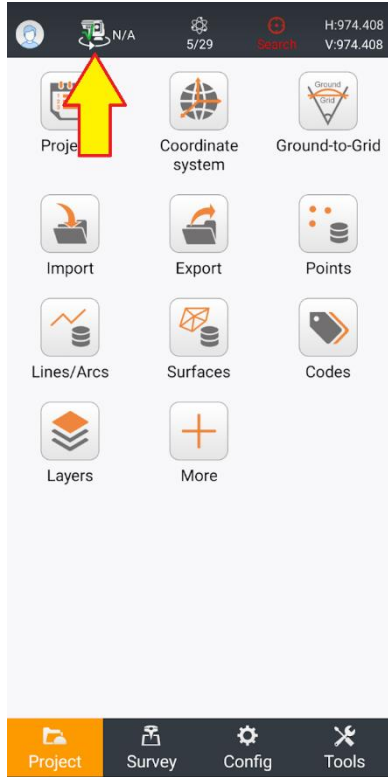


## Getting Started with a Zoom 95 with Land Star 8 2024 Edition

January 31, 2024

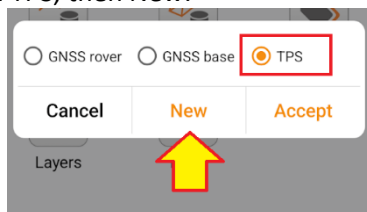
### Make an Instrument Profile

Click on the Instrument Profile button from the main menu:

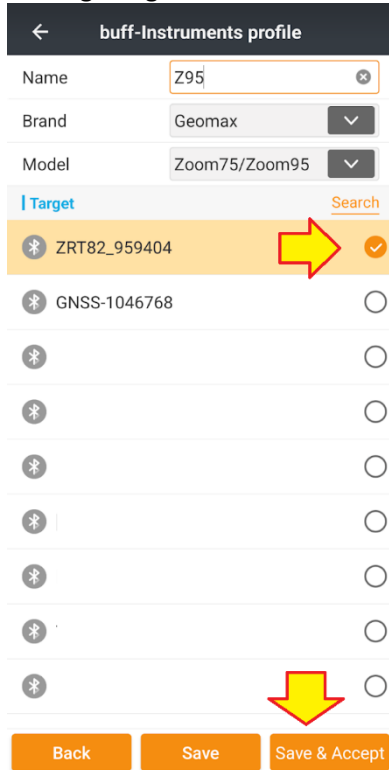


1

Click on TPS, then New:



Select the Long Range Bluetooth Handle, which will begin with ZRTxx-:

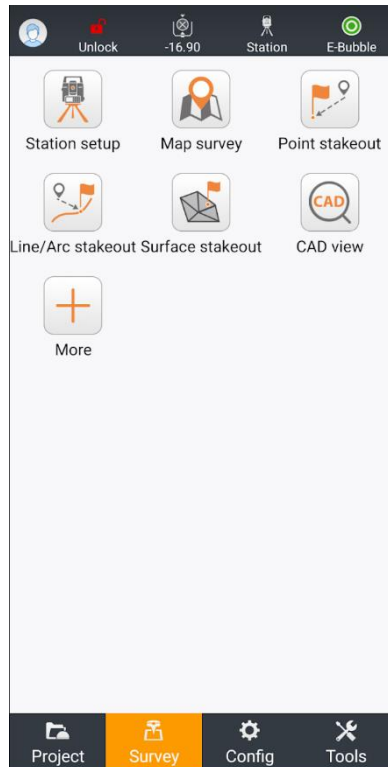


Then click **Save & Accept** to save the profile then connect to the robot and make it the current instrument.





### Setup the Robot

Put the robot on a stable tripod at a known station, set a prism at a known azimuth. For this example, the Prism will be at 0-0-0 and the circle will be zeroed.

## Main Survey Menu

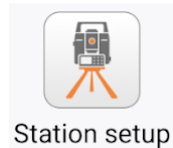


On the top menu line:

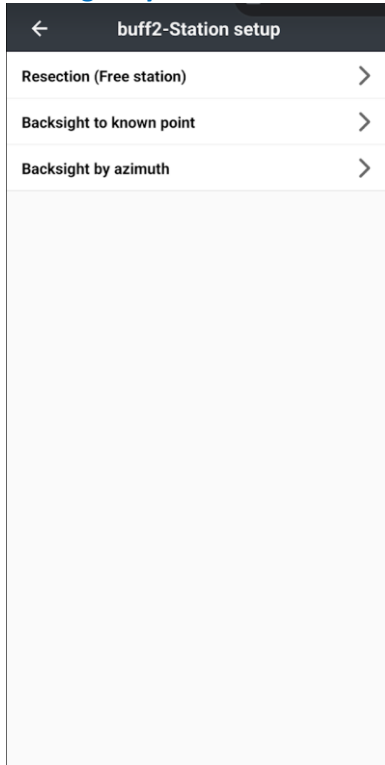
-  E-Bubble Instrument internal bubble, with turning instructions.
-  Station Station setup and current station status
-  -16.90 Prism selection
-  Unlock Robot Control

## Station Setup

Begin with a **Station Setup**. From the **Survey menu**, click on:



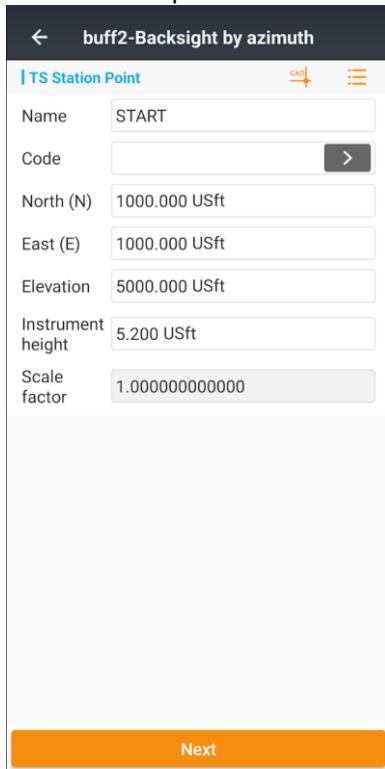
Choose **Backsight by azimuth**:



A screenshot of a mobile application menu titled "buff2-Station setup". The menu has a dark header with a back arrow and the title. Below the header, there are three list items, each with a right-pointing chevron: "Resection (Free station)", "Backsight to known point", and "Backsight by azimuth". The "Backsight by azimuth" option is highlighted in blue.

4

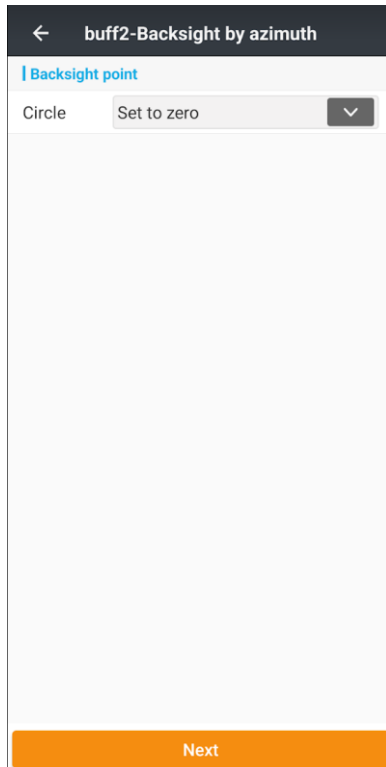
Enter, recall from the point list or recall from CAD a starting station:



A screenshot of a mobile application form titled "buff2-Backsight by azimuth". The form has a dark header with a back arrow and the title. Below the header, there is a section titled "TS Station Point" with a "CAD" icon and a menu icon. The form contains several input fields: "Name" (START), "Code" (with a right-pointing chevron), "North (N)" (1000.000 USft), "East (E)" (1000.000 USft), "Elevation" (5000.000 USft), "Instrument height" (5.200 USft), and "Scale factor" (1.000000000000). At the bottom of the form is an orange "Next" button.

Click **Next**.

Choose to zero the circle:



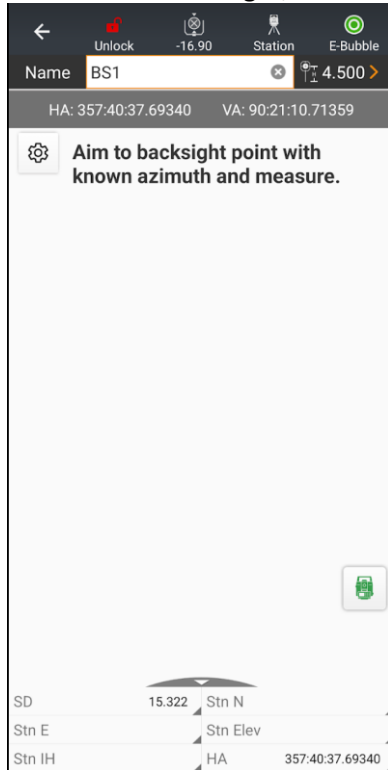
Click **Next**.

If the wrong prism is selected, click the prism select button:

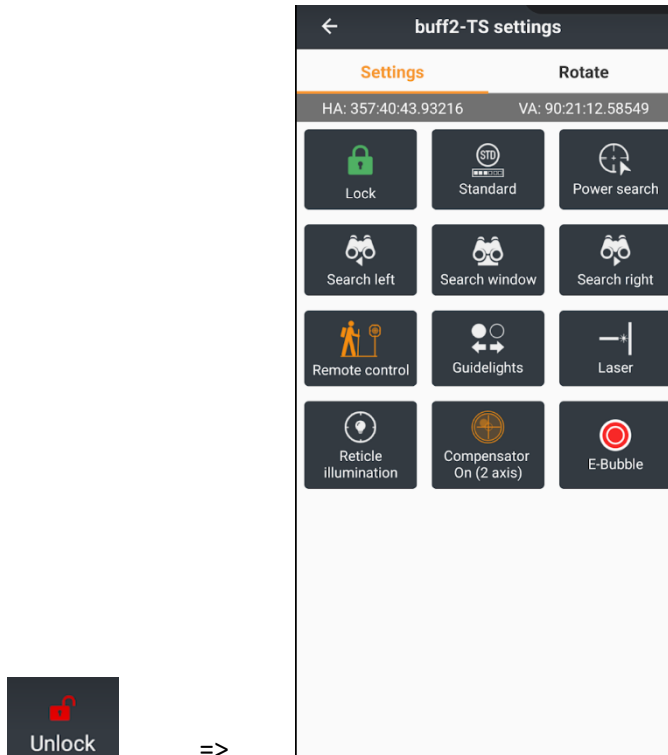


Then choose the correct prism.

Enter a **Name** for the backsight, **BS1** in this case:



Click the Robot Control button:



Use the **Search left** or **Search right** button to **Power Search** the robot to the backsight prism and lock it. Click the Back button.

Hint: the **Remote Control** toggle button, reverses the Search Left/Right direction:

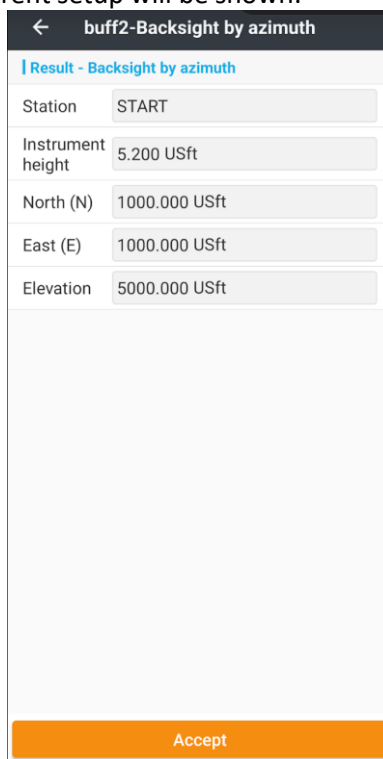


When it is ON (orange) then the direction will be correct if you are standing next to the prism, looking at the robot.

Click the measure button to read the prism:



The current setup will be shown:



buff2-Backsight by azimuth

Result - Backsight by azimuth

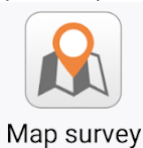
Station	START
Instrument height	5.200 USft
North (N)	1000.000 USft
East (E)	1000.000 USft
Elevation	5000.000 USft

Accept

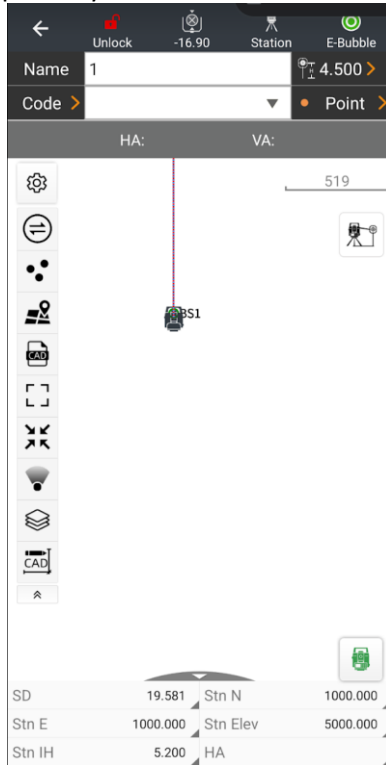
Click **Accept** to keep the station setup.

Store a point

Click Map Survey:



The Map survey screen will be shown:



You may need to click either the:



Zoom extents



Zoom to current position

To center your current position on the map display.

Use the Robot control button:



To search for the foresight prism. Be sure to change the prism type if it changes.



Click the measure button to read the prism:

SD	15.733	Stn N	1000.000
Stn E	1000.000	Stn Elev	5000.000
Stn IH	5.200	HA	33:09:47.09237

HA: 33:09:47.09237 VA: 83:04:24.46022

13

OBS1

O1

Point

6.562

Station

-16.90

ATR

←

⇒

Hint: If the

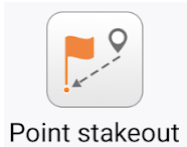


Zoom to current position

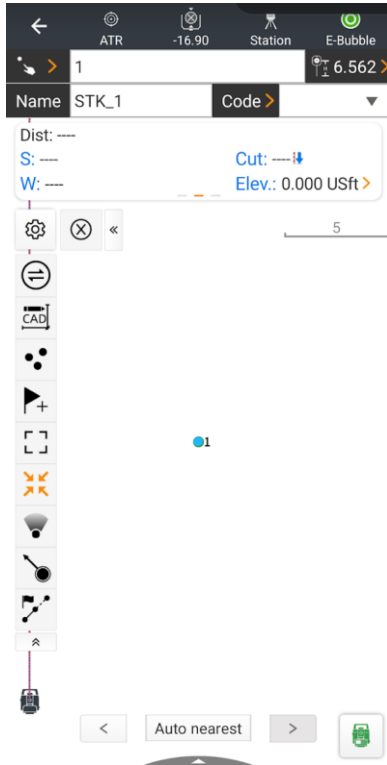
Button is enabled (orange) then the last stored point will be centered on the map view.


### Stakeout a point

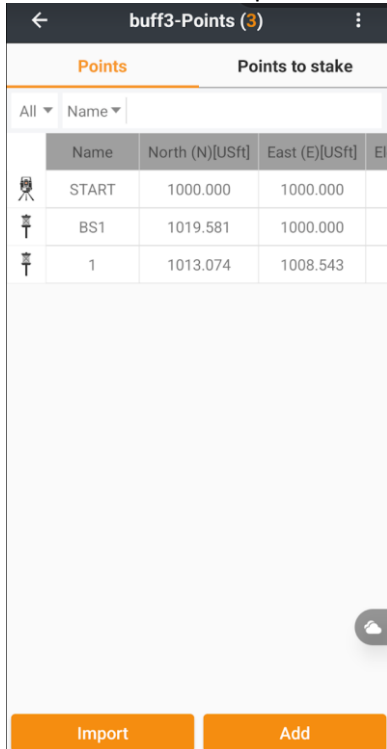
From the Survey menu, click on the Point stakeout button:



The Point Stakeout menu is shown:



Click on  to select a point to stake:



Click on the Measure button:

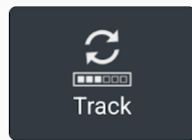


To fire the laser and compute offsets to the staked points.

Click on the **Robot control** button:



Then set the Tracking mode to Track to continuously read the prism:



Once in Track mode, clicking the Measure button will start continuous measurements and the Measure button will change to a Stop button:

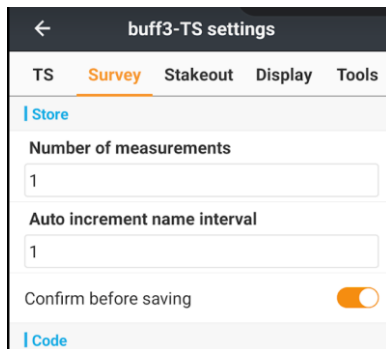


If there is a current measurement, click on the Save button:

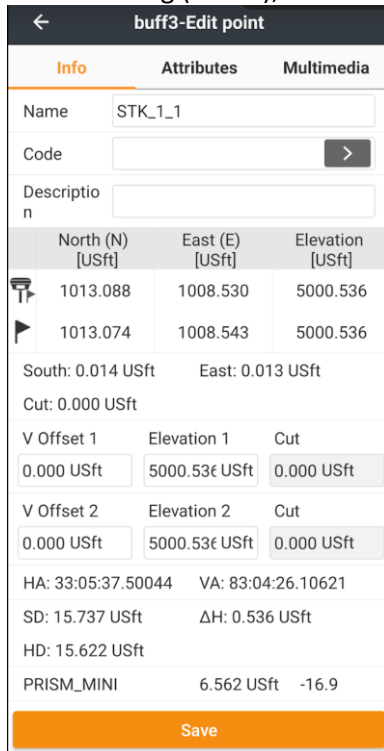


To store the staked point.

Enabling the setup option:





Confirm before saving (above), will enable a staking report:



The screenshot shows the 'buff3-Edit point' interface with the following fields and values:

- Name: STK\_1\_1
- Code: [Empty]
- Description: [Empty]
- Coordinates table:

	North (N) [USft]	East (E) [USft]	Elevation [USft]
	1013.088	1008.530	5000.536
	1013.074	1008.543	5000.536

- South: 0.014 USft      East: 0.013 USft
- Cut: 0.000 USft
- V Offset 1: 0.000 USft      Elevation 1: 5000.536 USft      Cut: 0.000 USft
- V Offset 2: 0.000 USft      Elevation 2: 5000.536 USft      Cut: 0.000 USft
- HA: 33:05:37.50044      VA: 83:04:26.10621
- SD: 15.737 USft      ΔH: 0.536 USft
- HD: 15.622 USft
- PRISM\_MINI: 6.562 USft      -16.9

Save

Which allows confirmation before saving the staked point.

Remember that **Option > Stakeout > Auto description** allows control over the staked point description.