Overview

The PATRec application compliments the MemoryPAT-*Blu* and allows PAT test results to be annotated and saved as they are made.

MemoryPAT-Blu Communication Link

Communication between the MemoryPAT-*Blu* and the Android device (Smartphone or Tablet) running the PATRec application uses Bluetooth.

The Bluetooth link on the MemoryPAT-*Blu* is turned on by pressing the button labelled 'Bluetooth' – shown circled in the picture below. The blue LED above the 'Bluetooth' button will flash when the link is active.



By default, the link will remain active for 1 hour. During the first 50 minutes, the LED will flash once per second. For the last 10 minutes of the hour, the LED will flash twice per second.

Once the link is active, pressing the 'Bluetooth' button again for approximately ½ second will extend the link active time by a further 1 hour. The LED will flash rapidly 5 times to indicate the 1 hour active period has been re-started.

To turn off the Bluetooth link manually, press and hold the 'Bluetooth' button for approximately 3 seconds. The LED will immediately flash rapidly for about ½ second. Continue to hold the button. Release the button once the LED comes on.

Bluetooth Pairing

The Android device and the MemoryPAT-*Blu* need to be Bluetooth paired before the PATRec application will work properly.

To pair the MemoryPAT-Blu and the Android device, perform the following steps:

- Turn on the Bluetooth link on the MemoryPAT-Blu.
- In the Bluetooth configuration screen of the Android device, select the "Scan" option. (The Bluetooth configuration utility is part of the "Settings" application of the Android device).
- You should be prompted to pair with a device labelled either "MPBluxxxx" (where xxxx is the serial number of the MemoryPAT-*Blu* tester, which is printed on a label on the underside of the tester) or "linvor". You may be prompted for a pass code and if so enter "1234".
- There should now be a device named "MPBluxxxx" in your paired devices list.

The PATRec Application

The PATRec application is designed to run on any Android device (e.g. Smart phone or Tablet) running V4.x.y of the Android operating system.

Note: You can check which version of Android your device is running, by selecting the "Settings" application and then "About this Device".

Downloading the PATRec Application

The application is free to download from the Google Play Store. In the Play Store search for the name "PATRec": the correct one is the First Stop Safety PATRec application published by Tele-Products. It is at top of the list on the image shown below left and if selected looks like the image shown below right:



On choosing to install the PATRec application, the following screen will be displayed:

▶ patrec X		
App permissions First Stop Safety PATRec needs access to:		
Storage Modify or delete the contents of your USB storage		
Hardware controls Take pictures and videos		
System tools Access Bluetooth settings		
Network communication Full network access, pair with Bluetooth devices		
See all		
ACCEPT		

Select "Accept" to download and install the PATRec application.

Once installed, select the PATRec icon, circled in red below, to start the application.



The application runs in fixed portrait mode and will not rotate if the Android device is held in landscape orientation.

NOTE: Before starting PATRec, ensure that:

(a) the Bluetooth function of the Android device is turned on

and

(b) the MemoryPAT-*Blu* has been successfully paired with the device.

PATRec Main Menu Screen



The PATRec main menu screen has six options:

Receive Results	Select this option to allow the application to receive and process results from the MemoryPAT- <i>Blu</i>
Process Pending Results	If the application has received results from the MemoryPAT- <i>Blu</i> but these have not been saved or deleted then there will be a number shown in () after the menu option title. Selecting this option will then allow the results to be retrospectively processed
Application Settings	Allows the user to customise the operation of the application
Contact Information	Information on how to contact First Stop Safety (FSS)
About the MemoryPAT-Blu	A description of the MemoryPAT-Blu
About this Application	Information on the application. In the event of problems, you may be asked to send FSS the information displayed on this screen

Receiving and Processing PAT Test Results

To receive and process PAT test results, select the Receive Results option from the Main Menu screen.

Note: Remember to check that Bluetooth is enabled both on the MemoryPAT-*Blu* and the Android device.

Assuming a MemoryPAT-*Blu* has been previously paired, you will be prompted to select the tester. Simply tap the area highlighted in red in the example screenshot below.

Select Device	
Paired Devices	
MPBlu1002 20:13:05:14:17:10	
Scan	

PATRec will display a message saying "Looking for MemoryPAT" which should change within a few seconds to "Connected to MemoryPAT". The application will only successfully receive PAT Test results when Bluetooth connected.

Important Note: If PATRec continues to display the "Looking for MemoryPAT" message then PAT test results will not be received. Re-check that the MemoryPAT-*Blu* has been paired with the Android device and that the Bluetooth link is turned on.

Once connected, PATRec will automatically receive PAT test results as they are carried out on the MemoryPAT-*Blu*.

After a PAT Test has been carried out on the MemoryPAT-*Blu* and transmitted via Bluetooth to the Android device, the PATRec application will display the test results.

Unit Under Test

PATRec uses the phrase "Unit Under Test" to describe the item of electrical equipment being PAT tested.

Examples of a "Unit Under Test" are; electric drill, kettle, toaster, extension lead, laptop power supply.

Example of Received PAT Test Result

The following screenshot illustrates the initial display of a received PAT test result on a smart phone (Samsung Galaxy). The central area of the display, shown below, scrolls up/down to show more information about the PAT test.



Scroll the display to show more information:



The PAT test result display is split into four sections:

- Information on the location of the Unit Under Test
- Details of the Unit Under Test
- Results of the PAT test (not editable)
- Formal Visual Inspection results

Annotating PAT Test Results

PATRec also allows the PAT test result to be annotated by optionally adding any or all of the following additional information:

1. The Location of the Unit Under Test: Company Name, Site Name and Location ID.

Examples of the use of these fields might be:

Company Name:	Tele-Products
Site Name:	York
Location ID:	Training Room

Initial default settings for Company Name and Site Name can be defined in the Application Settings screen.

Additionally once entries have been made into either of these two fields, they will be automatically re-entered for subsequent test results. However these can be changed if required.

2. Details of the Unit Under Test: Description, Appliance ID and Retest Period.

Examples of the use of these fields might be:

Description:	Laptop Power Supply
Appliance ID:	12M423F
Retest Period:	6 months

Barcode reading

Next to the Appliance ID field there is a small icon of a barcode and a magnifying glass. If you tap this icon, PATRec will attempt to use the rear camera on the Android device to read a barcode. If PATRec can not immediately find a barcode to read, it will provide a live video image so that the barcode can be correctly located in the camera view. Important Note: The barcode reader function is designed to work with cameras that have an auto-focus function. Some phones and tablets are only equipped with a fixed focus camera and it is unlikely that these will be able to successfully read a barcode.

Tapping in the Retest Period field generates a menu with options of 3 months, 6 months, 1 year, 2 years and 4 years.

3. Results of Formal Visual Inspection (FVI): PASS or FAIL and any relevant notes.

Tapping in the FVI Result field generates a menu with options of PASS, FAIL or blank. If you have not carried out an FVI, then you can leave this field blank.

Saving or Deleting Results

Once any required additional information has been input, the PAT test result can be saved by pressing the Save button. Alternatively the result can be deleted with the Delete button.

Hiding PAT Result Information Sections

There are small downward pointing arrows to the right of the section headings on the PAT test results display, indicated by red arrows in image to the right:



Tapping an arrow hides the information display for that section as shown below. Notice that the arrow is now pointing upwards. Tapping it again will re-display the information.



Saved Results

PAT test results are saved to a CSV format file on the Android device. The filename can be configured in the Applications Settings menu but by default is results_dd_mm_yyyy.csv in a directory called PATREC located in the root of the Android device default storage device.

CSV format files will import into most spreadsheet programs including Excel and Kingston Office for Android (a free download from the Play Store).

Other Main Menu Options

Contact Information

The "Contact Information" menu options provides information on how to contact First Stop Safety:



About the MemoryPAT-Blu

The "About the MemoryPAT-Blu" menu option provides general information about the MemoryPAT-Blu PAT Tester:



About this Application

The "About this Application" menu option provides information about the version of PATRec installed and the Android device. In the unlikely event of problems with PATRec, you may be asked to provide information from this option.

