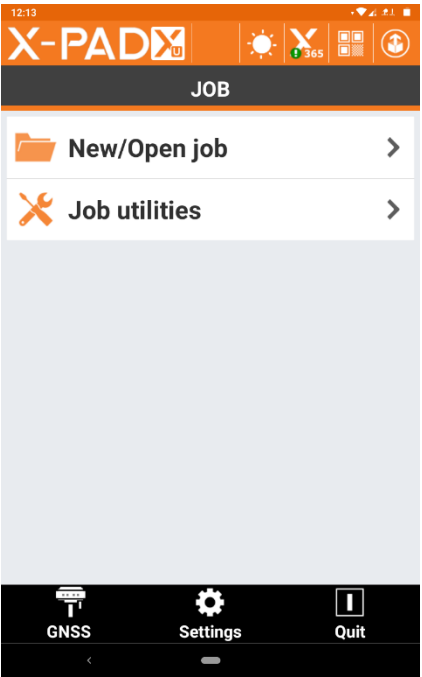


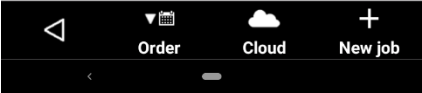
# Creating Instrument Profiles in X-PAD

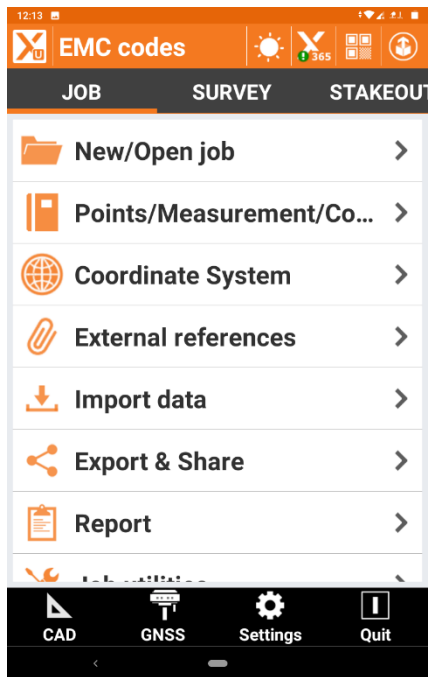


Power on Receiver and Open X-PAD Ultimate Software

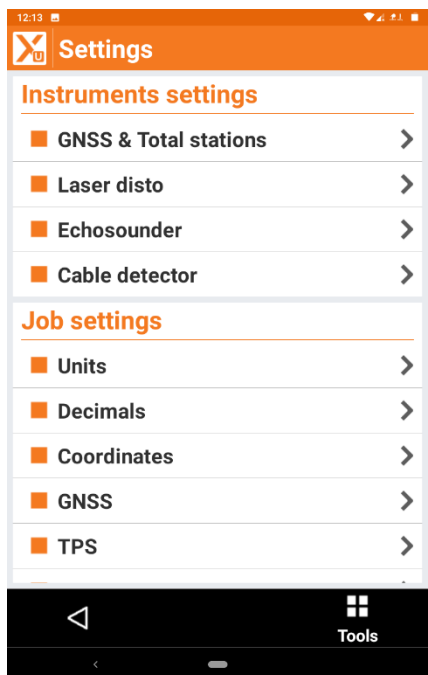


Create new Job

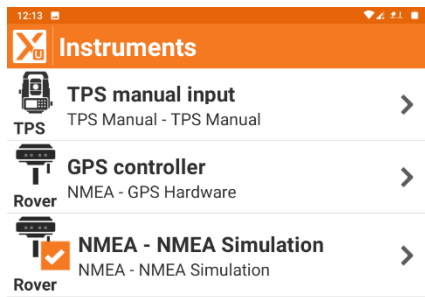




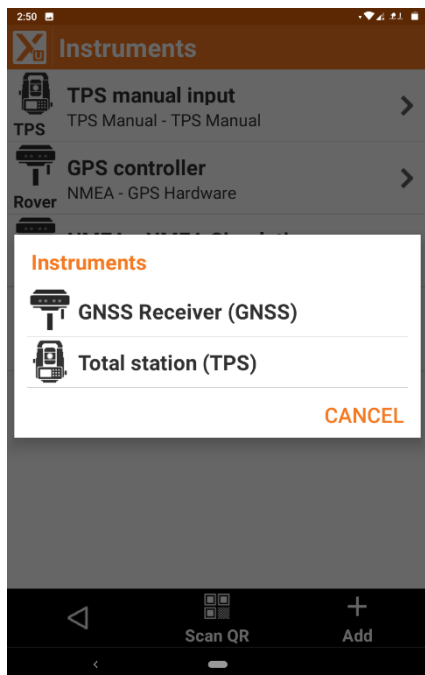
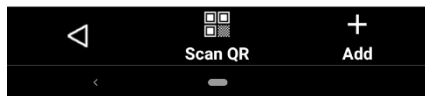
Go to Settings on Bottom of Screen



Select GNSS & Total Stations



Select Add at Bottom of Screen



Select GNSS Receiver

12:14

New profile

Profile

Profile name

Mode GNSS Rover

Brand GeoMax

Model GNSS Zenith 15

Next

Name Profile

Then Select Next

12:14

New profile

Profile

Profile name

NETROVER1055

Mode GNSS Rover

Brand GeoMax

Model GNSS Zenith 15

Next

I have named my Profile as NETROVER1055.

This lets me know that this Profile is setup to work on an RTN Network such as eGPS VRS.

The Select Next

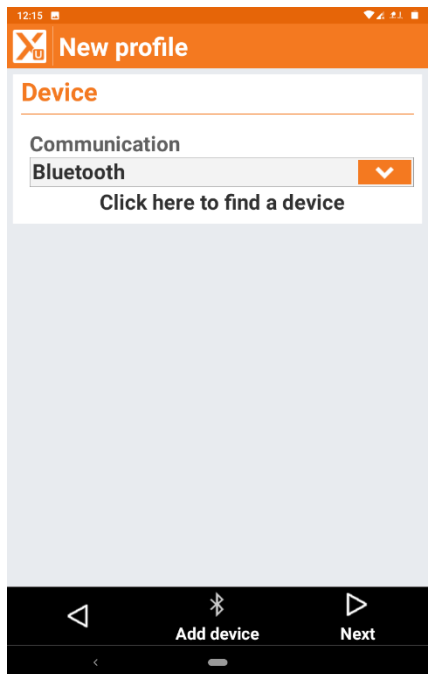
The screenshot shows a mobile application interface for creating a new profile. At the top, there is a header bar with a logo and the text "New profile". Below this, the section is titled "Profile". Under the "Profile name" label, there is a white dialog box titled "Brand" in orange. This dialog lists five options: "GeoMax", "NMEA", "Stonex", "HI-Target", and "CHC", each with a radio button. The "GeoMax" option is selected, indicated by an orange dot. At the bottom right of the dialog is an orange "CANCEL" button. Below the dialog, there is a dark navigation bar with a left arrow, a right arrow, and the text "Next".

Next Select the Brand

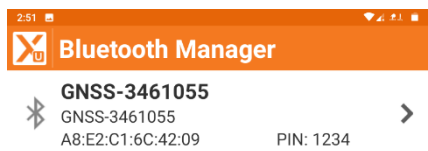
The screenshot shows the same "New profile" screen, but now the profile settings are complete. The "Profile name" field contains the text "NETROVER1055". Below this, there are three rows of settings, each with a label, a value, and a dropdown arrow: "Mode" with the value "GNSS Rover", "Brand" with the value "CHC", and "Model" with the value "Smart GNSS". At the bottom, the navigation bar now only shows a left arrow and a right arrow with the text "Next" below it.

I have selected the MODE as GNSS Rover, The Brand as CHC, and the Model as Smart GNSS.

Then Select Next

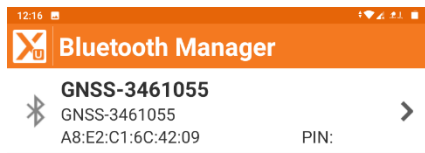


Select Bluetooth Communication and Select Add Device

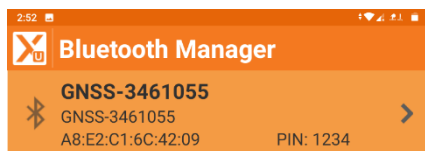


Select Search on Bottom of Screen

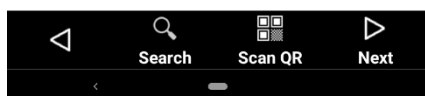


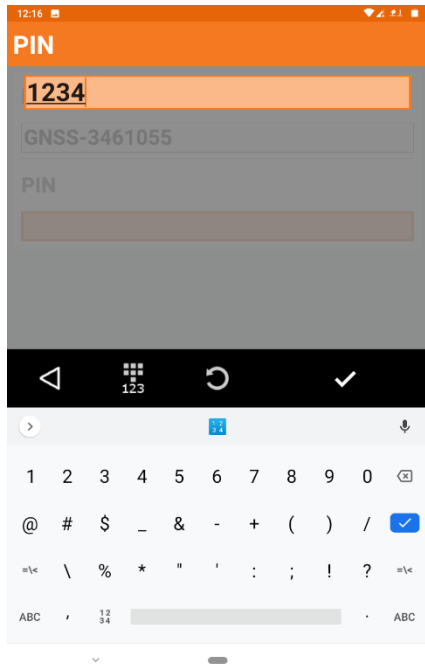


Find your device by Serial Number



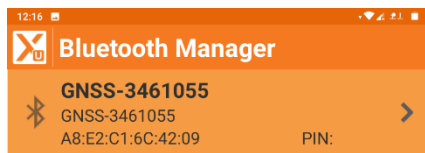
Touch Device to Open Dialog Box and Select Modify





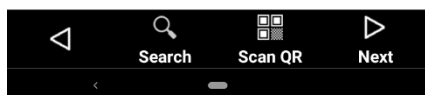
For eGPS (CHC) Receivers Enter the PIN as 1234

Then tap the Check Mark



The Instrument is Selected although PIN is not Displayed.

Select Next



The screenshot shows a mobile application interface titled "New profile". Under the "Device" section, there are two dropdown menus. The first is labeled "Communication" and has "Bluetooth" selected. The second is labeled "Device" and has "GNSS-3461055" selected. At the bottom, there is a navigation bar with a back arrow, a Bluetooth icon with the text "Add device", and a forward arrow with the text "Next".

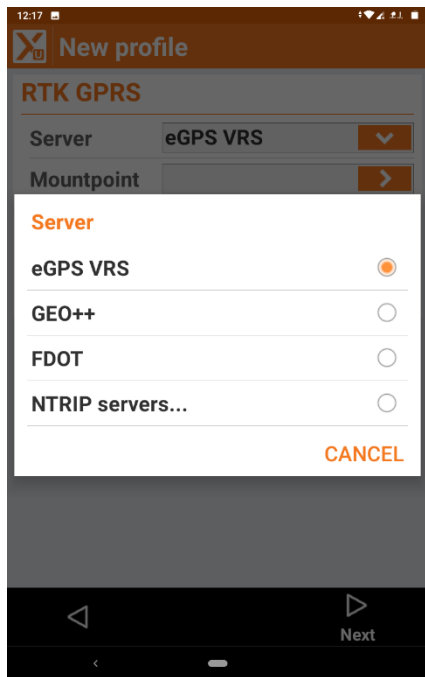
This is the Screen you will see for Review of Communication Method and Device Serial Number

Select Next

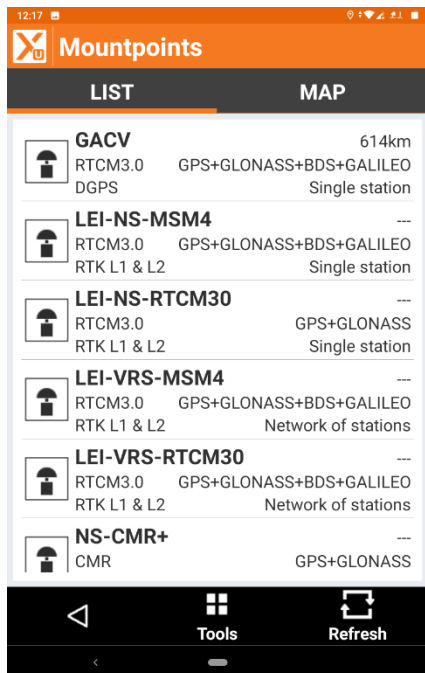
The screenshot shows a mobile application interface titled "New profile". Under the "RTK - receive corrections" section, there are five radio button options. The first is "None" with the subtext "No device". The second is "Internal radio" with the subtext "Uses the internal UHF radio of the receiver". The third is "Internal GPRS (receiver)" with the subtext "Uses the internal GPRS of the receiver". The fourth is "External radio" with the subtext "Uses an external UHF radio". The fifth is "External GPRS (controller)" with the subtext "Uses the internet connection of the controller (GPRS/WiFi)" and is selected with a checked radio button. At the bottom, there is a navigation bar with a back arrow and a forward arrow with the text "Next".

For RTK Corrections Select External GPRS for Using Sim Card in Tablet or MiFi Hot Spot for Internet Access.

Then Select Next



On the Next Screen Select NTRIP Server. Here I am using eGPS VRS



Once your NTRIP Server is selected you should see a list of Mount Points.

To Check my Internet Connection, I Tap on Refresh in Lower Right Corner of Screen to re-load the Mount Points.

The screenshot shows a mobile application interface titled "New profile" with a sub-header "RTK GPRS". It contains four settings rows: "Server" with a dropdown menu showing "eGPS VRS", "Mountpoint" with a dropdown menu showing "VRS-MSM4", "Format" with a dropdown menu showing "RTCM3", and "Add prefix to reference station" with a toggle switch that is currently turned off. At the bottom, there is a navigation bar with a back arrow, a forward arrow, and the text "Next".

After Selecting Mount Points the RTK GPRS Screen Should look like this. I have selected the following:

Server=eGPS VRS

Mount Point =VRS-MSM4

Format = RTCM3

Then Select Next

The screenshot shows a mobile application interface titled "New profile" with a sub-header "Parameters". It contains five settings rows: "Satellites Cut-off angle(^)" with a numeric input field showing "15", "Use GLONASS" with a toggle switch that is currently turned off, "Use BEIDOU" with a toggle switch that is currently turned off, "Use GALILEO" with a toggle switch that is currently turned off, and "Use SBAS" with a toggle switch that is currently turned off. Below these is a row for "Position update freq." with a dropdown menu showing "5 times per second". At the bottom, there is a navigation bar with a back arrow, a forward arrow, and the text "Next".

On the Parameters Screen You can change the settings to your desired Survey Style.

12:18

**New profile**

**Parameters**

Satellites Cut-off angle(°) 10

Use GLONASS ☒

Use BEIDOU ☒

Use GALILEO ☒

Use SBAS ☐

Position update freq.

Every second

Next

On the Screen to the left I have selected a Satellite Cutoff Angle (Elevation Mask) of 10°

GLONASS, BEIDOU, and GALILEO are Turned On.

SBAS(Mapping Birds) are Turned Off

Position Update Frequency is set to Every Second (Default is 5Hz or 5 Shots per Second)

Select Next

12:18

**New profile**

**Antenna**

Model Integrated

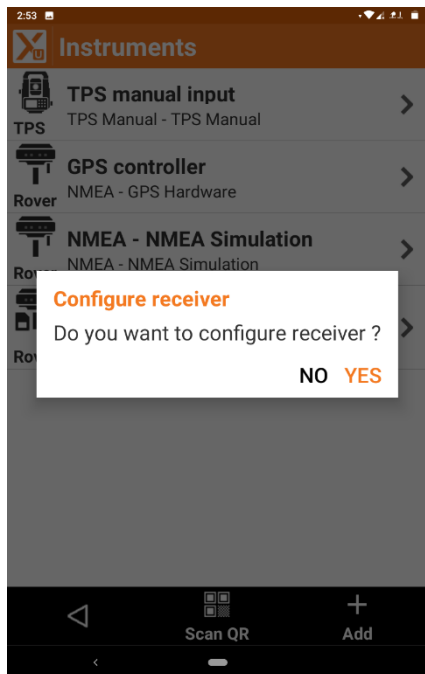
Height 6.562ft

Additional offset 0.000ft

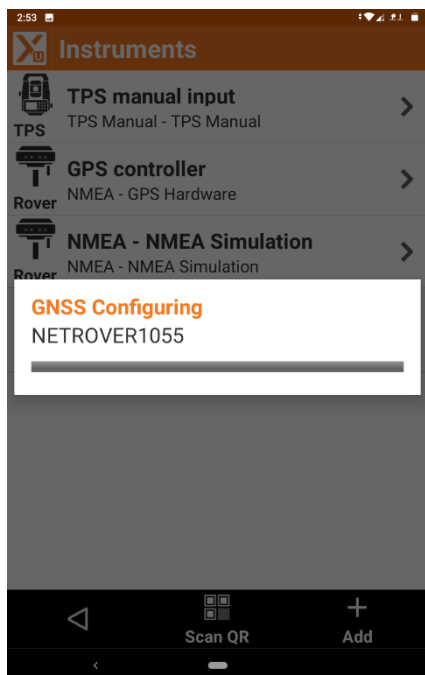
Accept

On the Antenna Screen Enter your Rod Height.

Select Accept



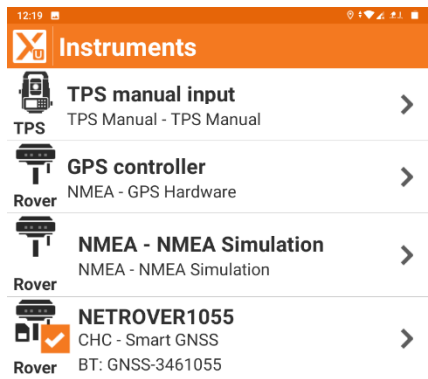
Configure Receiver – Select Yes



You will next see the Display

GNSS Configuring

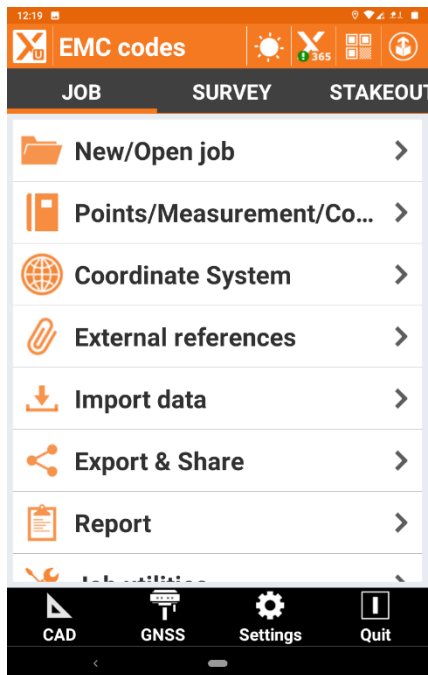
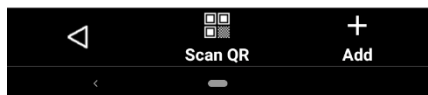
Your Profile Name



Once your Receiver is Configured you will be taken back to the Instrument Screen.

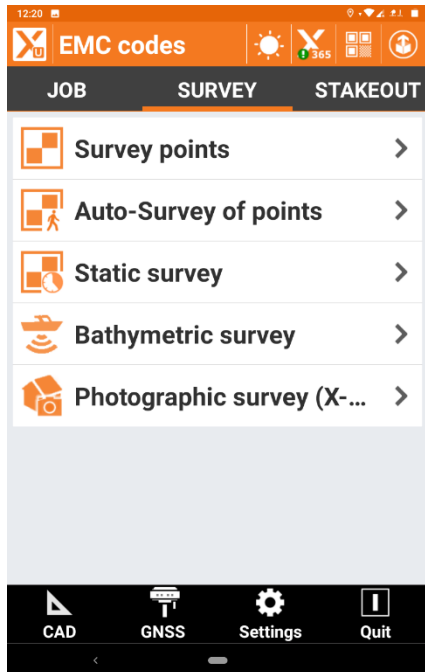
The Orange Check Mark signifies the Current Instrument Profile.

Select the Left Arrow

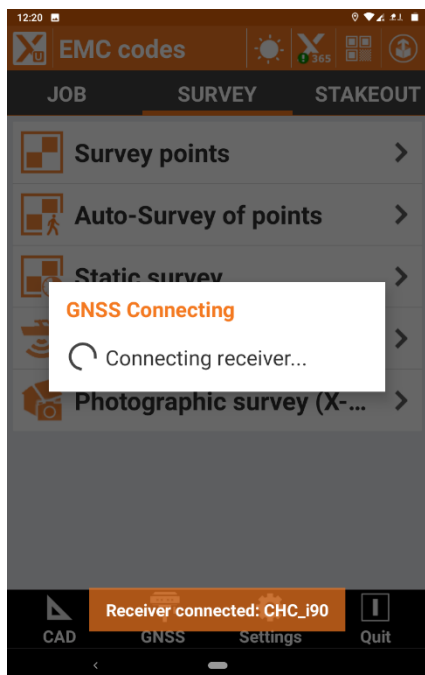


You will now be taken back to the Main Menu of X-PAD Ultimate and your Instrument Profile is Current and Configured.

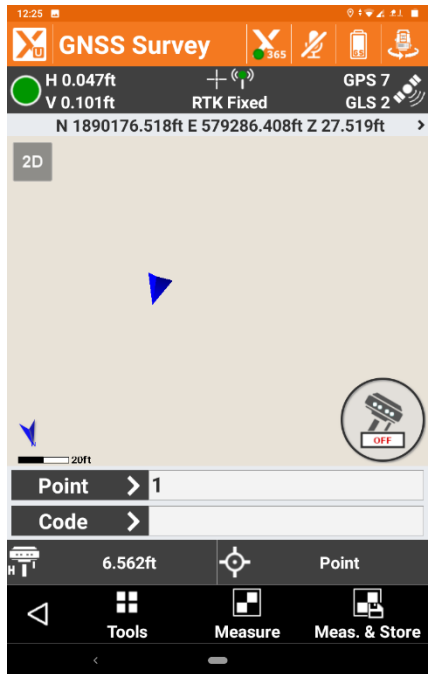
Select Survey



Select Survey Points to Locate Points.



X-PAD Ultimate will now Connect to your GNSS Receiver.



X-PAD will now display the GNSS Survey Screen with your Survey Information such as Point Number, Code, Rod Height, Residuals, and Type of Shot (Point or Line).