

## How to attach a green laser pointer to your telescope

Having a Goto telescope a laser pointer attached to it can be a very nice accessory identifying celestial objects and/or show them to visitors both naked eye as well as through the telescope. The latest Celestron NexStar telescopes feature a mode called “Identify” which will tell the user the name of an object which is centered in the eyepiece or targeted by the laser pointer.

The human eye is much more sensitive to green light and thus a green laser beam can be seen easier and at a greater distance than a red one with the same power. The laser pointer I am using has a nominal output power of 5mW. This can be very well seen not only when standing right behind it but also from guest standing close to the telescope whom I want to show celestial objects.



Well, after getting access to this nice green laser pointer I needed a mean to attach it properly to my N11GPS.



I found a low cost solution based on a simple 6x30mm finderscope. Such finderscopes can be found often on Ebay or Astromart for very little money – the optics is far from perfect but the bracket can be used to hold the laser instead of the finder. Thus we can make use of the possibility to adjust the laser relative to the main telescope.

To hold the rather thin laser pointer in the bracket I used a cylindrical piece of plastic and drilled a hole with the diameter of the laser pointer along its axis. I could now insert the laser pointer into this plastic cylinder. To clamp the laser pointer in the cylinder I drilled a radial hole and cut a thread for a corresponding screw. The laser pointer has a push button to activate it. To switch the laser pointer on while riding on the telescope it is more convenient to have a switch rather which keeps the laser active – this is accommodated by drilling another radial hole, cut a thread and insert a thumbscrew. Once this thumbscrew is screwed in far enough it will push on the button and activate the laser. It can be switched off by screwing the thumbscrew out again. If you make sure that the thumbscrew is out far enough several turns are needed to activate the laser which makes it very failsafe.





Now this assembly of laser pointer and cylinder around it can be inserted into the bracket and then attached to the telescope. The bracket features 2 rings each with 3 screws to allow an easy alignment of the laser pointer relative to the telescope.

Finally here is a picture of the laser as attached to my N11GPS. It works great and the whole setup was built in one afternoon.

**Please take special care when using laser for any purpose. It can harm you eyes seriously and must therefore never be directed to any people or airplanes. Please do not let your children play with them.**



Questions are always very welcome.

Best regards

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