Tips for a Successful TiVo Install

Setup steps

Step 1 – Set up customer's TiVo service

To save time on the install, before you arrive at the job site, go to www.TiVo.com/activate or call into the activation line (877-367-8486) and set up a TiVo account for your customer. You will need:

- 15-digit TSN from each TiVo unit
- customer's billing information (credit card, expiration date, billing address)
- customer's email address
- customer's usernames and passwords for frequently used apps

NOTE: The maximum number of TiVo units on a customer's account is 12, including any combination of DVRs and Minis. If you need more than 12 in a single residence, they will need to be split up onto different accounts. Also note that TiVo units that are set up on different accounts will not be able to connect to each other.

Step 2 – Update the DVR software

Depending on the installation application your customer requires, you may want to update the DVR software before you arrive at the customer's location, saving you time and reducing time required at the install. Before you begin, be sure you have any necessary usernames and passwords handy for apps your customer frequently uses.

First, connect Roamio DVR(s) to a TV and to a broadband connection and start the guided set up.

- The first screen will ask what country.
- The second screen will ask if you want to set it up as a retail demo unit. On this screen press the "Enter" button.
- TiVo will ask you if you have a CableCARD. You can tell it to skip this step and fully set up the box offsite, adding the CableCARD and finishing setup at the customer's house. This will allow you to do the "Express Installer Setup."

When you connect the TiVo DVR at the customer's house, it will be up to date and setup will take less time.

Step 3 – Check & update the CableCARD firmware version

If you're getting the CableCARD from the cable company on behalf of your clients, have the cable company make sure that the CableCARD has the latest firmware.

It's important to check the firmware version of the CableCARD to be sure it can support the full 6-tuner capacity of the TiVo Roamio Plus and Pro DVRs. The older firmware versions can only handle 4 tuners.

The following CableCARD firmware versions are capable of handling six tuners with Roamio Plus or Pro:

- Motorola CableCards-version 6.25 or later
- Cisco/Scientific Atlanta CableCards-OS Ver: 1.5.3.1101 or later
- NDS: VGUARD3.0.7_F.p.0601

RECOMMENDATION: Whenever possible, we also recommend getting more than one CableCARD, as a backup.

To check your Motorola CableCard firmware version:

From TiVo Central > Settings & Messages > Account & System Info > CableCARD Decoder > CableCARD options (for installers) > CableCARD Menu > CableCARD Status

To check your Cisco/Scientific Atlanta CableCARD firmware version:

From TiVo Central > Settings & Messages > Account & System Info > CableCARD Decoder > CableCARD options (for installers) > CableCARD Menu > SA CableCARD Diag Screen

To check your NDS CableCableCARD firmware version:

From TiVo Central > Settings & Messages > Account & System Info > CableCARD options (for installers) > CableCARD Menu > Conditional Access

Currently we have no data on compatible Conax CableCARD firmware. Nagravision CableCards can support four tuners only. Please contact the specific cable service provider directly for process to update card firmware if needed.

Step 4 – Setting up at the customer site

At the customer's house, make sure that Roamio is 100% active and completely set up, with CableCARD, and that you are able to get all of the customer's subscribed channels. You will need to force the DVR(s) to connect to the TiVo service 3 times in Network Settings and then plug in and set up one TiVo Mini at a time.

IMPORTANT: Do not try to set up the Minis before you have the DVR completely set up and working on the client's network at the client's home.

Step 5 – Using MoCA

Although every Roamio DVR has built-in Wi-Fi, adding TiVo Minis will require a wired connection. Ethernet (Cat 5 or Cat 6) is preferred, but not many homes have that already run, adding significantly to the cost of the installation. A more practical and cost-effective solution for many is MoCA, which uses the coaxial wiring already in the home to carry the Internet signal necessary for networking. Here are a few tips on how to get the most from any MoCA network.

For best results when using MoCA, limit the number of TiVo devices on the network to five. If more TiVo devices are needed, please use an Ethernet connection instead.

NOTE: If FiOS is the cable provider, most likely there is already a MoCA network in place. The FiOS router uses a MoCA network to get a network signal to each coax outlet in the house using the home's existing coax. Some other cable companies also use cable modems that act as MoCA injectors. To determine if there is already a MoCA network in place, look at the coax connector on the cable modem and see if it has the MoCA written on it (Figure 1).

NOTE: If you determine that there is already a MoCA network in place, do not turn on the "Create a MoCA Network" setting in the Main DVR, since there can be only one MoCA network in place. To connect the TiVo boxes to the existing MoCA network, select "Connect to MoCA Network" from the Network Settings screen.

Figure 1

MoCA®

Most common problems using MoCA

Once you've made sure that all connections are firm, look for these common issues associated with MoCA networks:

Splitters: In the event of signal issues (such as bad performance or devices not seeing each other), old or inadequate splitters are a common issue. Replace any old or inadequate splitters (rated less than 1000 MHz) with new splitters that are rated for 1500 MHz (1.5 GHz) or higher.

Amps: Signal amps should be placed at the coax cable's point of entry in the house. However, sometimes they are not. Ideally, the amp should be moved. But if that is too complicated, the amp should be rated to pass through signals of at least 1500 MHz (1.5 GHz) bi-directionally. Replace if necessary.

Old coax: Very old and weathered/damaged coax cable and loose connection points might be to blame as well. These coax lines would have to be replaced with new coax.

Loss of Internet connectivity: If you are getting weak MoCA signals and the Minis are unable to connect to the host Roamio DVR, it is good practice to install a point of entry (POE) MoCA filter (Figure 2). Make sure you've installed a POE filter before the first splitter inside or outside the home to maximize signal strength.

Figure 2

SDV Tuning Adapter malfunctions: Not all cable systems use tuning adapters, but some will. If your SDV tuning adapter isn't working when activating MoCA, try installing a second POE filter (in addition to the one mentioned above) on the coax line going to the tuning adapter. For more information about MoCA, visit http://www.mocalliance.org/index.htm

Tips

Using Ethernet and Cat with TiVo

If you're using Ethernet to connect the Minis, use a dedicated switch. A good rule of thumb is 1GB of bandwidth per TiVo device.

> EXAMPLE: Eight (8) TiVo devices on switch will need at least 8 GB of bandwidth. This is commonly referred to as backplane, port-to-port throughput, or switching fabric. Please verify with switch manufacturer that there is enough bandwidth in the switch. If runs are over 150-200ft and you are having an issue with the Mini finding the Roamio, put a switch in between those runs to make sure there is enough signal coming through.

Signal strength

In DVR diagnostics screen, make sure that the signal the TiVo is receiving is less than 90dB in signal strength and SNR is not more than 40. The sweet spot seems to be 85-87 SS with a 36-37 SNR. If the signal strength is too high, attenuate the signal by adding a splitter or an in-line coax attenuator.

Dedicated support line

If you encounter any issues, please contact the TiVo Level 2 tech support

Phone
888-921-8486

Hours
Mon-Fri: 7am-7pm PT
Sat + Sun: 8am-6pm PT

CableCARD Activation Hotlines

For households with cable, the TiVo DVR requires a CableCARD from the service provider.
Use this list to quickly reach CableCARD activation and support lines for various providers.

Service Provider	Number	Hotline Name
Charter Communications	1-888-438-2427	Charter Support
Comcast/XFINITY	1-877-405-2298	CableCARD Activation Line
Cox Communications	1-877-820-8202	CableCARD Activation Line
Insight Communications	1-866-440-1024	Insight Support
Mediacom	1-866-848-7064	CableCARD/Self-Install Activation Line
Optimum	1-866-670-0855	Optimum Support
RCN	1-888-891-7770	CableCARD/Self-Install Activation Line
Suddenlink	1-888-822-5151	Suddenlink Support
Time Warner Cable	1-866-606-5889	CableCARD Activation Line
Verizon FiOS	1-888-897-7499	Automated Activation Line