

Askar

# ACL200

## User's Manual

### WARNING!!

NEVER VIEW THE SUN THROUGH THE TELESCOPE. THIS WILL CAUSE INSTANT BLINDNESS TO THE EYE. PLEASE PURCHASE A SPECIAL SOLAR OBSERVATION FILTER FOR THE SAFEST OBSERVATION. GUIDANCE THROUGH THE FINDERSCOPE WILL ALSO CAUSE SERIOUS DAMAGE TO THE EYE. PLEASE KEEP CHILDREN AWAY FROM THE SCOPE DURING THE DAY.

www.askarlens.com

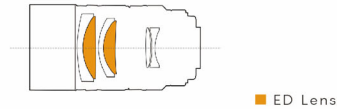
English

### Instructions for use

This lens is optimized designed specifically for astrophotography, meanwhile, it meets the landscape photography requirement. It is excellent quality, lightweight and simple to use. This is exactly a groundbreaking product that perfectly combines the use of telescope and telephoto camera lens. Using this lens for deep-sky imaging, it will produce clear and sharp images that have a very minimal amount of distortion and chromatic aberration, the resulting astrophotos are of high quality. This lens helps you unlock your creative potential and offer more photographic possibilities.

This lens features three-group and six-element optical design including two extra-low dispersion (ED) lens elements, thus the effect of chromatic aberration is minimized and surpasses general lens with its high image quality.

### Lens Structure:



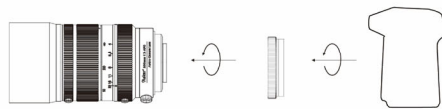
### Rear Lens Connection Part:

1. The rear side is M48x0.75 Male thread adapter, can install many kinds of camera adapter ring, easy to screw onto many brands of camera.

2. The calculation of back focus from the end thread face is 55mm as most lens have, when using different cameras, please pay attention to the flange focal distance and adapter depth (or thickness) between cameras and lens mounts, so that the distance indicator can work correctly.

For instance: Canon SLR camera has a flange focal distance of 44MM, adapter depth is 11MM, then the back focus is  $44\text{MM} + 11\text{MM} = 55\text{MM}$ .

### Camera Connection Diagram:



The back focus starting from the M48X0.75 thread is 55mm (excluding the thread length).

\* It also can be used from 40-57mm, but the distance scale will not be correct.

3. If you need to attach professional astro camera and other accessories such as filter wheel, etc, please contact the relevant manufacturer for attachment guidance.

### Specification:

Focal length:200mm

Specification:Full frame

Lens Construction:Three-group and six-element

Aperture blades:10 pieces

Minimum aperture:22

Closest focusing distance:About 3m

Focus mode:Manual focus

Focus type:Coarse adjustment and Micro adjustment

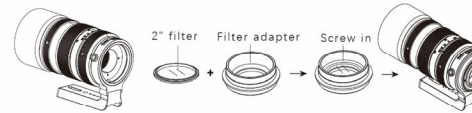
Micro-motion distance:1mm

Filter diameter:82mm

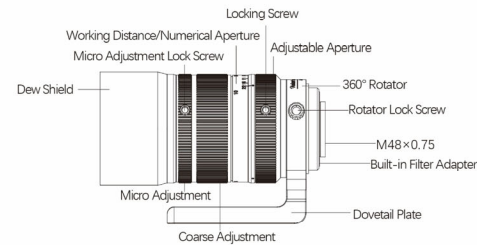
Maximum diameter & length:About $\Phi$ 100x195mm

Weight:1.8kg

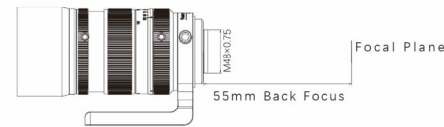
### 1. Lens Filter Connection Diagram



### 2. Lens External Components



### 3. Diagram of Back Focus



### 4. Focusing

This lens adopts coarse adjustment and micro adjustment in manual focus mode, for achieving accurate focus by micro adjusting the focus.

#### 1) Coarse adjustment:

After attaching the camera, slowly turn the coarse adjustment ring until the subject comes into general focus, it is easy and quick focus in landscape photography.

#### 2) Micro adjustment:

By turning the focus adjustment ring based on coarse focusing, you can micro-adjust the subject. This is especially effective for night sky and star photography, and it is usually works with the screen magnification display function that most cameras have today, can accurately point at the focus. It offers sharp and crisp image.

### 5. Aperture Use

This lens is a professional lens for astrophotography, but it also designed for landscape photography. Therefore, the aperture component rarely seen in astronomical telescopes is added, which adjust your aperture to maintain correct exposure and control depth of field with F4-F22 aperture.

### 6. Dew-shield

The dew-shield is a standard accessory to shelter the lens from stray light. To install, screw the dew-shield on the lens.

### 7. Focus Distance Display

The focus distance of this camera is 3 meters to infinity. When back focus is correct, distance display is correct. When back focus is not at 55MM, the distance display will be deviated, For relative reference only.

### 8. Use of Dovetail Plate

This lens attached with 360° rotator and VIXEN standard dovetail plate, can easy to connect with most of the Equatorial mounts. This lens also features camera standard thread adapter (four 1/4-20UNC and one 3/8-16UNC) to connect most of camera tripods.

### 9. Maintenance

Avoid rain, splashing water and falling water. When storing, avoid high temperature or cold environment, avoid long-term exposure to the sun. Avoid shock.

Use a microfiber cloth to wipe the dust and keep it clean. Do not breathe upon the lens or wipe with your fingers. It is not recommended to use lens cleaning fluids containing irritating chemicals. Use a lens brush or professional blowing equipment for cleaning.

When the camera is not in use, you can put it back in the camera bag to keep it dry.