



VBox VHome XTi - TV Gateway

How To Guide: *Connect from outside your home*



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1 Introduction

Your VBox Home TV Gateway is a great way to distribute Live TV channels across your home network to any mobile or connected device.

And now you can access your Home TV Gateway from outside your home to:

- Watch Live TV while on the road
- Watch your recordings outdoor
- Record Live TV program
- Schedule recording so you'll never miss your favorite show again
- Manage the TV Gateway remotely
- Receive remote support assistance from VBox support engineer

2 Internet Bandwidth

To access your Home TV Gateway from outside of your home network, you need to connect the Home TV Gateway to the Internet.

Your Home TV Gateway stream the full channel's broadcast quality and therefore requires fast internet upload speeds and fast internet bandwidth all the way to your outdoor device.

Note: VBox cannot guarantee the quality of the stream outside of your home network and quality of stream may vary between different TV channels due to differences in bit rate, broadcaster's encoding, resolution and other factors.

Note: Number of simultaneous users that can access the Home TV Gateway remotely also varies and depends on the upload speed of your internet connection.



3 Setting up your network router

Requirements:

- **NOTE 1** – Network router connected to the Internet
- **NOTE 2** – Access to the router’s management web page
- **NOTE 3** – Fast Internet upload speed
- **NOTE 4** – This feature is available from VBox TV Gateway software version 2.47 and above

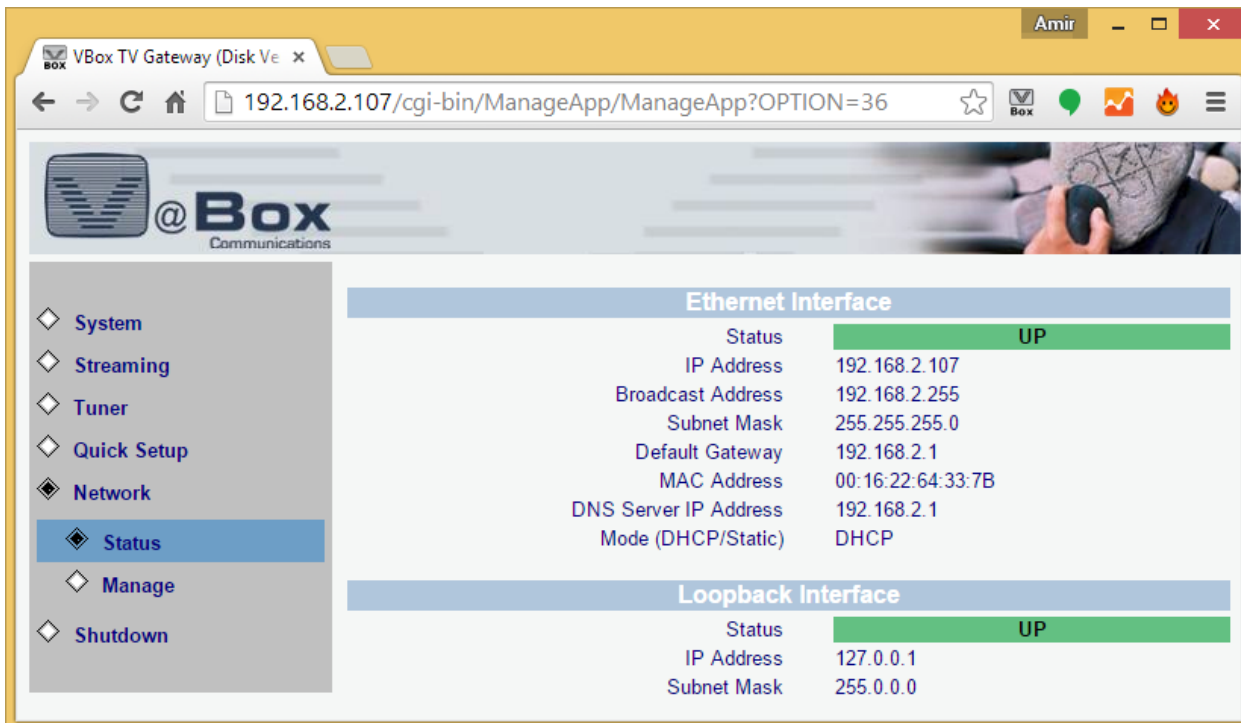
Accessing your Home TV Gateway from the Internet, requires assigning internal static IP address to your TV Gateway and setting up port forwarding on your router.

3.1 Assigning Static IP Address to your TV Gateway

It is very important to setup a static IP address. When you have port forwarding setup, your router forwards ports to an IP address that you specify. This will probably work when you initially set it up, but after restarting your router or the Home TV Gateway, your Home TV Gateway may receive a different IP address. When this happens the ports will no longer be forwarded to your Home TV Gateway's IP address. So the port forwarding configuration will not work.

3.1.1 Capturing the current Home TV Gateway network settings

1. Go to your Home TV Gateway management console web page.
2. Go to Network → Status and write down your Ethernet Interface data



The screenshot shows a web browser window displaying the management console for a Home TV Gateway. The browser address bar shows the URL `192.168.2.107/cgi-bin/ManageApp/ManageApp?OPTION=36`. The page header includes the logo for "Box Communications" and a navigation menu on the left with options: System, Streaming, Tuner, Quick Setup, Network (selected), Status (selected), Manage, and Shutdown. The main content area displays network interface information:

Ethernet Interface	
Status	UP
IP Address	192.168.2.107
Broadcast Address	192.168.2.255
Subnet Mask	255.255.255.0
Default Gateway	192.168.2.1
MAC Address	00:16:22:64:33:7B
DNS Server IP Address	192.168.2.1
Mode (DHCP/Static)	DHCP

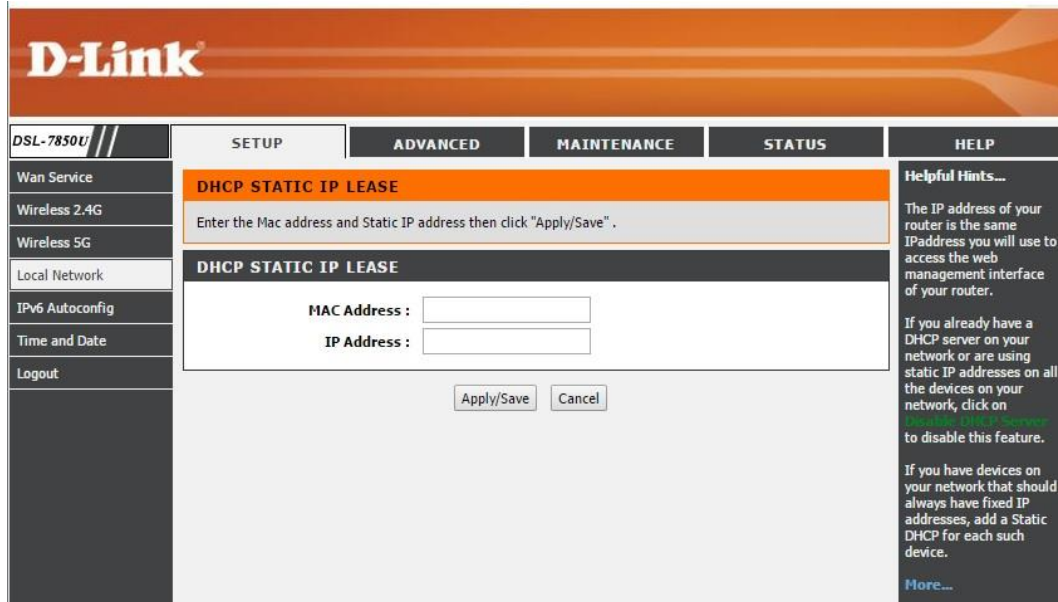
Loopback Interface	
Status	UP
IP Address	127.0.0.1
Subnet Mask	255.0.0.0



3.1.2 Configure your network router – Assigning Static IP address to the TV Gateway

To set a static IP address access your network router’s configuration screen

1. Look for “DHCP Static IP Lease” or “IP Address Reservation” (see example image below)
2. Enter the Home TV Gateway MAC address – copied from the Ethernet Interface
3. Enter the IP address you have copied from the Ethernet Interface or assign a new IP address (make sure that the IP address you assign is part of your network’s range)



3.2 Port Forwarding

To access your Home TV Gateway from outside of your home network you need to forward specific web traffic to your Home TV Gateway, this is done by configuring your network router to direct all web traffic that is coming from a specific port to your Home TV Gateway.

The Home TV Gateway is using two ports, port **55555** and port **80**

Redirecting Port 80

1. Port 80 is the standard web port redirecting it to the Home TV Gateway will redirect all your web traffic to the Home TV Gateway.
2. To avoid this you need to set an unused port address we recommend choosing a random 5 figure number that you can remember (for example 19999) and redirect all traffic coming to this port to the Home TV Gateway's port 80

Redirecting Port 55555

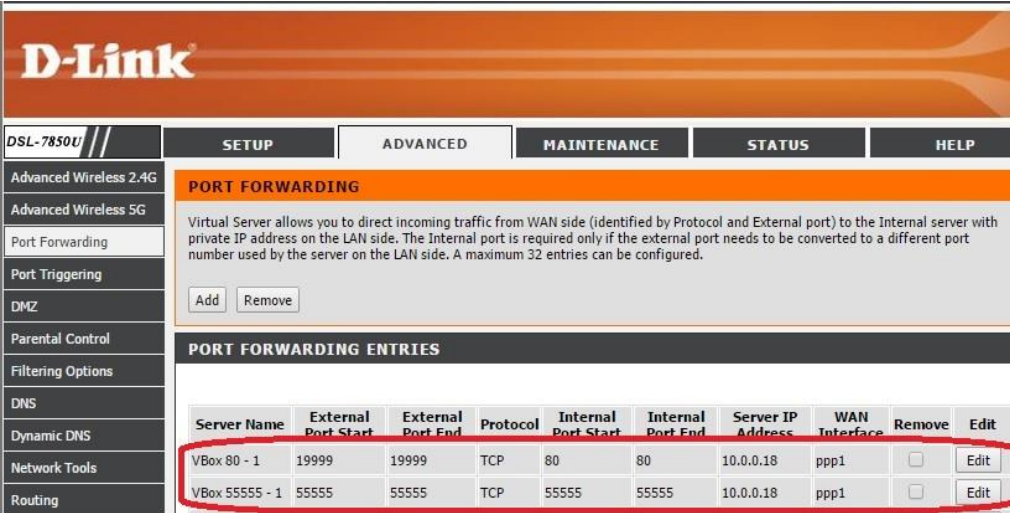
1. Redirect all web traffic accessing port 55555 to the Home TV Gateway's port 55555
2. You must set both internal and external port 55555 the same, this port cannot be changed

Access the port forwarding section of your router's console and manually add each port. For example for the first entry (port 80), you would set external port to 19999 to forward to internal port 80 for IP address you have previously assigned to the Home TV Gateway, repeat the process for port 55555 entering both external and internal ports the same (55555).

Unfortunately, each router uses a different set of commands or menus in its console to do this. If you need assistance to access port forwarding for your router check your router's user manual or support forums.

It is recommended to check the port forwarding to make sure that the external port you assigned for port 80 is working and that your ISP is not blocking it, if the port is not working set a different external port number

You can test your port with sites such as - <http://www.canyouseeme.org>



The screenshot shows the D-Link router's web interface. The top navigation bar includes 'DSL-7850U', 'SETUP', 'ADVANCED', 'MAINTENANCE', 'STATUS', and 'HELP'. The 'ADVANCED' tab is selected, and the 'PORT FORWARDING' section is active. Below the navigation bar, there are links for 'Advanced Wireless 2.4G', 'Advanced Wireless 5G', 'Port Forwarding', 'Port Triggering', 'DMZ', 'Parental Control', 'Filtering Options', 'DNS', 'Dynamic DNS', 'Network Tools', and 'Routing'. The 'PORT FORWARDING' section contains a description of Virtual Server and 'Add' and 'Remove' buttons. Below this is a table titled 'PORT FORWARDING ENTRIES' with the following data:

Server Name	External Port Start	External Port End	Protocol	Internal Port Start	Internal Port End	Server IP Address	WAN Interface	Remove	Edit
VBox 80 - 1	19999	19999	TCP	80	80	10.0.0.18	ppp1	<input type="checkbox"/>	Edit
VBox 55555 - 1	55555	55555	TCP	55555	55555	10.0.0.18	ppp1	<input type="checkbox"/>	Edit



4 Accessing the Home TV Gateway from outdoors

4.1 Finding your public IP address

To access your Home TV Gateway from outside of your home network you need to know your external IP address.

1. To find out your external IP address you can write in google “what is my IP” or use sites such as - <http://www.whatismyip.com>

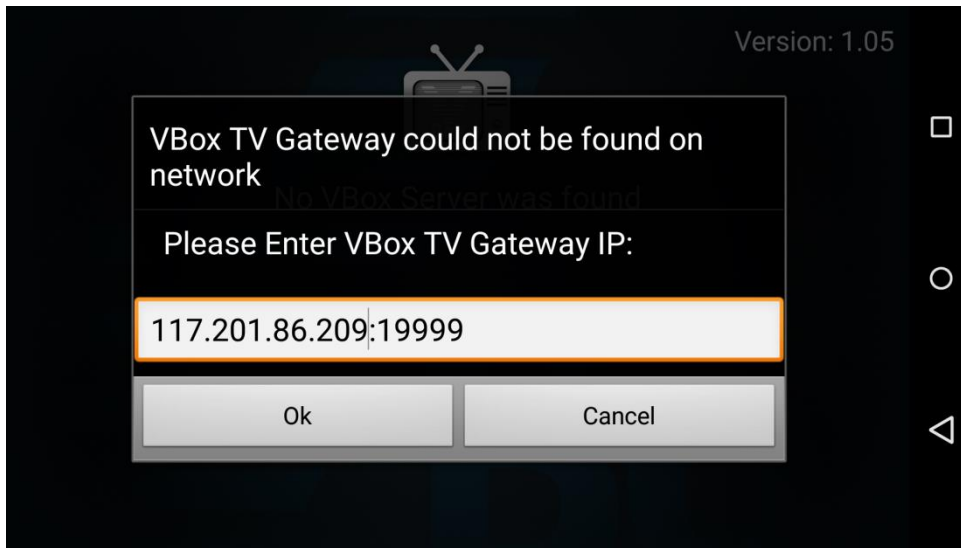


2. Write this IP address down as you will have to use it to access your network.
3. Please note that most ISPs provide a dynamic IP address and every time your network router or internet connection reconnects your ISP assigns a new IP address and you will have to identify the new IP address again.
 - a. To dynamically find your IP address even when it changes, you can use services such as <http://www.noip.com/free>
 - b. However such services requires leaving a PC always on, in order to communicate with noip’s servers to update your IP address.



4.2 Accessing from your iOS or Android VBox mobile apps

- Run the VBox iOS or Android mobile app from outside your home network
- The app will attempt to locate your Home TV Gateway
- Wait until the app prompts to enter an IP address
- Enter your public IP address followed by colon “:” and your external port 80 port
 - The address should look like this: **117.201.86.209:19999**
 - Without any spaces

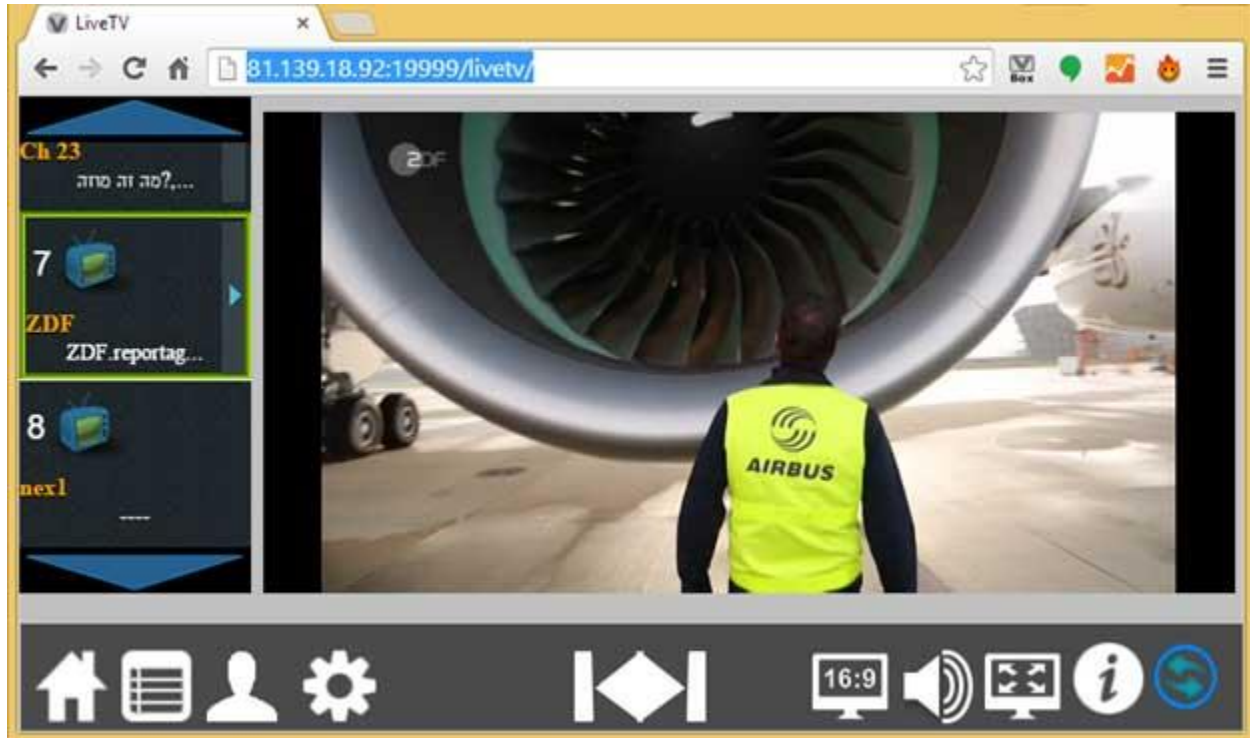


- Press OK
- The App will connect with your Home TV Gateway
- You only need to enter the IP address once, the app will remember it and the next time you are outside of your home network it will prompt you to try and access this IP address



4.3 Accessing from supported web browsers

- Open your web browser
- Enter your public IP address followed by colon “:” and your external port 80 port, followed by “/livetv”
 - The address should look like this: <http://117.201.86.209:19999/livetv>
 - Without any spaces
- Bookmark this address to access the Live TV in the future



5 Troubleshooting

- If you cannot access your Home TV Gateway
 - Make sure that your public IP has not changed
 - Make sure that you can reach your device - <http://ping.eu/port-chk>
 - Make sure that you are on a fast internet connection
- Live TV or Recording has jamming and stuttering effects
 - Try to improve your device internet connection
 - Reduce other parallel internet traffic
 - Connect to another hotspot
 - Try a different channel
 - Try to improve your Home network connection
 - Make sure that your home upload speed is fast enough
 - Make sure that you don't have any parallel internet traffic
 - Try a different ISP

