2025

Pocket 3D v15.5.3

Patch release

Updates…

Pocket 3D v15.5.3, with improved functionalities, is now available for Windows and Android devices on myTopcon NOW!. iOS version is available in the AppStore.

New features and improvements:

- iOS: Hybrid machine setup available
- iOS: import DWG/DXF supported
- New pairing routine for GR-i3 with 3.1.3 firmware
- Improved mmGPS usage with Hiper XR
- TILT disabled for control points measurements
- Base station control points not displayed before valid localization
- Grade indicator improvements
- Several important bugfixes, as compare surfaces

Supported devices

Windows (v15.5.3)

- FC-5000 / SHC-5000
- FC-6000 / SHC-6000
- FC-6400 / SHC-6400
- FT-100
- Windows PC, tablets, …

Android 8 or higher (v15.5.3)

- FC-6000A
- FC-700 / SHC-700
- GX-10W
- Juniper CT8x2
- Phones/tablets

iOS 14 or higher (v15.5.3)

- Phones/tablets

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December 2025

Contents

Overview

Pocket 3D v15.5.3 is a new version of our long-ranging Pocket 3D software application. It's an aftermarket range pole system utilizing Topcon's & Sokkia's GNSS, LPS & Hybrid solutions. This version of Pocket 3D can be run on any Windows, Android and iOS platform.

Pocket 3D for Android on the CT8x2 or GX-10W is an integral part of Topcon's MC-Mobile solution and works closely together with MC-Mobile Excavator and MC-Mobile CTL. It's also called MC-Mobile Pocket 3D. This release of Pocket 3D supports all LPS, GNSS and mmGPS options. It's also offering the advantage of working with the cloud-based Sitelink2 solution.

The release notes gather all the important information that was found during validation and verification testing. Some of the new features are explained and introduced in the release document with some helpful tips and tricks.

This patch release contains especially bugfixes and improvements.

Latest recommended SW and FW

Even though Pocket 3D supports all SW and FW versions, we recommend using the latest versions as of now:

- SW_MC-MOBILE_RVR_AM_v15.5.3.203_ANDROID.apk for Android
- SW_POCKET-3D_RVR_AM_v15.5.3.103_WINDOWS.zip for Windows
- SW_POCKET-3D_RVR_AM_v15.5.3_iOS for iOS from the AppStore

- **GR-i3: FW 3.3.1 & GNSS FW 5.5.2**
- **Hiper XR/Sokkia GRX5: GNSS FW 7.1**
- **General GNSS FW 5.7**
- **LN-160**: Optical Firmware - LN-160 VERSION 16
- **LN-150**: Optical Firmware - LN-150 VERSION 16
- **LN-100:** Optical Firmware – LN-100 VERSION 1.08
- **GT 1200**: Optical Firmware – GT-600/1200 Series VERSION 16
- **GT 1000**: Optical Firmware - GT-500/1000 Series VERSION 2-1.03EN_01
- **GT 700/1500**: Optical Firmware - GT-700/1500 Series VERSION 6
- **PS-100**: Optical Firmware - 1.28EN_10
- **PS-200:** Optical Firmware – PS-200 Series VERSION 3

New Features

Hybrid machine setup available for iOS

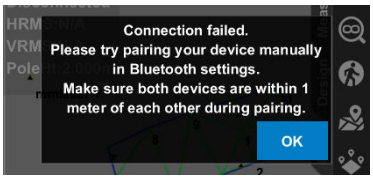
The hybrid machine file can now be created in Pocket3D v15.5.3 in iOS devices.

Import DWG/DXF files supported for iOS

Pocket3D v15.5.3 on iOS now supports the import of DWG/DXF files.

New pairing routine for GR-i3 using 3.1.3 firmware

The pairing routine for GR-i3 receivers running on controller firmware version 3.1.3 has been improved, to match RED compliance (cyber security). The display and GNSS receiver need to be within 1m of each other during the first pairing attempt. It may take several minutes before the Android pairing request appears.



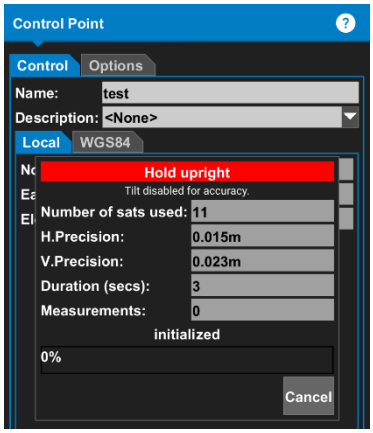
Improvements

mmGPS usage with Hiper XR

The usage of mmGPS with Hiper XR has been improved.

TILT disabled for control points measurement

Users are notified that TILT is disabled while measuring a control point with a TILT-enabled GNSS rover. If the tilt is too high, a message also prompts them to hold the pole upright. Previously, TILT had to be turned off manually before control-point measurement.



Base station control points not displayed before valid localization

When a base station is started over an unknown point, its control point will not be displayed on the map until a valid localization has been performed. This prevents showing an inaccurate position prior to localization.

Grade indicator

The “on-grade” range of the grade indicator has been modified to match better jobsite accuracy expectations.

Radio settings stored

Radio settings are now preserved when switching between different radio types within the same machine setup. For example, Pocket3D will retain the original NTRIP credentials entered for a HiPer XR even after switching to the internal radio and then back to NTRIP.

Spanish language

The Spanish language file has been updated and improved.

Project details: Deflection and Rotation now use configured display units

Pocket3D v15.5.3 now displays localization parameter values in the Project Details dialog according to the selected display units. Previously, these values were always shown in DMS:

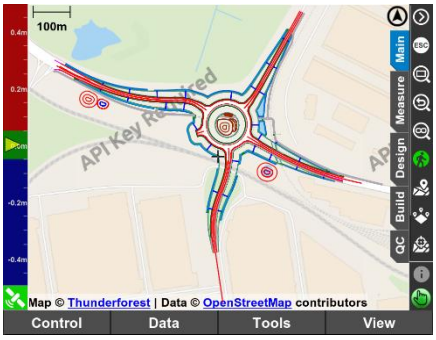
- **Deflection** is now shown using the **grades display units**, allowing users to view the value in percentages when applicable.
- **Rotation** is now shown using the **angle display units**.

Bugfixes

Compare 2 surfaces

In some cases, the result of compare of 2 surfaces was incorrect. This issue has been resolved.

OSM background map



Issue resolved related to OSM background map not loading anymore in 15.x software.
NOTE: “API key required” watermark on map is normal behaviour for this software build.

Cut sheet report error

Issue resolved related to cut/fill values in cut sheet report when performing stake out of alignment with surface elevation.

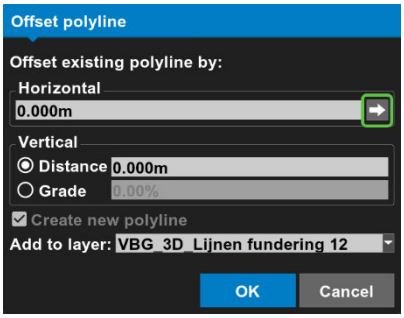
Elevate polyline result

Issue resolved related to elevate polyline results not being saved when closing and restarting the application.

Import txt file

Issue resolved related to import of txt file with space delimiter, where the import didn’t succeed.

Segment – create offset polyline



Resolved an issue where the direction arrows in the Offset Polyline dialog were not visible when offsetting a single polyline segment, making it unclear whether the offset would occur to the left, right, or both sides.

Working surface display settings - Plane

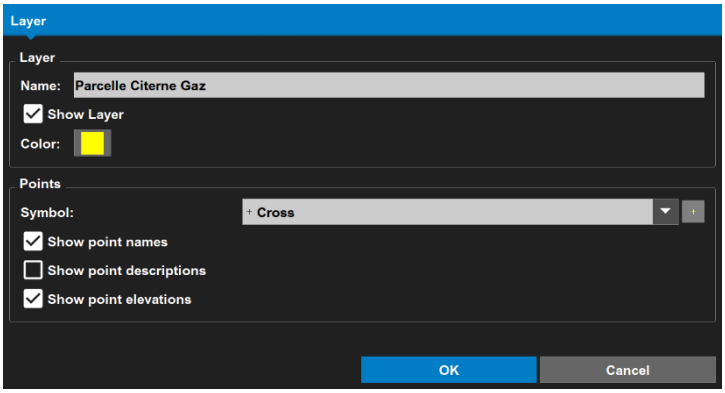
Fixed an issue where the Plane display settings (Show Grid Lines, Grid Interval and color) were not being applied correctly.

General Info, Defects and Known Issues

List of general information relating to general changes, known issues and/or items not supported in Pocket 3D v15.5.

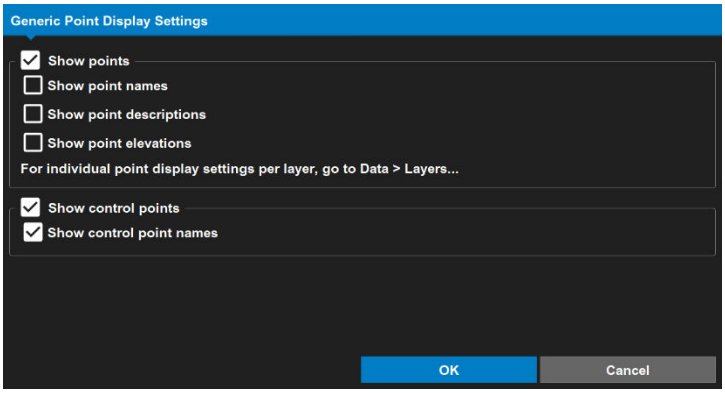
- Pocket 3D v 15.5 only supports serial connection to Hiper XR and Sokkia GRX5 for external radio usage. If the user wants to connect the field controller over serial connection to the GNSS receiver, he should use a DB9 RS-232 serial cable. A USB-C to USB-C cable will not work as serial connection.
- Pocket 3D v 15.5 only supports the usage of a total station (GT and PS series) set with distance units meters and US survey feet on the total station. When the distance units are set to International feet, errors may occur.
- After starting up a Base Station, by default the last used settings (Antenna type, radio settings, etc) are stored. Next time the user wants to start up a different base, he should reconfigure those settings again (matching the new base station). Use the < Discover > button to find the new Bluetooth device in the device list to connect to the device.
- Pocket 3D v 15.5 only supports the import of metric CAD files (.dwg or .dxf) in meters. Importing CAD files in millimeters or centimeters will result in scaling issues.
- To import and export files on the GX-10W and FC-700, the user should use the folder Internal Storage > Download when selecting the folder “Downloads” as file location in Pocket 3D.
- Bluetooth connection between “older” Total Stations and GX-10W using Pocket 3D may lag. We see delay in the distance & angle values and coordinates update. Known delay issues appear with Total Stations running the “older” Bluetooth module WT-41.
  Affected devices:
  - LN-150 with SN LW008099 and earlier
  - All GT-500/1000
  - GT-600/1200 with SN starting with XQ

- Connecting to Hiper XR or Sokkia GRX5 over Wi-Fi, the checkbox “Use authentication” should always be unticked, as by default configured in a new machine file created in 15.5. This issue is related to a GNSS FW issue.
- Isolate surface has some issues in 15.5 in some specific situations.
- On Windows when installing Pocket 3D V15.5 it will upgrade the remote support client too. The customer will be asked to agree to the install, shutting down remote support client and potentially restarting the device. Please agree to all those prompts.
- After a fresh install, the splash screen will stay up much longer than normal. This only happens once, as Pocket 3D needs to move specific files in the background.
- WM6 is no longer supported.
- Sitelink v1 is not supported.
- USB on Android needs to be browsed to before usage in Pocket 3D.
- When hard resetting your Android device, you will lose all your apps but also your oaf file, as the device id might change.
- Removed the way to switch cross section on/off inside Display options -> Layout tab. This is now moved to the “View Area” tab in the same dialog. It is now setup like in 3DMC. The user can define its own cross section view, full screen or half screen and can switch between different views via the Next state toggle button inside the shortcut bar.
- To use the Built-in GNSS of the phone/tablet/controller, select machine file “Built-In GPS”. NOTE: You will not achieve a fixed solution with that type of GNSS.
- When connecting to a GNSS receiver, there are 3 type of potential error codes: Txxx – for timeout, Rxxx – for rejected and Exxx – for Error. The xxx stands for the ID of Gril command that has failed. E.g., T002 – stands for your 2. Command has timed out, which means, you don’t have a valid connection to the receiver.
- **Surface/Device data settings** are set to default (shown as default green color in section view) if the machine is connected to the SL site after the data sync.
- Empty layers will not be able to be synced to sitelink. If you have an empty layer inside your site, the data sync icon might always show “Device data has changed”.
- General versus per Layer settings: Operator can set his personalised preferences for each layer starting with the point symbol , color and display properties (point name, description and elevation). These



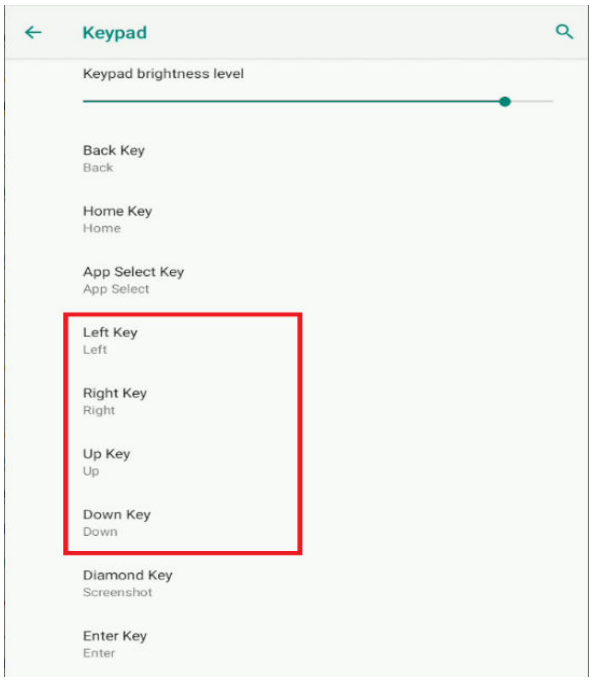
settings can be personalized for every layer: **Data -> Layers -> Edit**

The operator can set the overall/general display settings under **View -> Display Options -> Points…,** without going into each layer separately.
General point display settings will respect the layer settings, and will display only what is enabled.



- Pocket 3D on CT8x2: use F1/ F2 key as Enter/ESC button inside Pocket 3D.

  Pocket 3D on Android: Go to Settings -> Keypad -> advanced to use arrow buttons inside Pocket 3D e.g. for rotating total station.



- All LN-150 units that have the LPS/MC OAF, can easily be identified with the label. If you connect to a LN150 without LPS/MC oaf, or an LN-100, Pocket 3D will show you a message after station setup, notifying you, that this station setup can only be used with Pocket 3D and not for the machine.
- The iOS version can't be used to calibrate a mmGPS laser transmitter, nor to download/upload calibration data of the laser transmitter, due to missing BLE module in the transmitters.
- Landscape mode is not supported on small devices.
- FC-600 doesn't support GPSlock using TS only due to no available internal GNSS. Although, GPSlock is available for hybrid machines.

Works with 3D-MC

NOTICE

LN-150 does not have an on-board display to check the activated options. Once P3D gets connected to the LN-150, the LPS/MC options and firmware version can be checked via the TS status dialog and the station setup routine

NOTICE

P3D cannot be used with GRi3F, as this unit does not have any batteries at all, and has to remain on the mast of a machine to get powered on.

NOTICE

When using the P3D and 3D-MC software applications in the MC-Mobile workflow with the same NTRIP account, it may take some time to obtain a fixed solution when switching between the two applications. This is because some NTRIP accounts or casters may still be holding the account open from a previous connection, even if the device has stopped using it. This can result in a delay of up to 5 minutes before the NTRIP caster frees up the account. It's important to be aware of this potential delay and consider using separate NTRIP accounts or casters for each software application to avoid conflicts.

NOTICE

When switching between P3D and 3D-MC software applications in the MC-Mobile workflow, we recommend disconnecting and shut down the software before swapping the GRi3 antenna. It may take some time for the GRi3 to swap between CAN and BT connection.

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