



For maximum enjoyment and optimum performance of this product - please read this instruction manual in full.

# INSTRUCTIONS FOR USE

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## DIGISCOPING TIPS

### CORRECT ALIGNMENT

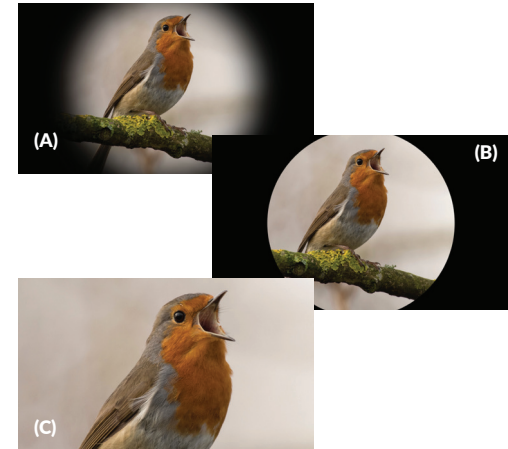
When you first attach your smartphone to your spotting scope you will need to set the appropriate eye relief on the eyepiece eye relief cap - An incorrect setting will result in a blurred circle (FIG A). Twist the eyerelief cap forward and backwards until the circle is crisp (FIG B) This is the optimum distance between the smartphone camera lens and eyepiece.

### GENERAL ADVICE

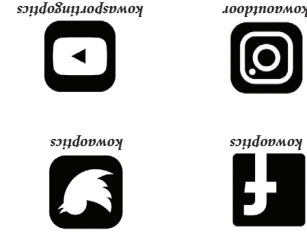
Learn to use all the camera features on your smartphone before digiscoping. It is advisable to use a good tripod with a smooth pan and tilt video head to keep the smartphone as steady as possible. If your smartphone supports it - lock the focus to prevent the lens from focus hunting, then use the focus wheel of your spotting scope to manually focus on the subject. If your smartphone supports it - try to limit hand operation when taking the image, try using remote shutter techniques such as voice or breath control to limit lens shake.

### VIGNETTING

Most smartphone utilise a wide angle lens, so when you attach the smartphone to the scope eyepiece, more often than not, you will experience vignetting (Image within a black circle - FIG B). To eliminate this effect, if you are using a zoom eyepiece, twist the zoom ring to increase the zoom until the vignetting is reduced or eliminated. This will also increase the magnification of your subject (FIG C).



You may need to apply a small amount of digital zoom on the smartphone to completely eliminate all vignetting, but using too much digital zoom will have a negative effect on the final image quality. Image quality will always be better by using the zoom on your eyepiece rather than digital zoom.



Follow us on social media where you can learn more about digiscoping with your smartphone

Receive the latest Kowa sporting optics news and offers first - sign up at: [www.kowasnextdigiting.com](http://www.kowasnextdigiting.com)

You can watch digiscoping videos on our Youtube channel for more advice and techniques: [www.youtube.com/kowasportingoptics](http://www.youtube.com/kowasportingoptics)

current compatible eyepiece: TE-11WZ  
**TSN-DA10**  
suitable for larger, more heavy smartphones. This method offers a secure screw-on connection rather than the usual push on method and is particularly suitable for larger, more heavy smartphones. The adapters in combination with our TSN-AR30 adapter ring via our Kowa TSN-DA10 and TSN-DA20 digiscoping and RP adapter to our spotting scope is also available. An alternative method of connecting your smartphone and RP adapter to our spotting scope is also available. The adapters are also compatible with a variety of historical eyepieces - please visit our websites for more compatibility information.



## OTHER CONNECTION OPTIONS



## TSN-RP SMARTPHONE DIGISCOPING ADAPTERS

# RP SERIES RUGGED PROTECTION





1. Locate the camera lens on your smartphone and the camera opening on the case.



2. Press your smartphone in to the case and ensure that the smartphone is fully inserted on all sides.



3. The smartphone camera lens should now be centred in the case opening.



4. Locate the screw thread on the adapter and line up the appropriate adapter ring (sold separately). (See opposite).



5. Screw the adapter ring (sold separately) on to the filter thread until it is secure. Do not over tighten.



6. Adjust the eye relief cap on your eyepiece to suit the lens of your smartphone (see back page for more information).



7. Line up the adapter ring to your eyepiece.



8. Push the adapter ring firmly and fully on to the eyepiece.



9. Shoot in landscape.



10. Shoot in portrait.

## ATTACHING THE LANYARD



The supplied lanyard strap is easy to fit and is recommended to be attached at all times whilst operating the smartphone adapter. Push the lanyard clip chord through the eye-hole on the smartphone case, make a loop with the chord and then fully pass the clip through the loop and pull secure. Click the lanyard strap to the lanyard clip.

## EYEPIECE ADAPTER RINGS

To connect the adapter body to a spotting scope eyepiece or binocular you will need to purchase an additional Kowa Equip adapter ring. The Kowa Equip series has a wide range of different sized adapter rings available to fit most Current Kowa spotting scope eyepieces and many other spotting scope brands too. Use the information below to identify the correct ring required. Visit our websites (see back page) for the latest compatibility information.

**TSN-AR 11WZ** Size 55mm

**Compatible Kowa products:**  
TSN-880/770 spotting scopes eyepieces  
TE-11-WZ (25-60x wa-zoom)  
TE-10Z (20-60x zoom) & TE-17W (30x wide)

**TSN-AR YS** Size 41mm

Standard Binocular adapter ring  
**Compatible Kowa products:**  
SV50, SV42, SV32, YF30, BD42, BD32

**TSN-AR 66Z** Size 50mm

**Compatible Kowa products:**  
TSN-660/600/550/82SV/820/820M/550 spotting scopes eyepieces : TE-9Z, TE-9WD, TE-7Z, Highlander 50x eyepiece

Visit our websites (see back page) for additional adapter ring sizes.



**TSN-AR 66HL** Size 50mm

**Compatible Kowa products:**  
TSN-660/600/82SV/820/820M spotting scopes eyepieces: TE-14WD, TE-21WD, TSE-21WE, TSE-14WE Highlander 21x eyepiece, Highlander 32x eyepiece

**TSN-AR 500** Size 39mm

**Compatible Kowa products:** TSN-500 spotting scopes

**TSN-AR 44GE** Size 45mm

**Compatible Kowa products:** Genesis XD44

**TSN-AR 33GE** Size 43mm

**Compatible Kowa products:** Genesis XD33

**TSN-AR 25BD** Size 32mm

**Compatible Kowa products:** BD25