Product Release Information No. 490

UCL-90 M67/UCL-90 LD Underwater Close-up Lens

INON INC. is pleased to announce official release of powerful yet user-friendly underwater close-up lenses <code>[UCL-90 M67]</code> (screw mount type)/<code>[UCL-90 LD]</code> (28LD compatible bayonet type) on <code>[December 27th, 2017]</code>. The UCL-90 series is designed to use solely underwater (*1) to acquire high quality image from its compact body thanks to HR glass providing long working distance and widely supports from a macro lens for full frame SLR system to a compact digital camera.

- (*1) This lens is designed solely for underwater use and using on land will not magnify a subject and will have distortion on image edge or or vignetting etc.
- 「UCL-90 M67」 Underwater Close-up Lens
 - --Release date: December 27th, 2017
 - --JAN code: 456212143 858 3
- 「UCL-90 LD」 Underwater Close-up Lens
 - --Release date: December 27th, 2017
- --JAN code: 456212143 859 0



「UCL-90 M67」



「UCL-90 LD」



Optional accessories are same as <code>[UCL-67 M67]/[UCL-67 LD]</code>. In conjunction with release of this new lens, those accessories have changed their names and JAN/EAN codes as below.

• [Lens Adapter Ring for UCL-67/90]

--Available in the market. *Identical with 「Lens Adapter Ring for UCL-67」 Product name and JAN/EAN code has been changed from December 26th, 2017 shipment

: 456212143 860 6 --JAN code

• [M67 Flip Mount Adapter for UCL-67/90]

-- Available in the market. *Identical with \(\text{M67 Flip Mount Adapter for UCL-67} \) Product name and JAN/EAN code has been changed from December 26th, 2017 shipment

--JAN code : 456212143 861 3



[Lens Adapter Ring for UCL-67/90]

Right: 「UCL-165M67」 stacked on 「UCL-90 M67」 via 「Lens Adapter Ring for UCL-67/90」

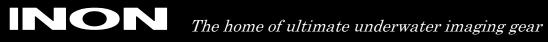


[M67 Flip Mount Adapter for UCL-67/90]

Right: [M67 Flip Mount Adapter for UCL-67/90] installed on [UCL-90]

• Please refer below link pages for detail of <code>[UCL-67 M67]</code> / <code>[UCL-67 LD]</code> close-up lenses that delivers more magnification at +15 diopter.

UCL-67 M67 http://www.inon.jp/products/lens/ucl67m67/top.html http://www.inon.jp/products/lens/ucl67ld/top.html UCL-67 LD



■Product features

High Power +11 Close-up Lens

• The maximum magnification when using this lens with 100mm range macro lens for a full frame SLR system is x2.23 (area ratio x4.98) (*2) which delivers middle power in between [UCL-67 M67/UCL-67 LD] (+15 diopter) and [UCL-165M67/UCL-165 LD] (+6 diopter). High power close-up lens with underwater focal length of 90mm which is equivalent to +11 diopter.

Long Working Distance for Comfortability

• While the UCL-90 delivers high magnification, it still offers long working distance. When using with 100mm range macro lens for a SLR system, working distance (from front edge of the lens surface) is 69mm (*2) at minimum focusing distance.

High Quality All Focus Range

• Optically designed sole use underwater(*1) to effectively suppress aberrations in all focus range to deliver high contrast and sharp images despite of shooting distance.

HR Glass for Compact Body

• Using HR glass makes lens size compact supporting wide range of camera system from 100mm range macro lens for SLR to compact digital camera (*3). Also compact lens body has less limitation of lighting enabling you to use wide variety of lighting techniques.

Achromat Lens

• The lens is consists of 3 elements in 2 groups and effectively suppresses chromatic aberration by using achromat lens inside. Also anti-reflection coating on all lens surfaces suppresses flare/ghost.

Stack Another M67 Lens

• Optional [Lens Adapter Ring for UCL-67/90] allows to stack another INON M67 series close-up lens ([UCL-165M67]/[UCL-330] on the front side of UCL-90 for even higher magnification (*4).

Compatible with M67 Flip Adapter

• Optional 「M67 Flip Mount Adapter for UCL-67/90」 is available to replace with original M67/LD mount to attach the lens on flip lens holder from other manufacture such as Nauticam flip holder etc.

(*Not compatible with any flip lens holder with 57mm or less diameter such as SAGA etc. Use the lens as it is without using this optional M67 Flip Mount Adapter for UCL-67/90)

(*Original lens mount is replaceable by a customer using precision Philips screw driver to unscrew fixing screws)

『UCL-90 M67』 (*1)

Outer diameter/length: ϕ 70mm(2.76in.)/36.4mm(1.43in.)

Weight: [Air] 322g(11.4oz)/[Underwater] 214g(7.5oz)

Mount system: INON M67 Mount

Depth rating: 60m (197ft)

Material/surface finishing: Corrosion-resistant aluminum alloy/rigid black alumite

Lens material/coating: Optical glass/anti-reflection coating

Construction: 2 groups 3 elements Focal length[Underwater](*5): 90mm(3.54in.)

[UCL-90 LD] (*1)

Outer diameter/length: ϕ 75.2mm(2.96in.)/36.4mm(1.43in.)

Weight: [Air]311g(11.0oz) / [Underwater]202g(7.1oz)

Mount system: INON 28LD Mount

Depth rating: 60m(197ft)

Material/surface finishing: Corrosion-resistant aluminum alloy/rigid black alumite, POM etc.

Lens material/coating: Optical glass/anti-reflection coating

Construction: 2 groups 3 elements Focal length[Underwater](*5): 90mm(3.54in.)



Lens Adapter Ring for UCL-67/90

Outer diameter/length: ϕ 71.2mm(2.80in.)/15.6mm(0.61in.)

Weight [Air]: 20g(0.7oz)

Mount system (front): **INON M67 Mount**

Material/surface finishing: Corrosion-resistant aluminum alloy/rigid black alumite

M67 Flip Mount Adapter for UCL-67/90

Outer diameter/length: φ 69mm(2.72in.)/7.0mm(0.28in.)

Weight [Air]: 18g(0.6oz)

Mount system: M67 screw mount

Material/surface finishing: Corrosion-resistant aluminum alloy/rigid black alumite

- (*2) When using for AF-S VR Micro-Nikkor 105mm f/2.8G IF-ED
- (*3) Usable zoom range is between 60mm and 100mm (35mm film equivalent). Beyond this range, there will be vignetting at wider side and deteriorated image quality at telephoto side.
- (*4) Any other higher magnification close-up lens, [UCL-67 M67] or [UCL-100M67] (discontinued) <u>are</u> not recommended due to degradation of image quality.
- (*5) Focal length of \[\text{UCL-90 M67} \] \(/ \text{UCL-90 LD} \] standalone and not combined focal length with camera's master lens.

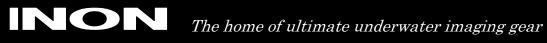
Compatible lens

- 60mm-100mm range macro lens for full-frame digital SLR (*6)
- 40mm-60mm range macro lens for APS-C (*6)
- · 45mm-60mm range macro lens (*6), standard zoom lens (*3) for mirrorless camera
- Compact digital camera with maximum optical zoom 5x or less (*3).
- (*6) Vignetting may be observed using for a housing system which has significantly long distance between camera master lens and port lens surface or this product and port.

Set-up example



「UCL-90 M67」on Olympus「E-M1 Mark II」/「PT-EP14」via lens port 「PP0-EP03」





[UCL-90 LD] on Canon [PowerShot G7 X Mark II]/[WP-DC55] via INON [LD Lens Adapter Base DC54/55]



 $\lceil UCL$ -90 M67 \rfloor on SONY $\lceil DSC$ -RX100M5 \rfloor / $\lceil MPK$ -URX100A \rfloor

■ 『UCL-90 M67』 Sample images





--Subject

: Japanese inflator filefish

-- Equipment

: Canon EOS6D/X-2 for EOS6D, EF100mm F2.8 Macro USM, S-2000 Strobe x2

--Photo data

: [Left] Without close-up lens

Manual exposure mode (F11, 1/60, ISO1600), S-2000: Manual, photo taken at minimum focusing distance

[Right] With UCL-90 M67

Manual exposure mode (F11, 1/60, ISO1600), S-2000:Manual, photo taken at

minimum focusing distance

--Photo by: R. Hattori (INON INC.) at "Wannai", Osezaki, Shizuoka, Japan







--Subject : Redfin velvetfish

-- Equipment : Canon EOS6D/X-2 for EOS6D, EF100mm F2.8L Macro USM, S-2000 Strobe x2

--Photo data :[Left] Without close-up lens

Manual exposure mode (F9, 1/200, ISO400), S-2000: S-TTL Auto mode,

photo taken at minimum focusing distance

[Right] With UCL-90 M67

Aperture priority mode (F9, 1/200, ISO400), S-2000: S-TTL Auto,

photo taken at minimum focusing distance

--Photo by: R. Hattori (INON INC.) at Kawana, Shizuoka, Japan



--Subject : Emperor shrimp

-- Equipment : Canon EOS6D/X-2 for EOS6D, EF100mm F2.8 Macro USM, S-2000 Strobe x2

--Photo data : Manual exposure mode (F16, 1/200, ISO200), S-2000: S-TTLAuto, photo taken at minimum focusing

distance

--Photo by: R. Hattori (INON INC.) at "Sentan" Osezaki, Shizuoka, Japan

Relative Information

- 「M67 series attachment lens [UCL-330 Close-up Lens]] http://www.inon.jp/products/lens/ucl330/top.html
- 「M67 series attachment lens 『UCL-165 M67 Close-up Lens』」 http://www.inon.jp/products/lens/ucl165m67/top.html
- Lens options <u>http://www.inon.jp/products/lens/option.html</u>

December 25th, 2017 INON INC.

*Press release information is as of December 25th, 2017 and subject to change without prior notice.

