

TIVO, REPLAYTV, PVRs, HARD DISK RECORDERS

AND

EN-TEL DIGITAL TV

INSTALLATION GUIDE AND Q & A



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## OVERVIEW

This document describes the systems known as Personal Video Recorders (PVRs) and how to use them with En-Tel Digital TV.

Topics covered include:

- What are PVRs, TiVo, and ReplayTV
- How to connect your TV, PVR, and En-Tel Digital TV Residential Gateway
- The issues you may encounter when first setting up TiVo, ReplayTV, or another PVR system
- Some typical questions our customers have had regarding setting up their PVRs with En-Tel Digital TV.

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## DESCRIPTION OF TECHNOLOGY

### Terminology

- DVR:** Digital Video Recorder  
**HDR:** Hard Disk Recorder  
**PTV:** Personal TV  
**PVR:** Personal Video Recorder

(The above four terms are used interchangeably to refer to the hard disk recorder that we refer to in this document as “PVR.”)

**ReplayTV:** A brand of service for hard disk recorders that provides program information, special features, and other interactive functions.

**TiVo:** A brand of service for hard disk recorders that provides program information, special features, and other interactive functions.

All of these terms are used to refer to the video systems that allow for recording of TV programming on a hard drive instead of onto tape (VCR). This technology also offers more control over the television viewing experience. There are several terms you may hear used to refer to these devices: DVR (Digital Video Recorder), HDR (Hard Disk Recorder), PTV Box (Personal Television Box), PVR (Personal Video Recorder), as well as brand names such as TiVo, ReplayTV, and ShowStopper. For purposes of consistency, we will use the most common designation of “PVR” for the equipment (the hardware). When referring to the accompanying service for the PVR (for program information, special features, and interactive functions), we will use “TiVo” or “ReplayTV” depending on the specific brand of service being described. Popular usage often refers to both the service and the equipment simply as “TiVo”.

### Product Description

PVRs are manufactured by Hughes (DirecTV TiVo Receiver), Phillips (PTV Recorder), Sony (Digital Video Recorder), Panasonic (Hard Disk Recorder), and a few others. They typically record up to 30 hours (or more) of programming on a hard disk. A PVR also allows the pausing of live TV, rewinding, instant replay, and fast-forwarding to catch up when viewing has been paused. PVRs work with virtually all current VCRs, cable, and satellite systems, including En-Tel Digital TV.

To take advantage of the fuller feature of PVRs, you will need to subscribe to a service such as TiVo or ReplayTV. TiVo powers the Phillips, Sony, and Hughes systems and requires a monthly or product lifetime subscription fee. ReplayTV works with the Panasonic HDR (and a few other brands) and is free. Please go to the TiVo Web site (<http://www.tivo.com>) or the Panasonic Web site (<http://www.panasonic.com>) for details.

These services, accessed via the phone line, download program data to the PVR on a regular basis and provide program guides, subscriber newsletters, the actual daily lineup of programs that are available for recording, and many other features. Their interface replaces the default interface by cable or En-Tel Digital TV services. As you watch live TV, the PVR is recording it “behind the scenes” so that you can use the pause, rewind, instant replay, and catch-up feature. Thus, if you change channels, recording on the previous channel stops and immediately begins on the new channel.

With a PVR, you can also record a program on one channel while watching a previously-recorded program, save a program recorded on the hard disk onto tape on your VCR, change channels using the PVR’s remote control and a supplied Infrared Transmitter (aka “IR Blaster”), and perform many other functions described in the specific manufacturer’s documentation. Please see the documentation that came with your PVR or go to the manufacturer’s Web site.

## SETTING UP A PVR WITH EN-TEL DIGITAL TV

### Setup Notes

1. **Telephone Line Required:** All PVRs use a telephone line on a periodic (daily to weekly) basis for downloading programming information to the PVR system. This does NOT supersede the requirement for a telephone line connected to the En-Tel Digital TV Residential Gateway box. Simply split the phone line coming out of the wall telephone jack with a standard RJ-11 phone jack splitter; connect one line to the PVR, and the other to the Gateway. Important Note: Be sure to use the telephone jack, not the Gateway network jack that looks similar.
2. **Cable Box Channel Type:** For TiVo, when prompted during initial setup for the Cable Box Channel, choose "3-digit (most digital cable boxes)." ReplayTV does not prompt for this option.
3. **Infrared Transmitter Positioning:** The emitter on the IR transmitter must send its signal to the IR sensor on the front to the Residential Gateway box. To locate the IR sensor on the Residential Gateway, shine a flashlight through the dark plastic panel on the front of the Gateway and look for a small flat square. That is the IR sensor. On the RG2000 and older models, it is approximately 3/4 of an inch to the left of the SELECT button on the front of the Gateway. Position the IR transmitter in the front of the sensor. On the newer 2200 Gateways, the IR sensor is located just to the left of the SETUP button (the wrench icon). This step is required for the PVR to be able to change channels on the Residential Gateway using the PVR's remote.
4. **Infrared Transmitter Code:** For TiVo, use code "10005 Fast" when presented with the list of IR codes in the on-screen setup process. Some customers have found that "10005 Slow" works better. Try each of them and choose the one that works best for you.

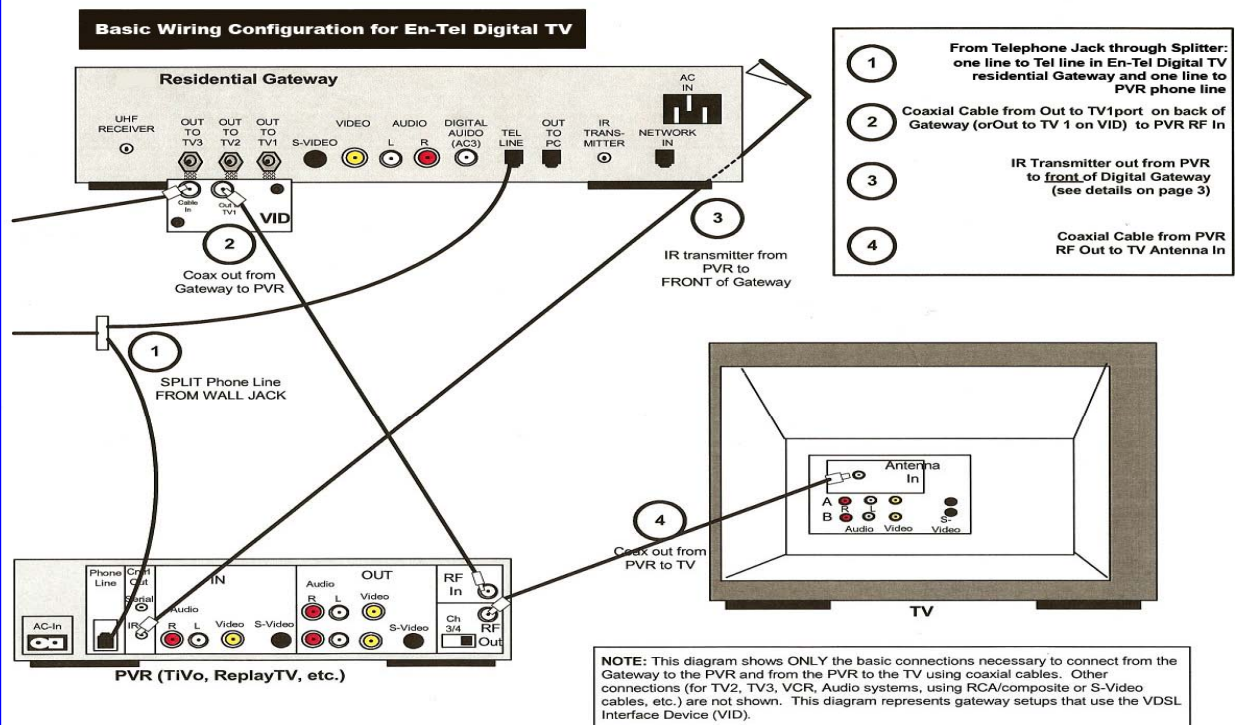
For ReplayTV, use code 0764 and select "OK to accept that code" when prompted during the on-screen setup. Don't bother to try testing it if prompted. Because of the nature of the En-Tel Digital TV Residential Gateway box's "always on" status, testing it by turning it on or off will not work.

5. **Cable Box (equipment) Type and Input:** When prompted for what type of equipment is connected to the LINE 1 input, accept the prompted "Cable Box." For LINE 2 and ANT/CATV configuration, accept the prompted "Nothing." (Line 1 and Line 2 may be switched, depending on the way you connected the PVR to the Gateway). These screens will be very similar in both the TiVo and ReplayTV setups. When prompted for the brand or type of cable system, choose "Next Level Comm" for TiVo and "Next Level" for ReplayTV.
6. **Cable Providers (obtaining the TV Programming Lineup):** The En-Tel Digital TV program lineup must be available to the PVR for it to provide you with the correct channels and programs.
7. **Program Guide/Menus:** The PVR replaces the En-Tel Digital TV interface with its own interface (TiVo or ReplayTV), so you won't see the normal En-Tel Digital TV Interactive Program Guide (the GUIDE Plus+ menu). If you wish to see the GUIDE, use your En-Tel TV remote in the normal fashion, instead of the PVR's remote.

## BASIC WIRING CONFIGURATION

Below is the basic wiring configuration for connecting En-Tel Digital TV Residential Gateway, a PVR, and a TV. This should provide you with enough information to supplement the diagrams and explanations in your PVR Owner's Manual. In a step-by-step approach, you will need to:

1. Connect your phone line from the wall jack to the PVR and the Gateway box, making very sure they connect to the TEL LINE port on the Gateway, not the Network IN port. This will require a standard RJ-11 phone IN jack splitter.
2. Connect the Digital Gateway to the PVR by going OUT from the Gateway and IN to the PVR. Ports on both systems are clearly marked for simple coaxial cable, for RCA/composite cables, and for S-Video. If the Gateway has a VDSL Interface Device (VID), you will not see the three ports that go OUT from the Gateway to TV1, TV2, and TV3, since they are covered by the VID. Instead, you will simply connect a coaxial cable from the "Out to TV1" port on the silver VID to the "RF IN" port on the PVR. If no VID is present, you should use the "OUT TO TV1" port from the back of the Gateway.
3. The IR transmitter must be installed so that the PVR's remote control can control the Gateway. It should come OUT from the PVR and be positioned on the front of the Gateway in a direct line to the IR sensor. On the RG2000 and older models, the sensor is located approximately 3/4 of an inch to the left of the SELECT button on the front of the Gateway. On the newer RG2200 Gateways, the IR sensor is located just to the left of the SETUP button (the wrench icon). (DO NOT USE THE IR TRANSMITTER PORT ON THE GATEWAY.)
4. The final connection in the simplified diagram shows the connection from the PVR to the "Antenna In" port on the TV by coaxial cable.



## **FREQUENTLY ASKED QUESTIONS**

**Q: I'd like to buy a TiVo system. Will it work with my En-Tel Digital TV?**

**A:** Yes, TiVo, ReplayTV, and other PVR hardware and software are compatible with En-Tel Digital TV service.

**Q: Will En-Tel send a technician to connect my En-Tel Digital TV with my new PVR?**

**A:** No. We're sorry, but En-Tel does not dispatch technicians to connect, configure, or repair customer-owned equipment such as hard disk recorders, home theater systems, DVD players, etc. The information contained in this document, your PVR owner's manual, and the En-Tel Digital TV User's Guide or Owner's Manual should provide enough basic knowledge for connecting to En-Tel Digital TV Residential Gateway box. Think of the Residential Gateway like a satellite or cable box when using the PVR owner's manual. From the perspective of the En-Tel Digital TV documentation, the PVR should be connected to the Residential Gateway in the same manner as a VCR. If connecting a PVR to an existing Gateway, VCR, and TV configuration, simply connect the PVR before the VCR—i.e., between the Gateway and the VCR. For more advanced or complicated setups, you might need to hire an audio-video service technician.

**Q: What is the best IR transmitter code to use?**

**A:** For TiVo, use "10005 Fast," although some customers have found that "10005 Slow" works better. Try each of them and choose the one that works best for your own setup. For ReplayTV, use "0764." Note: Some customers have experienced difficulties getting the IR transmitter that is supplied with your PVR to control the En-Tel Digital TV Residential Gateway. This is usually a matter of more carefully positioning the IR transmitter on the front of the Gateway box so that the IR sensor picks up its signal. The best position (for the RG2000 and older versions of the Gateway) is approximately 3/4 of an inch to the left of the SELECT button on the front of the Gateway. On the newer 2200 Gateways, the IR sensor is located just to the left of the SETUP button (the wrench icon). In some rare instances, customers have had to purchase an IR transmitter from an electronics store to replace the one supplied by the PVR manufacturer.

**Q: What cable box manufacturer do I choose during initial setup?**

**A:** Next Level Communications (NLC).

**Q: What do I do if En-Tel Digital TV is not listed as a cable provider when I am doing my setup?**

**A:** En-Tel Digital TV has arranged for their current lineups to be listed in all markets for both the TiVo and ReplayTV services.

**Q: Can I watch one TV show while recording another on my PVR?**

**A:** Yes. However, this usually requires a cable splitter and additional RF cables going from the splitter to the TV and the Hard Disk Recorder. The connection will be OUT from the En-Tel Digital TV Residential Gateway to the splitter. From that point, follow the instructions included in your PVR owner's manual for the specific setup instructions. NOTE: Watching a previously-recorded show while recording another in real time requires no additional cables or splitters. Check your PVR owner's manual for viewing instructions.

## **FREQUENTLY ASKED QUESTIONS (Cont'd)**

**Q: The system seems to take a long time when changing channels using the PVR's remote. Is there something I can do to adjust this or speed up the time it takes to change channels?**

**A:** You may try running through the setup of the IR transmitter again and experimenting with the different codes presented. However, using either the CHANNEL UP/DOWN arrows or entering the channel number using the number keys and pressing ENTER is noticeably slower when using the PVR with the Residential Gateway (and, in fact, with most traditional cable boxes). This slight pause, although not ideal, is normal and, once you have selected the best IR code, there is no other way to speed up the changing of the channels.

**Q: The picture quality seems to be less sharp now that I have a PVR. Is there anything I can do to get the higher quality picture that I am used to seeing with En-Tel Digital TV?**

**A:** Users find that if they have the PVR set to record using the maximum storage time (also known as BASIC quality), some degradation of the picture occurs. To remedy this, go into the PVR's setup program and reduce the default storage time (or increase the level of picture quality). The smaller the storage amount, the better the picture quality. This, of course, means that you will be able to store fewer hours of programs on the hard drive. In most PVRs, you can select the picture quality individually for each program that you record. This is similar to the Standard Play (SP) and Extended Play (EP) speeds on your VCR.

**Q: Is my En-Tel Digital TV service compatible with the new TiVo® HD Digital Media Recorder?**

**A:** Unfortunately, no. This particular digital media recorder is not compatible with your En-Tel Digital TV service. The TiVo® Series 3™ HD Digital Media Recorder requires CableCAD™ support along with a digital QAM signal. Your En-Tel Digital TV service operates on a different type of platform, and there is no input to this device for your VDSL HD Residential Gateway that would allow you to record your HD programs.