

INSTRUCTION MANUAL



Breathalysers

SUPPLEMENTARY OPTIONS AVAILABLE



One-on-one or group phone call with our Qualified Expert Trainer for 20 minutes to fast track your knowledge and set up of the Shield

\$87.50





6-Month Recalibration Plan

AS3547: 2019 + A1: 2021 Certification

\$95.00 + GST



Australian Standard AS3547:2019 Lic. SMK41033

12-Month Single Recalibration

AS3547: 2019 + A1: 2021 Certification

\$175.00 + GST



Australian Standard AS3547:2019 Lic. SMK41033

18-Month Single Recalibration

AS3547: 2019 + A1: 2021 Certification

\$245.00 + GST



Compatible rechargeable Energizer batteries *recharger not included

\$39.00



240v Power cord For use without batteries

\$54.95



Rubber protective case (1 x included with purchase)

\$54.95



Additional mouthpieces x 100 (individually wrapped for hygiene)

\$69.00



Additional sampling cups x 5 (individually wrapped for hygiene)

\$22.00



SHIELD-approved non-alcohol cleaning swabs (pack of 10)

\$12.00

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SECTION 1

IMPORTANT INFORMATION

Access one-on-one or group phone call with our **Qualified Expert Trainer for 20 minutes** to fast track your knowledge and set up of the SHIELD.

Ensure recalibration intervals are maintained. Failure to do so may result in inaccurate readings.

Recalibration

All breathalysers require recalibration to maintain accuracy. Our AS3547: 2019 + A1: 2021 certification requires that Workplace Breathalysers be recalibrated every 12 months by a trained technician with New Zealand Certified equipment.

Your device is set to a 12-month recalibration period. Our system will automatically generate a notification to your registered email address when recalibration is due, as will the device itself.

During recalibration, a professional technician will reset the sensor baseline values and perform a full diagnostic check to ensure the accuracy and reliability of the product.



Warning: Recalibration can be impacted negatively by strong concentrations of alcohol across the sensor. This is usually caused by not waiting 15-20 minutes after consuming alcohol before testing or testing whilst excessively intoxicated.

Included with your SHIELD

	SHIELD Express Touch	SHIELD Express Identity
Colour touch screen		
16,000 tests record memory		
GPS location services		
Downloadable data		
USB download cable		
Hard carry case		
12v emergency charging cord		
4 x AA Energizer batteries		
5 x Individually wrapped mouthpieces		
1 x Sampling cup		
Warranty - 3 years *		
AS3547: 2019 + A1: 2021: 2019 Certification		
Photo Identification. 100% subject verification	X	

^{*} See Warranty Information (page 19).



PRECAUTIONS

- Do not drop, knock, or shake excessively
- Do not blow smoke, food, or liquids into the device as this could damage the sensor
- Do not reuse mouthpieces due to hygiene reasons
- Store in the hard black case when not in use to prevent foreign objects from entering the device
- Do not use hand sanitiser or alcohol-based cleaners in the testing environment
- Wait 15-20 mins after drinking, eating or smoking before testing. Testing before this can cause inaccurate readings and damage the sensor
- Ensure your SHIELD is calibrated regularly by contacting us at service@breathalysers.co.nz
- Keep in a cool, dry place and out of extreme temperatures
- Keep away from electrical interference
- Replace the 4 x AA batteries when the battery indicator icon reaches one bar. We recommend Energizer brand batteries for peak performance of the unit

Key Components of your Device

Diagram 1 - PHYSICAL DEVICE

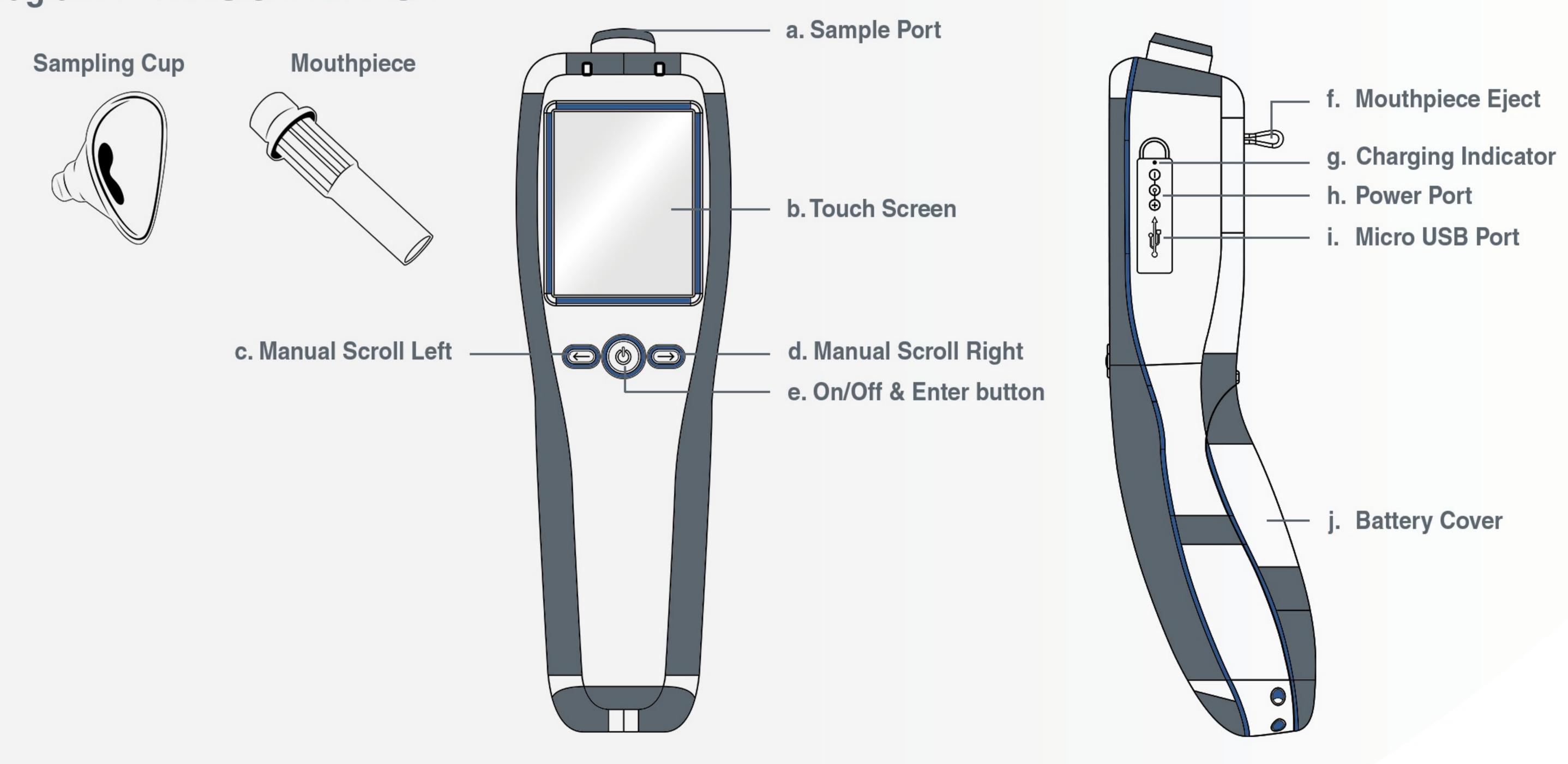
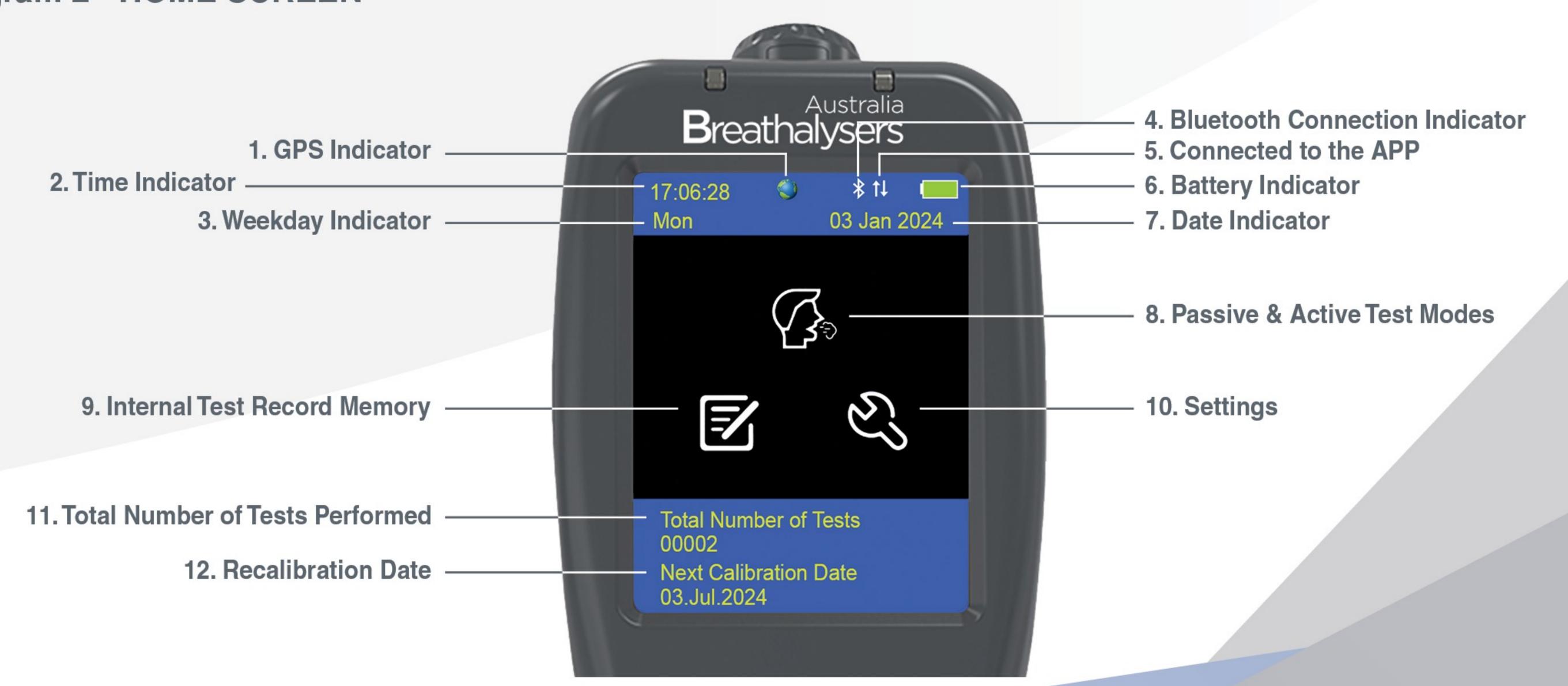


Diagram 2 - HOME SCREEN



HOW TO TEST USING DIFFERENT MODES

How to Conduct a Passive Test

A Passive test is typically used for testing groups of people quickly. It gives either a Pass (green) or Fail (red) result by taking a sample of the subject's breath by exhaling, talking or blowing at the sampling cup.

- 1. Firmly insert the Sampling Cup into the Sample Port (a) until securely fastened.
- 2. Hold the On/Off & Enter button (e) for 3 seconds until the device switches on.
- 3. Ensure that the unit is in Screening Mode by selecting Settings (10) > Screening > On > Enter > Home.
- 4. Select Passive & Active Test Modes (8).
 - *Please note the unit is now set to Passive testing mode and must be switched to Off to conduct an Active test.
- 5. When the display shows 'Please Blow', take a deep breath and blow at the sampling cup at a distance of between 3 and 6 cm.
- 6. Ensure that the Subject does not touch the sampling cup.







Test results will show on the colour coded screen GREEN: No alcohol | RED: Alcohol Detected

The screen will then display either 'No Alcohol' or 'Alcohol Detected'.

If Alcohol Detected is displayed, it is recommended to conduct an Active Test.

To end testing, press down on the Mouthpiece Eject (f) to remove the sampling cup and hold the On/Off & Enter (e) button for 3 seconds until the device switches off. Sample cup can be reused.

Refer to Other Testing modes on page 5 for RETEST.

Note: Screening mode is disabled when connected to the mobile phone App.

How to Conduct an Active Test

An Active Test gives an accurate BAC reading induced by the Subject blowing into a mouthpiece. This method is less prone to external environmental influences. A new mouthpiece will need to be used per person for hygiene purposes.

1. Prepare the mouthpiece by holding the smaller end without removing the plastic. Tear away the perforated top section. Firmly insert the mouthpiece into the Sample Port (a) until securely fastened. Dispose of plastic wrapper.

*For hygiene reasons do not directly touch the mouthpiece whilst inserting.

- 2. Hold the On/Off & Enter (e) button for 3 seconds until the device switches on.
- 3. Ensure that the unit is in Active Mode by Settings (10) > Screening > Off > Enter > Home.
- 4. Select Passive & Active Test Modes (8).

Air Blank Processing will appear. This is a safety check for residual alcohol in the testing environment prior to testing.

If alcohol is present, DO NOT PROCEED WITH TESTING.

If this occurs, it is recomended to take the test in an outdoor or spacious area to ensure there are no containments affecting the sample intake. Do not use hand sanitiser.

- 5. The Supervisor Name field will appear where you can choose to input this information. Alternatively, bypass this field by selecting > ENTER (e).
- 6. The Employee Name will appear where you can choose to input this information. Alternatively, bypass this field by selecting > ENTER (e).

If information is not entered in these fields, it will not be available in the Internal Test Record Memory (9) and therefore not stored in the SHIELD device memory. Please note that fields can be customised or increased by contacting Breathalysers Australia.

7. When the display reads 'Please Blow', take a deep breath and blow continuously and evenly until both the T and V dials show 100%.

Note: A longer blow will result in a more accurate sample.



Refer to pt. 3



Refer to pt. 4



Refer to pt. 7





Test results will show on the colour coded screen GREEN: No alcohol present | RED: Alcohol present |

Other Testing Modes

A Manual Test can be performed if the Subject cannot blow enough volume and time or purposely intends not to blow correctly. In this case, select "Manual", which will interrupt the Active Test to provide an instant sample.

If the Subject did not blow within 30 seconds, a REFUSE option will be displayed. To **RETEST**, select > Test Again to allow the Subject to take the test again.

If the Subject failed to give a valid breath sample, select > Discontinue to confirm; or select > Test Again to allow the Subject to test again.



SETTINGS OF THE SHIELD

Go to the home screen and select Settings (10).

Settings Home Screen 1

Breathalysers	Setting	Function
Auto Off Cal. Advanced Screening SN: SA000056 Last Calibration Date: Dec. 23, 2023 Back Home Enter	Settings Home Screen 1	The screen displays options that you can choose in adjusting the Settings.
Breathalysers Autro off 1 Minute 2 Minutes 5 Minutes 10 Minutes Back Home Enter	Auto Off	To save batteries, select the time limit to turn off the device automatically. Select the time required and then > Enter to confirm.
Breathalysers Screening Mode On Off Back Home Enter	Screening Mode	Allows for Passive or Active testing. Please refer how to test using different modes (pages 3 – 5).
Breathalysers PASSWORD 1 2 3 4 5 6 7 8 9 0 . Back Home Enter	Recalibration	For use by Breathalysers New Zealand only. It is recommended to have a supplementary unit available for testing in the recalibration downtime period when your device is sent away for recalibration. Please contact Breathalysers New Zealand at service@breathalysers.co.nz for a discount on a second unit purchase.
Breathalysers PASSWORD 1 2 3 4 5 6 7 8 9 0 . Back Home Enter	Advanced Setting	Due to compliance with the AS3547: 2019 + A1: 2021 standards, only Breathalysers New Zealand is authorised to change Advanced settings. Please contact service@breathalysers.co.nz for further information.

Settings Home Screen 2

The SHIELD has a second settings screen that can be accessed via Settings Home Screen 1 and then selecting > ___ at the bottom of the screen. The below functionalities will be available.



Breathalysers	Setting	Function
GPS Date&Time Brightness Print Mirror display Keyboard Back Home Enter	Mirror Display	Mirror Display is only used when connected to the App. It is for self-testing purposes.
Breathalysers SETTING GPS Date&Time Brightness Print Mirror display Keyboard Back Home Enter	Keyboard	Deselect "Keyboard" to disable the keyboard. Note: By deselecting the keyboard, the Internal Test Record Memory (9) will not contain any detailed employee information as this function disables employee records input.
Record No. 00013 Date Jan 3, 2024 Time 00:11:48 Test Mode Auto Test Result 0.0000 % GPS 54.51" S and 35.64" E Employee: Bill Smith Supervisor: Jim Evans Home Print Home Print	Internal Test Records Memory	Scroll through previous records and information which are stored in the unit's memory. The SHIELD can store up to 16,000 records. The individual records can also be deleted via this screen

DATA MANAGEMENT

All information can be downloaded to PC for reporting and backup purposes via PC software.

Installing the Software

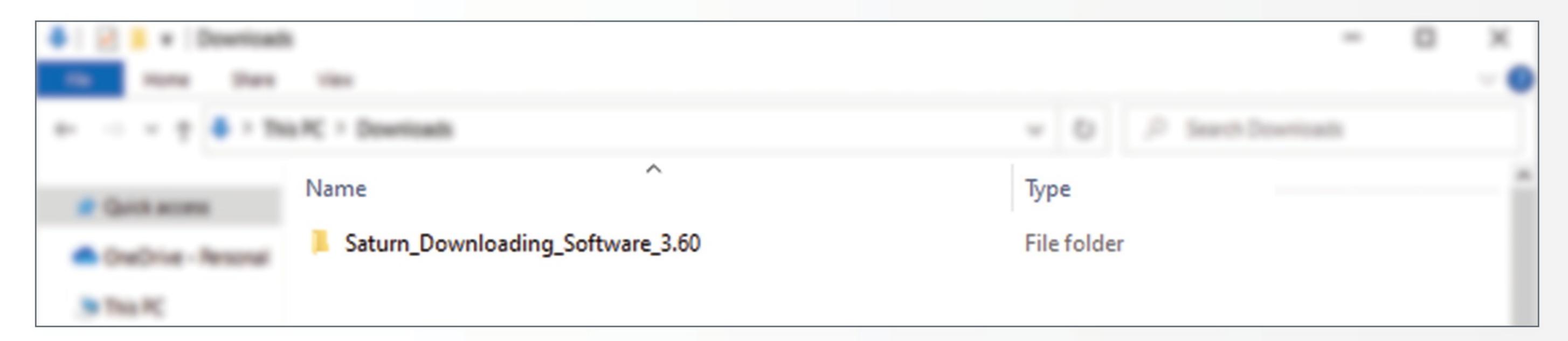
Software can be obtained via the following link:

https://breathalysers-australia.com.au/breathalyser/shield-express-identity/shield-software

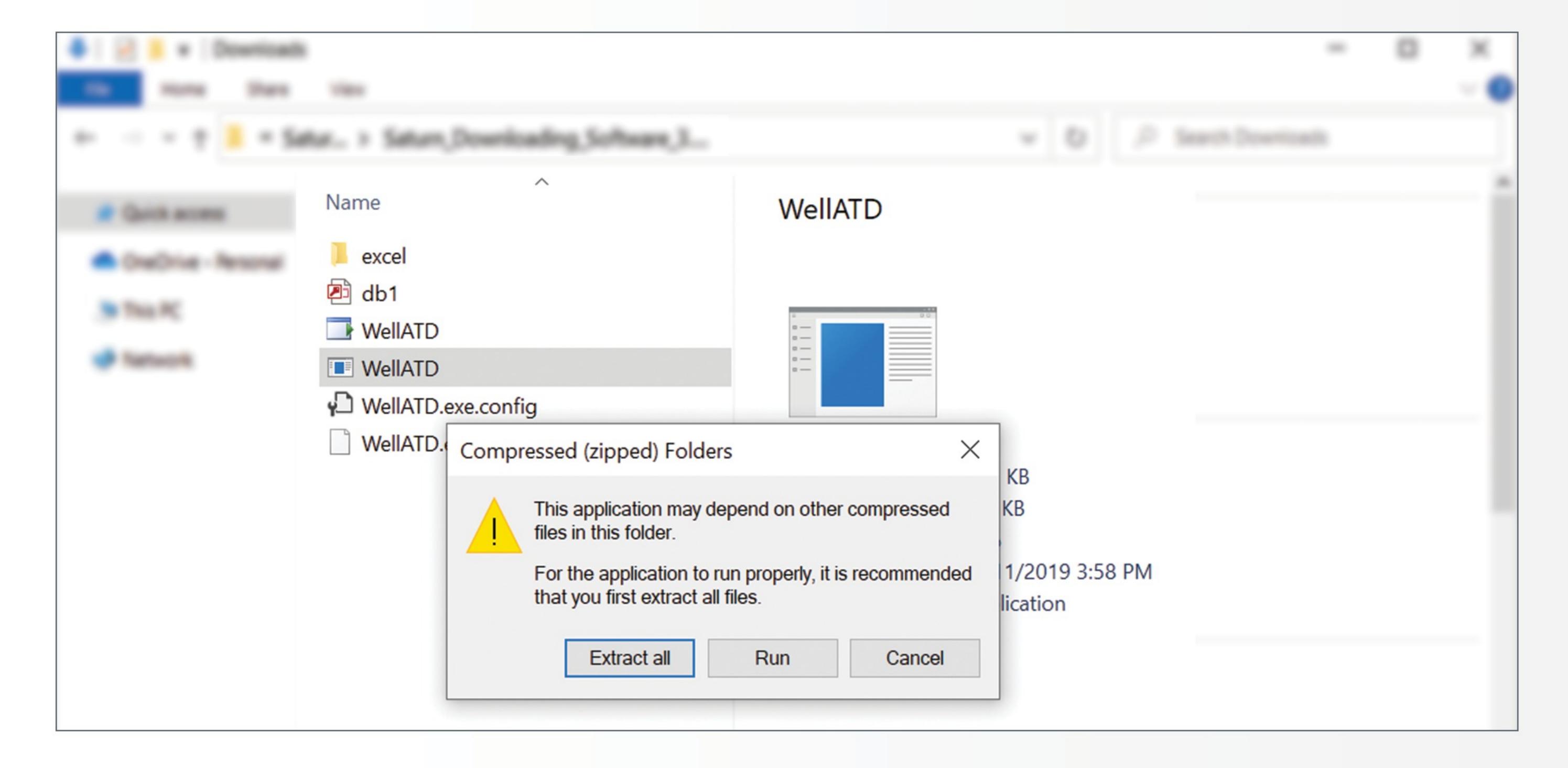
The software can also be accessed by visiting www.breathalysers.co.nz and navigating to either SHIELD product page or email service@breathalysers.co.nz to have it emailed to you.

Software Setup

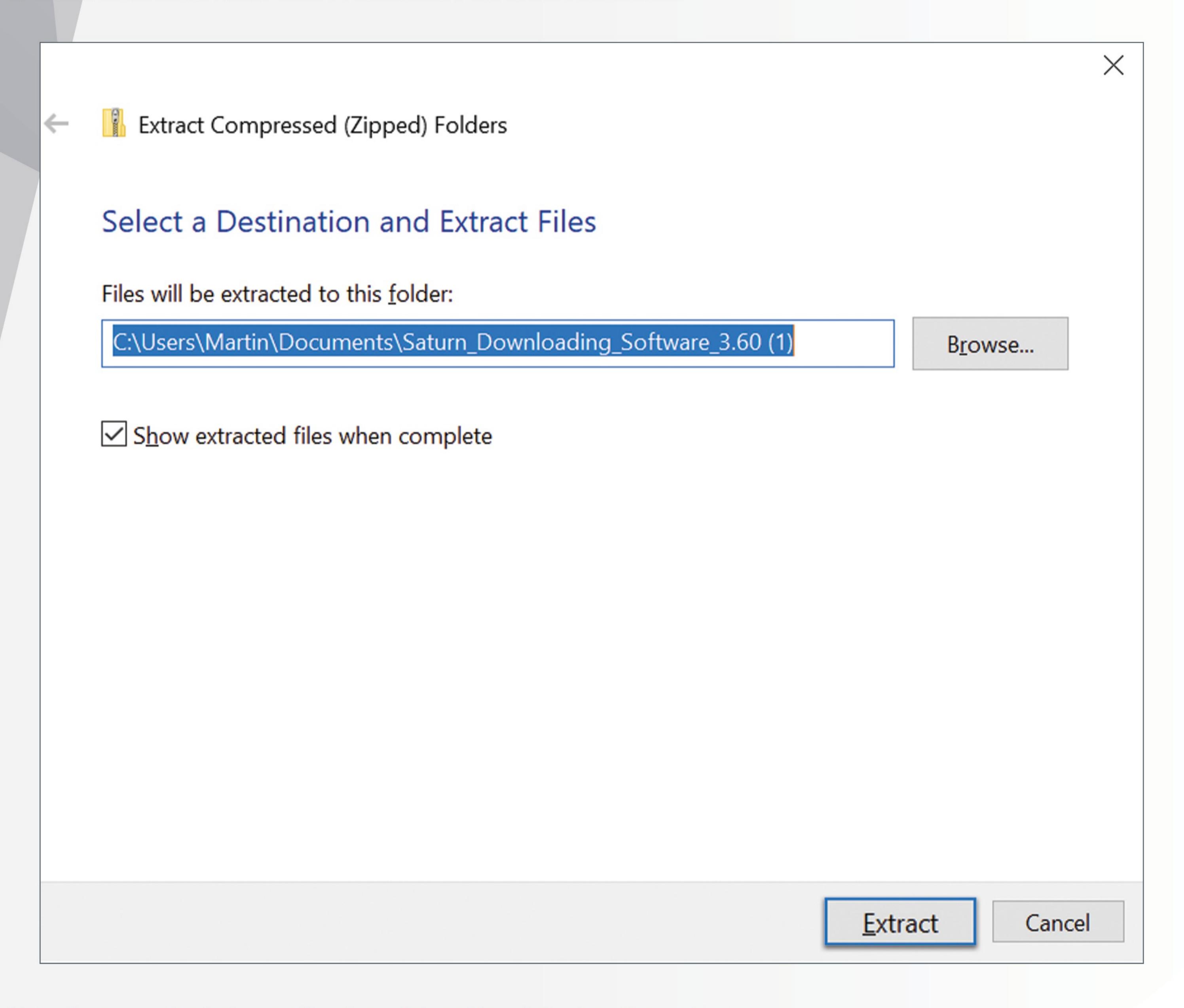
1. Open Saturn_Downloading_Software_3.60



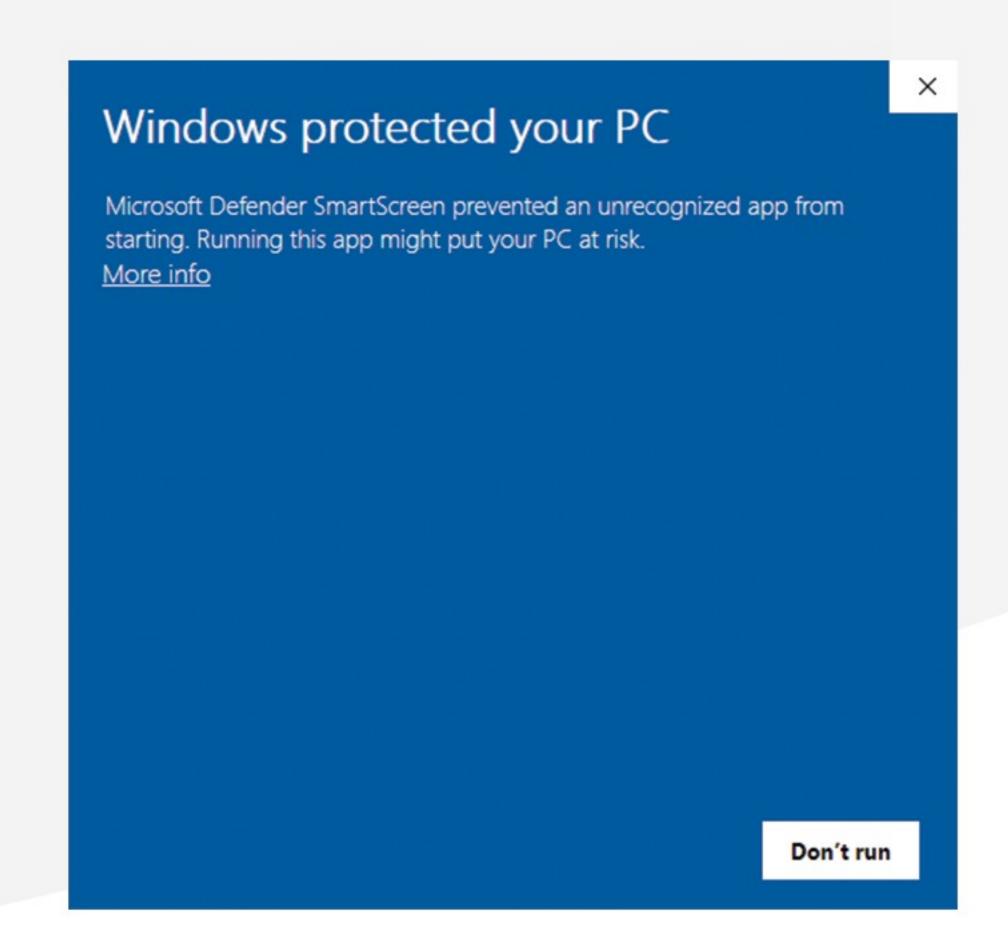
2. Double click on WellATD as shown below and Extract all.

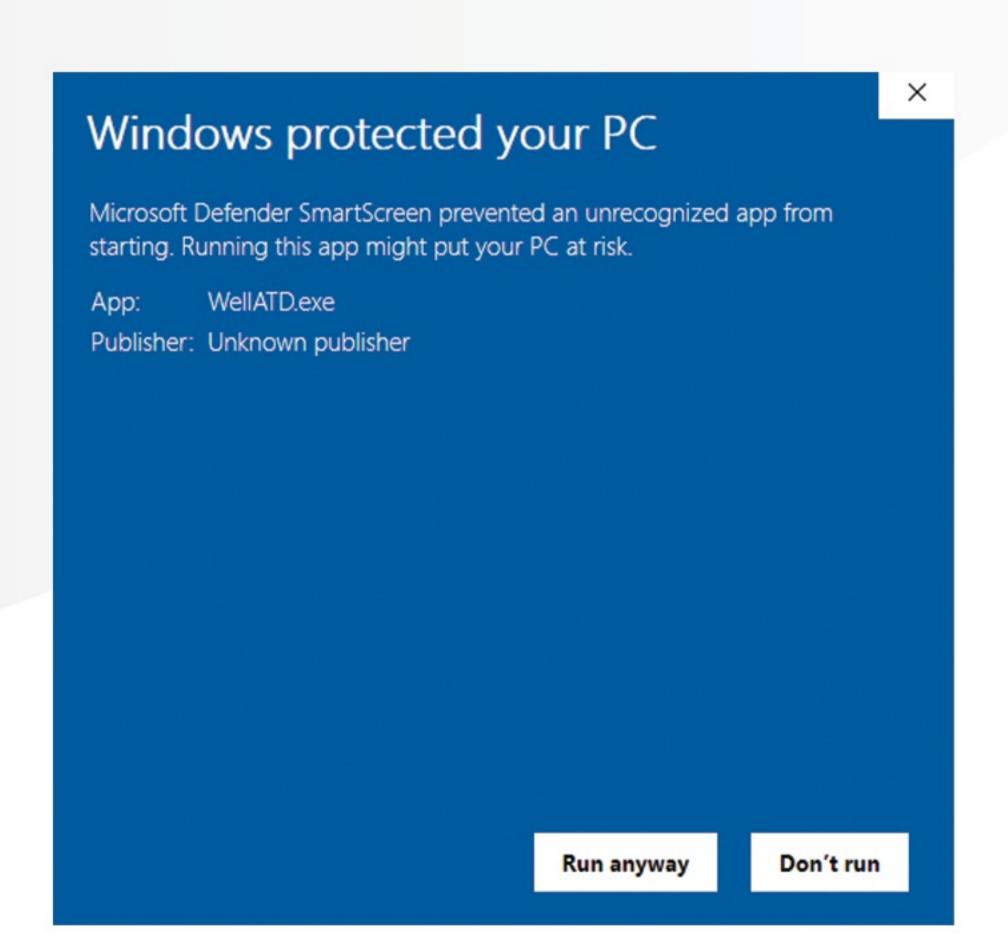


3. Select destination folder where Authorised Personnel can access.

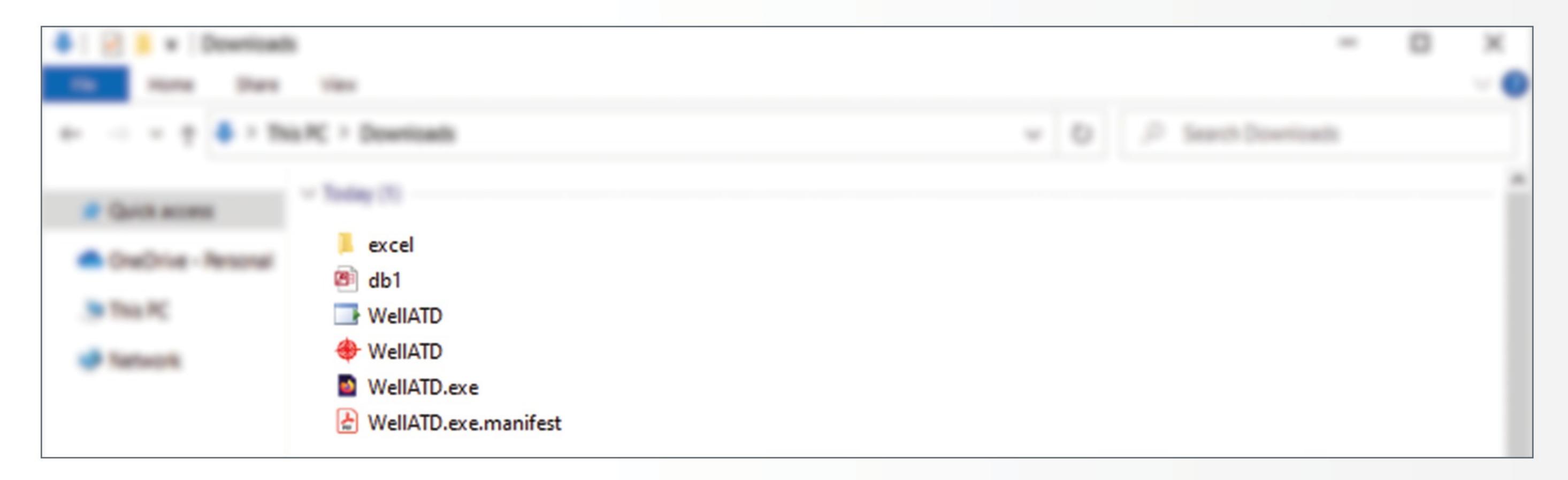


Note: il you get the below notification, click on More Info then Run anyway.

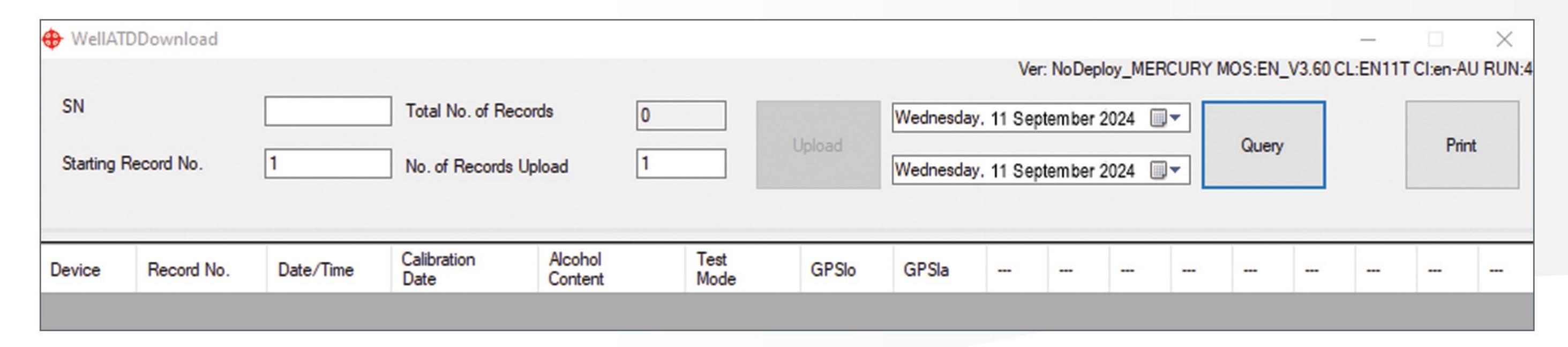




4. Click on WellATD.



This folder will then display confirming the successful download.

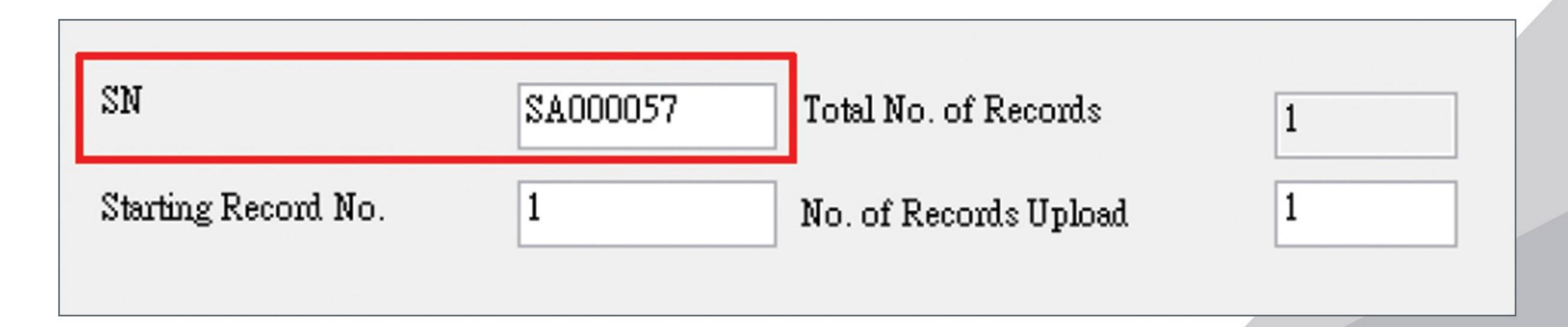


Connecting to PC

- 1. Connect the SHIELD to the PC with USB Cable.
- 2. Turn on the SHIELD. The screen will become disabled at this point and display 'Connect to PC'.



3. The serial number of the SHIELD will be displayed.

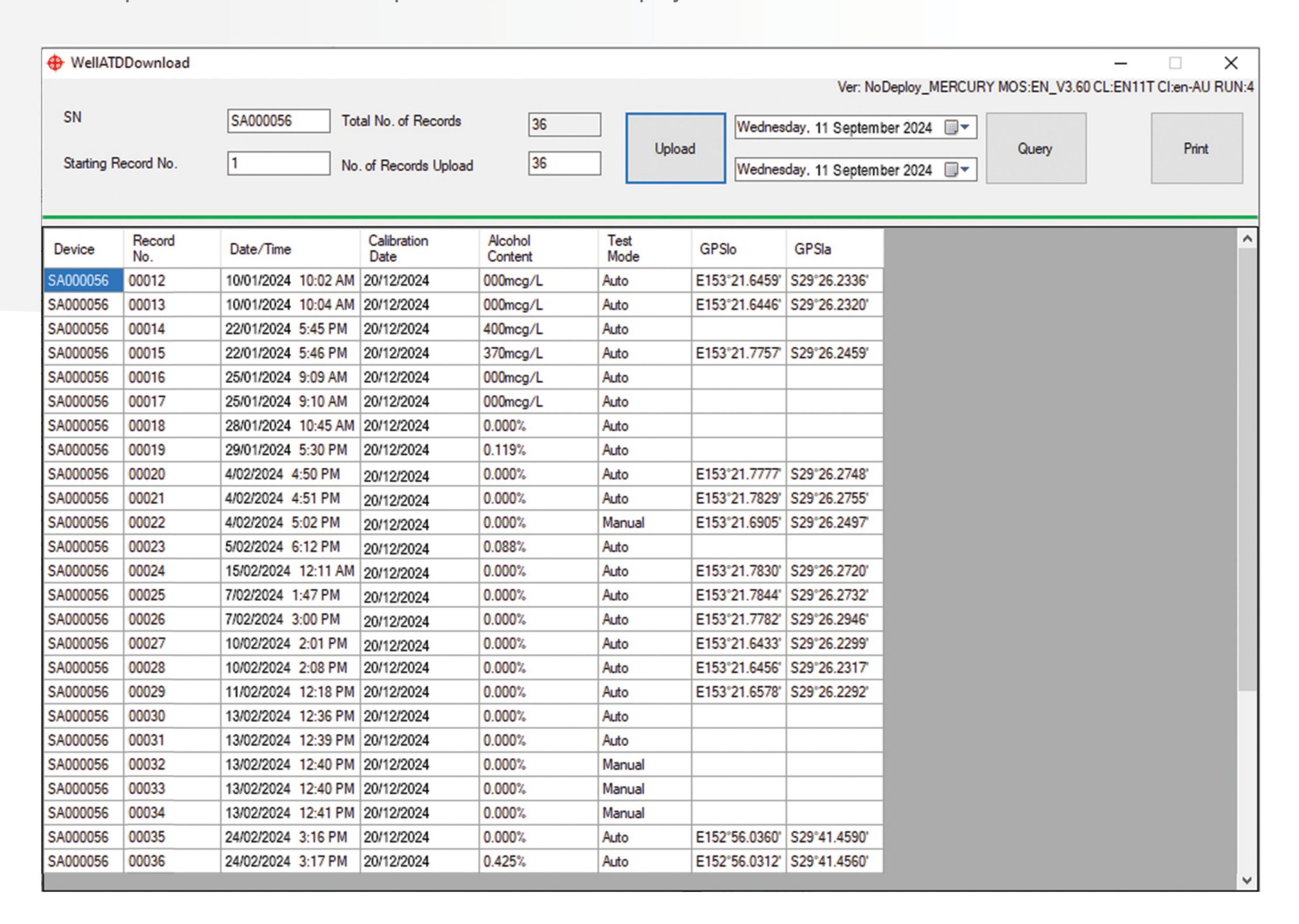


Downloading Data

- 1. Input the first record at Starting Record No. and the final number at No. of Records Upload to create a range of records to be uploaded or printed.
- 2. To Upload or Print all records, select the Total No. of Records figure and repeat in No. of Records Upload.

Note: If date is selected for the present day, it will capture all records in Upload from the present day back to the first record.

3. Select Upload and data from the parameters set will display.

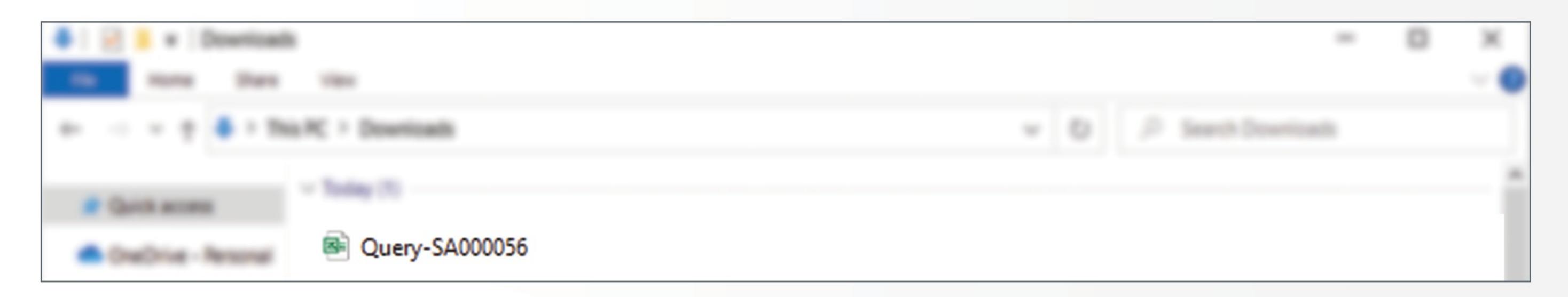


7. This will have an automatically-generated report in your destination folder.

The file name is "Query-YOUR SERIAL NUMBER.xls".



8. By selecting PRINT a copy of the report will be generated in your destination folder and will override the Query report.



9. Disconnect by removing USB and selecting Home on the Shield touchscreen.

APP INSTRUCTIONS FOR THE SHIELD EXPRESS IDENTITY

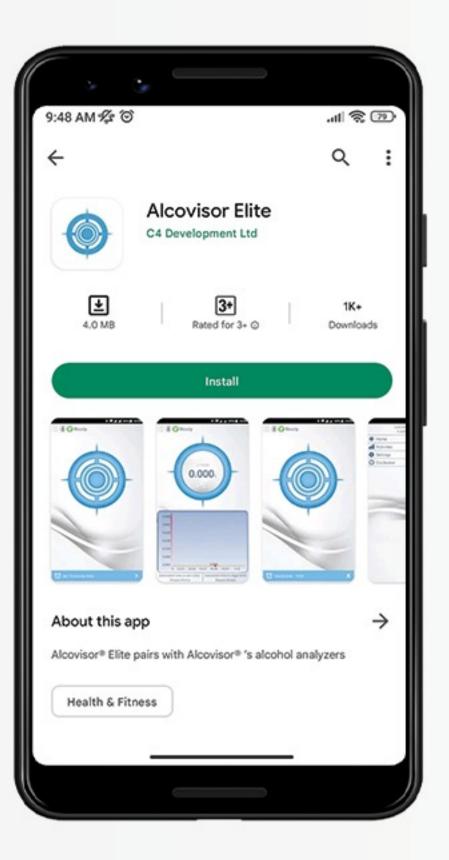
Note: Not for use with the SHIELD Express Touch. Only Active Tests can be conducted through the App.

Downloading the Free Smartphone App

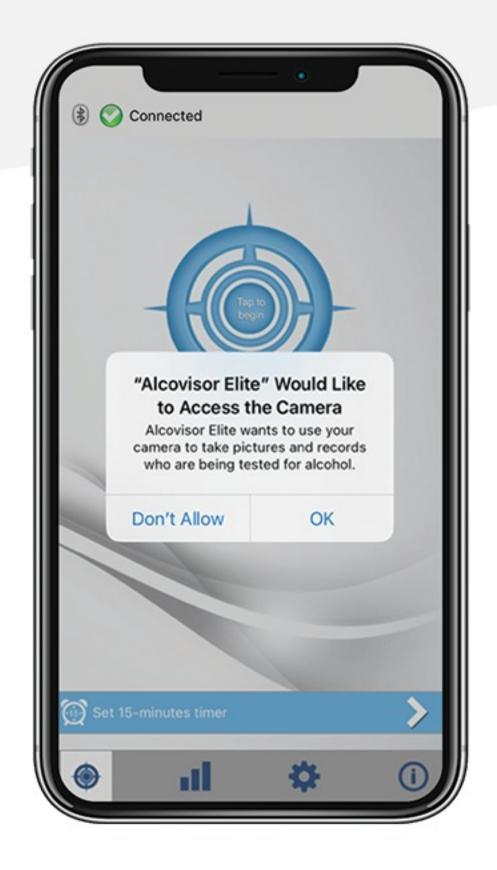
Enable Bluetooth in Settings on Smartphone

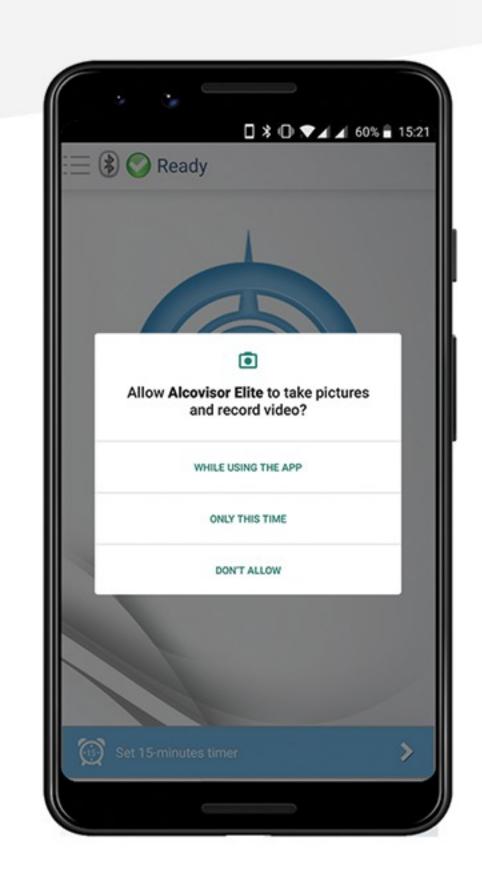
1. Go to App Store (iOS) or Google Play (Android) and search 'Alcovisor Elite'

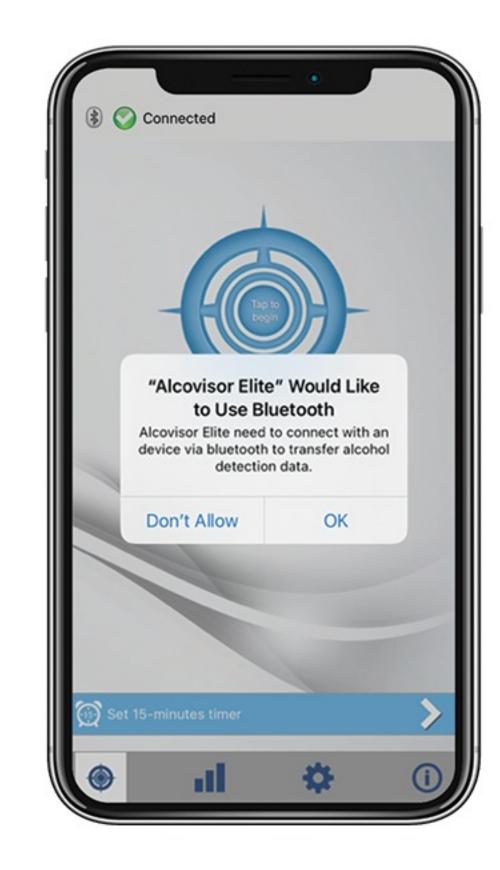




2. Select download > Enter your password (if necessary) > Ok for the App to access your phone camera > Ok for the App to access your Smartphone's Bluetooth







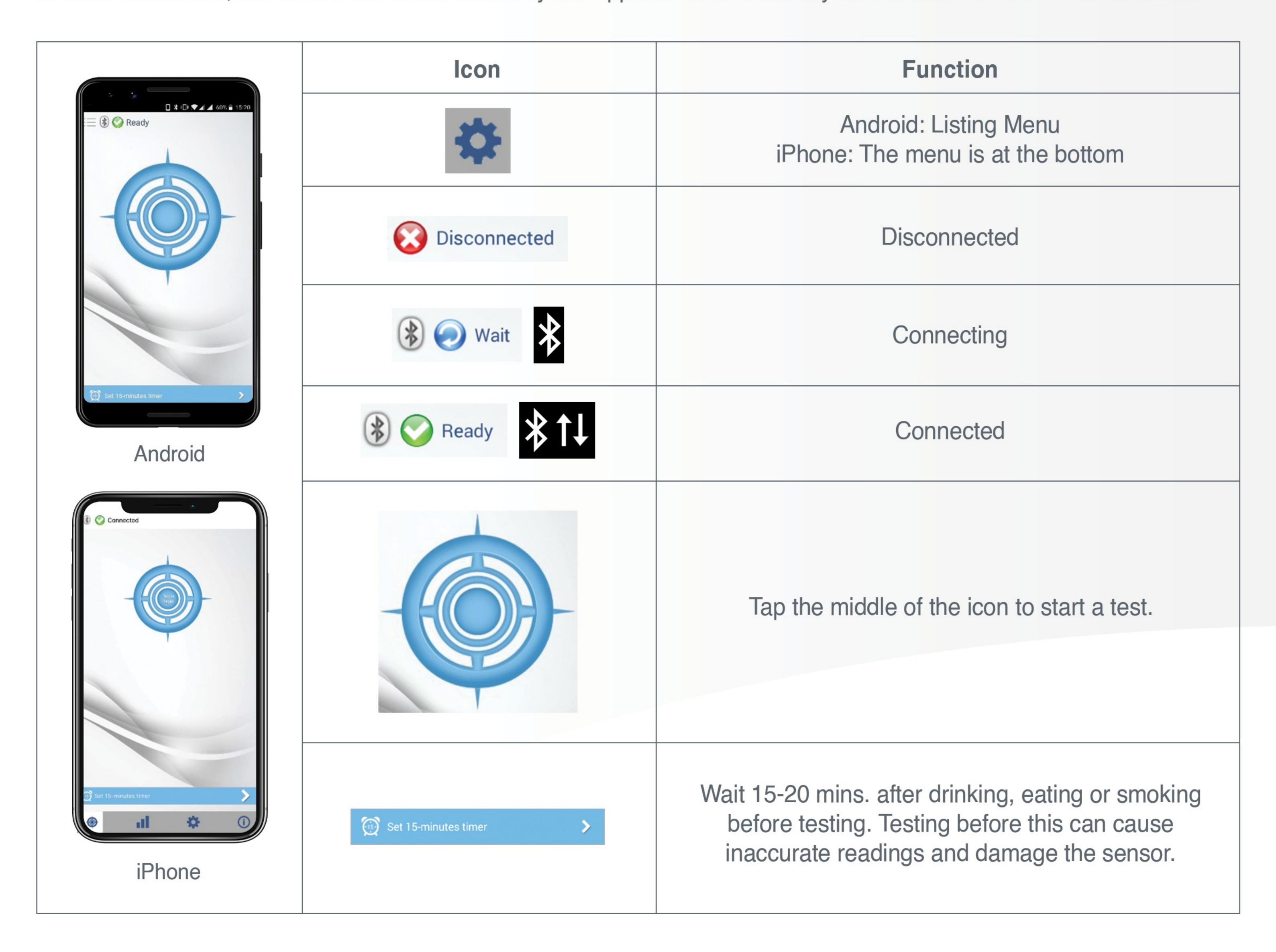


Allow access to Camera

Allow access to Bluetooth

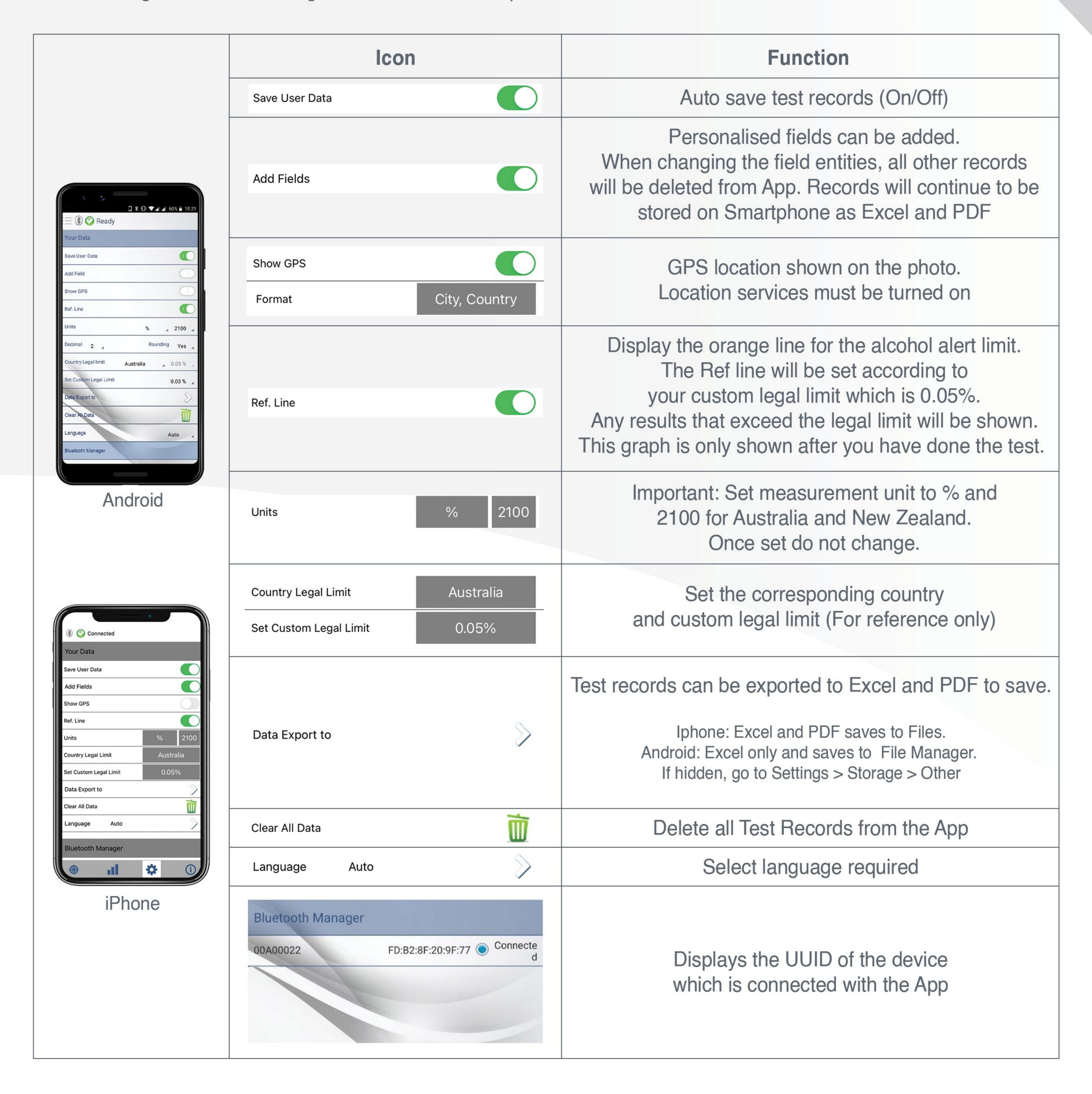
- 3. Hold the On/Off & Enter (e) button for 3 seconds until the SHIELD switches on
- **4.** Open the App on your Smartphone and ensure "Connected" is displayed in the top left corner. Both Bluetooth and connection signal are shown once successfully connected.

5. Once connected, the device will be controlled by the App and all functionality on the SHIELD unit will be disabled.



Getting Started using the Smartphone App

Before testing, ensure the settings are correct on Smartphone.



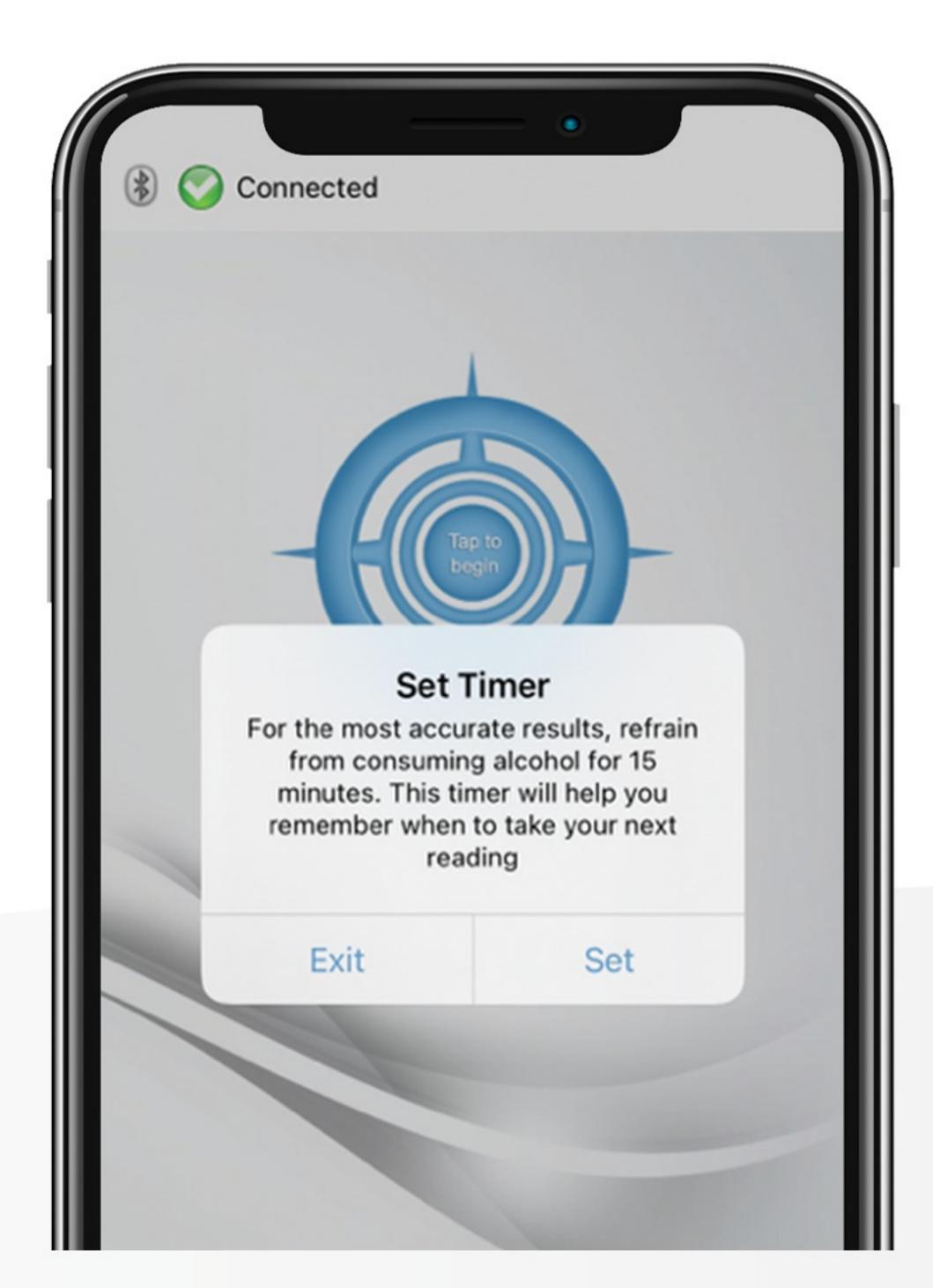
Testing using your Smartphone

- 1. Insert the mouthpiece as directed in How to Conduct an Active Test. Refer to Page 4.
- 2. Set Timer will display allowing for a 15 min reminder. If the Subject has not had anything to eat or drink within 15 mins select Exit and start the test.

 Otherwise, Select > Set Timer and test when notified.

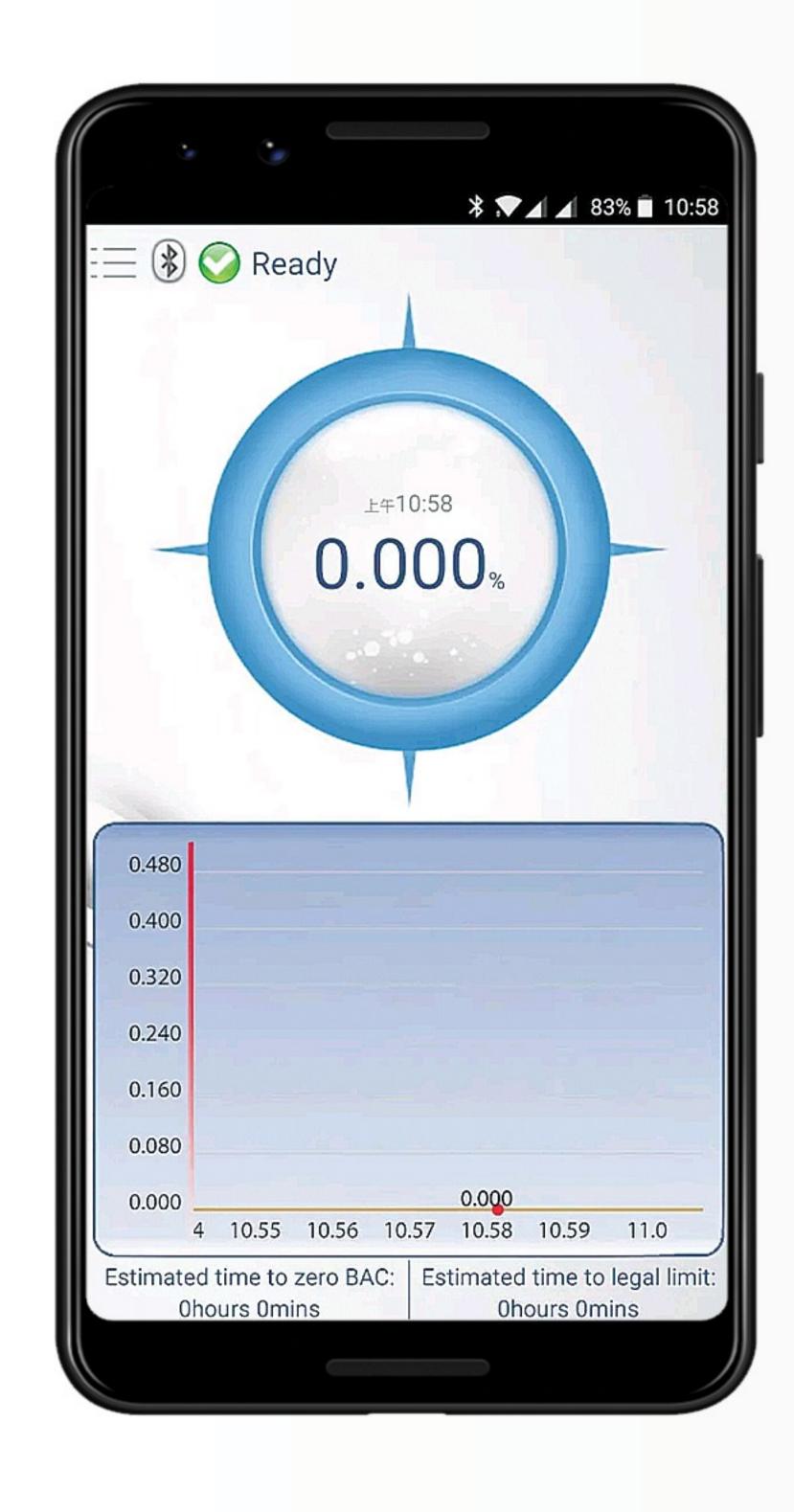
This must be done prior to initiating the test.

- 3. Select > Tap to Begin on the Smartphone screen to start the test.
- **4.** The camera will turn on, and the breathalyser will conduct an air blank processing function to ensure that there is no alcohol in the testing environment.
- **5.** Face the Smartphone camera, ensuring the Subject is in the camera frame. If necessary, the camera can be reversed. Refer Mirror Display on Page 8.



6. Take a deep breath and blow for around 5 seconds. Once complete, the test results will be shown on both the SHIELD and the Smartphone App. The results on the SHIELD will be colour coded Green or Red and demonstrate a successful test.









You will not be able to select any settings until the test is complete.

Test Records using the Smartphone App

Records	lcon	Function	
8 ① ◆ ▲ ▲ 56%. 15:20 E ② Ready Date Time Result 06-07 14:10 0.0 %	Date Time Result 06-07 14:10 0.0 % 06-07 14:08 0.0 % 08-08 17:22 0.0 % 06-06 17:22 0.0 % 06-06 17:06 0.0 % 06-06 17:05 0.0 % 06-06 15:40 0.0 % 06-06 15:09 0.0 %	Show all the test results. Select the specific record to show the details.	
06-07 14:08 0.0 % 06-07 14:07 0.0 % 08-08 17:22 0.0 % 06-06 17:22 0.0 % 06-06 17:06 0.0 % 06-06 17:05 0.0 %		Add remarks of the specific test record	
06-06 15:09 0.0 %		Tap this button to review the test photos	
Android	06-07	Date of Test	
© Connected	14:07 0.0 %	Time and test result	
Date Time Result 2019-01-16 11:04:03 0.000% 2019-01-16 11:03:16 0.000% 2019-01-16 10:53:43 0.000% 2019-01-16 10:52:25 0.000% 2019-01-16 10:51:40 0.000% 2019-01-16 10:53:05 0.000% 2018-12-18 11:33:04 0.000% 2018-12-18 11:33:04 0.000% 2018-12-18 11:33:04 0.000% 2019-01-16 10:53 0.000%	iPhone SN 00A00022 Last Calibration Date: 23 Dec, 2022 Test result: 0.00% Date: 23 Jac, 2023 Date: 23 Jac,	Test photo that displays the following information: a. The test result b. Date and time c. Device serial number and last calibration date Tap Smartphone screen to return to results.	
iPhone the property of the pr		Forward button	

Disconnecting

Close the App on your phone to disconnect the device.

If no test is taken whilst in Bluetooth, the App must be closed and refreshed to take another new test.

Periodically, the App will need to be updated. It is recommended to always use the latest updated version.

At time of print, SHIELD is compatible with Android version 4.3 and IOS 9.0 operating systems with the internal Bluetooth module being 4.0. Please ensure that you keep up to date with the latest operating system.

GPS

Connection Port

Battery Life

Battery Type

Clock

Optional Power

Detection Range

Working Temperature

Storage Temperature

TECHNICAL SPECIFICATIONS & TROUBLESHOOTING

Sensor Electrochemical Fuel Cell. Law Enforcement Grade

Accuracy 0 - 0.005% BAC: ±5% BAC

Sampling System Automatically or manually take a deep lung sample

Display LCD Size 2.4" TFT colour touch screen

Memory 16,000 test records including all information

±5M

Weight 280g included batteries

Size 180.0mm x 56.8mm x 54.6mm

Micro USB and Bluetooth

Up to 3,000 tests

4 x Energizer AA alkaline batteries

12-volt car adapter (included) or AC 240 volt adapter (accessory)

Real time clock

0.00% BAC to 0.40% BAC (all ranges)

-10°C to 50°C

-25°C to 70°C

Units of Measure BrAC: mg/L, mcg/L, or other units

BAC: grm%, mg/mL, mg/100mL, or other units

A black hard carry case is supplied. The device and its accessories should be stored in this case when not in use to prevent dirt and small particles entering the device and the accessories being misplaced.

A blue rubber cover is also supplied to protect the device from minor knocks and abrasions.

Improper storage of the device will shorten the lifespan of the fuel cell sensor.

36-month Limited Warranty

The warranty covers manufacturer's defects only.

SHIELD breathalysers not kept within the required 12-month calibration cycle are excluded from the 36-month warranty period. Breathalyser sensors need regular servicing to maintain performance.

Troubleshooting

FLO ERROR

The Subject did not blow consistent breath into the device. Restart test. If using connectivity, disconnect device and restart test.

How do I restart a Connectivity test?

Close App and reopen again.

App Installation Issues

- Check your wifi / internet connection for connectivity.
- Please check your mobile storage space. If there is not enough space on your disk, the app will not install.
- Verify that the app you're trying to install supports your iOS version.

App not updating correctly on my Smartphone

Check your wifi/mobile data connection and verify that it is working properly. It may be interrupted and stopping you from updating the Alcovisor Elite app.

App Notifications not working properly

Select > Settings > Notifications > Alcovisor and check whether notifications is enabled. If it is not enabled, please enable.

Notification Alert Sounds

Ensure notification sounds are unmuted.

Touchscreen is dimly lit or slow to respond

Ensure that new batteries are installed and the Brightness Setting (page 7) is sufficient.

Displays Need Recalibration

Calibration is out of date and needs to be recalibrated. Contact service@breathalysers.co.nz

Exclusions, Limitations, and Disclaimers

The g/210L BrAC reading obtained by correct use of this instrument is only considered accurate at the time of testing. Great care has been taken to ensure the accuracy of each reading. Neither the manufacturer, the distributor, nor the owner accepts liability or responsibility due to any action or claim arising from the reading produced by this instrument, whether used correctly or incorrectly.

Breathalysers New Zealand makes no warranties, express or implied, as to the ability of this product to determine whether, or the extent to which, a test subject's mental or physical functioning, or judgment, may be impaired by blood alcohol including whether the test subject is intoxicated under any definition of that word. Breathalysers New Zealand expressly disclaims any liability for direct, indirect, incidental, special, or consequential damages of any nature under any legal theory. Any act or failure to act based on a reading from this product shall be at the test subject's or user's own risk. Breathalysers New Zealand assumes no responsibility for consequences to or of test subjects who use this product and later are shown to have been under the influence of alcohol or to have had their judgment or any mental or bodily function impaired by alcohol. Correlation between breath alcohol content and blood alcohol concentration depends on many variables, including environmental factors (such as air quality, wind, humidity, temperature, etc.) and health conditions of the test subject. A low BAC reading does not mean that the test subject's physical or mental performance or judgment (including reaction times) can respond to an emergency. The concentration of alcohol in the blood of a test subject cannot be exactly determined by using a breath alcohol screening product.

Breathalysers New Zealand does not warrant that the operation of the product will be error-free. Breathalysers New Zealand is not responsible for any consequences arising from failure to follow instructions or relating to the product's use. This warranty does not apply: (a) to consequences caused by accident, abuse, tampering, misuse, flood, fire, earthquake or other external causes; (b) to consequences caused by operating the product outside the permitted or intended uses described by Breathalysers New Zealand; (c) to consequences caused by service performed by anyone who is not a representative of Breathalysers New Zealand or a Breathalysers New Zealand Authorized Service Provider; or (d) to a product or part that has been modified to alter functionality or capability without the written permission of Breathalysers New Zealand.

To the extent permitted by law, this warranty and the remedies set forth above are exclusive and in lieu of all other warranties, remedies and conditions, whether oral or written, statutory, express or implied. As permitted by applicable law, Breathalysers New Zealand specifically disclaims any and all statutory or implied warranties, including, without limitation, warranties of merchantability and fitness for a particular purpose and warranties against hidden or latent defects.

If Breathalysers New Zealand cannot lawfully disclaim statutory or implied warranties then to the extent permitted by law, all such warranties shall be limited in duration to the duration of the express warranty and to the repair or replacement service as determined by Breathalysers New Zealand in its sole discretion.

No Breathalysers New Zealand reseller, agent, or employee is authorized to make any modification, extension, or addition to this warranty. If any term is held to be illegal or unenforceable, the legality or enforceability of the remaining terms shall not be affected or impaired.

Except as provided in this warranty and to the maximum extent permitted by law, Breathalysers New Zealand is not responsible for direct, special, incidental or consequential damages under any legal theory, including but not limited to loss of use; loss of revenue or income; loss of actual or anticipated profits (including loss of profits from a contract); loss of the use of money; loss of anticipated savings; loss of business; loss of opportunity; Loss of goodwill, or loss of reputation.

This Breath Alcohol Tester is intended to measure alcohol in human breath. Readings obtained by this device are used in the diagnosis of alcohol intoxication. Some countries, states and provinces do not allow the exclusion or limitation of incidental or consequential damages or allow limitations on how long an implied warranty or condition may last, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights that vary by country, state or province. This Limited Warranty is governed by and construed under the laws of the country in which the product purchase took place.

NOTES

