

Using the NTRIP Caster on an iG9 Receiver

Date: 8 October 2021

Thesis

Configure the internal NTRIP caster on an iG9 to broadcast corrections via a Wi-Fi connection.

Setup

Connect to the iG9 using the Wi-Fi interface using the instructions in the iG9 User Manual. After you log in it will look like this:

	ଟ	9 192.168.1.1/pc/index.html?param >	+			•
← → C ▲ Not secure	e 192.168	8.1.1/pc/index.html?param1=HC_	PRODUCT_MODEL_I	1908:param2=true¶m3=true¶m4=false¶m5=true¶m6=true¶m7=false	¶m8=undefined8	iparam 🗟 🛧 🌻 🏀
G Google 📙 IG8 😴 Home	National G	ie 🖸 YouTube 🚺 RPLS Todaj	/ 🍳 Google Maps	🖸 Calendar 😫 Contacts 🗃 The New York Time 🐲 Washington Post: B 🔟 WIRED	*	Other bookmarks 🔠 Reading
च 9 39			/		5N:3369080	📷 English 🗸 Quit
🗊 Status	I/O Set	tings ×				
Satellites		Туре	Description	Output	Connection Status	Modify
X Receiver Configuration	1	RTK Client	apis1.us:2101		Unconnected	Connect Disconnecting Detail
Data Recording	2	TCP/UDP_Client1/NTRIP Server1	192.168.3.18.9900		Unconnected	Connect Disconnecting Detail
I/O Settings	3	TCP/UDP_Client2/NTRIP Server2	192.168.3.18.9901		Unconnected	Connect Disconnecting Detail
 I/O Settings 	4	TCP/UDP_Client3/NTRIP Server3	192.168.3.18.9902		Unconnected	Connect Disconnecting Detail
	5	TCP/UDP_Client4/NTRIP Server4	192.168.3.18:9903		Unconnected	Connect Disconnecting Detail
	6	TCP/UDP_Client5/NTRIP Server5	192.168.3.18:9904	-	Unconnected	Connect Disconnecting Detail
	7	TCP/UDP_Client6/NTRIP Server6	192.168.3.18.9905		Unconnected	risconnecting Detail
	8	TCP Server/NTRIP Caster1	9901	-	Closed	Connect Disconnecting Detail
	9	TCP Server/NTRIP Caster2	9902		Closed	Connect Disconnecting Detail
	10	TCP Server/NTRIP Caster3	9903	-	Closed	Connect Disconnecting Detail
	11	TCP Server/NTRIP Caster4	9904	-	Closed	Connect Disconnecting Detail
	12	Serial Port	115200	-		Settings
	13	Bluetooth	GNSS-3369080			Settings
Retwork Setting	14	Radio	461.0250MHz		-	Settings
B Module Setting						
Firmware						

Click on the 'Connect' button for one of the NTRIP Casters as shown above.



The 'TCP Server/NTRIP Caster' screen is shown:

Auto connect:		Connection Protocol:	NTRIP	
User Name:	mark	Password:	••••	
Port:	9901	Mount Point:	RTCM32	
Differential Data:	RTCM3.2	Raw Data:	OFF	
HCPPP Data:	OFF	HRC Data:	OFF	
GPGGA:	OFF	GPGSV:	OFF	
GPRMC:	OFF	GPGLL:	OFF	
GPVTG:	OFF	•		
GPZDA:	OFF	GPGST:	OFF	
GPGSA:	OFF	GPHDT:	OFF	
GPROT:	OFF	PTNL,VGK:	OFF	
PTNL,VHD:	OFF	PTNL,GGK:	OFF	
PTNL,AVR:	OFF	PTNL,BPQ:	OFF	
PTNL,PJK:	OFF	PTNL,PJT:	OFF	
Retransmit:				

Set:

Connection Protocol	NTRIP
User Name and Password	(something clever, I used 'mark' for both above)
Port	unused, 9901 is a reasonable choice
Mount Point	name the mount point to match the correction message type
Differential Data:	usually RTCM3.2

Click on Confirm.

The port will now display as 'opened':

7	TCP/UDP_Client6/NTRIP Server6	192.168.3.18:9905		Unconnected	Connect Disconnecting Detail
8	TCP Server/NTRIP Caster1	9901	Differential Data:RTCM3.2	Opened	Connect Disconnecting Detail
0	TOP Server/NTDIP Cactor?	0002		Clocod	Connect Disconnecting Detail

Configuration is complete and will remain available/active until you change it or do a factory reset on the head.

Configure the Receiver as a Base

Setup the head as a Base using Carlson SurvCE/SurvPC, X-PAD, Field Genius, LandStar7 or the Web interface directly.



The Base position that you enter when configuring the receiver as a Base must be within 500 meters of it's true location and it would be best if it is correct if you don't want to have to correct the UAV positions later.

Check Configuration

I like to use the *LaFebure NTRIP Client* to test the connection. Here is how to setup the client to connect to the head, here is the configuration for the setup above:

Connection Type		
Protocol:	NTRIP v1.0	
NTRIP Caster Set	tings	
Address:	192.168.1.1	
Port:	9901	
Username:	mark	
Password:	mark	
Your Location Some streams in be created for ye	need to know your location so that correction data ca ou. If the selected stream requires this, I want to	
Use position	n data from the Serial Port	
-		

Once configured download the mount table (the only entry will be 'RTCM32'), select the NTRIP Stream Mount Point and then you can click the Connect button:





Correction data will begin streaming. Congratulations, any device that connects to the head will have access to the correction stream.

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