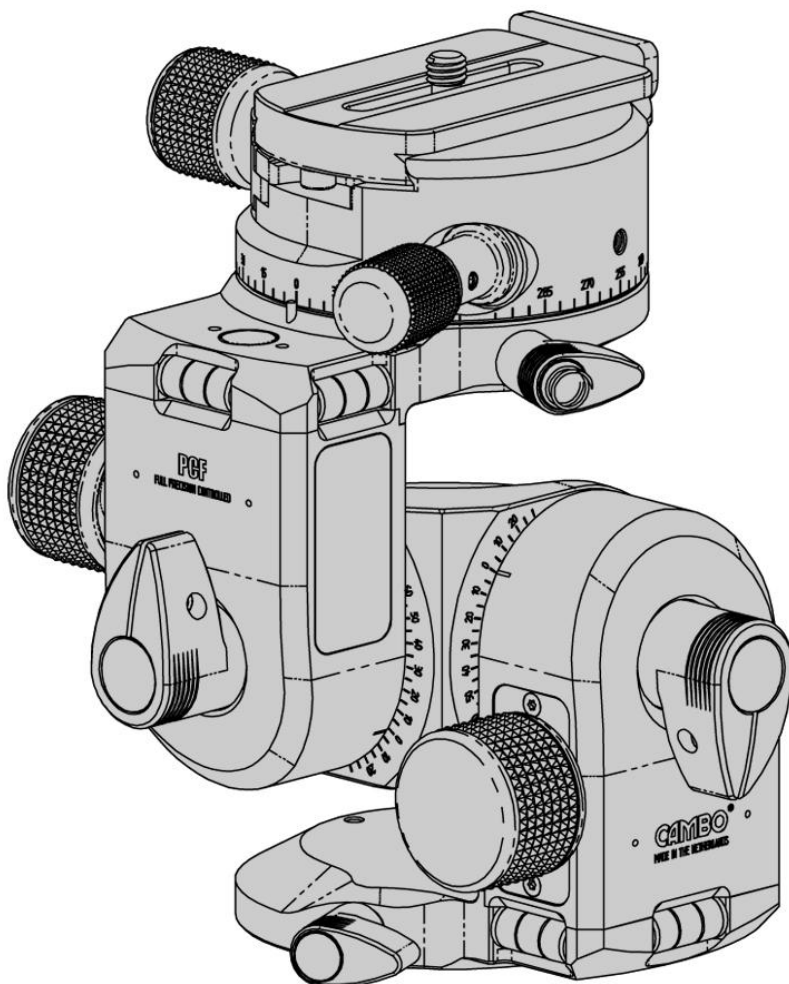


## INSTRUCTION MANUAL EN

Please read this manual carefully before using the PCF!





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## **Thank you for purchasing a Cambo product**

The **PCH** is a tripod head which features geared rotational movement around the X- and Y-Axis and Z-Axis (top) and double (top and bottom plate) manual rotation around the Z-axis. This enables the PCF to be used as a normal ball head for fast levelling adjustment as well as a precision gear head for fine levelling adjustments.

## 1. Key Features PCF

- 360° manual panning at the top and bottom plate
- 360° geared panning at the top plate
- Position click indication every 90° at the top and bottom plate
- 140° X-axis tilt (30° backwards 110° forward)
- Separate manual (fast) or geared (fine) movement around the X-axis
- 140° Y-axis pivot (30° backwards 110° forward)
- Separate manual (fast) or geared (fine) movement around the Y-axis
- X-, Y- and Z-axis rotate over the same point
- When X-, Y- and Z-axis locking knobs are open the PCH can move freely like a normal spherical head.
- Adjustable geared friction
- Adjustable manual friction
- Arca compatible clamp
- 4 large spirit levels
- Durable stainless steel 3/8" and 1/4" tripod mounting options.

## 2. Warnings

- ⚠ Always! support the camera when unlocking one of the PCF locking knobs.
- ⚠ Keep your camera supported until all locking knobs are back in locking position.
- ⚠ Apply no more than 4Kg to the PCF

### 3. Operating the PCF

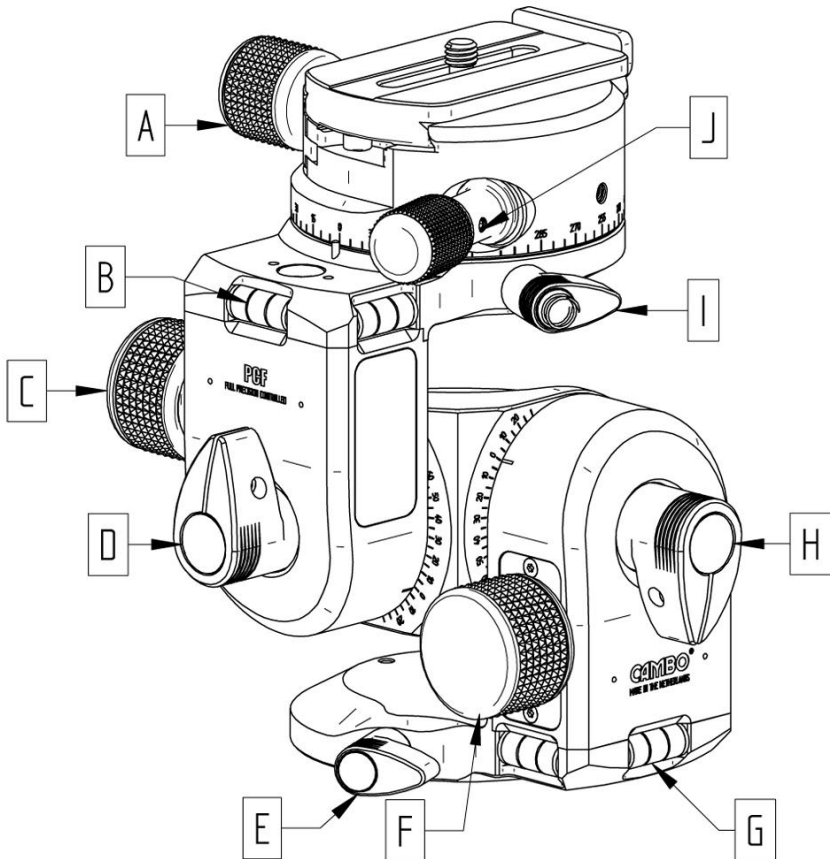
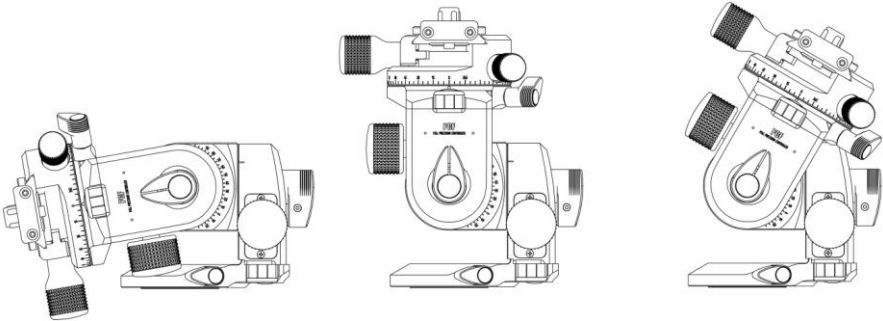


Figure 1 PCF operation knobs.

- |   |   |
|---|---|
| A | QR knob                                   |
| B | Top spirit levels                         |
| C | Geared pivot adjustment knob              |
| D | Manual pivot adjustment locking knob      |
| E | Bottom plate rotation index locking knob  |
| F | Geared tilt adjustment knob               |
| G | Bottom spirit levels                      |
| H | Manual tilt adjustment locking knob       |
| I | Top plate rotation index locking knob     |
| J | Geared top plate rotation adjustment knob |

## 4. Pivoting



*Figure 2 PCF Pivot movements*

### **For pivoting the PCF manually:**

- make sure to support your camera before unlocking
- Rotate locking knob [D] Counter clockwise (CCW) to unlock manual operation
- Manually push to the desired position
- Rotate locking knob [D] Clockwise (CW) to lock it into position

### **For pivoting the PCF geared:**

- Make sure knob [D] is locked
- Rotate knob [C] CW for pivoting to the right
- Rotate knob [C] CCW for pivoting left
- Maximum pivot movement 110° left, 30° right

## 5. Tilting

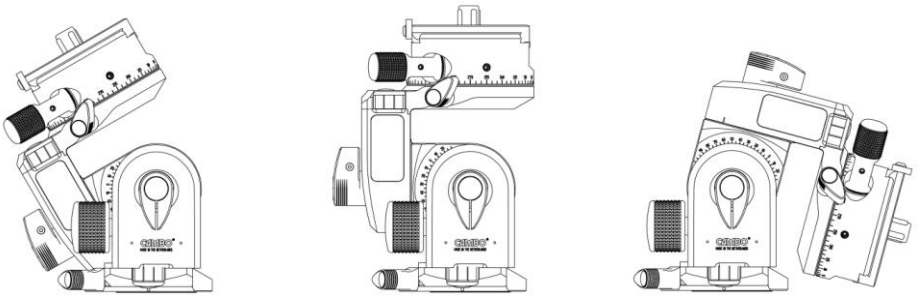


Figure 3 PCF tilt movements

### For tilting the PCF manually:

- make sure to support your camera before unlocking
- Rotate locking knob [H] CCW to unlock the manual operation
- Manually push to the desired position
- Rotate locking knob [H] CW to lock it into position

### For tilting the PCF geared:

- Make sure knob [H] is locked
- Rotate knob [F] CW for pivoting to the right
- Rotate knob [F] CCW for pivoting left
- Maximum tilt movement 110° forward, 30° backward



## 6. Rotating

To rotate the camera, unlock either locking knob [E] (rotate CCW to unlock) for manual rotation around the bottom plate, or knob [I] to rotate around the top plate. Both rotating movements have position click indications every  $90^\circ$  for fast positioning. The top plate is fitted with a  $360^\circ$  scale for precise positioning. Use knob [J] for geared rotation around the Z-axis.

To prevent the locking knobs from interfering with the housing or base plates that exceed the size of the bottom plate, both locking knobs have been fitted an indexing feature. By pulling the locking knob outward [1.] the locking knob can be rotated [2.] to any desired position.

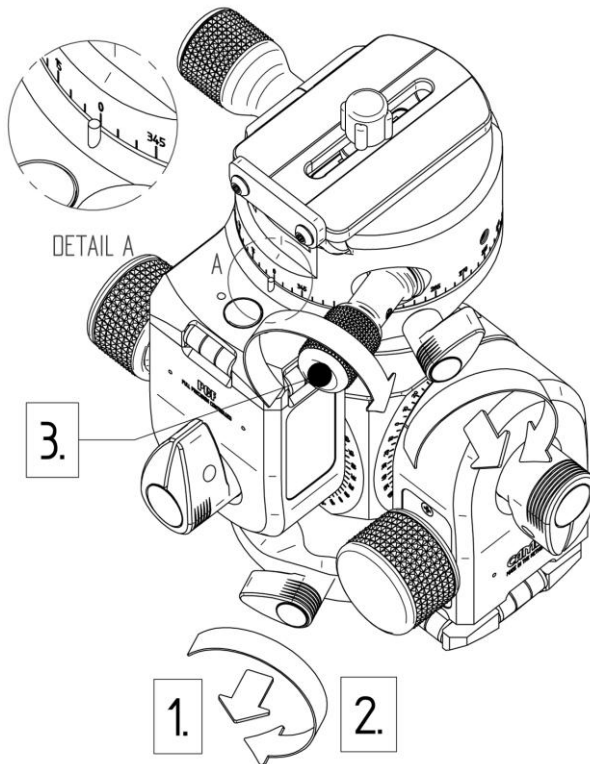


Figure 4 PCF index locking knobs

## 7. Adjusting the PCF friction

It is possible to fine tune the PCF manual control friction to your own preference. Note that fine tuning the PCF friction is a precise task and should be performed with great care to prevent damages or malfunctioning.

### Fine tuning the manual friction:

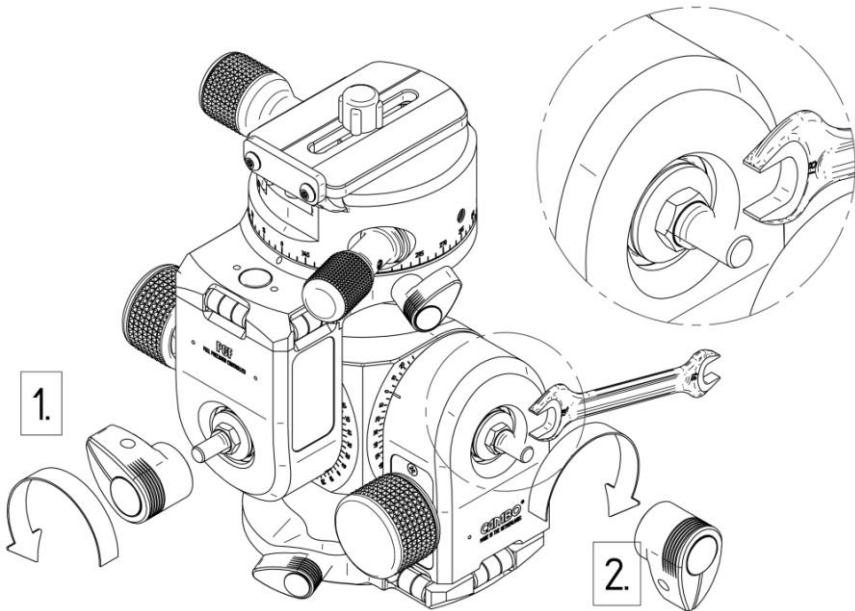


Figure 5 PCF manual friction adjustment

1. Rotate locking knobs [D] and [H] CCW until they come off the threaded axis.
2. Use an 8mm wrench to turn the M5 locking nut CW to apply more friction or CCW to apply less friction.
3. Re-apply locking knobs [D] and [H] by rotating them CW over the threaded axis.

## 8. Malfunction measures

To prevent the possibility that the rotation locking knob will not apply sufficient force to unscrew the PCF from any 3/8" or 1/4" tripod mounting options, safety measures have been met. The bottom mounting plate and rotation disc haven been fitted with matching holes [1. & 2.] which can be aligned. When aligned a 2,5mm pin can be placed through both holes to apply extra force on the 3/8" or 1/4" thread.

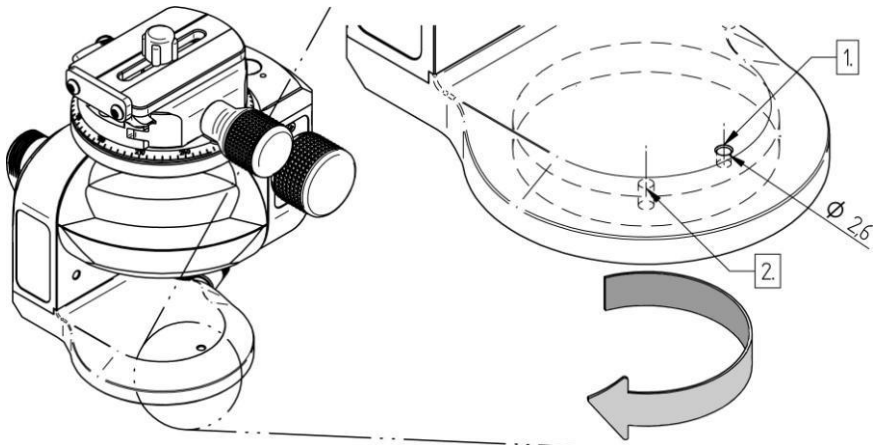


Figure 6 Thread lock prevention measure

This instruction manual is prepared with care, although no responsibility, financial or otherwise, is accepted for any consequences related the information stated in this instruction manual. All specifications in this instruction manual are subject to change without notice.

For more information please visit the Cambo web site: [www.cambo.com](http://www.cambo.com)