PH DENIX LIDAR SYSTEMS

Reconfiguring Ground Station Wi-Fi (Groove) Technical Bulletin

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Introduction

The purpose of this document is to demonstrate how to reconfigure the settings on a Groove Wi-Fi Antenna for use with a ground station computer from Phoenix LiDAR Systems. This reconfiguration is required if you need the module to connect to a different WiFi network, e.g. when you switch between multiple rover systems.

During this procedure, the Wi-Fi module and antenna must be powered and connected locally to the laptop used for acquisition via an ethernet cable. Ensure the navigation box is powered on (CPU light is on) and the 5.8 GHz Wi-Fi antenna is connected to the navigation box. Provide power to the rover with the included AC adapter.

Pre-Procedure

After connecting the WiFi module to the notebook, ensure the notebook's ethernet adapter shows an IP address of 192.168.200.X and a DHCP server of 192.168.200.1. If that's not the case, please configure your ethernet settings as shown in the section titled Wired Ethernet Network Card Setup in the Phoenix LiDAR Systems User Manual.



Figure 1: Verify Network settings

Procedure

1. Launch a web browser from the computer connected to the Groove Wi-Fi antenna. To access the Groove Web UI, enter the address: **192.168.200.1**. If a privacy error warning appears, select the option to proceed to the address.



Figure 2: Enter address into browser

2. Login with username: phoenix and password: aeriallidar

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RouterOS v6.40.8			
You have connected to a router. Administrative access only. If this device is not in your possession, please contact your local network administrator.			
WebFig Login:			
Login: phoenix Login			
Password:			
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3. Select the **WebFig tab** of the web interface.

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LAN MAC Address	B8:69:F4:8A:47:1D					Wireless Network
				Wireless	Address Acquisition	Static Automatic PPPoE
Status	searching for network				IP Address	192.168.20.20
ΑΡ ΜΑΟ					Netmask	255.255.255.0 (/24)
Network Name					Gateway	192.168.20.10
Tx/Rx Signal Strength					DNS Servers	▼ 8888
Tx/Rx CCQ					Upload	unlimited • bits/s
Signal To Noise					Download	unlimited v bits/s
Wireless Protocol						Local Network
					IP Address	192.168.200.1
					Netmask	255.255.255.0 (/24)
					DHCP Server	8
	cur: cur:	avg: avg:	max: max:		DHCP Server Range	▲ 192.168.200.2-192.168.20
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192.168.200.1/webfig/#Interfaces				11		· · · · · · · · · · · · · · · · · · ·

Figure 3: Main Landing Page (Quick Set)

4. In the WebFig page, select the Interface tab and click on "wlan1"

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5. Enter the new **SSID** in the text field. The correct SSID will be **phoenix** ending in the last 3 digits of your system's serial number.

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Figure 5: Enter new SSID

6. Select the **Apply** button after making any changes.

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7. Navigate back to the **Quick Set** page to verify a connection to the nav box.

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Status	connected to ess				IP Address	192.168.20.20					
АР МАС	00:0E:8E:8F:12:78				Netmask	255.255.255.0 (/24) 🔻					
Network Name	phoenix000				Gateway	192.168.20.10					
Tx/Rx Signal Strength	-38 dBm				DNS Servers	▼ 8.8.8.8	•				
Tx/Rx CCQ	91 %				Upload	unlimited • bits	5/S				
Signal To Noise	80 dB				Download	unlimited • bits	5/S				
Wireless Protocol	802.11								Loca	al Netwo	rk
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192.100.200.1/weblig/#Quick_Set											*

Figure 7: Check for connection

To verify setup further, a SpatialExplorer connection to the nav box with the IP address
 192.168.20.10 or the hostname rover-wifi can be used to test the Groove. A successful connection to the rover via Wi-Fi connection concludes the test and reconfiguration.

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LicenseKey		× •
Requires internet connec session.	tivity for all peers. Please enter your licens	e key to identify th
Connect to rover via Phoenix	LiDAR Systems' connection service	
Serial Port Scan	-	Speed 115200
Connect to rover using a serie	al port	
Hostname rover-wifi		
Connect to rover as a UDP clip	ent (WiFi or ethernet)	
• Wor <u>k</u> Offline		
Phoenix LiDAR Systems SpatialEx	plorer v5.0.5 (3b6fedc6 from 2020-01-28)	? ×

Figure 8: Connect to rover via wifi to test

This content is subject to change.

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If you have any questions about this document, please contact Phoenix LiDAR Systems by sending a message to support@phoenixlidar.com.

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