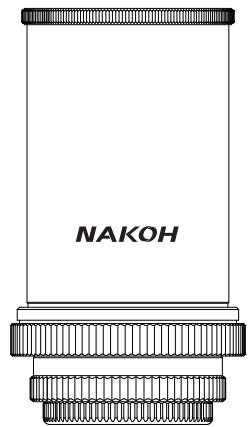
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# 60GT Specific 0.65x Reducer

## Instruction Manual

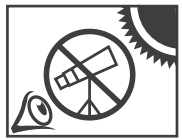



Thank you for purchasing the NAKOH 60GT 0.65x Reducer.
Please read this manual carefully and refer to it before use.

# ⚠ Safety Precautions
(Read Before Use)

## WARNING

- Never use this reducer for direct solar observation, as it may cause permanent eye damage.



## CAUTION

- Before use, ensure all components are securely fastened to prevent the reducer from falling or being damaged.
- Do not use or store the product in damp, high-temperature, or dusty environments.
- Do not disassemble the optical components or mechanical structure yourself, as this may affect performance and void the warranty.
- During transport, store the telescope properly to avoid severe shock or vibration.
- Strictly adhere to the 55mm back focus requirement, as this is critical for achieving optimal image quality. Any deviation may result in distorted edge star points, failure to achieve focus, and other issues. Precisely calculate the total length of the camera, filter wheel, and all adapters.

⚠

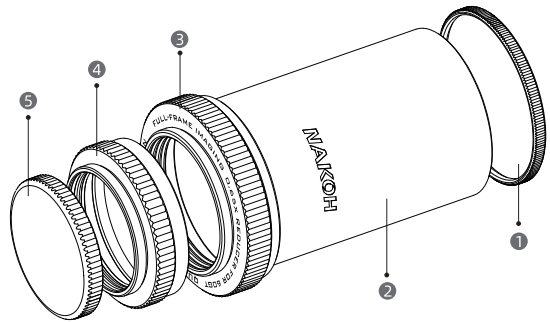
Use by Children Requires Strict Supervision!

This product is not a toy. Children must always be under adult supervision when using this product. Ensure children understand and follow all safety rules, especially the warning against looking at the Sun.



## Product Introduction

This 0.65x reducer is specially designed for the NAKOH 60GT with field flattening capabilities. When used with the 60GT, it reduces the focal ratio to f/3.9 and shortens the focal length to 234mm. Featuring a quadruplet lens design that includes one SD glass element (made in Japan), it effectively corrects field curvature and coma,ensures sharp, clear imaging from the center to the edges of a full 44mm image circle, enabling faster imaging while shortening the telescope's focal length.

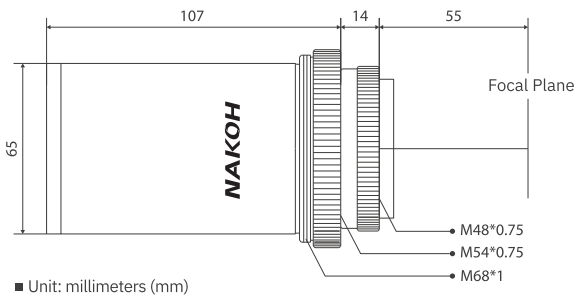



❶ Front Cap: Protects against dust and physical damage to the lens.
❷ 60GT 0.65x Reducer Body
❸ M68 to M54 Adapter: end-interface is M54 male thread.
❹ M54 to M48 Adapter : end-interface is M48 male thread.
❺ Rear Cap: Protects against dust and physical damage to the lens.

## Specifications

| | |
|---|---|
| Model | 60GT Specific 0.65x Reducer |
| Dimensions | 128*72*72 mm |
| Magnification | 0.65x |
| Optical Design | Quadruplet<br>[ 1 SD glass element (made in Japan)] |
| Effective focal ratio | F3.9 |
| Image Circle | ϕ44mm |
| Back Focus | 55mm |
| Connection Threads | Telescope Side: M68 * 1 、<br>Camera Side: M48 * 0.75、M54*0.75 |
| Weight | ≈0.58kg |
| Standard Accessories | 0.65x Reducer * 1、Front & Rear Caps * 2、<br>Instruction Manual * 1、Warranty Card * 1 |

## Dimensions




■ Unit: millimeters (mm)



## Installation and Usage Guide

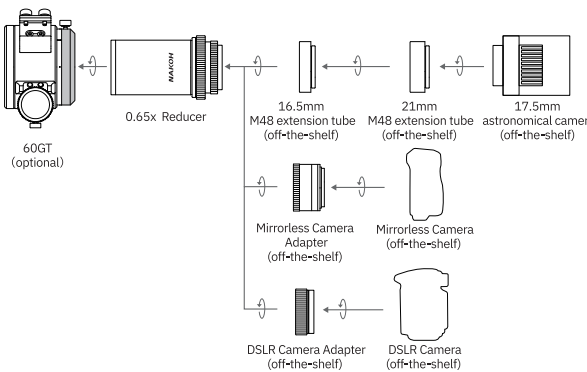
### ● Pre-Installation Checklist:

1. Ensure all components are complete.
2. For initial installation, perform in daylight or well-lit conditions.

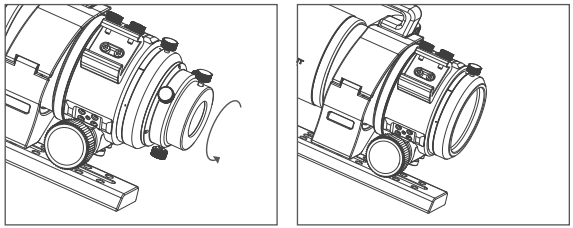
### ● Step 1: Determine the Back Focus

This is a critical step. The total distance from the camera sensor to the flattener's mounting flange should be precisely 55mm.

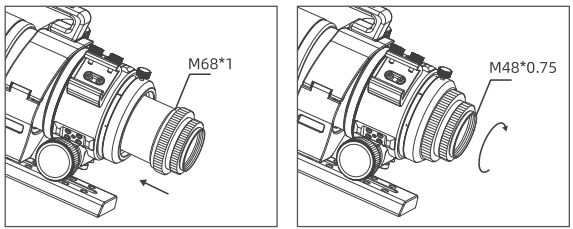
※Example Configuration:55mm Back Focus = 16.5mm M48 extension tube + 21mm M48 extension tube + astronomical camera (with 17.5mm flange distance).
Standard or third-party adapters of different lengths may be used to achieve the exact 55mm back focus requirement.



## ● Step 2: Connect to the Telescope



① Rotate the rear interface of the NAKOH 60GT focuser counterclockwise to remove it.

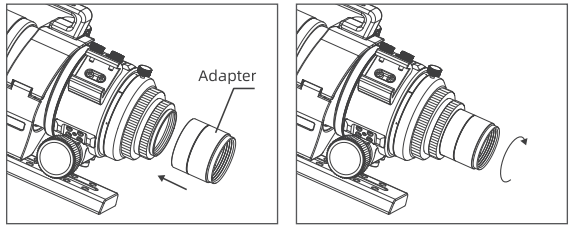



② Remove both silver metal end caps from the 0.65x reducer. Insert it straight into the tube, being careful to avoid contact with the focuser's inner wall, and gently rotate it clockwise to secure it in place.

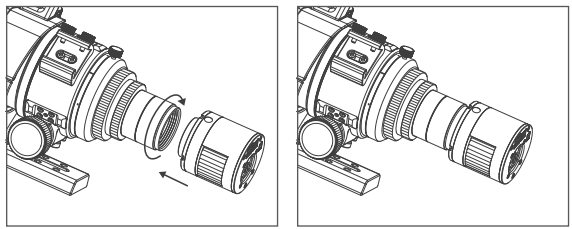
## ● Step 3: Connect the Camera

Select the required astronomical accessories and configure appropriate camera adapters according to the 55mm back focus specification.






③ Choose suitable adapters, connect, and tighten by rotating clockwise.



④ Attach the astronomical camera and tighten by rotating clockwise.

⑤ Fully tighten all connections to complete the assembly.

## ● Step 4: Imaging and Verification

1. Aim the telescope at a bright star and achieve precise focus.
2. Inspect star shapes at the image center and all four corners. If corner stars appear elongated or distorted, first verify that the back focus is accurately set to 55mm.

## Warranty & Contact Information

### Warranty Policy

This product is covered by a one-year limited warranty from the date of purchase. The warranty does not cover accidental damage, misuse, or normal wear and tear. Please refer to the warranty card included with the product for detailed terms and conditions.

### Technical Support

For any inquiries or repair services, please contact the store of purchase or Nakoh's authorized dealer in your country.

- Company Name: NAKOH CO., LTD.
- Add: La Casa Ueshio 902,4-5-8 Ueshio, Tennoji-ku, Osaka 543-0002,Japan
- E-mail: support@nakoh.co.jp
- Official Website: www.nakoh.co.jp
- Telephone: 81-6-7892-2731
- Fax: 81-6-7897-9116