

## AUSCORS NTRIP Configuration in Carlson SurvPC (Windows)

The following outlines the procedure for configuring a Carlson BRx7 receiver to the AUSCORS NTRIP Broadcaster in Carlson SurvPC. The service provides free and open access to real-time GNSS data corrections from Continuously Operating Reference Stations (CORS) around Australia.

## Prerequisites

- a. Carlson RT4 tablet with SurvPC software installed.
- **b.** Internet connection to the RT4 via cellular\* or Wi-Fi (hotspot using a cellular modem or mobile device)
- **c.** Established Bluetooth connection between RT4 and BRx7 receiver. (Ensure receiver has clear line-of-sight with the sky)
- d. Registered account with Geosciences Australia: <u>https://gnss.ga.gov.au/registration</u>

\*For cellular enabled version of Carlson RT4 only.

1. From the main menu, go to Equipment – <u>3</u> GPS Rover then select the **RTK** tab.

GPS Rover		Ĩ	
Current	Comms	Receiver	RTK
Device: D	o not configure		▼
Network:	one		

2. Under the Device drop-down menu, select Data Collector GSM or Wifi.

🔍 GPS Rover			T: 🗸 🔀
Current	Comms	Receiver	RTK
Device: Do Network: Ca Sat Par Do	not configure ta Collector GSM or Wifi ble or Generic Device tel Bluetooth cific Crest XDL BT not configure		

**3.** Click the Settings () icon next to the *Network* section.

GPS Rover			T# 🗸 🔀
Current	Comms	Receiver	RTK
Device:	Data Collector GSM or Wifi		
Network:	NTRIP		
RTK Port:	Data 🗨		



**4.** In the *NTRIP Broadcasters* window enter the following details then click button when finished **IP addr:** ntrip.data.gnss.ga.gov.au **Port:** 2101 **User** & **Pwd:** *Your Geosciences Australia credentials.* 

NTRIP Bro	adcasters				
Name:	AUSCORS	]	Ν	lew	Delete
IP addr:	ntrip.data.gnss.ga.gov.au	Port	t:	2101	
User:		Pwo	1:		

5. Check the Sort Bases by Nearest checkbox at the bottom of the Bases for AUSCORS screen.

The *Name* drop-down menu will re-populate the reference station list by distance to your location.

Select the reference station that is nearest to you then click the value button.

Bases for AUS	SCORS			
Name:	PKVL00AUS0 (1.6 km)	▼ New	Delete	
	EML200AUS0 (1.6 km)	▲		
User Name:	PKVL00AUS0 (1.6 km)	Password:		
	MOBS00AUS0 (5.5 km)			
Identifier:	HBRG00AUS0 (11.9 km)			
	KEPK00AUS0 (12.6 km)			
Short la:	CLYT00AUS0 (20.2 km)			
Туре:	CBG200AUS0 (24.6 km)	ole Pivot Platform Co	ORS	
<b>F</b>	WRBE00AUS0 (26.8 km)	CO) 1022		
Format:	KNOX00AUS0 (29.5 km)	50),1055		
Position:	WSEA00AUS0 (35.2 km)			
	BMSH00AUS0 (45.7 km)			
Misc:	CRAN00AUS0 (46.9 km)			
Send Rover Posi	GSBN00AUS0 (47.3 km)	ases by Nearest		
	MRNT00AUS0 (50.1 km)			

6. The screen will transition back to the GPS Rover – RTK menu.

Confirm the AUSCORS section is displaying the chosen reference station then click the button.

GPS Rover			T# 🗸 🗙
Current	Comms	Receiver	RTK
Device:	Data Collector GSM or Wifi		
Network:	NTRIP		
RTK Port:	Data 🔻		
Message Type:	RTCM V3.2	•	
Use server transfo	ormations		
AUSCORS: PKVLOOAU	JSO (1.6 km)		▼ ()
Send Rover Positio	on to Network	Sort Bases by Nearest	



7. From the main menu, go to Equipment – 7 Monitor/Skyplot

🔍 🧻 јов:м	IEW2						
Eile	Equip	Survey	Survey COGO Road				
1 Total Station	n	*	6 Localization				
2 GPS Base		*	Z Monitor/Sk	yplot			

**8.** Under the *Quality* tab, the *Status* should display a **FIXED** position which indicates the receiver is connected to the AUSCORS NTRIP service and receiving corrections.

🔍 🗍 Mon	itor/Skyplot							
Quality	Position	١	SAT	View		SAT	Info	Ref
Status:	FIXED			Satellite	s:		26/34	
Latency:	1.0s			Local Ele	ev:		8.4291r	n
Base Selectio	on:		EML200	AUS0	D	)ate:		07/05/23
Local Northin	ng:	58	15344.28	12m	Т	ime:	1	5:01:24.6
Local Easting	:	3	18265.33	00m				
HDOP:	0.50		VDOP:	0.90	0			
X-Tilt:	N/A		PDOP:	1.03	3		Rese	t RTK
Y-Tilt:	N/A		Г	Disco	nne	ect	Con	nect
Hrms:	0.007m							
Vrms:	0.019m							

If a *FIXED* solution cannot be achieved with a few minutes, then it's likely that the reference station is offline and not transmitting corrections. Repeat **Step 5**. and select another reference station.

**9.** It's recommended to save the settings as a configuration profile for ease of setup on future deployments. This is also useful for switching between correction sources such as internal radio, serial, Bluetooth, etc.

To save a configuration profile, navigate to the GPS Rover – Current tab and click Save.

🔍 GPS Rover			
Current	Comms	Receiver	RTK
Manufacturer:	Carlson		- ()
Model:	BRx7		▼
Load	Save	Delete	Defaults



**10.** Input desired name for the profile then click the **v** button.

Save As	🗸 🔀
Create New Configuration:	
Carlson AUSCORS	
Set as default configuration	
Export to shareable file	

**11.** To load the profile, select the profile name in the list then click the **Load** button.

GPS Rover			
Current	Comms	Receiver	RTK
Manufacturer:	Carlson		<b>–</b> ()
Model:	BRx7		▼
Carlson AUSCORS			
Load	Save	Delete	Defaults