## Mobile Device Viewing Tips

The following tips are recommended for mobile viewing:

- For best reception, stay close to your Wi-Fi router while viewer streaming video.
- While streaming, avoid having too many devices being used at one time on your internet router.
- Use Wi-Fi rather than 3G or 4G connection whenever possible.
- Close extra mobile apps and internet browser windows.
- Clear your cache memory on your phone.
- Make sure that your device had the latest updates for your OS and apps.
- Do not use private browsing mode on Safari on iOS
- If you use your cell phone network beware that you may exceed your monthly bandwidth limit and may lose connection during live streaming broadcast.
- Run a speed test on your device to know your maximum bandwidth limits.
- Start with lower bit-rate first and then increase if you have enough bandwidth to handle a higher bi-rate speed.
- Reboot mobile device

## Internet Connection Recommendations

- For successful live streaming, you need a high quality internet connection. A connection that is sufficient to check email or load web pages may not be good enough for streaming. You don't need "a" internet connection, you need a high quality internet connection, particularly to do uninterrupted HD streaming.

- Not all connections are of the same quality. You want to use a wired Ethernet connection and not use Wi-Fi as Wi-Fi connections are more prone to fluctuation in quality and can more easily drop.

- Cellular (3G/4G/LTE) connections can be very unreliable. It is strongly recommended to use a hardwired Ethernet connection or a Wi-Fi connection over a cellular connection. But the type of connection is only one factor. For every type of connection, it is important to conduct bandwidth (http://speedtest.dal01.softlayer.com/speedtest) tests ahead of time to know you have sufficient bandwidth to stream.

- It is important to use a connection which is not shared with many other users. For example, when streaming from a typical corporate office, the amount of bandwidth available for your stream may be inconsistent depending on the number of other users on the same network.

- If you have plenty of bandwidth and not many users sharing the same bandwidth, this may not be necessary. But if you find you are on a shared connection and cannot always get adequate bandwidth, you may want to ask for this, or to try to minimize how many other users are on the same connection at the time of your stream.

## Viewing Troubleshooting Steps

*Try watching at a lower quality*

If you are not sure of the strength of your bandwidth speed, start with the lowest and work your way up and stay on the bitrate  speed that your device can handle without buffering or freezing and easiest for your bandwidth and CPU to playback the video smoothly.

*Update Browser*

We recommend viewing your streaming video on an up-to-date version of Firefox or Chrome. Go here to get the latest version of Firefox or Chrome. One benefit of Chrome is that it already has Adobe Flash installed by default. If you need to use Internet Explorer and are having issues, be sure to update to the latest version of IE.

*Install and Update Adobe Flash*

Go here and follow the steps outlined on that page to make sure that you have an up to date version of Adobe Flash Player installed. Do this on the same computer and browser that you are trying to watch streaming video  on.

*Check Internet Connection and Bandwidth*

You can only watch a live stream if you have a consistent internet connection. Shared wi-fi networks, like what you might find at a coffee shop, are often too unreliable to view a live stream without interruption. We recommend viewing on the best possible connection you can find.

You can run a speedtest here  (http://speedtest.dal01.softlayer.com/speedtest)   to determine your download speed. It can be helpful to run the test several times to see if you are getting consistent download speeds.

When possible, plugging in via an ethernet cable can help you avoid the possibility of an inconsistent wireless connection.

*Check Computer Resources*

A possible cause of choppiness or pausing playback is insufficient CPU resources on the broadcaster or the viewer side. Older computer's graphics cards may have a difficult time encoding and decoding live and recorded video.  We recommend shutting down all other applications and browser tabs / windows while viewing if you are experiencing playback problems.

Watching video content can be fairly CPU intensive, especially the HD content. It is best to have a dual core system that is less than two years old that has a discrete (non-integrated) graphics card. Intel Core i3, i5 or i7 CPUs or the AMD equivalent are preferred. Netbooks or low power systems should be avoided. You can check the CPU load in the Task Manager (Windows) or Activity Monitor (Mac OS).

*Disable or Enable Hardware Acceleration*

Hardware acceleration means that your computer's graphics card is used to render the stream on your screen rather than decoding and rendering in software. The advantage is typically smoother playback, less battery drain and less overheating. In some cases, hardware acceleration does not function properly and the stream will go black or you will see a "stuttering" or "skipping" effect where everything is jittering. If you see this symptom or are seeing low frame rate playback, try enabling or disabling hardware acceleration using these steps:



1. Right click on the player
2. Choose settings
3. Click on the far left tab that looks like a screen
4. Check or uncheck the box that says "Enable Hardware Acceleration"
5. Click close
6. Refresh the page

*Restart your Computer / Mobile Device*

If that doesn't work, then please click here for Live Chat Support.

## Articles

### Video buffering and playback problems
http://www.theguardian.com/technology/askjack/2011/may/12/ask-jack-streaming-media-buffering

### Problems With Your Streaming TV? Get Answers With Our Online Help Guide http://www.worldtvpc.com/blog/streaming-tv-online-help-guide/#ixzz3Wx3QM9V7

**Get Perfect Playback with Streaming Videos**
http://www.speedupnew.com/speed-up-internet/video-buffering.html

**Clearing Your Web cache to Optimize Internet**
http://www.speedupnew.com/speed-up-internet/browser-cache.html

**Improve video Streaming in Internet Explorer**
http://www.speedupnew.com/speed-up-internet/streaming-connection-tweaks.html

**How to Improve Your Video-Streaming Clarity**
http://www.technewsworld.com/story/73552.html

**Tips for Improving Streaming Video Quality and Speed**
http://www.doityourself.com/stry/tips-for-improving-streaming-video-quality-and-speed

**Ten Ways to Boost Your Wi-Fi Signal**
http://askbobrankin.com/ten_ways_to_boost_your_Wi-Fi_signal.html

**How Wi-Fi Works**
http://computer.howstuffworks.com/wireless-network.htm

## Video

Video:  How to Fix a Slow Streaming iPad : iPad Tips

https://www.youtube.com/watch?v=H-4ujXKtbC8