HOLGA

CLOSE-UP LENS SET - CLS-1 (CL-120, CL-250 & CL-500) and MACRO LENS SET - MLS-1 (ML-30 & ML-60)

1 Introduction

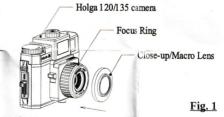
This set of lenses are designed for use on both the Holga 120 and Holga 135 series of cameras. The set includes altogether five lenses as follows -

to the second se	Model	Focal Length
(a) Close-Up Lens Set (CLS-1)	CL-120	120 mm
	CL-250	250 mm
	CL-500	500 mm
(b) Macro Lens Set (MLS-1)	ML-30	30 mm
	MI -60	60 mm

With these lenses, pictures can be taken at much closer distances and they open up another world to challenge one's imagination in creative photography.

2 Installation & Removal

To Install - The lenses are made of plastic material with sufficient elasticity which allows them to be slid over the lens bezel of the camera with great ease. They will also hold on to the bezel firmly and will not slip off easily.



To Remove - Simply hold the two sides of the lens and pull gently in a parallel manner.

3 A Few Tips - Shooting with Close-Up & Macro Lenses

When using these lenses, pay attention to the following -

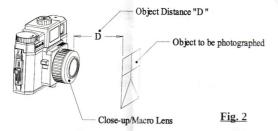
(a) Focus Position

The focus ring of the camera must be set for infinity.

(b) Object Distance

"Object Distance" refers to the distance from the surface of the lens to the surface of the object to be photographed (distance "D" as demonstrated in Fig. 2 below).

The object distance manageable by the lens is determined by the local length of the lens. Refer to the focal length information in Section 1 above to, depending on the object distance, decide which lens to use and what object distance to set.

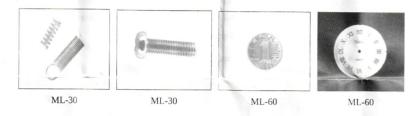


Tool to **Help** - It would help if a measuring tape or measuring rods cut to the local lengths of the lenses are made available to set the exact object distances needed.

(c) Accuracy of Object Distance

The shorter the focal length of the lens, the more accurate the object distance has to be. Therefore, when the lenses with shorter focal lengths are used, there must not be much difference between the actual object distance and focal length of the lenses. Otherwise, the picture will be out of focus and unclear.

4 Some Examples of Photographs Taken with the Close-Up/Macro Lenses



5 Related Accessories Available Separately

When Close-Up/Macro Lenses are used, due to the closeness between the object and the camera, two problems are usually encountered, namely -

- insufficient lighting, particularly in the centre of the object; and
- instability caused by vibration as slight as that resulting from breathing.

To help overcome these problems, the following specially designed products are available.

(a) Holga Macro Light MCL-30/60

This is a ring light that can be used together with either the ML-30 or ML-60 Macro Lenses. Fluorescent lamps are used to ensure even illumination.

(b) Holga Close-Up Light CFL-500

This is also a ring light but, as it uses flash technology, it can cover up to an object distance of 500 mm.

(c) Holga Close-Up Stand CCS-250

This is a stand for mounting the camera. The distance from the object is adjustable from 60 to 250 mm. This can also be used as a copy stand and is compatible with cameras other than Holga in most cases.