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Photography — Digital still cameras — Measuring shooting time lag, shutter release time lag, shooting rate, and start-up time lag

Photographie — Caméras numériques — Décalage dans le temps du mesurage de la prise, décalage dans le temps de l'ouverture de l'objectif, cadence de prise et temps de démarrage

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Contents

Page

Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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This document was prepared by Technical Committee 42, *Photography*.

This third edition cancels and replaces the second edition (ISO 15781:2015), which has been technically revised.

The main changes compared to the previous edition are as follows:

— Current scope includes digital still cameras that continuously shoot images into the buffer and select an image depending on the moment the exposure button is pressed.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

Taking pictures of a moving target was nearly impossible in the early days of digital photography. After pressing the exposure button it took a significant amount of time to capture the image and the chance to preserve the desired moment was gone.

Part of the time between pressing the exposure button and the exposed picture is needed to focus, another part is needed to adjust the exposure, etc. This unwelcome but unavoidable period of time is called shooting time lag. This is often mixed with the term shutter release time lag, which is also defined in this document. Optimized systems are nowadays able to decrease these time lags.

Capturing the different stages of a fast moving object is sometimes very important especially in areas like sports or people photography. This high shooting rate requires fast image processing within the digital still camera that can be measured according to the method described in this document.

When a photographer decides to capture an image of a changing scene, if his or her digital still camera takes a long time to be ready to shoot once it is turned on, the opportunity to capture the image is lost. This time named start-up time lag is therefore another important value, which can be determined using this document.