

# Telephotography

**Telephotography using SLR cameras (digital or film).** In this system the camera lens is substituted for the telescope + telephotoadapter or telescope + eyepiece + photoadapter. To convert your GS fieldscope to a 750mm<sup>1</sup>/f.11.3 telephoto lens, you will need a 40215 telephotoadapter. Alternatively connect a suitable push fit photoadapter to your viewing eyepiece.<sup>2</sup> A T mount is required to connect the assembly to the camera body.

Notes. Focusing is facilitated on the telescope. Camera may need to be operated in 'MANUAL' mode with shutter locks disengaged where necessary. The high magnification to aperture ratios result in slower shutter speeds compared with conventional telephoto lenses so ISO 400+ settings are suggested when using D-SLRs. For 35mm film SLRs 400/800ASA film is recommended. If possible use a cable release or remote control to reduce camera 'shake' when operating the shutter.

<sup>1</sup>This is an approximate figure based on 35mm SLR cameras. Many D-SLRs use different sized image sensors compared to 35mm so an equivalent telephoto conversion figure must be calculated separately.

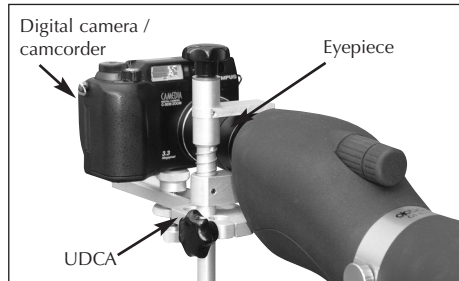
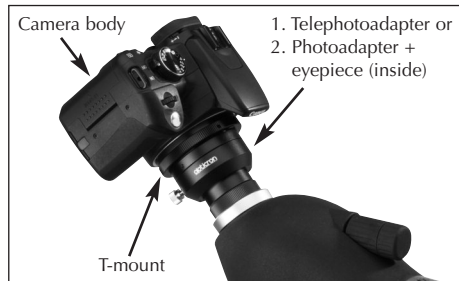
<sup>2</sup>For information on push fit photoadapters visit our TELEPHOTOGRAPHY page at [www.opticron.co.uk](http://www.opticron.co.uk)

## Telephotography using digital compact cameras and camcorders.

In this system the camera is positioned up against the eyepiece of the telescope using the 40849 Universal Digital Camera Adapter. To get the best results:

1. Use any of the following eyepieces; 40810G, 40812G, 40930G or zoom eyepieces 40933G, 40862G, 40935G or 40936G on their lowest magnification settings.
2. Use a camera/camcorder with a lens diameter as small as possible.

**For more information contact Sales on +44 (0)1582 726522**



# opticron

## GS Telescopes User Guide



**Models**  
**GS 665 GA**  
**GS 665 GA/45**  
**GS 665 GA ED**  
**GS 665 GA ED/45**

## Getting Started

Your GS telescope will open up a whole range of new and exciting impressions, whether for general use or specialist study. To focus at different distances, simply turn the main focus wheel in conjunction with the 9:1 ratio accurate focus adjuster until the image being viewed becomes sharp. To minimise image shake caused by high magnification the instrument should be supported using a suitable tripod or mount connected via the tripod socket located on the tripod sleeve. If the eyepiece being used has a fold down or retractable rubber eyecup it should be used in the down position when wearing glasses. This ensures the maximum available field of view is obtained. Be sure to return the eyecup to the up position if you or anybody else wants to view without glasses. The retractable lens hood should be extended when viewing in bright sunlight.



## Care & Cleaning

To clean outer glass surfaces of any eyepiece and the objective lens, gently remove excess dirt and dust using compressed air or a blower brush.

Caution. Hard and persistent rubbing of dirty surfaces can cause abrasive scratches on the surface of the glass which may distort viewing.

Breathe on exposed glass surface and then wipe with an optical cleaning cloth (code 30277) in a circular motion until the surface is clean again.

Do not attempt to dismantle the instrument as this will invalidate the guarantee.

Whenever possible store in a stable dry atmosphere away from moisture. For extra protection, use the gift box or one of the optional cases available.

## Specifications & Eyepieces

| Specifications | 665   | 665/45 | 665ED | 665ED/45 |
|----------------|-------|--------|-------|----------|
| Product Code   | 40960 | 40961  | 40962 | 40963    |
| OG Dia (mm)    | 66.5  | 66.5   | 66.5  | 66.5     |
| Min Focus (m)  | 3.8   | 3.8    | 3.8   | 3.8      |
| Length (mm)    | 326   | 326    | 326   | 326      |
| Weight (g)     | 976   | 980    | 1049  | 1053     |

| EYEPIECES      | • HR/HR2 |        |        |        |         |
|----------------|----------|--------|--------|--------|---------|
| Product Code   | 40812G   | 40930G | 40931G | 40932G | 40933G* |
| Magnification  | 18x      | 21xWA  | 27xWA  | 38x    | 18-54x  |
| Field/1000m    | 46       | 49     | 39     | 18     | 38/20   |
| Eyerelief (mm) | 18       | 18     | 17     | 20     | 18-14   |

\* 40934G eyepiece adapter required

| EYEPIECES      | • SDL/SDLv2 |        | • HDF  |        |        |        |        |        |        |
|----------------|-------------|--------|--------|--------|--------|--------|--------|--------|--------|
| Product Code   | 40935G      | 40936G | 40810G | 40809G | 40858G | 40859G | 40860G | 40861G | 40862G |
| Magnification  | 16-48x      | 16-48x | 18xWW  | 25xWW  | 35xWW  | 40xWA  | 60xWA  | 80x    | 16-48x |
| Field/1000m    | 40/22       | 41/25  | 50     | 47     | 35     | 29     | 19.5   | 12.5   | 42/20  |
| Eyerelief (mm) | 27-22       | 20-18  | 22     | 18     | 17     | 15     | 15     | 16     | 22-17  |

## Waterproof Cases

**Stay-on-the-scope waterproof in Black.** Water resistant multi-layer padded cases individually designed to fit and protect the instrument whilst connected to a tripod/clamp and in use. Includes removable end caps and adjustable padded carry strap.

**Stay-on-the-scope waterproof in Khaki Green** (angled models only). As Black models but featuring a zippered prism housing section providing easier access when changing eyepieces, focus flap retention stud allowing better access to the focus wheel plus deluxe neoprene carry strap for extra comfort.

**40847 Traveller semi rigid case** (not illus). Manufactured from water resistant material with central zip fastener, adjustable straps & loop attachments to carry a tripod.

