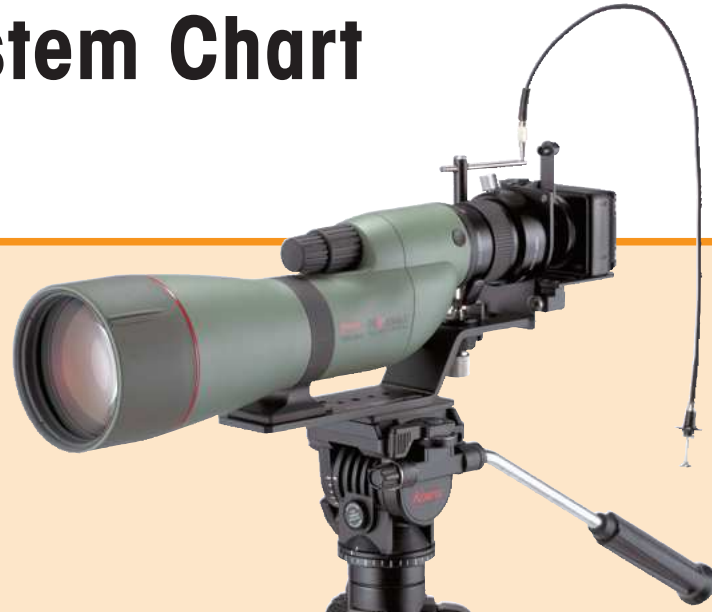


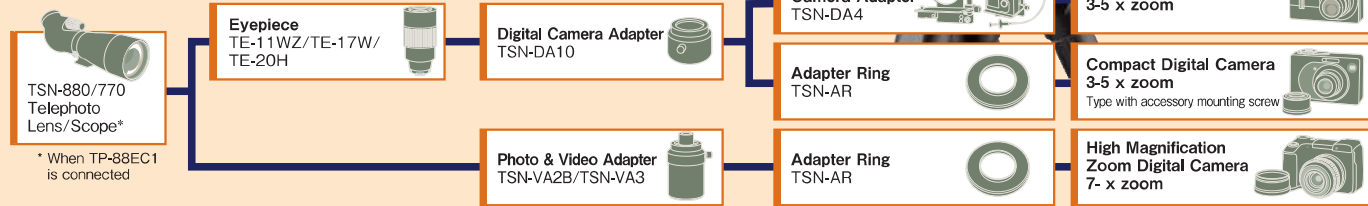
Digiscoping System Chart



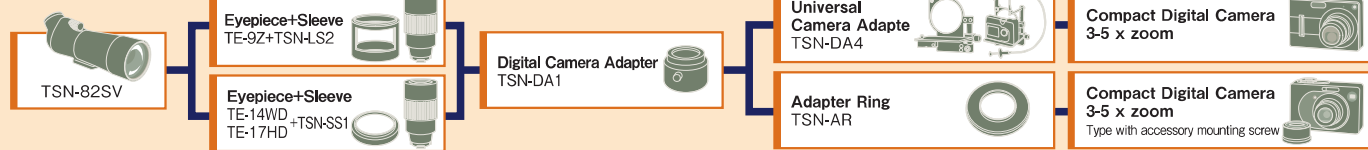
Compact Digital Camera Digiscoping System Diagram

Attach a compact digital camera to a Kowa spotting scope for Super-telephotography.

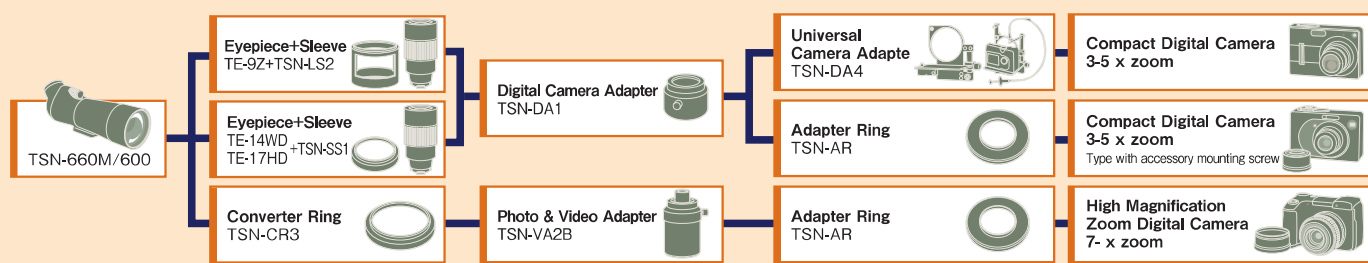
[TSN-880 Series, Telephoto Lens/Scope Digiscoping System Diagram]



[TSN-82SV]

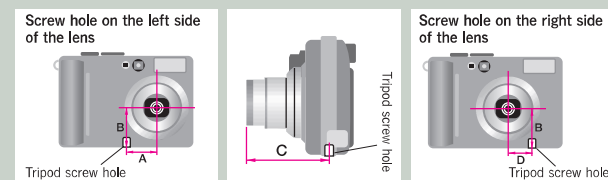


[TSN-660M/600 Series Digiscoping System Diagram]



TSN-DA4 Compatibility

The TSN-DA4 universal camera adapter can be used with cameras that meet the following criteria.



- The TSN-DA4 allows a compact digital camera without filter threads to be used for digiscoping.
- Quickly change between photographing and viewing through the scope.
- The camera is attached to the adapter with the camera's tripod mount. Locking mechanisms ensure safe operation.

A	0~44mm
B	21~40mm
C	~56mm (When the power is switched on and the lens is fully extended)
D	0~28mm
B	21~40mm
C	~56mm (When the power is switched on and the lens is fully extended)



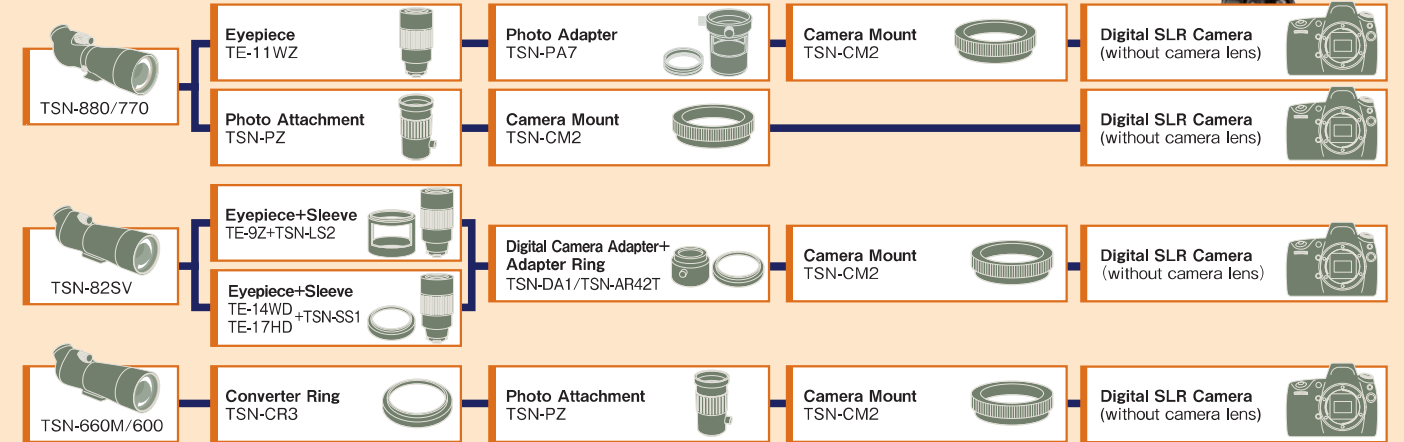
For cameras with the tripod mount to the left of the lens (facing the lens).
A. The distance between the center of the tripod mount and the center of the lens.
B. The distance between the center of the lens and the base of the camera.
C. The distance between the center of the tripod mount and the front of the lens.
For cameras with the tripod mount to the right of the lens (facing the lens).
D. The distance between the center of the tripod mount and the center of the lens. B and C are the same as above.

"SLR Digiscoping" and "Videoscoping" System Chart



Super-Telephotography with a Single Lens Reflex Camera

Attach a 35mm film single lens reflex camera or digital single lens reflex camera to a Kowa spotting scope for super-telephotography.



Collimation method

Attach a digital single lens reflex camera to a Kowa TSN-880/770 series spotting scope using the TSN-VA3 to enjoy super-telephotography using the collimation method.

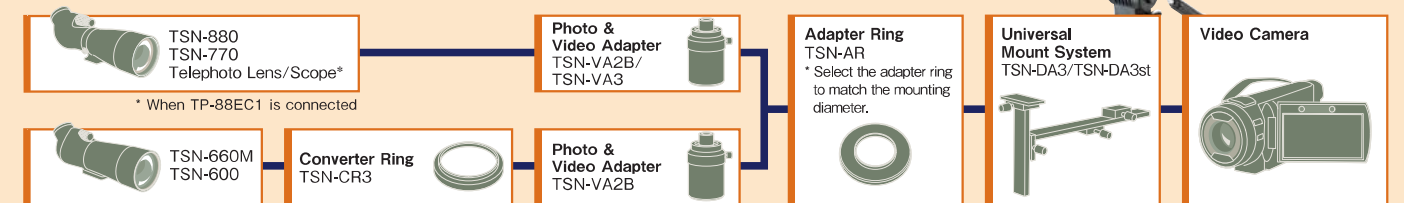


*1 In some cases, step-up or step-down rings may be necessary.
 *2 The TSN-DA3 or TSN-DA3st may also be used instead of the TSN-PS2/PS2-SP.
 * For carrying out collimation photographing using digital SLR cameras, inner focusing camera lenses should be used. Further, care will be required depending on the model since in some cases the auto-focus function may not be used or vignetting may occur.

Super-Telephoto Video

Super-telephoto video by connecting a video camera to a spotting scope.

[Video Camera Mounting System Diagram]



TSN-DA3/TSN-DA3st Mounting a Digital Camera/Video Camera

The TSN-DA3/TSN-DA3st can be used with cameras that meet the following criteria:

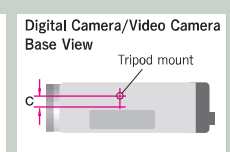
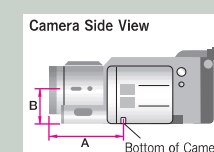
[TSN-DA3] This cannot be mounted on TSN-880/770 Series angled type spotting scopes.

Spotting Scopes	TSN-884 TSN-774			TSN-662/664		TSN-602/604		TSN-661/663				TSN-601/603			
	Straight type spotting scope			Straight type spotting scope		Straight type spotting scope		Angled type spotting scope				Angled type spotting scope			
	TSN-VA1	TSN-VA2B	TSN-VA3	TSN-VA1	TSN-VA2B	TSN-VA1	TSN-VA2B	TSN-VA1		TSN-VA2B		TSN-VA1		TSN-VA2B	
A	to 160mm	to 135mm	to 135mm	to 155mm	to 130mm	to 200mm	to 175mm	to 160mm*1	to 55mm*1	to 135mm*1	to 30mm*1	to 190mm*1	to 85mm*1	to 165mm*1	to 60mm*1
B	to 85mm (to 125mm)*2			to 75mm (to 115mm)*2		to 70mm (to 110mm)*2		to 100mm*1	to 205mm*1	to 100mm*1	to 205mm*1	to 120mm*1	to 225mm*1	to 120mm*1	to 225mm*1
C	55mm (right and left)			55mm (right and left)		55mm (right and left)		55mm (right and left)				55mm (right and left)			

[TSN-DA3st]

Spotting Scopes	TSN-884 TSN-774			TSN-662/664		TSN-602/604	
	Straight type spotting scope			Straight type spotting scope		Straight type spotting scope	
	TSN-VA1	TSN-VA2B	TSN-VA3	TSN-VA1	TSN-VA2B	TSN-VA1	TSN-VA2B
A	to 170mm	to 145mm	to 145mm	to 165mm	to 140mm	to 210mm	to 185mm
B	to 85mm (to 125mm)*2			to 73mm (to 113mm)*2		to 68mm (to 108mm)*2	
C	55mm (right and left)			55mm (right and left)		55mm (right and left)	

*1 As the value for A increases, the value for B decreases. The maximum values for A and B are shown.
 *2 The values in () apply when the TSN-DA3-40 (sold separately) is used.



A. The distance between the center of the tripod mount and the front of the lens.
B. The distance between the center of the lens and the base of the camera.
C. The distance between the center of the tripod mount and the center of the lens.