# SkyLink5060 Radio Update Guide



## !Warnings!

Thoroughly read this guide before performing updates. Failure to follow these instructions can result in damage to hardware.

### DO NOT POWER ON RADIO WITHOUT ANTENNA OR RF LOADS ATTATCHED.

DO NOT provide more than 32 VDC to radios.

Before performing these procedures, download the appropriate firmware files and save them somewhere known on your PC.

# 1 ARS Radio Firmware Update

### DO NOT POWER ON RADIO WITHOUT ANTENNA OR RF LOADS ATTATCHED

The ARS Radio firmware is updated using the pingBootFlasher application.

Open PingBootFlasher and press Select File and select the correct firmware file.

R PingBoo	otFlasher v2.10								×
File									
COM Sett	ings	P	roduct Inform	ation					
Port	COM22	A	pp ID op Version	0x0041003D v0 4 12		<b>\</b>			
Product	Auto	~ A	App CRC 0x3F70EF4C						
	Disconnect	B	oot Version oot CRC	v1.0.0 0xC040FFF0 0x3039510700250053	uA	viò	'n	i)	ç
e C	:\Users\Robert\uAvionix	a Dropbox∖Micro	avionix_Man	ufacturing_Images\Releas	a\SkyLink\SkyLink\De	bug_SkyLink_	Sel	lect File	

Connect the ARS via the CTRL port to a PC using the provided serial to USB adapter. Supply 12-32v of power to the radio.

On the pingBootFlasher application, select the proper COM port from the "Port" dropdown.

RingBootFlasher UAV-1002813-001 v2.1	1		- 0	×
File				
COM Settings Port COM3   Product Auto   Connect	Product Information App ID N/A App CRC N/A Boot ID N/A Boot Version N/A Boot Version N/A Boot CRC N/A Device UUID N/A	uAvior		
File Progress			Select File Flash	
PingBoot Status: Disconnected				

Press "Connect." When the ARS is connected, the Product Information window will populate with the current radio information and the PingBoot Status in the bottom left will change to "Idle."

Қ PingBoo	tFlasher v2.10						_		×
File									
COM Setti	ngs		Product Inform	ation					
Port	COM22	$\sim$	App ID App Version	0x0041003D					
Product	Auto	$\sim$	App CRC	0x3F70EF4C					
	Disconnect		Boot ID Boot Version Boot CRC Device UUID	0x003000FE v1.0.0 0xC040FFF0 0x3039510700250053	uAv	io	ni	F	
File Progress							Selec Fla	t File sh	
PingBoot Sta	tus: Idle								

Press "Flash". <u>DO NOT</u> power off or disconnect the device until the flash is complete.

🖍 PingBoo	tFlasher v2.10							×
File								
COM Settin	ngs	Pro	duct Inform	ation				
Port	COM22	App App App	App ID         0x0041003D           App Version         v0.4.12           App CRC         0x3F70EF4C			/		
Product	Auto	Ap						
	Disconnect	Boi	ot ID ot Version ot CRC	v1.0.0 0xC040FFF0	ιιΔνί	on	i	2
	Disconnect	De	vice UUID	0x3039510700250053				
File C:	\Users\Robert\uAvior	iix Dropbox∖Microa	vionix_Man	ufacturing_Images\Releas	e\SkyLink\SkyLink\Debug_Sky	Link_ Se	elect File	
Progress							Flash	
oingBoot Sta	tus: Flashing							

# 2 HUB Firmware update

The HUB firmware is updated through the HUB Landing page. The HUB Landing page is accessed via web browser from a PC or mobile device on the same Local Area Network (LAN) as the powered SkyLink Hub. The IP address assigned by the DHCP server is the base URL. An IP scanner, such as Advanced IP Scanner, can be used to find the IP address of the Hub. MAC addresses are printed on the Hub label.

Use an IP scanner to find the IP address of the SkyLink HUB. Navigate to http://###.###.###/

Advanced	P Scanner				- 0
le View S	ettings Help				
Scan	II 🗜 🕵 🔚 📰				
2.168.2.1-25	14		Example: 192	168.0.1-100, 192.168.0.200 Sear	ch
esults Far	vorites				
Status	Name	IP	Manufacturer	MAC address	Comments
. iii	ICO-MSI-716P	192 168 2 249		04-71-48-10-08-CA	
	192 168 2 100	192,168,2,100		0471/48/10/08/09	
. iii	102 168 2 2dR	192 168 2 248		04-71-48-10-08-FR	
÷	DESKTOP-HUDVON	192,168,2,218	latel Comorate	0403-8070-64C8	
÷ .	LAPTOR-GREDSTH	192 168 2 195		08/71-90-69-CR-98	
÷.	192.168.2.63	192,168,2,63	Nest Labs Inc.	18-84/30-F9/31/7D	
÷ .	URNTEdgeSwitch	192, 168, 2, 242	Ubiquiti Networks Inc.	18/F8/29/5F-27/66	
	CC-DP3571	192.168.2.207		28:68:35:59:05:66	
÷ .	DESKTOP-51M919U	192,168,2,176		28:68:35:65:0E:CD	
	BR5CE3705156C8	192,168,2,144	Belkin International Inc.	30/23-03-8D-49-0F	
÷.	DESKTOP-RH6GP10	192,168,2,108	Intel Corporate	34/E1:2D:CF:77:88	
÷	LAPTOP-D95PT4UC	192.168.2.117	Formlabs	38:0A:AB:04:84:43	
÷	BRN3C2AF46888A3	192,168,2,98	Brother Industries, LTD,	3C:2A:F4:6B:88:A3	
	DESKTOP-VS6GQS6	192,168,2,170	Dell Inc.	54:48:10:D4:5E:CE	
÷	192.168.2.192	192,168,2,192		54:6F:71:00:00:72	
	LAPTOP-BOK75JM6	192.168.2.208		54:6F:71:00:00:C0	
	192.168.2.173	192,168,2,173		54:6F:71:10:00:86	
	192.168.2.37	192.168.2.37		54:6F:71:10:00:D2	
	192.168.2.137	192.168.2.137		54:6F:71:10:00:D3	
	192.168.2.245	192.168.2.245		54:6F:71:10:00:D4	
	192.168.2.6	192.168.2.6		54:6F:71:10:00:D5	
	RNP5838791C6244	192.168.2.233	RICOH COMPANY, LTD.	58:38:79:1C:62:44	
	DESKTOP-1E14LNU	192.168.2.190	Dell Inc.	6C:28:59:61:6D:9F	
	LAPTOP-D96PT4UC	192.168.2.149		6C:CD:D6:A9:EA-4C	
	LAPTOP-JATDPEKO	192.168.2.142		70:88:6B:87:9C:AA	
	UAV-FARNBOROUGH	192.168.2.224		70:88:6B:89:50:1B	
	DESKTOP-AOSDM8C	192.168.2.227		70:88:6B:89:50:7D	
	LAPTOP-CINGI8SC	192.168.2.209		70:88:6B:89:CA:15	
	LAPTOP-GTOQ5665	192.168.2.133		70:88:6B:8A:ED:24	
	LAPTOP-QVEVN8CC	192.168.2.243		70:88:6B:8B:A1:04	

#### Navigate to the HUB Landing page

< → C ∆ (	192.168.2.219	
ux	ishe	7
Firmware	Informatior	a
SkyStation Version: V Radio Version: V RadioID: (	V 0. 0.12 Update V0.2.8 0x1003BC0DF	
Settings		
Skyline Information Websocket URL:		
Datamux Informatio	m	
IP Address: (0.0.0.0 fc	or listen) 0.0.0.0	
User Port:	42430	
contorron.	42451	
Save Status Info	ormation	
Name	Value	
Up Time	2w:4d:23h:8m:29s	
GPS Fix	4	
Num GPS Sats	12	
Latitude	48.0275296	
Longitude	-122.0705152	
GPS Altitude	277	
PPS Detected	true	
SkyLine Up Time	23h:42m:32s	
User Skt Up Time	0s	
Ctrl Skt Up Time	0s	
Mission Timeout	0	

Click "Update" Next to the SkyStation Version.

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#### **Firmware Information**

SkyStation Version:	V 0. 0.17	Update
Radio Version:	V	Update
RadioID:		
DNS Server:	192.168.2.1	

### Settings

Skyline Information	
Websocket URL:	
Datamux Information	
IP Address: (0.0.0.0 for listen)	0.0.0.0
User Port:	42430
Control Port:	42431
Network Configuration	
Save	

Choose the appropriate file to upload and click "Start Update."

Firmware Update
Update file transfer complete. Rebooting
Choose File SkyStationF7_V0.0.5.uav
Start Update
<u>Main Page</u>

DO NOT power off or disconnect device until update is complete. Status will read "Rebooting" when update is complete.

When the file transfer is complete, click the Main Page link to return to the SkyLink Hub Settings page. The version number on the Configuration Webpage should reflect the firmware version uploaded.

# 3 GRS Radio Firmware Update

#### DO NOT POWER ON RADIO WITHOUT ANTENNA OR RF LOADS ATTATCHED

The GRS Radio firmware can be updated via the SkyLinkApp (via network) or the PingBootFlasher (via serial). To update the GRS Radio with PingBootFlasher, follow the same procedures as the ARS Radio Firmware. To perform update using the SkyLinkApp method, follow these procedures.

Connect the GRS to the SkyLinkApp by entering the IP address of the connected skyLink HUB found by using and IP Scan. Mode dropdown should be "TCP." Status indicator box will be green when connection has been established.



Press "Radio FW Update" in the upper right corner of SkyLinkApp. A new window will open.

Press "Select File" and select the correct firmware file.

Press "Connect." When the GRS is connected, the Product Information window will populate with the current radio information and the PingBoot Status in the bottom left will change to "Idle."

💦 skyLinkApp v1.0		- 🗆 X
<u>F</u> ile		
Connection Type: Serial	Product Information	
Port: COM25	App ID 0x0041003D App Version v0.4.0 App CRC 0x67E72133	
	Boot ID 0x003000FE Boot Version v1.0.0	
Disconnect	Boot CRC 0xC8DF9C34 Device UUID 0x4B535017003A0017	
File C:\Release_UAV-XXXXXX-001_Sk	yLink_STM_V0.2.8_9bf0869.uav	Select File
Progress		Flash
PingBoot Status: Idle		

Press "Flash." DO NOT power off or disconnect the device until the flash is complete.