

# 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 choose an ISO setting of 400. For 35mm SLRs 400 ASA 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. D-SLR cameras use different sized image sensors compared to 35mm so an equivalent telephoto conversion figure must be calculated separately.

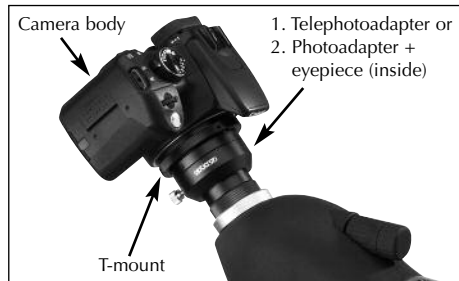
<sup>2</sup> For information on push fit photoadapters visit our Telephotography pages at [www.opticron.co.uk](http://www.opticron.co.uk)

## Digi-scoping with digital compact cameras and camcorders



Shooting high magnification photos and video through your telescope is possible if you have a suitable camera or camcorder. To find out how suitable or not your camera is for digi-scoping, position it up to the viewing eyepiece and see if an image appears on the screen. You may have to position the camera a few mm away from the eyelens of the eyepiece and increase the zoom to get a full frame image.

The most suitable cameras are those with a lens diameter of 20mm or under and zoom range no greater than 5x. To get the best results you will also need to fit a low magnification wide angle eyepiece to your telescope or use a zoom eyepiece set at minimum. To find out more about bespoke digi-scoping kits and universal mounts and brackets visit the Telephotography pages at [www.opticron.co.uk](http://www.opticron.co.uk) or 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**

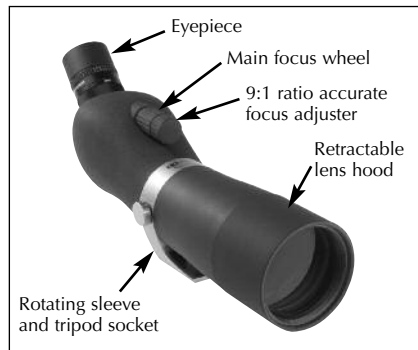
Opticron, Unit 21, Titan Court, Laporte Way, Luton, Beds LU4 8EF UK.

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GS6650513

## 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 surface of the eyepiece and objective lens, gently remove excess dirt and dust using a compressed air device or 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.

**WARNING.** Never under any circumstances use a telescope to view the sun. Doing so will cause serious damage to your eyes.

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	• SDLv2	• HDF	• HR/HR2							
Product Code	40936G	40810G	40809G	40858G	40860G	40861G	40862G	40930G	40931G	40933G*
Magnification	16-48x	18xWW	25xWW	35xWW	60xWA	80x	16-48x	21xWA	27xWA	18-54x
Field/1000m	41/25	50	47	35	19.5	12.5	42/20	49	39	38/20
Eyerelief (mm)	20-18	22	18	17	15	16	22-17	18	17	18-14

\* 40934G eyepiece adapter required

## Waterproof Cases

**Stay-on-the-scope waterproof in Black.** Water resistant multi-layer padded cases individually designed to fit each model. Protects instrument while fitted to a tripod and in use. Includes removable end caps and adjustable carry strap.

**Stay-on-the-scope waterproof in Green** (angled models only). As Black models but supplied with a fully adjustable neoprene carry strap for extra comfort.

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

