CHCNAV How to use CHC APIS function with NX510SE

Prerequisites

Hardware: NX510SE system & I50 RTK BASE & two SIM cards Software & Firmware:

- a) AGNAV3.0: Released version
- b) PA-3 firmware: Released version
- c) I50 firmware: https://chcnavigation.jianguoyun.com/p/DdmJGY0Q2Lf-BxjxsvIEIAA

Contents

Part A.	i50 RTK BASE APIS setup	2
Part B.	NX510SE APIS setup	3

Steps

Part A. i50 RTK BASE APIS setup

It is necessary to insert SIM card into i50 to get the cellular internet. Also It is necessary to upgrade to the i50 firmware version as listed above for using APIS function if the i50 is AG i50 which PN is 1150433695145, **but pls do not upgrade if the i50 is previous regular RTK i50 which PN is 1150432195145**.

a) Go to Network Setting---Mobile Network setting, set up SIM card information then dial as information below.

CHCNA	
Status	▼ 二十 7火リ Hoble Network Setting ×
🚯 Satellites	Network Settings
Receiver Configuration	GPRS Model Status: ON COFF
I/O Settings	Auto Start.
Network Setting	2
Mobile Network Setting	3G Only
 Email Alarm 	Network Mode: 2G/3G Auto
 HTTP HTTPS 	 2G/3G/4G Auto
FTP Service	-Telecom cards only support 4G!
	Dating Status: connected Auto Connect: @ Vio Vio Auto: Connect: @ Vio Vio Vio Vio Vio Vio Vio Vio Auto: Connect: @ Vio
88 Module Setting	
Firmware	Save _
Cloud Service Setting	5

b) Connect to i50 WIFI with PC/cellphone, enter 192.168.1.1/pc in the google browser(user name is "admin", password is "password")

\leftrightarrow \rightarrow C \blacktriangle	不安全 192.168.1.1, pc/i	ndex.html?param1=HC_PRODUCT_MODEL_I5	0¶m2=true¶m3=true∥	am4=f 🕶 🍳 🖻 🚖 🞒 🗯
CHCNA	✓华测		Base Station Name	e:3215995 Base Station ID:3215995 SN:3215995
Status	Position ×			
Position	Position		DOP	
Activity Google Map	Lattude: Longitude:	31*9/34.37902800*(North) 121*10/42.13851600*(East)	PDOP. HDOP.	1.244007 0.604399
	Height: Type:	44.336 Single	VDOP. TDOP.	1.087315 0.744942
	Satellite Used: 30Total		Satellites Tracked: 43	Total
	GPS(8):	1,7,8,9,16,21,27,30	GPS(8):	1,7,8,9,16,21,27,30
	GLONASS(5):	11,12,21,22,23	GLONASS(5):	11,12,21,22,23
	BDS(11):	3,7,9,10,11,23,25,34,40,43,59	BDS(23):	1,2,3,4,5,6,7,9,10,11,12,16,23,24,25,28,34,38,39,40,43,59,
	GALILEO(6).	2,13,27,30,34,36	GALLEO(7).	2,7,13,27,30,34,36
	QZSS(0):		QZ58(0)	
	Receiver Clock			
	GPS Week	2245		
Satellites	GPS Seconds:	119792		
)	

c) Set up Auto Base/Manual Base as what are needed.

Status	Reference Station Settings ×
Satellites	
Receiver Configuration	Reference Station Mode: Auto Dave
 Description 	Base Station Name: 3209707
 Antenna Configuration 	Base Station ID: 3209707
 Reference Station Settings 	Reference Lattude: 31 9 34 50844800 0 N S
Receiver Reset	Reference Longitude: 121 10 42.53631200 1 E W
 Language 	Reference Height: 45.0280
User Management	Save
 HCPPP Settings 	2
	Sample for Average C Postcolar Constraint: @ Sincle Solution Coordinates () Fixed Solution Coordinates
	Sampling Amount: 10 100.0%
Data Recording	() Star
I/O Settings	
Network Setting	Coordinates transfer threshold o 1 Message Box
Module Setting	Collect End Successfully 1
Firmware	Bace list

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d) Go to I/O settings---RTK client, click connect to set APIS_BASE with RTCM3.2 output to CHCNAV APIS sever (IP: APIS1.huace.cn; Port:9901).

CHCNA	V L	「とうない」		Base Station Name:3215995	Base Station ID:3215995	5N:3215995 📷 English 🗸
😝 Status	1/0 Set	tings ×				
Sotellites		Type	Description	Output	Connection Status	Modify
* Receiver Configuration	1	RTK Clent	APIS1 huace.ct 9901		Unconnect <mark>2</mark>	Connect Disconnecting Detail
👚 Data Recording	2	TCPIUDP_Clett1NTRIP Server1	192.158.3.18.9990		Unconnected	Connect Disconnectine Detail
I/0 Settings	з	TCPIUDP_Clett2NTRIP Server2	192.158.3.10.9901		Unconnected	Connect Disconnecting Detail
► 1/O Settings	4	TCP/UDP_Clast3NTRIP Server3	192.168.3.10.9982		Unconnected	Connect Disconnectine Detail
	5	TCPIUDP_ClassiNTRIP Sever4	192.158.3.10.9903	-	Unconnected	Connect Disconnecting Detail
1	6	TCP/UDP_ClientSINTRIP berver5	192.158.3.10.9904	QRTK Client	Unconnected	Connect Disconnecting Detail
	7	TCPIUDP_ClientSNTRIP ServerS	102.158.3.10.9905	Connection Protocot APIS_BASE V	Unconnected	Connect Disconnecting Detail
	8	TCP BerverNTRIP Caster1	9901	Server IP: APIS1 hasos on V	Closed	Connect Disconnecting Detail
	D	TCP Server/NTRIP Caster2	9902	Port 9911	Cloved	Connect Disconnecting Detail
	50	TCP Server/NTRIP Caster3	9903	Differential Data: RTGW3.2	Closed	Connect Disconnecting Detail
	11	TCP ServerNTRIP Caster4	2204	Confirm Back	Closed	Connect Disconnecting Detail
	12	Serial Port	9900			Settinos
	13	Buelooh	GN55-3215995	GPGGA.5a,		Settings
	54	Rado	450.00000WHz			Settinus
	15	CISM	Date		Offine	Settings Connect
 Network Setting 						
92 Hodule Setting						
Firmuare						

Part B. NX510SE APIS setup

It is necessary to upgrade the AGNAV software and PA-3 firmware as listed above for using APIS function.

a) After run the software, pls go to **Setting---Receiver**, select **Display Network/Controller Network** which depends on that customers insert SIM card to the tablet or Controller.

\leftarrow GNSS Correction Settings					
Data Link	Interr	al Radio			·
Table Net State	Displ	ay Network			
Base Sta	ation Cont	oller Network]		
ty	Exter	nal Radio			
	Multi	Network Mode		Edit	
				A	
				Арріу	
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b) Click Add to add an APIS configuration, enter CHC APIS server IP: APIS1.huace.cn; Port:9901; Also base station number should be I50 base SN, finally Click Save

÷	GNSS C	orrecti	on Settings										
			Data Link	D	isplay Net	vork				•			
			Table Net State	• La	anded succ	essfully							
			Base Sta	ation		Dista	nce		Add				
			APIS	5		0.048	km	L)	Delete				
									Edit				
								l	Apply				
	← Ntrip	/APIS	Settings									ſſ	Save
	← Ntrip)/APIS Base	Settings Station		APIS						8	Ľ	Save
	← Ntrip	APIS Base Prote	Settings Station cool		APIS						© •	Ľ	Save
	← Ntrip	APIS Base Proto Serve	Settings Station Docol er IP		APIS APIS APIS1.	huace.cn					⊗ ▼	٢	Save
	← Ntrip	Prote Port	Settings Station col er IP		APIS APIS APIS1. 9901	huace.cn					© •	Ľ	Save
	← Ntrip	Proto Serve Port Base	Settings Station xcol er IP Station Number	r	APIS APIS APIS1. 9901 321599	huace.cn 95]	© •	Ľ	Save
	← Ntrip	Proto Servi Port Base	Settings Station cool er IP Station Number	r	APIS APIS APIS1. 9901 321599	huace.cn 95)	© •	Ľ	Save
	← Ntrip	Proto Serve Port Base	Settings Station bool ar IP Station Number	r	APIS APIS APIS1. 9901 321599	huace.cn)	© •	Ľ	Bave Save
	← Ntrip	/APIS Base Prote Serve Port Base	Settings Station Scol er IP Station Number	r.	APIS APIS APIS1. 9901 321599	huace.cn)	© •		Save

c) Click **Apply** to get APIS configured and see the distance from i50 Base, finally go to the main screen to check if it will get Fix solution.



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