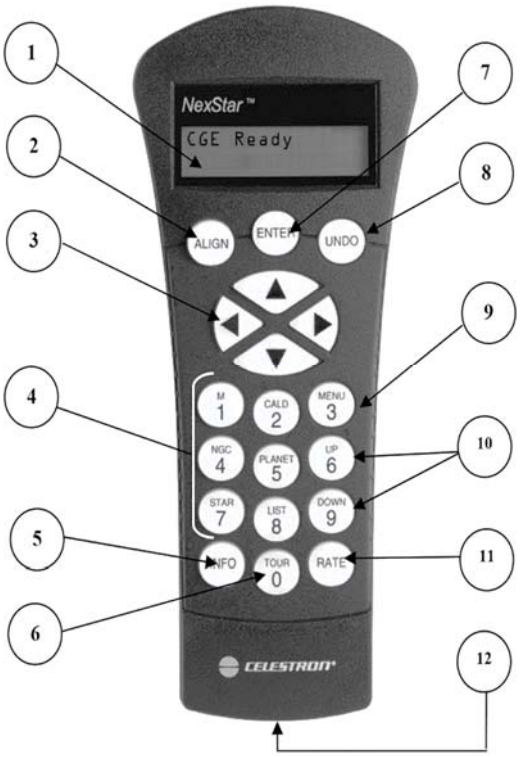
Celestron CGE Mount



1. **Liquid Crystal Display (LCD) Window:** a dual-line, 16 character display screen with backlighting.
2. **Align:** Instructs the telescope to use a selected star or object as an alignment position.
3. **Direction Keys:** Allows complete control of the telescope in any direction. Use the direction keys to move the telescope to the initial alignment stars or for centering objects in the eyepiece.
4. **Catalog Keys:** The CGE Series has keys on the hand control to allow direct access to each of the catalogs in its database. The hand control contains the following catalogs in its database:

Messier – Complete list of all Messier objects.
NGC – Complete list of all the deep-sky objects in the Revised New General Catalog.
Caldwell – A combination of the best NGC and IC objects.
Planets - All 8 planets in our Solar System plus the Moon.
Stars – A compiled list of the brightest stars from the SAO catalog.
List – For quick access, all of the best and most popular objects in the CGE database have been broken down into lists based on their type and/or common name:

Named Stars	Common name listing of the brightest stars in the sky.
Named Objects	Alphabetical listing of over 50 of the most popular deep sky objects.
Double Stars	Numeric-alphabetical listing of the most visually stunning double, triple and quadruple stars in the sky.
Variable Stars	Select list of the brightest variable stars with the shortest period of changing magnitude.
Asterisms	A unique list of some of the most recognizable star patterns in the sky**.**
CCD Objects	A custom list of many interesting galaxy pairs, trios and clusters that are well suited for CCD imaging with the CGE telescope.
IC Objects	A complete list of all the Index Catalog deep-sky objects.
Abell Objects	A custom list of the Abell Catalog deep-sky galaxies.
Constellation	A complete list of all 88 constellations.

5. **Info*:*** Displays coordinates and useful information about objects selected from the CGE database.
6. **Tour:** Activates the tour mode, which seeks out all the best objects for the current date and time, and automatically slews the telescope to those objects.
7. **Enter:** Pressing *Enter* allows you to select any of the CGE functions and accept entered parameters.
8. **Undo:** *Undo* will take you out of the current menu and display the previous level of the menu path. Press *Undo* repeatedly to get back to a main menu or use it to erase data entered by mistake.
9. **Menu:** Displays the many setup and utilities functions such as tracking rates and user defined objects and many others.
10. **Scroll Keys:** Used to scroll up and down within any of the menu lists. A double-arrow will appear on the right side of the LCD when there are sub-menus below the displayed menu. Using these keys will scroll through those sub-menus.
11. **Rate:** Instantly changes the rate of speed of the motors when the direction buttons are pressed.
12. **RS-232 Jack**: Allows you to interface with a computer and control the telescope remotely.

Start Up

1. On the Circuit Breaker panel in the Warm Room are two switches labeled **DOME** – move those to **ON** (left)

2. Power Up the Mount

rocker switch on column

3. If, Hand Controller says "**Wake Up**" – press Enter, to confirm the time (or Undo to change it).

- OR -

If it says "**Press Enter to Begin Alignment**" then:

a) Press Enter on the key pad and wait for mount to move to default position.
b) Press Enter to accept the parameters displayed or Undo to change them.
c) When offered "**2 Star Alignment"**, use the UP / DOWN (6 and 9) keys to scroll to "**Quick Align**" and press Enter.

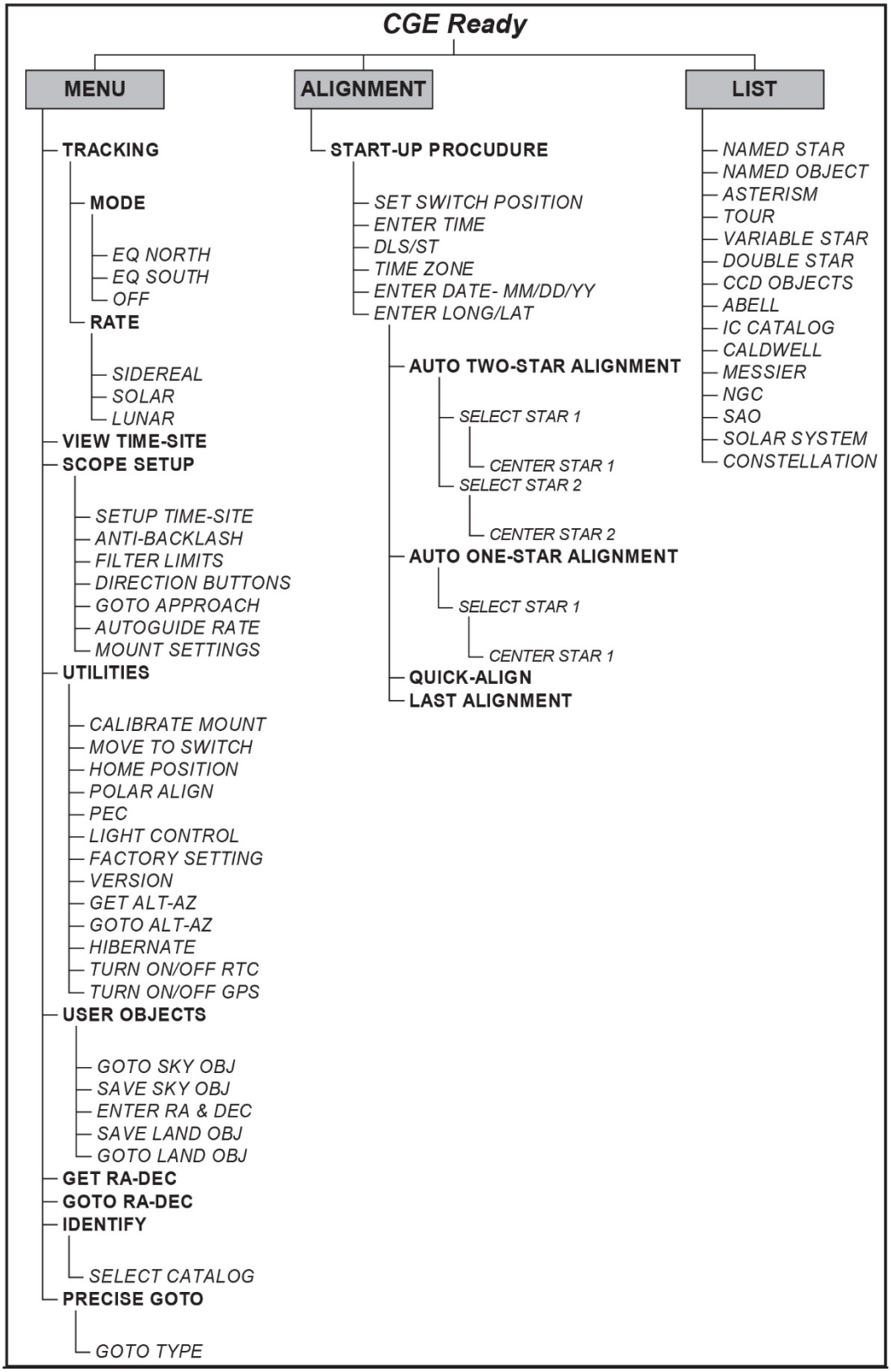
Shut Down

1. Press Menu (3 key)
2. Use the UP / DOWN (6 and 9 keys) to scroll to "**Utilities**", press Enter
3. Move through those options (UP / DOWN) to "**Hibernate**" and press Enter
4. Follow the key pad instructions:
    a. Move scope to a shut down position (not critical)
    b. Power off the mount
5. Switch **OFF** circuit breakers in the Warm Room (step #1 above)

Sync to improve pointing accuracy in a specific region of the sky (not crossing the Meriden)

1. First choose an object from one of the database lists and slew to it.
2. Once the slew is complete, press Undo until you are at the main menu (scope name displayed).
3. Press Align.
4. Use UP / DOWN keys and select the "**Sync**" option.
5. Press Enter.
6. Center your object in the finderscope, press Enter.
7. Then center your object in the eyepiece and press Align.

If you get into trouble, call me - 440.786.7968



Focal length	Apparent FOV	Power	True FOV	Exit pupil	Power + barlow	Exit pupil + barlow
31	72	126	0.57	2.8	252	1.4
18	82	217	0.38	1.6	434	0.8
13	65	301	0.22	1.2	602	0.6
8	52	489	0.11	0.7	978	0.4
6	65	652	0.10	0.5	1303	0.3