



# DetectLogPro

The Premier App for Detectorists!



# DetectLogPro

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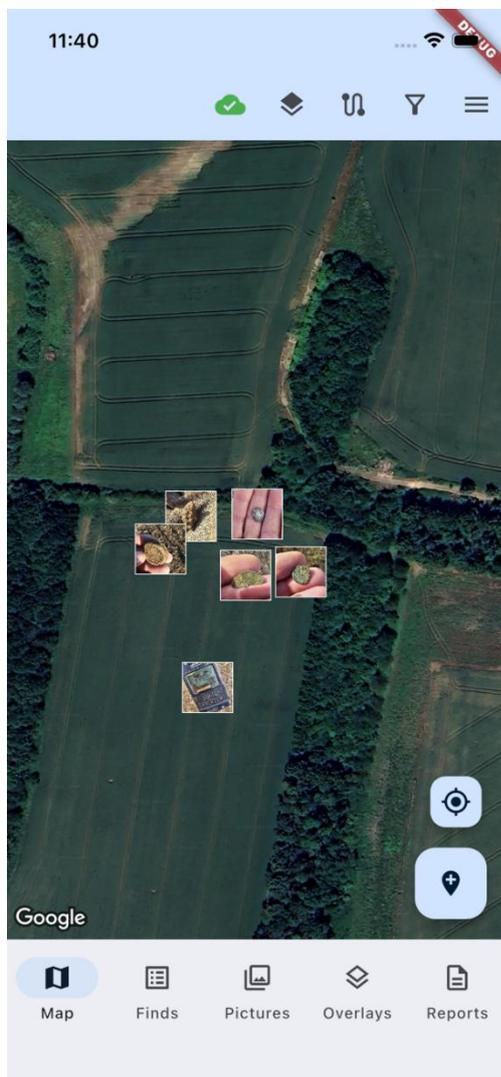


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## 2 Introduction

DetectLogPro is an advanced tool for Metal Detectorists giving you a place to record and manage your finds, and with the Premium upgrade, plan trips using historic maps and Lidar, and reports and labels. The premium edition also provides synchronisation with your Google Drive account to back up data and share with other devices you may have.

## 3 Maps



The Maps screen is the default and allows you see all your finds where you found them (centre of the thumbnail). Ribbon icons from left to right are:

**Cloud Sync** (currently only Google Drive) – connect in the Settings screen if using for first time.

**Overlays** visible. Overlays are only available when one of the ‘URL’ maps is selected, not the native Google maps. If you are not on one of these map types or don’t have loaded Overlays (see Overlay section), then this icon won’t appear.

**Route Tracking.** This is not visible on desktop versions (see the mobile screen shot lower down), but when on will track you and stop automatically if you start travelling faster than a human is designed to go (so will stop when you drive home). When it stops, the route is saved and can only be seen by toggling ‘show routes’ in the menu.

Note: If route tracking is erratic on your phone, make sure that you have allowed the app to always run in the background (battery optimisation), and in location services.

**Filters** This option allows you to select what is loaded from your database. When data is filtered the icon changes to solid (in case you wonder where your finds have gone!)



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## Troubleshooting:

If overlays or Lidar layers are not visible, ensure you're using a URL map, have loaded the MBTiles file, and try adjusting the zoom level (often zooming out will 'catch' the zoom level of the overlay and then it can use that to zoom in).



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## 4 Adding Finds

Finds can be added in the field by pressing the waypoint icon, but also by selecting a point on the map and long pressing to get the add find prompt.

By default, the Add find form keeps things simple so you can quickly capture the name, target ID and a picture in the field. But you can expand out the form to capture more information if needed (or when back home).

Note if you add a PAS reference against your find, when viewing your find a button will automatically be enabled that will allow you to launch the page on [finds.org.uk](https://finds.org.uk) (If you are not in the UK but have a similar system you can edit the URL in the Settings screen to use your countries search). It is also possible to add a web URL – DetectLogPro will then use this instead of mapping to the PAS format.

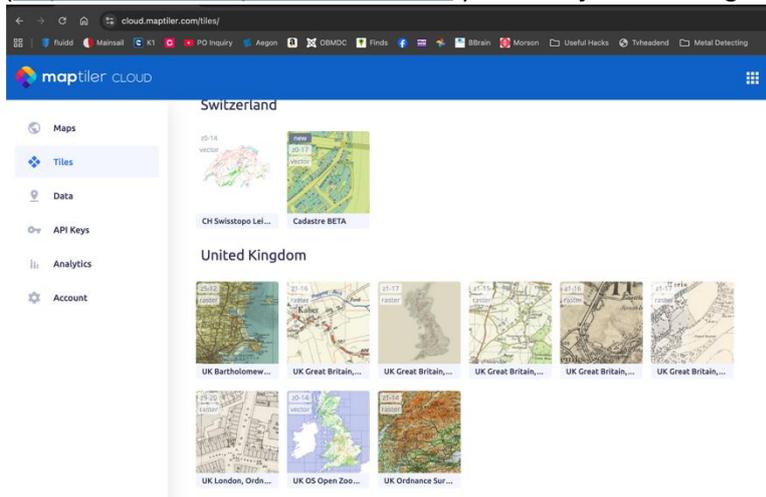
If you have an iPhone and Apple Watch you can also add finds using the watch using dictation and avoiding the need to get your phone out with muddy gloves!



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## 5 Custom 'URL' Maps

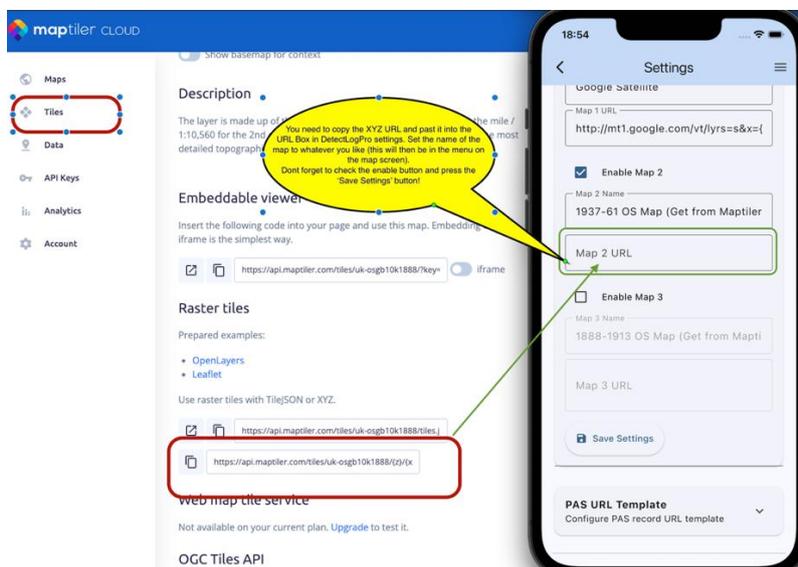
In the Settings screen it is possible to add your own custom maps using XYZ format URL's. In the UK, the best source is the national library of Scotland maptiler service (<https://cloud.maptiler.com/tiles/>) where you can sign up for free and copy the URL



into the URL field on the settings form.

You can add up to six custom maps and toggle their availability on/off to make visible in the Map screen menu drop down (note depending on your phone the menu could grow to be bigger than the screen, but it will be scrollable)

You will need to copy 'Raster Tile XYZ' URL from maptiler and then paste it into DetectLog Pro as below

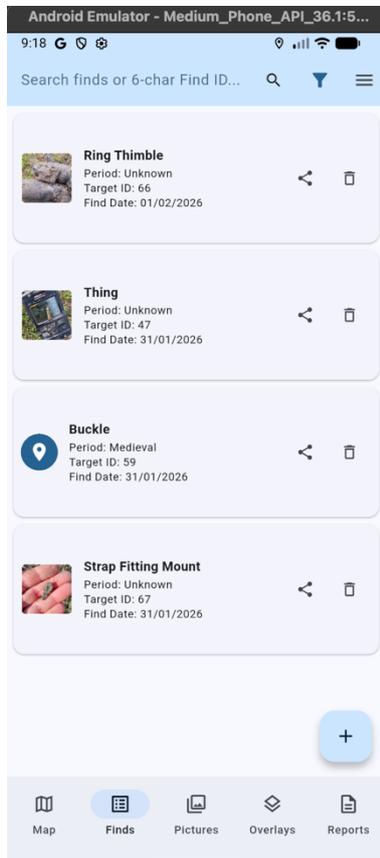


Note: When selecting a URL map, it may take a few seconds to reload your finds as the app is changing from a different map system. Also, you may have to zoom out to 'catch' the highest level of zoom for that tile set and then zoom back in (this also applies to Lidar Overlays). A good example of this is the 1937-61 OS map set that is provided with a lower zoom level than Google Satellite or the 1880's 6inch OS map.



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## 6 Finds Tab



The Finds tab is where you can search for Finds, share with friends and delete the duds (up until you sync this can be reversed by filtering on deleted finds in the map tab). It is possible to add new finds from this screen, but this can also be done from the map screen.

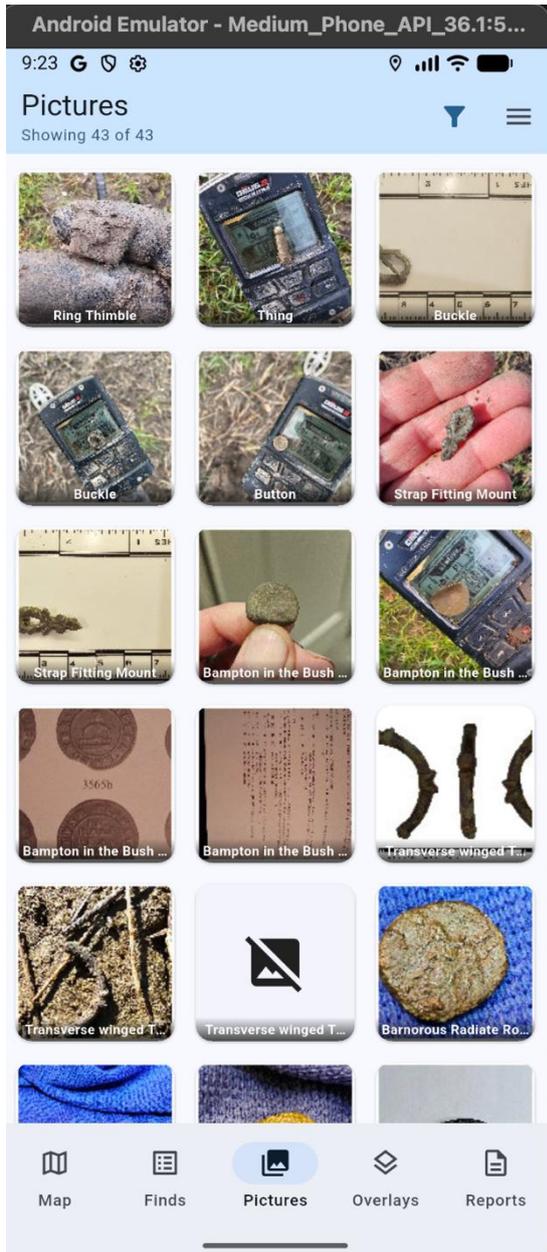
Long pressing on a entry will trigger selection mode where a number of finds can be selected and then used in Reports such as finds labels.

The search at the top of this form will search for text in each find but will also automatically recognise if you input a find ID.



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## 7 Pictures Tab



The Pictures tab shows all pictures and from where you can click to open the find record and see the full image.

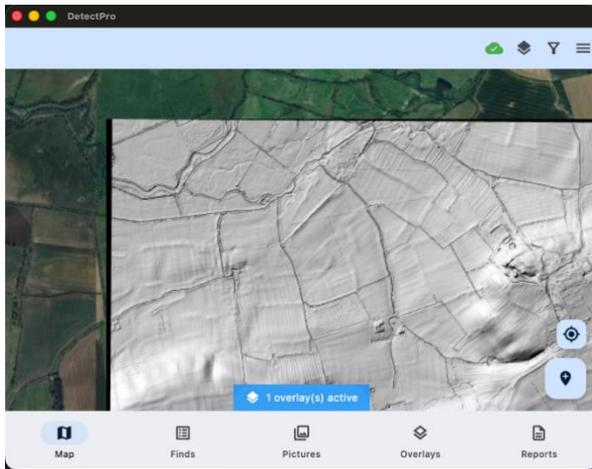
To manage phone memory the app will only initially load a limited number of images, but scrolling down will automatically load more.



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## 8 Overlays

The app can support overlays in the format of MBTiles files. These can be exported from the excellent open source QGIS application. You can also download from the PageTech web site a simple tool that will convert TIF files downloaded from the UK DEFRA website (as seen above). For a detailed description of how to download and convert a lidar tile from Defra see *Appendix A - Generating MBTiles files*



On desktop and Android versions you can load MBTiles files directly from the Overlay tab. It is quirkier on iPhone but files can be selected in the same way.

To import Overlays go to the Overlay tab and use the '+' button to pick an Mbtiles file.

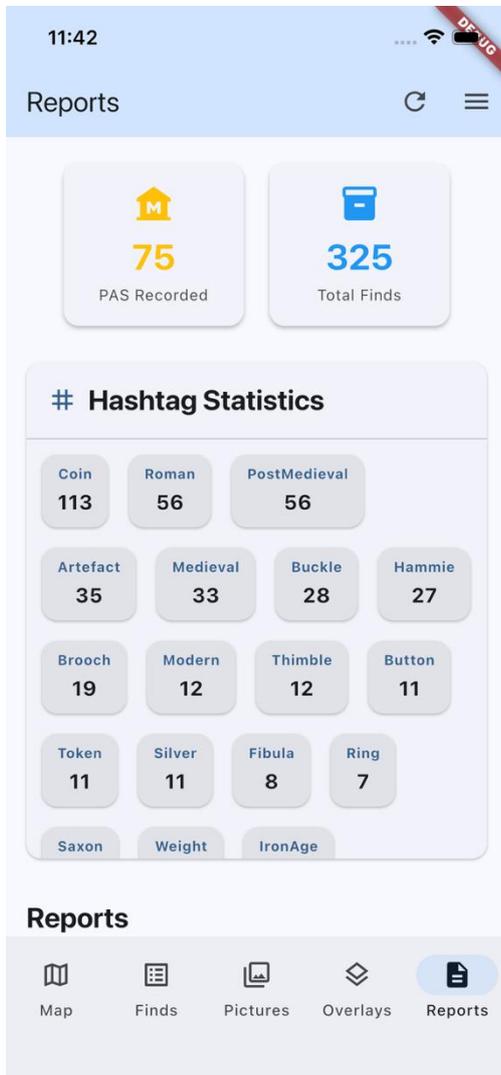


Note that for iPhone the file explorer is a bit 'interesting' and you will need to press the '<' at the top left of the screen to move up from the apps storage folder to be able to see the rest of your device and cloud storage locations.



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## 9 Reports



In addition to printed reports the app also offers counts on hashtags which you can record against each find. These totals are for the current filter (see map section), so can be used to report for instance on the finds this year. The PAS count is driven by the PAS field on the Finds form.

Several standard reports can be printed (scroll down). Apart from the Storage & CSV reports you need to select finds first in the Finds tab (press and hold to start selection then tap as many as you need to print).



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## 2D Label Printing

The 2D labels are intended to print on 3 x 7 standard labels. The 2D barcode can be scanned by the mobile camera and will launch the app, finding the record in the database.

To print labels, you will need to print test prints (I recommend on paper rather than labels themselves) and adjust the settings to match your device (unfortunately I have found the mobile prints smaller

labels compared with the Mac) and printer.

Label Printing configuration is in the Settings section and these values I found worked with my Mac and Brother printer:

By comparison I had to set a Horizontal gap of 40 for the same report on a Samsung S23 Ultra.

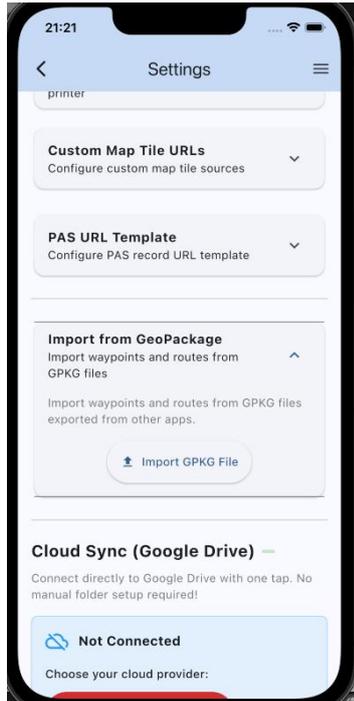
To save label stock this report can start printing at the next space on your label sheet by specifying which label it should start printing at.



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## 10 Import from GPKG

It is possible to import your finds from other apps that support export to GPKG (these contain the finds record and photos. This can be done by clicking the import GPKG button in settings:



On Mac, Windows and Android this the file manager is obvious to use, and you can navigate to a folder on your device or cloud provider (e.g. OneDrive) and select files exported from your other application. You can also select more than one file at a time to bulk load your already recorded finds. On iOS the same can be done but the file manager is a little quirky, and it is not (for those of us used to the other platforms) obvious that to navigate to folders outside of the apps little area, you need to press the back button after

clicking 'Browse' (but once you know, you know):



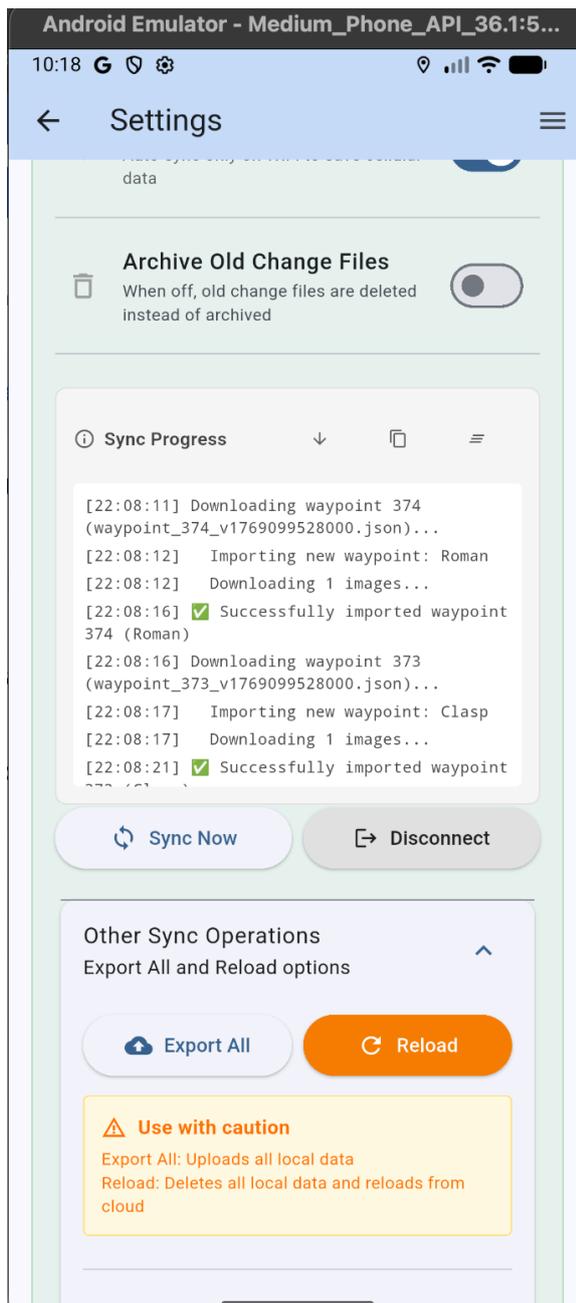
On iPhone it is also possible to 'share' a file by downloading from an app like OneDrive and then 'sharing' with DetectLogPro. However, this method will only work one file at a time so I recommend using the method above as you will probably have a few exports to load!



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## 11 Cloud Sync

First time you intend to Sync you need to connect to your Google Drive. It is possible for the DetectLogProSync Folder to be shared with others if you want to work as a team (their finds will show with a blue surround on the map screen if you each set a different username).



First time use you can either export all the local database with the cloud or import all from the cloud. In the latter case this will delete everything on your local database and replace with records from the cloud – so take care! Exporting all to the cloud will push a fresh record of everything in your database to the cloud folder, which in turn will trigger a refresh in other devices.

Note syncing a big database for the first time can take a little while to complete and the app needs to be in the foreground and screen on while this completes (as iOS and Android suspend file transfer in the background).

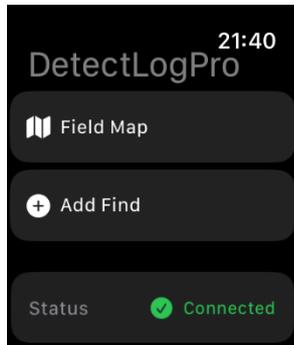
Recommendation is to temporarily turn display timeout so this can complete. As a guide 340 records takes about 35 minutes. Fortunately sync updates after that are much quicker!



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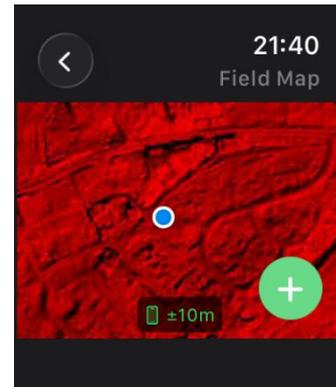
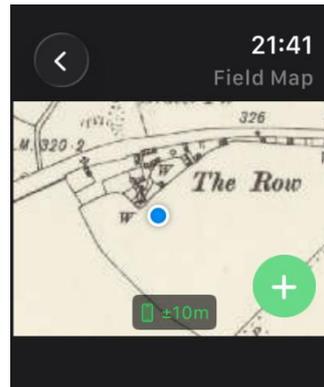
## 12 Apple Watch App

If you have an iPhone, you also have access to the DetectLogPro Watch app.



This once installed (via the apple Watch App on your phone) will give you two useful field functions of adding finds using your voice to dictate find

descriptions and seeing a copy of the current map on your iPhone (including Lidar Overlays – although an unfortunate shade of red!):

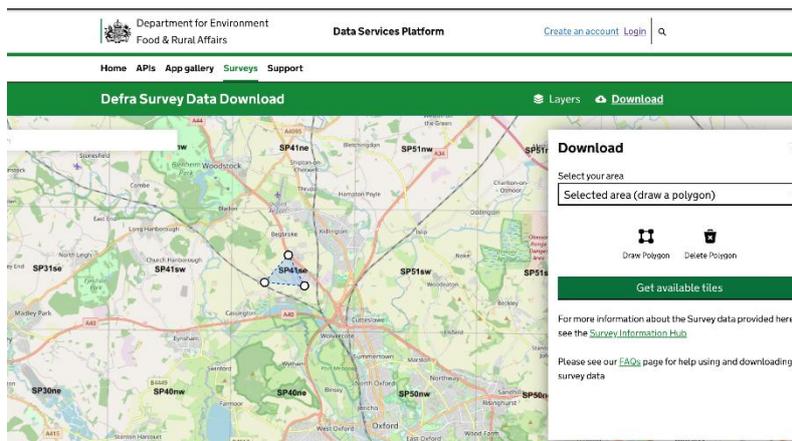




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## 13 Appendix A - Generating MBTiles files

To create a MBtiles file you first need to download a tile set from <https://environment.data.gov.uk/survey> and after zooming into the part of the country you need lidar for drawing a polygon over the area you need:



Then after pressing 'Get available tiles', downloading your datasets. I use the LIDAR Composite DTM type and go for the highest resolution. This will download a zip file with amongst other things a TIF file (it will be the biggest thing in the zip file). This is

the one you need to then convert to MBTiles. As mentioned earlier QGIS (<https://www.qgis.org/downloads-list/>) is brilliant but complex.

Another option is to use the Hillshade Converter script we will shortly be making available on our website.



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The screenshot shows the 'Hillshade to MBTiles Converter' application window. The interface is dark-themed and includes the following sections:

- Input GeoTIFF (DEM):** A text field containing the path `/Users/stevepage/Downloads/lidar_composite_dtm-2022-1-SP41sw/SP41sw_DTM_1m.tif` and a 'Browse...' button.
- Output MBTiles:** A text field containing the path `/Users/stevepage/Downloads/lidar_composite_dtm-2022-1-SP41sw/SP41sw_DTM_1m_h` and a 'Browse...' button.
- Parameters:** Three sliders for 'Z-Factor (vertical exaggeration)' (set to 7.951724137931035), 'Azimuth (light direction)' (set to 315.0), and 'Altitude (light angle)' (set to 45.0). Below the sliders are 'Min Zoom' (10) and 'Max Zoom' (17) dropdown menus.
- Processing Log:** A text area showing the execution of GDAL commands and progress updates, including 'Generating hillshade preview...' and 'Preview generated successfully!'.
- Buttons:** 'Generate Preview', 'Convert to MBTiles', and 'Clear Log' buttons are located at the bottom of the window.
- Preview:** A small window on the right side of the application displays a grayscale hillshade map of a terrain.

## 14 Appendix B - Frequently Asked Questions

Issue	Solution
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Route tracking only appears to record a point when the phone is turned on (straight lines between points)	Your phone is probably stopping the app from running when screen is off as modern phones are aggressive when trying to save battery power. Check for battery optimisation or sleeping apps in your phones settings.
I cannot see the overlay toggle icon	You need to be viewing a URL map AND have a MBTiles file loaded in Overlay tab.
I cannot see my Lidar overlay	Check the show overlay toggle is not off, and also try zooming in or out. The MBTiles export has a limited set of zoom levels and the app needs to be in one of these to 'find the tile'. It can zoom closer as it can stretch the last tile.
On my iPhone I cannot get to where I saved my MBTiles or GPKG files	See the note earlier in the manual about the iOS file manager – it isn't obvious! You can also 'Share' MBtiles and GPKG one at a time with the app on iOS.
Maps wont load	Check your data connection. If you are going to a location with poor data signal, try pre-loading map tiles at home by zooming into the area you plan to visit.
I cannot edit my Finds – the edit button is greyed out!	The app by default prevents you changing others finds entries if you are sharing the database, but this can be managed by making sure you have your user name added correctly in Settings. Once this matches the finds in the database, they will be editable and the map images will no longer have a blue border.
My finds have disappeared!	Check you haven't a filter active.
Cloud sync keeps stopping	Unfortunately, it is only possible to share data with your Google Drive whilst the app is open (showing on the screen). The app will detect sync has stopped and prompt you to resume when it regains focus. If you are doing a full load (or export), it is best to leave you phone with screen on (turn of screen saving). 300 records for me took 30-40 minutes to transfer. Fortunately dig updates are much quicker!



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<p>I want to add a photo and make it the default?</p>	<p>Goto the find and click the edit icon, you can then add photo's using camera or gallery. You can also change the order by grabbing the bar at the bottom of the photo. If you have just added the photo you may need to save the record and re-edit to move the new photo to the front.</p>
<p>Where are my finds stored?</p>	<p>Along with a database on your device, finds are stored in the DetectLogProSync folder on your cloud storage. Each waypoint has a text record with your data, and there is also a subfolder 'Images' that contains all your photos. Data is totally in your control and PageTech Ltd has no access to it!</p>
<p>How many records are stored on my phone?</p>	<p>At the bottom of the Settings form there are stats showing memory and storage used plus total number of finds and total images.</p>
<p>I cannot see DetectLogPro on my Apple watch!</p>	<p>Go to the 'Watch' app on your iPhone and scroll to the bottom where there will be a list of uninstalled apps – you can then install it.</p>
<p>Watch app does not correctly show my location.</p>	<p>The app uses the GPS on your phone as this is more accurate than the watch itself, and it can take a few seconds to get the value. Also to reduce battery usage it is only updated every 5 seconds. If though it is 'stuck' exit the map view to the main screen and re-enter – this will force a new load of the map.</p>