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TiVo Stream Overview

This Operator’s Guide for the TiVo Stream® describes the TiVo Stream hardware and software specifications and requirements, installing TiVo Stream and setting it up on your mobile devices, the TiVo App user interface for streaming and downloading, TiVo Stream’s functional architecture, as well as TiVo Stream troubleshooting information.

The audience for this Operator’s Guide is the Operator’s learning and development and support management teams, as well as TiVo’s Network Operations Center and Product Support Team.

Overview

TiVo Stream is a network (Ethernet) attached transcoding accessory that converts MPEG-2 streams to MPEG-4 streams, then streams the converted video to Apple iOS® mobile devices. TiVo Stream allows you to:

- Stream DVR recordings (including in-progress recordings) that you may watch on Apple iOS mobile devices: iPad, iPhone®, or iPod Touch® within the home.
- Transfer DVR recordings to take out of the home on your mobile devices.

Figure 1–1 shows the TiVo Stream:

![Figure 1–1: TiVo Stream](image)

**TiVo Stream feature summary**

The main features of TiVo Stream are as follows:

- **Stream to multiple mobile devices simultaneously.** TiVo Stream can only stream recordings of linear copy-once and copy-freely television content (including in-progress recordings) to up to four mobile devices simultaneously.
Overview

You can also stream from one or more Premiere Series of DVRs on the home network, as well as use TiVo-like trick modes such as pause, scrub, 30-second skip, and gestures.

- **Download to mobile devices at 4x speed.** You can download copy-freely television content to mobile devices up to 4x real time (for example, you can download a one-hour show in 15 minutes). Downloading a program allows you to view the program on the mobile device anywhere and at any time.

- **Record and Watch.** This is a TiVo App feature that allows you to start recording a show and immediately stream the recording to a mobile device by pressing a single button, allowing you to watch nearly-live TV.

TiVo Stream limitations

TiVo Stream limitations to take into account are as follows:

- Achieving four streams simultaneously depends on the resolution and bit rate of the source content. Performance may degrade when streaming four high bit-rate HD programs.

- At least two DVRs are required to achieve four simultaneous streams to mobile devices since each DVR has a limit of three simultaneous multi-room or transcoded output streams.

- Copy-never content such as pay-per-view shows cannot be streamed to mobile devices.

- Downloading is allowed for copy-freely content only.

- Downloaded content such as Amazon Instant Video, Music Choice downloads, and video podcasts are not supported.

- HDMI and Airplay output is disabled on the Apple iOS device during video playback. It will display the following informational message:

  Video mirroring is not allowed.

Shipping carton specifications

This section summarizes the TiVo Stream shipping packaging specifications.

Retail Package

The following components are shipped with the retail TiVo Stream package:

- TiVo Stream
  - UPC: 851342000971
  - Model: TCDA94000

- Carton dimensions
  - 4.75” W x 7.5” D x 2.1” H
  - Weight: 16 oz.

- Ethernet cable
  - Length: 3 feet
Overview

- Power supply
  - 12v DC power supply
- Documentation
  - TiVo Stream Installation & Setup Quick Start Guide

Operator Multi-Pack


- TiVo Stream
  - Quantity: 12 TiVo Stream devices
  - SKU Model: RA9400BU/TCDA94000
- Multi-pack dimensions
  - 10.375” W x 9.75” D x 6.250” H
  - Weight: 6.5 lbs.
- Accessories
  - Accessories are not included. Accessories may be ordered with the TiVo Stream device or ordered separately if needed. Accessories are shipped on the same date with the balance of the order due. Accessories are packaged in bulk cartons as delivered from the manufacturer.

TiVo Stream hardware specifications

This section describes the TiVo Stream hardware specifications.

Device dimensions and weight

The TiVo Stream component dimensions and weights are as follows:

- TiVo Stream dimensions:
  - 4” W x 4” D x 1.05” H
  - Weight: 0.3 lbs.

Rear panel

The TiVo Stream device’s rear panel includes:

- Gigabit Ethernet connector with Link Activity and Link Status LEDs
- Power/Status (main) LED
- 12v DC power supply

Figure 1–2 shows the TiVo Stream rear panel.
Overview

![Figure 1–2: TiVo Stream rear panel](image)

The TiVo Stream has three LEDs on the rear panel. The two LEDs on the Ethernet jack are standard Link and Activity LEDs.

**LED description**

TiVo Stream has three LEDs on the rear of the unit (as shown in Figure 1–2).

**Ethernet connector Link LEDs**

The two LEDs on the Ethernet jack are standard Ethernet link activity and link status LEDs. The behavior for the Ethernet connector LEDs is as follows:

- Left LED = Link Activity
  - Blinks green on packet RX and TX (Receive and Transmit). Otherwise, this LED is off.
- Right LED = Link Status
  - No link = Off
  - 10 Megabit half duplex = Off
  - 10 Megabit full duplex = Green
  - 100 Megabit half/full duplex = Green
  - Gigabit half/full duplex = Yellow

**TiVo Stream Status LED**

The third and main LED on the back of TiVo Stream can be either amber or white and it indicates the overall status of the TiVo Stream device:

- **Off**: No power. TiVo Stream is off.
- **Steady Amber**: TiVo Stream has powered on.
- **Blinking Amber**: TiVo Stream is applying a firmware update.
- **Blinking White**: TiVo Stream is booting.
- **Steady White**: TiVo Stream is fully booted up and ready. DHCP lease and IP address obtained, connected, and discoverable.

Boot time is usually less than three minutes. This boot-up could be repeated if a critical software update is needed, which is typically only the first time TiVo Stream is set up as all other software updates occur late at night when the TiVo Stream is idle.
The LED goes through the following sequence during a normal bootup process:

\textit{Steady Amber > Blinking White > Solid White}

Once the TiVo Stream downloads the new software, if the TiVo App is in the TiVo Stream guided setup, it automatically restarts the TiVo Stream; you will need to wait while the device reboots. The LED goes through the following sequence as the TiVo Stream boots and installs the new software:

\textit{Off > Steady Amber > Blinking White > Blinking Amber > Off > Steady Amber > Blinking White > Solid White}

Therefore, the time required for initial setup is longer than normal.

\textbf{Host DVRs supported}

TiVo Stream supports the TiVo Premiere Series of DVR’s (Series 4) running software release 20.2.1 or greater. The following is a list of the currently supported DVRs.

- TiVo Premiere
- TiVo Premiere XL
- TiVo Premiere Q
- TiVo Premiere 4
- TiVo Premiere XL4/Elite

\textbf{Default group mappings}

TiVo Stream has the following default group mappings:

- AP\_http
- AP\_mrs
- AP\_trio
  
  \textbf{Note:} AP\_trio will not be present if a customer opted out of the account privacy setting.
- DG\_standard
- SF\_nopgd
- SF\_nouidata

\textbf{System requirements}

The system requirements for TiVo Stream are as follows:

- At least one TiVo Premiere Series (or later) DVR connected via a high bandwidth hardwired connection (Ethernet or MoCA) to the home wireless router.
  
  \textbf{Note:} The wireless connection is to the mobile devices only.
- TiVo App 2.0 or later.
  
  \textbf{Note:} The TiVo App 2.0 will be available for download on 09/05/2012.
System requirements

- The mobile devices TiVo Stream supports are as follows: iPad, iPhone®, or iPod Touch® running Apple iOS® 5.1 or greater.
- TiVo Stream requires that DHCP is enabled on the router.

TiVo Stream ventilation requirements

The TiVo Stream design includes many small ventilation openings on the top and bottom surfaces of the device. The requirement is to not cover up the ventilation holes on either the top or bottom of the device.

TiVo requires that the product be placed on a hard surface. This is so that the “feet” of the TiVo Stream can provide the necessary space between the bottom ventilation holes and the surface the device is resting upon. Thus, placing the TiVo Stream on carpeting or another soft surface is not supported.

Home network and account requirements

The home network and account requirements for TiVo Stream are as follows:

- The TiVo Stream must be on the same TiVo account as the source DVR.
- All devices must be on the same network and subnet.
- All devices’ accounts must be activated and in good standing.
- The host DVR must be connected to the home router via a high-bandwidth connection (Ethernet or MoCA).
- No more than 10 devices (with a TSN) can be associated with a user account.

TiVo Stream output resolutions by device

Table 1–1 describes the TiVo Stream output resolutions by mobile device.

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<tr>
<th>Source video</th>
<th>Mobile device</th>
<th>Output resolution</th>
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<tr>
<td>1080i or 720p60 or 480i</td>
<td>iPad</td>
<td>1280x540</td>
</tr>
<tr>
<td>1080i or 720p60 or 480i</td>
<td>iPhone4/iPod Touch</td>
<td>960x540</td>
</tr>
<tr>
<td>1080i or 720p60 or 480i</td>
<td>iPhone 3GS</td>
<td>480x270</td>
</tr>
</tbody>
</table>

Regarding TiVo Stream and parental controls

Even if Parental Controls are enabled on the host DVR, TiVo Stream will show content that would be limited by parental controls. To respond to this limitation, TiVo suggests that parents put a password on their Apple iOS device to prevent children from viewing inappropriate content, just as they should for such applications as Netflix on Apple iOS devices.
**TiVo Stream and the TiVo Service**

The Operator can associate a TiVo Stream with a customer account and activate or deactivate an account with the same systems that exist for DVRs today.

TiVo Stream calls into the TiVo Service for the following:

- Firmware updates
- Service State changes
- Sharing Certificates
- Media Access Key (MAK)
- Secure HLS Data
- HTTPS Certificate
- TiVo groups
- Uploading logs

**TiVo Stream service life cycle**

TiVo Stream has service states like every other TiVo box (see Figure 1–3). For service state changes to be updated, a connection to the TiVo Service is required. If a TiVo Stream does not call into the TiVo Service for more than 30 days, the device’s certificates expire and TiVo Stream ceases to function.

![Figure 1–3: TiVo service states](image)

The TiVo service states are described as follows:

- **Service State 22 Grace Period**: TiVo Streams are shipped to Operators in this service state. When boxes are returned from the customer, Operators can send a web service API `serviceReset` to put a TiVo box into this service state for restaging purposes (process to be defined in a later release).
Functional architecture

- **Service State 3 Activated:** Operators can send a web service API `serviceActivate` to activate a TiVo Stream. This is the service state TiVo Stream is in during normal operation. All features are available.
- **Service State 8 Canceled:** Operators can send a web service API `serviceCancel` to cancel a TiVo Stream. This will deactivate a TiVo Stream and disable all features.

Backhaul logs

TiVo Stream can send logs back to the TiVo Service for troubleshooting just like any other TiVo box. These logs are known as “backhaul” logs. TiVo Stream can send backhaul logs to the TiVo Service only when the `backhaul` flag is enabled for that device. TiVo can enable this flag upon request.

If backhaul logs are desired for a particular TiVo Stream, make a request to TiVo through the Enterprise Portal.

Functional architecture

This section describes how the TiVo Stream components—TiVo Stream, TiVo Premiere series DVR, and Apple iOS mobile devices—interact with each other in the home.

How TiVo Stream components interact in the home

When fully installed and set up in the home, the TiVo Stream communicates and interacts in the following way:

- The TiVo DVR sends high bit-rate MPEG2 recordings to the TiVo Stream via a hardwired connection.
- The TiVo Stream transcodes high bit-rate MPEG2 into a low bit-rate MPEG4 format.
- The TiVo Stream wirelessly sends the low bit-rate MPEG4 video content to the Apple iOS mobile devices.

Network communication path

The components are connected to the local network as follows:

- **TiVo Stream:** Hardwired to the wireless router.
- **TiVo Premiere series DVR:** Hardwired to the wireless router.
- **Apple iOS mobile devices:** Connected to the router wirelessly.

Figure 1–4 below illustrates TiVo Stream’s network communication path, from the TiVo DVR to the wireless router via an Ethernet or MoCA connection, and then from the router to the TiVo Stream. One or two Ethernet to Coaxial bridges (ECBs) may be necessary to connect the TiVo DVR via MoCA.
Video communication path

Figure 1–5 shows the path of video communication from the TiVo DVR to the TiVo Stream device and finally from the TiVo Stream to mobile devices.
Functional architecture
Installing and Setting Up TiVo Stream

Installing TiVo Stream

To install the TiVo Stream device, follow these steps:

1. The Operator activates TiVo Stream on the same user account as the host DVR(s). Be sure to activate all the TiVo devices at the same time.

   **Note:** There is an approximate wait of ten to fifteen minutes after activating the devices before the TiVo Stream can call in and receive the authorization changes (Service State, Media Access Key, etc.).

2. Verify that your TiVo DVR is connected to your home network using either a wired Ethernet or MoCA connection.

   **Note:** TiVo Stream does not support a TiVo DVR connected wirelessly.

3. Connect the TiVo Stream to an open port on your router using an Ethernet cable.

4. Connect the power cord from the back of the TiVo Stream to a power source.

5. Perform a *Test Internet Connection* from all the TiVo DVRs.

   Running *Test Internet Connection* ensures that the DVR can download the latest list of devices in its share group, which now includes the recently added TiVo Stream.

   **Note:** Before running the *Test Internet Connection*, make sure that at least 15 minutes has elapsed since TiVo Stream was activated (in Step 1).

   From TiVo Central, select **Settings & Messages > Settings > Network > View network diagnostics > Test Internet Connection**.

6. Wait for the LED on the back of the TiVo Stream to turn solid white.

   This LED is located to the left of the Ethernet connector (see Figure 2–1). The LED should turn white in about three minutes for a normal boot up. If a firmware update is being applied, it may take up to ten minutes. For details about the TiVo Stream LED sequence and what each LED display indicates, see *LED description* on page 4.
Setting up TiVo Stream on your mobile device

Figure 2–1: Location of the TiVo Stream status LED and power outlet

For instructions on downloading the TiVo App to the mobile device and how to connect to a host DVR and complete TiVo Stream setup, see the next section, Setting up TiVo Stream on your mobile device.

Setting up TiVo Stream on your mobile device

To set up TiVo Stream on your mobile device, follow these steps:

Note: This process should be completed on the customer’s mobile device. It will have to be repeated on each mobile device the customer wishes to use with the TiVo Stream.

1. Ensure you have access to the customer’s mobile device.
   This will require the customer to be present to enter in any passwords (such as the passwords for WiFi, iPad®, App Store, and so on).
   If the customer’s mobile device is not available, the installer can use his or her own mobile device. This will allow the installer to verify the TiVo Stream functionality only. In this case, the customer will need to complete the setup on his or her own mobile device at a later time.

2. On your iPad or other mobile device, download or update the TiVo App.
   Note: The TiVo App is compatible with iPad, iPhone®, and iPod touch® devices running Apple iOS® 5.1 or later. For additional device compatibility information, visit tivo.com/stream.

   To stream or download shows from your TiVo DVR, you’ll need the latest version of the TiVo App.
   - If you don’t already have the TiVo App, download it from the App Store and install it on your device now.
   - If you already have the TiVo App, make sure it’s up to date (with no updates pending).

   Note: Not all programs may be transferred due to copy protection mechanisms used by copyright owners under the FCC’s encoding rules (47 C.F.R. 76.1904).
Now finish setup on your mobile device. Before you proceed, ensure that your mobile device is connected via WiFi and to the same local network as your TiVo Stream and DVRs.

3. On your iPad or other mobile device, launch the TiVo App and follow the on-screen instructions to connect to your DVR.

Once connected to your DVR, the TiVo App automatically detects the TiVo Stream and initiates the TiVo Stream Setup process.

**Note:** For information on how to respond to problems during TiVo Stream Setup, refer to *Chapter 4, Troubleshooting TiVo Stream*.

The TiVo Stream Setup process completes the following tasks:

- **Step 1.** Checks for any TiVo Stream firmware updates and applies the updates as necessary.
- **Step 2.** Checks to make sure that TiVo Stream has been activated.
- **Step 3.** Checks to make sure that TiVo Stream and the DVR are in the same share group.
- **Step 4.** The TiVo App runs a test video stream to ensure that your network has the bandwidth to support streaming.

a. If the on-screen instructions do not appear automatically, tap the TiVo App’s *Settings* icon.

The *Settings* menu appears (see **Figure 2–2**).

![Figure 2–2: Bringing up the Settings menu](image)

b. Tap **TiVo Stream Setup**.

The TiVo Stream Setup dialog appears, which displays the message, “*Checking for TiVo Stream.*”
**Setting up TiVo Stream on your mobile device**

Figure 2–3 shows the TiVo Stream Setup dialog when a TiVo Stream device has been discovered on the network.

**Step 1. Checking the software version**

Once the TiVo Stream has been found, the TiVo App checks the software version to see if a critical software update is required.

**Note:** Operator units at initial launch do not require a critical software upgrade.

When a critical software upgrade is needed, the screen shown in Figure 2–4 appears.
Setting up TiVo Stream on your mobile device

The software upgrade process can take up to 20 minutes. The progress bar indicates elapsed time up to 20 minutes. When the new software has been downloaded, the TiVo App reboots the TiVo Stream. After the reboot, the TiVo App automatically resumes the TiVo Stream Setup process.

Step 2. Checking activation status

The TiVo Stream Setup process checks to ensure that the TiVo Stream has been activated (see Figure 2–5).

![Image](image.png)

Figure 2–5: Checking Stream’s activation status

If the TiVo App reports that the TiVo Stream has not been activated:

a. Ensure that activation was sent for this device and that at least ten minutes have elapsed.
b. Tap I’ve done this, continue.

The TiVo App checks the TiVo Service once per minute. Once the TiVo App sees the device has been activated, it continues to Step 3 (below).

The progress bar indicates elapsed time up to 15 minutes.
Setting up TiVo Stream on your mobile device

Step 3. Linking TiVo Stream to your DVR

The TiVo Stream Setup process checks to make sure your DVR has the updated share group list that includes the newly activated TiVo Stream. As shown in Figure 2–6, if your DVR has not received the updated share group list, the following message appears:

*Please wait while we link your TiVo Stream to your DVR. This will take about 4 minutes.*

If the DVR does not have the latest share group, the TiVo App instructs the DVR to perform a *Test Internet Connection*. If this process fails, you receive a message instructing you to manually perform a *Test Internet Connection*.

**Note:** Performing a *Test Internet Connection* is required only if the installer has not already performed a Test Internet Connection on the DVR.
Setting up TiVo Stream on your mobile device

**Step 4. Testing your network for streaming**

To ensure the throughput is adequate for streaming, the TiVo App starts a test stream by streaming 15 seconds of the most recent supported recording on your DVR. Thus, there must be at least one supported recording on your DVR—TiVo Stream can only stream recordings of linear copy-once and copy-freely television content.

After a successful fifteen-second stream test, you’re ready to stream (see Figure 2–7).

![Figure 2–7: Ready to stream](image)

After successfully completing the TiVo Stream Setup, you may choose **Done** or **See tutorial**.

4. To get a tutorial overview of how to use the TiVo Stream features in the TiVo App, choose **See tutorial**.
Setting up TiVo Stream on your mobile device
Using TiVo Stream

This chapter describes the TiVo App user interface for streaming and downloading to mobile devices via the TiVo Stream. This chapter also describes the TiVo Stream system information available from the TiVo App and the TiVo Stream System Information web page.

TiVo Stream does not have a display. You use the mobile device for both setting up and viewing the content from the DVR through the TiVo Stream.

To enjoy your favorite programs whether you’re in the kitchen, an airplane, or a hotel room, all you need is a TiVo Stream, a TiVo Premiere DVR, and an iPad®, iPhone®, or iPod Touch®. TiVo Stream allows you to:

- Stream up to four recorded programs simultaneously.
- Watch a program on a mobile device as it’s being recorded.
- Wirelessly download programs to your mobile devices.
- Download a one-hour program in as little as 15 minutes.

Note: For all streaming and downloading operations, with exception of playing back a recording that has been downloaded to the mobile device, your mobile device must be connected to your local wireless network. These features are not available when the TiVo App is connected via the Away access mode.

Streaming a recording

This section describes how you can stream content from your TV to your mobile devices using the TiVo App.

TiVo Stream can only stream recordings of linear copy-once and copy-freely television content (including in-progress recordings) to up to four mobile devices simultaneously.

You can stream from one or more Premiere Series DVRs on the home network, as well as use TiVo-like trick modes such as pause, scrub, 30-second advance, 8-second instant replay, and gestures. You can also stream recordings that are in-progress.

To stream a recording to your iPad or other mobile device:

1. Tap the TiVo App icon on your mobile device (see Figure 3–1).
Streaming a recording

2. If the TiVo App is not already connected to your DVR, select your DVR and connect to it. When the TiVo App first opens, you’ll see the Info screen showing you what’s on right now. Note that Watch now is the only watch option available (see Figure 3–2).

3. Tap the My Shows tab (at the bottom of the iPad screen) to watch and manage your downloaded content.

4. If not already selected, tap the On DVR button.

5. Select a program in My Shows, then tap on Watch now. When you tap on Watch now, you’re presented with the two options shown in Figure 3–3:
   - Watch on TV
   - Watch on iPad
Streaming an in-progress program

6. To stream a recorded program, tap **Watch on iPad**.

   You’ll see the message: “Connecting to TiVo Stream...”

   A connection to your TiVo Stream is established. The video you selected is loaded and starts playing on your mobile device.

---

**Streaming an in-progress program**

You can stream a program currently playing on your TV via a TiVo App feature called *Record and Watch*. With this feature you can start recording a show and immediately stream the recording to a mobile device by pressing a single button, allowing you to watch nearly live TV.

To stream a program currently playing on your TV:

1. To find the program that’s currently playing, select the **Guide** tab and select the program that you wish to watch.

2. Tap **Watch Now > Watch on iPad** (see Figure 3–4).

---

Once you tap **Watch on iPad**, the DVR starts recording the program and simultaneously the iPad starts to stream the program. The screen in Figure 3–5 confirms that the program is being recorded.
Controlling the video player

You can control the video player by using the Scrub Bar and the Video Player Header Bar. Both bars appear automatically when playback begins, and both bars automatically disappear after 8 seconds.

To display the Scrub Bar and the Video Player Header Bar, simply tap anywhere on the screen.

Note: HDMI and Airplay output is disabled on the Apple iOS device during video playback.

The Trick Play® functions are available on the Scrub Bar (see Figure 3–6).

For fully recorded programs, the recording completion bar is completely green. Both Instant Replay and 30-second advance are accompanied by sound effects.
Using the Trick Play functions

The TiVo Trick Play functions are:

**Trick Play buttons**

**Instant replay**
Gives you instant 8-second replay.

**Pause and Play**
Toggles video pause and playback.

**Scrub bar**
You can scrub to any point in the program and instantly jump to that location.

**30-second advance**
To advance 30-seconds ahead in a playing program, tap the 30-second advance icon.

**Trick Play gestures**
Gestures are a way to control the video player by tapping the iPad screen or swiping your finger across the screen.

**Instant replay**
*Gesture*: One finger swipe to the left.
*Result*: Replays the last eight seconds.

**30-second advance**
*Gesture*: One finger swipe to the right.
*Result*: Video skips forward 30 seconds.

**Zoom**
*Gesture*: Double-tap with one finger.
*Result*: Toggles zooming in and zooming out.
Controlling the video player

About the Video Player Header Bar

The Video Player Header Bar provides both program information and a set of video controls.

Program information

The program information provided on the Video Player Header Bar is illustrated in Figure 3–7.

![Figure 3–7: Program information provided on the Video Player Header Bar](image)

Video controls

The video controls provided on the Video Player Header Bar are illustrated in Figure 3–8.

![Figure 3–8: Video controls provided on the Video Player Header Bar](image)

End video playback

The Done button ends video playback on the iPad and takes you to the previous screen.

Start playback on the DVR

The Play on TV button ends playback on the iPad and begins playback on the DVR. When you use this feature, the program will play back on the DVR that the TiVo App is currently connected to. This button doesn’t display if the program is currently playing on the DVR.
Controlling the video player

Set closed captioning (CC)
The CC button toggles closed captioning on and off.

Zoom the playback in or out
The Zoom button toggles zooming in a video currently being played back.
The Zoom feature zooms to fill in the available letter boxes (space above and below the screen) or pillar boxes (space right and left of the screen).

See more information about a program
The Info button allows you see more information about a program (see Figure 3–9).

Controlling video playback volume
The video player allows you to control the video playback volume. This volume control is identical to the iPad’s master volume control.
To change playback volume:
1. Tap the Volume icon on the Scrub Bar (see Figure 3–10).
   The Volume bar appears.
Controlling the video player

2. Use the Volume bar to drag the volume level up or down as desired.

3. To mute the volume, tap the Mute icon (at the top of the Volume bar).
   Alternatively, you can use the volume controls on the iPad.

Deleting or keeping a program when streaming completes

Once you’ve finished watching a streamed program on your iPad, you can either delete the recording from your DVR or choose to keep it on your DVR (see Figure 3–11).

When the Delete this recording from your DVR? message is displayed, click Delete Now to delete the program from your DVR or click Keep this recording to keep it on your DVR.
Downloading programs to your mobile device

Downloading programs allows you to view those programs on your mobile device anywhere and at any time. You can download copy-freely television content to mobile devices up to 4x real time (for example, you can download a one-hour show in 15 minutes).

Program download requirements

Downloaded programs are stored within the mobile application and are not accessible through the Apple iOS file systems (to prevent copying downloaded recordings). The mobile device must have adequate storage space available to store the downloaded programs.

Note: If you reset or uninstall the TiVo App, all downloaded programs will be deleted from the mobile device.

The storage space required for each program depends on whether you choose Standard Quality or Best Quality. The size of the download doesn’t vary with the source video or with native resolution of the destination device. This provides consistent, high-quality video across devices by always scaling the video in the transcoder rather than depending on a scaler in the player.

Table 3–1 summarizes the download sizes for a 30-minute program.

<table>
<thead>
<tr>
<th>Source Video</th>
<th>iPad</th>
<th>iPhone/iPod</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 Minutes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1080i</td>
<td>525 MB</td>
<td>305 MB</td>
</tr>
<tr>
<td>720p60</td>
<td>525 MB</td>
<td>305 MB</td>
</tr>
<tr>
<td>480i</td>
<td>525 MB</td>
<td>305 MB</td>
</tr>
</tbody>
</table>

The TiVo App must remain open for a download to complete. If the TiVo App is closed (for example, to check email or make a phone call), the download pauses until you reopen the TiVo App. You can go to other tabs within the TiVo App, such as Browse or Guide, without affecting downloading.

Since downloading keeps the TiVo App open until the downloading process is complete, TiVo recommends that you plug in your mobile device to a power source, especially if a large number of downloads are queued.

How to download a program to your mobile device

To download a program to your mobile device:

1. Tap the My Shows tab (at the bottom of the iPad screen).
2. If not already selected, tap the On DVR button.
3. Select a program in My Shows.
4. Tap Download in the Preview Pane (see Figure 3–12).

![Figure 3–12: Download a program](image1.png)

When you tap **Download**, the Download Options dialog box appears (see Figure 3–13).

![Figure 3–13: Specifying the download options](image2.png)

You can change the quality of your download if you wish, or let the default quality setting stand.
5. To change the quality of your download, click the **Down Arrow** in the **Quality** field drop-down menu, and select the download quality you desire.

6. To continue with downloading the program, tap **Download with these options**.

   The TiVo App must remain open for a download to complete. If the TiVo App is closed (for example, to check email or make a phone call), the download pauses until you reopen the TiVo App. You can go to other tabs within the TiVo App, such as **Browse** or **Guide**, without affecting downloading.

   A counter notification appears in the segmented control bar on the **On iPad** tab, as well as on the **My Shows** tab at the bottom of the screen (see Figure 3–14).

![Figure 3–14: Recorded programs counter notifications](image)

7. To download another program, tap the desired program in the **My Shows** list, then tap **Download**.

8. After confirming the download options again, add the program to the download queue by tapping **Download with these options** (as shown on Figure 3–13 on page 28).

   The counter updates to 2 to reflect that two programs are in your download queue (see Figure 3–15).
Downloading programs to your mobile device

Viewing a summary of your downloaded programs

To see all the programs you’ve already downloaded:

1. Tap the **My Shows** tab (at the bottom of the iPad screen).
2. Tap the **On iPad** tab.

The download queue appears (see Figure 3–16).

The download queue displays a list of the downloads in-progress or waiting to be downloaded.

As shown in Figure 3–16 above, the space available on your iPad or other mobile device is displayed to the right of the **On iPad** tab.
**Pausing and resuming downloads**

When you’re downloading multiple programs, you can specify which program you want to download first.

To specify which program you want to pause or resume:

1. Tap the **My Shows** tab (at the bottom of the iPad screen).
2. Tap the **On iPad** tab.
   
   The download queue appears.
3. In the download queue, tap the **Pause download** button or the **Resume download** button as desired (see Figure 3–17).

To pause the program currently downloading, you can also tap the **Pause download** button in the Preview Pane.

![Pause or resume downloads](image)

*Figure 3–17: Pause or resume downloads*

The program download you chose starts to download while the second program download pauses until the first download is completed.
**Downloading programs to your mobile device**

**Reordering downloaded programs**

You may wish to change the order in which programs will download to your mobile device. To be able to reorder your downloaded programs, you must have programs currently in the download queue.

To reorder downloaded programs:

1. Click the **Edit** button (see Figure 3–18).

![Figure 3–18: The Edit button](image)

2. Press and drag the Reorder icon (as shown in Figure 3–19) to move the programs in the download queue to the download positions you desire.

![Figure 3–19: Reordering in-progress downloads](image)

3. When satisfied with the download order, tap **Done**.
Deleting downloaded programs from your mobile device

You can delete programs you’ve downloaded to your mobile device.

To delete downloaded programs from your iPad:

1. Tap the My Shows tab (at the bottom of the iPad screen).
2. If not already selected, tap the On iPad button.
3. Select the program you want to delete from the list in My Shows.
4. Delete the selected program.

You can delete downloaded programs in any one of three ways:

Delete by swiping

To delete by swiping:

a. Swipe the selected program to the right or left.
   The Delete button appears on the same line as the selected program (see Figure 3–20).

b. Tap Delete.
   The program is deleted from your iPad or other mobile device.

Figure 3–20: Deleting program by swiping
**Downloading programs to your mobile device**

**Delete by using Delete button in Preview Pane**

To delete a program using the *Delete* button in the Preview Pane:

a. From the list in *My Shows*, select the program to be deleted.
b. Tap the *Delete* button in the Preview Pane (see Figure 3–21).

c. Click **OK** to confirm the deletion.

The program is deleted from your iPad or other mobile device.
Playing back downloaded programs on your mobile device

To play back downloaded programs from your iPad:

1. Tap the My Shows tab (at the bottom of the iPad screen).
2. If not already selected, tap the On iPad button.
3. Select the program you want to play back from the list in My Shows.
4. Tap Watch on iPad.

If your mobile device does not have an Internet connection, simply tap the Shows on iPad button when launching the TiVo App (see Figure 3–22).
**TiVo Stream System Information**

**System Information available from the TiVo App**

To access the TiVo Stream System Information menus:

1. If you have not already done so, tap the **TiVo App** icon on your mobile device.
   The Info screen appears.
2. Launch the TiVo App and connect to your DVR.
3. Tap the **Settings** icon (see Figure 3–23).
   The Settings menu appears.
4. Tap **System Information**.
   The Stream Info screen appears (see Figure 3–24).
See Table 3–2 for descriptions of each of the fields in the TiVo App System Information.

**Table 3–2: TiVo App System Information**

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status</td>
<td>Provides the current status.”Succeeded” indicates that TiVo Stream successfully completed the guided setup process.</td>
</tr>
<tr>
<td>TSN</td>
<td>TiVo Service Number. The TSN is a 15-digit code that uniquely identifies each TiVo device. It is also printed on the back of each unit on a label adjacent to the power supply.</td>
</tr>
<tr>
<td>Name</td>
<td>Friendly name assigned to the DVR. The name is set via tivo.com.</td>
</tr>
<tr>
<td>Software Version</td>
<td>The currently installed TiVo Stream software version.</td>
</tr>
<tr>
<td>IP Address</td>
<td>The IP address of the TiVo Stream device.</td>
</tr>
<tr>
<td>MAC Address</td>
<td>The Machine Access Control (hardware) address of the TiVo Stream device.</td>
</tr>
<tr>
<td>Next Service Call</td>
<td>The time and date of the next scheduled TiVo service connection.</td>
</tr>
<tr>
<td>Software Update Status</td>
<td>Current software update status (currently not used).</td>
</tr>
<tr>
<td>Mobile Devices</td>
<td>The number of mobile devices that have ever connected to the TiVo Stream.</td>
</tr>
<tr>
<td>Full System Information</td>
<td>This launches a web page that shows the full list of system information.</td>
</tr>
</tbody>
</table>
System Information available from the TiVo Stream System Information web page

This section describes the system information available from the TiVo Stream System Information web page. There are two ways to access this web page:

- In your browser, enter the following: [TiVo Stream IP address]:49152/sysinfo
  For example: 192.168.1.100:49152/sysinfo
- In the TiVo App, go to Settings > System Information > Full System Information.

Main tab

The Main tab for the TiVo Stream System Information web page appears (see Figure 3–25).

Table 3–2: TiVo App System Information (continued)

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restart TiVo Stream (button)</td>
<td>When you tap this button, you initiate a soft restart on the TiVo Stream.</td>
</tr>
<tr>
<td>Make Service Call (button)</td>
<td>Tapping this button forces a Service Connection to the TiVo service.</td>
</tr>
</tbody>
</table>

![Figure 3–25: TiVo Stream System Information web page (Main tab) ](image)
Table 3–3 describes the fields displayed in the Main tab for the System Information web page.

Table 3–3: TiVo Stream System Information web page (Main tab)

<table>
<thead>
<tr>
<th>System Information</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Time</td>
<td>The current time on the TiVo Stream.</td>
</tr>
<tr>
<td>Software Version</td>
<td>The version of software installed on the TiVo Stream.</td>
</tr>
<tr>
<td>Build Date</td>
<td>Date the installed version of the Stream software was built.</td>
</tr>
<tr>
<td>Network Address</td>
<td>IP address of the Stream device.</td>
</tr>
<tr>
<td>Hardware Address</td>
<td>MAC address of the Stream device.</td>
</tr>
<tr>
<td>Serial Number</td>
<td>TiVo Service Number. The TSN is a 15-digit code that uniquely identifies each TiVo device.</td>
</tr>
<tr>
<td>Transcode Status</td>
<td>Status of TiVo Stream’s transcoder. In seconds, how long it has been in that status.</td>
</tr>
<tr>
<td>System Power</td>
<td>TiVo Stream’s current power state. In seconds, how long it has been in that state.</td>
</tr>
<tr>
<td>System Temp</td>
<td>Current internal temperature in Celsius.</td>
</tr>
<tr>
<td>Fan Speed</td>
<td>Speed of internal fan expressed as a percentage.</td>
</tr>
<tr>
<td>Sharing Certificate</td>
<td>Sharing certificate availability.</td>
</tr>
<tr>
<td>Log 911 Timestamp</td>
<td>Click the Log 911 button to add a timestamp to the logs.</td>
</tr>
<tr>
<td>Software Update Status</td>
<td>Current software update status (currently not used).</td>
</tr>
<tr>
<td>Restart Silverstreak</td>
<td>Tap the Restart Now button to initiate a soft restart of the TiVo Stream device.</td>
</tr>
</tbody>
</table>

**Service tab**

To view the TiVo Stream Service system information, access the TiVo Stream System Information web page, then tap Service.

Figure 3–26 shows the Service tab fields for the TiVo Stream System Information web page.
Table 3–4 describes the fields displayed in the Service tab for the System Information web page.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sharing Certificate</td>
<td>Indicates sharing certificate availability. A sharing certificate is a secure file that allows the TiVo device to interact with the TiVo share group. Each TiVo device needs this sharing certificate to communicate and share secure information within the group of TiVo devices on the same account.</td>
</tr>
<tr>
<td>Media Access Key</td>
<td>Indicates Media Access Key availability.</td>
</tr>
<tr>
<td>Secure HLS Data</td>
<td>Indicates Secure HTTP Live Streaming (HLS) data availability.</td>
</tr>
<tr>
<td>HTTPS Certificate</td>
<td>Indicates HTTPS certificate availability.</td>
</tr>
<tr>
<td>Guided Setup</td>
<td>State of the TiVo Stream guided setup process.</td>
</tr>
<tr>
<td>Streaming Clients</td>
<td>The total number of mobile devices that has connected to this TiVo Stream device.</td>
</tr>
<tr>
<td>Streaming State</td>
<td>Indicates whether TiVo Stream ready for streaming.</td>
</tr>
<tr>
<td>Share Group</td>
<td>List of TSNs in the share group.</td>
</tr>
<tr>
<td>Last Call State</td>
<td>State of the last service call.</td>
</tr>
<tr>
<td>Last TCD Call State</td>
<td>Last state of the current service call.</td>
</tr>
</tbody>
</table>
Clients tab

To view the TiVo Stream Clients system information, access the TiVo Stream System Info web page, then tap Clients.

Figure 3–27 shows the Clients tab fields for the TiVo Stream System Information web page when the mobile device is streaming or downloading programs.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Next Service Call</td>
<td>Time and date of the next scheduled TiVo service call.</td>
</tr>
<tr>
<td>Force Service Call</td>
<td>Tap <strong>Call Now</strong> to force a call to the TiVo Service.</td>
</tr>
</tbody>
</table>

Figure 3–27: TiVo Stream System Information web page (Clients tab: streaming)
Table 3–5 describes the fields on the System Information Clients tab.

### Table 3–5: TiVo Stream System Information web page (Clients tab)

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Release All Clients on This Device</td>
<td>Frees up transcoding contexts on the current mobile device if they failed to clear by themselves. If done when the device is streaming, the streaming ends. The Release All Clients On This Device button works only when pressed on the streaming device’s web browser. It passes the IP addresses of the device showing the web page to the TiVo Stream and uses that IP address to look up the streaming sessions. If you tap Release All Clients On This Device when looking at TiVo Stream System Information from a different computer, the button does nothing.</td>
</tr>
<tr>
<td>Release All Clients on All Devices</td>
<td>Frees up transcoding contexts on all mobile devices if they failed to clear by themselves. If done when the devices are streaming, the streaming ends.</td>
</tr>
<tr>
<td>Context</td>
<td>For internal TiVo use only.</td>
</tr>
<tr>
<td>Client Type</td>
<td>Identifies type of mobile device and the quality setting for current Stream.</td>
</tr>
<tr>
<td>Network Address</td>
<td>IP address of the mobile device.</td>
</tr>
<tr>
<td>Session ID</td>
<td>For internal TiVo use only.</td>
</tr>
<tr>
<td>Recording</td>
<td>Current recording being streamed or downloaded—displayed in the format: [DVR TSN]:[Program ID]</td>
</tr>
<tr>
<td>Target Bit-rate</td>
<td>Transcoded bit-rate.</td>
</tr>
<tr>
<td>Current Segment</td>
<td>Current segment of program being transcoded.</td>
</tr>
<tr>
<td>Encrypted HLS</td>
<td>Indicates whether the current Stream device is being encrypted with HTTP Live Streaming (HLS).</td>
</tr>
</tbody>
</table>

Figure 3–28 shows the Clients tab buttons for the TiVo Stream System Information web page when the mobile device is not streaming or downloading programs.
Table 3–6 describes the *Release All Clients* buttons available from the *Clients* tab when the mobile device is *not* streaming or downloading programs.

### Table 3–6: TiVo Stream System Information web page (Clients tab buttons)

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Release All Clients on This Device</td>
<td>Frees up transcoding contexts on the current mobile device if they failed to clear by themselves. If done when the device is streaming, the streaming ends. The <em>Release All Clients On This Device</em> button works only when pressed on the streaming device’s web browser. It passes the IP addresses of the device showing the web page to the TiVo Stream and uses that IP address to look up the streaming sessions. If you tap <em>Release All Clients On This Device</em> when looking at TiVo Stream System Information from a different computer, the button does nothing.</td>
</tr>
<tr>
<td>Release All Clients on All Devices</td>
<td>Frees up transcoding contexts on all mobile devices if they failed to clear by themselves. If done when the devices are streaming, the streaming ends.</td>
</tr>
</tbody>
</table>
TiVo Stream System Information
Troubleshooting TiVo Stream

This chapter discusses troubleshooting guidelines and recommendations for the TiVo Stream.

Setup and installation issues

Issue 1: The TiVo Stream’s status LED never turns steady white.
This indicates that TiVo Stream is unable to acquire an IP address from the DHCP server.
Resolution:
Take the following steps:
1. Check the Ethernet cable on the TiVo Stream and make sure it’s securely connected to the TiVo Stream and the router or wall outlet.
2. Check the Link Status LED on the right of the Ethernet port.
3. Make sure DHCP is enabled on the router. Please consult your router manufacturer.
4. Reboot your network equipment.

Issue 2: There is no TiVo Stream Setup option in the TiVo App.
Resolution: Ensure you have installed the latest version of the TiVo App for Apple iOS (Version 2.0 or later). The version of the TiVo App can be found under the Settings menu of the TiVo App (see Figure 4–1 on page 46). Android and other devices are not supported at this time.

Issue 3: The TiVo App is unable to find the TiVo Stream or displays the “TiVo Stream Not Found” error message.
Resolution:
Do the following:
1. Ensure the TiVo Stream is connected properly to your router via an Ethernet cable.
2. Make sure the TiVo Stream is connected to a power outlet and the LED on the back of the TiVo Stream is solid white. Ensure the link LED on the Ethernet port is lit.
3. Reboot your TiVo Stream (by unplugging the power cord and plugging it in again) and your router.

Issue 4: It has been more than three minutes and the TiVo Stream guided setup screen on the TiVo App has not refreshed. It appears to be stuck on a step.
Response: To reinitiate the guided setup process, tap the Settings button, then tap TiVo Stream Setup (see Figure 4–1).
Setup and installation issues

Figure 4–1: Reinitiating the guided setup process

Issue 5: You are unable to get past “Step 2: Checking activation status” of the guided setup process and you have already activated the TiVo Stream. The progress bar reached the end and the TiVo App displays a “TiVo Stream Activation Status” error message.

Resolution: First ensure that you have activated the TiVo Stream. If selecting Try again does not resolve your issue, manually re-initiate the TiVo Stream guided setup process by tapping the Settings icon and then tapping TiVo Stream Setup (as shown in Figure 4–1).

Issue 6: You receive the following error message on your TiVo App:

Title: Not able to set up TiVo Stream

Text: The TiVo Stream was not able to contact the TiVo service. Please try again.

Resolution: If you receive this error message, TiVo Stream is having difficulty reaching the TiVo Service through the Internet. Do the following:

1. First tap Try again.
2. If selecting Try again does not resolve the issue, double check your Ethernet cable and reboot your network router and TiVo Stream. You can perform the reboots for both simultaneously.
Streaming issues

**Issue 7**: TiVo Stream guided setup will not go past Step 3 and keeps asking the user to make a *Test Internet Connection* on the DVR, even though this step has been completed.

**Resolution**:

1. Ensure that at least ten minutes have elapsed since activating the TiVo Stream and the DVR before making the *Test Internet Connection*.
2. Check to ensure the TiVo Stream is activated on the same account as the DVR.
   a. In the TiVo App, go to *Settings > System Information > Full System Information > Service*.
   b. Ensure the DVR’s TSN is listed in the *Share Group* field. If the DVR’s TSN is not listed, the TiVo Stream may not be activated on the correct account.

**Streaming issues**

**Issue 1**: The *Watch on [mobile device]* option is not available for some programs in your *My Shows* tab.

**Resolution**: Ensure the program is supported for streaming to your mobile device. TiVo Stream can only stream programs recorded from live TV.

**Issue 2**: When trying to stream a recording (including the use of the Record and Watch feature), the video player is hung and keeps displaying the message “Buffering.”

**Resolution**:

Do the following:

1. Make sure the recording is not an empty recording. This can happen if the DVR is recording a channel that is not received or authorized, such as a premium channel or pay-per-view. You can check by attempting to tune to the channel on the DVR.
2. Ensure the program is supported for streaming to your mobile device:
   a. TiVo Stream can only stream programs recorded from live TV channels that have copy protection set to copy-freely or copy-once.
   b. Ensure the copy protection CCI value is set to 0x00 or copy-freely for the channel that program was recorded from.
   c. Ensure the program was recorded from live TV and not content that was downloaded such as Music Choice, video podcast, or web content sent from TiVo Desktop.

**Issue 3**: While streaming a program, the video stutters and pauses frequently.

**Resolution**: This occurs if there is not enough network bandwidth between your DVR and your TiVo Stream or between your TiVo Stream and your mobile device.

1. Ensure your DVR and TiVo Stream are connected to your network with a hardwired connection using Ethernet or MoCA. A wireless adapter is not supported.
2. Make sure your mobile device has a strong connection to your wireless router. Check the WiFi signal strength on your mobile device. Your mobile’s WiFi signal strength is different from the cellular signal strength provided by your wireless phone provider.
General video playback issues

3. If someone else is streaming or downloading a program on another mobile device or using Multi-Room Streaming on another TiVo box, this slows down the network. Try pausing the streaming or downloading on the other mobile devices or TiVo boxes.

General video playback issues

Issue 1: During video streaming or playback, the Closed Captions are missing characters.
Resolution: Rescrub the video segment and play it back again.

Issue 2: The audio volume on some streamed or downloaded content is too low to hear.
Resolution: Use headphones or amplified external speakers.

Issue 3: The TiVo App shows the error “Unable to connect to TiVo Stream” while playing back downloaded content on an iPad.
Resolution: Take these steps:
   1. Put the mobile device into airplane mode and/or disable WiFi.
   2. On the TiVo App login screen, tap Shows on iPad.

Issue 4: TiVo Stream locks up after playing back a program that contains an EAS alert.
Resolution: Reboot the TiVo Stream by unplugging the power cord and plugging it in again.

Issue 5: Streaming some programs results in a horizontal banding video artifact.
Resolution: Try to stream the same asset again a couple of times. If retrying the stream does not correct the issue, reboot the TiVo Stream.

Issue 6: TiVo Stream enters a state where it fails to stream anything and fails to recover.
Resolution: Reboot the TiVo Stream by unplugging the power cord and plugging it in again.

Downloading issues

Issue 1: The Download option is not available for some programs in your My Shows tab or the download fails.
Resolution:
   1. Ensure the program is supported for downloading to your mobile device. TiVo Stream can only download programs recorded from live TV.
      Make sure the program you are trying to download to your mobile device was not downloaded from the Internet. This includes Music Choice downloads, video podcast downloads, and web content sent from TiVo Desktop.
   2. Ensure the program is supported for downloading to your mobile device. TiVo Stream can only stream programs recorded from live TV channels that do not have any copy protection set. Most premium channels will have copy protection enabled.
3. Ensure the copy protection CCI value is set to 0x00 or copy freely for the channel that program was recorded from.

**Issue 2:** Downloads fail when two in-progress recordings are queued for download.

**Resolution:** This is currently not supported. Please only add one in-progress recording for download at a time.

**Issue 3:** Programs appear to take a long time to download.

**Resolution:**
1. When setting up a download, select the **Standard** video quality. This will reduce the file size and allow for faster downloads.
2. Make sure the TiVo App is active and currently opened when downloading. Downloading only occurs while the TiVo App is in focus. If you switch to another application, such as email or web browsing, downloads will pause; they will automatically resume once the TiVo App is opened again.
3. If you are streaming a program or someone else is streaming a program on another mobile device or using Multi-Room Streaming on another TiVo box, this slows down the download.
4. Make sure your TiVo DVR is connected to the network with a hardwired (Ethernet or MoCA) connection. A wireless connection is not supported.
5. Make sure your mobile device has a strong connection to your wireless router. Check the WiFi signal strength on your mobile device. The WiFi signal strength is different from your cellular signal strength provided by your wireless phone provider.

**Miscellaneous issues**

**Issue 1:** You receive the following error message on your TiVo App:

**Title:** Network Problem: TiVo Stream to DVR

**Text:** The TiVo Stream cannot contact the DVR. Make sure that the DVR and TiVo Stream are on the same wired Ethernet or MoCA network, then try again.

**Resolution:** If you receive this error message, the TiVo App can communicate with both your DVR and the TiVo Stream on your local network, but the TiVo Stream is unable to communicate with your DVR. This is probably an issue with Bonjour network discovery.

Do the following:

1. First tap **Try again**.
2. If selecting **Try again** does not resolve the issue, reboot your network router, DVR, and TiVo Stream. You can perform the reboots for all three simultaneously.
Miscellaneous issues

**Issue 2**: There are many partial recordings appearing in your *My Shows* list.

**Resolution**: Have you been using the “Record and Watch” feature on the TiVo App with your TiVo Stream? You are using this feature whenever you select *Watch on iPad* from the *Guide* or *Info* tab of the TiVo App.

When you use this feature, it starts a recording of the selected program on your DVR and then begins to stream that recording to your mobile device. If you started watching in the middle of a program, it results in a partial recording on your DVR. This is normal and expected behavior. Simply delete these recordings if you don’t wish to keep them.

**Issue 3**: Your downloaded programs do not sync to your computer, such as on iTunes.

**Resolution**: This is not supported. Your downloaded programs will not sync to your computer and the video files are not accessible outside of the TiVo App. This is because the TiVo App is required to save all the downloaded programs in the same place the files for the applications are saved. The programs are not saved in your videos directory and will not sync to your computer.

**Issue 4**: All of your downloaded programs have disappeared from your mobile device.

**Resolution**: If you uninstalled the TiVo App or did a reset of the application via *Settings > Reset applications*, all your downloaded programs will be deleted. This is because the TiVo App saves all the downloaded programs where the files for the applications are saved. The programs are not saved in your videos directory and will not sync to your computer.

**Issue 5**: After plugging in the TiVo Stream, the status LED never turns on. The status LED should turn amber within 15 seconds of plugging in the TiVo Stream.

**Resolution**: Unplug the TiVo Stream and plug it in again. Wait up to 15 seconds for the status LED to turn on. Repeat until the status LED lights up.

**Issue 6**: The DVR’s user interface becomes unresponsive after streaming a long program.

**Resolution**: Reboot the DVR.
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