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● The included flash memory may become full because of the map and dictionary data. You can expand the memory by purchasing a separate SD memory card.

Preparations

Safety Precautions

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Description of Parts

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Charging the Battery and Using External Power

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## Safety Precautions

Please read the following important precautions for proper use of the product to prevent personal injuries and property damage.

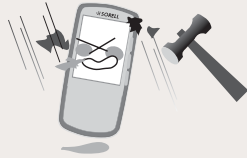
Do not listen to music at a high volume for a long time.

It may damage your hearing.



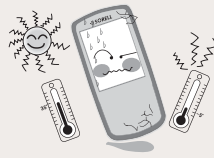
Avoid physical impact on the touch screen or the product.

It may cause the product to break down.



Do not place the product in a place with extreme temperatures.

(Optimum operational temperature: 5~35°C, humidity: 10~70%)  
It may cause a failure of the product.



Use a soft, dry cloth when cleaning the product. Do not use benzene or lacquer thinner.

It may damage the product.



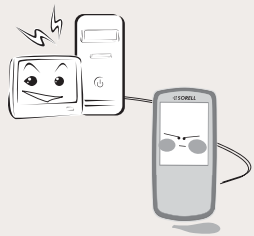
Avoid foreign particles or liquid getting into the product.

It may cause the product to break down. If foreign particles or liquid gets inside the product, stop using the product and contact the customer service center.



Avoid saving an important document or file in the device.

The file may be damaged.



Store the stylus pen where children cannot reach.

It may cause an injury.



Do not use or store the product without a Dummy SD card in the SD card socket.

Prolonged use without a Dummy SD card inserted may allow dust or foreign particles to enter the socket and cause product damage.



## Package

The package contents may be changed without notice to improve the features or quality of the product.  
The package contents may differ from the provided information of actual contents.

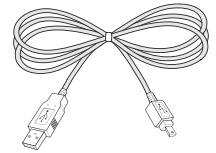
### Package Contents



NVX216



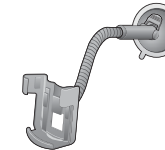
AC/DC ADAPTER



USB cable



Car recharger



Car holder



Map Data DVD



Manual & Quick service guide



Stylus pen



Dummy SD card

### 참고

- A stylus pen is inserted in NVX216.
- You cannot save data in the Dummy SD card.  
(When inserted, the Dummy SD card prevents dust and foreign particles from entering the device.)

■ THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES.

OPERATION IS SUBJECT TO THE CONDITIONS:

- (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND
- (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRE OPERATION.

■ Caution : Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

■ 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 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.

## Description of Parts

The diagrams below may differ from the actual figure of the product.

### Top/Front



### Left/Right



#### Note

- Some of the compatible SD cards are listed below.

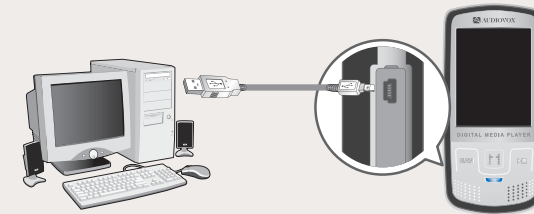
TEAM : 1GB	SANDISK : 512MB/1GB	Transcend : 512MB/1GB	Teraviv : 512MB/1GB
Barun Electronics : 512MB/1GB	Samsung : 512MB/1GB	Billionton : 512MB	

## Charging the Battery and Using External Power

### Connecting to PC - charging the battery

(NVX216 must be turned off)

Turn on the PC, and connect NVX216 to a USB port of the PC using the provided USB cable.  
The LED will light blue, and charging will begin.



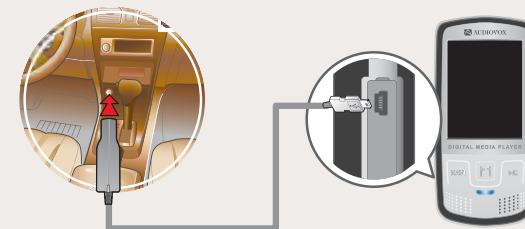
#### Note

- The LED of NVX216 lights blue during charging, and the light disappears when the charging is complete.  
(about 3~4 hours)
- : low battery      : charging      : charge complete
- Charge time may vary according to the USB condition of the user's PC.

### Connecting the car recharger – charging the battery

(NVX216 must be turned off)

Connect NVX216 to the car using the car recharger provided.  
The LED will light blue, and charging will begin.



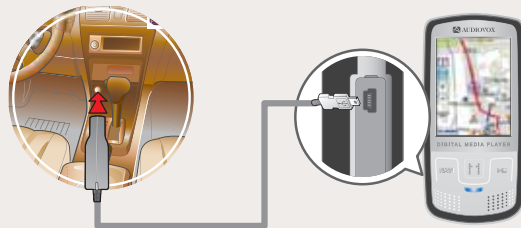
#### Note

- The LED of NVX216 lights blue during charging, and the light disappears when the charging is complete.  
(about 3~4 hours)

# Charging the Battery and Using External Power

## Connecting the car recharger – using external power

Connect NVX216, with the power on, to the USB port using the provided car recharger.  
NVX216 can be operated with external power at the same time as charging the battery.



# Connecting to PC

## Recommended PC requirements

Component	Requirement
CPU	Pentium MMX or above
Operating System	Windows 2000 / XP
Hard Disk	50 Mbytes of free space
Others	CD-ROM drive, USB port

## Connecting to PC

- 1 Turn on the power of NVX216.
- 2 Connect NVX216 to a USB port of the PC using the provided USB cable.  
[My Computer] – [Removable Disk] will appear.
  - Two drives will appear when NVX216 is connected.  
(e.g. – F:\ : NVX216 drive, G:\ : SD Card drive)
- 3 After selecting a file to save, drag it to [Removable Disk] with a mouse, or select 'copy' and 'paste'.  
When data is being transferred, never disconnect the USB cable. Removing the player during data transfer will damage data. The order of music files shown in Windows Explorer is not the order in which the player plays.

## Connecting to PC

Install a USB driver only if the operating system is Windows 98SE / ME.

### Removing the device from the PC

- 1 When removing NVX216 from the PC in Windows ME / XP / 2000, (🔄) click [Safely Remove Hardware] in the Windows status bar to stop and remove the device.



- 2 When the [Safely Remove Hardware] window appears, you may disconnect the USB cable.

## Power On/Off, Hold Switch, and Resetting

### Turning the power on



Press the [▶] button for 1~2 seconds.  
The power is turned on as 'SORELL' is displayed on the LCD screen.

#### Note

- The booting may take longer due to memory capacity.

### Turning the power off



Press the [▶] button for 2~3 seconds.  
The power is turned off as 'GOODBYE' is displayed on the LCD screen.

### Hold switch and resetting



Slide the [HOLD] switch in the direction of the arrow (◀) to lock the unit and disable all the buttons.



If a problem develops when using the device, press the [RESET] button to resolve the problem.  
A hole appears after sliding the [HOLD] switch in the direction of the arrow (◀).  
Reset the device by pressing the hole with the stylus pen.

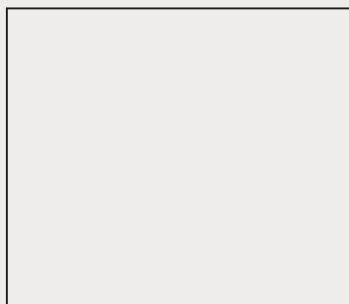
## Saving Files

### Saving files in the internal memory

(NVX216 must be turned off)

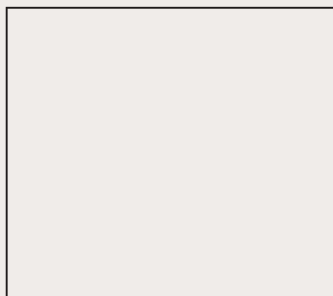
#### 1 Connect NVX216 to the PC using the USB cable

When the power is turned on, 'USB CONNECTED' appears on the screen, and a removable disk will appear in the PC.



#### 2 Copy the music, image, text, and video files you want to the 'MEDIA' folder of the removable disk.

Disconnecting the USB cable after copying files, the screen will display 'USB DISCONNECTED', and the power is automatically turned off. The file in the "MEDIA" folder only can be played, so user should save the music, image, text and video files in the " MEDIA" folder.



#### 3 Turn on the power to view files in NVX216 for each mode.

According to the selected mode, the related file will be checked and indicated by automatically.



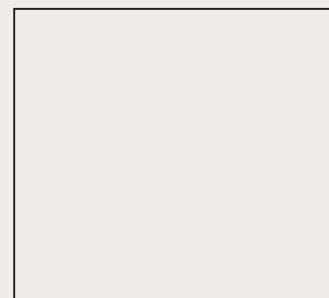
## Saving Files

### Saving files in the SD Card

(NVX216 must be turned off)

#### 1 Create a 'MEDIA' folder in the SD card, and copy the music, image, text, and video files you want to it.

The file in the "MEDIA" folder only can be played, so user should save the music, image, text and video files in the " MEDIA" folder.



#### 2 Insert the SD card into NVX216.



#### 3 Turn on the power to view files in the SD card for each mode.



AUDIO BOX

## Operation

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## Music Mode

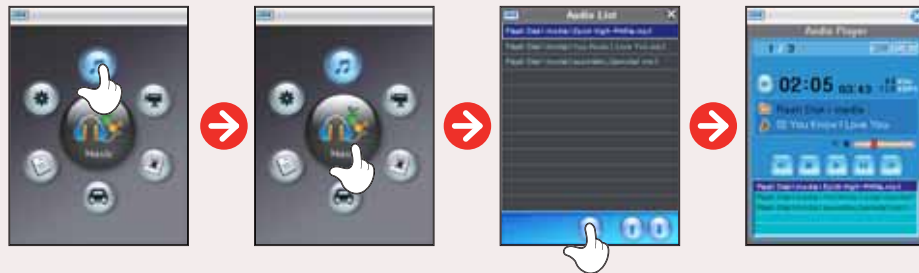
You must save music, video, image, and text files in the 'Media' folder.



Removing the SD card during operation may damage the device.

- Make sure to insert or remove the SD card with the power off.

### Selecting the music mode



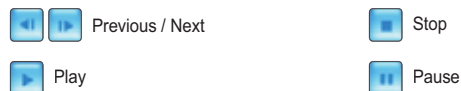
- 1 Select the button in the initial screen and <Music>.  
<Music> mode screen will be displayed.

### Music mode screen



#### 참고

The major buttons in music mode are described below.



## Music Mode

### Playing a music file



- 1 Press the [M] button for about two seconds in the music mode.

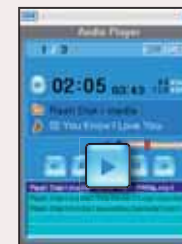
The <Audio List> screen will be displayed.

The list is sorted by location and name of the files.



Move between pages by pressing (move page) buttons, select the file you want, and press the button.

A playback screen will be displayed.



- 2 Select the button in <Music> mode.

A music file will be played.

#### 참고

- You can play/pause a music file using the buttons as in the figure.



- 3 Press the buttons during play.

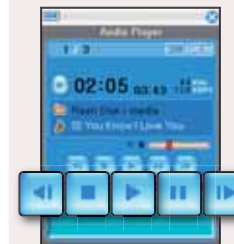
The player will skip to the previous/next song.  
Its button is using when skipping Audio file list too.

Press to pause a song.

The music file being played will pause.

Press to stop a song.

The music file being played will stop.



#### 참고

- Press [M] to go to the main menu.

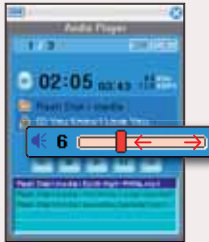




## Music Mode

### Volume adjustment

(The volume can be adjusted from 00~15)



- Slide the volume-adjusting bar to the left or right during play.  
Left : to decrease the volume  
Right : to increase the volume

#### 참고

- When the power is turned on, the volume will be at the same level as before the power was turned off last time.
- Please note that listening to music at maximum volume may damage your hearing or the earphone.

### Setting the playback style



- Press in <Music> mode.  
Files will be played in the selected style.

#### 참고

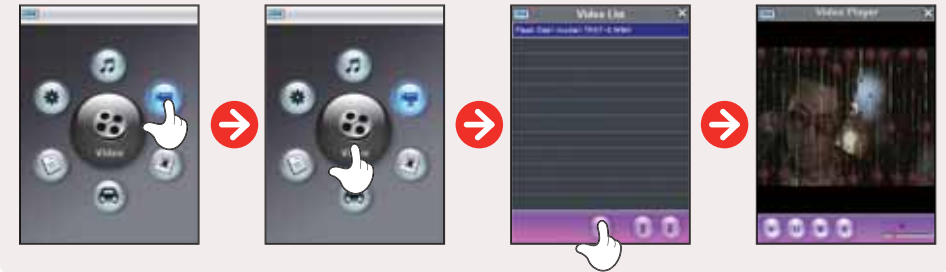
- Repeat one song
- Repeat the whole list (activated in blue)
- Play once (inactive in white)
- Play in the list order (activated in white)
- Play songs randomly (activated in blue)



## Video Mode

You can only play Video files by converting them into the video format using the Window Media Encoder.

### Selecting the video mode



- Press <Video> to display a video list after selecting the button in the initial screen.  
Selecting a video file will display the video mode screen.

### A sample video mode screen



#### 참고

Features of major buttons in the video mode are described below.

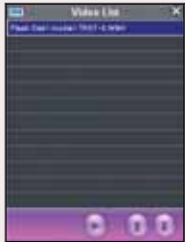
- |                      |       |
|----------------------|-------|
| Play                 | Pause |
| Go to the video list | Stop  |



## Video Mode

The player supports WMV files.

### Playing a video



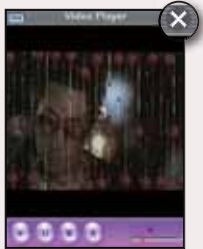
- 1 Press [M] for several seconds on the front panel in <Video> mode.  
<Video List> screen will appear.



Move between pages using (move page) buttons, select the file you want with the stylus pen, and press the button.  
A playback screen will appear.



- 2 Press in <Video> mode.  
The video file will be played.



- 3 Press X at the upper right corner to exit from <Video> mode.

#### 참고

- Pressing [M] shortly will display the main menu.



## Image Mode

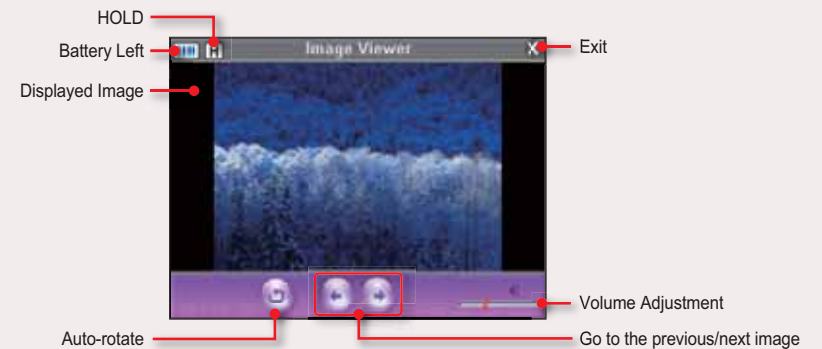
You can listen to music at the same time as viewing images.

### Selecting the image mode



- 1 Press <Image> after selecting the button in the initial screen.  
<Image> mode screen will be displayed.

### A sample image mode screen



#### 참고

Main buttons in the image mode have the following features.

- Turn on the slideshow  
Slideshow images.
- Turn off the slideshow  
The user must press buttons to move between images.
- Previous/Next  
Go to the previous/next image.



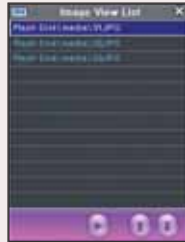
Volume-Adjusting Bar  
Adjusts volume when music is being played.



## Image Mode

You can listen to music at the same time as viewing images.  
JPG files compressed in progressive mode are not supported.

### Displaying an image



- 1 Move between pages by pressing , select the file you want with the stylus pen, and press the button.  
An image will be displayed.

Press [M] for several seconds in  
<Image> mode.  
<Image List> screen will appear.



- 2 Press during display.  
The previous/next image will be displayed.  
Press during display.  
Images will be displayed as a slideshow.  
Press again.  
The slideshow will be disabled.  
Go to another image by pressing buttons.

#### 참고

- You can listen to music while looking at images by pressing the button.  
Before setting Image mode, in order to playing it, user should select Image mode right away after playing Music mode.
- Press once again to stop the music.



- 3 Press at the upper right corner to exit from <Image> mode.

#### 참고

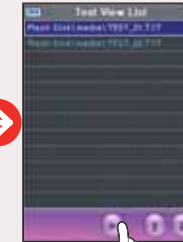
- Pressing [M] shortly will display the main menu.



## TextView Mode

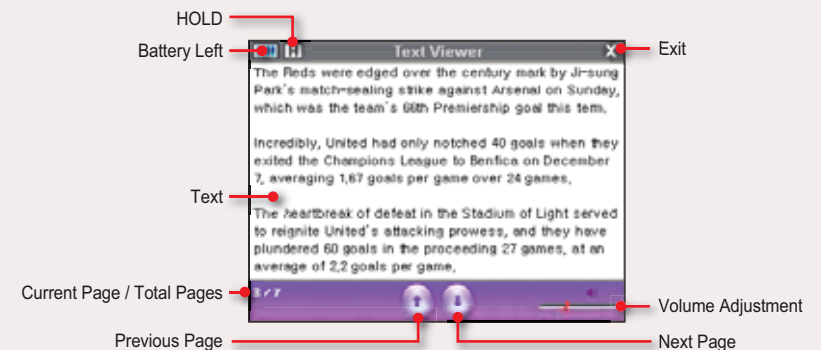
You can listen to music while reading documents.

### Selecting TextView mode



- 1 Press <TextView> after selecting in the initial screen.  
<TextView> mode screen will appear.

### A sample TextView mode screen





## TextView Mode

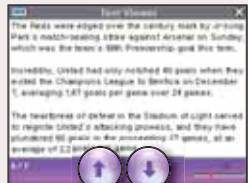
You can listen to music while reading documents.

### Using TextView



- 1 Move between pages by pressing (move pages), select the file you want with the stylus pen, and press . <TextView> will be displayed.

Press [M] for a long time in <TextView> mode.  
<TextView List> will appear.



- 2 Select in TextView.  
The previous/next page will be displayed.

#### 참고

- Press to listen to music while reading a text.  
Before setting Text mode, in order to playing it, user have to select Text mode right away after playing Music mode.
- Press once again to stop the music.



- 3 Press at the top to exit from <TextView> mode.

#### 참고

- Pressing [M] shortly will display the main menu.



## Setting Mode

### Setup Menus



#### Sound

- Volume Level



#### Display

- Contrast
- Backlight



#### Power Option

- Sleep Power Off
- Stop Power Off



#### System

- Default
- System Info



#### Format

- Format



#### Calibration

- Touchkey Control



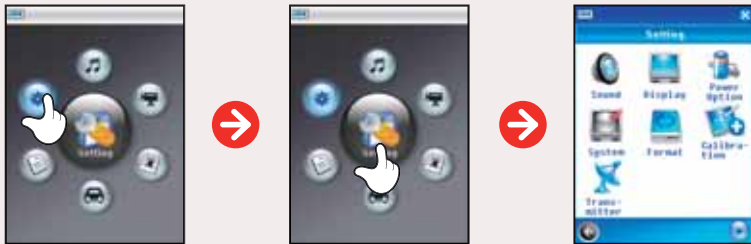
#### Transmitter


- Transmitter



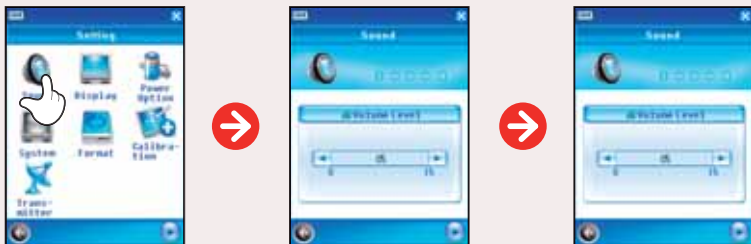
## Setting Mode


### Selecting setting mode



- 1 Press <Setting> after selecting  in the initial screen.  
<Setting> mode screen will be displayed.

### Moving to each submenu

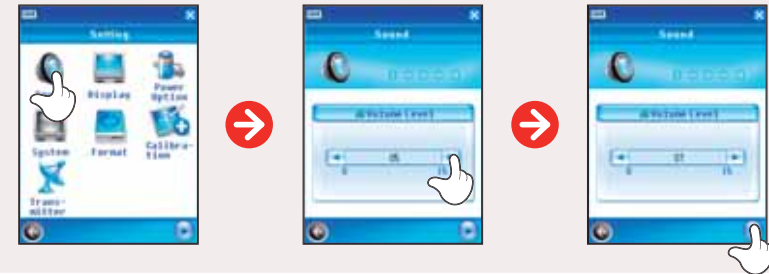






- 1 Select a submenu to enter in the <Setting> mode screen.
- 2 Press the  button.  
The selected submenu will appear.



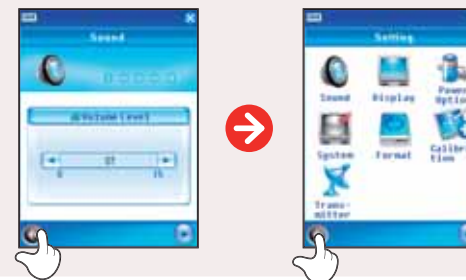
## Setting Mode



### Changing the settings




- 1 Select a menu to enter in <Setting> mode screen.
- 2 Press the  button.  
A window for setting details will appear.
- 3 Change the settings by pressing   buttons.
- 4 Select the  icon to save the selected settings.

### Exiting from a submenu



- 1 Press the  button.  
You will exit from the submenu.
- 2 Press the  button at the bottom.  
You will exit from the <Setting> screen.

#### 참고

Press either [M] at the top or  on the front panel to exit from <Setting> mode.  
The main menu will appear.







## Setting Mode

Select the volume you want when adjusting the volume.

### Sound

#### ■ Volume Level

Select the volume level you want.

Select a bigger number (0~15) or move the bar to the right for higher volume.

Select the band using the stylus pen, and slide the bar to the left or right.

It will be setting with the Default volume level when it power on.



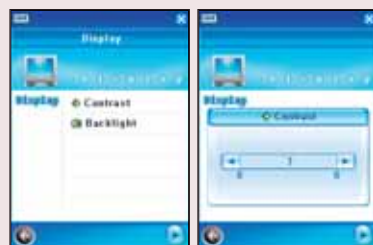
### Display

#### ■ Contrast

Adjusts the brightness of the LCD screen

You can choose between levels 0~8.

(Level 8 gives the highest brightness.)



#### ■ Backlight

Adjusts the time duration of the LCD backlight

You can choose between 00~60 seconds.

When the car recharger is connected, the backlight is always on for the user's convenience.

It can not be setting in the Navi, Video, Image, Text view mode.



## Setting Mode

### Power Option

#### ■ Sleep Power Off

Sets the time duration before turning off the power during playback

You can choose between 00~120 minutes.



#### ■ Stop Power Off

Sets the time duration before turning off the power when stopped

(00~60 minutes)

It can save power consumption.



### System

#### ■ Default

Reset the device to the initial factory settings.

You must choose this option to optimize the system performance after upgrading the firmware.



#### ■ System Info

Displays the firmware version and memory status





## Setting Mode

### Format

#### ■ Format

Use this feature to format the memory.

Be careful since all the files in the player are deleted after formatting the memory.

User should format the built in Nand Flash Memory with using this setting mode.

Using by PC format, it may bring a problem to the Nand Flash Memory.



### Calibration

#### ■ Touchkey control

This menu calibrates the touchpad so that the position you pressed with the stylus pen matches the actual position on the map.

Carefully press the center of the cross with the stylus pen.

After repeating this five times with the cross mark at different positions, the screen returns to the menu.

When the touchkey movement is inaccurate on the touch screen, you can calibrate the touchpad by running this menu.



### Transmitter

#### ■ Transmitter


This menu enables the playing of music played by portable audio players equipped with an FM transmitter using devices (car audio, home audio, etc.) with an FM radio.

Once the transmitter is turned on, it is still on when other mode is in use. Therefore, inactivate the transmitter by pressing the 'ON' icon (grey color) to save the battery, if the transmitter is not in use.



### 참고

#### How to use the FM transmitter :

1. Connect an earphone to the NVX216, which sends the data.  
(Since the earphone acts as an antenna, it must be connected.)
2. Select the frequency you want among the 7 frequency bands, and press 'ON'.
3. Set the machine with an FM radio which receives audio data to the identical frequency of the transmitter.
4. Select the  icon at the bottom, choose a mode to send the data, such as MUSIC, VIDEO, and NAVI mode, and play audio. The machine which receives the data will play the same sound as NVX216.

## Software

### Window Media Encoder

How to use Window Media Encoder ..... 30

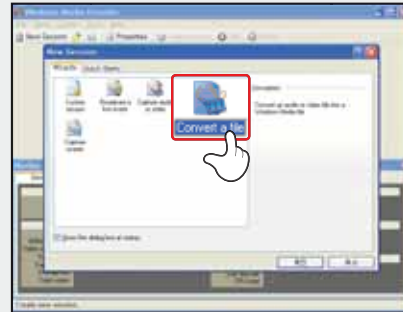


## Window Media Encoder

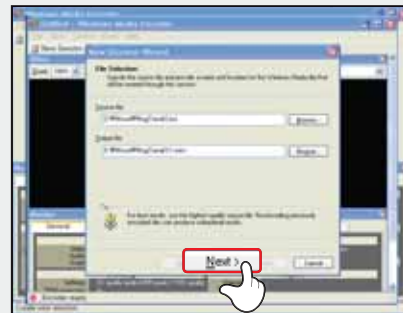
Free software Window Media Encoder which converting movie file program is provided by Microsoft.

### How to use Window Media Encoder

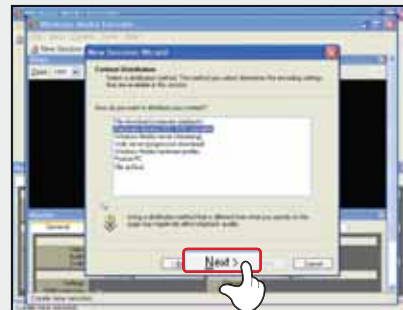
- 1 Click 'Convert File' after selecting a file to encode.



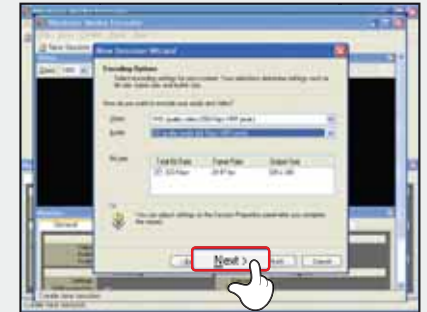
- 2 Select the folder with the source file, and specify the location and name of the converted file to be produced. Click [Next].



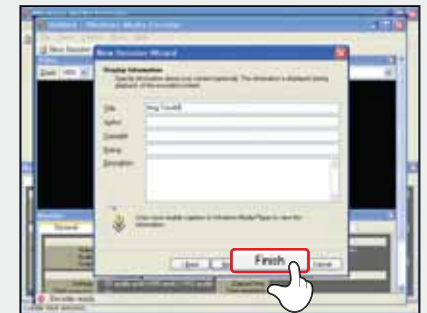
- 3 Select a method to distribute the content, and click [Next].
- The recommended method of content distribution for producing an optimal video for NVX216 is the following.  
Distribution method : Hardware devices (CD,DVD,portable)



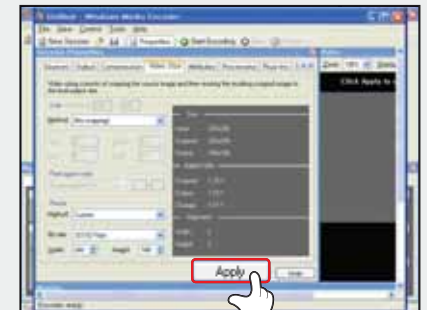
- 4 Select the option as follows, and click [Next].
- Video : VHS quality video (250 Kbps VBR peak)  
Audio : CD quality audio (64 Kbps VBR peak)



- 5 Enter the file information, and click [Finish].



- 6 Set the video size for NVX216.  
(Recommended size: 240 x 168)



**7** Start the encoding after applying the video size.



**8** Encoded output files copied to the media folder in NVX216 or the SD card can be played in Video mode.

## Customer Service

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## Upgrading the firmware

### What is firmware?

Firmware means the operating system which runs the device.  
Improve performance of the product by updating the firmware regularly.

Download a new version of firmware (SCAMUpdate\_AV.exe, EZSCAM01\_AV.OUT) from the product website using a PC.


Turn on the power of NVX216 after inserting the SD card into NVX216.

As UPDATE MODE screen automatically appears, the progress bar will progress in the order of Loading, Erasing, and Program. Wait for 10 seconds after this.

Reset NVX216, and extract the SDcard. And turn on the power.  
The version of the updated firmware will be displayed at the lower right corner of the screen.

Finally, format NVX216 for the optimized performance of the player system.  
(Setting → System → Default)

### 참고

- Make sure the battery is sufficiently charged (at least ) when updating the firmware.  
If the power is turned off while upgrading due to an incompletely charged battery, fatal damage may occur to the product.  
Therefore, conduct upgrades with the power adapter connected so that the power is not turned off during upgrade.

## Before contacting the service center...

Please check the following if a problem develops.

Problem	Solution
The unit does not operate, and nothing is displayed on the LCD.	<ul style="list-style-type: none"> <li>• Recharge the battery.</li> </ul>
There is no sound when playing MP3 or video.	<ul style="list-style-type: none"> <li>• Check if a file is saved on the removable disk.</li> <li>• Check if the volume is set to '0'.</li> <li>• Check whether the earphone is properly connected.</li> </ul>
Buttons do not work.	<ul style="list-style-type: none"> <li>• Check the HOLD switch.</li> </ul>
Files are not copied to NVX216.	<ul style="list-style-type: none"> <li>• Check whether NVX216 is properly connected to PC.</li> <li>• Check the connection if USB cable extension cord is used.</li> </ul>
The system stopped during operation and does not work again.	<ul style="list-style-type: none"> <li>• Press the RESET button next to the HOLD switch of the player. (It turns off the device.)</li> </ul>
The location displayed on NAVI screen and the actual location are different.	<ul style="list-style-type: none"> <li>• Please move to another spot if you are using NVX216 in an underground parking lot, under an overpass, or between high buildings.</li> <li>• Check whether there is any machine that can affect transmission of the GPS signal. (Metal tinting, wave-interfering substance, or a receiver near the antenna.)</li> </ul>
The Navi Mode stopped during operation and does not work again.	<ul style="list-style-type: none"> <li>• Press the RESET button next to the HOLD switch of the player. (It turns off the device.)</li> </ul>
The guided path is wrong although the antenna status of NAVI is fine.	<ul style="list-style-type: none"> <li>• The map matching is inaccurate. Go to a place with good satellite signal transmission and try again.</li> <li>• Upgrade the firmware at the company website.</li> </ul>

## Specifications

These can be changed without notification for improvement in product performance.

Classification	Field	Details
General	Model Name	NVX216
	Dimensions	49 x 98 x 22mm
	Weight	100g
	Internal Memory	512MB / 1Gb / 2Gb
	Expanded Memory	SD Card slot (Maximum 2GB)
	LCD	320x240, 2.2inch 260K Color, TFT LCD
	Touch screen	Supported (A stylus pen is provided)
	Multi-tasking	Audio can be played during TEXT/IMAGE View
	firmware	support for USB-type upgrade
	Operation time(Music files)	7 hours (128kbps, Black Light Off, at Vol 7)
	Operation time(Video)	app. 4.5 hours (at Vol 7)
Audio	DIRECT ENCODING	MP3, OGG
	PLAY MODE	1 / ALL, SURFFLE / REPEAT / NORMAL
	SPEAKER	500mW INTERNAL SPEAKER
	Headphone Output	11mW (Left) + 11mW (Right) : (16Ω, Vol Max)
	BIT RATE	Supported Range MP3: 8kbps ~ 320kbps, VBR OGG: Q0 ~ Q6
	S/N ratio	85dB with 30KHz LPF
	Frequency Range	20Hz ~ 20KHz
Video	File Types	Normal (240x168)

## Specifications

These can be changed without notification for improvement in product performance.

Classification	Field	Details
Additional Features	TEXT VIEW	TXT Format (mp3 can be played during display)
	IMAGE VIEW	JPG Format (mp3 can be played during display) SLIDE
	Removable Disk	Supported (using internal and external memories)
	Search the file list	Supported (using a computer)
PC System	Supported Computer OS	Windows 2000 / XP
	TYPE	USB 2.0 Full Speed
	Transfer Speed	About 12 Mbps
Power System	Battery	Lithium-polymer 1050mA (internal battery)
	Continuous Operation Time	About 7 hours (with MP3 play), about 3 hours (with GPS Navigation)
	Self Recharge and Play	Supported (about 3~4 hours)

FM Frequency: 88.1MHz, 88.3MHz, 88.5MHz, 88.7MHz, 88.9MHz  
89.1MHz, 89.3MHz, 89.5MHz, 89.7MHz, 89.9MHz  
90.1MHz, 90.3MHz, 90.5MHz, 90.7MHz