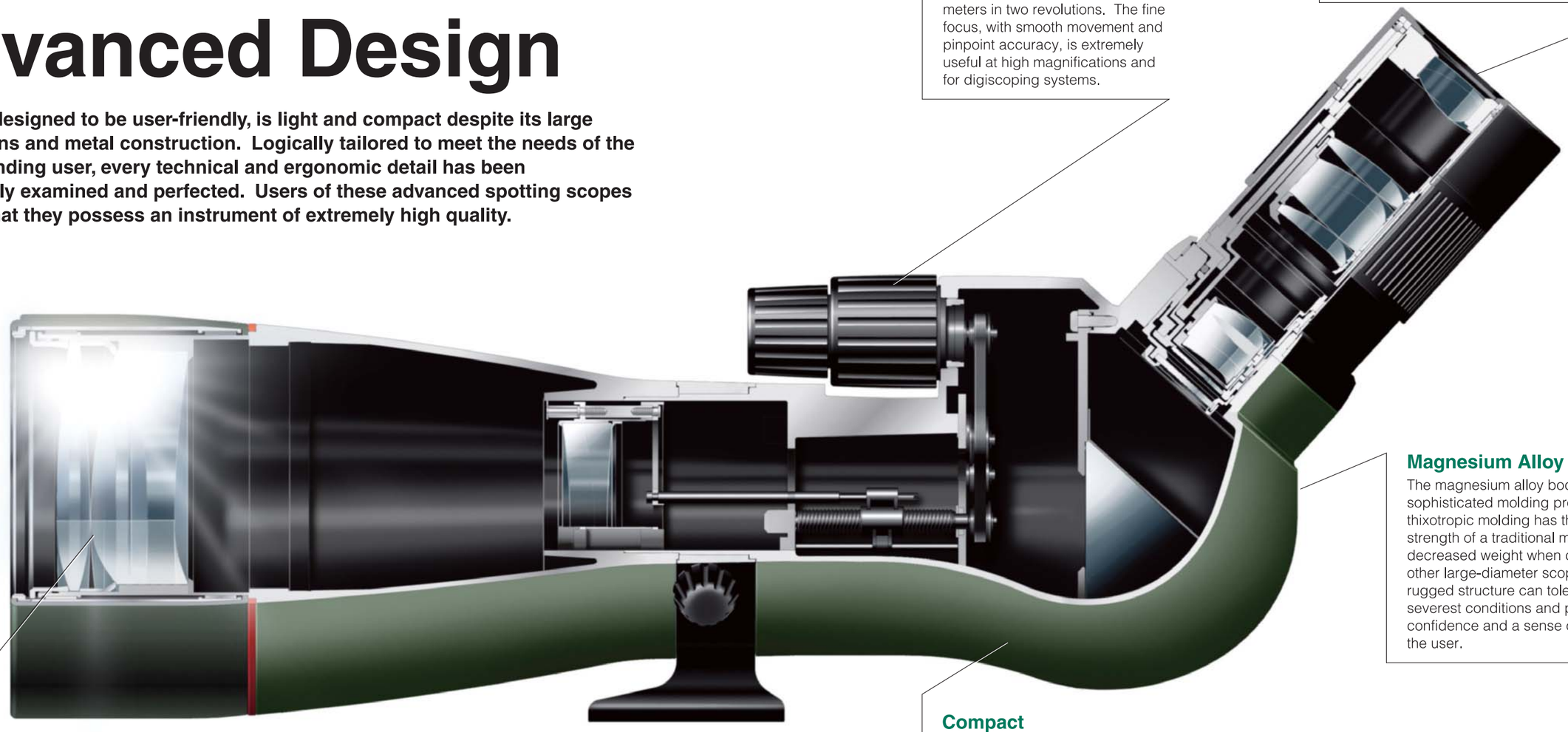
SPOTTING SCOPES

TSN-880/770 Series

Advanced Design

This body, designed to be user-friendly, is light and compact despite its large objective lens and metal construction. Logically tailored to meet the needs of the most demanding user, every technical and ergonomic detail has been painstakingly examined and perfected. Users of these advanced spotting scopes will know that they possess an instrument of extremely high quality.



Dual Focus (Quick & Fine Focus)

The well established Kowa focus system has progressed to a new dual focus system. The quick focus, with a large and easy to turn knob, will focus from infinity to five meters in two revolutions. The fine focus, with smooth movement and pinpoint accuracy, is extremely useful at high magnifications and for digiscoping systems.

Eyepiece Locking Mechanism

Kowa's standard eyepiece bayonet mount has been passed down to these new spotting scopes with a new attractive feature. An eyepiece locking mechanism has been added to the mount to prevent the eyepiece from getting lost or falling out unexpectedly.

Magnesium Alloy Body

The magnesium alloy body made by a sophisticated molding process called thixotropic molding has the feel and strength of a traditional metal body with decreased weight when compared to other large-diameter scopes. The rugged structure can tolerate the severest conditions and provides confidence and a sense of security for the user.

"PROMINAR" Lens

One of the major causes of deterioration of viewing quality in optics is chromatic aberration (color blur). Chromatic aberration occurs due to the dispersion of light and the different wavelengths of light focusing on different positions, resulting in a red or purple fringing around the image. The optimum optical material to minimize chromatic aberration is fluorite crystal. A fluorite crystal with extremely low dispersion characteristics is used for the convex lens of the TSN-883/884 PROMINAR models. In place of an ordinary optical glass lens, the concave lens paired with the fluorite crystal lens is made of glass with special dispersion properties to reduce the chromatic aberration to a further degree. This combination of fluorite crystal and glass with special dispersion properties nearly eliminates chromatic aberration and redefines the standards of color brilliance. This technology is the result of many years of optical design and has realized great reduction in chromatic aberration, while maintaining a large diameter lens and high contrast images when compared with conventional models. The XD lens used in our TSN-773/774 PROMINAR models has characteristics similar to those of fluorite crystal to significantly reduce the chromatic aberration. All lenses are environmentally friendly Eco-Glass.

(Eco-Glass is an environmentally friendly glass that does not contain lead or other harmful substances.)

Compact

The telephoto lens design of using 5 lens elements in 4 groups has successfully shortened the overall length of the scope while keeping a large diameter objective lens without sacrificing optical performance. The adoption of an inner focusing system has made the prism box light and compact and at the same time decreases the amount of image movement when compared to conventional prism focusing systems. The highly achromatized objective lens makes the scope as compact as a 60mm class scope without sacrificing performance.

Fluorite Crystal…
Kowa uses the fluorite crystal exclusively in its flagship spotting scope and large binocular models. The fluorite used to make an optical lens is an artificially grown mono-crystal with "ultra-low dispersion," a characteristic that ordinary optical glass does not have. It is an ideal lens material that almost completely eliminates chromatic aberration (color blur). The fluorite crystal produced by the sophisticated processing technology that Kowa has accumulated over the years guarantees the ultimate viewing experience.

XD Lens…
This lens has outstanding optical performance and is easier to work with than fluorite crystal. When an XD lens (eXtra-low-Dispersion-lens) is paired with a concave lens with special dispersion properties, chromatic aberration is almost eliminated. The performance of spotting scopes with XD lenses is very close to that of our flagship models with fluorite crystal.

TSN-770 Series

A 77mm objective lens in a compact body. With the portability and compactness of a 60mm class scope and the optical performance of an 80mm class scope, this model will satisfy both experienced users and beginners.

High-Performance Model with Superior Optics

Compact Size

The adoption of the inner focus system keeps the prism box light and compact, realizing a large 77mm objective lens in a body length of a 60mm class scope.

Magnesium Alloy Body

The magnesium alloy body decreases the weight of the scope while providing a rugged structure that can withstand the severest conditions.

Dual Focus Mechanism (Quick and Fine Focusing)

The dual focus mechanism allows focusing in two revolutions and fine pinpoint accuracy in one system.

Eyepiece Locking Mechanism

The eyepiece locking mechanism secures the eyepiece to the scope body and prevents it from getting lost or falling off suddenly.

Tripod Mount

The addition of a brass insert to the tripod mount of the scope allows the scope to be secured to both 1/4 and 3/8 inch mount tripods.

Waterproof and Filled with Dry Nitrogen Gas

The housing is waterproof to JIS* Protection Class 7** and filled with dry nitrogen gas to prevent the lens from fogging.

*JIS=Japanese Industrial Standard.
**The scope is not intended for use underwater.

77mm XD Lens

The PROMINAR models “TSN-773/774” have an XD objective lens with low dispersion properties to diminish chromatic aberration. Like the TSN-880 Prominar models, the concave lens paired with the XD lens is made of glass with special dispersion properties to reduce the chromatic aberration to a further degree. The performance and compactness of these spotting scopes are second to no other scope in this class.

TSN-771 High Grade Normal Lens Angled type

TSN-772 High Grade Normal Lens Straight type

TSN-773 PROMINAR XD Lens Angled type

TSN-774 PROMINAR XD Lens Straight type

*Eyepiece sold separately.