



## Pipe Pressure Testing Using

# PressureTest+



### Important Notes

All operations must be thoroughly planned before work commences on site to identify hazards and assess risk.

These instructions form guidance for pipe pressure testing using the Stopper Specialists PressureTest+ App. Non-standard applications should be approved by a suitably qualified engineer.

Ensure all personnel engaged in pressure testing operations are properly briefed and adequately supervised by a competent person.

**THIS USER GUIDE IS NOT CONTROLLED WHEN PRINTED**

To ensure you are reading the most up-to-date version of this user guide, [download as a pdf](#) from the Groundforce Technical Library.



A video with step by step instructions on how to perform a test using the PressureTest+ app is available to [watch now](#) on our YouTube channel.

**IF IN ANY DOUBT SEEK FURTHER ADVICE ON:**

**0370 850 5153**



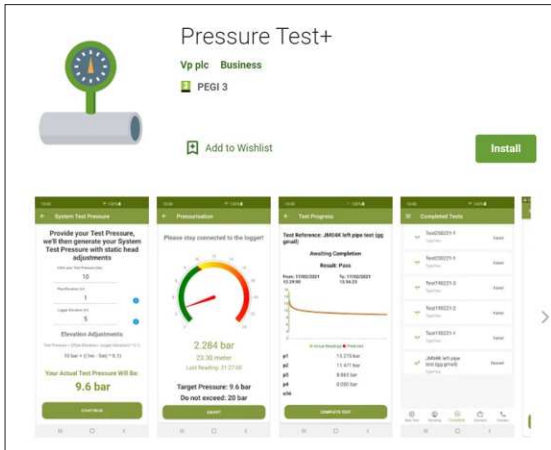
Certification Number 14419  
ISO 9001 • ISO14001 • ISO45001

Rev	Date	Comments	Initial
1.2	01/06/21	YouTube Video link added	DSW

## Introduction

The Stopper Specialists PressureTest+ app is designed to on-site monitor and record the pressure testing of pipework. The app works alongside a Bluetooth enabled Data Logger to prepare, record and capture pressure test data in real time. The app will provide an instant, on-site pass or failure analysis, along with test recommendations and GPS tracking.

## Downloading the App



If you have not already installed the PressureTest+ app, search for **PressureTest+** in the Google Play Store and follow the on-screen instructions.

**Note:** Only available on Android devices, [click here](#) to access the PressureTest+ app on the Google Play Store.

If you experience any problems with the install, please contact Stopper Specialists for further assistance on **0370 850 5153** or email: [info@stopperspecialists.co.uk](mailto:info@stopperspecialists.co.uk)

## Equipment Specification

Item No.	Description
1	Pressure Logger
2	Tablet (not supplied)
3	Pressure Test Box
4	Pipework to be Pressure Tested
5	Motorised Pump



Typical Pressure Testing Arrangement

**Safety Note:** Extreme care and adequate precautions must be taken to prevent injury during assembly and installation. Follow the recommended precautions when working in confined spaces or working from height.

## Pressure Testing Procedure



1. Connect the pump to the pipeline via the Valves and Pressure Test Box.



2. Connect the cable from the Flow Meter to the Pressure Logger.



3. Connect the blue coiled transducer cable from the Pressure Logger to the Valves and Pressure Test Box.

## Registering your Profile

1. Launch the PressureTest+ app and tap the 'Add Operator' button.
2. Enter the following details as shown right: create and confirm your password.
3. Tap the 'REGISTER' button; once your profile has been downloaded, you will be returned to the login screen.

### Troubleshooting

#### **If experiencing problems registering:**

- a) Ensure you have a working internet connection
- b) Make sure you are using the correct password

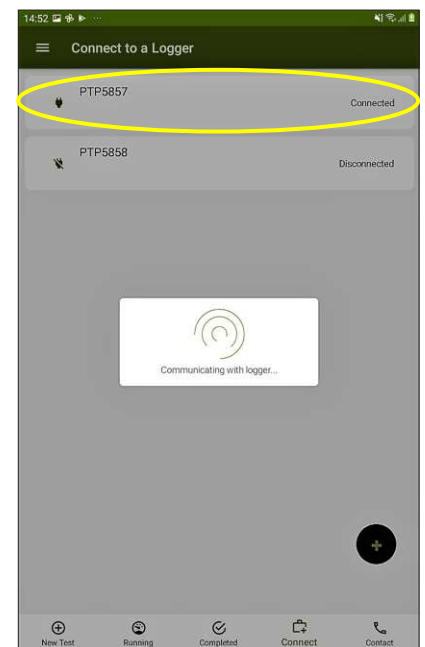
**If problems persist after following all the above steps, contact Stopper Specialists on 0370 850 5153**

## Pairing with the Pressure Logger

You must go to the "Connect" screen to connect a logger before it will allow you to start a test

### **Before starting to use the app, a paired Pressure Logger connection must be established:**

1. Ensure the Pressure Logger is powered on by pressing the button on the Logger for three seconds for the red light to become visible and make a note of the Data Logger number marked on the unit.
2. Select the 'Connect' tab and if the device is not already listed, tap the + to open your device's (tablet, phone etc) Pressure Logger settings.
3. Search for your Data Logger Bluetooth device, once this appears tap the 'pair' button. It will always appear as a prefix followed by a unique identifier: for example, 'PTPXXX'.
4. Tap the 'back' button on your device to return to the app, pull down the screen to refresh the list and select the Pressure Logger you wish to connect to.



### Troubleshooting

#### **If experiencing problems pairing:**

- a) Ensure you are close enough to the Pressure Logger (typical range is within 10 metres)
- b) Try turning the phone's Bluetooth off and back on again
- c) Try turning your device (tablet, phone etc) off and back on again
- d) Try turning the Pressure Logger off and back on again

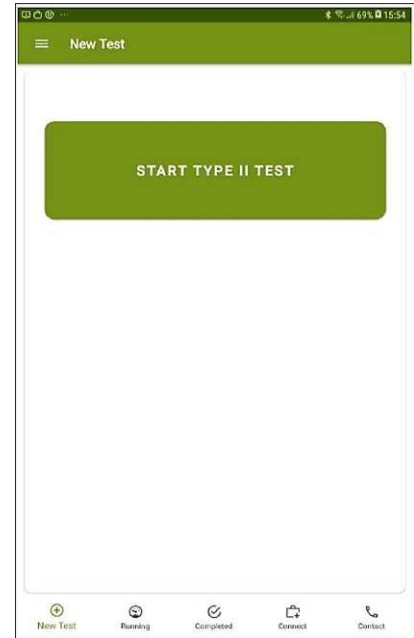
**If problems persist after following all the above steps, contact Stopper Specialists on 0370 850 5153**

## Start a Test

**Note:**

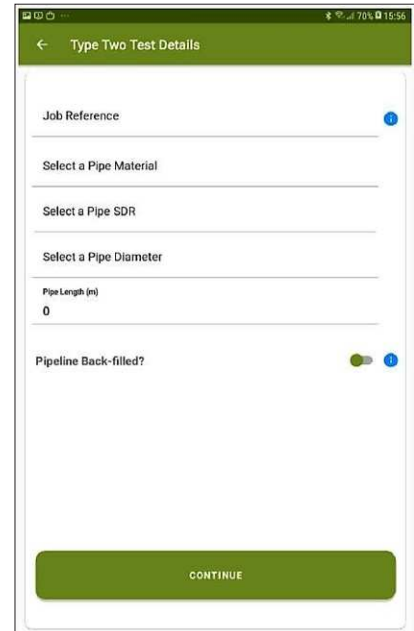
You must be connected to a logger to start a new test. The Start Type II Test button will not be enabled if a logger is not connected.

1. Select the New Test Page
2. Select the Start Type II Test button



## Test Details

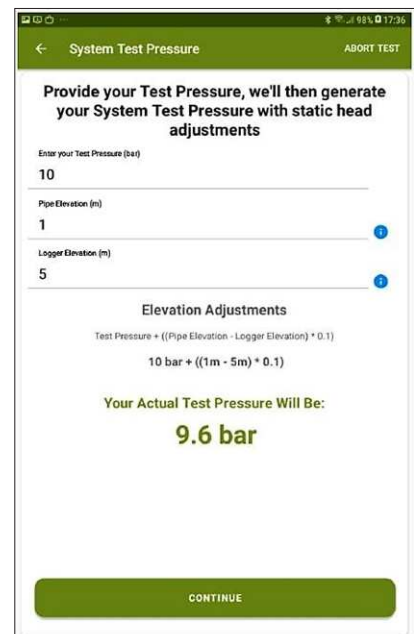
- All fields on this screen are compulsory
- The Job reference is used by the customer to identify a test
- Pipeline Back-filled toggle indicates whether the pipe has been compacted (covered with earth)
- When all details have been provided select the CONTINUE button



## System Test Pressure

**Note:** Static head is the natural pressure that would be exerted on the bottom of the pipe due to the weight of the column of water.

- Test pressure is required in bar
- Pipe Elevation and Logger Elevation can be zero
- If Pipe / Logger Elevation values are provided then the System, Test Pressure will automatically be recalculated to accommodate for static head
- An ABORT TEST option is available in the top right corner



## Pre-Pressurisation Checks

This page allows for a check to ensure that the pipe and water pump are correctly set up and configured before starting the pressurisation process.

When “YES” is selected for all questions the “START PRESSURISATION” button will be enabled.

Selecting “START PRESSURISATION” will take the user to the Pressurisation Page. The pump **SHOULD NOT** be turned on at this stage, the user will be prompted when to do this.

If the logger has disconnected during the test setup process the user will get the opportunity to reconnect. If this happens the user should ensure that the logger is on and an internet connection is in range of the logger before selecting the “RETRY CONNECTION” button.

Once a connection has been established the app will continue

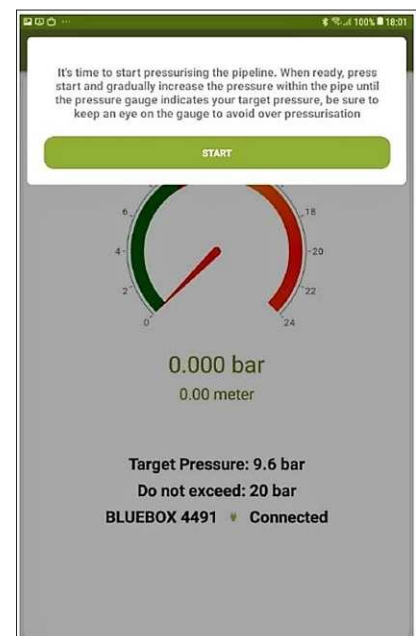
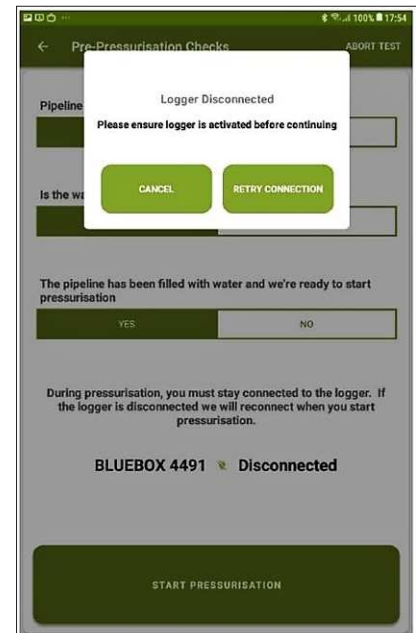
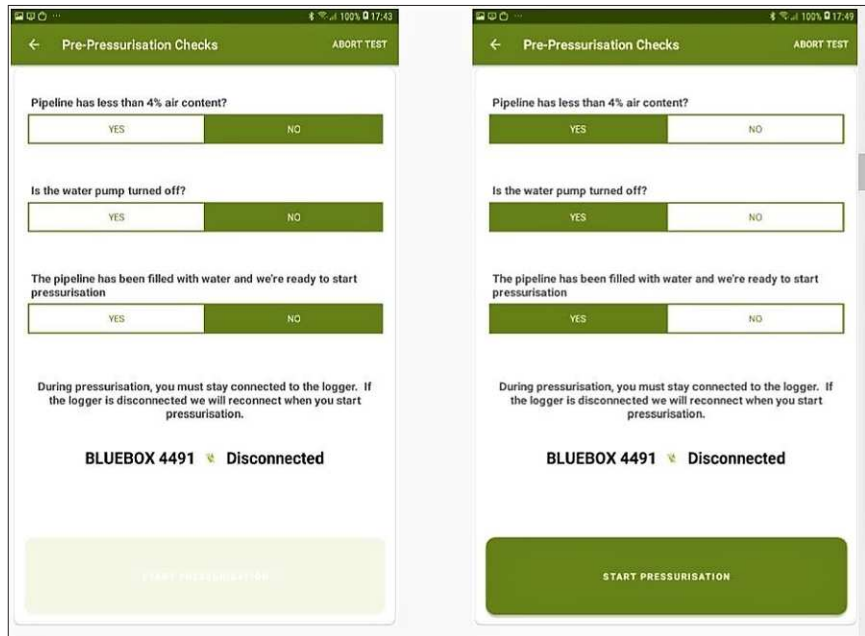
- An ABORT TEST option is available in the top right corner

## Pressurisation

When the pressurisation page is initially loaded a dialog will be shown prompting the user to select the “START” button when they are ready to begin pressurisation.

When start has been selected the app will communicate with the logger, once this has completed the user can start slowly pressurising the pipeline.

The app will record when start was selected and it will be used to calculate the pressurisation time.



## Pressurisation cont...

As pressure is added to the pipeline the pressure gauge will rise.

The pressure is shown below the gauge in bar and meter head.

As the pressure gets closer to the target pressure the device will start to vibrate. Vibration will increase in duration the closer the pipeline gets to STP (Target Pressure).

ABORT TEST is available at the top right corner; selecting this will cancel the test and take the user out of the pressurisation process.

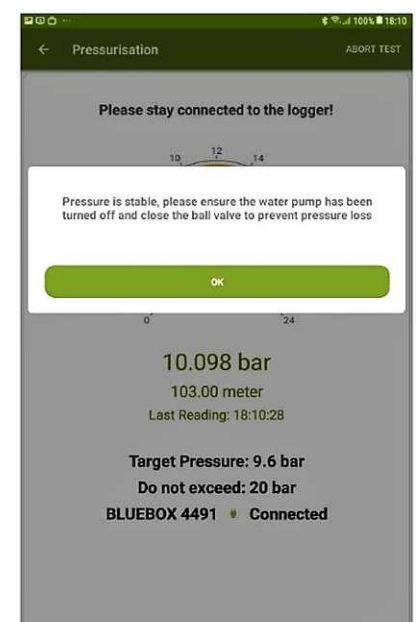
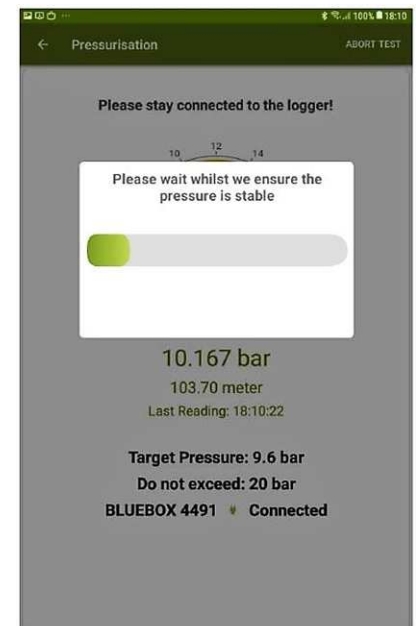
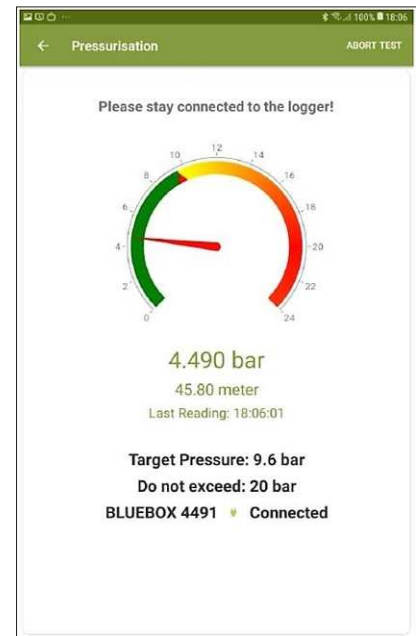
When STP is achieved the following verbal notification will sound **“Target Pressure Reached”**.

The app will then ensure the pressure is stable. A dialog box will show for 6 seconds and a progress bar will update during this process.

**Note:** If the pressure drops below the STP then pressurisation will resume.

When stable STP has been achieved, the user will be prompted to ensure the water pump is turned off and to close the ball valve. Once this is confirmed by selecting OK, the app will identify the test location, the test will be started and the user will be returned to the new test page.

Pressurisation time will be calculated from the point the user indicated that they were ready to start pressurisation, to the point this dialog was acknowledged.



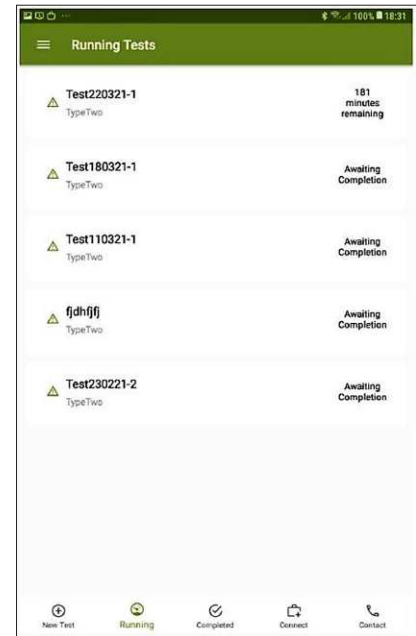
## Running Tests

When a test has been successfully started it will appear on the running test screen.

Test Reference, Test Type and time remaining will be shown against each test on this screen.

If a test has finished the time remaining will be replaced with Awaiting Completion.

Swipe down the screen to update this list, if the user is connected to a logger it will also update with the latest reading. This takes place in the background and may take some time.



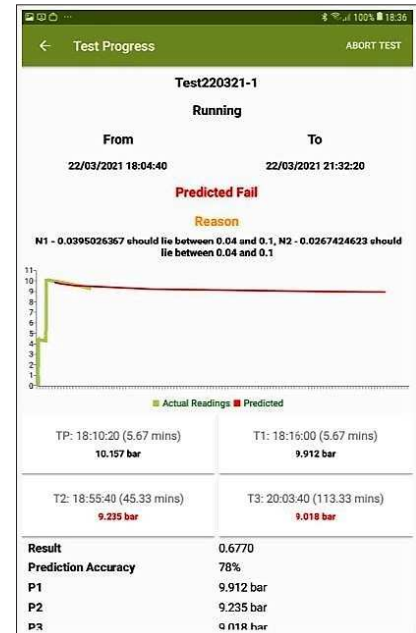
## Viewing a Test

A test can be viewed by selecting a test from the Running or Completed test page which will open up the 'Test Progress' screen.

Tests in progress will show a predicted result; the accuracy of this result is displayed under 'Prediction Accuracy'. This will help highlight if a test is likely to fail.

Red pressure values in the T1, T2 and T3 sections indicate a predicted value; black indicates actual.

- An ABORT TEST option is available in the top right corner



## Viewing a Test (Landscape View)

Changing the orientation of the device to landscape mode will show the pressure decay graph in greater detail.

Selecting a point on the graph will display the pressure at that point.



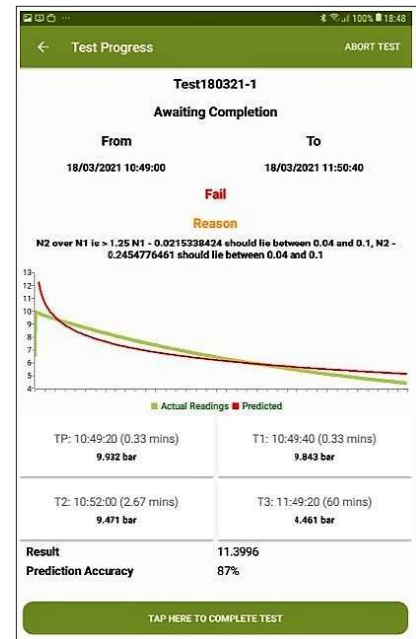


## Completing a Test

When a test has finished it will display 'Awaiting Completion' on the running test page. When the test is complete, a button reading 'TAP HERE TO COMPLETE TEST' will be shown at the bottom of the screen.

Selecting this button will save the test results and the Complete Test page will be displayed as shown below.

If readings are missing from the test the user will be required to connect to the logger and update them.

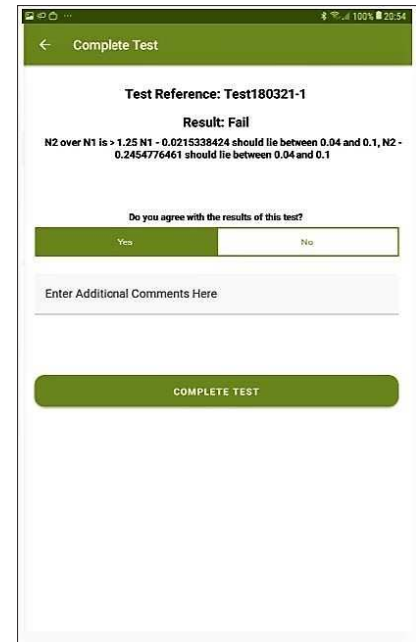


## Complete Test Page

The Complete Test page provides the user with the option to agree with the test results or not, 'YES' is selected by default. The result and reason is shown at the top of the page.

Optional additional comments / notes can also be added,

Selecting the 'COMPLETE TEST' button will finish off the completion process. At this point the test will be removed from the Running Tests Page and added to the Completed Tests page.



## Completed Tests Page

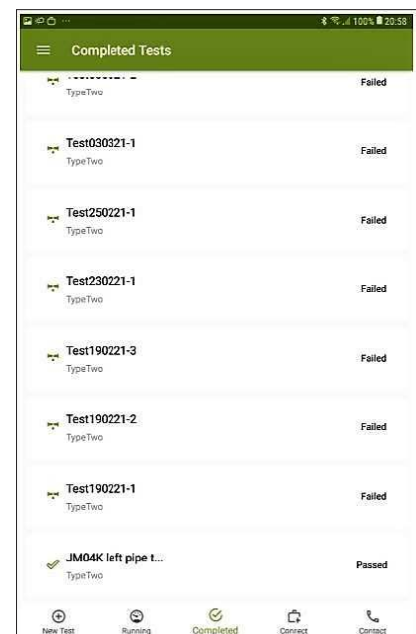
Here the user will see all their completed tests.

Each test will be displayed with an icon; a broken pipe will indicate a failed test; a tick will indicate a passed test.

Test Reference, Test Type and Result will also be shown for each test.

Selecting a test will take the user to the test result page, this is the same page that is shown when a running test is selected however the abort button is hidden.

to view/review your test results visit:  
[pressuretest.stopperspecialists.co.uk](http://pressuretest.stopperspecialists.co.uk)





Do	Do Not
<ul style="list-style-type: none"><li>✓ Ensure the operator carrying out the test understands the test procedure and methods</li><li>✓ Check all equipment is ready to test</li><li>✓ Ensure the pump has sufficient oil and fuel to cover the fill and pressurisation</li><li>✓ Clean the inlets and outlets before testing</li><li>✓ Check the Bluetooth connection between the Logger and the app</li><li>✓ Ensure all connections are secure (transducer, manifold, flowmeter, logger and all hoses)</li><li>✓ Follow the instructions on the app</li></ul>	<ul style="list-style-type: none"><li>✗ Over pressurise the pipeline</li><li>✗ Stand directly in front of the Test Flange whilst under pressure or during testing</li><li>✗ Stop the pump during pressurisation until prompted by the app</li><li>✗ Abort the job and reset the logger if the test reports a fail but you still require data. If you abort the job, all data will be lost</li><li>✗ Disconnect the logger and/or flow meters until the test is complete</li></ul>