



# TD - 650

## Car Radio User Manual



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Thanks for choosing our product TD-650. To ensure safety and good user experience, please read this user manual thoroughly before starting to use the product.

Important Note:

1. Please use the rated voltage stated on the product for power supply.
2. Please remain open circuit for BAT connection to avoid short circuit.
3. Please study the connection requirements carefully.
4. Please change a rated fuse if necessary.
5. Please do not knock down the product without professional guidance.
6. Please do not let metal or other things go into the inner part of the product to avoid unnecessary accident.
7. Please contact our aftersales service department by (86) 021-39117568 #8011.

## FCC Requirement

( 1 ) 、 changes or modifications not expressly approved by the party responsible for compliance could void the user' s authority to operate the equipment.

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 ) 、 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.

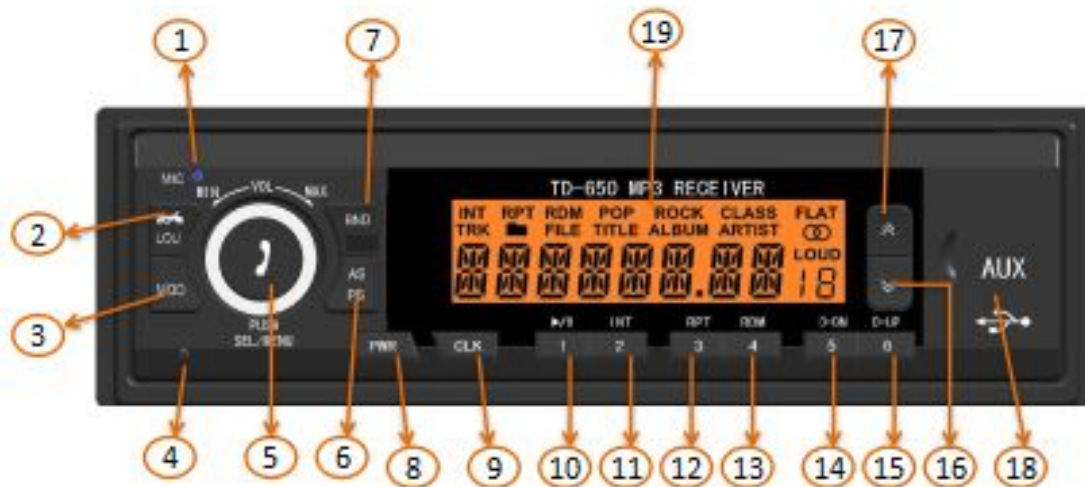
( 5 ) This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator & your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

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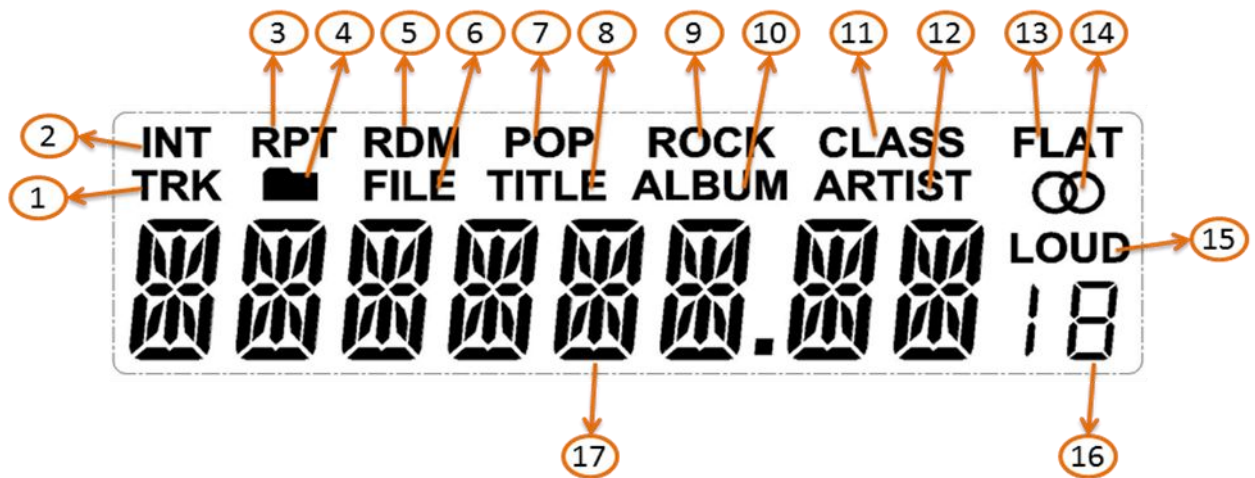
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# Control Panel



- ① Microphone
- ② Loud / End of phone call / Refuse to pick up
- ③ Mode
- ④ Reset
- ⑤ Volume control / Menu / Call pick up
- ⑥ Preset radio stations / songs
- ⑦ FM / AM selection
- ⑧ Power on
- ⑨ Clock display / Clock setting
- ⑩ Preset station 1 / Play / Stop
- ⑪ Preset station 2 / Pre-play song (fast scan)
- ⑫ Preset station 3 / Repeat
- ⑬ Preset station 4 / Random
- ⑭ Preset station 5 / Next 10 songs
- ⑮ Preset station 6 / Previous 10 songs
- ⑯ Tune down / Next song
- ⑰ Tune Up / Previous song
- ⑱ USB / AUX connector
- ⑲ LCD display

## LCD Display



- ① Track indication
- ② Pre-play indication (fast scan)
- ③ Repeat indication
- ④ Folder indication
- ⑤ Random indication
- ⑥ File name indication
- ⑦ POP effect indication
- ⑧ Song name indication
- ⑨ ROCK effect indication
- ⑩ Album name indication
- ⑪ CLASS effect indication
- ⑫ Artist name indication
- ⑬ FLAT effect indication
- ⑭ FM stereo sound indication
- ⑮ Loud indication
- ⑯ Preset station indication
- ⑰ Main display area

## Power Up / Down

1. Press “PWR” to turn on.
2. Press “PWR” again to turn off.



## Time Setting



### Setting Method 1:

#### Step1 Enter Time setting mode

When the machine is turn on, it will display Time with 24-hr format. Press and hold “CLK” (>2 sec) until the display is flashing. Now you can start to set the Time.

#### Step2 Set Hour Digit

Following Step 1, by rotating “Switch 5”, you can add or minus the hour digit when the hour digit is flashing.

#### Step3 Set Minute Digit

Following Step 2, press “CLK” and minute digit starts to flash, by rotating “Switch 5” to add or minus the minute digit.

#### Step4 End of setting

The setting is completed if not operation within 5 secs.

### Setting Method 2:

When the machine is under operation, press “CLK” to show Time information. Press “CLK” again or without operation within 5 secs then display goes back to normal mode. Press and hold “CLK” will enter Time setting mode. You can set the Time by the same procedure as Method 1.

Turn off the machine by pressing “PWR”, LCD backlight is off while Time still displays.

## Mode Switching



1. Press “PWR” to turn on the machine.
2. Press “MOD” to switch across different sound source correspondingly. If USB device is inserted, the machine will directly get into next mode. This machine has RADIO mode, Bluetooth PLAY mode, USB MP3 mode and AUX IN MP3 mode.

## Reset



If the machine is malfunction, please use a pointy object to press the reset button to reset the machine to see if the machine can restore.


Note: The machine uses FLASH for saving, preset stations will not be initialized.



## Tune Operation





Frequencies of FM1, FM2, and FM3 are the same (E.g. for China range of FM frequency is 87.5 – 108.0MHz).

Frequencies of AM1 and AM2 are the same (E.g. for China range of AM frequency is 522 - 1620 KHz).

The machine can store the last frequency after turning off. If the FM signal is good then FM stereo sound indicator is “”lit up.

### Auto Seek Function



1. Press “BND” to switch from FM1, FM2, FM3, AM1 or AM2.
2. Press “” or “” to seek radio stations by tuning up or down respectively. The seeking will be stopped when station is sought.
3. Press “” or “” during auto seek, seeking will be stopped by interruption.

## Manual Seek Function



1. Press “BND” to switch from FM1, FM2, FM3, AM1 or AM2.
2. Press and hold “ $\wedge$ ” or “ $\vee$ ” for 2 seconds to enter single step tuning. Each press then can increase or decrease the frequency by a designated step width (E.g. China step width: FM: 0.1MHz and AM: 9 KHz).
3. Press “ $\wedge$ ” or “ $\vee$ ” each time to increase or decrease by a step width.
4. Go back to Auto Seek Function without operation in 5 secs.

## Auto Preset Stations



1. Press “BND” to switch from FM1, FM2, FM3, AM1 or AM2.
2. Press and hold “AS/PS” for 2 seconds to enable auto preset process. Preset stations will be stored starting from lower frequency to higher one. During the scanning process, each effective station will be played for 2 seconds and continue to scan. Press “AS/PS” again to interrupt and stop the auto preset process.

Every Preset station set can store 6 stations. Preset stations are based on stronger signal, higher priority to be stored.

After Auto preset station setting, “Preset button 1” will show the corresponding radio station. (Below is reference)

FM1 87.9 1

If you reset again the preset stations, the previous preset stations maybe overwrite. (Below is for reference)

FM1 90.7 1

### Manual Preset Stations



1. Press “BND” to switch from FM1, FM2, FM3, AM1 or AM2.
2. Press “▲” or “▼” to tune until the frequency needed to be stored.
3. Press and hold any “1” .....“6” for 2 seconds to overwrite current frequency to preset station memory correspondingly.
4. Repeat the above procedures, FM1, FM2, FM3, AM1 and AM2 can stored at most 6 preset stations. If there is already a preset station previously, the new preset station will overwrite the previous one. (Below is for reference)

FM1 98.1 5

## Multiple Region Frequency Selection

Operating Procedure	Area	FM/AM	Frequency Range	Step Width
During standby mode, press accordingly “LOU”, “MOD”, “AS/PS”, “BND” and any “1~5” which represent the corresponding area to complete selection.	1. China/ Europe	FM	87.5 - 108.0MHz	0.1MHz
		AM	522 - 1620KHz	9KHz
	2. Middle East	FM	87.5 - 108.0 MHz	0.1MHz
		AM	531 - 1602KHz	9KHz
	3. America	FM	87.5 - 107.9 MHz	0.2MHz
		AM	530 - 1710KHz	9KHz
	4. Japan	FM	76 - 90 MHz	0.1MHz
		AM	522-1692KHz	9KHz
	5. Russia	FM	65 - 74 MHz	0.1MHz
		AM	522-1602KHz	9KHz

## USB Play



1. Press “PWR” to turn on.
2. Insert USB device into USB Port

USB

3. If there are MP3 format files, then after several seconds, display total number of MP3 files.

MAX 016

4. After several seconds, display the current file sequence.

CUR 001

5. After several seconds, display the current sound track time.

0'19

## USB Mode Operation



Button	Function Descriptions under USB Mode
	Press to pause or start to play, press and hold to stop.
	Press to play next song, press and hold for fast forward.
	Press to play previous song, press and hold for fast backward.
<b>D-DN</b>	Press to skip 10 songs and play the next 10 <sup>th</sup> song.
<b>D-UP</b>	Press to skip 10 songs and play the previous 10 <sup>th</sup> song.
<b>INT</b>	Press “INT” and LCD displays “INT”. Starting from next song, each song will be played for 8 seconds and jump to next song until pressing “INT” again. <div> <div>INT TRK</div> <div>2'58</div> </div>
<b>RPT</b>	Press “RPT” and LCD displays “RPT”. The current song will be played repeatedly until pressing “RPT” again. <div> <div>RPT TRK</div> <div>2'58</div> </div>
<b>RDM</b>	Press “RDM” and LCD displays “RDM”. The play list will become random and until pressing “RDM” again. <div> <div>RDM TRK</div> <div>2'58</div> </div>

## Sound Setting



1. Press “PWR” to turn on.
2. Press the rotary button, to switch Main-Volume, TREB, BASS or BAL left/right.
3. According to the LCD display, rotate to set corresponding as below.

Item	VOL-	VOL+
MAIN-V	Volume decrease	Volume increase
TREB	Treble decrease	Treble increase
BASS	Bass decrease	Bass increase
BAL LxRx	Balance left/right decrease	Balance left/right increase

4. Complete setting without pressing any button for 5 seconds.

The default function for the rotary button is MAIN-V.

## Sound Effect setting



The machine has 4 sound effects for choosing. POP, ROCK, CLASSIC or FLAT. The default function is FLAT.

1. Press and hold the rotary button for 2 seconds to change setting.
2. Rotate the button to switch from POP, ROCK, CLASSIC or FLAT.

- Complete setting without pressing any button for 5 seconds.

## Loud Function




Press “LOU” to amplify the sound source especially when the volume is low. The LCD will display “LOUD ON”. Press again to turn off this function.

## Bluetooth Operation



When you need to use the Bluetooth function, please enable the Bluetooth module of the phone device needed to be connected. Search and connect to our machine named: ORTEK\_TD650. Connect successfully to start the below.

### Bluetooth Connection

- Turn on phone Bluetooth.
- Search for new device. When the machine is detected by the phone, click “connect”. When the connection is successful, LCD will display “” to represent



effective connection.



- After connection, press “MOD” to switch the mode to BT PLAY

Different phone may lead to different operation procedure. The above illustration is for your reference only.

### Bluetooth Music Player






Functions of corresponding buttons under Bluetooth Mode:

Button	Functions
	Press to Pause / Play the music. If the music is paused, then LCD displays “PAUSE”. (Need phone support)
	Press to play the next song (Need phone support)
	Press to play the previous song (Need phone support)
	Press to play the next song (Need phone support)
	Press to play the previous song (Need phone support)

## Bluetooth phone function



Functions of corresponding buttons under Bluetooth Mode:

Button	Functions
	Press to refuse the call when ringing. Press to end the call when calling.
	Press to pick up the call when ringing. Press to end the call when calling.
	Microphone for voice input.

## AUX



## IN Mode

1. Press “MOD” to switch to “AUX IN” mode.
2. Through 3.5mm AUX in cable, play external MP3 files in external device

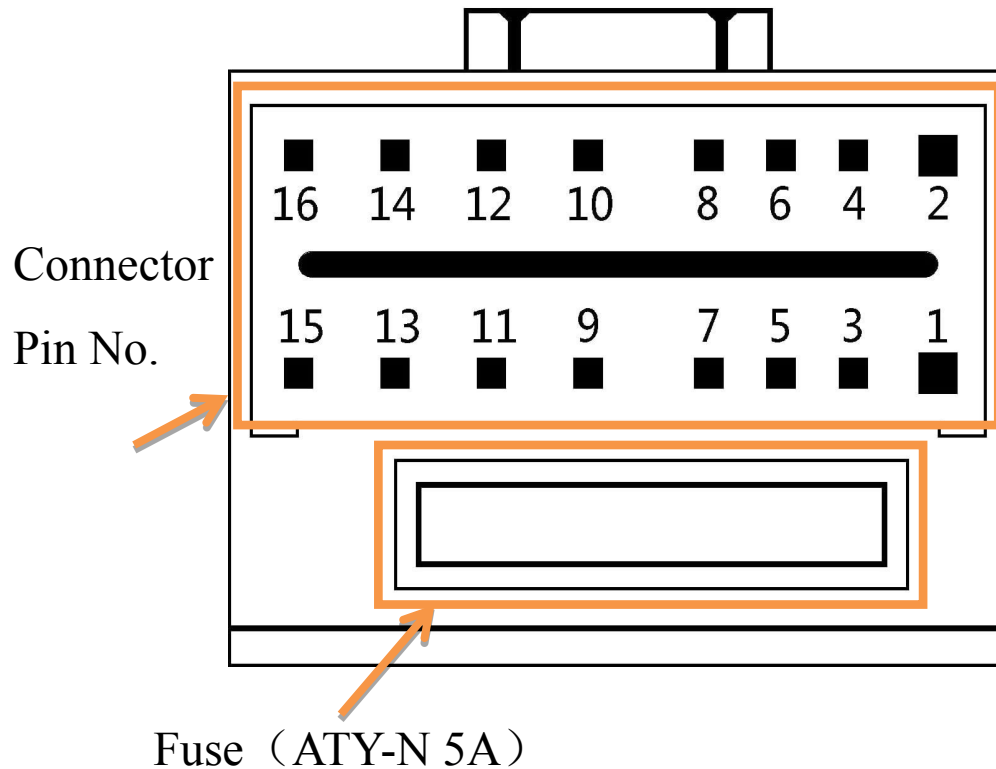
including MP3 device / Phone device.

## Definitions



LCD Display	Definition
FM1+Digit	Radio FM1 (Each set can store 6 preset stations)
FM2+Digit	Radio FM2
FM3+Digit	Radio FM3
AM1+Digit	Radio AM1
AM2+Digit	Radio AM2
USB	USB Mode
MAX+Digit	USB device total MP3 files
CUR+Digit	USB device current MP3 file number
PAUSE	Pause
MUTE	Mute
MAIN-V+Digit	Volume
VOL+Digit	Volume, same as MAIN-V
TREB+Digit	Treble
BASS+Digit	Bass
BAL L+Digit/ R+Digit	Balance
POP	Sound effect Pop
CLASSIC	Sound effect Classic
ROCK	Sound effect Rock
FLAT	Sound effect Flat
LOUD ON	Loud On
LOUD OFF	Loud Off
BT PLAY	Bluetooth Mode
PHONE	Phone call in
AUX IN	Aux in Mode

## Connector and Pin Definitions (Reference)



Definition of each Pin for connector is shown as below:

Pin No.	Function	Pin No.	Function
1	Battery + (BAT+)	2	Battery - (GND)
3	ACC	4	---
5	Light Control (+12/24V)	6	---
7	Antenna (9V)	8	---
9	---	10	---
11	---	12	---
13	Left Speaker -	14	Left Speaker +
15	Right Speaker -	16	Right Speaker +

The above connector and Pin definition is for reference only. You have to check with your engineer or our aftersales service department for more information.

## Maintenance

When you need to clean the panel, please do not use with alcohol, phenyl-related or any corrosive solvent or water. Instead you can use tissue paper or some soft towel for cleaning.

## FAQ

FAQ	Possible reasons	How to deal with
No sound after turning on the machine	1. Volume to low 2. Speaker not connected	1. Volume Up 2. Check with the Speakers
No Power	1. ACC not turn on yet 2. Fuse broken	1. Turn on ACC 2. Change the fuse
Radio no signal	1. Antenna not connected 2. Bad signal in the region	1. Check with the Antenna 2. Try again at open area
Can do with auto seek	Bad signal in the region	Use manual seek instead
Buttons malfunction	Possible Program bugs	Use reset button to reset
USB can't charge phone	This machine may not have USB charging functions	Check with your vendor and don't charge if not this function