ZINWELL®

PC to TV Transmission Kit

ZIN-2100

User's Manual

Safety Instructions

This product has been engineered and manufactured to assure your personal safety. However, improper use can result in potential electric shock or fire hazards. In order not to defeat the safe-guards incorporated in this instrument and its accessories, please adhere to the following instructions when installing, operating and servicing.

Power Source Warning

- A marking label attached on the rear side of the adapter (supplied) indicates the correct power source for this equipment. Operate this product only from an electrical outlet with the voltage and frequency indicated on the product label. Incorrect power source may result in a risk of electric shock or fire. If you are uncertain of the type of power supplied to your home, consult your local power company or appliance dealer.

- Only use the power cord and adapter provided by the manufacturer. Internal component may be damaged if you use a different adapter to power this product. To avoid electric shock and fire hazard, match the plug and outlet connections carefully, then fully insert. If the plug fails to fit the outlet, please contact an electrician to update your power outlets.

- Do not overload electrical outlets, extension cords, or integral convenience receptacles as this can result in a risk of fire or electric shock. And to prevent power cord damage, arrange all power cords so that people cannot walk on the cords. Do not place objects on the cords.

- Place this product in a location that is close enough to an electrical outlet and where the power cord is easily accessible to be disconnected from the wall outlet.

Usage Warning

- To reduce the risk of electric shock, do not remove the cover or attempt to disassemble this product. There are no user-serviceable parts inside. Please refer all servicing to qualified service personnel.

- Protect this product from foreign objects. Never push object of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock.

- Do not expose this product to liquids, rain or moisture.

- This product has ventilation openings that protect it from overheating. Never block or cover these openings. And do not place this product near heat sources such as radiators, heat registers, stoves or other products producing heat.

- Before cleaning or wiping this product, make sure your power cord is already unplugged from the electrical outlet. Only use damp cloth to clean this product, and never use a liquid cleaner or an aerosol cleaner.

- During a thunderstorm, or when this product is unused for long periods of time, unplug power cord from the wall outlet. This will prevent damage to the product due to lightning and power-line surges.

Service Warning

- Refer all servicing to qualified service personnel. For damage that requires service, please unplug your power cord from the AC outlet first, and contact your dealer or servicing personnel to obtain service for the following conditions.
  - If there is damage to the adapter, power cord or plug.
  - If liquid enters this product.
  - If you drop this product, a heavy object falls on this product, or damage occurs to the cover of this product.
  - If you expose this product to rain or water.
  - If this product does not operate normally by following the operating instructions.
  - If this product exhibits a distinct change in performance.

Caution

Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the instructions.

For ZIN-2100R

FEDERAL COMMUNICATIONS COMMISSION INTERFERENCE STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

– Reorient or relocate the receiving antenna.

– Increase the separation between the equipment and receiver.

– Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

– Consult the dealer or an experienced radio/TV technician for help.

CAUTION:

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference and

(2) This device must accept any interference received, including interference that may cause undesired operation.

RF exposure warning ·

This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter must be installed

to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. End-users and installers must be provided with antenna installation instructions and transmitter operating conditions for satisfying RF exposure compliance.

Canada, Industry Canada (IC) Notices

This Class B digital apparatus complies with Canadian ICES-003 and RSS-210.

Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Radio Frequency (RF) Exposure Information

The radiated output power of the Wireless Device is below the Industry Canada (IC) radio frequency exposure limits. The Wireless Device should be used in such a manner such that the potential for human contact during normal operation is minimized.

This device has also been evaluated and shown compliant with the IC RF Exposure limits under mobile exposure conditions. (antennas are greater than 20cm from a person's body).

This device has been certified for use in Canada. Status of the listing in the Industry

Canada's REL (Radio Equipment List) can be found at the following web address: http://www.ic.gc.ca/app/sitt/reltel/srch/nwRdSrch.do?lang=eng

Additional Canadian information on RF exposure also can be found at the following web address:

http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf08792.html

Canada, avis d'Industry Canada (IC)

Cet appareil numérique de classe B est conforme aux normes canadiennes ICES-003 et RSS-210.

Son fonctionnement est soumis aux deux conditions suivantes : (1) cet appareil ne doit pas causer d'interférence et (2) cet appareil doit accepter toute interférence, notamment les interférences qui peuvent affecter son

fonctionnement.

Informations concernant l'exposition aux fréquences radio (RF)

La puissance de sortie émise par l’appareil de sans fil Dell est inférieure à la limite d'exposition aux fréquences radio d'Industry Canada (IC). Utilisez l’appareil de sans fil Dell de façon à minimiser les contacts humains lors du fonctionnement normal.

Ce périphérique a également été évalué et démontré conforme aux limites d'exposition aux RF d'IC dans des conditions d'exposition à des appareils mobiles (les antennes se situent à moins de 20 cm du corps d'une personne).

Ce périphérique est homologué pour l'utilisation au Canada. Pour consulter l'entrée correspondant à l’appareil dans la liste d'équipement radio (REL - Radio Equipment List) d'Industry Canada rendez-vous sur: http://www.ic.gc.ca/app/sitt/reltel/srch/nwRdSrch.do?lang=eng
Pour des informations supplémentaires concernant l'exposition aux RF au Canada rendez-vous sur : http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf08792.html

For ZIN-2100T

FEDERAL COMMUNICATIONS COMMISSION INTERFERENCE STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

– Reorient or relocate the receiving antenna.

– Increase the separation between the equipment and receiver.

– Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

– Consult the dealer or an experienced radio/TV technician for help.

CAUTION:

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference and

(2) This device must accept any interference received, including interference that may cause undesired operation.

RF exposure warning ·

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

SAR compliance of this product has only been verified for use with typical laptop computers.

To comply with RF exposure limits, user must not simultaneously operate

wireless products in adjacent USB-ports or cardbus slots.

SAR Value: 0.624W/kg.

Canada, Industry Canada (IC) Notices

This Class B digital apparatus complies with Canadian ICES-003 and RSS-210.

Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Radio Frequency (RF) Exposure Information

The radiated output power of the Wireless Device is below the Industry Canada (IC) radio frequency exposure limits. The Wireless Device should be used in such a manner such that the potential for human contact during normal operation is minimized.

This device has been evaluated for and shown compliant with the IC Specific Absorption Rate ("SAR") limits when installed in specific host products operated in portable exposure conditions.

Canada's REL (Radio Equipment List) can be found at the following web address: http://www.ic.gc.ca/app/sitt/reltel/srch/nwRdSrch.do?lang=eng

Additional Canadian information on RF exposure also can be found at the following web address:
http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf08792.html

Canada, avis d'Industry Canada (IC)

Cet appareil numérique de classe B est conforme aux normes canadiennes ICES-003 et RSS-210.

Son fonctionnement est soumis aux deux conditions suivantes : (1) cet appareil ne doit pas causer d'interférence et (2) cet appareil doit accepter toute interférence, notamment les interférences qui peuvent affecter son fonctionnement.

Informations concernant l'exposition aux fréquences radio (RF)

La puissance de sortie émise par l'appareil de sans fil Dell est inférieure à la limite d'exposition aux fréquences radio d'Industry Canada (IC). Utilisez

l’appareil de sans fil Dell de façon à minimiser les contacts humains lors du fonctionnement normal.

Ce périphérique a été évalué et démontré conforme aux limites SAR (Specific Absorption Rate – Taux d'absorption spécifique) d'IC lorsqu'il est installé dans des produits hôtes particuliers qui fonctionnent dans des conditions d'exposition à des appareils portables.

Ce périphérique est homologué pour l'utilisation au Canada. Pour consulter l'entrée correspondant à l’appareil dans la liste d'équipement radio (REL - Radio Equipment List) d'Industry Canada rendez-vous sur: http://www.ic.gc.ca/app/sitt/reltel/srch/nwRdSrch.do?lang=eng
Pour des informations supplémentaires concernant l'exposition aux RF au Canada rendez-vous sur :
http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf08792.html

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1 Introduction

The product is designed as a pair of PC to TV Transmission Kits with transmitter and receiver, which capture PC's screen into TV via WiFi technology. It also features up to 1080p resolution with specific environment.

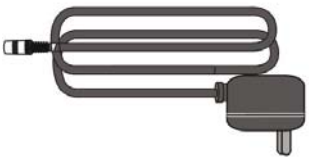
1.1 Package Content

Please make sure the following items are included within your new product package. The product might not be compatible with some accessories made by other manufacturers. We highly recommend that you use only the specific accessories we suggest.

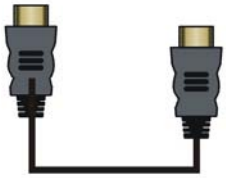
ZIN-2100 Receiver

ZIN-2100 Transmitter

Compact Disk



AC Power Adapter



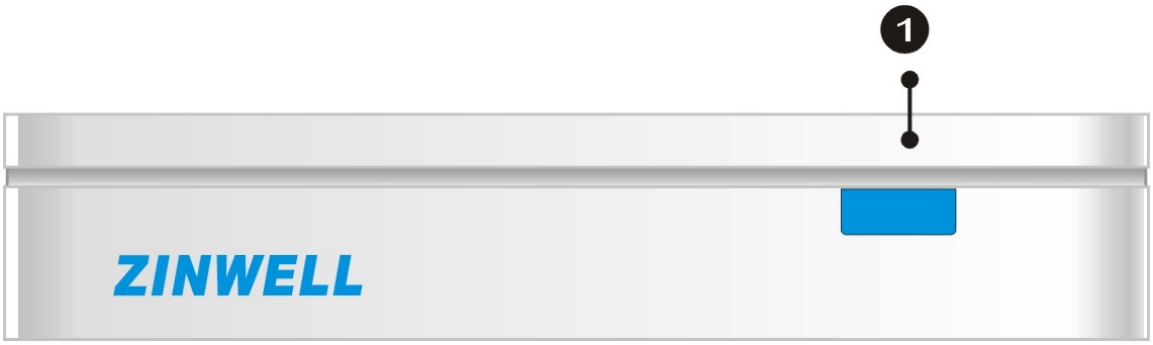
HDMI Cable

Quick Guide

1.2 Specification

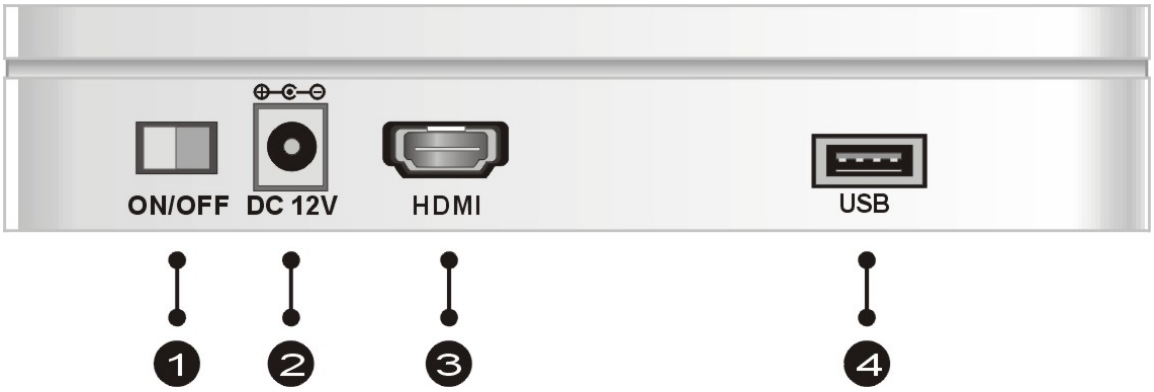
General Specifications		
Protocol	WiFi IEEE 802.11n	
Supported Resolution	1920x1080(up to 1080p), 1280x720、1024x768、1025x576、800x600、720x480	
A/V Output	HDMI	
Data Control (USB Port)	USB HID: Mouse / Keyboard USB Flash disk for firmware upgrade	
Power Supply	100~240V ±10% input voltage/ 5V @ 1.5A	
System Requirements	Desktop/Workstation PC	Notebook/Laptop PC
CPU Grade	Intel Core 2 Duo 2.0G or better	
Chipset	Intel 965 series chipset or better	
Memory	DDR2-800, 2GB or better	
Graphic	NVIDIA GeForce 8400GS / ATI Radeon X300 or better	Chipset integrated (Intel X3100 Graphic) or better or NVIDIA GeForce Go 8200M / ATI Radeon Mobility X300 standalong graphic chip or better
Operating System	Windows 7, x86 and x64 version (Recommendation) Windows Vista (Service Pack 1 or later), x86 and x64 version Windows XP (Service Pack 3 or later)	

1.3 Front View



①	Power LED	Blue: Turn on the product Dark: Power Off

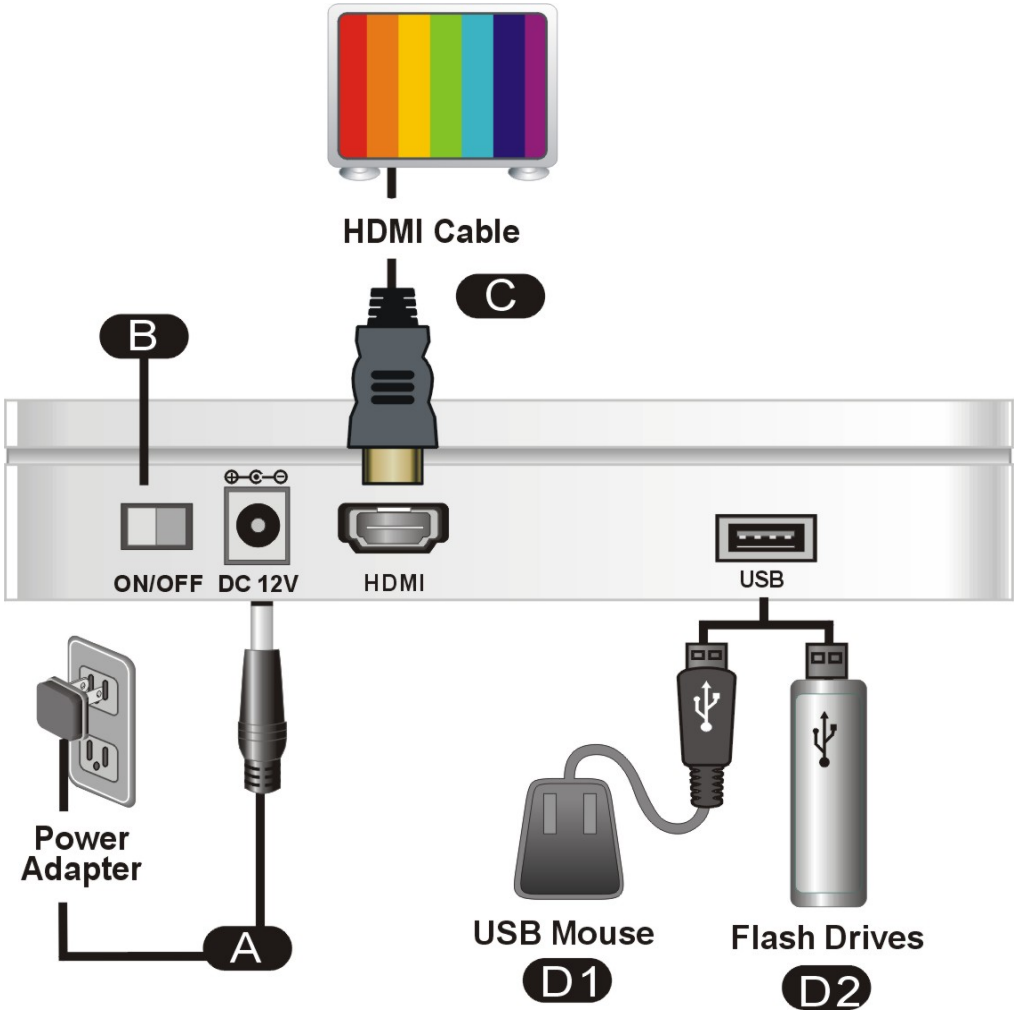
1.4 Back View



①	Power Switch	Switch power On/ Off
②	DC IN	Connects to the DC output of the power adapter.
③	HDMI OUT	Connects to the HDMI jack on the display; a single cable transmits both audio and video data.
④	USB Port	Connects to the USB Mouse/ USB Keyboard Connects to USB disk for firmware upgrade

2 Installation

2.1 Device Connections



A Plug power adapter into AC power outlet, then connect adapter plug into DC IN port.

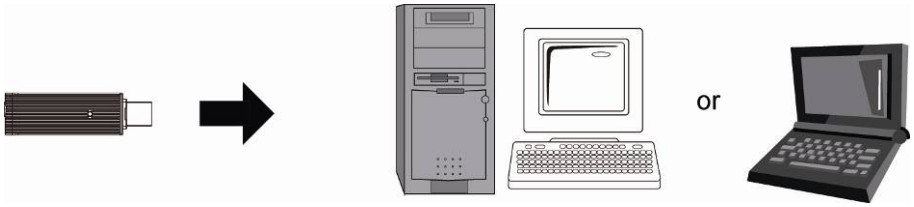
B Switch power key to turn it on.

C Connect a HDMI cable between the receiver's HDMI output and HDMI input of your display.

D1 Connect USB Mouse or USB Keyboard to control remote PC.

D2 Plug the USB fresh disk into USB ports for firmware upgrade.

E Connect Transmitter into PC/Laptop.

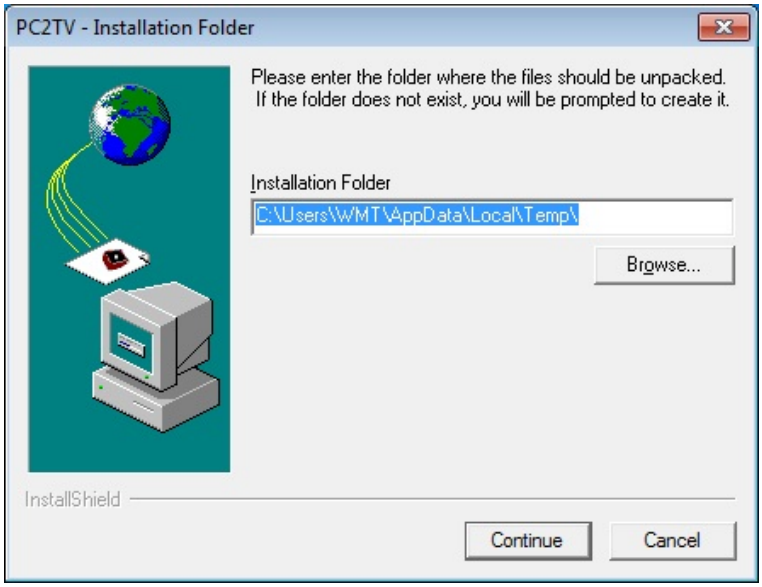

or

2.2 Software Installation

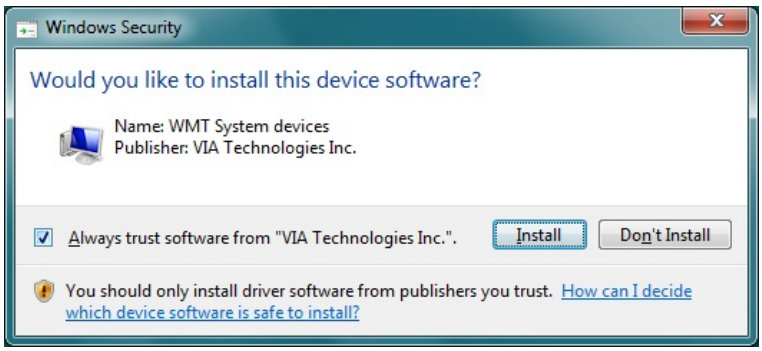
2.2.1 Standard Installation

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

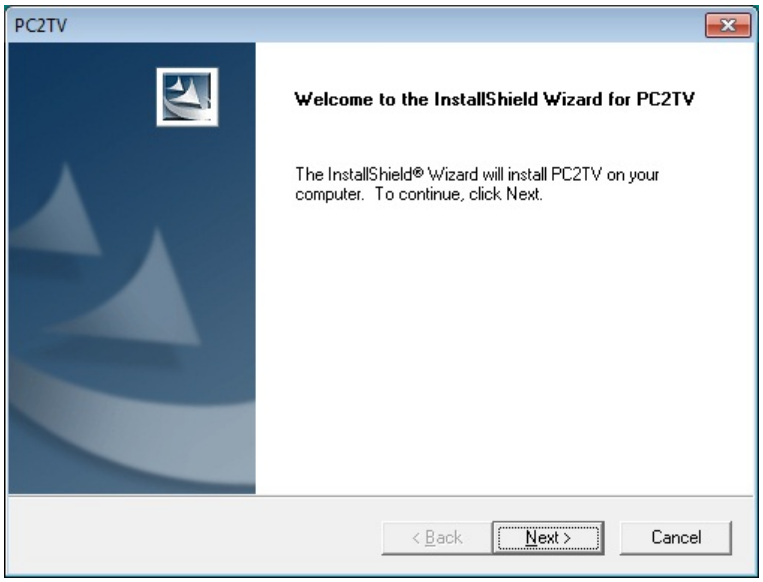
- Double click the icon of PC to TV utility.



- Please choose a folder to unpack files for installation.
- Then click “Continue” to unpack them.

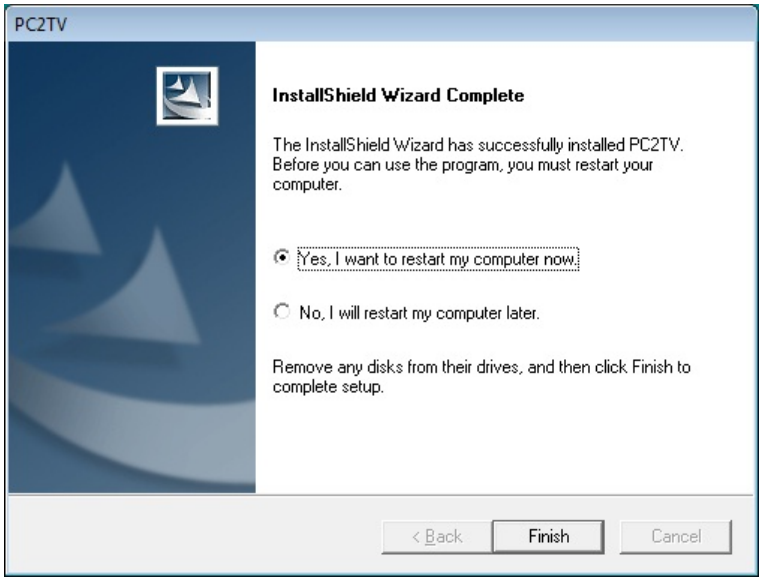


- Click “Install” for the following several notifications to install drivers, or tick Always trust software from “VIA Technologies Inc.”.



- Click “Next” to install the PC to TV utility.

- After drivers and utility installed, the PC to TV benchmark tool would be prompted to evaluate your PC.
- Please refer to *Section 2.1.1* to get more information.



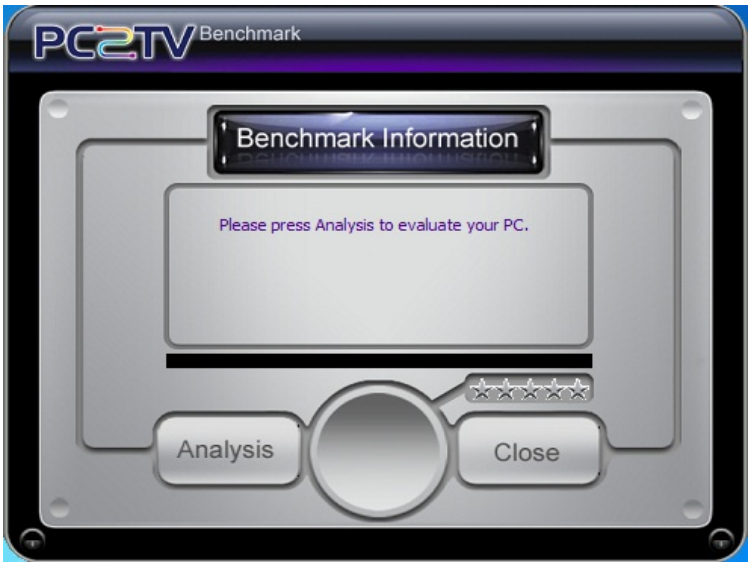
- After the benchmarking is done, please choose “Yes” and then click “Finish” to restart your PC.

2.2.2 Benchmarking Your PC

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

2.2.2.1 PC to TV Benchmark Tool

You can see the PC to TV benchmark tool when installation or manually start-up it from PC to TV 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 PC to TV application.
- Click “Close” to close the PC to TV benchmark tool.

2.2.2.2 Star Level in PC to TV Benchmark Tool

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

Stars	Level	Explanation
1 star	Lowest	The capability of CPU and Graphic are poor to support PC to TV 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 PC to TV 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 Section 3.1.1 and Section 7.6.1.

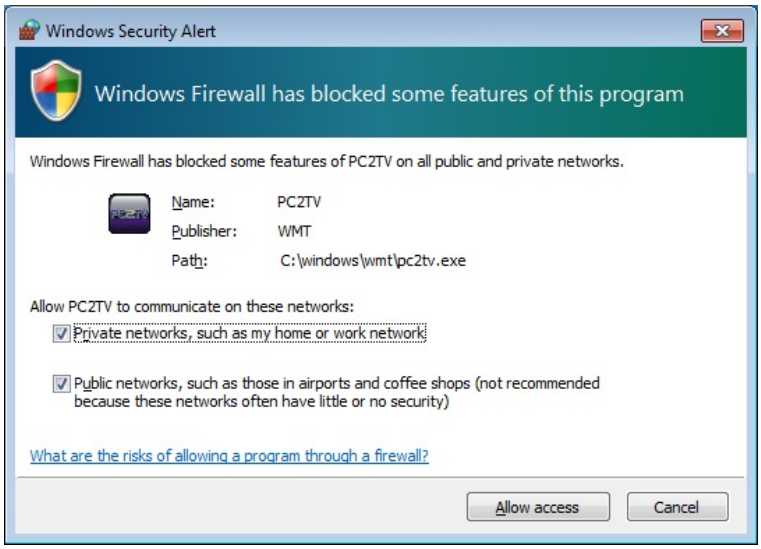
3 Usage of PC to TV Utility

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

3.1 Basic Usage of PC to TV Utility

The following steps are for basic usage.

- Double click the PC to TV icon from your desktop.



- If the left dialog window is prompted, please tick both of “Private networks” and “Public networks”.
- Then click “Allow access” to agree that PC to TV application could be unblocked from Windows Firewall.

- The PC to TV “Control Key” would be prompted, and start to search the PC to TV device.[1]

- If getting PC to TV device, click “Play” to run the PC to TV application.[2]

- Click “Stop” to stop the PC to TV application.[3]

- Click to see the information of this utility.
- Click to exit the window.

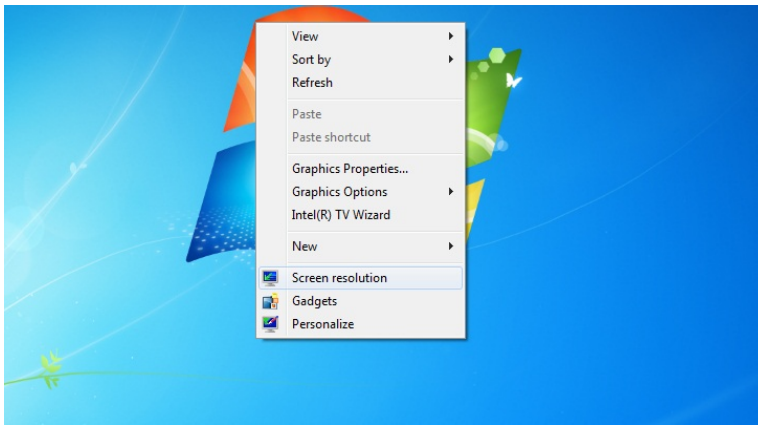
[1] Sometimes, the network might spend a long time to finish the connection, even experience a sudden disconnection and reconnection again in a short time. Therefore, it would extend the waiting time before “Play” PC TO TV application.
[2] After clicking “Play”, the PC’s desktop resolution might be changed,
[3] After clicking “Stop”, the PC’s desktop resolution might be changed back to the original one, if it has changed ever.
[3] After exiting the utility. the PC’s desktop resolution might be changed back to the original one, if it has changed ever.

- Click to minimize the “Control Key” to Taskbar and System Tray.

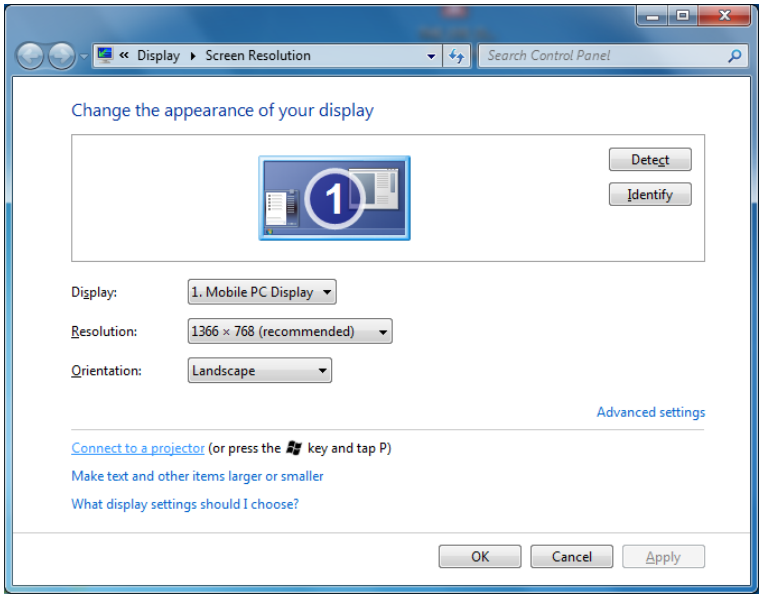
- Click to exit the PC to TV utility.[4]

3.2 Extend Screen Playing

No matter you are running the PC to TV application or not, you can “Play” the PC to TV application to the extend screen in Windows 7.

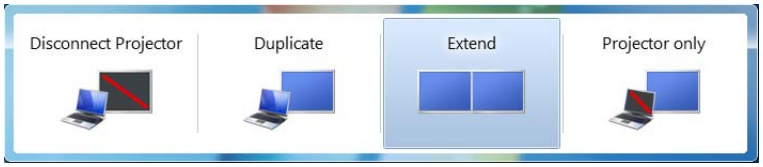


- Click right key of your mouse on the desktop, and then select “Screen resolution”.

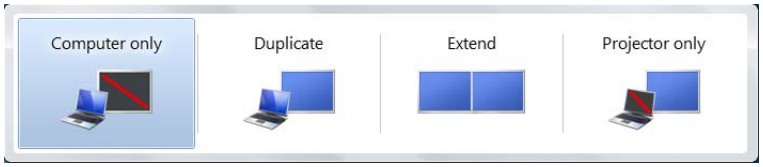


- Select “Connect to a projector” (or just press the “” key and tap “P”) to open Windows Presentation mode.
- If you are not able to see the 2nd display after “Connect to a projector”, your PC might not able to support extend

screen.



- Select “Extend” and then press “Enter” to run PC to TV application to extend screen.[5]



- Select “Computer only” or “Duplicate” to go back to run it in primary screen.[6]

Due to different PC’s specifications, there are a few PCs that are only able to support the extend screen playing with a physical monitor connected to it.

[5] After selecting “Extend”, the PC’s desktop resolution might be changed.
[6] After selecting back to primary screen, the PC’s desktop resolution might be changed.

3.3 Advanced “Play” Management of PC to TV Utility

There are more adjustable configurations for you to choose to “Play” PC to TV application.

3.3.1 Advanced Selections

The following selections are for advanced usage.

- Click to open the advanced menu.

- You can see all of the connected PC to TV 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 “PC to TV Device”.

- You can also double click to go to “Device Configuration” page. Please refer to *Section 5*.

- If you want to see PC video/movies, please draw the bar of “Optimum Mode” to “Middle” or “Movie” mode. Please refer to *Section 3.1.1* to get more information.
- After drawing it, please click “Play” or “Apply” to apply it.

- The PC audio is disabled in default after “Play” PC to TV application. If your want to listen to the audio/music from both of PC and TV sides, please tick “Keep PC Audio”.
- After ticking it, please click “Play” or “Apply” to apply it.

- Click to close the advanced menu.

3.3.2 “Optimum Mode” Settings

In order to provide the optimized performance between normal PC applications[7] 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.[8]

- If the performance of video/movie is still not acceptable in “Middle” Mode, you can set it to “Movie” mode.[9]
- At “Movie” mode, it would spend more PC resources. Please refer to the following table.

[7] Normal PC applications include audio/music playback, office working, web surfing, storage access, printing, and playing tiny games, except video/movie playbock.
[8] At “Middle” mode, it would slow down the instancy of mouse / keyboard.
[9] At “Movie” mode, it would slow down the instancy of mouse / keyboard.

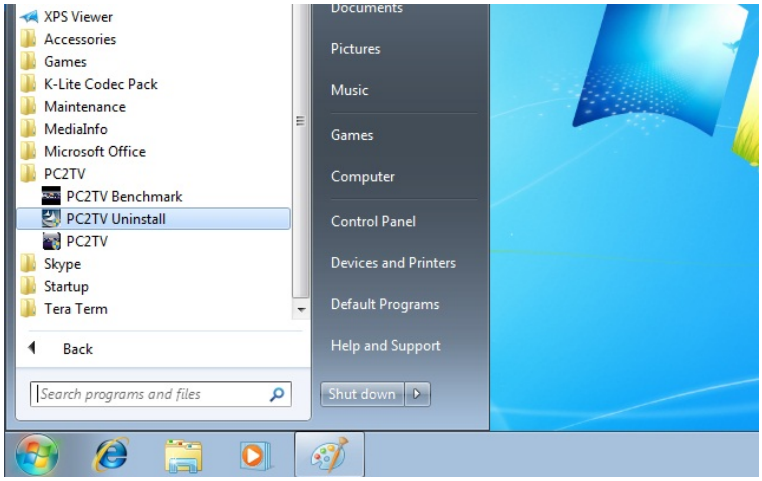
The following table shows the reference platform to support the appropriate media content type and maximum PC's desktop resolution at "Movie" Mode.

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

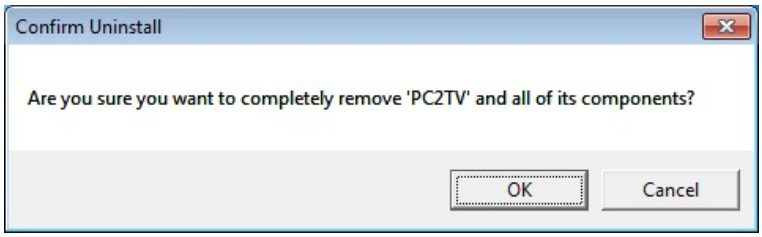
- The performance of video/movies might get worse then "PC" and/or "Middle" mode, if your PC capability is worse then above requirements.
- Network bandwidth is another key factor to affect the PC to TV application. If it is under the above requirement, the display fluency might be poor. If this is the case, it is recommended to lower PC's desktop resolution or switch to "PC" or "Middle" mode. Please refer to *Section 7.6.3* and *Section 7.6.5*.
- About the PC capability and supported desktop resolution, please also refer to *Section 2.2.2.2*, *Section 2.2.2.2*, and *Section 7.6.1*.

4 Un-installation of PC to TV Utility

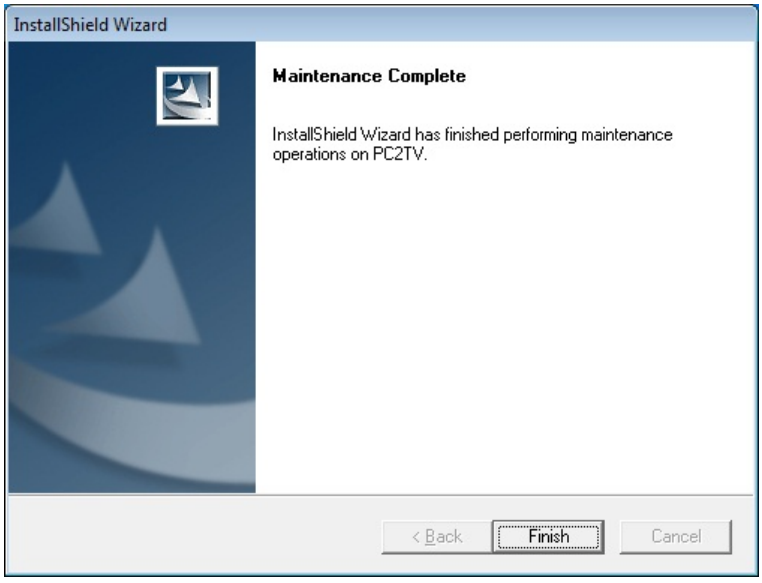
If you want to upgrade the PC to TV utility, you have to uninstall the previous version first.



- Click the “PC to TV Uninstall” icon from “All Programs”.



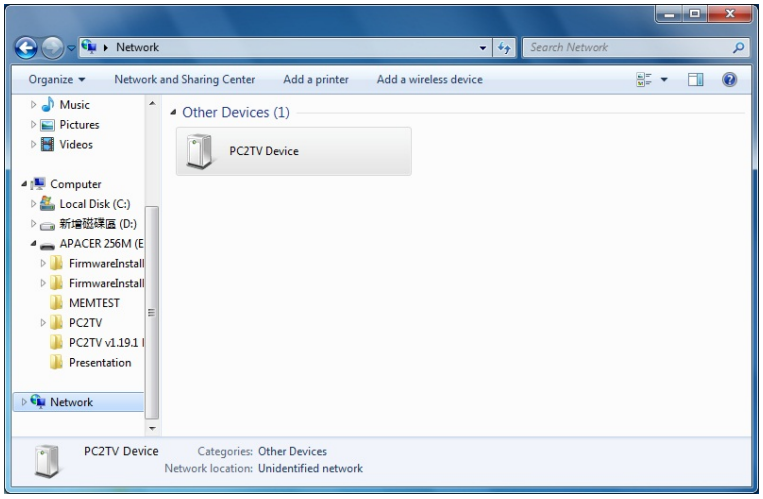
- Click “Yes” to remove all of PC to TV components.
- If the PC to TV application is still playing, it will be ended automatically.



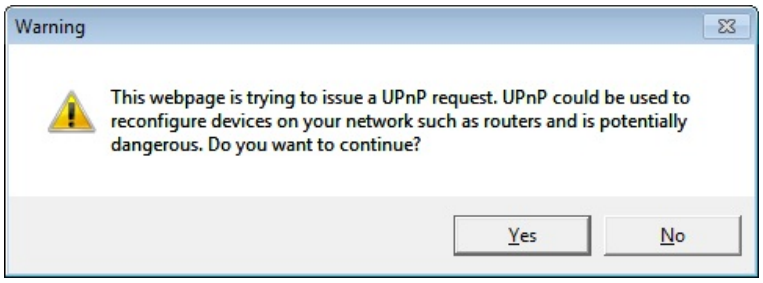
- Click “OK“ to finish the un-installation.
- Restart your Windows after the un-installation is done.

5 Device Configuration

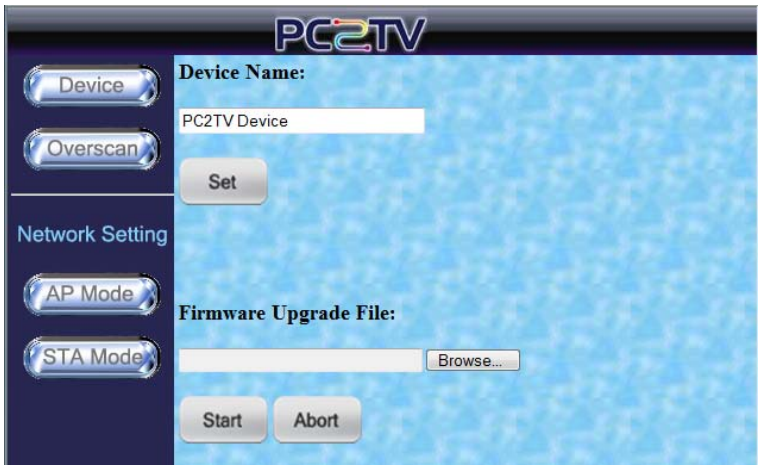
5.1 Go to “Device Configuration”



- 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 “PC to TV Device”.
- If you could not see any “device name” in “Network”, please refer to *Section 7.2.1*.



- If the warning page prompted, please click “Yes”.



- The “Device Setting” page would be showed as default page in “Device Configuration”.

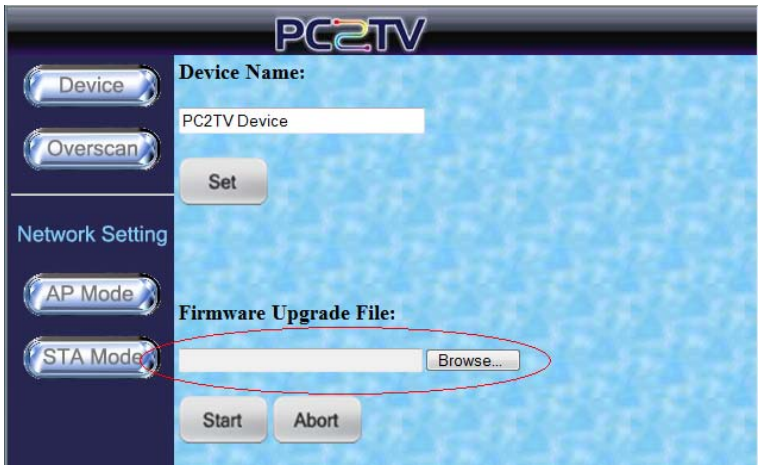
5.2 Device Setting

This page is for changing device name and upgrading the firmware of PC to TV device.

5.2.1 Device Name Change

- Please modify the PC to TV's device name in this page.
- After changing the "Device Name", please click "Set".

5.2.2 Firmware Upgrade



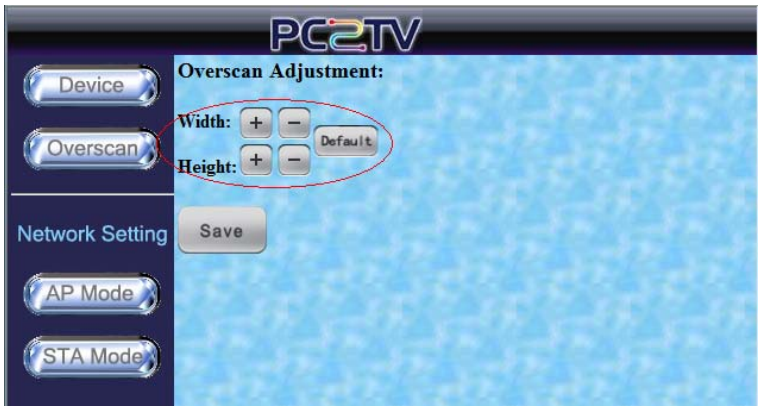
- Please browse your PC to get an upgrade file (.tgz) for firmware upgrade of PC to TV device.

- After confirmed the file, please click "Start" to send the file to PC to TV device, and then the upgrading procedure will start automatically.
- Before finished the sending process, you can click "Abort" to break it off.

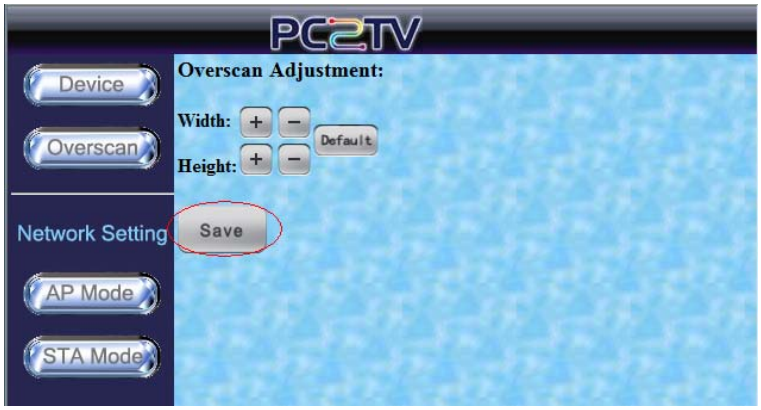
5.3 Overscan Setting

If the borders of PC's desktop are hidden to not be shown on your TV, you can try to adjust "Overscan Setting" in this page. Please also refer to Section 7.1.

- Click "Overscan" button to go to "Overscan Setting" page.



- You can click "+" or "−" of Width or Height to modify the hidden borders.
- If you want to back to default setting, please click "Default".



- After the adjustment, please Click "Save" to save it.
- If the adjustment is not saved, it will keep the previous setting after rebooting your PC to TV device.

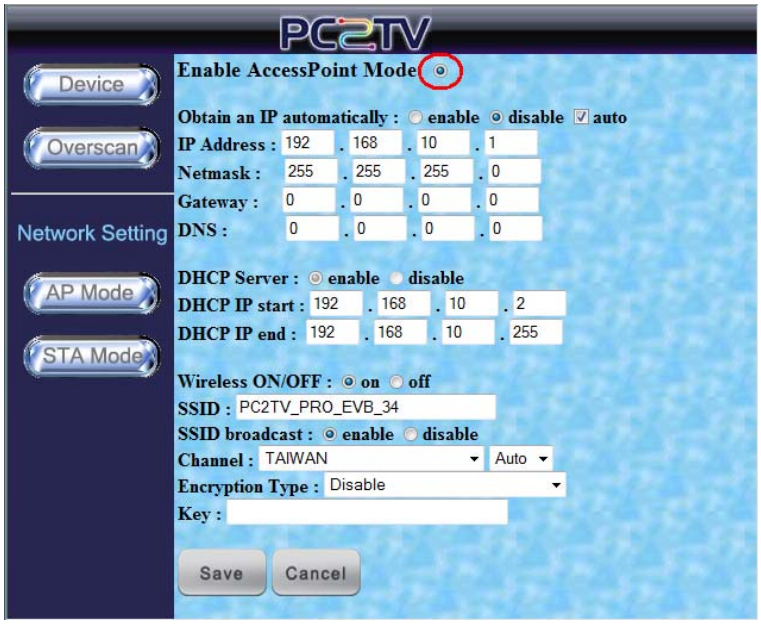
5.4 Network Settings

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

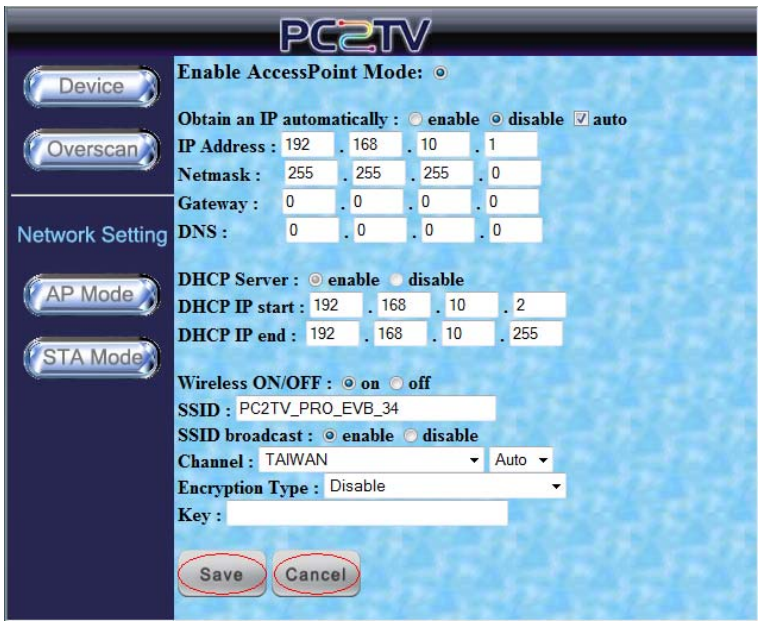
5.4.1 Access Point Mode Setting

PC to TV device is also set as a Wi-Fi Access Point in default.

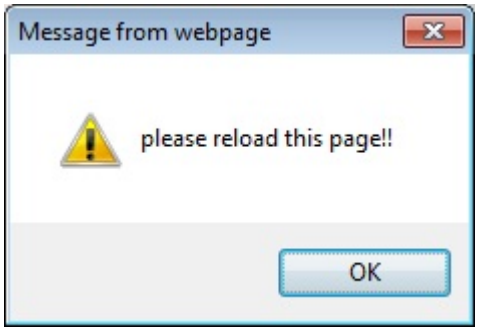
- Click "AP Mode" button to go to "Access Point Mode Setting" page.



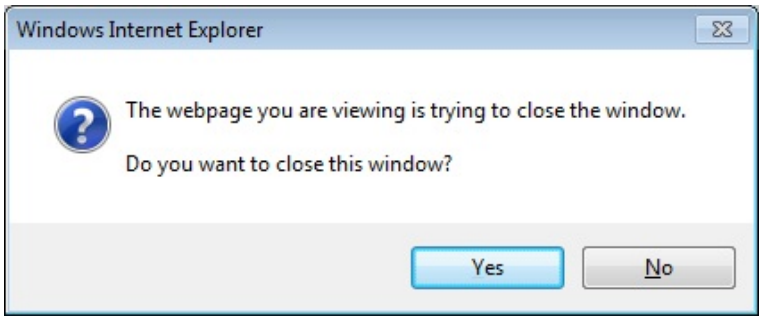
- Please click "Enable AccessPoint Mode" to set it as an Access Point.
- You can change the IP obtaining method, DHCP status, and Wi-Fi configurations here.
- It is recommended to not make any changes, if you are not familiar with network settings. Otherwise, the PC to TV device might be not able to be connected again.



- After changed the settings, please click “Save”.
- If you don’t 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 PC to TV device would go into reloading stage.

6 Firmware Upgrade

6.1 Upgrade the PC to TV Utility

If you are going to upgrade your PC to TV utility in Windows, please uninstall the previous one and then install the new one. Please refer to Section 1 and Section 2.2.1.

6.2 Upgrade the PC to TV Device

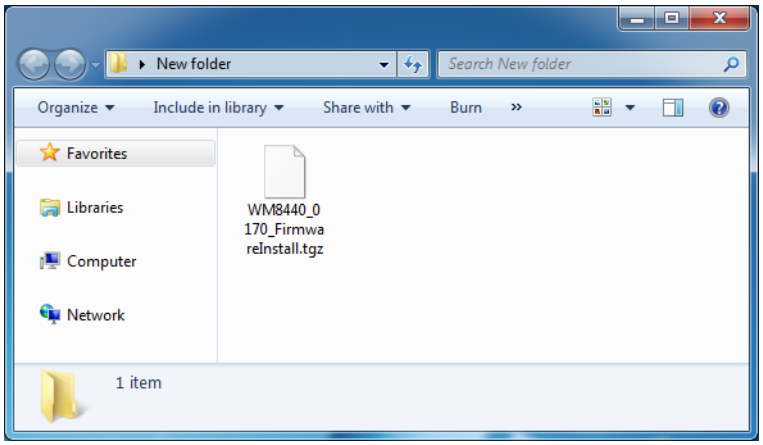
There are two ways to upgrade the firmware of PC to TV device:

A. By Network

B. By USB

6.2.1 Upgrade Firmware by Network

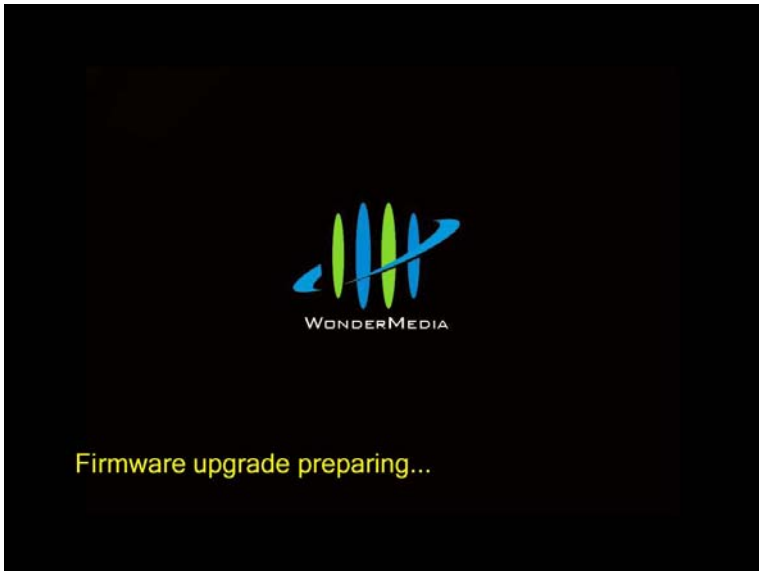
Before upgrade the firmware, please prepare the suitable firmware package and one USB flash disk.



- Prepare the firmware upgrade file in your PC, and then connect you PC to the PC to TV device.
- The sample of firmware upgrade file in the left picture is "WM8440_0170_FirmwareInstall.tgz".

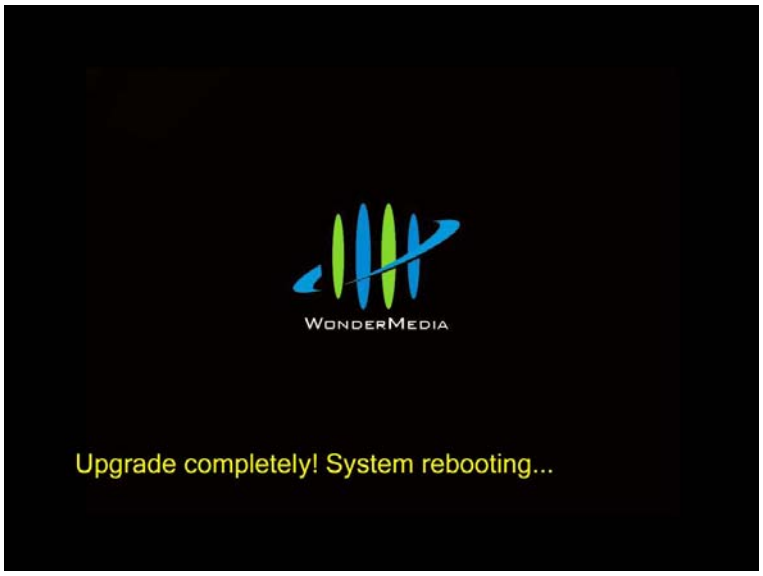
- Go to the "Device Configuration" page. Please refer to *Section 5.1*.
- Select the upgrade file to upgrade PC to TV device. Please refer to *Section 5.2.2*.
- After finished to send the upgrade file, the firmware upgrade

procedure will start.



- The firmware upgrade status will show on the screen of TV / Monitor
- The upgrade procedures will run step by step automatically

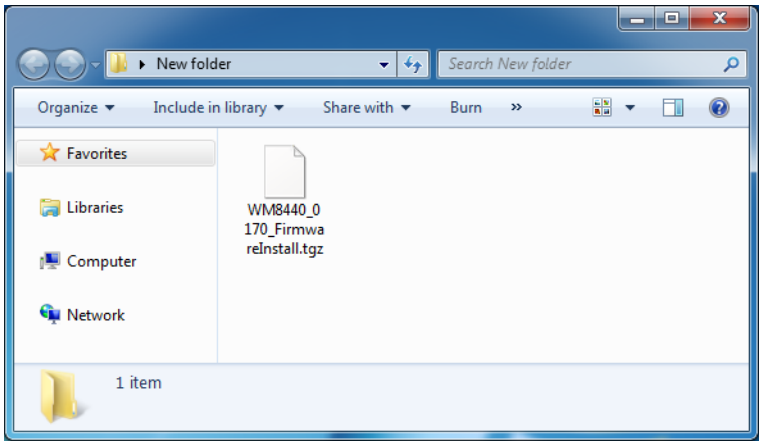
- During the upgrading, please avoid to power off the device, or else you may damage the device.



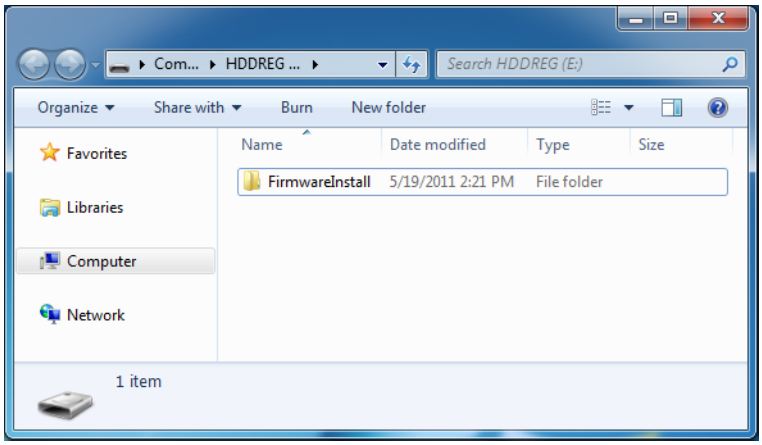
- After firmware upgraded, the device will reboot automatically.

6.2.2 Upgrade Firmware by USB

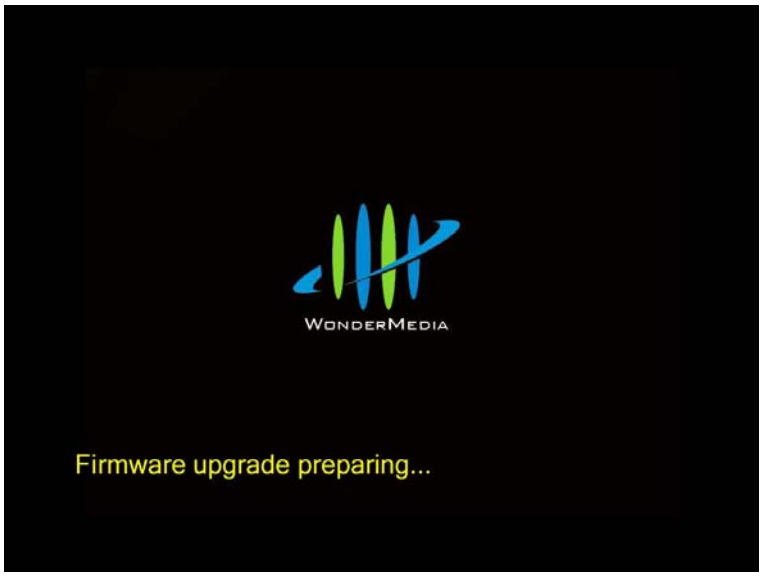
Before upgrade the firmware, please prepare the firmware upgrade file and one USB flash disk.



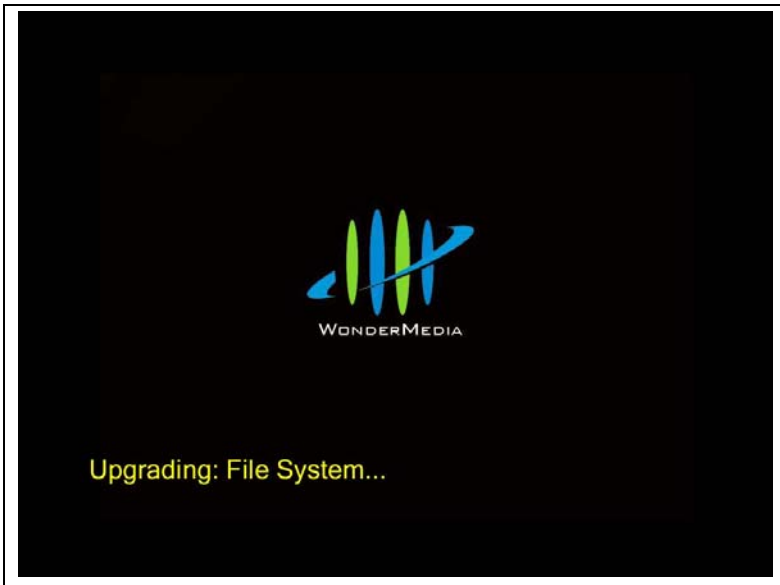
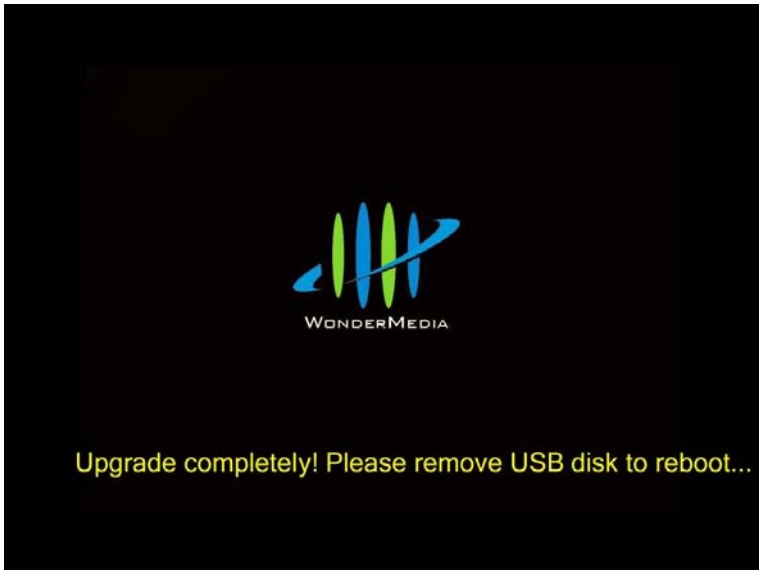
- Extract the firmware upgrade file to get the "FirmwareInstall" folder.
- The sample of firmware upgrade file in the left picture is "WM8440_0170_FirmwareInstall.tgz".



- Copy the entire "FirmwareInstall" folder to the root folder of the USB flash disk.



- Plug in the USB flash disk into one of USB ports of PC to TV 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 firmware upgraded, please remove your USB flash disk, and the device will reboot automatically.

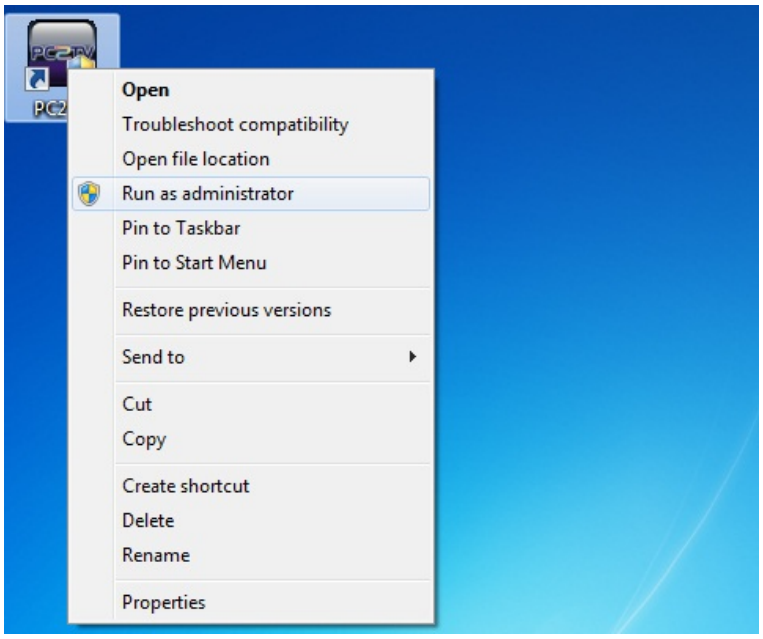
7 Troubleshooting

7.1 Run as Administrator in Windows 7 / Vista

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

- Click to exit the PC to TV utility.

- Click the right key of mouse on the PC to TV icon.

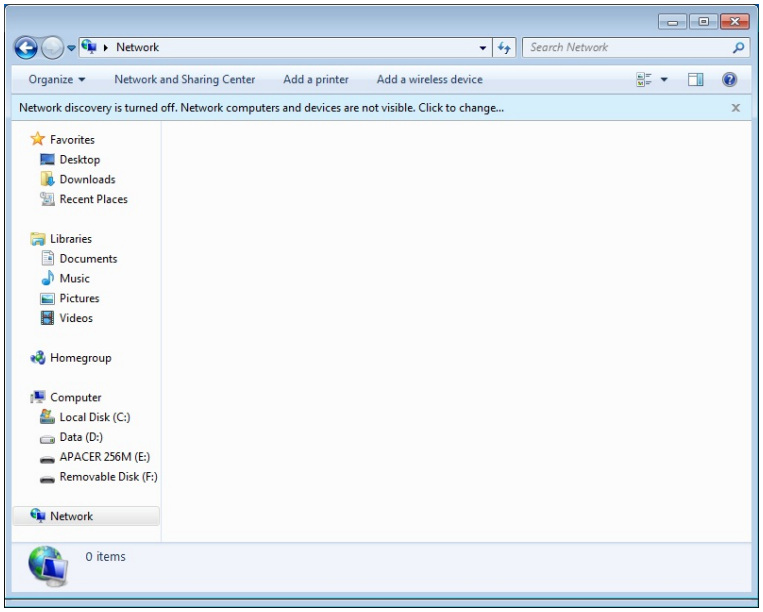


- Select “Run as administrator” to start-up the PC to TV utility again.

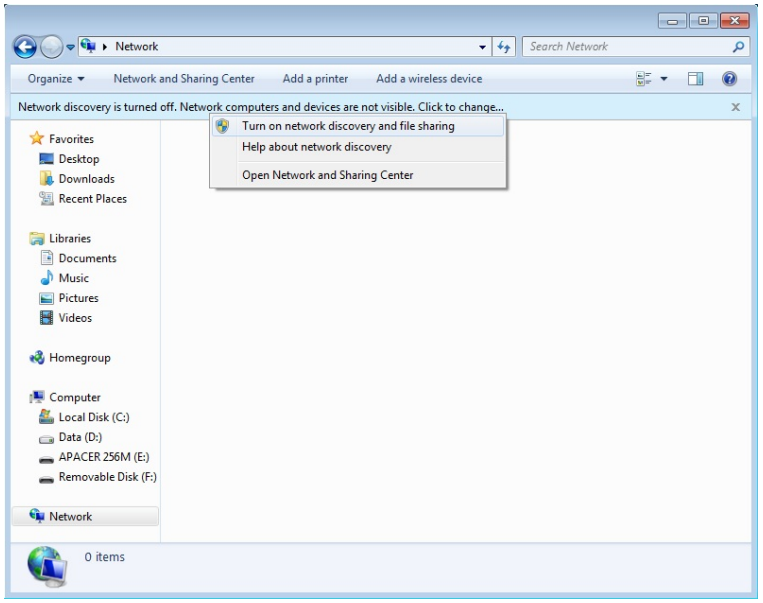
7.2 Network Discovery and Firewall Checking

If the network is connected well, but the PC to TV utility cannot find any PC to TV devices, please try to check the each following status and get solutions.

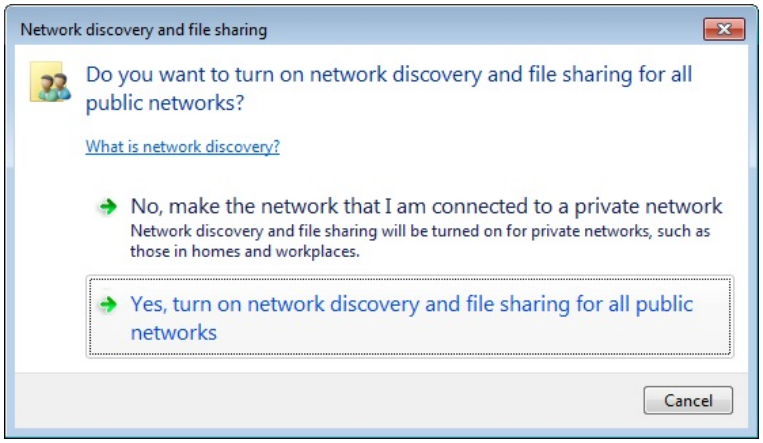
7.2.1 Turn on Network Discovery and File Sharing



- Select “Network” from “Windows Explorer”.
- If you see the warning bar shows “Network discovery is turned off” as the left picture, please click it.

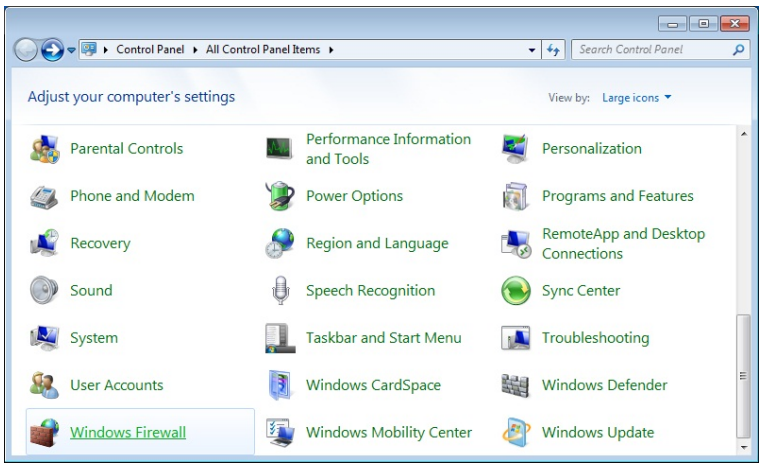


- Select “Turn on network discovery and file sharing”.

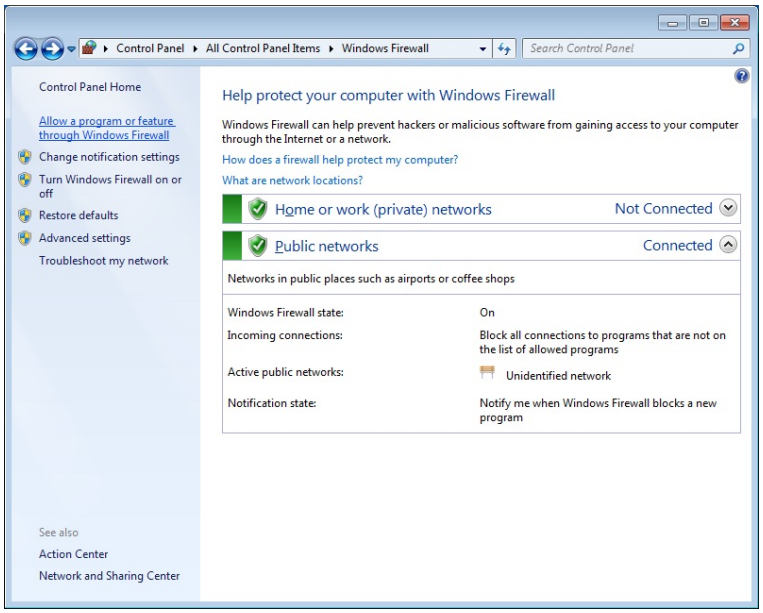


- Click “Yes” to turn on network discovery and file sharing.

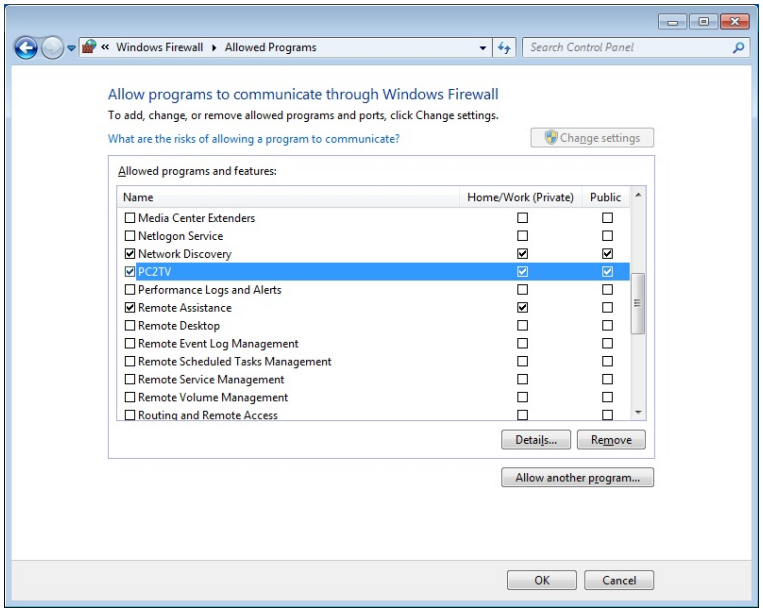
7.2.2 Unblock PC to TV Application from Windows Firewall



- Open the “Windows Firewall” from “Control Panel”.

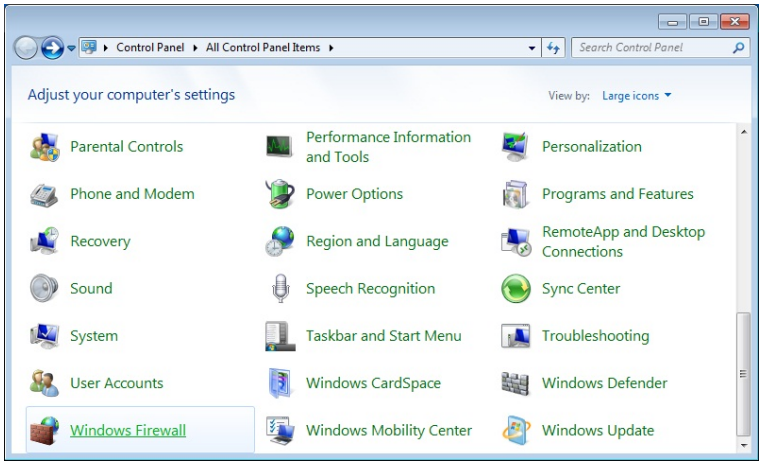


- Click “Allow a program or feature through Windows Firewall” from the left panel.

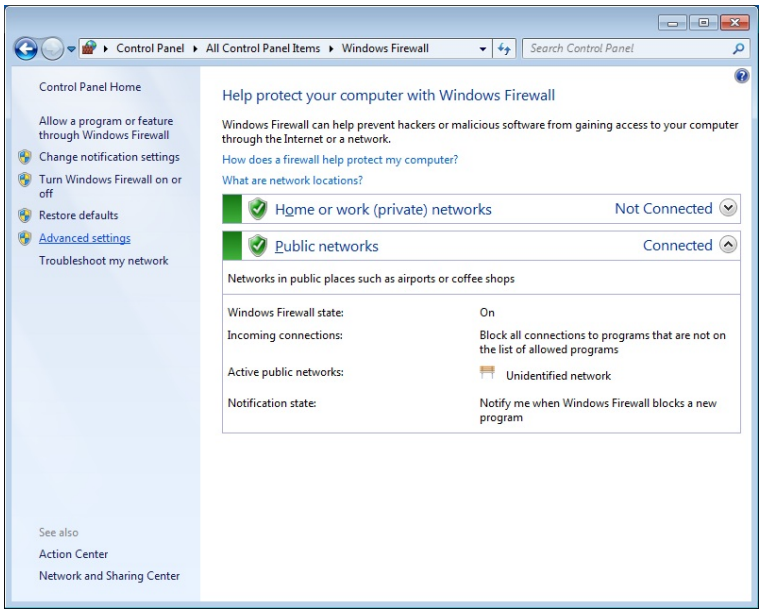


- Check "PC to TV" is ticked in both of “Private” and “Public” to unblock PC to TV application from Windows Firewall.
- If not, add or tick it.

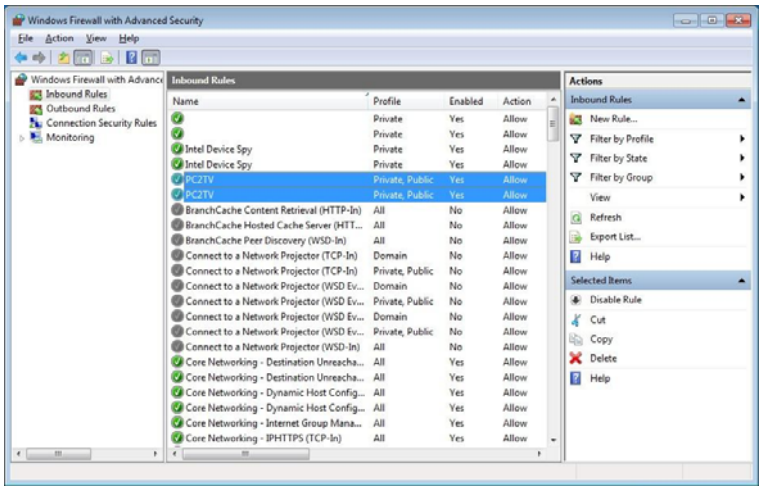
7.2.3 Enable SSDP and UPnP from Windows Firewall



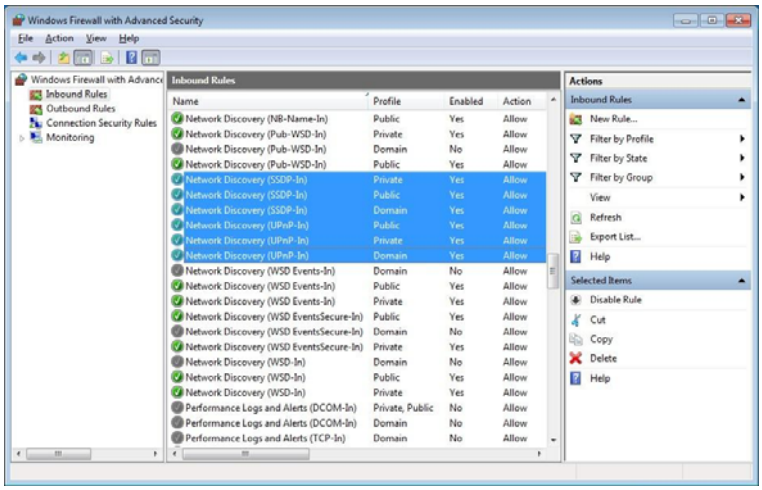
- Open the “Windows Firewall” from “Control Panel”.



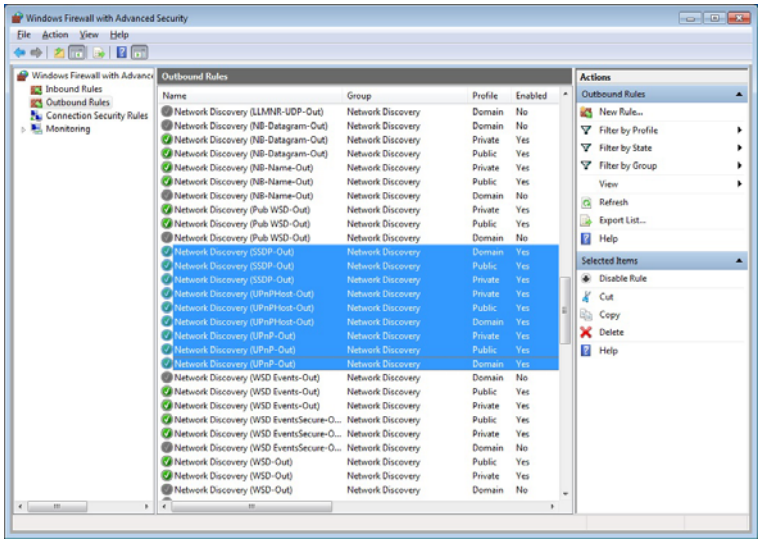
- Click “Advanced Settings” from the left panel.



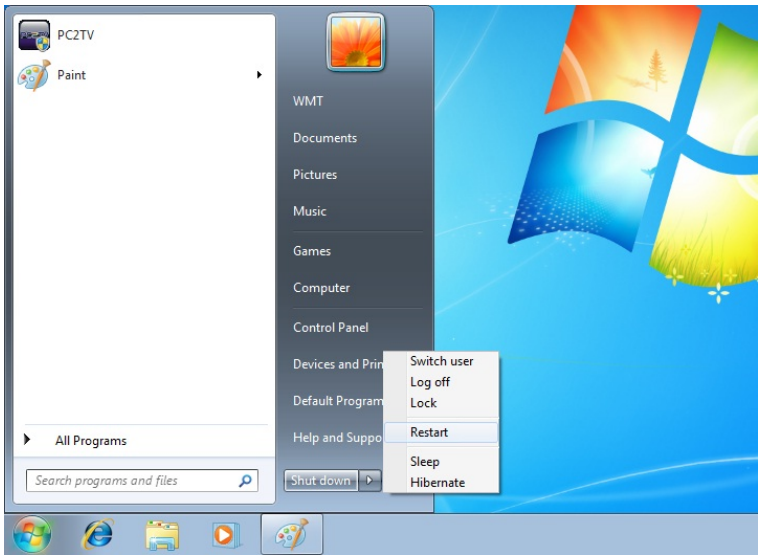
- Select “Inbound Rules” from the left window.
- Chick “PC to TV” is enabled in “Private” and “Public” profiles.
- If not, enable them.



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



- 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 may need to “Restart” your Windows and then run PC to TV utility again.

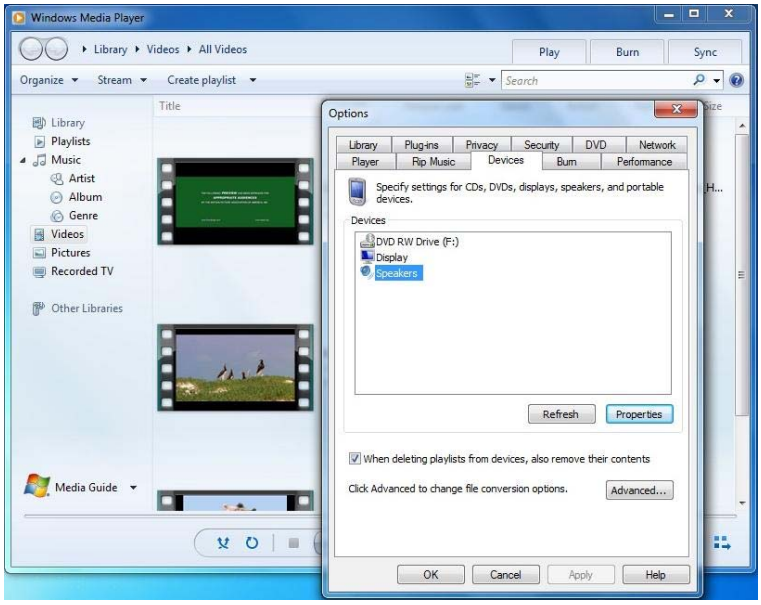
7.3 Audio Playback Issue

This section is to check and troubleshoot the audio device when “Play” PC to TV application or after “Stop” PC to TV application.

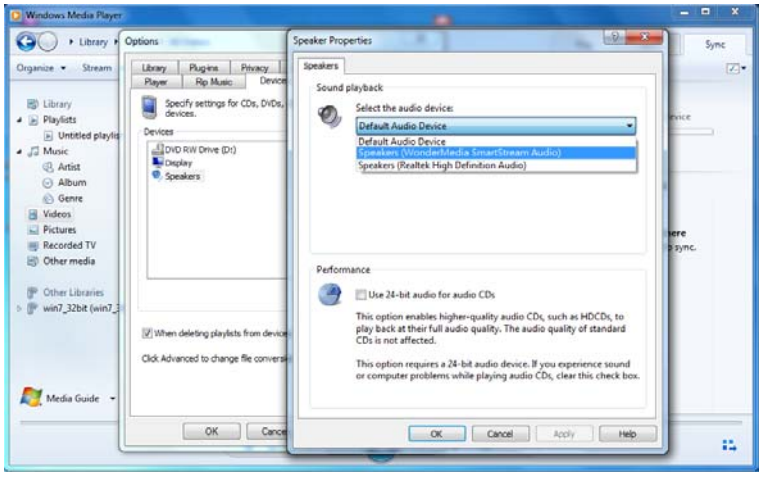
7.3.1 “Play” Mode Issue

If the audio is not worked well after “Play” PC to TV application, please check the audio devices on your media player.

For example: Windows Media Player 12



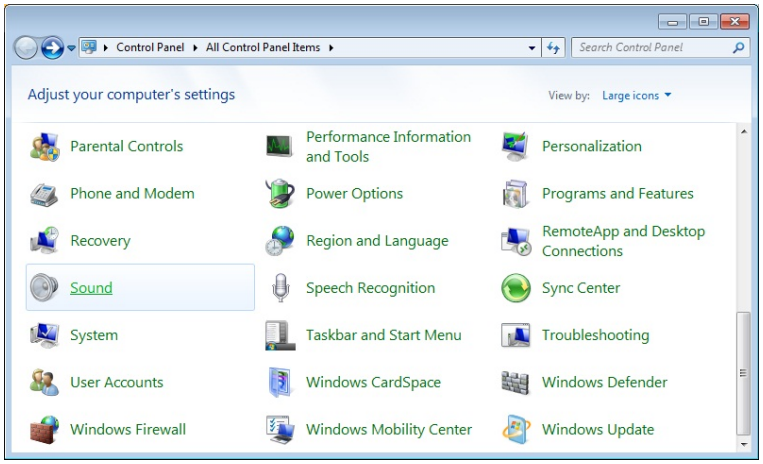
- Select the audio device setting from Windows Media Player.



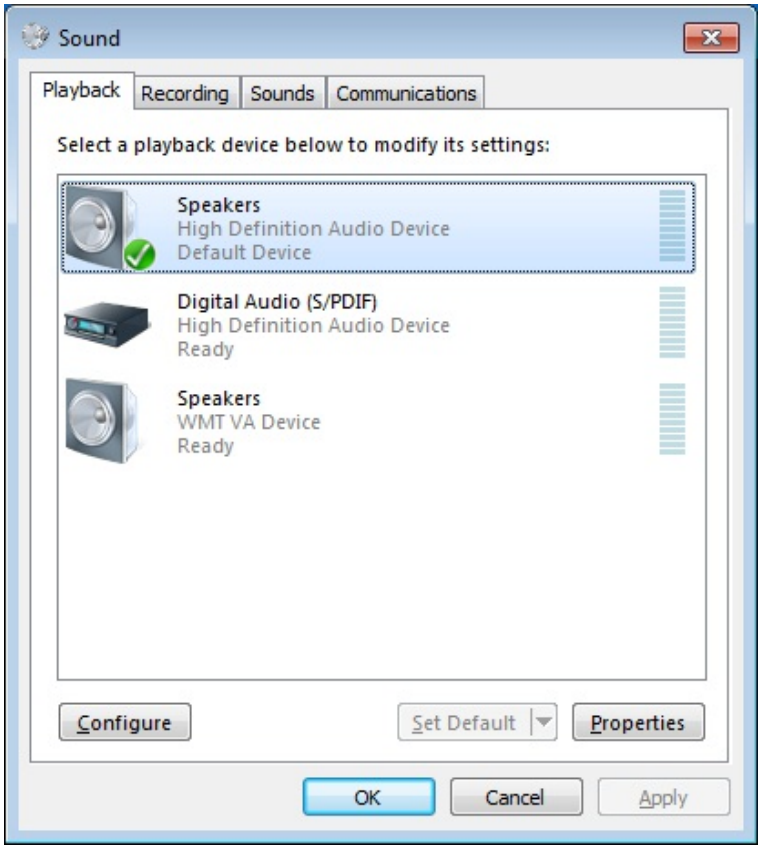
- The “Speakers” should be set as “Default Audio Device” or “WonderMedia SmartStream Audio”.
- If not, select it and then click “OK” or “Apply” to save the setting.
- Then close your media player and restart-up it again.

7.3.2 After “Stop” Issue

If the audio is not worked well after “Stop” PC to TV application, please check the audio devices on your PC.



- Open the “Sound” from “Control Panel”.

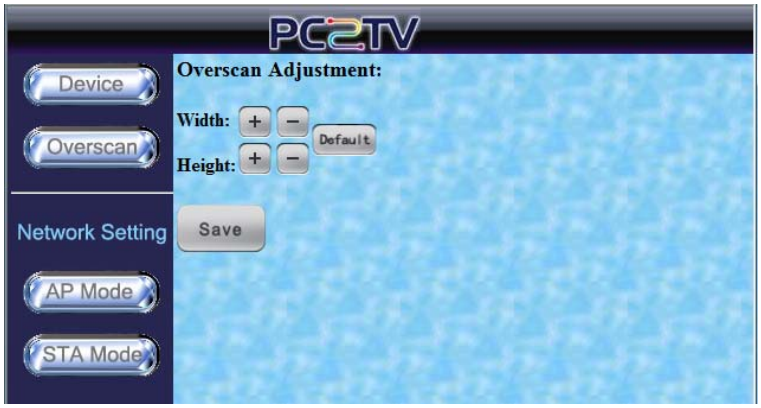


- The “Default Device” in the “Playback” tab should be set at your PC’s hardware audio speakers.
- In the left picture, the PC’s hardware audio speakers is “High Definition Audio Device”.
- If not, select it and then click “OK” or “Apply” to save the setting.
- Then close your media player and restart-up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

7.4 Display Overscan Issue

If the borders of PC's desktop are hidden to not be shown on your TV, you can try to adjust it.

- The borders of PC's desktop are hidden as the left picture.

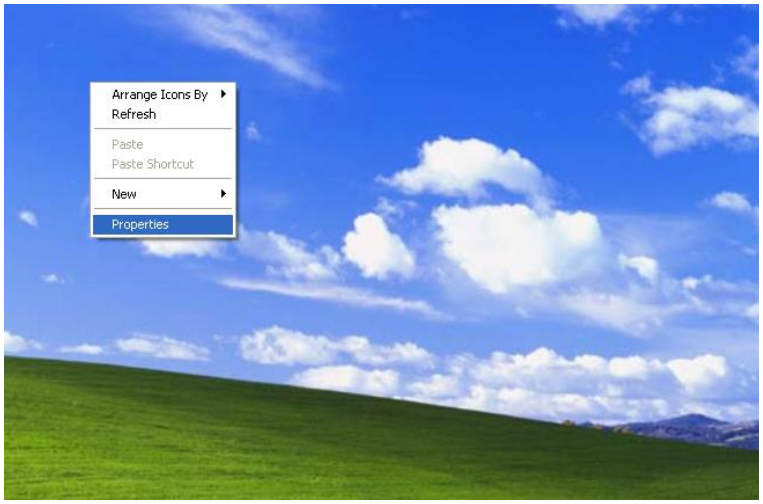


- Go to the "Device Configuration" page. Please refer to *Section 5.1*.
- You can click "+" or "−" of Width or Height to modify the hidden borders. Please refer to *Section 5.1*. [10]

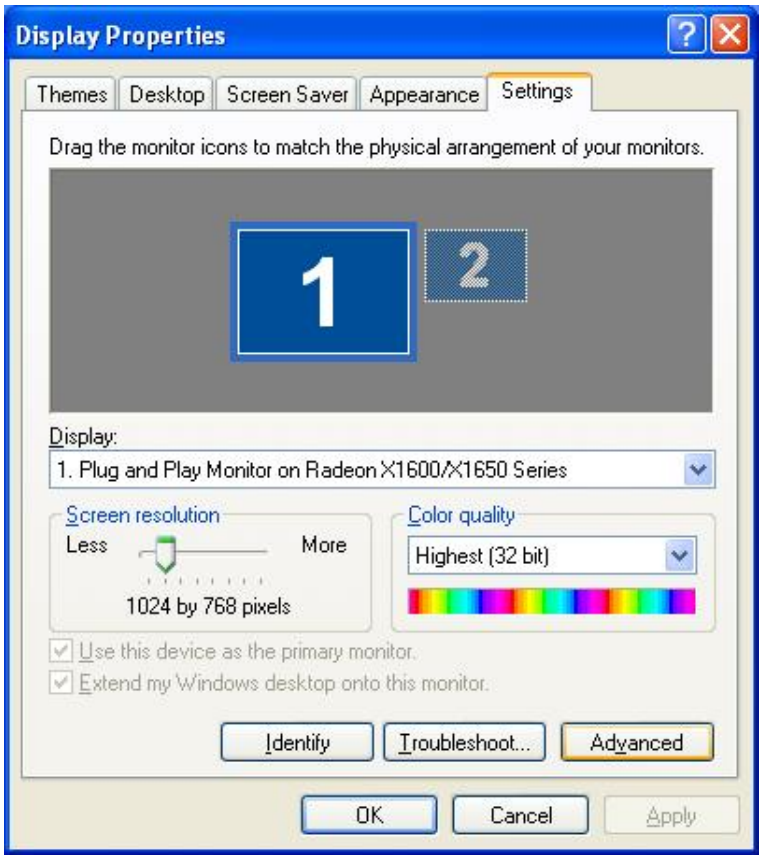
[10] In order to provide the stable performance for movie/video playback, the overscan adjustment function is disabled when the display resolution is at 1080P. Please refer to *Section 8.1*.

7.5 Movie and Video Playback Issue in Windows XP

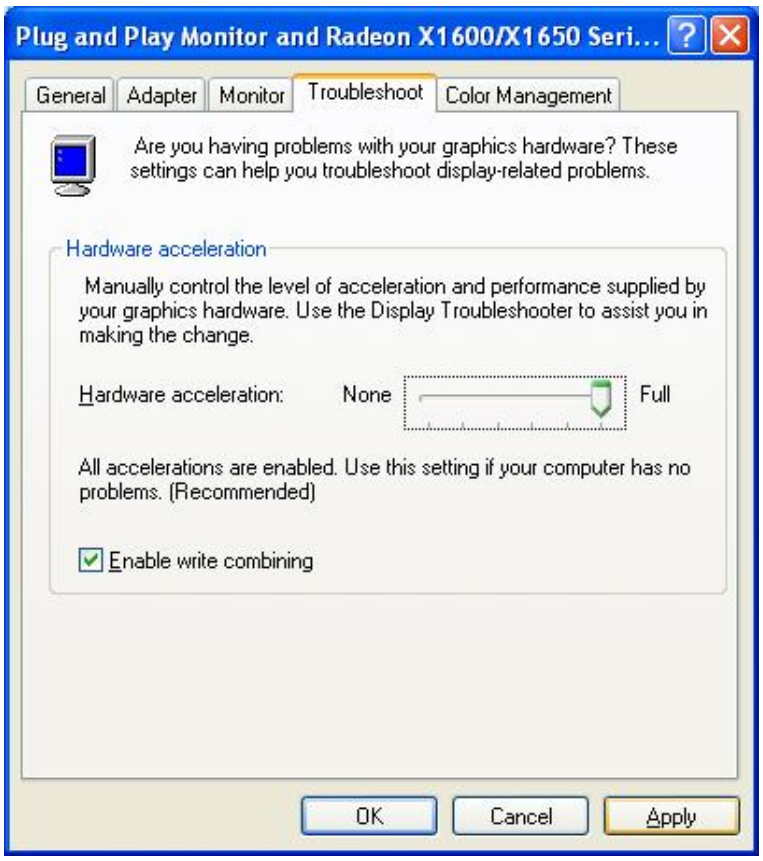
If you play a movie through PC to TV application, but only hear its audio without video displaying in your media player in Windows XP, please see the following steps to solve it.



- Click right key of your mouse on the desktop, and then select “Properties”.



- Select “Settings” tab and then click “Advanced”.

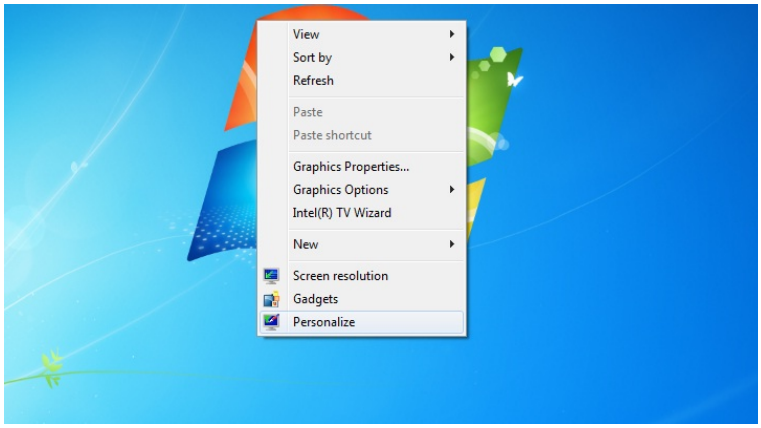


- Select “Troubleshoot” tab and then move the Hardware acceleration to “Full”.
- Click “OK” or “Apply” to save the setting.
- Then close your media player and restart-up it again.

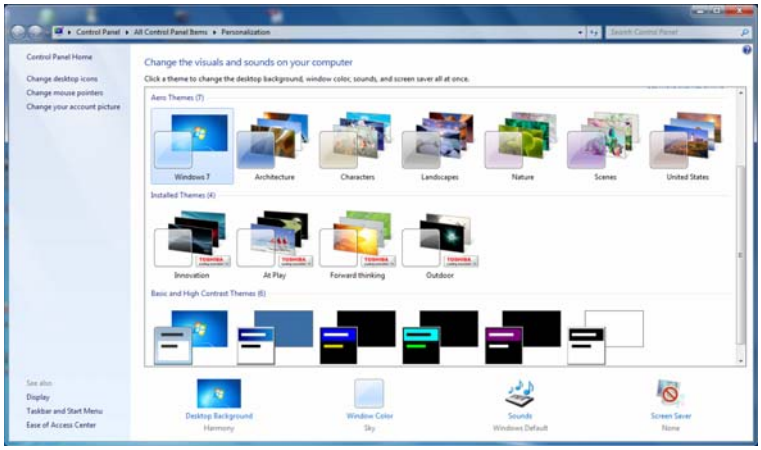
7.6 Poor Display Fluency of PC to TV Application

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

7.6.1 Switch Desktop Themes of Windows 7 / Vista



- Click right key of your mouse on the desktop, and then select “Personalize”.



- Switch the theme between “Basic and High Contrast Themes” and “Aero Themes”.
- Close the window.

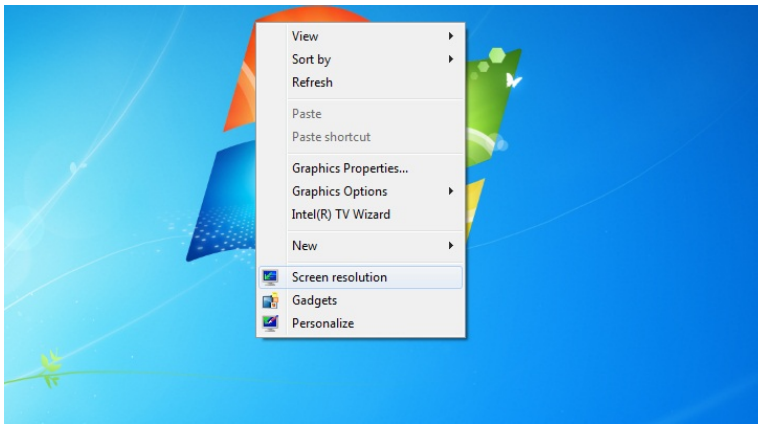
The “Aero themes” should be for better PC capability, and the “Basic and High Contrast Themes” should be for poorer PC capability. Please refer to Section 3.1.1, and Section 7.8.1.

7.6.2 Check the “Optimum Mode” setting

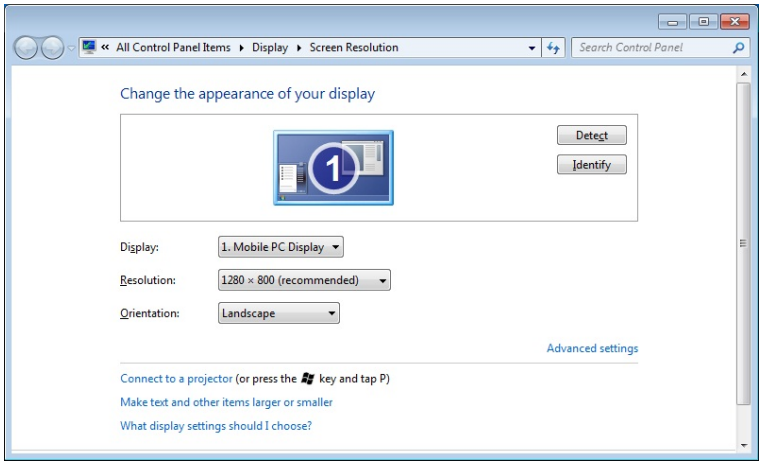
- Click to open the advanced menu.

- Please refer to *Section 3.1.1* to check the setting of “Optimum Mode”.
- If the “Optimum Mode” is set at an inappropriate mode, please modify it.

7.6.3 Check PC’s Desktop Resolution

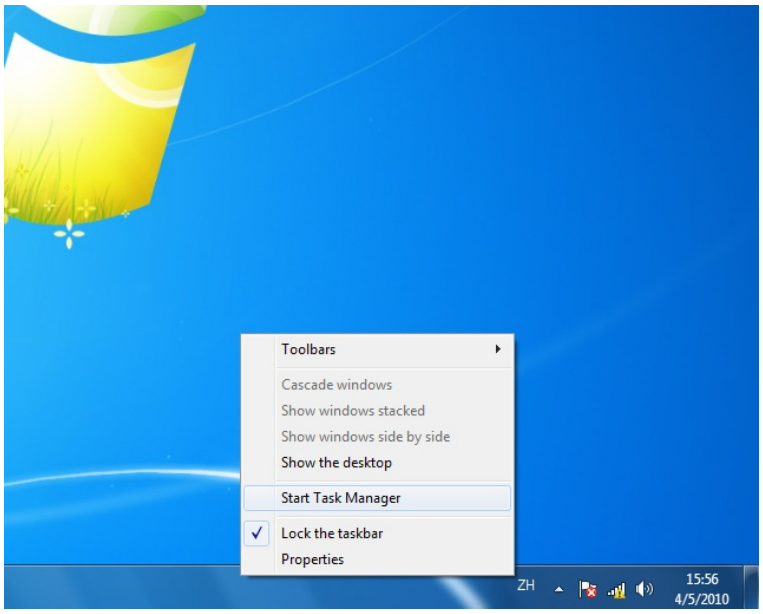


- Click right key of your mouse on the desktop, and then select “Screen resolution”.

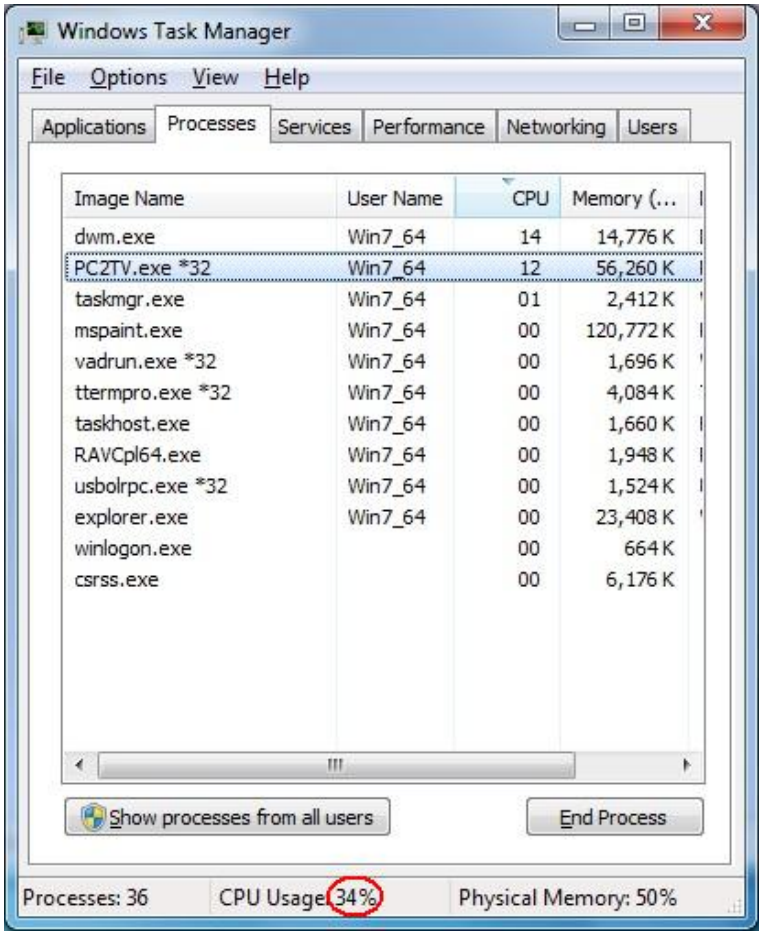


- Please refer to *Section 3.1.1*.
- If the “Resolution” setting is higher then the maximum supported one of your PC capability, please change the resolution to an appropriate one.

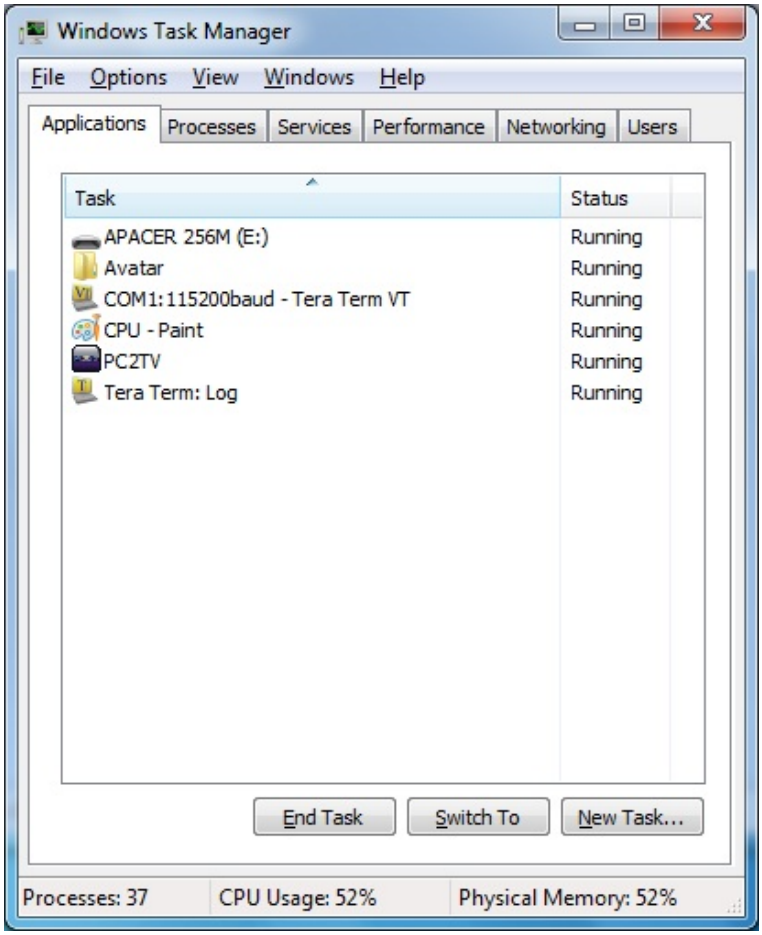
7.6.4 Check CPU Usage



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

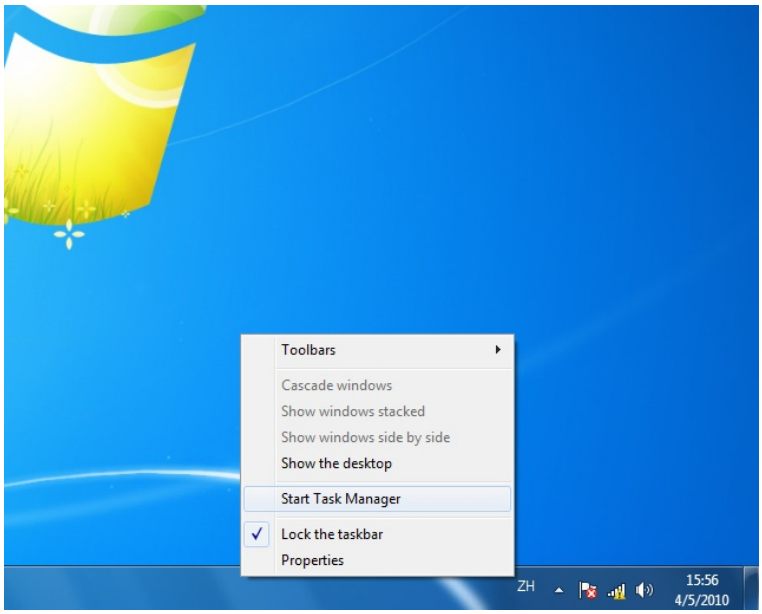


- Check the “CPU Usage” under the “Task Manager” window; it should be under **80%**.

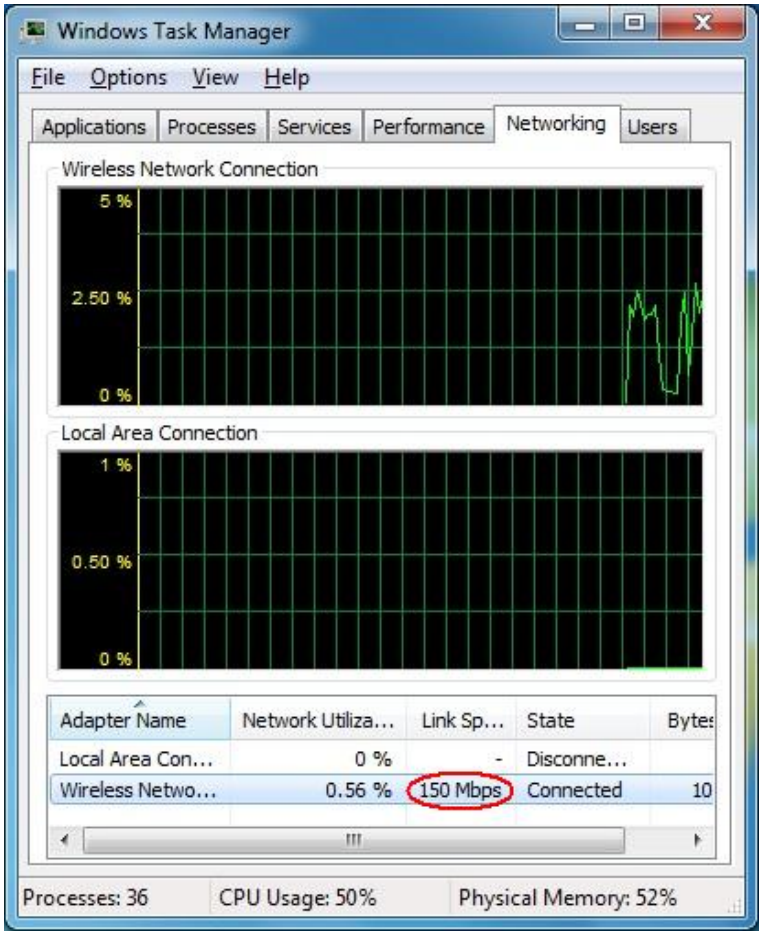


- If not, please save your documents, and close unused programs from “Applications”.

7.6.5 Check Wi-Fi Link Speed

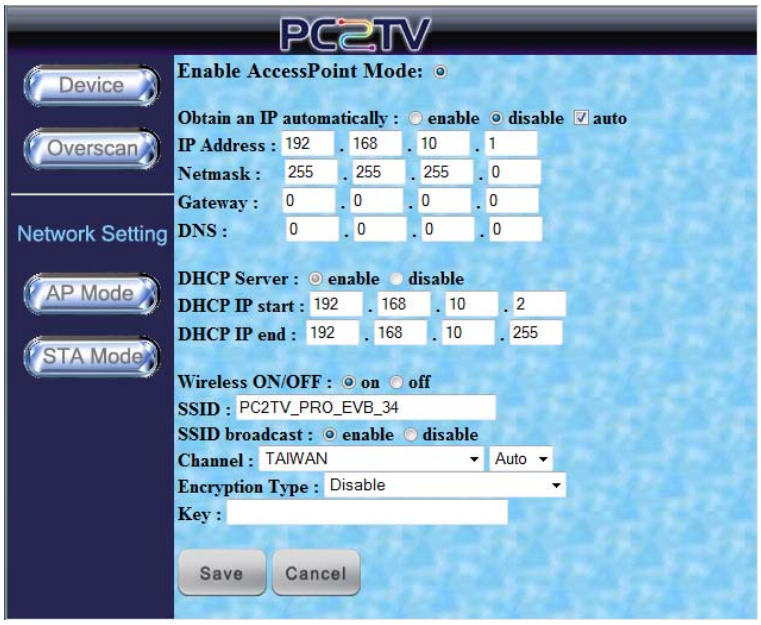


- This solution is only for Wi-Fi connection.
- Click the right key of your mouse on the taskbar, and then select “Start Task Manager”.



- Click the “Networking” tab.
- Check the Wi-Fi link speed; it should be higher than **36 Mbps**.
- If not, try to move the PC to TV device to different positions that should be farther away from other electronic equipments, or closer to your PC. 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.

7.6.6 Change the Wi-Fi Channel



- This solution is only for the connection of Wi-Fi AP Mode.
- Go to the “Device Configuration” page. Please refer to *Section 5.1* and *Section 5.4.1*.
- Fix a specific channel instead of “Auto”.[11]
- “Save” it and then connect the Wi-Fi again.

If the fluency is still poor after fixing a channel, please try other ones.

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

7.7 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 PC to TV utility.
- Please wait enough time for the readiness of network before “Play” PC to TV application.
- Close PC to TV utility, restart-up the utility, and then “Play” PC to TV application again.
- Close PC to TV utility, disconnect the network, reconnect your network, restart-up PC to TV utility, and then “Play” PC to TV application again.
- Close PC to TV utility, disconnect the network, close all of other programs and services on your PC, reconnect your network, restart-up PC to TV utility, and then “Play” PC to TV application again.
- Shut down the PC to TV device, reboot the device, reconnect your network, restart-up PC to TV utility, and then “Play” PC to TV application again.
- Shut down your PC, reboot the PC, reconnect your network, restart-up PC to TV utility, and then “Play” PC to TV application again.
- Uninstall PC to TV utility, restart your Windows, install PC to TV utility, restart your Windows, restart-up PC to TV utility, and then “Play” PC to TV application again.
- Check Windows Firewall and network service settings again. The firewall might be blocking the PC to TV utility. For firewall help, please refer to *Section 7.1*.

7.8 Known Issues and Limitations

This section lists known issues and limitations of PC to TV applications, including some workarounds for trying.

7.8.1 PC to TV Limitations

In “Basic and High Contrast Themes” of Windows 7 / Vista, there are several limitations with PC to TV application as follows. Therefore, it is recommended to change the theme to “Aero themes”. Please refer to Section 7.6.1.

- When playing a movie/video by Windows Media Center or Windows Media Player through PC to TV application, it may show a middle horizontal line on the TV / Monitor.
- PC to TV application could not support full screen of Windows Media Center.
- When you press Ctrl + Alt + Delete while PC to TV application is playing, it would freeze the TV / Monitor’s screen.
- When setting password in Windows screen saver, it could not be supported by PC to TV application.

It is not achievable while you want to play DVD movies by Windows Media Player in Windows XP through PC to TV application; it is recommended to use another media player, ex. Media Player Classic - Home Cinema.

It should be avoided to change any kinds of network configurations when PC to TV application is playing, otherwise it may cause momentary disconnection or end the connection directly.

8 Appendix

8.1 Display Resolutions

- Generally speaking, the PC to TV device could support display resolution up to 1,440 x 900 (widescreen) and 1,280 x 1,024 (4:3 screen).
- The PC to TV device is also able to support 1,920 x 1,080 (HDTV: 1080P), but the following conditions are all required:
  1. 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).
  4. The working graphic on PC should be Intel's graphic; AMD/ATI or Nvidia graphic is not able to support it.

8.1.1 Principals of Resolution Implementation

- After "Play" PC to TV 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 *Section 3.3.1*.
  1. 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".
  2. "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"
  3. "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 PC to TV 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" PC to TV application.

8.1.2 Resolution Implementation Table

- The following two tables show the implemented display resolution of your TV / monitor after "Play" PC to TV 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, PC to TV application might work abnormally.
- The implemented display resolutions shown below are only supported, but the performance of PC to TV application might be not acceptable. Please refer to Section 2.2.2.2 and Section 3.3.2 to consider the balance between your PC capability and display resolution.

PC to TV Support Resolution Table (1)						
\	TV / Monitor	TV / Monitor Highest Support Resolution (EDID Support)				Remark
PC	\	1,024 x 768	1,280 x 800	1,280 x 1,024	1,366 x 768	
Resolution Setting of PC's Desktop	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	
	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	
	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	

PC to TV Support Resolution Table (2)						
\	TV / Monitor	TV / Monitor Highest Support Resolution (EDID Support)				Remark
PC	\	1,440 x 900	1,600 x 1,200	1,680 x 1,050	1,920 x 1,080	
Resolution Setting of PC's Desktop	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	
	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	
	1,366 x 768	1,366 x 768	1,366 x 768	1,366 x 768	1,366 x 768	
	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	

8.1.3 Media Players Compatibility of PC to TV Application

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

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

Note 1: Windows Media Player 11 does not support it in default.

Note 2: 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

Note 3: It would be “OK” after changing KMPlayer setting: [options] → [Preferences] → [Video Processing] → [Renderer] → [Renderer: VMR7 Windowed]

Note 4: It would be “OK” after setting "Hardware Acceleration" to "Full". Please refer to *Section 7.1*.

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