

Filter Kits



TEST THE EFFECTS OF FILTERING AND MONOCHROMATIC LIGHTING

Midwest Optical offers a line of filter kits designed to assist machine vision integrators and end users attempting to evaluate and improve image quality.

Each kit provides a selection of filters useful in observing the effects of different colors, light intensity and polarization on images obtained with various types of commonly used industrial lighting and imaging systems.

The variety of options provided with each kit allows the user to determine which type and color of lighting hardware best satisfies their application requirements. Once appropriate lighting has been chosen, a complimentary filter aids in correcting specific problems and in controlling the variability of ambient lighting conditions.

FEATURES OF EACH KIT

- A selection of up to 10 different filter types in specified sizes.
- Double-pocketed transparent vinyl pages, each holding one filter, a corresponding transmission curve and a table of data points describing each filter
- Protective three-ring binder with additional educational information

FILTER KIT CONTENTS

All XX100-27 kits, our most popular size, includes step rings for lenses with M25.5, M27 and M30.5 filter threads which covers about 90% of all machine vision lenses in use today.

- **FK100-xx** – All-purpose Machine Vision Kit with our 10 most popular and useful filters.
- **BK100-xx** – Bandpass Kit for additional band-pass options
- **IK100-xx** – Infrared Kit for near-infrared imaging applications
- **NK100-xx** – Neutral Density Kit with options for controlling light intensity
- **UK100-xx** – Ultraviolet Kit for UV and fluorescence imaging
- **SK100-xx** – *Super Kit* with 63 filters for the broadest testing regimen

HOW TO ORDER MIDOPT FILTER KITS:

Filter Kits can be ordered by creating a part number that specifies what type of kit is desired, coupled with the size of filters required.

Ex: FK100-25.5 is the stock number for the Machine Vision Filter Kit for use with lenses having 25.5mm diameter filter threads.

Custom Filter Kits can be ordered with a variety of filter types, sizes and/or shapes. Call us to discuss your specific needs.



SK-100
Complete
Collection

MIDOPT

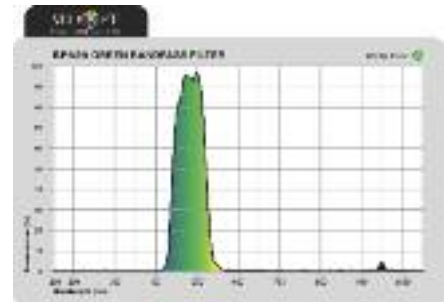
Midwest Optical Systems, Inc.
Machine Vision Filters, Lenses and Accessories

322 Woodwork Lane, Palatine IL 60067
P: 847-359-3550
F: 847-359-3567
E: midwest@midopt.com
W: www.midopt.com

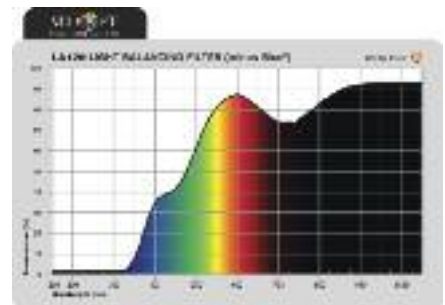
Sample Results

USEFUL TESTS WITH THE FK100 MACHINE VISION FILTER KIT

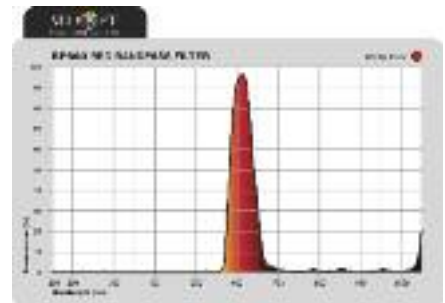
1. Color recognition and separation of subject matter



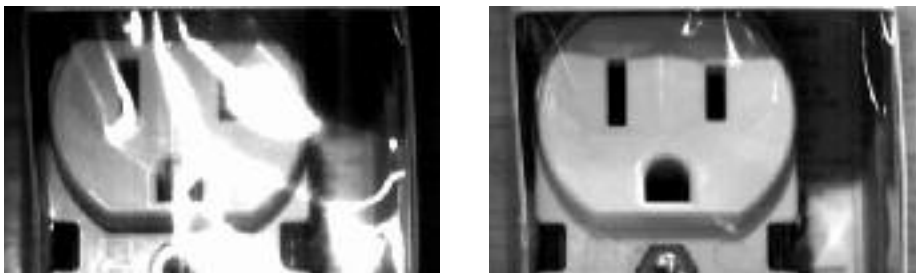
2. Suppress the strong blue 'spike' found in standard white LED lighting



3. Improve lens resolution by reducing the color range being imaged

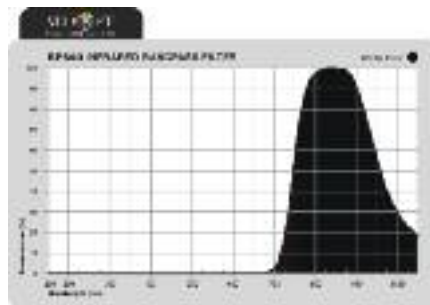


4. Eliminate glare

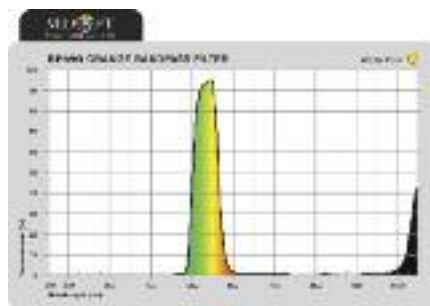
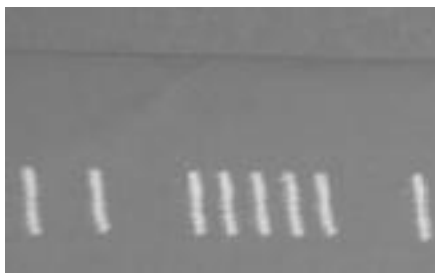


Sample Results

5. Test contrast in non-visible wavelengths



6. Enhance contrast for improved viewing of desired features



7. Test common LED lighting colors without the expense and lead time of the lighting



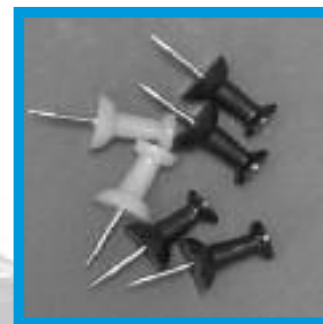
Ambient light ... no filter



... with BP525 Light Green Bandpass Filter



... with BP660 Dark Red Bandpass Filter



... with BP470 Blue Bandpass Filter

