

# TSN-88 PROMINAR 88mm PURE FLUORITE CRYSTAL SERIES

















# THERE IS NO GREATER EXAMPLE OF COLOUR THAN THAT OF THE NATURAL WORLD.

A vibrancy when witnessed that can stir our emotions and make us feel alive.

Seeing nature represented true to life can be one of the most engaging experiences we can ever hope to enjoy.

For decades, it has been the passion, drive and goal of Kowa optical engineers to always deliver this natural spectacle to the observer in glorious detail through our optics.



### IMPROVING AN ICONIC OPTIC.



GETTING BACK TO BASICS.

When crafting the new TSN-88 PROMINAR series, Kowa went back to its roots in optical design.

Roots which have made it one of the most popular spotting scope manufacturers in the world.

To enhance a basic fundamental feature that PROMINAR users enjoy every time they look through their eyepiece - *Natural Colour*.

Kowa has always prided itself on manufacturing optics that deliver a pure rendition of the view in front of the lens. Allowing you, the observer to explore and enjoy every detail of the subject.

An image free of negative optical distractions allowing you to immerse yourself into the scene in front of you.





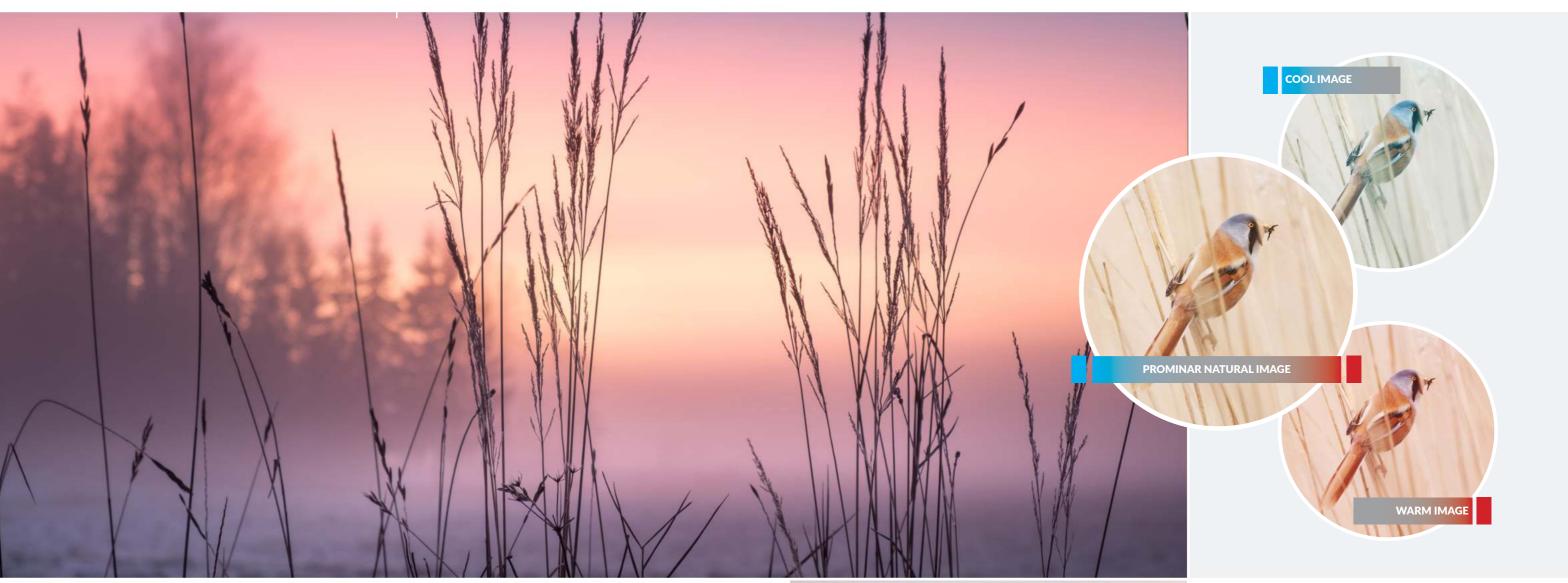


MEET THE NEW 88MM FLAGSHIP PROMINAR SPOTTING SCOPE.



#### UNDERSTANDING LIGHT.

PROMINAR OPTICS DELIVER HIGH LIGHT TRANSMISSION ACROSS **ALL WAVELENGTHS OF LIGHT,** TO ACHIEVE A NATURAL, COMFORTABLE AND TRULY REALISTIC IMAGE THAT IS WORTHY OF THE SUBJECT YOU ARE VIEWING.



Available light enters through the objective lens and internal optics of the spotting scope which is then finally transmitted to our eyes via the exit pupil. The more light photons that make it through the lens, the better and more clear we can see the object at high magnification and in greater detail.

Lens coatings help to transmit the light photons entering the optic and control how the image is delivered to our eyes.

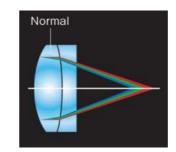
Lens coating chemicals which are not perfectly balanced with high performance across the entire colour spectrum can produce unnatural colours in the final image seen by your eye.

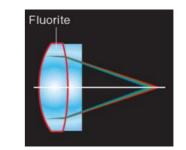
Cool or blue tints, or possible warm or red tints are often associated with optics that have good transmission values in certain wavelengths of light – but not the full spectrum.



## NEW OPTICAL COATINGS ARE ONLY HALF THE STORY.

#### ELIMINATING CHROMATIC ABERRATION





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. Aligning these light wavelengths in to one focal point is critical.

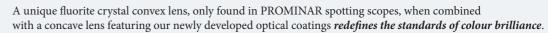
The optimum optical material to do the job and minimize chromatic aberration is fluorite crystal.

The new TSN-88 PROMINAR series features an *88mm* pure fluorite crystal objective lens - the true optical powerhouse at the heart of all PROMINAR flagship optics.















# BLACK, WHITE AND EVERYTHING ELSE IN BETWEEN.

you are viewing.

#### WHAT YOU THOUGHT WAS A BLACK BIRD ISN'T.



### ULTIMATE CONTROL.



#### **DUAL FOCUS**

The dual focus system is one of the defining features of our flagship spotting scopes, highly engineered to give ultimate control, the TSN-88 PROMINAR is no exception, the optic is a dream to use out in the field.



The dual focus mechanism is the gateway to controlling the image between your eye and the scope. Exquisite engineering is refined to make operation flawless. *Quick focus* allows for fast action to bring your subject in to detail in just a few smooth revolutions, whilst *Fine focus* gives pin-point, finger-tip control offering the ultimate in focussing accuracy with minute adjustments possible even when wearing gloves.

\*We believe no other spotting scope offers this level of fine control.\*

The responsive focus system is tuned to not only respond effortlessly for conventional observation, but increases performance for applications such as digiscoping when accurate focus is critical.



#### WE DIDN'T REINVENT THE WHEEL.

When we developed TSN-88 PROMINAR we had the benefit of experience behind us. We utilized and enhanced the key features that have made our flagship PROMINAR optics range so popular with nature viewers around the globe.

HIGHLY ENGINEERED WITH PRECISION AND EASE OF USE AT THE FOREFRONT.





### TOUGHER AND LIGHTER.



# FULLY WATERPROOF & NITROGEN SEALED.

The scope body is fully sealed to protect from the elements. The rugged structure can tolerate the severest conditions and provides confidence and a sense of security.



The aluminium barrel formerly used on the TSN-880 series has now been upgraded meaning the new TSN-88- PROMINAR benefits from a full 100% magnesium alloy body.

This sophisticated alloy offers all the strength benefits of metal whilst retaining a lightweight body.

By employing the use of a 100% magnesium alloy structure, the TSN-88 PROMINAR series spotting scope is one of the most compact and lightweight in its class of large objective spotting scopes making it more portable than many other models.





The new TSN-88 PROMINAR series is built to last a life time - use it with absolute confidence even in the harshest of environments.

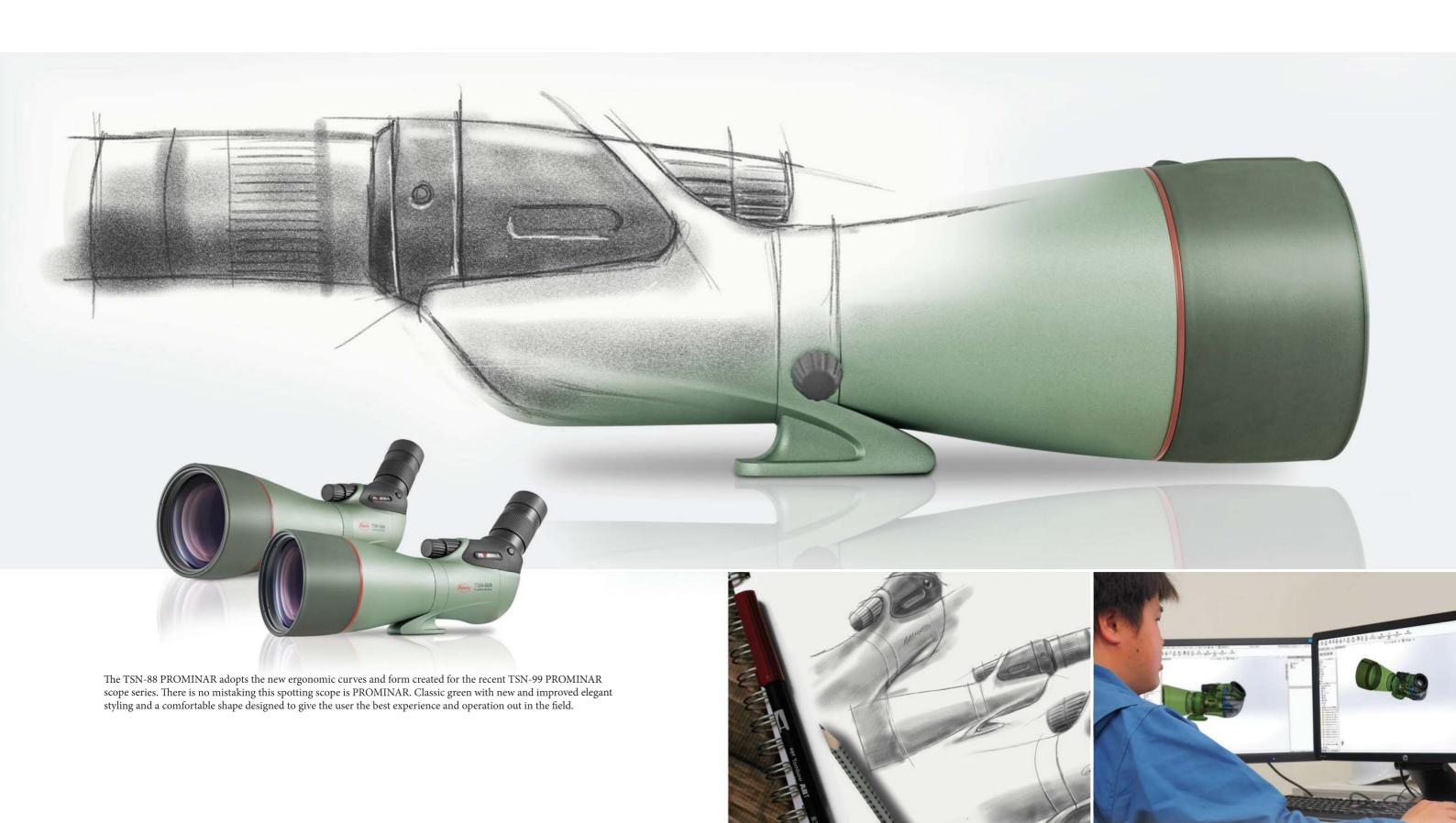
Your reliable, life-long partner in any excursion to the great outdoors.

#### KR COATING.

An additional upgrade now includes the objective lens benefiting from enhanced protection from the elements with Kowa's unique KR coating which actively repels dirt, moisture and dust from building on the surface.



# LOOKS AREN'T EVERYTHING, BUT...









#### SUN SHADE

A smooth twist sunshade helps to eliminate glare from the sun and also reduces exposure of the objective lens to elements such as moisture, grit and sand



#### EYEPIECE RELEASE BUTTON

To release the eyepiece smoothly, we re-engineered our quick release button, further enhancing the operation to allow quick eyepiece or adapter changes without compromising on a secure connection to the scope body.

#### **DUAL TRIPOD MOUNT**

The tripod mount features a dual mounting system which helps prevent the scope from slipping or rotating on the tripod shoe ensuring extra stability for long periods of use.

The tripod mount has removable screws that allows the spotting scope to be attached to either 1/4 and 3/8 inch tripod heads. With the tripod screw inserted the mount can be used on 1/4 inch tripods. Removing the screw allows the scope to be attached to 3/8 inch tripods.

The orientation of the scope can be smoothly changed with the release of a locking button if you require to alter the viewing position.



#### ACCESSORY COLLAR

An easy accessible collar on the eyepiece mount allows for quick connection of current KOWA SYSTEM accessories including adapters for digiscoping and 1.6x extender.

This accessory collar is the gateway to expand the scope to new levels of functionality.





#### FILTER THREAD

A 95mm filter thread is situated on the scope body allowing for a protective or UV filter to be added offering enhanced protection.

The sunshade can still be used even with a filter added.



#### AIMING SIGHT

The spotting scope includes a new detachable aiming site that can be fixed on to the accessory collar to assist in locating your subject more rapidly.

The lens hood also features a newly designed built in aiming site as a further visual aid.

# A PERFECT PARTNER FOR THE NEW TSN-88 PROMINAR



#### SEE MORE.

Immerse yourself into the scene with a magnification of 35x and a field of view of up to 45m at 1000m distance. Find a subject quicker with a wider view of your surroundings.



TE-80XW
EXTREME WIDE EYEPIECE

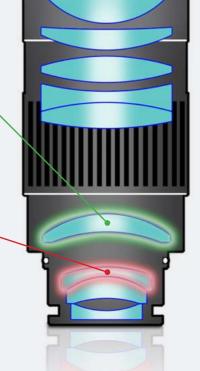


#### Field flattener lens

The optical design incorporates a field flattener lens maintaining a flat resolution throughout the entire 80 degree field of view.

#### XD lens

A Kowa XD lens is utilized to minimize chromatic aberration.



Both the field flattener and XD lens combine to produce a view that is completely uniform and ultra sharp across the entire image.



#### REDEFINING WHAT IT IS TO VIEW NATURE.

A true optical innovation. Kowa engineers have developed one of the most immersive visual experiences you can expect to see in a sporting optic device.

Featuring an advanced optical design, the view through TE-80XW can only be described as breath-taking.

We created an eyepiece with one of the widest field of views, an incredible 80 degrees.

#### FULLY PROTECTED.

The Kowa TE-80XW is 100% waterproof and sealed to protect against the elements.

Kowa's unique KR coating is applied to the lens with enhanced protection against dirt, moisture and dust.



# DIGISCOPING GAMECHANGER.

TE-80XW
EXTREME WIDE EYEPIECE

# WIDE, BRIGHT & EXTRA POWERFUL.



Experience the best of both worlds with an eyepiece designed for optimum viewing with the human eye as well as digital cameras/smartphones for digiscoping.

Not only does the eyepiece offer the widest field of view for any spotting scope delivering one of the most engaging, true to life and comfortable views on the eye, now you can experience a new level of creativity when you attach a smartphone or digital camera with zero vignetting giving you ultimate control of your image.



As smartphone digiscoping popularity ever increases we decided to create an eyepiece to take your digiscoping to the next level. *No more cropping or digitally zooming* and degrading image quality. The TE-80XW gives you total creative freedom *completely eliminating vignetting* and free from chromatic aberration.

Now you can decide how to compose your image.



The eyepiece is 100% compatible with *Kowa System* accessories.

For long range applications and an extra powerful view that still remains wide angle and bright, simply combine the eyepiece with the Kowa TSN-EX16 1.6x extender and enjoy *56x magnification*.



The flexibility and cross compatibility that *Kowa System* offers means you can add our range of smartphone and digital camera adapters whilst still using the 1.6x extender for even greater telephoto reach.



THE COMBINATION OF TSN-EX16 & TE-80XW DELIVERS ONE OF THE MOST POWERFUL, WIDE AND BRIGHTEST VIEWS OF THE NATURAL WORLD.

#### FITS RIGHT INTO THE FAMILY.



Cross compatibility is a fundamental feature of all PROMINAR spotting scopes. The TSN-88 PROMINAR accessory collar and bayonet mount is 100% compatible with our Kowa System accessory range, giving you access to interchangeable eyepieces and accessories, creating a truly flexible optical tool that can be used for many applications.



The spotting scope body allows connection of our PROMINAR eyepieces including the 25-60x TE-11WZ II wide zoom, the Extreme wide zoom 35x TE-XW80 and the TE-20H 25x long eye-relief eyepiece.

If you own historical TSN-880/770 eyepieces – rest assured they will fit and work perfectly with TSN-88 PROMINAR. Add the EX-16 1.6x extender for increased magnification for long range applications, attach the latest smartphones and digital camera bodies with our easy to use digiscoping adapters for super telephoto photography. Even insert astronomical eyepieces and push the boundaries of this planet to the next.



#### **EYEPIECES**

Three eyepieces are available for the TSN-88 PROMINAR series: **TE-11WZ II** 25-60x wide zoom **TE-80XW** 35x Extreme wide **TE-20H** 25x Long eye relief



#### **EXTENDER**

THE **TSN-EX16** Extender increases the magnification of the attached eyepiece by 1.6x for long range applications up to 96x optical zoom.



#### DIGISCOPING

A range of easy to use digiscoping adapters for many smartphone models, DSLRs and compact system cameras are available.



#### **PROTECTION**

Protect both the objective lens and eyepiece with our protection kit including **TSN-95FT** filter coated with KR dirt/dust repelling technology and our TSN-**CV88A** eyepiece protection cap.



#### STAY-ON-CASE

This case is not only a statement of style, the unique high quality neoprene modular design offers incredible protection for your scope.



Quickly fit and use 1,25" astronomical eyepieces on the Kowa TSN-99 body with **TSN-AS 1.25** astro adapters.



### DIGISCOPING.



#### SMARTPHONE.

Kowa has an enviable line-up of dedicated and universal smartphone adapters to allow simple connection of most smartphone models to the TSN-88 PROMINAR, take highly magnified and detailed images and videos with your smartphone of the natural world.

OTTERBOX

#### ATTACH A SMARTPHONE OR DSLR TO TSN-88 PROMINAR.

The TSN-88 PROMINAR retains its crown in the world of digiscoping, offering the photo enthusiast ultra long range telephoto photography options not possible in conventional photography. The improved coatings further enhance digiscoping performance even at the highest levels of magnification producing images that were once only achievable with high end DSLR systems.

For the photo purist, who want to use a DSLR or compact system camera, our TSN-PA7A and TSN-DA10 digiscoping adapters will meet every demand and connection option desired for full creative control.

#### TSN-PA7A

An extremely easy to use digiscoping adapter for connection to full frame/APSC/MFT camera bodies\*. It can quickly be removed to switch between eye observation and digiscoping and allows shooting in landscape or portrait format.



Compatible Eyepieces **TE-11WZ II** 25-60x wide zoom **TE-80XW** 35x Extreme wide

#### TSN-DA10

Versatile adapter that can be used with full frame/ APSC/MFT camera bodies with or without a lens attached\*\* . Also compatible with Kowa smartphone adapters for a fixed connection.\*\*



Compatible Eyepieces **TE-11WZ II** 25-60x wide zoom **TE-80XW** 35x Extreme wide

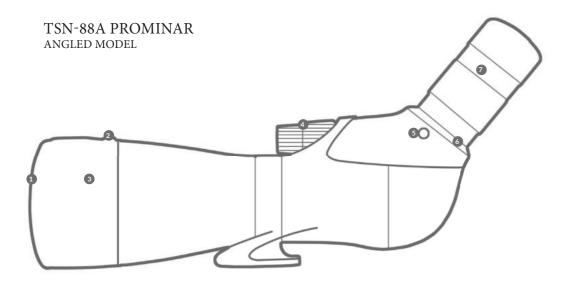
The simplicity and achievable results makes it clear to see why this method of digiscoping is by far the most wide spread and gaining popularity all the time.



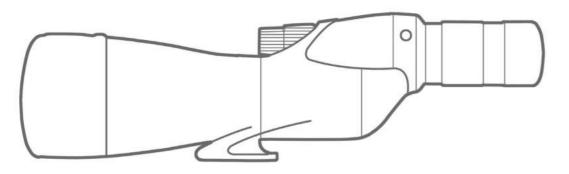
<sup>\*</sup>Requires additional T2 adapter depending on camera model.

<sup>\*\*</sup> Requires additional TSN-AR adapter ring





# TSN-88S PROMINAR STRAIGHT MODEL



- 1. 88mm objective lens
- 2. Aiming site
- 3. Sun shade
- 4. Dual focus (quick/fine)
- 5. Eyepiece release button
- 6. Accessory collar
- 7. Eyepiece

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#### **SPECIFICATIONS**

# TSN-88 PROMINAR 88MM PURE FLUORITE CRYSTAL SPOTTING SCOPE

Objective Lens Effective Diameter:	88mm
Objective Lens Material:	Fluorite crystal
Minimum Focusing Distance:	5m
Length 88A / 88S:	342mm / 326mm
Weight 88A / 88S body only:	1460g / 1480g
Weight 88A / 88S Zoom kit:	1840g / 1860g
Filter thread:	95mm

# TE-80XW 35X EXTREME WIDE ANGLE EYEPIECE

Magnification:	35x
Subjective field of view (degree):	80
Field of view at 1000m:	45m
Exit Pupil Diameter:	2.5
Relative Brightness:	6.3
Twilight Factor:	55.5
Eye Relief (mm):	17
Weight:	485g

Eyepiece specification when attached to Kowa TSN-88 series. Specification changes when attached to other spotting scope bodies.

#### TE-11WZ II 25-60X ZOOM WIDE ANGLE EYEPIECE

Magnification:	25-60x
Subjective field of view (degree):	55-69
Field of view at 1000m:	42-23m
Exit Pupil Diameter:	3.5-1.5mm
Relative Brightness:	12.3-2.3
Twilight Factor:	46.9-72.7
Eye Relief (mm):	17
Weight:	380g

Eyepiece specification when attached to Kowa TSN-88 series. Specification changes when attached to other spotting scope bodies.





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