# Quick Start Guide SkyFi 3 Wireless Telescope Controller

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**INTRODUCTION TO SKYFI 3**
SkyFi 3 is a Wireless Telescope Controller that allows wireless connection to your telescope mount. It is used in combination with the SkySafari Plus or SkySafari Pro app which is available for purchase on the iOS and Android platform through the iTunes and Google Play store. To fully utilize SkyFi 3, download SkySafari Plus or SkySafari Pro and become familiar with the app before you connect SkyFi 3 to the telescope.

**BEFORE USING SKYFI 3**
Charge SkyFi 3 before use! Plug in the included AC adapter into SkyFi 3's micro-USB port (3, Fig. 2) to charge. SkyFi 3 will be fully charged once its charging indicator LED (3, Fig. 1) turns off. Charging time will depend on initial battery level. When fully charged, SkyFi 3's internal rechargeable lithium ion battery should last about 10 hours depending on usage.

**POWERING SKYFI 3 ON & OFF**
To turn SkyFi 3 on and off, press and release the center on/off button (2, Fig. 1). The power LED (1, Fig. 1) will illuminate when on.

**CONFIGURING SKYFI 3**
SkyFi 3's default settings allow quick connection to the telescope without worrying about security passwords. Just power on SkyFi 3 and connect to the "SkyFi 3" network using a phone or tablet. SkyFi 3 connection will occur without passwords using the default settings.

To enable password protection or security features, power SkyFi 3 on, connect to the "SkyFi 3" Wi-Fi network, open your web browser and go to the following address http://10.0.0.1. The SkyFi 3 webpage will load and various security and firmware settings can be configured. You can configure SkyFi directly from SkySafari Plus or SkySafari Pro by going to Settings > Setup > SkyFi Settings Web Page.
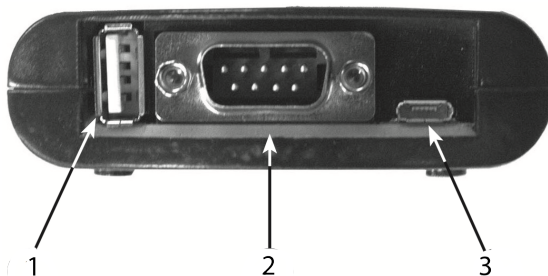
**Figure 1. SkyFi 3 (Top View)**



(1) Power LED
(2) On/Off Button
(3) Charging LED
(4) Data LED

**Figure 2. SkyFi 3 (Side View)**

(1) USB-A Port
(2) DB9 Serial Port
(3) Micro-USB Port



**CONNECTING SKYFI 3 TO YOUR TELESCOPE**
Connect SkyFi 3 to your telescope using the required cables.

With USB telescopes, use a standard USB cable to connect SkyFi 3's USB "A" port (1, Fig. 2) to the telescope's USB "B" port. On Meade LS telescopes, the USB "B" port is on the mount base. With iOptron telescopes, the USB "B" port is on the GOTONova hand controller.

With serial telescopes, you'll need a serial cable to connect your telescope's RS-232 port to a standard PC DB9 Male serial port. Different telescopes require different serial cables. Simulation Curriculum sells serial cables for the more common telescope mounts.

1. Connect your telescope serial cable to the RS-232 port on your telescope. On most telescopes, the RS-232 port is a 4- or 6-wire modular ("telephone") jack. On Meade LX-200 and LX-400 telescopes, the RS-232 port is located on the mount base. On almost all others (e.g. Meade telescopes with #497 AutoStar controllers, Celestron telescopes with NexStar controllers, Orion and SkyWatcher telescopes with Synta controllers), the RS-232 port is located on the bottom of the hand controller. See note below.
2. Connect the other end of your telescope's serial cable to the DB9 male connector on SkyFi 3's serial port.
3. Turn on your telescope, and perform any telescope alignment procedures that you would normally perform. See your telescope user manual for instructions on how to align your telescope.

***IMPORTANT: Do not connect SkyFi 3 to the AUX port, handbox port, autoguider port, or any port on your telescope (or its hand controller) other than its RS-232 serial port. Doing so may damage SkyFi 3 and/or your telescope hardware. Make sure you know where the RS-232 serial port on your telescope is located, and only connect SkyFi 3 to that port.***

**USING SKYFI 3 TO CONTROL YOUR TELESCOPE**

1. Once SkyFi 3 is connected to your previously aligned telescope, power the SkyFi 3 Wireless Telescope Controller on and open the SkySafari Plus or SkySafari Pro app.

2. In the app **Settings** tab, navigate to the Setup page under Telescope. Select the correct telescope model, mount type, and SkyFi 3 communications settings.

***NOTE:*** *If you wish to use a static IP address and port number to configure SkyFi 3, the default IP Address is 10.0.0.1, and the default Port Number is 4030. If you have configured SkyFi 3 3 to use a different IP address or port number, enter those same values in SkySafari.*

3. Tap the **Scope** button in the toolbar to show the Scope Control Panel. Then tap **Connect** to begin communication with the scope.

4. You can now use SkySafari Plus or SkySafari Pro to point your telescope to any object shown above the horizon. Select any object in the chart that is above the horizon and tap **GoTo** to move the telescope to that object in the sky.

5. When finished using SkyFi 3, disconnect from the telescope and press the On/Off (2, Fig. 1) button on SkyFi 3 to power off.

**RESETTING SKYFI 3 TO THE FACTORY DEFAULTS**

1. Power on SkyFi 3.
2. Press and hold the center button for 5 seconds, then release. The data LED (4, Fig. 1) will begin to flash slowly. When SkyFi 3 has completed the reset it will flash quickly.
3. Release the center button and SkyFi 3 will power down.
4. SkyFi 3 has now been configured to its factory settings.

**LED INDICATORS**
The power LED is always illuminated when there is power. The data LED will blink once per second, when the battery is below approximately 25% full power.

***www.SkySafariAstronomy.com***

## TROUBLESHOOTING SKYFI 3

### Can't connect to SkyFi 3:

• Verify SkyFi 3 is charged, powered on, and within range of the connecting device.
• Make sure you star aligned the telescope before trying to connect.
• Verify your serial cable is the correct one for your scope type.
• Verify your SkySafari app settings for telescope type and mount type  are correct.
• Verify the SkyFi 3 name, IP Address, and port number are correct  in the SkySafari Plus or SkySafari Pro app Settings page.
• Change the SSID and/or transmitting channel to one with less  traffic to prevent interference issues. See SkyFi 3's settings  webpage at http://10.0.0.1 for more information.
• If your telescope has GPS, try turning off "Set Time & Location" in the SkySafari Plus or SkySafari Pro app. Go to Settings ->Setup and turn off Set Time & Location.
• Contact Simulation Curriculum for the latest SkyFi 3 user guide, firmware updates, and troubleshooting tips.

### Telescope behaves erratically or has motor run-away:

• Verify SkyFi 3 and the telescope do not have low battery. Low battery often causes erratic behavior to occur. Plug-in or charge SkyFi 3, the telescope, and phone or tablet as needed.
• Move to a location with less Wi-Fi interference.
• Change SkyFi 3's SSID, Channel, or other settings to prevent  unwanted individuals from connecting to your telescope.
• In SkySafari Plus or SkySafari Pro's Settings->Setup change the Readout Rate  setting to a lower value.

## UPDATING SKYFI 3 FIRMWARE

1. Connect to SkyFi 3 from your computer at the default IP Address of http://10.0.0.1 and navigate to the "Firmware" tab.
2. Browse and select firmware file.
3. Click the "Update Firmware" button ONCE.
4. Wait for a notification of firmware application.
5. If no notification is seen within 10 seconds, refresh the page and try again.
6. You may need to rejoin the SkyFi 3 network after a firmware update.

## SOFTWARE COMPATIBILITY

Compatible with the SkySafari Plus or SkySafari Pro app on phone or tablet. Available for purchase on iOS & Android platforms. Download from iTunes or Google Play store. Compatible with *SkySafari for Mac OS X* version 1.0 or higher on a Mac.

## LIMITED WARRANTY

Every SkyFi 3 is warranted by Simulation Curriculum Corp. to be free of defects in materials and workmanship for a period of ONE YEAR from the date of original purchase. Simulation Curriculum will repair or replace a product, or part thereof, found by Simulation Curriculum to be defective, provided the defective part is returned to Simulation Curriculum, freight-prepaid, with proof of purchase. This warranty applies to the original purchaser only and is non-transferable.

*This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference; and (2) this device must accept any interference received, including interference that may cause undesired operation.*

## TELESCOPE COMPATIBILITY

• Meade LX200 Classic / GPS / ACF
• Meade LX400 / LX600/850
• Meade LS / LT
• Meade ETX (when equipped with #497 or AudioStar Controller)
• Meade LXD 55 / 75 / 650 / 750 / LX 80/90
• Meade Magellan I & II
• Celestron NexStar 5i / 8i / GPS / SLT / SE / Advanced GT
• Celestron AVX / CGE / CGEM / CPC series /WiFi
• SkyWatcher SynScan
• Orion Sirius / Atlas / SkyView Pro / SkyQuest XTg / StarSeeker / HDX
• iOptron iEQ45 with 8406 controller
• iOptron 8407 / 8408 controllers
• Astro-Physics GTO
• Losmandy Gemini
• Vixen SkySensor 2000
• Sky Commander
• Losmandy DSC
• StellarCAT ServoCAT
• Takahashi Temma 2
• Celestron AstroMaster
• JMI NGC Max
• Lumicon Sky Vector
• Orion Sky Wizard / IntelliScope
• Takahashi Super Navigator
• Tangent Instruments BBox Encoder System (and compatible)

### Customer Support and Service

If you have a question concerning your SkyFi 3 Wireless Telescope Controller, contact us at: http://support.simulationcurriculum.com
In the unlikely event that your SkyFi 3 Wireless Telescope Controller requires factory servicing or repairs, write or call us first, before returning the device to the factory. The great majority of servicing issues can be resolved by telephone, avoiding return of the device to the factory.

**RGA Number Required:** Prior to the return of any product or part, a Return Goods Authorization (RGA) number must be obtained from Simulation Curriculum by writing, or calling (800) 626-3233. Each returned part or product must include a written statement detailing the nature of the claimed defect, as well as the owner's name, address, and phone number.

This warranty is not valid in cases where the product has been abused or mishandled, where unauthorized repairs have been attempted or performed, or where depreciation of the product is due to normal wear-and-tear. Simulation Curriculum specifically disclaims special, indirect, or consequential damages or lost profit which may result from a breach of this warranty. Any implied warranties which cannot be disclaimed are hereby limited to a term of one year from the date of original retail purchase. This warranty gives you specific rights. You may have other rights which vary from state to state. Simulation Curriculum reserves the right to change product specifications or to discontinue products without notice.

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