

Congratulations! You have received a newly upgraded NexStar+ hand control with your telescope. The hand control now features a USB connector used for linking to a PC with control software, and to perform firmware updates. This is a drop-in replacement for all existing telescopes that accept the NexStar+ Hand Control with RS-232 Connector.

Update hand control firmware over USB without external power or without connecting to the mount. To update the firmware, simply plug a mini USB cable (not included) from your PC to the port on the bottom of the hand control, and run Celestron Firmware Manager (CFM), available for free from the support section on Celestron.com.

Below is a brief description of the individual components of NexStar+ hand control.

**1. LIQUID CRYSTAL DISPLAY (LCD) WINDOW:** Red backlighting for comfortable nighttime viewing of telescope information and scrolling text. Remove the clear protective tape from the screen before use.

**2. ALIGN:** Instructs the telescope to begin the default alignment procedure. It is also used to select star or object as an alignment position.

**3. DIRECTION KEYS:** Allow complete control of your telescope in any direction. Use the direction keys to center objects in the eyepiece or to manually slew your telescope.

**4. CATALOG KEYS:** Allow direct access to each of the main catalogs in the database of thousands of objects.

Your telescope contains the following catalogs in its database:

- **Solar System** – All 7 planets in our Solar System plus the Moon, Sun and Pluto
- **Stars** – Custom lists of all the brightest stars, double stars, variable stars, constellations and asterisms
- **Deep Sky** – Custom lists of all the best Galaxies, Nebulae and Clusters, as well as the complete Messier and select NGC objects

**5. IDENTIFY:** Searches your telescope's database and displays the name and offset distances to the nearest matching objects.

**6. MENU:** Displays setup and utilities functions, such as tracking rate and user defined objects and others.

**7. OPTION (CELESTRON LOGO):** Works similar to the SHIFT key on a keyboard and can be used in combination with other keys to access more advanced features and functions to be added with later firmware updates.

**8. ENTER:** Pressing ENTER allows you to select any of your telescope's functions, accept entered parameters and slews the telescope to displayed objects.

**9. BACK:** Pressing BACK will take you out of the current menu and display the previous level of the menu path. Press BACK repeatedly to get back to a main menu or use to erase data entered by mistake.

**10. SKY TOUR:** Activates the tour mode, which seeks out all of the best objects in the sky and automatically slews your telescope to those objects.

**11. SCROLL KEYS:** Used to scroll UP and DOWN within any of the menu lists. A double arrow symbol on the right side of the LCD indicates that the scroll keys can be used to view additional information. The buttons have an angled shape to make it easier to locate without looking.

**12. MOTOR SPEED:** Similar to the Rate Button on the original NexStar hand control, it allows you to change the motor's speed when the direction keys are pressed.



**13. OBJECT INFO:** Displays coordinates and valuable information about objects selected from your telescope's database.

**14. MINI USB PORT (cable not included):** Links to PC to control telescope with desktop or to perform firmware updates.

**15. HELP MENU:** In future firmware updates, this button will offer troubleshooting tips. For your convenience, it currently functions as a shortcut to the Messier Catalog.