

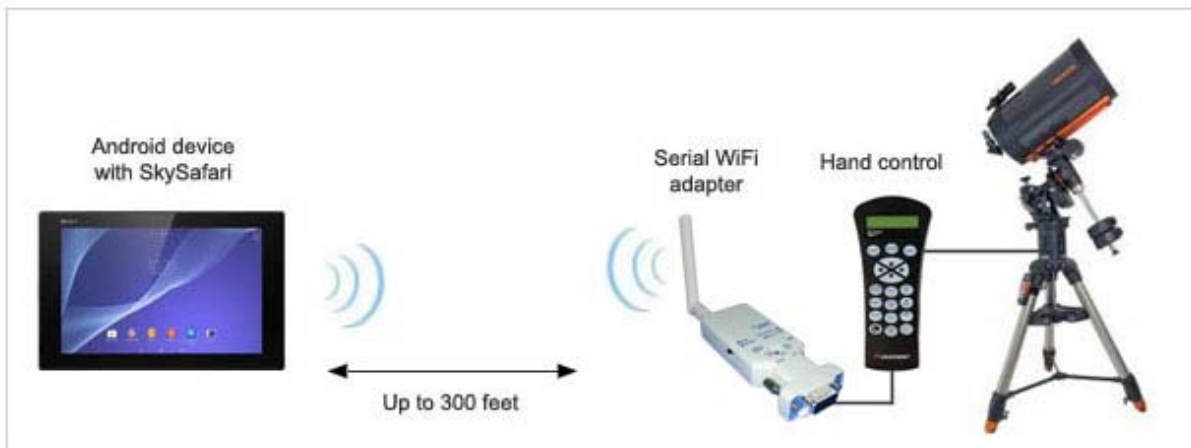
Controlling a Telescope over WiFi using SkySafari on Android

Step-by-Step Setup Guide

Tested with SkySafari Plus 4.0.7 on ASUS tablet TF701T with Android 4.4.2 (KitKat) using a Celestron NexStar SLT telescope mount.

The Setup

The setup is fairly simple and looks like shown below. The serial Wi-Fi adapter is connected to the hand control via a RJ11 to DB9 female cable. The hand control is then connected to the telescope mount.



A look at the parts you need

Below is a list of parts we use for this setup; some are required, some are highly recommended and some are optional.

Required



[Serial Wi-Fi adapter](#)
[part UCW232C](#)

Available from
www.usconverters.com

This is needed to connect to the telescope.

Required



[RS232 / RJ11 Cable](#)
[part 93920](#)

Available from
www.celestron.com

This cable is used for connecting the serial Wi-Fi adapter to the hand control.

Optional



[Rechargeable USB Battery](#)
[part 206647](#)

Available from
www.usconverters.com

This rechargeable lithium USB battery pack is optional but very useful if you have no other power source for the serial Wi-Fi adapter.

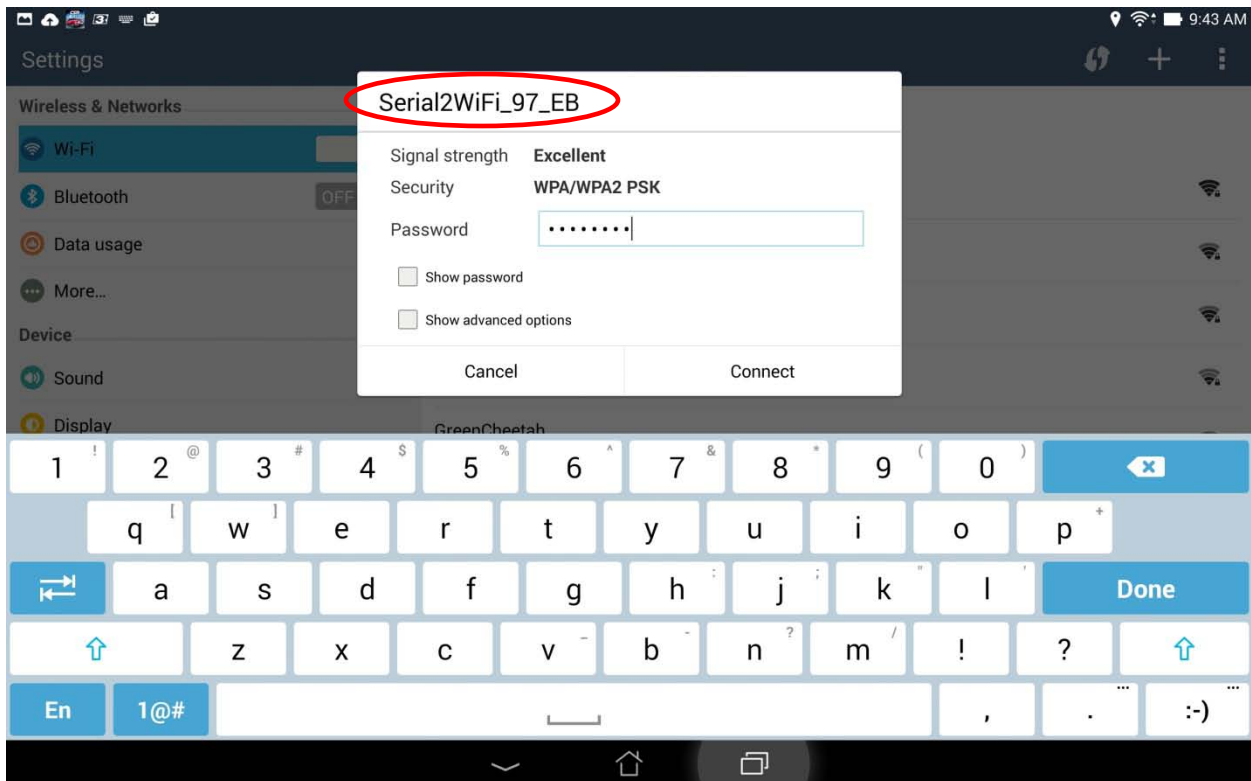
Connecting the Serial Wi-Fi adapter

The UCW232C serial to WiFi adapter is pre-configured to work with most astronomy software including SkySafari, so you don't need to configure any of the adapter's parameters. All parameters should be at default settings. To make sure all parameters are at default settings you can press and hold the reset button for about 5 seconds.

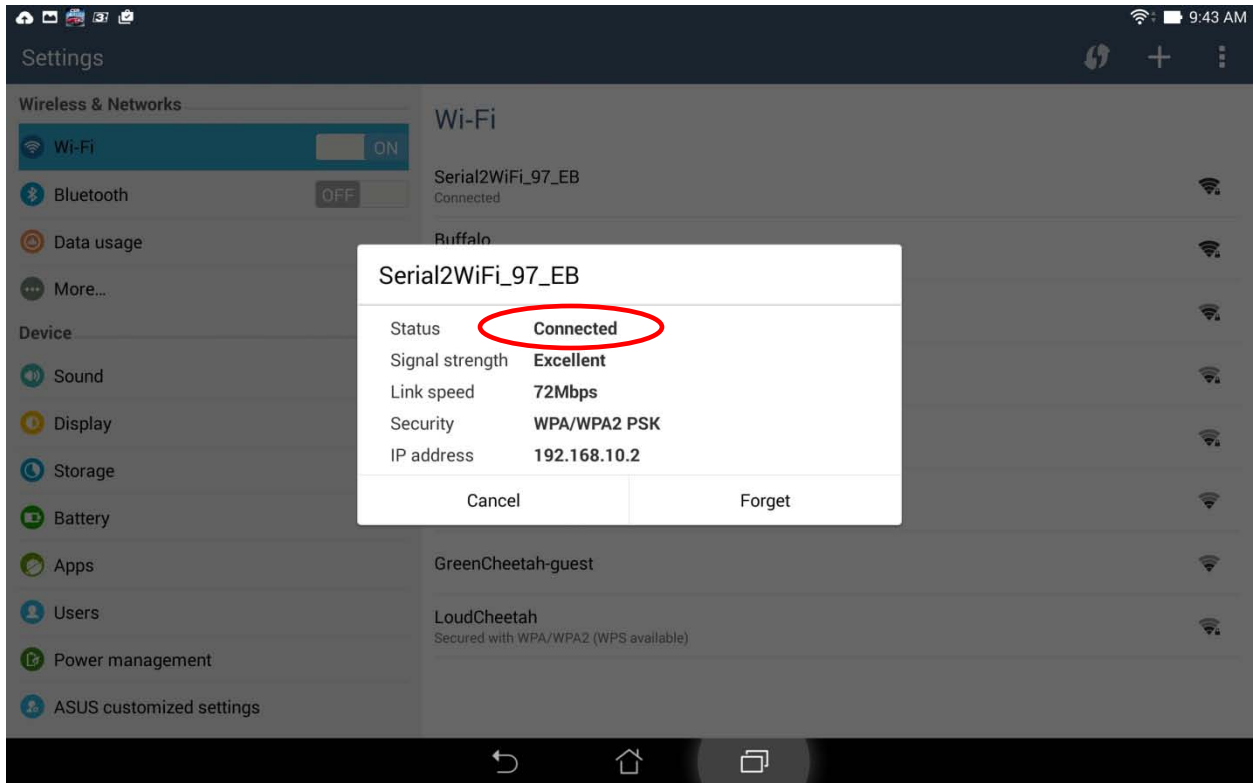
Connecting the adapter to your Android device over Wi-Fi.

First connect the Wi-Fi adapter to 5VDC through the USB power port. Check that the DCE/DTE switch on the side of the adapter is in position DTE.

Go to your Android device's Wi-Fi settings page and search for WiFi devices. Connect to the adapter, the SSID is "Serial2WiFi_xx_xx", (the xx_xx is the last 4 digits of the adapter's MAC address):



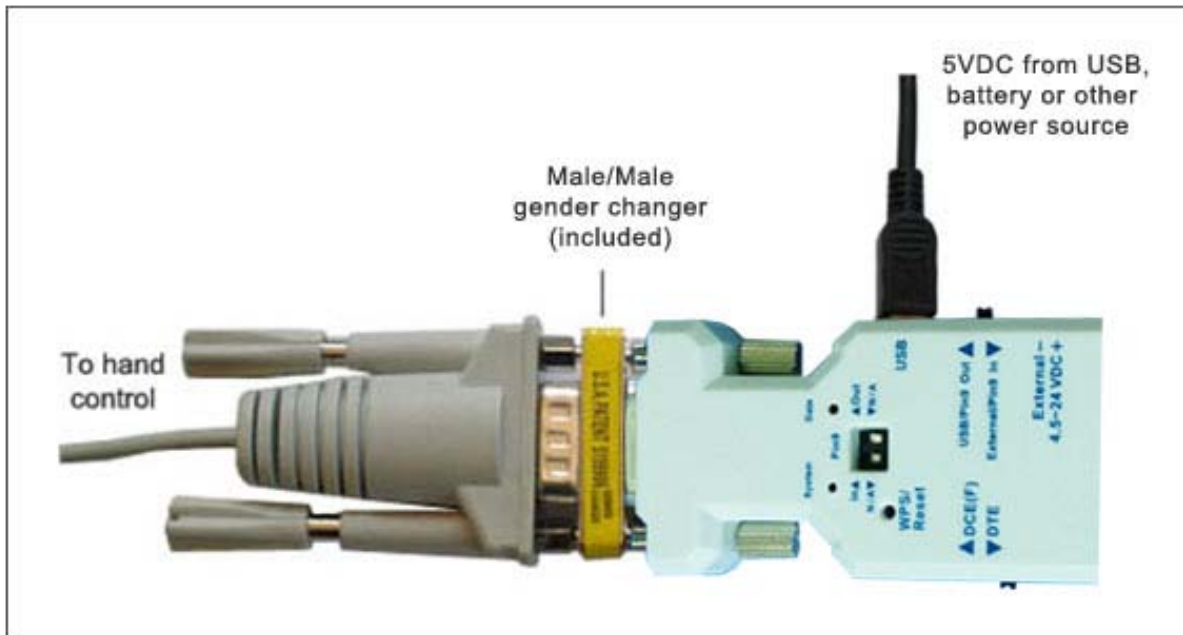
Connected:



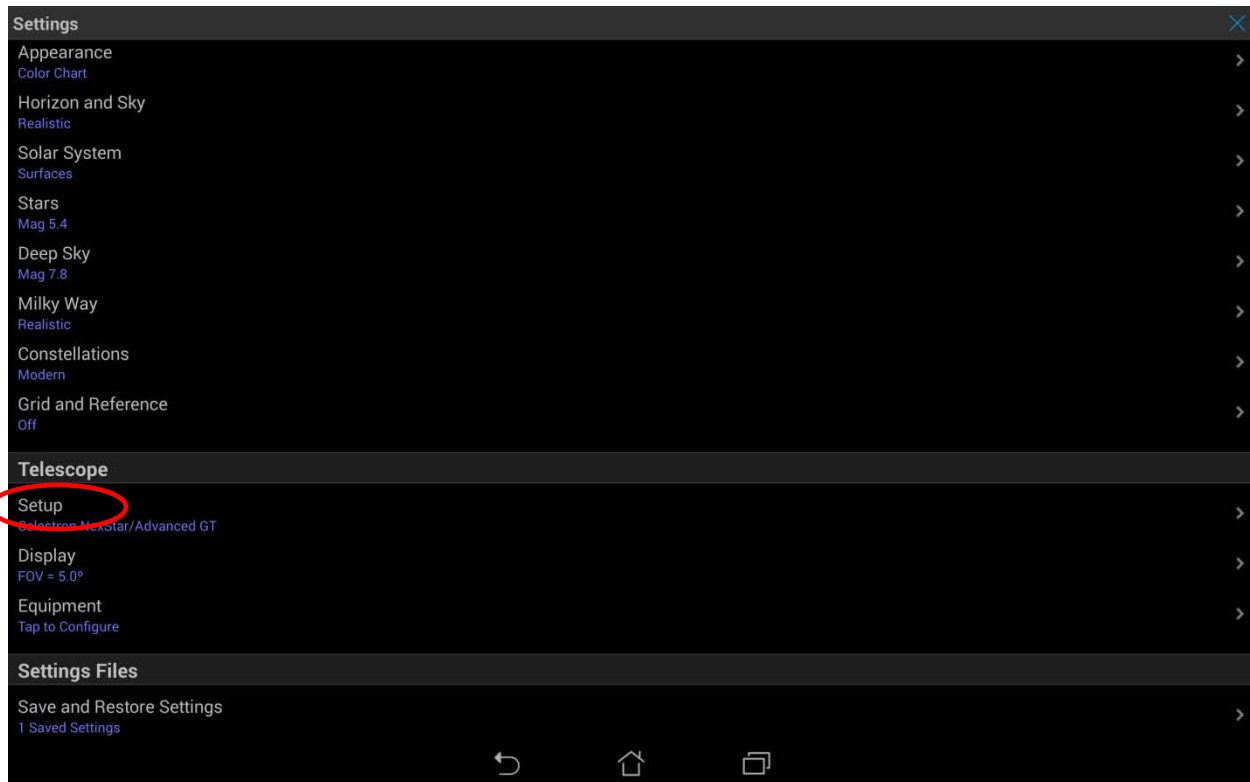
Align your telescope now!
The WiFi adapter cannot connect to your telescope if it is not successfully aligned.

Connecting with SkySafari

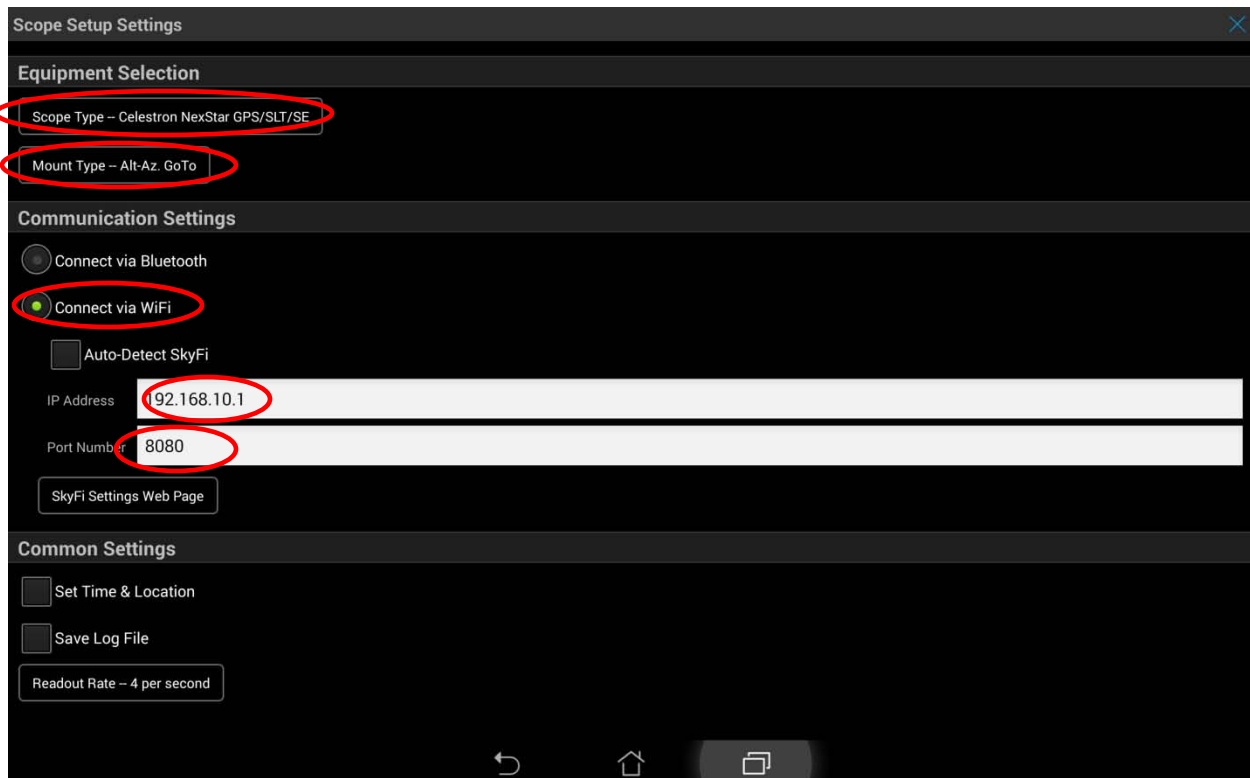
Connect the serial Wi-Fi adapter to the hand control using the DB9/RJ11 cable and the male/male gender changer as shown below. **NOTICE: The DCE/DTE switch on the side of the adapter must be in position DTE.**



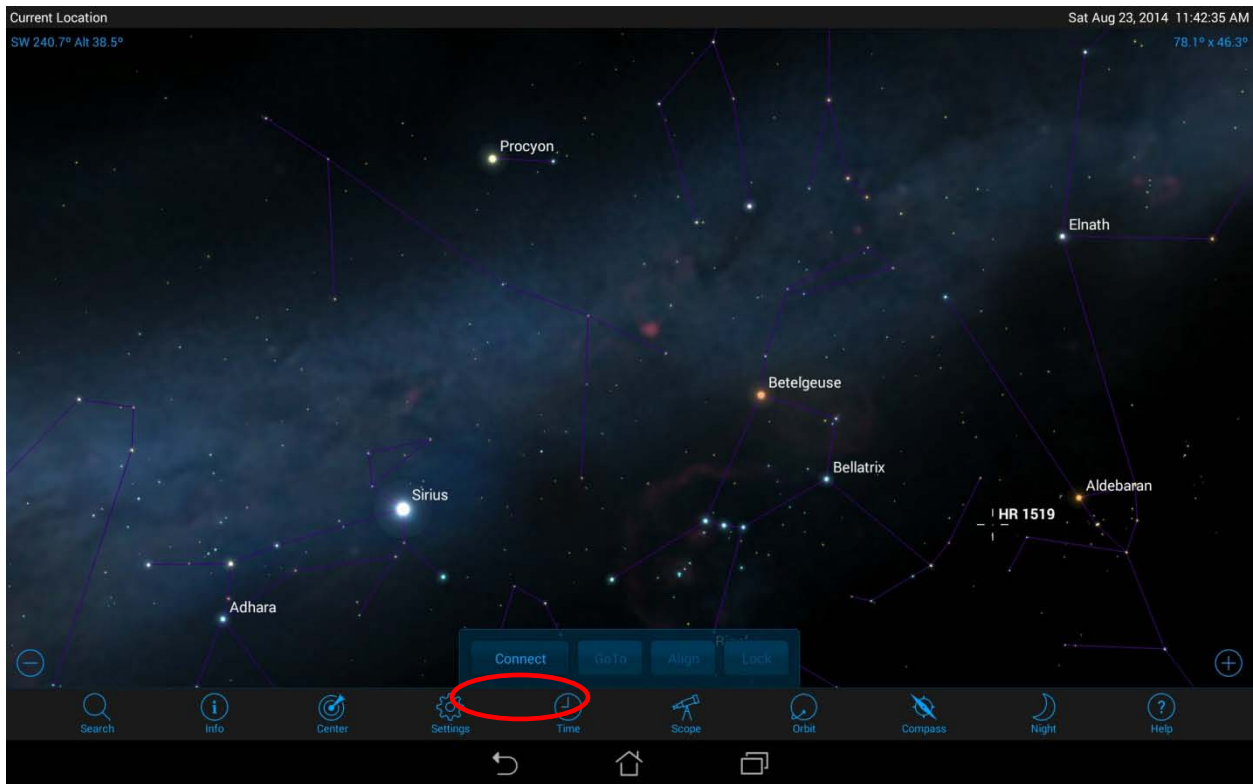
Install and open SkySafari on your Android device. On the main screen tap the *Settings* menu:



Select telescope and mount type under the *Telescope* menu. Select *Connect via Wi-Fi* under *Communication Settings* and enter the WiFi adapters IP address (192.168.10.1) and port number (8080):



Go back to the main menu and tab the *Scope* menu, and tab *Connect*:



Once SkySafari has created the connection to the serial Wi-Fi adapter the blue LED light on the adapter should be solid ON.

You are now able to select any star on the screen and tab "GoTo" and the telescope will slew to the selected star:

