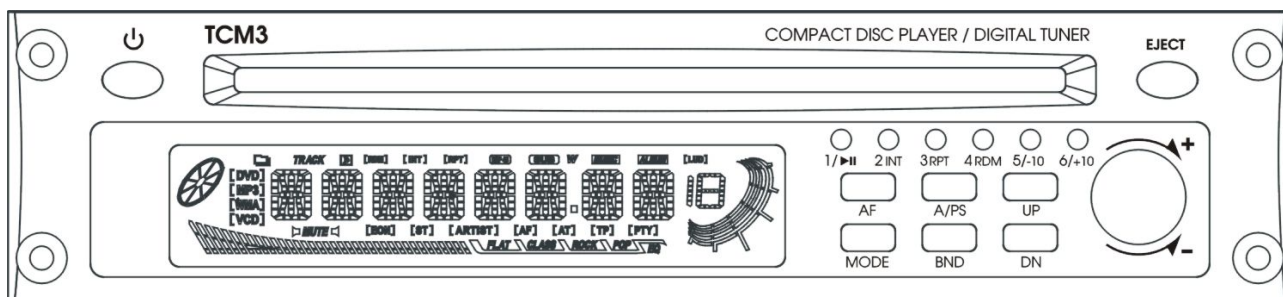
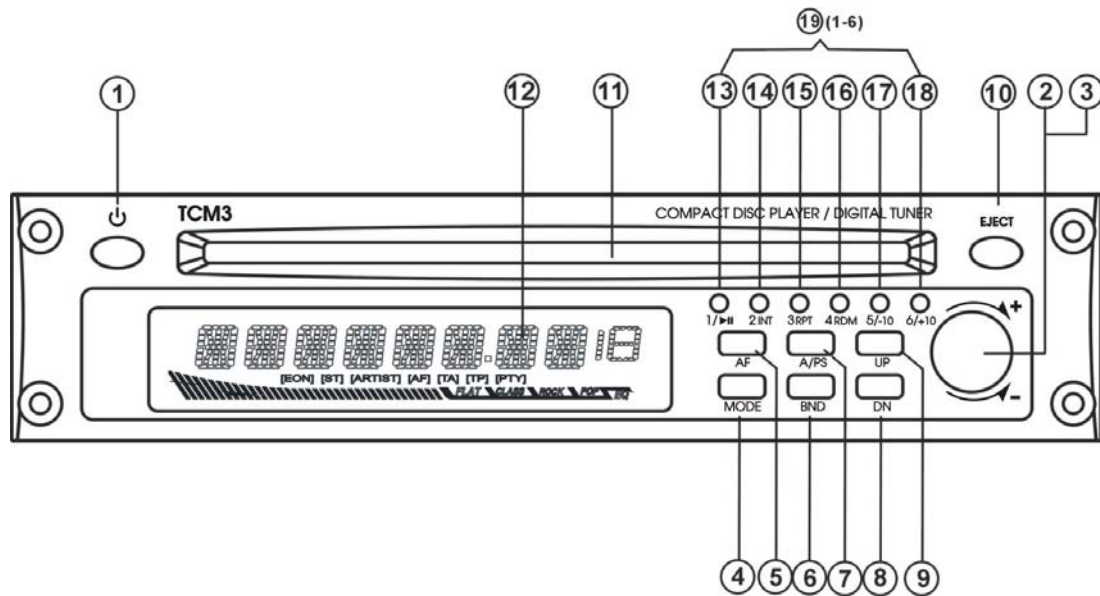


# Model : TCM-3

## Instruction Manual



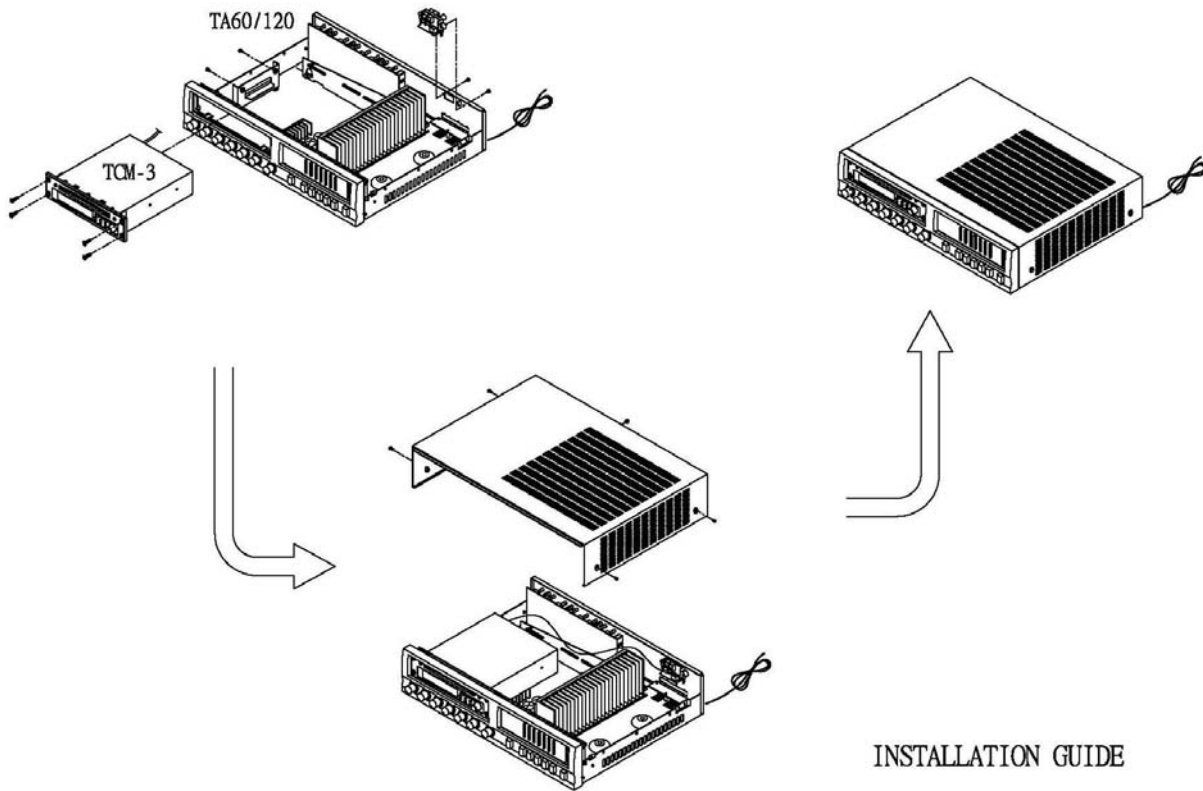
**CD/CD-R/CD-RW/MP3 Player**  
**with PLL MW/FM Radio,**  
**Radio Data System**



## LOCATIONS OF CONTROLS

1. POWER ON/OFF
2. FUNCTION SELECT BUTTON
3. VOL UP/VOL DOWN
4. MODE BUTTON
5. AF FUNCTION (ALTERNATIVE FREQUENCIES)
6. BAND BUTTON (BND)
7. AUTO SEEK SEARCH TUNING (AS/PS)
- 8.9. AUTOMATIC OR MANUAL TUNING (FREQ UP ►► OR FREQ DOWN ◀◀ / CD TRACK/SEARCH BUTTON
10. CD EJECT BUTTON (⏏)
11. CD SLOT
12. LCD DISPLAY
13. PAUSE BUTTON
14. INTRO BUTTON (PREVIEW ALL TRACKS)( INT)
15. REPEAT BUTTON (RPT)
16. RANDOM BUTTON (RDM)
- 17.18. -/+10 TRACK SEARCH DOWN/UP
19. PRESET STATIONS (1,2,3,4,5,6)

## MOUNTING EXAMPLE



INSTALLATION GUIDE

### ACCESSORIES

1. ANTENNAE \*1
2. 6PINCONNECTORWIRE \*1
3. INSTRUCTIONMANUAL
4. ANTENNAESOCKET\*1
5. SCREW\*4 FRONT
6. SCREW\*2 SIDE
7. SCREW\*2 ANTENNAE SOCKET

## OPERATING INSTRUCTIONS

### 1. POWER ON/OFF

By pressing this key (1), the unit is switched on and off.  
This unit is turned on by pressing any key.

### 2. SELECT (SEL)

### 3. VOLUME KNOB

Rotate Volume up/down knob to control the VOLUME to select other functions, press the SEL (2) button shortly until the desired functions is shown on the display.

Figure 1 shows how control functions are selected using the SEL button.

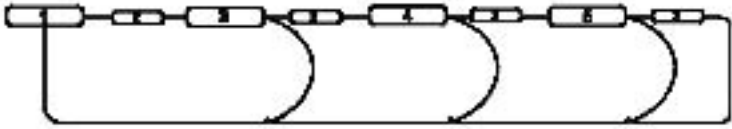


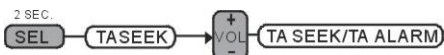
Fig. 1 Selection of sound control functions

### 1. VOLUME 2. SELECT 3. BASS 4. TREBLE 5. BALANCE

To increase or decrease the volume by rotating the volume knob. These buttons can be used to adjust the BASS, TREBLE, BALANCE.

### (1) TA SEEK/TA ALARM (2)

When press the SEL button (2) for more than 2 seconds, it is activated as selecting mode of these function. TA SEEK Mode or TA ALARM mode is selected by rotating the volume knob.



#### TA SEEK mode:

When newly turned station does not receive TA information for 5sec, the radio retunes to next station which has not the same station (PI) as the last station, but has the TA information. In TA seek mode, the current station can be changed to the completely different station because the unit searches TA station when the field strength of the current station is very weak, or the current station has no TA signal.

#### -TA ALARM mode:

Any automatic retune mode is not activated, just can be heard Beep sound.

### (2)PI MUTE / PI SOUND (2)

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



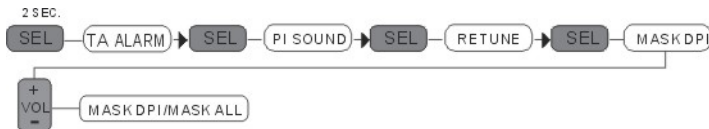
### (3)RETUNE L/S

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



### (4)MASK DPI (2)

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

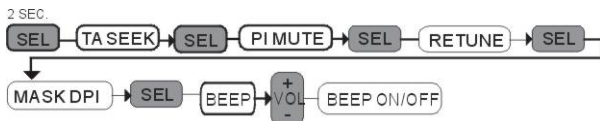


**MASK DPI:** masked only the AF which has different PI.

**MASK ALL:** masked the AF which has different PI and NO RDS signal with field strength.

### (5)BEEP MODE (2) (NO FUNCTION)

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



## 4. MODE BUTTON (MODE)

By pressing this key, user can select RADIO mode or CD/MP3 PLAYER mode.

## USING THE RDS FUNCTION

**What is RDS?**

The RDS (Radio Data System) is a digital information system developed by the EBU (European Broadcast Union). Piggy backed on normal FM broadcasts, RDS offers a variety of information services and automatic retuning functions for RDS-compatible car stereos. In 1988, RDS became available in the United Kingdom, France, West Germany, Ireland and Sweden. Test transmissions are being conducted in many other European countries. It is expected that RDS will be available in most western European countries in the near future.

## 5. AF/REG function (ALTERNATIVE FREQUENCIES)

When press short, AF/REG switching mode is selected.

When AF/REG switching mode is selected, the radio checks the signal strength of the AF all the time. When press long, it is activated as regional mode ON/OFF.

-Regional mode ON:

AF switching or PI SEEK is implemented to the station which have all PI codes same as current station. REG segment is turned on in LCD display.

**-Regional mode OFF**

The regional code in the format of PI code is ignored when AF switching or PI SEEK is implemented.

**6. BAND BUTTON (BND)**

Each band is toggled cyclically by pressing this key FM1-FM2-FM3-MW1-MW2.

**7. AUTO SEEK SEARCH TUNING (AS/PS)**

By pressing shortly, the radio searches for each preset Station.

When field strength level is bigger than the threshold level of stop level, the radio is holding at that preset number for 5 secretary.

With releasing mute, and then searches again.

By pressing longer than 1 sec., and then 6 strongest stations are preset to the corresponding preset number.

When AS operation is finished, the radio executes the preset scan.

**8.9. AUTOMATIC OR MANUAL TUNING (FREQ UP ► OR FREQ DOWN ◄ )**

**(A) RADIO MODE**

When press short, these keys are operated as MANUAL tuning mode.

When press longer than 1 sec., they are operated as SEEK tuning mode.

**(B) CD/MP3/WMA PLAYER MODE**

When press short, they are operated as TRACK UP/DOWN mode.

When press longer than 1 secretary, they are operated as CUE or REVIEW mode.

**10. CD EJECT BUTTON**

Press the EJECT button (10) to remove the CD.

**11. CD SLOT**

**12. LCD DISPLAY**

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

**13. PAUSE BUTTON**

During PLAY mode, press PAUSE button (13) to PAUSE.

Press it again to resume play.

**14. INTRO BUTTON (Preview all Tracks)**

When this button (14) is pressed, INT indication is displayed and the first several seconds of each track of the disc are played.

Press again to stop intro and listen to track.

**15. REPEAT BUTTON (RPT)**

When this button is pressed, RPT indication is displayed and play of the selected track will be

continually repeated until the Track Repeat mode is cancelled by pressing RPT button (15) again.

#### 16. RANDOM BUTTON (RDM)

When this button is pressed, RDM indication is displayed and each track of the disc are played in random instead of normal progression.

To cancel RANDOM mode, press RDM button (16) again.

#### 17,18. 10 TRACK DOWN/UP SELECT:

(In case of MP3 files)

5: 10 TRACK DOWN

6: 10 TRACK UP

#### 19. PRESET STATIONS (1,2,3,4,5,6)

##### RADIO MODE:

When press short, these keys select a preset station directly. When press longer than 1 sec., current station is stored in preset memory bank

#### CD CONTROL LOCATION OF PARTS

#### 8. 9. SKIP TRACK/SEARCH BUTTON

##### FORWARD AND REVERSE TRACK SEARCH

(or changing songs)

Press the SKIP button( TUN ►► or TUN ◄◄ ) during play to go to the desired track(song).

TUN ◄◄ ...REVERSE                      TUN ►► ...FORWARD

Press and hold the SKIP button ( TUN ►► or TUN ◄◄) during play to scan the disc at high speed. When the desired music section of the disc is found, release the button. Normal play will resume. When CD/MP3 play is finished, CD/MP3/WMA mode automatically changes to FIRST TRACK.

#### HOW TO SELECT MP3/WMA FILES

##### 1. Searching Track:

Press "AS/PS" , then searching track is activated.

Press "SEL", then the first digit is blinking.

With "VOL  / VOL  " knob, select first digit you want.

Press "SEL", then the first digit is fixed and second digit is blinking.



With "VOL  / VOL  " knob, select 2'nd and 3'rd respectively.

Then automatically the song you selected will start.



##### 2. Searching File Name:

Press "AS/PS" twice, then file search is activated.

Press "SEL", then the first directory is displayed.

With "VOL  / VOL  " knob, you can select the directory you want.

Press "SEL" again, then the directory is fixed and the first file name

With "VOL  / VOL  " knob, you can select the file you want is displayed.

Press "SEL", Then The Song you selected will start.

## **Specification**

### **SPECIFICATIONS**

#### **FM SECTION**

<b>Frequency range</b>	<b>87.5-108.0MHz</b>
<b>Channel step</b>	<b>50 KHz</b>
<b>Intermediate frequency</b>	<b>10.7MHz</b>
<b>Sensitivity</b>	<b>2uV at 30 dB S/N</b>
<b>Signal to noise radio</b>	<b>&gt;60dB</b>

#### **MW SECTION**

<b>Frequency range</b>	<b>522-1620KHz</b>
<b>Channel step</b>	<b>9 KHz</b>
<b>Intermediate frequency</b>	<b>450KHz</b>
<b>Sensitivity</b>	<b>30 dB</b>
<b>Signal to noise radio</b>	<b>&gt;50dB</b>

#### **CD/MP3/WMA PLAYER SECTION**

<b>Signal to Noise Ratio</b>	<b>&gt;60dB</b>
<b>Frequency Response</b>	<b>20Hz-20KHz</b>

#### **GENERAL**

<b>Power Supply Voltage</b>	<b>DC 12 Volts Negative Ground</b>
<b>Max Current Consumption</b>	<b>1A</b>
<b>Max Output Level</b>	<b>2 V</b>