

X-PAD: Using a Network to 'Seed' a UHF Base Position

Date: 2 March 2022

X-PAD has a fully automated solution for setting up a UHF Base, then connecting the Base to a network to get a network position, and then using the network position as the broadcast Base position.

Let's get Started

First setup two instrument profiles for the Base instrument. We can use these profiles over and over, so you can do this at the office.

Use the instructions in the **User Manual** in the 'Network Rover instrument profile' section to setup a network Rover profile for the Base receiver. Then use the instructions in the printed User Manual in the 'UHF Base instrument profile' section to setup a UHF Base profile for the same instrument.

Here are synopsis of these profiles:

Network NTRIP Rover





UHF Base

10:34 ⊕ ⊕ 🦁 🗣⊿ 🖹 86%	10:34 ⊕ ⊕ 🖲 🛡 🖬 86%	10:34 ⊕ ⊕ ♥ 🖌 🔒 86%	10:34 ⊕ ⊕ ♥ 🗸 🖹 86%		
Modify profile	Modify profile	🔀 Modify profile	🔀 Modify profile		
Profile	Device	Parameters	Antenna		
Profile name	Communication Bluetooth	Satellites Cut-off 5 angle(°)	Model Integrated		
IG_Base_onit	Device	Use GLONASS	rieght		
Mode GNSS Base	GNSS-1079773	Use BEIDOU			
Brand CHC		Use GALILEO			
Model Smart GNSS		Use SBAS			
		Position update freq.			
		5 times per second			
⊲ D _{Next}	Add device Next		Accept		

START BASE

Lock your Base down on a stable mount at any random position.

From the Settings: GNSS & Total Stations, choose the UHF Base profile as CURRENT.

At the main menu go to the **START BASE** tab and click on **Current position**, configure **Base ID** if needed, click on **Measure Here**, then click on **Get RTK Position from NTRIP**:





X-PAD will prompt for tolerance requirements for the RTK position:

		⊕ ❤⊿ ∎82%
🔀 Start bas	е	
RTK position	1	
Time with fix (secs)	~	15 🔨
Max RMS		0.250ft
Timeout (secs)	×	120 🔨
<1		19

Set appropriate values and click on the next arrow at the bottom.

X-PAD will automatically configure the Base receiver as a Rover, connect to the network, wait for a FIXED position, collect an average and display the Network derrived position for the base on the Base position dialog:

10:44 💿	© 	10:44 💿	🛞 ❤⊿ 🔒 82%	10:45 🛞	(Ξ) ♥⊿ 🗎 82%	10:45 💿	⊛ 🗣 🖌 🔒 82%	
Start base		Start base		Start base			🔀 Start base	
Base position	position Base position		Base position		Base position			
Latitude	S 0°00'00.0000"	Latitude	S 0°00'00.0000"	Latitude	N 40°53'10.1494"	Latitude	N 40°53'10.1494"	
Longitude	W 0°00'00.0000"	Longitude	W 0°00'00.0000"	Longitude	W 109°11'03.3506"	Longitude	W 109°11'03.3506"	
Height	0.00ft	Height	0.00ft	Height	5620.40ft	Height	5620.40ft	
N		Rase position		N	7499839.457ft	N	7499839.457ft	
Base position Getting current position		Fixed position		CNSS Configur			2280707.617ft	
				Configuring receiver: iG_Base_UHF		z	5666.76ft	
Receiver configu	CLOSE		CLOSE	100%				
⊲ ∎ Measur	re Here		sure Here	⊲		\bigtriangledown		

Click the next arrow at the bottom to accept the position.



Click the **Start Base** button and **X-PAD** will start the base with the network position:



After a few more seconds, the base should begin broadcasting corrections on it's UHF radio.

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