




Manfrotto Tripod + Head Chooser

1. Choose the ideal type of head for your style of photography

When putting together the ideal tripod, the head is usually the most important component to choose first. Under normal circumstances, once the tripod itself is open it stays open and almost untouched, but you'll find yourself constantly adjusting the head to reposition your camera and track or frame your subject. The first thing to do, therefore, is to decide which of the basic photographic head types - ball, three-way/3-D, geared three-way or two-way/pan-and-tilt - best suits your style and your subject matter.

Information is provided about two-way/pan & tilt heads which are designed for video use (you can't rotate the camera between landscape and portrait but you can track and pan smoothly). These heads are popular in two specific fields of photography - nature/birdwatching with digiscopes and sports photography with long heavy tele- lenses. In both fields, the subject is fast-moving and the head needs to be able to follow the subject's motion without being locked between shots.

Basic types of head

	POSITIONING SPEED		LOCKING PRECISION
			
TYPE:	TWO-WAY / PAN & TILT HEAD	BALL HEAD	THREE-WAY HEAD
MAIN ADVANTAGES:	// smooth panning and tracking	// speed of positioning and locking // compact	// separate control of each axis // extremely precise positioning
DISADVANTAGES:	// no portrait/landscape orientation	// precise adjustment difficult to achieve	// slower in basic movements // heavier/bulkier
IDEAL FOR:	// sports // nature / birdwatching	// all-round // portrait, fashion	// still life // all-round // architectural // macro

2. Make sure the head is proportioned to the size and weight of your camera

Once you've chosen a basic head type, you need to pick a specific model of head that is proportionately sized for your camera equipment and that will comfortably carry the load. When choosing a tripod and head, it is therefore important to know the total weight of your camera (eg. body + lens + battery grip + flash + other mounted accessories).

In case you don't have the weight of your own camera to hand, the guide at the bottom of the page gives you an idea of to the total weight of some typical cameras and camera setups that may be comparable to your own equipment.

Head models and their load capacity

head type	model & weight	max load:	2kg	4kg	6kg	8kg	10kg	12kg	14kg	16kg
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TWO-WAY / PAN & TILT HEAD



700RC2 - 0.52kg	██████████
701RC2 - 0.8kg	██████████
501/503 - 1.5kg	██████████
516 - 2kg	██████████

BALL HEAD



486 - 0.38kg	██████████
488 - 0.56kg	██████████
490 - 1.05kg	██████████
222 - 0.78kg	██████████
322RC2 - 0.7kg	██████████
468MG - 0.65kg	██████████
468MGRC0/3/4 - 0.8kg	██████████
468MGRC2 - 0.65kg	██████████
468MGRC5 - 0.74kg	██████████

THREE-WAY HEAD



056 - 0.5kg	██████████
390RC2 - 0.7kg	██████████
460MG - 0.43kg	██████████
804RC2 - 0.75kg	██████████
029 - 1.5kg	██████████
808RC4 - 1.39kg	██████████
329 - 1.2kg	██████████

GEARED THREE-WAY HEAD



410 - 1.22kg	██████████
405 - 1.6kg	██████████
400 - 2.6kg	██████████

3. Select a tripod that's compatible with the head, and that has the features you need

First and foremost, the tripod must be able to securely support the weight of your heaviest camera setup PLUS the weight of the head you have chosen. Once this fundamental requirement is answered, the tripod should of course also have the extra features that your photographic style, subject and location require.

For example:

- if you're shooting outdoor macros or if you need a low angle shot that requires you to sit or kneel, it may be useful to be able to position the centre column of the tripod horizontally to allow you to extend the camera out away from the tripod without the legs getting in the way
- if your location is a long trek away from home, reduced tripod weight will be more important than extended height
- if you'll be travelling by air, it may be fundamental that the closed tripod fits in your hand luggage

- if you're shooting for long periods, tripod height may be crucial to avoiding back pain
- if you're shooting in a studio with delicate/expensive/heavy equipment, a column stand or studio stand may be more useful than a tripod

Tripod ranges, specific models and their load capacity

tripod model & *weight* distinguishing features max load: 5kg | 10kg | 15kg | 20kg | 25kg |

ATTITUDE - a.k.a. DIGI compact "all-in-one" tripods with built-in, non-interchangeable head

714SHB - 1kg	micro ball head, only 35cm folded	■
714B - 1.15kg	micro ball head, 163cm open	■
715SHB - 1kg	Q.R. ball head, 42cm folded	■
715B - 1.15kg	Q.R. ball head, 164.5cm open	■
718SHB - 1.2kg	video/photo head, 40.5cm folded	■
718B - 1.4kg	video/photo head, 166.3cm open	■
724B - 1.41kg	higher max load ball head	■
728B - 1.75kg	higher max load 3-way head	■

DISCOVER - a.k.a: Lightweight, 190-series, 3001/3205-series (USA)

190D - 1.7kg	"no-frills"	■
190CL - 1.9kg	quick action locks	■
190PRO - 1.9kg	low angle & horizontal column	■
190NAT3 - 2.2kg	designed for outdoor use	■
190MF3 - 1.6kg	carbon fibre	■
190MF4 - 1.6kg	carbon fibre, only 46cm folded	■

CHALLENGE - a.k.a: Lightweight Pro, 055-series, 3011/3021/3221-series (USA)

055D - 2.2kg	"no-frills"	■
055CL - 2.3kg	quick action locks	■
055PRO - 2.4kg	low angle & horizontal column	■
055NAT3 - 2.8kg	designed for outdoor use	■
055MF3 - 2kg	carbon fibre	■
055MF4 - 2kg	carbon fibre, only 54cm folded	■
458B Neotec - 2.4kg	rapid - no locks/levers	■

PRO - a.k.a: Studio Pro

028B - 4.15kg	rigid twin-tube structure	■
475B - 4.3kg	independent leg angles	■
161MK2- 7.95kg	strongest, tallest tripod - 267cm	■
058B - 6.15kg	rapid opening and adjustment	■

STUDIO STANDS - a.k.a: column stands

800 - 23kg	92-162cm	■
806 - 34kg	56-182cm	■
809 - 64kg	57-221cm	■
816 - 80kg	60-274cm	■
816/1 - 80kg	60-230cm	■

Weights of some typical camera equipment

ULTRA-COMPACT / COMPACT / "POINT-AND-SHOOT" - 35MM / DIGITAL



WEIGHT RANGE FOR
THIS TYPE OF CAMERA:
0.1kg - 0.7kg

TYPICAL WEIGHT:

0.2kg

- Casio Exilim EX-Z1000: 0.1kg
- Epson PhotoPC L-400: 0.3kg
- Kyocera Finecam SL300R: 0.2kg
- Leica C-LUX 1: 0.2kg
- Leica CM 35mm: 0.3kg
- Nikon S6: 0.1kg
- Nikon Coolpix P4: 0.2kg
- Panasonic Lumix DMC-LC1: 0.7kg
- Sony DSC-T30: 0.2kg
- Sony DSC-W100: 0.2kg

RANGEFINDER - 35MM / DIGITAL



WEIGHT RANGE FOR
THIS TYPE OF CAMERA:
0.5kg - 1.2kg

TYPICAL WEIGHT:

0.7kg

- Contax G2: 0.6kg
- Epson R-D1: 0.6kg
- Hasselblad XPan II + 45mm f/4: 0.7kg
- Leica M7 / MP (body only): 0.6kg
- Leica Lens - SUMMILUX-M ASPH. f/1.4/35mm: 0.3kg
- Leica Lens - APO-SUMMICRON-M ASPH. f/2/90mm: 0.5kg
- Nikon S3: 0.8kg
- Rollei 35RF: 0.4kg
- Voigtlander Bessa-R + 35mm f/2.5 C Skopar: 0.4kg
- Voigtlander Bessa R2C (body only): 0.5kg
- Voigtlander Lens - Classic 35mm: 0.1kg
- Voigtlander Lens - Color Heliar 75mm: 0.2kg
- Zeiss Ikon: 0.5kg

BRIDGE SLR (NON-INTERCHANGEABLE LENS) - 35MM / DIGITAL



WEIGHT RANGE FOR
THIS TYPE OF CAMERA:
0.3kg - 1kg

TYPICAL WEIGHT:

0.6kg

- Fujifilm FinePix S9000Z: 0.75kg
- Konica Minolta DiMAGE Z6: 0.4kg
- Kyocera Finecam M410R: 0.3kg
- Olympus IS-50 Zoom 28-120mm 35mm: 0.65kg
- Sony DSC-H5: 0.55kg
- Sony DSC-R1: 1kg

SLR (BODY ONLY OR BODY + LENS) - 35MM / DIGITAL



WEIGHT RANGE FOR
THIS TYPE OF CAMERA:
0.5kg - 6kg

TYPICAL WEIGHT:

1.5kg

- Canon EOS-1Ds MkII (body only): 1.2kg
- Canon EOS 5D (body only): 0.8kg
- Canon EOS 30D (kit): 0.8kg
- Canon EOS 350D / RebelXT kit: 0.5kg
- Canon EOS 1v (body only): 0.9kg

- Canon EOS 3 (body only): 0.8kg
- Contax RXII (body only): 0.8kg
- Fujifilm FinePix S3 Pro (body only): 0.9kg
- Konica Minolta Maxxum/Dynax 5D: 0.7kg
- Leica R9 + 35-70mm f/4 R Lens: 0.8kg
- Leica R9 + Digital-Modul-R back: 1.4kg
- Nikon D50 (kit): 0.6kg
- Nikon D70 (kit): 0.7kg
- Nikon D200 (body only): 0.9kg
- Nikon D2X (body only): 1.2kg
- Nikon F100 (body only): 0.8kg
- Nikon F6 (body only): 1kg
- Nikon F80 (body only): 0.5kg
- Sigma SD10: 1kg
- Sony DSLR-A100: 0.8kg

SLR (BODY + LENS + ACCESSORIES) - 35MM / DIGITAL



WEIGHT RANGE FOR
THIS TYPE OF CAMERA:
1.5kg - 8.5kg

- LENSES:
 - Canon EF 14mm f/2.8L USM: 0.6kg
 - Canon EF 35mm f/2: 0.2kg
 - Canon EF-S 17-55 f/2.8 IS USM: 0.6kg
 - Canon EF 70-200mm f/2.8L IS USM: 1.5kg
 - Canon EF 600mm f/4L IS USM: 5.4kg
 - Nikkor AF 14mm f/2.8 D ED: 0.7kg
 - Nikkor AF-S DX 17-55mm f/2.8G: 0.8kg
 - Nikor AF 35mm f/2 D: 0.2kg
 - Nikkor AF 180mm f/2.8: 0.8kg
 - Nikkor AF-S VR 200-400mm f/4G IF-ED: 3.3kg
 - Nikkor AF-S 600mm f/4 D IF-ED II: 5.9kg
 - Sigma 8mm F4 EX DG Circular Fisheye: 0.3kg
 - Sigma 12-24mm F4.5-5.6 EX DG ASPHERICAL HSM: 0.6kg
 - Sigma APO MACRO 180mm F3.5 EX DG IF HSM: 1kg
 - Sigma APO 800mm f5.6 EX DG HSM: 4.7kg
- TELECONVERTERS:
 - Sigma APO 2x: 0.2kg
- BATTERIES & BATTERY GRIPS:
 - Canon BP-511A: 0.1kg
 - Canon NP-E3: 0.3kg
 - Canon BG-E2 (for 20D / 30D): 0.3kg
 - Nikon MB-D200 (for D200): 0.2kg
 - Sony NP-FM55H: 0.1kg
- FLASH:
 - Canon 580EX Speedlite E-TTL II: 0.4kg
 - Canon MT-24EX Macro Twin Lite Ringlite: 0.5kg
 - Cullmann 34 AF Digital TTL: 0.2kg
 - Metz 54MZ-4 TTL: 0.5kg
 - Nikon SB-800 Speedlight i-TTL: 0.4kg
 - Novoflex Flat Flash Panel: 0.4kg
 - Sigma EM-140 DG Macro: 0.4kg
 - Sony HVL-F56AM: 0.4kg

TYPICAL WEIGHT:

4kg

(Canon EOS30D or Nikon D200 70-200 lens + 2x converter camera-mounted flash battery grip + 2 batteries)

MEDIUM FORMAT (BODY + BACK/CARTRIDGE + LENS) - FILM / DIGITAL



WEIGHT RANGE FOR
THIS TYPE OF CAMERA:
1.5kg - 5kg

- Hasselblad H2 + viewfinder + film magazine + 2.8/80mm: 2.1kg
- Hasselblad H2D (39Mpx) + lens: 2.2kg
- Hasselblad 503CW + Planar 80mm f/2.8 CFE + A12 film

TYPICAL WEIGHT:

2kg

- magazine: 1.5kg
- Hasselblad CFE2.8/80 lens: 0.5kg
- Hasselblad CFE4/40IF lens: 1.1kg
- Mamiya 645 Pro-TL + 80mm f/2.8 Lens, FE401 Prism Finder + 120 Film Back + SV Power Drive Grip: 1.6kg
- Mamiya ZD 22Mpx (body only): 1.2kg
- Mamiya RZ67 Pro II "D"+ 110mm f/2.8 Lens + Folding Waist Level Finder + 120 Film Back: 2.5kg
- Mamiya 7 II Pro + 80mm f/4: 1.2kg
- Pentax 645N II (body only): 1.3kg
- Pentax Super Telephoto 600mm f/5.6 ED (IF) Manual Focus Lens for 645: 4.8kg
- Rolleiflex 2.8 FX TLR 80mm f/2.8 Planar: 1.3kg
- Rolleiflex 6008 AF + 80mm f/2.8 AF-Xenotar + PhaseOne db20 back: 2kg
- Rollei Normal 110mm f/2 Zeiss Planar PQ Lens: 1.3kg

LARGE FORMAT - FILM / DIGITAL



WEIGHT RANGE FOR
THIS TYPE OF CAMERA:
2kg - 10kg

- Linhof 4x5 Master Technika 2000 Metal Field Camera: 2.7kg
- Linhof 5x7 Kardan Master GTL-AMS: 8.3kg
- Toyo-View 8x10 810MII: 6.8kg
- Wista 45SWIII 4x5 Wood Field Camera: 1.8kg
- Arca-Swiss 4x5 F-Line Monorail: 3.3kg
- Arca-Swiss 4x5 M-Line Monolith: 5.6kg
- Sinar 4x5 "x": 5.9kg
- Sinar 8x10 p2: 8.2kg
- Nikon 135mm f/5.6 Nikkor-W Lens with Copal #0 Shutter: 0.2kg
- Nikon 300mm f/5.6 Nikkor-W Lens with Copal #3 Shutter: 1.25kg
- Rodenstock 55mm f/4.5 Apo-Grandagon-N Lens with Copal #0 Shutter: 0.4kg
- Schneider 1100mm f/14 Fine Art XXL Lens: 2.4kg

TYPICAL
WEIGHT:

6kg

DIGISCOPE



WEIGHT RANGE FOR
THIS TYPE OF SCOPE:
3.2kg - 7kg

- Nikon Fieldscope III 2.4"/60mm Spotting Scope + Coolpix 5600: 3.2kg
- Leica Televid 77 3.0"/77mm (scope only): 6.4kg
- Nikon Fieldscope III ED 2.4"/60mm (scope only): 5.7kg
- Swarovski ATS-65 2.6"/65mm (scope only): 4.3kg
- Zeiss Diascope 85 T* FL 3.3"/85mm (scope only): 5.5kg

TYPICAL
WEIGHT:

6kg

(NB. The selection of cameras, lenses and accessories above is fairly arbitrary. All data are taken from the websites of the relative manufacturers or from hopefully reliable sites but of course Manfrotto make no guarantee that this information is accurate... if you notice a discrepancy or error, please let us know. If in doubt, weigh your camera! In some cases, weights may not include batteries and film / memory cards. July 2006)