



4K TV Buying Guide Quick Reference Handout

4K TV is the gold standard for TV and video quality. Also known as Ultra HD, a 4K TV offers you the best of all worlds—from top-quality resolution to smart features for instant video streaming.




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Why you'll want 4K

Pixels make up the '4' part of 4K TV, and the term comes from the fact there are approximately 4000 horizontal pixels available on this type of TV. In comparison, a regular HD TV has only about 2000 horizontal pixels. The more pixels you have, the more clear, precise, and vivid your display will be. The resolution of a 4K TV is 3,840 x 2,160 pixels, and that adds up to more than 8 million pixels total.

Learn about TV resolutions

	1080p	4K	8K
 Resolution	1920 x 1080	3840 x 2160	7680 x 4320
 Total Pixels	2.1 million	8 million	33 million
 Ideal For	Small screens and everyday streaming	Any screen size and Ultra HD video content	Large screens and 8K content

What is 4K Ultra HD?

When shopping for a new 4K TV, you'll see the terms 4K, UHD, Ultra HD, or 4K Ultra HD. The terms are interchangeable.

What's better? 4K Ultra HD, OLED or QLED?

The next step to buying a 4K TV is defining the TV type you'd like to buy. One of the easiest ways to narrow down your options is to choose the best type of backlight for you. When choosing a 4K TV you have several options.



- LED
- OLED
- QLED
- QLED with Mini-LED
- Quantum or QD OLED
- Nanocell
- Full Array. Micro-LED

What is 4K OLED TV?

OLED stands for Organic Light Emitting Diode TV. OLED diodes are entirely self-illuminating. They can light up your display without requiring an additional backlight and they can turn on and completely off.

1. OLED TVs don't use a backlight so they can be ultra-thin.
2. They have brilliant colour and contrast.
3. There is very little bleed through or blurring of colour as the diode can turn fully off.
4. Because the diode can turn off, OLED TVs are also the only TVs that can achieve true black.

When it comes to your TV, OLED and 4K are a team. 4K supplies the screen resolution via the number of pixels, and it works with OLED technology supplying the light and the colour.

What is 4K QLED TV?

QLED TVs are LED TVs, so they use a backlight as the light source. The difference between a standard LED and a QLED TV is that a QLED TV has a layer of nanoparticles called quantum dots.

1. Quantum dots enhance the TV's colour and brightness.
2. 4K QLED TVs are very popular, and you'll find this type of TV available from brands like Samsung, TCL, and LG.
3. You can now find QD-OLED 4K TVs that combine quantum dots over and OLED panel.

What is a 4K Mini-LED TV?

A Mini-LED TV is an LED TV, but the diodes are only about a fifth the size of a standard LED. Because of the smaller size, more Mini-LEDs can be packed into a display and they are distributed across more than one hundred dimming zones.

1. When paired with quantum dots, a 4K Mini-LED QLED TV can produce a picture with ultra-bright colours, amazing contrast, and almost true black.
2. Mini-LED TVs can produce almost the same deep, dark blacks and rich colours as an OLED, but they are a more budget-friendly option than OLED.

What is 4K MicroLED?

A MicroLED is even smaller than a Mini-LED. They are only 0.002 inches across, so they are approximately the size of a single pixel. Because of that, they can do something LED and even Mini-LED can't do; function as a single pixel.



1. MicroLEDs are bunched together in clusters of red, blue, and green, and each pixel can light up in any colour, can achieve any level of brightness, or can switch off completely.
2. 4K MicroLED TV can achieve an almost true black, and that makes it almost as perfect as OLED.
3. MicroLED TVs aren't part of the mainstream for 4K or even 8K yet, but 2023 could be the year we begin to see smaller sizes of MicroLED TVs.

Nanocell & Full Array technology

You may also see 4K TVs associated with Full Array technology and Nanocell technology. Full Array is a method of backlight distribution while Nanocell is a technology that filters colour.

1. Edge-Lit TVs use LEDs placed around the perimeter of the screen and lighting zones will brighten or dim the screen as a group.
2. Full Array Local Dimming uses LED lights and dimming zones spread out behind the screen. The lights can be precisely controlled, so Full Array 4K TVs offer a sharper picture, realistic colour representation, deep blacks, and improved contrast over Edge-Lit TVs.

Nanocell technology uses nanoparticles that are integrated into the TV panel. They are used to create realistic colour and remove incorrect and unwanted colour waves. You'll find Nanocell TVs offered by LG.

Benefits of 4K resolution

When you place a 4K TV beside a TV with 1080p resolution, you can immediately see the difference in detail and how sharp the video quality is. There are a lot of other benefits to having a 4K TV too.

1. 4K looks better in a bright room

4K TVs have more pixels than a 1080p Full HD TV. With so many extra pixels to showcase colour and produce a brighter picture, a TV with 4K resolution is much better for bright rooms with a lot of natural light.

2. 4K TVs have better contrast

4K TVs, especially 4K QLED TVs or 4K Neo QLED TVs, can produce a wider colour palette and have better contrast than 1080p TVs. Some models can produce millions of colours, and can achieve deep, rich blacks and ultra-bright whites.

3. 4K content is now mainstream

4K content is now the norm, not the exception. Most Canadian streaming services include 4K as an in-home option for cable subscribers. Netflix and Disney+ are leading the way in Ultra HD programming, but you can also find a huge amount of content on YouTube for free. If you choose a TV with HDR or Dolby Vision, you'll be able to access that content too.

If you're a gamer, the latest consoles offer many titles in 4K. You can choose a TV with HDMI 2.1 ports that offer 4K/120Hz to connect to your PS5 or Xbox Series X.

How big should a new 4K TV be?



While 4K TVs do come in a wide range of sizes, most people agree that with this resolution, the image is most impressive for screens larger than 40 inches.

1. A good starting size for a new 4K TV is a 40" set that can fit easily into a living room or family room.
2. A 55-inch 4K TV is one of the most common sizes selected by Canadians for their living room.
3. If you want to go really big, there is plenty of 4K TVs available in the 60-69 inch, 70-79 inch, 80 inches and larger category.
4. LG, Sony, Samsung, Panasonic, Philips and VIZIO all make TVs that will fill your field of vision with razor-sharp, realistic video, TV, gaming, or whatever kind of content you're into.

How 4K upscaling works

Many 4K TVs offer upscaling, so your new TV will be able to upscale HD content so it's as close to 4K resolution as possible. No matter what you're watching, everything will look better on your new TV.

What about 8K TV?

A 4K TV will be a wise choice for at least the next 6-10 years. 8K TV is a new but still-emerging technology that's going to take some time to get its feet on the ground. You can choose an 8K TV today at Best Buy, but you won't find a lot of real content being made in 8K resolution just yet.