

WATCH LIVE AND RECORDED TV ON YOUR MOBILE DEVICES—ANYWHERE.

@TVplus



User Manual

## SETUP AND INSTALLATION

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### 1. Getting @TV connected to your home network

The @TV setup software for PC and Mac is the best way to configure @TV. Visit <http://www.belkin.com/mytveverywhere> to download the software.

#### a. Wired

- i. Direct connection via an Ethernet cable will provide the best possible performance for your @TV product. Simply connect the cable to one of the open ports on your broadband-connected network router and then to the Ethernet port on your @TV.
- ii. If you have trouble getting your @TV to connect with your router, first make sure that the network cables are attached properly to both devices. Then try restarting your router or cable/DSL modem: unplug the devices for 30 seconds, plug them back in, and they should find one another.

#### b. Wireless

- i. In order to get your @TV onto your home wireless network, follow the directions in the setup software.
- ii. If your router is WPS (Wi-Fi Protected Setup) enabled, you can also follow your router's instructions for how to connect devices to it using that feature; this will not always work for all router/@TV combinations, but should work for most. The red @TV WPS button is located on the right side of the product as you face it, just next to the USB service port.

@TV

## Get Wireless.

Please tell the @TV your wireless network's name and password.

\*\*\*My network is not listed\*\*\* Enter network name

password  Hide password

Security type: WPA(2)

During setup your computer will not be connected to the Internet. Your network connection will be restored after setup is complete.

**i** **SKIP** **NEXT**

### c. Advanced network connections

@TV will use UPnP to configure our network connection. In some cases you will need to use your router's setup pages to change a few settings.

#### i. Apple using 3G/4G

1. In order to access @TV on a 3G or 4G network using an Apple product like an iPhone, you may need to modify your Port Forwarding settings. These settings allow your @TV app and your @TV box to connect through your router by opening specific ports (you can think of these as doorways linking your @TV and your @TV apps). The following section explains how to make those changes.

#### ii. Manual Port Forwarding settings

1. Open your router settings page and find the "Port Forwarding" or "Virtual Servers" section (Belkin routers call this "Virtual Servers"; most brands use the term "Port Forwarding").
2. Make the following setting changes on this page:
  - a. First open port 56123 for both UDP and TCP traffic
  - b. Then, open port 49177 to TCP traffic
3. Save the settings. Once these settings are saved in your router, you should have access to @TV on iOS devices over a 3G or 4G connection.

#### iii. More complex networks (NAT/firewall issues)

1. In some cases your @TV may be behind more than one router: apartment complexes with shared Internet services or homes with Wi-Fi extenders or Wi-Fi bridges would fall into this category. In these situations, you will need to also configure the second router or firewall device with the same Port Forwarding settings as above.



@TV  
**Configure for 3G**

First:

- 1) Open your router's [configuration screen](#).
- 2) Find the section for "UPnP"
- 3) Enable it, if it is not already enabled.
- 4) Press 'Try Again'

If that doesn't work, or if UPnP was already enabled:

**\*\*Apple routers - use these instructions**

- 1) In your router's [configuration screen](#) find the section for "Port Forwarding"
- 2) On port 56123 forward TCP and UDP to 192.168.1.6 (@TV's IP address)
- 3) On port 49177 forward TCP to 192.168.1.6
- 4) Save these settings and then press 'Try Again'

(See [more detailed router-specific instructions](#) for popular brand routers.)

If you choose to skip these steps, you will still be able to watch your TV from anywhere with WiFi or wired internet, or from any Android device.

TRY AGAIN ⓘ EXIT FINISH

### 2. Connecting to your cable or satellite set-top box

#### a. Connections

- i. Video inputs from your set-top box to your @TV: You can connect your @TV to your cable or satellite box via composite or component cables; we recommend component because they provide better overall video quality.
- ii. Audio inputs: your @TV has a traditional RCA-style composite input available for both the right and left channels of audio from your cable or satellite box.
- iii. IR blasters (infrared) to control your set-top box: your @TV comes with a set of IR blasters. These plug into the back of the @TV and allow it to send IR commands to your cable or satellite box, just like your home remote control. Identifying where your cable or satellite box receives the commands from its remote control will help you place them in the optimal location.

#### b. Video pass-through

- i. This feature is useful only if you currently have your cable box connected to your home TV with the same connections that you would like to use for your @TV; it allows you to directly pass the input video from your cable or satellite box through the @TV to your home TV. If you have your TV connected to your cable or satellite box via HDMI and have free component or composite connections, you have no need to use the video out connections.

#### c. Other issues

- i. HDMI syncing  
In rare cases, certain cable or satellite boxes automatically

disable analog outputs like the ones @TV uses whenever an HDMI enabled device (like an HDTV) is connected to them; this is because that particular cable or satellite box manufacturer has chosen to enable advanced content protection protocols that are triggered by your TV/STB combination. The best workaround is to utilize @TV's HD pass-through feature and take the 1080i component cable signal from your cable or satellite box and pass it through to your television. This will enable you to enjoy @TV and also watch your cable or satellite on your HDTV in 1080i quality.

#### ii. Audio troubleshooting

If you are experiencing distortion or another audio issue, please check to make sure that the cables connecting your cable or satellite box to your @TV are attached correctly. Turning on your TV to listen to the audio and switching to other channels will help you pinpoint whether it is an issue with the broadcast or something else.

## INSTALLING AND SETTING UP THE ADAPTER

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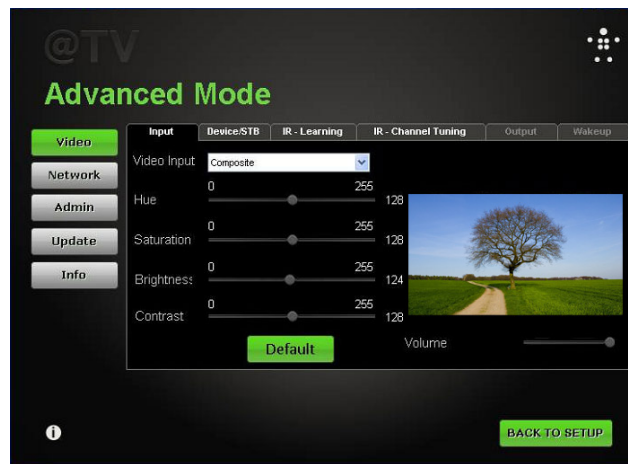
### d. Advanced settings tab

#### i. Video

##### 1. Input

##### a. Component vs. Composite

- i. Allows you to select which input on your @TV you would like to use. We recommend using component as it provides the highest video quality.
- ii. It is possible to attach two separate devices to @TV and toggle between these inputs in your App. However, as there is only one audio input, you would need to either listen in mono (dedicate the left channel to one device and the right to the other device) or purchase an audio splitter separately.



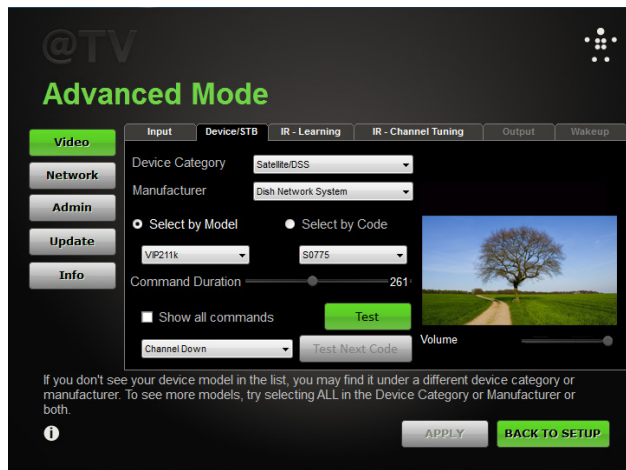
- b. Hue, saturation, brightness, contrast
    - i. Various settings to help you optimize the look of your @TV's video
  - c. Default
    - i. Automatically resets the picture optimization settings to their initial settings
2. Device/STB

This section is used to manually configure your remote control settings so that your @TV can control your set-top box. We recommend that you use the @TV setup software to configure your @TV box, but these tools are available for expert users.

- a. Device category
  - i. Remote codes are grouped into various categories based on standard industry practices. This can be somewhat confusing as a device category like "VCR" can also refer to a set-top box that is a Digital Video Recorder (DVR). Use "Digital Video Disk" only if you are attaching an @TV to a DVD player or other similar product.
- b. Manufacturer
  - i. Once you've identified the device category, your set-top box manufacturer should be found in this list.
- c. Select by model
  - i. Manually select the model number here.
- d. Select by code
  - i. If you happen to know your product's IR code set, this setting allows you to manually select it.
- e. Command duration
  - i. This setting allows you to adjust the speed at which the @TV sends IR commands to your set-top box. For instance, if you are trying to switch to

channel 425 and continue to arrive at channel 42, then channel 5, you should experiment with shortening the duration of remote commands.

- f. Show all commands/test
  - i. This button allows you to test remote commands to make sure that you have the proper settings in place. We recommend that you select the "Show all commands" box and test multiple commands to ensure your setup is perfect.



## CONNECTING TO YOUR CABLE OR SATELLITE SET-TOP BOX

### 3. IR-Learning

In this section you can help your @TV “learn” remote commands. This is particularly useful if you have a cable or satellite box not currently supported by @TV. The steps are as follows:

- Select the appropriate device you are trying to control from the “Command Mapping” list.

- From the list below, select the command that you are trying to capture and then click “Learn.”
- Follow the onscreen instructions and repeat until you capture all of the remote commands you will need to control your cable or satellite box.
- When you are done, click “Save.”

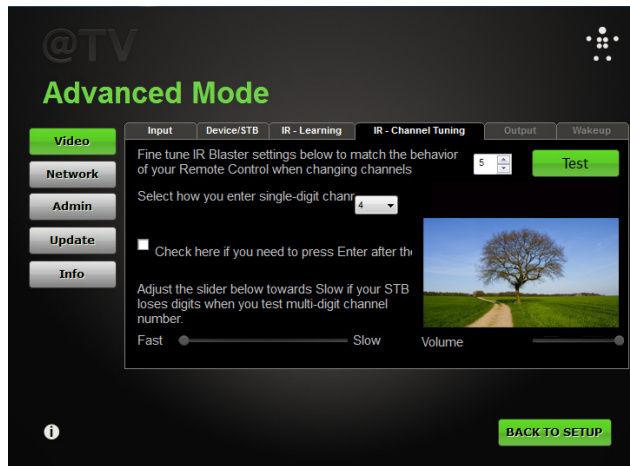


## INSTALLING AND SETTING UP THE ADAPTER

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### 4. IR-Channel Tuning

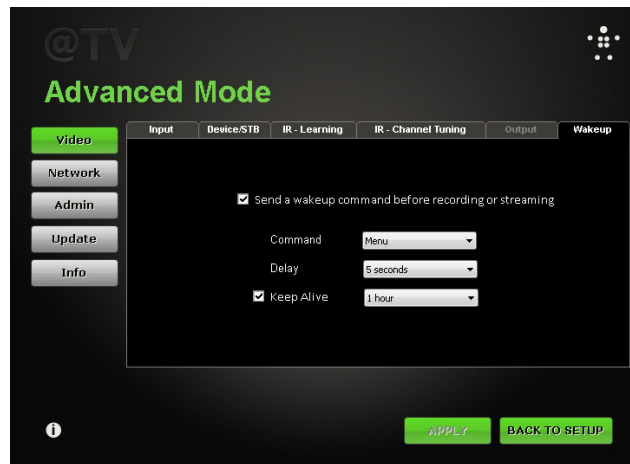
- a. Cable and set-top boxes vary in what they require when you enter a channel. For instance, on some boxes going to channel 42 requires just that you enter 42 while on another you must enter 042 or 0042. This section allows you to manually configure your @TV so that it works well with your set-top box.





### 5. Wake-up

- a. Some boxes require a “wake-up” command; in this section you can automatically set that command when you start streaming from your set-top box to your @TV app. For most cable or satellite boxes, these commands are automatically configured when you select that code set. However, in some cases you may want to adjust the settings. If this section is not available for adjustment, it means that the code set for the box you have selected indicates that a wake-up command is not necessary.



### ii. Network

This section allows you to manually configure how your @TV interacts with your home network.

#### 1. Radio

Here you can adjust how your @TV uses its Wi-Fi capabilities.

##### a. Ad-Hoc vs. Client Mode vs. Radio Off

- i. Select the mode appropriate to your network setup; Radio Off means Wi-Fi is turned off
- ii. Most setups will only use Client Mode

##### b. SSID

- i. You can either choose your network from the drop-down list or manually enter your network name.
- ii. Frequency
  1. Band and Channel: this allows you to select the frequency band and Wi-Fi channel used to talk to your router or access point.
  2. Encryption Type: select the type of security your network uses; if you don't have a password, select "none."
  3. Security Key/Confirm Key: enter your network's password here and confirm it again.

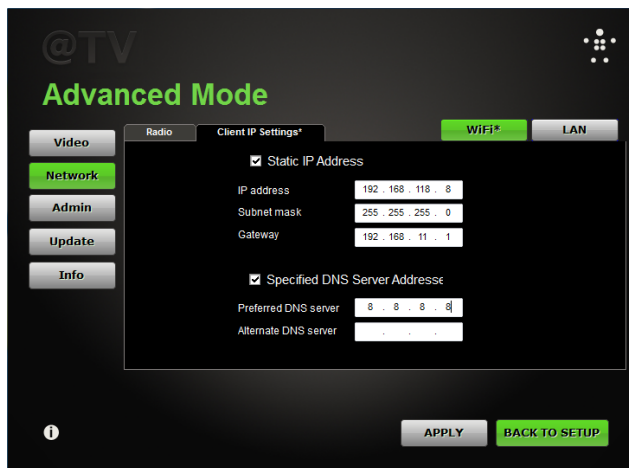
The screenshot shows the @TV Advanced Mode network configuration interface. At the top, the @TV logo is visible. Below it, the title "Advanced Mode" is displayed in green. The interface is divided into several sections:

- Radio\*:** This section contains three radio buttons: "Ad-Hoc", "Client Mode", and "Radio off". "Client Mode" is selected.
- SSID:** This section has two options: "Choose from List" (selected) and "Enter network name". The "Choose from List" option is accompanied by a dropdown menu.
- Frequency:** This section includes "Band" and "Channel" dropdown menus.
- Security:** This section includes "Encryption" (set to "None"), "Security Key", and "Confirm Key" input fields.

On the left side, there is a vertical menu with buttons for "Video", "Network" (highlighted in green), "Admin", "Update", and "Info". At the bottom right, there are "APPLY" and "BACK TO SETUP" buttons. A small information icon (i) is located at the bottom left.

### 2. Client IP Settings – Manual Configuration

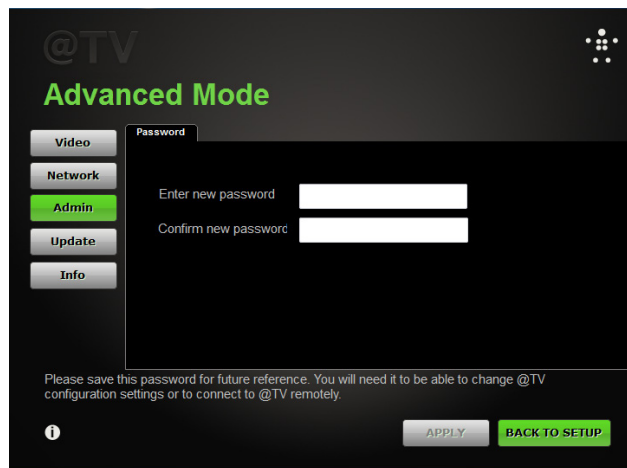
This is for advanced network users to give your @TV a specific IP address and/or DNS server address.



The screenshot shows the @TV Advanced Mode interface. The 'Client IP Settings\*' tab is selected, with 'WIFI\*' highlighted in green. On the left, there are navigation buttons: Video, Network (highlighted in green), Admin, Update, and Info. The main area contains two sections: 'Static IP Address' with a checked checkbox and fields for IP address (192.168.118.8), Subnet mask (255.255.255.0), and Gateway (192.168.11.1); and 'Specified DNS Server Address' with a checked checkbox and fields for Preferred DNS server (8.8.8.8) and Alternate DNS server (-.-.-). At the bottom, there are 'APPLY' and 'BACK TO SETUP' buttons.

### iii. Admin

1. Password change: allows you to change your @TV's password

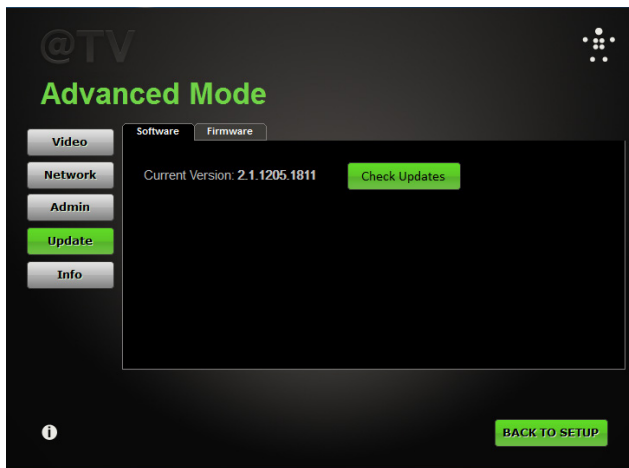


The screenshot shows the @TV Advanced Mode interface. The 'Password' tab is selected. On the left, there are navigation buttons: Video, Network, Admin (highlighted in green), Update, and Info. The main area contains two input fields: 'Enter new password' and 'Confirm new password'. At the bottom, there is a note: 'Please save this password for future reference. You will need it to be able to change @TV configuration settings or to connect to @TV remotely.' Below the note are 'APPLY' and 'BACK TO SETUP' buttons.

### iv. Update

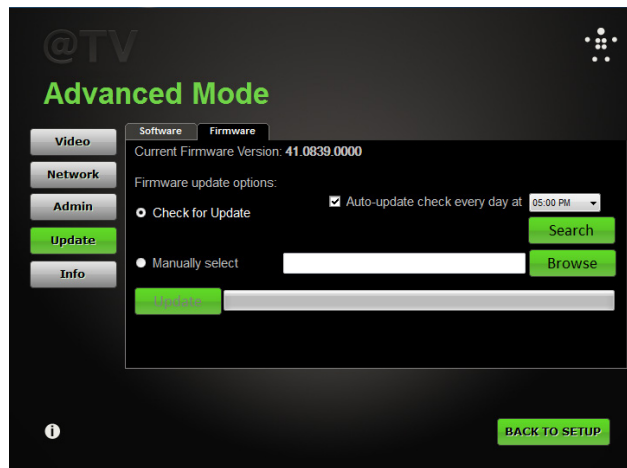
#### 1. Software

- a. Use the version of your @TV setup software for troubleshooting and also automatically update it to the latest version.



### 2. Firmware

- a. Firmware is the software code that runs inside your @TV box. We recommend that you allow it to automatically check for updates every day. You can also manually update it by downloading the firmware from the @TV support website and using the "manually select" feature.



### v. Info

1. Summary of your current @TV setup. This information is useful for any troubleshooting that is necessary as it provides key info about your configuration. All of the sections except the "Ports" tab are for information only.

The screenshot shows the @TV Advanced Mode interface with the 'Info' tab selected. The interface includes a sidebar with buttons for Video, Network, Admin, Update, and Info. The main content area displays system information under the 'General' tab.

General	LAN	WIFI	Status	Audio/Video	Remote	USB	Ports
@TV ID	1A679613F043B7102900892F0A586207						
Serial Number	VUL3F-04-20120116-00068						
Friendly Name	Mobile TV 1						
@TV Model	@TV						
Firmware Version	0539.0000						
Kernel Version	41						
IR Blaster Version	Gonder YX						
Driver Version	1.9.2.6						
Setup Wizard Version	2.1.1205.1811						
Max Local Clients	Unlimited						
Max Remote Clients	1						

At the bottom of the screen, there are 'REFRESH' and 'BACK TO SETUP' buttons.

### 2. Ports

- a. Allows you to test to see whether your Port Forwarding settings are correct and working properly.
- b. UPnP is an automated approach to configuring your router; most routers allow @TV to automatically configure your router ports using this feature.
- c. For routers that do not have UPnP compatibility, you will have to manually configure the ports. You can test to see whether your manually configured ports are working correctly by clicking the "Test" button.

The screenshot shows the @TV Advanced Mode interface with the 'Ports' tab selected. The interface includes a sidebar with buttons for Video, Network, Admin, Update, and Info. The main content area displays port testing information.

Testing of ports accessibility:

- Configure again using UPnP
- Test the configuration remotely

Please wait while we're trying router settings for specific ports:

Configuring router by UPnP - not tried.  
Port 56123 - not tried.  
Port 49177 - not tried.

At the bottom of the screen, there is a 'BACK TO SETUP' button.

### 3. Accessing your TV, Anywhere

- a. General overview
  - i. Simply put, @TV takes the video and audio signals from your cable or satellite box and sends them over the Internet to your phone, tablet, or computer.
- b. Out of home
  - i. When you access @TV from outside your home network (like from a Wi-Fi hotspot or from a 3G or 4G phone), that stream is the only stream available. Any additional users trying to access your @TV box—either from out of the home or in the home—will see a message stating that someone else is using @TV.
- c. In home
  - i. You can have up to eight devices accessing @TV within your home network at a time. However, video performance will be dependent on your router's capability to handle large amounts of streaming content, so as you add additional users you will likely see reduced picture and audio quality.
  - ii. @TV optimizes the video and audio stream it sends based on the types of devices that are receiving the stream. In the case of multiple streams in your home, the device that has the lowest resolution and lowest available bandwidth will determine the video feeds all of the other devices will receive. For instance, if you have five tablets but one is at the edge of your Wi-Fi network (and thus able to receive less video and audio data), all of the streaming devices will see the picture quality adjusted downward to support the device that is on the edge of the network. Likewise, if you have a mix of devices, such as tablets and phones, you will see the overall resolution reduced to match what the smallest device can receive.
- d. Other issues: who controls the TV?
  - i. When you use @TV you will be taking control of your living-room cable or satellite box. If someone else is watching and you change the channel, he or she will be watching right along with you.

