

How to Build a Computer Home Theater System

Introduction:

This instruction set is for users who have basic knowledge of how to connect a television to various devices. The instruction set will guide you through finding the right equipment for your needs and setting up your computer to be able to use with the TV. For each device there are two sections in the specifications, minimum and recommended. The minimum is the lowest spec that I would recommend for this particular use. The recommended specifications will give you a better home theater experience.

When buying your equipment don't forget to purchase your equipment from a reputable source and take note of their return policy. Also, have someone help you carry the equipment to your house or have it delivered and remember to always bend with your knees.

STEP 1: Buying the right Equipment

A. Finding the right TV:

TV Specification	Spec(<i>minimum, recommended</i>)
1.HDMI Ports	1, 3
2.VGA or DVI Port	1(neither one or both) depending on Graphics Card Selection
3.Computer Audio In	1, 0→(if HDMI Graphics Card purchased see B.6)
4.Size	32-50", 42-65"
5.Screen Resolution	720p, 1080p
6.Screen Refresh Rate	120 Hz, 600 Hz
7.3D?	No, Yes

B. Finding the right computer:

Computer Specification	Spec(<i>minimum, recommended</i>)
1.Operating System	Windows XP, Windows 7 Home Prem/Prof
2.Hard Drive	500 GB[7,200rpm], 1.5 TB [10,000rpm], or→SSD(best)
3.Ram Memory	4 GB, 8 GB DDR3
4.Processor (AMD or Intel)	3 core [2.8 GHz], 6 core [3.2 GHz]
5.Audio Out	5.1 Channel, 7.1 Channel HD
6.Graphics Card	DVI or VGA(either or, depending on choice of TV above), HDMI output [3D HD with 1 GB Memory]
7.Optical Drive	DVD Supermulti drive, Blu-ray ROM or RE(best)
8.Keyboard and Mouse	Wireless keyboard and mouse (Bluetooth is best)
8.Software (optional)	3D Software(CyberLink PowerDVD 9, 3D edition)

C. Finding the right home theater system:

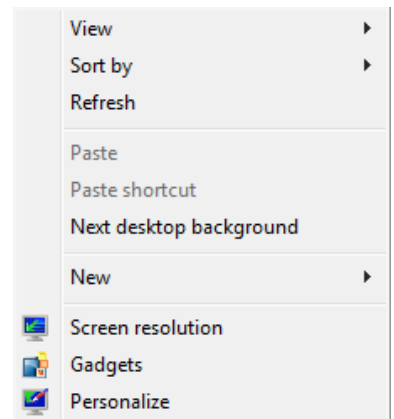
Home Theater Sys. Spec.	Spec(<i>minimum, recommended</i>)
1.Channels	5.1, 7.1
2.Wi-Fi	No, Yes
3.Power	600W, 1300W
4.HDMI Inputs	1, 2-3 (one for computer, one for gaming system, etc.)
5.3D-Ready	No, Yes
6.Additional Inputs (if computer Graphics Card is w/o HDMI)	5.1 or 7.1 Channel Auxiliary Audio Input (optional but better results can be expected)

D. Determining the correct cables and making the connections

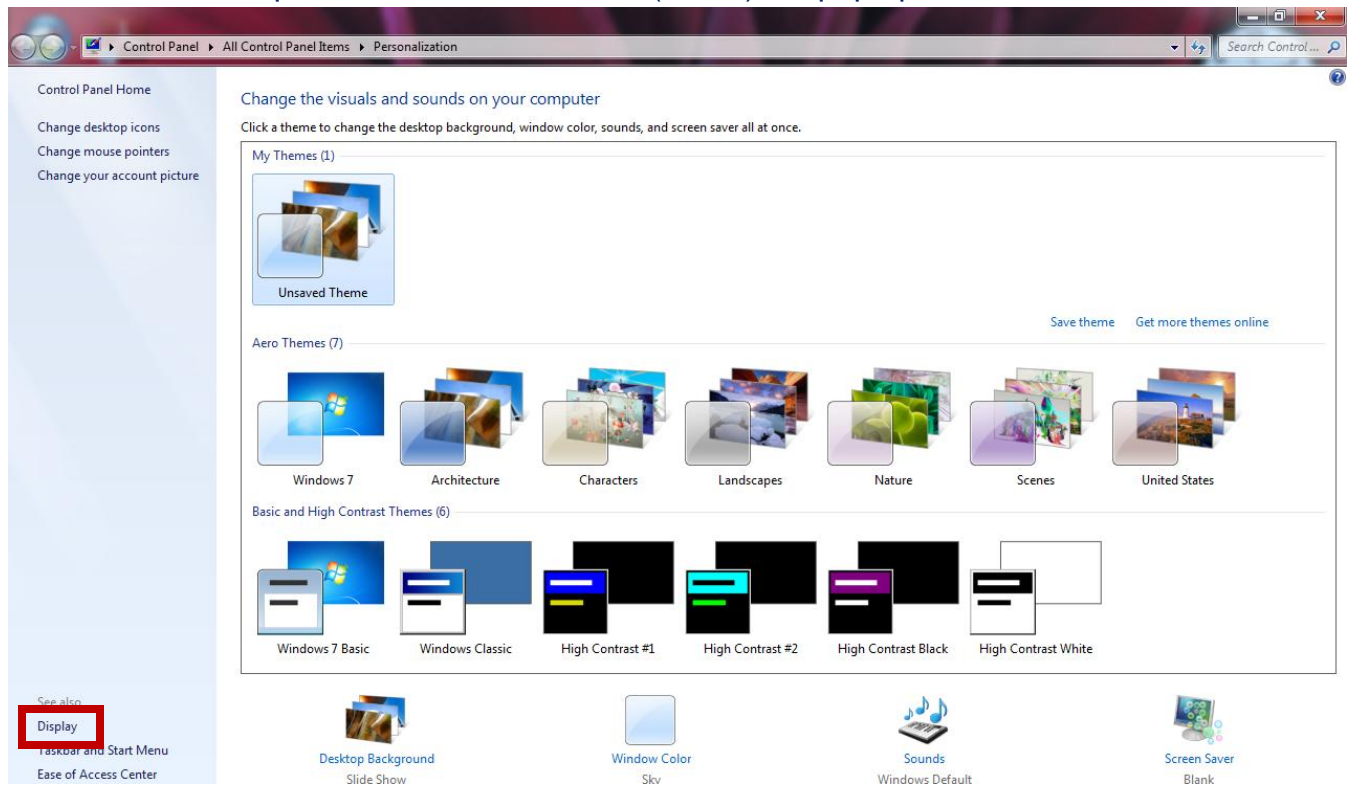
Minimum Specifications	
If in B.6 a graphics card with a DVI or VGA AND A.3 a television with a PC audio input was purchased. (Must purchase together)	Purchase one DVI or VGA cable and an audio cable; connect both directly to the television.
If in C.6 a home theater system with Auxiliary Audio input ports AND in B.5 a 5.1 or 7.1 channel audio output were purchased.	Purchase the corresponding 5.1 or 7.1 channel audio cables and connect them to your home theater system.
Recommended Specifications	
If in B.6 a graphics card with an HDMI port was selected.	Purchase two HDMI cables; connect from computer to the home theater system then from the home theater system to the television.
If in C.6 a home theater system with Auxiliary Audio input ports AND in B.5 a 5.1 or 7.1 channel audio output were purchased.	Purchase the corresponding 5.1 or 7.1 channel audio cables and connect them to your home theater system.

Step 2: Setting up the computer (Windows 7)

- A. Make sure all connections have been made correctly.
- B. If the TV is the main monitor then go to section D.
- C. For two monitors, after the main monitor is set up and running, on the desktop, right click. A drop down should look similar to this:

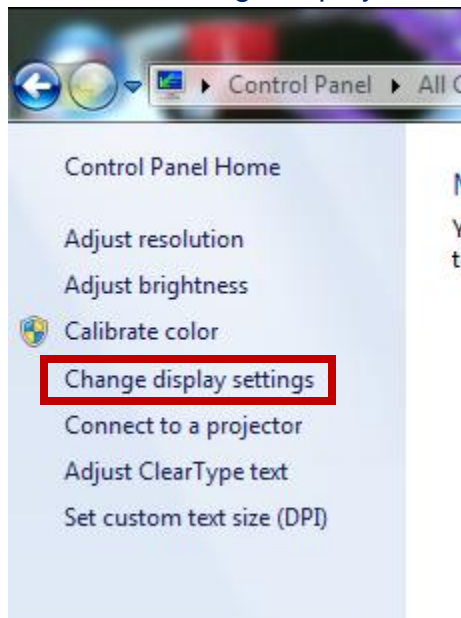


D. Click personalize and a window (below) will pop up.

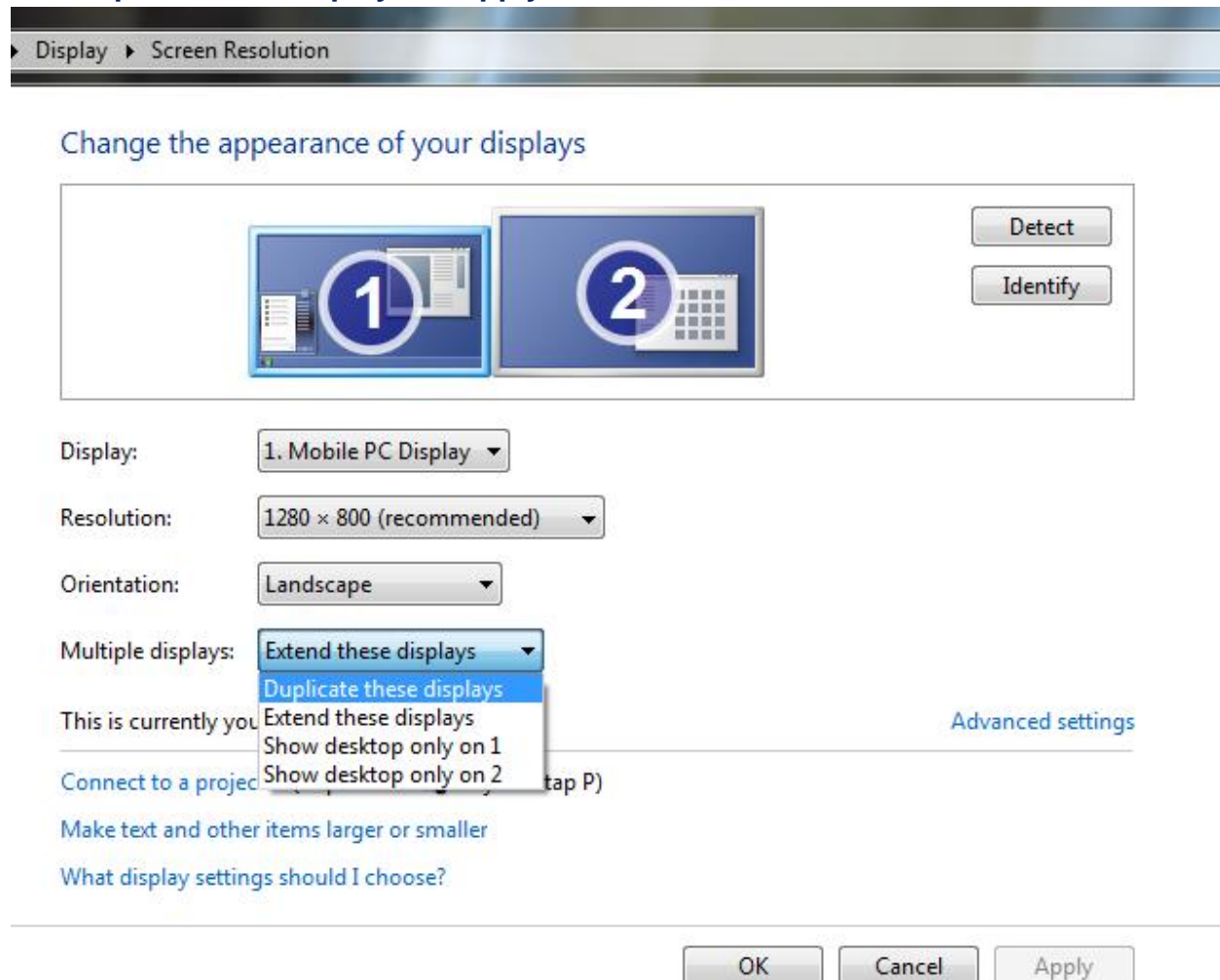


E. Click Display.

F. Then click Change display settings in the upper left of the window.



G. Set up the TV by clicking on the dropdown menu of multiple displays and click **duplicate this display**. Hit **Apply** then **Ok**.



At the completion of this step you will be able to use your tv as a computer monitor. Sit on the couch, put your wireless keyboard on your lap and enjoy!