

PENTAX K-3 III



PentaxForums.com

Pentax K-3 Mark III: The Ultimate Guide

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Foreword

Thank you for purchasing this in-depth eBook by PentaxForums.com! As the title implies, we have written *Pentax K-3 Mark III: The Ultimate Guide* as a practical, in-depth resource covering key aspects of Pentax's latest flagship camera as applied to various types of photography. This book is meant to complement the owner's manual¹: whereas the manual will give you explicit breakdowns of camera components and menu layouts, our book is focused on helping you make the most of your camera by understanding exactly how it works, discovering hidden features, choosing the right lenses and accessories, and learning useful tricks and shortcuts.

Before we jump into **chapter 1**, we would like to share some background information on the origins of this book, as well as a brief biography of its authors. On the following pages, you will also find a Table of Contents that outlines the breakdown of the remainder of the book. This eBook includes many clickable links and references, and is thus primarily intended to be read on a PC or tablet. However, we have designed the layout to also be easily printable on standard letter-sized or A4 paper.

History of Pentax Forums

PentaxForums.com is the premier community and resource for Pentax photographers. The **forum**, which was founded in 2006, has to date helped tens of thousands of Pentax users (as well as many other photographers) troubleshoot camera issues, share their photos, and grow their photographic knowledge and technique. The forum is, and always will be, free to join and use.

Our website has grown over the years to include editorial coverage of Pentax news, **in-depth equipment reviews**, and vast **databases** of Pentax and third-party lenses, cameras, and accessories. You will also find monthly photo contests and gear periodic giveaways—in fact, we have given away two Pentax K-3 III cameras to date, alongside many other models!

History of Pentax eBooks

This eBook is inspired by the work of the late Yvon Bourque, who initially published an in-depth guidebook to the **Pentax K10D** in 2007. Yvon's "K10D Book" was quick to receive praise from the Pentax community, and Yvon continued authoring eBooks on future Pentax models for over a decade, up to and including the Pentax KP. PentaxForums.com became the primary distributor of Yvon's books in 2016, where the **eBooks remain available** to this day. On behalf of the entire community, we would like to sincerely thank Yvon for impactful work, and hope to honor his legacy through this book.

About the Authors

Bernard Déry is a technical leader and former optical designer working in the photonics industry. He holds a Ph.D. in physics, specialized in optics. He has studied lens design, atmospheric light transmission and LiDAR, fiber optics, optical components such as those used by photographers, and many other topics relevant to optics and photonics. His main photographic interests are studio and portraits, macro, landscapes and cityscapes (particularly at night). Bernard is a 14-year veteran of Pentax Forums as well as a staff reviewer focusing on

¹Download or print the manual from <https://www.ricoh-imaging.co.jp/english/support/man-pdf/k-3-3.pdf>.

Pentax and third-party lenses. He currently shoots with the Pentax K-1 II and K-3. You can [connect with Bernard on the forum](#) or [visit his website](#) to view his favorite photos.

Adam Oest is the founder and administrator of PentaxForums.com. Having used Pentax cameras since before the digital era, he bridged his passion for photography with his interest in web development to set up and grow the community since its inception. He has hands-on experience with nearly every Pentax camera model since the Spotmatic, and primarily enjoys landscape, macro, and travel photography. He currently uses the Pentax K-1 and K-3 III with a suite of both modern and classic lenses. He holds a Ph.D. in computer science, specialized in web security. Outside of his work on the forum, he focuses on advancing technologies that help protect Internet users and services from scams. [Connect with Adam and browse his photos on the forum.](#)

Acknowledgements

We would also like to thank [Murray O'Neill](#) and [Ole Oest](#) for support with the graphical design and editing of this book. This work was formatted with the help of the [ElegantLaTeX project](#). Some product photos featured in this eBook were provided by Ricoh Imaging.

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Feedback and Errors

Unlike prior Pentax eBooks, this eBook will receive frequent updates and useful content additions over time. If you have a request or suggestion, or if you find a typo or other error, please reach out via the [PentaxForums.com contact form](#) or send an e-mail directly to contactpf@pentaxforums.com.

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Chapter 1 Introduction

1.1 Model Overview

The Pentax K-3 Mark III¹ is a Digital Single Lens Reflex (DSLR²) camera launched in March 2021. It is the 29th DSLR released by Pentax, and the third iteration of the high-end K-3 product line. This camera is designed to deliver enough performance to satisfy the most demanding users—who might need it for professional shooting such as sports and weddings—while still delivering all the classic Pentax features geared toward convenient and enjoyable everyday photography.



Figure 1.1: K-3 III

The original **Pentax K-3** was introduced in 2013, and happened to be the first DSLR fully developed under Ricoh’s ownership of the Pentax brand. The camera reaped awards and was regarded as one of the best high-end APS-C DSLRs at the time. 2015 saw the release of the **Pentax K-3 II** (also referred to as the K-3 Mark 2), a moderate upgrade whose main difference with the original was the replacement of the built-in flash with a GPS unit and the incorporation of cutting-edge technology called **Pixel Shift**, a type of super-resolution. The company launched several **other models** since then, but waited until 2021 to update its flagship line with the K-3 Mar III. This new camera keeps the **K-3 DNA**, but features a new body and overhauled hardware. The list of new and enhanced features is seemingly never-ending.

¹Although *K-3 Mark III* is the camera’s official name, for brevity we will refer to it as the *K-3 III* in the remainder of the book. The camera itself is also badged only with *K-3 III*.

²DSLR cameras have an optical viewfinder which allows the photographer to look directly through the lens by means of a mirror. The mirror is lifted at the time of exposure to allow the light to be recorded by the camera’s image sensor. You can also see what the sensor sees by means of a “Live View” function, which is critical for applications such as video and macro.



Figure 1.2: DA 16-85mm, F7.1, 1/250 seconds

Like its predecessors, the K-3 III is an APS-C camera, meaning its 24x16mm image sensor covers a smaller area than “full-frame” sensors corresponding to 35mm film. APS-C is a popular format due to advantages such as the ability to use smaller lenses, more compact camera bodies, cost-effectiveness.

Given the 6-year gap between the K-3 II and the K-3 III, it is evident that the K-3 III camera had been under development for a significant period of time. Pentax engineers put a lot of care and passion into the final product, which led to the modernization of several aspects of the Pentax system while remaining true to the brand’s ethos.

Over the following chapters, you will learn about the camera’s background, features, functions and operation. Our hope is that this eBook will teach you how to get the most out of your K-3 III. We start by highlighting the numerous innovations and improvements of the K-3 III when compared with older Pentax DSLRs.

1.1.1 What’s New

Understanding the K-3 III’s new features and technological innovations can be very helpful toward using the camera in an optimal way.

New Sensor and ISO Range

At the heart of the **K-3 III** is the new, 25.7-megapixel image sensor. This is a slight increase in resolution from the K-3 II’s 24 MP sensor. More importantly, the sensor is back-illuminated, normally beneficial for high-ISO performance. Furthermore, the sensor is rated to operate up to an astounding ISO 1,600,000 value. Of course, we do not expect performance to be particularly impressive at such high ISO levels, but it bodes well for the camera’s capability to otherwise manage noise.

The sensor is coupled with a (also new) PRIME V engine³ and second-generation accelerator unit, for faster processing and operation, and better fine-tuning of the noise management.

³Pentax Real Image Engine V: the camera’s primary image processing chip.