



---

## **Baader Eyepiece Adapters, Rings**

---

One of the unique aspects of our series of eyepiece clamps, adapters, rings, etc is their compatibility. These components are all part of **Baader Planetarium's ASTRO T-2 System™**. As a result, they have been designed to be mixed and matched as you see fit, enabling you to create a multitude of combinations that allow you to meet exactly your needs. This novel and ingenious system of interchangeable components provides an array of photo-visual reducers, multipliers, star diagonals, and a myriad of adapters, couplers, and spacers. With these matched components, practically any system can be configured to provide the highest quality visual, photo, and CCD output from your telescopes. No other system of components gives you such flexibility.

The ASTRO T-2 System™ is based around a standard T-2 thread (the same M42 T-thread used on popular camera T-adapters). By using this thread standard throughout, the system components all play together, enabling practically any configuration imaginable. For a detailed schematic overview of some possible configurations, please see the **Astro T-2 System Layout** (52 kB PDF file in library, requires Acrobat reader).

Please see our **ASTRO T-2 System Specs in information library** for a detailed listing of threads and path length dimensions for all of these components. With this information, you can easily calculate the resulting path length of any combination of parts (useful for applications that depend on knowing exact focal path length or where limited back focus may be available - such as bino-viewers or cameras).

As you would expect from Baader Planetarium, the quality of all system components is first-rate. The components of the T-2 System are all manufactured to close machining tolerances, and are black anodized or attractively painted for lifetime durability and appearance. ASTRO T-2 System™ components all mate snugly, unlike the sloppy fits found in so many commonly available accessories. Your eyepieces and other accessories will fit and locate precisely, maintaining accurate centering as well as a quality feel. Threads are accurately machined to specification, and machined surfaces are precisely and expertly finished.

**A Note About Filter Threads:** we have found enough variation between the threads used by filter manufacturers that filter may be affected (we have found some Lumicon and unknown make filters that fit snugly, or fully thread on but continue to spin even though fully and safely seated due to short thread length and large thread reliefs). In most cases, the filter fit is still functional and secure. If you plan to use filtration, we suggest you try your filters with your particular setup soon after receipt, to ensure the fit is adequate.

---

◆ Reducers 1¼"/.965", 2"/1¼" ◆



**Reducer 1¼"/.965"**



**Reducer 2"/1¼"**

We offer two sizes of eyepiece reducers, which allow you to precisely center and clamp your eyepieces or standard accessories into the next larger (or two) sized focuser. As with most **Baader Planetarium** accessories, even our reducers offer features and quality not found in any other commonly available products.

**- Reducer 1¼"/.965" (# T2-10)**

Many of the world's finest oculars are only available as .965" versions. This reducer will allow you to upsize your .965" eyepieces and accessories to the 1¼" standard., **and to make use of 1¼" filters!** That's right, our reducer incorporates filter threads, and is the only .965 reducer we have ever seen that includes them! Now, you can finally make use of nebula and colored filters with your quality .965" eyepieces. Why it took this long to finally get this feature to market, we'll never know...

The accurate machining is especially useful for users of popular 1¼" Bino-Viewers. Now, you can make use of the numerous high quality .965" eyepieces (Takahashi/Pentax/Nikon/Zeiss), minimizing misalignments caused by decentering. A broad recessed retention groove adds a measure of safety, and the nickel plated brass lock screw has been machined with a radiussed point, in order to minimize marks on your fine eyepieces.

**- Reducer 2"/1¼" (# T2-15)**

Our 2"/1¼" reducer permits you convert your 2" focuser for use with 1¼" eyepieces and accessories. As with its little brother, the 2" reducer incorporates several useful features. A captive spring bronze lock ring guarantees protection of your eyepiece barrels from damage. This reducer also incorporates two large nickel plated brass knurled clamp screws that are oriented 90 degrees apart. The inclusion of two clamp screws results in a superior attachment that completely constrains your equipment from wobble, particularly important for imaging applications (typical single clamp screw adapters still allow some motion). Also, for those users that are physically unable to firmly grasp and tighten lock screws, the addition of a second screw doubles the locking force.

The input side is provided with 48mm filter threads, and also includes a nested internal T-2 thread which enables you to use the reducer along with the other T-2 system components. One more

unique feature sets our reducer apart - it includes an external T-2 thread that surrounds the eyepiece opening (covered and dressed by a knurled removable ring). This thread permits you to couple other T-2 accessories to the output side. In one application, you can attach T-2 Extension Tubes and create an afocal or eyepiece projection system. Once again, you are free to creatively construct your own combinations.



---

### ◆ Focusing Ring Collar FR-4 ◆



***Focusing Ring Collar FR-4***

Our Focusing Ring Collar slips onto your 1¼" eyepiece barrel, and enables you to adjust and lock a reference stop for repeatable eyepiece focus. This allows you to set an eyepiece to be precisely parfocal with another eyepiece or piece of equipment (i.e. setting an eyepiece parfocal with a CCD camera for visual framing and focus). For one example of this, see the Alan Gee, [CCD Imaging](#) schematic. Multiple collars can also be useful in pre-setting Bino-Viewer eyepieces for repeatable focus (to compensate for eye-to-eye focus differences). The focusing collar is 0.39" (9.9mm) thick, and incorporates two nickel plated brass lock screws, which are tip radiussed to minimize eyepiece barrel damage.



***FR-4 on Eyepiece***

- Focusing Ring Collar FR-4 (# T2-30)

---

◆ Click-Lock Eyepiece Clamp 1¼”/T-2 ◆



*Click-Lock Eyepiece Clamp*



*T-2 Amici Diagonal Shown with new Click-Lock Eyepiece Clamp*

The **NEW Baader Planetarium Click-Lock Eyepiece Clamp** (# T2-08) is a precision clamping eyepiece holder that enables you to insert your eyepieces or standard 1 ¼” accessories anywhere within the ASTRO T-2 System™, or for upgrading the stock holder supplied with telescopes. The Click-Lock clamp offers a brand new approach to eyepiece holders. Once you try one, you'll never go back to simple set screw or even captive brass clamp rings again! With a gentle twist of the outer ring, two special non-marring rollers cam into contact with the eyepiece and firmly lock it into the holder. The 3-point clamp action guarantees none of the eyepiece wobble common in all single screw clamps or Takahashi locking style holders. The lack of a protruding lock screw also eliminates one of the annoying hassles of standard holders - no more contortions trying to trying to work your nose around an inconveniently positioned screw.

The holder is precisely machined to fit your eyepieces with a minimum of slop, resulting in a close accurate fit that keeps your eyepiece properly centered on the optical axis. The long contact length of the cam rollers also makes this holder compatible with all grooved eyepiece barrels by bridging the groove. No more mismatch or hassle of unlocking from the groove. The secure grip of the cam lock makes the grooved barrels obsolete. On the front (input) side, the eyepiece clamp has an internal T-2 thread, to mate it to the other components of the T-2 system. On the output, Baader has added two additional unique and useful features. The top of the holder is actually an adjustable micro-focusing collar, with 6.5mm of travel. It allows you to precisely vary and set the overall clamp's height to allow fine adjustment of focus or height for matching other accessories. Furthermore, this ring is removable, which exposes an external T-2 thread. By coupling extension tubes, you can use the Click-Lock as an afocal projection system (using eyepieces with ODs of 37mm maximum).

Our Click-Lock Eyepiece Clamp makes a superior replacement for the stock eyepiece holders supplied with popular telescopes. Owners of Takahashi telescopes will find our Deluxe Eyepiece Clamp far superior to the stock Takahashi eyepiece holder, which is frustrating to use (and even allows eyepiece wobble which is particularly bad for guidescope use). See [Telescope Adapters](#),

below, for threaded adapters to mate to your specific telescope.

The Click-Lock Eyepiece Clamp is also a key component for a number of common Astro T-2 System configurations, such as the [Precision Amici Diagonal](#), and as a parfocal eyepiece holder for CCD focusing with the [Alan Gee Mark II Telecompressor](#). You may find additional uses in other T-2 system assemblies of your own making.

---

◆ **Nosepieces 1¼"/T-2, 2"/T-2** ◆



***Nosepiece 1¼"/T-2***

We offer two sizes of T-2 Nosepieces, which allow you to mount your T-2 accessories into standard 1¼" or 2" focusers or accessories. Both nosepieces have an external T-2 thread on one end, for attaching to T-2 system components. Typical applications include use as the input piece for the Precision Amici Diagonal and [OPFA System](#) (afocal and ocular projection).



***Nosepiece 2"/T-2***

The nosepiece outside diameters are precisely machined and finished to provide a secure fit with a minimum of slop or decentering. Both nosepieces feature a recessed groove that provides an extra measure of security to prevent accidental slippage. The 1¼" nosepiece is provided with standard 1¼" filter threads as well as an internal M34 thread for accepting the VIP Barlow Lens or Glasspath Compensators (for Baader/Zeiss Bino-Viewer), and the 2" nosepiece has both 48mm filter threads and a nested internal T-2 thread to enable even more uses within the system. Of course, both nosepieces incorporate full internal sharp V-threading and blackening to reject stray light and maintain maximum contrast.

- Nosepiece 1 1/4"/T-2 (# T2-14)

- Nosepiece 2"/T-2 (# T2-16)

---

◆ T-2 Quick Change System ◆



***Complete T-2 Quick Changer***

The **Baader Planetarium T-2 Changer System** provides a convenient and secure way to rapidly couple and de-couple the wide range of ASTRO T-2 System™ components. The T-2 Changer System serves as a central piece in the large array of possible combinations within the T-2 System. This novel system is comprised of two parts, the T-2 Quick Changer, and the T-2 Change Ring (available as a set, or separately). These two components work together to enable you to quickly exchange assemblies and components, without having to thread or unthread pieces. The dovetail design results in an extremely secure and accurate coupling, maintaining precise and repeatable location and focal distance. This is especially useful in permitting rotation of T-2 system components (i.e. [Precision Amici Diagonal](#), [Alan Gee Mark II Telecompressor](#)) or other equipment such as CCD or film cameras. In addition, the T-2 Quick Changer is compatible with the input dovetail ring on the Baader/Zeiss Giant Bino-Viewer, giving you a convenient way to attach to your telescope or other T-2 System components.

***Quick Change Ring and Changer***

**- T-2 Quick Changer System (# T2-6,7)**

The T-2 Quick Changer System is comprised of one each, Quick Changer and Quick Change Ring. Purchase additional Quick Change Rings if you desire to interchange multiple components.

**- T-2 Quick Changer (# T2-06)**

The T-2 Quick Changer incorporates machined internal dovetail lips, and a large nickel plated brass knurled thumbscrew for securely clamping the T-2 Change Rings (#07). The Quick Changer is

provided with an internal T-2 thread, which mates with any external threaded T-2 component, or adapted directly to your telescope.

#### **- T-2 Quick Change Ring (# T2-07)**

The T-2 Quick Change Ring is a machined stainless steel ring that incorporates an external dovetail lip on one side, and an external T-2 thread on the other. When inserted into the T-2 Quick Changer (#06), the action of the dovetails and clamp screw precisely center and tightly seat the ring. By slightly loosening the clamp screw, the ring can be rotated 360 degrees while still securely captured in the Quick Changer. As with the other Baader Planetarium ASTRO T-2 System™ components, the Quick Change Ring is internally threaded and blackened to capture any stray light.

---

### ◆ T-2 Extension Tubes ◆



***Two T-2 Extension Tubes, 40mm***

T-2 Extension Tubes enable you to securely set or vary the spacing between T-2 components. The tubes are available in three lengths, 7.5mm, 15mm, and 40mm, and are provided with an internal T-2 thread at one end and an external T-2 thread at the opposite end. Full internal threading and blackening kills any stray light reflections.



***T-2 Extension Tube, 15mm***

T-2 Extension Tubes are used throughout the ASTRO T-2 System™ to provide proper spacing of system components. The [Alan Gee Mark II Telecompressor](#) may be configured in various ways that benefit from the ability to vary the spacing of the lens relative to camera or eyepiece. The extension tubes provide a secure way of varying projection ratios (eyepiece to camera separation), for the [OPFA System](#) (afocal and ocular projection). You can use the extension tubes anywhere you need to precisely space and couple any of the T-2 components, in configurations of your own design.

#### **- T-2 Extension Tube 7.5mm (# T2-25C)**

#### **- T-2 Extension Tube 15mm (# T2-25A)**

**- T-2 Extension Tube 40mm (# T2-25B)**

---

**◆ Short T-Adapter ◆**



***New Short SCT T-Adapter (C8, 15mm)***

This short T-2 threaded adapter enables you to couple all of the T-threaded components of the ASTRO T-2 System™ to your popular SCT while using a minimum of valuable back-focus distance. This adapter is particularly useful in attaching the optimized SCT photo-visual [Alan Gee Mark II Telecompressor](#), and fits all Celestron and Meade Schmidt Cassegrains. The short length also permits you to pair the Alan Gee II Telecompressor with the Baader/Zeiss Giant Binocular Viewer – providing incredible large-aperture wide field binocular viewing at f/5.9! Of course, the internal surface is fully sharp threaded and blackened to kill stray light reflections. Using the Short T-Adapter and Astro T-2 System, your SCT becomes the perfect platform for a wide array of potential visual and imaging configurations. We are pleased to introduce this Brand **NEW** version, which incorporates a new compact Baader design that allows you to more easily rotate and lock your components. The new wide fluted surfaces enable better grip and result in more secure locking.

**- Short T-Adapter (15mm) (# T2-21)**

---

## ◆ Threaded Couplings ◆



***Inverter T-2/T-2***



***T2 Conversion Ring (10mm)***



***T-2 Locking Ring (2mm)***

Our growing selection of threaded couplers enable you to convert T-2 threaded parts to alternate thread sizes or genders. They allow you to rigidly couple to various manufacturer's telescope focuser threads or to combine T-2 parts into useful configurations. Precision threading guarantees proper fit-up, and internal surfaces are fully sharp V-threaded and blackened to cancel any stray light reflections.

### **- Inverter T-2/T-2 (# T2-26)**

The Inverter is a simple T-2 externally threaded ring, which can be used to convert internal T-2 threads to external T-2 threads (gender changer). It is also useful for retaining certain components, like the [Alan Gee Mark II Telecompressor](#) when used with the Celestron/Baader 60° Bino-

Viewer in 2" configuration.

**- T-2 Conversion Ring (10mm thick, 49mm OD) (# T2-34)**

**- T-2 Locking Ring (2mm path length, 6mm overall thickness, 49mm OD) (# T2-35)**

The #34 T-2 Conversion Ring is an internally threaded ring, which can be used to convert external T-2 threads into internal T-2 threads. The #35 internal T-2 Locking Ring can be used with T-2 extension tubes to enable you to adjust and securely lock the rotation of the stack. Simply thread the T2-35 onto the external T-2 threads of the component, adjust the rotation as desired, and lock the T2-35 against the component.

---

### ◆ Telescope Adapters ◆



*Adapter 36.4/T-2 (Takahashi/Vixen)*



*Adapter M43/T-2 (Vixen)*



*Zeiss Adapter M44/T-2 (inner)*



*Zeiss Cameraadapter M44/T-2 (outer)*



#### ***Russian/Pentax Cameraadapter M42/T-2***

Our growing selection of Telescope Adapters enables you to convert your telescope to T-2 threading. They allow you to rigidly couple to various manufacturer's telescope focuser threads or to combine T-2 parts into useful configurations. Precision threading guarantees proper fit-up, and internal surfaces are fully sharp V-threaded and blackened to cancel any stray light reflections.

#### **- Adapter 36.4/T-2 (# T2-03)**

#### **- Adapter M43/T-2 (# T2-22)**

The T2-03 adapter converts Takahashi/Vixen 36.4mm (small) internal thread to the T-2 standard external thread, enabling you to solidly attach T-2 accessories to your Vixen, Takahashi, or Chinese telescope with 36.4mm threads (i.e. Celestron, Synta, Orion, and other Vixen 'clones'). The T2-22 adapter converts the Vixen M43 (large) internal thread to external T-2 threading. This will permit you to solidly attach the full range of Baader ASTRO T-2 System™ mechanical and optical components (note: for use with Takahashi, you will need to use the knurled step down ring provided with your Takahashi telescope). As with all Baader Planetarium components, even these adapter rings exhibit an attention to function and detail. The thin profile preserves maximum back-focus, and the T2-03 includes an internal M34 thread, for installing a VIP Modular Barlow lens or Glasspath Compensator (for Baader/Zeiss Bino-Viewer). Now, your Takahashi or Vixen telescope can utilize our flexible array of components to enable you to produce virtually any visual or imaging configuration that you can imagine. This Adapter is particularly useful for attaching our [OPFA System](#) (afocal and ocular projection) and [Click-Lock Eyepiece Holder](#) to your Takahashi or Vixen telescope.

#### **- Zeiss Adapter M44/T-2 (inner) (# T2-09)**

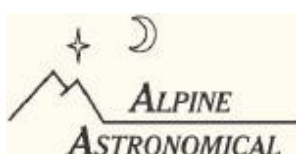
#### **- Zeiss Cameraadapter M44/T-2 (outer) (# T2-13)**

These adapters allow you to convert Zeiss telescopes and M44 accessories to the Baader T-2 standard. Zeiss telescope and equipment owners will really appreciate the new flexibility they gain from converting over to the Baader Astro T-2 System. We've outfitted many Telementor users with our quick change system and prism diagonals, using a T2-13 adapter. Owners of Zeiss M44 eyepieces can now convert them to 2" barrels, by simply adding a T2-09 and a T2-16 2" Nosepiece. Or, convert the superb Zeiss M44 prism diagonal or amici turret for use with 2" focusers and 1.25" eyepiece holders. These adapters also let you convert the M44 input/output threads of the unique [Zeiss Position Circle](#) (#T2-12) to T-2 thread.

#### **- Russian/Pentax Cameraadapter M42/T-2 (# T2-23)**

This adapter converts the external M42x1 threads of many Russian telescopes, into an external M42x.75 T-2 thread. The M42 x 1 thread is also common to Pentax threaded camera lenses.

Last Update 07/24/04




---

*ASTRO T-2 System Specs*

---

Part #	Description	Optical Path Length (mm)	Threads/Size, Objective End	Threads/Size, Eyepiece End	Filter/ Auxiliary Threads
MAX-1	T-2 Maxbright Mirror Diagonal	54	T-2 (i)	T-2 (e)	-
AMICI	Deluxe Amici Diagonal	38.5	T-2 (i)	T-2 (e)	-
T2-01	T-2 Prism Star Diagonal	47.5	T-2 (i)	T-2 (e)	-
T2-03	Adapter 36.4/T-2 (Takahashi/Vixen)	0.5	M36.4 x 1 (e)	T-2 (e)	M34 (i)
T2-06	T-2 Quick Changer	11	T-2 (i)	Bayonette (i)	-
T2-07	T-2 Change Ring	4	Dovetail (e)	T-2 (e)	Ø38mm(i)
T2-08	Deluxe Eyepiece Clamp 1.25"/T-2	29	T-2 (i)	Ø1.25" (i)	M34 (i)
T2-09	Zeiss M44/T-2 Adapter (Inner)	14	T-2 (i)	M44 x 1 (i)	-
T2-10	Reducer 1.25"/.965"	6.5	Ø1.25" (e)	Ø0.965" (i)	M28.5 (i)
T2-12	Zeiss Position Circle	18	M44 x 1 (e)	M44 x 1 (i)	-
T2-13	Zeiss Camera Adapter M44/T2	5	M44 x 1 (e)	T-2 (e)	Ø38mm(i)
T2-14	Nosepiece 1.25"/T2	0.5	Ø1.25" (e)	T-2 (e)	M28.5(i)/ M34 (i)
T2-15	Deluxe Reducer 2"/1.25"	10	Ø2" (e)	Ø1.25" (i)	M48 (i)
T2-16	Nosepiece 2"/T2	2	Ø2" (e)	T-2 (e)	M48(i)/ T-2 (i)
T2-17	2" Deluxe Clamping Eyepiece Holder	53	UNC 2" (i)	Ø2" (i)	-
T2-21	Short T-Adapter (16mm)	16	SCT 2" thd (i)	T-2 (e)	Ø38mm(i)
T2-22	Adapter M43/T2 (Vixen)	2.5	M43 x 1 (e)	T-2 (e)	Ø38mm(i)
T2-23	Russian Camera Adapter M42/T2	7	M42 x 1 (i)	T-2 (e)	Ø38mm(i)
T2-25A	T-2 Extension Tube 15mm	15	T-2 (i)	T-2 (e)	Ø38mm(i)
T2-25B	T-2 Extension Tube 40mm	40	T-2 (i)	T-2 (e)	Ø38mm(i)
T2-25C	T-2 Extension Tube 7.5mm	7.5	T-2 (i)	T-2 (e)	Ø38mm(i)
T2-26	Inverter T-2/T-2	0.0	T-2 (e)	T-2 (e)	Ø38mm(i)
T2-28	Expanding Ring T-2/2"	5	T-2 (i)	UNC 2" (e)	-
T2-29	Expanding Ring T-2/M48	2.5	T-2 (i)	M48 (e)	-
T2-30	Focusing Ring Collar FR-4	9.9	1.25" (i)	-	-
T2-34	T-2 Conversion Ring	10	T-2 (i)	T-2 (e)	-
T2-35	T-2 Locking Ring	2	T-2 (e)	T-2 (e)	-


**Notes:**

(i) = Internal Thread

(e) = External Thread

T-2 Thread = M42 x 0.75