

YFi2TV_{HD} User's Guide

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Preface

■ The purpose of this document is mainly to introduce how to use YFi2TV_{HD} device completely through various PC2TV applications.

Terms in this Document

- **PC2TV applications:** There are several applications included:
 - PC2TV application: To project your PC's screen to the TV, and then control your PC's applications at the side of TV, including audio and video playback, office working, web surfing, and even playing tiny games.
 - DLNA-DMR applications: To receive streaming contents from DLNA-DMC/DMS device and then play it on the TV / monitor.
- YFi2TVHD device: It indicates the ARM-based hardware system for PC, smart phone, and tablet-PC to connect to run PC2TV applications.
- **PC2TV utility**: The program on your PC to operate PC2TV application.
- **PC2TV Benchmark Tool**: The program to evaluate your PC capability for PC2TV application.
- "Play" PC2TV application: To Click "Play" key from PC2TV utility to project the PC's desktop to the TV or monitor.

1 PC2TV Application

1.1 Hardware & Software Support

- YFi2TVHD device is designed to be a receiver for PC2TV application, and you can run PC2TV utility on your PC to project the screen to your TV through this device.
- In order to run PC2TV application smoothly, please refer to the following hardware recommendation.
- The performance of PC2TV application might be affected by PC capability, network bandwidth, desktop resolution, and "Optimum Mode", please also refer to <u>Section</u> <u>1.3.2.2</u>, <u>Section 1.4.3.2</u>, and <u>Section 5.1.6</u>.

1.1.1 Hardware Recommendation

Desktop/Workstation PC

- CPU: Intel Core 2 Duo 2.0G or better
- Chipset: Intel 965 series chipset or better
- ♦ Memory: DDR2-800, 2GB or better
- Graphic Card: NVIDIA GeForce 8400GS / ATI Radeon X300 or better
- Network: 802.11 g/n Wi-Fi and/or 100/1000 Mbps Ethernet

Notebook/Laptop PC

- CPU: Intel Core 2 Duo 2.0G or better
- Chipset: Intel 965 series chipset or better
- ♦ Memory: DDR2-800, 2GB or better
- Graphic: Chipset integrated (Intel X3100 Graphic) or NVIDIA GeForce Go
 8200M / ATI Radeon Mobility X300 standalong graphic chip or better
- Network: 802.11 g/n Wi-Fi and/or 100/1000 Mbps Ethernet

1.1.2 Supported OS

- Windows 7, x86 and x64 (Recommendation)
- Windows Vista (Service Pack 1 or later), x86 and x64
- Windows XP (Service Pack 3 or later)

1.1.3 Supported USB Devices on YFi2TVHD Device

- USB HID: Mouse / Keyboard.
- USB Flash disk for firmware upgrade.

1.2 Network Connection

1.2.1 Supported Network Types

The following network types are supported by PC2TV application.



1.2.2 Waiting for Connection on YFi2TVHD Device

- You have to power on the YFi2TVHD device, wait for a while, and the waiting screen would be shown on your TV / Monitor.
- If you want to connect YFi2TVHD device by Ethernet, it is suggested to connect Ethernet cable before powered it on. Please also refer to <u>Section 1.2.3.1</u>and <u>Section 6.1</u>.



- The screen of YFi2TVHD device should stay at the standard waiting screen as the picture.
 - The device information, Wi-Fi configuration, IP address, and firmware version are shown here.
- For the connection of Wi-Fi Direct mode, the waiting screen would only show pin code on the TV / Monitor, please refer to <u>Section</u> <u>1.2.3.2</u>.

1.2.3 Network Connection Types

- Before running PC2TV application with your PC, the network should be connected by Ethernet or Wi-Fi.
- YFi2TVHD device supports three modes of Wi-Fi connections to link PC and it:
 - A. Wi-Fi Direct mode (Section 1.2.3.2)
 - B. Access Point (AP) mode (*Section 1.2.3.3*)
 - C. Station / Client (STA) mode (Section 1.2.3.4)

1.2.3.1 Ethernet Connection

- Please refer to <u>Section 1.2.1</u>, the Network Type 1 & 2 & 6 & 9 should be connected by Ethernet.
- After the YFi2TVHD device is ready as <u>Section 1.2.2</u>, please confirm the Ethernet cable is connected well on your PC, the device, and/or the AP Router.



The Ethernet connection should be ready on your PC; the IPv4 address should have gotten 192.168.x.x or 169.254.x.x, Please refer to <u>Section 6.1</u>. Sometimes, the network might spend a long time to finish the connection. Please refer to <u>Section 1.2.4</u>.

1.2.3.2 Wi-Fi Direct Mode Connection

- Please refer to <u>Section 1.2.1</u>, the Network Type 7(with one Wi-Fi device) should be connected by Wi-Fi Direct Mode.
- Your PC's Wi-Fi device should have specific driver and utility to support Wi-Fi Direct, please follow its connecting procedures to connect you YFi2TVHD device by it.
- If the YFi2TV_{HD} device is configured for Wi-Fi Direct connection, it could not be connected or re-configured to other Wi-Fi connection modes.

1.2.3.3 Access Point Mode Connection

- Please refer to <u>Section 1.2.1</u>, the Network Type 5 & 7(with two Wi-Fi devices) & 8 & 10 should be connected by Wi-Fi AP mode.
- After the YFi2TVHD device is ready as <u>Section 1.2.2</u>, please connect your PC's Wi-Fi to the "device SSID" of the YFi2TVHD device.



ganize Connect To Disable this network device [Diagnose this connection *		
Network cable unplugged Network Cable Unidentifi	letwork Connection ed network .ite Wireless USB Adapter		
Wireless Network Connection Status	Network Connection Detai	ls	x
eneral	Network Connection Details	:	
Connection	Property	Value	~
IPv4 Connectivity: No Internet access IPv6 Connectivity: No Internet access IPv6 Connectivity: No Internet access Media State: Enabled Statistic: 2 days 08:5640 Duration: 2 days 08:5500 Speed: 150.0 Mps Signal Quality: Image: Constructive access Detais Wireless Properties Activity Sent — Received Bytes: 93,546,391,683 1,145,663,754	Connection-specific DN Description Physical Address DHCP Enabled IPVA 4ddress IPV4 Subnet Mask Lease Obtained Lease Optime IPV4 DHCP Server IPV4 DHCP Server IPV4 DNS Server IPV4 UNIS Server IPV4 UNIS Server IPV4 UNIS Server IPV6 DNS Servers IPV6 DNS Servers IPV6 DNS Servers	local Edmax nLie Wireless USB Adapter 00-1F-1F-64-C7-91 Yes 192.188.10.5 255.255.255.0 Monday, January 11, 2010 10:05:13 Thursday, January 21, 2010 7:08:29 192.168.10.1 Yes fe80::1935.7de0:8787:8c89%14 fec0:00-0fff::1%1	
Properties Sisable Diagnose			

The "device SSID" shows on the waiting screen as <u>Section</u> <u>1.2.2</u>.

The sample of "device SSID" in the left picture is "Smartstream_AP-77 8".

- The WEP/WPA/WPA2 key may be required, based on your YFi2TVHD network setting.
- After the Wi-Fi is connected, please check its readiness on your PC; the IPv4 address should have gotten 192.168.x.x or 169.254.x.x. Please refer to <u>Section 6.1</u>.
- Sometimes, the network might spend a long time to finish the connection. Please refer to <u>Section 1.2.4</u>

1.2.3.4 Station / Client Mode Connection

- Please refer to <u>Section 1.2.1</u>, the Network Type 3 & 4 & 7(with Wi-Fi Direct driver) should be connected by Wi-Fi STA mode.
- Before configuring the YFi2TV_{HD} device to Wi-Fi STA mode, you have to connect it by Ethernet or AP mode first, please refer to <u>Section 1.2.3.1</u> or <u>Section 1.2.3.3</u>.
- After connected the YFi2TV_{HD} device, please go to "Device Configuration" page to set the network in STA mode. Please refer to <u>Section 3.1</u> and <u>Section 3.4.2</u>.



After connected the YFi2TVHD device in STA mode, please connect your PC's Wi-Fi device to the same Access Point as set one.

1.2.4 Network Stability

- Sometimes, the network might spend a long time to finish the connection because of the Windows behaviors.
- Before the readiness of the network, you are not able to run PC2TV application or set its network configuration.
- Especially in Windows 7 / Vista, it would spend more time to detect the possibility of Internet connection when a new network is connected at the first time. Moreover, in the same phenomenon, you might experience a sudden disconnection¹ and reconnection again in a short time.

,		2:40 PM /15/2010
	Currently connected to:	43
	Identifying SmartStream_ No Internet access	AP-778
	Intel ABG	~
	Wireless Network Connection	~
	SmartStream_AP-778 Connect	ed 🚮
	9	5.01
	3Com	3.1
	chris2	341
	CITIZ	
	2	201
		3a1 3a1
	2	

- The Network icon in System Tray as the left picture presents that the network is not ready yet.
- At this moment, you can check the readiness by click the "Network" icon at the System Tray.
- If the connected network device still shows "Identifying", you are not able to run PC2TV application yet.



In Windows 7 / Vista, the yellow exclamation mark is normal to express that it is without Internet ability, and it would not affect PC2TV application anymore.

¹ it might cause "Stop" after PC2TV application has been "Play".

1.3 Installation of PC2TVUtility

1.3.1 Standard Installation

In order to install the PC2TV utility more stably, please close all of other programs before installation.





Click "Next" to install the PC2TV utility.



- After drivers and utility installed, the PC2TV benchmark tool would be prompted to evaluate your PC.
- Please refer to <u>Section</u> <u>1.3.2</u> to get more information.

PC2TV	
	InstallShield Wizard Complete The InstallShield Wizard has successfully installed PC2TV. Before you can use the program, you must restart your computer. Yes, I want to restart my computer now! No, I will restart my computer later. Remove any disks from their drives, and then click Finish to complete setup.
	< Back Finish Cancel

After the benchmarking is done, please choose "Yes" and then click "Finish" to restart your PC.

1.3.2 Benchmarking Your PC

The PC2TV Benchmark tool is a useful program to evaluate your PC capability to run the PC2TV application.

1.3.2.1 PC2TV Benchmark Tool

■ You can see the PC2TV benchmark tool when installation or manually start-up it from PC2TV folder under "All Programs".



After starting-up it, your can see the left dialog window. Please click "Analysis".



The evaluating process will run around 10 seconds.



- After evaluated, it will show the capability of your PC for PC2TV application.
- Click "Close" to close the PC2TV benchmark tool.

1.3.2.2 Star Level in PC2TV Benchmark Tool

The following star level is to evaluate your PC, and then give you some suggestions to run PC2TV application.

Stars	Level	Explanation
1 star	Lowest	The capability of CPU and Graphic are poor to support PC2TV application.
2 stars	Low	Acceptable for picture/music playback and web surf, but suggested to downgrade the desktop resolution to support video playback.
3 stars	Fair	Fair for picture/music playback and web surf; sometimes lag for video playback.
4 stars	Good	Smooth to support web surf and video playback.
5 stars	Excellent	Great capability to support PC2TV application.

The star level might be different, once you change the PC's desktop resolution or desktop theme setting in Windows 7/ Vista, please refer to <u>Section 1.4.3.2</u> and <u>Section 5.1.6.1</u>.

1.4 Usage of PC2TV Utility

In order to run the PC2TV application more stably and compatibly, please close all of other programs before starting-up it.

1.4.1 Basic Usage of PC2TV Utility

The following steps are for basic usage.



² Sometimes, the network might spend a long time to finish the connection, and even experience a sudden disconnection and reconnection again in a short time. Therefore, it would extend the waiting time before "Play" PC2TV application. Please refer to <u>Section 1.2.4</u>.



 ³ After clicking "Play", the PC's desktop resolution might be changed, please refer to <u>Section 6.2</u>.
 ⁴ After clicking "Stop", the PC's desktop resolution might be changed back to the original one, if it has changed ever.
 ⁵ After exiting the utility. the PC's desktop resolution might be changed back to the original one, if it has changed ever.

1.4.2 Extend Screen Playing (Windows 7 only)

■ No matter you are running the PC2TV application or not, you can "Play" the PC2TV application to the extend screen in Windows 7.

View ► Sort by Refresh Paste Paste shortcut Graphics Properties Graphics Options Intel(R) TV Wizard New New ► Screen resolution ● Gadgets ● Personalize ●	Click right key of your mouse on the desktop, and then select "Screen resolution".
Change the appearance of your display Change the appearance of your display Change the appearance of your display Detegt Identify Detegt Identify Display: I.Mobile PC Display Resolution: I366 × 768 (recommended) Qrientation: Landscape Advanced settings Connect to a projector (or press the 🏹 key and tap P) Make text and other items larger or smaller What display settings should I choose?	Select "Connect to a projector" (or just press the "" " key and tap "P") to open Windows Presentation mode.
OK Cancel Apply	Select "Extend" and then press "Enter" to run PC2TV application to extend screen. ⁶
Computer only Duplicate Extend Projector only	Select "Computer only" or "Duplicate" to go back to run it in primary screen. ⁷

■ If you are not able to see the 2nd display after selecting "Connect to a projector" or not able to "Play" extend screen after selecting "Extend", please refer to <u>Section 1.4.3.3</u>.

■ However, due to PC's manufacturing settings, there are a few PCs that are only able to "Play" extend screen with a monitor connected to its physical 2nd monitor output connector.

⁶ After selecting "Extend", the PC's desktop resolution might be changed, please refer to <u>Section 6.2</u>.

⁷ After selecting back to primary screen, the PC's desktop resolution might be changed, please refer to <u>Section 6.2</u>.

1.4.3 Advanced "Play" Management of PC2TV Utility

There are several adjustable configurations for advanced usage to "Play" PC2TV application.



1.4.3.1 Device Selections

You can see all of the connected SmartStream devices in the device list.



- Double click the "device name" to select/change the target device, if possible.
- In the left picture, the sample of selected "device name" is "SmartStream".



You can also double click to go to "Device Configuration" page. Please refer to <u>Section 3</u>.

1.4.3.2 "Optimum Mode" Settings

■ In order to provide the optimized performance between normal PC applications⁸ and video/movies playback, there are three settings for different using scenarios.



The bar of "Optimum Mode" is set at "PC" mode in default for normal PC applications.

- If you want to see PC video/movies, please set the bar of "Optimum Mode" to "Middle" mode.
- After drawing it, please click "Play" or "Apply" to apply it.
- If the performance of video/movie is still not acceptable in "Middle" Mode, you can set it to "Movie" mode.
- After drawing it, please click "Play" or "Apply" to apply it.

⁸ Normal PC applications include audio/music playback, office working, web surfing, storage access, printing, and playing tiny games, except video/movie playbock.

At "Movie" mode, it would spend more PC resources. The following table shows the reference platforms to support the appropriate media content type and maximum PC's desktop resolution at "Movie" Mode.

CPU & Graphic	RAM	Network ⁹ (Min. Bandwidth)	OS & Desktop Theme ¹⁰	Video/Movie Content	Max. Desktop Resolution
2 nd Generation Intel Core i3 / i5 / i7 series (SandyBridge) with CPU integrated graphic	2GB	802.11n Wi-Fi or 10/100M Ethernet (100 Mbps)	Windows 7 with "Aero Themes"	, Mpeg4/H.264, 1080P	1,920 x 1,080 ¹¹
Intel Core i3 / i5 / i7 2.0G per core with standalone graphic chip	2GB	802.11n Wi-Fi or 10/100M Ethernet (100 Mbps)	Windows 7 with "Aero Themes"	Mpeg4/H.264, 1080P	1,440 x 900(wide) 1,280 x 1,024
Intel Core 2 Duo 2.4G with standalone graphic chip	2GB	802.11n Wi-Fi or 10/100M Ethernet (90 Mbps)	Windows 7 with "Aero Themes" or Windows XP	0 Mpeg4/H.264, 720P	1,280 x 800 1,280 x 720
Intel Core 2 Duo 2.0G with chipset integrated graphic	1GB	802.11b/g Wi-Fi or 10/100M Ethernet (36 Mbps)	Windows 7 with "Basic and High Contrast Themes" or Windows XP	DVD/Mpeg2, 480P	1,024 x 768

- The performance of video/movies might get worse then "PC" and/or "Middle" mode, if your PC capability is worse then above requirements.
- Network bandwidth is another key factor to affect the PC2TV application. If it is under the above requirement, the display fluency might be poor. If this is the case, it is recommended to lower PC's desktop resolution or switch "Optimum Mode" to "PC" or "Middle" mode. Please refer to <u>Section 5.1.6.3</u> and <u>Section 5.1.6.5</u>.
- About the PC capability and supported desktop resolution, please also refer to <u>Section</u> <u>1.1.1, Section 1.3.2.2</u>, and <u>Section 6.2</u>.

⁹ About network, please also refer to <u>Section 5.1.6.5</u>.

¹⁰ About desktop theme, please also refer to <u>Section 5.1.6.1</u>.

¹¹ There are some other conditions to support 1,920 x 1,080 resolution, please also refer to <u>Section 6.2</u>.

1.4.3.3 Advanced Audio and Video Settings

There are two configurations of audio and video to change using scenarios of PC2TV application.



Device Name

PC

100

Keep PC Audio

Virtual Extend

Mo

Apply

- The PC audio is disabled in default after "Play" PC2TV application.
 - If your want to listen to the audio/music from both of PC and TV sides, please tick "Keep PC Audio".¹²
 - After ticking it, please click "Play" or "Apply" to apply it.
 - The "Virtual Extend" is enabled in default to provide more stable graphic handling for PC2TV application.
- If you got abnormal primary and/or extend display after "Play" PC2TV application, please untick it.
- After unticking it, please click "Play" or "Apply" to apply it.

¹² However, if the "Optimum Mode" was set at "Middle" or "Movie" mode with ticked "Keep PC Audio", the audio would be asynchronous between PC and TV sides.

1.5 Un-installation of PC2TV Utility

If you want to upgrade the PC2TV utility, you have to uninstall the previous version first.



Click the "PC2TV Uninstall" icon from "All Programs".



InstallShield Wizard	
	Maintenance Complete InstallShield Wizard has finished performing maintenance operations on PC2TV.
	< <u>B</u> ack Finish Cancel

- Click "Yes" to remove all of PC2TV components.
- If the PC2TV application is still playing, it will be ended automatically.
- Click "OK" to finish the un-installation.
- Restart your Windows after the un-installation is finished.

2 DLNA-DMR Application

2.1 Hardware & Software Support

- The Digital Living Network Alliance (DLNA) is a non-profit collaborative trade organization comprising more than 250 member companies who have stated the common goal of using standards-based technology to make it easier for consumers to use, share and enjoy their digital photos, music and videos. About DLNA, please refer to its web site: http://www.dlna.org/home
- SmartStream device is designed to be a DLNA-DMR (digital media renderer), and you are able stream contents from PC (Windows 7 based), Mac, smart phone, and Tablet-PC to your TV through this device. Please refer to <u>Section 6.4</u>.

2.1.1 Hardware Recommendation

- PC
 - ♦ CPU: 1.6 Ghz or better
 - Memory: 1.0 GB or better
 - ♦ Network: 802.11g/n Wi-Fi and/or 100/1000 Mbps Ethernet

Smart phone

- ♦ CPU: 800 Mhz or better
- ♦ Memory: 256 MB or better
- Network: 802.11g/n Wi-Fi or better

Tablet-PC

- CPU: 600 Mhz or better
- ♦ Memory: 256 MB or better
- Network: 802.11g/n Wi-Fi or better

2.1.2 Supported DMC / DMS

- Windows Media Player 12 on Windows 7 (for PC)
- Twonky Suite on Windows, Mac OS, Android (for PC / Mac / smart phone / tablet-PC)
- WonderMedia DMC APP on Android (for smart phone / tablet-PC)

2.1.3 Supported USB Devices on SmartStream Device

- USB Mouse
- USB Flash disk for firmware upgrade

2.2 Usage of DLNA in Windows 7

2.2.1 Turn-on Media Streaming

Before streaming a file to the DMR of SmartStream device by Windows 7, you have to connect the device with your PC and then turn on the media streaming first. You can also refer to <u>Section 1.2.1</u>.

Every time the device is disconnected with the PC, you have to run this section again before streaming a file to the DMR by Windows 7.





- "allowed" and then click "OK".
- In the left picture, the "Friendly Name" of DMR is "WonderMedia SmartStream-DMR".13

¹³ If you want to change the "Friendly Name", please refer to <u>Section 3.5</u>,

2.2.2 Stream A File to DMR

After turned on the media streaming as <u>Section 2.2.1</u>, Please follow the following steps to stream a file to DMR.



Open your folder with targeted media file(s).



Select the targeted file, and then click the right key of mouse on it.



- Move the cursor onto "Play to", and then the list of DMR device(s) would be prompted by the side of "Play To".
- Select a DMR device and then click it.



The DMC (Digital Media Controller) would be prompted on the desktop of Windows 7 for user to control, and the targeted file would start to be playback on the TV / Monitor through SmartStream device for a while.¹⁴



After end of the playback, the SmartStream device would be back to the waiting screen.¹⁵

2.3 DMR Control on SmartStream Device

■ If you connect a USB mouse to the USB connector on SmartStream device, you are able to control the streaming content easily by following operations:



Pause and Continue: double click the left key of mouse.

Stop or Next (if possible): double click the right key of mouse.

- Skip forward: roll forward the scroll wheel of mouse.
- Skip backward: roll backward the scroll wheel of mouse.

¹⁴ If the other SmartStream application is running, it would be ended and the device would be switched to DLNA-DMR mode directly, after the "Play To" started. The reverse is also true.

¹⁵ The end of DMR might back to YFI2TV application instead of waiting screen, once it was started when YFI2TV application was running,

3 Device Configuration

3.1 Go to "Device Configuration"

Before going to the "Device Configuration" of SmartStream device, the network should be well connected by Ethernet or Wi-Fi. Please refer to <u>Section 1.2.3</u>.



- Select "Network" from "Windows Explorer", and then double clock the "device name" form "Other Devices".
- The sample of "device name" in the left picture is "PC2TV Device".
- If you are not able to see any "device name" in "Network", please refer to <u>Section</u> <u>5.1.2.1</u>.
- If the warning page prompted, please click "Yes".
- The "SmartStream" page would be showed as default page in "Device Configuration".

3.2 Device Setting

This page is for device name change and firmware upgrade of SmartStream device.

3.2.1 Device Name Change



- You can change the SmartStream's device name in this page.
- After changing the "Device Name", please click "Set".

3.2.2 Firmware Upgrade

■ YFI2TVHD device would not show this method for firmware upgrade.



Please browse your PC to get an upgrade file (.tgz) for firmware upgrade of SmartStream device.



After confirmed the file, please click "Start" to send the file to SmartStream device, and then the upgrading procedure will start automatically.

Before finished the sending process, you can click "Abort" to break it off.

3.3 Overscan Setting

If the border of PC's desktop is hidden on your TV, you can try to adjust "Overscan Setting" in this page. Please also refer to <u>Section 5.1.4</u>.



3.4 Network Settings

"Network Setting" is for you to adjust the various network configurations.

3.4.1 Access Point Mode Setting

SmartStream device is also set as a Wi-Fi Access Point in default.



Click "AP Mode" button to go to "Access Point Mode Setting" page.

- Please click "Enable AccessPoint Mode" to set it as an Access Point.
- You can change the IP types, DHCP status, and Wi-Fi configurations here. Please also refer to <u>Section 6.1</u>.
 - If you are not familiar with these settings, any changes might cause the device could not be connected anymore.
- If this is the case, you can try to reboot it with Ethernet cable to modify the settings again. Please refer to <u>Section 1.2.3.1</u> and <u>Section 6.1</u>.





Windows I	nternet Explorer		83
?	The webpage you ar Do you want to close	re viewing is trying to close the windov e this window?	v.
		Yes <u>N</u> o	

After changed the settings, please click "Save".

If you do not want to make changes, please click "Cancel".

Once you "Save" the new settings, please click "OK" to reload this page.

If the warning page prompted, please click "Yes" to close the setting window, meanwhile, the SmartStream device would go into reloading stage.

3.4.2 Station / Client Mode Setting

SmartStream device could be set as a Wi-Fi station to connect to another Access Point.



Click "STA Mode" button to go to "Station / Client Mode Setting" page.

- Please click "Enable Station Mode" to set it as a Wi-Fi station.
- Then you have to fill in the SSID, encryption type and KEY of your target Access Point.
 - After done it, please click "Save", and then the device would reboot and connect to the targeted Access Point automatically.
 - If you get troubles with auto-connecting, please reboot it with Ethernet cable to modify the settings again. Please refer to <u>Section 1.2.3.1</u> and <u>Section 6.1</u>.
- If you do not want to make changes, please click "Cancel".

3.5 Change the Friendly Name of DMR

Before changing the "Friendly Name" of DMR, the network should be well connected by Ethernet or Wi-Fi. Please refer to <u>Section 1.2.3</u>.



4 Firmware Upgrade

4.1 Upgrade the PC2TV Utility

If you are going to upgrade your PC2TV utility in Windows, please uninstall the previous one and then install the new one. Please refer to <u>Section 1.5</u> and <u>Section 1.3.1</u>.

4.2 Upgrade the SmartStream Device

- The firmware upgrade for SmartStream device have two ways.
 - A. By Network (Section 4.2.1)
 - B. By USB (*Section 4.2.2*)

4.2.1 Upgrade Firmware of SmartStream device by Network

Before upgrade the firmware, please prepare the suitable firmware package and one USB flash disk.





- Prepare the firmware upgrade file in your PC, and then connect you PC to the SmartStream device. Please refer to <u>Section</u> <u>1.2</u>.
- The sample of firmware upgrade file in the left picture is "WM8440_0170_Firm wareInstall.tgz".
- Go to the "Device Configuration" page. Please refer to <u>Section</u> <u>3.1</u>.
- Select the upgrade file to upgrade
 SmartStream device.
 Please refer to <u>Section</u>
 <u>3.2.2</u>.
After finished to send the upgrade file, the firmware upgrade procedure will start.





- The firmware upgrade status would be shown on the screen of TV / Monitor.
- The upgrade procedures will run step by step automatically.
- During the upgrading, please avoid to power off the device, or else you may damage the device.
- After the firmware upgrade is finished, the device would reboot automatically.

4.2.2 Upgrade Firmware of SmartStream device by USB

Before upgrading the firmware, please prepare the firmware upgrade file and one USB flash disk.

_ **D** _ X

Size

Q

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Organize ▼ Include ir	n library 🔻 Share with 💌	Burn »	•N •	0
🔆 Favorites				
演 Libraries	WM8440_0 170_Firmwa			
🖳 Computer	reInstall.tgz			
🙀 Network				
1 item				

New folder

JFirmwareInstall 5/19/2011 2:21 PM

▼ ≤→ Search HDDREG (E:)

Туре

File folder

Date modified

Com... > HDDREG ... >

Organize 🔻

☆ Favorites

🥃 Libraries

👰 Computer

1 item

Share with 🔻

Burn

Name

- Extract the firmware upgrade file to get the "FirmwareInstall" folder.
- The sample of firmware upgrade file in the left picture is "WM8440_0170_Firm wareInstall.tgz".
 - Copy the entire "FirmwareInstall" folder to the root folder of the USB flash disk.



- Plug the USB flash disk into one of USB ports of SmartStream device, and then power on the device.
- The upgrade procedures will run step by step automatically.



During the upgrading, please avoid to power off the device or remove the USB flash disk, or else you may damage the device.



After the firmware upgrade is finished, please remove the USB flash disk, and then the device would reboot automatically.

5 Troubleshooting and Known Issues

5.1 Troubleshooting of YFi2TVHD

5.1.1 Run as Administrator in Windows 7 / Vista

■ If the network is connected well, but the PC2TV utility cannot find any SmartStream devices in Windows 7 / Vista, please restart-up it as administrator.



5.1.2 Network Discovery and Firewall Checking

■ If the network is connected well, but the PCV2TV utility cannot find any SmartStream devices, please try to check the status of each following parts and get solutions.

Select "Network" from ✓ 4 Search Network C V Vetwork 2 "Windows Explorer". Organize 👻 Network and Sharing Center 🛛 Add a printer 🔹 Add a wireless device ----Network discovery is turned off. Network computers and devices are not visible. Click to change... If you see the warning ★ Favorites E Desktop bar shows "Network Downloads Secent Places discovery is turned 🔚 Libraries Documents off" as the left picture, J Music Pictures please click it. Videos 🝓 Homegroup 📜 Computer 🟭 Local Disk (C:) Data (D:) APACER 256M (E:) Removable Disk (F:) Network 0 items r Select "Turn on 🔾 🗢 🗣 🕨 Network ✓ ✓ Search Network 2 Organize Vetwork and Sharing Center Add a printer Add a wireless device - - network discovery and Network discovery is turned off. Network computers and devices are not visible. Click to change... file sharing". 😵 Turn on network discovery and file sharing ☆ Favorites Help about network discovery 📃 Desktop Open Network and Sharing Center Downloads Secent Places 🔚 Libraries Documents J Music Pictures Videos 🝓 Homegroup Computer Local Disk (C:) 👝 Data (D:) APACER 256M (E:) Removable Disk (F:) 📬 Network 0 items 6 × Network discovery and file sharing Click "Yes" to turn on Do you want to turn on network discovery and file sharing for all network discovery and 33 public networks? file sharing. What is network discovery? > No, make the network that I am connected to a private network Network discovery and file sharing will be turned on for private networks, such as those in homes and workplaces. Yes, turn on network discovery and file sharing for all public networks Cancel

5.1.2.1 Turn on Network Discovery and File Sharing

5.1.2.2 Unblock PCV2TV Application from Windows Firewall





5.1.2.3 Enable SSDP and UPnP from Windows Firewall

Windows Firewall with Advance	Inbound Rules					Actions	-
El bebaund Rules Outbound Rules A Connection Security Rules	Name Mame Med Device Spy Control Device Spy Control Device Spy Control Device Spy Descrit/Cache Content Retrieval (HTP-In) BranchCache Hosted Cache Serve (HTL. BranchCache Per Discorrey (VSD-In) Connect to a Network Projector (TCP-In) Connect to a Network Projector (TCP-In) Connect to a Network Projector (TCP-In)		Enabled Yes Yes Yes Yes No No No No No No No No No No	Action Allow Allow Allow Allow Allow Allow Allow Allow Allow Allow Allow	• •	Hours Rules New Rule Ver Rule Filter by Profile Filter by Group View Refresh Befresh Befresh Help Selected Rems Disable Rule Cut	•
,	Connect to a Network Projector (VSD Fi- Connect to a Network Projector (VSD-In) Core Networking - Destination Unrescha Core Networking - Dynamic Host Config Core Networking - Dynamic Host Config Core Networking - Internet Group Mana Core Networking - Internet Group Mana Core Networking - Internet Group Mana	Private, Public All All All All	No No Yes Yes Yes Yes Yes	Allow Allow Allow Allow Allow Allow Allow Allow		a Copy ⇒ Copy > Delete ■ Help	

- Select "Inbound Rules" from the left window.
- Chick "PCV2TV" is enabled in "Private" and "Public" profiles.
 - If not, enable them.



- Then check "Network Discovery (SSDP-In) and (UPnP-In)" are all enabled in "Private", "Public", and "Domain" Profile.
- If not, enable all of them.

Windows Firewall with Advance	Outbound Rules					Actions
III Inbound Rules Contound Rules Connection Security Rules	Name Meterok Discovey (JLM-R-UDP-Out) Meterok Discovey (JM-Datagam-Out) Meterok Discovey (JM-Datagam-Out) Meterok Discovey (JM-Datagam-Out) Meterok Discovey (JM-Mame-Out) Meterok Discovey (JM-Mode) Meterok Discovey (JM-Mo	Group Network Discovery Network Discovery	Profile Domain Drivate Public Domain Private Public Domain Domain Domain Domain Public Private	Enabled No No Yes Yes Yes Yes No Yes Yes Yes Yes Yes Yes	•	Outbound Rules Coutbound Rules Coutbound Rules Filter by Profile Filter by State Filter by Sta
	Network Discovery (UPnPHost-Dut) Network Discovery (UPnPHost-Dut) Network Discovery (UPnP-dut) Network Discovery (UPnP-dut) Network Discovery (UPnP-dut) Network Discovery (UND Events-Dut) Network Discovery (UND Events-Dut) Network Discovery (UND Events-Dut)	Network Discovery Network Discovery Network Discovery Network Discovery Network Discovery Network Discovery Network Discovery Network Discovery	Public Domain Private Public Domain Domain Public Brite	Yes Yes Yes Yes Yes No Yes Yes		a Con Copy X Delete Help
	Network Discovery (WSD EventsSecure-O. Network Discovery (WSD EventsSecure-O. Network Discovery (WSD EventsSecure-O. Network Discovery (WSD-Out) Network Discovery (WSD-Out) Network Discovery (WSD-Out)	Network Discovery Network Discovery	Private Public Private Domain Public Private Domain	Yes Yes No Yes Yes No	-	



- Select "Outbound Rules" from the left window.
 - Check "Network Discovery (SSDP-out), (UPnPHost-out), (UPnP-Out)" are all enabled in "Private", "Public", and "Domain" Profile.
 - If not, enable all of them.

After enabled/checked all of above items, you might need to "Restart" your Windows and then run PCV2TV utility again.

5.1.3 Audio Playback Issue

■ This section is to check and troubleshoot the audio device when "Play" PCV2TV application or after "Stop" PCV2TV application.

5.1.3.1 "Play" Mode Issue

If the audio does not work well after "Play" PCV2TV application, please check the audio devices on your media player.

For example: Windows Media Player 12



it again.

5.1.3.2 After "Stop" Issue

If the audio does not work well after "Stop" PC2TV application, please check the audio devices on your PC.



Open the "Sound" from "Control Panel".



- The "Default Device" in the "Playback" tab should be set at your PC's hardware audio speakers.
- In the left picture, the PC's hardware audio speakers is "High Definition Audio Device".
 - If not, select it and then click "OK" or "Apply" to save the setting.
 - Then close your media player and restart-up it again.

5.1.4 Display Overscan Issue

If the border of PC's desktop is hidden on your TV, you can try to adjust it.



The border of PC's desktop is hidden as the left picture.



- Go to the "Device Configuration" page. Please refer to <u>Section</u> <u>3.1</u>.
- You can click "+" or " " of Width or Height to modify the hidden border. Please refer to <u>Section 3.3</u>.¹⁶

¹⁶ In order to provide the stable performance for movie/video playback, the overscan adjustment function is disabled when the display resolution is at 1080P. Please refer to <u>Section 6.2</u>.

5.1.5 Movie and Video Playback Issue in Windows XP

■ If you play a movie through PC2TV application, but only hear its audio without video displaying in your media player in Windows XP, please see the following steps to solve it.



Click right key of your mouse on the desktop, and then select "Properties".



Are you having problems with your graphics hardware? These settings can help you troubleshoot display-related problems.

Manually control the level of acceleration and performance supplied by your graphics hardware. Use the Display Troubleshooter to assist you in making the change.

None All accelerations are enabled. Use this setting if your computer has no

OK

🗍 🗍 Full

Cancel Apply

Hardware acceleration

Hardware acceleration:

problems. (Recommended)

Enable write combining

Select "Settings" tab and then click "Advanced".

- Select "Troubleshoot" tab and then move the Hardware acceleration to "Full".
- Click "OK" or "Apply" to save the setting.
- Then close your media player and restart-up it again.

5.1.6 Poor Display Fluency of PCV2TV Application

■ If you get bad or poor fluency in playing a video or movie through PCV2TV application, please try to check the status of each following parts and get improved solutions.



5.1.6.1 Switch Desktop Themes of Windows 7 / Vista

Click right key of your mouse on the desktop, and then select "Personalize".



The "Aero themes" should be for better PC capability, and the "Basic and High Contrast Themes" should be for poorer PC capability. Please refer to <u>Section 1.4.3.2</u>, and <u>Section</u> <u>5.4.1</u>.



5.1.6.2 Check the "Optimum Mode" setting



- Please refer to Section 1.4.3.2 to check the setting of "Optimum Mode".
- If the "Optimum Mode" is set at an inappropriate mode, please modify it.

5.1.6.3 Check PC's Desktop Resolution



Click right key of your mouse on the desktop, and then select "Screen resolution".

00-	All Control Panel Items Display Screen Resolution	 ✓ ✓ Search Control Panel 	Q
	Change the appearance of your display		ſ
		Detect Identify	
	Display: 1. Mobile PC Display <u>Resolution:</u> 1280 × 800 (recommended) <u>Orientation:</u> Landscape		E
		Advanced settings	
	Connect to a projector (or press the 💐 key and tap P)		
	Make text and other items larger or smaller		_
	What display settings should I choose?		

Please refer to Section 1.4.3.2 and Section <u>6.2</u>.

If the "Resolution" setting is over the maximum supported one of your PC capability, please change the resolution to an appropriate one.

5.1.6.4 Check CPU Usage



Click the right key of your mouse on the taskbar, and then select "Start Task Manager".

Check the "CPU
Usage" under the
"Task Manager"
window; it should be
under 80% .

Applications Proc	esses	Services	ces Performance Netwo			orking Users		
		1.0	ser Name	CPU		,		
Image Name					Memo		4	
dwm.exe			/in7_64	14		776 K	1	
PC2TV.exe *32	2		/in7_64	12		260 K		
taskmgr.exe			/in7_64	01	Contraction of the	412 K	1	
mspaint.exe			/in7_64	00	2.5	772 K	1	
vadrun.exe *3	_		/in7_64	00		696 K	1	
ttermpro.exe *	32		/in7_64	00		084 K	ें	
taskhost.exe			/in7_64	00	1	660 K	1	
RAVCpl64.exe		W	/in7_64	00	1,	948 K	1	
usbolrpc.exe *	32	W	/in7_64	00	1,	524 K	1	
explorer.exe		W	/in7_64	00	23,	408 K	1	
winlogon.exe				00		664 K		
csrss.exe				00	6,	176 K		
4								
	_		_	_			_	
Show proce	esses fi	rom all user	s		End Pro	cess		



If not, please save your documents, and close unused programs from "Applications".

5.1.6.5 Check Wi-Fi Link Speed



- This solution is only for
 Wi-Fi connection.
- Click the right key of your mouse on the taskbar, and then select "Start Task Manager".



- Click the "Networking" tab.
- Check the Wi-Fi link speed; it should be higher than **36 Mbps**. Please also refer to <u>Section 1.4.3.2</u>.
- If not, try to move the SmartStream device to different positions that should be farther away from other electronic equipments, or closer to your PC. The recommended distance is less than 6 meter.
- If the above solution is still not useful, try to disconnect the Wi-Fi connection and then connect it again.

5.1.6.6 Change the Wi-Fi Channel

		PC	SI	\vee					This solution is only for
Device	Enable Acc	essPoi	nt Mod	le: 💿	1967	100	1 AS	-	the connection of
	Obtain an IP				e 🧿 disabl	e 🔽 auto			Wi-Fi AP Mode.
Overscan	IP Address : Netmask :	192 255	. 168 . 255	. 10	. 1				Go to the "Device
	Gateway :	0	. 0	. 0	. 0			_	Configuration page.
Network Setting	DNS :	0	. 0	. 0	. 0				3 1 3
AP Mode	DHCP Serve DHCP IP sta	10 10 10 10 10 10 10 10 10 10 10 10 10 1		and the statements	. 2				Please refer to <u>Section</u>
	DHCP IP en	South Statements			255				<u>3.1</u> and <u>Section 3.4.1</u> .
STA Mode	Wireless ON				110			-	Fix a specific channel
	SSID : Sn SSID broade			AP-179					instead of "Auto". ¹⁷
	Channel : T		Vianhla		Auto 👻			-	"Save" it and then
	Encryption T Key :	ype: L	Isable			1.24			connect the Wi-Fi
	Save	Cance							again.

- If the fluency is still poor after fixed a channel, please try other ones.
- If your PC's Wi-Fi could not get the "device SSID" anymore after changing the channel of SmartStream device, it means your PC's Wi-Fi could not support this channel. Please reboot the device with Ethernet cable to change the channel settings again. Please refer to *Section 1.2.3.1*.

5.1.6.7 Change the connection to Ethernet

If the Wi-Fi modification could not still improve the fluency, please try to connect PC and SmartStream device by Ethernet cable. Please refer to <u>Section 1.2.3.1</u>.

¹⁷ The standard channels of Wi-Fi are 1, 6, 11, and you can also try channel 12, 13, or 14, if possible.

5.2 Troubleshooting of DLNA-DMR

5.2.1 No "Play To" Selection in Windows 7

■ If you are not able to see "Play To" when clicking the right key of mouse on a targeted media file in Windows 7, please try to check the status of each following parts.

The format of targeted file is supported by SmartStream device. Please refer to <u>Section 6.4</u>.

The "Media Streaming" of Windows 7 should be turned on. Please refer to <u>Section</u> <u>2.2.1</u>.

The DLNA required services and protocols might be blocked by Windows. Please refer to <u>Section 5.1.2.1</u> and <u>Section 5.1.2.3</u> to unblock it.

5.2.2 Blank Screen after "Play To"

If you are not able to see and hear anything on the TV / Monitor after streaming a file to SmartStream device by DLNA, please try check the status of each following parts and get improved solutions.

The format of targeted file is supported by SmartStream device. Please refer to <u>Section 6.4</u>.

It might be because of poor network bandwidth. Please refer to <u>Section 5.2.3</u>.

5.2.3 Poor Display Fluency of DMR

If you get bad or poor fluency in streaming a video or movie to SmartStream device by DLNA, please try check the status of each following parts and get improved solutions.

The video format of the file is within the support criteria of SmartStream device. Please refer to <u>Section 6.4.3</u>.

The CPU utilization of you PC / smart phone / Tablet-PC should be under 80% for video or movie streaming. Please refer to <u>Section 5.1.6.4</u>.

If the connection between PC / smart phone / Tablet-PC and SmartStream device is through Wi-Fi, the bandwidth of network is recommended to over 36 Mbps for video or movie streaming. Please refer to <u>Section5.1.6.5</u>, <u>Section 5.1.6.6</u>, <u>Section</u> <u>5.1.6.7</u>.

5.2.4 Audio is Always Mute

■ If you always get mute audio in streaming an audio, video, or movie to SmartStream device by DLNA, please check whether the audio format of the file is within the support criteria of SmartStream device or not. Please refer to <u>Section 6.4.2</u>.

5.3 Common Solutions to Many Issues



If the other troubleshooting sections have not helped, there may be some common solutions for trying.

Please wait enough time for fully booted of Microsoft Windows before starting-up PCV2TV or DLNA (Windows DMC) utility.

Please wait enough time for the readiness of network before "Play" PCV2TV application or "Play To" DLNA-DMR application. Please refer to Section 1.2.4.

Close PCV2TV or DLNA utility, restart-up the utility, and then run the application again.

Close PCV2TV or DLNA utility, disconnect the network, reconnect your network, restart-up the utility, and then run the application again.

Close PCV2TV or DLNA utility, disconnect the network, close all of other programs and services on your PC, reconnect your network, restart-up the utility, and then run the application again.

Shut down the SmartStream device, reboot the device, reconnect your network, restart-up PCV2TV or DLNA utility, and then run the application again.

Shut down your PC, reboot the PC, reconnect your network, restart-up PCV2TV or DLNA utility, and then run the application again.

Uninstall PCV2TV utility, restart your Windows, install PCV2TV utility, restart your Windows, restart-up PCV2TV utility, and then "Play" PCV2TV application again.

5.4 Known Issues and Limitations

This section lists known issues and limitations of PCV2TV and DLNA-DMR applications, including some workarounds for trying.

5.4.1 YFI2TVHD Limitations

- In "Basic and High Contrast Themes" of Windows 7 / Vista, there are several limitations with PCV2TV application as follows. Therefore, it is recommended to change the theme to "Aero themes". Please refer to <u>Section 5.1.6.1</u>.
 - When playing a movie/video by Windows Media Center or Windows Media Player through PCV2TV application, it may show a middle horizontal line on the TV / Monitor.
 - PC2TV application could not support full screen of Windows Media Center.
 - When you press Ctrl + Alt + Delete while PCV2TV application is playing, it would freeze the TV / Monitor's screen.
 - When setting password in Windows screen saver, it could not be supported by PCV2TV application.
- It is not achievable to play DVD movies by Windows Media Player in Windows XP through PCV2TV application; it is recommended to use another media player, ex. Media Player Classic - Home Cinema. Please refer to <u>Section 6.3</u>.

5.4.2 DLNA-DMR Limitations

- It might be not achievable to "Play to" a media file to DMR device, when your PC already connects to Internet by another network connection (Ethernet or Wi-Fi). Please disconnect the link of Internet and then "Play to" again.
- Some types of video or movie files are not suitable for streaming. If this is the case, the audio might be always mute in streaming.

5.4.3 General Limitations

- No matter for PCV2TV or DLNA-DMR application, once the Wi-Fi bandwidth is not always stable enough, the video playback might lag suddenly or even continually.
- It should be avoided to change any kinds of network configurations when PCV2TV or DLNA-DMR application is playing, otherwise it may cause momentary disconnection or end the connection directly.

6 Appendix

6.1 Network Initialization Process

In order to meet different network and connection requirements, the network initialization process of SmartStream device is as follows:



6.2 Display Resolutions

6.2.1 Maximum Resolution Support and Conditions

- The SmartStream device is able to support 1,920 x 1,080 (HDTV: 1080P) for PCV2TV application, but the following conditions are all required:
 - The PC is powered by 2nd Generation Intel Core i3 / i5 / i7 series CPU (Intel's codename: SandyBridge).
 - 2. The operation system should be Windows 7 or above.
 - 3. The PC's graphic driver(s) should be updated to the latest one(s).
 - The working graphic on PC should be Intel's graphic; AMD/ATI or Nvidia graphic is not able to support it.
- Lack of either of above conditions, SmartStream device could only support the display resolution up to 1,440 x 900 (widescreen) and 1,280 x 1,024 (4:3 screen).

DLNA-DMR application would always support the maximum resolution of TV / Monitor (under 1080P.)

6.2.2 Principals of YFI2TVHD Resolution Implementation

- After "Play" PCV2TV application, the TV / monitor would follow the three principals to implement the display resolution. By the way, the "Extension Screen" follows the same principals, please refer to <u>Section 1.4.3.1</u>.
 - The resolution of PC's desktop should be implemented on your TV / Monitor, once it is within your TV / monitor's EDID (Extended Display Identification Data) information. Please refer to your TV / monitor's user manual to check its resolution support table. If not, please see "Auto-720P".
 - "Auto-720P" means the PC's desktop resolution is higher then 1,280 x 720 (HDTV: 720P), but TV / monitor's EDID does not support it and only supports 1,280 x 720, then 1,280 x 720 would be implemented as the display resolution on both sides of PC and TV / monitor. If not, please see "Auto-XGA"
 - "Auto-XGA" means the PC's desktop resolution is higher then 1,024 x 768 (XGA), but TV / monitor's EDID supports neither PC's desktop resolution nor 1,280 x 720, then 1,024 x 768 would be implemented as the display resolution on the TV / monitor.
- For HDMI output, the supported resolutions of PC2TV application are only 1,920 x 1,080, 1,280 x 720, 1,024 x 768, and 800 x 600. If the PC's resolution is not set at one of them, the 1,280 x 720 or 1,024 x 768 would be implemented automatically as the display resolution on the TV / monitor, after "Play" PCV2TV application.

6.2.3 YFI2TVHD Resolution Implementation Table

- The following two tables show the implemented display resolution of your TV / monitor after "Play" PCV2TV application.
- If your PC's desktop resolution is not set as one of the first column (Resolution Setting of PC's Desktop) in the tables, PCV2TV application might work abnormally.
- The implemented display resolutions would not guarantee the performance of PCV2TV application. Please refer to <u>Section 1.3.2.2</u> and <u>Section 1.4.3.2</u> to consider the balance between your PC capability and display resolution.

	Y	FI2TVно Sup	port Resolu	tion Table (1)	
١	TV / Monitor	TV / Monito	or Highest Supp	ort Resolution (E	EDID Support)	Remark
PC	١	1,024 x 768	1,280 x 800	1,280 x 1,024	1,366 x 768	Remark
	800 x 600	800 x 600	800 x 600	800 x 600	800 x 600	
	1,024 x 768	1,024 x 768	1,024 x 768	1,024 x 768	1,024 x 768	
	1,280 x 720	Auto-XGA	1,280 x 720	1,280 x 720	1,280 x 720	
	1,280 x 768	Auto-XGA	1,280 x 768	1,280 x 768	1,280 x 768	
Resolution	1,280 x 800	Auto-XGA	1,280 x 800	1,280 x 800	Auto-720P or Auto-XGA	
	1,280 x 1,024	Auto-XGA	Auto-720P or Auto-XGA	1,280 x 1,024	Auto-720P or Auto-XGA	
Setting of PC's Desktop	1,366 x 768	Auto-XGA	Auto-720P or Auto-XGA	Auto-720P or Auto-XGA	1,366 x 768	
	1,440 x 900	Auto-XGA	Auto-720P or Auto-XGA	Auto-720P or Auto-XGA	Auto-720P or Auto-XGA	
	1,600 x 1,200	Auto-XGA	Auto-720P or Auto-XGA	Auto-720P or Auto-XGA	Auto-720P or Auto-XGA	
	1,680 x 1,050	Auto-XGA	Auto-720P or Auto-XGA	Auto-720P or Auto-XGA	Auto-720P or Auto-XGA	
	1,920 x 1,080	Auto-XGA	Auto-720P or Auto-XGA	Auto-720P or Auto-XGA	Auto-720P or Auto-XGA	

YFI2TVHD Support Resolution Table (2)									
١	TV / Monitor	TV / Monito	TV / Monitor Highest Support Resolution (EDID Support)						
PC	١	1,440 x 900	1,600 x 1,200	1,680 x 1,050	1,920 x 1,080	Remark			
	800 x 600	800 x 600	800 x 600	800 x 600	800 x 600				
	1,024 x 768	1,024 x 768	1,024 x 768	1,024 x 768	1,024 x 768				
	1,280 x 720	1,280 x 720	1,280 x 720	1,280 x 720	1,280 x 720				
- Resolution	1,280 x 768	1,280 x 768	1,280 x 768	1,280 x 768	1,280 x 768				
	1,280 x 800	1,280 x 800	1,280 x 800	1,280 x 800	1,280 x 800				
	1,280 x 1,024	Auto-720P or Auto-XGA	1,280 x 1,024	1,280 x 1,024	1,280 x 1,024				
Setting of PC's Desktop	1,366 x 768	1,366 x 768	1,366 x 768	1,366 x 768	1,366 x 768				
Deskiop	1,440 x 900	1,440 x 900	1,440 x 900	1,440 x 900	1,440 x 900				
	1,600 x 1,200	Auto-720P or Auto-XGA	Auto-720P or Auto-XGA	Auto-720P or Auto-XGA	Auto-720P or Auto-XGA				
	1,680 x 1,050	Auto-720P or Auto-XGA	Auto-720P or Auto-XGA	Auto-720P or Auto-XGA	Auto-720P or Auto-XGA				
	1,920 x 1,080	Auto-720P or Auto-XGA	Auto-720P or Auto-XGA	Auto-720P or Auto-XGA	1,920 x 1,080 or Auto-720P or Auto-XGA				

6.3 Media Players Compatibility of PC2TV Application

- The following table shows the supported phenomenon for different media players by PCV2TV application.
- The operating process should be: Start-up PCV2TV utility \rightarrow "Play" PCV2TV application \rightarrow Start-up media player \rightarrow Playing the target media content. It might be not workable when the media player is started-up before "Play" PCV2TV application.

Media Player	Version	OS	DVD playback	WMV playback	Mpeg2 playback	Mpeg4 playback	H.264 Playback
Windows Media Player	12	Windows 7 & Vista	OK	ОК	ОК	OK	OK
Windows Media Center	n/a	Windows 7 & Vista	ОК	ОК	ОК	OK	ОК
Media Player Classic - Home Cinema	1.3.1959.0	Windows 7 & Vista	ОК	ОК	ОК	OK	ОК
KMPlayer	2.9.4.1435	Windows 7 & Vista	ОК	ОК	ОК	OK	ОК
Cyberlink PowerDVD	10	Windows 7 & Vista	ОК	ОК	ОК	OK	ОК
Windows Media Player	11	Windows XP	N/A, Note 1	ОК	N/A, Note 2	N/A, Note 2	N/A, Note 2
Media Player Classic - Home Cinema	1.3.1959.0	Windows XP	OK	ОК	ОК	OK	OK
KMPlayer	2.9.4.1435	Windows XP	OK	ОК	ОК	Fail, Note 3	OK
Cyberlink PowerDVD	10	Windows XP	Fail, Note 4	ОК	ОК	Fail, Note 4	Fail, Note 4

- Note 1: Windows Media Player 11 does not support it in default.
- <u>Note 2</u>: Windows Media Player 11 does not support it in default, but it would be "OK" after installing K-Lite Codec Pack v6.0.0 or later
- <u>Note 3</u>: It would be "OK" after changing KMPlayer setting: [options] \rightarrow [Preferences] \rightarrow [Video Processing] \rightarrow [Renderer] \rightarrow [Renderer: VMR7 Windowed]
- <u>Note 4</u>: It would be "OK" after setting "Hardware Acceleration" to "Full". Please refer to <u>Section</u> <u>5.1.4</u>.

6.4 DLNA Support Formats

- In order to support multimedia streaming of DLNA, you need at least a DLNA-certificated PC (Windows 7 based), smart phone, Tablet-PC, and/or DLNA software (DMC, DMS) to connect to SmartStream device. Please refer to <u>Section 2.1</u> and <u>Section 2.2</u>.
- The following tables show the formats that are supported by the DLNA-DMR application of SmartStream device, basically, contents with the supported extension can be streamed to the device. However, due to the file extension might be not always correct, the contents with supported extension might still not able to be played on the TV / Monitor.

6.4.1 Supported Picture Formats

Format	File extension
GIF	gif
PNG	png
BMP	bmp
JPEG	jpg, jpeg

The following picture formats are supported by SmartStream device.

6.4.2 Supported Audio Formats

- The following audio formats are supported by SmartStream device.
- Besides, SmartStream device could only support **2-channels** audio content. To stream audio contents with multi-channels (over 2-channels) would be mute.

Format	File extension
LPCM	pcm, wav, I16
MPEG-1 Layer 3	mp3
WMA	wma
WAV	wav
MPEG-4	mp4
AAC	аас
OGG	ogg, oga, ogv

6.4.3 Supported Video Formats

- The following video formats are supported by SmartStream device.
- Besides, the bit-rate of a video content is recommended to under **15 Mbps** to be streamed through Wi-Fi network, otherwise, the display fluency might be poor.
- If a video content with unsupported audio format or multi-channels audio, it might cause poor display fluency, influent audio, or mute audio. Please refer to <u>Section 6.4.2</u>.

Format	File extension
WMV	mpe, mpeg, mpg
AVI	avi
AVI	avi
MPEG-1	mpg, mpeg
MPEG-2	mpg, mpeg
MPEG-TS	m2t, tts
MPEG-4	mp4, mp4v, mpeg4, m4v
3GP	Здр, Здрр
3GP2	3g2, 3gpp2
MOV	mov
MPEG	mpe, mpeg, mpg
MPEG-2	mpe, mpeg, mpg
WMV ¹⁸	wmv
DVR-MS	dvr, dvr-ms

 $^{^{\}rm 18}$ Only Windows Media Video v9 (WMV3 / WVC1) is supported in WMV format.