

Meade's LX6/2120 10 inch F6.3 SCT

Introduction

Having previously reviewed the Meade LX200 (10 inch) and Celestron's Ultima (9.25 inch), it was time to make my own choice for a replacement observatory telescope. The main consideration was cost with a secondary concern being the depreciation due to being left in a cold and damp location. Obviously a second hand instrument has already lost much of it's original value and will depreciate less. The LX6 was marketed around 1989 and was the top of the range model. Some of it's features are found on the current LX200 series. The LX6 was a luxury version of the standard 8 inch or 10 inch SCT, in the 10 inch version it came with the following accessories as standard:

Beefier Wedge (although not quite a Super Wedge), illuminated 9 x 60 finder scope which includes polar alignment 'rings' - in my opinion it's not useable for this purpose, hand controller, adjustable height tripod (with bubble level and compass), 2 inch right angle adapter and 25mm eyepiece.

Accessories available for the LX6 series were digital circles with ra and dec readout on the hand controller, focus motor and declination motor. Jim's Mobile Inc (JMI) also produce these motors.

This telescope was offered for sale when the original owner 'upgraded' to a superb Astro Physics refractor, the package included SGT-MAX digital setting circles with a copy of 'The Sky' by Software Bisque and optional motors for focus and declination.



One of the main features of the LX6 series was the microprocessor controlled electronic 'Command Centre', however the only benefit when using one without the digital readout is that the ra drive motor is reversed quickly when slewing East so the drive resumes very quickly. The two slewing rates available are 'x2' and 'x8' (including declination when the optional motor is fitted), with quartz crystal control of drive speed when in sidereal mode

and a variable speed control marked with solar, sidereal and lunar tracking speeds. Other controls on the Command Centre are a very useful led map light that's more than adequate and a variable control for a wired illuminated reticle eyepiece. The telescope is 12 volts dc powered and draws between 500mA and 800mA depending on whether the various options are fitted, at this power level it is possible to run the scope from quite a small gel cell or even from alkaline penlight cells. The only other item worthy of note is the North - South switch that reverses the drive for use in either hemisphere.



Having already covered much of the common ground with SCT's in the other two reviews, I'll try and mention the pro's and con's of the LX6 relative to other telescopes and in particular the newer Meade and Celestron units.

Bad points

1. After several weeks of use, it has become apparent that despite Meade's claim about the superb tracking accuracy of the quartz drive, the drive produces some very irritating random tracking errors. These make ccd work tedious although with the aid of dual axis drive correction, normal photographic work should be straightforward.
2. The forks seem rather flexible and have quite a 'spring' when carrying the very heavy tube assembly by one fork, also there is a rather unnerving clunk as the tube's weight flex's one fork more than the other when viewing in the East or West (there doesn't seem to be anything locking the tube to the forks to prevent this). The current LX50 and LX200's have much stiffer forks.
3. Despite Meade's claim that f6.3 optics aren't any worse on planetary detail than f10 optics, this scope performed rather badly when comparing the view in a low cost 6 inch Newtonian when viewing Mars. The better light gathering of an f6.3 instrument can be an advantage with "webcams" for planetary image taking.
4. Allen keys are needed to bolt the fork assembly to the wedge (see Meade LX200 review for photographs of the same mounting), it's very easy to forget to take Allen keys when you travel or to loose one into grass. Hand wheel bolts would have been a better choice as per the Celestron 9.25 inch unit.
5. In common with many fork mounted telescopes, there is no polar alignment telescope. Accurate polar alignment is only possible by the drift method, this can take an hour or more. By comparison, Vixen and Losmandy german equatorial mounts can be fitted with very accurate polar alignment scopes in their polar axis.

Good points

1. The illuminated 9 x 60 finder is the best view finder I've ever used, why aren't more scopes supplied with such a useful accessory as standard?
2. The mounting bolts do actually line up with their holes, maybe this is just a fluke as later scopes don't seem to line up!
3. There is no backlash in either ra or declination.
4. From a second user point of view the LX6 series come with many of the features that are costly extras on modern scopes, at roughly a third of the cost of the current equivalent it's a good second hand buy for those on a limited budget.

Finally...

I've replaced the mounting for this telescope with a Losmandy G-11 German equatorial mount. The difference in overall stability is amazing, although it costs a great deal more for the G-11 compared to the Meade fork mount, I feel the difference in cost to be well worth the extra expense.