

# Beauty and the Beast

A Review Of Benro's GD3WH & Some Thoughts On Geared Heads



**Benro GD3WH on TMA28C Tripod on Sgurr na Stri**



**Benro GD3WH and Manfrotto 410 Geared Heads**

When I heard rumours of a new geared head, I contacted Scott Bagley at Benro UK. Although a die hard ballhead user, I knew this could be the Holy Grail for many landscape photographers. The killer qualities would be weight, or rather a lack of, Arca Swiss compatibility and Benro's reputation for quality design and production.

Little did I know how good the GD3WH would be. GD3WH, by the way, stands for Gear Drive 3 Way head.

Much to my surprise, it soon became addictive and the positives massively outweighed any negatives. Having used the Benro TMA28C and B1 Ballhead for quite a few months, they had become so natural to use; they just worked, did the job asked, were simple, light and compact. 8 weeks ago I would never have envisioned replacing the ballhead but it simply has sat on my desk neglected all that time.

The unconverted will ask, "so what's the big deal with a geared head?"

The answer, in a word, is "precision." A geared head allows you to fine tune the composition and frame your shot perfectly. They are much favoured by top end photographers shooting macro, architecture and landscape. The primary function of a geared head is to let the photographer make large or small incremental changes to composition in an easy yet precise manner.

Ballheads have a lot of positives; light and compact, easy to use, relatively cheap. The down side is having to adjust and get right all 3 axes of movement at once and even the best can droop slightly as they are tightened up. I accepted the negatives in return for the light weight and bulk but have suffered frustration

both trying to set up the composition correctly and even worse looking at a computer monitor and seeing wonky horizons or converging verticals.

Until the advent of the GD3WH, Manfrotto pretty much had the market sewn up with a variety of models but none seemed ideal and there were lots of reports of design flaws, repairs and replacements. The only alternative was the mega expensive and complex Arca Swiss D4. All bases were covered; light weight, well designed, compact, durable, competitively priced but unfortunately it was impossible to get all these concepts in a single model so priorities had to be made. Then Benro entered the market.....

	<b>Cost</b>	<b>Weight</b>	<b>Max Load</b>
<b>Benro GD3WH</b>	£200	870g	6kg
<b>Manfrotto 410</b>	£242	1220g	5kg
<b>Manfrotto 405</b>	£532	1600g	7.5kg
<b>Manfrotto XPRO</b>	£195	750g	4kg
<b>Arca Swiss D4</b>	£960	800g	

Fortunately I had a client booked for a couple of one to one workshops including an overnight camp for sunset/rise high in the Cuillin. Not only would this allow us some serious testing time but the client has a bad case of GAS (Gear Acquisition Syndrome) From previous visits, I knew he had a variety of Manfrotto heads so I asked if he could bring the one he thought most closely specced to the Benro GD3WH.

Charles loves his gear, has loads of it and never sells a thing. In fact, he has all 3 of the Manfrotto heads listed above. With camping gear and a long walk in from the Sligachan, the 405 was instantly dismissed as “too heavy.” Apparently the XPro although the lightest of all was “too flimsy” so by default the 410 Junior Geared Head was to be matched against the Benro. This was ideal since some initial research by me suggested it was a very popular model with landscape photographers being a reasonable compromise of size/weight/price compared to it’s big brother.

First impressions of the GD3WH were extremely favourable. It arrived exceedingly well packed in a bubble wrap filled box containing the trademark Benro blue box and the head itself was encased in a hefty foam cut out that looked well capable of shaking off anything that the most heavy handed courier could deal out.





Instructions, an allen key and a blue Arca swiss plate were all present alongside the head itself which appeared to be a triumph of engineering, design and aesthetics. 10 out of 10 for eye candy appeal. Now I'm not normally drawn to mechanical things but the combination of it's utility and the precision engineering compelled me to try it out immediately on the pier outside our house. So here's a few product shots of the GD3WH looking out towards the Island of Raasay and it's ferry photobombing the shots!













Some initial thoughts;

- It feels surprisingly light compared to the Manfrotto ; 870g versus 1220g so a 350g saving. Good to know when you are backpacking long distances and every gram counts. It might not sound a lot but with one head in each hand then the difference seems huge.

- The Benro is much more compact and looks quite diminutive side by side with the Manfrotto yet can take a maximum load of 6 rather than 5kg. The 410 looks and feels more agricultural, almost over engineered. The Manfrotto plate system seems massive compared to the industry standard Arca Swiss of the GD3WH.
- Everything operates very smoothly and the whole thing feels like a premium product. Robust is the word that springs to mind. Controls on the GD3WH feel much smoother and more ergonomically designed.
- The clutch control that enables you to disengage the gears and make large changes of angle works really well and makes for a rapid initial set up of composition.
- The Benro has 3 bubble levels, one on each axis as opposed to the single level on the Manfrotto.

The GD3WH looks the business but looks counts for little when you are out in the field and a photo opportunity presents itself. A quick familiarisation with the controls and I was hooked.

- Constructed of magnesium alloy, everything feels precisely engineered and the controls are very smooth to operate.
- The control knobs for the 3 different axes of adjustment are very positive yet easy to adjust by very small increments; despite being so easy to adjust, the controls are totally secure so no accidental knocking of the tripod or a casual brushing of them will not alter the chosen composition.
- Twist locks on each axis are spring loaded and allow for fast, smooth adjustments.
- It is so easy to fine tune a composition whilst looking at the screen/viewfinder, something that can sometimes be frustrating with a ball head.

- I am a big fan of my original Sony A7 for it's diminutive size/weight but am also aware that I need to use best possible practice to maximize it's output ; it only has a 24 mp sensor compared to 40-50 of newer models. This is where the GD3WH really comes into it's own. It is so easy to get horizons and the like level and fine tune the composition so as to get things as right as possible in camera rather than in Lightroom/Photoshop where cropping will obviously reduce file sizes. I guess it's easy to become a bit sloppy with huge mega pixel files and get things right after the event but why not maximise their potential and get things right on the tripod.
- Such ease of use and precision certainly motivates me get things right in camera and once you are used to the dual controls it is easy to disengage the gears to make large sweeping movements then re engage to fine tune the composition. This soon becomes second nature although to start with, I must admit, I felt like a second world war sailor desperately trying to train an anti aircraft gun on a fast approaching enemy plane. Now I find it doesn't take much longer than with a ballhead and the end results are nearer to in camera perfection so less editing time required.
- The degree scales are useful and I find myself able to try one composition, take a note of the angle then try another with the knowledge that I can quickly and easily return to the first if necessary.
- Like other Benro heads it has the added safety of having to pull as well as twist the knob to release the camera from the head. A great safety feature that works well.



**Dawn at Sconser.**

**Sony A7, Zeiss Batis 25mm, Benro GD3WH. ISO 100, F11, 1/60.**



24 km and 650m of ascent was the length of our walk to and from Sgurr na Stri so plenty of time to keep an eye open for photo opportunities and to discuss the merits of the Benro and Manfrotto heads. With heavy packs, we were only too pleased to stop and chat and get some moody photos on the way. Once we had gained the summit of Sgurr na Stri, the clouds started to dissipate and we hoped for a glorious sunset but this was not to be.





**Dawn of a new day. Summit at 0430.**



**New Day, New Dawn.  
New Era for users of geared heads**

Being woken by the sound of rain on fabric at early o'clock didn't bode well for the sunrise but the total cloud cover did clear to reveal a very atmospheric Cuillin Ridge and Loch Coruisk with varying degrees of cloud swirling around. Both of us were more than satisfied with the photos ; not at all what we had hoped for or expected but perhaps more moody than the standard sunrise shots (if we keep telling ourselves that then eventually we might really believe it!)



**The kind of dawn we had hoped for. Shot during earlier testing of Benro gear.  
ISO 100, F11, 1/30.**

Sgurr na Stri is a classic location for breathtaking views across Loch Scavaig and Loch Coruisk to the Cuillin Ridge but our views were a bit more limited as strong winds blew squally rain showers across us, drenching us and our gear. Once again the Cuillin proved a good testing ground and threw it's worst at us.



**A stormy reality that greeted us first thing. Loads of atmosphere but not what we hoped for.  
ISO 100, F11, 1/8.**

Charles and I have had several more days out comparing geared heads and also taken a lot of photos from the pier where we live in Sconser. Having used the GD3WH fairly extensively over about 6 weeks, I feel qualified to pass judgement on it. The conditions have for the most part been pretty tough for gear. An extended hot spell means everything has been dry and dusty, fires have been raging on the fringes of the Cuillin and the heat has made getting up high for photography hard work. The last week has been the polar opposite with heavy rain, strong winds and fairly cold so the gear has had a thorough testing.

For years Manfrotto have cornered the geared head market with the 410 being popular due to it being the only reasonably priced GH with no competition. Charles loves his Manfrotto heads but isn't adverse to mix and match and uses Gitzo legs among others. His relationship with Manfrotto is one of love and hate. He says the 410 is his 3rd or 4th (he lost count of repairs/replacements) and although his current one is good, even he describes it as "a bit agricultural." Certainly the 410 does seem possibly a bit over engineered which may be useful for larger cameras/lenses but adds unnecessary bulk/weight for many users.

He has a lot of love for it's big brother, the 405, but is loathe to carry it in the field due to it's weight. As to the XPro, he loves the weight and design but feels cautious about using it due to it's technopolymer construction which obviously lightens things up but doesn't have the reassuring build quality of magnesium alloy. Also he talks of vibration problems with larger lenses due to the lighter weight and material used. Apparently the 410 is smoother to use and easier to make small adjustments due to the gear ratio.



**Another shot from an earlier visit.**

**ISO 100, F11, 1/60.**

**Stitched from 5 shots using Zeiss Batis 25mm lens.**



**Loch Coruisk.**  
**ISO 100, F11, 1/80.**

Charles thought the Benro GD3WH to have all the benefits of the Manfrotto 410 with none of the negatives. It is smaller, lighter, smooth to operate and cheaper. Best of all it is rock solid once set up and the controls are easier to use and more comfortable. Having used it a lot, I'd have to agree with all this.

Neither of us can really comment on long term durability but having used it in quite adverse environments, I'm quite happy to assume it will last. It's been used in dry, dusty conditions, carried around the mountains on the outside of my pack and got soaking wet in the rain. The controls and release mechanism seem well protected and haven't suffered the slightest from the hill top abuse they've endured. Benro have a good reputation for after sales support and service. Their website has a 24 hour helpline and Benro products are covered by a 3 year warranty which is extended to 5 years by registering your purchase.



**Waterfall below the Bhashtier Gorge with Glamaig and the Red Cuillin beyond.  
ISO 100, F11, 2 seconds.  
Stitched panorama.**

In a nutshell, Benro's GD3WH delivers a better performance than the Manfrotto yet is almost 30% lighter, supports a greater load and is over £40 cheaper. The bottom line is that Charles has already bought one and if I'm taking a tripod then I never leave home without the GD3WH. To me, this is really strange as usually I do anything to lighten my load in the mountains but the slight weight gain is more than offset by the efficiency and quality imparted into my work. Not only has Charles bought one but I am about to sell several no longer needed ball heads.



**Sunrise after a night on the Cuillin Ridge with a client.**

**ISO 250, F11, 1/25.**

In landscape photography less can often be more and one of the biggest single lessons I have learned is the need to look at a scene, evaluate what works in it then decide how to focus on that and exclude anything which doesn't add to the image. The GD3WH is a huge aid to this process and can be used to slow the process as much as you like as you experiment with small changes in angle. It's use kind of reminds me of a photographer client, ex military, who always muttered "slow is smooth, smooth is fast" which is apparently the mantra of the US Navy's SEALs. In photography, and, I assume, even more so in

combat, speed seems important but if you move too fast then mistakes will occur. Better to move slower so that everything works smoothly.



**Benro, Arca Swiss compatible with blue arca fitting plate and RRS L bracket.  
Manfrotto with it's own non industry standard compatible fitting.**

Oh, and the clincher for me is the Arca Swiss compatibility that enables me to use a RRS L bracket on my Sony. Manfrotto has always used it's own idiosyncratic system with no cross over to the industry standard Arca Swiss. It's good for them and ties people into their product line but does restrict people and even Manfrotto has started to introduce Arca Swiss type plates such as the 200PL. I don't think it will work with the 410 so people have had to rely on cobbling things together with additional plates or significant modifications neither of which add anything but sources of potential vibration and added bulk/weight.



**Sunshine and Storm over Sgurr nan Gillean**  
**ISO 100, F11, 1/60**

The L bracket is perfect for flipping quickly between portrait and landscape orientation and makes handling a bit easier on the diminutive Sony A7. If I'm going climbing then it is removed but otherwise it lives on the camera. (Just a thought, Benro, but it would be great if you could produce L brackets in your signature metallic blue. I'm sure they'd sell well and would be great for brand exposure).



**Skye's iconic Inaccessible Pinnacle**  
**ISO 100, F11, 1/320**



**The Cuillin from Elgol.  
ISO 100, F11, 30 seconds.**

Just the Swiss Arca compatibility will seal the deal for many photographers looking at the Benro, never mind the light weight, price, design and engineering.

This head works well for my style of photography and really does make my photographic life a lot easier. A good tripod and head are essential especially for some of my favourite styles such as long exposures and panoramas and the GD3WH is nigh on perfect for my needs. If you are considering a geared head then check out Benro's. More reports to follow with updates on durability and long term testing.

It might be advertising blurb but Benros words certainly ring true; "You asked, we listened. Lightweight, arca compatible and a 6kg max load." The GD3WH does exactly what it says on the tin.



