

# naxa

FULL FOLD DOWN DETACHABLE PLL ELECTRONIC  
TUNING AM/FM STEREO RADIO WITH MP3/CD  
PLAYER & REMOTE CONTROL



## NCA-649

## OPERATION MANUAL



Before going through the check list, check wiring connection. If any of the problems persist after checklist has been made, consult your nearest service dealer.

Symptom	Causes	Solution
No Power	The car ignition key has not been switched on	If the power supply is properly connected to the car accessory terminal, switch the ignition key to ACC.
	The fuse is blown	Replace a new fuse
CD Cannot Be Loaded or Ejected	A CD is already inside the player slot	Remove the CD from the player and insert the new one
	Inserting the CD in reverse direction	Insert the CD with the label facing up
	The CD is extremely dirty or defected	Clean the CD or try to play a new one
	Temperature inside the car is too high	Cool off until the ambient temperature return to normal
	Condensation	Leave the player off for an hour or so and try again
No Sound	Volume is at minimum	Adjust volume to desired level
	Wiring is not properly connected	Check wiring connection
Sound Skipping	The installation angle is more than 30°	Adjust the installation angle to less than 30°
	CD is extremely dirty or defected	Clean the CD or try to play a new one
The Operation Keys Do Not Work	The built-in microcomputer is not operating properly due to interference	Press the RESET button or reinstall the front panel properly
The Radio or Automatic Selection Does Not Work	The antenna cable is not connected correctly	Connect the antenna cable correctly
	The signals are too weak	Select the station manually

**TABLE OF CONTENTS**

**Thank you for buying this product!**

Please read through these instructions so you will know how to install and operate your model properly. *After you have finished reading the instructions, put them away in a safe place for future reference.*

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**PRECAUTIONS**

Choose the mounting location where the unit will not interfere/hinder the normal driving conditions of the driver,

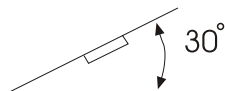
Before final installing the unit, connect the wiring temporarily and ensure that all wires are connected properly and the unit and the system work properly.

Installation accessories included with the unit should only be used to ensure proper installation, use of unauthorized parts can cause malfunctions.

Consult with your nearest dealer in the event the drilling of holes or other modifications of the vehicle may be required for proper installation & fitting.

Install the unit where it does not get in the driver's way and cannot injure the passenger if there is a sudden stop, like an emergency stop or when excessive brake is applied.

If installation angle exceeds 30 degrees from horizontal, the unit might not perform at optimum



Avoid installing the unit where there would be exposure to high temperature such as direct sunlight, hot air, heater or where it would be subject to dust, dirt or excessive vibration.

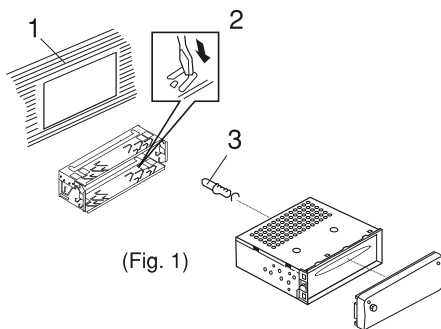
**TYPICAL FRONT LOAD DIN MOUNTING METHOD (Method A)**

Installing the unit

- 1. Dashboard
- 2. Holder

After inserting the holder into the dashboard, select the appropriate tab according to the thickness of the dashboard material and bend them inwards to secure the holder in place.

- 3. Screw



**General**

Power Supply Requirements:	DC 12V, Negative Ground
Maximum Output Power	7W x 4(CH)
Chassis Dimensions:	178 x 165 x 50mm (W x D x H)

**Tone Controls**

Bass (at 100Hz):	+10dB / -10dB
Treble (at 100KHz):	+10dB / -10dB
Current Drain:	5A

**CD Player**

Signal to Noise Ratio:	More than 60dB
Channel Separation:	More than 60dB
Frequency Response:	20Hz - 20KHz

**FM Radio**

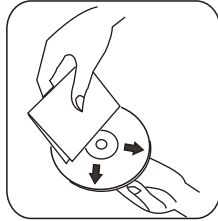
Frequency Coverage (MHz):	87.5 - 108 (Europe) 65 - 108 (OIRT) 87.5 - 107.9 (U.S.A.)
IF :	10.7MHz
Sensitivity (S/N=30dB):	12dBu
Stereo Separation:	>30dB

**AM Radio**

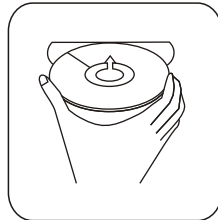
Frequency Coverage (KHz):	522 - 1620 (Europe/OIRT) 530 - 1710 (U.S.A.)
IF :	450KHz
Sensitivity (S/N=20dB):	32dBu

## Cleaning the CD

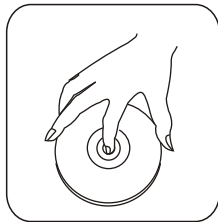
Before playing a CD, wipe it off with a clean, dust-free cleaning cloth. Wipe the disc in the direction of the arrow.



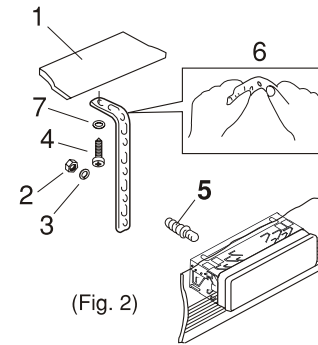
Always insert the CD with the label side facing upwards. If the CD is inserted with the printed side facing downwards, the device may be damaged.



If there is already a CD in the CD slot, do not try to insert a second CD. This may damage the device. Always hold CDs by the edge. In order to keep the CD clean do not touch the surface. Pull out the CD as follows.



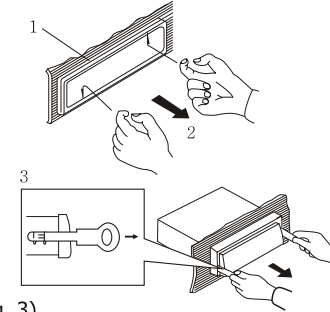
Do not attach any sticker or adhesive tape on the CD. Do not expose the CD to direct sunlight or sources of heating. Do not leave CDs in a car if it parked in direct sunlight as that will lead to a considerable rise in the temperature inside the car. Do not use any solvents such as petrol or thinning agents. Commercially available cleaning substances of antistatic spray will damage the device.



(Fig. 2)

1. Dashboard
2. Nut (5mm)
3. Plain Washer
4. Screw (5 x 25mm)
5. Screw
6. Strap  
Be sure to use the strap to secure the back of the unit in place. The strap can be bent by hand to the desired angle.
7. Plain Washer

## Removing the unit

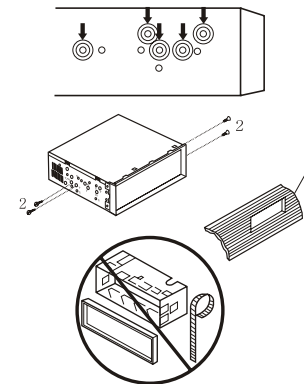


(Fig. 3)

1. Frame
2. Insert fingers into the groove in the front of frame and pull out to remove the frame. (When reattaching the frame, point the side with a groove downwards and attach it.)
3. Lever  
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 possible to remove the unit from the dashboard.

## TYPICAL REAR LOAD DIN MOUNTING METHOD (Method B)

Installation using the screw holes on the sides of the unit

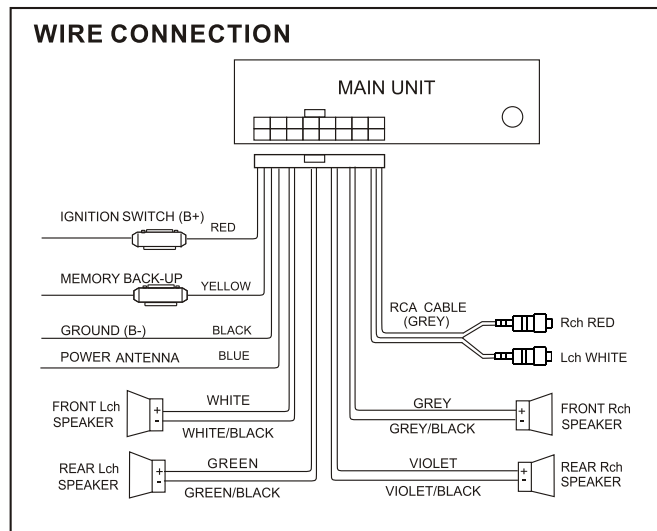


Fastening the unit to the factory radio Mounting bracket:

1. Select a position where the screw holes of the bracket and the screw holes of the main unit become aligned (are fitted), and tighten the screws at 2 places on each side. Use either truss screws (5 x 5 mm) Or flush surface screws (4 x 5 mm),
2. Screw ("T" Position)
3. Dashboard or Console

NOTE: The mounting box, outer trim ring, and half-sleeve are not used for method B installation.

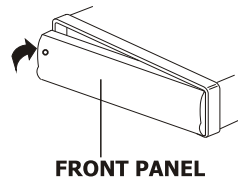
**WIRING CONNECTION DIAGRAM**



**HOW TO INSTALL AND REMOVE THE FRONT PANEL**

**INSTALLING THE FRONT PANEL**

To install the front panel, insert the panel into the housing and make sure the panel is properly installed, otherwise, abnormalities occurs on the display or some keys will not function properly.

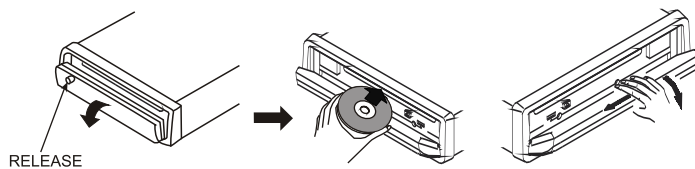


**DETACHING THE FRONT PANEL**

Press REL button in the upper left corner, and hen the front panel will be folded down.

**REMOVE THE FRONT PANEL**

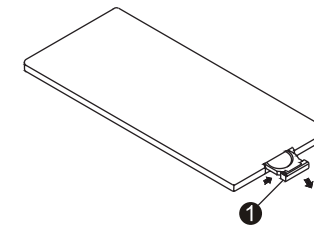
When the front panel was turned down to a position of 45°, hold and slide the front panel to left, and then pull it out.



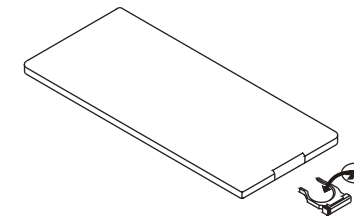
**Replacing Battery**

When the range of the operation of the card remote control becomes short or non responsive, it is recommended to remove the old battery cell from the remote handset & replace with new battery. Please ensure that placement of the battery polarity before replacement in order for the remote handset to work properly.

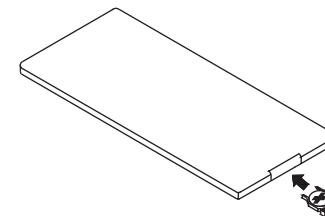
1. Pull out the Battery Holder while pressing the stopper ①.

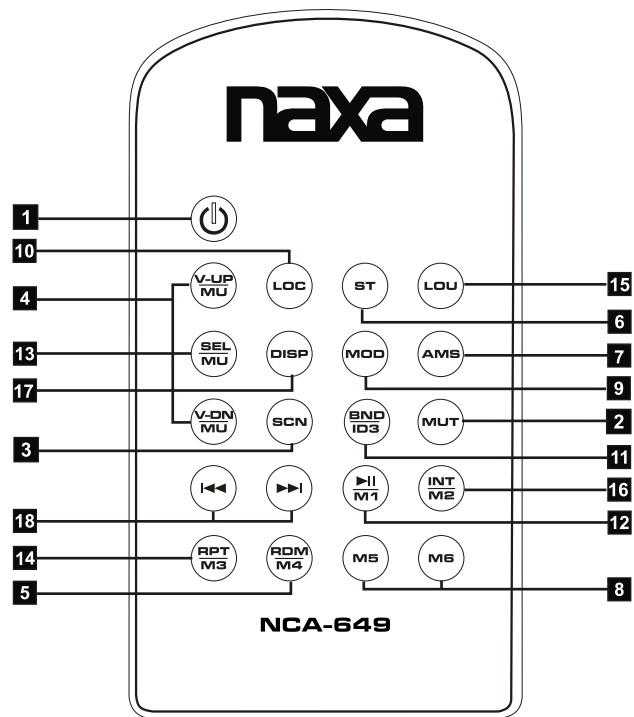


2. Put the button-type battery (+) mark upward into the Battery Holder.



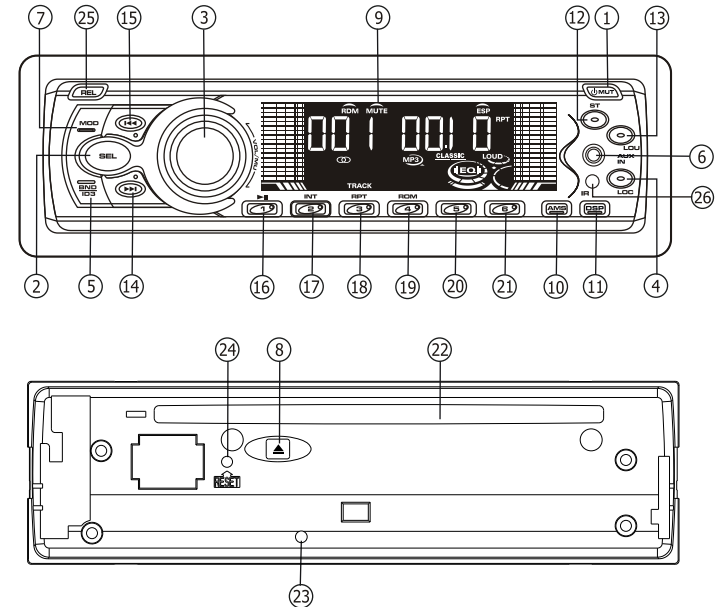
3. Insert the Battery Holder into the Remote Control.





- |                             |   |
|-----------------------------|---|
| <b>1</b> Power Switch       | <b>10</b> LO/DX Selector                    |
| <b>2</b> Mute Button        | <b>11</b> BND/ID3 Button                    |
| <b>3</b> Scn Button         | <b>12</b> Pause/Play Button                 |
| <b>4</b> Volume/Menu Button | <b>13</b> Setting the sound characteristics |
| <b>5</b> Random Playing     | <b>14</b> Repeat Playing                    |
| <b>6</b> MO/ST Selector     | <b>15</b> LOUDNESS Button                   |
| <b>7</b> AMS Button         | <b>16</b> INT Button                        |
| <b>8</b> Number Button      | <b>17</b> Time Display /Adjustment          |
| <b>9</b> MODE Button        | <b>18</b> Tuning/selecting/FW/RW            |

## FRONT PANEL LAYOUT



## GENERAL OPERATIONS

### ON/OFF

Press Power button (1) to turn on the unit. When the unit is on, press and hold it for several seconds to turn off the unit.

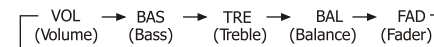
Note : Each time the unit is powered on, several seconds buffering time is required.

### FACEPLATE RELEASE

Press REL button (25) to detach the removable faceplate.

### SOUND ADJUSTMENT

Press SEL button (2) to select between Volume (Default), Bass, Treble, Balance & Fader



Rotate VOL knob (3) clockwise or anti-clockwise to adjust to the desired levels.

### VOLUME

Rotate VOL knob (3) to adjust to desired sound level.

### BASS

Press SEL button (2) until BAS appears. Rotate VOL knob (3) clockwise or anti-clockwise to adjust to the desired level.

### TREBLE

Press SEL button (2) until TRE appears. Rotate VOL knob (3) clockwise or anti-clockwise to adjust to the desired level

### BALANCE

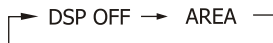
Press SEL button (2) until BAL appears. Rotate VOL Knob (3) clockwise or anti-clockwise to adjust balance between left & right speakers to the desired level.

### FADER (optional)

Press SEL button (2) until FAD appears. Rotate VOL Knob (3) clockwise or anti-clockwise to adjust balance between front & rear speakers to the desired level.

### FREQUENCY SPACING

When in radio mode, press & hold down SEL button (2) then select AREA mode, then rotate the Vol knob (3) clockwise or anti-clockwise to set to USA ( Default - American ) or EUR ( European ) frequency.



Note : Frequency spacing selection can be made during radio mode ONLY.

### ANTI-SKIP PROTECTION

When in Disc playing mode, press & hold down SEL button (2) then select ESP mode, then by rotating the Vol knob (3) clockwise or anti-clockwise to select the duration ( 12 seconds or 45 seconds ) of anti-skip protection required



### PRESET DSP CURVES

When in Disc playing mode, press & hold down SEL button (2) then rotate VOL knob (3) clockwise or anti-clockwise to select any of the desired preset sound curves and FLAT ( default ) equalization curves Any adjustment to the Bass or Treble settings automatically cancels the Current DSP curve ( if one is selected )



### MUTE

During the unit is on, press MUT button (1) immediately to cut down the sound. Press it again to release this mode and resume to previous volume level.

### LOUDNESS

Press LOU button (13) to increase bass output.

### SELECT MODE

Press MOD button (7) to select between Tuner, CD player and Auxiliary input. Modes of operation will be displayed when selected.

### AUX IN

Connect the external device to the AUX IN socket (6), press MOD button to select AUX IN mode.

### REMOTE SENSOR (OPTIONAL)

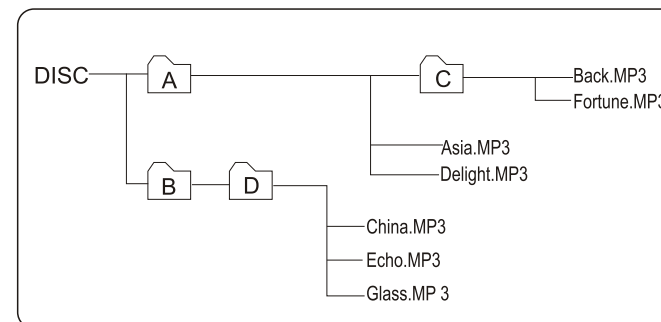
Point the remote handset to control the remote sensor (26).

Press the function keys on the remote handset to control the system.

4) Wait momentarily for "\*" to be prompted to enter the 2nd character of the desired Song name. Repeat this process until the name of the song that you wish to search has been fully entered & displayed.

5) Press & hold down SEL for longer than 0.3 seconds to confirm selection, the song selected will begin playback.

Note : In the event if a character has been wrongly typed, when searching under MP3, press AMS to delete and input the desired character.



### SEARCH NAVIGATION FUNCTIONS USING ROOT SEARCH

1) Press the AMS button (10) 3 times to initiate Root search mode will be displayed.

2) Press SEL button (2). LCD will display the file of currently disc.

3) Press SEEK+/- button to search root file.

4) Please press SEL enter when find the root file.

5) The LCD will display the Track of the file, and then press SEEK+/- to select the song.

6) Press SEL button finally, start to play.

Note : In the event if a character has been wrongly typed, when searching under Mp3, press AMS to delete and input the desired character.



### SEARCH NAVIGATION FUNCTIONS USING ALPHANUMERIC TRACK SEARCH

How to search for track number 123, song titled "name.MP3"

- 1) Press AMS button (10) to initiate track search mode which will be displayed on LCD.
- 2) Press SEL button (2) to initialize track enter mode, "---" will be prompted to enter the 1st digit of the desired track number that you wish to search & play.
- 3) Rotate VOL knob (3) clockwise or anti-clockwise to select the digit which will be displayed on the LCD.
- 4) Wait momentarily for "\*" to be prompted to enter the 2nd digit of the desired track number. Repeat this process until the track number that you wish to search has been fully entered & displayed.
- 5) Press SEL button (2) to confirm the track selection, the track selected will begin playback.

### SEARCH NAVIGATION FUNCTIONS USING CHARACTER SEARCH

If the file structure of Disc for MP3 TOC ( table of contents ) is shown as the appended diagram, operate as below:

Total Directories: 4  
 Total Song: 7  
 Directories to have MP3 file: 3 (A, C, D)  
 To listen to a song from MP3 (On Normal play)

- 1) Press AMS button (10) twice to initiate Character search mode which will be displayed on LCD.
- 2) Press SEL button (2) to initialize character enter mode, '\*' will be prompted To enter the 1<sup>st</sup> character of the desired song name that you wish to search & play.
- 3) Rotate VOL knob (3) clockwise or anti-clockwise to select character which will be displayed on LCD.

### PROGRAMMABLE DISPLAY

Press DSP button (11) to operate as the switch of each display mode.

#### MP3 MODE

Time is displayed when DSP key is pressed, and the previous display will return after 5 second.

### PROGRAMMABLE CLOCK

Under clock mode, when DSP Key is pressed for longer than 3 seconds, clock mode will switch to clock Adjusting mode and the clock display will begin to flash, after which the clock can be adjusted by rotating Vol knob (3) to the desired time. Press SEL button to switch between hour and minute selection.

### LCD

The LCD (9) can show the current working state of the unit.

### FLASHING LED

The built-in LED (23) will continuously flash if the front panel is not inserted or properly inserted in the main unit .

### RESET

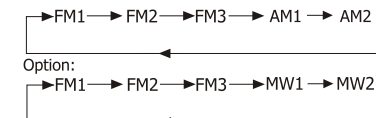
RESET button (24) is placed on the housing and must be activated with either a ball point pen or thin metal object. (DO NOT use sharp object to avoid damaging the unit.) The RESET button (24) is to be activated for the following reasons:

- Initial installation of the unit when all wiring is completed.
- All the function buttons do not operate
- Error symbol on the display

NOTE: If the problem continues to persist after pressing RESET button (24), it is recommended to use a cotton swab soaked in isopropyl alcohol to clean pin connector socket on the back of the front panel.

### BAND SELECTION

Under radio mode, press BND button (5) to select between FM1, FM2, FM3, AM1 AND AM2 bands.



### STATION SELECTION

Press TUNE/SEEK/TRACK FORWARD button (14) or TUNE/SEEK/TRACK REVERSE button (15) shortly for manual tuning function.

Press for several seconds the automatic tuning mode (SEEK mode) is selected.

### AUTOMATICALLY MEMORY STORING & PROGRAM SCANNING

- Automatically Memory Storing  
 Press AMS button (10) for several seconds, the radio searches from the current frequency and checks the signal strength until one cycle search is finished. And then 6 strongest stations are stored into the corresponding preset number button.

- Program Scanning  
 Press AMS button (10) shortly to scan preset station.

### STATION STORING

Press any one of the preset button 16~21 to select a station which had been stored in the memory. Press this button for several seconds (until 2<sup>nd</sup> beeps come out), current station is stored into the number button.

### STEREO/MONO:

In FM band, press ST button (12) to select mono or stereo reception for radio stations. You can sometimes improve reception of distant stations by selecting mono operation.

### LOCAL/DISTANT

Press LOC button (4) to activate local tuning to receive radio signals with the strongest signals broadcasted closest to your current location otherwise press the LOC button (4) again to set the unit to receive radio signals under distant setting with signals broadcasted further to your current location. This function is available in FM band only.

### CD OPERATION

#### SELECT TRACKS

During CD operation, Press TRACK REVERSE button(15) to skip to the beginning of the next track. Press TRACK FORWARD button(14) to return to the beginning of the current track. Pressing TRACK FORWARD button (14) again returns to the beginning of the previous track.

#### STOP PLAYING

Press PAUSE button (16) to temporarily stop CD playback. Press it again to resume playback.

#### REPEAT THE SAME TRACK

Press REPEAT button (18) once to continuously repeat the playback of the same track. Press REPEAT button (18) twice to repeat the entire soundtrack of the CD disc

#### PREVIEW ALL TRACKS

Press INTRO button (17) to play the first several seconds of each track on the current disc. Press again to cancel the function.

#### PLAY ALL TRACKS IN RANDOM

Press RANDOM button (19) to randomly playback tracks on the current disc. Press again to cancel the function.

#### EJECT

Press EJECT button (8) to stop CD playback and eject the disc from CD slot (22). The unit will automatically return to radio mode.

### MP3 OPERATION

MP3 and WMA music files are digital audio files that are compressed to allow more files on a single CD. This unit can play MP3/WMA directly from files contained on a CD-R/RW using the buttons on the receiver as outlined below. Many types of software are available for converting audio files into MP3/WMA formats. Depending on the media type and recording method, some CD-R/RWs may be incompatible with this unit.

#### Notes on MP3/WMA Play

This unit can play MP3. However, the MP3 recording media and accepted formats are limited.

#### Acceptable Media

The MP3/WMA recording media acceptable to this unit are CD-ROM, CD-R and CD-RW. When using CD-RW, use full format rather than quick format to prevent malfunction.

#### MP3 SEARCH MODES

MP3 Track, File and Character search is possible by using AMS button (10); During Mp3 operation, press AMS button(10) to select TRACK mode, CHARACTER mode or ROOT mode. Display of Directory, File, Song, Album, Artist Name is possible by using BND button (5). Name display will appear in order from left side of the LCD and any time DSP button (11) is pressed, current playing time will be displayed.

#### RECOMMENDED SETTING

For best results, use the following settings when burning a

##### MP3 disc

128 kbps or higher constant bit rate  
44.1 kHz or higher sampling frequency

##### WMA disc

64 kbps or higher constant bit rate  
32 kHz or higher sampling frequency

### Electronic Shock Protection

An internal buffer provides ESP to virtually eliminate skipping

#### For Default Setting

-2 or 45 seconds for CD recorded at 44.1 KHZ, 128kbps  
-70 seconds for MP3 recorded at 44.1 KHZ, 128kbps  
-120 seconds for WMA recorded at 44.1 KHZ, 128kbps

#### Bit Rates

The unit supports bit rates up to 64kbps

Note : Some files may not play or be displayed correctly ,Depending on sampling rates & bit rates.

#### CHARACTER SUPPORTED

English Capital Letters: A~Z  
Arabic Numbers: 0~9  
Special Char.: " , ' ( ) \* , + , - , = , /

#### SEL

During Mp3 operation, press AMS button(10) to select TRACK search, after selecting the desired track the playback of the selected song will begin after SEL button (2) is pressed for longer than 0.3 sec. During file search, when SEL button (2) is pressed for longer than 0.3 sec. In the current directory mode, first song in the corresponding directory will begin playing. After the song name has been selected, during manual input under character search mode, the selected song will begin playback the LCD may indicate "NOT FND" on the display when the SEL button (2) has been pressed longer than 0.3 seconds.

#### SKIP DIRECTORY

During Mp3 operation, press the number 5 button(20) to move back 10 songs while press the number 6 button(21) to move forward 10 songs.

NOTE: Skip Tracks, Repeat, Random and Play the first track functions are also available for MP3 playback.