

EFIX F4 & F7 GNSS

Quick Tour with eField

(Internal UHF Work Mode)



By surveyors , for surveyors



Guidance

This quick tour consists of the following information:

- Hardware and software prerequisites
- <u>Receiver installation</u>
- <u>Create a project</u>
- Connect to a receiver (<u>Bluetooth connection</u>)
- <u>Create a work mode</u>
- Survey

1. Prerequisites

1.1. Hardware

EFIX F4 base kit, EFIX F7 rover kit.

1.2. Software

eField.

2. Steps to set internal UHF work mode with eField

2.1. Base & rover installation

_ _ _ _ _ _ _ _ _

Screw the F4 receiver on the tripod adapter, fix the UHF whip antenna on the receiver.

Screw the F7 receiver to the pole, fix the UHF whip antenna on the receiver.







2.2. Create a project

- (1) Power on the receiver: Long press the F4 power button until the green and blue LED lights are on.
- (2) Launch the eField software.



(3) Tap [Projects] - [Project] to create or open a project.



(4) Tap [New] to create a new project.



- (5) Input the project name, the author of the project and the time zone of working region.
- (6) Tap **[Coordinate System]** to choose the coordinate system of the project.



(7) Tap **[Add]** to add pre-define coordinate system in the list.

		540	♦ ¥ E 11:24
÷	Com	mon Coord	inate
CRS S	election	r)	
Asia	/China/	China CGCS 20	000
User	/Admin/	/WGS84	
Asia	/China/	CHINA BEIJIN	G 1954
5-06	gree da	uss-kruger ow	0041
Ð	Add	⊗ Delete	Select

- (8) Select the continent and region according to working area.
- (9) Find proper coordinate system to use.
- (10) Tap **[Select]** to confirm.







(13) Tap [OK] to finish the project setting.



🔓 Logout 🐼 Accept

🖊 Edit



- 2.3. Connect to a receiver
- (1) Tap [Config] [Connect].
- (2) receiver supports two kinds of connection method in eField: Bluetooth connection and Wi-Fi connection.
- (3) Select the proper one to connect.





- 2.3.1. Bluetooth connection
- Select manufacturer as [RTK], device type as [F4], connection type as [Bluetooth].
- (2) Tap the Bluetooth icon on the right side to select the Bluetooth device.

÷	Connect	
GNSS	Periph	eral
Last Device	Bluetooth:GNSS- 3269707	
Device Type	RTK	
Connection Type	Bluetooth	
Bluetooth	GNSS-1042873	*
Antenna Type	F4	Ť
Auto Connect	No	
Receiver Dis	sconnected! lect 🖉 Con	nnect
Paired Bl GNSS-320	uetooth Device 2100	Î
54:4A:16:2 GNSS-940 00:80:25:/	066 \2:DF:76	

(3) Tap [Bluetooth Manager] to pair Bluetooth device. If the target device has been paired with the controller, select it in the [Paired Bluetooth Device] list directly.

	Bluetooth Manage
1	84:DD:20:7E:72:A7
	GNSS-1019434
ł	50:72:24:42:D8:24
l	GNSS-3203970
l	00:80:25:43:5D:AF
ł	GNSS-953519
l	84:DD:20:20:6A:D1
e	GNSS-1014271
ð	F4:88:5E:58:E7:88
ľ	GNSS-3200557
1	00:80:25:A2:DF:76
	GNSS-940066
	GNSS-3202100 54:4A:16:25:D0:86
l	
1	Paired Bluetooth Device



(4) Switch on the Bluetooth module at right-top corner, tap [Pair new device] to search the target receiver.



- (5) Select the target one in the list.
- (6) Tap to pair with it.

÷	Pair new device			
	Visible as "Android Bluedroid" to other devices			
	Available devices	Э		
	GNSS-3277812			
r.	891758263的Redmi 9A			
	LAPTOP-Q7RRG6H2			
r.	MED-AL00			
	GNSS-3285090			
ς.	Paul			
	WRT-WX9			

(7) Select the paired receiver in the [Paired Bluetooth Device] list.





(8) Tap [Antenna] icon to select the corresponding antenna type.



(9) Tap [Connect] to build the connection.

÷	Connect	
GNSS	Peripheral	
Last Device	Bluetooth:GNSS- 3269707	
Device Type	RTK	
Connection Type	Bluetooth	
Bluetooth	GNSS-1042873 🖁	
Antenna Type	F4 T	
Auto Connect	No	
Receiver Di	sconnected! nect ? Connect	
← i5	Otest-Connect 🤅 🤅	
	Peripheral	
Current Device	Bluetooth:GNSS-32039 70	
Prompt		
Connect S	Successfully!	
E 100%	100/100	
1	ок	
Auto Connect	. 192	
Connect to	the Receiver!	
ø° Disconr	nect 🔗 Connect	



2.4. Create a base work mode

(1) Tap [Config] - [Work Mode] to create or accept a work mode.

(2) Tap [New] to create a new work mode.





÷	Work Mo	ode	
WorkMode	e List:		
1			
🖓 New	Preview	🗹 Accept	:

(3) Select the work mode as [Auto Base], datalink as [Internal Radio], protocol as [Transparent], step value as [25kHz] and choose the channel.

RTK Setti	ngs	Static Settings
Work Mode	Auto Base	Advanced
DataLink	Internal Ra	idio
Correction Format	RTCM3.2	
Protocol	Transpare	ent 🦼
Step Value	25KHz	4
Baud rate	9600	4
Power	1W	
Channel	1	



(4) Check the [Frequency] and tap [Save].

RTK Settin	gs	Static Se	ettings
Protocol	Transpa	rent	
Step Value	25KHz		
Baud rate	9600		a.
Power	1W		
Channel	1		
Frequency	456.050)MHZ	
Elevation Mask	10		
Power Save Mode		011	
Power Save Mode		011	

(5) Input the name of the new work mode and tap [OK].

RTK Setting	gs	Static Setting	gs
Protocol	Transpar	ent 🛛	
Step Value	25KHz		
Baud rate	9600		
Power	1W		
Channel	1		
Frequency	456.0500	MHZ	
Elevation Mask	10		
Power Save Mode		off	
NOTE: In complex saving mode may	working env	ronments, the pov ed rate	ve

- (6) Select the new work mode in the [Work Mode List] and tap [Accept].
- (7) Click [Accept] to apply the work mode, There will pop up a message with 'Start up base successfully and break connection', which means the base was set successfully.





2.5. Connect to a rover

Connect to a rover receiver, the step is the same as connecting to a base receiver.

Antenna type select F7, and tap [Connect] icon to connect.



2.6. Create a rover work mode

(1) Tap [Config] - [Work Mode] to create or accept a work mode.

(2) Tap [New] to create a new work mode.

(3) Select the work mode as **[Auto Rover]**, datalink as **[Radio]**, protocol as **[Transparent]**, step value as **[25kHz]** and choose the same channel as base receiver.

← :	EFD	EFIX-Create Nev	
RTK Sett	ings	Static Settings	
RTK		Yes	
Work Mode	Auto R	over	
DataLink	Radio	4	
Protocol	Trans	parent 🦼	
Step Value	25KH	2A	
Baud rate	9600		
Channel	1	, E	
Frequency	456.0	500MHZ	

✓ Save

(4) Check the frequency value, enable [BaseChanged Tip], and tap [Save].





(5) Input the name of the new work mode and tap **[OK]**.



(6) Select the new work mode in the [Work Mode List] and tap [Accept].

Click **[Accept]** to apply the work mode, There will pop up a message with 'Parameters successful!', which means the rover was set successfully.





2.7. Survey

(1) Wait until the green LED flashes and the software shows **[Fix]**, which means the rover is getting the correction data from base.

(2) Tap the [Survey] - [Map] to start your work.

(3) Tap the [Survey] icon to	collect the points	and start your
work.		







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