



LED Multi *SeaCam*[®]

**B&W, LOW LIGHT
B&W, COLOR OR LOW
LIGHT COLOR**

**INTEGRATED
VARIABLE LED
ILLUMINATION**

**4000 METER DEPTH
RATING**

TITANIUM HOUSING

**SCRATCH-RESISTANT
SAPPHIRE PORT**



The LED Multi *SeaCam*[®] is the latest evolution of DeepSea's proven Multi *SeaCam*[®] camera line. This product mates our proven imaging platform, with a powerful LED illumination system. While developed primarily as a manipulator camera for the ROV community, users will undoubtedly find a variety of applications for this versatile product. With camera and lights in one compact package, the possibilities are endless.

As with the standard Multi *SeaCam*[®], this camera can be delivered in black & white, low light black and white, color or with a new highly sensitive color model. All varieties of the LED Multi *SeaCam*[®] are available with a titanium (4000 meter rating) housing, and the same, robust, 4-pin connection as our other Multi *SeaCams*[®]. As a result, these versital cameras do not require any special cables or hardware, and can work with existing systems. (Other connectors available upon request.)

A ring of 24 ultra bright LED lights is located behind a scratch-resistant sapphire port providing variable illumination for close-up inspection applications, eliminating the need for separate lighting. The Multi *SeaCam*[®] is one of the toughest, most durable and reliable cameras in the underwater industry. By integrating rugged LED lights, DeepSea has extended the capabilities of this proven product.

All camera versions come with DeepSea's acclaimed wide angle, fixed focus optics.

LED Multi SeaCam[®] Specifications

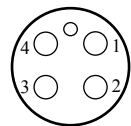


	LED Multi SeaCam [®] 1055	LED Multi SeaCam [®] 1065	LED Multi SeaCam [®] 2055	LED Multi SeaCam [®] 2065
MECHANICAL	Black and white	Low light Black and White	Color	Low Light Color
Housing:	Titanium	Titanium	Titanium	Titanium
Port:	Sapphire	Sapphire	Sapphire	Sapphire
Outer Diameter:	4.74 cm (1.87 in.)	4.74 cm (1.87 in.)	4.74 cm (1.87 in.)	4.74 cm (1.87 in.)
Overall Length:	12.95 cm (5.10 in.)	12.95 cm (5.10 in.)	12.95 cm (5.10 in.)	12.95 cm (5.10 in.)
Weight in Air:	459 g (16 oz.)	459 g (16 oz.)	459 g (16 oz.)	459 g (16 oz.)
Weight in Water:	112 g (4 oz.)	112 g (4 oz.)	112 g (4 oz.)	112 g (4 oz.)
OPTICAL				
Lens:	2.8 mm, f2.8	5 mm, f2.8	2.9 mm, f1.8, wide angle	3.0 mm, f2.0, wide angle
Focus:	Fixed focus, wide angle	Fixed focus	Fixed focus, wide angle	Fixed focus, wide angle
Depth of Field:	10 cm (4 in.) to infinity	30 cm (12 in.) to infinity	10 cm (4 in.) to infinity	10 cm (4 in.) to infinity
Field of View in Air:	106 deg.(H) x 78 deg.(V) x 132 deg.(D)	77 deg.(H) x 56 deg.(V) x 98 deg.(D)	105 deg.(H) x 78 deg.(V) x 130 deg.(D)	95 deg.(H) x 75 deg.(V) x 130 deg.(D)
Field of View in Water:	80 deg.(H) x 59 deg.(V) x 98 deg.(D)	57 deg.(H) x 45 deg.(V) x 71 deg.(D)	79 deg.(H) x 59 deg.(V) x 98 deg.(D)	75 deg.(H) x 60 deg.(V) x 85 deg.(D)
VIDEO				
Image Sensor:	1/3-inch CCD image sensor	1/2-inch CCD image sensor	1/3-inch CCD image sensor	1/3-inch CCD image sensor
Number of Pixels:	537 (H) x 505 (V) (EIA) ; 537 (H) x 595 (V) (CCIR)	811 (H) x 508 (V) (EIA) ; 795(H) x 596 (V) (CCIR)	768 (H) x 494 (V) (NTSC); 752 (H) x 582 (V) (PAL)	537 (H) x 505 (V) (NTSC); 537 (H) x 597 (V) (PAL)
Resolution:	400+ TV lines horizontal	570 TV lines horizontal	460 (H) x 400 (V) (NTSC); 450 (H) x 450 (V) (PAL)	400+ TV lines horizontal
Scene Illumination:	0.27 Lux at f2.8	0.01 Lux at f2.8	8 Lux at f1.8	1.1 lux
Signal to Noise:	More than 45 dB (AGC off)	46 dB (AGC off)	50 dB (AGC off)	More than 45 dB
Video Output:	1.0 volt peak-to-peak at 75 ohm	1.0 volt peak-to-peak at 75 ohm	1.0 volt peak-to-peak at 75 ohm	1.3 volt peak-to-peak at 75 ohm
Video Format:	EIA (RS170), CCIR	EIA (RS170), CCIR	NTSC, PAL, composite standard, (Y/C optional)	NTSC, PAL, composite standard
ELECTRICAL				
Input Power	Camera 11-30 volts DC Below 14 volts DC, the LED output may be diminished	Camera 11-30 volts DC Below 14 volts DC, the LED output may be diminished	Camera 11-30 volts DC Below 14 volts DC, the LED output may be diminished	Camera 11-30 volts DC Below 14 volts DC, the LED output may be diminished
Current:	Camera 110 mA LED's, 0-250mA Total max 360mA	Camera 160 mA LED's, 0-250mA Total max 410 mA	Camera 300 mA LED's, 0-250mA Total max 550 mA	Camera 200 mA LED's 0-250 mA Total max 450 mA
ENVIRONMENTAL				
Depth:	4,000 meters	4,000 meters	4,000 meters	4,000 meters
Operating Temperature:	-20 deg.C to +40 deg.C	-10 deg.C to +40 deg.C	-10 deg.C to +40 deg.C	-30 deg.C to +40 deg.C
Storage Temperature:	-30 deg.C to +70 deg.C	-30 deg.C to +70 deg.C	-30 deg.C to +70 deg.C	-30 deg.C to +70 deg.C

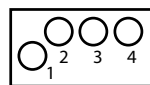
Rev.02/08/05

ELECTRICAL

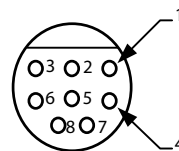
Pin-out:



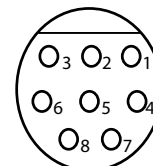
BH4MP
1 = Ground
2 = Power
3 = Video
4 = Not Used



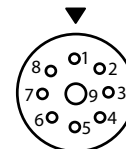
LPBH4 MP
1 = Ground
2 = Power
3 = Video
4 = Not Used



IE55-1508-BCR
Or
B5507-1508
1 = Ground
2 = Power
3 = Video
4 = Not Used
5 = Not Used
6 = Not Used
7 = Not Used
8 = Not Used



IE55-2008-BCR
Or
B5507-2008
1 = Ground
2 = Power
3 = Video
4 = Not Used
5 = Not Used
6 = Not Used
7 = Not Used
8 = Not Used



MSAJ-9-BCR
1 = Power
2 = Ground
3 = Video
4 = Not Used
5 = Not Used
6 = Not Used
7 = Not Used
8 = Not Used
9 = Not Used



Specifications subject to change without notice

DEEPSEA POWER & LIGHT • 4033 Ruffin Road • San Diego, CA 92123-1813 USA • TEL (858) 576-1261 • FAX (858) 576-0219

http://www.deepsea.com • info@deepsea.com

revised: 05/15/09 MDG