

# Manual Tripodheads



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# **Operating and care instructions**

NOTICE: Before mounting your camera, please read this manual carefully!

All knobs are secured against unscrewing. Please unscrew only until you feel resistance (stop). Please always allow your tripod head time to adjust to the respective temperature. Moisture or condensation water can temporarily impair the velvety smooth running of the ball.

# Assembly and function of the 15° stop button

All FT models can be retrofitted later with the new 15° stop system. The protective cover is removed with the help of a suitable screwdriver or with a coin (picture 1). In its place the 15°-stop button is fixed with a 10mm open-end wrench (picture 2). The locking function of the 15°-stop button is activated by turning the grey handle to the right until it stops. Deactivation is done by turning the grey handle to the left. An audible and perceptible click of the raster during panorama rotation now enables single image recordings at the smallest distance of 15°. By pressing the black 15°-stop button at position "0" the panorama base locks into place (picture 3). Now the tripod head is screwed onto the tripod or removed by holding the pressed button simultaneously. Especially with changing temperatures, this additional function allows quick and safe handling.



# Using the tilt function

By tightening the tilt button it is possible to lock the rotation and left/right tilt of the ball. The ball can now only move in one plane, similar to a 2-way tilt. However, the load for horizontal rotation of the center ball is limited by the O-ring. If the O-ring is damaged, it must be replaced immediately.



# Maintenance and cleaning of the FLM Centerball

The FLM Centerball requires no maintenance, but regular care. If the preload force (FRIKTION) of the ball decreases or the ball is dirty, clean the ball tilted into the slot with a lint-free cloth soaked in pure alcohol (spirit). To rotate the ball, loosen the adjustment knob, and if present, also the TILT/TILT knob. Neveruse oil! Due to the new design, the FLM Centerball can also be completely disassembled for possible repairs or cleaning - but only by the manufacturer, otherwise the manufacturer's warranty is void.



# Instructions for adhesive mounting QRB and PRP

Adhesive joints at the FLM Centerball

The stud bolt supplied with the center ball can be screwed into the ball in two ways. With the 1/4" thread on top, the single plate can be screwed on, so that the protruding 1/4" thread represents the camera connection. For the construction of special camera plates, however, the 3/8" thread must point upwards - the 1/4" thread of the stud bolt disappears in this case in the ball. To avoid damage to the bottom thread of the camera, it is essential to pay attention to the protruding thread length.



To connect the Quick Release Base or the Power Release Base (picture 2) firmly and non-rotatably to the center ball, the stud screw is glued to the base and center ball. Please use metal adhesive with a temperature resistance of up to approx. 100° C to enable subsequent replacement of your Base. We recommend UHU plus endfest 300.



Apply the adhesive at the end of the 3/8" thread approx. 3 turns all around (no adhesive on the screw head - see picture 1) and screw this screw end into the Power Release Base as far as it will go. With the Quick Release Base, however, the screw must not protrude from the top of the base plate. After curing (see instructions for use of your adhesive), the base is glued to the center ball in the same way (picture 3). A later replacement of your old base plate can be done by completely dipping the base plate - but only the base plate - into boiling hot water. This will soften the metal adhesive and the plate can be easily removed. Protect your hands from burns.



## Note:

Please make sure that no sand or salt water gets inside the tripod head



# Operation of the stop ring and adjustment handle

### 1. Friction and fixation

Hold the ball head so that you are looking directly at the FLM logo. Now the fixed button is on the right side. The black scale ring acts as a locknut and serves as a stop for the grey fixed knob, which is thus protected against being turned out completely counterclockwise.

As soon as you turn the scale ring clockwise as far as it will go, the ring and knob are fixed and can no longer be turned. To release the fixation, turn the knob slightly clockwise. Now you can turn the ring and knob simultaneously counterclockwise to the stop. The ball is now freely movable again.



adjustment handle

# 2. Adjustment of the friction with mounted camera and released ball

Turn the adjustment handle clockwise until the camera stops automatically in any position. If you now turn the black scale ring also clockwise until it stops, you have saved the position value of the friction setting. This procedure is carried out once for each camera/lens combination. The number on the scale ring below the arrow shows the set position value for this camera/lens combination. By setting to this numerical value, you can safely repeat the friction setting for a specific camera/lens combination at any time.

# 3. Readjusting the friction fine adjustment

First turn the adjustment handle clockwise to release the lock with the scale ring. Then turn the scale ring clockwise to a higher value. This increases the friction. Turning it counterclockwise reduces the friction. Then turn the adjusting handle counterclockwise until it stops. Only now have you changed the friction. Please note, as mentioned under point 2, that a 100% friction setting is only guaranteed if the adjusting handle is turned back to the stop of the adjusted scale ring and locked.

# 4. Adjusting the friction of different cameras or lenses

Proceed as described under point 2. With the help of the number displayed on the scale ring, the friction setting can be safely repeated for each camera/lens combination at any time.

Now change the camera/lens combination and adjust the friction as described in point 2. Note the number on the scale ring for the camera/lens combination that is now mounted. Repeat this procedure for all camera/lens combinations.

# 5. finding the individual friction positions again

Tighten the adjustment knob so that the mounted camera/lens combination cannot be moved. Now set the scale ring to the value determined for this camera/lens combination under point 3. Then turn the adjustment knob counterclockwise until it stops.

Points 1-5 are one-time settings.

Point 6 describes the adjustment procedure of the ball head immediately before taking a picture.

### 6. Fixation

At the friction value set in point 2, the camera/lens combination is determined by turning the adjustment knob clockwise. Since the ball head for the specific camera/lens combination is already preloaded, a half to full turn of the knob is usually sufficient to fix the camera correctly. When turning the adjustment handle back, you automatically reach the set friction position. Even in darkness, the set position cannot be missed. This prevents unintentional release of the head with the camera/lens combination mounted.