LX200GPS Start-Up Checklist
Alt-Az Mode

Utilize these start-up checklists in conjunction with your manual to check the electronic controls, calibrate your telescope, and begin the alignment process.

A. First Time Start-up: Indoors or daytime

1	Power on & Note AutoStar II Version	pg 16	Make sure you have the latest AutoStar II version. See List D below.
2	Follow AutoStar Prompts		Follow any prompts for confirming your location (nearest city) or Telescope Model, etc. Read & Acknowledge the "Sun Warning" message
3	Observe "Smart Drive Initiation" process		Observe as the scope cycles through the RA & DEC motors briefly.
4	Cancel GPS Alignment	pg 16	Once GPS alignment sequence begins, hit any key (EXCEPT MODE) to cancel GPS fix & Automatic Alignment.
5	Check electronic controls (Microfocuser, RA & DEC motors)	pp 16-17	Check movement of the scope with the hand controller.
6	Record all default values in Setup Menu	pg 28	Make a list of all the values in the Telescope menu. Good idea to check against the defaults in case you need to RESET AutoStar II.
7	Enter your location	pg 32	Entering location significantly speeds up the initial search for satellites that the GPS system performs. GPS will take longer and often "time out" if left to its own search.
8	Set Daylight Savings Time option	pg 28	Must be set twice per year when DST changes.
9	Familiarize yourself with AutoStar II controls & menus	pp 22-31	Use the daylight or time indoors to understand scope control
10	Turn Power Off		Will need to restart scope for remaining steps.

B. First Time Start-up: Outdoors at night

1	Put scope in Home position	N/A	Control panel facing South, User facing North. OTA level & centered between RA hard stops. Put Microfocuser in about the middle of its range of travel.
2	Power on	pg 16	
3	Perform Initial GPS Acquisition	pp 18-19	Should complete within a couple of minutes if you've entered your location, first. If GPS "times out" (by asking you for time & date) it did not get a GPS fix and you must redo. Power off & restart. Try changing orientation of the scope (e.g., tip OTA down about 30 degrees, especially for 8" scope). Remove finder scope, if necessary.
4	Select Auto Alignment	pp 19-20	Follow AutoStar instructions for centering alignment stars. Careful alignment will help GOTO performance.
5	Perform GOTO Testing	pp 20-21	Use one of the guided tours or select your own objects. "Tonight's Best" is a good one to start with.

Start-Up Checklists (continued)

6	Test tracking	Pg 20	If you can stand the wait, check how well the scope tracks something. Objects should remain in the center of the field for some time. Test initially for 20-30 minutes; later you can test for longer tracking.
7	Calibrate & Train the Scope		Calibrate Sensors, Train Drives, Anti-Backlash Compensation, Periodic Error Correction. See List D below.
8	File a First Light Report		The Yahoo LX200GPS User Group wants your comments and feedback on this checklist and the performance of your scope!

C. Ongoing Start-up

1	Put scope in Home position	N/A	Control panel facing South, User facing North. Scope pointed down 45%, approx. centered b4etween RA hard stops. Put Microfocuser in about the middle of its range of travel.
2	Power on		
3	Proceed through AutoAlign (or other Alignment Routine)	pg 18	You should be ready to go after AutoAlign
4	When Done, Power Off or Sleep Scope or Park Scope	pg 28	Use the "Sleep" function to power down while preserving the scope's alignment. The internal clock keeps running. Consumes battery power. Press Enter to wake. Best for short-term shutdown when scope is not moved. Use the "Park" to power down while preserving the scope's alignment. Requires you to shut down power. Consumes no battery power. Better for longer-term shutdown when scope is not moved.

D. For Improved Performance

A	Perform AutoStar II Update	pg 9; Meade Web Site	Check Meade Website for updated AutoStar II files & firmware. Look for updated tours & satellite coordinates on Meade's web site.

Perform the next four steps in this exact sequence.

B	Train Drives	pp 39, 58	Carefully training drives will significantly improve GOTO and tracking performance. Train in daylight using a faraway stationary object or at night using Polaris (stationary enough for training).
C	Calibrate Sensors	pg 29	Necessary to properly calibrate the telescope for the difference between magnetic north and true north. Careful alignment will help alignment and GOTO accuracy.
D	Anti-Backlash Compensation		This is an adjustment that enables the RA & DEC motors to remove the slack in the gears when changing directions. It is a percentage adjustment (between 0% to 99%), manually entered via the AutoStar II handbox. It requires some trial & error to get the right percentage for smooth changes in direction withoutjerking.
E	Perform PEC Training (if desired)	pg 39	Periodic Error Correction (PEC) will improve tracking for longer duration tracking (especially for Astrophotography).

LX200GPS Start-Up Checklist (continued)
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F	**Check Collimation**	**pp 44-45**	**Collimation of SCT scopes is critical for achieving good focus and seeing. Follow procedures in the manual for collimating the scope. Careful attention, here, will pay off later in good observing.**

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