

Clarion®

FX109
User's Manual
Bluetooth USB/MP3/WMA RECEIVER



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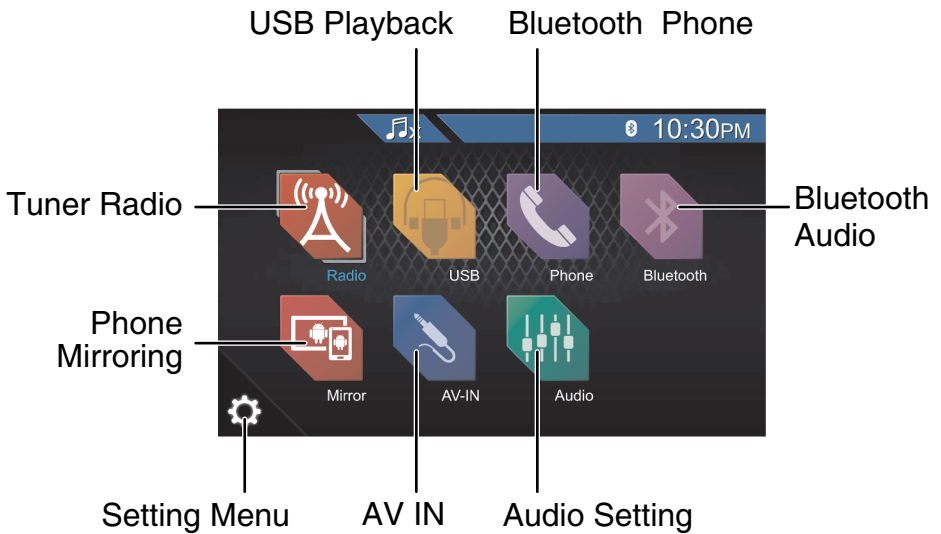
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1. FUNCTIONS



◆ Functions of the Buttons on the Head Unit

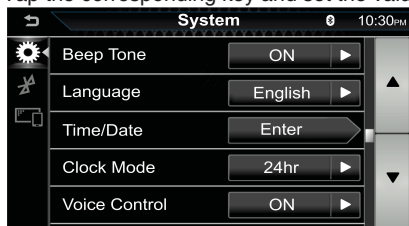


◆ Home Screen Descriptions



2. GETTING STARTED

1. Press the [ POWER] button on front panel to turn on the unit.
2. Tap [].
3. Tap the corresponding key and set the value.



◆ System Mode

[Beep Tone]

Activates or deactivates the key-touch tone.

[Language]

Select the language used for the control screen and setting items.

[Time/Date]

Adjust the clock time.

[Clock Mode]

Select the time display format.

[Voice Control]

The voice recognition function of the cell-phone.

[Dimmer]

To adjust the LCD display backlight

[Demo]

To automatically demo this unit's major features cyclic on LCD display.

[SWC Learning]

Sets the desired function in the steering remote controller.

[Parking Mode]

Turn On/Off the parking mode.

[Parking Assist Guide]

Display parking guidelines to enable easier parking when you shift the gear to the reverse position.

[Parking Guide Adjust]

If you select [ON] for [Parking Guidelines], you can adjust the parking guidelines.

[Rear AV In]

Set up the input device of the AV-IN terminal.

[Camera In]

Set the camera to be displayed when you shift the gear to the reverse (R) position.

[Information]

To view all detailed information of the system.

[Default]

Restores the default settings.

[Factory Mode]


Reset back to factory default settings.

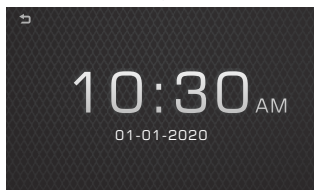
◆ Bluetooth Mode

Displays the Bluetooth Settings screen.

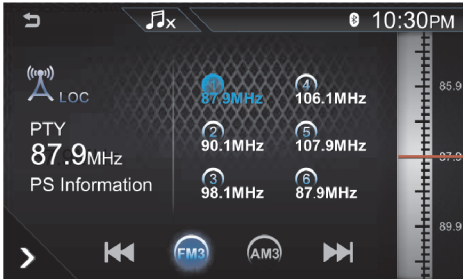
◆ Phone Mirror

Displays the Phone Mirror Settings screen.

4. Press the [ POWER] button on the front panel to mute or restore volume.
5. Press the [+ / -] buttons on the front panel to increase / decrease the volume.
6. Tap to view the Clock.



3. LISTENING TO THE RADIO



◆ Selecting The Radio Band

Tap on [**FM3** / **AM3**] buttons to select one radio band among FM/AM.

◆ Auto Seek

Tap on [**◀◀/▶▶**] buttons to automatically search for the next radio station.

◆ Manual Seek

Tap and hold [**◀◀/▶▶**] buttons to Manual search for the next radio station.

◆ Presets

Tap and hold [**① ② ③ ④ ⑤ ⑥**] to select the preset position to save the current frequency.

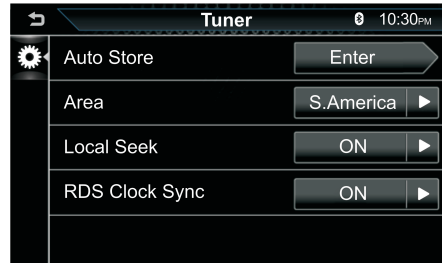
◆ Recalling a Preset Station

A total of 6 preset positions exists to store individual radio stations in memory.

Tap on [**① ② ③ ④ ⑤ ⑥**] to select the desired preset station.

◆ Radio Setup

Tap on [**▶**] button to access the Radio Setup Menu.



• Auto Store

Automatically searches and stores the 6 stations with the strongest signals for the selected band.

• Area

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

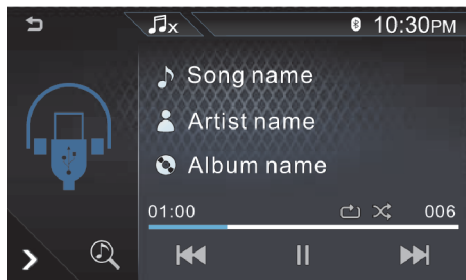
• Local Seek

To receive more radio stations or only stations with strong signal, you can adjust the tuner sensitivity.

• RDS Clock Sync

Synchronizing the Radio Data System station time data and this unit's clock.

4. USB PLAYBACK



◆ Play / Pause

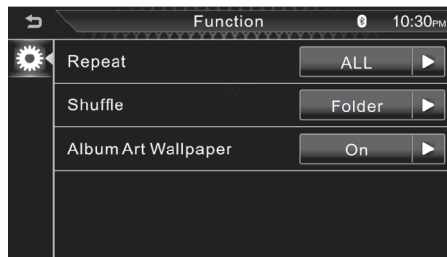
Tap on [▶/||] buttons to Play or Pause audio playback.

◆ Selecting a Track

1. Tap on [◀◀/▶▶] buttons to move to the beginning of the previous/next track.
2. Tap and hold the [◀◀/▶▶] buttons to Fast forward/backford.

◆ Music Function Setup

Tap on [▶] button to access the Music playback Function Setup Menu.



• Repeat

- ☀ All:Repeats all files
- 📁 One:Repeats current file
- 📁 Folder:Repeat all files in current folder

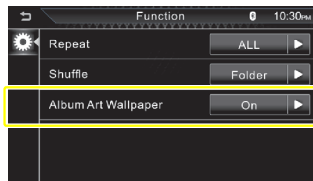
• Shuffle

- ⌂ Off:Normal playback
- 📁 On:Shuffling plays all files

• Album Art Wallpaper

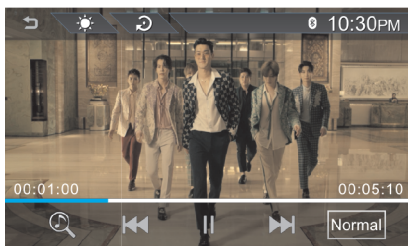
You can set the Album Art to the background image.

Tap [ON] or [OFF] to enable/disable this function.



◆ Video Playback




1. Tap on [🔍] button to display the Playback List.
2. Tap on [📺], and then tap desired item from the content list.





- [NORMAL]/[16:9]/[4:3]:Select a screen mode
- [🔍]:Searches file
- [🔄]:Reset to the factory settings
- [☀]:Adjust image quality in video screen
- [▶/||]:Play/Pause
- [◀◀/▶▶]:Searches the previous/next content. Tap and hold to fast forward or fast backward

4. USB PLAYBACK

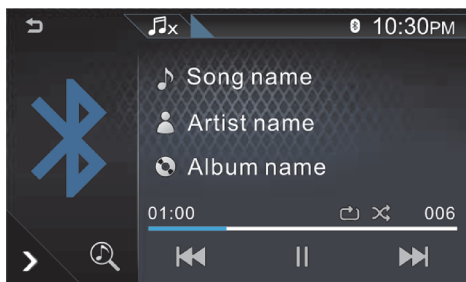
◆ Selecting a Track In a List

1. Tap on [] button to display the Playback List.
2. Select whether you search by audio files [] / video files [].



3. Tap [ / ] to moves to the upper hierarchy
4. Touch the desired folder. When you tap a folder its contents are displayed.
5. Tap desired item from the content list, the playback starts.

5. BLUETOOTH



◆ Play / Pause

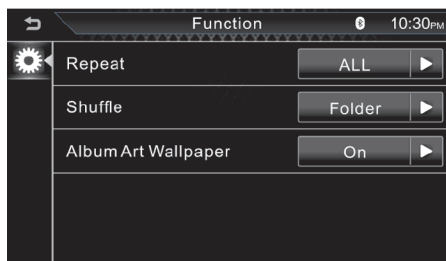
Tap on [▶/||] buttons to Play or Pause audio playback.

◆ Selecting a Track

1. Tap on [◀◀/▶▶] buttons to move to the beginning of the previous/next track.
2. Tap and hold the [◀◀/▶▶] buttons to Fast forward/backford.

◆ Music Function Setup

Tap on [⏮] button to access the Music playback Function Setup Menu.



• Repeat

- ◻ All:Repeats all files
- ◻ One:Repeats current file
- ◻ Folder:Repeat all files in current folder

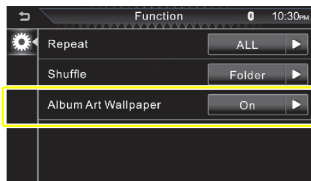
• Shuffle

- ◻ Off:Normal playback
- ◻ On:Shuffling plays all files

• Album Art Wallpaper

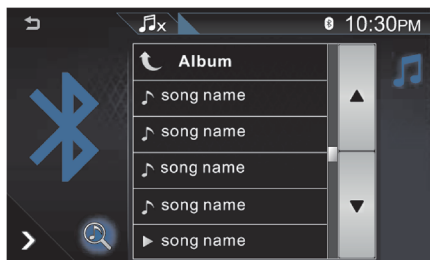
You can set the Album Art to the background image.

Tap [ON] or [OFF] to enable/disable this function.



◆ Selecting a Track In a List

1. Tap on [🔍] button to display the Playback List.
2. Select whether you search by audio files [🎵].







3. Tap [▲/▼] to moves to the upper hierarchy
4. Touch the desired folder. When you tap a folder its contents are displayed.
5. Tap desired item from the content list, the playback starts.



6. BLUETOOTH PHONE

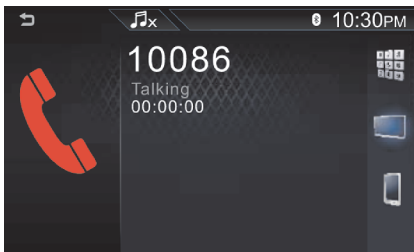
◆ Making a Call





1. Enter a phone number with number keys.
2. Tap [] to make a call.
 - : To delete the last entry
 - : Call using call records
 - : Phonebook

◆ Receiving a Call

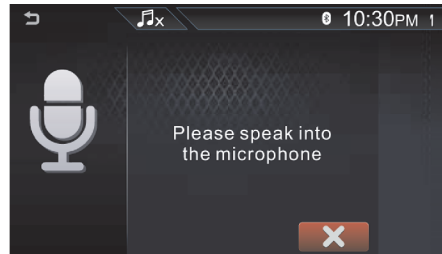
1. If there is an incoming call, tap  to answer/accept the call.
2. When conversation ends, tap  to terminate the call.




-  You can send tones by touching desired keys on the screen.
-  Switches the speaking voice output between smartphone/cell-phone and speaker.

◆ Voice Assistant

You can access the voice recognition function of the phone connected to this Car AV System.



7. 24BIT DSP AUDIO OPERATION

Tap  to access into the Audio Settings Mode adjust the various settings.

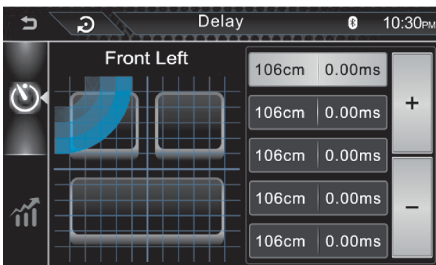




◆ 13 Band Equalizer



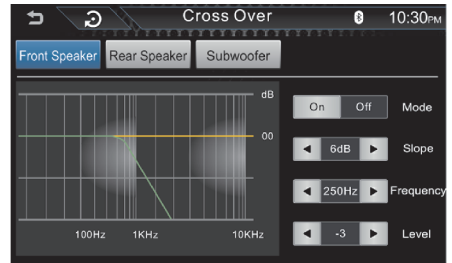
You can customize the equalizer, tap **User 1** **User 2** stored.

◆ Time Alignment



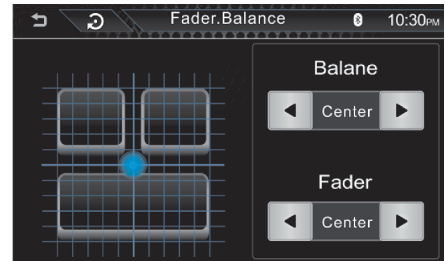
- Tap  to adjust the delay time of the selected speaker
- Tap  to adjust the sound level of the selected speaker.

◆ Cross Over



- Tap **Front Speaker** to set the virtual tweeter when you are selecting front speakers.
- Tap **Rear Speaker** to switch Front/Rear high pass filter function
- Tap **Subwoofer** to switch Subwoofer low pass filter transfer function

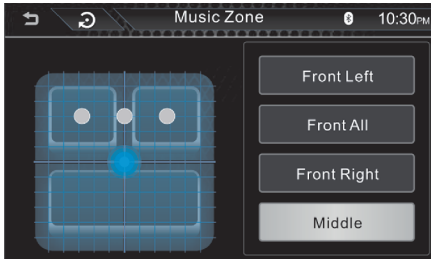
◆ Fader/Balance



- **[Fader]:** Adjust the front and rear volume balance. 15(front) to -15(rear)
- **[Balance]:** Adjust the left and right volume balance. 15(right) to -15(left)

7. 24BIT DSP AUDIO OPERATION

◆ Music Zone



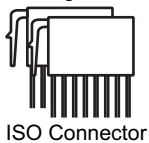
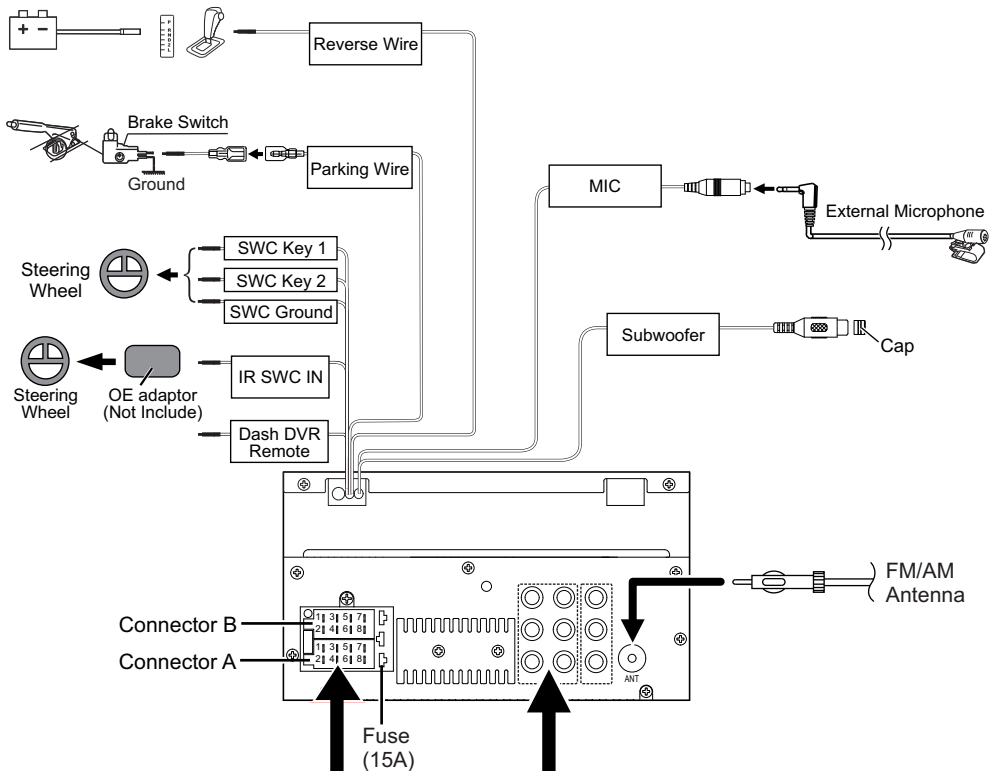
- Select the preset listening zone to fit with perfect listening position

◆ Bass Boost

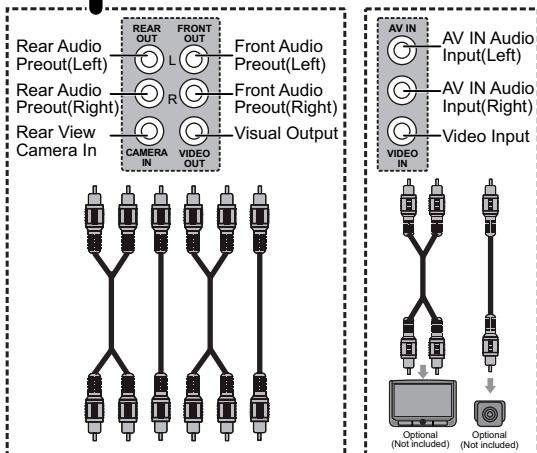


- **[Bass Boost]**: Set the amount of bass boost
- **[Loudness]**: Set the amount of boost of low and high tones

8. WIRING DIAGRAM



Pin	Color and Function
A4	Yellow Battery(+)
A5	Blue/White Power Control
A7	Red Ignition(ACC)
A8	Black Earth (Ground) Connection
B1/B2	Purple(+)/Purple Black(-) Rear Right
B3/B4	Gray(+)/Gray Black(-) Front Right
B5/B6	White(+)/White Black(-) Front Left
B7/B8	Green(+)/Green Black(-) Rear Left



9. SPECIFICATIONS

Monitor section

Screen Size	6.8 Inches
Display Resolution	800x480 dots
Contrast Ratio	500

USB interface section

USB Standard	USB 2.0 Full Speed
File System	FAT 16/32
Maximum Current	DC 5 V \approx 1.5A
D/A Converter	24 bit

Bluetooth section

Communication System	Bluetooth Ver 4.1
Output	Bluetooth Standard Power Class 2
Maximum Communication Range	Approx. 10meters
Frequency Band	2.4 GHz
Compatible Bluetooth Profiles	HFP/SPP/A2DP/AVRCP /PBAP
Supported Codecs	SBC (Sub Band Codec)

Radio section

Frequency FM Range	87.9-107.9MHz
Frequency AM Range	530-1710KHz
Usable sensitivity	13.2 μ V (FM) 44.7 μ V (AM)(MW)

Video section

Color System of External Video Input	NTSC/PAL
External Video Input (RCA/3.5m Jack)	1 Vp-p /75 Ω

Audio section

Maximum Power	50Wx4
Continuous Power Output (RMS)	22Wx4
Preout Level (V)	2V/10k Ω
Preout Impedance	\leq 1.3k Ω
Speaker Impedance	4-8 Ω
Output Frequency Band	20-20000Hz

General

Operating Voltage	14.4V(10.5-16 V)
Operational Temperature Range	-20° C ~ +70° C
Maximum Current Consumption	15A

Support Formats

Support Audio Formats

- MP3/WMA/WAV/FLAC Bit rate:16-320 Kbps,VBR
- WMA Version V9 or earlier
- ID3 Tag Version 1.0/1.1/2.2/2.3/2.4

Support Video Formats

- MPEG 1 (.mpg,mpeg), 720x480(30fps)
- MPEG 2 (.mpg,mpeg), 720x480(30fps)
- MPEG 4 (.mp4,avi), 1280x720(30fps)

Support File / Folder Formats

- Directory nesting up to a maximum of 8 levels
- Number of tracks/titles: maximum 999
- Number of albums/folders:maximum 99

FCC STATEMENT

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, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

2. any 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/IC 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 Warning

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s).

- 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.

Cet appareil contient des émetteurs / récepteurs exemptés de licence conformes aux RSS(RSS) d'Innovation, Sciences et Développement économique Canada.

- (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."

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