

# Re: Meade and SCTs / MCTs in general

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*Source:* <http://sci.tech--archive.net/Archive/sci.astro.amateur/2005-12/msg02719.html>

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- *From:* "Roger Hamlett" <[rogerspamignored@xxxxxxxxxxxxxxxxxxxxxx](mailto:rogerspamignored@xxxxxxxxxxxxxxxxxxxxxx)>
  - *Date:* Fri, 30 Dec 2005 09:55:56 GMT
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"Paul Murphy" <[pmurphy3@xxxxxxxxxxxxxxxxxxxxxxxxxx](mailto:pmurphy3@xxxxxxxxxxxxxxxxxxxxxxxxxx)> wrote in message [news:2m2tf.56480\\$XC4.35466@xxxxxxxxxxxxxxxxxxxxxxxxxx](mailto:news:2m2tf.56480$XC4.35466@xxxxxxxxxxxxxxxxxxxxxxxxxx)

> 1. What are the odds they are planning a 10in Maksutov on the new RCX  
> mount?

The RCX mount, is not 'new'. Just a facelift job, on their existing products. This is one of the big 'pities' about the RCX....

I doubt if there is enough perceived demand for such a product at present. Also, the nose heavy nature of the Mak-Cass, compared to the SCT (which led to them putting a counterweight behind the mirror on the 7" unit), makes this a less than ideal combination.

> 2. Any idea why Celestron is only using the different mirror geometry on  
> the 9.25 and why neither they nor Meade are making other scopes of the  
> same geometry even though it apparently has real advantages optically?  
The advantage, is a flatter field, and a slight reduction in spherochromatism. Downside is a larger central obstruction, and hence reduction in contrast. As always with scopes, it is a 'balancing act'.

> 3. Why has it been decades since either Meade or Celestron have really  
> made significant geometrical changes to their SCTs optics (not coatings,  
> mounts and electronics) but the actual design? At first I thought just  
> to save manufacturing costs, but they must have retooled their shops a  
> couple of times in the last 25 years.

What geometry changes?. There is nothing you can do to the basic SCT optics, that doesn't involve extra costs. In fact, this is exactly what the RCX, is. It is not a Ritchie Chretien, but an SCT, with a more complex corrector, and fractionally modified secondary, to reduce coma. This gives it the coma free field of a RC, but with the 'downside', of having the chromatic aberration inherent in the SCT.

The problem with a Maksutov Cassegrain, is that the steep curves on the corrector, do make it more expensive to make, especially in larger sizes. The cooldown times of a full aperture corrector, this thick, also become painful. There is also a balancing act here, that a unit designed to give a faster focal ratio, and a large field for photography, then has a large CO. Almost all of the mass production scopes, really are trimmed to produce the most 'kick per buck', and electronics and similar features, are a cheap way of making the system look better, without increasing the

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costs significantly. In the UK, Orion Optics (UK), do a lovely 'photo Mak', using a sub aperture corrector, which gets round the cooling problems otherwise associated with the design.

At the end of the day, both Meade and Celestron, are trying to produce the cheapest design, in the largest quantities, rather than necessarily producing 'good' scopes. It is just the competition, which has driven expectations upwards on the optics, and economies of scale, which have allowed them to produce suprisingly good optics, at very impressive prices. However it is very noticeable, that systems which are even a little 'better', tend to only appeal to a much smaller 'niche' market, rather than the mass production units, 90% of which are sold to people who really do not understand what they are buying.

Best Wishes

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• *Follow-Ups:*

- ◆ **Re: Meade and SCTs / MCTs in general**

◇ *From:* nick

• *References:*

- ◆ **Meade and SCTs / MCTs in general**

◇ *From:* Paul Murphy

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