

# TV BUYING GUIDE

## BASIC---

With the advancement of modern technology there are tons of things that have changed for electronics products and latest features that make peoples buy new product and yes for TV buying its essential to know the huge variety of types of technology, features, category and which one to choose from huge amount of options this tv blog will help you guide through every thing you must know to buy the best TV for your budget and taste. Let's know about TV technology first and get rid of all the confusions.

## Factors to Consider---

### Display of the TV

The display of a tv primarily comprises of HDR, contrast, refresh rate, resolution and the type of display. Here is some of the basic details about these components of display.

### HDR (High Dynamic Range)

HDR stands for Hight Dynamic Range. In simple term, you can say it is more Colors and finer picture quality while you are watching TV. However, HDR display works only when the content you want to watch is available in HD quality.

### Contrast

A TV with higher contrast ratio will have better display on its screen because you even get to see the finest details of picture on your screen. OLED TVs are considered the best when you are looking for a TV with high contrast ratio.

### Refresh Rate

This refers to the number of times the image on your TV screen is replaced every second. It is measured in FPS or Hz. The higher the refresh rate of your TV, the better will be you viewing experience while you are watching your favorite sports or action movies.

### Resolution

The sharper the resolution, the better will be the clarity you get on the screen. On the basic of resolution, 3 Types of TVS are available-HD Ready, Full HD(FHD) and 4K or UHD (Ultra HD). HD Ready TVs have 1 million pixels and resolution is 1280\*720 which is 720p HD screen.

FULL HD TVs are those having 1920\*1080 resolution and they are quite good as it has 2 million pixels which is decent sharp for TV. Price starts around \$500 or more.

Modern TVs having much higher 4k or UHD resolution like 3840 \*2160 display resolution is very sharp to look at and it is quite expensive to buy around 800\$ or more depending upon all the features and brands. It can get up to more than 3000\$ dollar even.

There are also 8K 7680\*4320 display which is crazy to have and not recommended as its very expensive and not all the content have 4k yet rather 8k is good for future proofing nothing else!

### Types of display (Display Type)

On the basis of type of display, TVs are into 3 basic types-LED, QLED and OLED TVs. Here is the brief discussion of these 3 types of display to help you in understanding them better:

### OLED

Watching an OLED TV for the first time is genuinely a pure joy moment. So smooth, fluid, colourful and contrasty are the images that it's really hard to go back to your old LCD or plasma TV. Once you look into that beautiful OLED Display you will never like other Displays!

Almost as flat as wallpaper, organic light-emitting diode (OLED) is a breakthrough moment for TVs. Critically, it emits its own

light, so the huge backlight used by most TVs isn't there. As well as being slim, in an OLED display each pixel self-illuminates, so you can control images at an individual pixel level.

In an OLED panel, organic films are placed between semiconductors, then supplied with an electrical current, which effectively means that each and every pixel can be switched on and off individually. This process simultaneously uses less power to create more brightness, and makes total black possible.

So, video that features both darkness and extreme brightness, such as a star-filled night sky, looks realistic. With unlimited contrast, it means the whitest whites and the darkest blacks – and everything in between. Expect eye-popping color, and, crucially, lightning-fast response times. There are downsides to OLED too though: it's very expensive, and no one is quite sure how long panels will last.

**Pros of OLED**

- 1. The slimmest TV TECH(2.57mm)
- 2. Self-Lighting pixels
- 3. More convincing blacks
- 4. Faster Refresh rates
- 5. Judder and Blur-free

**Cons of OLED**

- 1. Only Found in 3 Screen Sizes: 55,65 and 77-inch
- 2. Muted Brightness (1000 nits)
- 3. Expensive

**LCD/LED**

All major TV brands are still selling plenty of LCD-LED TVs. LCD (liquid crystal display) and LED (light-emitting diode) TVs are often thought of as competing concepts, but they actually refer to identical display technology. In an LCD TV, liquid crystals rotate polarized light, effectively acting as a light valve that illuminates all pixels simultaneously. Instead of the pixel-by-pixel lighting of OLED TVs, in a standard LCD TV all light comes from a big energy-guzzling backlight. The result is a uniform brightness, and relatively low contrast images.

LCD is an outmoded technology, so much so that you can't easily buy basic LCD TVs of any size anymore, at least not in the original configuration. That's where LED-backlighting comes in – instead of having a one-piece backlight that limits contrast, LED TVs are illuminated by (you guessed it) LEDs. They're ranged in either clusters behind the panel (so-called full-array local dimming) or on the sides (called 'edge' or 'edge-lit' LED TVs). The latter is more common, largely because the resulting TV is flatter.

There are a few drawbacks, namely that both techniques still get their light from an external source that increases the components and size of the finished TV. If you watch in a completely black environment, you'll notice blotches and uneven brightness on the panel too, and a lack of shadow detail in dark areas of the screen. That said, images are usually very bright, and very colorful, and you can buy an LED TV in virtually any size you want. They're great value.

**Pros of LCD/LED**

- 1. It's very affordable
- 2. Available in any Size
- 3. Bright and colorful

**Cons of LCD/LED**

1. Aging technology
2. narrow Viewing angle
3. Average contrast
4. Poor black level

## **QLED**

Another premium TV technology that's only recently gone on sale, QLED (quantum-dot light emitting diode) is very different to OLED. QLED panels are not self-emissive, instead lit by LEDs along the edge (just like an Edge LED-backlit LCD). The advantages of QLED TVs are that they use a quantum dot color filter and are capable of significantly higher brightness than OLED TVs. Cue eye-popping color, but slower response times than an OLED TV. However, the contrast and blacks aren't as good as OLED TVs.

So far, QLED has had only modest success, but that could change. At CES 2018, Samsung announced that its QLED TVs for 2018 would use direct, local-dimming backlighting, and boast even higher brightness. If the black level performance and motion blur issues can be improved, Samsung could be on to something. But only if they're cheaper than OLED, which for now remains the benchmark.

## **Pros of QLED**

1. Excellent Whites.
2. Ultra-bright (1500 nits+).
3. Variety of Screen Sizes 49-88 inch

## **Cons of QLED**

1. Not as slim as OLED (25.4mm).
2. Overly Bright.
3. Slower Refresh Rates
4. Less convincing black than OLED

## **Recommendation:**

Most TV brands sell whatever TV technology is popular. However, there is a schism in the market. There is no brand that sells both OLED and QLED. OLED panels are manufactured only by LG, and QLED panels only by Samsung. Other brands use them on license and try and add their own secret sauce to give their particular models the edge.

What you decide to buy largely comes down to price. Future innovations could turn that advice on its head, but for now, if you have money to burn and want the best, go for an OLED – no question. Want a brighter panel? Go for a QLED. If price is more of a concern and you don't need the blackest blacks around, then an LED-backlit LCD TV could well be the one you want – they might not have quite the same level of contrast, but depending on the manufacturer's technology they could come very close.

It may all seem confusing at first, but when armed with a little knowledge about the differences between OLED, QLED, LED and LCD, buying a TV isn't quite as tricky as you might think.

## **Sound Quality of TV**

The sound of the TV is measured in watts where the higher the watts, the louder will be the maximum volume of your TV. The latest TV these days are equipped with pre-defined sound modes for gaming, sports, movies which automatically tune the volume of your TV viewing experience better.

The most preferred sound technology in TVs these days are Dolby Digital, DTS Premium and Harman Kardon. To enhance the

sound quality of your TV, you can always attach speakers and soundbars to your TV.

**SOUND BAR**

Even the most expensive TVs have poor sound quality so in order to get rich sound from your great viewing experience use sound bars. Sound bar is so popular as for \$300 or less they can significantly increase the sound quality and yet they are slim and look standard with your TVs.

Some TVs and sound bars also support Dolby Atmos which is a newer audio standard from Dolby that includes overhead sound for a fuller listening experience. While you can get the Atmos effect using in-ceiling speakers, many soundbars have Atmos audio processing and upward firing speakers built-in to create more realistic sounding audio that doesn't require the multiple speaker placement that you would have with 5.1 or 7.1 Surround Sound.

You never have to think about additional cable clutter. Nearly All the current TVs feature at least one HDMI Port with Audio Return Channel (ARC) capability. This standard HDMI feature provides lets you use HDMI as both an input and audio output, letting you not only send audio to the TV from external media devices, but also out to your sound bar. That ARC connection means that you get great sound for all your devices, with no special receiver needed.

**Screen Size of TV:**

Both viewing distance and screen size are important factors that determine the picture quality that you are able to enjoy on your TV. The screen size of TV is measured diagonally. If you are confused about what screen size will be idea for your desired TV location, here are some tips that will help you out.

Measure the distance between the place where you will be sitting to watch TV and the wall where you want to affix your TV. Depending on that, here is the right screen size guide for you.

Distance-----ideal Screen Size

5-6 fit 32 inches

6-9 fit 40-45 inches

9-10 fit 50 inches

10-12 fit 60-65 inches

**Connectivity---**

The Connectivity options that you want in your TV will solely depend on your personal need. The most common input connectivity option in the modern-day TVs are USB ports, HDMI ports and Bluetooth connectivity feature.

**USB**

It is used for connecting pen drives, hard drives, internet dongles and digital camera to your TV.

**HDMI**

It has more connectivity options and helps in transferring the best audio and video quality between two devices. You can connect a set-up box, laptops, DVD player fire TV stick, gaming console like PS4 or Xbox One etc. using HDMI port.

**BLUETOOTH**

It your TV has Bluetooth connectivity and feature, you can even connect devices to your TV using cables.

*When it comes to output ports of you TV, you will find these features in the TVs, that are available in the market these days.*

**3.5mm Audio Jack**

It is used for connecting speakers, soundbars, headphones to your TV.

**HDMI ARC**

An HDMI Arc port gives you an output option to connect a home theatre system to your TV.

**RCA Audio Output**

This is the traditional output port that is used for connecting home theatres and soundbars to your TV using cables.

**SMART TV GUIDE**

**Smart TVs**

Smart Tv is a must thing before buying a modern TV as the television technology seems to have re-defined with the invention of smart TVs. Here is everything that you should know about them!

**Special features of smart TV**

1. A smart TV can be connected to the internet with the help of wired or wireless media.
2. Play games and watch your favorite YouTube videos and Netflix shows on your TV for hours.
3. Use social media apps on wide screen using your smart TV.
4. Some smart TVs even have a camera and offer video calling feature. Thus, you can conduct video meetings on larger screen.

**Features to Consider**

1. Interface or Operating system of the TV will help in determining the ease with which you can use your smart TV. The Most popular ones are Google certified and Android TVs. Some of the TV brands offer their own interface as well.
2. Go for the TV with higher RAM to ensure that the processing speed of your TV is not slow while you are multi-tasking.
3. Choose high Storage TV option which is good for recording your loved shows and re-watching them at your convenience.
4. If you want to use your Smart TV as a projector Screen for your phone, go for the option that support phone casting option.
- 5.Voice control Remote and air remotes are the latest features of smart TV that you can would love to use. Give a voice command and let your TV do the work for you. You can even use some remotes as a pointer device to allow faster navigation.