

Model No. SN1510-A7

Operating Instructions DUAL STREAM NETWORK AV BOX

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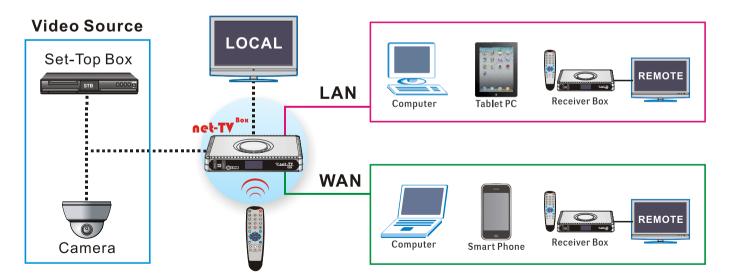
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Product Overview

Introduction

The net-TV Box is a device that connects to your set-top box or camera and streams your TV shows and DVR content over the network for you to watch and control anywhere you go.

net-TV Box provides simultaneous dual streams Full D1 video quality. With the net-TV Box placed in a living room for instance, you can enjoy any videos from anywhere in your home by using the computer, smart phone, tablet PC and receiver box on these client devices. Every two of the local, LAN and WAN users can watch different programs independently.



Key Features

- High quality encoding
 Advanced video (H.264) and audio coding
 (AAC) provides high quality encoding at low
 - (AAC) provides high quality encoding at low bitrates saving bandwidth without compromising quality in live streaming applications.
- Coding and TV OUT function
 Box has encoding and TV OUT function, so video files recorded can be watched on TV (using the supplied remote control).
- 3 Local schedule recording
 The second generation PVR schedule record
 function can set the recording assignment from
 long-distance or the box. You can also record
 the video without PC
- 4 IR Blaster
 Supports various remote controls of STB. User can control the video devices remotely after IR learning.
- WiFi wireless network connection*
 Supports the USB WiFi wireless network connection (the WiFi wireless network card is not supplied).
- * Only supports Ralink's 2571 chip.

Dual streams

Supports two services at the same time, and their video resolution can both achieve D1. Users can watch different video source programs independently of each other.

7 Convenient connection

Supports connection from the remote Receiver Box / PC / Smart Phone AP, and you can connect it anywhere and anytime of the world.

8 Easy to install P2P server and UF

P2P server and UPnP communication protocol make an easy network connection. You can avoid the annoying network setting and just use it by Plug and Play.

9 PVR & IP STB in one

With CAM and AV video input source, and has both functions of PVR and IP STB.

1 Firmware upgradeable

Provides remote firmware update mechanism, and retaining the lasted version and upgrading new version no longer need to spend money.

System Requirements

net-TV Box

□ Cable or DSL modem, Home network router (UPnP compatibility highly recommended)
 □ External connected video device such as DVD, DVR or STB
 □ 256 Kbps upstream network speed (higher upstream network speeds yield higher quality video)
 □ USB storage such as USB flash disk for recording (Must be FAT32 File system)
 net-TV 2012 for windows
 □ CPU: Intel Pentium 4 1.5GHz or above
 □ RAM: 512MB or above
 □ Operating system: Windows XP, Vista, 7

■ Sound Card : PCI sound card or on-board audio

☐ Hard disk: at least 100MB capacity or above

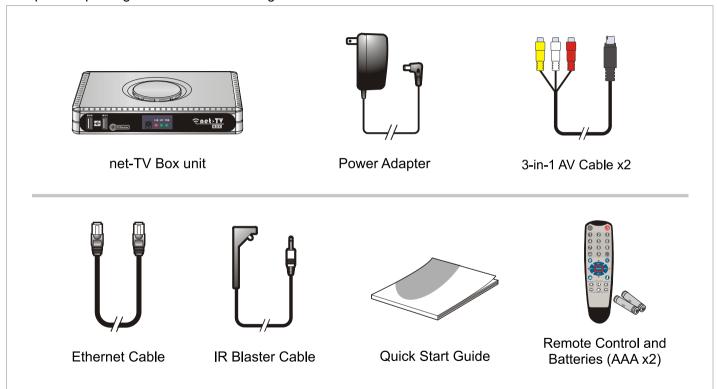
□ Network : 10/100Mbps Ethernet LAN port connection ability

■ Windows-compatible Graphics Card with DirectDraw Overlay Support

net-TV mobile2 for Android:
☐ An Android mobile phone or Tablet with 3G or 4G wireless service or Wi-Fi Internet connectivity
☐ Android 1.6 or later
☐ 5 MB free memory is required on the Android device to install the net-TV mobile2
☐ Network download speed of 150Kbps (or higher)
net-TV mobile2 for iPhone:
☐ Support devices: iPhone 3G, iPhone 3GS, iPhone 4, iPod touch
☐ Requires the latest software update
☐ 5 MB free memory is required on the iPhone or iPod touch to install the net-TV mobile2
☐ Network download speed of 150Kbps (or higher)
net-TV mobile2 for iPad:
□ Support devices: iPad, iPad 2
□ iOS 4.2 or higher.
☐ 3G wireless service or Wi-Fi Internet connectivity.
5 MB free memory is required on the iPad to install the net-TV mobile2
☐ Network download speed of at least 500 Kbps (Your results may vary based on network conditions).

Package Contents

The product package includes the following items and accessories:



• One ID number is supplied on the sticker of Box for remote application login.

Specifications

System	
OS	Embedded Linux
CPU	Dual core (ARM 9 + DSP)
Memory	FLASH:16MB; RAM:256MB DDR2
Signal System NTSC and PAL	
Network protocols HTTP, UDP, TCP/IP, SMTP, FTP, NTP, PPPoE, DHCP, UPnP, RTSP	
Interface	
Camera & Audio	1 x Camera IN (BNC, Female) 1 x Talk audio in (pink;3.5mm,phone Jack)
	1 x Listen audio out (green;3.5mm,phone Jack)
AN IN	1 x composite VIDEO IN (RCA, Yellow)
	1 x L/R Stereo AUDIO IN (RCA, White/Red)
	The AV IN signals above input by the supplied 3-in-1 AV cable.
AV OUT	1 x VIDEO OUT (RCA, Yellow)
	1 x L/R Stereo Audio OUT (RCA, White/Red)
	The AV OUT signals above output by the supplied 3-in-1 AV cable.
Data transmission	2 x Type A, USB Host
	1 x Ethernet jack x1,10 Base-T/100 Base-TX
	1 x IR Blaster, 3.5mm mini jack

Power	1 x 5.5V DC jack
LEDs	3 x Indicate power, network and USB status
Reset button	1 x semi-recessed pushbutton to load factory default.
Recording	
Video compression	H.264 Main profile @ Level 3.0
Support resolutions	D1, Half D1, CIF all @30/25 fps
Audio Compression	AAC
Recording File format	MP4
Recordable Media	USB External HDD or USB Flash drive
File System	FAT32
Recording Quality	D1 (about 1.5Mbps), Half D1 (about 1Mbps), CIF(about 512kbps)
General	
Power Requirement	5.5VDC, 2A
Power Consumption	< 10 Watts
Operating Environment	0° C to 35°C, Humidity 10% to 80% RH(No condensation)
Storage Environment	-10° C to 50°C, Humidity 5% to 95% RH(No condensation)
Dimensions	185(L)x124(W)x28.5(H)mm
Mass (weight)	TBC

 $[\]mbox{\%}$ Specifications and design are subject to chang without notice.

Guide to Parts and Control



Front Panel

- 1 USB Port:
 - DISK: Connect a USB storage device for record or playback.

WiFi: Connect a wireless USB adapter to access network (Only supports Ralink's 2571 chip.)

2 IR Blaster Port:

Connected with a supplied IR blaster cable, via the learning function of remote control, the box can emit IR signals to control STB remotely.

3 Remote Sensor:

Point remote control here.

4 Status indicators:

Show the current status of this product. USB: USB storage indication NET: Network connection indication PWR: Power indication.



Rear Panel

- 1 DC-IN:
 Connect the supplied power adapter.
- **ETHERNET:**Connect a network with an always-on broadband connection.
- AV-OUT:

 Connect to the A/V input of TV by the supplied 3-in-1 AV cable.
- CAMERA & AUDIO IN/OUT:
 Camera IN (BNC), Audio OUT (connected to speaker) & Audio IN(connected to microphone).
- RESET:
 Press it with pen-point for three seconds, the box will reset to the default setting.
- AV-IN:
 Connect to external A/V devices (such as DVD or STB) by the supplied 3-in-1 AV cable.

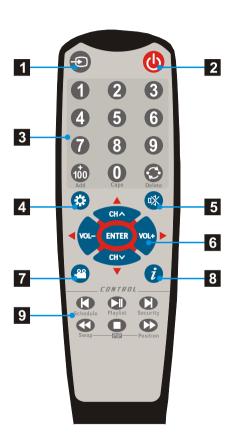
Table 1 The Status Indicators:

The net-TV Box has three status lights on the front to indicate what's happening.

LED	Indication	Meaning
	Light off	The power of the box is off.
PWR	Dark green static	The box is starting up or in standby.
FVVK	 Light green static 	The box is operating.
	Green flashing	The box is resetting to the factory defaults.
	Light off	Both the WAN and LAN connection are not ready, or have failed.
	Red static	LAN functionality is enabled.
NET	🔆 Red flashing	The box is sending or receiving data over LAN.
	 Green static 	Either WAN or WAN+LAN functionality is enabled.
		The box is sending or receiving data over either WAN or WAN+LAN.
	Light off	The USB storage is not being used.
USB	Red static	The USB storage is plugged into the USB port.
	* Red flashing	Illuminates when data is read from or written to the USB storage.

Viewing the Remote Control

- 1 → Video source switch
- On/off the video output to TV.
- 3 0-9 numerical buttons, +100 and channel return
- 4 ★ Menu key, press it to enter to function setting page.
- Mute button, temporary sound switch-off.
- Generally CH ^/v keys are used for channel selection and VOL+/
 keys for volume control. When in the menu page, The direction keys and ENTER key are used to select and confirm the function settings.
- 7 Page 1 Instant recording key.
- 8 *i*On/off the system and network status information.



Play control keys
Please refer the following page for the detailed instructions.

These six keys have different functions when playing recorded files and watching AV/CAM programs:

Keys	Functions when playback	Functions when watching programs
H	Last file	Set schedule recording
►II	Play or pause	Open the play list
H	Next file	Function reservation for other products.
*	Fast rewind	Swap between main picture and sub picture under PIP.
	Stop	Start the PIP function.
>>	Fast forward	Switch the position of sub picture on TV.



1 Lift the cover at the back of the remote control upward as shown in the figure.



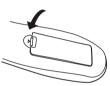
2 Install two AAA size batteries.

Make sure to match the "+" and "-" ends of the batteries with the diagram inside the compartment.



3 Replace the cover.

Remove the batteries and store them in a cool, dry place if you won't be using the remote control for a long time. The remote control can be used up to about 5 meters from the box.



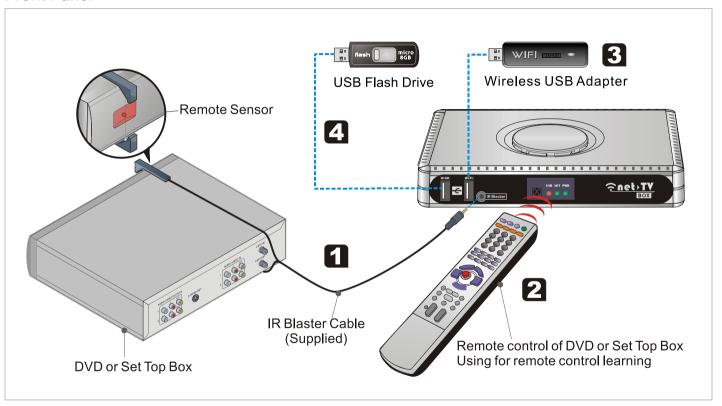


If the remote control doesn't work, check the following:

- Is the net-TV Box power on?
- · Are the plus and minus ends the batteries reversed?
- · Are the batteries drained?
- Is there a power outage, or is the power adapter unplugged?
- · Is there a special fluorescent light or neon sign nearby?

Hardware Installation

Front Panel



1 Connecting the IR Blaster cable

Connect the supplied IR Blaster cable to the **IR Blaster** port of the net-TV Box, and place the other head on the video source such as Set Top Box to point at its Infrared receiver.



- Keep the distance between the IR cable's head and the remote sensor of video source within 5cm.
- After a successful IR Learning, you could remove the backing paper from the IR Blaster and fix in place.

2 IR learning

With the net-TV 2012 installed on your PC, you could do the IR learning by switching to the video source of the external connected video device. While learning, you must aim your physical remote control of the video source at the front led cap of the net-TV Box and keep the distance between them within 5cm. You can refer to IR Learning for more instructions.

Connect the wireless WiFi adapter

Plug the USB WiFi wireless network card into the **WiFi** port, and set WiFi as the network configuration of the Box, and then you can get to internet via the WiFi wireless network.



The two USB ports on the Box have their respective use, so the USB devices must be plugged into the correct port to avoid the unavailable situation.

4 Connect USB storage

If you want to set schedule recording or play the recorded files, you should plug the USB storage device in the **DISK** port at the front panel of the net-TV Box.



- The external USB device must be FAT32 format.
- The Box doesn't support some USB storage devices.

How to format the USB device with partition more than 32GB

If the USB device partition is more than 32GB, and it can't be format to FAT32 by Window system, you con format it to FAT32 by following these steps:

- **1.** Download a copy of fat32format.zip from http://www.ridgecrop.demon.co.uk/download/fat32format.zip, Extract the single EXE file to somewhere suitable, like C:\.
- 2. Click 「Start ► Run」 and enter

cmd

When the command prompt opens, type this - C:\ is the place you extracted the exe file to.

CD C:\

Press enter and then type this. You need to replace f: with the drive letter you are trying to format.

fat32format f:

You should see this displayed

Warning ALL data on drive 'f' will be lost irretrievably, are you sure (y/n)

Now when it says this, it really means it. If you format the boot sector, FATs and root directory will be filled with zeros. Type **y** and hit return if you are sure to format.

You should see this displayed

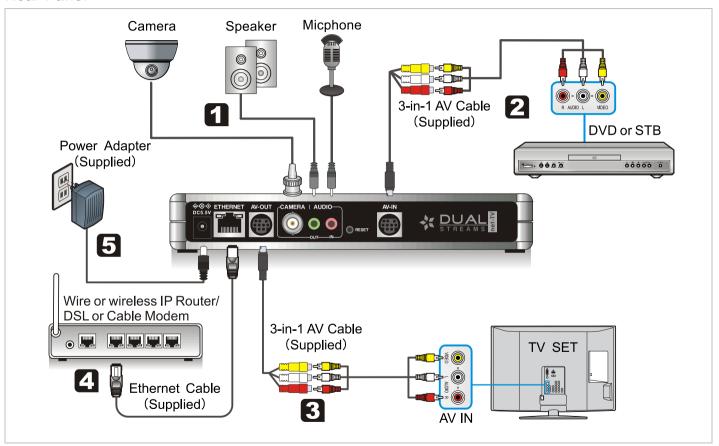
.

Initialising reserved sectors and FATs...

Done

This means that all has gone according to plan, and the USB device has been formatted to FAT32.

Rear Panel



1 Connect CAM and Audio Source

Connect the speaker, microphone and camera to the corresponding ports of net-TV Box.

2 Connect Video Source

Use the supplied 3-in-1 AV cable to connect the **AV-IN** jack on the unit and connect the other end of it to the 3RCA to 3RCA cable and S-video cable, then to the corresponding out jack on your video device.

Connect output

Use the supplied 3-in-1 AV cable to connect the **AV-OUT** jack on the net-TV Box. Then connect the other end to the 3RCA to 3RCA cable, then to the output of your TV.

4 Connect to your network

Connect the net-TV Box's **ETHERNET** port to the corresponding port on your Modem or Router using a LAN cable. Use a commercially available LAN or Ethernet cable (CAT5 or better withRJ-45 connector). If the Box is not near a network connection, many retailers have LAN cables in lengths of 50 feet or more.

Connect Power Source (Remember to place the step at last.)

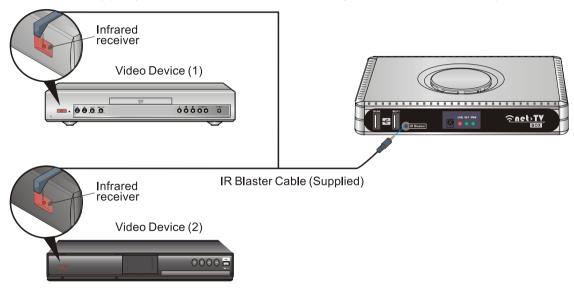
Connect the supplied power adapter to the port labeled **DC5.5V**, and plug the power adapter into an electrical outlet.

When plugged in, the PWR light on the front panel comes on.

Using two video devices

We supplied another using method for you to connect and control two video devices at the same time. You can connect two video devices as following.

1. Plug the supplied IR Blaster cable to the **IR Blaster** port of Box, and place one of the other head on the top of the video device (1) to point at its Infrared receiver, then place the other on the top of the video device (2).

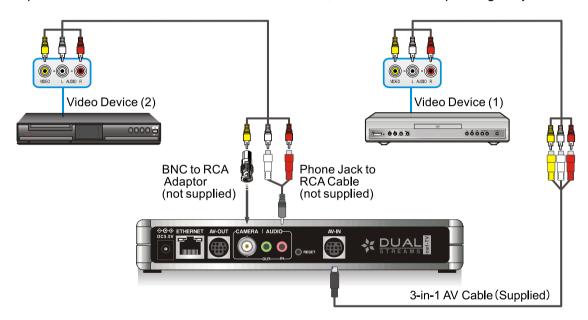




The remote controls of the two video devices must be different to avoid the disturbance situation.

2. Following the above video source connection instructions to connect video device (1).

Then start to connect video device (2), first connect a BNC to RCA Adaptor (not supplied) to the **Camera** port of Box and plug a phone jack to RCA audio cable (not supplied) to the **AUDIO** in port, and then connect the Adapter and audio cable to the 3RCA to 3RCA cable, then to the corresponding out jack on video device (2).



3. Start net-TV 2012 application on PC, and switch the video source to AV after login. Then use the remote control of video device (1) to do IR learning. (Please refer to IR Learning for more instructions.)





net-TV 2012

4. Then switch to the CAM video source and use the remote control of video device (2) to do IR learning.





net-TV 2012

5. After learning, you can use the IR remote panel on net-TV 2012 to control video device (1) when in AV source and control video device (2) in CAM source.

Local Operations

Using Rule

This product supports dual D1 streams. And every two of the local, LAN and WAN users can watch different programs independently. It can support two of the following services at the same time, and their video resolution can both achieve D1.

8960A7 Services:

Local(Box)	LAN(Remote)	WAN(Remote)
1. Watch AV / Instant Recording /	1. PC	1. PC
Playback Recorded Files	2. Phone or Table	2. Phone or Table
(select one of them)	3. Receiver box	3. Receiver box
2. Schedule Recording		



- · User who login first has high priority.
- Only schedule recording can be canceled or stopped. When there are two services going on and one of them is schedule recording, then the third user try to connect Box or the other online user try to switch source, it will remind and let user decide whether to stop the recording or not. If schedule recording happens when there are two services going on, it will ask the online user whether to cancel or enable the schedule recoding.
- Box can't support two services to access USB device at the same time. So Instant Recording, Playback Recorded Files and Schedule Recording can't be used at one time. Each function can only be used at a time.

Connection rule (except schedule recording):

- 1. When both the two video sources (AV & CAM) are idle, the first login user can switch source.
- 2. And if user sends connection request when only one source is in use (such as AV), it will automatically distribute the other source (CAM) them for requester.
- **3.** When both the video sources are in use, user can't switch source. If user switches source, it will remind that "The other video source is in use".
- **4.** When both the video sources are in use, then anther user send connection request it will remind that "The services have reached the limit. Please try again later!".

On Screen Menu

You can also set the net-TV Box via OSD operation on TV without opening computer.

Use the supplied remote control and aim it at front led cap of the net-TV Box, then press the "*" key, it will pop up the main menu page on TV as shown on the right.

Picture: Adjust brightness, contrast, hue and

saturation.

Setup: Set the display language, clock, view system

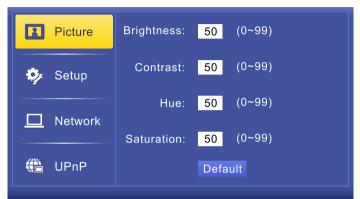
information and update firmware.

Network: Set the network type.

UPnP: Set the UPnP type.

Use the "▲/▼" keys to select an item, and press the "ENTER" or "▶" key to enter in the corresponding menu.

¾f you can't enter into the main menu, please press the "O" key of the remote control to open the OSD function.



1 Picture

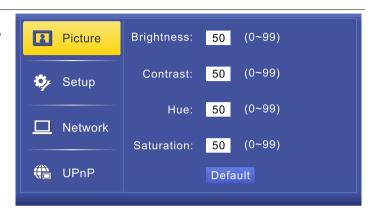
Select the 「Picture」 item, and press the "ENTER" or "▶"

to enter in the 「Picture」 page.

You can adjust brightness, contrast, hue and saturation in this page.

You can also set the default value by press the "**Default**" button.

Use the "▲/▼" keys to select the item, enter the value directly with the number keys or adjust the value with "◀/▶" keys, then press "ENTER" key to confirm.



2 Setup

Select the 「Setup」 item, and press the "ENTER" or "▶"

to enter in the 「Setup」 page. You can set display language and clock, view system information and update firmware here.

Display Language:

You can set the OSD display language in this page. Use the " $\blacktriangle/\blacktriangledown$ " keys to select the desired language, press "**ENTER**" key to save the setting.



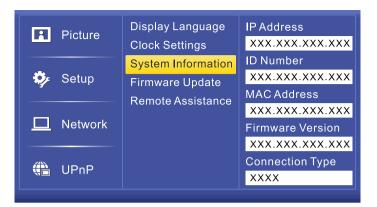
Clock Settings:

You can set time zone, date and time in this page. Use the "◀/▶" keys to select the desired value, and use the "▲/▼" keys to adjust the value, press "ENTER" key to save the settings.



System Information:

You can view the information such as IP Address, ID Number, MAC Address, Firmware Version and Connection Type in the page.



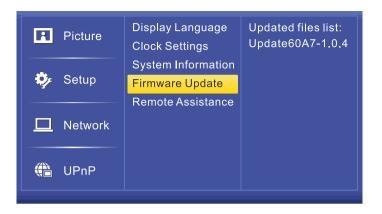
Firmware Update:

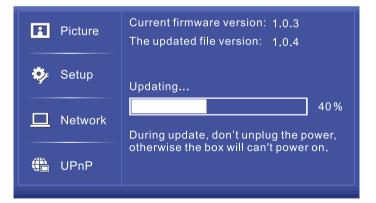
You can update firmware in the page. You have to insert the USB storage with firmware update file in net-TV Box first.

It will automatically display the firmware update file in the USB storage. Move the cursor to select the update file and then press "**ENTER**" to update.

It will display the transfer progress bar as right when updating.

Then the box will reboot to effect the firmware update. After that, you can enter in the 「System Information」 menu to check the Firmware Version.

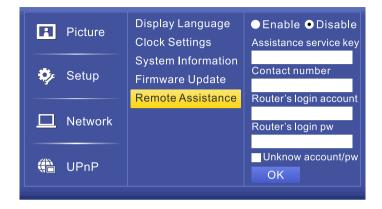




Remote Assistance:

To enable the remote assistance service please first confirm that the network equipment which net-TV Box connected is a router, and the computers that connected to the router can access to the web, just the net-TV Box can't go online via internet (the NET light doesn't turn green).

This situation may be because that the router can't transmit the requisite connection ports for net-TV Box, and then you have to set the router to configure these connection ports.



If you don't know how to set, select "Enable" to enable the remote assistance service and let the professional personnel help to set it.

Enter the Assistance service key, your contact number, Router's login account and password. Click 「OK」 then the box will reboot and waiting for the assistance service settings.

When the assist personnel complete the remote assistance settings, the Remote Assistance Service Settings item will be change to Disable, then the box will reboot and user can connect net-TV Box.



The Assistance service key is "nettvk3q3q", you can also find it in the Quick Start Guide.

3 Network

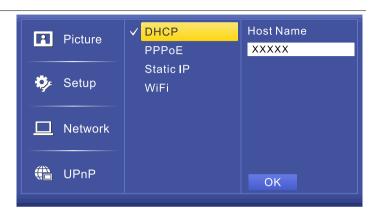
You can set network connection type in the 「Network」 page.

DHCP:

Choose this option to obtain an IP Address automatically from your ISP. (Applicable to most Cable MODEM or router users)

PPPoE:

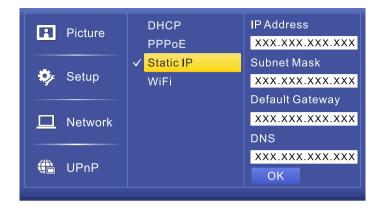
Select this option when you want to connect the Receiver Box to DSL/ADSL modem directly. Then you need to enter the Account and Password by using the on screen keyboard.





Static IP:

Select this option and enter the static IP information provided by your ISP, such as IP Address, Subnet Mask, Default Gateway and DNS.



WiFi:

Select a WiFi wireless network, if it has password protection you should enter the correct password later.



4 UPnP

You can set the UPnP type in the 「UPnP」 page.

Auto:

The default UPnP setting is Auto. If there is more than one net-TV Box connected to a router, it will adjust communication port automatically.



Custom:

If the effect of automatic port isn't satisfying, you can set AV port for yourself.



Disable:

Select disable to close UPnP and change to DMZ or Virtual Server.

If the router supports UPnP, please don't select the item. If you select the item (only available under LAN) you have to enter the corresponding ports in the fields when set to DMZ or Virtual Server.



Picture In Picture (PIP)

PIP(Picture In Picture) function means that both the two video sources are displayed on TV as main picture and sub picture at the same time.

Enable PIP:

When watching one video source, pressing "■ PIP" key can display the other video source as sub picture on TV (as right). The size of sub picture is fixed as 240x176(NTSC), 240x192(PAL).

Swap Pictures:

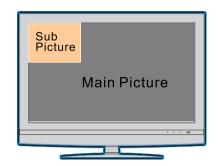
You can press "◀ Swap" key to swap the two video sources between main picture and sub picture.

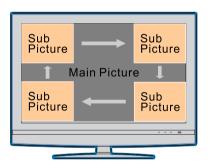
Change Position:

Sub picture is at the top left corner on TV as default. Pressing ">> Position" can switch sub picture position in a clockwise direction (as right).



- Because the two video sources are both in use when PIP is enabled, it will remind other users who want to connect the net-TV Box via network the message that 'the services have reached the limit'.
- Under PIP mode, the operations such as recording, audio output and channel switch are on main picture.
- PIP function can't be enabled when playback, in the on screen display menu or the other video source is in use.





Instant Recording

When watching programs you can record them and enjoying them later.

- 1. First plug the USB storage device to USB connector of the Box, and ensure that the USB status light of Box is on.
- 2. Press "a" on the remote control, the Box will begin to record programs, and it will display the recording sign on the screen. The time means the record duration. You can press the "a" button again to stop recording.
- 3. When meet the undesired video, you can also press "▶II" to pause, then press "▶II" again to continue.



For a USB recording task, it will create a recorded file every half hour. The default naming rule of the recorded files is as following (TV48-YYMMDD-HHMMSS_000.mp4 for example):

TV48	YYMMDD	HHMM(SS)	000
Video Source	Record date	Record time	The recorded file No.

So the name TV48-111117-1700_000 means that the file is recorded at 2011.11.17 17:00 and the recorded video source was TV source 48 channel. (The source item can be TV + channel number, AV or CAM.)

Schedule Recording

You can set the schedule recording task at the local Box and record the video without power on PC.

Press the "◀(Schedule)" key on the remote control to enter in the 「Schedule Recording」 page when watching programs.

It lists all the schedule recording tasks that have been set on the left, and show the current time and the detail information of the selected task on the right.

You can use "▲/▼" to select "New Schedule" or a task, then press "ENTER" to move the cursor to the edit area on the right and begin to add or modify a schedule recording task. You can also press "•Ç•(Delete)" to delete the selected schedule recording task.



Press "◄/▶" keys to select the item in the edit area, then press number keys or use "▲/▼" keys to adjust the value.

The system will automatically calculate the duration and required space of the task, and available disk space. Press the "**OK**" button to confirm and exit.

The description of the items in the recording task list is as following:

"01 04/18 Mon 16:00 Once" for example, it's the first recording task in the list, start recording time is 04/18 Mon 16:00, repeat mode is Once, that is record only for one time.

Item	Description	
01	Serial number	
04/18 Mon	The date of schedule recording task.	
16:00	6:00 The start time of schedule recording task.	
Once	The repeat mode of schedule recording task: Once, Daily and Weekly.	

The description of the items in the detailed recording task is as following:

Item	Description			
	The repeat mode of schedule recording task. There are	Repeat: Once		
	three modes: Once, Daily and Weekly.	Date: 2011 / 04 / 18		
Repeat:	Once: Only record once	Obert/Maria: 40 : 00 / D4		
	Daily: Record every day.	Start/Mode: 16 : 00 / D1		
	Weekly: Record on the same day every week.	Duration: 120 Minutes		
	The date of schedule recording task. This item display	Source/CH: AV / 103		
Date:	different according to the recording mode.	Disk: disk1 OK		
	When selecting "Once", you can select the recording	Need/Free: 400 MB/ 16 GB		
	date (as right). It will record that date only once.			
Start/Mode:	Start: The start time of schedule recording task.			
Otal Wilload:	Mode: Recording video quality, you can select D1, Half D1 or CIF.			
Duration	The duration of schedule recording task.			
0	Source: Video source of schedule recording.			
Source/CH:	CH: channel number of schedule recording			
Disk:	Select the disk to save the recorded file.			
Need/Free	The required space of the task and available disk space.			

When the repeat mode is "Daily", you can select the recording days from Sunday to Saturday (as right). And it will record at the selected days every week.

Schedule Recording New Schedule Repeat: Daily 01 04/18 Mon 16:00 Once S M VT VW T F S 02 04/19 Tue 18:00 Daily 03 04/20 Wed 20:00 Weekly Start/Mode: 18 : 00 / D1 Duration: 120 Minutes Source/CH: ΑV 103 Disk: disk1 OK Need/Free: 400 MB/ 16 GB **◀**▶ Page +100 Add ENTER Edit Delete

When the repeat mode is "Weekly", you can select the recording day from Sunday to Saturday (as right). And Box will record at the same day every week.



Play Recorded Files

You can play the recorded files in your USB storage device by following these steps:

- 1. First plug the USB storage device to USB connector of the Box, and make sure that the USB indication light is on. Then press "►II(Playlist)" on the remote control to enter the 「Play List」page. It will list all the recorded files in the USB storage device.
- **2.** Move the cursor to select the recorded file which you want to play, and then press "ENTER" to play it. You can also press "• (Delete)" to delete the selected file or press the "◀/▶" keys to move to the last or next page.
 - You can press "0" key on the remote control to change the playback repeat mode.





If you don't know how to switch the playback mode, press " $\mathbf{\mathring{Z}}$ " to enter into to the 「Playback Options」 page. This page shows the loop mode switch method.



net-TV mobile2

Instructions before installation

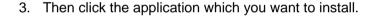
net-TV mobile2 is an network TV player which designed based Android, iPhone and iPad for net-TV Box.

Android phones and Tablet use the same application named net-TV mobile2. The application used for iPhone and iPad is also named net-TV mobile2 but it's a different application.



Install the application

- 1. Start the "Market" in the application list of Android or "App Store" in the application list of iPhone or iPad.
- 2. Enter the keywords "net-TV mobile2".click the search button.



4. When install finished, it will appear the application icon as right in the installed applications.





Market

App Store







net-TV mobile2

Login

Before login, please make sure that your phone can access internet.

- 1. Click the application icon to start it.
- 2. Enter in the ID and password of net-TV Box you want to connect in the login page, then click the "Login" button.
- 3. When login successfully, you can start to enjoy the wonderful video programs.

You can also click the " button to set the USB schedule recording tasks.

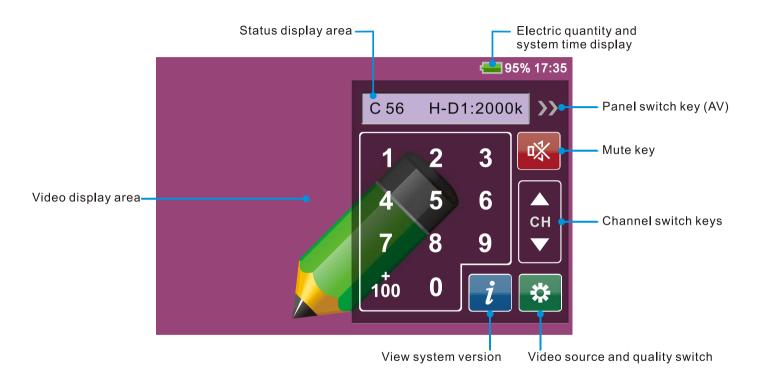
Clicking the "A" button can switch the display language.





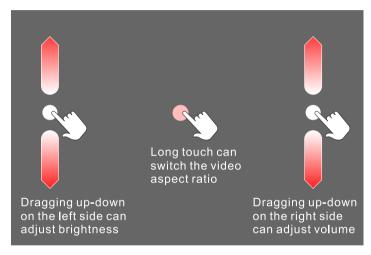
For the best quality and efficiency, this application uses the player of Android, iPhone and iPad's for coding. To come up to the player's use conditions, the video and audio data will buffer first when connect successfully, the step will take about 15~30 seconds according to your network condition (channel switch is the same).

Interface instructions





- Clicking on the video area can hide or display the remote control panel.
- As following, when the remote control panel is hidden, you can adjust the screen brightness and volume by dragging up-down on the video display area, and long touch can switch the video aspect ratio.



Above functions are for Android device only.

Video source and quality switch

Click the button, it will pop up the source and quality switch page as right.

There are two video sources: AV and CAM. Select the desired source then click 「OK」 button to confirm (the default is AV).

The video quality has three items: CIF, H-D1 and D1, user can select according to the displayed bit rate (the default is H-D1). The application will remember the quality status and use the same quality when login next time.

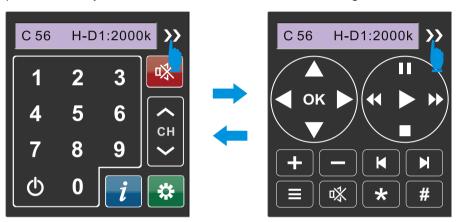
The video bit rate, frame rate, resolution and audio bit rate of each quality is as the following table:

	CIF	H-D1	D1
Video bit rate	Auto	Auto	Auto
Frame rate	Auto	Auto	Auto
Audio bit rate	24kbps	24kbps	24kbps



AV remote control

Switch to the AV source (Click the button and select AV in the source page.) There are two remote control panels of AV, you can click the button and select AV in the source page.) There are two remote control panels of AV, you can click the button and select AV in the source page.)





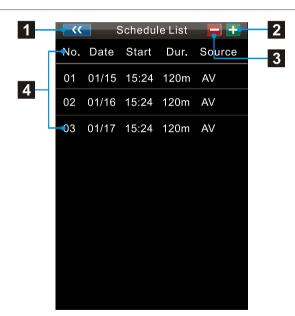
The application doesn't support the IR learning function, it will auto download the IR learning table from net-TV Box when switch to AV source. So please confirm that there is an IR Leaning table of the corresponding video device saved in the net-TV Box.

Schedule Recording

With net-TV mobile2, you can set the USB schedule recording tasks remotely, and then the Box will record the programs at the preset time. (You should connect the USB storage to the net-TV Box before).

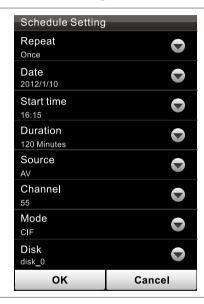
Enter the Box's ID and password in the login panel then click " icon to set schedule recording. The schedule recording main panel is as following:

- 1 Return to the previous panel.
- Add button. Press it to add a new schedule recording task.
- Enter the schedule delete page to delete the schedule recording task.
- Display all of the schedule recording tasks of the net-TV Box.
 - It will list the recording start date and time, duration and source of the recording tasks.



Add or edit schedule task

In the Schedule List panel, you can click the "List" button to add a new recording task or click the existed task to edit. Then it will go to the Schedule Setting page as following.



Recording repeat mode:
Once: record only once; Daily: record at the preset days every week;
Weekly: record at the same day every week.
Recording date, this item display different according to the repeat mode.
Start time of the recording task.
Duration of the recording task.
Recording video source.
Recording channel number.
Recording quality, D1: 1.5Mbps, H-D1: 1Mbps, CIF: 512kbps.
Select the disk to save the recorded file.

Click the "\sum " button to set the recording items, and the value will be displayed below each item with small fonts. After setting, click the "OK" or "Update" button at the bottom to save the schedule. And the added schedule will be listed in the Scheduled List page.

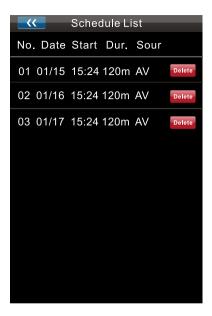
The "Start time" must be set 4 minutes later than current time, or else you will can't add new recording task.

Delete schedule task

You can delete the schedule recording task in the Schedule List.

Click the "button on the top of Schedule List panel to enter into the schedule delete page as right.

Then click the "Delete" button to delete the corresponding recording task.



net-TV 2012

What is net-TV 2012

Users can connect net-TV Box remotely by using net-TV 2012 installed on computer. The functions it supports are: watching programs, Time-Shifting, instant recording and setting schedule recording.

Software Installation

Before installing the net-TV Box, please make sure that your PC meets the minimum system requirement and is equipped with a HDD with at least 100MB free space.

Follow the following steps to complete the installation:

- Under the Operating System of Windows XP / Windows Vista/ Windows 7, download the installation folder from http://net-TVBox.dyndns.tv/, then run the Fnet-TV 2012.exe file after decompression.
- This is the first screen you will see. Click the Next button to begin the installation, and then follow the on-screen instructions.



3. Choose the destination folder where net-TV 2012 will reside and then click "Next" to install. The defaults location is C:\Program Files\ net-TV\net-TV 2012\.

4. Click **Finish** to exit the installation wizard.



After finishing the installation, it will come up a net-TV 2012 icon "on the desktop, double-click it to start your net-TV 2012.





Remove Software

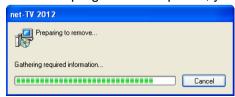
1. Click 「Start ▶ Programs ▶ net-TV 2012 ▶ Uninstall net-TV 2012」 to remove the software.



2. It will pop up a dialog asked "Are you sure you want to uninstall this product?", Click 「Yes」 to uninstall the program.



3. When the program is completed, you have finished removing net-TV 2012 application software.



Login

Double click net-TV 2012 icon "on your desktop to start your net-TV 2012.

The login window is attached to the center of the player window. It comes out along with the player window.

The application can login the net-TV Box from any place via network. User can enter the ID and Password and click the 「login」 button to build up connection.

Before login, you can click " in the main panel to hide or show the login panel. And when under the login status, you can also click " to logout directly.

You can get the ID number on the sticker labeled at the bottom of the Box unit.

The default password is 「admin」, and you can change it on the setting page after login.



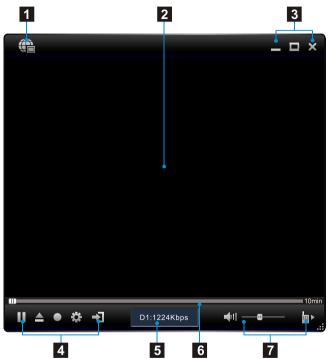


Operation Interface

The operation interface of net-TV 2012 includes 4 parts: 1. Main panel including video display area 2. On-screen remote control panel 3. Right click menu 4. Function setting pages



Main Panel Instructions



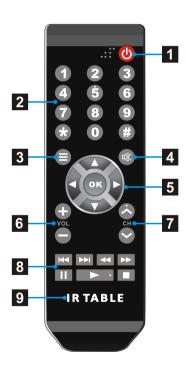
	Items	Instructions
1	(Login/Logout
2		Video display area
3		Minimize
		Full-screen
	×	Close the application
4		Playback / Pause
		Open the Playlist (Recorded files list)
		Instant recording / Pause
	*	Function setting key
	→]	Video source switch
5		Current status display
6		Playback and Time-Shifting control slide
		bar and On/Off Time-Shifting switch.
7	4 11 -0	Mute key and volume control slide bar.
	■ ►	On-screen remote control panel switch.

On-Screen Remote Control Panel Instructions

When you switch to the video source to AV source, the on-screen remote control panel will be AV on-screen remote control panel as following.

AV On-Screen Remote Control Panel

- 1 Power Button
- 2 Number Buttons
- 3 Menu Button
- 4 Mute Button
- 5 Direction & OK Buttons
- 6 Volume Up & Down Buttons
- 7 Channel Up & Down Buttons
- 8 Playing Control Buttons
- 9 IR learning shortcut button





The definition of the buttons on this panel is just the general meaning of them, you can also customize them yourself. And they are not usable before experiencing the IR Learning Process. You should conduct the IR Learning Process and save the T*.rpl file first. After loading the file, you could then use the panel.

Mouse and Keyboard Operations

You can perform the following net-TV 2012 operations with your computer's mouse and keyboard.

Keyboard operations

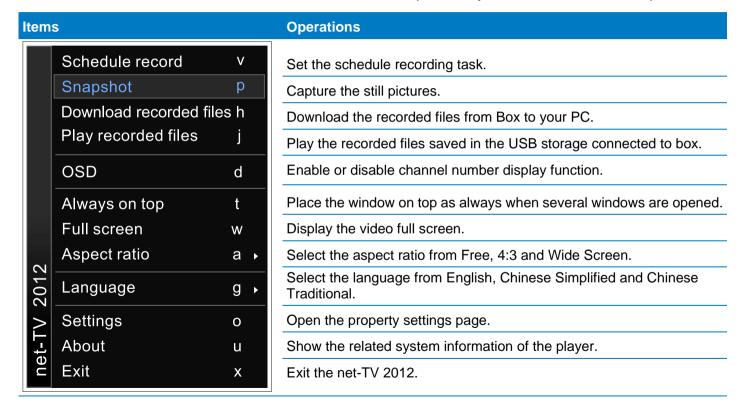
Shortcut Key	Operations	Shortcut Key	Operations
Α	Select the aspect ratio	V	Schedule recording
В	Pop-up the right-click menu	W	Full screen
D	Enable or disable channel OSD	X	Exit
G	Switch the display language	[「] Home」	Record
Н	Download recorded files.	[「] End」	Stop recording
J	Play recorded files	<u> </u>	Channel up
L	Return to last channel	\downarrow	Channel down
M	Mute or restore sound	\rightarrow	Volume up
0	Pop-up the property setting page	←	Volume down
Р	Capture image	+	+100
R	Pop up the remote control panel	(0~9)	Jump to the monitoring point.
Т	Always on top	「Space Bar」	Play/pause(Only take effect when
U	Show the related system information	Space bar	playing the recorded files)

Mouse operations

Items	Operations	
Rotating the mouse wheel	On a screen, rotating the mouse wheel away from you volume up, and rotating it towards you volume down.	
	Volume up Volume down	
Scroll wheel click	Mute	
Right click	Right clicking anywhere inside the window displays a context menu as	
	described below.	

Right click menu

When you run net-TV 2012, you could move your mouse cursor and right click to open the pop-up menus. The commands on this menu are the same with those on the control panel but you could find some more options.



Setting Page Instructions

SYSTEM

■ Path:

Snapshot: Select the directory path to save the captured picture files.

Record: Select the directory path to save the recorded files.

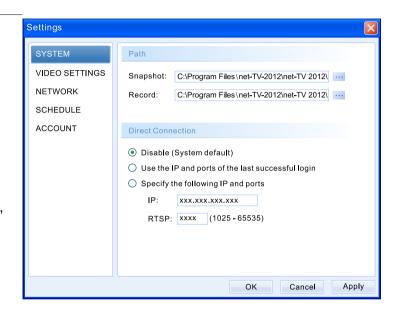
Direct Connection:

Disable(System default): Connect to Server to obtain the connection information of the Box first, then connect Box according to the information.

Use the IP and ports of the last successful login:

Connect the Box directly according to the last successful connection information.

Specify the following IP and ports: Connect the Box according to the specified IP and RTSP port.



VIDEO SETTINGS

Resolution:

There are three resolutions for you to choose, and the vertical resolutions have a little difference under different TV system (NTSC/PAL).

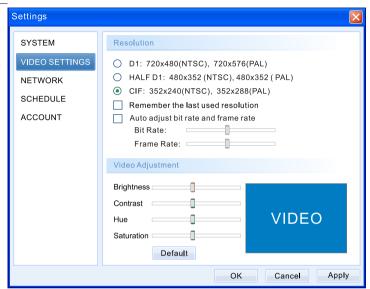
Auto Adjust bit rate and frame rate:

When you select the item it will auto adjust the Bit Rate and Frame Rate.

■ Video Adjustment:

You can adjust the Brightness, Contrast, Hue and Saturation. Drag the slide bar to adjust the value.

You can also press the 「Default」 button to resume to the default value. It will show adjustment effect preview on the right.



NETWORK

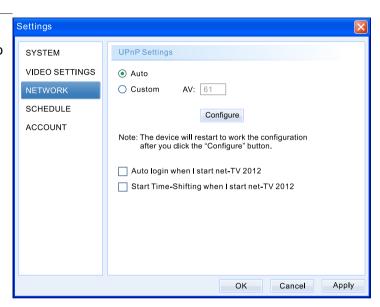
UPnP Settings:

The Box uses the UPnP communication protocol to transmit the audio and video data stream to petitioner for default.

Auto

The default UPnP setting is Auto. If there is more than one Box connected to a router, it will adjust communication port automatically. (Between 60~100, the default is 60.)

- Custom
 If the effect of automatic port isn't satisfying, you can set AV port for yourself.
- Auto login when I start net-TV 2012: When you select the item, it will auto login when you start the application next time.
- Start Time-Shifting when I start net-TV 2012: When you select the item, it will automatically start Time-Shifting function when you start the application next time.



SCHEDULE

This page implements the settings of the schedule recording.

Add:

The button only takes effect when there is a USB flash drive connected to the Box.

Press the 「Add」 button to add a new recording schedule.

Edit:

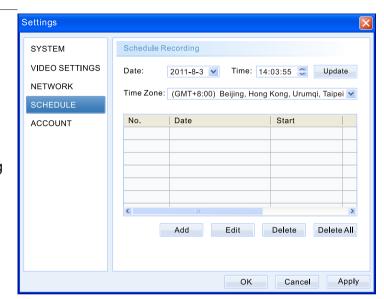
Edit the selected schedule.

Delete:

Delete the selected schedule task.

Delete All:

Delete all of the schedule task.



MY ACCOUNT

My Account:

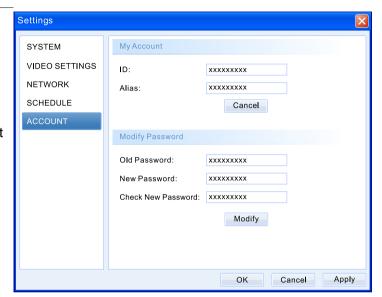
ID: ID number of the net-TV Box.

Alias: You can login by using the alias that you have set. Enter the alias that you want, and then click 「OK」 to complete alias setting. (The default alias is the same as the Box's ID.)

Modify Password:

You can modify the login password of net-TV Box here.

Press 「Modify」 button to complete the modification.



Easy Setup

Confirm Whether the UPnP is Useable

With the net-TV Box connected to network and power on, the net-TV Box will proceed to the start and network detecting program, the PWR led will turn constant on. Then you should notice that whether the NET led is green, if the NET led is green, it means that net-TV Box has been connected to internet, and you can login the net-TV Box and skip the instruction of EasySetup. If the NET led is off or red, please follow the below method for setting. \times It will not affect the LAN connection if the NET led is red.

There are two causes if the NET led isn't green:

- The UPnP function of the IP Router is not enabled.
- The Router is NON-UPnP or the UPnP isn't compatible with the net-TV Box.

To confirm whether is the first cause, please connect your computer and net-TV Box to the same one IP Router, then click 「Start ► All Programs ► net-TV 2012 ► EasySetup」.



Select 「UPnP Function Testing」, and then click 「Test」 to start the testing.

If the test result is that UPnP is not enabled, please refer to the manual of the Router or contact manufacture of the Router for help to enter in the setting page of the Router to Enable the PnP function.

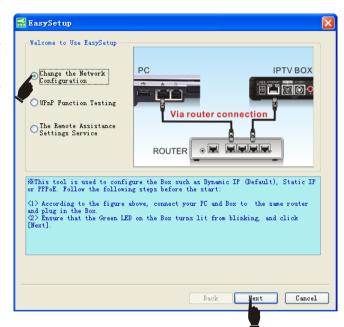
If the Router doesn't support UPnP or the UPnP is enabled but not useable, you could set the DMZ or Virtual Server to take the same effect, but there is network security problem for DMZ setting and Virtual Setting is so complex. We recommend you skip Router setting and connect to xDSL Modem (or Cable Modem) directly to go internet. Please refer to the following steps for detailed process.



Change the Network Configuration

When you decide to connect net-TV Box to xDSL Modem (If Cable Modem supports plug-n-play function, you needn't make any change) directly, you must change the factory connection status of the net-TV Box, so you should use the Ethernet Cable to connect your net-TV Box and computer.

Please follow the above process to start the EasySetup, select 「Change the Network Configuration」 as the right picture (you could follow the on-screen instruction to operate), click 「Next」 to forward to the next step.

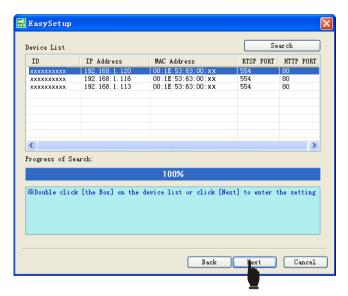


Search Device

Then the EasySetup will search the net-TV Box that have been connected, it will list the information of the searched net-TV Box, such as ID / IP Address / MAC Address. Then double click the device to login or click 「Next」 directly to forward to the setting page.

(If PC can't search any net-TV Box, please follow the instruction to do **RESET**, then search again. If PC still can't search any net-TV Box, please contact your distributor for help. Don't open the Box privately.)

Note: If your net-TV Box and PC are not in the same LAN network, you can't search it.



Network Configuration (Choose one from four options)

Dynamic IP:

Choose this option to obtain an IP address automatically from your ISP.

Static IP:

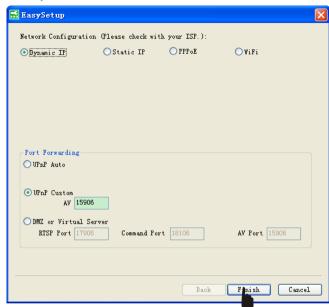
If the applied network type is Static IP, please select the [Static IP] option, and enter the related information provided by ISP(If there is any problem, please contact your ISP.) in the below blank column.

■ PPPOE:

If the applied network type is PPPoE, please select the 「PPPoE」 option as the right picture, then enter the account and password provided by ISP(If there is any problem, please contact your ISP for help) in the below blank column.

WiFi:

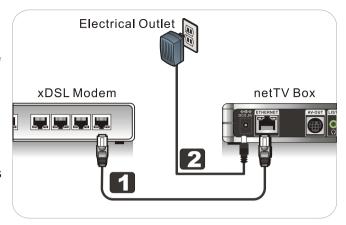
If you use the wireless network, you can select the option. Select a WiFi wireless network, if it has password protection you should enter the correct password later.



If you select PPPoE network configuration, after finish the information input and click 「Finish」 button, it will notice you connect net-TV Box to ADSL Modem and replug in the power source.

Please plug out the Ethernet Cable from the computer which is connected to net-TV Box and reconnect it to the xDSL Modem that has been set.

Plug on the power of net-TV Box after the Ethernet Cable is properly connected. Please notice the order of the two steps: Connect Ethernet Cable first, then plug on the power. Then the PWR led of the net-TV Box will turn constant on, you should notice whether the NET led is on afterwards. If so, congratulate that you have installed successfully, if not, please retry by above steps.



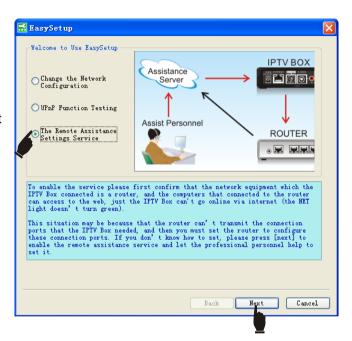
Port Forwarding:

The default setting is UPnP. If the effect of automatic port isn't satisfying, you can set AV port for yourself. If the router supports UPnP, please don't select DMZ or Virtual Server. If you select the item (only available under LAN) you have to enter the corresponding ports in the following fields when set to DMZ or Virtual Server. (Please refer to instructions of router.)

The Remote Assistance Settings Service

To enable the service please first confirm that the network equipment which the IPTV Box connected is a router, and the computers that connected to the router can access to the web, just the IPTV Box can't go online via internet (the NET light doesn't turn green).

This situation may be because that the router can't transmit the connection ports that the IPTV Box needed, and then you must set the router to configure these connection ports. If you don't know how to set, please press [next] to enable the remote assistance service and let the professional personnel help to set it.



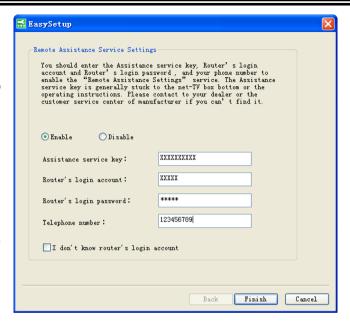
Then the EasySetup will search the net-TV Box that have been connected, it will list the information of the searched net-TV Box, such as ID / IP Address / MAC Address. Then double click the device to login or click 「Next」 directly to forward to the setting page.

Select "Enable", then enter the Assistance service key, Router's login account and Router's login password, and your phone number.

The Assistance service key is "nettvk3q3q", you can also find it in the Quick Start Guide.

Click 「Finish」 then the box will reboot and waiting for the assistance service settings.

When the assist personnel complete the remote assistance settings, the Remote Assistance Service Settings item will change to Disable, then the box will reboot and user can connect the net-TV Box.



Instant Recording

When watching programs you can record them and enjoying them later.

1. Press the recording button "O" to begin to record programs. While recording, it will display the recording sign 00:00:30 on the video display area. The time means the recorded duration.



2. The recording button will become stop recording button "while recording. Pressing the "" button can stop recording.



3. You can also press the "I" button to pause, then the time on the recording sign will pause too.

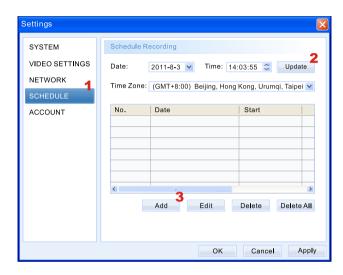
Pressing the "I" button again can continue recording.



USB Schedule Recording

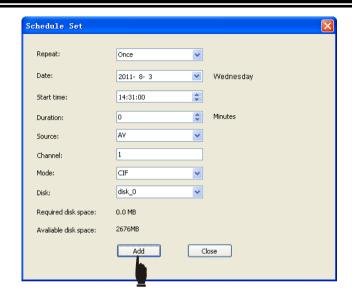
Before setting the schedule recording, make sure that there is a USB Flash Drive connected to the Box.

- Click the setting button to go to the setting page and select the 「Schedule」 page.
- 2. Select the time zone of your net-TV Box on the pull-down menu of 「Time Zone」.
 If time isn't adjusted to the corresponding Time Zone, please manually adjust the Box's time to the current local time, then click 「Update」 to update the Box's time.
- 3. Click the 「Add」 button to add a recording task.



- The external USB device must be FAT32 format.
- If there is no external storage plugged in the Box or the Box can't recognize the external storage, the button is shown in gray, and it will take no effect.

- 4. Select the recording information in the pop-up schedule set page, such as recording mode, date, start time and duration.
 For detail information, please refer to <u>Schedule Recording Items instructions</u>.
- 5. Click 「Add」 to complete your settings. The newly added task will show up on the following scheduled task list. You could click 「Add」, 「Edit」, 「Delete」 or 「Delete All」 to add a task, edit the selected task, delete the selected task or delete all tasks.



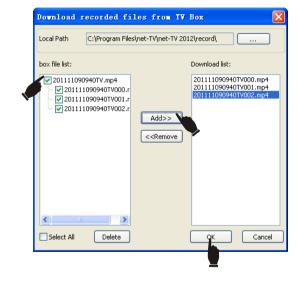


The 「Start time」 must be set 3 minutes later than Box time, or else you can't add recording task.

Download Recorded Files

You can download the recorded files from the net-TV Box to your PC by following these steps:

- **6.** Login the net-TV Box. Right click the image window and select 「Download files from net-TV Box」 on the popup menu.
- 7. On the setting page, 「Box file list」 will list down all the recorded files. If there is no USB device connected to the net-TV Box or the connected USB device has no recorded files, the 「Box file list」 is empty.
- 8. Select the wanted file and click 「ADD>>」 to add the file to the "Download list". You could remove the files from 「Download list」. Select a to-be-removed file on 「Download list」, and click the 「Remove」 button.
- **9.** Click the 「OK」 button to confirm the file download task.



10. If there are too many recorded files and they occupy too many USB storage space, you could delete the selected files from your USB device remotely. Select a single file and click the 「Delete」 button at the bottom to delete it. You could also check 「Select All」 to select all files and click 「Delete」 to delete all files in the

USB device.

Play Recorded Files

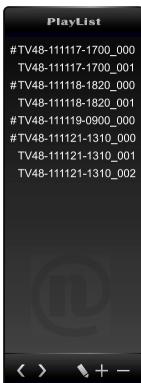
You can use net-TV 2012 to play the recorded files saved in the USB storage which connected to Box by following these steps:

- 1. After login, right click and select 「Play recorded files」 on the pop-up menu.
- 2. Then it will list all the recorded files in the USB storage in the PlayList panel (as right figure).
- 3. Double click the desired file to play it. When playing, it will display the current playing duration as following (03:35), and you can drag the slide bar on the blue bar to play from any time.

When playing, it will display the recorded file's quality and current download speed from Box in the status display area as above (D1:1224Kbps). If the download speed is lower than the speed that the current resolution request, the video will be not smooth. You can click the "1" button to pause and let it buffer for a time, then click it again to enjoy the smooth video.



If you click the "\$\int_"" button when playing recorded files, it will stop playing and logout, and ask "Do you want to re-login?". You can click "Yes" to re-login and play real-time programs.



IR Learning

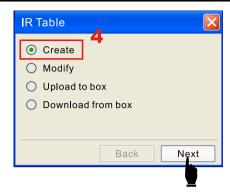
Before you can control a new video device via the on-screen remote control panel of the net-TV player, you have to create a new IR learning table to save the corresponding buttons of your physic remote control.

- Click the source switch button "
 at the bottom of playing window to switch to CV/SV video source.
- 2. Click the remote control button " to show the CV/SV on-screen remote control panel.
- 3. Click the "IR TABLE" button on the on-screen remote control panel to go to the IR table page.



4. Select "Create" option in the pop-up IR table page, then click 「Next」 to create a new IR learning table.

5. Then click the 「Start Learning」 button to begin to learn.





6. Then all the unlearned keys on the on-screen remote control will become gray, click the key you want to learn (1 for instance) until it become the standby status as following.

Then aim your physical remote control at the remote sensor of net-TV Box and press "1" button.

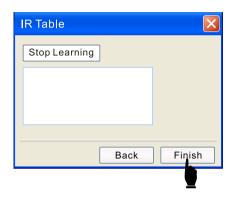
After the box receive and remember the IR learning signal, "1" button on the on-screen remote control will become blue. It means that you have learned "1" button successfully.



- 7. According to the steps above, you can complete learning all the keys of the physical remote control. While you are learning one key but net-TV Box doesn't receive the IR signals, it will show the fail message. Then you merely need to click the key and learn again.
- 8. After learning all the keys, click the 「Stop Learning」 button and click 「Finish」 to return to the player.

 Then you can control the corresponding video device with on-screen remote control panel remotely.

 On the on-screen remote control, the keys which have been learned are shown in white and those which have not been learned are shown in gray.



- While learning keep the distance between the remote control and net-TV Box within 5cm and you are recommended to shade the light between them.
- The Box only supports remote controls with 38~40 KHz carrier wave, and doesn't support remote controls with 48~64 KHz carrier wave.
- · Please don't use or move the devices with IR function far away.
- Different video devices correspond to different IR learning tables. One IR table can only be used to control the corresponding video device.
- If some keys in the IR table of box are incorrect, you can select "modify" then go to the start learning page and learn the incorrect keys again.

Upload to box

If your Box reset to factory default because some causes, the IR learning table in it will be clear up. In order to avoid repeating IR learning process, you can upload the IR table saved in PC to the Box. If you have more than one Box connected to same video device, you can also upload the IR table to other Box.

- Select 「Upload to box」 in the IR table main page, then click 「Next」.
- Select the IR learning table (*. rpl) that you want to upload in the pop up dialog.
 Generally the IR learning table is saved in the folder named by each box ID under the UserData folder in the application install directory.



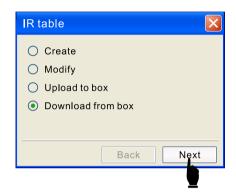


The on-screen remote control controls the video device according to the IR table saved in the box. So you connect other video device to box, you have to upload the corresponding IR table to control it.

Download from box

When you connect the box, PC will download the IR table from box to the application install directory automatically. If you want to make a backup of the IR table at other path, you can download the IR table with the "Download from box" function.

- **1.** Select 「Download from box」 in the IR table main page, then click 「Next」.
- Select the folder where you want to save the IR table and click "Save" button. Then you will find the IR table has been downloaded to the desired path. Yon can rename it or upload it to box when necessary.



Time-Shifting

The Time-Shifting function makes the Box can record the playing program at any time, and you can continue to watch later, it's also easy to skip advertisements. So if you need leave the player when watching program, you can enable the Time-Shifting function, and the Box will begin to record the programs automatically, then you can watch the program when get back.

1. Click the "10min" to enable the Time-Shifting function. (It can also disable the Time-Shifting function.)



2. Then the Box will begin to record the programs. The blue bar means the recording duration, and you can drag the slide bar to watch the recorded programs at any time. You can also drag it to the right of blue bar and watch the live program.

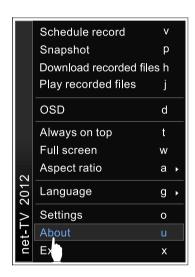


- When the Time-Shifting function is on, the interval of channel switch will has a longer delay time (about 3 three seconds).
- The Box can only record the programs for 60 minutes, and when it up to 60 minutes, the first recorded programs will be replaced. So you can only watch the program for the last 60 minutes.

Firmware Update

To upgrade the net-TV Box firmware, follow these instructions: When you upgrade the net-TV Box firmware, you will lose current configuration settings, so make sure you backup the net-TV Box settings before you upgrade its firmware.

- 1. Download the latest firmware upgrade file from the manufacturer website.
- 2. Login net-TV 2012, right-click the image window to get the pop-up menu shown as the following figure. Then, select 「About」 on the pop-up menu.



3. Click the 「Update」 button on the pop-up window.

4. View the folders and select the downloaded file.





5. The Firmware update procedure is totally 2 phases: transmit the update file to the Box and the Box itself update.

During the firmware update, don't switch off the product itself or stop the activity, otherwise the product may be out of order.

6. After the completion of the firmware update, the window as right will pop up.

7. It takes about 1 minute for the product itself to restart. After that, please re-login and redo step 2 to check out the Firmware Version. If the Firmware Version is not correct, please redo step 2 to 6.

Transform Progress:91.9%(Translated 1819412 bytes/Total 1979401







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