





## Red Super Eye HD-Multi

Detail Enhancement Filter System

## Full HD 1080i or NTSC/PAL SD format

Automatic Operation (No need to set parameters, but intensity level can be changed.)

Works with live and recorded video (Real-Time processing)

Front Panel Control and External Controls (Various serial or Ethernet communications configurations)

RSE-HDSD-S is a unique digital image improvement filter with a broad range of applications in surveillance, research and imagery analysis. It works with existing video recording networks, as well as for real-time viewing of imagery as it is collected. The device will enhance the detail of subjects in any given image captured under unfavorable climatic and lighting conditions, including fog, snow, rain, low light, strong backlight, sun glint, and many other circumstances where the image lacks sufficient viewable details in all or portions of a video frame.

The algorithm of "Detail Enhancement Filter" (DEF) on a chip can be used on surveillance and security camera systems, biomedical images, surface inspections, and any other application that incorporates pixels from a digital camera. The DEF Processing takes advantage of the complete dynamic range of the image and enhances both the surface and edge detail to exact image information from the dark and bright regions of the image. The DEF algorithm simultaneously processes and extracts information from both the over and under exposed regions of an image to reveal details contained in the picture, but are not viewable. The image sharpening and enhancement is automated and requires no additional user configuration to adjust for varying image conditions such as fog or darkness however, the operator has the option to control the blend of the original and processed images to regulate the level of enhancement required to produce a clear image.

## RSE is a Plug and Play addition to existing video collection and monitoring systems







Original image

Integrating into your

Red Super Eye HD-Multi

Recorder and Monitor

Front Panel Control

External Controls,
And Remote Controller

Model Number: RSE-HDSD-S				
Input / Output	Image	3 Type Connectors (1 Channel)		
	Signal Format	NTSC/PAL	HDMI	HD-SDI
	Signal Type	$1 \text{Vpp} / 75 \Omega$	HDMI 1.4	SMPTE292M
	Connector	BNC	HDMI	BNC
		(1 input / 1 output)	(1 input / 1 output)	(1 input / 2 output + 1 thru)
	Resolution	NTSC: 720 x 480	1920 x 1080 (60i, 50i, 30p, 25p)	1920 x 1080 (60i, 50i, 30p, 25p)
		PAL: 720 x 576	1280 x 720 (60p, 50p)	1280 x 720 (60p, 50p)
Control	External Control	RS232C, RS422/485, Ethernet		
	Connector	Dsub9p, Phoenix1803303, RJ-45		
Front Panel	Button	DEF: ON/OFF Color enhancement: ON/OFF		
	Knob	DEF: Intensity (16 steps) Color enhancement: Intensity (16 steps)		
Image Processing	Valid Pixels (Max)	1920 x 1080 (interlace)		
	Throughput	1/60 sec per a field (Real-Time)		
	Delay time	$1{\sim}2$ fields (DEF delay time: less than 1 field, NR delay time: 1 field)		
Capture	Media	microSD, microSDHC (Max 32GB) File format: JPEG		
	Recording	Original and processed image outputting		
Environment	Temperature range	0°C - 40°C (Normal: -20°C - 65°C)		
	Humidity range	10% - 80%RH <noncondensing> (Normal: 5% - 95%RH <noncondensing>)</noncondensing></noncondensing>		
Component	Dimensions/Weight	W: 370mm x D: 171mm x H: 61mm Weight: 2.5kg		
	Power	Power: DC12V±10%, 3.8A, (AC adaptor: 100-240VAC 50/60Hz DC12V 40W)		
	Rack mount adapters	2U		

Sales / Development company:

## INFOTECH INC. of Japan

15-2, Doyamacho, Kita-ku, Osaka 530-0027 Japan TEL: +1 (6) 6360-4557 FAX: +1 (6) 6360-4549

WEB: http://www.infotech-japan.co.jp E-mail: contact@infotech-japan.co.jp