

Using Nexus with Deep Sky Browser

This document describes how to setup your Nexus with your iPhone/iPad/iPod touch using default factory settings.

1. Please go to 'Setting' then 'Wi-Fi' on your iPhone/iPad/iPod touch. You will see 'AD_Nexus_XXXXX' there (where XXXXX is the serial number of your Nexus found on the back of Nexus), select it.

Nexus will be connected in a few moments.

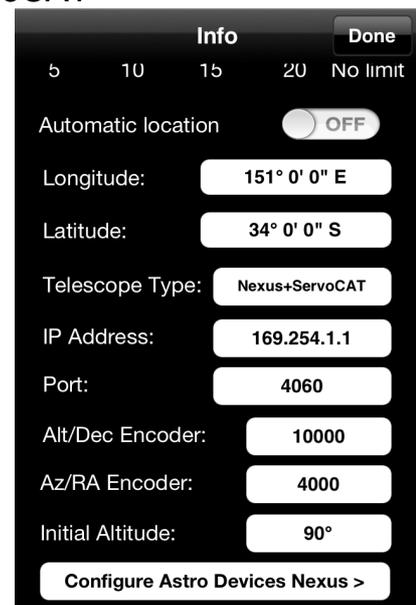
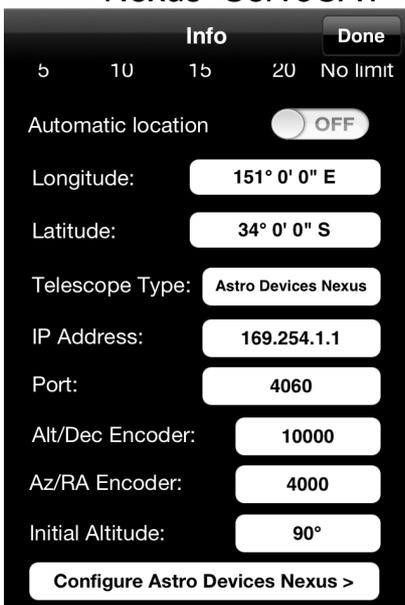


It is also better to enable 'Auto Join' in the network settings for your Nexus.

2. Run Deep Sky Browser and go to 'Settings' by touching .

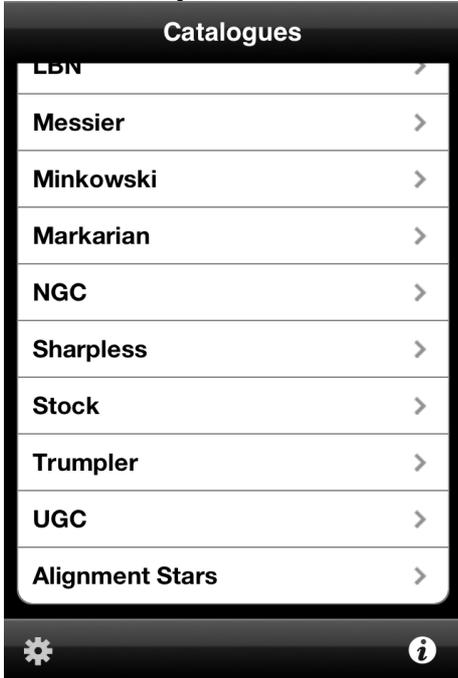
Please select the appropriate Telescope Type by touching the button on the right from 'Telescope Type':

- 'Astro Devices Nexus' when using Nexus as standalone
- 'Nexus+ServoCAT' when using Nexus with ServoCAT

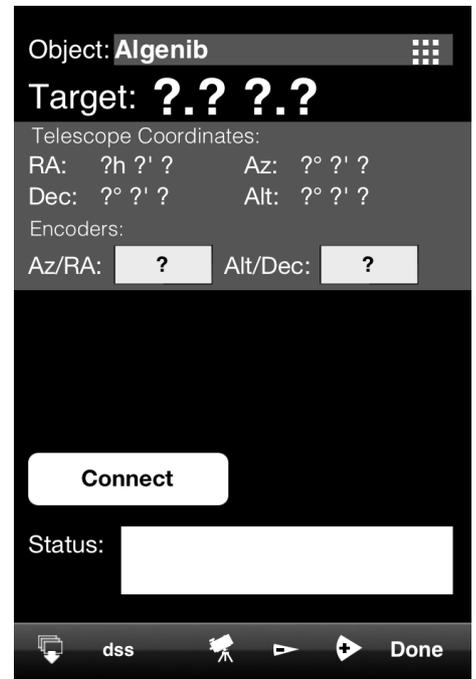
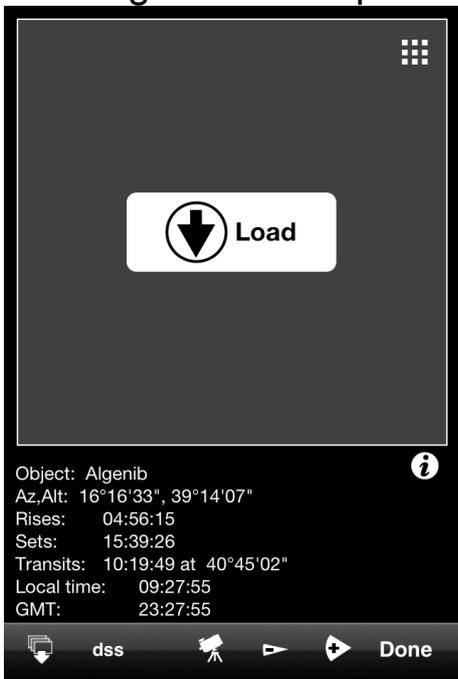


Set the 'IP address' to 169.254.1.1, 'Port' to 4060. Set 'Alt/Dec Encoder' to the number of steps per revolution of the altitude/declination encoder (10000 in this case). Set 'Az/RA Encoder' to the number of steps per revolution of the azimuth/right ascension encoder (4000 in this case). Set 'Initial Altitude' to either 90 degrees or 0 degrees. It is also advisable to set 'Automatic Location' to 'ON'. Touch 'Done'.

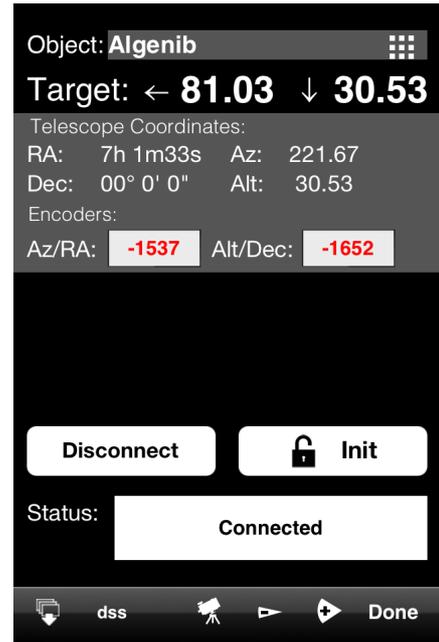
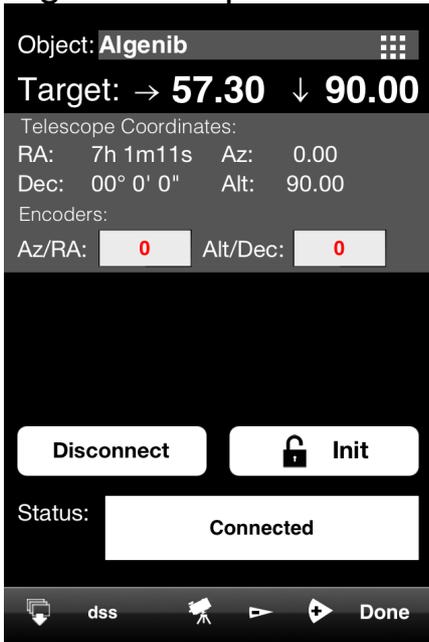
3. Select 'Alignment Stars' from the catalogues list. The list will show only the stars that are currently above the horizon.



4. Select a star from the list and activate the telescope control panel by touching the telescope icon.



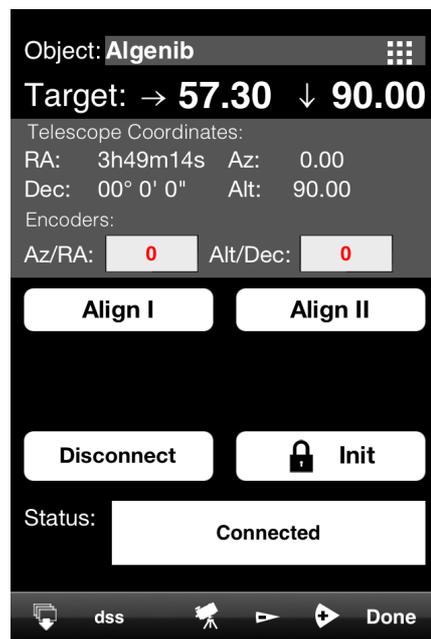
5. Touch 'Connect'. The screen will now show the current encoders' position and coordinates. The coordinates will only be valid once the two star alignment is performed.



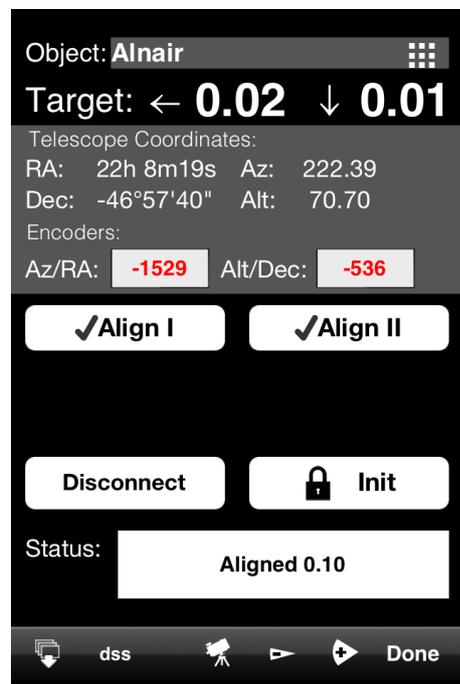
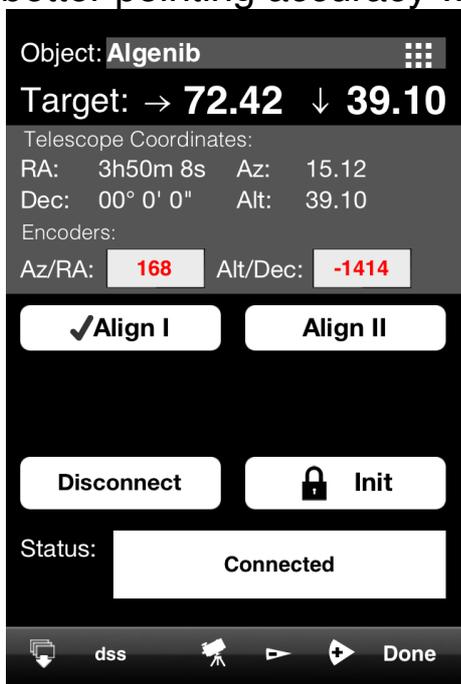
Note: Please make sure that Az coordinate is increasing when rotating the telescope clockwise and Alt coordinate is increasing when the telescope is moved up. Change the sign for the corresponding encoder steps to opposite in the settings if the coordinate is changing incorrectly.

6. Now point telescope vertically (if 'Initial Altitude' is set to 90 degrees) or horizontally (if 'Initial Altitude' is set to 0 degrees). Please note that the angle is relative to the telescope base and not the ground. The angle does not have to be very precise - +/- 5 degrees is enough.

Now touch the 'Init' button. You will notice that Az,Alt will go to 0, 90. Two buttons will be displayed now – 'Align I' and 'Align II'. The 'Init' button will be locked. 'Long touch' (2 seconds) will unlock the button.



7. Now point the telescope at the selected star (Algenib in this case) and touch 'Align I'. A tick mark will appear on the button. Now select a second alignment star (Alnair in this case), point the telescope at the star and touch 'Align II'. A tick mark will appear on the 'Align II' button. The alignment error will be reported in the status window (0.10 here) – the smaller error the better pointing accuracy will be achieved.



The Alignment is now done.

Now you can touch the telescope icon again to display a small telescope control pane that shows only the direction arrows with deltas and current telescope coordinate. There will be also additional 'GoTo' button displayed if the telescope type was set to 'Nexus+ServoCAT'. You can now select an object from one of the catalogues and Deep Sky Browser will show where to move the telescope to point at the object (NGC300 in this case). The deltas will approach near zero values once the telescope is close to the object. Or you can touch the 'GoTo' button if using ServoCAT.

