



## TR7412UB-OR

RADIO / USB MP3 / WMA / Bluetooth® 12V

### OWNER'S MANUAL



RADIO DATA  
SYSTEM



WORLDWIDE  
TUNER



MP3 / WMA



Bluetooth®



LOUDNESS  
CONTROL



LOGIC ON  
LOGIC OFF



BACKUP  
MEMORY



USB CONNECT



AUX IN

## Safety Information

Thank you for purchasing this product, please read the manual carefully before operating, and reserve it for future reference.

### PRECAUTIONS

- Only in a 12-volt DC negative-ground electrical system.
- Disconnect the vehicle's negative battery terminal while mounting and connecting the unit.
- When replacing the fuse, be sure to use one with an identical amperage rating. Using a fuse with a higher amperage rating may cause serious damage to the unit.
- Make sure that pins or other foreign objects do not get inside the unit, they may cause malfunctions, or create safety hazards such as electrical shock.
- If you have parked the car for a long time in hot or cold weather, wait until the temperature in the car becomes normal before operating the unit.
- Keep the volume at a level at which you can hear outside warning sounds (horns sirens, etc.).

### CAUTION

- DO NOT open covers and do not repair by yourself. Ask the dealer or an experienced technician for help.

## Specifications

### General

|                             |                     |
|-----------------------------|---------------------|
| Power supply:               | 12 V DC (10.8V-16V) |
| Maximum power output:       | 4 x 41 W            |
| Suitable speaker impedance: | 4 ohm               |
| Fuse spec:                  | 10 A                |
| Weight:                     | 0.7 kg              |
| Dimensions (WxDxH):         | 188x116.3x58.5 mm   |

### Frequency Table

| AREA         | BAND | RECEIVED FREQUENCY | AUTO SPACE | CHANNEL SPACE |
|--------------|------|--------------------|------------|---------------|
| USA          | FM   | 87.5 - 107.9MHz    | 200KHz     | 100KHz        |
|              | AM   | 530 - 1710KHz      | 10KHz      | 10KHz         |
| EUROPE       | FM   | 87.5 - 108.0MHz    | 100KHz     | 50KHz         |
|              | MW   | 522 - 1620KHz      | 9KHz       | 9KHz          |
|              | LW   | 144 - 288KHz       | 3KHz       | 3KHz          |
| NORTH AFRICA | FM   | 87.5 - 108.0MHz    | 100KHz     | 50KHz         |
|              | MW   | 531 - 1602KHz      | 9KHz       | 9KHz          |
|              | LW   | 153 - 252KHz       | 3KHz       | 3KHz          |
| ASIA         | FM   | 87.5 - 108.0MHz    | 50KHz      | 50KHz         |
|              | AM   | 522 - 1629KHz      | 9KHz       | 9KHz          |
| JAPAN        | FM   | 76 - 90MHz         | 100KHz     | 100KHz        |
|              | AM   | 522 - 1629KHz      | 9KHz       | 9KHz          |

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### BEFORE OPERATION

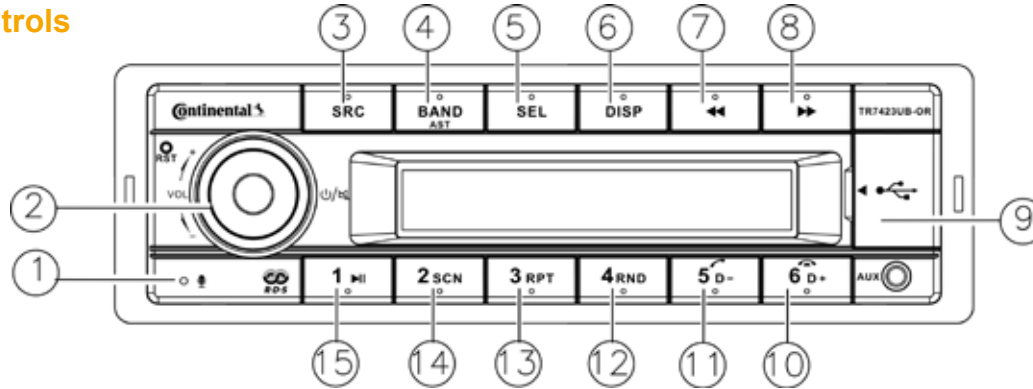
- Do not raise the volume level too much, as this will block outside sounds, making driving dangerous.
- Stop the car before performing any complicated operation.

Note:

1 According to models with different wiring harness to connect the definition of the specific content, please refer to the model label.

2 Specifications and the design are subject to change without notice due to improvements in technology.

## Panel Controls



- |   |  |   |
|---|--|---|
| <p>(1). - Microphone</p> <p>(2). - Power on/off,<br/>- Mute,<br/>when on,hold it more than 2 seconds to power off.<br/>- Rotate the VOL knob to adjust volume.</p> <p>(3). - Source<br/>Radio,<br/>USB (when USB inserted),<br/>AUX IN,<br/>A2DP,<br/>Hold it more than 2 seconds to select PTY mode.</p> <p>(4). - Band switch:<br/>FM1 -&gt; FM2 -&gt; FM3 -&gt; MW1 -&gt; MW2-&gt; LW</p> <p>- Hold it Automatically search station and store the signal strongly station to 1-6 Preset.</p> <p>(5). - Press SEL and rotate VOL knob to select EQ preset mode:</p> | <p>EQ OFF-POP-CLASSIC-ROCK-JAZZ</p> <p>- Press to enter,when selecting the PTY mode,<br/>- Press SEL and rotate VOL knob to adjust the time,when on the CLOCK mode.</p> <p>(6). - Display system clock<br/>- Hold it to setting clock<br/>- Radio mode:<br/>display PTY info/system clock/current channel,<br/>- MP3 mode:<br/>Turn and turn about folder name/file name/ ID3 TAG/Clock .</p> <p>(7). - Radio mode<br/>- Auto search the station from high to low<br/>- MP3 mode<br/>Select the previous track</p> | <p>(8). - Radio mode<br/>Auto search the station from low to high<br/>- MP3 mode<br/>Select the next track</p> <p>(9). - USB slot</p> <p>(10). - MP3 folder ahead/Hang up</p> <p>(11). - MP3 folder back/Contact mode/Dial/Call transfer</p> <p>(12). - MP3 random play</p> <p>(13). - MP3 repeat play</p> <p>(14). - Program intro play (10 sec.)</p> <p>(15). - Play/pause</p> <p>(10-15).<br/>- 1-6 radio preset<br/>Press to tune in a preset station.<br/>Hold for more than 2 seconds to store current station.</p> |
|---|--|---|

## Button Tips

### MP3 Playback

#### Track skip

Press the ◀▶ button to go to the previous or next track.

Hold it to enter fast forward or reverse back mode.

#### MP3 track fast search

Press the [5D-]/[6D+] button to select MP3 folder back/ahead

### Set Clock

If RDS clock (CT) doesn't work, you can adjust manually the Clock time.

Long press the [DISP] button to set the time.

Select [CLOCK] with the search buttons [◀▶].

Press [SEL] button and rotate [VOL] knob to adjust the minutes.

Press [SEL] button and rotate [VOL] knob to adjust the hours.

Press the [SEL] button to exit the clock setting.

### System setting

On the non time display menu:

Hold it [DISP] and press [◀▶] button to enter the system setup menu,  
 CLOCK→TA→TA RETURN→AF→REG→CT  
 →DX/LO→ST/MONO→AUTO ANS→AUTO  
 CON F→12H/24H→MIC SEL→REGION  
 →SWRC (ON/OFF)→LOGIC(ON/OFF)→  
 SCROLL(ON/OFF)

Wait for 1s and rotate the knob to set the system.

TA setting: Rotate [VOL] knob to set ON/OFF.

TA RETURN: On the FM mode, set the TA time space Info of auto search with RDS.

Setting for "LONG", Auto search the TA time space for 180 sec, Setting for "SHORT", auto search the TA time space for 45 sec.

Region setting to select AMERICAN, EUROPE, ASIA, JAPAN.

Press [SEL] button, and then press the [◀▶] button to choose EQ/BAS/TRE/BAL/FAD/LOUD function, rotate the knob to adjust.

### Tune

#### Radio seek automatically

Press the ◀▶ button auto search the station from high to low or from low to high.

#### Radio tune by step

Hold it more than 2 second, switch to the manual mode, press the button step search the station from high to low or from low to high.

#### Manual Memory Store

At FM1/FM2/FM3/MW1/MW2/LW mode, press and hold button 1-6 to store current station in memory. You can store 36 stations in total. (18 FM/ 18 AM).

### RDS

Press the [DISP] button to set AF/TA/REG, rotate the [VOL] knob to open or close AF/TA function.

Hold the [SRC] button to PTY function, rotate the [VOL] knob, display NEWS and POP program type.

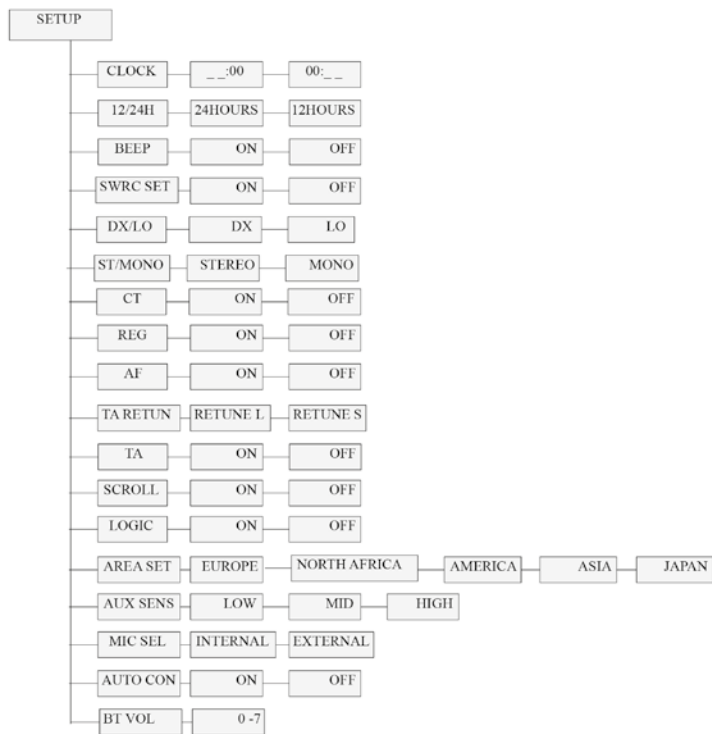
When display NEWS, rotate the knob to select opposite preset

**NEWS-AFFAIRS-INFO-SPORT-EDUCATE-  
 DRAMA-CULTURE-SCIENCE-VARIED-POP  
 M-ROCK M-EASY M-LIGHT M-CLASSICS  
 M-OTHER M-WEATHER -FINANCE-  
 CHILDREN-SOCIAL -RELIGION-PHONE IN-  
 TRAVEL-LEISURE-JAZZ-COUNTRY-NATION  
 M-OLDIES-FOLK M-DOCUMENT-TEST-  
 ALARM**

### Logic ON/Logic OFF

Logic ON to limit the use of the set to one hour when the car ignition is switched off. Logic OFF to prevent the set from turning on, when the car ignition is switched off.

## System Setting Item List



## Bluetooth Functions

### Pairing

1. Open the smartphone's Bluetooth function.
2. The smartphone searches the Bluetooth equipment.
3. Enter the pairing code(1234) to pair.

Press [6D-] button more than 2 sec, the mobile phone and the unit disconnect.

### Bluetooth mode selecting

Press [SRC] button to choose Bluetooth mode.

Press [DISP] button to display the A2DP information.

### Dialing

1. Phone dialing

Mobile phone dialing, LCD screen displays dialing information.

2. Unit dialing

Press [SRC] button switch to A2DP(Bluetooth) mode,

press [5 D+] to choose the DIAL ON function, press [SEL] button / [◀▶] button and rotate the knob to input dialing numbers, press [5 D+] button to dial.

### Voice switch

In the process of the phone,touch the icon to switch call voice in mobile phones.or press the [5D+] button to switch to DIAL ON/PLS PAIR/BLUETOOTH MUSIC.

### HANG UP/ON

Press [5D+] button to answer a call,

Press [6D-] button to hang up.

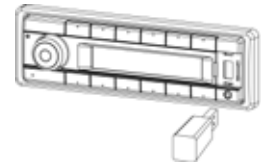
### A2DP mode

On A2DP music playing mode,press [1] button to choose pause/play mode.

## USB Function Summarization

### Loading/Take out USB equipment

1. Insert a USB device into the connector and the unit will begin to play automatically.
2. To stop playback of USB device, push the SRC button to non USB mode and then remove the USB device.



### USB functions (flash memory type)

1. USB flash memory 2 in 1 support.
2. FAT 12/FAT 16/FAT 32 format supported.
3. USB 1.1 support, USB 2.0 support (For 2.0, speed performance is as USB 1.1)
4. WMA files supported
5. Maximum number of MP3 files FAT 32 format supported is 65535 files. (Maximum number of MP3 files NTFS supported is 1000 files.)  
Maximum number of folders is 999.
6. Maximum USB capacity support is cap at 8 GB and best performance with songs not more than 500, and not exceeding 30 folders.
7. Not all USB devices are compatible with the unit.

## FCC

### 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.

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

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.

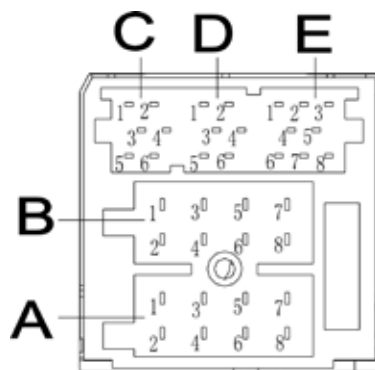
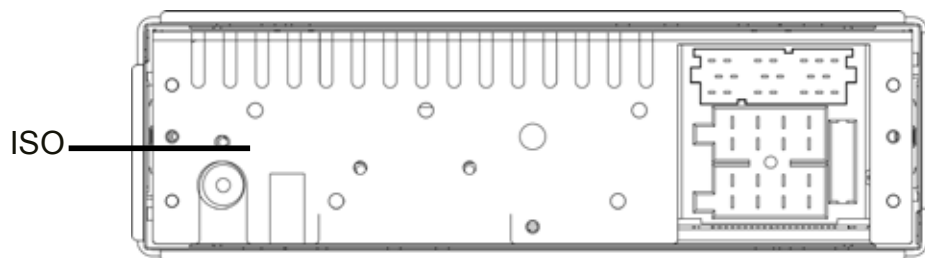
Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

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.

## Electrical Connections



| NO | NOTE               | NO | NOTE     |
|----|--------------------|----|----------|
| A1 | No Function        | B1 | Rear R+  |
| A2 | NC                 | B2 | Rear R-  |
| A3 | Telephone Mute Low | B3 | Front R+ |
| A4 | Ignition           | B4 | Front R- |
| A5 | Antenna remote     | B5 | Front L+ |
| A6 | ILLumination       | B6 | Front L- |
| A7 | Battery +          | B7 | Rear L+  |
| A8 | Power Ground       | B8 | Rear L-  |
| C4 | SWRC GND           | D1 | MIC-     |
| C6 | SWRC+              | D2 | MIC+     |



## TROUBLESHOOTING

The following checklist can help you solve some problems which you may encounter when using the unit. Before consulting it, check the connections and follow the instructions in the user manual. Do not use the unit in abnormal condition, for example without sound, or with smoke or foul smell can cause fire or electric shock, immediately stop using it and call the store where you purchased it.

| Problem                                    | Possible cause  | Solution   |
|--|---|--|
| <b>General</b>                             |   |  |
| The unit will not switch on.               | Car ignition is not on.<br>Cable is not properly connected.<br>Fuse is burnt. | Turn your car key in the ignition.<br>Check cable connection.<br>Replace fuse with a new fuse of the same capacity.                            |
| No sound                                   | Volume is set at minimum or the mute function is on.                          | Check the volume or switch the mute function off.  |
| The unit or screen does not work normally. | The unit system is unstable.  | Press the RESET button.  |
| <b>Mode TUNER</b>                          |   |  |
| Unable to receive stations.                | The antenna is not connected properly.  | Connect the antenna properly.  |
| Poor quality reception of radio station.   | The antenna is not fully extended or it is broken.                            | Fully extend the antenna and if broken, replace it with a new one.   |
| <b>Mode USB</b>                            |   |  |
| Unable to insert USB device                | The USB device has been inserted the wrong way round.                         | Insert it the other way around.  |
| The USB device cannot be read.             | NTFS format is not supported.   | Check that the file system is in FAT or FAT32 format. Due to different formats, some models of storage devices or MP3 players may not be read. |

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