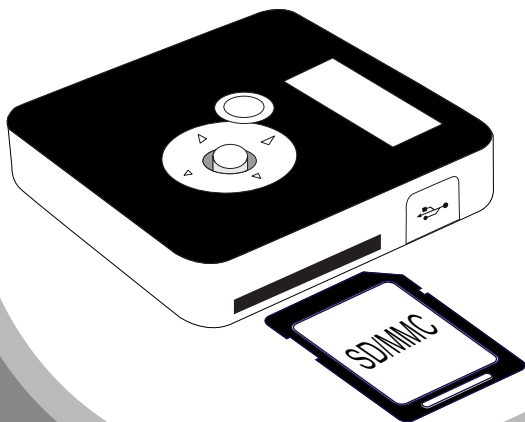# ASTONE®

NIVA
MP3 Player

USER MANUAL

For Customers in U.S.A. or Canada
If you have any questions about this product, you can email to support@astone.com.hk

Regulatory Information:

```
Declaration of Conformity

Model: NIVA
```

This device complies with part 15 of 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.

FCC Notice:
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 and 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.

For Customers outside USA

If you have any question about this product, you can email to support@astone.com.hk

For Customers in Europe
This product conforms to the following European Directives:
89/336/EEC (EMC Directive)
This product complies with EN55022/A1:2000 and EN 55024/A1:2001 for use in the following areas: residential, commercial and light industrial.

Contents

Preface

Thank you for purchasing NIVA MP3 Player with SD/MMC. Before using this device, read carefully all the instructions in this user manual and keep it for future reference.

Astone introduces this new NIVA MP3 player that uses SD/MMC memory cards to play your favorite.

You can also use it as a traditional key chain storage device. Just plug it into your computer and save or download whatever files you desire.

We try to provide products with appearance identical to the pictures included in this manual. However, the real one may differ more or less from the pictures. Please see the real product for reference. The PC we mentioned in this manual, except otherwise specified, refers to a desktop computer or notebook with Windows operating system. All products, devices, MP3 players we mentioned in this manual, except otherwise specified, refer to MP3 Player with SD/MMC.

To make copies or publish this manual in whatever means or in whatever forms without written authorization from Astone Holdings Pty Ltd is prohibited. Astone Holdings Pty Ltd reserves all rights.

Astone Holdings Pty Ltd will not be held responsible for data loss, modification of the device or other indirect loss resulting from mal-operation, maintenance, battery overflow or other accidents. Astone Holdings Pty Ltd will not be held responsible for restoration of any personal data lost.

Astone Holdings Pty Ltd devotes to improving the function and performance of its products. The functions described in this manual are subject to change for the purposes of technical progress with prior notice.

Liability Exemption Statement

1. All the information written in this manual was produced with our company's careful caution, but there still may be some mistakes. Astone will not be responsible for this maybe mistakes.

2. As we can't control users' understanding of this manual, Astone Holdings Pty Ltd will not be held responsible for any accident or other loss caused by misunderstanding of this manual. We shall not be held responsible either for any loss caused by using this product or for any claim by any third party.

3. Astone will be responsible only for the inherent problem of the device, but not for data loss, revision of the device or other indirect losses resulting from mal-operation of software, maintenance or other accidents. Astone will not be responsible for restoration of the data lost.

4. Astone reserves the right of modifying the software, hardware and user manual of this device without special notice.

5. To make copies, publish, transfer, store in traceable system, or translate to any other languages without written authorization from Astone is forbidden.

Important

1. Do not drop the player or give a hard impact, it could cause malfunction.
2. Do not subject the player to high temperature or direct sunlight.
3. Keep it far away from humidity or damp.
4. Do not disassemble it by yourself.
5. Use dry cloth to clean the device.
6. Keep it away from the chemicals such as benzene or diluents.
7. Take the battery out if the device is not in use for a long period of time.

When the battery is firstly inserted or USB connection is disconnected, the unit will take 6-8 sec to start up.

Safety Precaution

Before using this device, read carefully and understand all safety instructions included in this chapter, and observe them strictly when using to ensure that the device provides you with pleasure and entertainment for a long period of time.

1. Read carefully through this manual, and fully understand all the operation instructions and warnings of this device.

2. Check if the contents in the packing comply with the packing list. If not, contact the dealer immediately.

3. When it is left unused for a long period of time, the battery must be taken out from battery chamber. If battery liquid leakage is detected and the device works abnormally, do not disassemble the device for cleaning, which may lead to irremediable damage. In this case, contact Astone customer service center for technical support and help from Astone professional service team. However, Astone takes no liability for any damage resulting from battery liquid leakage.

4. This device is a hi-tech electronic product, which should be kept away from heat, cold or moisture when being used. Special care should be taken to observe the followings:

   a) The device should not be exposed to strong sunlight, and should be kept away from heat sources.

   b) Avoid using the device outdoor at low temperature for a long period of time.

   c) The device should not be placed in the environment of extra-humidity; Care should be taken so that water and other liquids are not spilled into the device. If it happens, it should be switched off immediately.

   d) The device should not be used in dust-plagued or very dirty places.

   e) Do not clean the device with any type of detergent containing chemical elements or other solutions in order to avoid damages from corrosion or moisture. If necessary, please clean it with soft cloth or paper slightly.

5. Never use the device in a strong magnetic field, strong electric charge or electromagnetic interference environment to prevent data from being lost.

6. Do not drop the device to the ground or suffer it from fierce impact by other objects, which may lead to unnecessary damage.

7. The device uses a rapid internal storage for data memory. Generally, even when the power is suddenly turned off, the data in the device will not lose. However, mal-operation, malfunction or external strong electromagnetic interference may lead to data loss. So, it is advisable for users to make a copy of all useful data in time. Astone will be responsible only for the inherent problem of the device, not for data loss or other indirect loss arising from mal-operation, maintenance or other accidents. Astone will not be held responsible for restoration of any personal data lost.

8. The device should be opened under no circumstances. The manufacturer takes no liability for any damage resulting from unauthorized tampering.
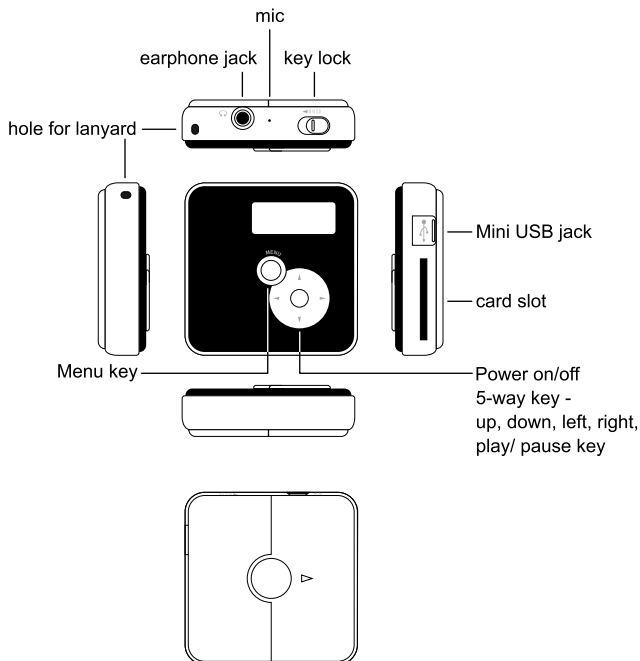
Features of the product

This device is a new generation of multi-functional MP3 player with SD/MMC, which can play music files (MP3, WMA,WAV). It can also serve as a plug-and-play U disk.
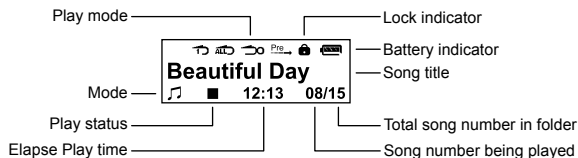This MP3 player supports SD/MMC. Now, we list some features here for your reference.

Highlights
 - Formats: MP3, WMA and WAV
 - 512M or 1G on board flash memory (depending on version)
 - MMC/ SD card, up to 2G
 - Store, playback and transferring of audio and non-audio files.
 - LCD display VA 30 x 9mm, LED backlight
 - ID3 tag
 - USB connector via supplied cable
 - No driver required for file/audio transferring (Windows 98 SE may need driver)
 - Voice recording
 - Folder browsing
 - USB2.0 full speed
 - 5-way switch control button
 - Lyric display support
 - FM radio and FM radio recording
 - Face inter changeable

Product Drawing & Function Keys

mic

earphone jack   key lock

hole for lanyard

Mini USB jack

card slot

Menu key

Power on/off
5-way key -
up, down, left, right,
play/ pause key

Description of LCD display

Play mode ─────────────── Lock indicator

Beautiful Day ─────────── Battery indicator
                          Song title

Mode ─── 12:13 08/15

Play status ──────────── Total song number in folder
Elapse Play time ─────── Song number being played

Hard icons

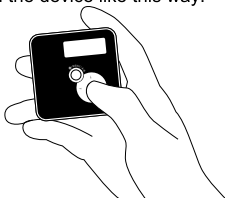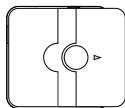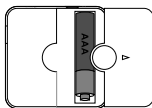| Repeat one | Repeat All | Random | Intro | Battery indicator |
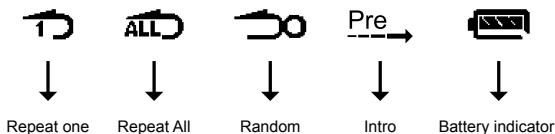
Operation instruction

You are recommended to hold the device like this way:

Battery installation

Open the battery door in this direction.

Place one AAA battery into the battery compartment. Pay attention to the polarity.
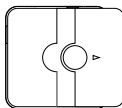
Close the battery door
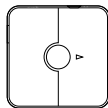
MMC/SD card placement
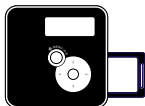
Place & push your MMC/SD card in this direction until you hear a click sound. Pay attention to the card direction.

The card will be protruded a little bit. This is normal. Push inwards again to release the card.

Important:

Only insert or remove the card when the player is power off, otherwise, the data may be crashed or damaged. Astone will not be responsible for data lost or card damage.

Operation instructions of function keys

N **Note:**
Short press-----press the key for less than one second
Long press-----press the key for more than one second

Under Music and Voice mode

Key	Operation	Stop/pause state	Play state	Enter menu in stop state	Enter menu in play state
Play/Stop ⦿	Long press	Power off	Power off	Power off	Power off
	Short press	Play	Pause	Select the option or enter the option and exit	Select the option or enter the option and exit
Menu	Long press	Enter record mode and start recording	/	Enter record mode and start recording	/
	Short press	Enter menu in stop state	Enter menu in play state	/	/
Next	Long press	/	Fast forward	Move forward continuously	Move forward continuously
	Short press	Next item	Next item and Play	Move forward	Move forward
Prev.	Long press	/	Fast backward	Move backward continuously	Move backward continuously
	Short press	Previous item	Previous item and Play	Move backward	Move backward
Vol. +	Long press	Increase volume continuously	Increase volume continuously	/	/
	Short press	Increase volume	Increase volume	/	/
Vol. -	Long press	Reduce volume continuously	Reduce volume continuously	/	/
	Short press	Reduce volume	Reduce volume	/	/

Under FM Radio mode

Key	Operation	Radio reception state	FM menu
Play/Stop	Long press	Power off	Power off
	Short press	Select the next saved channel	Select the option or enter the option and exit
Menu	Long press	Enter FM record mode and start recording	Enter FM record mode and start recording
	Short press	Enter FM menu	/
Next	Long press	Scan forward continuously	Move forward continuously
	Short press	Scan forward step by step	Move forward
Prev.	Long press	Scan backward continuously	Move backward continuously
	Short press	Scan backward by step	Move backward
Vol. +	Long press	Increase volume continuously	/
	Short press	Increase volume	/
Vol. -	Long press	Reduce volume continuously	/
	Short press	Reduce volume	/

Under System Setting mode

Key	Operation	First level selection state
Play/Stop	Long press	Power off
	Short press	Select the option or enter the option and exit
Menu	Long press	Enter record mode and start recording
	Short press	/
Next	Long press	Move forward continuously
	Short press	Move forward
Prev.	Long press	Move backward continuously
	Short press	Move backward
Vol. +	Long press	/
	Short press	/
Vol. -	Long press	/
	Short press	/

Under Folder Selection mode

Press menu during stop state, press ▶ to select local folder or card folder then press Play/Stop to enter local folder or card folder.

| Key	Operation	Selection state
Play/Stop	Long press	Power off
	Short press	Select and enter the folder and exit
Menu	Long press	/
	Short press	/
Next	Long press	/
	Short press	Enter sub folder
Prev.	Long press	/
	Short press	Exit to previous folder
Vol. +	Long press	Move to the previous folders continuously
	Short press	Move to the previous folder
Vol. -	Long press	Move to sub folders continuously
	Short press	Move to sub folder

Connected to computer

Computer system requirement

- Only supports Windows 98 Second Edition, 2000 (SP3 or above), ME, XP (SP1 or above), XP pro and XP home. Other systems are not supported.(Window 98 is not supported)
- Pentium II 200MHz
- 64 MB RAM
- 500MB memory space
- CD-Rom drive
- USB 1.1 port or above (USB2.0 is recommended)
- Connected to internet (necessary only when the firmware has to be upgraded)

Connected to computer via USB cable

The device can be connected to computer via USB cable as the figure below:

Connect mini USB cable
to the USB port of your PC
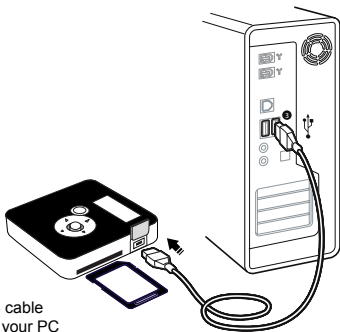
N **Notes:**
1) The device will lock the power pin when it enters USB mode (i.e. it will turn on when USB cable is unplugged)
2) Before unplugging the unit from PC via USB cable, make sure that you have to "safely remove" the device on Windows desktop.
3) For windows 98 Second Edition, please download the driver at www.astone.com.au.

File upload and download

After the device is connected to computer for uploading/downloading, no special operation other than simple "drag-drop" is needed.

1. Double click "my computer" in Windows, you will find a new icon "removable disk", which represents your MP3 player.
2. If you want to download files to the device from your computer, just drag the desired files to "removable disk", which represents your MP3 player.

3. You can also upload the files in your MP3 player to your computer.
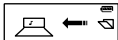
4. During uploading / downloading, keep USB connected to the computer. Plug it out from USB port when the uploading / downloading is completed.
5. The device can store all types of files in addition to music files.

N Notes:

1. When transferring files to the player, be sure to copy them from your hard drive to the player. If you move or cut the files from hard driver and paste them to the player, the files will no longer exist on your hard drive.
2. Using Windows Explorer, data files can be transferred from the player to PC.
3. Data files that are stored on the player cannot be browsed using the player's interface.

Firmware upgrade

Firmware upgrade program can upgrade the firmware of this device in order to enhance the performance of your MP3 player. Users need to visit our website www.astone.com.au to download the desired firmware upgrade program.
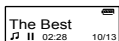
N Note:

Disconnection during firmware upgrading may cause failure to the device.

Basic Operation

Power on

Long pressing Play/Stop key to power on. When powered on, it enters Stop state in Music mode. Press Play/Stop key to play music.

 Notes:

1) If no card is inserted into the device, it will play music on the local folder after powered on.
2) Only insert or remove the card when the device powers off. Otherwise, the data in the device may be crushed or damaged. Astone will not be responsible for data lost or card damaged.

Power off

Long press Play/Stop key under Stop state, the device will shut down automatically.
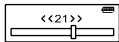
Key lock

When "Hold" is on, all the keys can't work. Turn "Hold" key to the left, there will be an icon of "Key lock" at the upper right corner of LCD display. With key lock function, mal-operation shall be prevented.

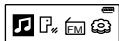### Volume adjustment

You can increase or decrease volume by pressing ▲ or ▼ key continuously.

Music mode

If not in music mode, press menu in stop state, press Play/Stop to select mode, then press Play/Stop again to select music mode. Press Play/Stop key to start playing music, short press it again to pause playing. Press ▶ to play the next item while press ◀ to play the previous item.

However, under Stop state in Music mode, press Menu key and there are five options available as below, which you can select by pressing ▶ or ◀ key and enter by pressing Play/Stop key:

- Mode
- Local Folder
- Card Folder (If a card is inserted)
- Delete File
- Exit

Folder browsing

When selecting Local Folder (internal memory), you can browse the folders by pressing ▶ key. Press Play/Stop key to select and press Play/Stop again to play the desired folder. Details, pls refer to page 15.

Local folder 2/5	🗁The Best

When selecting Card Folder, you can browse the folders on the inserted card, the operation is the same as browsing in local folder.

Card folder 2/5

Delete a song

When you do not need a song and would like to delete it, press Play/Stop key to pause playing when it is being played. Press Menu key and ▶ or ◀ key to select Delete file and enter by pressing Play/Stop key. At the moment, there are two options Yes or No on the LCD display. Press Yes to delete the said song by Play/Stop key while press No to exit to Stop state in Music mode by Play/Stop.

The Best ×B   YES NO

1. Play modes

Under Play state in Music mode, press Menu key to enter Play modes and press Play/Stop key to enter sub menu. There are five play modes available as below, which you can select by pressing ▶ or ◀ key and enter by pressing Play/Stop key

- Normal (play music one by one from beginning to end)
- Repeat one (play one music item repeatedly)
- Repeat all (play all music items repeatedly)
- Random (play music randomly)
- Intro (play first part of each music item only)

2. Equalizer

Under Play state in Music mode, press Menu key and press ▶ or ◀ key to select Equalizer, press Play/Stop key to enter sub menus. There are seven Equalizers available as below, which you can select by pressing ▶ or ◀ key and enter by pressing Play/Stop key.

- Natural
- Rock
- Pop
- Classic
- Soft
- Jazz
- DBB

3. Lyrics

Under Play state in Music mode, press Menu key, then press ▶ or ◀ key to select Lyrics, press Play/Stop key to enter sub menu. You can select On or Off by pressing ▶ or ◀ key, press Play/Stop to enter. With Lyrics on, you can see on the LCD display the lyric to the song being played while with Lyrics off, you can see only the title of the song being played on the LCD display.

4. Exit

The device exits to the previous menu.

FM Radio

1.Mode

Press Menu key, select mode, then select FM radio mode. Press Play/Stop key to listen to the saved radio channels.

2. Auto search

In FM radio mode, press Menu key and select Auto Search by pressing ▶ or ◀ key, then press Play/Stop key to start searching for radio channels automatically. When a channel is located, it will be saved automatically with an icon "S" on the LCD display.

CH01
FM87.0

3. Save

In FM radio mode, press Menu key and select Save by pressing ▶ or ◀ key, then press Play/Stop key to save the desired channel you locate manually.

4. Record

In FM radio mode, press Menu key and select Record by pressing ▶ or ◀ key, then press Play/Stop key to enter Record state and press Play/Stop key again to start recording the desired radio programs. Short press Play/Stop key to pause recording while long press Play/Stop key to save recording and exit.

FM_001 01/01
1RFM ● ▶ 02:28

5. Delete

In FM radio mode, press Menu key and select Delete by pressing ▶ or ◀ key, then press Play/Stop key to delete the saved channel you do not need.

6. Delete All

In FM radio mode, press Menu key and select Delete All by pressing ▶ or ◀ key, then press Play/Stop key to delete all the saved channels you do not need.

7. Normal Band

In FM radio mode, press Menu key and select Normal Band by pressing ▶ or ◀ key, then press Play/Stop key to search between 87 MHz and 108 MHz.

8. Japan Band

In FM radio mode, press Menu key and select Japan Band by pressing ▶ or ◀ key, then press Play/Stop key to search between 76 MHz and 90 MHz.

9. Exit

In FM radio mode, press Menu key and select Exit by pressing ▶ or ◀ key, then press Play/Stop key to exit.

Voice mode

Press Menu key, then Play/Stop key to select mode and select Voice mode by pressing ▶ or ◀ key and press Play/Stop key to start listening to the saved voice file, press it again to pause.

1.Play modes

Under Stop state in Music mode, press Menu key to enter Mode and press Play/Stop to enter sub menu. Select Voice mode by pressing ▶ or ◀ key, press Play/Stop key to enter Voice mode, and press Play/Stop key again to start playing voice file. Under Play state in Voice mode, press Menu key to enter Play modes and press Play/Stop key to enter sub menu. There are five play modes available as below, which you can select by pressing ▶ or ◀ key and enter by pressing Play/Stop key:

- Normal
- Repeat one
- Repeat all
- Random
- Intro

However, under Stop state in Voice mode, press Menu key and there are five options available as below, which you can select by pressing ▶ or ◀ key and enter by pressing Play/Stop key:

- Mode
- Local folder
- Card folder (If a card is inserted)
- Delete file
- Exit

2.Exit

Under Play state in voice mode, press Menu key and select Exit by pressing ▶ or ◀ key and exit to voice stop state by pressing Play/Stop key.

3.Voice record

Under Stop state in Voice mode, long press Menu key to start recording, and short press Play/Stop key to pause recording, Under Play state in Voice record mode, long press Play/Stop key to save recording and exit to Stop state in Voice mode.
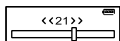
REC001   01/01
REC ◀▶ 02:28
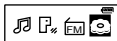
System setting

Under Stop state in Music mode, press Menu key to enter Mode, press Play/Stop key and select System setting by pressing ▶ or ◀ key and enter by pressing Play/Stop key. System setting includes the following:

1. Backlight
You can set the duration of LCD display backlight after each operation, i.e."3s, 6s, 9s, 12s, 15s, 18s, 21s, 24s, 27s and 30s".

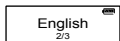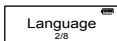| Backlight	<<21>>
1/8	

Note:
when the device is running out of power, the backlight will become dimmer. To resume the normal state, the battery should be replaced.
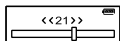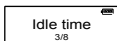
2. Language
You can set the desired language for your device i.e."Simplified Chinese, English and Traditional Chinese".

Language	English
2/8	2/3

3. Idle time
When the device is playing, the time for auto power off (i.e. from 1m to 30m) can be preset. That's to say, if there is no operation for the preset time or idle time, the device will power off automatically.

Idle time	<<21>>
3/8	

4. Sleep time
When the device is playing, the time for sleep (i.e. from 1m to 120m) can be preset. That's to say, when the preset time for sleep runs out, the device will power off automatically.

Sleep time	<<21>>
4/8	
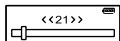
5. Contrast

You can set the contrast of LCD display (i.e. from 1 to 16).

Contrast 5/8	<<12>>
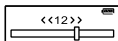
6. Memory info

With this function, you can check the memory space of the local card and SD/MMC card.

Memory info. 6/8	119M <91%>
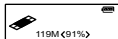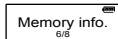
7. FW version

With this function, you can check the version of the firmware of your device.

FW version 7/8	? 2005/07/05

8. Exit

With this function, you can exit System setting and return to Mode.

Exit 8/8

Main Menu Tree Diagram

```
Mode
├── Music Mode
│   ├── Play State ──┬── Play modes
│   │                ├── Equalizer
│   │                ├── Lyrics
│   │                └── Exit
│   └── Stop State
├── FM Mode
│   ├── Mode
│   ├── Auto search
│   ├── Save
│   ├── Record ──┬── Mode
│   │            ├── Local folder
│   │            ├── Card folder
│   │            ├── Delete file
│   │            └── Exit
│   ├── Delete
│   ├── Delete All
│   ├── Normal band
│   ├── Japan band
│   └── Exit
├── Voice Mode
│   ├── Play State ──┬── Play modes
│   │                └── Exit
│   └── Stop State
└── System Mode
    ├── Backlight
    ├── Language
    ├── Idle time
    ├── Sleep time ──┬── Mode
    │                ├── Local folder
    │                ├── Card folder
    │                ├── Delete file
    │                └── Exit
    ├── Memory info
    ├── Contrast
    ├── FW version
    └── Exit
```

Trouble Shooting

The device does not work or LCD does not work.
1) Check if there is enough battery power.
2) Check if the polarities of battery are correct.
The device does not respond to key press
1) Check if it is in the status of "Key lock"
2) If it is in "Key lock", all the keys can not work.
It can not play MP3 files
1) Check if there is a MP3 file in the SD/ MMC card or internal memory.
2) Check if the player is in Play mode.
Firmware upgrade program cannot be installed.
Firmware upgrade program only supports WIN98SE, ME, 2000 (SP3 or above), ME, XP (SP1 or above), XP Pro and XP Home.
When the device is connected to computer, there is not a device icon on the computer.
Connect correctly to the computer via USB. Make sure that the device has been properly installed by checking "device management" of the computer.
LCD backlight is not on.
Check if the backlight setting of the device is in "OFF" position.
After the device is connected to the computer, there is not a player icon on the computer.
Connect correctly to the computer via USB cable. Make sure that the device has been correctly installed by checking the "device manager" of the computer.
Does it support Win 98 OS?
No, it does not. It only supports Win 98 SE but a driver is required.
How do I copy songs from a CD or my PC to the player?
Use Windows Media Player, Music Match, or a similar program to convert your CD's into MP3 or WMA formats to a folder on your PC, then Drag and Drop files from the folder to the MMC/SD card using either a card reader or directly to the player when it is connected with the USB cable. Refer to the Help Files in Windows Media Player, etc. for additional assistance.
Why I'm not able to play WMA songs on the player?
The player supports MP3 and WMA file formats. There are 2 possible causes for the player not playing a WMA file.
1) The WMA file is recorded with a bitrate less than or equal to 32kbps,
2) The WMA file has copy-protected enabled (DRM protection) but was not transferred through Windows Media Player. The file types (WMA, MP3) will scroll at the end of the song title on the screen when being played.

The song skips or does not play at all, but the song title shows. What is the cause?

There are several reasons why a song (file) can not play.

1) The file may be corrupted when it was converted from the CD or when it was copied over to the player during the transfer process. Make sure that the complete song (file) is copied to the player before disconnecting the USB cable. When copying is complete, Click on the "Safely Remove Hardware" icon in the tray on the bottom right hand side of your desktop and wait for the window that will state you can safely remove the drive. This needs to be completed prior to removing the device from the USB cable or removing the USB cable.

2) The song may be copy protected (DRM) and you do not have the right to play it or you do not transfer the song to the player through Windows Media Player. You can place your mouse pointer over a MP3 or WMA icon or song title for the file on your PC and a window will open with information on the file (or you can right-click on the song file and select "Properties"). If the problem persists, delete the file from the player or format the card and re-copy the new songs to it following the procedures in the manual.

3) If you used Windows Media Player check (Tools, Options, etc.) that the "Copy settings" that the songs (files) were not set to "Copy Protect Music" when they were converted to WMA or MP3 from your CD's to your PC.

How do I use the SD Card? Do I need to turn off the device to remove or insert the card?

The player should be turned off prior to removing or inserting a SD Card. Card damage or file corruption could occur if these procedures are not followed.

When inserting the card, check the card icon above the card slot on the player that shows how the card should to be inserted.

Sometimes I have a little difficult inserting the USB cable, what is the problem?

The USB cable needs to be inserted correctly; there is a slot alignment key on the male connector that inserts into female connector of the player. DO NOT force this plug into the slot; it could cause damage to the device and/or the PC that is being connected to (and could void the warranty).

I want to remove my files from the SD card, should I just delete them?

Yes, you can just delete them or you can format the card using FAT32. Go to "My Computer", put your mouse pointer over the correct drive letter for the player and right click > Format > choose FAT32 and then format.

I am not able to put more songs onto it though it has more capacity left. (For example 1 GB SD card)

Please format the SD card in FAT32 format. It is because the format of FAT16 has a limitation of the files supported.

Specification

Dimensions (Lx W x D)	53 x 53 x 16 mm
Weight	35g (battery not included)
Internal memory	512MB, 1GB (depending on version)
Supported SD card memory capacities	128MB, 256MB, 512MB, 1GB, 2GB (depending on version)
Power supply	1 AAA battery for more than 12 hours of playtime
PC interface	USB 2.0 full-speed
Digital Music format	MP3, WMA and WAV
Digital Voice format	Record: voice recording from internal microphone
	Built in microphone: electric condenser microphone
LCD size	30 x 9 mm (Visual area)
Compliance	FCC and CE
Operating temperature	-5 to 50 ℃ / 23 to 122 ˚F
Storage temperature	-10 to 50 ℃/ 14 to 122 ˚F
Relative humidity	5-95%
Operating altitude	Up to 20,000 ft

N **Note:**

The specification of the device is subject to change for the purpose of performance upgrading without notice.