

**HITACHI**  
Inspire the Next

Wide-Dynamic Range High-Sensitivity Color Zoom Camera

# VK-S454 (NTSC) VK-S454E (PAL)

Wide Dynamic Range (WDR)

Removable IR Cut Filter

Progressive-Scan CCD

Digital Slow Shutter

High-Durability x23 Optical Power Zoom Lens

Digital Image Flip

Privacy Zone Masking

Internal/External Sync. (AC-Line Pulse Signal)



Made in JAPAN

**WIDE**  
DYNAMIC RANGE  
PROGRESSIVE SCAN

**DIGITAL**  
SLOW  
SHUTTER

**x23**  
OPTICAL  
ZOOM

**IR**  
FILTER ON/OFF

**D.S.P.**  
Digital Signal Processor



# VK-S454 / VK-S454E

## SPECIFICATIONS

	VK-S454 (NTSC)	VK-S454E (PAL)
<b>CCD Image Sensor</b>		
Image Size	4.5mm Dia. (1/4- inch)	
Total Pixels	380k (758 x 504)	450k (758 x 592)
Effective Pixels	360k (724 x 494)	420k (724 x 582)
Practical Pixels	360k (724 x 494)	420k (724 x 582)
Progressive Scan	Yes	
<b>Lens Optical</b>		
Zoom Magnification	23 x (f=3.6 - 82.8mm)	
Practical f-value	f=3.6 - 82.8mm	
Practical Horiz. Angle	54° (w) - 2.5° (t)	
F-value	F1.6 (w)* - F3.7 (t)	
Zoom Speed (Manual)	4.2s*/5.8s (soft)	
(In Preset : Trace / No-)	2.9s/4.6s (soft)	
<b>Focus</b>		
Auto	VAF	
Manual (Far/Near)	Provided (soft)	
Focal Range	infinity - 1m (t) - 0.01m (w)* (soft)	
<b>IR Cut Filter Removable</b>		
Auto	Pro. AER+* (Off - On - 1/4* - 1/4k)	Pro. AER+* (Off - On - 1/3* - 1/4k)
Manual (On/Off)	Provided (soft)	
<b>Durability</b>		
Zoom / Focus / Iris	500k cycles	
IR Removable	50 cycles	
<b>DSP Functions</b>		
	DSP - 6	
Digital Slow Shutter	Yes (SDRAM I/) w/o WDR	
Progressive Scan	Yes	
Wide Dynamic Range	Off*/On (Auto * [offset]/Manual) (Soft)	
Image Reverse	Off*/On (Soft) w/o WDR	
Scene Memory (Freeze)	Off*/On (Soft)	
Privacy Zone Masking	Off*/On* (2 positions/ movement cont) (soft)	
Digital Zoom (Zoom Mag)	Off*/On (2x* [soft: max. 10x])	
<b>Electrical Shutter</b>		
Auto	Pro. AE (1/60 - 1/4ks)	Pro. AE (1/50 - 1/4ks)
Auto (+DS Shutter)	Pro.AE+ (1/2 - 1/4* - 1/4ks : Seamless)	Pro.AE+ (1/1.5 - 1/3* - 1/4ks : Seamless)
Manual	Shutter Priority w/o WDR 1/2 - 1/30ks:soft	Shutter Priority w/o WDR 1/1.5 - 1/30ks:soft
	Exposure Priority w/o WDR F1.6 - F34:soft	Exposure Priority w/o WDR F1.6 - F34:soft
	AGC Priority w/o WDR 0 - 30dB:soft	AGC Priority w/o WDR 0 - 30dB:soft
Manual (Sensitivity)	32x, 16x, 8x, 4x, 2x (soft)	
Iris	Auto*/(Offset:soft) w/o WDR	
White Balance	Auto*/(Manual:soft)	
<b>Horizontal Resolution</b>		
Normal (1/60s, 1/50s)	470/(400) TVL	470/(550) TVL
DSS (1/4s, 1/3s)	470/(400) TVL	470/(550) TVL
Luminance S/N Ratio	More than 50dB	
<b>Min. Sensitivity</b>		
IR-Cut ON (1/60s, 1/50s)	3 lx (Color) (Typical)	
IR-Cut ON (1/4s, 1/3s)	0.2 lx (Color)	
(1/2s, 1/1.5s)	0.1 lx (Color)	
IR-Cut OFF (1/4s, 1/3s)	0.02* lx (B/W*)	
w/ IR Illuminator (option)	(0 lx [B/W*])	
In 3m Condition	(F1.6(w), 300mV)	
Sync System	Internal/Line-Lock (60Hz)	Internal/Line-Lock (50Hz)
<b>Power</b>		
Supplied Voltage	9V DC	
Supplied Current	340mA w/ WDR	
Max.	540mA w/ WDR	
Consumption	3.1W (4.6W) w/ WDR	
Dimensions (W x H x D)	50 x 60 x 89.5mm (w/ M-case)	
Weight	230g (w/ M-case)	
No. of Connectors	1 (9-pin) (Flat Cable)	
Operating Temp (Recommended)	0° - 60° (0° - 40°C)	

\* Default Mode (Design and Specifications are subject to change without notice)

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