# **ENGLISH**

# **Table of Contents**

1. Intro	oduction	. 3
1	l.1 Preface	. 3
1	l.2 Packing List	. 4
1	1.3 Cautions	. 4
1	1.4 Connection	. 6
1	1.5 Power On / Off	10
1	1.6 Menu Language	10
1	1.7 HDD Format	11
2. Abo	out the Player	12
2	2.1 Remote Control	12
2	2.2 Front Panel	14
2	2.3 Rear Panel	14
3. Setu	up Menu	15
3	3.1 Changing Audio Settings	15
3	3.2 Changing Video Settings	16
3	3.3 Changing Network Settings	17
3	3.4 Changing System Settings	21
3	3.5 Miscellaneous	23
4. Bro	wser Menu	25
4	I.1 Browsing All	25
4	1.2 Browsing Music	26
4	1.3 Browsing Photos	26
4	1.4 Browsing Movies	27
4	1.5 A/V Streaming via Network	28
4	1.6 A/V Streaming via UPnP-server	30
4	1.7 Renaming / Deleting Files	31
4	I.8 Managing the Playlist	32
5. File	Copy Menu	33
6. Med	dia Library	34
6	S.1 Music Library	34
6	S.2 Photo Library	37
6	S.3 Movie Library	39
7. Inte	ernet Radio	42
8. Dow	vnloads	43
9. NAS	S Function (samba)	45
	S (Internet Multimedia Service) Menu	
	P Server	
	rtual Remote Control	
•	ograding the Firmware	
•	ppendixes	
	4.1 Specifications	
	4.2 Frequently Asked Questions	
	4.3 Copyrights and Trademarks	
1	4.4 Warranty	54
1	4.5 GPL Statement	54

# 1. Introduction

#### 1.1 Preface

Thank you very much for purchasing FANTEC FHDL. We hope you will enjoy using it as a great home entertainment partner. This player has the following functionality.

#### A/V Output

- HDMI V1.3 for high-definition video and digital audio
- Composite & component video and stereo audio for analog audio-visual connection
- S/PDIF coaxial & optical interface for high-fidelity digital audio
- Adjustable video output resolution (NTSC, PAL, 480p, 576p, 720p, 1080i, 1080p)

# Multimedia Playback

- Supports major audio, video and image file formats (1080p HD video decoding)
   Movie format: AVI, VOB, MKV, MOV, MP4, MPG, TS, WMV, DAT, IFO, RM, RMVB, ISO
   (DVD & BluRay), AVCHD, MTS, M2TS, M4V, ASF, FLV, XviD, DivX 3/4/5
- Music format: MP3/OGG/WMA/WAV/AAC/FLAC/Dolby Digital/DTS/DTS downmix/ Dolby True HD downmix
- Photo format: HD JPEG/BMP/GIF/TIF/PNG
- Photo slide show with background music

#### **Network Feature**

- A/V streaming/transmission via Ethernet (10M/100M) & Wi-Fi (802.11b/g/n, optional)
- File sharing via Samba server
- A/V streaming via UPnP Media Server
- BitTorrent download
- Internet Radio (Please visit <a href="https://www.shoutcast.com">www.shoutcast.com</a> for available stations)

# **File Copy**

Supports copying & moving files among USB devices, Local HDD, and Network

#### **USB 2.0 Support**

- USB DEVICE port (for computer connection)
- USB HOST port x 2 (for USB storage devices and USB-DVD drive)
- DVD playback: supports DVD, Mini BD, AVCHD, VCD, CD

**Note**: All the information contained in this manual was correct at the time of publication. However, as our engineers are always updating and improving the product, your device's software may have a slightly different appearance or modified functionality than presented in this manual.

# 1.2 Packing List

Part	Quantity
Player	1
A/V cable	1
USB cable	1
Remote Control	1
Remote Control Battery	2
AC/DC adaptor	1
AC/DC adaptor Power Cord	1
User Manual (printed)	1
Driver CD (with User Manual)	1
Warranty card	1

#### Note:

The actual contents in the package might be different from the packing list in this manual.

#### 1.3 Cautions

The FANTEC FHDL design and manufacture has your safety in mind. In order to safely and effectively use this player, please read the following before usage.

#### 1.3.1 Usage Cautions

User should not modify this player. If commercial hard disk is being used, the environmental temperature should be within  $+5^{\circ}$ C ~  $+35^{\circ}$ C.

#### 1.3.2 Power

The player's power voltage: DC 12V.

When using this player, please connect the supplied AC adapter or AC adapter cable to the player's power jack. When placing the adapter cable, make sure it can not get damaged or be subject to pressure. To reduce the risk of electric shock, unplug the adapter first before cleaning it. Never connect the adapter to the player in a humid or dusty area. Do not replace the adapter or cable's wire or connector.

#### 1.3.3 Radio Interference

- If not properly shielded, almost all electronic devices will get radio interference. Under some conditions, your player might get interference.
- The design of this player has followed the FCC/CE standard, and has followed the following rules:
  - (1) This player may not cause harmful interference;
- (2) This player could accept some interference received including interference that may cause undesired operation.

#### 1.3.4 Repair

If the player has a problem, you should take it to an appointed repair center and let the specialists do the repair, never repair the player yourself, you might damage the player or endanger yourself or your data.

#### 1.3.5 Disposing of the Player

When you dispose of the player, be sure to dispose it appropriately. Some countries may regulate disposal of electrical device, please consult with your local authority.

#### 1.3.6 Hard Disk Cautions

The player uses an internal hard disk for data storage, in normal case, format or repair is not required.

You should carefully read the < Frequently Asked Questions > chapter, and check our website for latest information before formatting the hard disk.

- Physical impact may create bad sector in the hard disk, you can use CHKDSK to fix the problem.
- All data stored in the player may be lost due to physical impact, electrical shock, power lost, HDD format etc. Please backup your data.
- It is suggested to do defragment after a long period of usage.
- Regularly backup the data in the hard disk so that it can be recovered in the event of data corruption or loss. Our company takes no responsibility for loss of data stored on the hard disk.

#### 1.3.7 Others

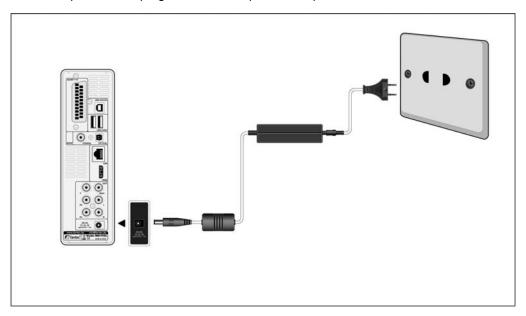
When using this player, please do not let the player come into contact with water or other liquid, if water is accidentally spilled on the player, please use a dry cloth to absorb the spillage. Electronic products are vulnerable, when using please avoid shaking or hitting the player, and do not press the buttons too hard.

- ♦ Do not let the player come into contact with water or other liquid.
- Do not disassemble the player, repair the player or change the design of the player, any damage done will not be included in the repair policy.
- Do not press the buttons of the player too hard.
- Avoid hitting the player with hard object, avoid shaking the player, and stay away from magnetic fields.
- During electrostatic discharge and the strong electromagnetic field, the product will malfunction, then unplug the power cable and the product will return to normal performance next time it is powered on.

# 1.4 Connection

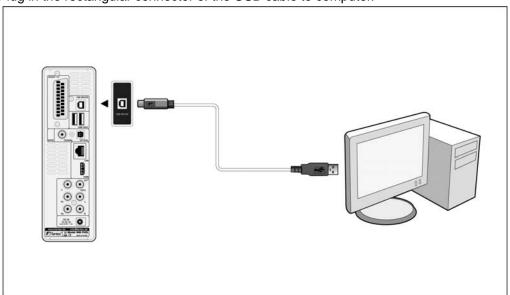
# 1.4.1 Connecting the Power Supply

- (1) Follow the picture and connect the AC adaptor to the player's DC IN jack;
- (2) Follow the picture and plug in the AC adaptor to the power outlet.



# 1.4.2 Connecting to a PC

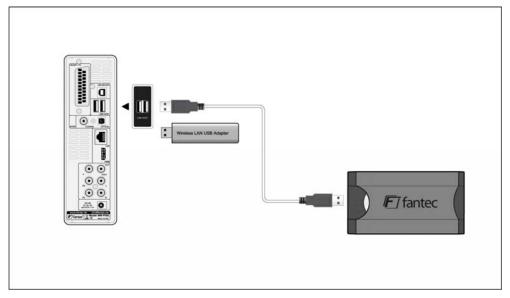
- (1) Make sure the player is powered on;
- (2) Plug in the squarish connector of the USB cable to this player's USB DEVICE port;
- (3) Plug in the rectangular connector of the USB cable to computer.



In this way, you can manage content on the built-in HDD of the player on your local PC.

# 1.4.3 Connecting a USB Device

- (1) Make sure the player is powered on;
- (2) Plug in the USB stick or USB HDD etc. to the USB HOST port of this player.

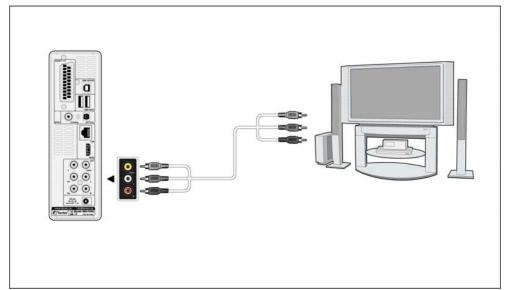


In this way, you can browse contents on the USB device.

# 1.4.4 Connecting to a TV

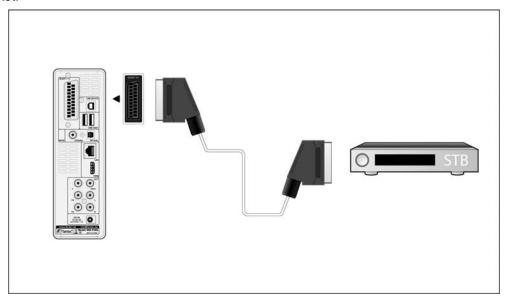
# 1.4.4.1 A/V OUT

- (1) Follow the picture and plug in the 3 color connector to the player's A/V OUT jack;
- (2) Follow the picture and plug in the 3 color connector to the TV's A/V IN jack. In this way, you can enjoy the content in the player on TV or other display devices.



#### 1.4.4.2 SCART OUT

- (1) Follow the picture and plug one connector on the SCART cable to the player's SCART socket;
- (2) Follow the picture and plug the other connector on the SCART cable to the TV's SCART socket.



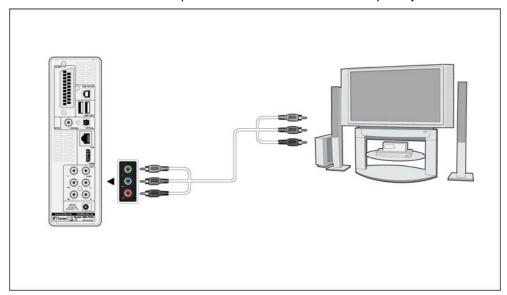
# 1.4.4.3 Y/Pb/Pr Component OUT

- (1) Follow the picture and plug in the 3 color connector to the player's Y/Pb/Pr jack;
- (2) Follow the picture and plug in the 3 color connector to the TV's Y/Pb/Pr jack.

Audio Connection while using Y/Pb/Pr Video out:

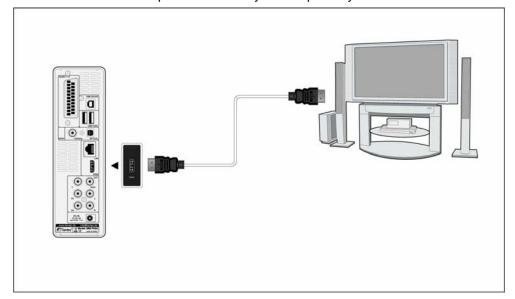
First method: use the audio output from the A/V OUT jack;

Second method: use the audio output from the S/PDIF Coaxial or Optical jack.



#### 1.4.4.4 HDMI OUT

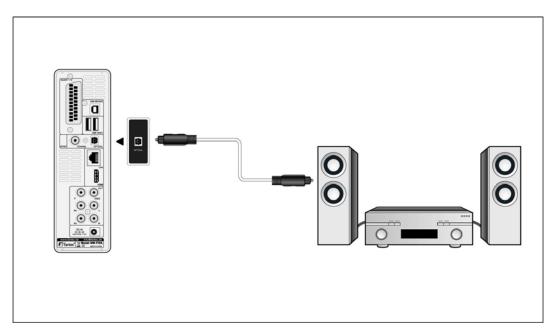
- (1) Follow the picture and plug one connector on your HDMI cable to the player's HDMI jack;
- (2) Follow the picture and plug the other connector on your HDMI cable to the TV's HDMI jack. **Note**: The HDMI cable is an optional accessory sold separately.



In this way, you can have the highest quality video and audio via a single cable.

# 1.4.5 Connecting to an Digital Amplifier

- (1) Follow the picture and plug in the Toslink connector on your optical fiber to the player's S/PDIF Optical jack;
- (2) Follow the picture and plug in the other connector on your optical fiber to the digital audio device (digital amplifier or decoder).



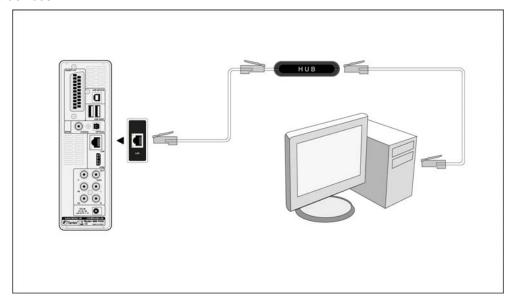
Note: Optical fiber cable is not supplied.

In this way, you can enjoy powerful Dolby Digital/ DTS or MPEG sound. (Please refer to '3.1 Changing Audio Settings' for configuration)

# 1.4.6 Connecting to a LAN

To connect to a LAN (Local Area Network) you require a cat5, cat5e or cat6 network cable (not supplied).

- (1) Connect one of the crystal plugs on the cable to the player's RJ45 LAN socket;
- (2) Connect the other crystal plug on the cable to a RJ45 LAN port on your router, switch, or hub devices.



#### 1.4.7 Connecting to a WLAN

- (1) Make sure the player is powered on;
- (2) Plug the Wireless LAN USB Adapter (i.e. Wi-Fi USB Dongle) to the USB HOST port of the player.

**Note**: The Wi-Fi Dongle is an optional accessory sold separately. (Please refer to '**3.3** *Changing Network Settings*' for more details about wireless setup)

#### 1.5 Power On / Off

#### **Power On**

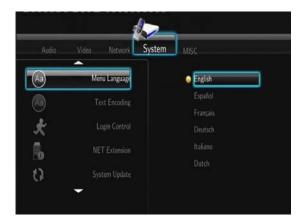
After connecting the DC IN jack and press the power button on the front panel, the player will soon enter the home screen, and the power indicator will turn blue.

#### **Power Off**

Press the power button on the front panel, the player will soon enter standby mode, and the power indicator will turn red. Then unplug the power cord to cut off the power supply.

# 1.6 Menu Language

The system language of this player can be set to English or other languages. Change the language you wish in the setup menu, the selected language will take effect immediately.



#### 1.7 HDD Format

For users who wish to install a new SATA HDD into the player, please refer to the following procedures to format the hard disk on the player before usage.

Note: This page can be also accessed via **Setup->System->HDD Format** menu.

- Step 1: Select **OK** on the **Warning** page, press **ENTER** to confirm.



- Step 2: Select **Format**, press **ENTER**, and then hard disk format will start.



The formatting procedure will be finished within a few minutes. And then you can use the hard disk properly on the player.

**Note**: HDD format will remove all data stored on the hard disk drive. Please take care and backup your data in advance!

# 2. About the Player

# 2.1 Remote Control

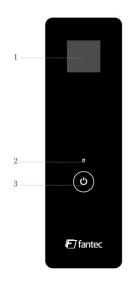
All procedures in this manual can be carried out using the remote control buttons.

See the following for details on each button and its function:

1 —	1 2 3 3 33 34 5 6 7 8 9 8 9 8 6 6 7 8 9 8 9 8 6 6 7 8 9 8 9 8 6 6 7 8 9 8 9 8 6 6 7 8 9 8 9 8 6 6 7 8 9 8 9 8 6 6 7 8 9 8 9 8 6 7 8 9 8 9 8 6 6 7 8 9 8 9 8 6 7 8 9 8 9 8 6 7 8 9 8 9 8 6 7 8 9 8 9 8 6 7 8 9 8 9 8 9 8 9 8 9 8 9 8 9 8 9 8 9 8		1. STANDBY	2. MUTE
$3\frac{2}{4}$			3. TV SYSTEM	4. BROWSER
5 —			5. Numeric buttons	6. REPEAT
6 —			7. FR	8. VOL-
$7{8}$		$\frac{32}{30}$	9. FF	10. PLAY
$9 \frac{10}{10}$	HOME PLAY STOP RETUR	28 <sup>29</sup>	11. HOME	12. Navigational buttons
	11 2 SETUP 27  13 PRIJESTEP SLOW AIB ANGLE 26  14 15 REGIEPAN-CN-9/SIP ZOOM NI ZOOM OUT 24  16 17 9 9 9 23  23		13. MENU	14. PAUSE/STEP
13-			15. SLOW	16. INS REPLAY
14,5			17. CM SKIP	18. SELECT
$18\frac{17}{19}$			19. CONFIRM	20. AUDIO
19	<i>F</i> fantec	20	21. SUBTITLE	22. ZOOM IN
			23. ZOOM OUT	24. A-B
			25. ANGLE	26. SETUP
			27. RETURN	28. STOP
			29. NEXT	30. VOL+
			31. PREV	32. GOTO
			33. COPY	34. MUSIC
			35. INFO	
No.	Button		Function	
1	STANDBY	Press to enter standby mode or wake up.		
2	MUTE	Press to mute audio output, and press again to resume.		
3	TV SYSTEM	Press to switch b	petween NTSC, PAL, 4	80P, 576P, 720P, 1080I,
		and 1080P.		
4	BROWSER	Press to enter th	e browser menu.	
5	Numeric buttons Press to enter numeric input when changing settings.			
6	REPEAT	Press to set repeat option: One, All and Shuffle.		
7	FR Press to fast rewind the current playback. Press repeatedly to		ck. Press repeatedly to	
		select speeds.		

8	VOL-	Press to decrease the volume.
9	FF	Press to fast forward the current playback. Press repeatedly to
		select speeds.
10	PLAY	Press to begin playback.
11	HOME	Press to enter the home screen.
12	Navigational	Press the arrow buttons to select menu options, and the ENTER
	buttons	button to confirm.
13	MENU	Press to activate tools menus:
		- Press in the browser menu to rename and delete files.
		<ul> <li>Press in My_Shortcuts in NET of the browser menu to add shortcuts for network access.</li> </ul>
14	PAUSE/STEP	Press to pause the current playback. Press again to step to the
		next frame. Press the <b>PLAY</b> button to resume playback.
15	SLOW	Press to play back in slow motion. Press the <b>PLAY</b> button to
		resume regular playback.
16	INS REPLAY	Press to backward 10 seconds of the current playback, which
		suitable for sport programs.
17	CM SKIP	Press to advance 30 seconds of the current playback.
18	SELECT	Press to select files in browser and file copy menu.
19	CONFIRM	Press to confirm and add the selects to the playlist.
20	AUDIO	Press to select an audio track.
21	SUBTITLE	Press to set subtitle options.
22	ZOOM IN	Press to zoom in the image (photo or video).
23	ZOOM OUT	Press to zoom out the image (photo or video).
24	A-B	Press to set the beginning and end points of a section to repeat.
25	ANGLE	Press to change the view angle during DVD (with multi-angle)
		playback.
26	SETUP	Press to enter the setup menu.
27	RETURN	Press to return to the previous screen while navigating menus.
28	STOP	Press to stop playback.
29	NEXT	Press to view the next file / page down.
30	VOL+	Press to increase the volume.
31	PREV	Press to view the previous file / page up.
32	GOTO	Press to jump to a specific point on a title. Specify the point
		using Title, Chapter and Time.
33	COPY	Press to enter the file copy menu.
34	MUSIC	Press to start playing music in the music playlist.
35	INFO	Press to hide or display the information bar during playback.

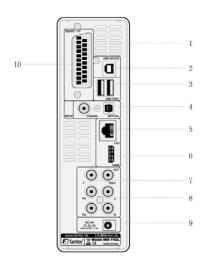
# 2.2 Front Panel



- 1. LCD screen
- 3. Power indicator & button

2. Working indicator

# 2.3 Rear Panel



- 1. Air Flow hole
- 3. USB HOST port x 2
- 5. RJ45 LAN socket
- 7. Y/Pb/Pr OUT jack
- 9. DC IN jack

- 2. USB DEVICE port
- 4. S/PDIF COAXIAL & OPTICAL jack
- 6. HDMI jack
- 8. A/V OUT jack
- 10. SCART socket

# 3. Setup Menu

The Setup menu allows you to personalize and configure the preferences for your player.

To select a Setup option:

- Select the **Setup** icon on the home screen, or press the **SETUP** button on the remote control.

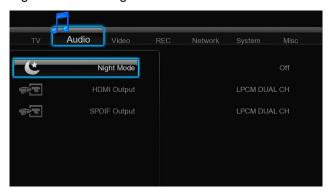


Use the LEFT/RIGHT navigational buttons to select an option, and then press ENTER.

There are five Setup options, including **Audio**, **Video**, **Network**, **System**, and **MISC**. Use the **UP/DOWN** navigational buttons to select a menu. Press **ENTER** to confirm. Press **RETURN** to cancel and display the previous menu screen.

# 3.1 Changing Audio Settings

Use this menu to configure audio settings.



# **Night Mode**

- Choose between **Off / On / Comfort**. If the option is turned on, the audio output volume will be decreased to make you more comfortable.

#### **HDMI Output**

- Choose among LPCM Dual CH, LPCM Multi CH and Passthough.

# **SPDIF Output**

- Choose among LPCM Dual CH and Passthrough.

**Note**: In raw mode, Dolby Digital, DTS sound can be by passed to the HDMI TV or Digital amplifier.

Due to the bandwidth requirement, Dolby Digital Plus sound and Dolby TrueHD only can be by passed through HDMI cable.

# 3.2 Changing Video Settings

Use this menu to configure video settings.



# **Aspect Ratio**

- **Pan Scan 4:3**: Display a wide picture on the entire screen and cuts off the redundant portions. Select when a standard 4:3 TV is connected.
- **Letter Box 4:3**: Display a wide picture with two black borders on the top and bottom of 4:3 screen. Select when a standard 4:3 TV is connected.
- **16:9**: Compress the image to convert the whole image. Select when a 16:9 TV is connected.

# **Brightness**

- Adjust the level of brightness.

# **Contrast**

- Adjust the level of contrast.

#### Hue

- Adjust the level of hue.

# **Saturation**

- Adjust the level of saturation.

# Video System

Select to adjust video output resolution: NTSC / PAL / 480P / 576P / 720P 50HZ / 720P
 60HZ / 1080I 50HZ / 1080I 60HZ / 1080P 50HZ / 1080P 60HZ.

#### 1080P 24FPS

- Choose this option to enable or disable 1080P 24HZ support. A TV set with 1080P 24HZ (24P) mode is needed.

# Screen Size

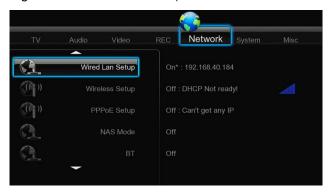
- Choose this option to change the display size.

# Plasma Mode

- Help to protect your plasma TV by reducing the level of brightness.

# 3.3 Changing Network Settings

Use this menu to configure Ethernet and WLAN (Wireless Local Area Network) settings.



#### **Wired LAN Setup**

- DHCP IP (AUTO)

Select to obtain IP address automatically.

- FIX IP (MANUAL)

Select to manually input the IP Address, Subnet Mask, Default Gateway, and DNS Server IP Address.

#### **Wireless Setup**

- Selecting a connection profile



This player can store up to three wireless network connections. Press **ENTER** to go to next step, press **RETURN** to cancel, and press **PLAY** to connect.

# - Get Connection Mode



Choose between Infrastructure (AP), Peer to Peer (Ad Hoc) or WPS(AP). Press ENTER to go to next step, and press RETURN to cancel.

#### - Infrastructure (AP)

Infrastructure mode is used to connect computers with wireless network adapters, also known as wireless clients, to an existing wired network with the help from wireless router or access point.

#### **Get SSID Name**



Press **ENTER** to go to next step, press **RETURN** to cancel, and press **SELECT** to refresh the SSID list.

**Note**: In the Security list, **WEP** (Wired Equivalent Privacy) and **WPA** (Wi-Fi Protected Access) means the network is encrypted, i.e. an encryption key is needed to access the network. **NONE** means it is an open system network.

Input WEP / WPA Key





Encryption keys can be inputted via the virtual keyboard. Press the navigational buttons to select, **ENTER** to input, **CAPS** to switch between uppercase and lowercase, <- to delete a character, -> to insert a space, **shift** to make more symbols available, and **OK** to confirm.

# - DHCP IP (AUTO)

Select to obtain IP address automatically.

# - FIX IP (MANUAL)

Select to manually input the IP Address, Subnet Mask, Default Gateway, and DNS Server IP Address.

#### **Test connection**



The testing process will take for a while, please be patient to wait. If the test is ok, the network information (Profile Name, IP address, Subnet Mask, Gateway, etc.) will be displayed on the screen.

# - Peer to Peer (Ad Hoc)

Peer to Peer mode, which is also called Ad Hoc mode or computer-to-computer mode, is used to connect wireless clients directly together, without the need for a wireless router or access point.

#### **Ad-Hoc Setup**



Press ENTER to go to next step, press RETURN to cancel, and press PLAY to connect.

#### WPS (AP)

WPS, Wi-Fi Protected Setup, is used to connect a wireless router directly, without searching SSID and inputting password. In this mode, you just need to configure the parameters of your router which support WPS function. There are two modes for you to select, PBC mode and PIN mode.



## **PBC**

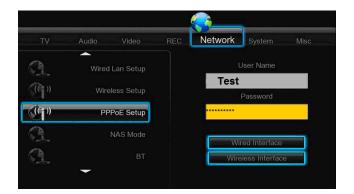
First press the WPS button on the router or select the button mode in the configuration menu of the router, then select the PBC mode, the connection process will take for a while, please be patient to wait.

#### PIN

Input the pin code when configure your router, then select the PIN mode, the connection process will take for a while, please be patient to wait.

# PPPoE Setup

- Input the ADSL accountant and password in this menu, system will obtain IP address automatically from the server based on PPPOE protocol.



# **NAS Mode**

- Select to turn NAS function On/Off.

# <u>BT</u>

- Select to turn BitTorrent download o On/Off.

#### **Host Name**

- Select to key in your desired host name to be seen in your network.

# **Remote Control**

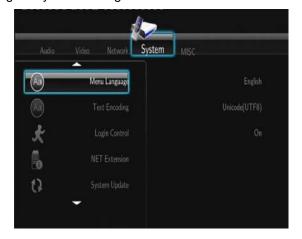
- Select to turn on / off network based remote control. Please refer to chapter '12. Virtual Remote Control for more details on this unique feature of this product.

# **FTP**

 Select to turn on / off FTP services and to configure your desired login User Name and Password. Please refer to '11. FTP Server' for more details on this unique feature of this product.

# 3.4 Changing System Settings

Use this menu to configure system settings.



# Menu Language

 Select to choose the OSD (On-Screen Display) language. (English, Espanol, French, German, Italiano, Dutch, Russky, Polski, Cesky, Slovensky, Romania, Portugees, Hebrew, Magyar, Slovenscina)

#### **Text Encoding**

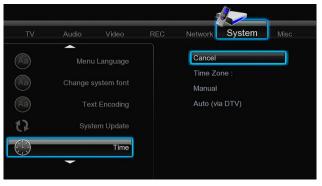
Select to set the text encoding option (subtitle display).

#### **System Update**

- Select Extension Package Upgrade to update extension files for BT download, NAS, and Web server.
- Select **system upgrade** to update the firmware via a USB stick.
  - Copy 'install.img' to the root directory of a USB stick, and connect it to the USB HOST port of the player.
  - 2) Press ENTER to confirm.

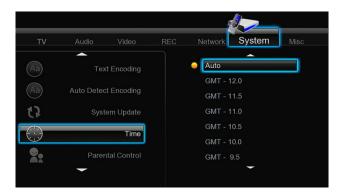
#### <u>Time</u>

- Select to set the system time.



Press the **up** / **down** button to select time zone and set system time by manual or via TV/internet. Press the **enter** button to confirm.

# **Time Zone**



We must select the correct time zone before setting time to get correct system time.

#### Manual



Press the **left** / **right** button to select each field and the **up** / **down** button to adjust each setting. Numeric buttons are available here. Press the **enter** button to confirm.

# **HDD Format**

- Select to format the built-in HDD.

Note: Please take care that all data on the hard disk will be removed after formatting.

# **System Info**

- Select to view system information (firmware version, HDD info, Mac address, etc.)

# **Restore Default**

- Select to restore factory defaults.

# 3.5 Miscellaneous

Use this menu to adjust miscellaneous settings.



# **Resume Play**

- Select to turn on / off resume playback (auto-bookmarking) feature for movies.

# **Slide Show Timing**

- Select to set the interval time for photo slide show.

# **Transition Effect**

- Select to set the transition effect for photo slide show.

# **Ken Burns**

- Apply PAN-Scan effects during Photo playback.

#### **Background Music**

- Select to set the background music options while view pictures: Off / Folder / Playlist.

# **Seamless Playback**

Uninterrupted playback of video files(.ts and .m2ts)
 (the naming of the files should be alike "abc01.ts" and "abc02.ts", etc)

# **Screen Saver**

- Select to turn on / off screen saver.

# **Movie Preview**

- Select to turn on / off movie preview in the browser menu.

# Subtitle on-off

- Turn on/off subtitle

# **LCD Direction**

- LCD directions for horizontal or vertical usage or auto detect.

# **LCD Light**

- Display on, temporarily off or permanent off.

# 4. Browser Menu

The browser menu allows you to browse and play media files stored on USB devices, Local HDD, Network, UPnP-server, and Playlist. To enter the menu, select the **Browser** icon on the home screen, or press the **BROWSER** button on the remote control.



The following buttons can be used while navigating the browser menu.

Button	Function
UP / DOWN	Move cursor up / down to select devices, folders, or files.
LEFT / RIGHT	Select filter options: All, Music, Photos, and Movies.
PREV / NEXT	Go to previous / next page.
ENTER	Enter or confirm the selected item.
SELECT	Select files under <b>Browser</b> -> <b>HDD</b> menu.
CONFIRM	Add the selected files to the playlist.
RETURN	Return to the previous menu.

# 4.1 Browsing All

In this mode, all folders and supported contents (music, photos, and movies) will be displayed.



#### Note:

- Please refer to chapter '9.1 Specifications' for more about the supported content formats.
- Music tracks might not be able to played continously under All filter, please switch to the Music filter instead.

# **4.2 Browsing Music**

In this mode, all folders and supported audio files in current directory will be displayed.

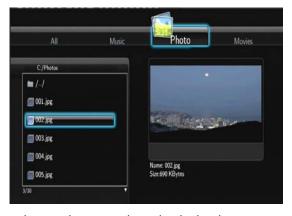


The following buttons can be used to control music playback.

Button	Function
PLAY	Begin playback.
PAUSE / STEP	Pause playback.
FR / FF	Fast rewind or fast forward. Press repeatedly to select the speed.
REPEAT	Set repeat options: One, All, and Shuffle.
INFO	Hide or display the information bar during playback.
STOP	Stop playback.

# 4.3 Browsing Photos

In this mode, all folders and supported image files in current directory will be displayed.



The following buttons can be used to control music playback.

Button	Function
PLAY	Begin playback.
PREV / NEXT	View the previous or next photo.
LEFT / RIGHT	Rotate a photo in any angle.
ZOOM IN / OUT	Zoom in / out the image.
INFO	Hide or display the information bar during playback.
STOP	Stop playback.

You can view photos in slide show mode with background music. When it is enabled, the slide show starts automatically once you press **PLAY** button. (Please refer to **Slide Show Timing**, **Transition Effect**, and **Background Music** in chapter '3.5 **Miscellaneous**' for more details)

# **4.4 Browsing Movies**

In this mode, all folders and supported video files in current directory will be displayed.



The following buttons can be used to control video playback.

Button	Function
PLAY	Begin playback.
PAUSE / STEP	Pause playback; Press again to step to next frame.
SLOW	Play video in slow motion. Press repeatedly to select the speed.
FR / FF	Fast rewind or fast forward. Press repeatedly to select the speed.
PREV / NEXT	View the previous or next movie.
REPEAT	Set repeat options: Title, Chapter, and All.
ZOOM IN / OUT	Zoom in / out the image.
INFO	Hide or display the information bar during playback.
GOTO	Display playback search menu.
A-B	Set the beginning and end points of a section to repeat.
ANGLE	Change the view angle during DVD (with multi-angle) playback.
MENU	Return to the root menu during DVD playback.
INS REPLAY	Backward 10 seconds of the current playback
CM SKIP	Advance 30 seconds of the current playback.
AUDIO	Select an audio track while watching DivX video or DVD with
	multiple audio tracks.
SUBTITLE	Set subtitle options.
STOP	Stop playback.

# 4.5 A/V Streaming via Network

You can stream the media files shared on the home network (Ethernet or WLAN). Please refer to '3.3 Changing Network Settings' for details about network settings.

There are two ways to locate media files shared on your local network in the **Network** menu. One is to browse through **Workgroup**; the other way is to browse through '**My\_Shortcuts**'.



# 4.5.1 Browsing through Workgroup

You can choose the workgroup which your PC belongs to from the workgroup list, find your PC name, and press the **ENTER** button to confirm. Then you can select and play the shared media files that you want to browse.



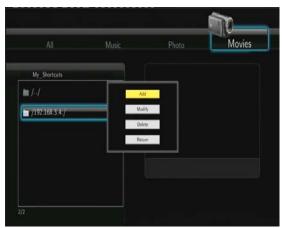
# Note:

- While browsing high definition video files (resolution up to 720p / 1080i / 1080p) via
   Ethernet or WLAN, the video might be buffering. It is normal due to the limit of network speed or signal strength.
- Due to different network conditions, sometimes the workgroup might not be accessed or shown in the list. And then you need to use 'My\_Shortcuts' to browse shared files.

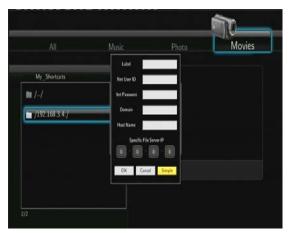
# 4.5.2 Browsing through 'My\_Shortcuts'

You can also set 'Specific File Server IP' and access it from 'My\_Shortcuts' in the menu.

- Press the **MENU** button and a popup menu appears.



Select Add to open a popup menu where you can input Net User ID (Username), Net
 Password, Domain, Host Name, and Specific File Server IP of destination PC. Select
 OK to confirm, Cancel to cancel, and Simple / Detail to switch between simple and
 advanced options.



 Select the shortcut you added and press the ENTER button to confirm. Then you can select and play the shared media files on the destination computer.



# 4.6 A/V Streaming via UPnP-server

A built-in UPnP (Universal Plug and Play) client has been integrated on the system, which enables the player to auto-detect UPnP Media Servers on the network to browse and stream media files from them.

# 4.6.1 Installing UPnP Media Server on your PC

There're a lot of free and commercial UPnP Media Server software, such as Windows Media Connect, Windows Media Player 11, XBMC Media Center (Linux/Mac/Windows), MediaTomb (Linux), etc. Please install one of them on you computer. In the following chapters, we will take Windows Media Player 11 on Microsoft Windows XP SP2 for an example.

# 4.6.2 Sharing Media on your PC

The Media Sharing feature of Windows Media Player 11 lets you enjoy the contents of your Windows Media Player library from anywhere in your home.

 Open Windows Media Player 11, click Library -> Add Library -> Advanced Options to add or remove media files from the library.



 Click Library -> Media Sharing, then you can allow or deny devices to access the media library. Click Allow to authorize your player.



#### 4.6.3 Streaming Media on your Player

- Connect your player to the home network (LAN or WLAN).
- Visit **Browser** > **UPnP** menu on the player, select the UPnP-server, and press **ENTER**.



- Then you can browse the media library shared by Windows Media Player 11.

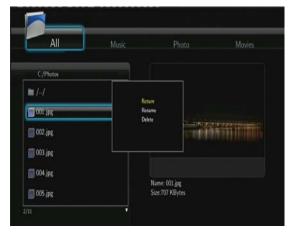


#### Note:

- Make sure your player and your computer are on the same local area network and subnet.
- Firewalls may prevent your player to communicating with your computer. Please open the ports manually and add your player to the 'trusted' list, or disable the firewall temporarily.

# 4.7 Renaming / Deleting Files

When navigating in the browser menu, you can press the **MENU** button to activate a popup menu where you can rename and delete files or folders.



Press the **UP / DOWN** buttons to select from **Return**, **Rename**, and **Delete**. And press **ENTER** to confirm.

# 4.8 Managing the Playlist

This player supports the playlist function, which allows you to add your favorite contents on local HDD to the playlists (All, Music, Photos, and Movies), and enjoy them at any time.

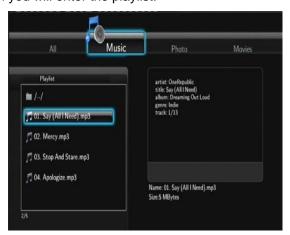
# 4.8.1 Adding files to the playlist

Select the favorite file you wish to add, press the **SELECT** button, and the file will be marked. Press the **CONFIRM** button to confirm, and then an on-screen message 'Add selects to list' will be shown. Multiple selections are allowed. See photo below.



# 4.8.2 Browsing the playlist

Press the **UP / DOWN** buttons to select **Play List** in the browser menu. Press the **LEFT** / **RIGHT** buttons to select between **All**, **Music**, **Photos**, and **Movies**. And press the **ENTER** button to confirm. Then you will enter the playlist.



If you wish to delete a file from the playlist, press the **SELECT** button to select, and then press the **CONFIRM** button to confirm.

# 5. File Copy Menu

Select the **File Copy** icon from the home screen to enter the **File Copy** menu, which allows you to copy files between USB devices, Local HDD, and Network.



The following buttons can be used under the file copy menu.

Button	Function
UP / DOWN	Move cursor up / down to select devices, folders
RIGHT	Go to the next step.
SELECT	Select (or cancel) folders or files (The selected items will be
	ticked).
STOP	Cancel all selections.
ENTER	Confirm the selected options.

Please refer to the following operations to copy / move folders / files between devices.

- Step 1: Select the source device and destination device.
- Step 2: Select the source files you want to copy.
- Step 3: Select the destination folder to store the above files.
- Step 4: Select Copy or Move to proceed.

# 6. Media Library



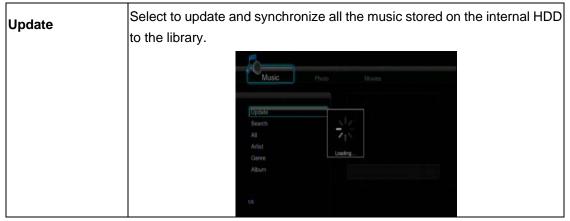
This is a powerful search engine. The media library menu allows you to search and browse multimedia files stored on the internal HDD. To enter this menu, select the **Media Library** icon on the home screen.

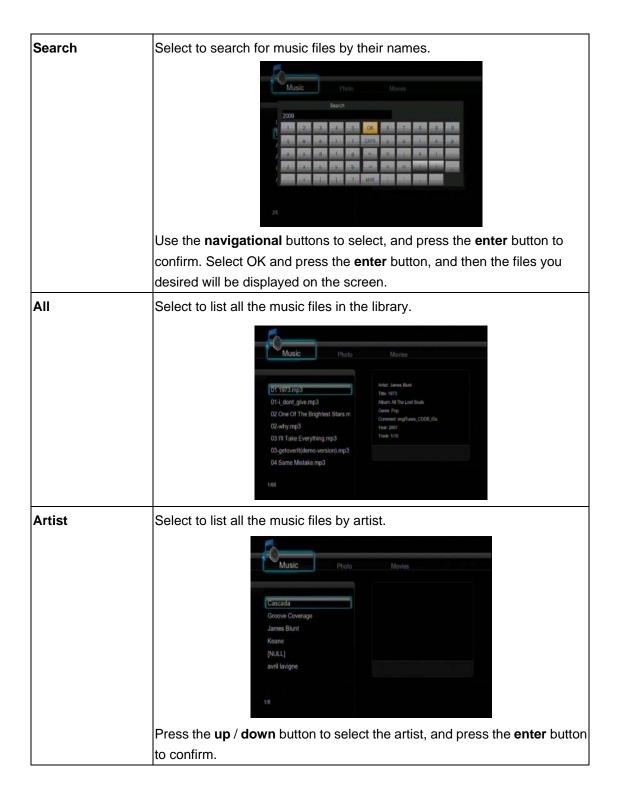
# **6.1 Music Library**

Use the left / right button on the remote control to select the Music tab.



Press the **up** / **down** button to select from Update, Search, All, Artist, Genre, and Album. And press the **enter** button to confirm.





#### Genre

Select to list all the music files by genre.



Press the **up** / **down** button to select the genre, and press the **enter** button to confirm.

### Album

Select to list all the music files by album.



Press the **up** / **down** button to select the album, and press the **enter** button to confirm.

# Quick-Search

You can also press the **right** button to turn on a Quick-Search bar while browsing music files in the library.



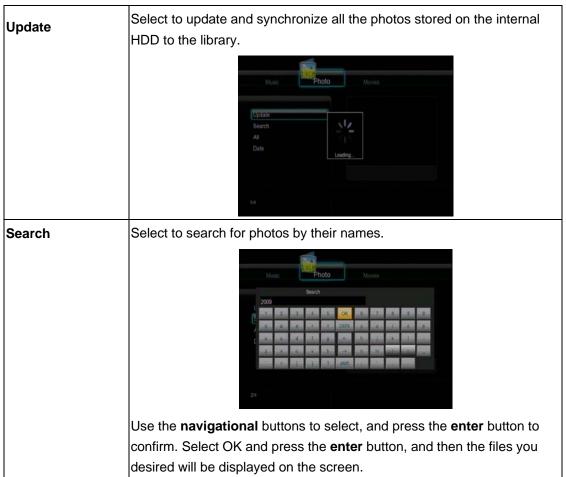
Press the **up** / **down** button to select characters on the Quick-Search bar, and press the **enter** button to confirm. The music files with the specific characters will be displayed. Press the **left** button to delete characters, and press the **return** button to close the Quick-Search bar. Finally press the **enter** button to start playback.

#### **6.2 Photo Library**

Use the **left / right** button on the remote control to select the **Photos** tab.

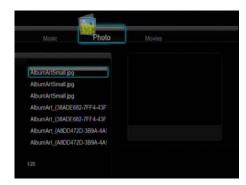


Press the **up** / **down** button to select from Update, Search, All, and Date. And press the **enter** button to confirm.



#### ΑII

Select to list all the photos in the library.



#### **Date**

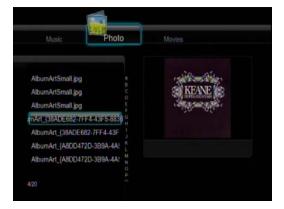
Select to list all the photos by date.



Press the **up** / **down** button to select the date, and press the **enter** button to confirm.

#### Quick-Search

You can also press the **right** button to turn on a Quick-Search bar while previewing photos in the library.



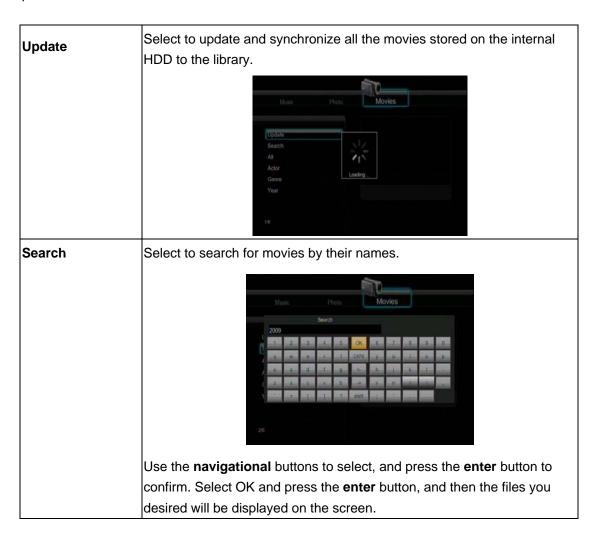
Press the **up** / **down** button to select characters on the Quick-Search bar, and press the **enter** button to confirm. The photo files with the specific characters will be displayed. Press the **left** button to delete characters, and press the **return** button to close the Quick-Search bar. Finally press the **enter** button to start playback.

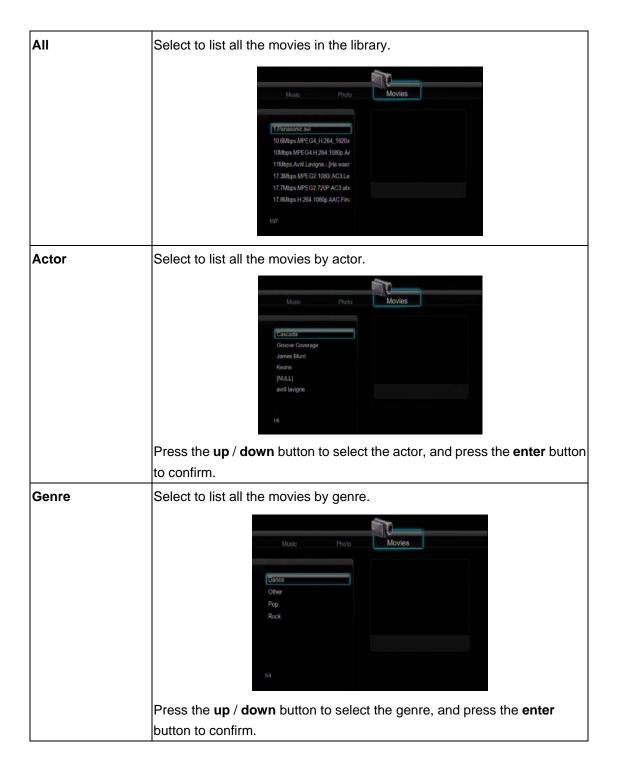
#### 6.3 Movie Library

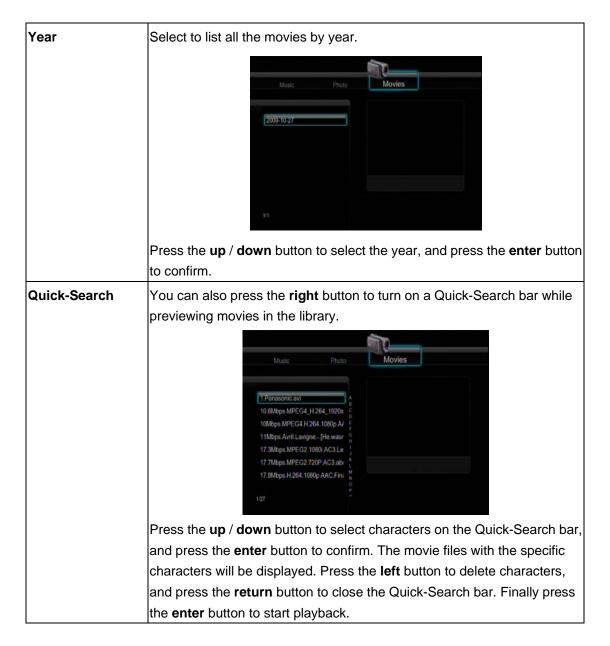
Use the **left** / **right** button on the remote control to select the **Movies** tab.



Press the **up** / **down** button to select from Update, Search, All, Actor, Genre, and Year. And press the **enter** button to confirm.







#### Note:

In order to use the search function more efficiently, you are encouraged to use the following rules to name the movies stored on the internal HDD.

Syntax: [Name][Actor][Genre][Year].extension

#### Examples:

[Enchanted.CD1][Amy Adams][Love][2007].avi, [The.Dark.Knight.CD1][Christian Bale][Action][2008].mpeg

#### 7. Internet Radio

This player integrates the SHOUTcast free Internet radio function. Select the **Internet Radio** icon on the main interface to enter this menu.



#### Note:

- Make sure the player is connected properly to a LAN or WLAN with Internet access, please refer to '3.3 Changing Network Settings' for more details;
- When you enter the Digital Radio menu at the first time, it will take several seconds to download data from the Internet, please be patient to wait;

The following buttons can be used under this menu.

Button	Function
UP / DOWN	Move cursor up / down to select station, channel, and genre.
PREV / NEXT	Page up / down.
ENTER	Confirm and enter the selected menu.
MENU	Add / delete a station to / from <b>Favorite</b> while it is highlighted.
PLAY	Begin playback after a channel has been selected.
STOP	Stop playback.
RETURN	Return to the previous menu.

#### **Station**

All downloaded stations will be listed under this menu.

#### **Genre**

- You can search for stations by genre (pop, rock, jazz, etc.) under this menu.

#### **Favorite**

- Your favourite stations can be kept under this menu.

#### **Search**

- You can search for radio stations. (Please visit <a href="www.shoutcast.com">www.shoutcast.com</a> for available stations)

#### 8. Downloads

Select the **P2P Share** icon on the main menu. You can see the status of torrents download progress and configure the BT download settings in this menu. Press **LEFT/RIGHT** button to enter into download menu and BT setup menu.



#### Add a new torrent

Locate your torrent file in Browser menu, then press **MENU** button to add the torrent to start downloading.





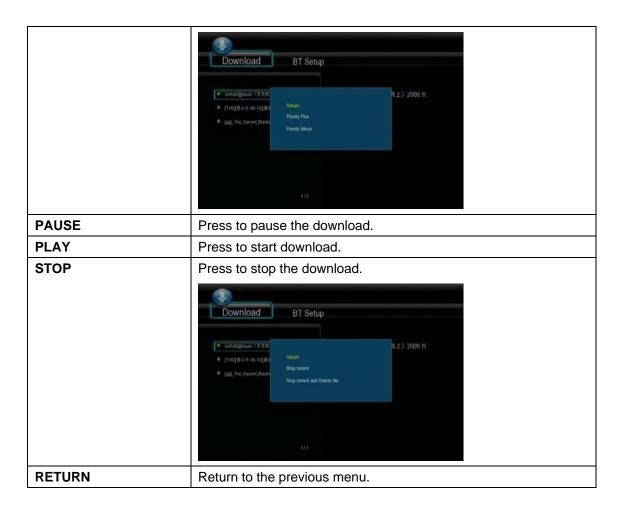
#### **Download Menu**

After add the BT torrent files, the download progress can be displayed in this menu.



The following buttons can be used under this menu.

Button	Function
UP / DOWN	Move cursor up / down.
MENU	press to adjust the priority of the download task



#### BT setup Menu

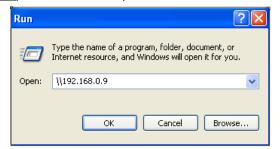


In the **BT Setup** menu, you can configure the following settings. Use **UP/DOWN** and **ENTER** to change the settings.

- Set the maximum download rate.
- Set the maximum upload rate.
- Set the idle hours to start the next download automatically.
- Set the seeding hours.
- Set to delete the finished torrent files automatically or not.
- Set the maximum number of simultaneous download tasks.

### 9. NAS Function (samba)

This player can be used as a NAS (Network-Attached Storage) device. It can be attached to the home network via either Ethernet or WLAN. This feature allows storing and retrieving large amounts of data more affordably than ever before.



Under windows vista and windows 7, please type: \\\192.168.0.9\) on search bar, then press the Enter button on the keyboard.



Then you can view, and edit the files stored on the hard disk installed on the player. In this way, you can also playback and copy files via network between your PC and the player.

#### NOTE:

1. Please run **SAMBA** in the setup menu before using this function.

### 10. IMS (Internet Multimedia Service) Menu

This feature is additional function. All contents and services under this feature are provided by third-party service providers, our company does not offer any contents and services of this feature and is not responsible for any contents and services provided under this feature. Our company is not responsible for any operational stability of the contents and services, for example, if you cannot access certain web site for video streaming or news broadcast, or the content of a web site has been changed etc, are all responsible and control by the third-party service providers. If you find that these features cannot operate properly, please contact our customer service or visit our company website to obtain the relevant information.

#### 11. FTP Server

This product can also be used as a FTP Server as far as it is attached to your home network.

#### FTP Server Configuration to access via the Internet

- Configure the username and password of the FTP Server.

#### Setting up your device:

- Assign a manual Fixed IP address for the product, for example 192.168.0.9
- Assign the same subnet mask as your router (usually 255.255.255.0)
- Assign the gateway of your router (router's local IP address, usually 192.168.xxx.xxx)...
- Assign the DNS address of your router (router's local IP address, usually 192.168.xxx.xxx).

Please refer to your router documentation on getting this information from your router

#### Setting up your router:

- Configure the FTP server service at your router and enter the IP address of your device, for example, 192.168.0.9. Additionally set up the FTP port to port 21 (default).

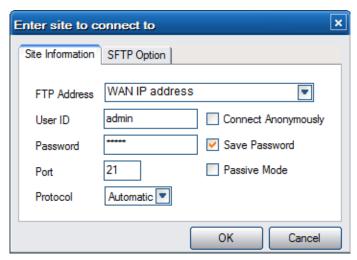
#### Use of a dynamic IP address

- At common internet connections the WAN IP address of the internet connection is changing every 24 hours. For this reason, the use of a dynamic DNS is recommended. This allows you to access your device by an individually defined name and replaces the recurrent update of the WAN IP address of your router.
- In order to get a DynDNS account, sign up for a free DDNS domain for one of the sites that offer this free service, such as www.dyndns.com. More information can be found in various tutorials on the topic "Setting up dyndns"
- Finally enter the account information on the DDNS page of your router and enter your host name, then user name and password. Please read the instruction manual of your router if your router supports the DDNS service and how to obtain this information for your router.

#### Accessing from a FTP program

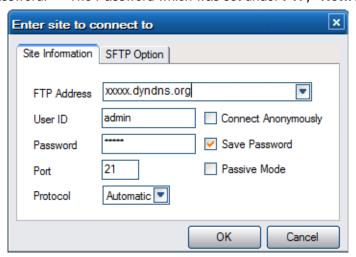
Use your favourite FTP application on your PC, for example ALFTP, which can be downloaded from http://www.altools.com/ALTools/ALFTP.aspx

At the FTP program connection page, you can enter your router's WAN IP address or your DDNS host name.



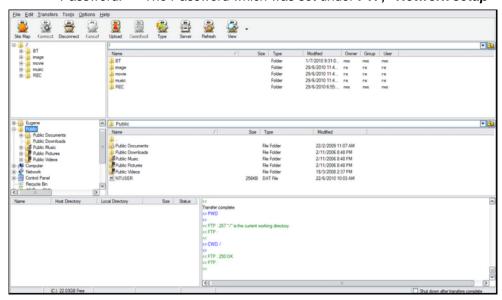
FTP Address: Your router's WAN IP address

User ID: The User Name which was set under **FTP**, ' **Network setup**' Password: The Password which was set under **FTP**, ' **Network setup**'



FTP Address: Your DDNS host name

User ID: The User Name which was set under **FTP**, ' **Network setup**' Password: The Password which was set under **FTP**, ' **Network setup**'



After login is successful, you will be able to upload/download files via FTP Server.

### 12. Virtual Remote Control

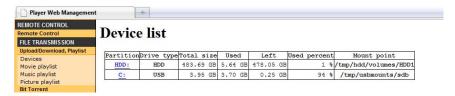
This product is equipped with a virtual network remote control. This feature allows you to remote your player from wherever you are. To access the unit you can use your mobile phone or computer as far as they are in the same local network.

#### **Network Remote control**

- To open the network remote control, please enter the IP address of the unit into your web-browser. E.g. IP address 192.168.0.9, and the port: 1024 (//192.168.0.9:1024).

#### **Upload/download files**

- You can view the status of your internal hard disk or the attached USB storage device from anywhere over the network/ internet.
- For up- and downloading files, please use Microsoft® Internet Explorer.



#### Upload

- Click on "Device" and then a select a drive (e.g. HDD). Then select the folder where the file should be uploaded. Next click the "Browse" button and select the file you want to upload. Finally click on the "Upload" button.

#### **Download**

- Click on "Device" and then a select a drive (e.g. HDD). At this point you see the content of your drive and are able to download the selected files.



#### BitTorrent management

View and manage your BitTorrent tasks remotely over the network/ internet.



#### HTTP Server Configuration to access via the Internet

#### Setting up your device:

- Assign a manual Fixed IP address for the product, for example 192.168.0.9
- Assign the same subnet mask as your router (usually 255.255.255.0)
- Assign the gateway of your router (router's local IP address, usually 192.168.xxx.xxx)...
- Assign the DNS address of your router (router's local IP address, usually 192.168.xxx.xxx).

Please refer to your router documentation on getting this information from your router

#### Setting up your router:

- Configure the HTTP server service at your router and enter the IP address of your device, for example, 192.168.0.9. Additionally set up the HTTP port to port 80 (default).

#### Use of a dynamic IP address

- At common internet connections the WAN IP address of the internet connection is changing every 24 hours. For this reason, the use of a dynamic DNS is recommended. This allows you to access your device by an individually defined name and replaces the recurrent update of the WAN IP address of your router.
- In order to get a DynDNS account, sign up for a free DDNS domain for one of the sites that offer this free service, such as www.dyndns.com. More information can be found in various tutorials on the topic "Setting up dyndns"
- Finally enter the account information on the DDNS page of your router and enter your host name, then user name and password. Please read the instruction manual of your router if your router supports the DDNS service and how to obtain this information for your router.

To access via HTTP server from out of your local network, launch a web browser such as Microsoft® Internet Explorer and enter following data into the address bar:

 http://123.456.789.000:1024 where 123.456.789.000 is the WAN IP address of your router. Please refer to your router documentation on getting this information from your router.

or

http://DDNS-HOST-NAME:1024, where DDNS-HOST-NAME is the host name which you
have signed up for at your desired DDNS service provider.

### 13. Upgrading the Firmware

The firmware is the operating system (OS) installed on the device. Firmware upgrades can bring new features, improvements and bug fixes.

Please refer to **System Update** in chapter '3.4 Changing System Settings' for more details.

You can also use the following method to upgrade the firmware:

- Copy 'install.img' to the root directory of a USB key;
- Plug the USB key to the USB HOST port on the player;
- Press and hold the POWER button on the front panel, and connect the player with power supply;
- Wait for more than 3 seconds, and then loose your finger on the POWER button.

Then the upgrade process will start automatically. The LED indicator on the front panel will be enlightened and flashing during installation. If it is connected to a TV set, an install page will appear on the TV screen.

### 14. Appendixes

#### 14.1 Specifications

#### I/O INTERFACES SUPORTED:

- 3.5" SATA HDD
- USB 2.0 HOST port x 2 (compatible to USB 1.1)
- USB 2.0 DEVICE port (connecting to PC)
- Composite (CVBS) A/V jack
- Component Y/Pb/Pr jack
- EURO Scart
- HDMI V1.3 interface
- S/PDIF coaxial & optical jack
- DC-IN 12V

#### FILE SYSTEM SURPORTED:

FAT/FAT32/NTFS/EXT3

#### **CONTENT FORMATS SUPPORTED:**

- AVI, VOB, MKV, MOV, MP4, MPG, TS, WMV, DAT, IFO, RM, RMVB, ISO (DVD & BluRay), AVCHD, MTS, M2TS, M4V, ASF, FLV, XviD, DivX 3/4/5, resolution up to 720p/1080i/1080p
- MP3, OGG, WMA, WAV, AAC, FLAC, DOLBY DIGITAL, DOLBY DIGITAL PLUS, DTS, DTS True HD & Downmix
- HD JPEG, JPG, BMP, GIF, TIF, PNG

#### **VIDEO CODECS SURPORTED:**

- MPEG-1
- HD MPEG-2
- HD MPEG-4 SP/ASP/AVC (H.264)
- WMV9 (VC-1)
- RealNetworks (RM/RMVB) 8/9/10, up to 720p

#### **AUDIO CODECS SURPORTED:**

 MP2/3, OGG Vorbis, WMA (DRM, and Advanced Profile not supported), PCM, LPCM, MS-ADPCM, LC-AAC, HE-AAC, COOK, RA-Lossless

#### **SUBTITLE FORMATS SURPORTED:**

SRT, SMI, SSA, ASS, IDX/SUB, SUB

#### **NETWORK FEATURE**

- 10/100Mbps Auto-Negotiation Ethernet
- 802.11b/g/n WLAN, up to 300Mbps (supported by optional WLAN USB Adapter)

Note: The specifications and design of this product are subject to change without notice.

#### 14.2 Frequently Asked Questions

Question 1. When I try to disconnect the USB device, I keep on getting "The device 'Generic volume' cannot be stopped right now. Try stopping the device again later." message, what should I do?

#### Answer:

Close any program that might be accessing data on the player, including Windows® Explorer. If it does not work, close all programs and wait for another 20 seconds, then try the green arrow icon again. If it still does not work, you should shut down the player and disconnect the USB cable.

# Question 2. I find new file names and folder names that I never created before or they have strange gibberish names.

#### Answer:

Most likely, the player's file allocation table (FAT) has been corrupted. This might be due to the player shutting down (due to low battery power) while reading or writing to your computer by the USB connection. Windows and Macintosh often write extra files to the hard disk such as finder.def or System volume info. These are normal and will not do any harm to the player.

# Question 3. I used my player to transfer files back and forth between different computers. Will defragmenting the player hard disk do any harm to it? Answer:

Defragmenting the player hard disk may be useful after having transferred many files to and from the player. It is never harmful to use the defragment on the player. Make sure no other programs are running while using the Windows® defragment utility. Make sure you have connected the player with the external power adapter during this procedure.

#### Question 4. My files have disappeared from the player.

#### Answer:

Make sure that you browse your files via the correct browser mode which means correct filtered views such as Photos, Music, or Movies.

### Question 5. During power on, why does the TV will have a short flashing, blue screen or screensaver?

#### Answer:

This is normal, when the system initializes, it will setup the corresponding parameters so it can output the correct video signal to the TV, during the initializing time, the TV will receive incorrect signals or the signals will not be stable and will cause the TV screen to flash, some TV's will treat this as no signal, and will display a blue screen or screensaver.

# Question 6. Why when I switch to Y/Pb/Pr 480p, 576p, 720p, 1080i, and 1080p, does the TV screen display an unwatchable picture?

#### Answer:

Please check if your TV supports Y/Pb/Pr 480p, 576p, 720p, 1080i, and 1080p output, if your TV does not support, please use the A/V signal display instead, press the TV SYSYEM button

on the remote control, then switch the TV's video input to NTSC or PAL.

# Question 7. Why is there no sound on movie or music playback when using Y/Pb/Pr component output?

#### Answer:

Y/Pb/Pr output is a video output only, and does not include sound signals. When using Y/Pb/Pr output, please plug the A/V OUT or the S/PDIF jack to output sound.

## Question 8. I cannot get SSID name, the screen always displays: 'Can't get any SSID!!' Answer:

When the WLAN USB Adapter is connected to the player, it needs some time to get initialized. Please wait for about 1~2 minutes and try refreshing the SSID list again.

## Question 9. I cannot see files shared on my computer via Browser->Network menu. Answer:

Please check following items:

- 1) Connect the player to network and obtain an IP address first;
- 2) Please enable NetBIOS of TCP/IP on computer;
- 3) Please check your PC's firewall settings;
- 4) Please enable your PC's 'Guest' account;
- 5) Please share the folders which you wish to browse on your PC, and make sure that 'Everyone' or 'Guest' has the right to access.

## Question 10. I configured everything correctly, but still cannot get the wireless network or UPnP function to work.

#### Answer:

Are you using a firewall such as Norton Internet Security, McAfee Personal Firewall, Zone Alarm, etc. or even the built-in firewall of Windows XP? (Don't forget that Service Pack 2 for Windows XP automatically upgrades your firewall and turn it on by default)

If you have a firewall, it may need to be configured or have exceptions created to allow you to see and communicate with the player on the network. To test if your firewall is preventing network communication (including PING and access shared folders), try disabling it to see if you can connect. If you can connect with the firewall disabled, you may need to add the player to the 'Trusted' list or configure the firewall for local intranet access. Worst-case, disable your firewall long enough to use the player, then enable it again when done.

# Question 11. I am using the 802.11n Wi-Fi dongle with an 802.11n wireless router, why the speed is still 802.11g 54Mbps rather than 300Mbps?

#### Answer:

The IEEE 802.11n Draft standard prohibits using high throughput with WEP or TKIP as the unicast cipher. If you use these encryption methods (e.g. WEP, WPA-TKIP), your data rate will drop to 54 Mbps. You may contact the Access Point or router manufacturer to download the latest firmware, or try other encryption methods (WPA2-AES or WPA2-TKIP), or choose to configure an unsecured profile, but this option is not recommended.

#### 14.3 Copyrights and Trademarks

#### Copyrights

**All rights reserved**. No part of this manual may be reproduced, or transmitted in any form or by any means, whether by electronically or mechanically, without the express written permission from the copyright holder.

Copyrighted materials, such as software, music files, or movies, are protected by local law, and may not be illegally copied or used without permission from the copyright owner.

#### **Trademarks**

Microsoft and Windows are registered trademarks of Microsoft Corporation.

All other trademarks are property of their respective holders.



Manufactured under license under U.S. Patent #'s: 5,451,942; 5,956,674; 5,974,380; 5,978,762; 6,487,535 & other U.S. and worldwide patents issued & pending. DTS and the Symbol are registered trademarks, & DTS 2.0+ Digital Out and the DTS logos are trademarks of DTS, Inc. Product includes software. © DTS, Inc. All Rights Reserved.



Manufactured under license from Dolby Laboratories.

Dolby and the double-D symbol are registered trademarks of Dolby Laboratories.

#### 14.4 Warranty

#### What your warranty does not cover:

- -Acts of nature, such as fire, static discharge.
- -Damage from unauthorized repair, alteration or accident.
- -Damage from misuse or neglect.
- -A unit that has been modified or incorporated into other products or is used for institutional or other commercial purposes.
- -Loss of customer's software, firmware, information, or memory data.
- -Improper handling or installation.

#### 14.5 GPL Statement

This product contains free software which is licensed under the GNU General Public License. After you purchase this product, you may procure, modify or distribute the source code of the GPL/LGPL software that is used in this product.

To obtain a copy of our open source software, please contact our support center and we will provide you with a CD-ROM of the source code that is used, charging only the actual expense involved. However, please be noted that we can not provide guarantee with the source code, and there is also no technical support for the source code from us.

#### **TECHNICAL INFORMATION**

License information for the software used in the unit.

This product contains Free Software which is licensed under the GNU General Public License. After you purchase this product, you may procure, modify or distribute the source code of the GPL/LGPL software that is used in this product.

If you contact our Support Center, we will provide you with a CD-ROM of the source code that is used, charging only the actual expensed involved. However, please be noted that we can not provide guarantee with the source code, and there is also no technical support for the source code from us.

#### **GNU GENERAL PUBLIC LICENSE**

Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc. 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301, USA

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

#### Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Lesser General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work

based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

- a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.
- b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.
- c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

- 3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:
- a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
- b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
- c) Accompany it with the information you received as to the offer to distribute corresponding

source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

- 4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.
- 5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.
- 6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.
- 7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

- 8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.
- 9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### **NO WARRANTY**

- 11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.
- 12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.