METREL®

aPAT Print Pack Product Guide

Contents

We also have some video guides for this kit, scan the QR to visit our video playlist or visit https://tinyurl.com/apathelp

1. aPAT dashboard screen

When you first open the aPAT app you will be presented with this screen.
Below describes what each button is for

Scans a QR Code from an existing tag to locate it in the database

Opens an existing project or allows you to create a new project database

Main Setting screen activate software, adjust print settings etc.

Displays all upcoming tests due within the next 30 days

Edit pre-setlists like Appliance name, locations and ID's

Allows you to download/upload the Simple Test or create custom test sequences
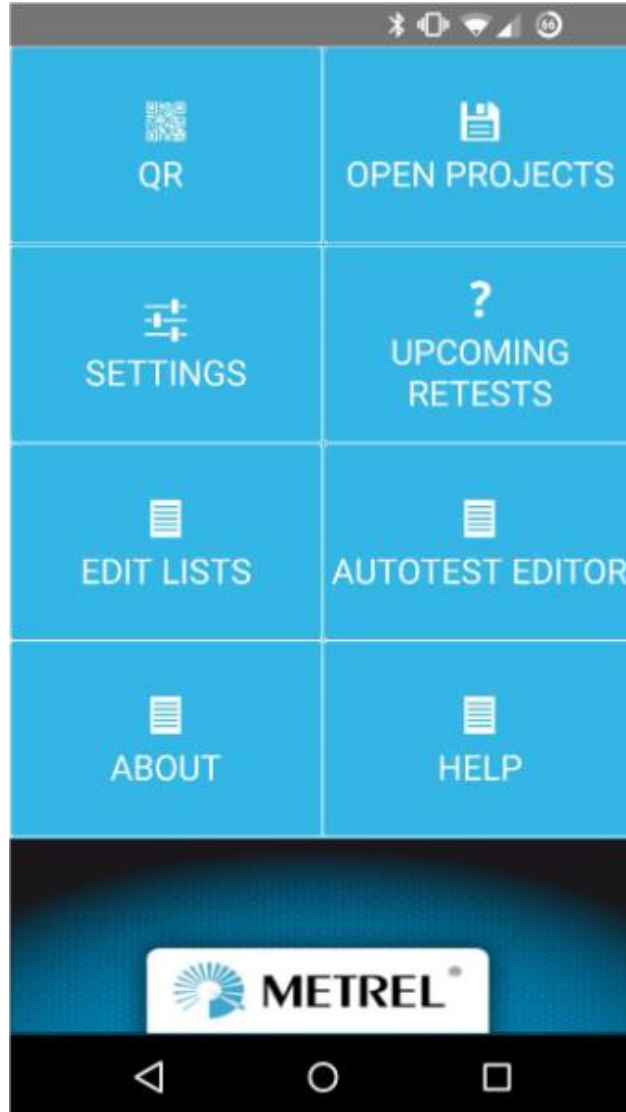
Displays current version of software

Opens PDF of the manual (pdf viewer needs to be installed)

2. **Applying A1434 aPAT Android Activation Code (license)**

If you do not have any activated devices, the application will work in a limited "demonstration" operation mode, which adds timeout to some operations. So you need to activate devices to start fully using the application. Each appliance tester that you want to communicate with must be activated. Let us go through device activation.

If you purchased this as a complete set including a tablet, the whole system may already be setup and the Bluetooth connections paired already, but if not, you can follow these steps:

Firstly, you will need an android tablet or phone (it is recommended to use an android phone or tablet with a good quality focusable camera, that will help for easy retesting by scanning the printed QR code on test tags)

1. Download the aPAT software from the Google Play Store. This can be accessed on your Android Device through the Google Play Store. The software is free to download but requires an activation code to register the full version. This activation code can be purchased from your Metrel dealer.
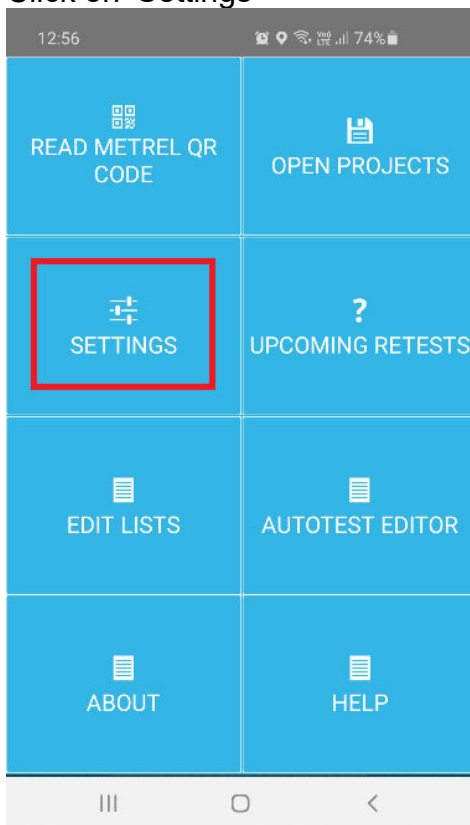You will need to search for and install aPAT on your device from the Google Play store, it will display an icon that looks like this.
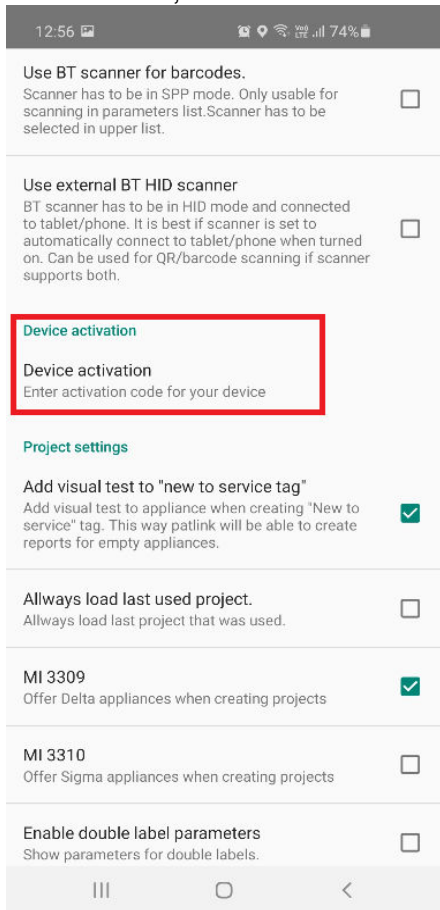You can download the app from here:
https://play.google.com/store/apps/details?id=si.metrel.apat

Once the app is installed, to apply the A1434 aPAT license follow the below steps:

2. Open the aPAT app.

3. Click on 'Settings'

4. Scroll down, find 'Device activation' and click on it

5. Turn on your appliance tester then Click on the "key +" icon in the bottom corner
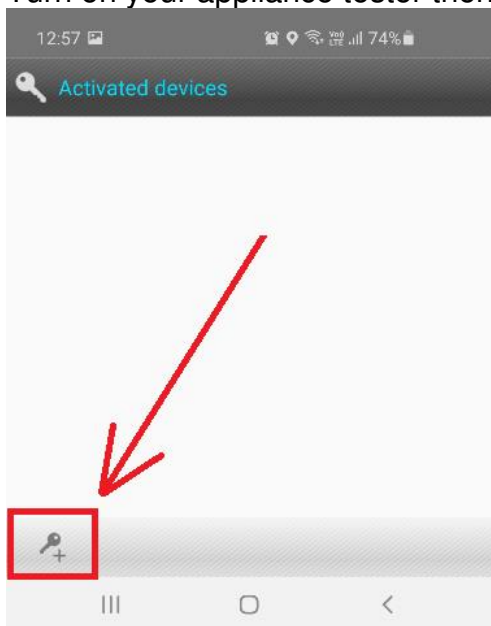
6. It will scan for nearby Bluetooth devices, ensure your appliance tester is turned on. once it appears, it will show the device name and serial number, select the appliance tester you want to activate – if it does not appear scan for device again.
    a.   if it still is not appearing for some android devices you can try to first pair it through regular android BT settings first, then once paired through regular BT settings go back into this and it should now appear.
    b.   If it prompts for a BT pairing pin at all, the pin is 'NNNN' for the MI3309BT
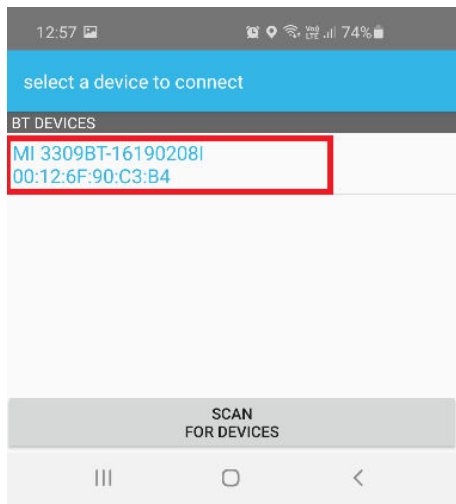
7. Now you have two options, easiest usually is the QR method, you can press the picture of the QR code on the right side and it will open up your barcode scanner app, then you can scan the QR code supplied by the dealer, then press done.

    Alternatively you can get the .lic file from the dealer and place it on the tablet in its files, the file will need to be placed inside the aPAT import folder. Usually at 'android/data/si.metrel.apat/files/metrel/aPATImports'

    Select the .lic file.
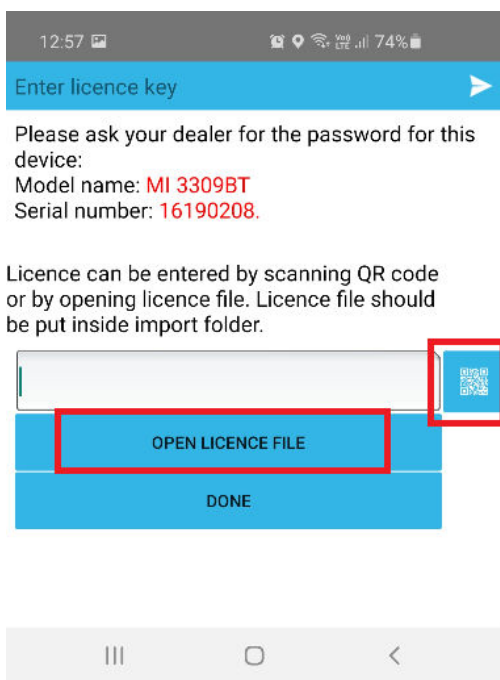
8. Press 'Done' it will then show the device in the list of activated devices

3. Adjusting aPAT settings

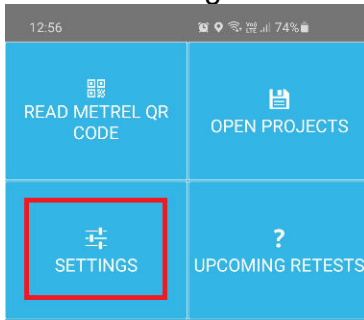There are some important settings which may need to be setup, **if you have purchased this as a complete pre-configured set you should be able to skip this**, but otherwise please follow the below steps to setup the recommended settings.

1. Click on settings

2. Here is a list of settings found within the menu which we suggest setting as per below recommendations, some will need customisation:

| General settings	Disconnect on exit	☑
Retest notice (days)	30	
Default retest period	12 months - (change to what suits you)	
Region	AUS,NZ	
Select BT Printer	Select your printer, (see section 4)	
Pick your printer model	Pick the relevant printer for you (see section 4)	
Zebra mobile printer settings	Leave everything within as default usually	
Select BT Scanner	Usually not set unless you use an external scanner	
Use BT scanner for barcodes	Leave unticked usually	
Use external BT HID scanner	Leave unticked usually	
Device activation	For adding your license (see section 2)	
Add visual test to "new to service tag"	☑	
always load last used project	Unticked (unless you always use same project)	
MI3309	☑	
MI3310	Unticked (only for a different model tester)	
Enable double label parameters	Unticked (only for a different model tester)	
Show address field in location element	Unticked (not typically used for MI3309)	
Autoincrement appliance ID when adding new..	☑	
Print&Save button preferences	Enable Print&Save print label and save to tester (unticked) Print label and save to android device	☑ ☐ ☑
Print without saving first.	Unticked	
Save to Android device	Unticked	
Save to tester	Unticked	
OK button behaviour	☑	
BT connection setting	Use alternative BT connection creation (unticked) Asus MemoPat BT fix (unticked)	☐ ☐
Picture	Picture quality default is 70	
Export project	Fix MESM export	☑

4. Setting up / Pairing BT printer

The android app handles the Bluetooth communications, we need setup the Bluetooth pairing between the android device and the printer. There are various compatible printers, and this guide will run through setup of each, **only follow the steps of your relevant printer.**

Printers must be setup by distributor to work correctly, each printer has special configuration inside to work with this application so please make sure only to purchase a printer specifically setup to work with aPAT.

1. Zebra ZQ520 / Zebra ZQ521 / Zebra P4T / Toshiba B-EP4DL

Only follow this section if your printer model is any of the above models

1. Ensure your printer is turned on

2. Go into settings
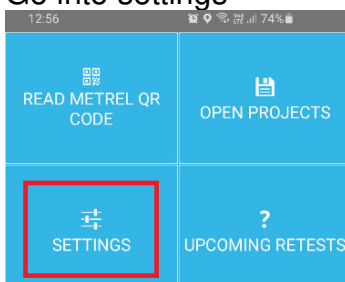
3. Under the 'select printer' section, click on 'Select BT printer'

4. This will scan for nearby Bluetooth devices; you will need to select your printer when it appears

    The device would usually appear as MODEL-XXXXXX (last 6 digits of serial number)

5. If it prompts for a Bluetooth pairing PIN, it should be '0000'

    HINT: *If your printer is not appearing with the search inside of aPAT, try to first pair the printer through the android devices actual Bluetooth settings first (outside of aPAT). Some versions of android had a restriction where an app could not see the Bluetooth device until it was paired first in the actual Bluetooth settings.*

6. Under 'pick your printer model' select the relevant printer

    'Zebra wide labels' is the correct setting for Zebra ZQ520 / ZQ521, the Zebra P4T, and the Toshiba B-EP4DL

7. Zebra mobile printers setting can be left as default, that is if you need to adjust darkness of the print or adjust X/Y position on the printed tags but usually default is ok.

    In some cases, with some test tags the darkness may need to be adjusted to improve the quality of the print, depending on where you purchase the rolls of test tags from some can have some slightly different material.
    For most setting as 0 will be ok but we have also seen some different label material where

setting as -12 produced the nicest print quality, so you can try to adjust this setting to get the best print quality from your test tag media if required.
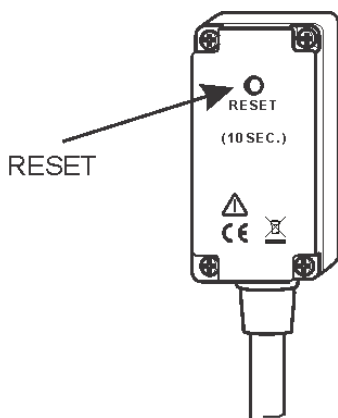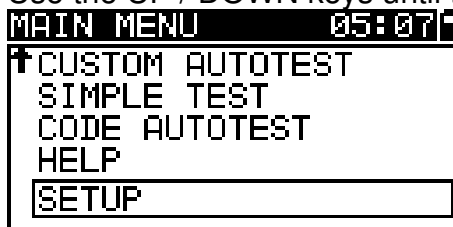
2. Zebra TLP2824+

1. First, plug your printer`s A1436 BT Dongle into the communications port on your tester via the A1410 adaptor as shown below.

A1436

A1410

2. Turn on your tester.

3. Reset the printer BT Dongle by holding the reset button down for at least 10 seconds as shown below.

RESET

RESET
(10 SEC.)

4. Use the UP / DOWN keys until the menu shows SETUP.

```
MAIN MENU       05:07
↑CUSTOM AUTOTEST
 SIMPLE TEST
 CODE AUTOTEST
 HELP
 SETUP
```

5. Enter SETUP menu using TEST button and move down to COMMUNICATION.

```
SETUP              05:07
 MEMORY
 LANGUAGE
 COMMUNICATION
 LCD
 TEST SPEED SETUP
```

6. Enter to COMMUNICATION menu (TEST button).

```
COMMUNICATION   05:07
COM PORT:RS232
PRINTER :PRINTEK
```

7. Select PRINTER and set to ZEBRA BT using TEST button.

```
COMMUNICATION   05:09
COM PORT:RS232
PRINTER :ZEBRA BT
PRN NAME:
INIT. BT DONGLE (PRN)
```

8. Move down to INIT. BT DONGLE (PRN) and press TEST button. (Make sure that BT Dongle is plugged to the instrument).

```
COMMUNICATION   05:09   COMMUNICATION   05:09
COM PORT:RS232          EXTERNAL BT DONGLE
PRINTER :ZEBRA BT       SEARCHING...
PRN NAME:               OK!
INIT. BT DONGLE (PRN)
```

9. Now that it's initialized, you can unplug the printer BT dongle and plug that into your printer as shown

A 1436

10. Now on aPAT, go into settings
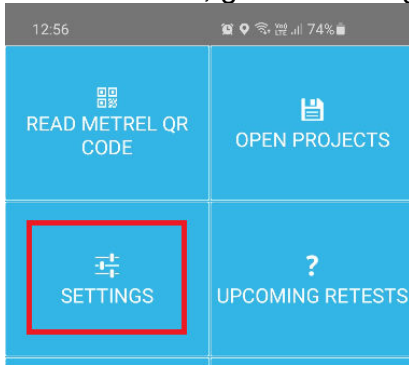
11. Under the 'select printer' section, click on 'Select BT printer'

12. This will scan for nearby Bluetooth devices; you will need to select your printer when it appears, Zebra TLP2824 will usually appear as 'ZebraPRN'

    HINT: If your printer is not appearing with the search inside of aPAT, try to first pair the printer through the android devices actual Bluetooth settings first (outside of aPAT). Some versions of android had a restriction where an app could not see the Bluetooth device until it was paired first in the actual Bluetooth settings.

13. If it prompts for a Bluetooth pairing PIN, it should be 'NNNN'

14. Under 'pick your printer model' select the 'Zebra 2824 Plus'

15. Zebra mobile printers setting can be left as default, that is if you need to adjust darkness of the print or adjust X/Y position on the printed tags but usually default is ok.

    In some cases, with some test tags the darkness may need to be adjusted to improve the quality of the print, depending on where you purchase the rolls of test tags from some can have some slightly different material.
    For most setting as 0 will be ok but I have also seen some different label material where setting as -12 produced the nicest print quality, so you can try to adjust this setting to get the best print quality from your test tag media.
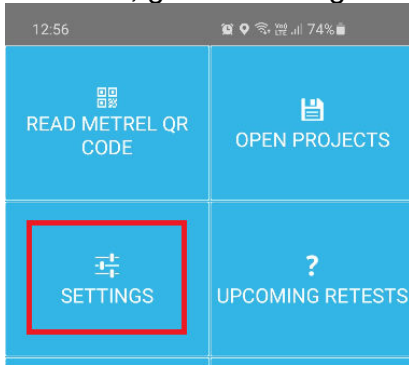
3. Godex RT200

Only follow this section if your printer model is Godex RT200

1. It's important to turn on the printer first (this is for Bluetooth to initialise correctly, otherwise you may experience BT connectivity issues) turn the battery pack on (or plug it in with the mains), then press the power button on top of the printer

The Power Status LED will illuminate RED at first, wait up to 15 seconds and once the LED turns to green the Bluetooth has initialised and ready to continue

2. on aPAT, go into settings

3. Under the 'select printer' section, click on 'Select BT printer'

4. This will scan for nearby Bluetooth devices; you will need to select your printer when it appears, Godex RT200 will usually appear as 'ZebraPRN' *(it is emulating a Zebra printer)*

   HINT: If your printer is not appearing with the search inside of aPAT, try to first pair the printer through the android devices actual Bluetooth settings first (outside of aPAT). Some versions of android had a restriction where an app could not see the Bluetooth device until it was paired first in the actual Bluetooth settings.

5. If it prompts for a Bluetooth pairing PIN, it should be 'NNNN'

6. Under 'pick your printer model' select the 'Zebra 2824 Plus'

7. Zebra mobile printers setting can be left as default, that is if you need to adjust darkness of the print or adjust X/Y position on the printed tags but usually default is ok.

   In some cases, with some test tags the darkness may need to be adjusted to improve the quality of the print, depending on where you purchase the rolls of test tags from some can have some slightly different material.
   For most setting as 0 will be ok but I have also seen some different label material where setting as -12 produced the nicest print quality, so you can try to adjust this setting to get the best print quality from your test tag media.

5. Setting the pass and fail logo's that print on the test tag

Continuing from the previous step, the setting of the logo applies the same no matter the printer model.

1. Within settings press AUS/NZ label setup (only appears if region is set to AUS,NZ)

2. Press the 'Pass label logo' button
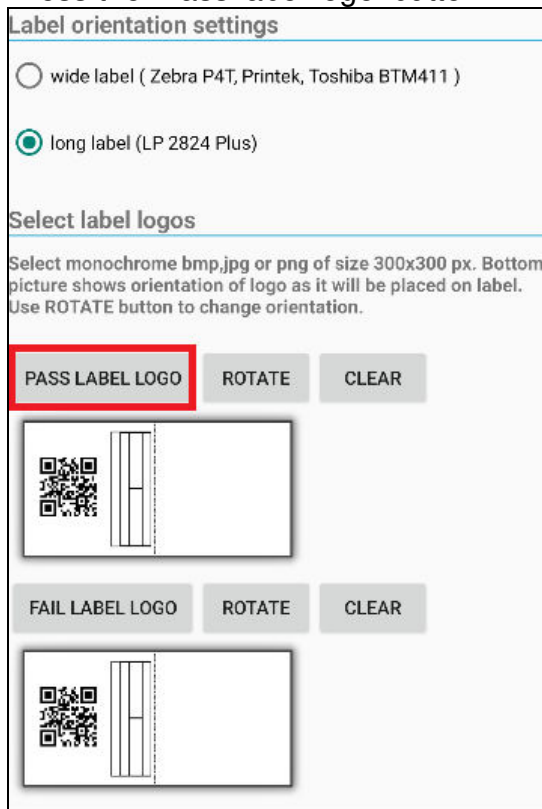
3. Best way to find the pre-installed 'pass' logo is to just use the search bar at the top, search for the word "pass", allow it a moment to search and it should find an image that says pass. Click on the pass image and it will set it as the logo to print for a pass result
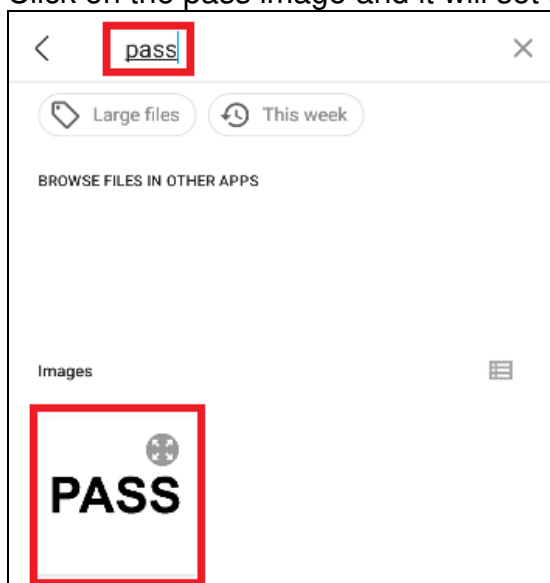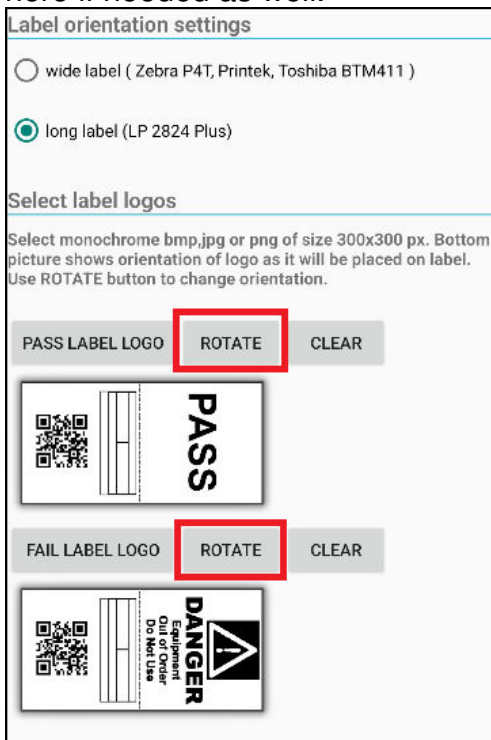
4. Do the same for the fail logo, press the 'fail label logo button'
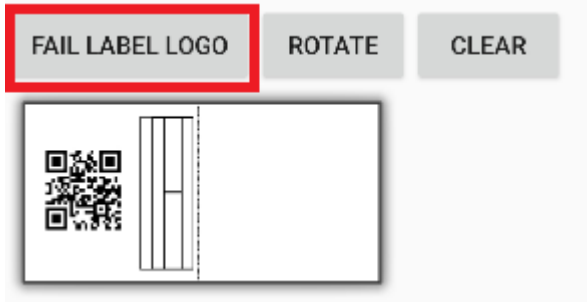
5. Using the search bar at the top, search for the word "danger", allow it a moment to search and it should find an image that says danger.
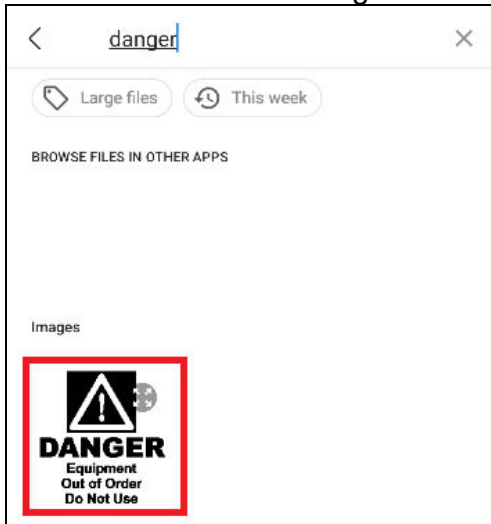
6. Now you will see your two logo's that have been set, you can choose to rotate the images here if needed as well.

You can also check this guide in section **11.VIII** which has some more information about adding a custom logo if desired.

6. Checking and setting up custom auto tests

Autotests are a sequence of single tests that are strung together to complete all the required tests any given appliance needs to be tested on.
For example, to test an IEC lead the user should perform a visual inspection, an earth continuity test, and insulation test, and a polarity test.

With an autotest you can sequence all of those tests together with an easy to recognise name and have all the required limits pre-set into 1 sequence that can be tested at a push of a button.

aPAT has the ability to customise auto tests, **if you have purchased this as a complete pre-configured set you should be able to skip this**, but otherwise please follow the below steps to setup the recommended settings.

I. Downloading Auto tests from your tester's memory

1. Easiest way to add the list of tests is to download the list of tests from the tester via Bluetooth

2. Open the Autotest editor from the dashboard when aPAT first opens.
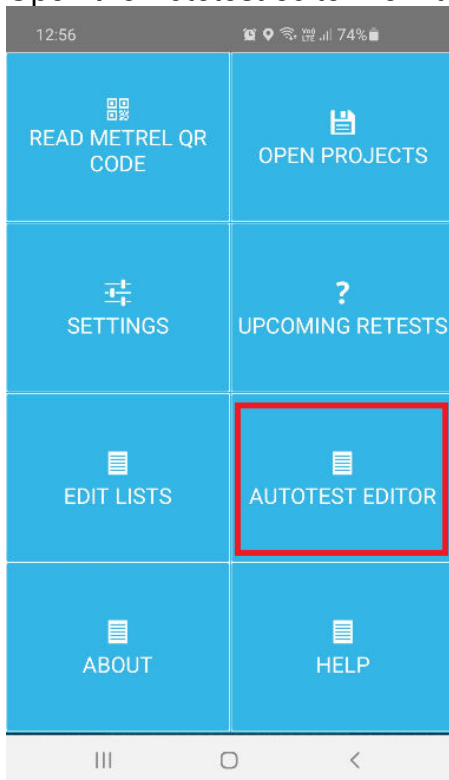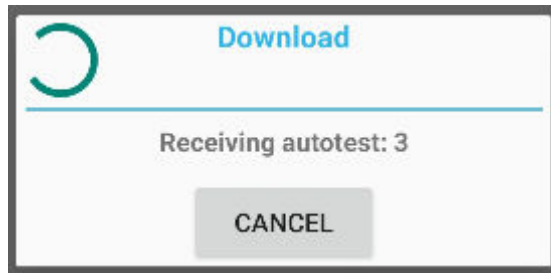

3. Just have your tester turned on and then press the down arrow (down for download)


4. It will scan for nearby Bluetooth devices, when your appliance tester appears, select it – it would usually be named MI3309BT-XXXXXXXX (the tester's serial number)
(If it prompts for a PIN enter 'NNNN')

5. It will download the list of tests from the tester.


II. Downloading and adding our pre-configured auto test list.

1. Alternatively – if your tester does not have a comprehensive list of tests on it you can download our list of tests from here:
https://www.dropbox.com/s/r5tf0khhncnremf/AutotestExportDELTA%20standard.axml?dl=0

2. You need to put this 'AutotestExportDELTA standard.axml' file on your android device
You can put it somewhere easily accessed with the system file picker

3. Inside of auto test editor, select the … menu
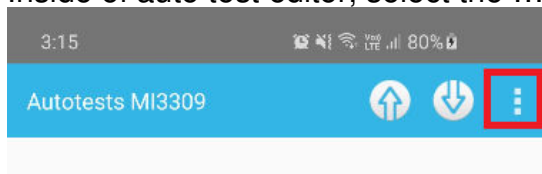
4. Press 'import exported autotests' and select the 'AutotestExportDELTA standard.axml' file from the location that you saved it.
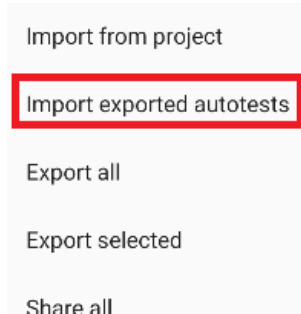
5. Now you will see you have a 'Group' of auto tests, within is each of the tests that you will be able to run.

If you click on one of the tests you could if required customise the settings of each test or create a whole separate group from scratch if required.
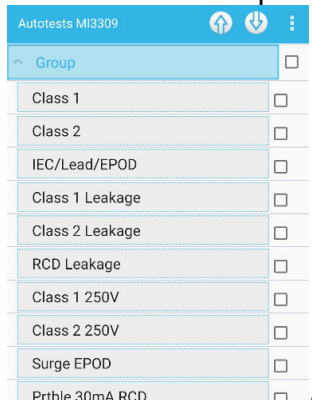
7. General information about projects and the menu's within

First, it is important to have a basic understanding of each of the functions within the project section of the app, then later once you have a basic understanding of each function, we this guide will go through the normal procedure of performing a test.

Now we can go into the projects view, press on Open Projects
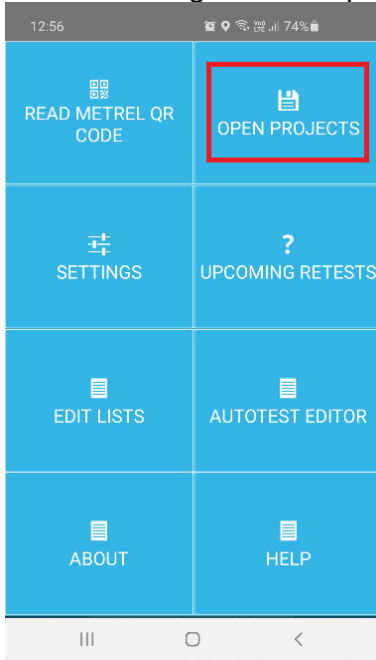
I.   Projects view

In projects view you can:
- Create new projects
- Open existing projects
- Share/Export/Import projects
- Search for appliances in tree structure
- Upload/download appliances (if instrument supports upload)
- Start execution of autotests
- Start parameters lists editor
- Open upcoming retest dialog for active project.

Projects are represented in form of tree. Under NODE element two kinds of structure elements can be inserted: PROJECT and LOCATION, which can be used to separate appliances and two kinds of APPLIANCES, for MI3309.

	NODE element is top element in tree. Underneath you can place all other elements
	PROJECT element can be only placed under NODE element. It is intended to group appliance elements.
	LOCATION element can be only placed under NODE element. It is intended to group appliance elements.
	Appliance icon

By swiping right, you can move between selected element measurements, parameters, and attachments. There are also buttons along the top you can press to switch view. Only appliance elements can have measurements.

II.   Tree view

In tree view the project's structure is presented. By clicking symbol on the left of the tree elements tree gets expanded or collapsed. By selecting element using short single click, its measurements, parameters, and attachments can be inspected or modified by moving to appropriate tab.

Each structure element has different info shown. For LOCATION and PROJECT elements, only name is shown and can be changed under parameters tab.

Appliances have more information:

Appliance ID information:

- **Autotest**, shortcode or custom autotest used for this appliance. (0 shown means that a custom autotest will be used)
- **Retest date**. When approaching retest date, this field will change colour to orange. After we are past retest date the colour will change to red. Warning period can be changed under settings.
- Symbol indicating autotest **status** (pass = green, fail = red, grey = untested)
- Paperclip symbol indicating element has **attachments**.

III. Measurement's view

In measurement view appliances that already have measurement results can view viewed.

IV. Parameter's view

In appliance parameter's view, parameters of appliance can be entered. Parameters can be entered manually or by scanning existing QR code. Once appliance has measurements, parameters will get locked, so that parameters do not get changed by accident. If user still wants to change parameters, they must be unlocked by using icon on top right of action bar.

For some of the parameter's user can prepare lists in advance. In case a list exists drop down symbol will appear next to edit field.

If you add a new name in one of these lists it will automatically add to the auto complete list, so you don't have to type as much next time.

These lists can be edited from dashboard if required

V. Attachment's view

For every tree structure element 4 different types of attachments can be added.
- Text
- Picture
- Video record
- Sound record

Once element has attachments a paperclip symbol will appear on tree element.
Note: attachments are for your reference only, they do not appear on reports.

# 8. How to perform a test via the aPAT app

Now that you have a general understanding of the menu's within, this section will demonstrate from scratch how to setup a new project, perform a test, save the result, and print a test tag.

Note: Some menus and options will vary depending on screen size, so some buttons may look different on a tablet for example as these screenshots are from an android phone.
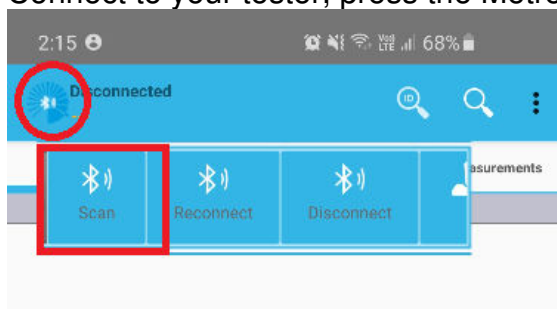
1. Turn on your printer first, followed by the tester and Android device.

2. Open the aPAT App on your android device

3. Press 'Open Projects'
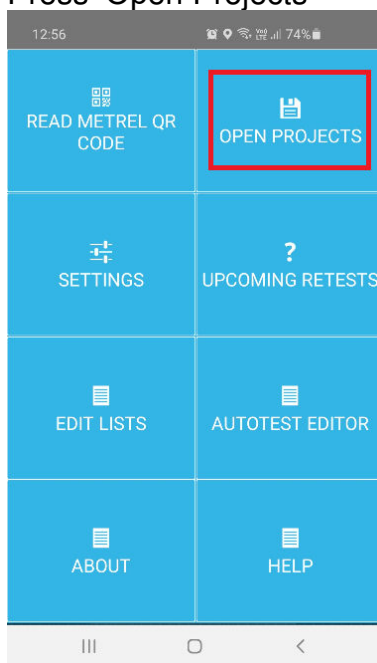
4. Connect to your tester, press the Metrel icon in the top left on the screen, then press Scan

   When your appliance tester appears, select it – it would usually be named MI3309BT-XXXXXXXX (the tester's serial number)

   It should then say connected in the top left corner. (If it prompts for a PIN enter 'NNNN')
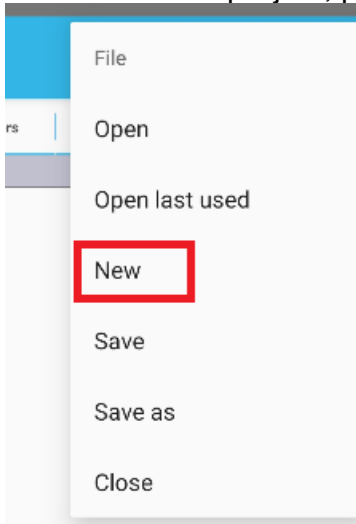
5. Now we need to make a new project, find the file menu which for small screen devices will be under the "…" menu
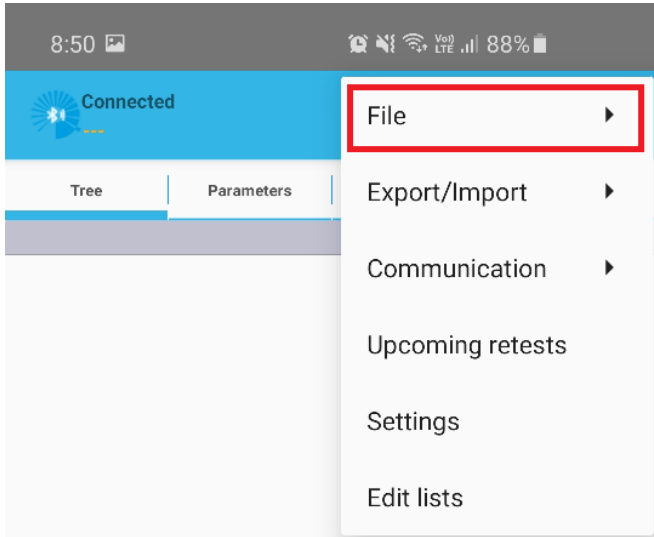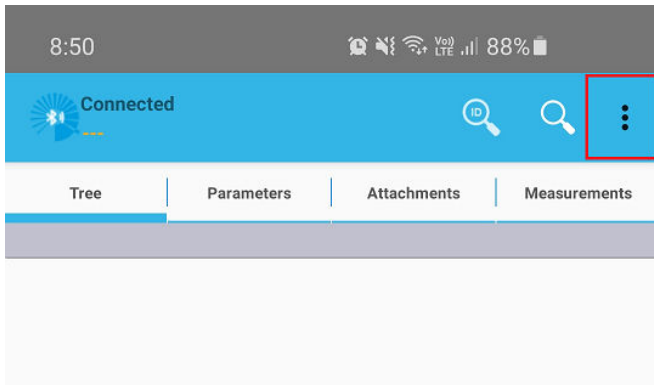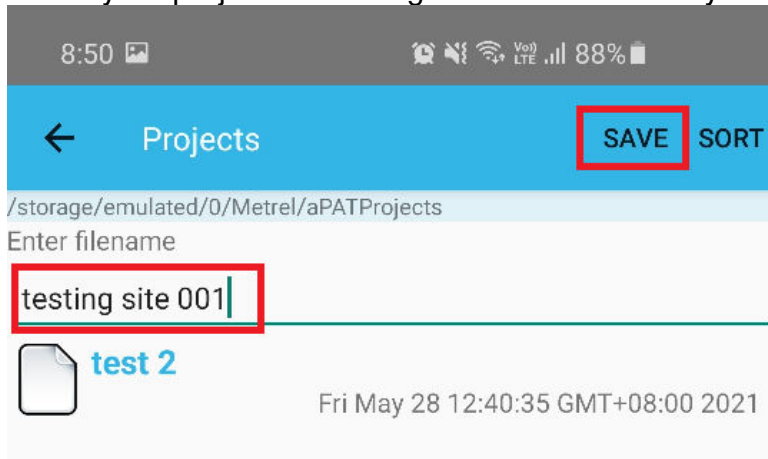
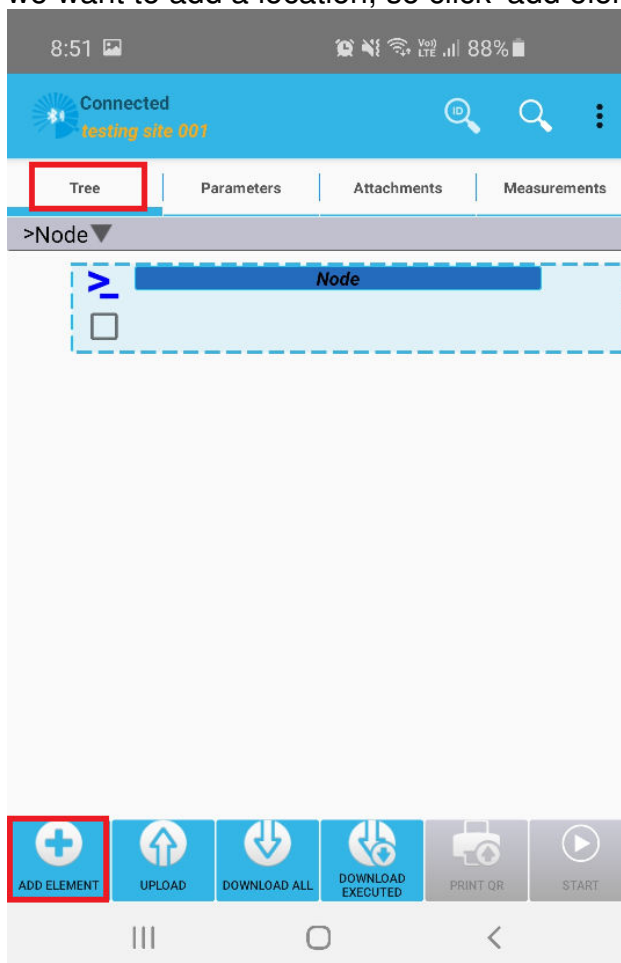Note: For device with a large screen the file menu has its own icon

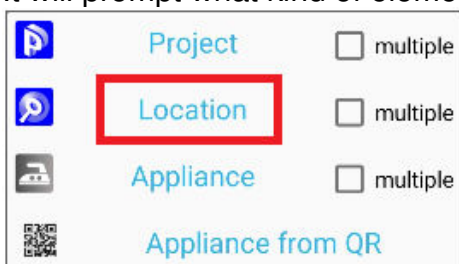Then for a new project, press 'New'

6. Name your project something relevant to the site you are testing, then press Save

7. Now click back over to the tree menu and within the node which is the top level of the "tree" we want to add a location, so click 'add element'
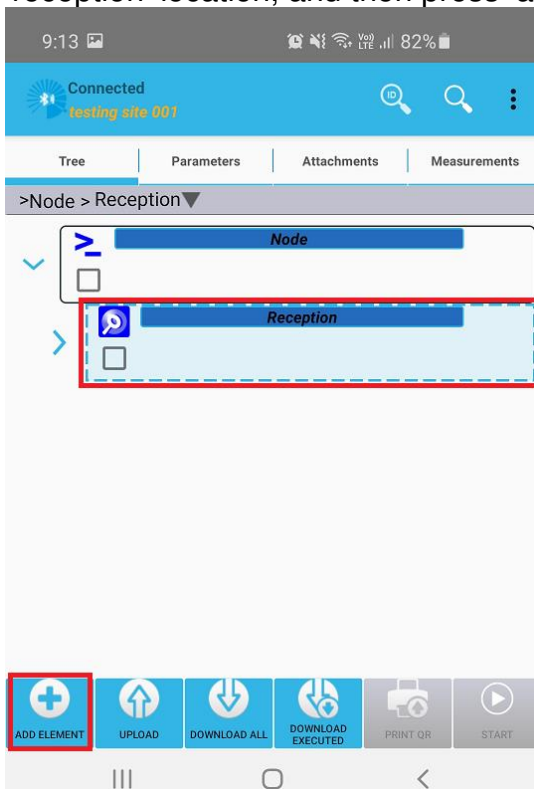

8. It will prompt what kind of element you want to add, here we will select 'Location'

9. Type in a name for the location you will be testing in, for example I will use 'Reception' Then click back to the tree display
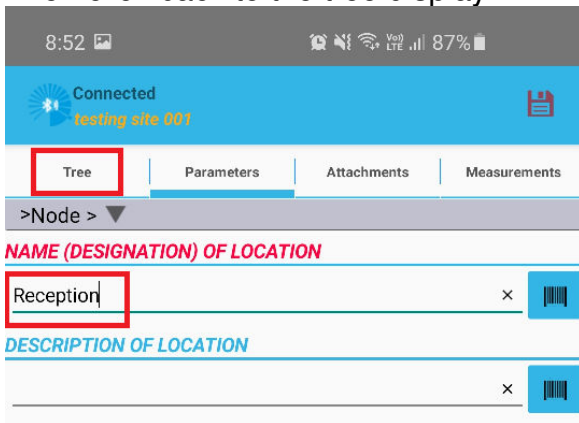
10. Now within the location we want to add an appliance that we will test, highlight the 'reception' location, and then press 'add element' again.

11. When it prompts what kind of element, here we will select 'Appliance'

12. It will automatically switch to the parameters screen, now complete some information about the device you will test.

   a. **Appliance ID -** I would suggest starting with a prefix which I have used "DTS" which is just an abbreviation for "demo test site", then just start with 0001 as the number, so the next test can be DTS0002 for example, then each ID can be unique.

b. **Name –** I would suggest naming this the item that you will test, for example I will test an IEC lead, so I have named it as such.
c. **Location (room)** will automatically be filled as we have added it from the location named 'reception'.
d. **Retest period for appliance (in months) –** Here choose how long you need until the item needs to be retested. EG: 3, 6, 12, 24, 60 months etc…
e. **Test code –** Choose the type of test to be run, described further in the next step.

13. Press on 'Custom tests', then expand the 'Group' of auto tests
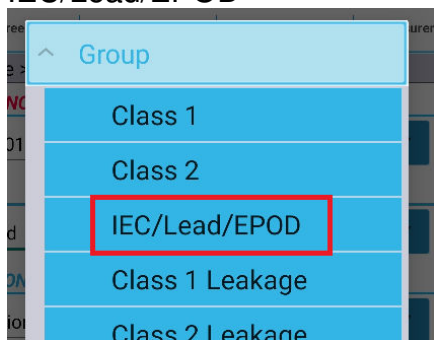
14. Choose the type of test to run, in this example I am testing an IEC lead so I will select IEC/Lead/EPOD

Note: *Knowing what type of test to run is not something covered here, we would suggest taking a test and tag course for training on how to choose what type of test to run for each different type of appliance.*

15. Now double check that all parameters are set as required, then press the start/run button in the top right corner
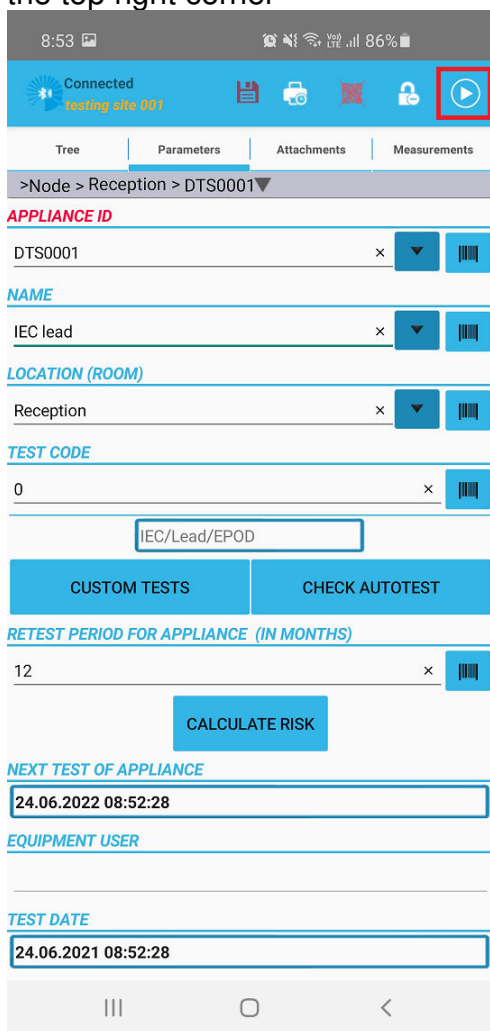

16. The tester will receive the start command and begin the test

Note: if you need to print a fail tag for a visually failed cable, press the tab key to switch over to fail, then press the OK/TEST button which will go straight to the overall results screen as a fail where you can then press 'print & save' on the app.

HINT: depending on the test you are running, some tests pause mid test with a prompt, things like RCD and leakage functions you need to press test again to begin. So make sure you proceed and wait until you reach the 'overall' results screen below before saving.

17. Allow the test to complete, at any prompts on the tester you many need to press continue for example prompting for visual inspection or prompting for performing an RCD test etc...
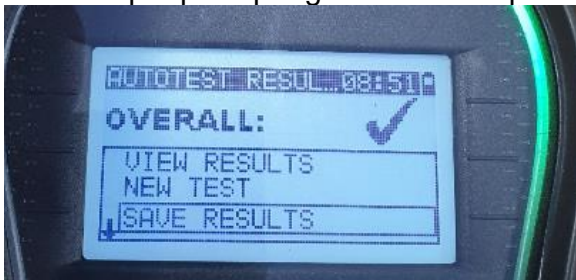

18. Ensure the tester's screen says "OVERALL" with a tick for pass or cross for fail, then press PRINT & SAVE

19. A test tag will print out the test is completed, and the results are saved.
You will notice in the measurements tab all the recorded results of the test are there.
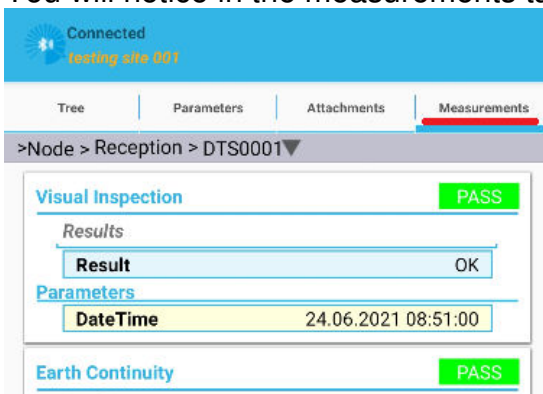
20. If you click back over to the tree view you will notice the item that was tested now has a coloured dot to indicate its result
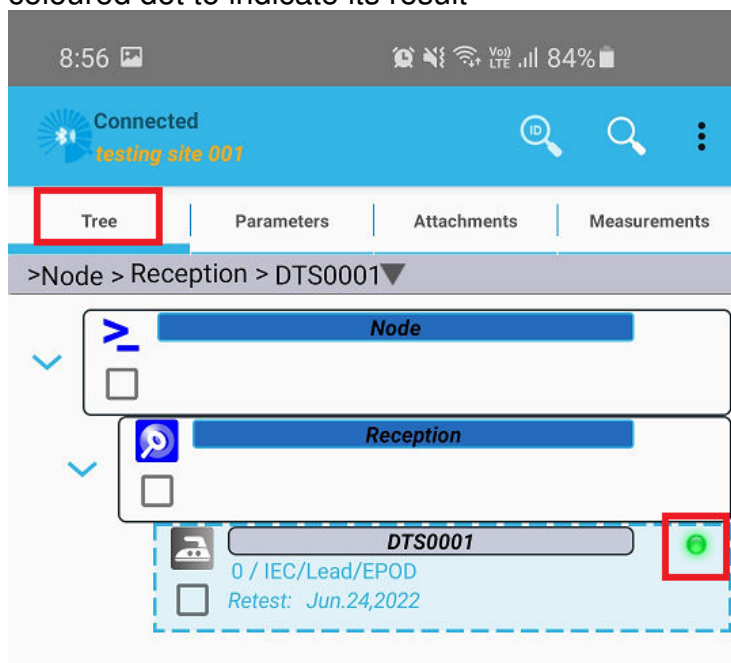
21. Now you can move on to the next item to be tested, press 'add element' per step 10 and take it from there.

# 9. Exporting projects to PC software and generating reports.

This section covers exporting the project from your android device, then importing into the Metrel ES Manager PC software and creating a report.

NOTE: These are two compatible software packages, we will cover the process for the newer **Metrel ES Manager (MESM)** software in this guide only (but PATLink PRO is also compatible)
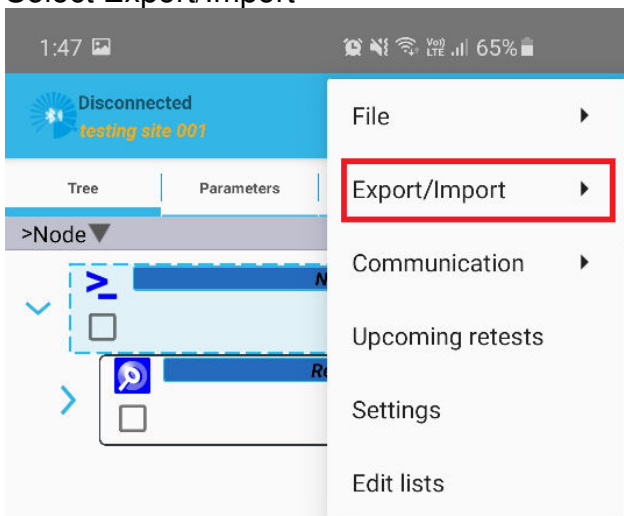
I.   Exporting project from aPAT

First, we need to export from the app, follow these steps.
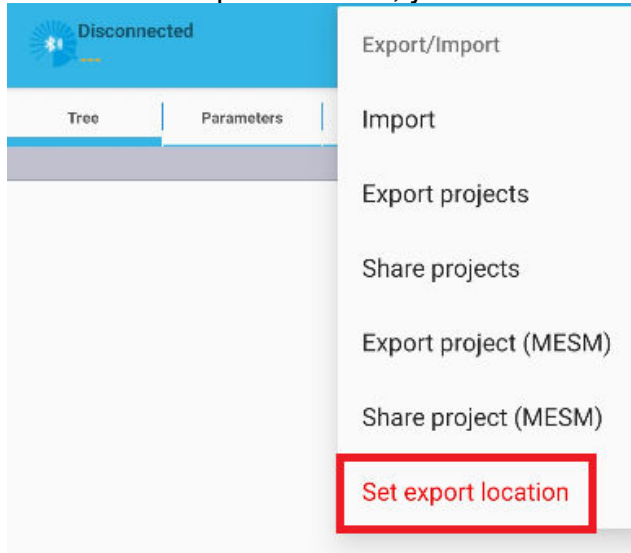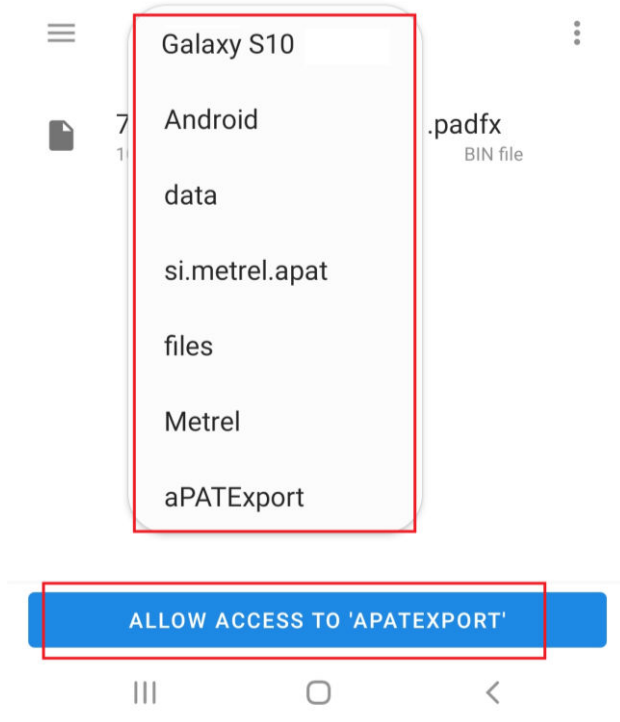
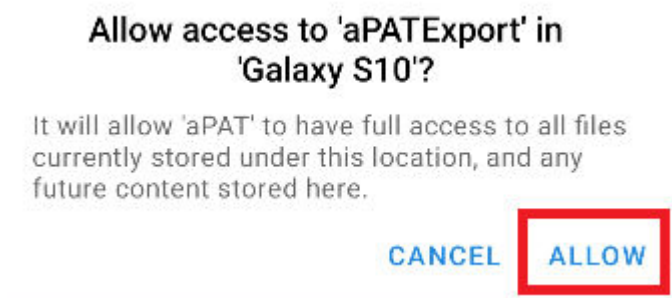1. Press the "…" to enter the menu
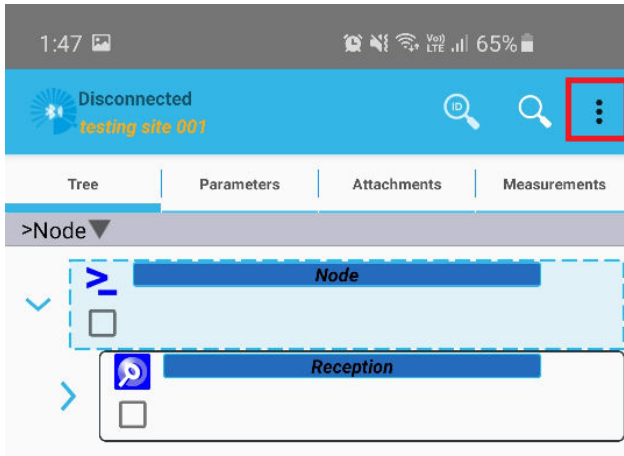
2. Select Export/Import

3. First set the export location, you need to choose where the files will go
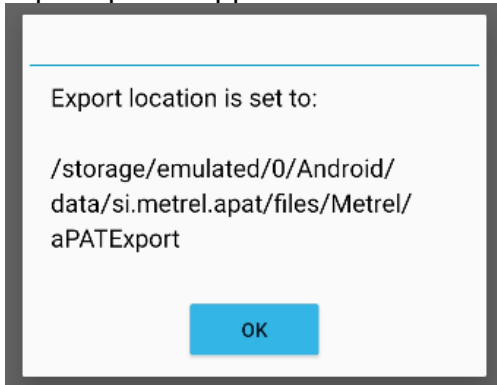

4. Choose a location and then press the 'allow access to ....' Button
   A typical location to use is 'android>data>si.metrel.apat>files>Metrel>aPATExport' but you can put it anywhere that is memorable for you.

5. Then select 'Allow'

6. A prompt will appear to confirm the new location for exporting has been set:

7. Press Export project (MESM)
    Alternatively you can also use 'Share project (MESM)' and the file can be sent as an attachment with an email, or you can send via Dropbox or something with this method if you want to try it.

    In this example just use regular export which puts the file on the tablet which you can get by plugging in by USB cable and copying it to the computer.
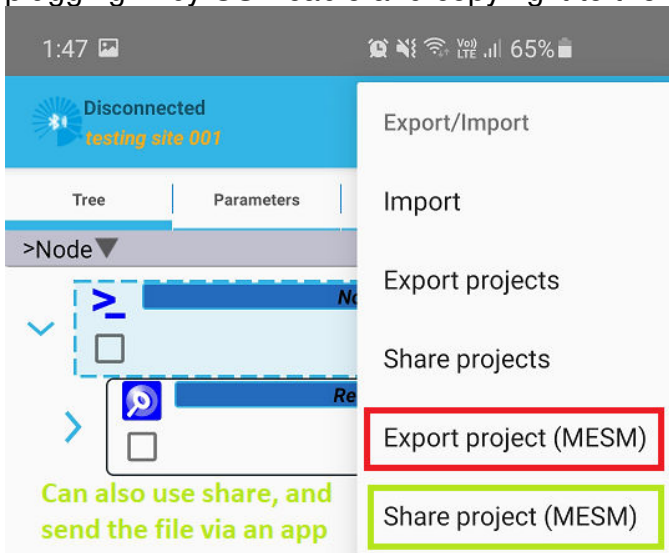
8. Select the project which you want to export, so I will click our example 'testing site 001'
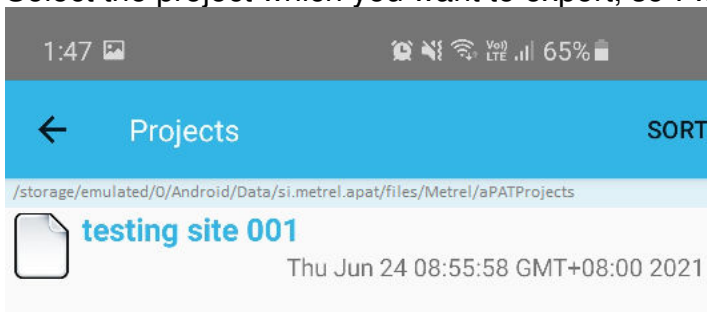
9. A message will appear saying that the project was exported, it will advise the location where the file is saved – make note of it.

Project exported.

Finished exporting project.
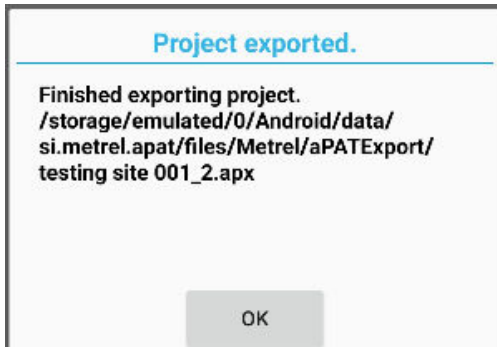/storage/emulated/0/Android/data/
si.metrel.apat/files/Metrel/aPATExport/
testing site 001_2.apx

OK

II.   Importing project into Metrel ES Manager PC software

Now we will import this project into the PC software.

1. Install Metrel ES Manager (MESM), it can be downloaded from the Metrel website here: https://www.metrel.si/en/downloads/ then use the search function to find tester software
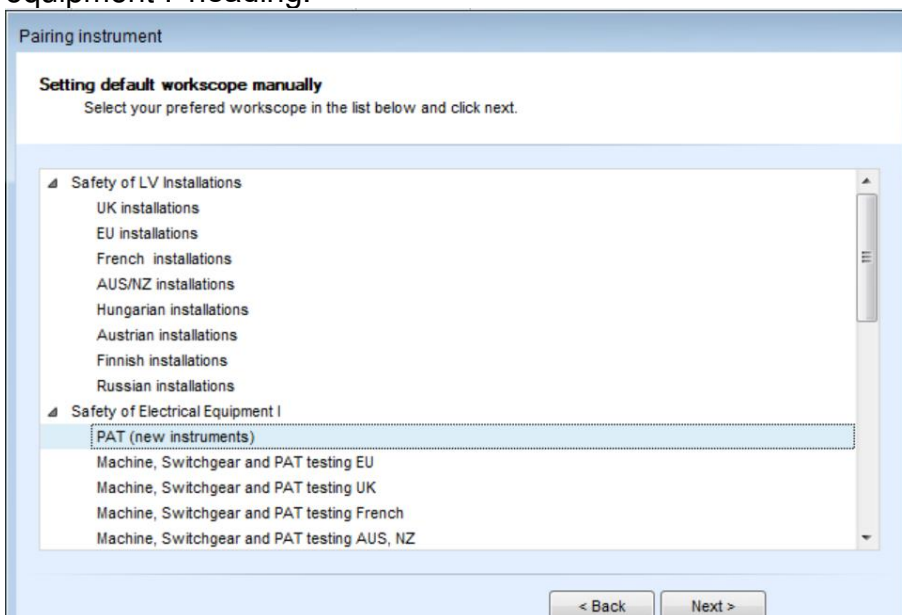
    Here is a direct link to download (correct at time of writing)
    https://www.metrel.si/assets/Metrel/PS_SW_dokumentacija/Metrel_ES_Manager/MESM.zip

2. Open Metrel ES Manager on your computer.

    Metrel ES Manager
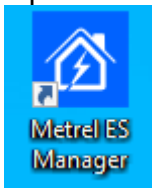
3. On the first run you may get an instrument pairing wizard, as we will not be connecting the test instrument directly, please press next and then skip and you can manually select the work scope, here please **select 'PAT (new instruments)'** under the 'Safety of Electrical equipment I' heading.

    Pairing instrument

    Setting default workscope manually
    Select your prefered workscope in the list below and click next.

    ◢ Safety of LV Installations
        UK installations
        EU installations
        French installations
        AUS/NZ installations
        Hungarian installations
        Austrian installations
        Finnish installations
        Russian installations
    ◢ Safety of Electrical Equipment I
        PAT (new instruments)
        Machine, Switchgear and PAT testing EU
        Machine, Switchgear and PAT testing UK
        Machine, Switchgear and PAT testing French
        Machine, Switchgear and PAT testing AUS, NZ

    < Back   Next >

    Then press next and finish.

4. Plug in your android device to the computer, you may be prompted on the android device to allow connection.

5. Navigate with file explorer to the folder you chose on in step 8.1 and find your project file, the location will be as per step 8.1

6. We suggest to setup a folder on your computer to keep all your exports in, so for example I will copy and paste this 'testing site 001.apx' to my backup folder that I made in 'documents'.
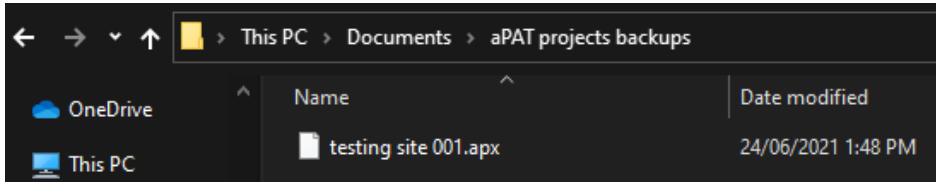

Note: Suggested as this is a helpful backup of your projects, if your android device was broken for example you can take all of these files, put them on a new android device and in aPAT use file > import to re-import these into the new device.

7. OK – now we can import that file into the software
Press File > Import > Import from aPAT
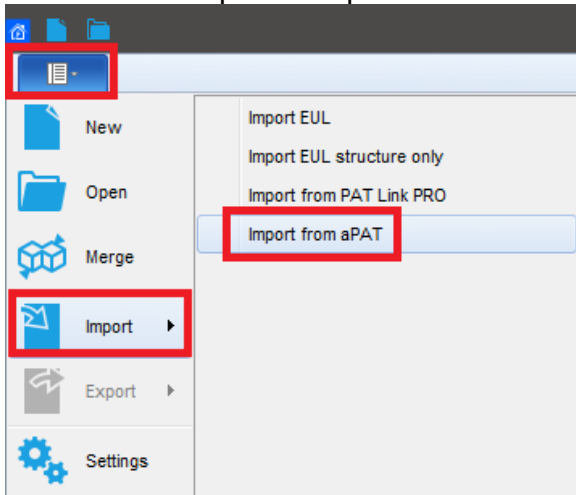
8. Navigate to the location which you saved the file, select it, then press Open
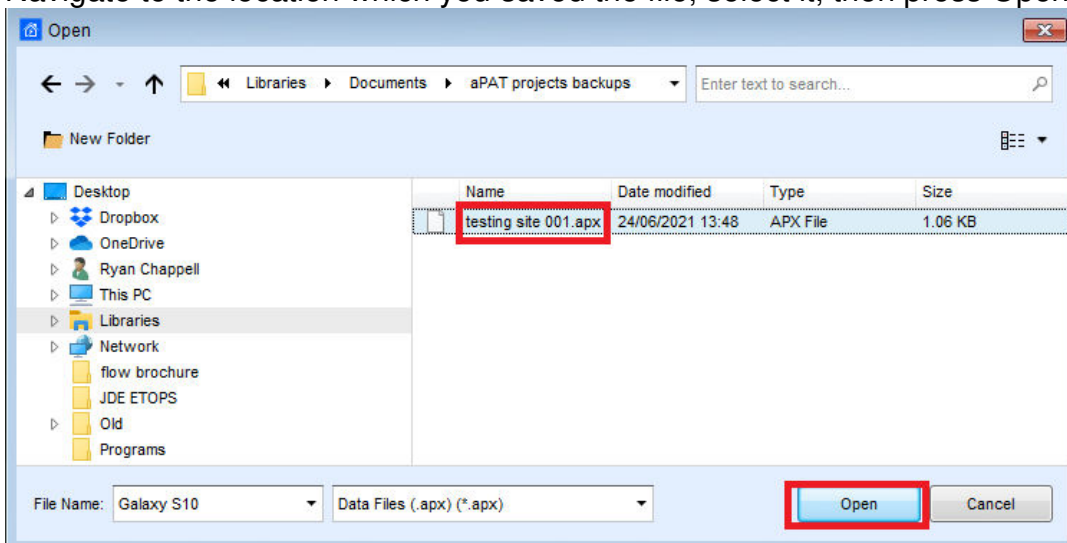
Note the software can't see the .apx file on the tablet memory sometimes, another reason why we suggest to copy/paste to 'documents' first

9. Now your project will open, here you can view all your results and now we can create a report.

10. Highlight the data that you want to create a report for on the left side in the 'Tree view'. I want to create a report for everything so I will just highlight the whole node.
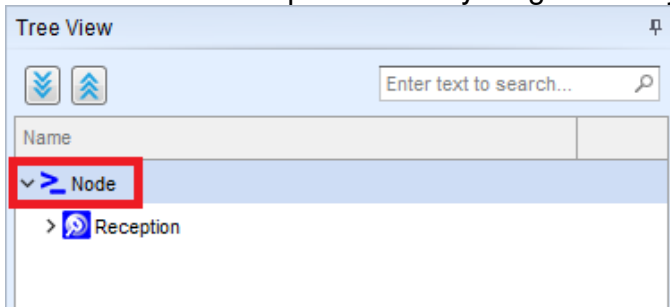
11. Now along the top banner under tools, select basic report
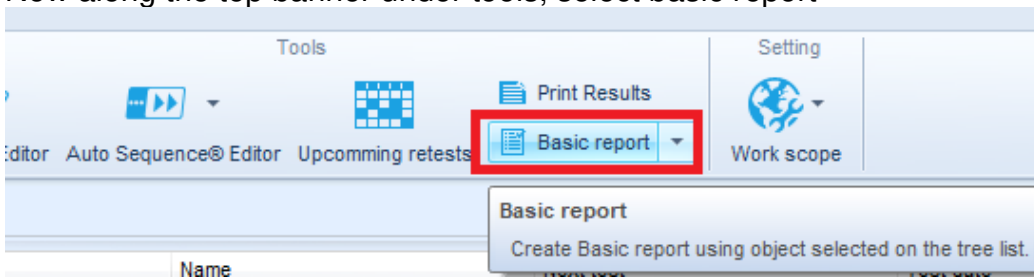
12. Now the report will generate, you can edit some fields (the ones highlighted in blue) by pressing 'Editing Fields' then you can choose to print or perhaps export as pdf, or email it as a pdf attachment.
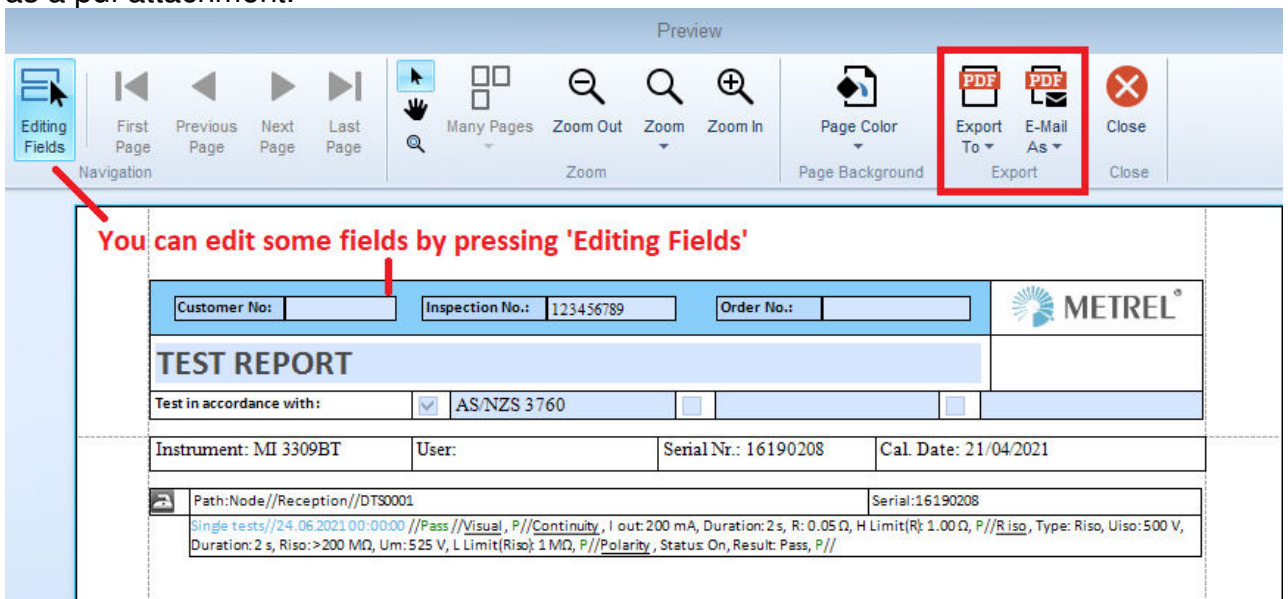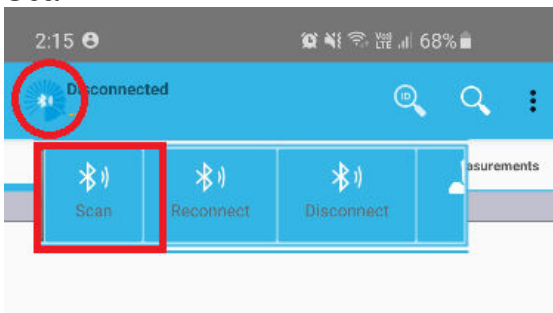
10. How to retest items in the following test cycle

When it comes time retesting you can quickly and efficiently re-test items. First open the project for the site that is being tested.
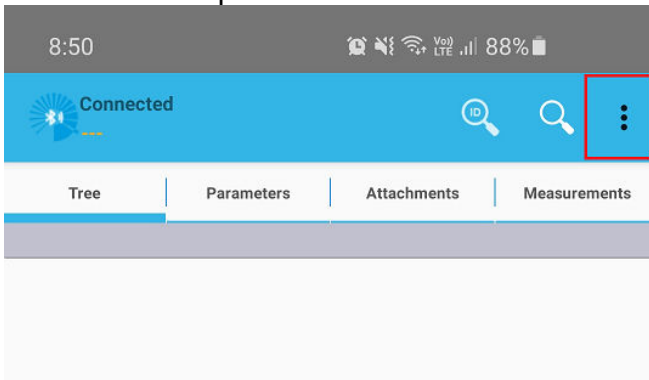
1. Press on open projects
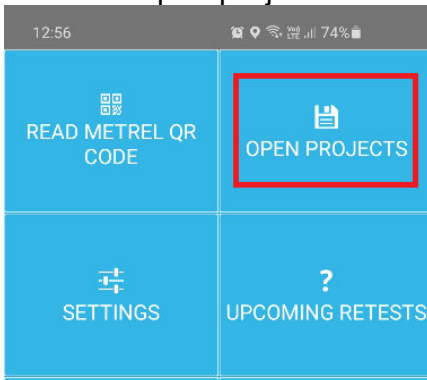
2. Connect to your tester, press the Metrel icon in the top left on the screen, then press Scan

It will scan for Bluetooth devices, when your tester appears select it to connect.

3. Select "…" to open the menu

4. Choose File
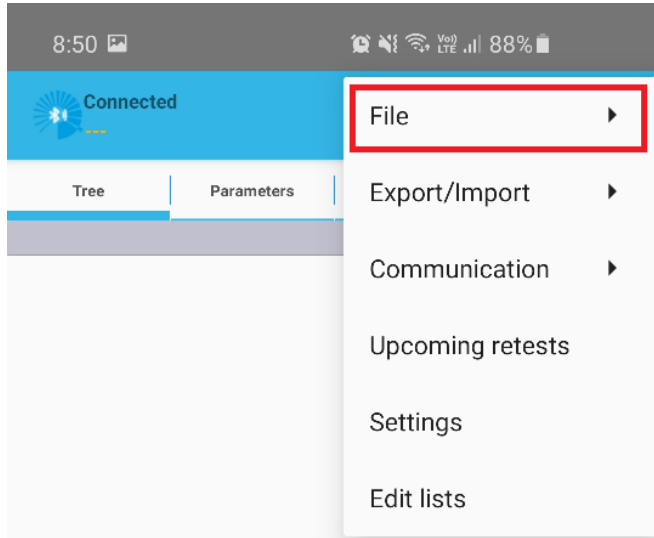
Note: For device with a large screen the file menu has its own icon

5. Then press Open

6. Select the relevant project for the site you are re-testing

Now there 3 ways you can find items in the project to re-test them, each described below:

I. Scanning the QR code on the test tag

This would be considered the normal method for re-testing of an average project.

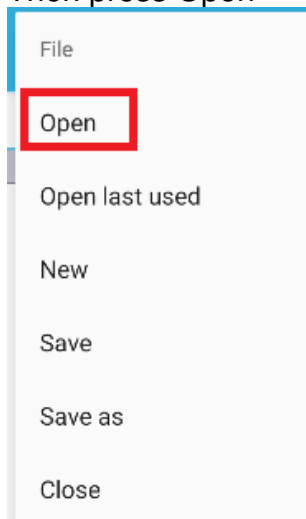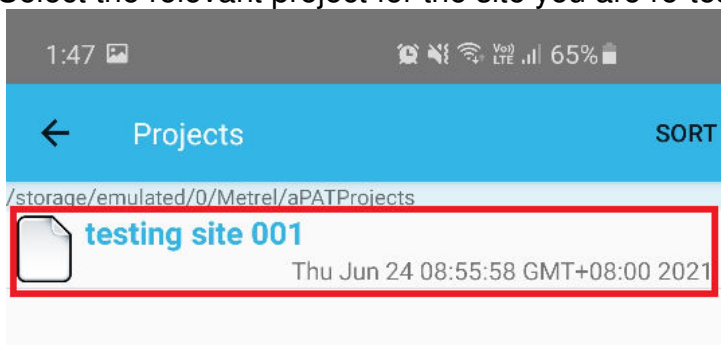1. Press the magnifying glass that says ID in the middle.
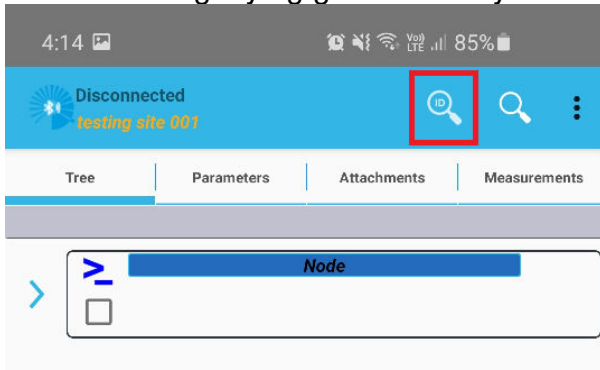
2. This will open the barcode scanner application.
   Hold the camera over the QR code of the test tag of the item you are re-testing.

Once the camera scans the QR code it will filter your project tree display to any appliances with a matching appliance ID (and you will see the red banner across the top which indicates it is in a filtered view)

3. Now select your item that needs to be re-tested, and press start.

It will start the same test with all the same parameters.

II.   Filter by appliance ID

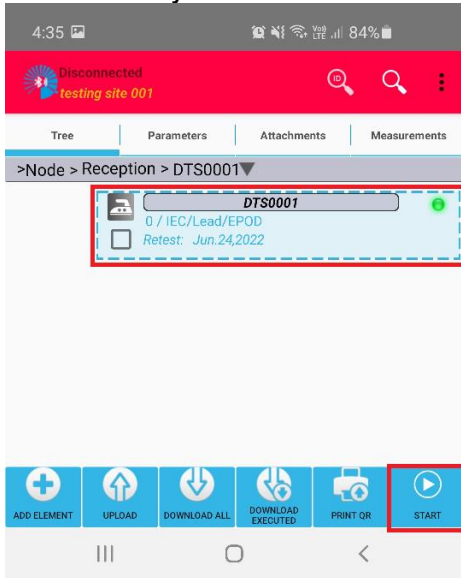This method is useful for large projects when the QR code is damaged or unreadable, but you can still see the appliance ID number.

1. Press the magnifying glass, this opens the appliance filter.
   (You can also swipe from the left side of the screen to open this filter.)
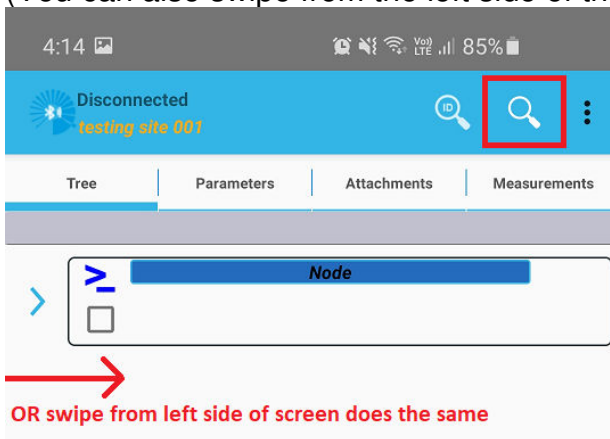
2. You can manually search by name for an appliance ID for example by typing the ID then pressing filter. Matches or partial matches will be shown.

   In my example I have picked up my IEC lead, I can see the appliance ID on the test tag is DTS0001, so I type that in and press filter
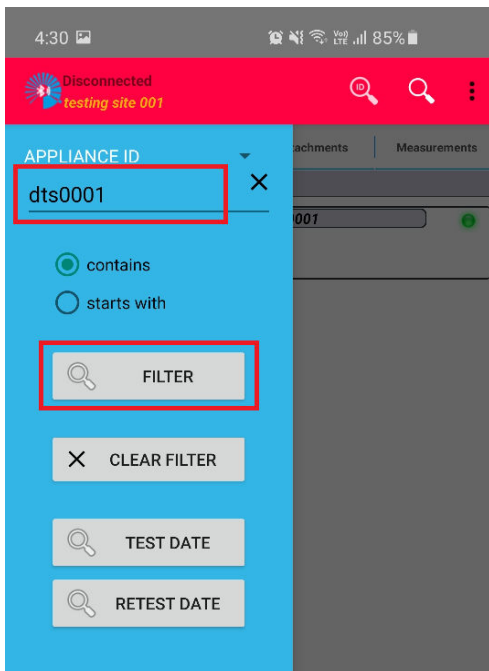
3. It has found it and it appeared behind in the tree in a filtered view, indicated by the red banner along the top bar, click on the item to highlight it, then press start– then it will start

III.   Manually scrolling through the tree and selecting the item to be retested

And finally, the last resort if perhaps the previous test tag is missing or damaged beyond reading, also what would be considered the easy way for small projects.

1. Just scroll through your tree, highlight the item, then press start to re-test the item.
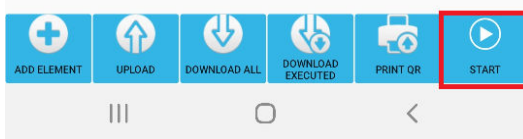
IV.   Clearing a filter

While filter is active top bar will become red as indication that only filtered elements are shown. You must clear filter if you want to see all elements in project again.

To access this menu a swipe from the left edge of the screen, then press clear filter.

11. Some other advanced functions that may be of interest

I. Modifying tree structure

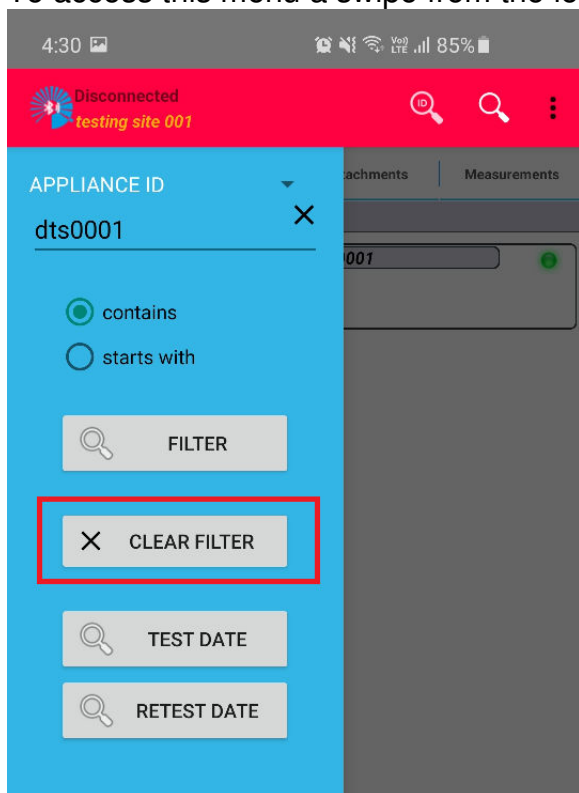When you wish to modify tree structure long press on any tree element must be used. Toolbar will change to edit mode. When in edit mode operations on tree elements possible are:

- copy/paste.
- cut/paste.
- Delete.
- add comment to element visible in tree.
- move up/down the structure.
- get info about instrument used when performing measurements.

When copy/cut/delete operation is used, check boxes on elements are used to determine which elements are going to be used. When pasting element, you must select element where you would like to paste selected elements. Elements are selected to copy/delete when green line appears around them. When pasting elements will be pasted to element enclosed by blue dotted line (single press on element).

II. Copy/Paste between projects

It is possible to copy/paste elements between projects.

1. First open project that contains elements that wish to be copied.
2. Long press on any tree element
3. Select by ticking each item and then press copy.
4. Close project or directly open new project. Dialog will show asking if copied elements should stay in clipboard. Answer yes.
5. In new project select Root (top) element and select paste
6. Elements will be copied in new project.

III. Edit parameter lists

From main dashboard or project view menu, 'Edit Lists' for editing parameter lists can be opened. User can enter parameter entries that can later be selected using dropdown in parameters view. The list will self-populate and save for later use each time you name something in a project. Add parameters entries can also be shared, imported, or exported if you have large list.

IV. Modifying parameters of a locked element

You will notice the parameters screen of an element item that already contains results are greyed out and normally cannot be changed, if you need to make changes you can press this padlock to unlock the fields so that it can be modified.
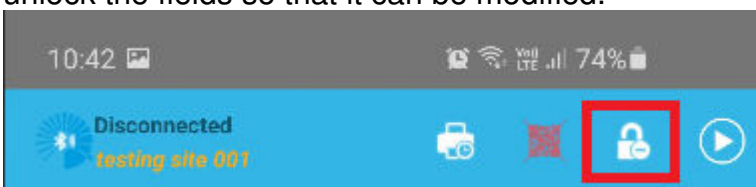
V. Re-printing test tags

QR test tag/label can be re-printed directly from tree-view (for saved appliances), just select the appliance then press the button at the bottom 'Print QR' it will re-print the same test tag.

VI. New to service label's

At the top of the screen there is an icon which allows users to print a "NEW TO SERVICE" label.

This label differs from other labels since it is usually created for appliance that was put to service and was not tested yet. There is only information about when appliance was put to service and when it should be tested.

VII. Upcoming retests dialog

On the dashboard when the app first opens there is an option for 'Upcoming retests'.
This dialog lets you check if some of the appliances need retest in selected date period. You can select any period by clicking "Select period" button.

By clicking on an appliance, it will open the project and select the item in the tree view.

You can also access the upcoming re-tests dialog in the top menu while within a project. If you do this while within a project it will only show appliances in current opened project.

VIII. How to create and setup a custom logo in aPAT

Logo must be of size 300 x 300 px. Smaller or bigger logos will not be positioned right. Also, logos must be monochrome (black/white) in *.bmp, *.jpg or *.png format.

You may sometimes loose some image quality saving as a monochrome, if that happens, I will show you a possible way to save some image loss – go to step 12 below if that happens to you.
First, we need to setup a logo and put the file on the tablet.
I will explain this one way, but there are many ways to do this…

1. Take your company logo - find the file, right click on it, then press open with > Paint
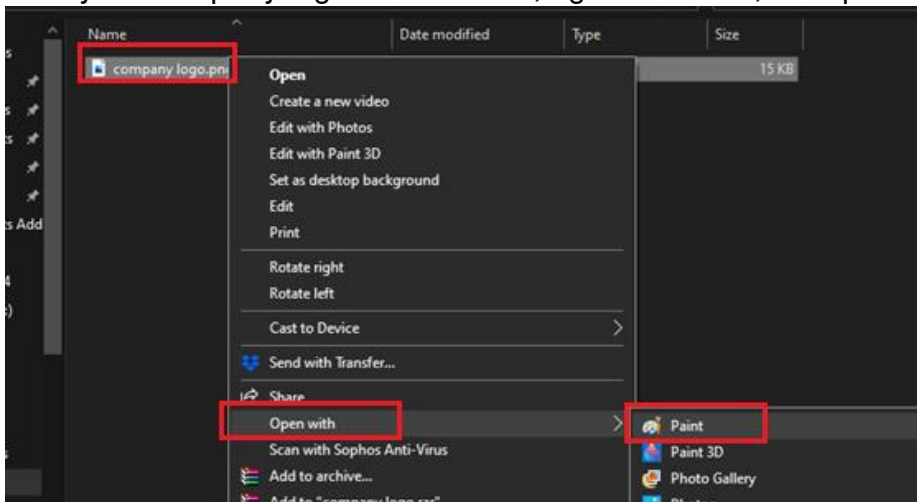

2. Within paint, we need to ensure the size is 300x300px (pixels) or smaller, press the resize button, select the Pixels button, if the image is not square these two numbers may be different, you will need to make them both less than 300 so which ever number is higher, make it 300 and the other number will reduce to maintain aspect ratio if that box is ticked, when we have numbers less than 300 we are good to press OK.
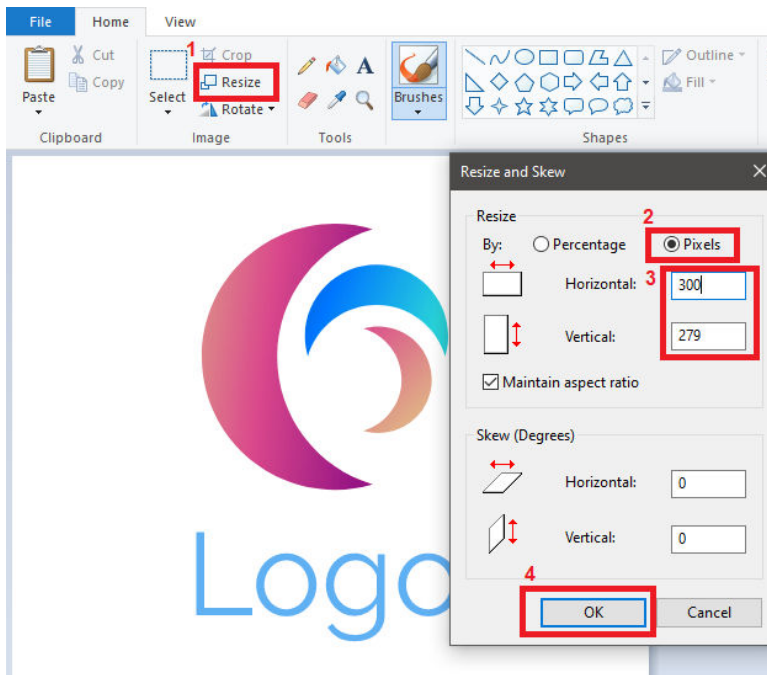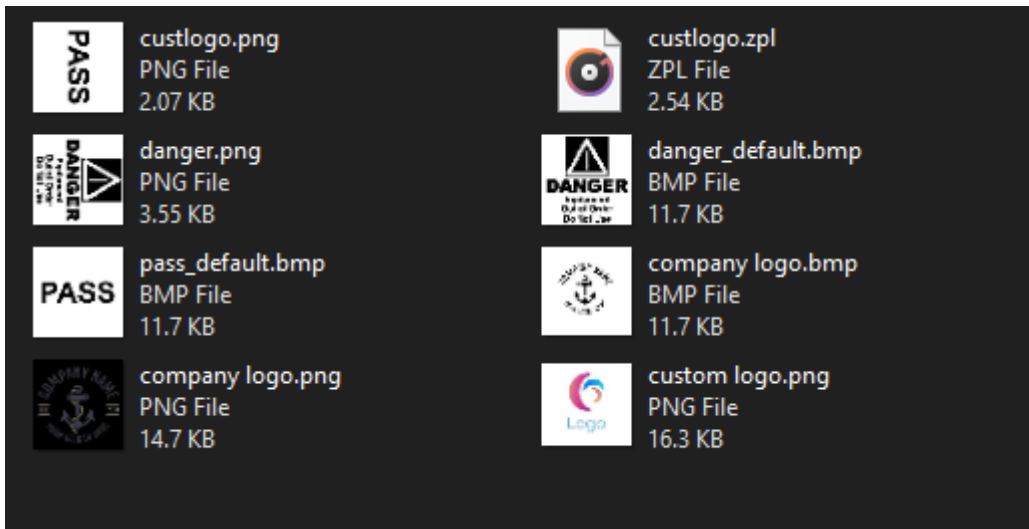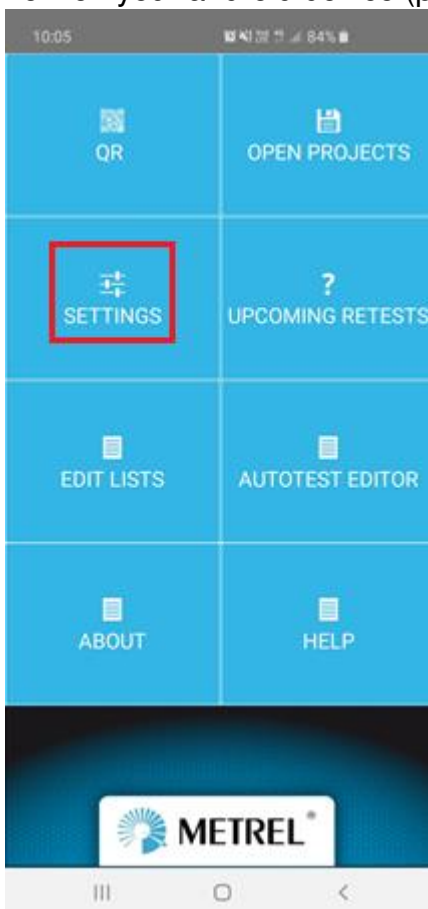
3. Now choose File > save as
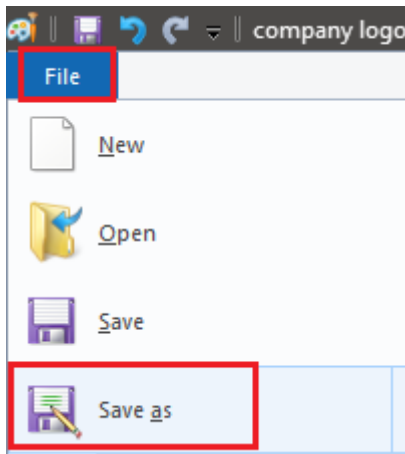
4. Set the save as type to Monochrome Bitmap (*.bmp;*.dib)
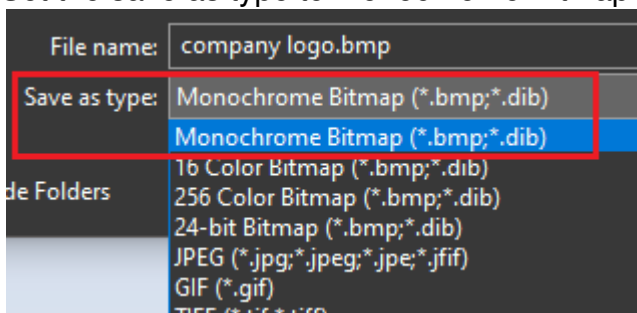
5. Plug your android device into your PC, then find where you saved the logo and copy/paste it on to your tablet in a memorable location.

custlogo.png
PNG File
2.07 KB

custlogo.zpl
ZPL File
2.54 KB

danger.png
PNG File
3.55 KB

danger_default.bmp
BMP File
11.7 KB

pass_default.bmp
BMP File
11.7 KB

company logo.bmp
BMP File
11.7 KB

company logo.png
PNG File
14.7 KB

custom logo.png
PNG File
16.3 KB

6. Now on your android device (phone or tablet), open the aPAT app and go to Settings

7. Scroll down and select 'AUS/NZ label setup'
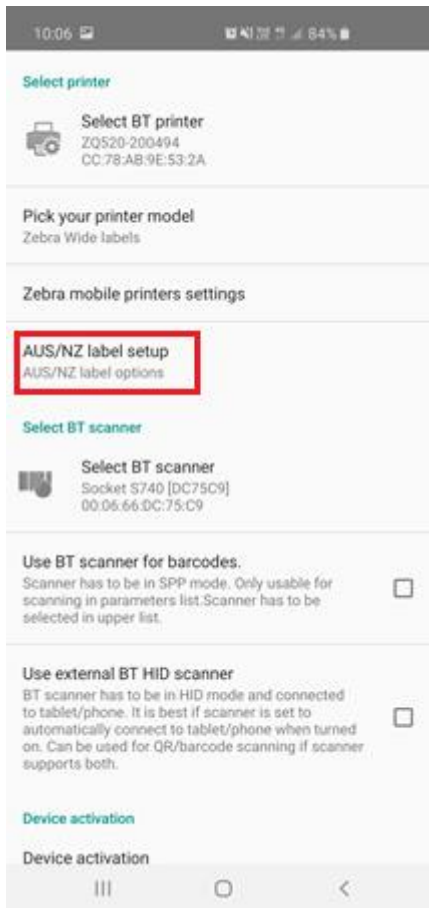
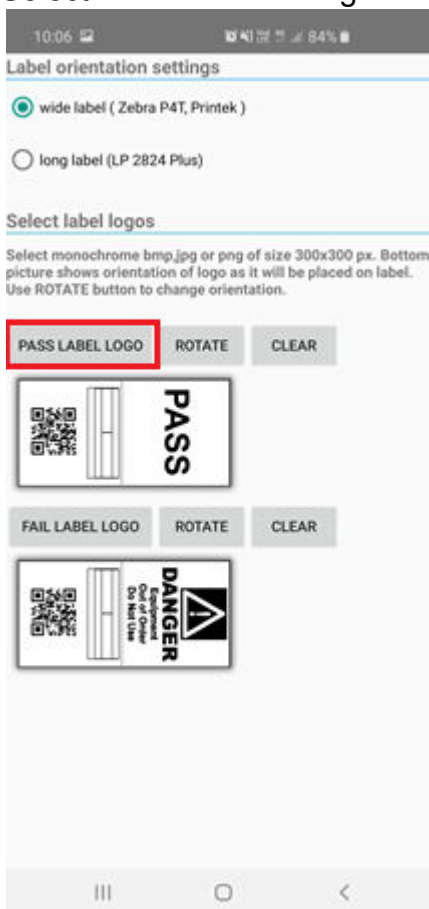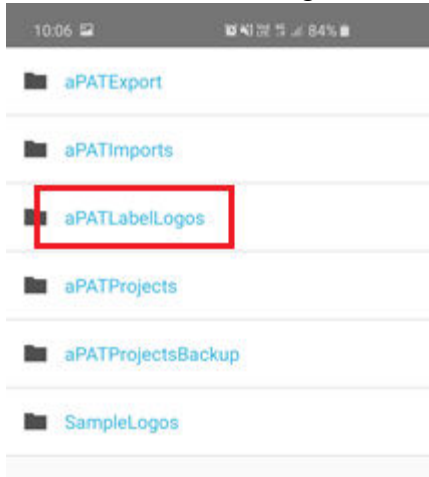8. Select the 'Pass label logo' button (note that you can also setup a custom fail label logo)

9. Navigate to the correct folder where you put your logo, In this example we chose a folder called 'aPATLabelLogos'

10. Then select the file we made, company logo.bmp
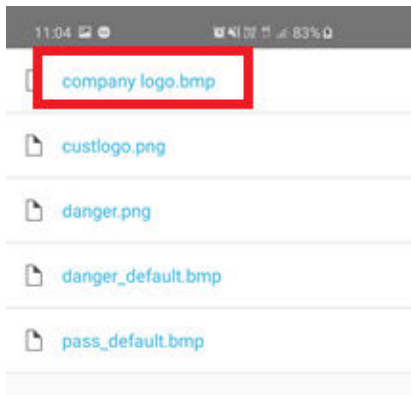
11. Now you see the logo appear, and you can use the 'rotate' button to have it show in the correct orientation. This is what will now print on your test tag.
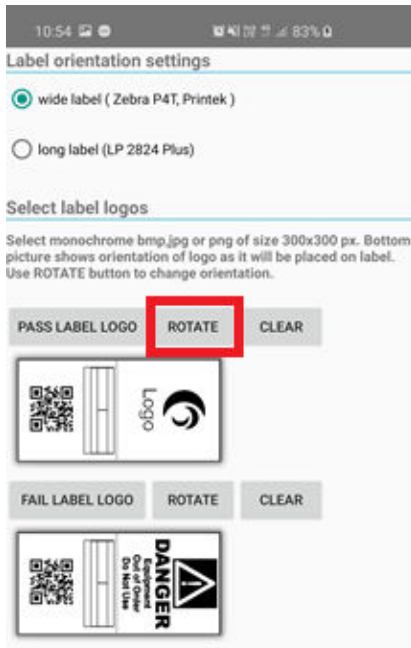
12. Now this is a bit of an advanced step if you had trouble saving the image as a monochrome bitmap and your logo lost quality or areas of the image.

One relatively easy way to get more of your image to appear is to re-colour it using Microsoft word. (your milage may vary depending on version of word you have but this is one example)

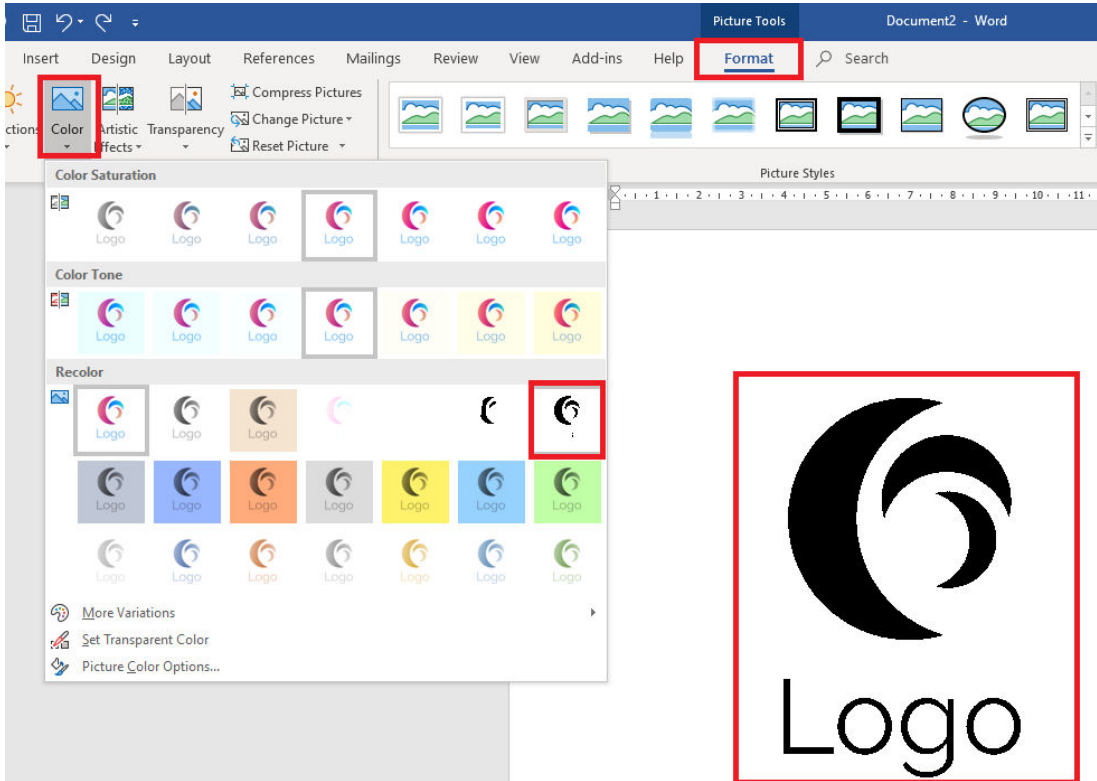Paste your image into word, click your image and use the format tab, then press the colour button and you can re-colour the image in various ways, in this case with this image I actually had to do this, and used the recolour to black and white 75% to get the best image quality.

Now that the image looks ok, you can copy/paste it back in to paint and resize it to less than 300x300 again (step 3) and then continue with the rest of the steps outlined above.

12.   Troubleshooting

1. BT devices are not visible when scanning.
   a. Try to go to android BT settings (outside of aPAT) and check if devices are under paired devices. Try to unpair them and then try to search again in aPAT.
   b. Turn all devices off (tablet, printer, and tester) and back on, then try to search devices again.
   c. Try to reinitialize BT on MI3309 (find it under setup) or for older firmware testers you will need to use 'initialize settings.' (after Bluetooth part press ESC to not reset other settings)

2. Error parsing project file – we have had a few cases where the projects become corrupt, for example if the app crashes while saving.

   a. The app automatically saves a backup of the project – navigate to the backup folder which is usually 'android/data/si.metrel.apat/files/metrel/aPATProjectsBackup' *(note you may not find this location with the inbuild android file browser, android does not allow access to app files by default so you may need a special file browser app such as "ES File Manager" or you can plug into a PC and use a PC file browser.)*
   b. Find your project folder and within will be the project name, EG: DataSource.padf.backup
   c. Take a copy of this file and navigate to:
      'android/data/si.metrel.apat/files/metrel/aPATProjects'
      Make a new folder here and paste your backup file within.
   d. Now you just need to rename the file to remove the backup off the end of the file so that it will open as a normal project, just have it named recoveredproject.padf for example
   e. Then open it as normal in aPAT via the 'open projects' button from the dashboard.

3. For further assistance you can check the app's inbuilt help guide / manual which goes into full detail on all functions, from the dashboard when the app first opens just select 'Help' (note a pdf reader app needs to be installed for this to work)

4. If you are prompted for a Bluetooth pairing pin at any stage, try NNNN or 0000

5. If printed labels are not appearing clearly, please try to adjust the printer darkness setting, see section 4, section 1, point 7

6. For any other issues or support, please contact the dealer or agent where you purchased this kit from.