Small tripod buying guide

You need a new tripod. Maybe this can help you!

Here you'll find a description of the Benro TMA48CL Mach

So I needed a better tripod in terms of maximum load, weight and stability than the one I was using until now: a relatively old Benro C-258EX. My selection criteria were the following:

1. Weight of the photographic equipment
2. Weight of the tripod itself
3. Tripod stability
4. Maximum and minimum height
5. Leg lock system

The weight of the photographic equipment

I intend to use this tripod for wildlife or landscape photography. In the first case, the equipment will consist of a Canon EOS 7 D II body equipped with a grip for two batteries, a 500 mm lens eventually with a 1.4 X multiplier and a Wimberley 200, for a total weight of 6.9 kg. In the second case, I intend to use, in the worst case in terms of weight, a Canon EOS 5 d III body with its battery grip and its lens, a panoramic head Manfrotto MH057A5-along with its Manfrotto Ball Camera Leveler 438 tray. This should weigh up around 5.9 kg.

The weight of the tripod itself

Who says photography in the field, says that all this equipment needs to be transported over sometimes substantial distances. Therefore the weight to be added to that of the camera itself plays an important role. The choice of carbon material seems quite obvious when one knowns that weight advantage of carbon varies from 500 to 750 grams compared to aluminum for equivalent tripod. This being said, carbon also has a disadvantage that you might be forced to take into account: the price that can vary from simple to double depending on the manufacturer.

Tripod stability

Whatever the use, the stability of the tripod is a very important factor. At long focal lengths predominant in wild life photography and the long exposure times sometimes needed for landscape photography, we absolutely want to avoid out of focus images due to camera movement. Here again carbon holds my attention being deemed more rigid than aluminum. In addition the possibility of hanging a bag to central column or a net to the tripod legs contributes to its overall stability. However this also increases its maximum load. I plan to hang a bag to the Central column with a weight of about 5 kg bringing the maximum payload to 12 kg. Finally the diameter of the legs may also contribute to stability, a large diameter ensuring greater stability.

Maximum and minimum height

I am 1.70 m tall and my eyes are about 1.58 m above the ground (if I stand well of course). This is the maximum height of the tripod with if possible the central column retracted for stability reasons again. The minimum height of the tripod should be between 40 cm (ease of use) and the ground level in the extreme case of image composition.

The leg locking system

It is personal preference. I prefer twist lock rather than flip lock system. The latter seems less efficient and less reliable (flip clamps sometimes loosens making locking inefficient) and noisier.

Conclusion

So I'm looking for a tripod in carbon whose maximum payload must be at least 12 kg, the maximum height of at least 1.58 m weight as low as possible and with twist locking system. The diameter of the legs is a less important criterion, but that could be used to decide between two candidates.

I then selected three brands: Benro, Manfrotto and Gitzo.
Here's a quick summary of characteristics of the tripods that could satisfy me and proposed by these three manufacturers.

	Model	Max payload	Weight	Max height Col extended	Max height Col retracted	Minimum height	Legs / Diameter	Price
Gitzo Mountaineer	GT3532	21 kg	1.88 kg	161 cm	133 cm	16 cm	3/33 mm	856,00 €
	GT3542	21 kg	1,86 kg	162 cm	134 cm	15 cm	4/33 mm	805,00 €
Manfrotto [1]	MT057C3	18 kg	2,8 kg	157 cm	132 cm	22 cm	3/39 mm	694,00 €
	MT057C4	18 kb	3,5 kg	205 cm	180 cm	23 cm	4/39 mm	689,00 €
Benro Mach 3 [2]	TMA38CL	16 kg	2,0 kg	177 cm	153 cm	35 cm	3/32 mm	419,00 €
	TMA48CL	20 kg	2,4 kg	176 cm	151 cm	36 cm	4/37 mm	482,00€

[1] Both Manfrotto tripods are equipped with a flip lock system.
[2] The minimum height of these two tripods is significantly larger. It can, however, be reduced by changing the central column for the short column provided by the manufacturer or an optional short column CSC4 sold for €40, 00.

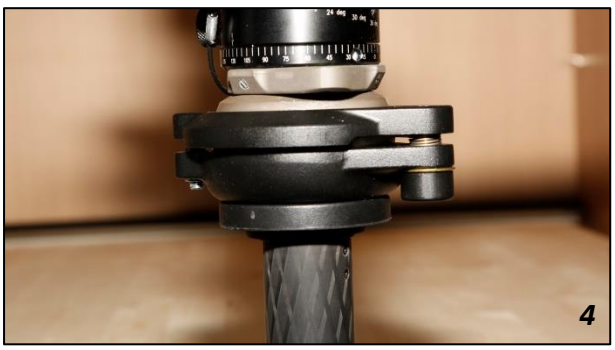
As one can see, Gitzo tripods have a maximum payload of 21 kg which is well above my criteria. Weighing less than 2 kg weight and their minimum height of less than 20 cm minimum height make them very attractive. However their price may seem important or even prohibitive.
Manfrotto tripods, although interesting in terms of maximum load, are handicapped by their own weight of 2.8 and a very important 3.5 kg for the MT057C4. In addition their flip lock legs system is not what I am looking for.
The Benro brand will finally get my favor. Despite its greater weight, I will choose the TMA48CL model that gives me more room for man oeuvre with regard to the maximum payload as well as a maximum leg diameter of 37 mm. I equip it with a short central column CSC4 to reduce the minimum height of the tripod.
I therefore order the tripod at Cameranu.nl and the column at Biglens.

Description

Opening the box, we find a carrying bag of good quality protecting the tripod from transport shocks and from weather. Two outer pockets contain, one a shoulder strap, and the other a short central column and a bag with a few tools *(1).*

The bag contains three spiked feet in replacement of the rubber feet, two ALEN and two hexagonal wrenches which use will be described later *(2)* The short column provided by the manufacturer is made of aluminum and is 8 cm long *(3)*. However, its plateau is smaller than the one of the long column (5.4 cm in diameter against 6.9 cm) which could be a problem of stability if you use a ball head with a wide enough base like the pan head by Manfrotto as represented mounted on the long column below *(4)*.

A short column CSC4 Benro made of carbon can be purchased separately as a replacement to the one supplied in the bag *(5)*. It is a little longer (13 cm against 8 cm) but his plateau is also 6.9 cm in diameter.

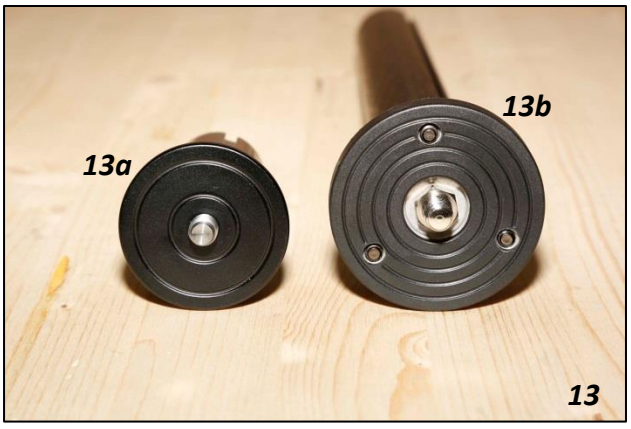


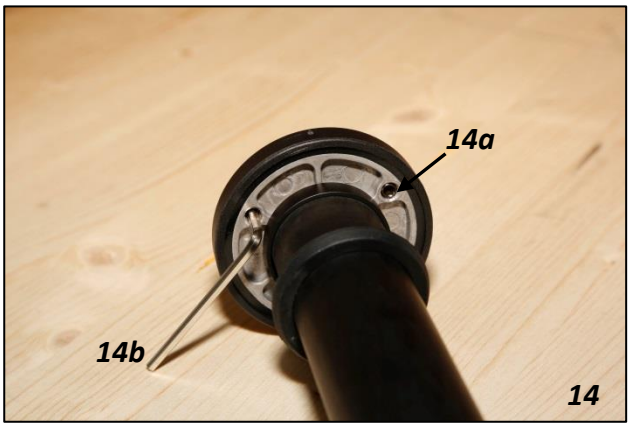
This is the tripod *(6)*. The legs are composed of four sections with a twist locking system designed for fast, quiet and comfortable handling and providing excellent resistance to dust and moisture *(6A)*. The central column and legs are made of nine layers carbon fiber *(6B)* alternating their axial direction to distribute weight loads in 3 directions. The result produces a lighter but very structurally stable material. All metal parts are molded in magnesium *(6 c)*. This metal is superior to aluminum for stability and anti-vibration properties. It also allows a weight benefit of about 30 percent.

The center column locks in position with the help of the big blue clamping ring *(7)*. The tripod is equipped with a small bubble level *(8)*. The legs can spread towards the low position in three steps using the "pull-and-lock" mechanism *(9)* system in order to reduce the minimum height 36 cm with the long column or 16 cm with one of the two short columns

The Central column can be positioned upside down *(10)* in order to bring the camera closer to the ground for macrophotography for example. To do this, unscrew the cap at the back end of the column *(11)* containing the hook for ballast *(12)*. Once it is removed, slide out the column upwards and slide it back in from between the legs of the tripod.

Back to two central columns provided by Benro. The shorter in aluminum is 8 cm long and has a plateau of 5.4 cm in diameter *(13A)*. The longest measures 34 cm while its plateau has a diameter of 6.9 cm *(13 b)*. The second shows three small head locking screws *(14a)* that can be tightened using the smallest Allen key *(14 b)* .





Both columns are initially equipped with 3/8-inch screws. On the long one only we can change it for a 1/4 inch screw. One must proceed as follows: using the large hex wrench, loosen the nut from the threaded rod *(15)*, remove the rod by unscrewing it out *(16)*, move the nut towards 1/4 inch end of the threaded rod *(17)* and the replace the whole to the desired height *(18)*, finally tighten the nut.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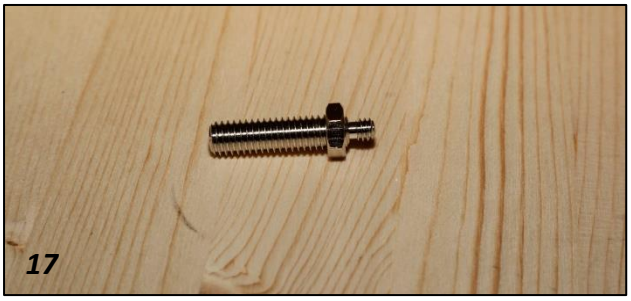
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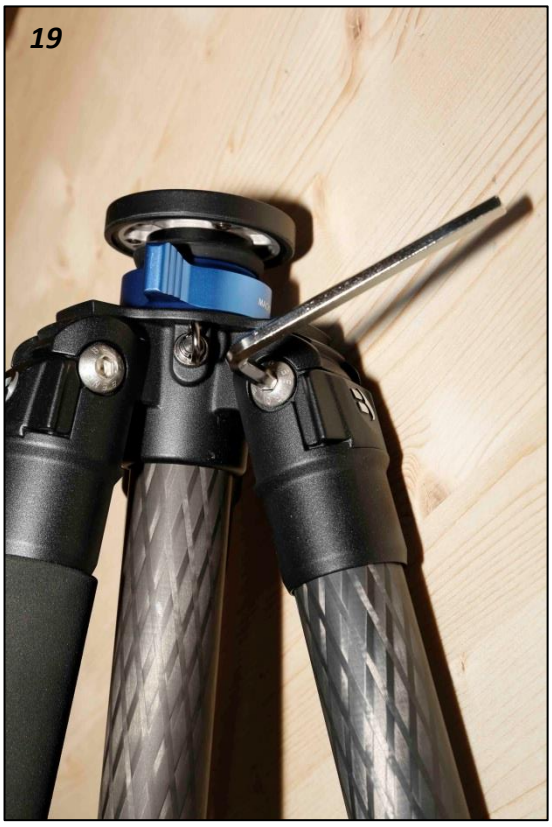
If one of the legs becomes loose, you can adjust the tightening using the largest ALEN key *(19)*. Finally the rubber feet fitted as standard on the tripod *(20)* can be replaced by spiked feet provided by the manufacturer. Unscrew the feet of origin and replace them with the spiked feet and tighten them with the large hex wrench *(21)*.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