

Using Nexus as WiFi to Serial adapter

This document describes how to setup your Nexus to work with a GOTO telescope to run Nexus as WiFi to Serial adapter.

Configuring Nexus

It is necessary to make sure that your Nexus is configured correctly before using it as WiFi to serial adapter. Configuring Nexus is required to be performed just once if using it with the same equipment.

1. Please download and install Nexus configuration utility for your computer from the Downloads section of our website at <http://www.astrodevices.com/Downloads/index.html>
2. Please connect your Windows based PC/laptop or Mac OS X based computer to Nexus's network. It usually takes a couple of minutes until the computer connects and gets the IP address.
3. Start the Nexus configuration utility and press 'Load Configuration' button. This will download the current configuration of your Nexus.
4. Configuring the serial ports. Press on the 'Port Settings' tab. Please consult the user manual for you telescope controller on the serial port settings. In this particular example we use 9600bps, 8 data bits, 1 stop bit and no parity (this setting is used by most telescope controllers):

Nexus Configuration - Astro Devices - version: 1.0.0.6

Nexus's IP address: 169 . 254 . 1 . 1

Load Configuration

Save Configuration

Info / DSC Parameters WiFi Settings Port Settings Port Routing Align

Port I

Baudrate: 9600 Data Bits: 8

Stop Bits: 1

Protocol: SkyCommander Parity: No

Port II

Baudrate: 9600 Data Bits: 8

Stop Bits: 1

Protocol: ServoCAT Parity: No

USB

Baudrate: 19200 Data Bits: 8

Stop Bits: 1

Protocol: ServoCAT Parity: No

Exit

Note: Selections for 'Protocol' do not matter when Nexus is used as WiFi to serial adapter.

5. Configuring TCP/IP ports. Please press 'Port Routing' tab. Using the following settings will allow Nexus to operate as WiFi DSC and WiFi to Serial adapter at the same time:

Port	Connect to	TCP/IP Port
Port 0	Astro Devices	4060
Port 1	Port I	4061
Port 2	Port II	4062
Port 3	NO Connection	4063
Port 4	NO Connection	4064
Port 5	NO Connection	4065

Please set all parameters as on the screen above. Please take a note of TCP/IP ports specified for Port I and Port II.

6. Please press 'Save Configuration'. This will save the selected configuration into Nexus's flash memory.

7. Done.

Connecting Nexus to your telescope

Please use only the serial cable designed for your telescope to connect it to Nexus. This cable must have a female DB9 connector:



1. Please connect one end (DB9 male) of the cable supplied with Nexus to DB9 female end of the telescope cable.
2. Please connect the other end (RJ12) of the supplied cable to either 'Port I' or 'Port II' of Nexus.
3. Connect the other end of the telescope cable to your telescope.

Using Nexus with SkySafari Plus/Pro

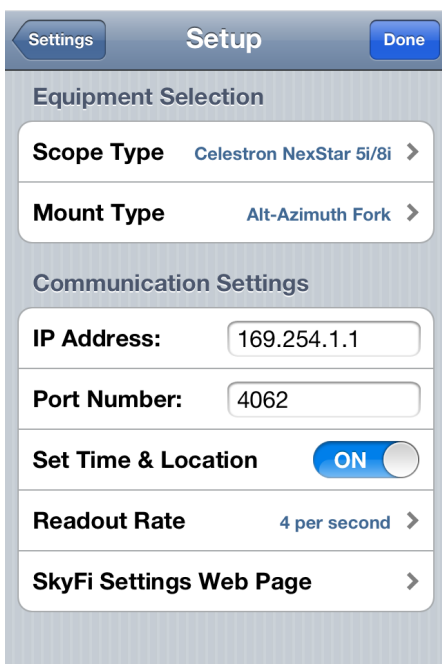
1. Please go to 'Setting' then 'Wi-Fi' on your iPhone/iPad/iPod touch. You will see 'AD_Nexus_XXXXX' there (where XXXXX is the serial number of your Nexus found on the back of Nexus), select it.

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 SkySafari Plus/Pro, go to 'Settings' -> 'Telescope' -> 'Setup'.



Under 'Communication Settings': set the 'IP address' to 169.254.1.1.

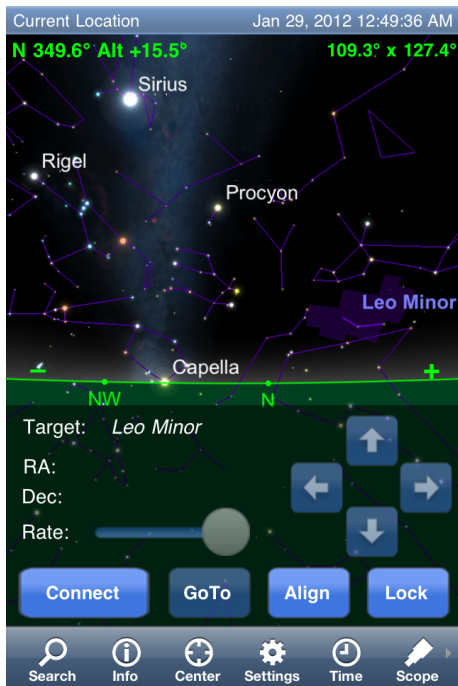
'Port Number' should be set to 4061 if you connected your telescope to 'Port I'.

'Port Number' should be set to 4062 if you connected your telescope to 'Port II'.

Set 'Scope Type' to your telescope type.

The 'Readout Rate' can be either set to '10 per second' for reduced lag or it can be set to default '4 per second'.

The setup is now finished.



Now you can bring up the scope panel and hit 'Connect'.

Now SkySafari Plus/Pro should show a telescope cursor on the screen. Moving the telescope will result in the cursor movements on the screen.

