INSTRUCTION MANUAL

SynScan Wi-Fi Adapter

#7961

Orion Telescopes & Binoculars

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The SynScan Wi-Fi Adapter connects to an Orion GoTo telescope mount to allow wireless control of the mount with the SynScan Pro smartphone app (iOS or Android). The Wi-Fi adapter allows Wi-Fi communication between the mount and the smartphone. We hope you enjoy this new way to control your Orion GoTo mount and telescope as you explore the night sky!

Included Parts

- SynScan Wi-Fi Adapter
- RJ12-to-RJ45 cable
- RJ45-to-RJ45 cable

Figure 1. *The SynScan Wi-Fi Adapter shown connected to a Sirius EQ-G GoTo mount.*

1. Connecting the Wi-Fi Adapter to an Orion Telescope Mount

Attach the SynScan Wi-Fi Adapter (RJ45 Jack) to the "Hand Control" port (RJ12 or RJ45 Jack) on the mount using the appropriate cable listed above **(Figure 1)**. Which cable you need will depend on whether your mount has an RJ12 or an RJ45 jack for the "Hand Control" port. Note that when using the Wi-Fi Adapter you cannot connect or use the SynScan hand controller that came with the mount.

2. Connecting to the SynScan Pro App on Your Smartphone

1. Download the free "SynScan Pro" app from the App Store or Google Play onto your smartphone.
2. Turn on the power to your mount.
3. Go to the Wi-Fi settings of your smartphone and choose "SynScan Wi-Fi_####" in the Wi-Fi list. You may have to wait up to 1 minute for the Wi-Fi icon to appear in the smartphone's notification bar.
4. Open the SynScan Pro app on your smartphone.
5. Tap on the "Connect" button at the top **(Figure 2)**. This will establish a Wi-Fi connection between the adapter and the mount.

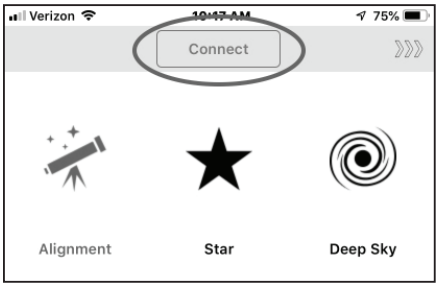

Figure 2. *Tap the "Connect" button at the top of the SynScan Pro app's home screen to establish communication with the SynScan Wi-Fi Adapter.*

3. Configure the Wi-Fi Adapter

In the SynScan app, tap Settings > Wi-Fi Setting.

- Check "Modify Access Point" to
  - Enable/Disable the Access Point Mode.
  - Change the SSID (Name of the access point).
  - Add or remove password for accessing the adapter's Wi-Fi access point.

- Check “Modify Station” to
  - Enable/Disable the Station Mode.
  - Enter the SSID of the Wi-Fi access point (router) to which the adapter will connect.
  - Enter the password for the designated Wi-Fi access point (router).
  - Enter a static IP. (This is not recommended for general users; using DHCP is preferred.)

Tap “Apply” to confirm the setting. You may need to restart the mount and/or re-connect to the correct Wi-Fi network on your smartphone.

Important: ***In most cases, users should use either “Access Point Mode” or “Station Mode”; do not enable both of them.***

4. Factory Reset

If you forget the password of the adapter’s access point, the adapter will need to be reset to the factory default for accessing.

The adapter can be reset to factory default after it’s powered on and not accessed for 1 hour.

5. Using Access Point Mode or Station Mode

- Access Point Mode is easier to use.
- Station Mode needs extra configuration, but it:
  - Allows a smart phone to access the internet while controlling the telescope mount.
  - Consumes less power.

Specifications:

Power Supply:	DC 5V to 16V; 100mA@5V, 40mA@12V
Baud Rate:	9600bps (default) or 115200bps (for supported mount)
Wi-Fi:	802.11 b/g/n
IP Address:	
– For Access Point Mode:	Fixed at 192.168.4.1
– For Station Mode:	DHCP or Static IP.
Transmission Protocol:	UDP; Port: 11880

Declaration of Conformity

FCC Compliance Statement: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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.

FCC Radiation Exposure Statement: This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator& your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

European Compliance Statement

The said product complies with the essential requirements established in Article 3 of the Council of Europe Directive 1999/5/CE, dated 9th March, 1999.

Canadian Compliance Statement

IC RSS warning

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, includ¬ing interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

IC Radiation Exposure Statement: This equipment complies with IC RF radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

Contains:

FCC ID: 2AC7Z-ESPWROOM02

CE 1177 206-000519

IC: 21098-ESPWROOM-2

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CMIIT ID: 2016DP3252

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One-Year Limited Warranty

This Orion product is warranted against defects in materials or workmanship for a period of one year from the date of purchase. This warranty is for the benefit of the original retail purchaser only. During this warranty period Orion Telescopes & Binoculars will repair or replace, at Orion's option, any warranted instrument that proves to be defective, provided it is returned postage paid. Proof of purchase (such as a copy of the original receipt) is required. This warranty is only valid in the country of purchase.

This warranty does not apply if, in Orion's judgment, the instrument has been abused, mishandled, or modified, nor does it apply to normal wear and tear. This warranty gives you specific legal rights. It is not intended to remove or restrict your other legal rights under applicable local consumer law; your state or national statutory consumer rights governing the sale of consumer goods remain fully applicable.

For further warranty information, please visit www.OrionTelescopes.com/warranty.