To provide Media Center experiences, you connect the Media Center Extender to an HP Media Center PC (MCPC) or HP Digital Entertainment Center (DEC) using either a wired (Ethernet) or wireless network. For more information on networking the Extender, visit http://www.microsoft.com/mcx/.

**A. Wired Network Connections**

In a wired network, all PC components and devices are connected to the network using RJ-45 Ethernet cables. The Extender and the access point are connected directly using Ethernet cables.

- Make sure to use an Ethernet switch that supports 100 Mbps (100 Mbps max is recommended for good performance).
- Make sure to use an Ethernet switch that supports 100 Mbps Ethernet cables.
- The Extender and the access point should be connected to the network using RJ-45 Ethernet cables.
- The Extender and the access point should be connected to the network using RJ-45 Ethernet cables.
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- The Extender and the access point should be connected to the network using RJ-45 Ethernet cables.

**B. Wireless Network Connections**

In this configuration, only the Media Center Extender is wireless. All other devices are connected to the network using Ethernet cables and an 802.11a or 802.11g wireless router.

- Wireless 802.11a access point/router
- Wireless 802.11g access point/router
- Wireless 802.11b access point/router

**C. Setting up and Troubleshooting the Media Center Extender on a Wireless Network**

When setting up a Media Center Extender on a wireless network, follow these guidelines:

1. Select and set up the access point or router
   - Use a recommended dual 802.11b access point/router.
   - Use an 802.11a access point/router.
   - Use an 802.11g access point/router.
   - Use a recommended dual 802.11a/802.11g (A+G) access point/router.
   - Use an 802.11a access point/router.

2. Locate and position the Extender, access point or router
   - Before you position the Extender, imagine a straight line between the Extender and the access point.
   - Locate the Extender and access point or router so there are as few obstructions as possible along the straight line. Obstructions include such items as TV, cabinets, other electronics, and furniture.
   - There should be no more than two walls or two floors between the wireless antenna and the access point for optimal performance.

3. Connect the Extender to the 802.11a network
   - Use the Media Center Extender Quick Setup Guide to set up the Extender hardware and cables. Then use the Windows Media Center Extender Setup Wizard on the MCPC/DEC to install the software and make sure the Extender and network are working.

4. Try the following if the Extender experiences pauses in TV viewing
   - When connecting the MCPC/DEC to an 802.11 A+G access point or router, use 802.11a for the MCPC/DEC. Use 802.11g for other wireless devices such as laptops.
   - To help you improve video quality, use the Media Center Extender Network Performance Tuner. To use the Extender Network Performance Tuner, see section B. above.
   - The following devices can cause interference with 802.11g networks. Adjusting them might reduce interference.
     - 802.11b wireless networking devices
     - Microwave ovens, 2.4 GHz cordless phones, 2.4 GHz baby monitors, etc.
     - Other wireless networks, for example those from neighboring houses

**Don’t Do This!**

Do not use an 802.11b network for MCPC/DEC and Extender connections. The 802.11b network standard does not provide the necessary capacity to support a MCPC/DEC or Extenders. Reserve 802.11b for other wireless devices such as laptops.

**Always Do This!**

Always use an 802.11a network for MCPC/DEC and Extender connections. The 802.11a network standard provides the necessary capacity to support a MCPC/DEC or Extenders.