

Setting Up TCP Corrections through a WiFi Network

The receiver must first be configured to connect to your WiFi network. Connect to your receiver in [NetView](#) and navigate to WLAN tab:

NetView

Connection

Receivers

Receiver 1

Parameters

Files

Greis commands

Real-Time Logging

Help

General Log-files TriPad Positioning Base Rover Ports Networking Event Advanced

LAN WLAN Server Client PPP Modems

Mode

WLAN Error none

WLAN Mode on

WLAN Connection State associated

IP

WLAN Receiver IP Address 192.168.1.20

WLAN Default Gateway 192.168.1.1

WLAN Network mask 255.255.255.0

WLAN Maximum Transmission Unit... 1500

WLAN MAC Address 00:18:d7:9c:1b:73

DHCP

Switch DHCP client on/off off

Switch DHCP server on/off off

Current IP Address 192.168.1.20

Access Point

WLAN Access Point ID 00:00:00:00:00:00

WLAN Access Point SSID M25

works if WLAN Access Point ID is 00:00:00:00:00:00

WLAN Access Point RSSI 224

WLAN AP Mode wpa

works if WLAN Access Point SSID is filled

WEP

WLAN Key N *****

WLAN Key N *****

WLAN Key N *****

WLAN Key N *****

WPA

WLAN WPA Passphrase *****

Info

/par/net/wlan/inf/fccid U9R-W2CBW003

/par/net/wlan/inf/ic 7089A-W2CBW003

Refresh Apply

Save Configuration to Script

Greis commands mode, press Ctrl for Help Tip, Ctrl+Space for print/set rotation

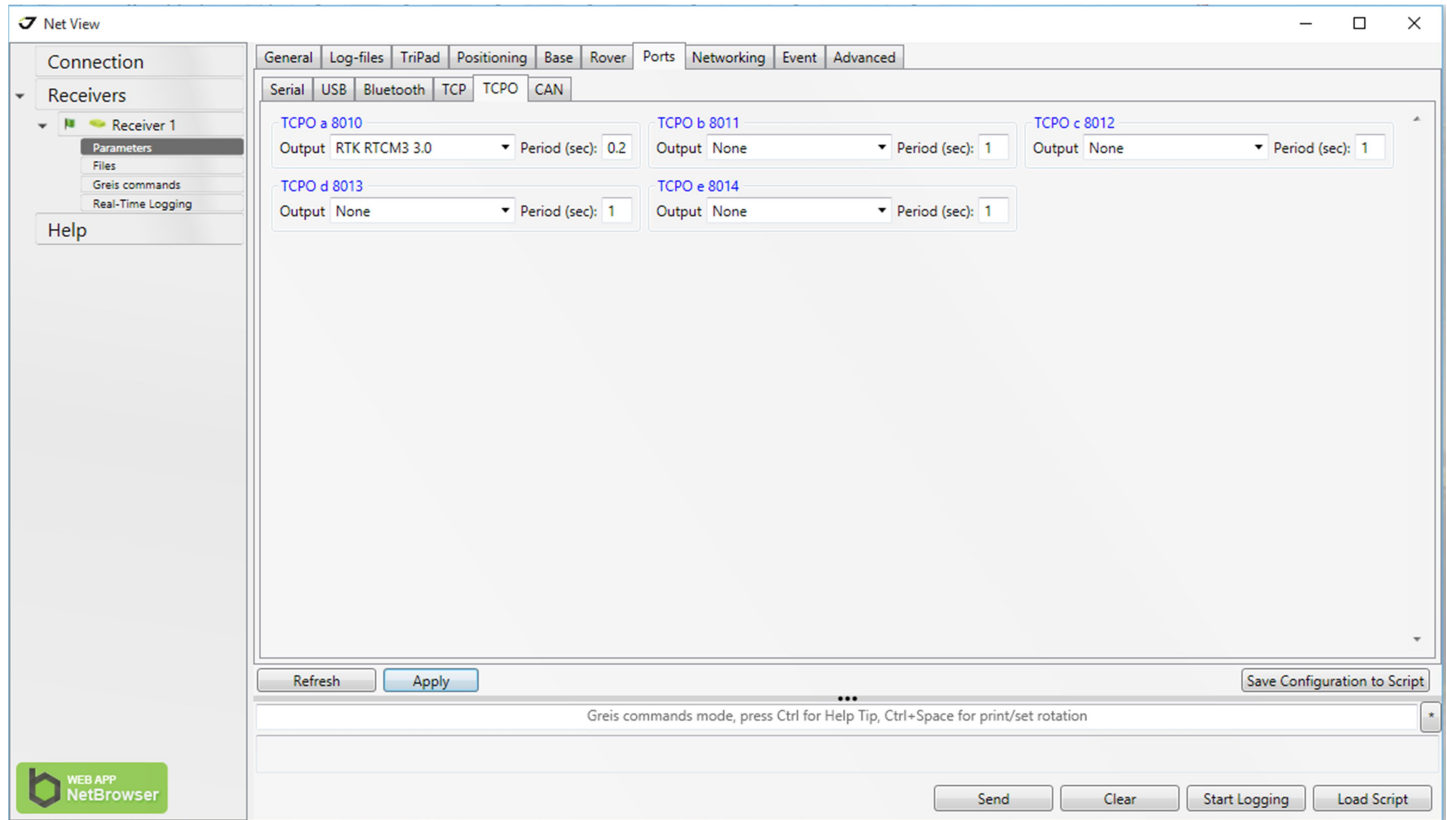
Send Clear Start Logging Load Script

The following fields need to be configured:

- WLAN Mode – on
- WLAN Access Point SSID – This is name of your wireless router.
- WLAN AP Mode – The type of encryption your router uses, most likely “wpa”
- WLAN WPA Passphrase – The password for your router
- DHCP client and server – These should be off or otherwise the IP address of your receiver may change each time it is connected to the WiFi network
- WLAN Receiver IP Address – Assign an IP address for the receiver, the first 3 values should match the default gateway address. The last value, 20, was chosen so it would not interfere with other connected devices typically assigned lower values with DHCP.
- WLAN Default Gateway – This is commonly 192.168.1.1, it can be found in the Wifi status screen in J-Field or in windows by executing “ipconfig” from the command prompt
- Subnet Mask – This is commonly 255.255.255.0. It can be found the same way as the default gateway

After these fields have been configured press Apply. When the receiver is properly configured and connected to the WiFi network you will see a WLAN Access Point RSSI that is greater than 0 and your IP address in the Current IP Address box.

TCP corrections can now be configured with the TCPO tab in NetView:



An Output and Period needs to be set. Here “RTK RTCM3 3.0” with a period of 0.2 seconds is configured for port 8010. Press Apply.

Now the ports 8002 and 8010 need to be forwarded through your router if you want if you want to be able to connect outside the local network. You can typically access your router setup by entering the default gateway in the address bar of your browser. Find the Port Forwarding settings and configure the TCP ports 8002 to 8014 to be forwarded for the IP Address of the receiver:

192.168.1.1/start.htm

NETGEAR genie

WNR1000v3

Logout

Firmware Version V1.0.2.68_60.0.93

English

BASIC **ADVANCED**

ADVANCED Home
Setup Wizard
WPS Wizard

Setup
Security
Administration
Advanced Setup

Wireless Settings
Wireless Access Point
Wireless Repeating
Port Forwarding / Port Triggering
Dynamic DNS
Static Routes
Remote Management
UPnP
Traffic Meter

Port Forwarding / Port Triggering

Please select the service type.

☒ Port Forwarding
☐ Port Triggering

Service Name: FTP Server IP Address: 192.168.1.1 [+ Add](#)

#	Service Name	External Start Port	External End Port	Internal Start Port	Internal End Port	Internal IP address
1	Triumph2_TCP	8002	8014	8002	8014	192.168.1.20

[Edit Service](#) [Delete Service](#)

[+ Add Custom Service](#)

[Help Center](#) [Show/Hide Help Center](#)

192.168.1.1/start.htm

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Traffic Meter

Ports - Custom Services

[Apply](#) [Cancel](#)

Service Name: Triumph2_TCP
Service Type: TCP
External Starting Port: 8002 (1~65535)
External Ending Port: 8014 (1~65535)
☒ Use the same port range for Internal port
Internal Starting Port: 8002 (1~65535)
Internal Ending Port: 8014
Internal IP address: 192.168.1.20

Or select from currently attached devices

	IP Address	Device Name
<input type="radio"/>	192.168.1.2	OFFICE
<input type="radio"/>	192.168.1.7	MATTS-IPHONE
<input type="radio"/>	192.168.1.3	--
<input type="radio"/>	192.168.1.4	IPHONE
<input type="radio"/>	192.168.1.8	TOSHIBA
<input type="radio"/>	192.168.1.20	--

[Help Center](#) [Show/Hide Help Center](#)

You can now create a new Setup in J-Field. Use "Real Time Network Service" as the source of corrections and create a new RTN APN.

RTK Corrections

UHF ☐

Real Time Network Service ☒

Back
Next ⁺

RTN APN

Home(RT
K -
RTCM ...

Select Delete Edit New

ODOT(...
JohnEv...
Home(R...

Back
Next ⁺

Enter the public IP address of your network modem and “8010” for the TCP Port. Your public IP address can be found by visiting <http://whatismyipaddress.com>.

APN Protocol

NTRIP Client ☐

TCP Client ☒

Back
Next ⁺

RTN TCP Client

Host Name 24.145.157.174

TCP Port 8010

Username

Password

NMEA GGA ☐

Back
Next ⁺

Choose RTK – RTCM 3.0 corrections and configure the remaining options in the setup profile.

Receive Format

RTK - RTCM 3.0 ☒

RTK - RTCM 2.x ☐

RTK - JPS ☐

RTK - CMR/CMR+ ☐

DGPS - RTCM 2.x ☐

Back
Next ⁺

Now go to your WiFi or GSM status screen and confirm that you are connected and receiving corrections.

WiFi			
Access Point	M25	RTN Status	CONNECTED
MAC Address	20-E5-2A-16-76-36	APN	Home
Auth. Mode	WPA2-PSK	APN Protocol	TCP Client
Signal Quality	Excellent (-45 dBm)	IP Address	24.145.157.178
Wlan State	Connected	TCP Port	8010
IP Address	192.168.1.5	Mountpoint	--
Subnet Mask	255.255.255.0	GGA	Disabled
Default Gateway	192.168.1.1	Data	RTK - RTCM 3.0
DHCP Server	192.168.1.1	St. ID, Distance	0, 34.2 ft
Lease Obtained	9/17/2015, 19 : 46 : 50	LQ, Delay	100.0%, 0 sec
Lease Expires	9/18/2015, 19 : 46 : 50	Data link latency	0.1 sec
DNS1		Received, Lost	39, 0
DNS2		Internet access	YES

Esc
Network >
RTN >
Configuration >

The base position can currently be configured in NetView or by switching to a UHF profile in J-Field, and sending the configured base position to the base receiver with the Start Base button. If you then switch back to the TCP profile, the base position being broadcast remains unchanged.