Unication

# Digital Media Adapter

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**Note: "SC-203" mentioned anywhere in the document refers to Unication's Server Center which is sold separately.**

# 1 Product Introduction

## 1.1.Features

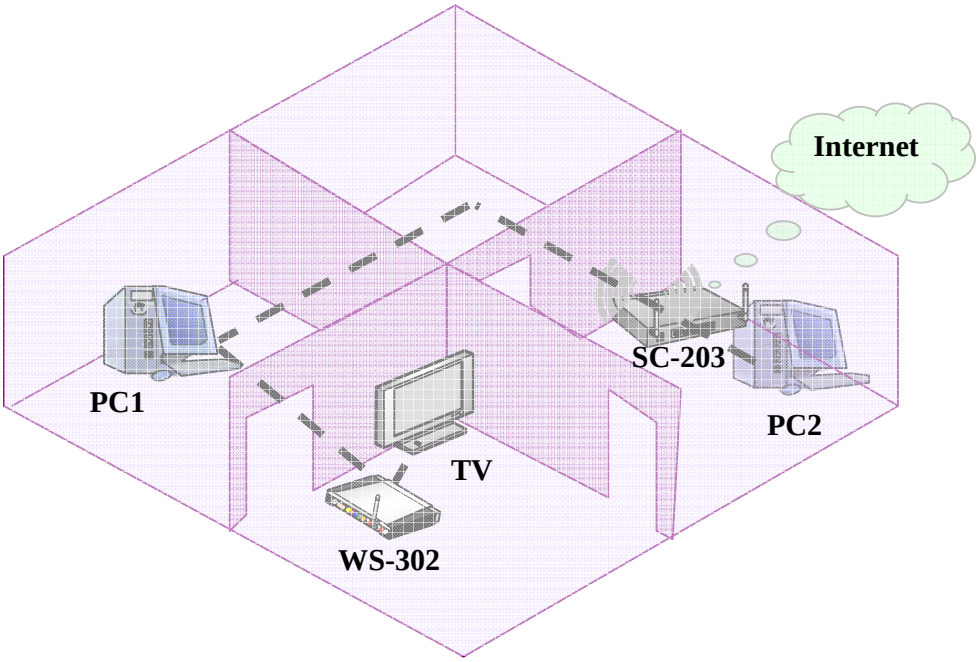
- Support various TV modes
- WiFi 802.11g & LAN connectivity
- Video Streaming Play from PC without extra program
- Multimedia Streaming Play from SC-203 or NAS
- DVD navigation
- USB storage plug-and-play
- Home Theater Quality, better than watching on PC
- Content Browsing: All playable files in the shared folder (and sub folders) of PC and SC-203. Previous, Next, Play All , Repeat.
- Trick Play: Pause, Stop, Fast forward, Fast Backward, Slow, Time seek, OSD, Mute, Volume
- Support various stream & file formats : DivX-AVI, WMV9, MPEG1/2/4, VOB, DAT, MP3, WMA, JPG, GIF, PNG
- High-definition 1080i video display
- Video-on-demand, supporting Content browsing & Trick Play
- 5.1 audio channel output
- Remote Control
- Multi-language

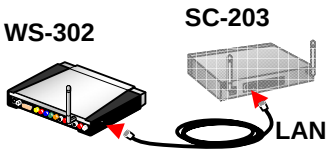
## 1.2. Specifications

| | |
|---|---|
| SOC | Sigma Design 8620L (WS-302D), 8621L (WS-302) |
| Memory | DDR RAM 64MB, Flash ROM 64MB |
| LAN connectivity | 1*100M LAN port (support stream data rate <10Mbps |
| WLAN connectivity: | WiFi 802.11g (support stream data rate <4Mbps) |
| WLAN channel: | This equipment marketed in the USA is restricted by firmware to only operate on 2.4 GHz channel 1-11. |
| Content Protection | Macrovision, CSS |
| DVD Player | Can play DVD-R, DVD-R/W, CD, VCD |
| USB support: | 2 USB 2.0 host hub ports |
| Connections : | Dynamic IP (DHCP), Fixed IP |
| Streaming protocol : | SAMBA |
| Streaming Files : | MPEG-2 TS, MPEG-4, AVI, WMV9, WMV3, VOB, MP3, WMA |
| Decoders : | MPEG1/2, MPEG4 (ASP/L5), DivX, XviD, WMV9, MPEG-4, AAC, AC3, JPEG, GIF, PNG |
| HD video display : | 480i (SD), 480p, 720i, 720p 1920x1080p (MPEG2), 1280x 720 (MPEG4, WMV9) |
| Video output : | CVBS (composite), YPbPr (component), DVI (digital), VGA (with a DVI-to-VGA converter), SCART(CVBS,RGB) |
| Display device : | Legacy TV (NTSC, PAL) , LCD/Plasma TV (16:9, 4:3) (Use YPbPr or DVI for SECAM TV) PC monitor (with DVI or VGA connector), Projector |
| Audio output : | 2-channel, 5.1 channel, S/PDIF (digital) with a pre-amplifier (1 Watt o/p) |
| Video-on-demand | Select a file or a folder of files to play. |
| Operations: | Pause, Play, Fast-forward (x2, x4, x6, x8), Fast-backward, Mute, Zoom-in, OSD, Repeat, Search, Subtitle |
| Slide-show : | Sequential or random play a folder of photos Sequential |

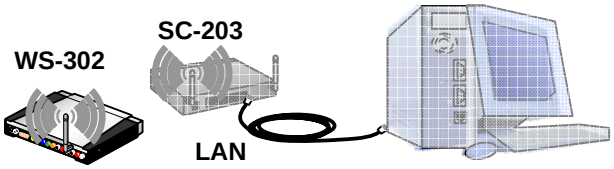
| | |
|---|---|
| | or random play a folder of MP3 files |
| ■ Multi-language UI : | English, French, German, Spanish, Japanese, Chinese |
| ■ Power : | 5V (WS-302) or 12V (WS-302D) DC universal Switching power adapter (UL, C,E, PSE approved) |
| ■ LEDs | Power, CVBS, YPbPr, DVI, SCART |
| ■ Certification | FCC, CE |
| ■ Requirement of PC : | Windows (XP, 2000), Linux, LAN or WiFi connection |

## 1.3. System Application Diagram

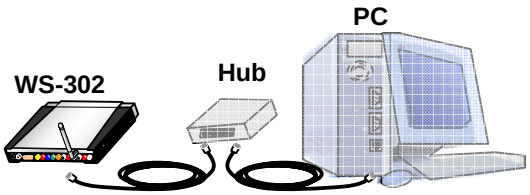



***----- (1) LAN-----***




***---- (2) Wireless LAN-----***




***----- (3) LAN-----***

## Descriptions of System Application Diagram

1. The functions of WS-302

   Play images, audio or video stored in USB, DVD, remote PC, or Unication's SC-203 to your home stereo or TV.

2. The functions of PC or SC-203 connected to WS-302

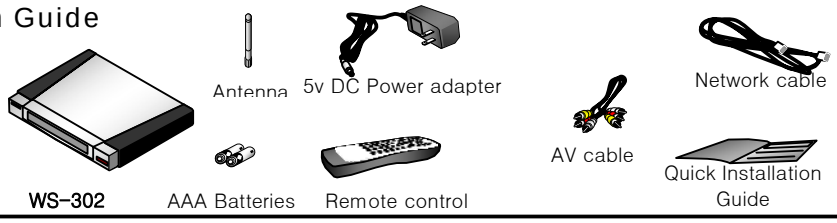
   The media storage for WS-302

3. WS-302 can be connected to a PC via a hub or SC-203.

# 2 Hardware Quick Installation Guide

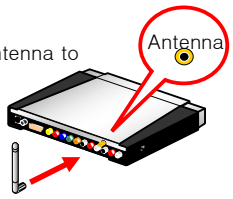
## Quick Installation Guide

Start here



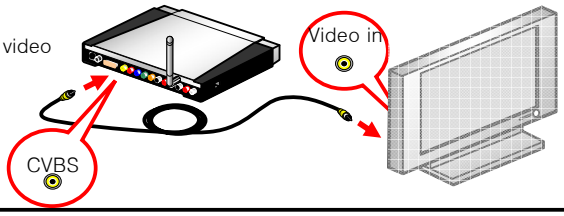

### 1 Antenna

Connect antenna to WS-302




### 2 Video

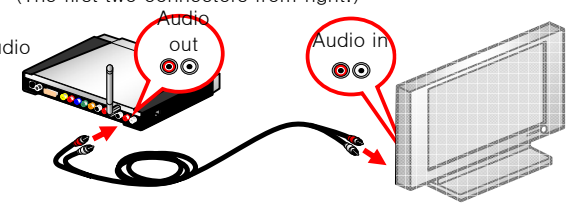
Connect video to TV




### 3 Audio

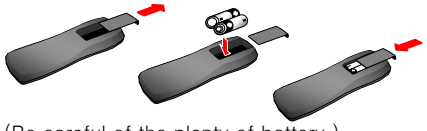
Connect audio to TV

(The first two connectors from right.)




### 4 Remote Control

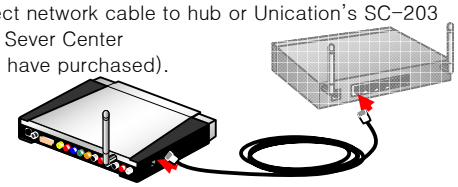
Install the batteries in remote control



(Be careful of the plenty of battery.)

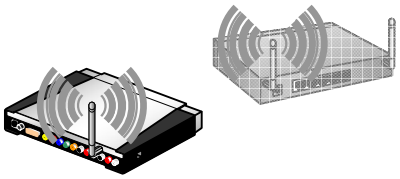
### 5 Network

Connect network cable to hub or Unication's SC-203 Home Sever Center (If you have purchased).



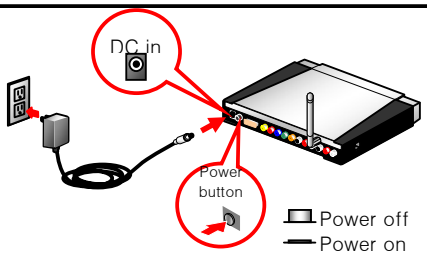
or

Connect to WiFi 802.11g Access Point or Unication's Sever Center

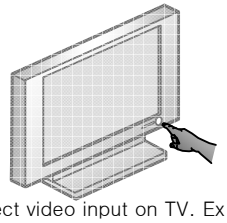


### 6 Power on

Connect power adapter and push down power button.

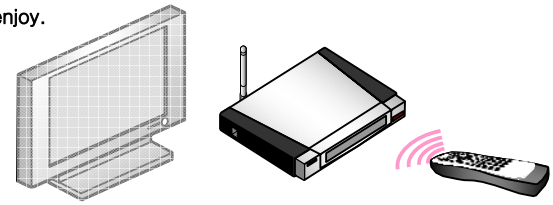



Power off
Power on



(Select video input on TV. Ex, YPbPr input)

### 7 Play and enjoy.



### 8 Read reference document

- Advance installation guide.

Unication support web site:
http://www.uni-wlan.com

## Advance Installation Guide

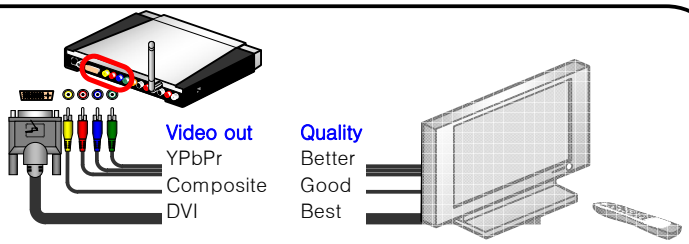
### Select best video quality

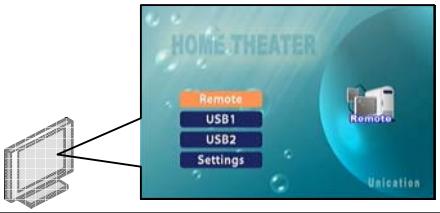
1. DVI is better than YPbPr(component). YPbPr is better than CVBS(composite).

2. Turn on the TV and change the display mode of the TV to the Video or YPbPr, DVI mode

3. Use Remote Control to change video output.. At the same time, change the TV video input correspondingly.

4. Then press "TV mode" key of the WS-302 Remote Control to displays the Home menu.

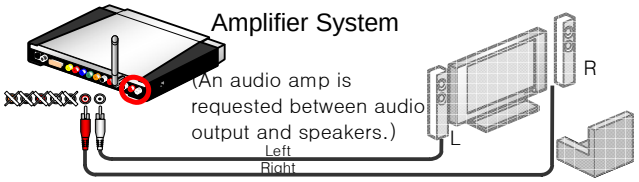





### Stereo Audio output

2 channels audio output.

Connect the first 2 connectors from right.

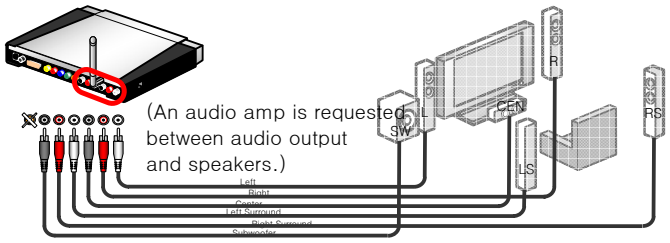



or

### 5.1 channel Audio output

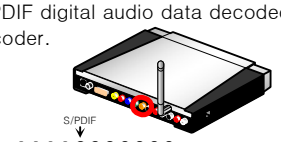
Connect all audio connectors to speaker system

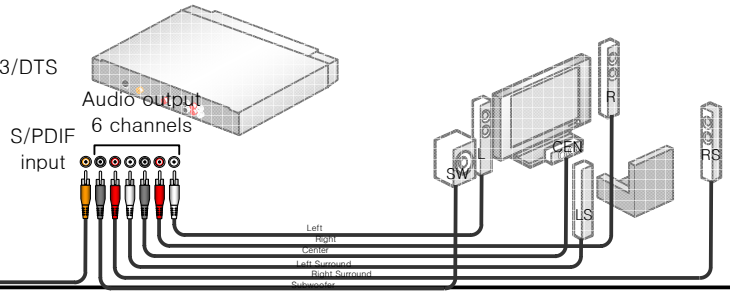
It could be 6 cables connecting to an amplifier and then output to the speakers)




### S/PDIF audio out

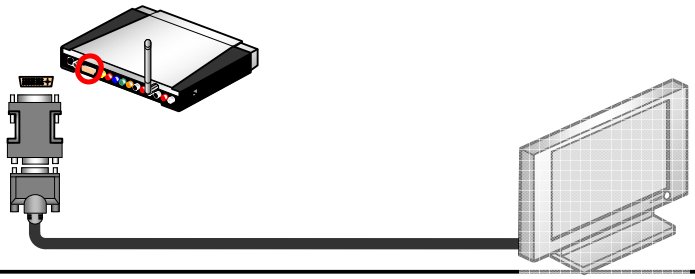
S/PDIF digital audio data decoded by AC3/DTS decoder.



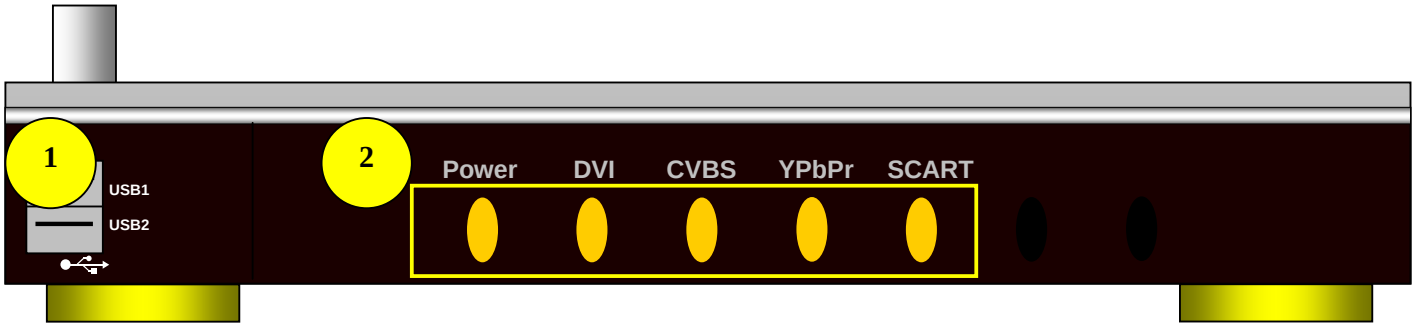




### DVI to VGA

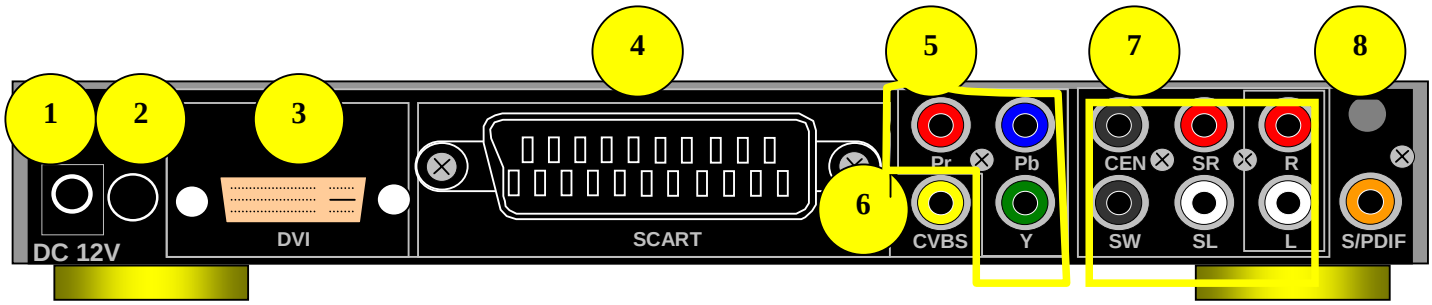
DVI ( high Definition) to VGA adapter is requested. (If your TV only supports VGA)



# 3 Hardware Connectors and LEDs

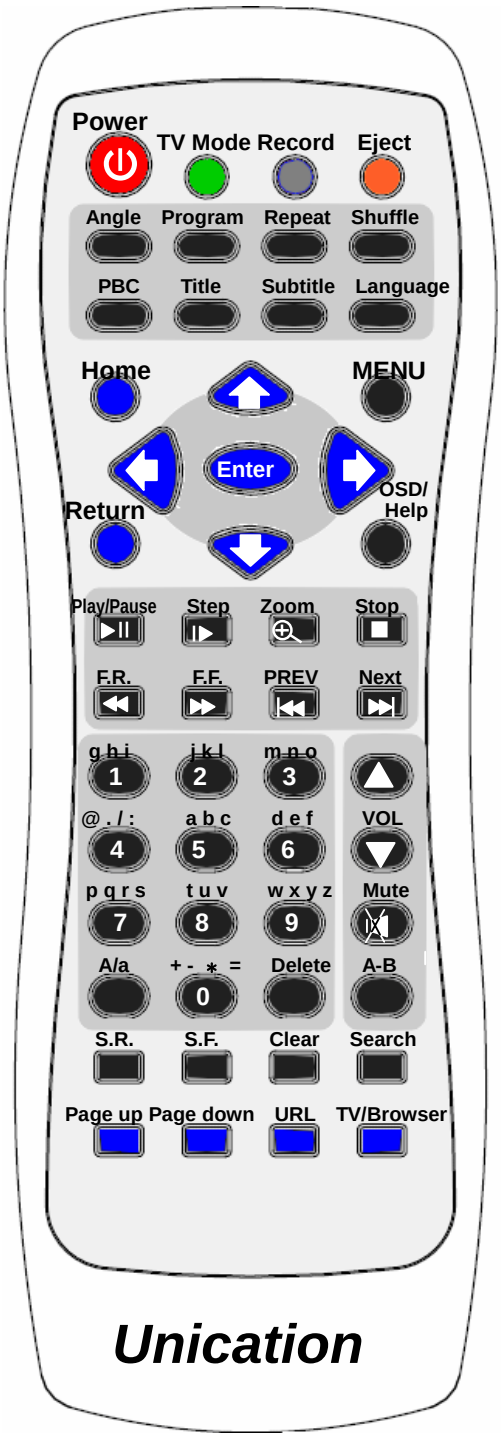



| | |
|---|---|
| 1 | USB 2.0 Port |
| 2 | LED Indicator:<br>■ Power (Red/Orange): Device boots (Red), Operation (Orange)<br>■ DVI (Orange): Video output via DVI<br>■ CVBS: Video output via CVBS<br>■ YPbPr: Video output via YPbPr<br>■ SCART: Video output via SCART |




| | |
|---|---|
| 1 | Power Input |
| 2 | Power Switch |
| 3 | Video Output (DVI/VGA) |
| 4 | Video Output (SCART) |
| 5 | Video Output (YPbPr) |
| 6 | Video Output (CVBS) |
| 7 | Audio Output (5.1 channel), 2-channel stereo(R,L) |
| 8 | Digital Audio Output (S/PDIF) |

# 4 Remote Control



## 4.1. Remote Control keys falls into 5 groups:

1. Device (workable at any time, including menu navigation and local & remote play)
   -**Power** (Red) : UI clear, video clear
   -**Eject** (Orange) : working in DVD mode
   -**TV mode** (Green) NTSC/PAL/480/720/1080 (save in flash)

2. Menu (workable in menu navigation)
   -**Up, down, left, right, enter,**
   -**Home** : return to UI Home page "Welcome to Home Theater"
   -**Return** : return to the previous level/page coming from
   -**Prev, Next** (shared with those keys in Play group)

3. Play (workable in local and remote play) :
   -**Volume +, Volume -, Mute**
   -**Play/Pause, Stop,**
   **-FF, FB** : x2, x4, x6, x8, x10, x12, x14, x16 (some file formats cannot be FF, FB)
   **-Zoom**, (1, 2, 3, off);
   **-Program** (adjust Contrast, Brightness, Saturation)
   -**OSD** : transparent show played file attributes, and time counter
   -**Next, Prev** : direct play the next or previous file
   **-Search** : Time seeking
   -**S.F.** (Slow Forward); **S.B**. (Slow Backward)

4. Alpha-numeric keys
   -**0, 1@, 2abc, 3def, 4ghi, 5jkl, 6mno, 7pqrs, 8tuv, 9wxyz** (characters **- .** shared with 1)
   -**Aa** : upper/lower case switching
   -**Delete**

5. DVD keys: (workable for commercial DVD movie, not workable for CD/DVD file format)
   **-Menu** : back to DVD home page; **PBC** (for VCD2.0 Karaok)
   **-1, 2, 3, 4, 5, 6, 7, 8, 9** (shared with those keys in Alpha-numeric ) : select chapter
   **-Language**
   **-Angle, Program, PBC, Title, Subtitle**
   **-A-B, Shuffle** (random play all files)**, Repeat** (repeat file one time, or repeat all files)

## 4.2. User Interface

(1) Remote
(2) USB1
(3) USB2
(4) DVD
(5) Setting

-Audio :

2 Channel or 5.1 Channel
S/PDIF encoded digital (need external Dolby/DTS decoder) or DPCM

-Video

**HD DVI**, : 480p (progressive), 720p, 1080i, 1080p, 1024p
**HD YpbPr,** 1920x1080p (MPEG2), 1280x720 (MPEG4, WMV9)
**SD CVBS :** NTSC or PAL
**Screen** : 16:9, or 4:3

-Network

**Current Status**
**Dynamic IP**
**Fix IP**
**WiFi** (SSID, WEP-64/128 key)

-Remote Device

**SC-203**
**Media Server**
**PC1**
**PC2**
**PC3**

-Maintenance

**DVD Parental Level**
**User Name / Password**
**Firmware Version**
**Firmware Upgrade**

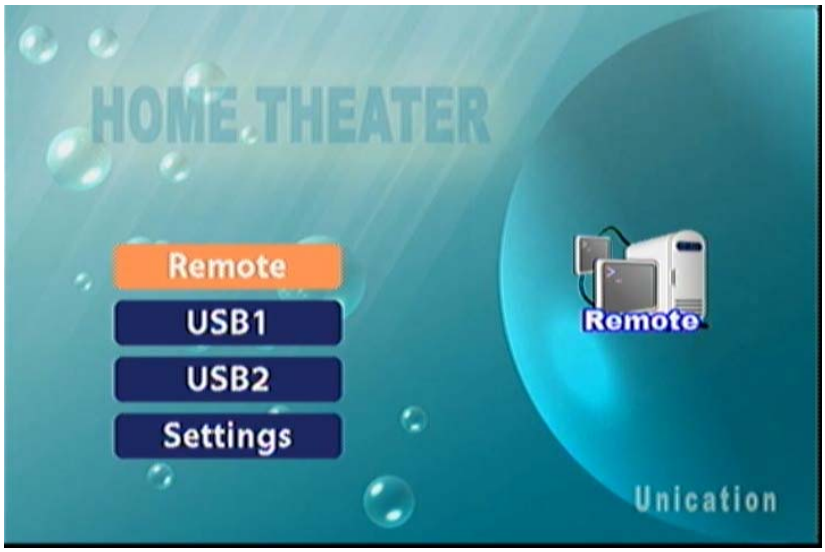
# 5 Operations Overview

Before you do the following operations, make sure that you have finished the hardware installation as described in the "Hardware Quick Installation Guide" section.

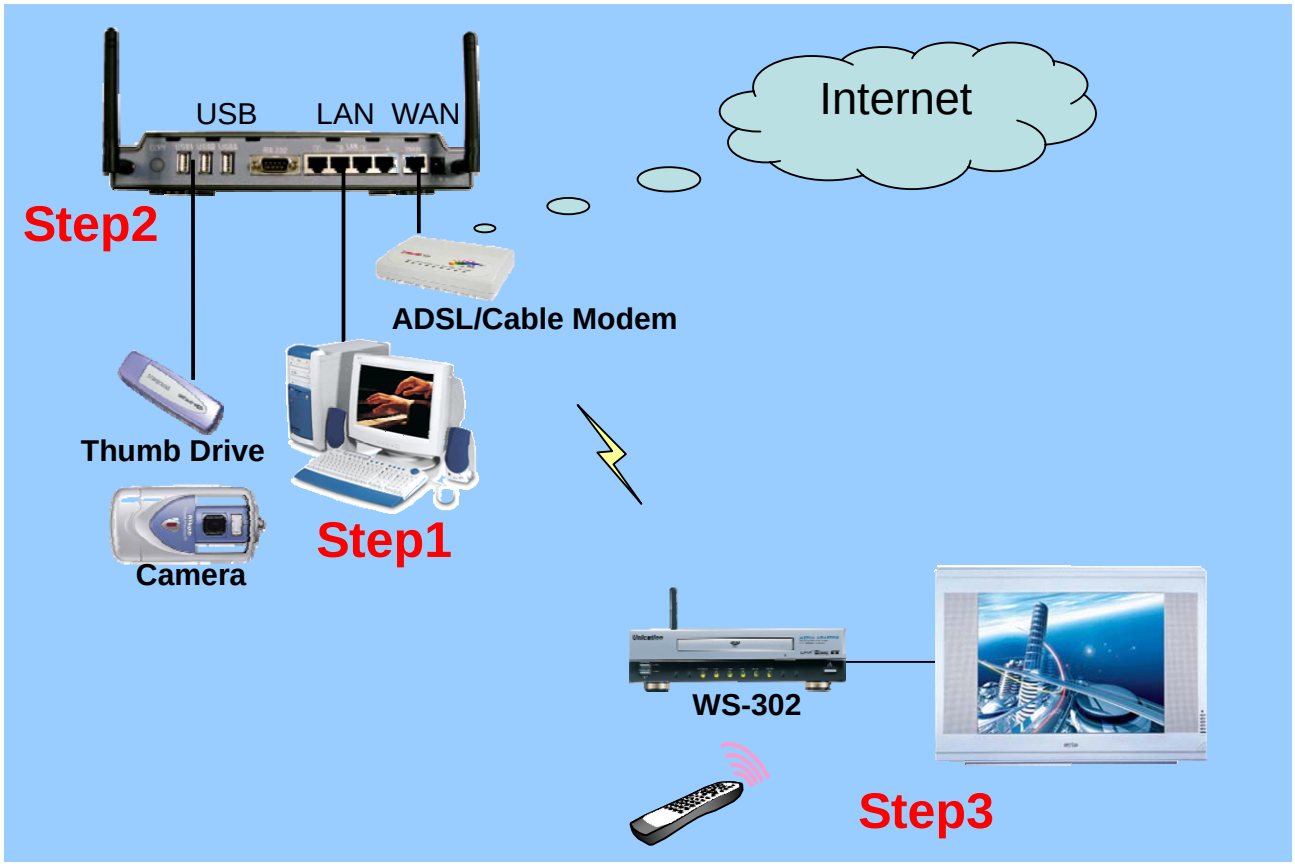
## 5.1. Launch the Home Menu

1. Follow the "Hardware Installation" to connect all the necessary devices.
2. Turn on the TV and change the display mode of the TV to the Video or YPbPr, DVI mode, and then press "TV mode" key of the WS-302 Remote Control to displays the Home menu.

**Note: Default output is CVBS mode. So if you don't have the CVBS mode, please switch it via press "TV mode" key of the WS-302 Remote Control**.



## 5.2. Structure Overview




# Step1:

1. Digital Audio/Video files are created (movie in MPEG4, DivX or WMV9) or copied from DVD-ROM or TV capture cards.
2. Put the files under share folder Network_Disk, with username "guest "
3. Or upload the files to SC-203 public area with Samba by \\(sc203-domain name)
4. Or upload the files to SC-203 private area with HTTP by http://(sc203-domain name) and login user account

# Step2:

5. Content Copied from USB into public area
6. Content uploaded in public area
7. Content uploaded in private area

# Step3:

8. Use Remote Control to set Network/Video/Audio
9. If Remote device is SC203, all default settings are valid (SSID=sc203, Remote IP=192.168.5.1)
10. Use Remote Control to browse the content & do trick play (Pause, forward, Backward, OSD Repeat, Time Seek…)

### 5.3. Play the Media Files Stored in the SC-203 for the first time

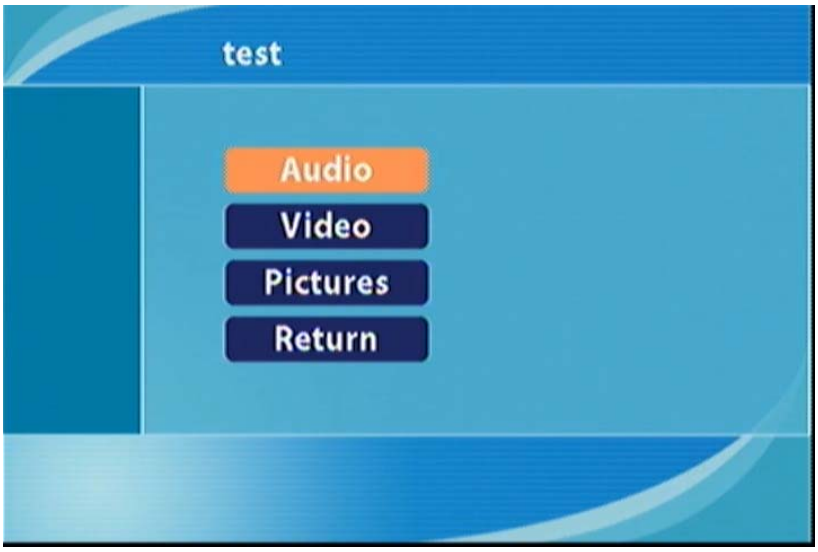
1. Make sure you have WS-302 connected to SC-203 via wired LAN or wireless LAN after Network Settings completed.

2. You need to enter the IP address of your device and SC-203 or Remote PC (More detail please refer to chapter **5.5.4 Settings**)

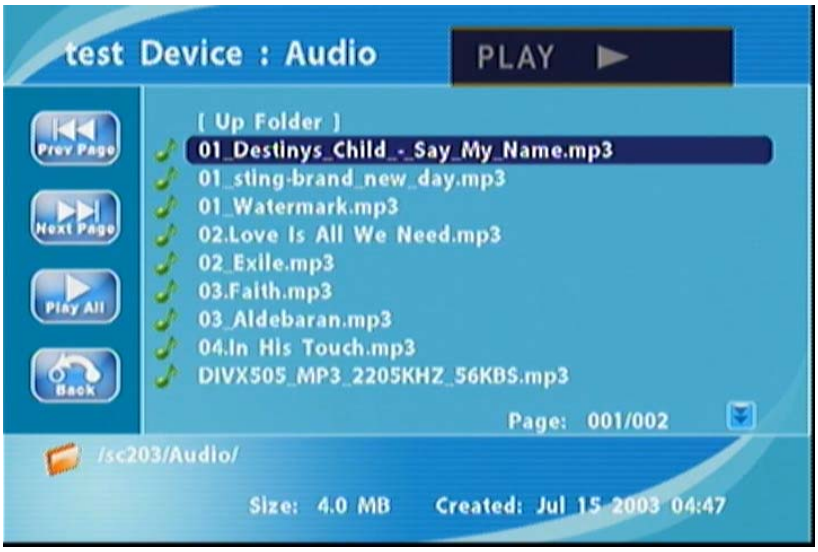
3. In SC-203, place the media files in the shared "network_disk" folder.

4. In the Home Menu, select "Remote" then press Enter [Enter].

5. Select one of the Remote Devices, then press Enter [Enter].



6. If you want to hear music, select "Audio" then press Enter [Enter].




7. Use Remote to select the file then press Enter [Enter] to start playing your choice of file.

## 5.4. Play the Media Files Stored in the PC for the first time

1. Make sure you have the WS-302 connected to PC with wired cable or WiFi via SC-203 or a hub after Network Settings.
2. In the remote PC, create a folder called "network_disk" and share it to the user whose user name is "guest" and the password is "guest"
3. In the remote PC, place the media files in the "network_disk" folder.
4. In the **Home Menu**, select "**Remote**" then press "Enter" press Enter [Enter].

5. Select the PC you want to connect then press Enter [Enter]
6. Follow the step 5 of the "Play the Media Files Stored in the SC-203 for the first time" section to play the music, see the last page.

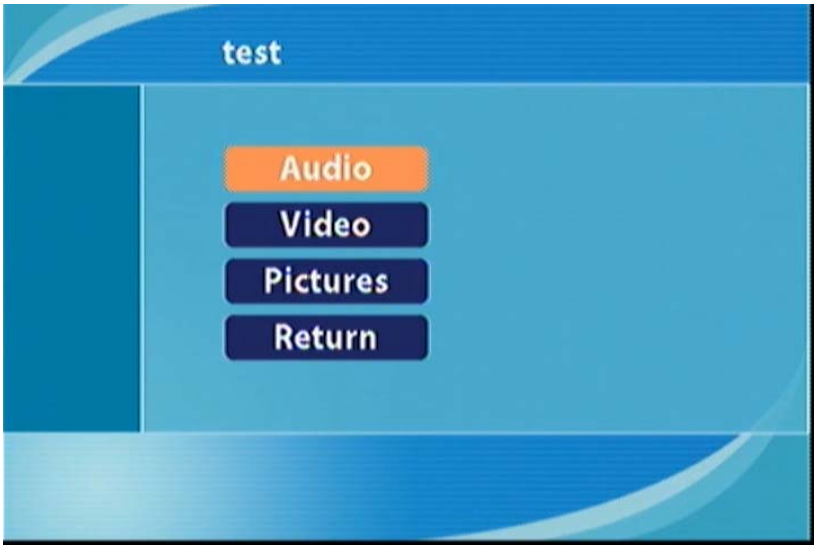
## 5.5. Play the USB Media Files

1. Plug in the USB storage device in the **USB slot**. (USB1 or USB 2 slot),.

2. Turn on your TV and change the display mode to "Video", which displays the **Home Menu** on the TV screen.

3. Use the WS-302 Remote Control or button to select **USB1** or **USB2**.

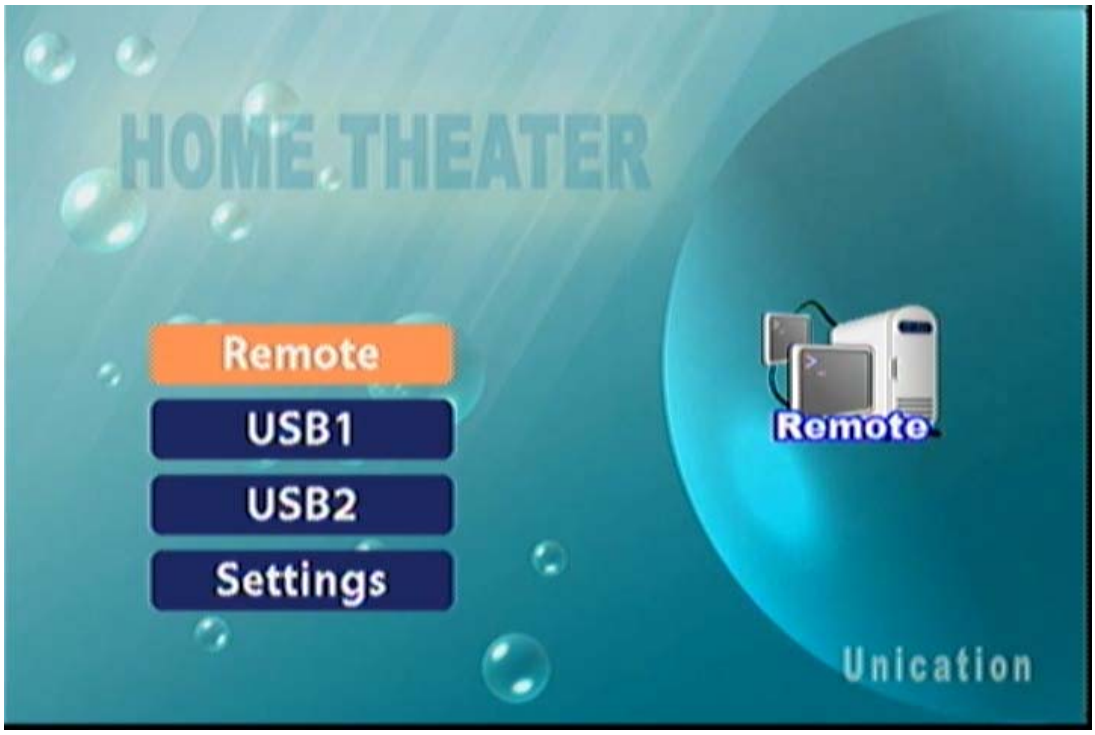
4. Press Enter [Enter], then the Audio/ Video/Pictures menu appears.
5. Use the Remote Control or button to select Audio, Video, or Pictures media files, let's say you select the "Pictures" and then press Enter [Enter] when "Pictures" is highlighted.




6. You will see a list of all image files and folders that contains the image files.
7. Use the Remote Control or button to select the file then press enter to view the image

Press (Next) or (PREV) to view the next or the previous image file respectively.

# 6 WS-302 User Interface (Complete UI Operations)

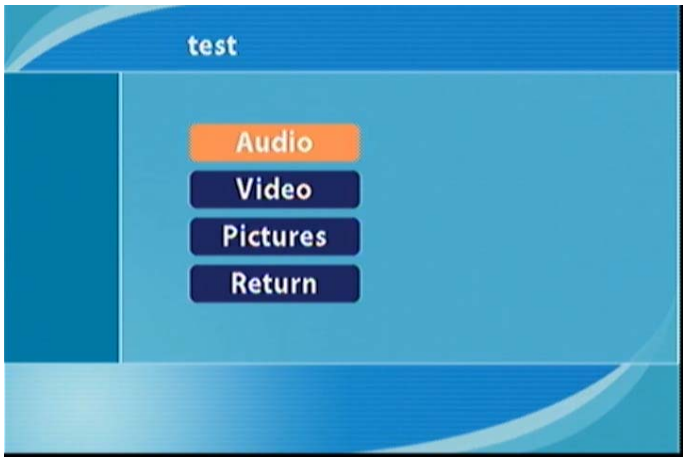
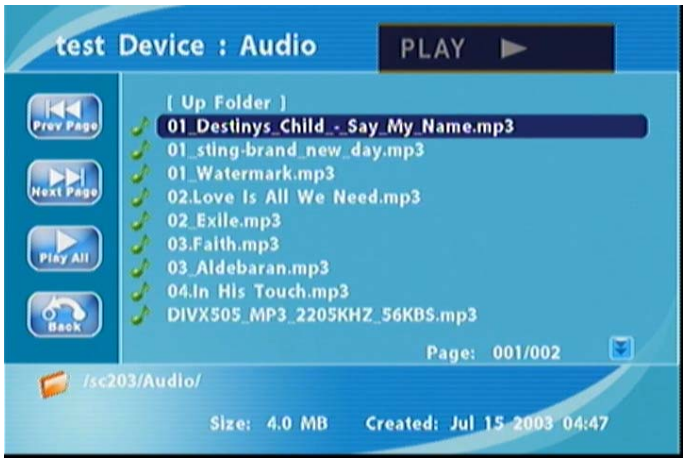



Note: You can launch the Home Menu from any screen by pressing Home or Return key of the WS-302 Remote Control.

You can launch the Home Menu from any screen by pressing Home or Return key of the WS-302 Remote Control.

During the initial startup, the WS-302 displays the setup screen. Press [Enter] on the remote control to enter the **Remote** screen.

## 6.1. Remote

| | |
|---|---|
| 1. Make sure you have WS-302 connected to SC-203 (test) via wired LAN or wireless LAN after Network Settings. Currently the SC-203 server is the Online Service available on channel **2**.<br>2. In the remote PC, create a folder called "leo" and share it to the user whose user name is "guest" and the password is "guest"<br>3. In the remote PC, place the media files in the "leo" folder. | |
| **Audio**<br>4. Play the **Audio** Files. In the SC203 (test) Menu, press "Enter" on the remote control to play the audio files. |  |
| Once you enter the Audio menu, there are many audio files. Use the selection arrows to navigate to the track you wish to play. Once you have located the appropriate track, high light it and press [Enter] or [Play] on the remote control. The track will begin playing on your stereo or television speakers. |  |

Video

5. Play the **Video**. In the SC203 (test) Menu, press "Enter" on the remote control to play the Video files.

**Video (Continued)**

Using the Remote Control with Video files

Enter – Click Enter to play your highlighted media files.

PLAY/PAUSE – Pause the video and to resume playing the video.

(VOL) – To increase the volume.

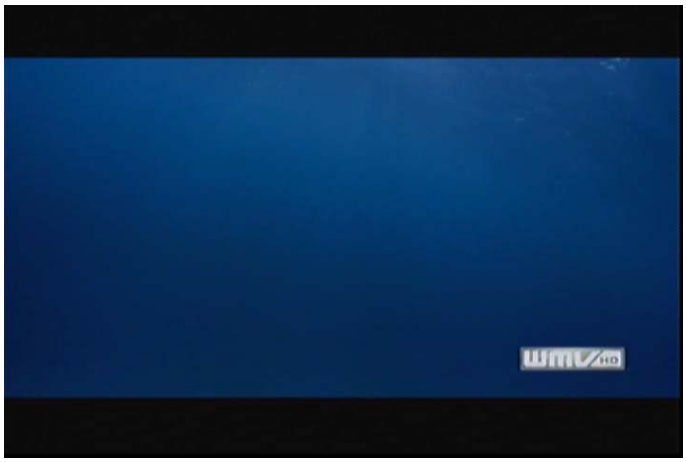
(VOL) – To decrease the volume.

MUTE – To silence the audio portion of the video.

FF – To fast forward through the video.

FR – To fast backward through the video.

REPEAT – To repeat the video.

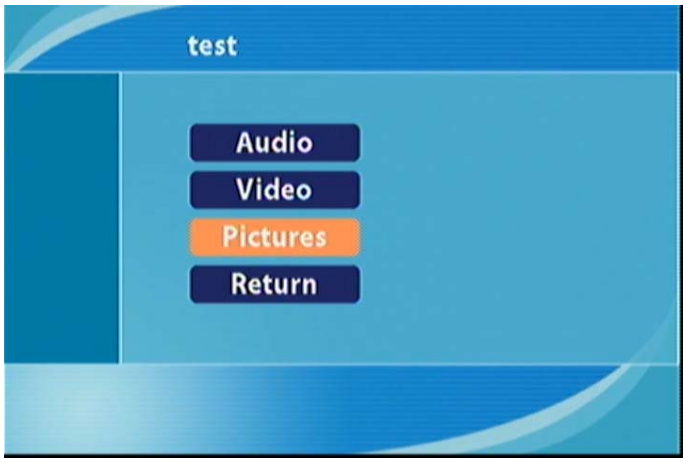


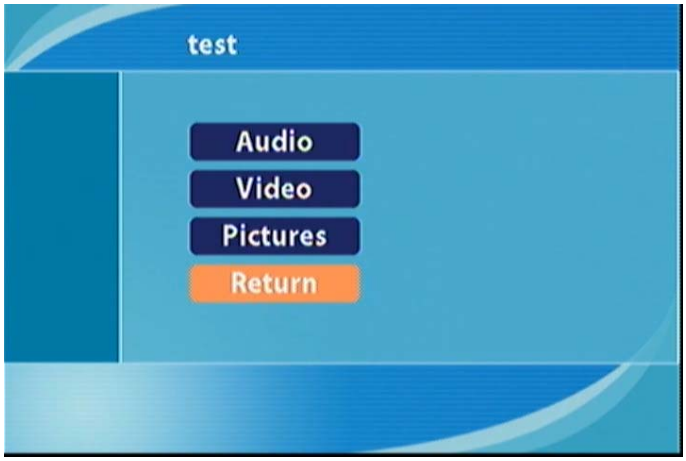
6. Play the **Pictures.** In the SC203 (test) Menu, press [Enter] on the remote control to play the pictures.

**Pictures (Continued)**

**Slideshow** - To start playing a pictures (include photos) slideshow, highlight a folder and press the [Play] button. The first picture will be displayed and then followed by the next pictures in the folder. All pictures in the folder will be displayed.

**Supported Pictures formats** - JPEG (The JPEG format is the Internet and digital picture format standard used by most digital cameras), GIF (Older format still widely available on the internet for pictures, web pages, and clip art), and PNG (Portable Network Graphics standard created in response to limitations in the GIF file format).

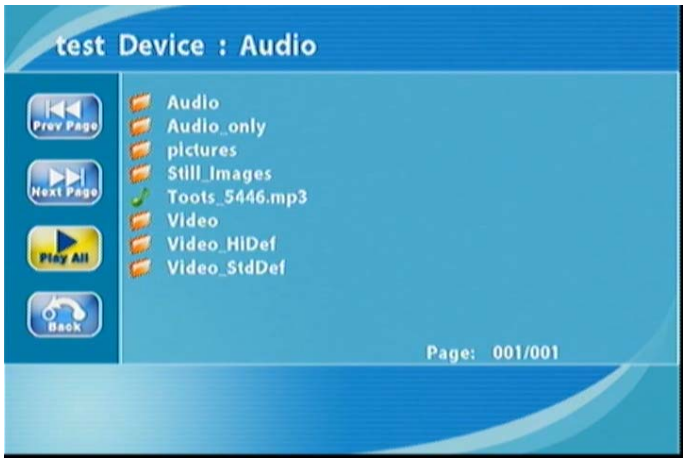


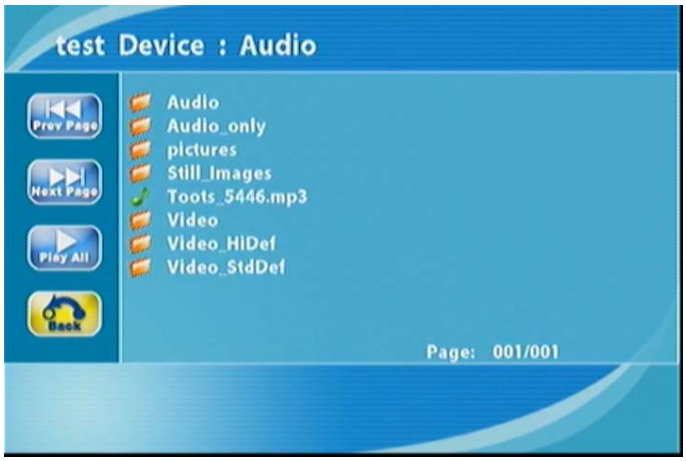
| | |
|---|---|
| | <br> |
| 7. In the SC203 (test) Menu, use the selection arrows to navigate to the Return and press "Enter" or press [Return] on the remote control to **Return** the preceding menu. |  |
| 8. Once you enter the Audio menu, you can view your list of audios. Use the ⬆ or ⬇ to navigate to the folder you wish to view. Highlight the functions icon, and press Enter [Enter] to view the audio folder.<br>9. Below are the on-screen | **Prev Page – View the previous page on the Audio menu** |

indicators when a button is pressed. These icons will appear in the left of the screen

**Next Page – View the next page on the Audio menu**

**Play All – Play the continuous files of all on the Audio menu**



| | |
|---|---|
| | **Back – Back to the last page**<br>  <br> |

## 6.2. USB1

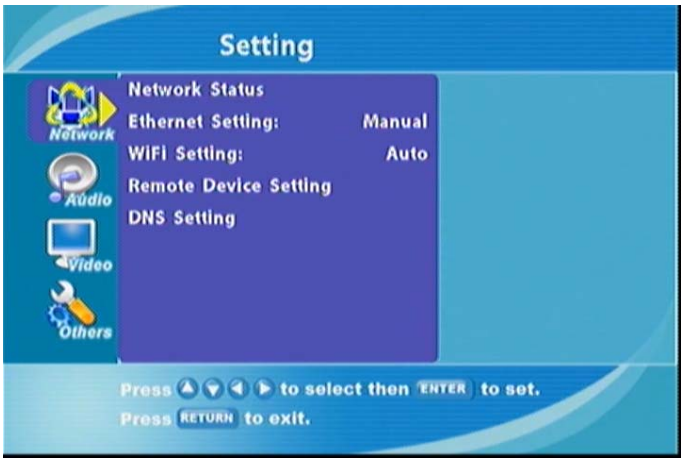
| | |
|---|---|
| 1. Make sure you insert the USB storage device connected to the usb port of WS-302's front panel.<br>2. During the initial startup, the WS-302 displays the setup screen of USB1. Press [Enter] on the remote control to enter the **USB1** screen. | <br> |
| 3. Then you can reference the Remote's operations to using.<br>4. Once you enter the Audio menu, you can view your list of audios. Use the ▲ or ▼ to navigate to the folder you wish to view. Highlight the functions icon, and press [Enter] to view the audio folder.<br>5. Below are the on-screen indicators when a button is pressed. These icons will appear in the left of the screen<br>6. The "Video", "Pictures" folders have the same operations as above. | <br> |

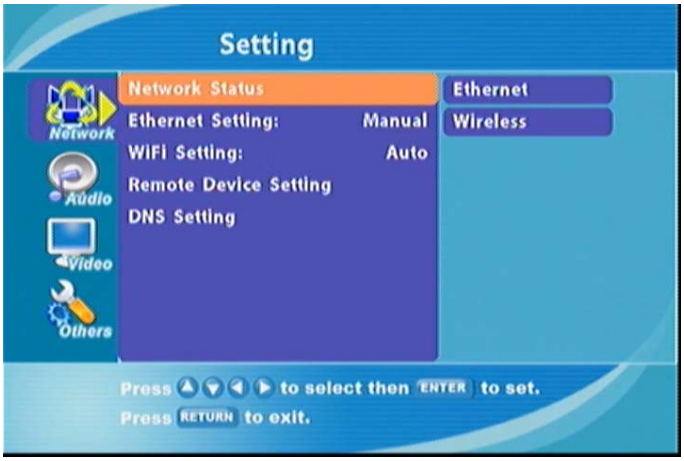
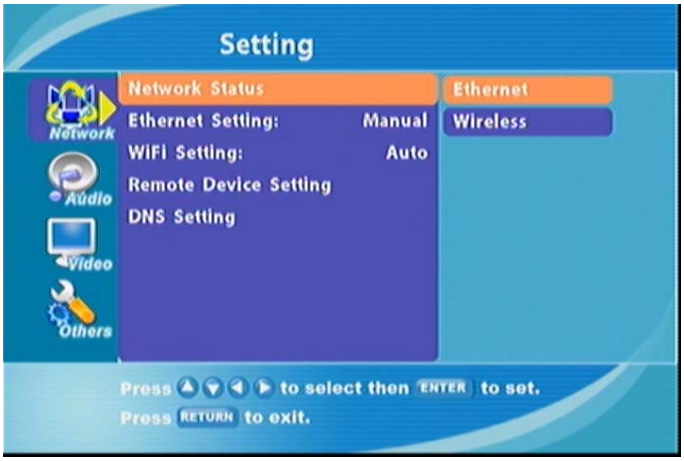
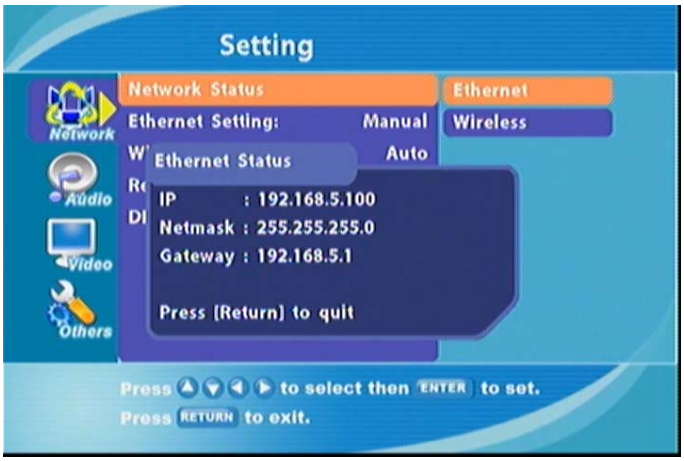
7. Or press [Return] on the remote control to Return the preceding menu.

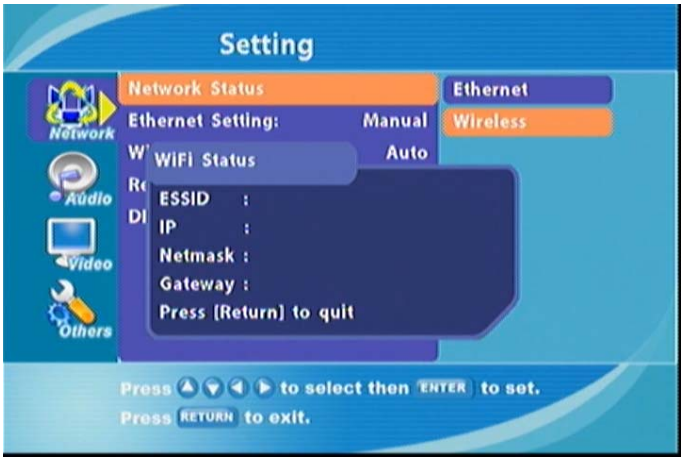
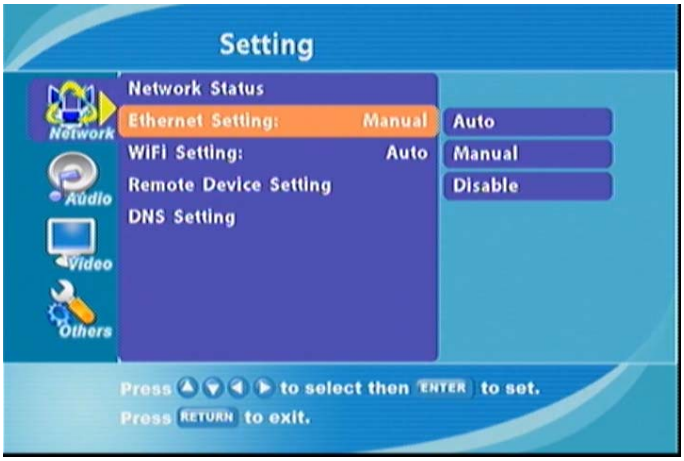
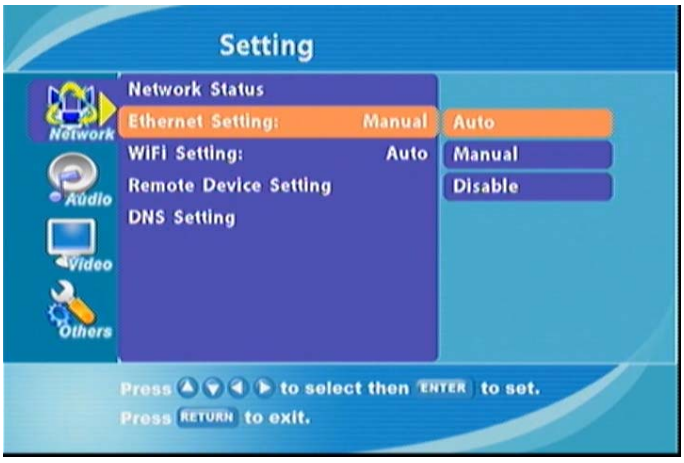
## 6.3. USB2

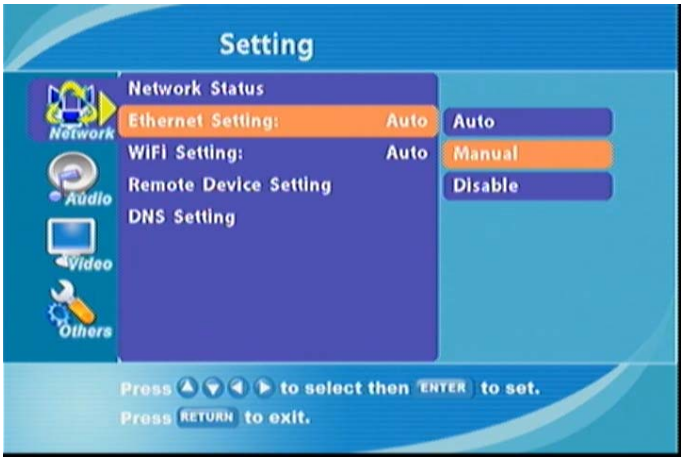
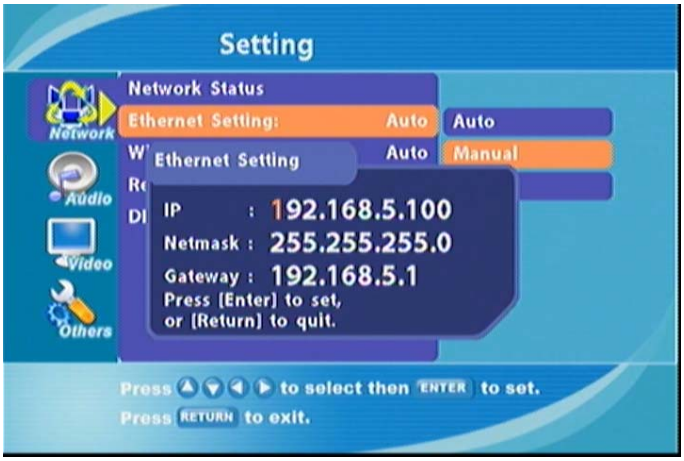
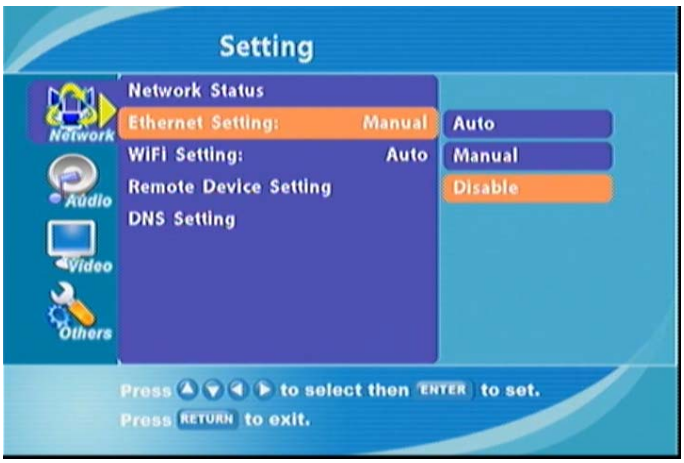
| | |
|---|---|
| WS-302 supports 2 USB storage devices to play. You can reference the USB1's operations to use. | |

## 6.4. Settings

| | |
|---|---|
| Basically, you don't need to change default settings except to enter the IP address of your device and SC-203 or Remote PC. If you want to change the configuration of your setup you can press [Enter] on the screen of the **Settings** button. | |
| The following describe to change the different settings:<br><br>Home screen → Settings → Network |  |

| | |
|---|---|
| To check your Ethernet network settings or Wireless network settings if it is correct.<br>Home screen → Settings → Network → Network Status |  |
| Home screen → Settings → Network → Network Status → Ethernet |  |
| To see the Ethernet Status:<br>Home screen → Settings → Network → Network Status → Ethernet (press [Enter]).<br><br>Ex. ( IP : 192.168.5.100<br>Netmask: 255.255.255.0<br>Gateway: 192.168.5.1 )<br>It means you can access Intranet via the Ethernet (LAN) network. |  |

| | |
|---|---|
| To see the WiFi Status:<br>Home screen → Settings → Network → Network Status → Wireless (press [Enter]).<br>There is no value on WiFi Status.<br>It means you can't access Intranet via the Wireless (WiFi) network. |  |
| To configure Ethernet Setting:<br>You can select "Auto" to auto acquired a IP or select "Manual" to configure manually or select "Disable" to disable the Ethernet's function:<br><br>Home screen → Settings → Network → Ethernet Setting |  |
| Select Auto to configure Ethernet automatically.<br>Home screen → Settings → Network → Ethernet Setting → Auto. |  |

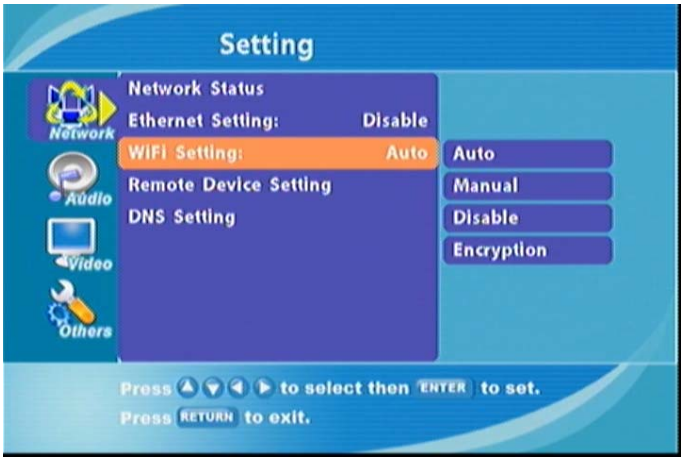
| | |
|---|---|
| Select Manual to configure Ethernet manually.<br>Home screen → Settings → Network → Ethernet Setting → Manual. |  |
| Home screen → Settings → Network → Ethernet Setting → Manual. (press [Enter]).<br>● IP: Enter the IP address of the WS-302<br>● Netmask: Enter the subnet mask of the WS-302<br>● Gateway: Enter the IP address of the router on your network<br>Ps. IP and Gateway are the same subnetmask, so they are alike. (all 192.168.5.x)<br>Note: They can't be the same |  |
| Select Disable to stop Ethernet configurations.<br>Home screen → Settings → Network → Ethernet Setting → Disable. (press [Enter]) |  |

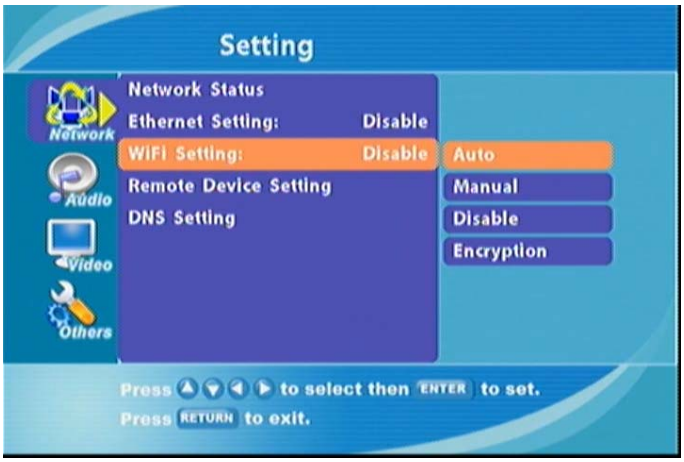
To configure WiFi Setting:

You can select "Auto" to auto acquired a IP or select "Manual" to configure manually or select "Disable" to disable the WiFi's function or select "Encryption" to protect WiFi to avoid Intruder:

Select Auto to configure WiFi automatically.

Home screen → Settings → Network → WiFi Setting → Auto.



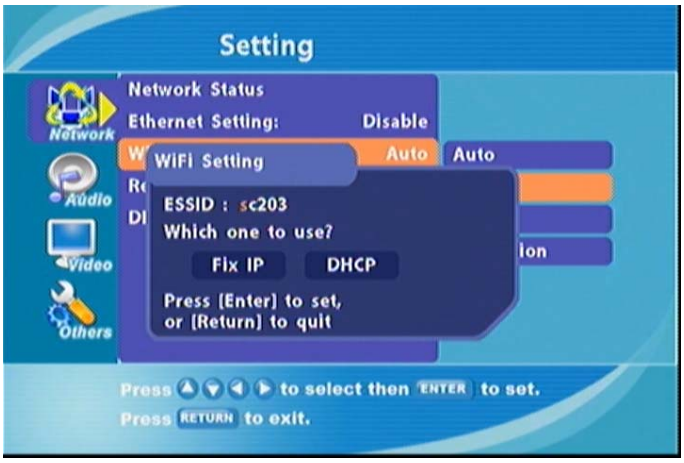



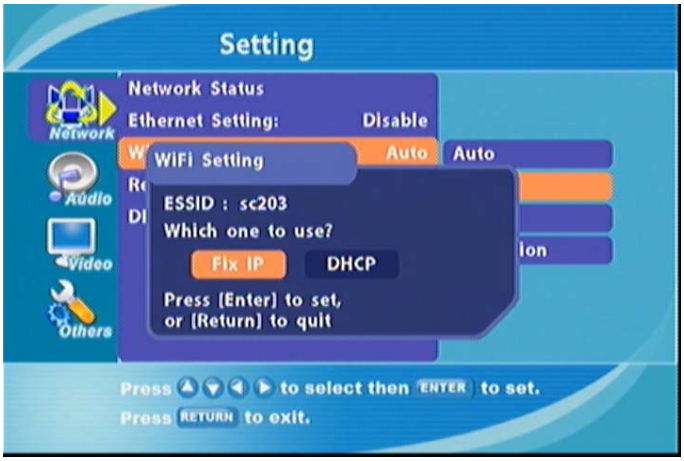
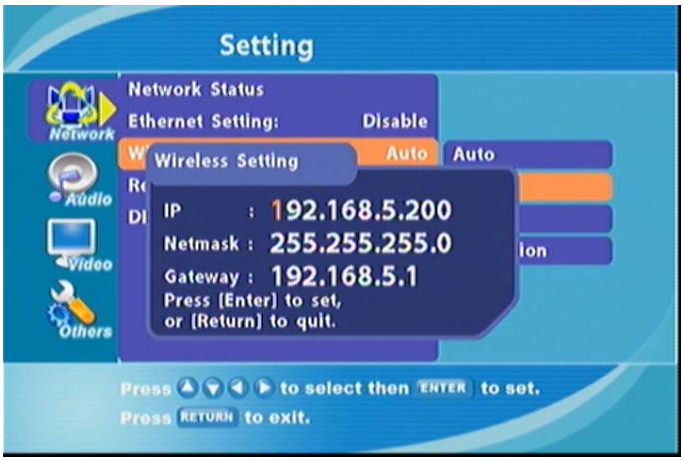
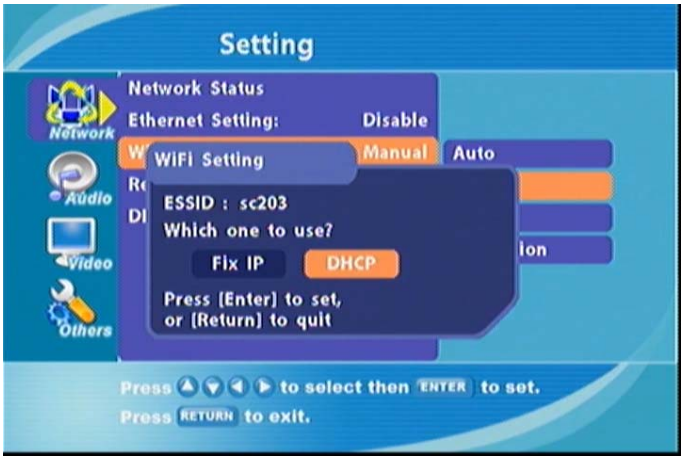

Select Manual to configure WiFi manually.

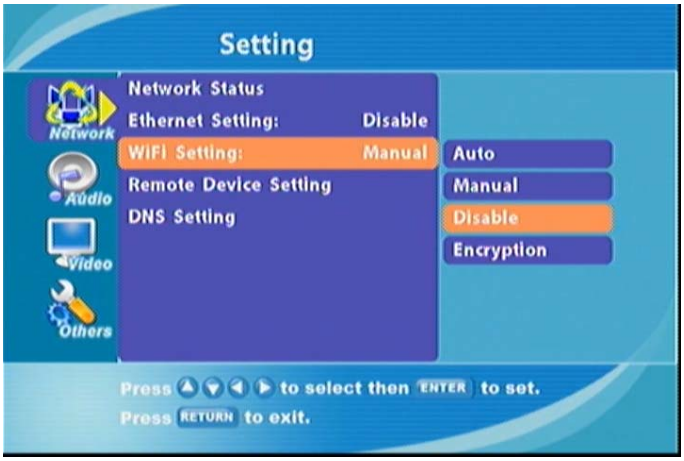
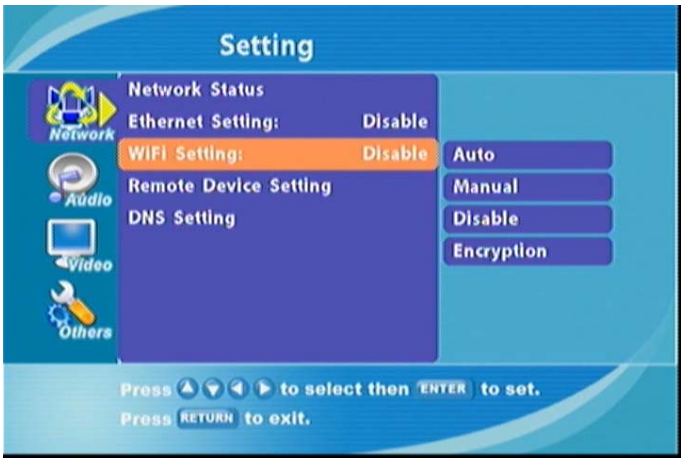
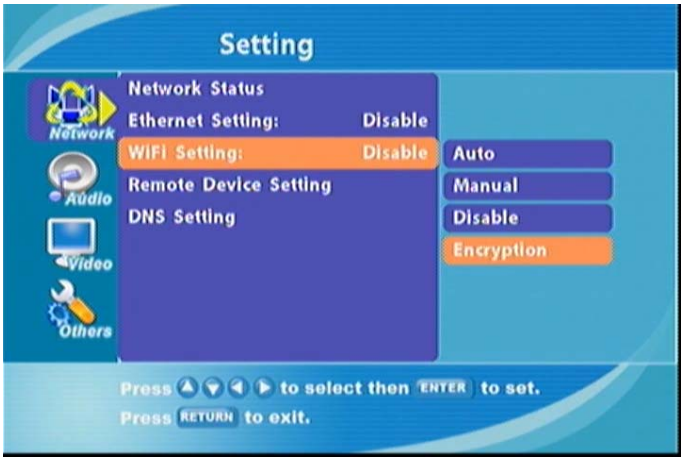
Home screen → Settings → Network → WiFi Setting → Manual.

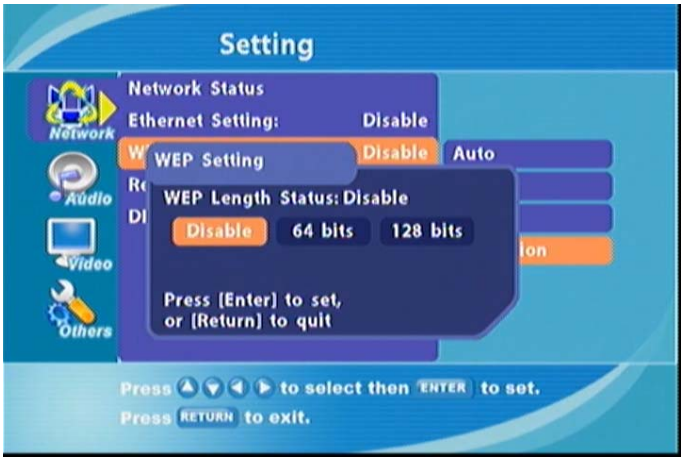
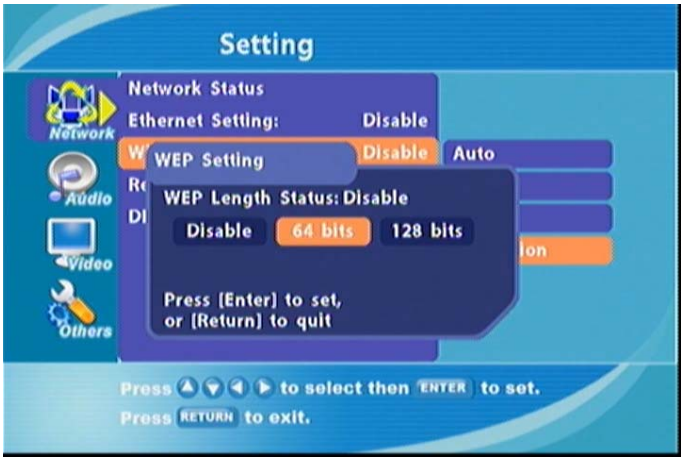
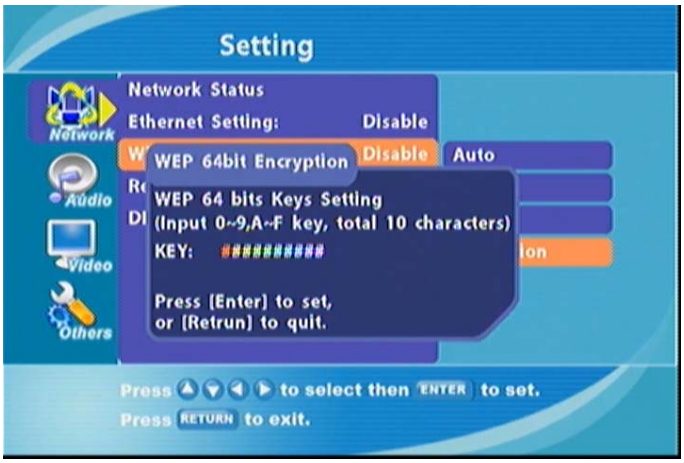
SSID: Enter the SSID (Service Set Identifier, or the name of the wireless network) by pressing [Enter] on the remote control when the field is highlighted. The on-screen keyboard will appear and you can manually enter an SSID

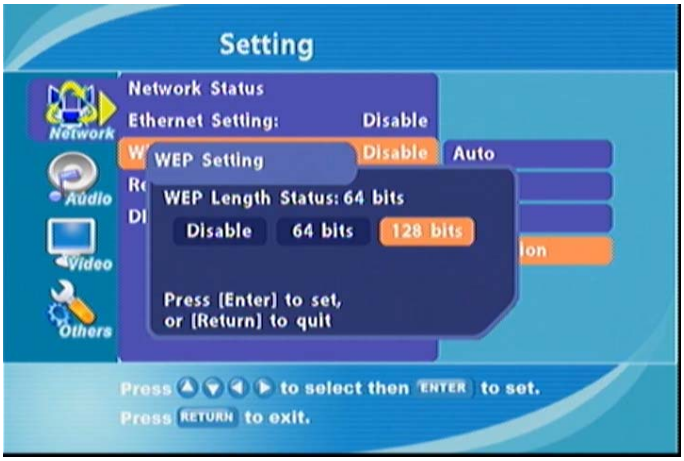
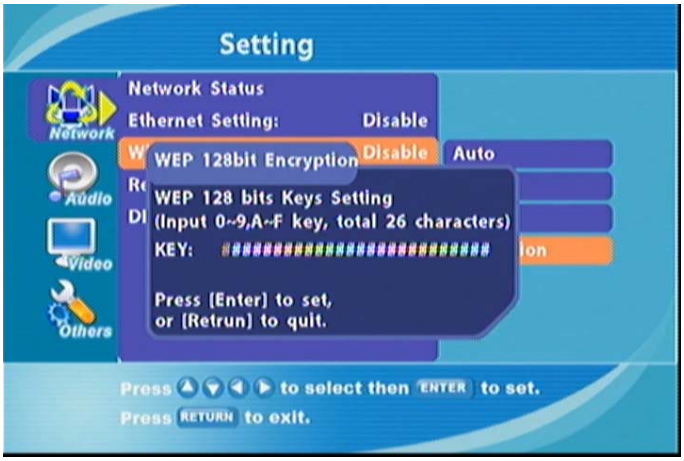
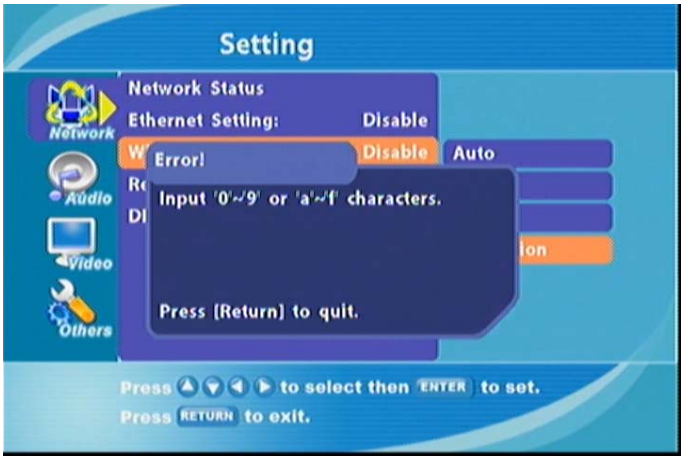
Which one to use: Fix IP is used for peer to peer wireless networks that do not contain a router or an access point. DHCP is used for networks with an access point or router.

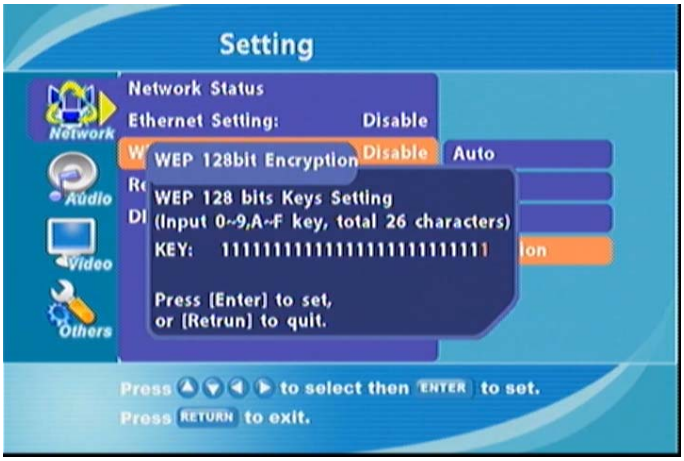


| | |
|---|---|
| Select "Fix IP" to configure IP manually<br>**Fix IP** is used for peer to peer wireless networks that do not contain a router or an access point. |  <br>  |
| Select "DHCP" to auto acquired a IP address<br>**DHCP** is used for networks with an access point or router. |  |

| | |
|---|---|
| Select Disable to stop WiFi configurations.<br><br>Home screen → Settings → Network → WiFi Setting → Disable. (press [Enter]) |  <br>  |
| Select Encryption to protect WiFi configurations.<br><br>Home screen → Settings → Network → WiFi Setting → Encryption. (press [Enter]) |  |

| | |
|---|---|
| **WEP (Wired Equivalent Privacy)**: An industry standard encryption technology used by 802.11b wireless devices. There are three options configurable under this setting, Disable, 64 bits, and 128 bits. To toggle between the options, press the [Enter] button when WEP is highlighted. |  |
| **Key**: To connect to an encrypted wireless device, the key you enter here must match the key of the device exactly. Press the [Enter] button on the remote control with this field highlighted to enter a key. The on-screen keyboard will be displayed and you can enter the key.<br>Keys must be entered in a specific hexadecimal format. Numbers 0 through 9 and letters A through F are used and the number of characters depends upon the encryption type. |  |
| 64 bits: A 64-bit encryption key must be exactly 10 characters in length. (Example: 1234567890 is a valid string of 10 characters for 64 bits encryption) |  |

| | |
|---|---|
| |  |
| 128 bits: A 128-bit encryption key must be exactly 26 characters in length. (Example: 1234567890ABCDEFABCDEFABCD is a valid string of 26 characters for 128 bits encryption) |  <br>  |



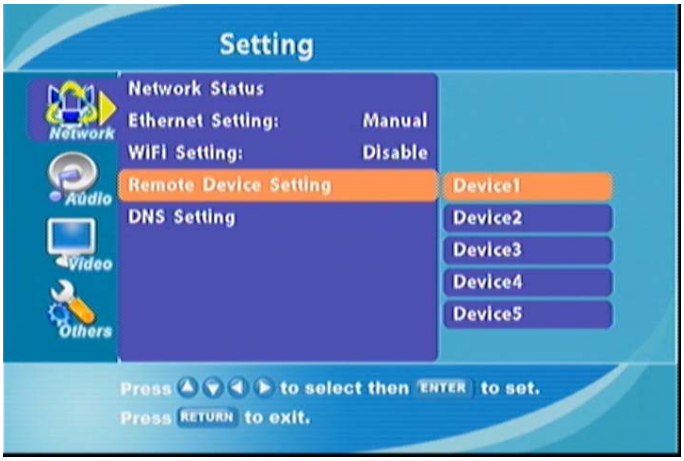

Select Remote Device Setting to setup **Remote**.

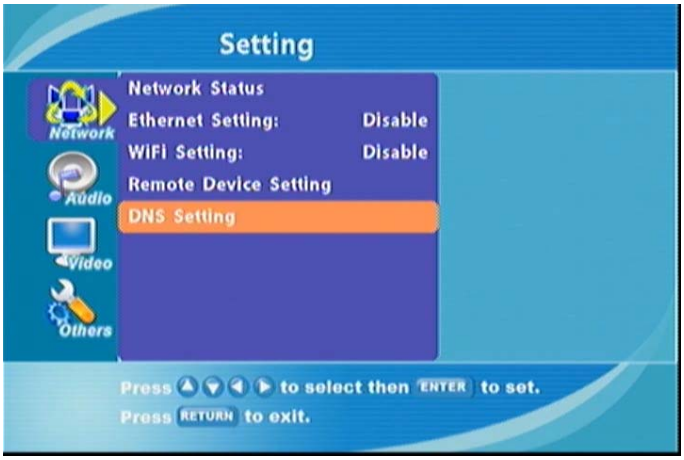
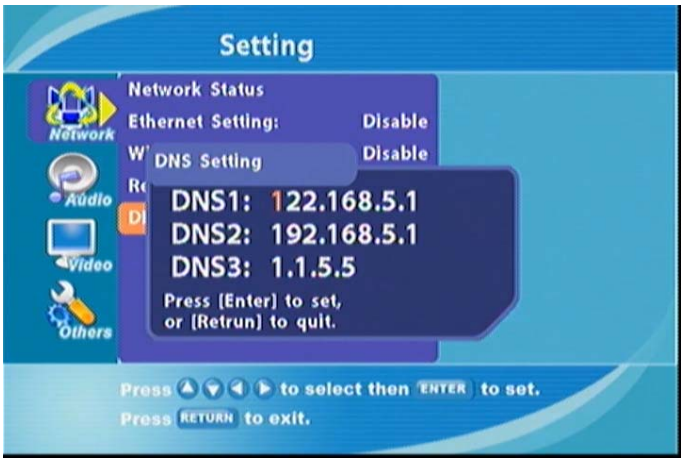
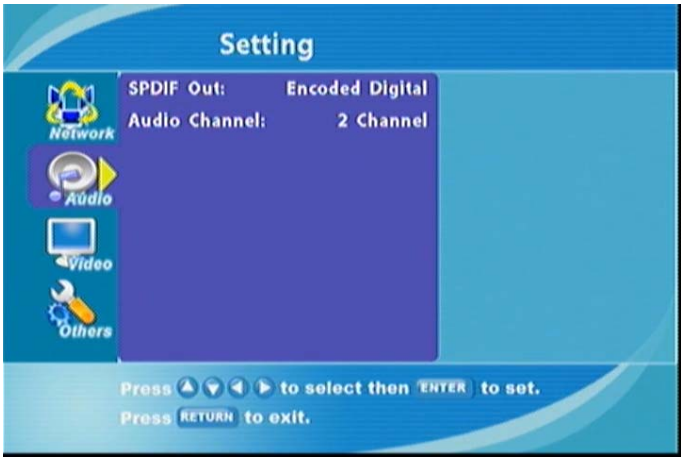
Home screen → Settings → Network → Remote Device Setting → Device1. (press [Enter])

Remote Content Devices: Setup your remote device its connection name, host name (IP address), shared path name, user name , and password. When done, press [Enter].

Note:

1. Make sure you have WS-302 connected to other device via wired LAN or wireless LAN after Network Settings.
2. Then select a channel (Device1 – Device5) to configure.
3. In the remote device(SC-203), create a folder called "network_disk" (Default folder) and share it to the user whose user name is "guest" and the password is "guest"



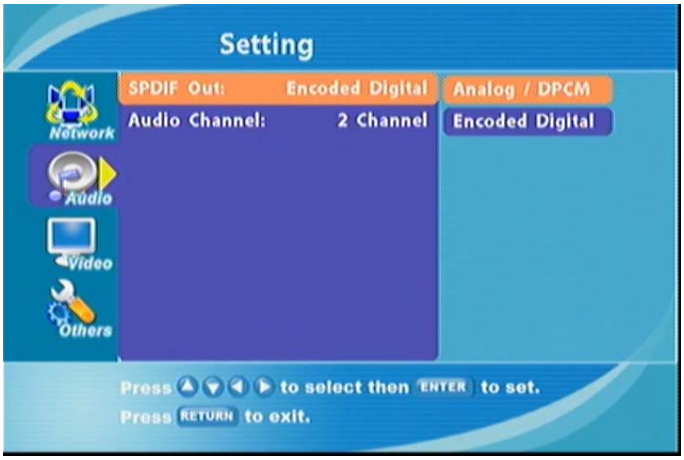
| | |
|---|---|
| Select DNS Setting to setup **Remote**.<br><br>Home screen → Settings → Network → Remote Device Setting → Device1. (press [Enter]) |  |
| **DNS Setting:** Enter the IP address of the domain name server. If your WS-302 use DNS (Domain Name Service) to Internet. |  |
| **Audio Setting**<br>Home screen → Settings → Audio. |  |

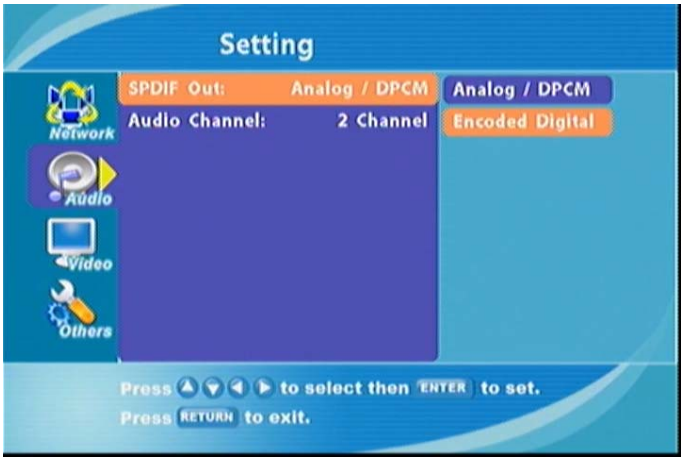
Home screen → Settings → Audio → SPDIF Out

Two Audio options for selection:

(1). SPDIF is digital output for high quality.

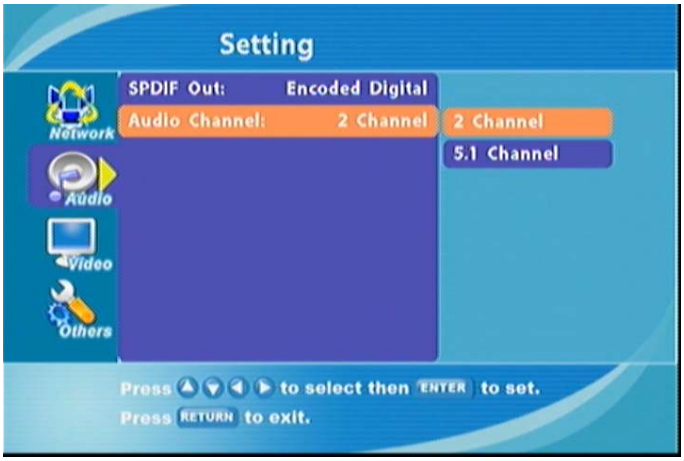
- Analog/DPCM: 2 Channel
- Encoded Digital: 5 Channel

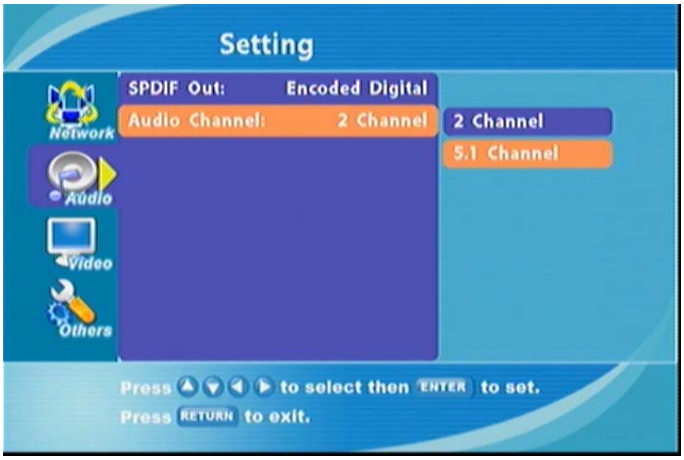
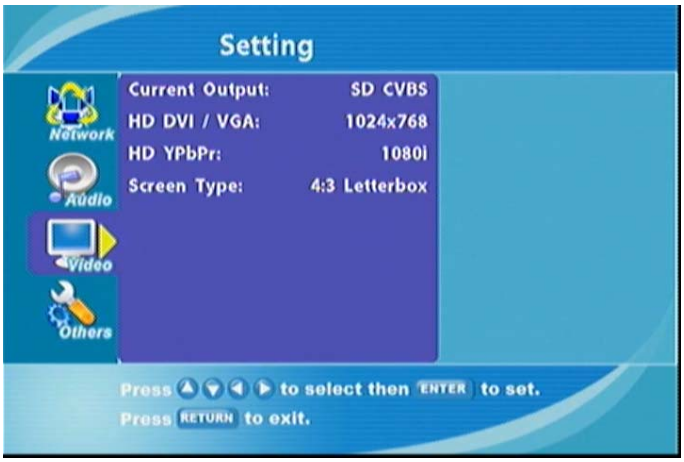
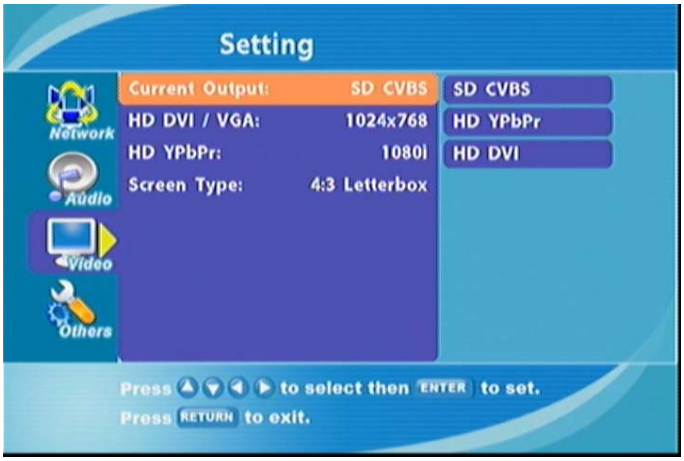


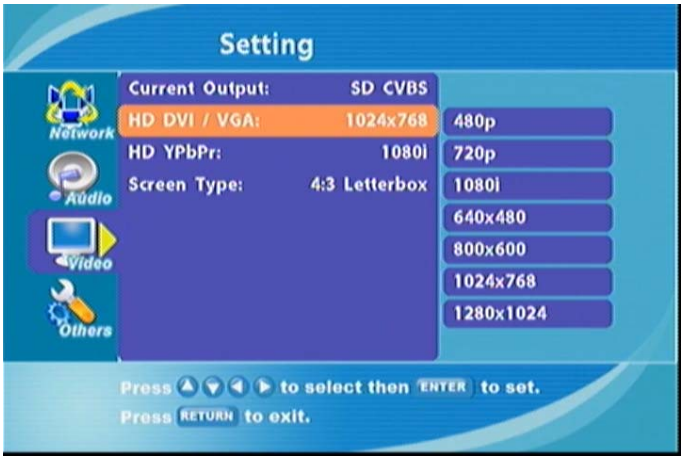
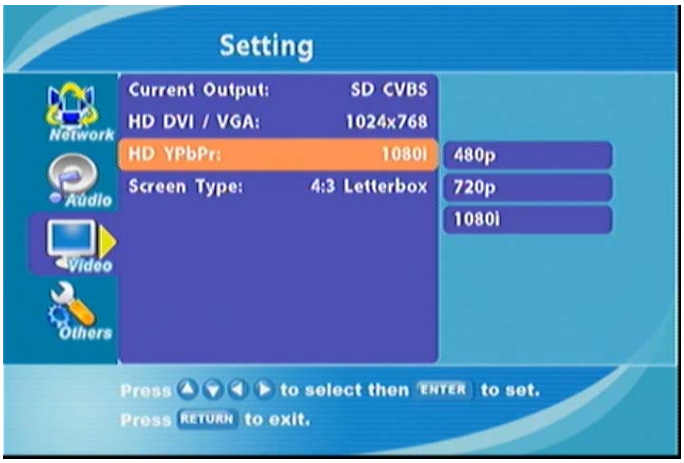
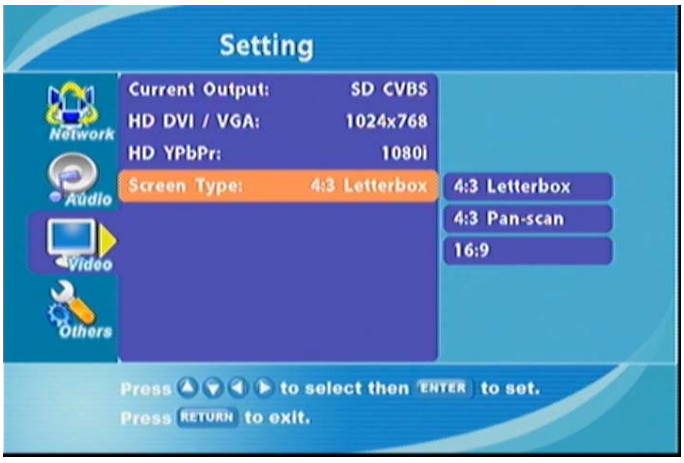



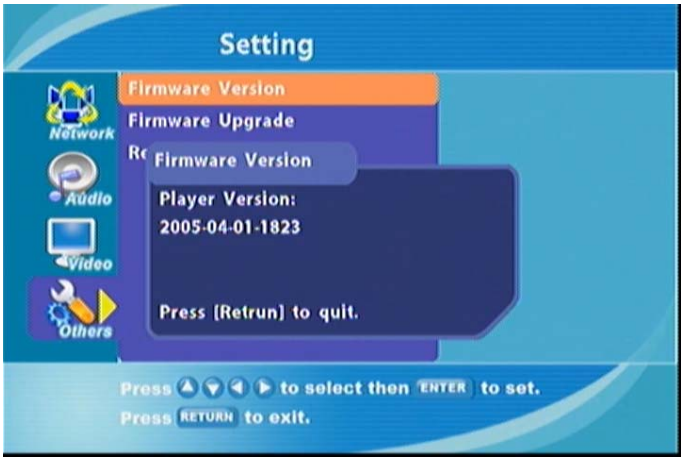
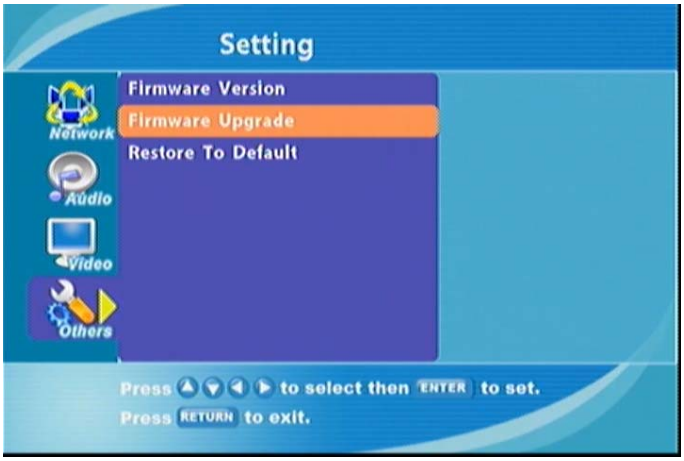
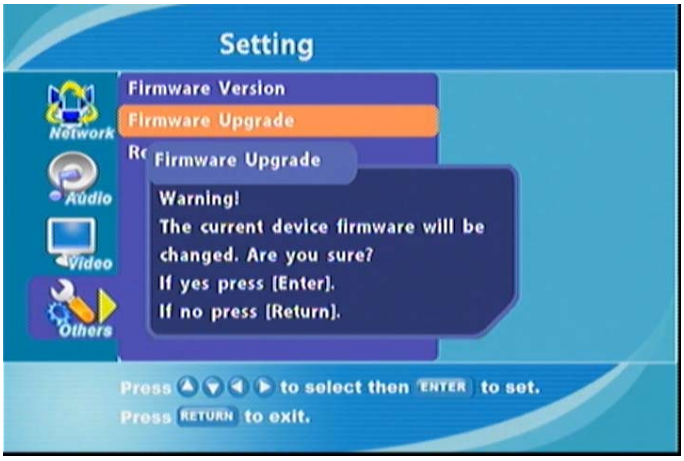

(2). Audio is analog output:

- 2 Channel
- 5.1 Channel
  - 2 Channel means 2 trumpets and supports all media files.
  - 5.1 Channel supports DVD media files.



| | |
|---|---|
| |  |
| **Audio Setting**<br>Home screen → Settings → Video. |  |
| (1). NTSC Active Output:<br>- SD CVBS<br>- HD YPbPr<br>- HD DVI |  |

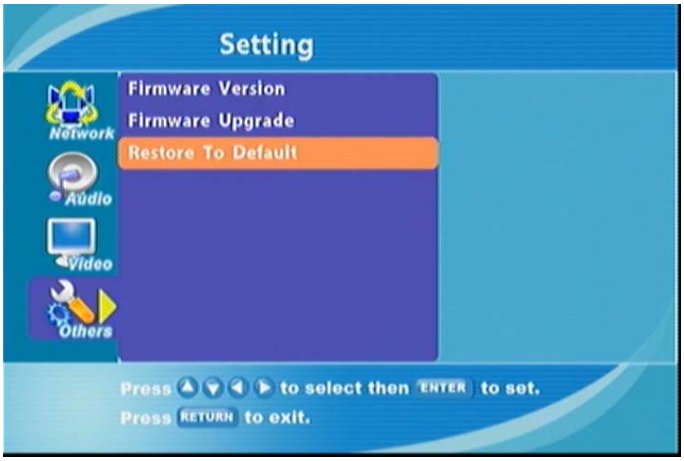
| | |
|---|---|
| (2). HD DVI/VGA:<br>- 480P<br>- 720P<br>- 1080i<br>- 640x480<br>- 800x600<br>- 1024x768<br>- 1280x1024 |  |
| (3). HD YPbPr:<br>- 480P<br>- 720P<br>- 1080i |  |
| (4). Screen Type: (select your TV screen 16:9 or 4:3)<br>- 4:3 Letterbox<br>- 4:3 Pan-scan<br>- 16:9 |  |

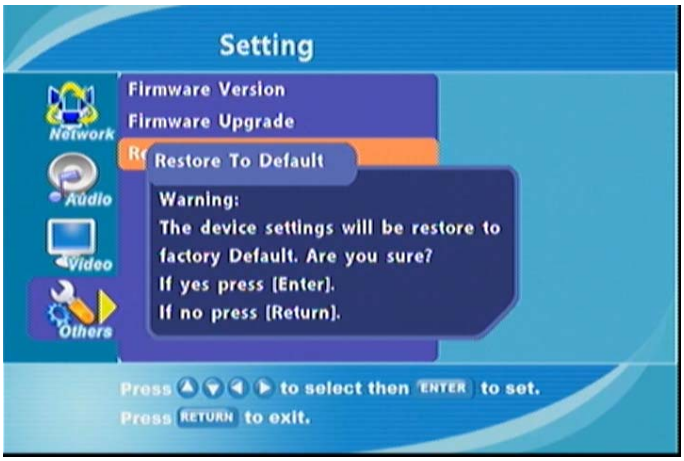
| | |
|---|---|
| Select **Firmware Version** to see the WS-302 currently version.<br>Home screen → Settings → Others → Firmware Version |  |
| Select **Firmware Upgrade** to upgrade the WS-302 currently firmware version.<br>Home screen → Settings → Others → Firmware Upgrade<br>Note: New Firmware files stored in USB flash then update to the device. |  <br>  |

Select **Restore to Default** to reset the WS-302 system.

Home screen → Settings → Others → Restore to Default.

**Restore to Default**: You will lose all current settings when selecting this option. The Factory defaults will be restored and any settings you have entered will be erased.



# 7 Additional Information

### Unication Consumer Web Site

On www.uni.com.tw or ww.uni-wlan.com, there is a Support Section where help and tips are only a few clicks away. Here you find the latest software updates, guides to use the products more efficiently.

### Guidelines for Safe and Efficient Use

Please read this information before using the product.

### Recommendations

- Always treat your product with care and keep it in a clean and dry place.
- Do not expose your product to liquid or moisture or humidity.
- Do not expose your product to extreme high or low temperatures.
- Do not expose your product to open flames or lit tobacco products.
- Do not drop, throw or try to bend the product.
- Do not attempt to disassemble the product.

### FCC Statement

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device harmful interference, and (2) This device must accept any interference received including interference that may cause undesired operation.

www.uni.com.tw www.uni-wlan.com.tw

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15.21

**Federal Communications Commission (FCC) Statement**

**You are cautioned that changes or modifications not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment.**

15.105(b)

**Federal Communications Commission (FCC) Statement**

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 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.

You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

**Operation is subject to the following two conditions:**

1) this device may not cause interference and

2) this device must accept any interference, including interference that may cause undesired operation of the device.

**FCC RF Radiation Exposure Statement:**

1. This Transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

2. This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.