

Mac PVR Documentation



Version 1.0
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Thank you for downloading Mac PVR, an application that turns your Macintosh into a digital personal video recorder using common consumer hardware that you may already have.

Mac PVR features one-touch recording as well as a scheduler to start and stop your recordings automatically. Shows are recorded using MPEG-4 compression, and can easily be imported into iMovie for editing, and sent to iDVD for burning (on SuperDrive equipped Macs).

System Requirements

OS X 10.2 (Jaguar) or later (tested up to Panther 10.3.5)
A FireWire (IEEE 1392) digital camcorder with an analog A/V input **OR** a FireWire DV bridge
A VCR connected to an antennae or cable line

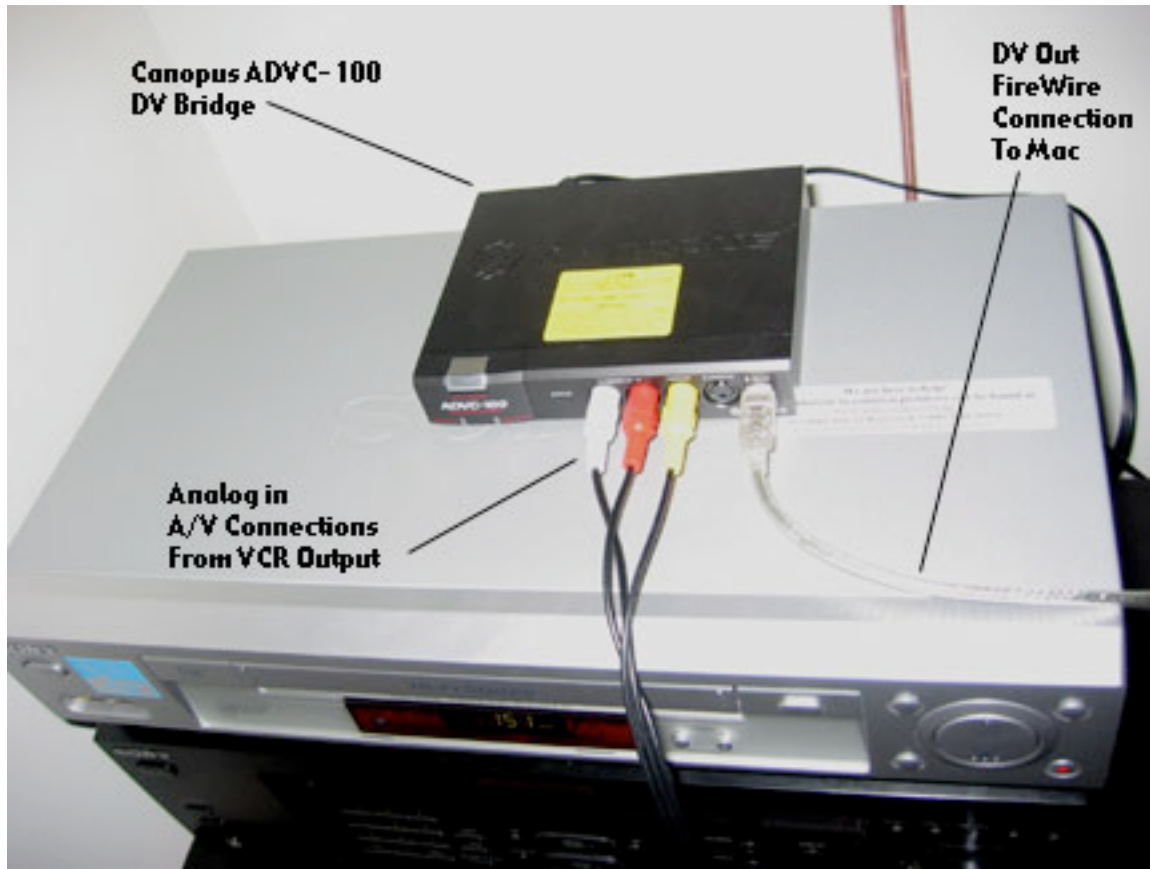
Hardware Connections

If you are using a Digital Camcorder - Connect the RCA output of the VCR to the analog A/V input of the digital camera, and connect the camera to your Mac with a FireWire cable. Connect an antennae or cable line to the VCR.

If you are using a FireWire DV Bridge - Connect the RCA output of the VCR to the analog input of the DV bridge, and connect the bridge digital output to your Mac with a FireWire cable. Connect an antennae or cable line to the VCR.

The A/D (Analog/Digital) convertors in camcorders are usually not that great, but they'll do a decent job. If you'd like the best quality possible for your recordings, consider getting a dedicated DV bridge.

See photo below for setup using a Canopus ADVC-100 DV Bridge.



Installation

Mac PVR does its magic by controlling QuickTime Broadcaster, a free application from Apple. Install QuickTime Broadcaster by double-clicking the included installation package, **QuickTimeBroadcaster.pkg** and follow the instructions.

After QuickTime Broadcaster has been installed, drag and drop the **Mac PVR** folder into your **Applications** folder. You may want to drag the Mac PVR application icon into your dock for easy access.

Registration

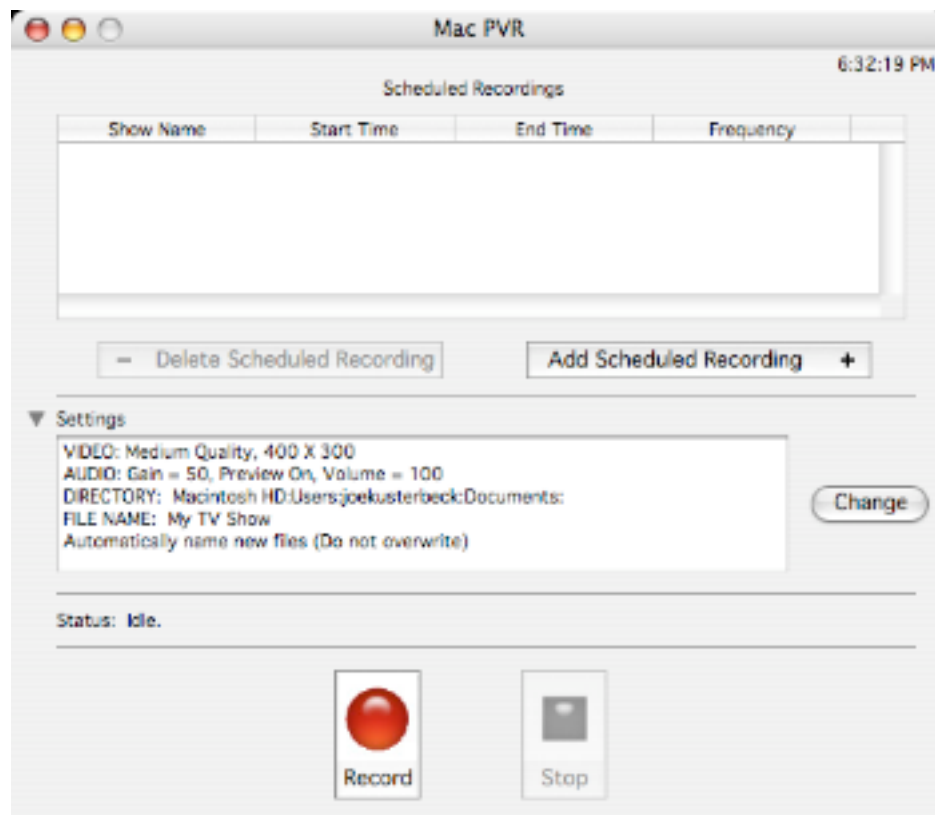
Double-click the Mac PVR application icon, or click the Mac PVR icon in the dock to start Mac PVR. To run Mac PVR in demo mode, click the **Use Unregistered** button, and your recordings will be limited to five minutes. If you've never used QuickTime Broadcaster before, Mac PVR will start and stop it automatically to create a preferences file.

Operation

IMPORTANT - Before attempting to record, you must turn on your VCR and camcorder or DV bridge to allow the video signal to get to your Mac. Consult the documentation for your camcorder or DV bridge to allow the signal to pass through. Mac PVR uses the VCR to

tune to a channel, so make sure the VCR is set to the channel you want to record.

Mac PVR's main screen is shown below:



Click the red **Record** button to make a recording manually, and click the black **Stop** button to stop the recording at any point. The settings displayed in the Settings pane will be used for these recordings.

Upon beginning a recording, Mac PVR will launch QuickTime Broadcaster which will do the actual video and audio recording. Mac PVR essentially acts as a controller for QuickTime Broadcaster.

Scheduling Recordings

Mac PVR contains powerful scheduling functionality, so you don't have to be at your Mac to record a TV show. Click the **Add Scheduled Recording** button, and the schedule screen will appear as shown below:

The image shows a dialog box titled "Add" with the following fields and controls:

- Show Title:** A text input field containing "My TV Show".
- Begin Recording:** A date field showing "Saturday, August 28, 2004" with a small calendar icon to its right. Below the date are two time input fields: "09" (labeled "Hour") and "00" (labeled "Minute"), followed by a "PM" dropdown menu.
- Show Duration:** Two time input fields: "01" (labeled "Hours") and "00" (labeled "Minutes").
- Frequency:** A dropdown menu currently set to "None".
- Buttons:** "Cancel" and "Save" buttons at the bottom.

Enter a title for the show you want to record in the Show Title field. This title will override the default title set in the settings window (see **Settings** section below). Click the small calendar icon to bring up a calendar for the date of the show. Enter the time and the show duration. If the recording is to repeat daily or weekly, set the Frequency appropriately, or set it to None for a one-time recording. Click Save when done.

You can edit a scheduled recording by double-clicking it. Select a recording and click **Delete Scheduled Recording** to delete it.

Mac PVR must remain running during the entire recording to start and stop QuickTime Broadcaster at the appropriate times, however you may minimize it to the dock at any time to keep it out of the way.

Settings

Settings for your recordings are listed in the **Settings** pane. Click the **Change** button in the Settings pane to change the recording settings. The Settings window is shown below:

The screenshot shows a preferences window with the following elements:

- Folder:** A text field containing "Macintosh HD:Users:joekusterbeck:Documents:" and a "Browse" button to its right.
- Filename:** A text field containing "My TV Show".
- Use a unique name for each recording (Do not overwrite file):** A checked checkbox.
- Video Recording Quality:** A dropdown menu set to "Medium".
- Width:** A text field containing "400".
- Height:** A text field containing "300".
- Play audio through speaker:** A checked checkbox.
- Gain:** A slider control.
- Volume:** A slider control.
- Changes are applied to your next recording:** A text label centered below the sliders.
- Buttons:** "Cancel" and "Save" buttons at the bottom.

Folder is the directory where your movie files will be saved. Click the Browse button to change this location. Filename is the name of the file that will be used as a default and for manual recording. Check the **Use unique name for each recording** box to keep your old files. Uncheck it to overwrite them.

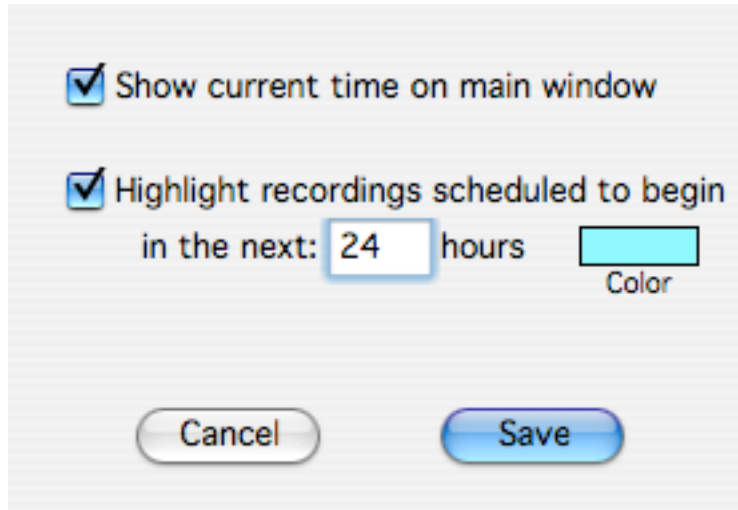
There are five levels of recording quality, from Least to Best. Lower settings use less disk space, but higher settings look better. You should set this setting as high as your Mac can handle while still keeping the Broadcaster frame rates at about 15 or above. Anything slower will be noticeably choppy. Width and Height determine the dimensions of the recorded movie.

Check **Play audio through speaker** to hear the audio as it is being recorded. Unchecking it will not affect the recording. Adjust the **Gain** and **Volume** to your preferences.

Click the **Save** button to save these settings.

Preferences

From the Mac PVR menu, click **Preferences** to display the preferences window, shown below:



Show current time on main window will toggle the time display on the upper right hand corner of the main window. You can choose to distinguish upcoming recordings using the **Highlight recordings scheduled to begin in the next __ hours** checkbox. Recordings fitting the criteria that you set will be highlighted in the highlight color. Click the color bar to change the color.

Editing Your Recordings Using iMovie

Open iMovie, and from the File menu, click **Import**. Select the recording or recordings that you wish to edit, and click **Open**. Consult the iMovie documentation for more information on editing video clips.

Advanced - Changing the Compression Codecs

Open QuickTime Broadcaster, and hit the **Show Details** button. Under the Video tab, select the compressor codec that you want to use. Save the preset as "PVR Video", and replace the existing preset.

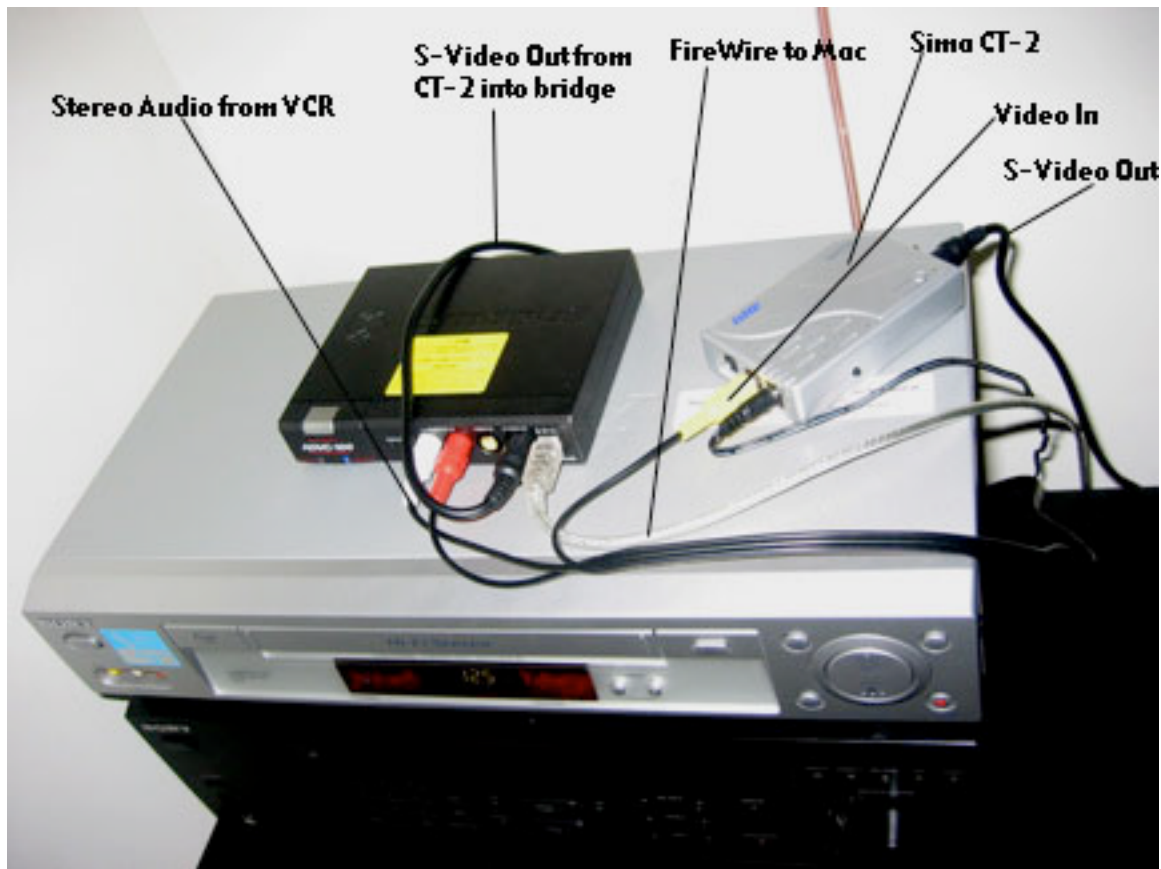
Subsequent recordings from Mac PVR will use the new codec.

The same procedure can be repeated for Audio.

Additional Information

With a VCR hooked up to your Mac via a camcorder or DV bridge, you can transfer your VHS tapes to iMovie, edit out the FBI warnings, and burn them to DVD's. iMovie will recognize the DV bridge as a camera. Just play the tape and start importing.

One thing I ran into while doing this myself was the telltale lightening and darkening of the image. This is Macrovision, an analog copy-protection mechanism. Fortunately, it's easy enough to remove - go to Best Buy and get a **Sima GoDVD CT-2**, and connect it on the video path between the VCR and the DV Bridge. Connections are shown in the photo below.



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