# What is Blu-ray?

Blu-ray is an optical disc format used to store high-definition video as well as games. These discs are the next generation of DVDs delivering Full HD picture quality and because they look and feel like standard DVDs, they're just as easy to use. Perhaps most importantly, the menus are similar on both formats, and Blu-ray Players can playback your entire library of silver discs whether they are CD or DVD.

#### Better Picture

Blu-ray discs produce the best possible picture quality for an HDTV—even better than HD cable or satellite broadcasts. They have up to seven times the resolution of DVD. Simply put, everything looks sharper—details such as skin and hair, patterns on clothing and even faces of people in the background can appear razor sharp. Also, Blu-ray discs provide far more accurate color which creates richer, more lifelike pictures that feel almost three-dimensional (even without 3D technology).

#### **Better Sound**

Blu-ray has taken the home surround sound capabilities first heard and felt from DVD to another level. Its high capacity format allows for more depth of sound and better support for additional speakers. Some of the new surround sound formats supported on Blu-ray, such as Dolby TrueHD and DTS-HD Master Audio, are basically identical to the original sound sent to theaters. So the only limitation on the sound quality is your home theater system or TV. And with home theater systems now available in every size and price range, it's easier than ever to upgrade your equipment and get a more theatrical experience at home.



## **How it Works**

Even though they are the same size and shape as DVDs, everything about Blu-ray discs has been redesigned:

• Newer laser technology for greater capacity - Blu-ray uses blue lasers, which have a narrower beam than the red lasers in DVDs, giving them up to five times the capacity of DVDs in the same sized disc.

- Different materials Blu-ray discs are made of a harder, much more scratch resistant plastic for better reliability.
- More advanced video compression the information stored on Blu-ray discs uses the latest video compression, packing more information into the same space without noise or video artifacts in the picture.

## **Special Features**

Although we've come to expect video extras such as commentary and "making of" content from DVDs, select Blu-ray players offer innovative new features that help the studios get us into their shows and movies in entirely new ways—like extra audio tracks and video overlays with additional content that is relevant to what is on the screen.

## Apps: Go Beyond the Disc

Newer Blu-ray players connect to the internet to go beyond the contents of Blu-ray discs and support Apps for streaming video on demand from the internet such as Netflix, Blockbuster, and Hulu.



Other types of supported apps include customized internet radio from Pandora, news and weather apps from sources such as AccuWeather and the BBC. Support for applications depends on the make and model of the Blu-ray player, but apps are quickly becoming a standard feature that can bring great convenience and selection to the content at your fingertips.

#### What You Need

In general, you will see a big benefit in picture quality if you are watching Blu-ray on any HDTV. The one thing you'll want to ensure if you are buying a Blu-ray player for a slightly older HDTV is that your player and TV have matching connections.

#### TV with HDMI or Component Input

Blu-ray and HDTV"S are literally designed for each other. The best and easiest way to connect a Blu-ray player to a TV is using an HDMI connection, which provides the highest quality signal over a single cable with a flat end. All Blu-ray players have HDMI outputs and all newer HDTV's have HDMI inputs.



If you don't have an HDMI input on your HDTV, a component input is an older option which can still provide excellent HD quality from your player. Component video connections use three round cables with red, blue, and green ends next to each other. Any HDTV without HDMI has one or more component inputs. If you need to use a component connection with your TV, make sure that the Blu-ray player you buy has a component output (some newer Blu-ray players don't).

## A Broadband (Cable or DSL) Internet Connection

As mentioned above, the latest Blu-ray players are designed to take advantage of the internet, with special internet-connected features on certain discs, and support of video streaming and other apps. Beyond those features, Blu-ray discs featuring new software or features sometimes require players to update themselves over the internet. If your cable or DSL modem is not near your TV to make a cable connection convenient, look for Blu-ray players with built in Wi-Fi, which can connect to your home wireless network with a minimum of effort.