Release notes for ViewPoint 1.4.21

Date: 2026-11-05

Minimum Android Version required: Android 9 (SDK 28)

Target Android Version: Android 16 (SDK 36)

Bug Fixes and Improvements

- Fixed an issue where the cursor depth could display incorrectly after switching radar channels.
- Minor improvements and compatibility updates.

ImpulseRadar Sweden AB
Skolgtan 22
SE-939 31 Malå, Sweden

+46 953 100 08
info@impulseradar.se
www.impulseradar.com

Org. No.: 559014-4035
VAT No.: SE559014403501
Bankgiro: 894-3532

Release notes for ViewPoint 1.4.18

Date: 2026-08-24

Minimum Android Version required: Android 9 (SDK 28)

Target Android Version: Android 16 (SDK 36)

Android 16 Update & Stability Improvements

- Updated ViewPoint's target version to Android 16 / SDK 36 to meet the latest Google Play Store requirements.
- Fixed several minor bugs and Improved overall stability.

Release notes for ViewPoint 1.4.17

Date: 2026-06-09

Minimum Android Version required: Android 9 (SDK 28)

Target Android Version: Android 15 (SDK 35)

Bug Fixes & Improvements

Improved initialization of Google Maps

In previous versions, the app could enter a state where the status could indicate that Google Maps was initialized and ready for offline use, even though some map functionality did not work properly, such as displaying markers on the map. This issue has now been addressed by making the initialization procedure more robust.

Note: For the best user experience, use a tablet with a SIM card and an active internet connection. This avoids the need to manually cache map tiles or rely on offline map behavior.

Release notes for ViewPoint 1.4.16

Date: 2026-03-26

Minimum Android Version required: Android 9 (SDK 28)

Target Android Version: Android 15 (SDK 35)

Bug Fixes & Improvements

- A new firmware version (0130) is now bundled with the app.
  This firmware fixes a bug introduced in version FW0129, where some GPR systems reported incorrect battery voltage, leading to inaccurate battery level readings. This issue has been resolved in FW0130. With this upgrade all our products will report correct battery level.

Release notes for ViewPoint 1.4.15

Date: 2026-01-19

Minimum Android Version required: Android 9 (SDK 28)

Target Android Version: Android 15 (SDK 35)

Bug Fixes & Improvements

- Fixed UI issues where the Android navigation bar overlapped the map and zoom controls.
- The app now closes the socket connection to the GPR system when entering the background, preventing conflicts with ViewPoint 2 Beta. Contact our support if you are interested in testing ViewPoint 2 Beta.

Release notes for ViewPoint 1.4.13

Date: 2025-11-07

Minimum Android Version required: Android 9 (SDK 28)

Target Android Version: Android 15 (SDK 35)

Bug Fixes & Improvements

- **Android 15 Navigation Bar Overlap**
  The Android system navigation bar will no longer overlap the bottom toolbar in ViewPoint.
- **Dynamic Gain**
  Dynamic Gain has been updated so it never reduces amplitudes. It only increases them. This results in a clearer radargram and reduces the need for additional Contrast or manual gain adjustments.
- **Background Removal**
  On certain firmware versions, the first collected traces can be unusually noisy, which could introduce unwanted artifacts when the background-removal filter is enabled. This is now handled correctly so these traces no longer affect the result.
- **Example Data Installation**
  Example data is now installed automatically during a clean installation of the app (this was missing in VP 1.4.12).

Release notes for ViewPoint 1.4.12

Date: 2025-09-29

Minimum Android Version required: Android 9 (SDK 28)

Target Android Version: Android 15 (SDK 35)

New features

Minor features

1. Application target has been updated to Android 15.
2. The example data project has been updated.
3. The ImpulseRadar logo has been updated.

Bug fixes

- The depth values of the markers in imperial unit have been corrected across the app, on the map view, the PDF report and the KMZ archive.
- The visibility of the trigger settings has been fixed when in advanced settings mode.
- The broadcasting of the markers's screenshot has been fixed.

Release notes for ViewPoint 1.4.11

Date: 2025-05-08

Minimum Android Version required: Android 9 (SDK 28)

Target Android Version: Android 14 (SDK 34)

Bug fixes

- The depth values of the markers have been corrected across the app, on the map view, the PDF report and the KMZ archive.
- A bug that made ViewPoint crash when a marker was placed in HF/LF or DV views has been fixed.

Release notes for ViewPoint 1.4.10

Date: 2025-05-06

Minimum Android Version required: Android 9 (SDK 28)

Target Android Version: Android 14 (SDK 34)

Bug fixes

- The widget “Delay slope” no longer appear.
- Emptying the data folder with language settings set to other languages than English no longer crashes the app.

Release notes for ViewPoint 1.4.9

Date: 2025-04-28

Minimum Android Version required: Android 9 (SDK 28)

Target Android Version: Android 14 (SDK 34)

Bug fixes

- The process of loading the Google map no longer get stucks in the “map not showing” mode.
- PDF reports can be generated in other languages than English.

Release notes for ViewPoint 1.4.8

Date: 2024-11-08

Minimum Android Version required: Android 9 (SDK 28)

Target Android Version: Android 14 (SDK 34)

New features

Minor features

4. If ViewPoint does not recognize the GPR unit that it is trying to connect to, a popup window will allow the user to say to ViewPoint which type of GPR unit they have (PinPointR, CrossOver, PLT, …). This feature is meant to prevent users from being stuck with an “Unknown Antenna”.

Bug fixes

- Markers will be placed correctly when moving back in the data while the crosshair is locked to the red line.
- In the application information menu, the links to our website and social media are fixed.
- The firmware folder is now updated correctly upon installation of ViewPoint.
- For users with devices set in French or Chinese (simplified), generating .pdf and .kmz files as well as screenshot folders will no longer cause ViewPoint to crash.
- PLT users will no longer experience a crash when pressing the play button a second time.
- Placing a marker while not connected to a GPR unit will no longer cause ViewPoint to crash.
- ViewPoint will no longer crash when accessing the application information page and when pressing the “upgrade app” button.
- Operator and company names will now be properly saved even after closing ViewPoint.
- The channel selection button in the top bar of the radargram page will now longer appear when using a single channel GPR unit.
- The start up procedure after the first installation of ViewPoint has been made more stable.

Release notes for ViewPoint 1.4.7

Date: 2024-08-14

Minimum Android Version required: Android 9 (SDK 28)

Target Android Version: Android 14 (SDK 34)

New features

Minor features

1. If the Android device has access to mobile data, ViewPoint will use the mobile data to access the Google map. Therefore, it is now possible to connect to the GPR unit via Wi-Fi and gather data while maintaining access to a live Google Map. Note that the first time ViewPoint is installed, it is still necessary to initialize the Google Map via Wi-Fi once, the status of the Google Map is indicated on the Main Page.
2. Added language localization for Chinese (simplified) and French. If the Android device default language is neither Chinese nor French, ViewPoint will default to English. Other languages can be added upon request. Note that as a consequence the language setting menu has been removed from the User Preferences page.
3. The Baud Rate setting is now visible when Total Station is selected as the GPS option in the Antenna Settings page.
4. A new firmware version (49012700) is packaged with ViewPoint 1.4.7. Firmware 49012700 solves the issue with noisy traces at the beginning of measurement, thereby improving the quality of the background removal filter in ViewPoint 1.4.7. We recommend our users to upgrade their GPR unit's firmware to 49012700.

Bug fixes

- Empty radargram windows (blue screens) will no longer appear.
- The battery symbol is correctly updated and will no longer be an empty grey container.
- The release date of ViewPoint is now correctly updated in the Application Information page.
- Cached Google Maps (when the Android device does not have access to mobile data) are no longer black or grainy at the cached location.
- A bug that made markers appear in the empty top panel of Dual View (HF or LF) when the bottom panel is occupied by the first profile has been fixed.
- Bugs related to hyperbola and crosshair movements with cursor lock ON are now fixed.
- A bug that on some rare occasions duplicated project folders is now fixed.
- A bug related to Xiaomi devices specifically has been fixed, ViewPoint will no longer crash on start up for Xiaomi devices without a GPS sensor.

Release notes for ViewPoint 1.4.6

Date: 2024-05-23

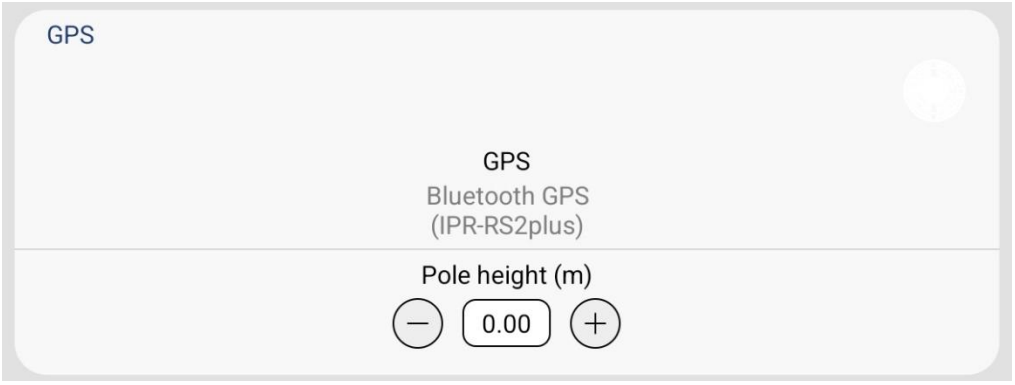
Minimum Android Version required: Android 9 (SDK 28)

Target Android Version: Android 14 (SDK 34)

New features

Minor features

1. Improved GPS information for GPS systems outputting multiple types of NMEA messages.
2. Improved crosshair movements in dual-panel views. Moving the crosshair with fingers is now permitted across panels. Moving the crosshair via the popup window down from the top to the bottom panel will first vertically scroll the top radargram to its end before moving to the bottom panel.
3. Possibility to add the GPS pole height for Bluetooth GPS in the antenna settings as seen below:



The pole height value will be added to the GPS information displayed by ViewPoint but not to the GPS data saved in the .cor files. Instead the pole height value will be saved in the header file (.iprh).

Bug fixes

- Switching between from the HF to the LF radargram view no longer causes ViewPoint to crash for old firmwares.
- GPS systems outputting non-NMEA messages will no longer cause ViewPoint to crash. Instead, ViewPoint will display a message in the GPS information popup to ask the user to setup their GPS system to output NMEA messages.
- The crosshair no remains on the screen after closing the hyperbola and known depth popups.

Release notes for ViewPoint 1.4.5

Date: 2024-02-01

Minimum Android Version required: Android 9 (SDK 28)

Target Android Version: Android 13 (SDK 33)

New features

Minor features

1. An improvement was made to the time-sync adjustment of GPS data. In the event that the measurement environment causes a significant number of missed traces, the time-sync step with the PinPointR or CrossOver antenna will be skipped. This change allows the GPS data (.cor file) to remain valid within 10 cm of accuracy.
2. The background removal filter is no longer disturbed by the first trace were it to not correspond to measurement data but to noise from the system and/or environment.
3. When using a GPS system not configured to send out GGA-type NMEA messages via Bluetooth, ViewPoint will still display the full message to the user (in the appropriate GPS information menu) but with a mention that this is not compatible with ViewPoint and that they should reconfigure their GPS system. Importantly, the non GGA-type NMEA messages are only reported to the user but not used by ViewPoint during measurement.

Bug fixes

- ViewPoint will now wait until the Android device acquires its own geo-coordinates before allowing the user to enter the map overview, thereby ensuring that ViewPoint does not crash when the “center the map on my location” button is pressed.
- The maximum zoom level no longer causes an offset between the crosshair and the markers placed at this zoom level.
- Moving the crosshair via the popup arrows is no longer hindered by the left and top edges of the radargram view and will continue until the first trace (toward the left) or the zero level (toward the top) is reached.

Release notes for ViewPoint 1.4.4

Date: 2023-12-12

Minimum Android Version required: Android 9 (SDK 28)

Target Android Version: Android 13 (SDK 33)

Bug fixes

- An issue causing ViewPoint to crash on launch was fixed. Note that this issue only occurred if you had updated to ViewPoint 1.4.3 from 1.4.2. Regardless of which version of ViewPoint you currently have (1.4.2 or 1.4.3), the issue is fixed with 1.4.4.

Release notes for ViewPoint 1.4.3

Date: 2023-12-07

Minimum Android Version required: Android 9 (SDK 28)

Target Android Version: Android 13 (SDK 33)

Bug fixes

- An issue preventing the creation of a project (single line and multi line) when ViewPoint was first installed (or updated) is now fixed.
- An issue preventing the correct wheel type to be loaded into the firmware when ViewPoint was first installed (or updated) is now fixed.

ImpulseRadar Sweden AB
Skolgtan 22
SE-939 31 Malå, Sweden

+46 953 100 08
info@impulseradar.se
www.impulseradar.com

Org. No.: 559014-4035
VAT No.: SE559014403501
Bankgiro: 894-3532

Release notes for ViewPoint 1.4.2

Date: 2023-11-23

Minimum Android Version required: Android 9 (SDK 28)

Target Android Version: Android 13 (SDK 33)

New features

Minor features

1. Non-GGA NMEA messages are now displayed in the GPS info with a message notifying the user that this is an unsupported format and that their GPS system should be configured to send GGA NMEA messages.
2. When a new version of ViewPoint is installed or after an update of ViewPoint, the cache is now automatically cleared.
3. When ViewPoint is installed or upgraded, the antenna factory reset will happen for the first antenna connected after installation (regardless of whether it was connected or not during the installation of ViewPoint).

Bug fixes

- The Galileo satellite constellation is no longer part of the default GNSS configuration for the internal GPS.
- An issue causing blue screens when starting a new project is now fixed.
- An issue causing markers misalignement was fixed.
- The prompt for the default wheel drive type on first installation has been reinstated.
- Vertical scrolling is no longer synchronized in the HF-LF view between the HF and LF panels.
- The selected GPS settings are now correctly saved and displayed in the Antenna Settings menu upon exit/re-entry.

Release notes for ViewPoint 1.4.1

Date: 2023-11-01

Minimum Android Version required: Android 9 (SDK 28)

Target Android Version: Android 13 (SDK 33)

New features

SBAS Service Area

As of version 1.4.0, it became possible to activate the Satellite Based Augmentation System (SBAS) of the internal GPS. With version 1.4.1, it is now also possible to manually set the SBAS service area as follow:

1. Go to Antenna Settings and press GNSS Configuration to display the following page:



2. In the “SBAS service areas” section you can select the option that you deem appropriate for your region (EGNOS: Europe, WAAS: North America, MSAS: Japan, GAGAN: India, SDCM: Russia) and press submit.
3. Importantly, the default AUTO setting will let the internal GPS automatically scan for the best SBAS service area at your location. However, if you are located in a region where several SBAS service areas are within reach, a conflict might arise that prevents you from receiving the SBAS correction. If that is the case, manually setting the SBAS service area to your region is the way to go.
4. You can find the explanation of 2. and 3. by pressing the question mark button in the “SBAS service areas” section.

Release notes for ViewPoint 1.4.0

Date: 2023-10-25

Minimum Android Version required: Android 9 (SDK 28)

Target Android Version: Android 13 (SDK 33)

New features

Android Mock GPS

It is now possible to utilize the Mock GPS feature of Android devices to receive GPS data in ViewPoint. This allows the use of GPS systems that require a specific third-party application and/or need to receive their correction data via the internet.

Bluetooth GPS

It is now possible to connect a GPS system wirelessly via Bluetooth to send GPS data to ViewPoint. To that end, simply:

1. Connect your GPS acquisition system to your Android device via Bluetooth.
2. Select “Bluetooth GPS” as the GPS setting in the Antenna Settings menu and select your paired Bluetooth GPS device in the subsequent popup menu.

Enhanced Crosshair behavior

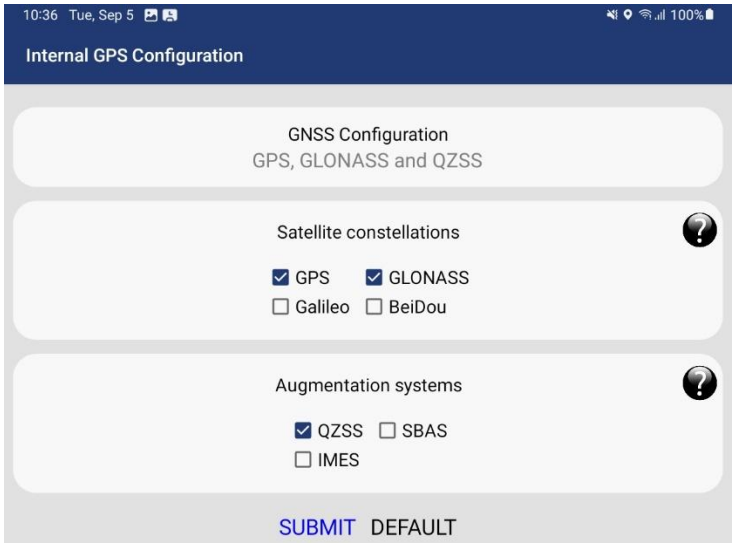
For a better user experience, the following modifications were made to the crosshair:

1. Crosshair position is now defined by the aimed sample and trace so that it does not change on scroll and zoom and remains fixated at the user intended position.
2. Zooming with the crosshair activated now focuses on the center of the crosshair to allow for the facile observation of locations of interest in the data.
3. A crosshair that would leave the screen due to scroll or zoom (as it follows the aimed position it is not bound by the display anymore) leaves a vertical or horizontal line behind and will reappear on screen if the user were to scroll/zoom back to it. This is especially useful in the HF/LF and DV views.
4. It is no longer possible to set a crosshair above the zero level.

GNSS configuration for the internal GPS

It is now possible to select a different GNSS configuration than the European default (i.e. GPS + Galileo + GLONASS + QZSS) for the internal GPS. To that end:

1. The firmware version should be 49000124 or higher on the ImpulseRadar system. We provide the upgrade file already packaged with ViewPoint version 1.336. To upgrade the firmware go to Antenna Settings > Antenna Info (Press once) > Press “Firmware / Fgpa upgrade” > Browse File > Firmware > Select DUAL_0124-upgrade.elf > Press “Start Upgrade”.
2. Go to Antenna Settings and select “Internal GPS” as the GPS system.
3. A sub-menu “GNSS configuration” will appear below “Internal GPS”, which, upon click, will display the following:

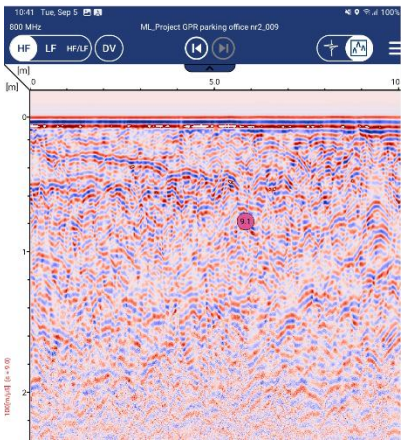


4. Simply select your desired GNSS configuration and press submit. ViewPoint will take a few seconds to perform the operation and will display “GNSS configuration successfully sent to the internal GPS” at the bottom of the screen when done. Note that you can come back to the default configuration at any time by pressing the default button.
5. Further note that all combination of satellite constellations and augmentation systems are not possible. For more information on what is possible press the question mark buttons to display the list of allowed combinations.

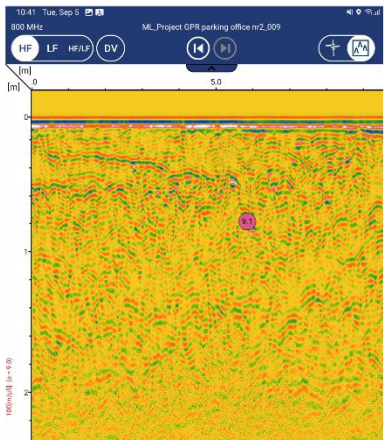
Radargram color scales

Three new color scales were added to ViewPoint in addition to the traditional grey scale. These new color scales are called Temperature, Rainbow and Seafloor and look as follows:

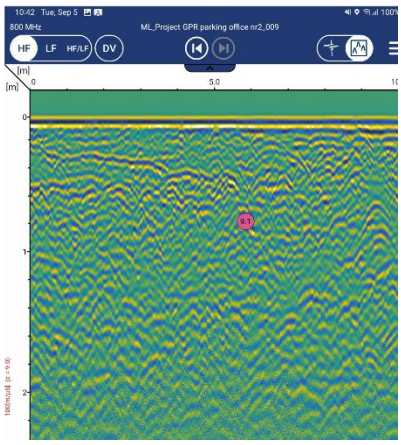
Temperature



Rainbow



Seafloor



To change the color scale, go to the User Preferences menu and locate the “Radargram Color” setting between the Markers and Language settings. Upon clicking, a popup menu will appear where you can select the color scale for your radargrams.

Minor features

1. It is now possible to add the current date to a Multiline project similar to a Single line project.
2. The radargram settings (HF-LF sync, Background removal, Gain Mode, Gain levels and Contrast) are now saved from one use to the next.

Bug fixes

- Fixed a bug that made ViewPoint crash randomly when the start, pause, continue, and stop measurement buttons were clicked. A similar fix was applied to the previous and next profile buttons.
- Fixed a bug that made the LF radargram over-gain compared to the HF radargram for the same manual gain settings. The LF radargram now follows the same gain behavior as its HF counterpart.
- Fixed a bug that made the distance between profiles of a Multi-Line project always 1 m regardless of the value entered by the user.
- Fixed a bug that made ViewPoint crash randomly when a marker was placed on the radargram.