## $360^{\circ}$ rotating viewer (option)

(d Although the Ergo stand is illustrated, this procedure is identical for all stands.
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The $360^{\circ}$ rotating viewer is a highly precise and heavy accessory. Make sure it is sufficiently supported during assembly/disassembly to avoid damage or misalignment.

The $360^{\circ}$ rotating viewer includes an integral ringlight and objective lens.

- While holding the viewer 1 in position below the zoom unit, use the Allen key supplied to secure the integral objective lens by tightening the grub screw (2).
- See below for connecting the $360^{\circ}$ rotating viewer.


## Connecting the $360^{\circ}$ rotating viewer

- Connect the cable from the back of the rotating viewer 1 to the ring-light socket on the back of the EVO Cam 2
- The illumination is controlled by the Ringlight illumination control 3 on the front of EVO Cam.



## Using the $360^{\circ}$ rotating viewer

Allows the operator to view a subject from an angle of $34^{\circ}$ from vertical，which can be rotated through to $360^{\circ}$ enabling a complete view of 3－dimensional subjects．
－The $360^{\circ}$ rotating viewer can be switched between direct and $360^{\circ}$ rotating view by swivelling the viewer into the designed position．
－Once in position，the viewer can be manually rotated by turning the knurled ring on the viewer to provide
 a rotating view of the subject．

## Operating techniques

When properly set up，and when viewing in the $360^{\circ}$ rotating mode，the centre of the image should be sharply in focus． The fringes of the field of view will not be as sharp as the centre due to the angle of the optical paths．At the lowest magnification settings，it is normal to have a dark area at the edge of the field of view．This is also due to the angle of the optical paths and diminishes as the zoom magnification is brought up from its minimum．

## Procedure：

－In the menu set the Lens power to the 1．Oav setting．
－Swing the viewer to the direct view position．
－Rotate the zoom knob fully to adjust for maximum magnification．
－Adjust the focus knob as required to get a sharp image of the subject．The system is now parfocal．The zoom magnification can be adjusted to any position and the image will stay clearly in focus．
－Swing the viewer to the $360^{\circ}$ viewing position．The centre of the image will be in focus on the subject．
－To view a section of the subject that is not in focus，move the subject into the focused area．
The $360^{\circ}$ rotating viewer is now set up and ready for use．
Optical data

| $360^{\circ}$ rotating view |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Zoom range | Magnification | Working <br> distance | Field of view at min． <br> zoom | Field of view at max． <br> zoom | Viewing angle |  |
| $5.3: 1^{*}$ | $19 \times-150 x^{* *}$ | 35.5 mm | $25.7 \times 22.1 \mathrm{~mm} * * *$ | $2.6 \times 2.2 \mathrm{~mm}$ | $34^{\circ}$ from vertical |  |
| Direct view |  |  |  |  |  |  |
| $5.3: 1$ | $28 \mathrm{x}-151 \mathrm{x}$ | 56.5 mm | $19.7 \times 11.2 \mathrm{~mm}$ | $1.6 \times 0.9 \mathrm{~mm}$ | - |  |

＊in the centre of the image
＊＊not displayed on screen
＊＊＊some vignetting is present
（！The oblique view gives a different perspective in the image so that the proportions of the image and magnification change across the image field．

