

How to: Install, Update and Provision LandStar

These instructions are specific to LandStar8 version 8.1 released April 1, 2024.

Version 8.1 includes a simpler registration method which supports PreCode (registration code) entry by scanning a QR code.

Before Installing LandStar8

Check for Android Operating System Updates

Make sure your Android device's Operating System is fully updated.

From Settings:

Settings > System > Software updates > System update > Check for updates

3-button navigation

Enabling soft buttons on the bottom of the screen will help navigation through large entry forms as there will be a dedicated back and a key to collapse the keyboard while in the Survey modes.

Google Pixel Devices	Samsung Devices
<p>Settings > Display > Navigation Mode</p> <p>Select 3-button navigation</p>	<p>Settings > Display Navigation type</p> <p>Select Buttons and swipe gestures</p> <p>Enable Gesture hints</p> <p>Enable Show button to hide keyboard</p> <p>> More Options > Swipe from bottom</p>

Install the Google Keyboard GBoard

The Google keyboard [GBoard](#) is highly recommended for use with LandStar. [GBoard](#) can be downloaded and installed from the Google PlayStore if the device has GMS (Google Mobile Services).

[Play Store](#) > search for [Gboard](#) > Install [Gboard – the Google keyboard](#)

Once installed follow the instructions to select and enable Gboard as the default keyboard.

When the keyboard is shown, you can change the [Gboard](#) preferences by clicking the [Settings](#) gear:



Click on [Preferences](#) then:

Enable [Number row](#)

Enable [Long press for symbols](#)

Gboard keyboard tricks

When entering a field that is primarily numeric, a numeric keyboard like this may be shown:



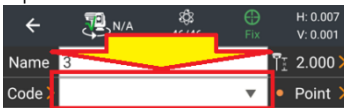
If you need to click a letter (like 'm' to switch a measurement to Meters), click on the space button:



and the keyboard will expand to alphanumeric entry:



LandStar8 has a dedicated text entry box for Codes, however no dedicated entry box is available for Descriptions:



Click and hold the **m** button:



to enter a question mark **?**. Everything entered after a **?** is placed in the **Point Description**.

Download and Install LandStar8 from the iGage website

Direct download from iGage.com

To directly download the latest iGage verified version, click on this link:

<https://igage.com/out/LandStarDistribution/LatestVersion/index.htm>

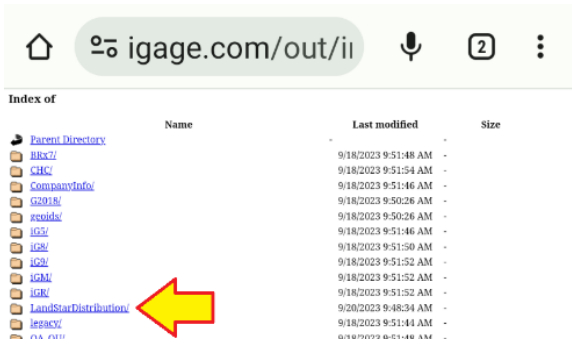
then download the **.apk** file found in the folder.

You may also open a browser on the Android device and navigate to www.iGage.com:



Find the link to **Out** on the gray top tool bar and click on it.

A web folder will be shown:



Click the link [LandStarDistribution](#):

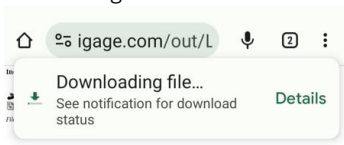


Click the link [LatestVersion](#):

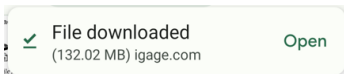


The [.apk](#) file in this folder will be the latest iGage approved version. Click on it.

The file will begin to download:

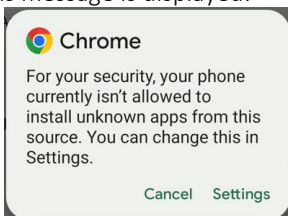


After the file downloads:

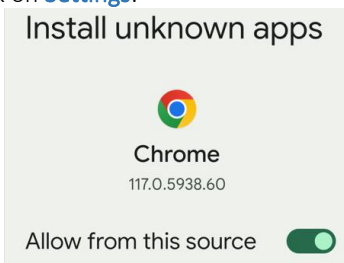


Click on [Open](#).

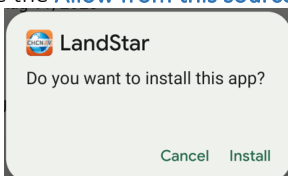
If this message is displayed:



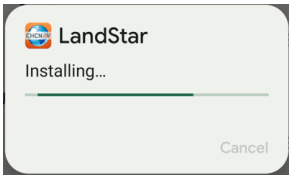
Click on [Settings](#):



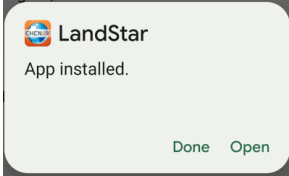
Slide the [Allow from this source](#) to the right. The installer should re-start automatically, if not click on back.



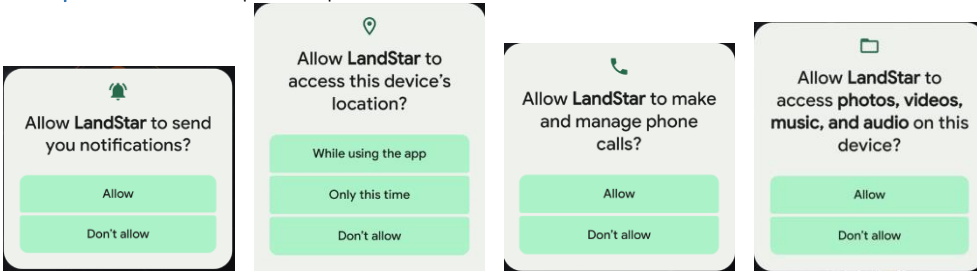
Click **Install**. Then wait while LandStar is installed and deployed.



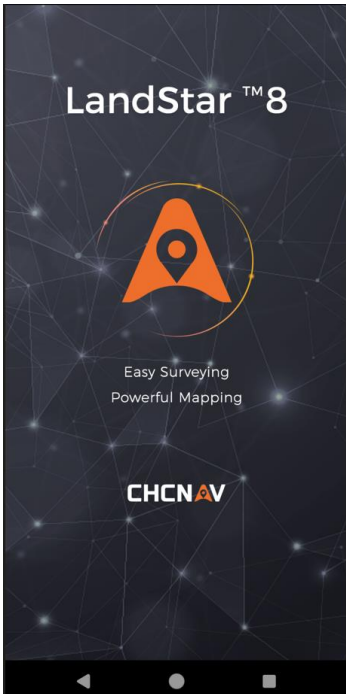
Finally, when the install completes:



Click on **Open**. **Allow** all requested permissions:

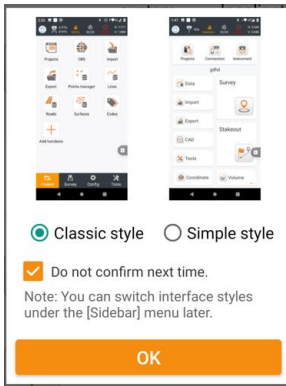


Wait while LandStar initializes:



The initial splash screen may take over a minute to complete.

Choose a menu structure:



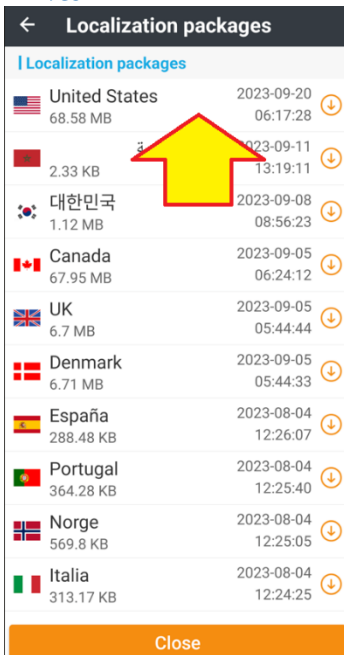
While the **Simple style** is simple, it does not match any of the descriptions in the [User Manual](#) or this FAQ. It might be best to use the **Classic style** while learning to navigate LandStar. Click the **Do not confirm next time** checkbox, then click **OK**.

Install the USA Localization package

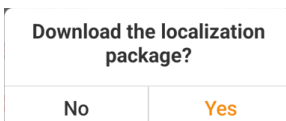
When prompted to download **localization package** files:



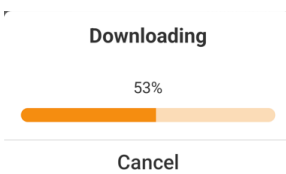
Click on **Yes**.



Click on the appropriate country **United States**.

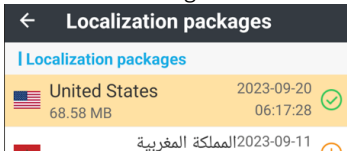


Confirm the package download, click **Yes**:




It will take several minutes to download the package. The package contains special projection zones, GEOIDS

and initial local settings.



Click **Close** at the screen bottom to return to the main menu.

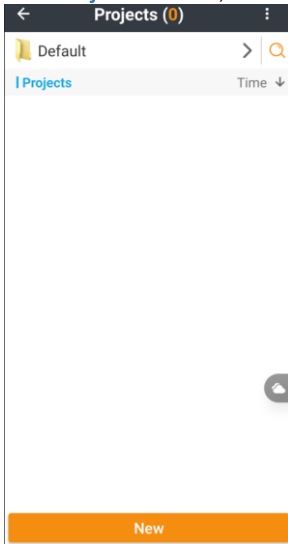
Create a New project with your local state plane zone

After the download and installation is complete, a  green checkmark will display next to the package. Click **Close** (at the bottom) to continue.

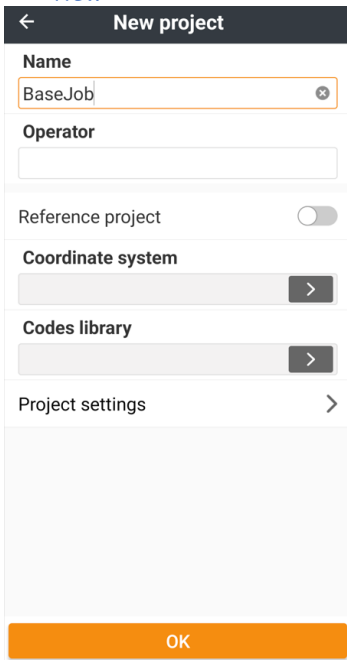



Projects

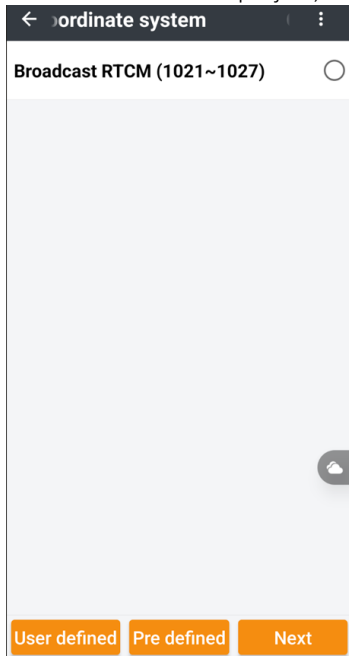
Click the **Projects** button,



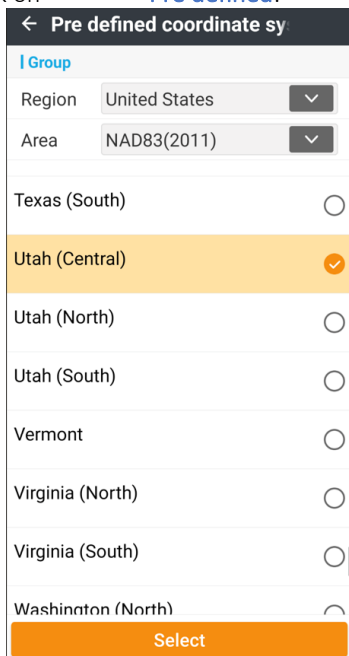
Click the **New** button at the bottom to create a new project:



Enter a **Name** for the first project, then click the  Coordinate system more button:

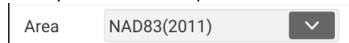


Click on  **Pre defined:**



Set **Region = United States** (or your local), **Area = NAD83(2011)**, then drag up / down to find the appropriate zone for your project. Additional information on Coordinate systems can be found in the User Manual.

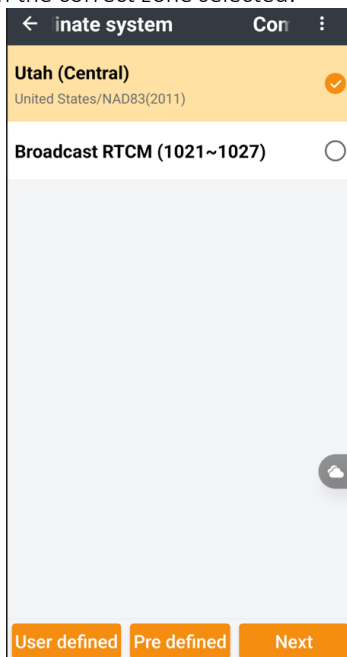
NOTE: If you are in a special state or county zone, click on:



then choose a specific special area:

- NAD83(2011)
 - USA COUNTY IA
 - USA COUNTY IN
 - USA COUNTY MN
 - USA COUNTY WI WCCS
 - USA COUNTY WI WISCRS
 - USA STATE ME
 - USA STATE OR
 - USA Territories
 - UTM
- Cancel

With the correct zone selected:



Important Note: NEVER select Broadcast RTCM (1021-1027)!

Click [Next](#).

Drag over to the right-column **Vert. adjustment** and select a **Geoid** file:

- None
- ARM_GEOID_GEO.ggf
- EGM96.ggf
- EGG97_QGRJ_SfASCII.grd
- sa2010.grd
- Geoid2018Minnesota_.CGD
- Geoid2018PRicoVirgin.CGD
- Geoid2018US.CGD
- Geoid2018Wisconsin.CGD
- GeoidAlaska12B.CGD
- GeoidAmericanSamoa12B.CGD
- GeoidGUAM12B.CGD
- GeoidHawaii12B.CGD

Add a GEOID to your default zone

Change the **Coordinate system Name** to include a reference to the selected **Geoid**:

← **Coordinate system**

Name

is **Horz. adjustment** **Vert. adjustment**

Type

Geoid file

Interpolation method

OK

Click **OK**.

Project settings >

Set default project settings

Click on [Project settings >](#) then [Units >](#):

← UHFSurvey1-1-Units

Angle
dd:mm:ss.ssssss

Azimuth display mode
Bearing

Azimuth input mode
dd.mmsssss

Lat/Lon input mode
dd.mmsssss

Lat/Lon display mode
dd:mm:ss.ssss

Horizontal distance
Feet (USSurvey)

Vertical distance
Feet (USSurvey)

Area unit
Acres

Volume unit
Cubic Yards

Station
K0+00.00

At a minimum, consider setting [Azimuth display mode](#) = [Bearing](#), [Horizontal](#) and [Vertical distance](#) = [iFeet/USFeet](#), [Area unit](#) = [Acres](#), [Volume unit](#) = [Cubic Yards](#), and [Station](#) = [K0+00.00](#).

Click [Back](#), then spend a few minutes looking through the [Decimals settings](#) and [GNSS settings](#). Additional information on Settings can be found in the User Manual.

Configure everything as you would like the new job defaults to be, then click on: [Save as default](#) so future jobs will share these settings.

Finally, click [Back](#), then [OK](#). The new project is available to work on.

License LandStar 8 so it can connect to devices

LandStar 8 will run in demo mode until it is activated. Most functions other than a connection to a GNSS receiver or a Total Station are available in the unlicensed Demo mode. It is possible to use an unlicensed demo copy to process Visual surveys and import and export work products.


30-day trial licenses are also available by self-service, see the 30-day trial section below.

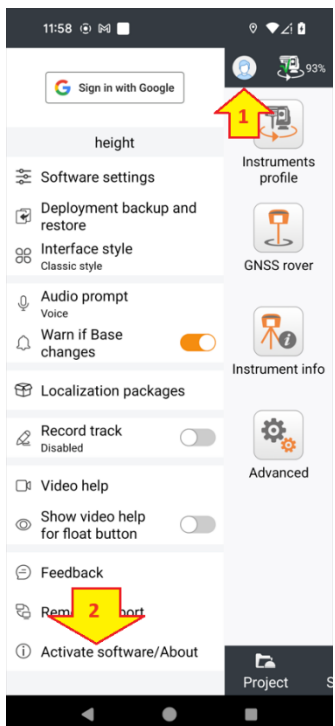
To permanently activate LandStar 8, buy a [Registration Code](#) (formally called a [Precode](#)) from an authorized dealer. Starting April 2024, codes purchased from iGage will include a QR code which will automate code entry:



A purchased [Registration Code](#) can be:
used on one device at a time
deployed on a lifetime total of 5 devices
freely transferred between the 5 devices an unlimited number of times

The Deployment Backup and Restore tool described in the User Manual makes transferring entire deployments by a single compressed file possible.

Click on the profile head  at the top-left corner to display the [System settings](#) panel. Drag the panel up:

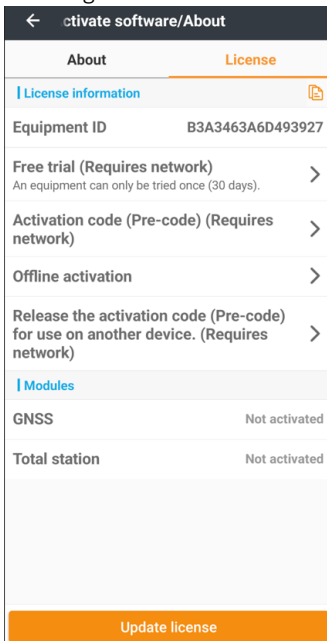


Click on [Activate software/About](#) at the bottom of the left-side menu.



Click on the [License](#) tab:

The licensing menu will be shown:



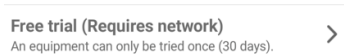
From this menu you can:

- Request a 30-day Free trial.
- Add purchased (Pre-code) activation codes for GNSS and TPS, or GNSS+TPS.
- Perform an offline activation.
- Release (Unbind) the activation code which allows transferring to another device.

Request a 30-day trial

Make sure your device is connected to the internet.

Click:



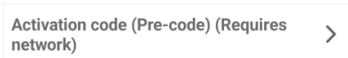
And follow the onscreen instructions. A device may only have 30-day trial, if you attempt to obtain a 2nd trial, this message will be shown:

Apply for trail failed. The equipment has already applied for trial in the past.

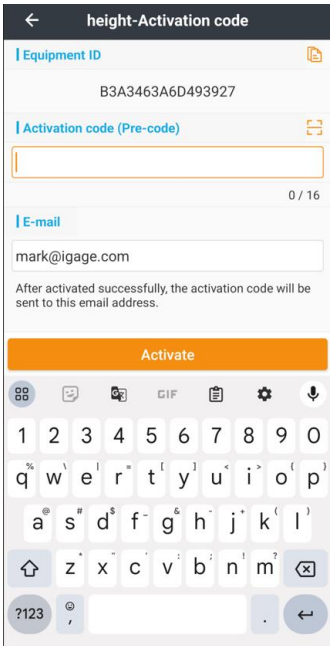
Add purchased activation code


Make sure your device is connected to the internet.

Click:



The **Activation code** menu will be shown:



Either type in your activation code, or click the scan button: 



And scan the QR code provided on the license certificate.

Finally click the **Activate** button:



The appropriate modules will be permanently activated:

Modules	
GNSS	Activated Expiration date: Permanent
Total station	Activated Expiration date: Permanent

An email detailing the activation will be sent to the registered address:

Dear Customer ,

Thank you very much for your interest in, and registration of LandStar field survey software.

Product : LandStar field survey software
Equipment ID : B3A3463A6D493927
Activation code : :

For more information on CHCNAV products please visit our website : www.chcnav.com

Perform offline activation

Offline activations allow permanent codes to be installed on a device without an internet connection.

Click on:

Offline activation >

The Offline activation menu is shown:

checkapis-Offline activation

Equipment ID
B3A3463A6D493927

Registration code
0 / 180

Register

Use the copy button to copy the **Equipment ID** into the clipboard, then send the EID to your dealer. They will request an **Offline activation** code which will be delivered as a 180-character code with a scannable QR code.

Scan the QR code then click **Register** and the license will be applied to the Android device.

Release activation code

A LandStar license can only be activated on one device at a time. A purchased license can be transferred to a total of 5 (five) devices over the registration code's lifetime. Please be careful when using transfers to not needlessly waste device registrations, only five are possible.

If a device is lost or damaged with the code attached, your dealer can help release the license for installation on a replacement device. The release could take several days, you can use a Free demo activation for 30-days on the replacement device.

Consider using a demo code to evaluate a new device.

IMPORTANT

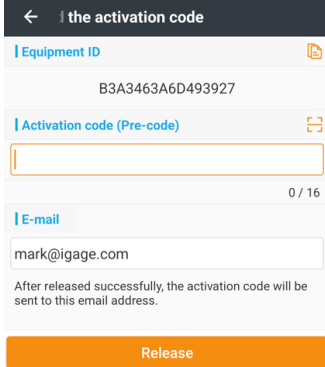
Before transferring LandStar to a new device, consider backing up EVERYTHING to a single Deployment backup file. These Deployment backups include all settings, instrument profiles, existing jobs.
See Deployment Backup / Restore in the User Manual.

Make sure your device is connected to the internet.

Click:

Release the activation code (Pre-code) for use on another device. (Requires network) >

The **Release activation** menu will be shown:



Enter or Scan the correct Activation code that is currently installed on the device.

The current code is not prefilled to prevent unauthorized license transfer. The Email must match the registered email address.

Finally click **Release** to remove the license from the current device.

An email listing the release, with the full registration code will be sent to the registered email address:

Dear Customer ,

The release of LandStar field survey software:

Equipment ID : B3A3463A6D493927

Activation code : [REDACTED]

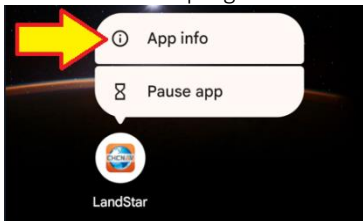
was successful. It is now possible to activate on another device.

For more information on CHCNAV products please visit our website : www.chcnv.com

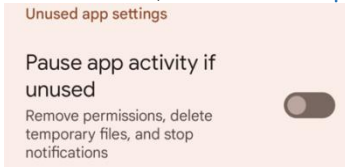
Operating System Optimizations

After installing LandStar, make the following operating system changes to prevent LandStar from freezing or losing permissions when running in the background, or after a few weeks of non-use.

Click and hold on the program icon on the desktop, then click the **App info** **App info** button:

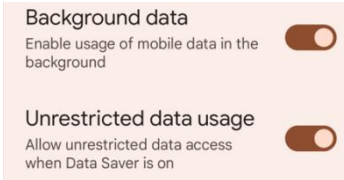


Under **Permissions**, disable **Pause app activity if unused**:



This will prevent the operating system from automatically removing permissions and cached files if LandStar is not used regularly. The removal of some permissions may result in LandStar being unable to start.

Under **Mobile data & Wi-Fi** enable background usage of mobile **Background data** and **Unrestricted data usage**:



Under **App battery usage** change battery usage to **Unrestricted**. This allows LandStar to continue to communicate with receivers and devices when another application is opened or while using the phone:

