

Much more than an eyepiece

HYPERION[®]-eyepieces

How to use the modular eyepiece system – illustrated instructions for the whole range of Hyperion accessories



Free case
with purchase of
7pc eyepiece set

Individually packaged
Hyperion eyepieces:



Scope of supply for each
Hyperion 68°-eyepiece (1-5):

1 dual
2" and 1 1/4"
nosepiece

2 Soft-leather bag
provides perfect
protection – takes very
little space

3 1 1/4" (31,7mm) Ø
Dust Cap

4 68° Hyperion eyepiece with
Phantom-Group[®] Coating
and two Photo-threads
M 43 and SP 54

5 Two end dust caps with
inner diameters of 48mm and 45mm

End dust caps

All Hyperion eyepieces are equipped with two dust caps which protect the eye lens side. This leaves you the choice of storing the eyepiece protected from dust with rubber eye cap folded down (especially for persons who wear glasses) or folded up.

System-threads M 43 and SP 54

The Hyperion threads are located beneath the rubber eye cap, or rather beneath the thread-protecting ring (made of high-quality, non-aging silicone rubber). The large number of Baader adapter rings allows use of the Hyperion eyepiece for (almost) every task in astronomical – and nature – photography as a high-quality projection optic or as a tele-extender.

The following pages describe in detail many of the adaptations and variations that are possible with the Hyperion system.



1 1/4" barrel with captive groove and filter thread, suitable for all 1 1/4" eyepiece-filters, as well as for the Baader 1 1/4" extension tube (#1905130)



1 System thread M43



2 System thread SP54

Variable focal lengths with the Hyperion 2" finetuning rings (FTR) 14 and 28 mm



Hyperion eyepiece with
FTR 14 and 28 mm

Hyperion eyepiece with FTR 14mm
(this combination is also portrayed in
the picture below which features the
2" mirror star diagonal)

Available combinations of Hyperion eyepieces with Finetuning Rings or 2" Baader Filter to modify the focal length and the field of view.

	Effective focal length in mm	Field-stop mm	with 14 mm FTR	with 28 mm FTR	with 14 + 28 mm FTR	with 2" Baader Filter*	without first group of lenses
Hyperion**	24.0	28.0	--	--	--	--	--
Hyperion	21.0	22.5	17.6	19.9	15.5	17.5	14.0
Hyperion	17.0	20.9	13.1	17.1	10.8	14.1	9.2
Hyperion	13.0	17.7	10.8	14.6	9.2	12.5	8.1
Hyperion	10.0	15.0	8.4	11.6	7.1	9.8	6.1
Hyperion	8.0	10.7	6.0	8.6	5.0	7.1	4.3
Hyperion	5.0	6.5	4.0	5.4	3.2	4.5	2.6



Hyperion eyepiece with built-in
2" eyepiece filter (e.g. Infrared-Blocking-Filter
2459210 A)

A variety of additional
Hyperion focal lengths can
be obtained at very moderate
prices by using our 2" Finetuning
Extension Rings 14 and 28 mm, or even
our 2" eyepiece filters. Thus an eyepiece of 5 mm focal length can be converted into one of 2.6 mm focal length – without loss of sharpness – above all, because no additional lenses are introduced into the beam, which is unavoidable when using a Barlow lens.

For marginal cost such experimentation is possible. You will discover how much your telescope can achieve, exceeding the recommended range of magnification without an additional Barlow lens. You will experience surprising results especially with refractors. With real apochromats the usable exit pupil may be considerably smaller than the literature recommends!

* Baader 2" eyepiece filter with a height of 8 mm. Yellow column of the table: focal length, Light-Grey column: diameter of the field stop
** non variable focal length

Hyperion eyepiece
with 1 1/4" barrel
unscrewed

Finetuning
2" Extension ring
28 mm # 2958228

Finetuning
2" Extension ring
14 mm # 2958214

2" Stop ring with
captive brass locking
ring and two locking
screws # 2958027

Front Hyperion lens element,
built into the 1 1/4" barrel.



Hyperion eyepiece

2" Stop ring
#2958027

Finetuning ring
14 mm #2958214

1 1/4" Hyperion
barrel with
built-in negative
lens group

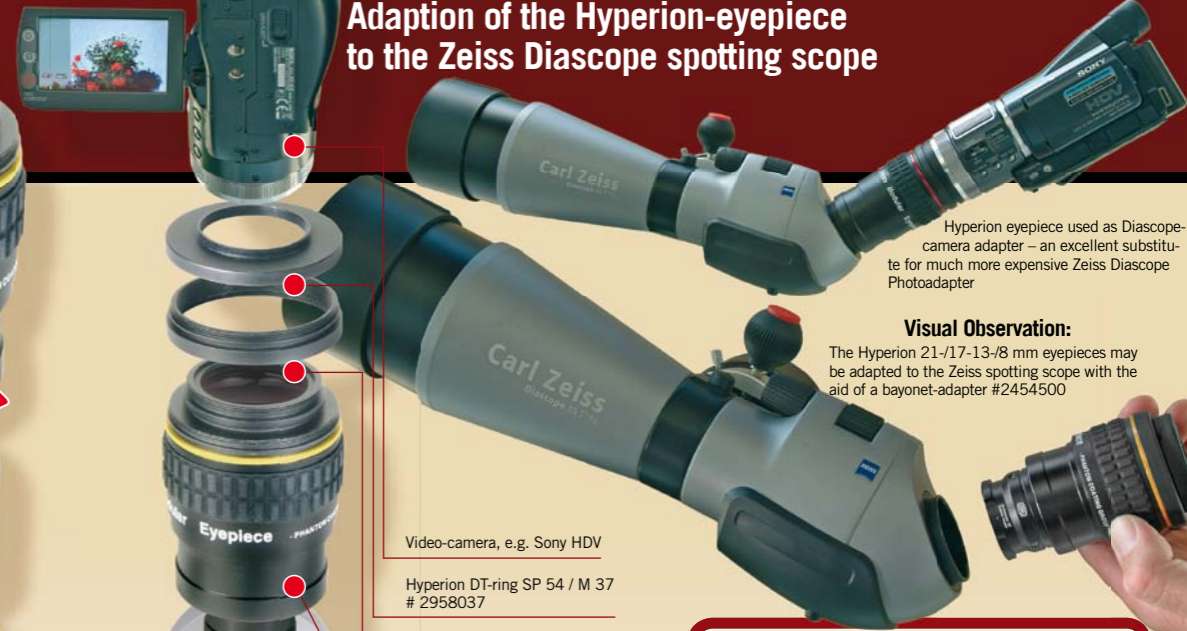
The M48 filter thread is located here!

To remove the first group of lenses,
all Hyperion eyepieces must only be
opened here (exception 24 mm).
Disassembling the eyepiece elsewhere
will void the warranty!

Combination of the Hyperion
eyepiece and the 14 mm
Finetuning Ring as well as the
2" stop ring

The stop ring prevents the eyepiece barrel
from hitting the mirror star diagonal or
prism.

Adaption of the Hyperion-eyepiece to the Zeiss Diascope spotting scope



Hyperion eyepiece used as Diascope-camera adapter – an excellent substitute for much more expensive Zeiss Diascope Photoadapter

Visual Observation:

The Hyperion 21-/17-/13-/8 mm eyepieces may be adapted to the Zeiss spotting scope with the aid of a bayonet-adapter #2454500

Video-camera, e.g. Sony HDV

Hyperion DT-ring SP 54 / M 37
2958037

Hyperion extension DT-ring 11 mm
SP 54i / SP 54 a # 2958090

Hyperion eyepiece

1 1/4" Baader Diascope bayonet-adapter # 2454500 with built-in captive brass locking ring – slipped over and fastened onto the chromium-plated eyepiece barrel

Carl Zeiss Diascope 85 T*FL

more information:
www.hyperion-okulare.de

... and if everything fails...

... for instance – if you want to use a small digital camera without lens thread for afocal projection-photography... why not use our

Baader-Microstage II Digiscoping Adapter (#2450330) – it will solve all adaptation problems!

The Baader Microstage II enables camera adaptation onto almost any telescope, spotting scope and many binoculars.

The camera support arm rotates to the side for visual aiming (with Clickstop action!). Camera remains completely adjusted and is ready for shooting the image when the support arm is clicked back into working position.

The whole family of Hyperion 68° eyepieces:



5 mm
#2454605

8 mm
#2454608

10 mm
#2454610

13 mm
#2454613

17 mm
#2454617

21 mm
#2454621

24 mm
#2454624



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We reserve all rights.

Hyperion eyepieces classical eyepiece projection

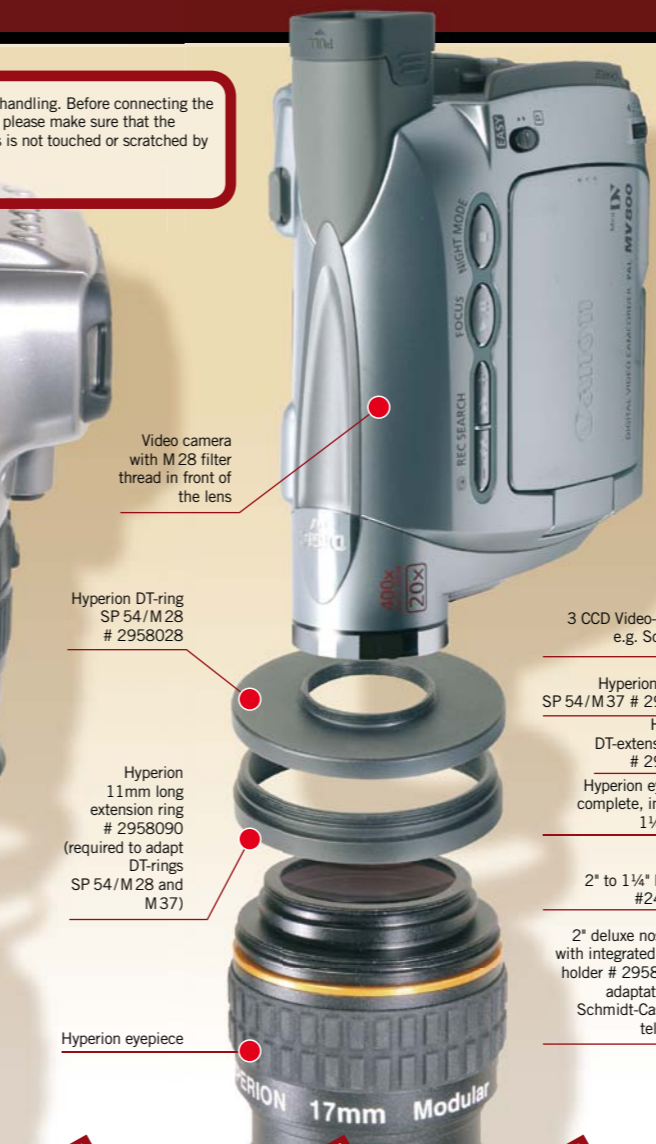
M43/T-2 adapter ring # 2958080 fits the smaller M43 system thread of the Hyperion eyepiece. Thus every Hyperion eyepiece can be used as a classical projection eyepiece. The whole range of adapter rings of our Baader Astro T-2 System® for moon- and planetary photography is available for this purpose. With eyepieces of 5 and 8 mm focal length, highest projection magnifications are easily attained.



Using SP 54 connecting rings, the objective of the camera and the Hyperion eyepiece may be connected with a minimum of separation distance.

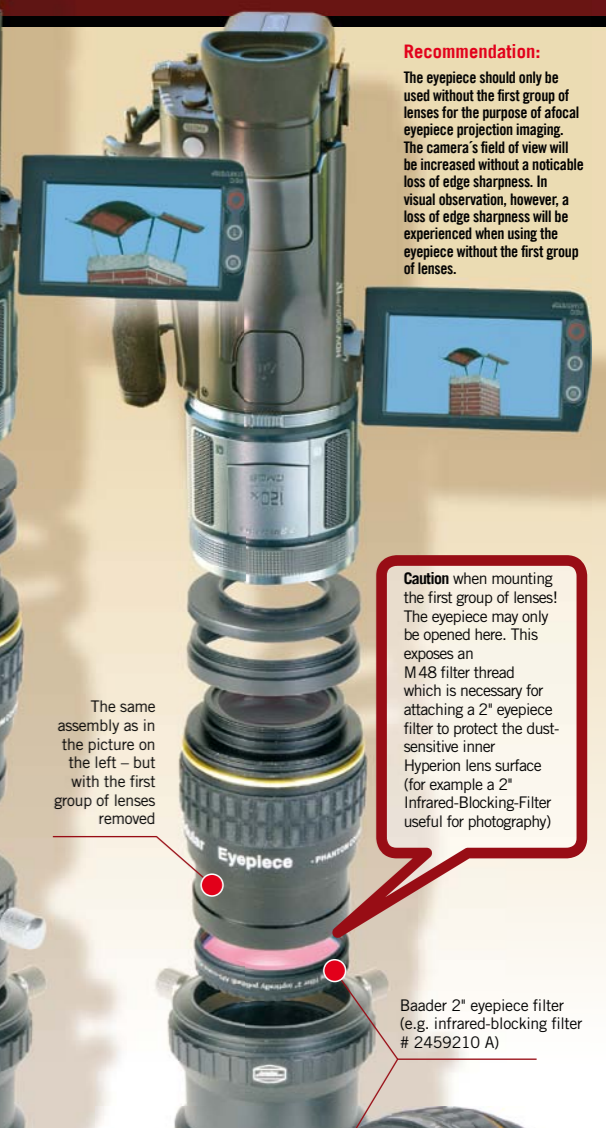
Hyperion eyepieces afocal projection with DSLR-cameras

All adaptation requires careful handling. Before connecting the eyepiece tightly to the camera, please make sure that the lens surface of the camera lens is not touched or scratched by any part of the eyepiece.



Hyperion eyepieces afocal projection with video-cameras

Recommendation:
The eyepiece should only be used without the first group of lenses for the purpose of afocal eyepiece projection imaging. The camera's field of view will be increased without a noticeable loss of edge sharpness. In visual observation, however, a loss of edge sharpness will be experienced when using the eyepiece without the first group of lenses.



Please consult our Astro-accessory list to find further adapter rings, including the Astro T-2 System®.