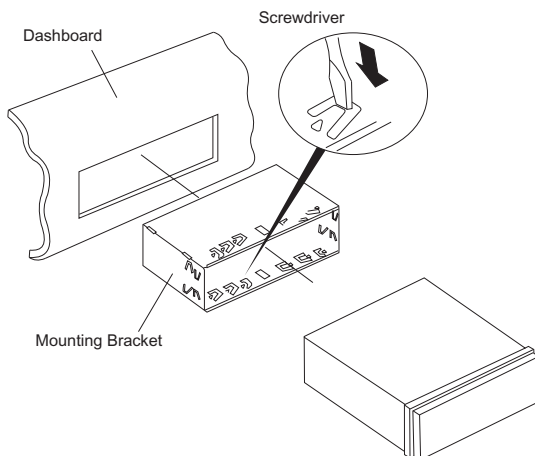
2. Fasten the front stopper securely to prevent the source unit from coming loose.

Notes of installation:

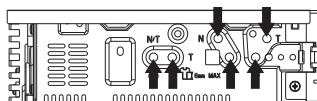
- Before installation, please make sure proper connections are conducted and the unit operates normally. Improper connection may result in damage to the unit.
- Use only accessories designed and manufactured for this unit and other unauthorized accessories may result in damage to the unit.
- Before installation, please fasten all power cables.
- DO NOT install the unit in the place where close to hot area to prevent damage to electrical components such as the laser head.
- 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.

Unit installation**Method A**

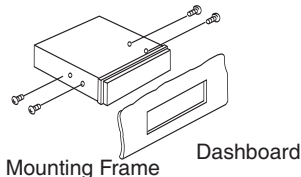
1. Insert mounting bracket into dash board, choose appropriate mounting tab according to the gap width, bending the mounting tab outwards with a screwdriver to fix the mounting bracket in place.
2. Slide the unit into the bracket until you hear a click sound.

**Method B**

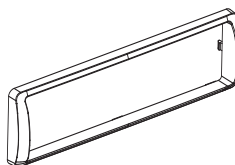
1. Insert this unit directly to the opening of the dashboard.
2. Place M5 × 7 cylindrical screw through the holes of the mounting frame located inside the opening to holes of the unit and fasten the screws to left & right.



M5x7

**Trim ring installation**

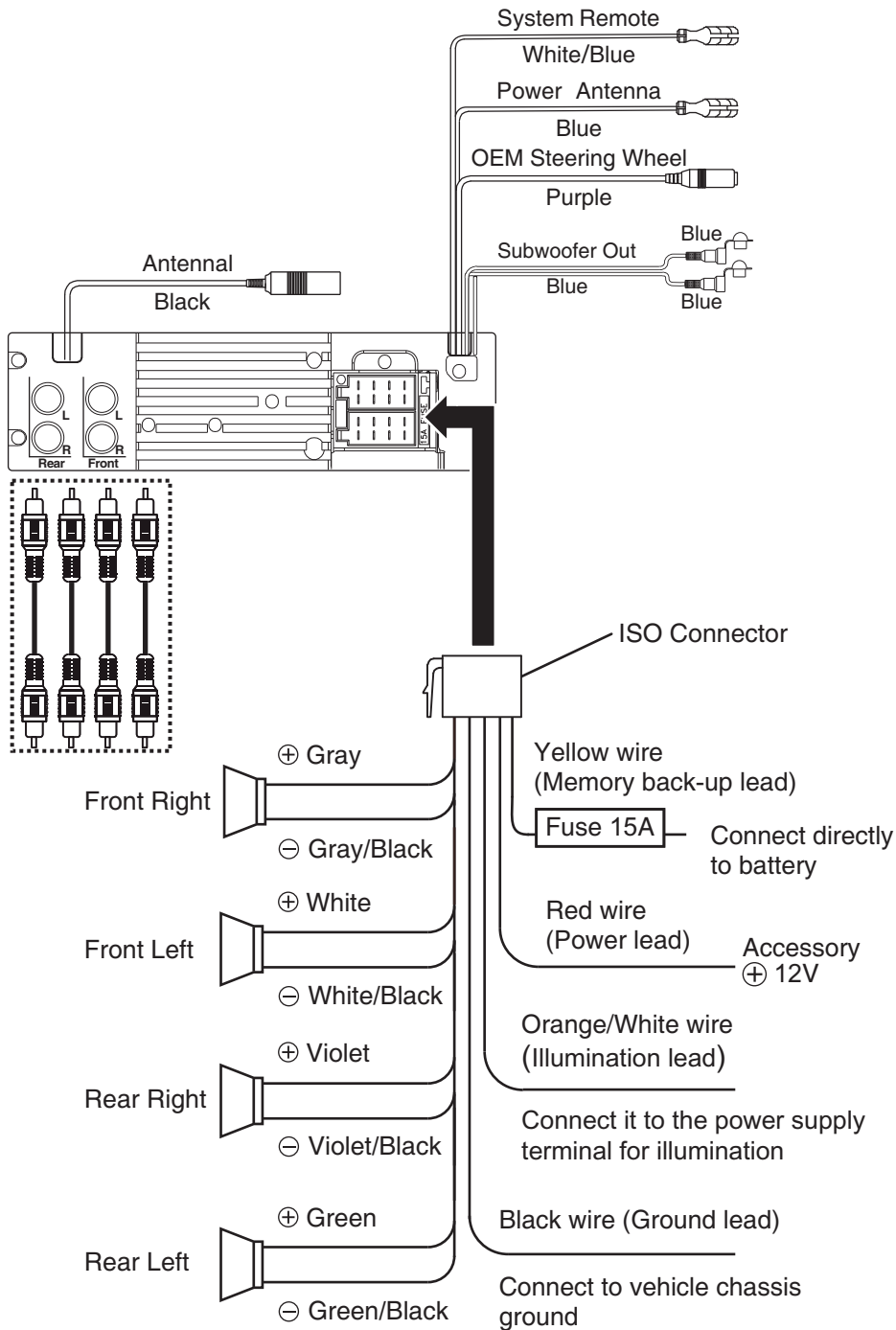
Attach the trim ring around the front panel. Take care of the top and bottom of the trim ring and mount it so that all the hooks are locked.



Top

Bottom

5. Wiring and Connections



Clarion Corporation of America

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