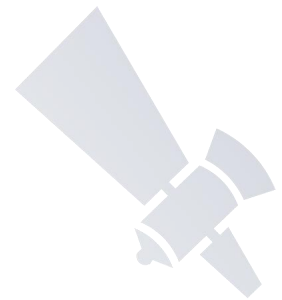




David GNSS Receiver

- **Rover Kit Network Mode**
- **Rover Kit with 2W Radio**
- **Base Kit Network Mode**
- **Base Kit with 2W Radio**
- **Base Kit with 30W Radio**



!	Note: Please check each item according to the item list first to confirm that all the accessories are correct for the purchased kit.
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1. System Structure

David GNSS Receiver can work as a Rover or a Base. According to different data links (radio or 2G/3G/4G network accessed via controller) and different types of radio, five kits for David GNSS Receiver are introduced in this Quick Start Guide.

- ✧ Rover Kit Network Mode
- ✧ Rover Kit with 2W Radio
- ✧ Base Kit Network Mode
- ✧ Base Kit with 2W Radio
- ✧ Base Kit with 30W Radio

According to the requirements, set up the system as per the following pictures.

David Quick Start Video including Nuwa operation is on the official website: <https://www.tersus-gnss.com/video/david-receiver> .

1.1 Rover Kit Network Mode

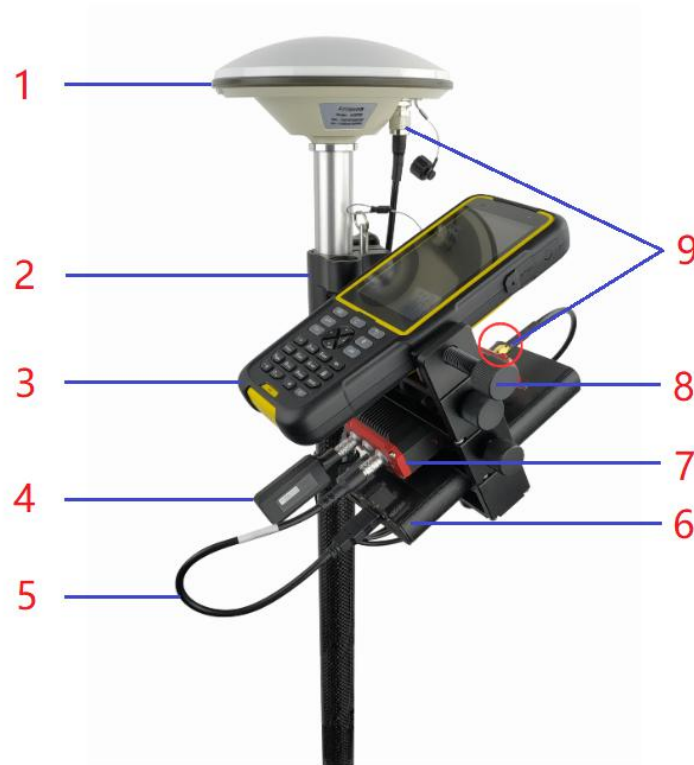


Figure 1.1 Rover Kit Network Mode

Table 1.1 Devices in Figure 1.1

NO.	Device Name
1	AX3702 GNSS antenna
2	Ranging pole
3	Android device TC20 (not included in the kit)
4	COMM1-Bluetooth module
5	DC-2pin to USB Power Cable
6	Power Bank (not included in the kit)
7	David GNSS receiver
8	Bracket for rover
9	TNC-J to SMA cable 1.5m (GNSS antenna cable)

1.2 Rover Kit with 2W Radio

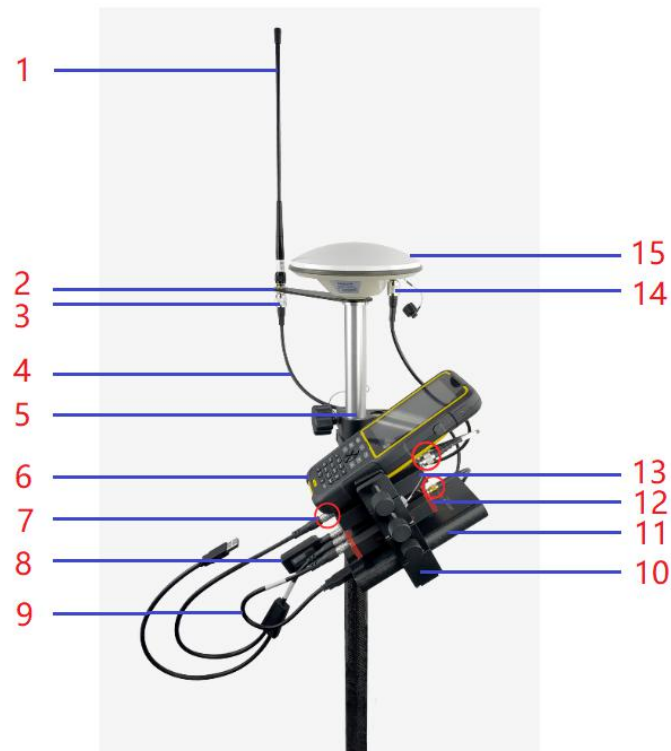


Figure 1.2 Rover Kit with 2W Radio

Table 1.2 Devices in Figure 1.2

NO.	Device Name
1	2W/460MHz radio antenna
2	Bracket for 460M antenna
3	TNC-TNC converter
4	TNC-J to TNC-J cable 1m (radio antenna extension cable)
5	Ranging pole
6	Android device TC20 (not included in the kit)
7	COMM2-7pin to USB & 2W-Radio-5pin cable
8	COMM1-Bluetooth module
9	DC-2pin to USB Power Cable
10	Bracket for rover
11	Power Bank (not included in the kit)
12	David GNSS receiver

13	2W/460MHz radio
14	TNC-J to SMA cable (GNSS antenna cable)
15	AX3702 GNSS antenna

1.3 Base Kit Network Mode

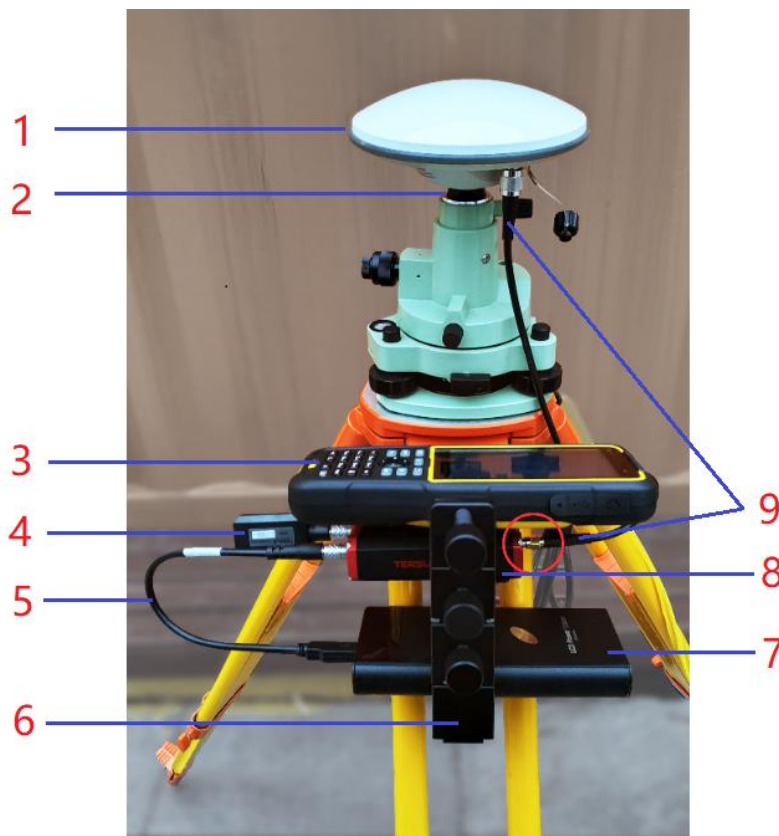


Figure 1.3 Base Kit Network Mode

Table 1.3 Devices in Figure 1.3

NO.	Device Name
1	AX3702 GNSS antenna
2	GNSS antenna connector
3	Android device TC20 (not included in the kit)
4	COMM1-Bluetooth module
5	DC-2pin to USB Power Cable
6	Bracket for base

7	Power Bank (not included in the kit)
8	David GNSS receiver
9	TNC-J to SMA cable 1.5m (GNSS antenna cable)

1.4 Base Kit with 2W Radio

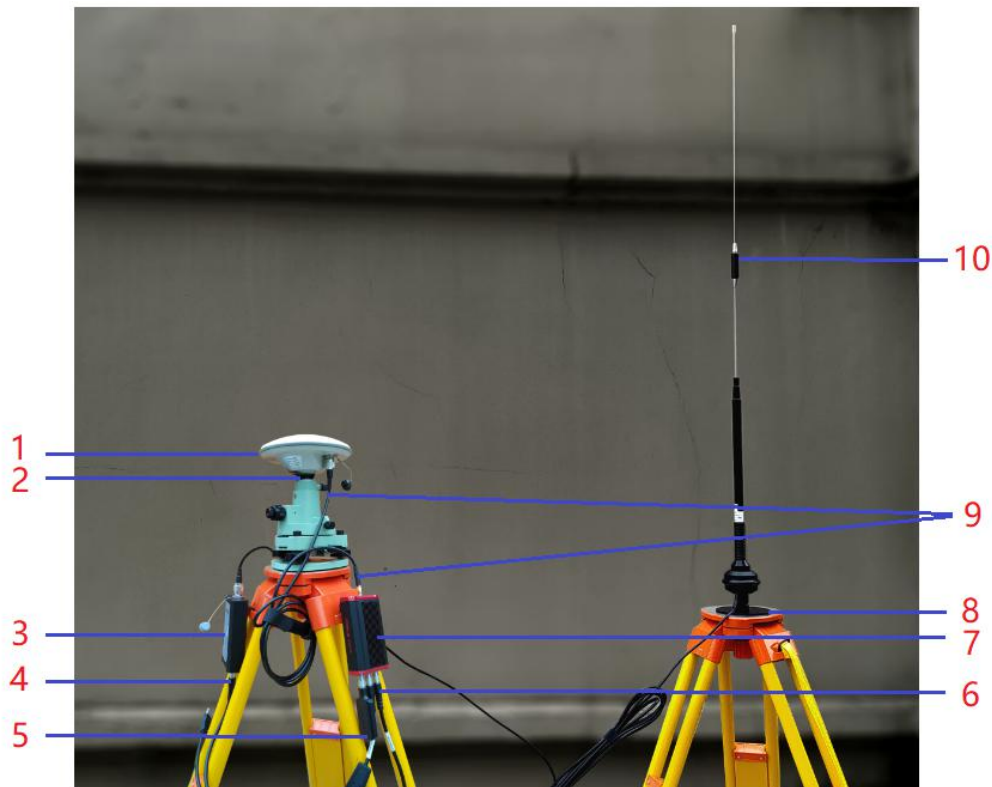


Figure 1.4 Base Kit with 2W Radio

Table 1.4 Devices in Figure 1.4

NO.	Device Name
1	AX3702 GNSS antenna
2	GNSS antenna connector
3	2W/460MHz radio
4	COMM2-7pin to USB&2W-Radio-5pin cable
5	COMM1-Bluetooth module
6	DC-2pin to Bullet-DC Power Cable
7	David GNSS receiver

8	Metal plate for radio antenna
9	TNC-J to SMA cable 1.5m (GNSS antenna cable)
10	High Gain Radio Antenna

Note: *Bullet-DC connects to 'Bullet-DC to Alligator Clips', then clips to 12V power supply.*

1.5 Base Kit with 30W Radio

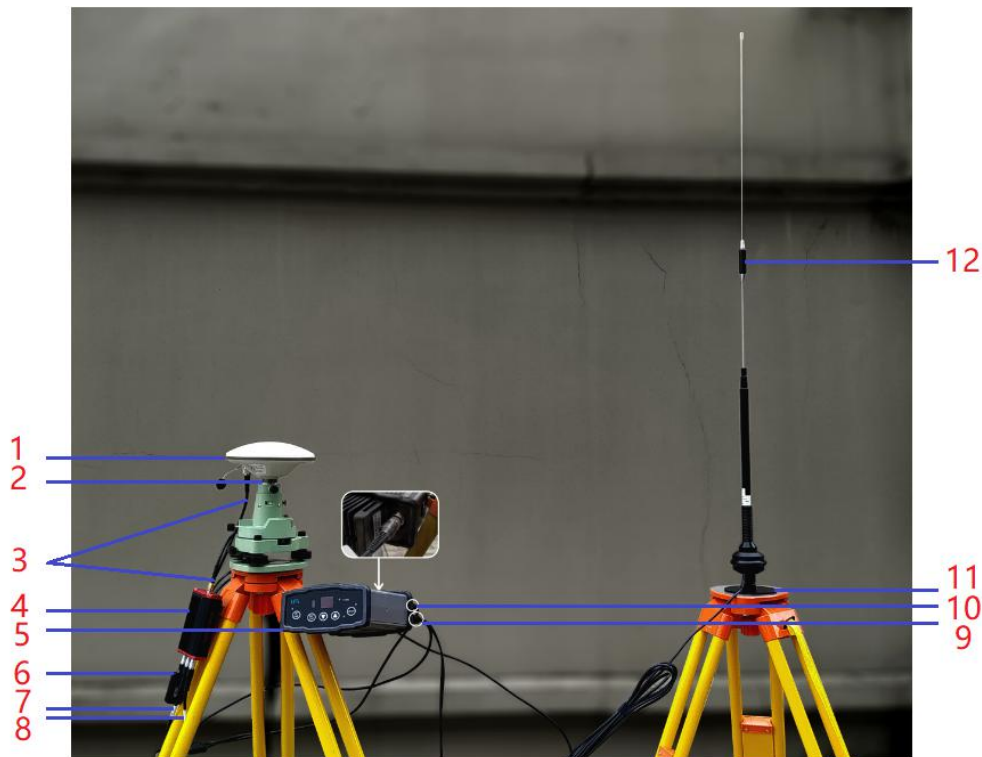


Figure 1.5 Base Kit with 30W Radio

Table 1.5 Devices in Figure 1.5

NO.	Device Name
1	AX3702 GNSS antenna
2	GNSS antenna connector
3	TNC-J to SMA cable 1.5m (GNSS antenna cable)
4	David GNSS receiver
5	30W radio
6	COMM1-Bluetooth module

7	COMM2-7pin to USB+30W-Radio-5pin cable
8	DC-2pin&30W-Radio-DC-2pin to Bullet-DC
9	DC-2pin&30W-Radio-DC-2pin to Bullet-DC
10	COMM2-7pin to USB+30W-Radio-5pin cable
11	Metal plate for radio antenna
12	High Gain Radio Antenna

Note: *Bullet-DC connects to 'Bullet-DC to Alligator Clips', then clips to 12V power supply.*

2. Configure and Survey

2.1 Create project or open existed project

Launch Nuwa application, click [Project] in the main interface to create a new project or open an existed project, refer to Figure 2.1 below.

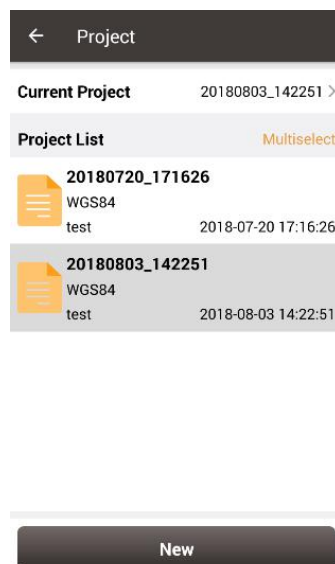


Figure 2.1 Project

2.2 Connect David

Back to the main interface of Nuwa, click [Device] -> [Connect], select the corresponding Bluetooth address to pair David, select AX3702 for the antenna, click [Connect] to complete the device connection, refer to Figure 2.2 below.

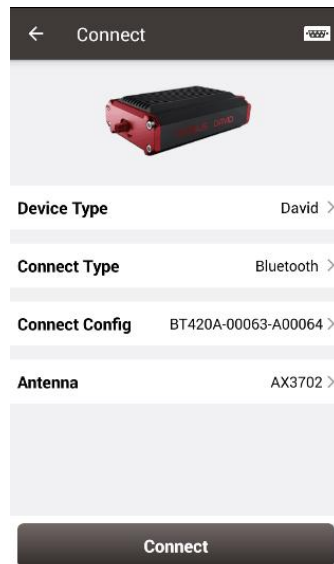
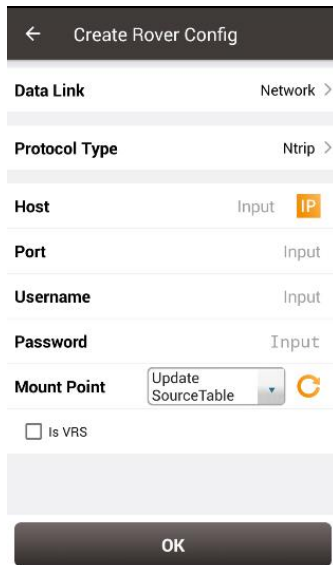


Figure 2.2 Connect David

2.3 Configure Rover or Base

Back to the Device interface, click [Rover] to enter the Work Mode List, create a new rover, select Network for Data Link, fill up Ntrip or TCP information as shown in Figure 2.3 or select Radio for Data Link, select 38400 for Baud Rate as shown in Figure 2.4;



← Create Rover Config

Data Link Network >

Protocol Type Ntrip >

Host Input IP

Port Input

Username Input

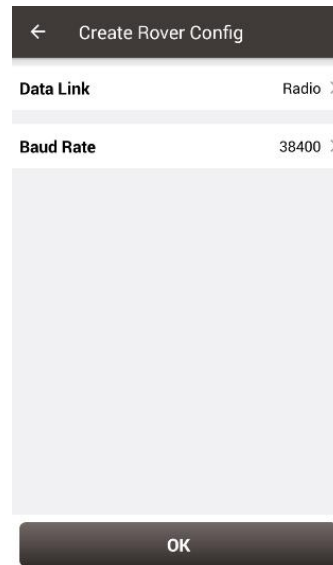
Password Input

Mount Point Update SourceTable > C

Is VRS

OK

Figure 2.3 Rover Config – Network



← Create Rover Config

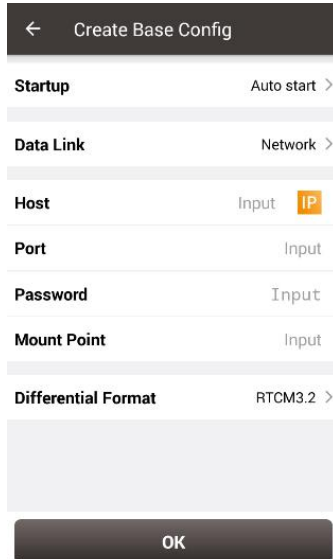
Data Link Radio >

Baud Rate 38400 >

OK

Figure 2.4 Rover Config – Radio

Under the Device interface, click [Base] to enter the Work Mode List, create a new base, select Network for Data Link, and fill up Ntrip information as shown in Figure 2.5 or select Radio for Data Link, select 38400 for Baud Rate as shown in Figure 2.6.



← Create Base Config

Startup Auto start >

Data Link Network >

Host Input IP

Port Input

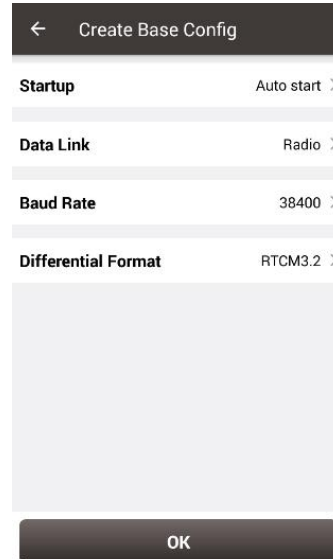
Password Input

Mount Point Input

Differential Format RTCM3.2 >

OK

Figure 2.5 Base Config – Network



← Create Base Config

Startup Auto start >

Data Link Radio >

Baud Rate 38400 >

Differential Format RTCM3.2 >

OK

Figure 2.6 Base Config – Radio

Then click [OK] to complete rover or base configuration. Select this configuration in the Work Mode List, click [Start] to configure the rover or the base.

2.4 Survey Work

Back to the main interface of Nuwa, click [Survey] to enter the survey interface. Users can do survey work including point survey, point stakeout, line stakeout and etc.

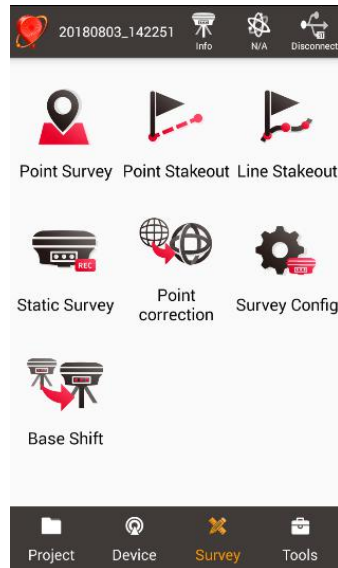


Figure 2.7 Survey Work

3. Get More

This Quick Start Guide briefly introduces the installation of five kits for David GNSS Receiver and the operation of Nuwa app. More details please refer to User Manual of David and User Manual of Nuwa app which can be downloaded from Tersus official website:

<https://www.tersus-gnss.com/document/david-receiver> .

4. Exemption of Liability

Before using this product, please be sure to read the product manual carefully, which helps you to better use the product. Tersus is not liable for damages caused by failure to follow the instructions in the manual.

Tersus is committed to continually improving product features and performance, and the contents of subsequent product manuals are subject to change without notice. If the pictures and icons in the manual are different with actual product, please refer to the actual product.

5. Technical Support

Thank you for using Tersus products.

If you have any technical questions for the products, please contact us at support@tersus-gnss.com or log a ticket in our tracking system: <https://tersus.supportsystem.com/> and we will serve you promptly.