

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 ES fieldscope into a telephoto lens (ES 80 950mm/f.11.9, ES 100 1250mm/f.12.5), you will need a 40215 telephotoadapter. Alternatively connect a suitable push fit photoadapter to your viewing eyepiece.² 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.

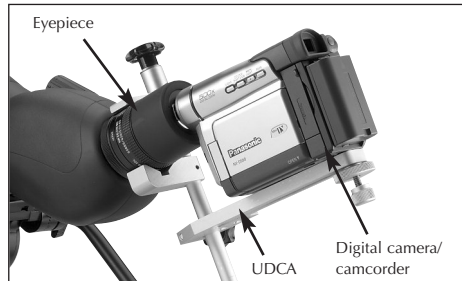
¹ This is an approximate figure based on 35mm SLR cameras. Many D-SLRs use different sized image sensors compared to 35mm so an equivalent telephoto conversion figure must be calculated separately.

² For information on push fit photoadapters visit our TELEPHOTOGRAPHY page at 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; 40810E, 40812E, 40930E or zoom eyepieces 40933E, 40862E, 40935E or 40936E 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

ES Telescopes v3 User Guide



Models

ES 80 GA SD/45

ES 80 GA ED/45

ES 100 GA ED/45

OPTICRON. PO Box 370, Unit 21, Titan Court, Laporte Way, Luton, Beds LU4 8YR UK.

© OPTICRON 2010. All equipment and specifications illustrated are subject to change without prior notification.

ES0910

Getting Started

Your ES telescope will open up a whole range of new and exciting impressions, whether for general use or specialist study. To get the sharpest picture turn the focus wheel slowly 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. These mounts are connected to the telescope tripod adapter socket located on the base of 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. Make sure it is retracted before fitting the integrated rubber objective lens cap.



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	80 SD/45	80 ED/45	100 ED/45
Product Code	40895	40890	40893
OG Dia (mm)	80	80	100
Min Focus (m)	6	6	10
Length (mm)	390	390	497
Weight (g)	1484	1591	2800

EYEPIECES	• HR/HR2				
Product Code	40812E	40930E	40931E	40932E	40933E
Magnification 80	23x	27xWA	34xWA	50x	23-69x
Magnification 100	30x	36xWA	46xWA	65x	30-90x
Field/1000m 80	38	41	33	18	29/15
Field/1000m 100	28	32	25	10	23/11
Eyerelief (mm)	18	18	17	20	18-14

EYEPIECES	• SDL/SDLv2		• HDF						
Product Code	40935E	40936E	40810E	40809E	40858E	40859E	40860E	40861E	40862E
Magnification 80	20-60x	20-60x	23xWW	32xWW	44xWW	50xWA	80xWA	100x	20-60x
Magnification 100	27-80x	27-80x	30xWW	42xWW	58xWW	67xWA	107xWA	134x	27-80x
Field/1000m 80	32/18	33/20	45	36	28	23	16	10	35/16
Field/1000m 100	25/14	26/16	33	27	20	16	12	7	29/12
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. 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.

Traveller semi rigid case (not illus). Available for 80mm models only. Manufactured from water resistant material with central zip fastener, adjustable straps & loop attachments to carry a tripod.

