Optical Module Stabilization Methods



Overview

An optical image stabilizer (OIS, IS, or OS) is a mechanism used in still or video cameras that stabilizes the recorded image by varying the optical path to the sensor. This technology is implemented in the lens itself, as distinct from in-body image stabilization (IBIS), which operates by moving the sensor as the final element in the optical path. The key element of all optical stabilization systems is that they stabilize the image projected on the sensor before the sensor converts the image into digital information.

Article Content

Image stabilization

An optical image stabilizer (OIS, IS, or OS) is a mechanism used in still or video cameras that stabilizes the recorded image by varying the optical path to the sensor. This technology is implemented in the lens itself, as distinct from in-body image stabilization (IBIS), which operates by moving the sensor as the final element in the optical path. The key element of all optical stabilization systems is that they stabilize the image projected on the sensor before the sensor converts the image into digital information. IBIS ca

Optical Image Stabilization

Image Stabilization (IS) comprises a variety of methods that are used to reduce blurring associated with the shaking of a camera, video camera, or other image

WhitePaper_draft_ver.1.2_(HI_RES)

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As an electro-mechanical method, lens stabilization (optical unit) is the most effective method for removing blurring effects from involuntary hand motion or shaking of the camera.

Optical Image Stabilization (OIS)

This paper hosts a technical explanation on the main aspects of Optical Image Stabilization and the actuator technologies and the solutions commonly available in the market. A brief description of the

Practical Approach for Controlling Optical Image Stabilization System

This paper proposes a practical methodology for designing an optical image stabilization system controller that consists of a gyro signal filter and feedback controller for a smart phone

ROHM Optical Image Stabilization (OIS) Technical White Paper

The two main methods of OIS in compact camera modules are implemented by either moving the position of the lens (lens shift) or the module itself (module tilt).

Practical Approach for Controlling Optical Image Stabilization System

optics modeling are described in Section 2. The system block diagram of the proposed controlling OIS system also introduced. In Section 3, the designing methodology for the OIS system controller is

Optical Image Stabilization -

Optical Image Stabilization (OIS) is a common feature in modern smartphones, designed to compensate for hand movements during photography, reducing blurriness in captured images.

Next Generation Autofocus and Optical Image Stabilization System for ...

Modern camera modules are required to perform positioning functions to improve the stability and quality of captured images. These functions mainly include the autofocus (AF) and

Phase stabilization with single photon detection for quantum networks

In conclusion, we demonstrated the phase stabilization of optical fiber links in quantum networks with faint light, suficient to empower many phase-stabilization-reliant quantum protocols.

Frequency stabilization method of optical phase-locked loop He-Ne

Methods This article reports an optical phase-locked loop bias locking system based on an acousto-optic modulator. An iodine stabilized frequency laser is chosen as master laser, and a thermally stabilized

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Laser power stabilization using conservation law in acoustic optic ...

Abstract Laser power stabilization plays an important role in modern precision instruments based on atom-laser interactions. Here we demonstrate an alternative active control

Stabilization procedures for TOPCon PV modules after UV-induced ...

Present results on TOPCon modules indicate that light soaking is a very effective stabilization method, meaning that additional flash testing after LS for 1 min generally does not lead

Research on High Stability Laser Frequency Stabilization Method

Abstract A high stability laser frequency stabilization method based on optical phase-locked loop is reported to improve the frequency stability and accuracy of a tunable external cavity semiconductor

Stability Driven Optimal Controller Design for High Quality Images

This note presents an optimal design method to enhance image quality in optical image stabilization (OIS) systems. First of all, performance limitations of conventional methods are shown

The developing condition analysis of semiconductor laser frequency ...

Finally, prospects of frequency stabilization technologies of semiconductor lasers are discussed in detail. Combining several of these methods are future trends, especially the combination of frequency

Optical Image Stabilization

While this method can potentially reduce the vibrations from your hands, improving the quality of a still image, the excessive exposure time can contribute to noise,

KB: Creating protection for Hyper-V VMs on Windows Server 2012

First published on TECHNET on Oct 11, 2012 Here''s a new Knowledge Base article we published. This one talks about an issue where using DPM 2012 SP1 to create a protection group for

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