BALL HEADS

Our new centre ball series is hot out of the hands of the design team. Favoured by those who give priority to speed over millimetric precision when setting up the perfect shot, the range offers considerable weight-saving features and low-profile design. Made completely of aluminium, the Manfrotto centre ball head range offers each type of user a similar basis to build upon. Movements across models have been brought closer together, while positioning angles cover 360° rotation around the vertical axis to +90° / -90° lateral tilt. The ratchet lever ball lock system is secure and fast, with speed in use further guaranteed by the quick release plate optional on many of the models in the series in addition to the standard 1/4" or 3/8" fixed



On models 482, 484, 486, 488, 490, 468: fixed screw.



On model 488RCO: hexagonal quick release plate



On models 484RC2, 486RC2, 488RC2, 468RC2: rectangular quick release plate.



On models 484RC4, 490RC4, 468RC4: large rectangular quick release plate.



locking single indexed ratchet lever for ball and pan lock.

On models 488 and 490: indexed ratchet lever for pan lock.

On model 482: tripod attachment dual 1/4" and 3/8" fittings. (all other models have industry standard 3/8" fittings).

Ball Heads



MICRO BALL HEAD 482













All-purpose ball head designed for use with compact, 35mm and small digital cameras. This head is ideal for the Table Top Tripod 209, car window clamp 243 and monopods such as the 276. It has a single indexed "ratchet" locking knob for 360pan ° and +90° -90° tilt movements. Camera attachment is via a 50mm platform with 1/4" male thread. Head to tripod attachment is 1/4" and 3/8" female All aluminium construction and black finish.

MINI BALL HEAD 484















Designed for use with compact, 35mm and small digital cameras. The strong die-cast construction, precision-machined aluminium housing and extremely hard phenolic resin ball provide excellent smooth movements across all tilt positions. A single "ratchet" control lever securely locks both the +90°-90° ball and the 360° pan movements. Camera attachment is via a 50mm platform with 1/4" male thread. Head to tripod attachment is 3/8" female

MINI BALL HEAD WITH RC2 RAPID **CONNECT SYSTEM 484RC2**

















This versatile head is fitted with a quick release 200PL camera plate system with a secondary safety catch. The head is perfect for 35mm SLR cameras with medium lenses, and light medium format cameras. Head to tripod attachment is 3/8" female.

Optional Plates: 200PL-38, 200PLARCH-14, 200PLARCH-38

COMPACT BALL HEAD 486











The Compact Ball Head is strong enough to take 35mm SLR cameras with medium lenses, and light medium format cameras. It has a single indexed "ratchet" locking knob for 360° pan and +90° -90° tilt movements. Camera attachment is via a 50mm platform with 1/4" male thread. Head to tripod attachment is 3/8" female. All aluminium construction and black finish.

COMPACT BALL HEAD WITH RC2 RAPID **CONNECT SYSTEM 486RC2**















Same as the 486 but equipped with a quick release 200PL camera plate system with a secondary safety catch. Camera plate has 1/4" male thread. Head to tripod attachment is 3/8" female.

Optional Plates: 200PL-38, 200PLARCH-14, 200PLARCH-38

MIDI BALL HEAD 488











With its solid aluminium construction and phenolic resin ball, this head is the ideal support for all traditional or digital small or medium format cameras. It features separate fast action "ratchet" locks on 360° pan and +90 -90° tilt movements. You can position your camera anywhere in 180° sphere with confidence and ease. Camera attachment is via a 50mm platform with 1/4" male thread. Head to tripod attachment is 3/8" female.

MIDI BALL HEAD WITH RCO RAPID CONNECT SYSTEM 488RC0













Same as the 488 but equipped with a quick release 030 camera plate system with a secondary safety catch and two spirit levels for precise levelling on both vertical or horizontal axes. Camera attachment has 1/4" male thread. Head to tripod attachment is 3/8" female.

Optional Plates: 030ARCH-14, 030ARCH-38, 030HAS, 130-14, 130-38, 030L, 030UNIV.



MIDI BALL HEAD WITH RC2 RAPID **CONNECT SYSTEM 488RC2**

















Same as the 488 but equipped with a quick release 200PL camera plate system with a secondary safety catch. Camera plate has 1/4" male thread. Head to tripod attachment is 3/8" female.

Optional Plates: 200PL-38, 200PLARCH-14, 200PLARCH-38

MIDI BALL HEAD WITH RC4 RAPID CONNECT SYSTEM 488RC4















Tilt +90°-90°

Same as the 488 but equipped with a quick release 410PL camera plate system with a secondary safety catch and two spirit levels for precise levelling on both vertical or horizontal axes. Camera plate has 1/4" male thread. Head to tripod attachment is 3/8" female.

MAXI BALL HEAD 490







Head to tripod attachment is 3/8" female.





The top of Manfrotto's range of centre ball heads in die-cast aluminium with precision phenol resin ball. The 490's features make it versatile and ideal for digital and traditional photographic equipment from 35mm to 20x25cm format up to 12kg in weight. It features separate locks on 360° pan and +90 -90° tilt movements, with an additional friction control on the ball movement to give just the right resistance and smoothness with minimum effort, even with varying weight of equipment on board. The Maxi Ball Head attaches to the camera via a 50mm platform with an ingeniously combined 1/4" and 3/8" male thread.

MAXI BALL HEAD WITH RC4 RAPID **CONNECT SYSTEM 490RC4**



13.7cm











Same as the 490 but equipped with a quick release 410PL camera plate system with a secondary safety catch and two spirit levels for precise levelling on both vertical or horizontal axes. Camera plate has 1/4" male thread. Head to tripod attachment is 3/8" female.

GRIP ACTION BALL HEAD BLACK 222 GRIP ACTION BALL HEAD GREEN 222NAT

21cm











Versatile, quick and easy to use. Just grip the handle and you can position your camera anywhere within a 180° sphere. Supplied with quick release camera plate with secondary safety lock, built-in bubble level and tension adjustment. Made of cast aluminium. Ideal for 35mm cameras with short or medium focal length lenses.

Available in two versions: the 222 is black painted while the 222NAT green painted.

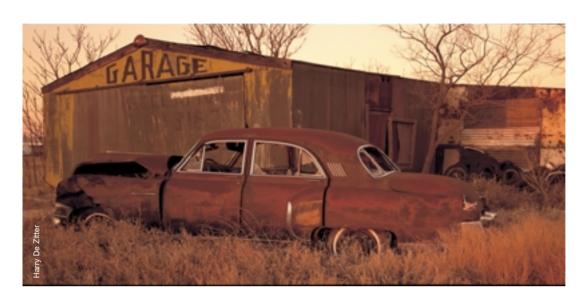
Camera attachment: 1/4"

Optional Plates: 200PL-38, 200PLARCH-14, 200PLARCH-38

PATENTED

HYDROSTAT BALL HEADS

The Hydrostat is the most advanced ball head of the entire Manfrotto range. Designed to meet the demand of professional photographers for a lightweight, but at the same time heavy duty load capacity ball head. This model has similar features to our standard range of ball and socket heads, like independent pan and tilt locks, 360° pan and +90° / -90° tilt movement - but employs a revolutionary friction and locking mechanism. Designed for camera and lens loads of up to 16kilos, this head has a magnesium die cast body, a 2" Teflon coated aluminium ball which combined with specially designed tension surfaces provides movement as smooth as silk. A calibrated adjustable tension control allows you to preset the ball tension to suit your camera weight and give you fingertip control. The oversized lock knob hides a "PAT PENDING" locking mechanism which uses the fundamental criteria of the hydraulic laws - specifically referring to the hydrostatic ones, which locks the camera in such a secure position it gives the impression it has become one solid part of the head and removing completely any movement during the locking phase. Completing this masterpiece, a graduated panoramic base and a choice of six different "Hydrostat Ball Head" versions featuring a variety of quick release plate fixings.





Manfrotto's range of quick release plates is as broad as the range of photographic shooting equipment available in the world. One of the principle criteria used in manufacturing a quick release camera plate is its capability to hold the weight of the camera in all head positions. That is why, for example, the 200PL (RC2) connect plate system is mainly used to hold SLR systems, while the 410PL (RC4) is used with medium format cameras, and the sliding quick release system, 357PL/501PL (RC3/RC5), is used with cameras with heavy and bulky tele lenses. In order to give all professionals the possibility to work with this innovative ball head, we have prepared a version for every quick release camera plate Manfrotto manufactures plus a fixed version for those who prefer this type of attachment. Enjoy the choices!



HYDROSTATIC BALL HEAD 468MG











Pan 360° Tilt +90°-90°



HYDROSTATIC BALL HEAD WITH RC0 RAPID CONNECT SYSTEM 468MGRC0















HYDROSTATIC BALL HEAD WITH RC2 RAPID CONNECT SYSTEM 468MGRC2





















HYDROSTATIC BALL HEAD WITH RC3









HYDROSTATIC BALL HEAD WITH RC4 RAPID CONNECT SYSTEM 468MGRC4















HYDROSTATIC BALL HEAD WITH RC5 RAPID CONNECT SYSTEM 468MGRC5













Ball Heads



HORIZONTAL GRIP ACTION BALL HEAD 322RC2













Take the versatility of a ball head, add true ergonomic control and you get the 322RC2: a photographic head that allows you to unblock, move, position and lock your camera with one hand in one position thanks to the revolutionary design of its grip handle, which incorporates the ball lock lever and can also mount the 322RS shutter release accessory. A friction control wheel lets you regulate the power of the blocking mechanism to match the weight of your camera/lens. The 322RC2 is made from magnesium for lightweight performance, and is designed to keep the weight of your kit as close as possible to the tripod's centre of gravity by way of its reduced height. It is this fact, matched with the precision construction of the 322RC2 that gives the head its load capacity of 5kg. Complete with built-in bubble spirit level and quick release camera plate (standard 1/4" screw, with secondary safety pin). Suitable for use with 35mm or medium format cameras.

Optional Plates: 200PL-38, 200PLARCH-14, 200PLARCH-38 PAT. PENDING







CENTRE OF GRAVITY

In turn, aligning the camera close to the tripod centre of gravity gives the **322RC2** an extraordinary 5kg load capacity. **Lateral tilt movement:** -3° / $+90^{\circ}$.

ERGONOMICS

Whether you're left handed or right, whether you prefer a horizontal grip or vertical, the 322RC2 is practical and ergonomic. Customise the location of the camera plate to suit your ideal working position.





322RS fitted for left-handed use of the 322RC2 head in horizontal position.



322RS fitted for left-handed use of the 322RC2 head in vertical position.



322RS fitted for right-handed use of the 322RC2 head in vertical position.



322RS fitted for right-handed use of the 322RC2 head in horizontal position.





BACK VIEW Double action switch 2.5mm stereo jack

ELECTRONIC SHUTTER RELEASE KIT FOR 322RS

The remote control electronic shutter release kit fits the 322RC2 grip action ball head and puts control of your camera's shutter down on the head itself, so you can take photos the moment you're in position, without having to move your hand from the head grip up to the camera body. The 322RS can be fitted to the head no matter which position you choose to use it in, for both right and left handed photographers. PAT. PENDING



CABLE SHUTTER RELEASE KIT 322RSM

The cable shutter release kit fits the 322RC2 Grip Action Ball Head and puts control of your camera's shutter down on the head itself, so you can take photos the moment you're in position, without having to move your hand from the head grip up to the camera body. The 322RS can be fitted to the head no matter which position you choose to use it in, for both right and left handed photographers.



ADDITIONAL CAMERA PLATE ADAPTER FOR 322RC - 322RA

Camera plate attachment assembly for the 322RC2 can also be available as a separate accessory in case you want the camera to be as close as possible to the tripod's center of gravity, which provides a higher rate of stability.

Code	Description	
U5463	Bronica SQAI	
U5453	Bronica SQAM, ETR md	
U5453	Canon	
U5FW41	Canon Elan 2, 2E, 7, 7E Rebel 200, XI Lite	
522SCA	Canon EOS 300D, DIGITAL REBEL	
U5FW46	Canon EOS 1, A2, A2E, AS, 1N, 620, T90	
U5FW43	Canon EOS 1V, 3, D2000, D30	
U5466	Canon EOS 1V, 3, D30, D60, 10D, 1D, 1D Mark II, 1Ds	
U5459	Canon EOS A5, A2E, A2, 1, 1N, 620, T90	
U5FW41	Contax 645, A1, N1	
U5465	Hasselblad 503CW/CXi	
U5452	Hasselblad ELM, ELX	
U5456	Leica	
U5467	Mamiya 645AF	
U5FW45	Mamiya 645AF	
U5454	Mamiya RZ67, RZ67 II, 645 Super, 645 Pro	
U5458	Minolta 5000/l, 7000/l, 8000/l, 9000/l, 5Xi, 7Xi, 9Xi, 700si	
U5FW42	Minolta 7 & 9	
U5FW44	Nikon D1, D1x, N90/s, F5, F90x, F100	
U5451	Nikon MD2/4/12/15, 8008/s, F4S	
U5453	Olympus	_
U522SCA	Pentax *ist	_
U5FW47	Pentax 645N & all Pentax Autofocus SLR cameras except Z-1P	_
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