THE ULTIMATE GUIDE TO BUYING A

Brought to you by the experts at 4K.com



COPYRIGHT

Copyright © 2016 4k.com

All rights reserved. This book or parts thereof may not be reproduced in any form, stored in any retrieval system, or transmitted in any form by any means—electronic, mechanical, photocopy, recording, or otherwise—without prior written permission of the publisher, except as provided by United States of America copyright law. For permission requests, write to the publisher, at "Contact@4k.com."

DISCLAIMER

Every effort has been made to ensure that the content provided in this ebook is accurate and helpful for our readers at publishing time. However, this is not an exhaustive treatment of the subjects. No liability is assumed for losses or damages due to the information provided. You are responsible for your own choices, actions, and results. 4k is not responsible for, and expressly disclaims all liability for, damages of any kind arising out of use, reference to, or reliance on any information contained within the ebook.



OVERWHELMED? UNSURE? CONFUSED?

We get it. Buying a 4K TV can be confusing.

UHD TV, Ultra HD TV, 4K Ultra HD TV, 4K UHD TV? What's the difference? What's upscaling? Why is HDR better than SDR? What does 10-bit color mean? Where do I get 4K video content? ...

You just want to watch your college football game in the biggest, best display possible, NOT pull your hair out wondering if you're buying the best TV for your budget.

Well, we're here to help.

In the following pages, we'll guide you through the 4K TV buying journey, covering topics like:

- What is a 4K TV?
- What do the different features mean?

- Which features are more important than others?
- Our recommendations for models and features

For all you TV tech whizzes out there, we've included a special section just for you, The Tech Guy's Guide to 4K Features, with more in-depth technical information.

Throughout the ebook, we've also included buying tips, recommendations, and links to more in-depth material on our website.

At <u>4K.com</u>, we pride ourselves on our expertise in all things 4K. This guide is guaranteed to give you everything you need to know to buy the 4K TV model that's best for you.

Let's get started.

CONTENTS

1. 4K BASICS & FEATURES

- 1.1. What is a 4K TV?
- 1.2. 4K Features (in brief)
- 1.3. Is a curved display better?

2. GETTING YOUR HOME READY FOR A 4K TV

- 2.1. Internet Speed
- 2.2. Upgrade Your Audio
- 2.3. Where can I find 4K content?
- 2.4. Can I use a 4K TV as a PC monitor? for gaming?

3. WHAT TO KNOW WHEN BUYING A 4K TV

- 3.1. 9 Quick Tips for Comparing 4K TVs
- 3.2. Is now a good time?
- 3.3. What does it cost?
- 3.4. What size should I buy?
- 3.5. The Best 4K TV at Any Price

4. THE TECH GUY'S GUIDE TO 4K FEATURES

- 4.1. Upscaling
- 4.2. High Dynamic Range (HDR)
- 4.3. Wide Color Gamut & 10-bit Color
- 4.4. Refresh Rates, Judder & Motion Control
- 4.5. Connectivity & Internet Speed
- 4.6. Backlighting
- 4.7. Smart TV Platforms



4K TV BASICS & FEATURES

WHAT IS A 4K TV?

A 4K UHD TV is characterized by its 4K ultra HD resolution of 3840 x 2160 pixels. It's pretty straightforward. 4K. 4,000 pixels. Though, 4K TVs can differ on some features, this standard pixel measurement will be found in any model.

The 4K TV earns the "4K" name even though the measurement is slightly under 4,000 pixels. A cinematic (Digital Cinema) true 4K resolution of 4096 x 2160 pixels is found in some 4K display devices, but it's rare in TVs. (We've only seen the true 4K resolution in a TV once a couple of years ago.) The true 4K resolution is much more common in UHD home theater projectors.

Along with high dynamic range (discussed later), the 4K TV display is the future of home entertainment. A 4K TV display is roughly four times sharper than the Full HD (1920 \times 1080p).



A TV By Many Names...

UHD TV. Ultra HD TV. 4K Ultra HD TV. 4K UHD TV.

People use many names to talk about the same thing. So, sorry for hope, eventually, the industry will decide on a universal term.

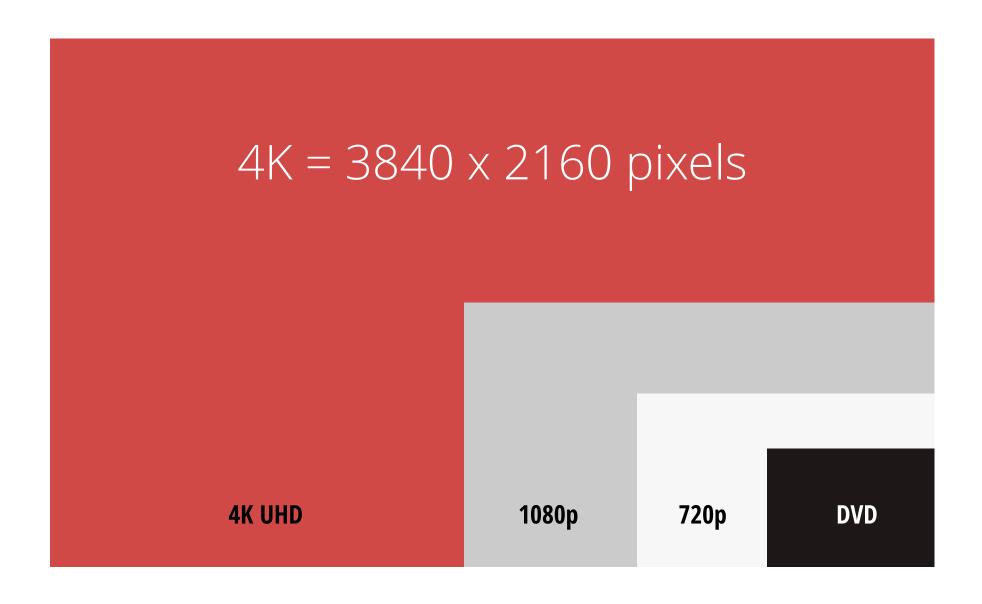
The 3840 x 2160 pixel display amounts to a total of 8.29 million pixels on the screen.

4K TVs are now the flagship or top-shelf model for all major TV manufacturers and come combined with other display, video rendering, and smart technologies. Talk about a cutting-edge home theater experience!

We believe HDTVs will stick around, but 4K is going to take over more of the market for both content production and display technology.



HOW BIG IS BIGGER?





Tech Tip

The last 4 numbers in each resolution are commonly used to distinguish 4K UHD from Full HD in more technical display specs. 4K TVs are referred to as 2160p TVs and HD TVs as 1080p TVs.

4K FEATURES

The 4K resolution is only the foundation of what makes a 4K TV special. Below, we'll cover a full range of features you can find when comparing models. For a more technical discussion on 4K features, skip ahead to The Tech Guy's Guide to 4K Features.

#1

Upscaling is a core technology in 4K TVs. Since the majority of television content isn't yet offered in a 4K resolution, this features allows the TV to upscale or stretch out non-4K content sources—like cable TV and DVDs—to fit the screen's UHD resolution. All 4K TVs come with the upscaling feature by default. This feature really does make lower resolutions look sharper than they would on a non-4K TV display.



#2

Any 4K TV can come in **high dynamic range (HDR) or standard dynamic range (SDR)**. We recommend buying a 4K TV with HDR because it is the single most important display technology in 4K TVs today.

It creates a picture quality far ahead of what SDR can offer, by expanding the range of color values and levels of darkness and brightness that a TV can display. This means HDR gives you a more realistic picture.

When you compare an HDR and SDR display side by side from a normal viewing difference, the HDR improvements are extremely obvious to the eye—even on smaller 4K UHD screens.

Most of the 2016 models offer HDR to some extent. It's now found in many budget models as well.





Standard Dynamic Range

High Dynamic Range

HDR is better than SDR