Tech Note

How to Install the RNDIS Driver for Ethernet Connectivity over USB



Abstract:

Outline the method for manually installing the correct RNDIS driver for your Red Lion device to be able to connect via USB and behave as an Ethernet device for Windows 7 and 10. This document details the steps to implement this functionality.

Product:

Any Red Lion Controls Sixnet Series SN or $\text{RAM}^{\textcircled{R}}$ units on firmware 3.18 / 4.18 and later.

Date:

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Procedure for Windows 7

- 1. First power on your Red Lion device and connect to your windows machine via the USB micro cable.
- 2. Next, observe the windows behavior to see if it is properly detected.

Note: You should hear an audible sound as the cable is connected and Windows begins searching for the correct USB driver.

- **3.** Most windows systems will locate and install a driver automatically. The device should appear in the Windows Device Manager.
- 4. There are several ways to bring up Windows Device Manager.
 - **a.** Method one: Right Click "Computer" on Start menu and click Manage. Click Device Manager on the left side of Computer Management Window.
 - b. Method two: Click Start and search for Computer Management in search field.
 - **c.** Method three: Click Start Control Panel. In Control Panel, click System and Security then click System. On the left side of Window, click Device Manager.
- 5. Once in the device manager screen, expand the Network Adapters section and look for USB Ethernet/RNDIS Gadget.



Note: If you have installed the Sixnet RNDIS driver previously, you may need to uninstall that driver first. This can be done by right clicking the RNDIS gadget and click Uninstall. When done, Either have Windows rescan for hardware changes under Action on Device Manager's menu bar or removing USB cable from PC and re-inserting USB cable



- 6. Right click on this new USB device and select Update Driver Software.
- 7. Select Browse my computer for driver software.





8. Select Let me pick from a list...

Undate Driver Software - USB Ethernet/RNDIS Gadget #19
T opuate priver software - osp Ethemety Mybis Gauget #15
Browse for driver software on your computer
Search for driver software in this location:
C:\Users\Matt.Crites\Desktop\AirLink USB Ethernet Driver x64 Browse
☑ Include subfolders
→ Let me pick from a list of device drivers on my computer This list will show installed driver software compatible with the device, and all driver software in the same category as the device.
Next Cancel

9. Uncheck the Show Compatible hardware checkbox and browse down the available list to Microsoft Corporation, then select the Remote NDIS Compatible device and click next.



Select Network Adap	ter	
Click the Network	c Adapter th or this featu	nat matches your hardware, then click OK. If you have an ure, click Have Disk.
Show compatible hardw	are	
Manufacturer	*	Network Adapter:
Microsoft		Remote NDIS based Internet Sharing Device
Microsoft Corporation		Remote NDIS Compatible Device
Motorola, Inc.	-	
NEC	•	
This driver is digitally s	signed.	Have Disk

10.Click Yes on the warning that appears and once it completes click close.



11. The new driver will begin to install. When done, click Close and Exit Device Manager.





12.You should now have the USB Ethergadget driver loaded and able to access your Red Lion Device via USB / Ethernet at 192.168.111.1:10000.

Procedure for Windows 7

This section will guide you through the same procedures using Windows 10.

- 1. To access Device Manager in Windows 10, enter Computer Management in the Search Bar and Click the link for Computer Management.
- 2. Click Device Manager on left side of window.
- 3. Expand the Network Adapters section and highlight the USB Ethernet/RNDIS Gadget.





Note: If you have installed the Sixnet RNDIS driver previously, you may need to uninstall that driver first. This can be done by right clicking the RNDIS gadget and click Uninstall. When done, Either have Windows rescan for hardware changes under Action on Device Manager's menu bar or removing USB cable from PC and re-inserting USB cable.



- 4. Right click on this new USB device and select Update Driver Software.
- 5. Select Browse my computer for driver software.





6. Select Let me pick from a list of device drivers on my computer.

		×
~	Update Driver Software - USB Ethernet/RNDIS Gadget	
	Browse for driver software on your computer	
	Search for driver software in this location:	
	C:\Users\TestPC\Downloads V Browse	
	☑ Include subfolders	
	→ Let me pick from a list of device drivers on my computer This list will show installed driver software compatible with the device, and all driver software in the same category as the device.	
	Next Ca	ncel

7. In the next Window, highlight the USB Ethernet/RNDIS Gadget driver and click Next.



Select the device driver you want to install for th	is hardware.
Select the manufacturer and model of your hardware	device and then click Next. If you have Have Disk.
Model	
USB Ethernet/RNDIS Gadget	
🖼 USB Serial Device	
	Have Dick
	ndve Disk
This driver is digitally signed.	

8. The USB driver will start to install. This may take a few minutes to complete.

		×
~	Update Driver Software - USB Ethernet/RNDIS Gadget	
	Installing driver software	

9. When done, click Close and Exit Device Manager.





10.You should now have the USB Ethergadget driver loaded and able to access your Red Lion Device via USB / Ethernet at 192.168.111.1:10000.

Disclaimer

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For questions contact Red Lion Support at 877-432-9908 or email to support@redlion.net.



