



Q3

Q3T

Q10

Q20

Markins Q-Ball Heads  
Users Guide  
and  
Technical Data Sheet - EN

# Markins Q3, Q10, Q20 Users Guide



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# Markins Q3, Q10, Q20 Users Guide



## ▲ Your new ball head

Thank you for choosing Markins. The Markins Q-Ball heads are designed to fulfill the needs of demanding photographers in all situations. It is a fine product, built with uncompromising craftsmanship. We offer our best wishes that the Markins ball head may enhance your photographic life. Make sure you read through this guide thoroughly before you start using your new Markins Q-Ball head. It will not take much of your time and it will make you more comfortable with the system. Keep this guide and other documents in a safe place for future reference.

### QR-48 and QR-60 clamps

The new Q3 and Q10, and Q20 Q-Ball heads come with the new integrated Markins QR-48 and QR-60 quick release knob clamps respectively. You may also choose a quick release lever clamp ball head.

- Made of the highest quality duraluminum, light weight but strong.
- Hard-anodized surface is smooth and extremely resistant to scratches, chips or corrosion.
- With built-in spirit level
- Patented spring loaded stop pin to prevent costly accidental drops
- Captive knob with smooth silicone rubber sleeve
- Completely enclosed mechanism to keep dust out
- Rounded corners and edges for added safety and ergonomics
- Compatible with standard dovetail mounting plates (Arca Swiss, Foba, Kirk, Wimberley, RRS, etc).



# Markins Q3, Q10, Q20 Users Guide



## New QL-48 and QL-60 clamps

The new Q3, Q10 and Q20 Q-Ball heads can also be bought with the new integrated Markins QL-48 and QL-60 quick release lever clamps respectively.

- Made of the highest quality duraluminum, light weight but strong.
- Hard-anodized surface is smooth and extremely resistant to scratches, chips or corrosion.
- With built-in spirit level
- Patented spring loaded stop pin to prevent costly accidental drops
- Adjustable lever can be used with either the left or right hand
- Rounded corners and edges for added safety and ergonomics
- Elegant and compact, with very high positive lock action
- Compatible with standard dovetail mounting plates (Arca Swiss, Foba, Kirk, Wimberley, RRS, etc).
- Easily adjustable width lever clamp to accommodate different width plates, other than Markins



## Using your ball head

1. Start with mounting a Markins camera plate, or a compatible Arca Swiss type plate on your camera. For modern bodies of most brands, there are custom designed Markins plates, like the P300U, P3U, P700U, PG-34N, PG-50



Screw the plate tight. Newest plates are shipped with an improved hexagonal head cavity screw for a 5/32" Allen wrench for positive locking.

On most bodies and battery packs, the best fit for the camera plate is when mounted with the anti-twist flange ("dove tail") pointing forward.

2. Attach the ball head tightly onto your tripod. You may use a leather shoe string or a rubber wrench to make sure it is well tightened. In addition to the 3/8" UNC tap, many tripods have one or more locking screws, pressing against the bottom of the base of the ball head to prevent it to rotate. If your tripod has such locking screws, you may use them, but be careful not to screw them in too tight. If you do, you may damage the panorama base of the ball head or at least make it difficult or even impossible to pan.

3. Adjust the clamp to horizontal position and turn the main friction control knob clockwise so that the ball does not move.

4. Open the Quick Release clamp (knob or lever type) to accommodate the plate mounted on your camera.

5. Attach your camera to the ball head by sliding the plate into the Quick Release clamp or by inserting it from the top with the clamp fully opened.

6. Turn the Quick Release clamp knob clockwise to lock the plate and camera or close the lever, depending on what type of clamp you chose.

7. Adjust the main control knob to the minimum desired friction, where your camera wont flop, or creep, but you can still move it.

8. Turn the small friction limit adjust dial all the way in, making the current friction setting the lowest friction you will use. This prevents the main control knob from being unscrewed to a point where the camera may flop. **IMPORTANT:** Do NOT use a screwdriver to turn the friction limit adjust dial, but use the tip of your finger and press firmly against the small dial. If the dial seems

stuck, all you need to do is to turn the main friction control knob clockwise. The first time the friction limit adjust dial is used, you may have to apply some additional force to screw it in.

9. You can now easily make small adjustments with the main friction control knob if you are using your camera at extreme angles. You may also completely lock and unlock the camera movement with less than a single turn of the control knob when you think you must.

10. With practice, you should be able to find a "sweet spot" where your camera will move to any position desired without creeping and without having to touch the ball head friction controls at all.

Notes:

a) Do not over tighten the panning lock knob. It is supposed to have some minimal play to better help absorb vibration, especially under windy conditions.

b) Markins ball heads are tested against sea water corrosion, its inside parts are all steel. If your ball head gets splashed by the sea or even falls into the ocean, you can thoroughly rinse it in tap or bottled water and then dry with a towel or cloth. After completely dried, place one or two drops of WD-40® in the ball, rotate it all around and clean it again with a dry cloth. (See "How to Clean your Ball Head" in the following page)

## Basic Maintenance Guide for the Markins Ball Head

Markins ball heads are assembled with high precision parts. To function well even in extreme environments (especially in very low temperature) regular maintenance of the ball head system is recommended:

1. Keep the surface of the ball head and ball housing free from dirt, dust, sand, etc.
2. Avoid exposing the ball head to adhesive agents, paint etc. Chemical reactions may destroy the finish and may damage the ball head.
3. If the interior of the ball head becomes wet, fully dry and clean the ball head system.
4. It is advisable to keep it covered with a MP-3 ball head protection cover pouch when not in use and when traveling in the field.

Note:

Being wet does not affect the performance of the ball head. All the parts are made to be corrosion, rust and stain resistant. However, the mechanism should be kept dry to ensure smooth operation in freezing temperatures. Please, follow the cleaning procedures as described below.

MP-3  
Protection Cover



## ▲ How to Clean your Ball Head

There could be situations that the ball head feels not as smooth as usual, especially in freezing weather. It is mainly because of frozen moisture or a contaminant inside the contact surfaces of the ball and housing. In such cases, follow this cleaning procedure:

1. Unscrew the friction limit adjust dial with your finger until it is flush with the cover of the main friction knob and turn the main friction knob of the ball head counter clockwise to loosen the ball completely. Further adjust the friction limit dial screw counter clockwise if necessary to allow full loosening of the main knob.
2. Place 2 to 3 drops of WD-40<sup>®</sup> or equivalent on the surface of the ball and rotate it thoroughly to cover the whole surface of the ball. After rotating the ball many times (about 10 times), clean the surface with a lens cleaning cloth or other suitable lint-free cloth. (A very thin film of WD-40<sup>®</sup> left on the surface will not affect the performance of the ball head.)
3. The above maintenance will restore the ball head to its initial condition of smoothness. It might be advisable to apply one or 2 drops of WD-40<sup>®</sup> with cleaning, before using it in extreme cold weather. WD-40<sup>®</sup> is a displacer of moisture that could freeze and interfere with ball operation.

▲ Keep the fastening knob of the quick release clamp tightened while carrying or storing the ball head for any significant time or distance. The Quick Knob Release clamps QR-60 and QR-48 all have captive knobs, spring loaded stop pin and integrated bubble level.



▲ The Quick Lever Release clamps QL-60 and QL-48 have an adjustable width distance for various plate sizes and can be used with either the right or left hand.



# Markins Q3, Q10, Q20 Users Guide



Technical Data Sheet. Markins Q20, Q10, Q3 Emille and Q3T Traveler with Knob Release Clamp



Markins Q-Ball Q20	Q20-KR
Weight (g / lbs)	555 / 1.22
Max. load (Kg / lbs)	50 / 110
Height (cm / in)	102 / 4.0
Housing diameter (mm / in)	58 / 2.28
Ball diameter (mm / in)	48 / 1.89
Camera connection type	QR-60 Knob Clamp
Friction control	Progressive, Bi-Axial
Tripod Mount	3/8" - 16 UNC
Standard color	Black



Markins Q-Ball Q10	Q10-KR
Weight (g / lbs)	490 g / 1.1
Max. load (kg / lbs)	45 Kg / 99 lbs
Height (mm / inch)	98 mm / 3.86 in
Housing diameter (mm / inch)	54 mm / 2.13 in
Ball diameter (mm / inch)	44 mm / 1.73 in
Camera connection type	QR-48 Knob Clamp
Friction control	Progressive, Bi-Axial
Tripod Mount	3/8" UNC
Standard color	Black



Markins Q3 Emille	Q3-KR
Weight (g / lbs)	375 / 0.83
Max. load (kg / lbs)	30 / 66
Height (mm / inch)	89 / 3.50
Housing diameter (mm / inch)	48 / 1.89
Ball diameter (mm / inch)	38 / 1.5
Camera connection type	QR-48 Knob Clamp
Friction control	Progressive, Bi-Axial
Tripod Mount	3/8" UNC
Standard color	Black



Markins Q3T Traveler	Q3T-KR
Weight (g / lbs)	368 / 0.81
Max. load (kg / lbs)	30 / 66
Height (mm / inch)	89 / 3.50
Housing diameter (mm / inch)	48 / 1.89
Ball diameter (mm / inch)	38 / 1.5
Camera connection type	QR-48s Knob Clamp
Friction control	Progressive, Bi-Axial
Tripod winding	3/8" UNC
Standard color	Black

# Markins Q3, Q10, Q20 Users Guide



Technical Data Sheet. Markins Q20, Q10, Q3 Emille and Q3 Traveler with Lever Release clamp



Markins Q-Ball Q20	Q20-LR
Weight (g / lbs)	555 / 1.22
Max. load (kg / lbs)	50/ 110
Height (mm / inch)	102/ 4.0
Housing diameter (mm / inch)	58 / 2.28
Ball diameter (mm / inch)	48 / 1.89
Camera connection type	QL-60 Lever Clamp
Friction control	Progressive, Bi-Axial
Tripod winding	3/8" UNC
Standard color	Black



Markins Q-Ball Q10	Q10-LR
Weight (g / lbs)	490/ 1.1
Max. load (kg / lbs)	45/ 99
Height (mm / inch)	98 / 3.86
Housing diameter (mm / inch)	54/ 2.13
Ball diameter (mm / inch)	44 / 1.73
Camera connection type	QL-48 Lever Clamp
Friction control	Progressive, Bi-Axial
Tripod winding	3/8" UNC
Standard color	Black



Markins Q3 Emille	Q3-LR
Weight (g / lbs)	375/ 0.83
Max. load (kg / lbs)	30 / 66
Height (mm / inch)	89 / 3.50
Housing diameter (mm / inch)	48 / 1.89
Ball diameter (mm / inch)	38 / 1.5
Camera connection type	QL-48 Lever Clamp
Friction control	Progressive, Bi-Axial
Tripod winding	3/8" UNC
Standard color	Black



Markins Q3 Traveler	Q3T-LR
Weight (g / lbs)	368 / 0.8
Max. load (kg / lbs)	30 / 66
Height (mm / inch)	89 / 3.50
Housing diameter (mm / inch)	48/ 1.89
Ball diameter (mm / inch)	38 / 1.5
Camera connection type	QL-48 Lever Clamp
Friction control	Progressive, Bi-Axial
Tripod winding	3/8" UNC
Standard color	Black

# Markins Q3, Q10, Q20 Users Guide



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