

## Benro GH2N

# Benro GH2N Carbon-Fiber Gimbal Head Instruction Manual

Model: GH2N

## 1. PRODUCT OVERVIEW

The Benro GH2N Carbon-Fiber Gimbal Head is engineered for photographers requiring stable and fluid support for large telephoto lenses. Its carbon fiber construction provides a lightweight yet rigid platform, ideal for tracking fast-moving subjects in wildlife and sports photography. This gimbal head is designed to manage heavy loads while offering precise control over camera movements.

### Key Features:

- **High Load Capacity:** Supports up to 55 lb, accommodating super-telephoto lenses and full-frame camera bodies.
- **Carbon Fiber Construction:** Ensures reduced weight and high rigidity for stable performance and vibration control.
- **Fluid Movement:** Offers smooth pan and tilt operations with adjustable tension for effortless subject tracking.
- **Arca-Swiss Compatible:** Features a vertical clamp and an adjustable lens plate for precise fore-aft balance tuning.

## 2. COMPONENTS

Familiarize yourself with the main components of your Benro GH2N Gimbal Head:

- **Quick Release (QR) Plate:** Secures your camera and lens to the gimbal head.
- **Vertical Arm:** The main support structure for the camera and lens.
- **Tilt Lock Knob:** Controls the friction and locks the vertical (tilt) movement.
- **Panning Base:** Allows for 360-degree horizontal rotation.
- **Pan Lock Knob:** Controls the friction and locks the horizontal (pan) movement.
- **Vertical Adjustment Scale:** Aids in precise vertical positioning and balancing.



Figure 2.1: Side view of the Benro GH2N Gimbal Head, highlighting its robust construction and key adjustment points.





Figure 2.2: Top-down view illustrating the tilt lock and pan lock knobs for precise control.

## 3. SETUP INSTRUCTIONS

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### 3.1 Attaching to a Tripod

1. Ensure your tripod is stable and capable of supporting the combined weight of the gimbal head, camera, and lens.
2. Locate the 3/8-inch threaded mounting hole on the base of the gimbal head.
3. Screw the gimbal head onto the 3/8-inch mounting screw of your tripod until it is securely tightened. Some tripods may require an adapter for a 1/4-inch screw.

### 3.2 Attaching Camera and Lens

The Benro GH2N uses an Arca-Swiss compatible quick release system.

1. Attach the provided Arca-Swiss style QR plate to the tripod collar foot of your telephoto lens. Ensure it is securely fastened.
2. Loosen the quick release clamp knob on the gimbal head.
3. Slide the QR plate with your camera and lens into the quick release clamp.
4. Tighten the quick release clamp knob until the plate is firmly secured.



Figure 3.1: Detail of the Arca-Swiss quick release plate mechanism for secure camera attachment.

### 3.3 Balancing Your Setup

Proper balancing is crucial for smooth operation and to prevent strain on the gimbal head and your equipment.

1. **Fore-Aft Balance:** With the camera and lens attached, loosen the quick release clamp knob slightly. Slide the QR plate forward or backward until the lens remains horizontal when the tilt lock is disengaged. Re-tighten the quick release clamp knob.
2. **Vertical Balance:** Loosen the vertical adjustment knob on the side of the vertical arm. Slide the entire vertical arm up or down until the camera and lens remain balanced when tilted. Use the vertical adjustment scale for reference. Re-tighten the vertical adjustment knob.





Figure 3.2: The vertical adjustment scale assists in achieving precise balance for various lens sizes.



Figure 3.3: A fully assembled Benro GH2N Gimbal Head with camera and lens, ready for use.

## 4. OPERATING INSTRUCTIONS

### 4.1 Panning Movement

The panning base allows for smooth 360-degree horizontal rotation.

1. To pan, loosen the pan lock knob located at the base of the gimbal head.
2. Adjust the tension by rotating the pan lock knob. A looser setting allows for freer movement, while a tighter setting provides more resistance.
3. Once the desired position is achieved, tighten the pan lock knob to secure the head.





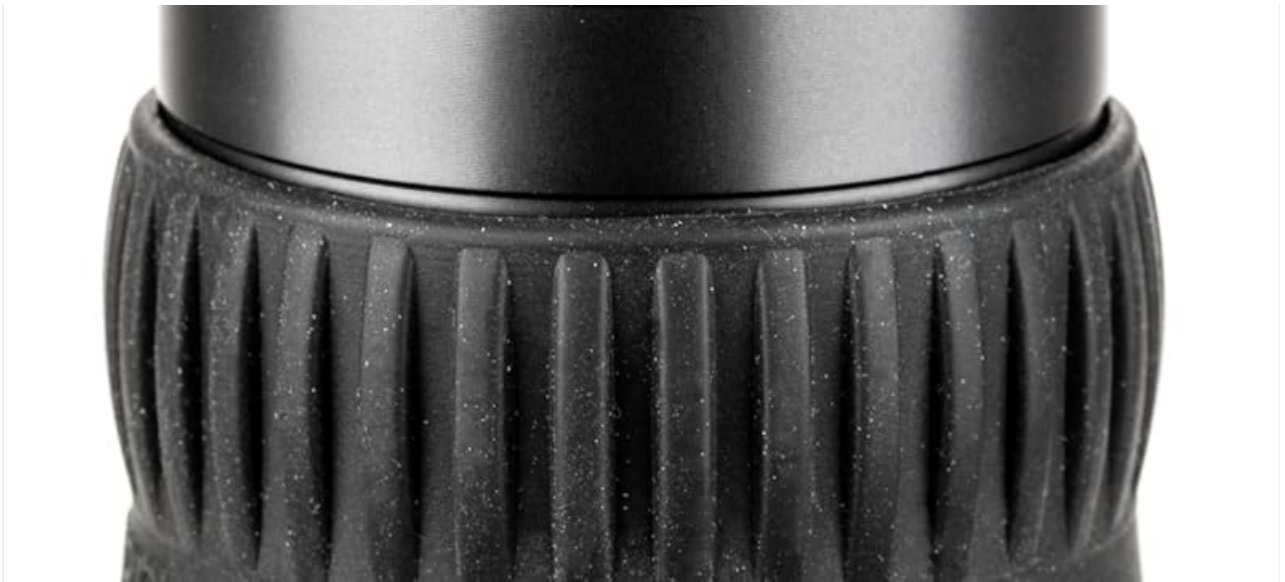


Figure 4.1: The panning base with clear degree markings for precise rotational adjustments.

## 4.2 Tilting Movement

The vertical arm allows for smooth vertical (tilt) movement.

1. To tilt, loosen the tilt lock knob located on the side of the vertical arm.
2. Adjust the tension by rotating the tilt lock knob. A looser setting allows for freer movement, while a tighter setting provides more resistance.
3. Once the desired angle is achieved, tighten the tilt lock knob to secure the camera and lens.

## 5. MAINTENANCE

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Regular maintenance ensures the longevity and optimal performance of your Benro GH2N Gimbal Head.

- **Cleaning:** Use a soft, dry cloth to wipe down the gimbal head after each use. For stubborn dirt, a slightly damp cloth can be used, followed by immediate drying. Avoid abrasive cleaners or solvents.
- **Lubrication:** The internal mechanisms are factory-lubricated. Do not attempt to lubricate moving parts yourself unless specifically instructed by Benro support.
- **Storage:** Store the gimbal head in a dry, dust-free environment. Use the provided carrying bag for protection during transport and storage.
- **Inspection:** Periodically check all screws and knobs to ensure they are tight. Do not overtighten.



Figure 5.1: The included Benro carrying bag for safe storage and transport.

## 6. TROUBLESHOOTING

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### 6.1 Stiff Pan or Tilt Movement

- **Issue:** The pan or tilt movement feels stiff even when the lock knobs are loosened.
- **Solution:** Ensure the lock knobs are fully disengaged. If the issue persists, verify that the camera and lens are properly balanced. An unbalanced setup can create perceived stiffness. Avoid applying excessive force; if movement remains stiff, contact customer support.

### 6.2 Difficulty Balancing Equipment

- **Issue:** The camera and lens do not stay in position when the tilt lock is disengaged.
- **Solution:** Revisit Section 3.3 (Balancing Your Setup). Ensure both fore-aft and vertical balance adjustments are correctly made. The center of gravity of your camera and lens combination must align with the gimbal's pivot points.

### 6.3 Quick Release Plate Not Securing

- **Issue:** The quick release plate does not securely fasten into the clamp.
- **Solution:** Check for any obstructions in the clamp or on the plate. Ensure the plate is fully inserted and the clamp knob is tightened sufficiently. Verify that the plate is an Arca-Swiss compatible type.

## 7. SPECIFICATIONS

Product Dimensions	7.87 x 8.86 x 3.94 inches
Item Weight	2.65 pounds
Item Model Number	GH2N
Load Capacity	55 lb (25 kg)
Material	Carbon Fiber
Compatible Devices	Camera (with telephoto lenses)
Color	Black

## 8. WARRANTY AND SUPPORT

### 8.1 Warranty Information

The Benro GH2N Gimbal Head comes with a standard limited warranty of 3 years from the date of purchase for the original owner. If you register the product online, the warranty is extended by 2 additional years, totaling 5 years in applicable regions. Please retain your proof of purchase for warranty claims.

### 8.2 Customer Support

For technical assistance, warranty claims, or further inquiries, please contact Benro customer support through their official website or the retailer where the product was purchased. Provide your model number (GH2N) and purchase date for efficient service.