

Release Notes - ViewPoint 1.306

Date: 2023-06-22

Current Release Version: ViewPoint 1.306

Minimum Android version required: Android 6.0 (Marshmallow) (SDK 23)

ViewPoint 1.306

News

Manual gain

The sensitivity of the manual gain has been improved.

Fixed bugs

The permission to save data to local storage is fixed for Android versions 11+ and users of these devices can now create projects.

ViewPoint 1.304

News

Enable/Disable Crosshair

Double tap on the radargram to enable/disable the crosshair.

Fixed Bugs

The corporate logo was not added to the PDF report.

ViewPoint 1.300

News

Dynamic Gain

In the filter window, you can now select between “manual” and “dynamic” gain. When the dynamic gain is on, an individual gain curve is calculated and applied to every single trace.

In this mode, the user only needs to adjust the contrast to the desired level. The dynamic gain curve is specially preferred to use on soil with high conductivity or when the material/soil varies a lot along the profile.

HF-LF Sync

In the filter window, you can now activate “HF-LF” sync. In this mode the filters of the high frequency and low frequency will be synced, so that you do not need to adjust it individually.

Draggable Cross Hair

It’s now possible to drag adjust the positioning of the cross hair by dragging it around with your finger.

HF/LF View

When the HF/LF view is selected (displaying the HF and LF channels at the same time), the vertical scroll sync between the channels has been removed. So now you do not need to display the same depth for both channels.

The depth is adjusted individually for each channel. E.g., you can select to display the depth 0-2 m on the HF channel and 2m and below on the LF channel.

Depth field in the KMZ

A depth field in the KMZ file has been added

Altitude Field in KMZ and PDF

An Altitude field in the KMZ file, and the PDF Report has been added

Plus Functionalities

All Plus functionalities has been opened so that it’s now available for all antennas:

- “Precision Markers”
- “Continue measurement on saved profile”
- “Support for total station (pseudo NMEA)”

Fixed Bugs

- The radargram for the LF channel was not displayed when the HF channels was disabled by the user.
- Problems to browse files when upgrading Firmware/FPGA on Android 11+.
- Problems with the Firmware/FPGA upgrade function.

ViewPoint 1.232

News

Send Files

It's now possible to send files directly from the file browser in ViewPoint.

It's only possible to send single files, like *.pdf, *.kmz or *.zip. So, if you want to send a whole project, you need to zip the project folder first.

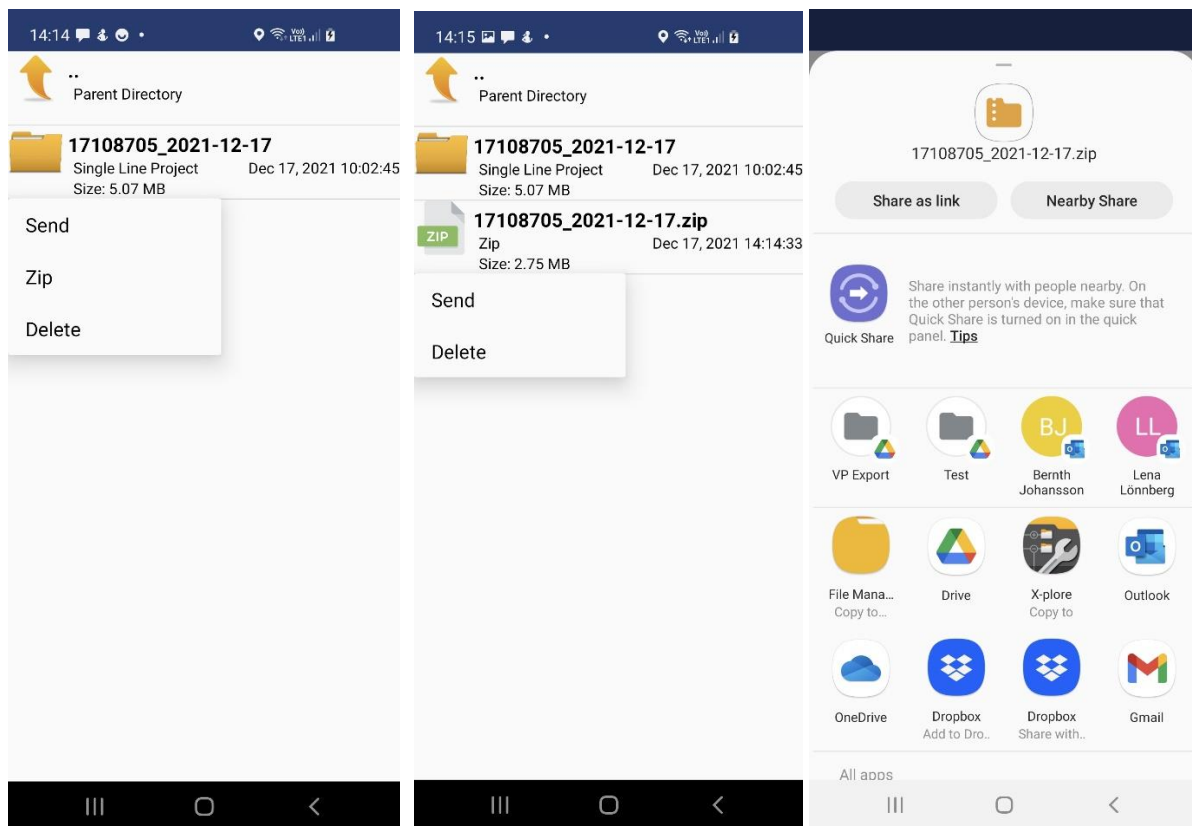
How to zip a folder:

Do a long press on the folder that you want to zip, and then click on the zip option in the popup menu.

How to send a file:

Do a long press on the file that you want to send, and then click on the send option in the popup menu. Then select the target App, e.g., Outlook or Google Drive from the "Send Menu".

If you want to send a file to a USB-drive you need have an external file manager Installed, like "File Manager" from Xiamoi or "X-plore File Manager" from Lonely Cat Games. If that is the case, a "Copy to.." option will the be displayed in the "Send Menu".



Fixed Bugs

- Improved Stability.

ViewPoint 1.226

News

Android 11

The target version for ViewPoint has been set to Android 11, which is the latest version of Android. From November 2021 Google Play only allow updates to Apps that has Android 11 as the target version.

Viewpoint will continue to work as normal for those users that use Android 6 – 10.

One important difference for Android 11 users, is that Apps only are allowed to read and write data to an app specific folder! For users that runs Android 11, this means that the ViewPoint data folder from now on will be found in:

"Internal Storage/Android/data/se.impulseradar.viewpoint/files/ViewPoint Data"

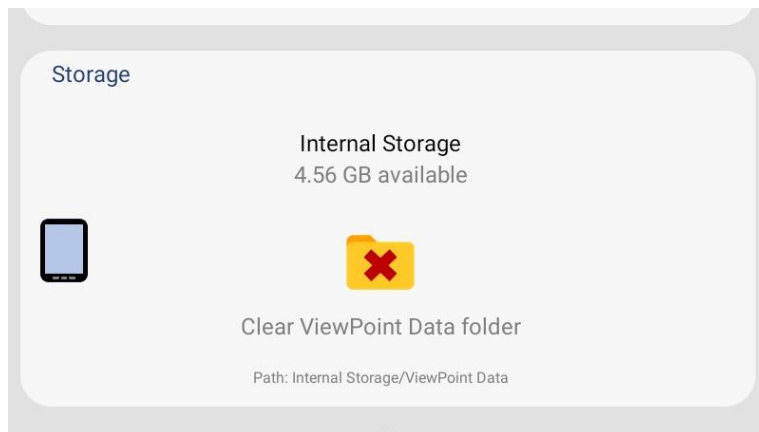
Note! The "ViewPoint Data" folder will be cleared if the user uninstalls Viewpoint on an Android 11 device. The "ViewPoint Data" folder will not be cleared when updating ViewPoint.

ImpulseRadars general recommendation is to always backup your data before you uninstall/update Viewpoint!

For users that runs Android 6-10, the ViewPoint Data folder will still be found in:

"Internal Storage/ViewPoint Data"

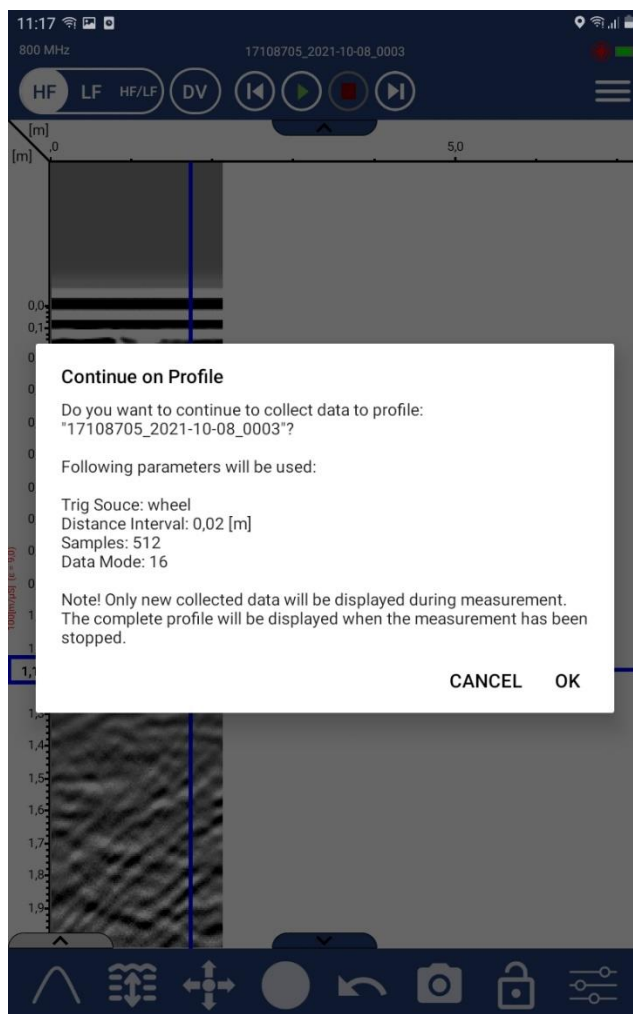
In the User Preferences Menu of ViewPoint, the path to the Viewpoint Data folder is displayed.



Continue measurement on saved profile

This function is only available on CrossOver, PLT, RQT and PinPointR-Plus Antennas.

Select "Resume Old Project" from the project menu. Then, use the back-and forward button to open the profile that you want to continue. Do a long press on the play button to continue the measurement on that profile. During measurement, only new data will be displayed on the screen. When the measurement has stopped, the complete profile will be displayed on the screen.



Real Time Marker Export

Viewpoint has now support for exporting markers to external apps in real time. When a marker is added or deleted a broadcast will be send with all information about that specific marker, including a screenshot of the marker in the radargram. Any app that are listening can receive these broadcasts.

This function was mainly built for the “SW Maps” App, but the function is built as a general function that can be used by any developer. See more information in the PDF “ViewPoint Marker Import.pdf”.

Fixed Bugs

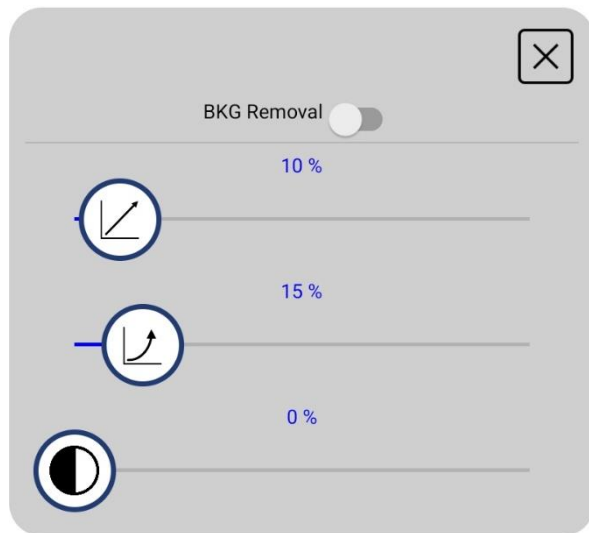
- Overall Improved Stability
- The Trace Viewer/Calibration Menu (Developers Mode) has been overseen, and a lot of bugs has been fixed.
- Viewpoint will detect if “Google Play Services” is not installed, and automatically disable functions that are dependent on it.
- ViewPoint will automatically detect if an old version of an Impulse Radar App is installed and prompt the user.
- All bugs that have been reported since the previous release version has been fixed.

ViewPoint 1.212

News

Exponential Gain

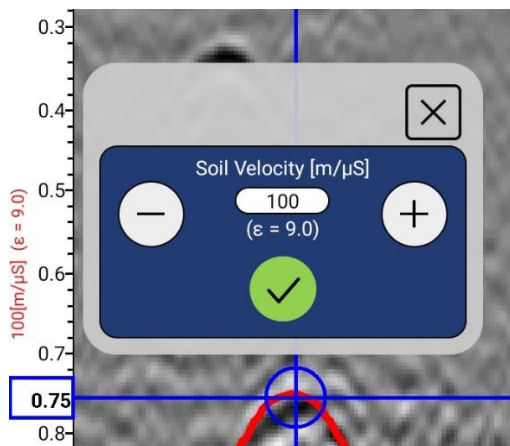
A slider for adjust exponential Gain is added to the filter window.



From top: BKG Removal, Linear Gain, Exponential Gain, Contrast.

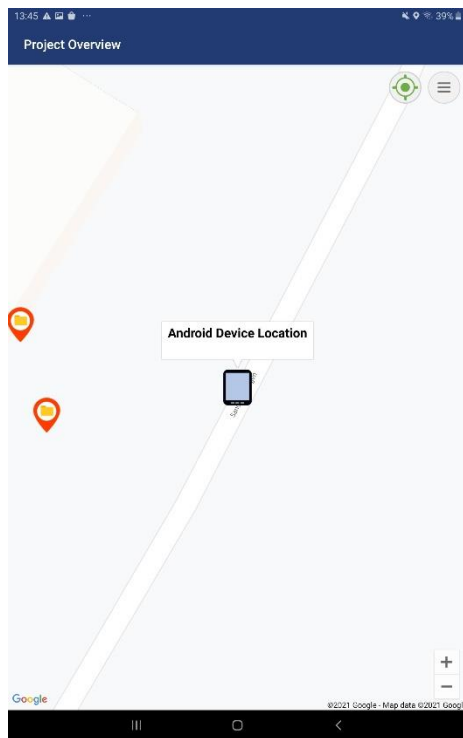
Dielectric Constant

The dielectric constant(ϵ) is now displayed beside the Soil Velocity field in the vertical scale and in the hyperbola fitting window. The dielectric constant is calculated from the soil velocity.



Android Device Location

When entering the Project Overview (Google Map View), the position of the Android Device will automatically be in focus. This will make it easier to cash map tiles for offline use.



Total Station (Pseudo NMEA)

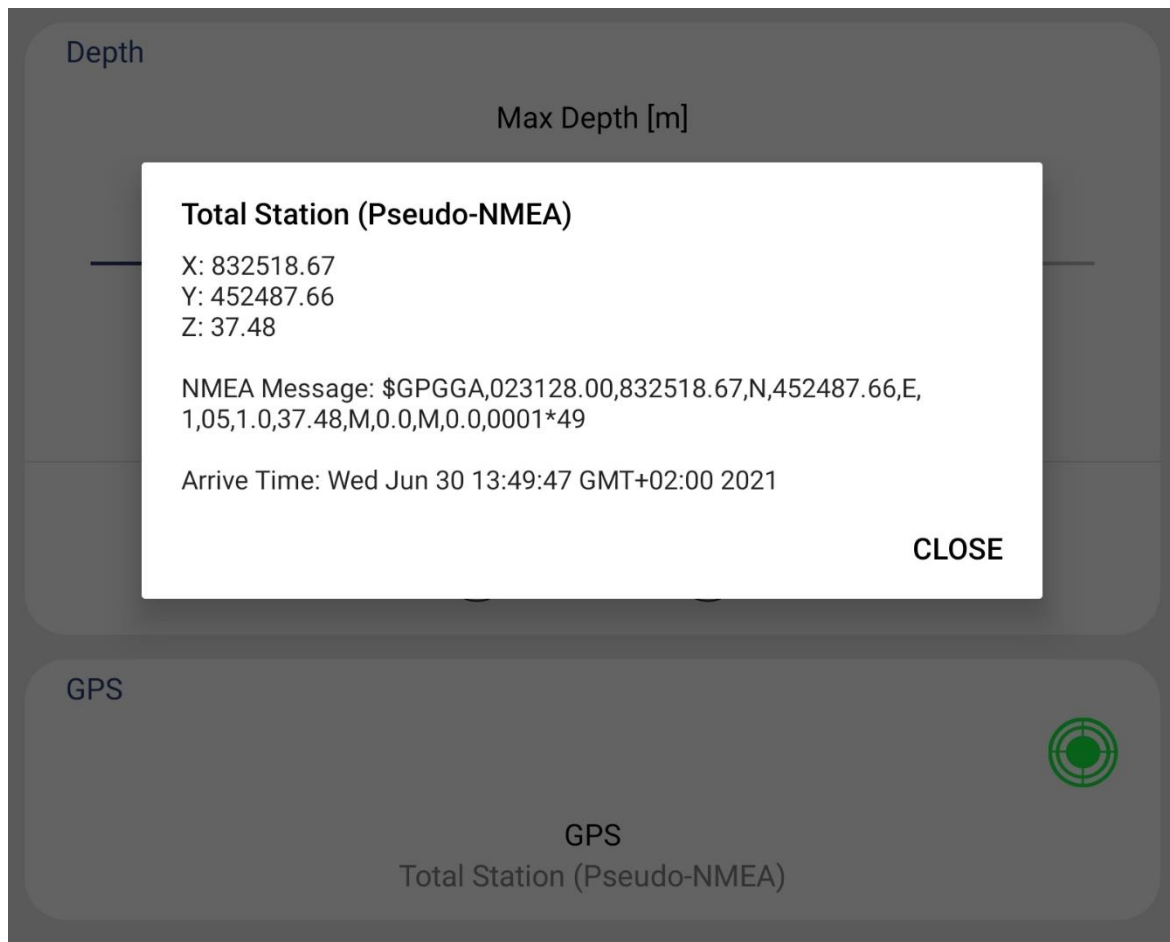
Support for Total Station (Pseudo NMEA) is added for PinPointR Plus and CrossOver Antennas.

When using this option as position system, a .tsp file will be created instead of a .cor file.

The .tsp file contains rows with the following columns:

Trace	X	Y	Z	Time	Status
-------	---	---	---	------	--------

Note: the Map View will be disabled when using this option as the positioning system.



Fixed Bugs

- ViewPoint need the "Location Property" in the Android device to be enabled to work properly. In this version, ViewPoint will detect if it is disabled and prompt the user.
- Bugs with the Vertical Scale (Time) has been fixed.
- Bugs with the GPS Status symbol in the Antenna Settings Menu has been fixed.
- The position of the red cursor was not updated when "Manual" was selected as trig-source. This has now been fixed.
- The option to select distance interval was not possible when "Manual" was selected as trig-source. This has now been fixed.

ViewPoint 1.2

News

New Core

The core of the App, that handles all graphics, has been rebuilt from scratch. The new core gives the app way much better performance and stability on all devices, especially on older devices there will be a big gain in performance. When building the new core, all objects that is drawn out on the screen had to be rebuild rebuild from scratch. So at the same time, the design on all objects like scales, hyperbolas, markers, crosshair etc has been overseen and redesigned.

Floating Zoom

The old zoom with five fixed steps has been replaced with a new zoom function, that works in the same way as you expect it to work on a touchscreen device. This means floating zoom, and that the focus is set where your finger is.

During measurement, focus is set on the last collected trace, and the sample where your fingers is placed. During file reading, the focus is set on the trace and sample where your fingers is placed.

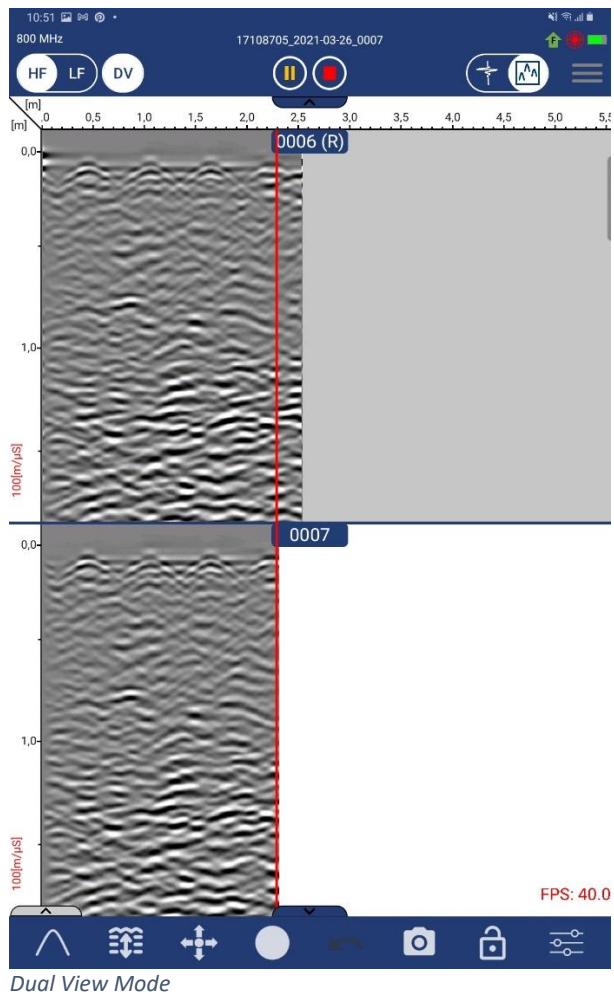
Dual View

The Multi Line Project “Dual View” is removed and instead replaced with a “Dual View function” that can be activate on all project types, during measurement or during file reading. When Dual View is enabled, the previous profile is displayed above the current profile. Just click on the “DV” button to activate Dual View. This mode is only available in single channel mode (HF or LF).

In this mode, the horizontal scroll is locked to the current profile.

Per default, the previous profile is drawn on the screen in the reversed measurement direction of the profile. Double tap on the profile number of the previous profile to flip the profile.

If there is an “R” after the profile number of the previous profile, it means that the profile is “Reversed”.

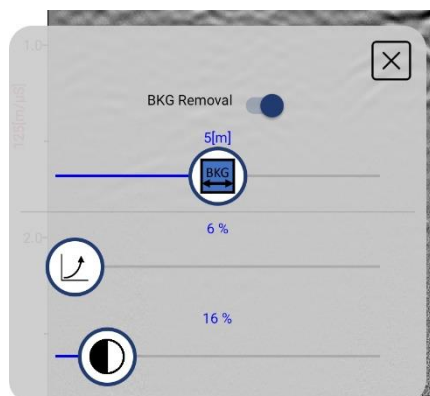


New Background Removal

The old background removal filter has been replaced with a new, that now also works in real time. The old filter did not update itself when new traces was collected.

A slider has been added, where you can adjust the mask size (the number of previous traces that should be included when the average trace is calculated).

When the trigger source is a wheel, then the mask size is set in meters or feet, and then translated into number of traces. When the trigger source is time, the mask size is set in number of traces.



Background Removal Filter

Automatic Measurement Direction

When this function is activated, the measurement direction will be set automatically. This means that in all projects types it's now also possible to collect data running the antenna backwards.

When a measurement is started, the measurement direction for the profile will be set when the wheel has moved 5cm in one direction totally. Data collecting starts directly, but no traces will be drawn on the screen before the measurement direction has been set. So, there will be a drawing delay on the first 5cm of collected data.

As soon as the wheels start to spin the antenna collects data, but if the direction is changed before the direction has been set, the data collection will restart from the turning point.

The sensitivity for detecting a direction change is 1cm. This means that you need move the antenna at least 1cm in the opposite direction before the App detects that the direction has changed.

This function can be enabled/disabled in the Antenna Settings menu. Per default, this function is enabled for the PinPointR and for the CrossOver antennas but disabled for PLT and RQT antennas.

Current measurement direction is displayed in the status field of the top toolbar.

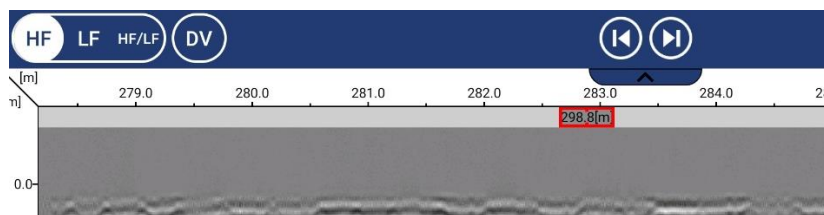
Function Tabs

To take advantages of the whole screen, and to make the UI more dynamic, you can now hide functionality that you do not use for the moment. Just click on the tab to show/hide functionality.



Horizontal Scroll Bar

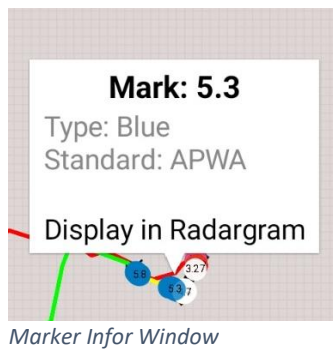
A horizontal scroll bar has been added, that makes it possible to navigate in the data in a more effective way. The slider can only be used in file reading mode.



Horizontal Scroll Bar

Data navigation through the map

Possibility to navigate in the data with help of the markers/tracks in the radargram has been added. When you click on a marker in the map, you will see an info window with the text "display in radargram". If you click on that text, the corresponding profile will be opened, and the corresponding marker will be displayed in the radargram.



Connect Button

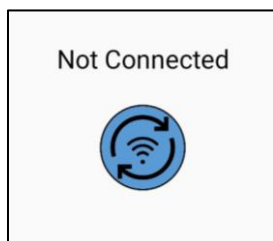
When this button is visible, the App has of some reason* stopped the attempt to connect to the Antenna associated with the connected Wi-Fi, this means that the App do not send any commands at all to the Wi-Fi, which in turn means that the App and the Android device will not cause any disturbance to the system in the case it already collects data from another Android device.

*It can be of the followed reasons:

1. The Antenna has already established a connection to another Android device.
2. The Antenna does not answer.
3. The connected Wi-Fi is not an Antenna.

Click on the connect button, to make a new attempt to connect to Antenna associated with the connected Wi-Fi.

See the pdf "ViewPoint New Connect Button.pdf" for more detailed information about this.



Connect Button

PinpointR Plus

Support for the PinPointR Plus has been added to the App. From the Antenna Settings Menu, it is now possible upgrade a PinPointR to a PinPontr Plus, which gives the PinPointR access to extra functionality. Currently this means access to "Precision Markers".

To upgrade the PinPontr, a unique password is required, that has been generated from the seerial number by the "CO_Password" software. It is also possible to make the antenna to a "PinPointR Plus" from the hidden settings menu.

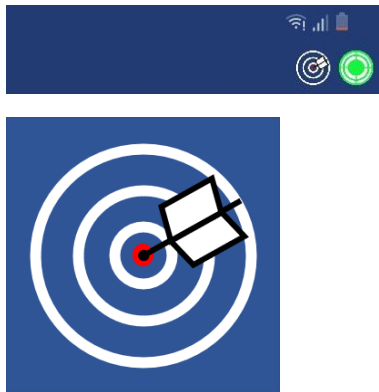
See the pdf "PinPointR Plus.pdf" for more detailed information of how to perform the upgrade.

Precision Marker Mode

When using an external GPS (that has signal) and the trig source is “wheel” and the “cursor lock” is activated, then the “Precision Marker Mode” will be activated. A symbol is displayed in the status field of top toolbar, that indicates when this mode is Activated or not.

When this mode is activated, the coordinates will be loaded from the current GPS fix when you set a marker in the radargram. The app will wait max 1 second to receive a new fix, if no fix is received, a normal marker will be set instead.

In the *.mrk file, the rightmost field indicates if the mark is a “Precision Mark” or not. The rightmost field will be “Y” if yes and “N” if not.



Precision Mark Symbol

Updated *.mrk file

The marker file now also includes coordinates for each marker, and a precision mark flag.

As before, each marker is represented by a <tab> separated row in the .mrk file.

Each row has the following fields:

Trace
Sample
Marker Standard
RGB color code
Marker type
User Comment
Latitude
North/South
Longitude
East/West
Altitude
Altitude Unit
GPS Status
Precision mark flag

Example:

```
3798<tab>348<tab>APWA<tab>#007BC3<tab>5<tab>comment<tab>63.8374790000<tab>N<tab>20.2733168333<tab>E<tab>28.90<tab>M<tab>4<tab>Y<CRLF>
```

Updated Marker Info Window

- In the marker info window, that is displayed when you click on a marker, you can now see if it is a “Precision Marker” or not.

Updated *.hdr file

The following field are added to the *.hdr file:

- Antenna name.
- Start temperature.
- Stop temperature.

Updated Field Summary PDF

- Antenna name has been added to the header.
- A Status Field have been added to the marker tables, showing the quality of the GPS signal.
- Frequency of the channel is printed out on the radargram screenshots.

New Zero Level Adjustment function

Long press on the vertical scale to activate the adjustment mode. When the background colour of the scale changes to green it is possible to adjust the zero level. Tap outside the scale to confirm the new zero level. The zero level parameter will only be send to the antenna when developers mode is activated.

Dual Frequency Mode

All function is now also available from the HF/LF mode. E.g., you can set markers, change soil velocity, take screenshots etc. from the HF/LF mode.

Battery Indicator

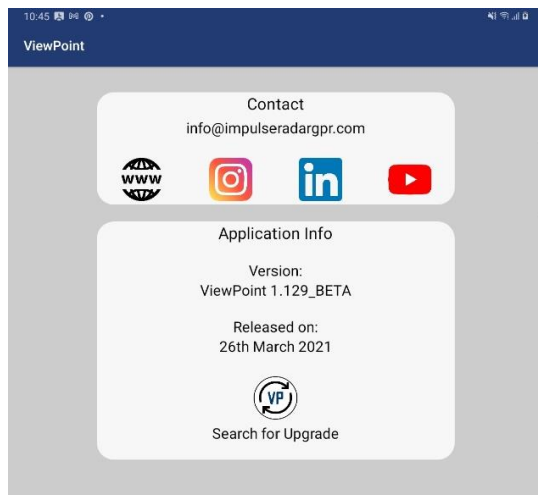
For antennas with firmware ≥ 49000109 , a battery indicator is displayed in the status field of the top toolbar.



Status Field

Updated Information/Help Screen

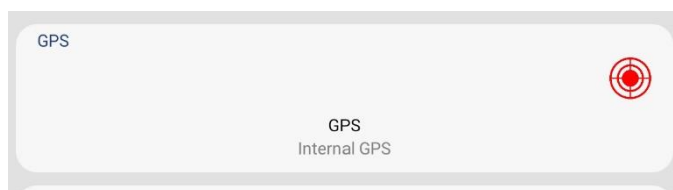
The help text” that was displayed in the Information/Help screen, has been replaced with links to all Impulse Radars channels on internet, and some App information.



Information Screen

GPS Status Symbol – Antenna Settings Menu

A GPS status symbol have been added to the Antenna Settings Menu, so that you now can see the status when you set up the GPS.



GPS Status Symbol in the Antenna Settings menu.

Multi Line - Reference line project,

The forward/backward arrow buttons and the Reference Line Left/Right buttons are only displayed when its necessary, and they have been moved to a draggable pop-up window.

When you set the reference line, the line will be represented by a red marker called “RL” placed on the zero level. The marker can be removed during data measurement. But It is not possible to stop the measurement until the RL marker has been set.

Fixed Bugs

All bugs that have been reported since the last release version has been fixed.

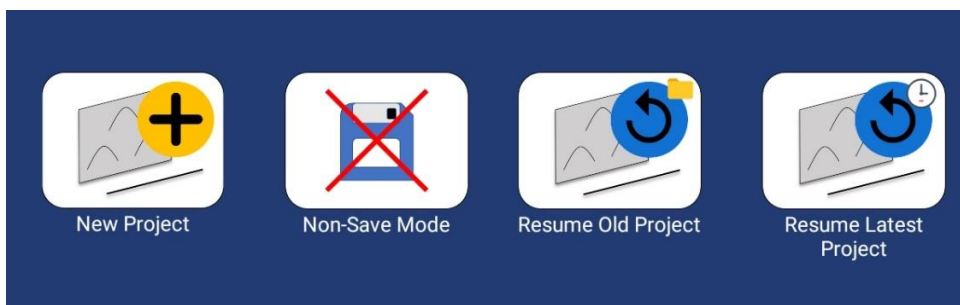
ViewPoint 1.100

News

Non-Save Mode

A “non-save mode” have been added to the app. When running in this mode, only the latest profile is saved. When pushing the play button, the previous profile will be deleted. The profiles in this mode is saved in the folder “*ViewPoint Data/Non Save Mode*”.

A PDF or KMZ will not be created in this mode. Screenshots will be saved as usual in the “*ViewPoint Data/Non Save Mode/Export*” folder.



Storage

Increased Stability

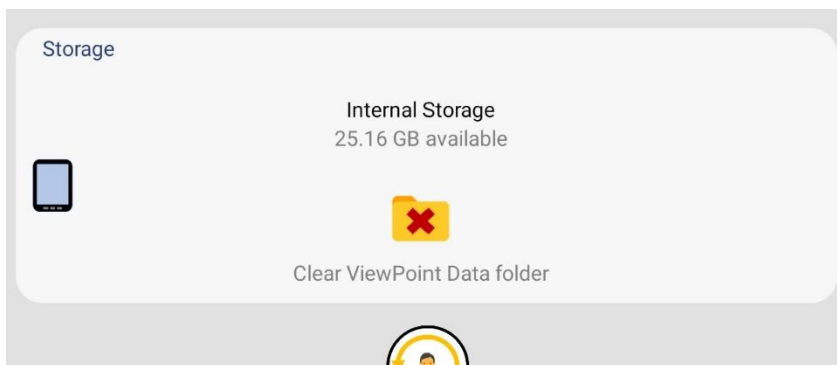
The functions that writes data to files during measurement have been improved, so that all files are more frequently flushed internal storage. This will decrease the risk of data loss if something unexpected happens, e.g. a system crash.

Data Folder

The “**XOver Data**” folder will be renamed to “**ViewPoint Data**” with this version. The user will be notified about this in the app.

Clear ViewPoint Data folder

From the user preferences menu it is now possible to see available storage space left on the Android Device. You can also clear the whole “ViewPoint Data” folder from there.



Storage Control

When starting a new profile (pushing the play button) the app will automatically check if the available storage is greater than 500Mb. If not, the measurement will not start.

Current Date

Per default the current date is added to the project name when starting a new Single Line Project.

E.g. if the chosen project name is “Jonathan” then the project name will be “Jonathan_YYYY-MM-DD” when this option is enabled.

You can enable/disable this option from the Single Line Project menu.

File Explorer

Delete Files/folders and individual Profiles

From the file explorer in the App, it is now possible to delete folders, files, and individual Profiles. Just do a long press and an options menu will pop up. When deleting a profile, **all** files for that specific profile will be deleted (.iprh, .iprb, .mrk, .cor, .gps, .time)



Open Pictures

It is now possible to open pictures (screenshots etc.) from the file explorer in the app.

Cursor Lock

If the cursor lock was on when pushing the stop button, then it will automatically turn on when pushing the play button again.

Fixed Bugs

- When running the system in an environment with a lot of Wi-Fi disturbances, there was a bug in the App that in some rare situation could cause the whole app to “freeze” and then

crash. This was usually noticed by the GPS-symbol turned over to red, and that the data collection stopped, and that the UI stopped to respond, followed by a crash. This bug has now been fixed!

- The “center current position” function in the Map View slowed down the speed of the App dramatically. When adding a lot (30 +) of markers to the map, the performance could be so bad, so that the UI stopped to respond, and then when trying to use the UI, the app could crash. This bug has now been fixed!
- Since the ViewPoint 1.008 version, when using the GPS mode “External + Time Pulse” the .cor file are using “Unix LF” line separator instead of “Windows CRLF”. This has now been changed back to “Windows CRLF”.
- There was a bug that slowed down the speed of the app when opening very large projects with hundreds of profiles. In the worst case, the app crashed. This bug has now been fixed!

ViewPoint 1.008

News

-

Fixed Bugs

- When using the GPS mode “External + Time Pulse” there was bugs that could impair the GPS accuracy.

ViewPoint 1.004

News

-

Fixed Bugs

- When using the GPS mode “External + Time Pulse” there was a bug that in some special situation could cause the App to crash.

ViewPoint 1.0

News

Name

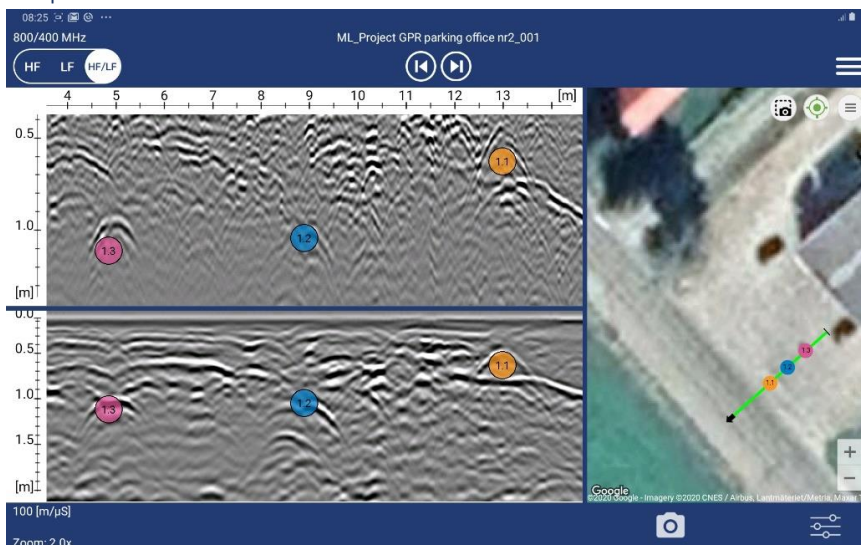
The app has changed name from IPR to ViewPoint.

App Icon

New App Icon

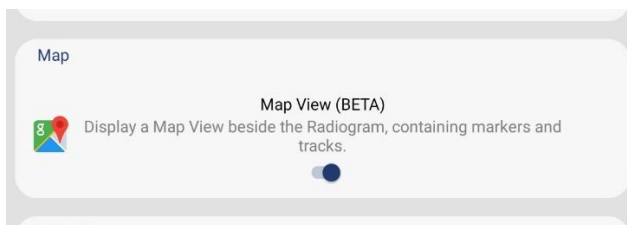


Map View



Activation

The Map View is activated from the User Preferences Menu. It is activated as default.



NOTE: The app must connect to internet so that the Google Maps API KEY can be initiated. This just need to be done one time. If this is not done, the map functionality will not work at all.

Tracks and Markers

When opening or resuming an old project, all tracks and markers for the project will be displayed on the map. The track for the current profile is green, and the other tracks is red.

NOTE: The tracks and markers are created from the *.mrk and *.cor -project files. So, the map functionality will also work with all your old projects.

Current Position

In measuring mode and when the antenna has a GPS signal, the current position will be displayed.



Center Current Position

On the map view there is a button for center current position on the map is added. When it is enabled (green symbol), the current position will be centered on the screen. When its disabled (red symbol), you are free to pan through the map as you want.



Map Screenshot

A separate button for taking a screenshot of the map is added.

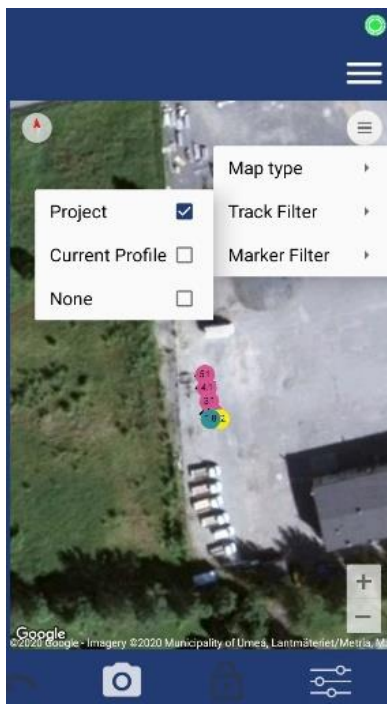


Map Filter

From the menu on the map, you can filter out if you want to see the tracks and markers for the project or current profile .

Map Type

You can select the map type that you prefer. Default is "Terrain".



Opening Profiles from Map

Click on the track that you want to open and then click on the info window to open the selected profile.



Offline Maps

If you do not have internet connection, or if no Google Map tiles are cached, no map image will load. In that case, the tracks, markers and current position will be placed out on a grid.

Cache Map Data

Instructions on how to cache map data:

Connect to Internet. Open the project Overview. Select the map type you prefer. Scroll and zoom over your target Area. Go back to the start screen. Done! The map is now cached for future use.

Markers

Marker Mirror

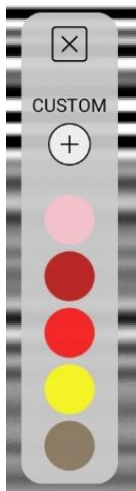
Markers you set on one channel will automatically be mirrored to the other channel.

Marker Index

The index system of the markers is changed. The first marker on profile 1 will be called 1.1, the second 1.2 and so on.

Quick Marker Menu

When activating the quick marker mode, a quick marker menu is displayed.



Marker Menu

The old marker menu that was accessed with a long press on the marker icon on the bottom toolbar is replaced by the Quick marker menu.

Marker Design

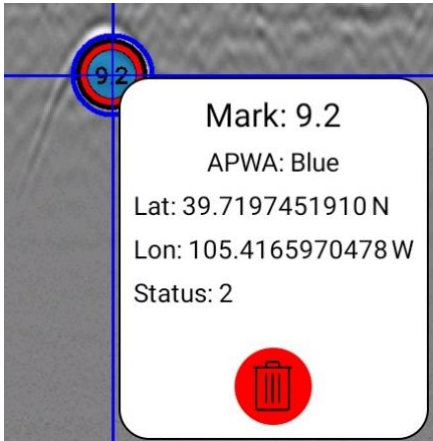
The opacity of the background color has been increased and a thin black border is added.



Clickable Markers

All markers in the radiogram is now clickable (double tap). When a marker is clicked, an info window will popup.

Note: It's not possible to click on a marker when "quick marker mode" is activated.



Delete Markers

In the info window there is a delete button. When its pushed, the selected marker will be deleted.

Marker Editor

Delete and set new markers works both in file reading mode and in measuring mode.

Auto Screenshot of Radargram and Marker

When setting a new marker, a screenshot will automatically be saved, with only the new marker displayed in the radiogram.

Marker Standard

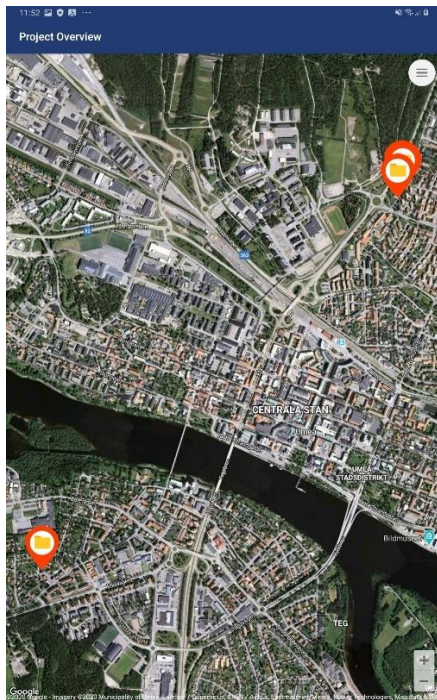
Now it just possible to change markers standard from the User Preferences Menu. When a maker has been added to a project, the project will be locked to the marker standard that the first added marker had.

Project Overview

From the main screen of the app you can navigate to the new Project Overview.

The Project Overview displays all your projects on a map (that has GPS info). All projects its displayed as a marker on the map. If you click on a project you can choose to open the project or to resume the project.

You can also use the project overview to cash the map tiles. Just scroll and zoom over your target area, and the map will be chased for offline use.



Extended PDF Summary

The PDF report has changed name to PDF summary.

Disclaimer text.

Impulse Radar disclaimer text is added to the PDF.

User Corporate Logo

Possibility to add company logo to the pdf report from the User Preference menu. The logo can be stored anywhere on the tablet, you just need to browse to the folder and select the image you want to use.

Auto Screenshots of the map

A screen shot of the map displaying all profiles and markers, is automatically added to the PDF.

Operator screenshots of the radargram and map.

Operators screenshots of the radargram and the map will automatically be added to the PDF.

Field Summary

Generate Field Summary

Auto generate a PDF Field Summary when the current project is finished.

☒

Operator Name

User

Company Name

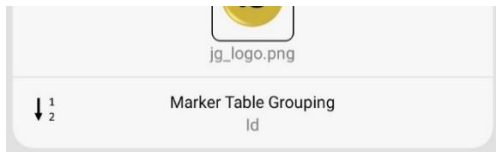
Company

Corporate Logo

jg_logo.png

Marker Grouping in PDF

From the User Preferences menu you can select if you want the markers to be grouped by its type or by the Id in the PDF Field Summary.



Markers

ID	Type	Latitude	Longitude	Target Depth [m]
1.1	APWA - White	63.8378826667 N	20.2735918333 E	1.24
1.2	APWA - Orange	63.8379881667 N	20.2736050000 E	1.24
1.3	APWA - Orange	63.8379448333 N	20.2736135000 E	1.68
1.4	APWA - Orange	63.8378826667 N	20.2735918333 E	1.83
1.5	APWA - Orange	63.8378640000 N	20.2735726667 E	1.69
1.6	APWA - Blue	63.8380301667 N	20.2736275000 E	0.75
1.7	APWA - Blue	63.8379761667 N	20.2736258333 E	0.41
1.8	APWA - Blue	63.8379448333 N	20.2736135000 E	0.33
1.9	APWA - Blue	63.8378826667 N	20.2735918333 E	0.47
1.10	APWA - Blue	63.8378640000 N	20.2735726667 E	0.80
1.11	APWA - Blue	63.8378640000 N	20.2735726667 E	1.17
2.1	APWA - Blue	63.8374690000 N	20.2732738333 E	1.12
2.2	APWA - Blue	63.8374641667 N	20.2732621667 E	1.44
2.3	APWA - Blue	63.8374576667 N	20.2732548333 E	1.22
2.4	APWA - Blue	63.8375151667 N	20.2733211667 E	1.02

PDF Size

The size of the generated PDF is reduced with a factor of >10 compared with a PDF generated from an earlier version of the App.(A corresponding PDF with a size of 50MB generated with an earlier version of the app will have a size of 5MB in this version).

KMZ export

A KMZ-file is automatically generated and are stored in the project folder as “projectname.kmz”. The KMZ includes tracks, markers and auto screenshots of the markers in the radargram. The KMZ follows the KML standard and can be opened in Google Earth.

Top Toolbar

The top toolbar is redesigned from scratch.

New Channel Selection Control (again..)

The old channel selection button is replaced with a new control with a separate button for each mode.



Toggle between profiles

Buttons for navigating between the profiles is added.



Other News

Generate PDF/KMZ

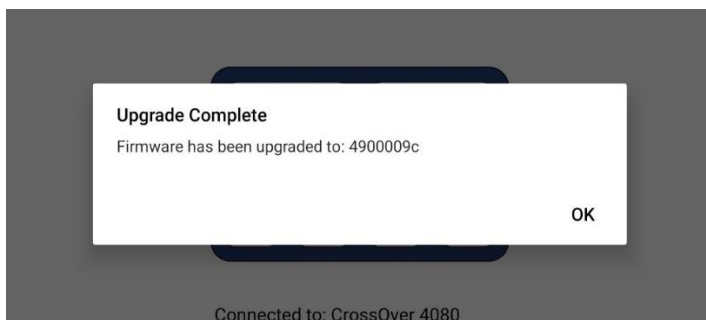
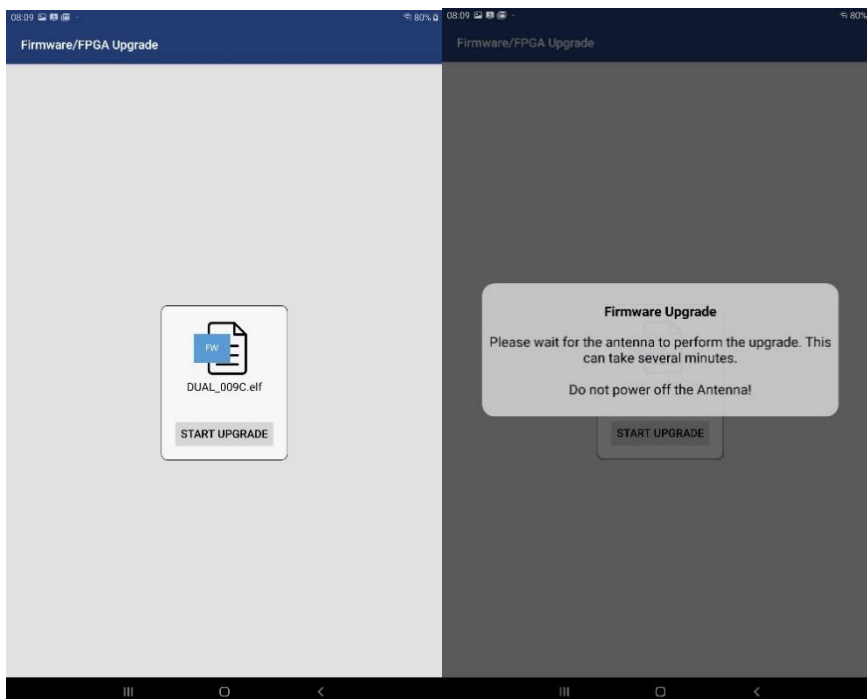
When leaving the current project, you will be prompted if you want to generate a field report and generate a KMZ. If there already exist a PDF or a KMZ for the current project, the old file will be overwritten.



Upgrade Firmware/FPGA

This function is updated, and now works as it should. The Antennas battery status will be checked, and you will be informed of the upgrade status, and you will be notified when the upgrade is done.

Design is also updated.



Fixed Bugs (from previous release)

- When changing the screen orientation, the default language was loaded. This is now fixed.
- Sometimes when the Android back navigation button was pressed, the App did close when it was supposed to go back to the previous screen.
- Sometimes data was written to the time file when it was not supposed to. From now, data will only be written to the time file when the GPS mode is set to "External + Time Pulse".
- The .cor file was not written to in real time. Which could have the impact that the GPS data could be lost if the App crashed. From now the *.cor file will be written in real time.
- The vertical scale for the LF-channel had incorrect position in HF/LF mode.
- The Reference Line Marker did not adjust its position correctly when the radiogram was zoomed.
- The red backup cursor was "jumping" when you had scrolled back more than a screen width in the data, with help of the wheel, and was going forward again.
- The millisecond field in the .time file could in some rare situations be >999. When that happened the .cor file could be corrupted.

IPR 1.130

News

Language

From the User Preferences menu there is an option for select language. The app must be restarted when the language settings is changed.

Note: the PDF-field report and the help window is always in English.

Available languages are:

- English (Default)
- French (Google Translated)
- Swedish

Auto Zoom

When starting a new measurement (pushing the play button), the zoom will automatically be adjusted to fill the screen. But it will not over scan. The current zoom factor will also be kept when you stop the measurement.

Auto Zoom can be disabled/enabled from the User Preferences menu.

Select Default Marker Standard

From the User Preferences menu there is an option for select the default marker standard.

JUPEM (Malaysian marker standard)

The JUPEM standard is added to the list of marker standards.

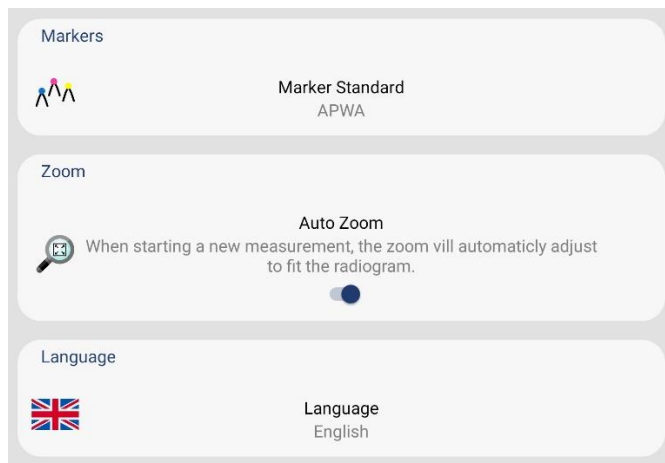


Figure 1: User Preferences Menu

Select Channel

The old select channel function, where you double tap on the screen to change channel, is replaced with a button in the top toolbar.

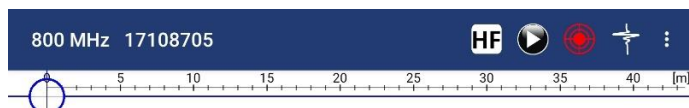


Figure 2: Top Toolbar

Manual Control Popup Window

This popup window now has buttons for controlling the cursor, scroll, set marker and zoom. This window can be opened together with other popup windows. It will not close when you click outside and it can also be opened in file reading mode.

The speed of the cursor will increase when you hold down the arrow buttons, so you can now scroll through the data horizontally and vertically much faster than before.

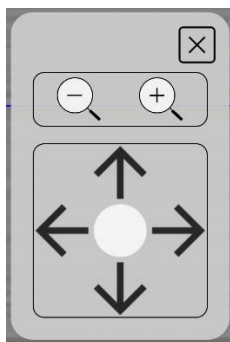


Figure 3: Manual Control Popup Window

Hyperbola and Depth to Target Popup Window

It is now possible to click outside the windows, which makes it possible to change the position of the Hyperbola or the known target with your finger. The popup window will close when the green accept button is clicked, or when the close button is clicked. The arrow buttons have been removed.

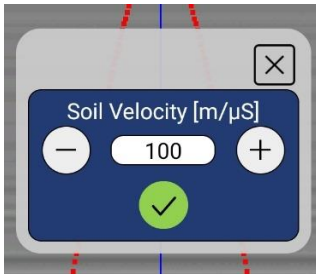


Figure 4: Hyperbola Popup Window

Popup Windows Positioning

The positioning of all popup windows is saved, so they will always pop up on the same position as when they were closed.

Screenshots in Dual Frequency Mode

It's now possible to take screenshots in the dual frequency mode. They will be saved, and they will also be displayed in the PDF-field report.

Wi-Fi Connection Warning

If the Wi-Fi connection is lost during an ongoing measurement, a warning will pop up on the screen.

If this happens, the app will try to reconnect to the Antenna until the connection is established, or until you press "Stop Measurement". When the connection is established the measurement will continue. If you press Stop Measurement, all data will be saved but missed traces won't be restored.

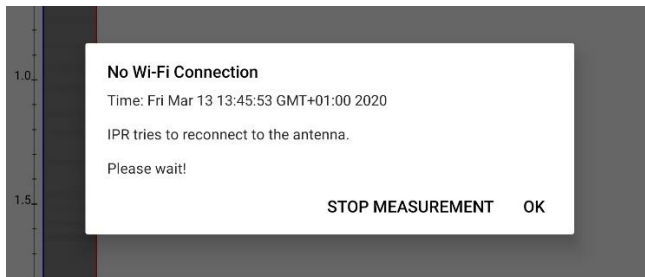


Figure 5: Lost Wi-Fi Connection dialog

Marker Index

When you continue an old project, the marker indexing will now start from last marker index in the project. In previous versions of the app, the marker index started from 1.

Fixed Bugs (from previous release)

- The gain and contrast parameter were restored when a new profile was started.
- Some small bug fixes.

IPR 1.120

News

Multi Line Project Menu

Design is updated.

Wheels

New installation/upgrade

First time after installation/upgrade when connecting the to the antenna, the app will ask you to select your default wheel.

Custom wheels

Custom wheels will not be deleted after a factory restore.

Direct Drive Cart

The new "Direct Drive Cart" is added in the default wheel list, the old cart is named "Belt Drive Cart".

Fixed Bugs

- The built-in file browser sometimes showed doublets of profiles.
- The app could crash when adding a new wheel.
- The Field Report always showed APWA standard.
- Default and custom wheels were not saved properly in the antenna, which caused that there sometimes was doublets of the same wheels or that some wheels were missing in the list.
- When you changed the "sample" (max depth) parameter in the settings menu, the app and the antenna could "freeze" when a new measurement was started with this new parameter.

IPR 1.116

News

Single Line Project

Single Line Project is now handled more like a project. This means that single line project also will be grouped in subfolders, the same logic that already is implemented with Multi Line project.

Project Menu

When you push on the Single Line Project/Multi line Project icon you will get three options, to start a new project, resume the latest project or resume an old project.

Antenna Settings Menu

The settings menu is replaced with the new "Antenna Settings" menu. It has an updated design and are more user friendly than the old menu.

Note! There is a switch called "Show Advanced Settings". When its deactivated, just the most necessary settings are displayed.

Zip Project Folder

It is now possible to zip a project from the apps file explorer. Do a long press on the project folder that you want to zip, and select “Zip Project”.

GPS Symbol Status

The GPS symbol will always be displayed. If there is no GPS signal, the GPS symbol is red.

PDF Field Report

The report function is adjusted to the new project structure. This means that one (1) Field report is created for each project. Example: if you running a project called “SL-X” and you have collected 10 profiles, then only one field report will created be for the whole project when it’s finished. In the case you are resuming an old project, an “extra report” will be created when you finish the project.

Project Folder Info

From the file explore in the app you can now see the size and type of the project.

Filter Window

The filter window can now also be displayed and used when showing both channels at the same time. And you can also have it opened, and on the same time use other UI.

First Installation

After a new installation/upgrade of the app, its necessary to make a factory reset after you have connected the antenna. This is now done automatically.

Fixed Bugs

- Problems regarding zoom tilt and scrolling are fixed.
- .cor file was not created if the GPS didn’t have signal when pushing play button.
- The sec time field showed “-1” instead of 0 in the .time file, when flipping over from 59.
- Not possible anymore to set a marker outside the radiogram.
- PinPonintR antennas will now be identified correctly.
- The app couldn’t open projects that only contained LF profiles.
- The thumbs of the gain/contrast seekbar in the filter menu looked very strange in Multi Line Dual View mode.
- When opening a profile with markers in CrossPoint, “user comment” was printed out for all markers.

IPR 1.104

News

Improved Performance

Improved performance on all devices.

Fixed Bugs

-

IPR 1.103

News

Vertical Zoom

The app has a new zoom functionality. The new function will zoom in both horizontal and vertically direction. The maximum zoom is limited to 5x.

The markers retain the size when zooming.

The current zoom factor is displayed in the left bottom corner.

Vertical and Horizontal Scrolling

Both the horizontal and vertical scroll is now controlled with just one finger, instead of three! And the horizontal scroll is much smoother than before.

You scroll just like when you are scrolling on a webpage or a zoomed picture on your smartphone. Just like in earlier versions of the App, the horizontal scroll is blocked during data collection.

Preference Screen

Some of the settings in the old Settings screen is moved to the new Preference screen, and some new preferences regarding the PDF field report is added.

The Preference Screen is always available, also when the antenna is disconnected.

Improved PDF Report

Multiline

The report is now adapted to also be useful for Multiline projects. When a Multiline project is finished, A report will be generated including all markers and screenshots from the entire project. When starting a new line, the indexing of the markers will continue from its last position.

Just one report will be made for each project, not one for every new line as before.

Marker grouping

Markers are now grouped by color in the report. One table for each color and channel.

This will reduce the number of pages in the report.

Automatic screenshots of markers

Screenshots of all markers will automatically be printed out in the report (exactly as many screenshots as needed to show all markers are printed). Operators screenshot will also be printed as before.

Open Field Report

The field report can now be opened directly from the file window in the app. The pdf will be opened in an external pdf reader.

Fixed Bugs

- The Imperial measurement system now works as expected in all places in the app. You can switch between Metric and Imperial from the new Preference Screen.