Although the NexStar line of telescopes is about as easy as it gets when it comes to computerized telescopes, there is a learning curve. I hope that by now most of your questions have been answered in the previous chapters, but there are some issues yet to discuss. The NexStar line is not entirely without problems, but fortunately many of the potential difficulties have simple solutions. When all else fails, it is time to contact Celestron Technical Support at (310) 328-9560 or via email at support@celestron.com.

The tips in this chapter are divided into sections for specific NexStar models and a section for tips that apply to multiple models. Refer to Chapter 3 for clarification regarding the original/new GT hand control and the various versions of the GPS hand control/motor control.

Various Models of NexStar

Buying a Used NexStar

(All models)

Amateur astronomers generally take excellent care of their equipment. Buying a used telescope is a good way to save substantial money while still getting the scope of your dreams. Here are some things to check on a used NexStar.

- Look for any obvious damage. Even if the dents or scrapes do not seem to have damaged any critical components, the impact that caused them may have caused unseen damage.
- Check the surfaces of the mirrors/lenses for scratches or discoloration that will impair optical performance.
- Try the scope out at night, checking for pinpoint star images and similar inside- and outside-focus star patterns as discussed in Chapter 9. Keep in mind that distorted patterns can be caused by poor collimation or inadequate time to cool the optics. If you cannot check the optics at night, focus on a distant object, looking for obvious defects. You can even check defocused “star” patterns using sunlight reflected off a distant glass or metal object.
• Check the focuser motion – it should move easily with little backlash.
• Power up the scope and attempt an Auto Alignment. Insure the scope slews smoothly to the alignment stars. Accept the given location of the two alignment stars. Press the Tour button and select an object, pressing Enter to GoTo the object. Again, observe whether the movement is smooth.
• Set the rate to 2 and focus on a star or distant object. Does the scope move smoothly (although slowly) in all four directions?

If the scope checks out, consider the age and condition and compare with the cost of a factory new telescope. With the number of NexStar telescopes sold since their recent introduction, I expect the market for used models to be substantial in the next few years. Personally, I would hesitate to purchase a used telescope via the Internet or through the mail – there is often little recourse if the telescope happens to be damaged – but if you can see and test it in person, a used scope is often a great deal.

Some of the Features Described in This Book Are Not Found on Your Scope

(All models)

Check to see if I noted that the feature applies to your model of NexStar. If so, perhaps you have an older version of hand control or motor control firmware. Refer to Chapter 3 for information on models and versions. If it is not possible to upgrade to a newer version, some of the tips in this chapter will help to overcome problems with older versions.

No Power When Running on Internal Batteries

(NexStar 5/5i/8/8i)

The battery compartment on the NexStar 5/5i/8/8i holds the batteries very tightly, sometimes resulting in difficulties in making a good connection. After inserting new batteries, if the telescope will not power up, try reseating the batteries. The best solution is to remove the batteries altogether and power your scope with an a.c. adapter or external power source as described in Chapter 8.

Power-Related Problems

(All models)

Low or marginal power causes any number of problems with NexStar telescopes. Hand control lockup, GoTos that either don’t reach their target or never stop looking, “No Response 16/17” errors, and various other misbehaviors of the scope are all common with faulty power. Celestron recommends an a.c. adapter with a minimum current rating of