

APO-ULTRON 90mm F2 VM

INSTRUCTION MANUAL

Voigtländer VM-mount lenses cover the full frame format and are manually controlled lenses. The user sets the focus and aperture. They are designed to be used on both rangefinder film cameras and digital cameras with M-type lens mount. They can also be used on mirrorless cameras with appropriate adapters.

Features of Voigtländer VM-mount lens

- VM-mount
- Full frame format
- Smooth focus for precise focusing
- All metal construction

Tips for lens care and safety

hazard

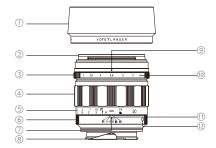
These tips are to protect the user from injury or damaging the lens.

WARNING	If the user ignores this warning sign and uses the equipment the wrong way serious injuries and even death might be the result.
! CAUTION	If the user ignores this caution sign it might result in injury and/or damage the equipment.
! WARNING	Never look directly at the sun with a telephoto lens as this can damage your eyes.
! CAUTION	Keep the lens, camera and accessories out of reach of children.
	Store the lens away from direct sunlight and always store

Never touch the lens surface. In case it is dirty or dusty use commercial lens cleaner or appropriate lens cleaning cloth.

Description of Parts

- ① Lens Hood
- ② Filter Ring
- 3 Aperture Ring
- ④ Focus Ring
- (5) Distance Scale
- 6 Depth of Field Ring
- Distance Index
- ® Mount
- Aperture Index
- Aperture Scale
- ① Depth of Field Scale
- Mount Index



How to attach/detach the lens

Please refer to the instruction manual for your camera for how to attach/detach the lens. Please hold the Depth of Field Ring ® to attach/detach the lens. To attach/detach the lens while holding other parts of the lens barrel may damage the lens.

Attaching Hood

dot on the lens hood ① with the aperture indicator mark ② and then turn the lens hood clockwise until it stops.

Remove the lens hood by rotating it anticlockwise.

The lens hood can also be attached in the

reverse position to improve portability and storability.

Attach the lens hood by lining up the white



Rangefinder coupling

Coupled focusing range of this lens is $\infty \sim 0.9 m$. However, rangefinder coupling range will be different depending on the rangefinder mechanism of the camera used.

Attaching Filter

Screw the filter (Ø52mm) to the front of the lens.

Attaching Mount Adapter

This lens can be used with below mentioned Voigtländer accessories.

VM-E Mount Adapter II

VM-E Close Focus Adapter

VM-X Close Focus Adapter

VM-Z Close Focus Adapter

Specifications

Product Name	APO-ULTRON 90mm F2
Focal Length	90mm
Maximum Aperture	F2
Minimum Aperture	F16
Lens Construction	7 groups 8 elements
Angle of View	27.4°
Aperture Blade	12
Rangefinder Coupling	∞ ~ 0.9m
Minimum Focus	0.9m
Filter	Ø52mm
Maximum Diameter	Approx. Ø61.9mm
Length	Approx. 63.3mm
Weight	Approx. 340g
Mount	VM-mount
Supplied Accessories	Lens Hood, Front Cap, Rear Cap

^{*} Specification and information is subject to change without notice.