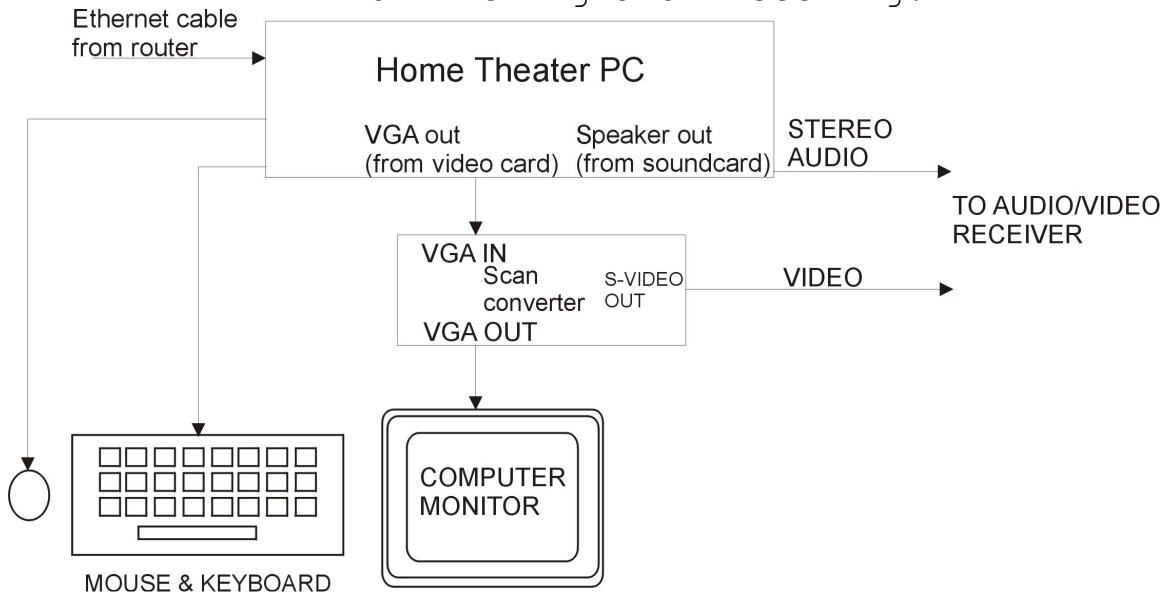


Building a Home Theater PC (HTPC) on a budget.

Don't need much of a computer: Intel Pentium III 600 MHz or AMD Athlon 600 MHz, Microsoft Windows 98SE, 2000 SP3 or higher, ME or XP (Any Version), 256MB RAM

- I. Set up the HTPC for playback of video, music and photos you already have, or can download from the Internet.
 1. Thing you might want to do
 - i. More RAM
 - ii. Second (large) hard drive
 - iii. Reinstall Windows (Clean out old crap)
 - iv. Install virus software
<http://free.grisoft.com/>
 - v. Cheap, used monitor, mouse, keyboard
 2. Get the video out of the HTPC onto your TV with an External VGA to S-video converter (also called a scan converter).
 - i. You want one with a remote control, here are two possibilities:
<http://tinyurl.com/y4ylxp>
<http://www.smarthome.com/7743C.html>
 3. Install the HTPC in your living room and connect it. (See the connection diagram, below)
 - i. Ethernet cable from router to computer
 - ii. VGA cable from computer to converter
 - iii. VGA cable from converter to monitor
 - iv. S video and stereo audio cables from converter to a/v receiver

- v. Note that computer can be some distance from monitor & keyboard, cables can be long
- vi. Share the HTPC data drive on your network so you can copy files to it for viewing and listening.



At this time, you've spent a minimum amount of money and should be able to see video from the computer on your TV and hear audio over your stereo speakers. You can now download most TV shows (and other videos) from Usenet archive sites such as Easynews <http://www.easynews.com> in MPEG, or Xvid or Divx AVI format and play them on the computer with Windows Media Player. WMP also plays music. You can also display graphics/photos.

4. It would be nice to have the ability to control the HTPC from the couch. Here are two inexpensive (\$50 each) possibilities
 - i. Streamzap PC remote control
<http://www.streamzap.com/>
 - ii. Wireless keyboard & mouse
<http://tinyurl.com/y7bggy>

5. It would also be cool to be able to control the HTPC from another computer. Real VNC <http://www.realvnc.com/> is free. Really cool!

II. Add the ability to record video and manage everything.

1. Need one or more **tuner cards** installed in your PC to record TV shows. You will connect the tuner cards to your cable TV incoming cable the same way you would connect a VCR.

i. Hauppauge tuner cards

PVR-150

http://www.hauppauge.com/pages/products/data_pvr150.html

Around \$100. You can record one show while watching a recorded show.

Or PVR-500

http://www.hauppauge.com/pages/products/data_pvr500mce.html

Around \$170. You can record two shows while watching a recorded show.

You can buy these at Comp USA or mail order from the Hauppauge website.

2. Sage TV software to control the tuner cards and manage everything.

<http://www.sagetv.com/sagetv.html> Around \$80.

At this time you have a complete HTPC able to record and display STANDARD DEFINITION video.

If you decide to buy a High Definition TV, you will need to make considerable changes to this system to be able to record and display HD video. As a minimum you will need a new video card with HD outputs, and a new tuner card that can receive HD stations. From what I have read on the Sage TV support forums you may also need a more powerful computer to properly play back the HD video you record.