

Manfrotto 405

Manfrotto 405 Pro Digital Geared Head Instruction Manual

Model: 405

1. PRODUCT OVERVIEW

The Manfrotto 405 Pro Digital Geared Head provides ideal support and fast, pinpoint positioning for professional medium format cameras with conventional or digital backs. Designed to meet the exacting, time-sensitive needs of busy professional digital photographers, it supports payloads up to 7.5 Kg. It features large, easy-to-grip knobs for smooth, positive, geared control through 360° pan and +90° to -30° frontal and lateral tilt. Additionally, the 405 incorporates a unique feature that allows you to instantly disengage the gears for rough positioning by hand, then instantly re-engage them for ultra-precise final alignment.

Key Features:

- **Suitable For:** Medium format and 35mm cameras, supporting up to 7.5 Kg (16.5 lbs).
- **Maximum Precision:** Ergonomic knobs provide fluid and precise geared control for 360° rotations and frontal/lateral inclinations from +90° to -30°.
- **Lightweight and Durable:** Constructed from strong yet lightweight aluminum, ensuring durability and portability.
- **Easy Assembly:** Innovative design allows for quick disengagement of gears for manual positioning, then re-engagement for fine-tuning.
- **Reliable:** Equipped with a leveling bubble and micrometric knobs to ensure maximum frame composition and professional performance.



Image 1.1: The Manfrotto 405 Geared Head, illustrating its compact size and design. Dimensions are approximately 6.6 inches (16 cm) in height.

2. SETUP AND INSTALLATION

Follow these steps to properly set up your Manfrotto 405 Geared Head:

1. **Mounting the Geared Head:** Securely attach the Manfrotto 405 Geared Head to your tripod's mounting plate. Ensure the connection is tight to prevent any movement during use.
2. **Attaching the Camera:** The head features a quick-release plate system. Attach the appropriate quick-release plate to your camera's tripod socket.
3. Slide the camera with the attached quick-release plate into the head's receiver until it locks securely. Verify the camera is firmly seated before releasing your grip.
4. **Leveling:** Utilize the integrated leveling bubble on the head to ensure your setup is perfectly horizontal. Adjust your tripod legs or the head's base if necessary.

3. OPERATING INSTRUCTIONS

The Manfrotto 405 Geared Head offers precise control over three axes: pan, frontal tilt, and lateral tilt. Each axis is controlled by a dedicated ergonomic knob.

3.1. Geared Control for Fine Adjustments

- **Pan Control:** Use the pan knob to rotate the camera horizontally 360°. Turn the knob slowly for fine adjustments to your composition.
- **Frontal Tilt Control:** The frontal tilt knob allows for vertical adjustments from +90° to -30°. This is ideal for precise framing when shooting upwards or downwards.
- **Lateral Tilt Control:** Use the lateral tilt knob for side-to-side adjustments, also from +90° to -30°. This helps in correcting horizons or achieving specific angles.

3.2. Quick Positioning Feature

For rapid, rough positioning of your camera, the 405 Geared Head includes a unique feature to disengage the gears:

1. Locate the quick-release levers or buttons associated with each axis (refer to the product diagram for exact locations).
2. Press or release the lever/button to temporarily disengage the geared mechanism for that axis.
3. Manually move the camera to the desired approximate position.
4. Re-engage the gears by releasing the lever/button. The head will then be ready for fine-tuning with the geared knobs.

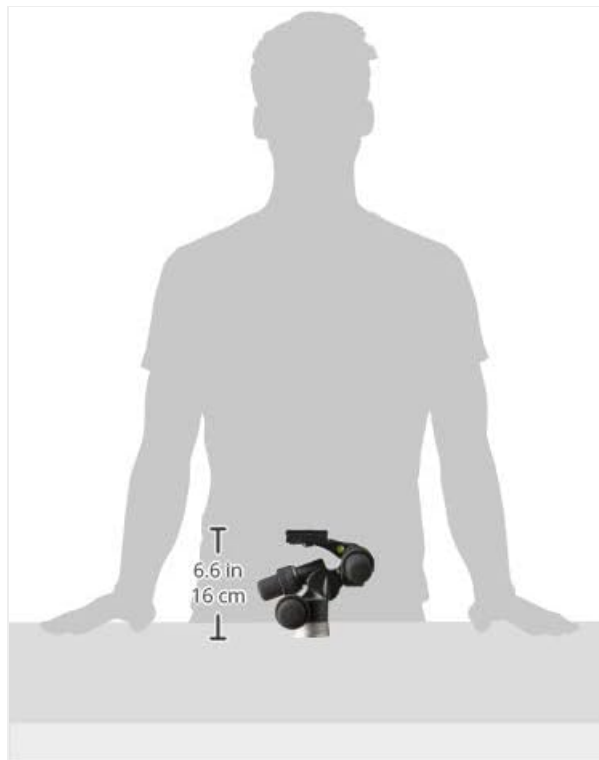


Image 3.1: Close-up view of the Manfrotto 405 Geared Head, highlighting the ergonomic control knobs for precise adjustments.

4. MAINTENANCE AND CARE

Proper maintenance ensures the longevity and optimal performance of your Manfrotto 405 Geared Head.

- **Cleaning:** Regularly wipe the head with a soft, dry cloth to remove dust and debris. Avoid using harsh chemicals or abrasive materials.
- **Gear Protection:** The geared mechanisms are precision components. Avoid sudden impacts or dropping the head, as this can damage the gears.
- **Storage:** When not in use, store the geared head in a protective case or its original packaging to

prevent dust accumulation and accidental damage.

- **Lubrication:** The internal geared mechanisms are factory-lubricated. Do not attempt to lubricate them yourself unless specifically instructed by Manfrotto support. Improper lubrication can attract dust and impair function.
- **Inspection:** Periodically check all knobs, levers, and mounting screws for tightness. Tighten any loose components carefully.

5. TROUBLESHOOTING

If you encounter issues with your Manfrotto 405 Geared Head, refer to the following common solutions:

- **Difficulty in Adjusting:** Ensure that the quick-release levers are fully re-engaged after rough positioning. If the gears feel stiff, check for any obstructions or debris.
- **Camera Not Secure:** Verify that the quick-release plate is correctly attached to your camera and fully seated and locked into the head's receiver. Ensure the plate's screw is tight.
- **Head Not Level:** Re-check the leveling bubble and adjust your tripod legs. If the bubble itself appears faulty, contact customer support.
- **Unusual Noises or Play:** If you notice grinding noises or excessive play in the geared movements, discontinue use and contact Manfrotto customer support for professional inspection and repair. Do not attempt to disassemble the head yourself.

6. SPECIFICATIONS

Feature	Detail
Product Dimensions	9.45 x 7.09 x 6.89 inches
Item Weight	3.53 pounds (1.6 kg)
Model Number	405
Manufacturer	Manfrotto
Color	Black
Compatible Devices	Camera (Medium format and 35mm)
Load Capacity	Up to 7.5 Kg (16.5 lbs)
Pan Rotation	360°
Frontal Tilt	+90° / -30°
Lateral Tilt	+90° / -30°
Material	Aluminum
Origin	Made in Italy

7. WARRANTY INFORMATION

Manfrotto products are designed to meet high quality standards. For detailed warranty information, please refer to the official Manfrotto website or the warranty card included with your product. Keep your proof of purchase for any warranty claims.

8. CUSTOMER SUPPORT

For technical assistance, spare parts, or service, please visit the official Manfrotto support website or contact their customer service department. You can find contact details on the Manfrotto website or in the packaging materials.