# Lumicon *Sky Vector II* Alignment & Object Location Instructions for Dobsonian Telescopes:

Lumicon is now owned by farpointastro.com but doesn't appear to stock the *Sky Vector II* (SV2) or provide any resources such as the operating manual.

Note: Some units have the **Enter** button labeled as **Star**, regardless it's the second from the left of the four button row: **Mode—Star/Enter—Up—Down**. (see image below)

**Star alignment—**
Identify two bright stars that you can see ~60 degrees apart (do not use Polaris). If you don't know the night sky very well, a simple star atlas will be needed as SV2 uses star names in the alignment process.

Powering up SV2 with telescope pointing straight up vertically within the mount will auto select **Vertical**, press **Star/Enter** to verify the scope is vertical. This gives the "home position" for the optical encoders.

*Note: just **Enter** will be used in following instructions.*



SV2 then auto advances to **Star Fix**, press **Enter**.



A list of alignment stars appears, scroll with **Up/Down** to first desired star, for example Vega (don't press any button), then move scope so as to get first desired star centered in your eyepiece, press **Enter**. The alignment star list reappears automatically.



Scroll to alignment star #2 (don't press any button), center in eyepiece, press **Enter**. This sequence of scrolling, centering in eyepiece, and then pressing **Enter** is critical. If done correctly, your ready to select your first object to view, but note that the SV2 doesn't indicate this. But first…

Press **Mode** to go to **SetUp/Date** (two digits for month/day/year) to verify it is correct and, if necessary, adjust to today's date by changing numerical choice

with **Up/Down**, then press **Enter** to set and advance to next digit. After the second digit of the year is set, selection auto advances to **Scope AV--Scroll speed** (which can be bypassed by pressing **Mode**).

Note: **Mode** selections include: **Catalog**, **Guide**, **Timer**, **Align**, **SetUp**, **Encoder**, **Star Fix**, and **RA  DEC**.

Press **Mode**, scroll to **Catalog** press **Enter**. Scroll to desired catalog from: **ST** (star #), **M** (Messier or M Object List), **NGC** (New General Catalog), **IC** (Index **Catalog**), **NS** (Non-Stellar), **New**, or **Planets**.

With the desired catalog displayed, press **Enter** to go into that catalog to enter the object's number, i.e., M057 for the Ring Nebula (You will need a star map, star atlas, or some other reference to get the catalog numbers—there are many online resources for planning a view session that will include catalog numbers.).  Use **Up** and **Down** to change each object's catalog number digit by digit using **Enter** to set and advance. If a particular digit is already what you want, just press **Enter** to advance.

Additionally, after setting the catalog number, pressing **Enter** once will display its RA/DEC location, a second press will give a brief description of the object. Then...

Press **Mode,** one click of **Up** to **Guide**, and it will give you the number of degrees in RA (right ascension) and DEC (declination) that your scope is currently away from the desired object. Move your telescope while watching the changing values in the SV2 display which will guide you as you adjust your scope's RA and Dec pointing (can do both at same time) until all values are zero and your object should be close to center in the eyepiece.

Should you find that objects aren't centered very well or even in the eyepiece, search around manually to find the current one, center it in the eyepiece, select **Mode/Align** and press **Enter**. This will recalculate the alignment values of the SV2. Then select **Mode/Catalog** to resume your viewing session.

*In the first step of setting the **Vertical**, it assumes you have put the telescope's optical tube assembly (OTA) in a 90 degree angle to the mount's base plate or azimuth axis. This can be determined by using a large carpenter's square with one leg on the base plate and moving the OTA to be 90 degrees by aligning to second leg of the carpenter's square. I placed a mechanical stop on one of the side boards to easily place the OTA vertically up against during this **Vertical** step. Additionally, when you place the Dob scope on the ground, try to get it vertical to the ground--eyeball judgment is sufficient.*

Comments or share a copy of original instructions:
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