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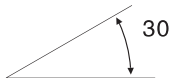
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# INSTALLATION

## Notes:

- Choose a mounting location where the unit will not interfere with the driver's ability to control the vehicle.
- Before final installation, temporarily connect the wiring. Make sure all connections are done correctly, and that the system operates properly.
- Use only the parts included with the unit to ensure proper installation. The use of unauthorized parts can cause malfunctions.
- Consult with your nearest dealer if installation requires the drilling of holes or other modifications to the vehicle.
- If installation angle exceeds 30° from horizontal, the unit might not give its optimum performance.



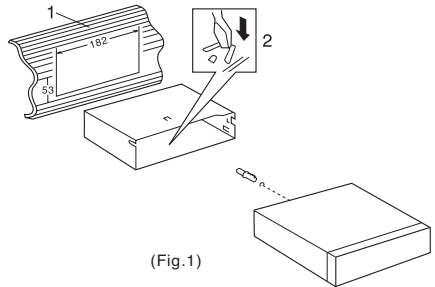
- Install the unit only where it is not subject to excessive temperature from heated air or direct sunlight, or where it is protected from dust, dirt and excessive vibration.

## DIN FRONT/REAR-MOUNT

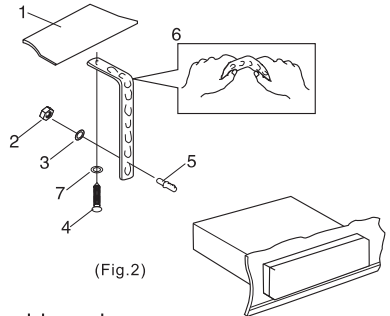
This unit can be properly installed either from "Front" (conventional DIN Front-mount) or "Rear" (DIN Rear-mount installation, utilizing threaded screw holes at the sides of the unit chassis). For details, refer to the following illustrated installation methods.

## DIN FRONT-MOUNT (Method A)

### Installing the unit



1. Dashboard
2. Mounting Bracket  
After inserting the holder into the dashboard, select the appropriate tabs according to the thickness of the dashboard material and bend them outward to secure the bracket in place.
3. Screw



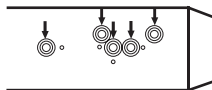
1. Dashboard
2. Nut (5mm)
3. Spring washer
4. Screw (5 x 16mm)
5. Screw
6. Backstrap  
Be sure to use the back-strap to secure the back of the unit in place. The back-strap can be bent by hand to the desired angle.  
Note: The trim piece, backstrap, and mounting bracket are not used for REAR-MOUNT.
7. Plain washer

# INSTALLATION

## DIN rear mount installation (uses factory radio mounting bracket)

Select a position on the head unit housing where the screw holes of the factory radio mounting bracket align with the threaded screw holes on sides of the head unit. Insert screws in two such locations on each side, and tighten securely.

select two mounting hole positions on each side of head unit

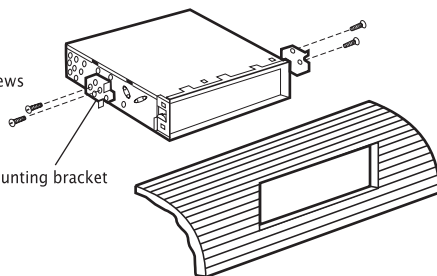


**NOTE: For the rear-mount installation, do not use the trim piece, backstrap or mounting case.**

use two mounting screws on each side

factory mounting bracket

factory bezel or dashboard opening

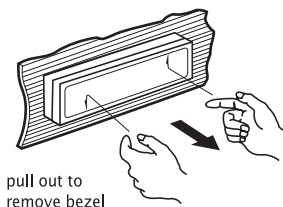
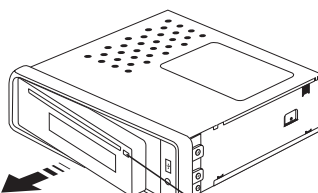


## Removing the head unit

1. Before removing the bezel, press the RELEASE button to remove the front panel.
2. Insert fingers into the groove in the right side of the frame and pull out to remove the frame. (You can also remove the frame from the left side.)
3. Then insert the levers supplied with the unit into the grooves at both sides of the unit as shown in figure until they click. Pulling the levers makes it possible to remove the unit from the dashboard.

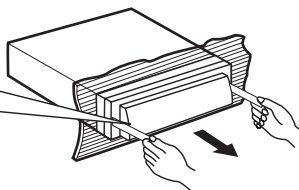
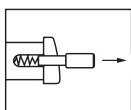
press RELEASE to release the front panel...

Release Button



pull out to remove bezel

insert keys until "click" occurs, and then use keys to pull out head unit

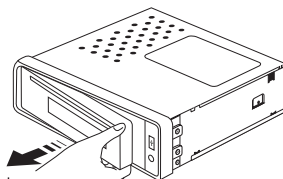
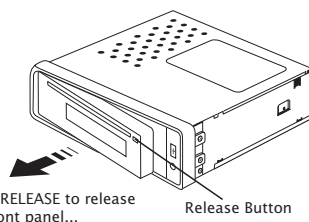


## DETACHING THE FRONT PANEL

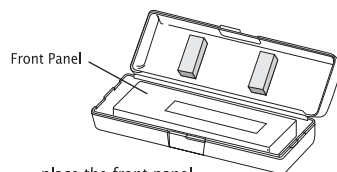
Press the RELEASE button to release the panel from right side of the head unit.

Grasp the right side of the panel and pull to remove it.

Immediately place the front panel in its protective case for safe and clean storage.



grasp the right side of the panel and pull to remove the panel...



place the front panel in its protective case...

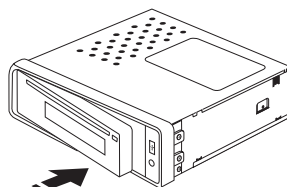
Be careful when handling the front panel!

1. Do not drop front panel.
2. When detaching or reinstalling, do not put pressure on the display
3. Do not touch the contacts on the panel or the main unit body - doing so may result in poor electrical contact.
4. Dirt or foreign substances can be removed with a clean, dry cloth.
5. Do not expose the panel to high temperatures or direct sunlight.
6. Do not permit volatile agents or solvents to contact the front panel.
7. Do not attempt to disassemble the front panel.

## REINSTALLING THE FRONT PANEL

Push the front panel into the main body. You should hear a "click"

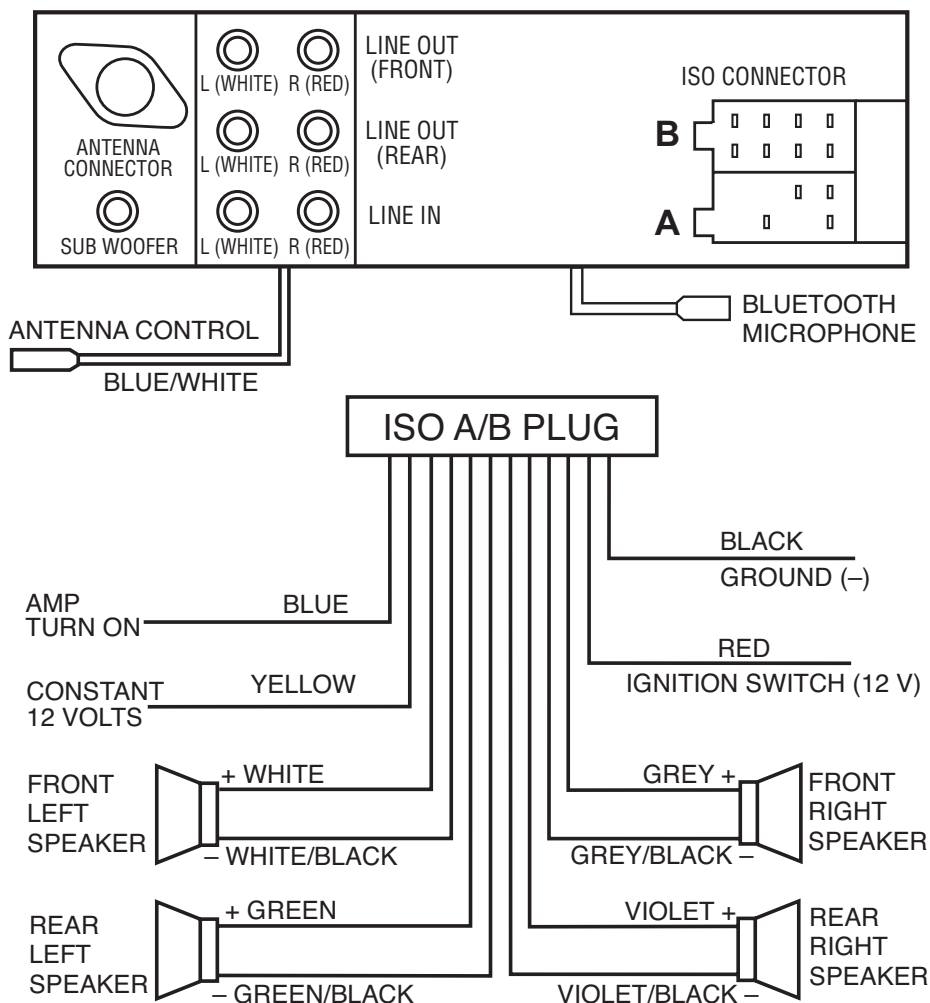
**NOTE:** If the panel fails to lock into position properly, the function of some controls may be impaired, and some segments of the display may not become illuminated. If this occurs, press **RELEASE** and reinstall the front panel.



push panel into main unit until you hear a "click."

# WIRING CONNECTION

## ELECTRICAL CONNECTIONS



### AUXILIARY INPUT FEATURE:

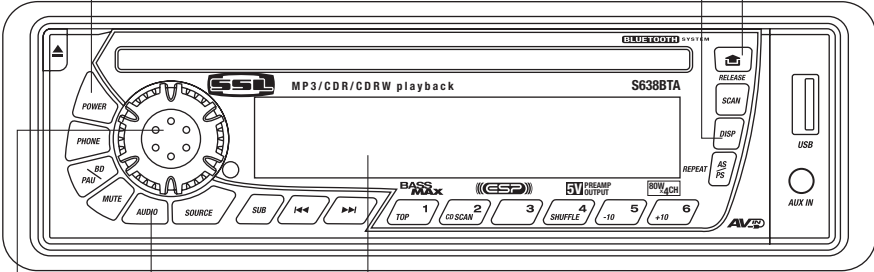
This CD Receiver features an Auxiliary Input jack on the back side of the unit. An external audio source such as a portable audio player or a DVD player may be connected via this input jack.

GENERAL CONTROLS

**POWER** Press any button to turn unit ON. To turn head unit off, press and hold POWER.

**RELEASE** Press to release and remove the front panel.

**DISP** Selects radio frequency or clock display.  
To set the clock:  
1. With clock display selected, hold down (DISP) button until clock display starts flashing.  
2. Rotating VOL left to change minutes, VOL right to change hours.  
3. Press (DISP) button to start clock



The Liquid Crystal Display will display the current state of the unit.

**SCROLL MODE** When press the AUDIO button for more than 2 seconds, it is activated as selecting mode of these function.



**SCROLL 1:** Unit displays song details but no text scrolling.  
**SCROLL 2:** Unit displays song details and scrolls the text information to the left.

**BEEP MODE** When press the AUDIO button for more than 2 seconds, it is activated as selecting mode of these function.



**BEEP ON:** BEEP sound can hear from speaker when the buttons are pressed.

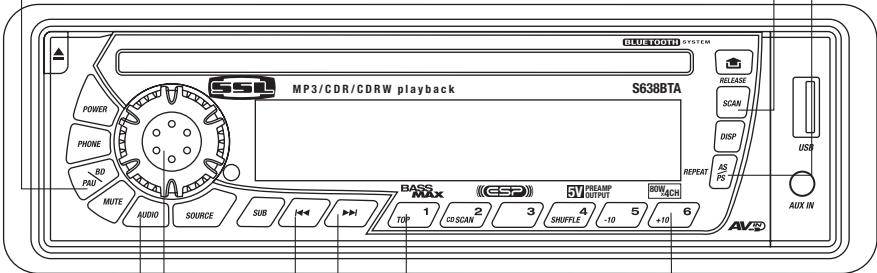
# OPERATION

## RADIO CONTROLS

- AS/PS Select six strong stations and store them in current band.
1. Select a band (if needed)
  2. Hold A/PS button for more than three seconds. The new stations replace stations already stored in that band.
- Preset Scan
- Scan stations stored in current band
1. Select a band (if needed)
  2. Touch A/PS for more than one second but less than three seconds. Radio pauses for five seconds at each station. Touch A/PS again to stop scanning when desired station is reached.

SCAN This key is operated as RADIO SCAN. The operation is similar as normal search but different thing is holding 5 seconds on every station detected in RADIO SCAN mode.

BAND Push this switch to select the desired band. Selection is made in regular sequence as FM-AM.



- STATION PRESETS Six numbered preset button store and recall stations for each band.
- Storing a station:
1. Select a band (if needed)
  2. Select a station
  3. Hold a preset button longer than one second. Preset station number appears in the display when station is saved.
- Recall a station:
1. Select band (if needed)
  2. Press a preset button for less than one second to select stored station.

TUNE BUTTONS When pressed for less than 1 second, these keys operate as SEEK tuning mode.

When pressed longer than 1 sec., they are operated as MANUAL tuning mode.

If the keys are not pressed for 3 seconds, they will return to SEEK mode again.

MENU MODE When press this button for more than 2 seconds, it is activated as selecting mode of these function.

STEREO/MONO MODE When press AUDIO button for more than 2 seconds, it is activated as selecting mode of these function.



When FM stations are weak and are disturbed, listening can be improved by selecting MONO.

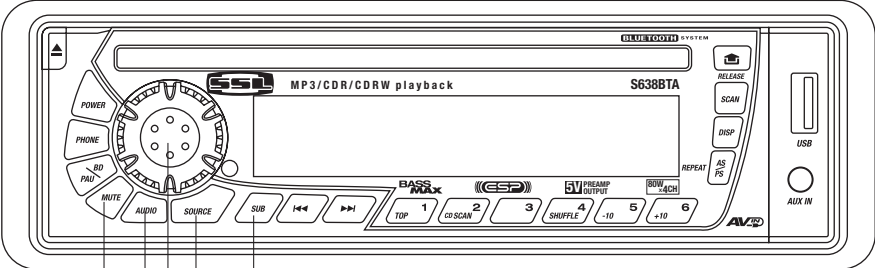
LOCAL/DX MODE When press AUDIO button for more than 2 seconds, it is activated as selecting mode of these function.



"Local" position in areas with strong signals to let radio stop at only strong stations during manual tuning (LOC appears). Press to Distant position in areas with weak signals to listen to all stations.

# OPERATION

## AUDIO CONTROLS



**SUBWOOFER** Press this button to engage subwoofer output

**SOURCE** By pressing this key, user can select AUX/TUNER/CD-MP3/USB mode.

**AUDIO BUTTON and ROTARY CONTROL** Press the button repeatedly to access Volume, Bass, Treble, Balance and Fader functions. Then use the knob to adjust the selected function.

**DSP MODE** When press AUDIO button for more than 2 seconds, it is activated as selecting mode of these function.



POP, ROCK, CLASSIC, FLAT or DSP OFF selected by rotary VOL left or right

**LOUD MODE** When press AUDIO button for more than 2 seconds, it is activated as selecting mode of these function.



LOUD ON/OFF mode is selected by rotary VOL left or right. Increase the level of bass output.

**SUBWOOFER** When press AUDIO button for more than 2 seconds, it is activated as selecting mode of these function.



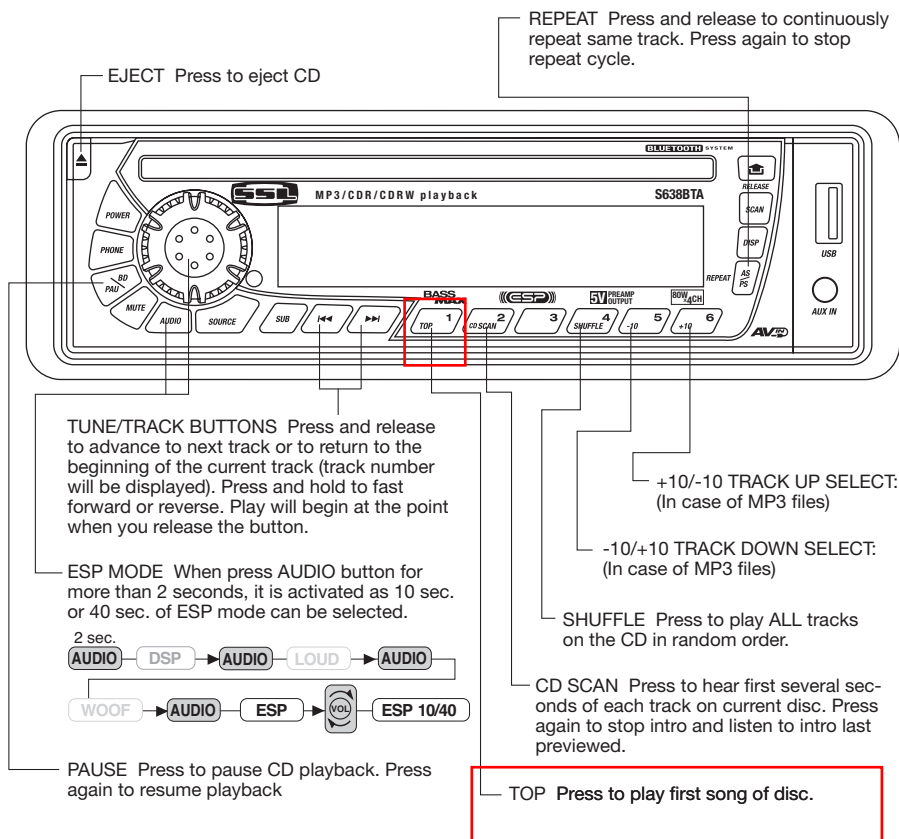
SUBWOOFER output selected by rotary VOL left or right.

**MUTE** Press this button to silence the receiver. Press again to return to normal operation.



# OPERATION

## CD/MP3 PLAYBACK CONTROLS



## CD/MP3 Operation

**To PLAY a CD** gently insert a CD with the label side up into the disc slot. It will automatically load and begin playing the first track.

**To EJECT a CD** press EJECT to stop the CD playback and eject the CD from the slot. The receiver will automatically switch to radio mode.

**To PAUSE a CD** press PAUSE to stop playback temporarily. Press again to resume playback.

**To SKIP TRACKS** press the **▶▶** or **◀◀** key to choose the next or preceding track.

**To FAST FORWARD or REVERSE** press and hold the **▶▶** or **◀◀** key to the desired location on the disc. Releasing the button starts playback at the location.

**To REPEAT a TRACK** press REPEAT to continuously repeat the current track. Press again to return to normal playback mode.

**To PREVIEW ALL TRACKS** press CD SCAN to play the first several seconds of each track. Press it again to stop an play the current track being previewed.

**To PLAY TRACKS IN RANDOM ORDER** press SHUFFLE to play ALL tracks on the CD in random mode. Press again to cancel this function.

## How to select MP3 files

### Searching Track:

- Press and hold "AS/PS", then search track is activated. First digit will flash.
- Rotate "VOL knob to right or left", select first digit desired.
- Press "AUDIO" button, then the first digit is fixed and second digit will flash.
- Rotate "VOL knob to right or left", select 2'nd 3'rd respectively.
- Then automatically the song selected will start.

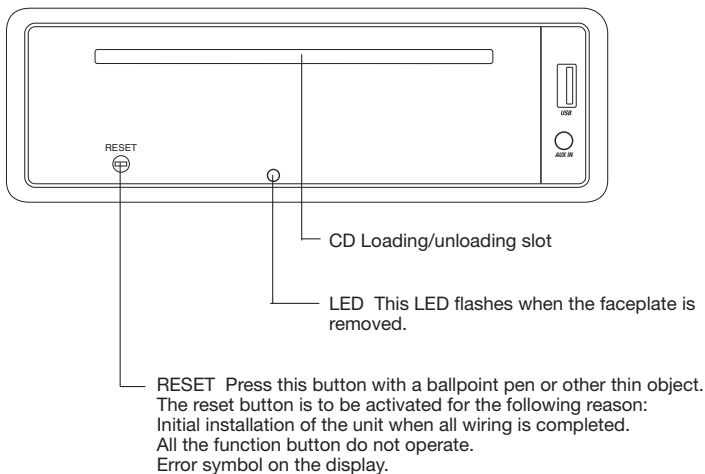
### Searching Directory:

- Press and hold "AS/PS". Press "AS/PS" again, then directory search is activated.
- Rotate "VOL knob to right or left", you can select the desired directory.
- Press "AUDIO" button again, then the directory is fixed and the first file name is displayed.
- Rotate clockwise to select the desired song.
- Press "AUDIO" button, then the song selected will start.

### Searching File Name:

- Press and hold "AS/PS". Press "AS/PS" twice, then character search mode is activated. "\*" character is displayed.
- Rotate "VOL knob to right or left", you can select the desired letter.
- Press "AUDIO" button longer than 2 sec.
- The song with the same character you selected is displayed.
- Rotate clockwise to select the desired song.
- Press "AUDIO" button, then the song selected will start.

## Controls behind faceplate



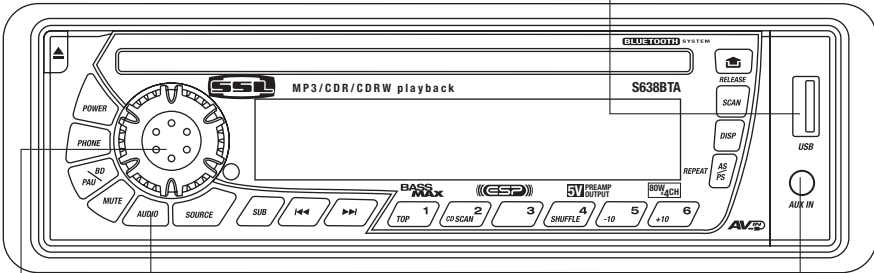
**NOTE:** If the unit does not function properly after you have pressed the **RESET** button, clean the socket and the connector on the rear of the front panel with a cotton swab soaked in isopropyl alcohol and try again.

# OPERATION

## USB and front side AUX IN operations

### USB Port

Enhanced control of connected Portable Media such as digital MP3 Players, by using function keys on the main unit or the remote control unit.  
This unit features the latest ID3 Tag support, which allows you to see the song's name and which folder it's located in, on the LCD display.



**AUX IN**  
Convenient easy to use front “AUX IN” input jack, allows easy connection of Portable Media and other digital MP3 Players.

**CD MULTI SECTION MODE** When press AUDIO button for more than 2 seconds, it is activated as selecting mode of these function.



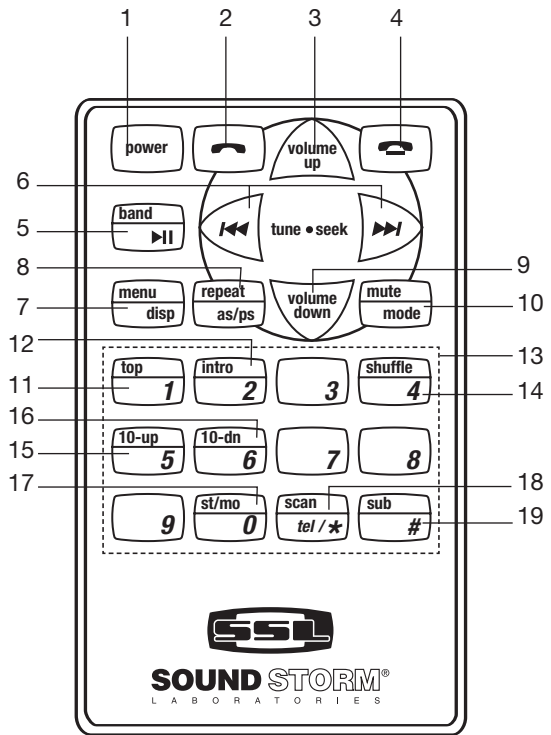
CD MULTI ON/OFF mode is selected by rotary VOL left or right  
CD MULTI ON: Read multi section CD.  
CD MULTI OFF: Read first section only.

**\* IMPORTANT INFORMATION:**  
BECAUSE OF THE GREAT VARIETY OF PRODUCTS WITH USB PORTS AND THEIR SOMETIMES QUITE MANUFACTURER-SPECIFIC FUNCTIONS WE CAN NEITHER GUARANTEE THAT ALL DEVICES WILL BE RECOGNIZED NOR THAT ALL OPERATING OPTIONS THAT ARE POSSIBLE IN THEORY WILL ACTUALLY WORK

# OPERATION

## Remote controls functions

- 1. POWER ON / OFF
- 2. ANSWER A CALL
- 3. VOLUME +
- 4. END A CALL
- 5. BAND / CD PLAY / PAUSE
- 6. TUNE / SEEK
- 7. MENU / DISPLAY
- 8. CD REPEAT / AUTO STORE/PRESET SCAN
- 9. VOLUME -
- 10. MUTE / MODE
- 11. CD PLAYER FIRST SONG
- 12. CD SCAN
- 13. PHONE NUMBER / BUTTON 1-6: STATION PRESETS
- 14. CD SHUFFLE
- 15. 10 TRACK UP SELECT
- 16. 10 TRACK DOWN SELECT
- 17. STEREO / MONO MODE
- 18. RADIO SCAN / PHONE
- 19. SUBWOOFER



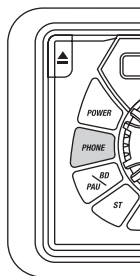
Note: You can dial calls with this remote control. Please refer to “Making Calls Using the Dial Keypad”.

# HOW TO USE BLUETOOTH IN YOUR CAR AUDIO

## HOW TO PERFORM PAIRING

Before you can dial out from the car stereo, you must first perform **PAIRING**. Pairing is a procedure used to connect 2 Bluetooth devices together.

1. Press and hold **AUDIO** button for 2 seconds.
2. Press **AUDIO** button repeatedly until **"PAIRING"** displays.
3. Press and hold **AUDIO** button to engage pairing mode. **"PAIRING"** blinks on the display.
4. Turn on the Bluetooth feature of your mobile phone. Perform "Add Bluetooth device" from your mobile phone. The mobile will search for any Bluetooth devices within the range. Select **"BHF207C"** and enter Passkey: **"0000"** to connect to the car audio. (Please refer to the instruction manual of your mobile phone for Bluetooth Pairing).
5. The LCD will display **"PAIRED"** after successful pairing.



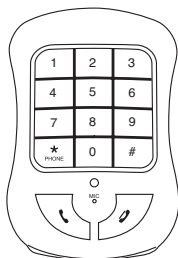
### Note:

- If **"DISCONN"** shows instead of **"PAIRING"**, it means the head unit currently is paired with another device. Press and hold **AUDIO** button to disconnect the connection and perform steps above again.
- **"BHF207C"** is the Bluetooth device name of the car stereo.
- Refer to your cellular user manual for the proper procedures of pairing Bluetooth devices.

## Audio Streaming




If your phone is "A2DP" format compatible, then you can play music in your mobile and the sound will be transferred to car head unit.

1. Make sure your mobile and the unit is properly paired and connected.
2. Play the music through your mobile music player software.
3. Press **SOURCE** repeatedly until **"BT-PLAY"** appears in the display. The sound will be transferred to the head unit.





## Making Calls Using the Dial Keypad

You can make calls directly from the supplied Dial Keypad. Before you make calls, make sure that the devices are properly paired and the keypad cable properly connected to the back of the head unit.

1. Press **PHONE** button or press and hold (\*) on the keypad.
2. Enter the phone number via the keypad and press  button to dial out. Press  button to make corrections when entering numbers.
3. Press  button to end call.

**Tips:** Press **PHONE** on the head unit is the same as press and hold (\*) on the keypad.


## Answering / Hanging Up

To answer a call, press the  button on the dial keypad. Speak directly to the keypad's microphone. Once you have finished your conversation, press the  button to hang up.


## Calls (Outgoing, Incoming)

The unit stores all the incoming and outgoing calls. Use this feature to check the numbers and make calls from it.

**"OUT NUM"** – outgoing calls made through the dial keypad.

1. Press **PHONE** then press and hold **AUDIO** button for 2 seconds. **"OUT NUM"** displays.
2. Press and hold **AUDIO** button again.
3. Rotate volume knob to search for entries and press  to call.

**"IN NUM"** – incoming calls received.

1. Press **PHONE** then press and hold **AUDIO** button for 2 seconds.
2. Press **AUDIO** button repeatedly until **"IN NUM"** displays.
3. Press and hold **AUDIO** button again.
4. Rotate volume knob to search for entries and press  to call.

## Adding Contacts

The unit can save contact telephone number for quick access.


1. Press **PHONE** then press and hold **AUDIO** button for 2 seconds.
2. Press **AUDIO** button repeatedly until **"ADD NUM"** displays.
3. Press and hold **AUDIO** button again.
4. Using volume knob, enter the name of the contact. Press **AUDIO** to save each character entered. Press and hold **AUDIO** to save name.
5. Enter the phone number. Press **AUDIO** to save each number entered.
6. Press and hold **AUDIO** to save entry.

# HOW TO USE BLUETOOTH IN YOUR CAR AUDIO

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## ***Finding Contacts***

After adding contacts, you can use this feature to find them.

1. Press **PHONE** then press and hold **AUDIO** button for 2 seconds.
2. Press **AUDIO** button repeatedly until “*FIND NUM*” displays.
3. Press and hold **AUDIO** button again.
4. Using volume knob, select the name of the contact and press  to call.

## ***How to Set Incoming Call Melody***

1. Press **PHONE** then press and hold **AUDIO** button for 2 seconds.
2. Press **AUDIO** button repeatedly until “*MELODY*” displays.
3. Rotate volume knob to the desired melody.

## ***How to Set Incoming Call Ring Volume***

1. Press **PHONE** then press and hold **AUDIO** button for 2 seconds.
2. Press **AUDIO** button repeatedly until “*RING*” displays.
3. Rotate volume knob to the desired level.

## ***How to Set Conversation Volume***

1. Press **PHONE** then press and hold **AUDIO** button for 2 seconds.
2. Press **AUDIO** button repeatedly until “*TEL*” displays.
3. Rotate volume knob to the desired level.

## ***Disconnect Paired Devices***

You can disconnect to an already paired Bluetooth device from your car stereo.

1. Press **PHONE** then press and hold **AUDIO** button for 2 seconds.
2. Press **AUDIO** button repeatedly until “*DISCONN*” displays.
3. Press and hold **AUDIO** button again to disconnect.

# SPECIFICATIONS

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## CD/MP3 PLAYER

Signal to Noise Ratio	> 60dB
Channel Separation	> 45 dB
Frequency Response	20Hz - 20 kHz

## RADIO

### FM Section:

Frequency range	87.5-108 MHz
Intermediate frequency	10.7 MHz
Sensitivity	3 $\mu$ V
Stereo separation	30 dB
Signal to noise ratio	50 dB
Channel step	50 kHz

### AM Section:

Frequency range	522-1620 KHz
Intermediate frequency	450 KHz
Usable Sensitivity	32 dB $\mu$ V

## LINE-OUT

Output	5 V (max.)
Impedance	10k Ohm

## GENERAL

Power Supply	12V DC (10.8-15.6V allowable)
Speaker impedance	4 or 8 ohm
Maximum output power	80 watts x 4 channels