



**SM-903CD**



**USER OPERATION MANUAL**

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## Safety Information

Please read this manual thoroughly and keep in your vehicle for easy future reference. We highly recommend that you find a licensed professional installer for the installation of this product.

**CAUTION:** This unit is a class 1 Laser Product. To prevent direct exposure to Laser system, DO NOT OPEN the unit. The Laser Beam may hurt or damage your eyes. If the unit requires adjustments, please contact Sumas Media.

### USE THIS PRODUCT SAFELY

Make sure you fully understand the following safety information:

#### When Driving

Keep the unit at an appropriate sound level. Driving with the sound at a level that prevents you from hearing the sounds outside and around the car may cause an accident.

#### When cleaning your interior

Do not expose the product to any type of liquid or excessive moisture. This could cause short circuit, fire or other severe damage to the unit or your vehicle.

#### When Parked

Parking in direct sunlight, especially in the summer time can produce very high temperature inside your vehicle. This may cause the unit to not work properly. Let the interior of your car to cool down before turning on the unit.

**Note:** Do not use or store player in dusty, high temperature or high humidity environments.

#### Replacing the Fuse

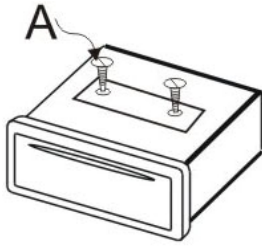
When replacing the fuse, be sure to use one matching the amperage rating stated on the original fuse.



### **WARNING!**

**NEVER** replace any Fuse with higher amperage than the original. This may cause damage to your unit and/or your vehicle's electrical wiring.

## Installation

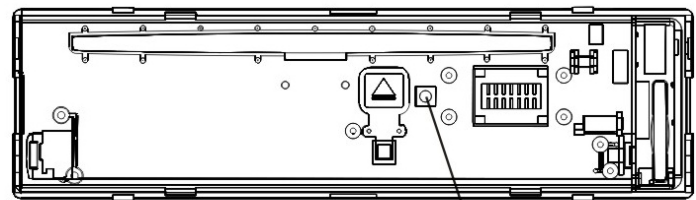
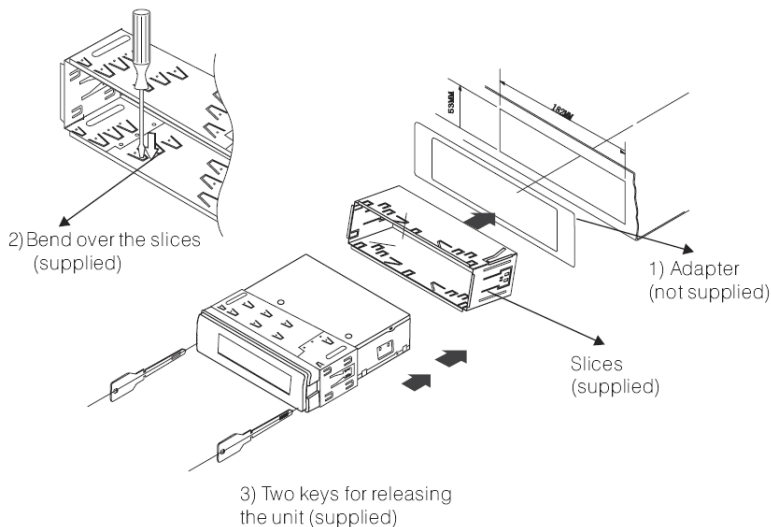


Note: Remove the protection screws (A) before installing and operation the unit.

**Please find the front panel inside carry caddy. to install panel by placing as flipped down position, insert panel left side into front adaptor first, then gently click right side into place. When completed correctly panel should be flipped up in place.**

**To remove the panel, flip down the panel, then gently push the panel toward the left side, then pull out the right side first.**

- This unit is designed for 12V DC, negative ground operation system only. (Connecting to other than 12V, will damage the unit)
- When replacing a fuse, be sure to match the amperage of the original fuse. Using the wrong fuse may cause your unit not to function or even electrical shortage.
- The negative battery terminal must be disconnected before making connections, which can prevent damaging the unit due to short circuit.
- Be sure to connect the color coded leads correctly according to the wiring diagram. Incorrect connections may cause damage or malfunction or even damage the vehicle's electrical system.
- Be sure to connect the speaker (-) leads to the speaker (-) terminal, and the speaker (+) leads to the speaker (+) speaker terminal and so on. Never cross connect the left / right channel speaker cables or to the vehicle body/frame.
- Do not block the unit's vents or heat sink. Blocking can cause heat to build up inside and may damage your unit.
- After the completion of the installation. Reconnect negative cable of vehicle to the (-) battery terminal, and then press the RESET in the front panel with the push pin to set the unit to initial status. Please refer below. ( see picture below)



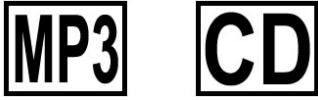
Unit Reset

### Unit Installation & Removal

## Maintenance

### Playable discs

CD/CD MP3 discs that display the logos shown below can be played back on this unit.



### CD Care

If you use an irregular or warped disc it may jam the CD player or not play, for this reason only use round discs.

Be sure to check all discs for cracks and scratches before playing, discs in those conditions will not play properly.

Also, be sure to avoid touching the recorded (plain) side of the disk

Avoid scratching the disc. Store CDs in case when not in use

Keep discs out of direct sunlight (this will cause them to warp and crack)

To clean the CDs, wipe with a soft cloth from the inside of the disc outward

### MP3

MP3 files on CD-ROM, CD-R and CD-RW are compatible with this unit.

Discs compatible with ISO9660 level one and two or with ROMEO and JULIET, recorded discs with the multi sections can also be played. MP3 files are incompatible with the transportation of read-in files.

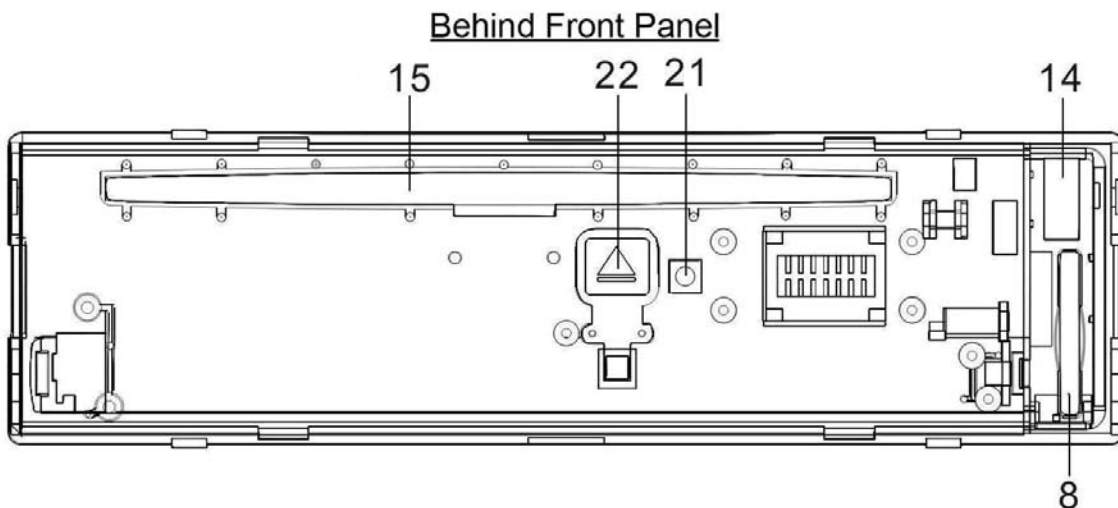
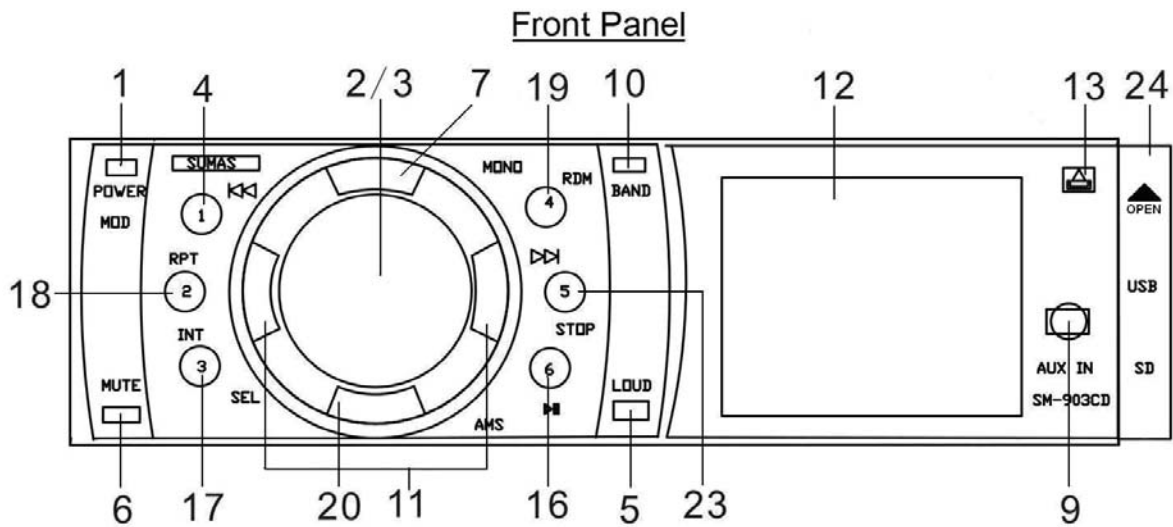
The max character width of the folder name is 32. If the file is recorded through ROMEO and JULIET system, only the former 32 characters are displayed. While playing discs with MP3 and CD-DA, such as CD EXTRA and MIXED MODE CD the system can only switch between MP3 and CD-DA. The selected folder sequence of playing and other operations will be the sequence to write in the software. So the anticipated sequence of playing should not conflict with the actual playing sequence. However, there is, indeed some software that play sequence is allowed to be set. The file is compatible with Id3 label version 1.0 and 1.1, so as to display the music titles and authors. The enhancing function is valid only when playing MP3 in 32, 44.1 and 48 KHz sample frequencies 16,22,05,24, 32, 44.1 KHz can be played. The tone of MP3s file can usually be bettered when the bit rate is increased. This machine can play recordings between 8KBPS and 320 KBPS. However, in order to enjoy a good tone, we recommend discs over 128KBPS.

### !!!!!!IMPORTANT!!!!!!

While naming an MP3 file, add relevant extending name ".mp3"



This machine will play files with .mp3 as MP3; do not use this extending name on non mp3 files to avoid noises and other problems.

# Front Panel



- |  |                          |
|--|--------------------------|
| 1. Power/Mode Button                                       | 13. Panel Release Button |
| 2. Function Select button                                  | 14. USB Port             |
| 3. Volume Knob   | 15. CD Slot              |
| 4. 1-6 Preset Stations                                     | 16. ►   (6) Pause Button |
| 5. Loud  | 17. (3) Intro Button     |
| 6. Mute  | 18. (2) Repeat Button    |
| 7. MO/ST   | 19. (4) Random Button    |
| 8. SD Slot   | 20. AMS                  |
| 9. Auxiliary input   | 21. Reset Button         |
| 10. Band   | 22. CD Eject Button      |
| 11. ◀◀ or ▶▶ Automatic/Manual tuning<br>Track Skip Buttons | 23. (5) Stop Button      |
| 12. LCD Display  | 24. USB/SD slot cover    |

## FRONT PANEL FUNCTIONS

1. **Power Button** – To turn the unit On/Off
2. **Function Select Button** – Press to change settings on Bass/Treble/Balance/Fader/EQ/LOC/Stereo/"Enter" in MP3 mode
3. **Volume Knob** – Turn left/right to adjust sound level/Bass/Treble, etc...
4. **1-6** – Preset Buttons for Radio Stations
5. **Loud** – Press to toggle between Loud On / Loud Off
6. **Mute** – To enable/disable sound
7. **MO/ST** – To toggle between Mono or Stereo
8. **SD Slot** – Secure Digital flash memory slot
9. **AUX IN** – Auxiliary input
10. **Band** – To switch between bands FM1-3/AM 1-2
11. **◀◀ or ▶▶** – For automatic/manual tuning, skipping tracks (CD/MP3 mode)
12. **LCD Displays** – Displays tracks, Radio stations, etc.
13.  – Panel Release Button
14. **USB** – USB Flash Memory Slot
15. **CD Slot** – CD input slot
16. **(6) ▶||** – Play/Pause Button
17. **(3) INT** – Intro button (CD scan) press to play the first 10 seconds of each tracks
18. **(2) RPT** – Press to turn on/off repeat
19. **(4) RDM** – Press to Shuffle songs/tracks on CD/MP3
20. **AMS** – Auto-Memory-Select, Press and hold to automatically set available radio stations to each presets (1-6)
21. **Reset Button** – Press to reset unit to the factory defaults
22.  – CD Eject Button
23. **(5) Stop Button** – Press to stop play
24. **USB/SD slot cover** – Pull down gently to open

# Basic Setup

## Powering the unit ON/OFF

- Press the **Power/Mode** button once to turn the unit on, press and hold to turn unit off.

**Note:** Never release/remove the front panel when the unit is on to avoid damaging the unit and/or draining your battery. The power will remain ON if the panel is removed without turning the unit off.

## Switching Modes

- Press the **Power/Mode** Button on the unit repeatedly to cycle through the modes **Radio/CD/USB/SD/AUX**.

Note: CD/USB/SD will not show up if you do not have any media inserted.

## Audio Settings

- To change audio settings, press the Volume knob to select between the following:
  - "**BAS**" – BASS
  - "**TRE**" – TREBLE
  - "**BAL**" – BALANCE
  - "**FAD**" – FADER
  - "**EQ**" – Equalizer (**Rock/Pop/Class/Flat/OFF**)
- To adjust an audio setting, rotate the volume knob while on that setting (**Bass/Treble etc...**) Repeat steps above for all the audio settings to get the desired sound output.

Note: The Bass and Treble cannot be changed if the equalizer is active.

- To adjust the volume, rotate the volume knob left/right to get the desired sound level.

## Setting up the Clock

- To set time: On any MODE press the volume knob repeatedly until the time shows up.
- To change time: Press and hold the volume knob until the hour section starts to flash.
- Rotate the volume knob left/right to set the correct hour and time period (AM/PM).
- Press the volume knob again to change the minutes (minutes will flash), rotate the volume knob to set the correct minutes.
- Once done setting the correct time, don't press any button for a few seconds, the unit will automatically save the correct time.



# Basic Operation

## Radio Mode

- Press **Power/Mode** button repeated on the unit switch to **Radio mode**.
- **Band Select:** Press "**BAND**" to select from **FM1, FM2, FM3, AM1 or AM2**.
- **Automatic Tuning:** Press **◀◀ or ▶▶** and hold for about 2second to enter SEEK tuning mode to automatically search available radio frequencies/stations.
- **Manual Tuning:** Press **◀◀ or ▶▶** repeatedly to locate the desired radio frequency/station.
- **Storing Radio Stations:** To store stations to the unit, locate the desired station using **◀◀ or ▶▶** , then press and hold the desired number on the unit (from 1 to 6) until you hear a beep and the pressed number shows up on the display.  
Repeat steps above for the rest of the numbers and Band section.

\***NOTE:** This unit can store up to 18 FM Stations (FM1=6, FM2=6, FM3=6) and up to 12 AM Stations (AM1=6 AM2=6).

## Music/MP3 CD Mode

- Press Mode button repeatedly to switch to CD mode.
- **Inserting a CD:** The unit will automatically switch to CD Mode when a CD is inserted.
- **Track Select:** To skip forward or backwards through the tracks simply press **◀◀ or ▶▶** .
- **Random Playing:** Press "**RDM**" (**4**) button once to play tracks in random order, press again to turn random off.
- **Repeat Play:** Press "**RPT**" (**2**) button to repeat what's currently playing, press again to turn off repeat play.
- **Display options (MP3 only):** Press "**▼**" **down arrow** button repeated to view the  
Title/Artist/Track #/Folder/etc...
- **Search options (MP3 only):** Press "**▼**" on the desired option to search. (Title/Artist/Track #/Folder)  
For example: To view the title of the song press "**▼**" 3x then press "**▶**" to search for the next for previous tracks, once the desired track is located press and hold "**▶**" to play the selected song.  
To view and select different folders press "**▼**" 4x.

## USB/SD Mode

Note: USB PORT is for flash drive only, will not work for IPOD.

- **Inserting a USB/SD flash drive:** Flip down the protective cover of the USB/SD ports, plug in a USB/SD card into the unit. (Unit will automatically switch to **USB/SD** mode).
- **Track Select:** To skip forward or backwards through the tracks simply press **◀◀ or ▶▶** .
- **Display options (MP3 only):** Press "**AMS**" button repeated to view the  
Title/Artist/Track #/Folder/etc...
- **Search options (MP3 only):** Press "**AMS**" button on the desired option to search.  
(Title/Artist/Track #/Folder)  
For example: To view the title of the song press "**AMS**" button 3X then press "**▶▶**" to search for the next for previous tracks, once the desired track is located press and hold "**▶▶**" for 1 second or until you here a double beep to play the selected song.
- To view and select different folders press "**AMS**" button 4X.

## AUX MODE (INPUT)

- To use "**AUX**" (**auxiliary**) mode: Plug 3.5mm audio cables into the front "**AUX input**" of the unit to your device. Press the **Power/Mode** button repeatedly to select Auxiliary mode.

\*Note: You can only control your device functions through the inserted device.

## Trouble Shooting

Problem	Reason/Cause	Conclusion/Solution
Will not turn on.	Incorrect wiring connections.	Check all wires are properly connected. Please refer to the wiring diagram
CD will not play, or play properly.	Disk is dirty or scratched. Disc isn't compatible with unit. Content of the disc is not supported.	Clean the disc with a soft cloth. Check disc compatibility. (see page 3) Try another disc that is compatible.
No Sound/Volume or will not increase.	Incorrect wiring connection. Mute is turned <b>ON</b>	Check all the speaker wires are connected properly with the unit and the speakers themselves. Turn Mute <b>OFF</b>
Certain speaker will not output sound.	Fader/Balance settings activated. Speaker(s) might be damage.	Make sure all the connections linking the speakers are properly connected. Make sure all the speakers work properly.
When the unit powers on, there is a loud noise.	The unit is reading inserted disc. The disc drive is resetting to its normal position.	Normal function.
SD/USB flash drive will not read.	Loose or dirty connection. Or not connected/inserted properly. Over capacity or not compatible	Check/clean connections. Make sure the USB flash/SD card drive is securely inserted into USB/SD port. Unit can only read 1- 4GB. Depending on the size of the data, read time may vary.
Does not play MP3 files.	Files are not supported.	Check that the files are supported. (see page 3) Make sure the files are converted correctly.
Cannot change/set <b>"BASS"</b> or <b>"TREBLE"</b>	<b>"EQ"</b> (equalizer) is turned on.	When <b>"EQ"</b> (equalizer) is turned on, <b>Bass</b> and <b>Treble</b> cannot be changed. Turn <b>"EQ"</b> (equalizer) to <b>"EQ OFF"</b> to change the Bass and Treble setting. (see page 6)
My Subwoofer doesn't work	Wrong wiring, Defective AMP or woofer.	Check all the wiring and make sure they are connected properly to the unit. (RCA connected to the RCA labeled <b>"Subwoofer"</b> ) see wiring diagram sheet.

# Specifications

## General

- Power Requirements ..... 12 V DC (10.8-15.6v allowable)
- Load Impedance .....  $4\Omega$
- Output Power ..... 20 W (RMS) x 4CH
- Dimensions ..... Approx. 7.36"D x 6.69"W x 2"H
- Mounting Dimensions ..... 7.50"D x 6.75"W x 2.25"H
- Weight ..... 3.25lbs

## CD/MP3 Player Section

- Signal to Noise Ratio ..... > 70dB
- Channel Separation ..... > 50dB (1kHz)
- Frequency Response ..... 20Hz – 20kHz

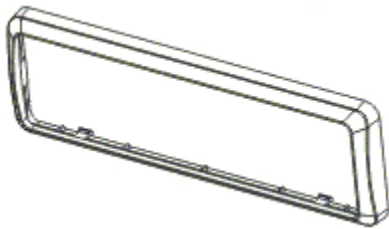
## Tuner

- Sensitivity ..... 17dB $\mu$
- Stereo separation ..... 35dB
- Signal to Noise Ratio ..... 55dB
- FM Frequency range ..... 87.5-108MHz
- AM Frequency range ..... 532-1710KHz
- Channel step FM: ..... 0.2kHz
- Channel step AM: ..... 10kHz
- Intermediate frequency ..... 10.7MHz

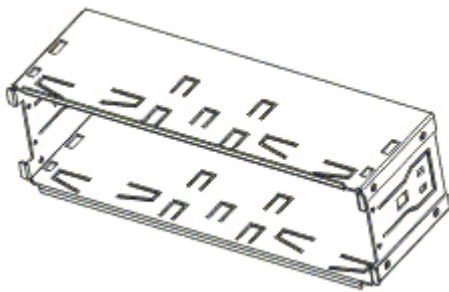
## Line-Out

- Output ..... 2V rms(+/-3)
- Impedance ..... 10kOhm

# Accessories



Faceplate Frame



Dash Insert Casing



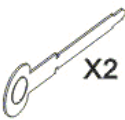
Nut and Bolt



Push Pin



Wiring Harness



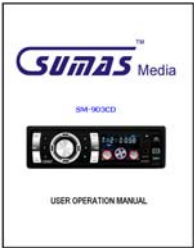
Extractors



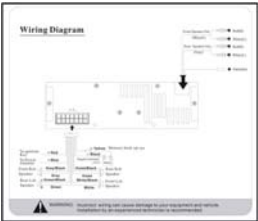
Faceplate Caddy



Mounting Strap



Manual



Wiring Diagram