Alcolizer Centurion User Manual

Product User Manual

Centurion
zero tolerance

Disclaimer – External Documents note to reader

The BAC reading obtained by correct use of this device 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 device, whether used correctly or incorrectly.

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Contents

1 INTRODUCTION 5
2 DESCRIPTION OF CENTURION 5
2.1 The Instrument 5
2.2 Specifications 5
2.3 Equipment Overview 6
2.3.1 External view 6
2.3.2 Internal view 7
3 INSTALLATION PROCEDURE 8
3.1 Installing the Back Plate 8
3.1.1 Mounting location 8
3.1.2 Mounting height and position 8
3.1.3 Mounting instructions 9
3.2 Mounting and Starting the instrument 9
3.2.1 Mounting 9
3.2.2 Initial starting 9
4 OPERATING INSTRUCTION 10
4.1.1 Providing a breath sample 10
4.2 Analysing the breath sample 11
4.3 Invalid sample 11
5 OWNER SERVICING 12
5.1 Cleaning 12
5.2 Cleaning Frequency 13
6 USER CONTROLS 13
6.1 Buttons 13
6.2 Keyboard 14
7 USER INTERFACE 16
7.1 Accessing the user menu 16
7.2 Status 17
7.2.1 Instrument 17
7.2.2 Alcohol Sample Module 17
7.2.3 Status Items 17
7.2.4 Network Connections 18
7.3 About 18
8 Settings 19

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8.1 Instrument Information 19
8.2 Clock 20
8.3 Authorisation 20
8.4 Authorisation Code Entry 20
8.5 Shutdown Instrument 21
9 CUSTOM APPEARANCE 22
9.1 Background Image 22
9.2 Custom Text 22
9.3 Intervals 23
10 Logs 23
10.1 View 23
10.2 Export 24
10.2.1 Exporting 25
10.3 Erase Event Logs 25
11 NETWORKS 25
11.1 Configuration 25
11.1.1 Network Setup 26
11.2 Services 26
11.2.1 Authorisation Over Network 26
11.2.2 Alcolizer Portal 27
12 EMAIL 27
12.1 Email Settings 27
12.1.1 Settings – Template 28
12.1.2 Settings – Server 28
12.1.3 Test Mail 29
12.2 Email Status 29
12.3 Email Reports 30
12.3.1 Breath Test Results 30
12.3.2 Instrument Status 31
12.3.3 Event Log Report 31
13 Relays 31
13.1 Hardware 32
13.2 Configuration 33
14 Functions 33
14.1.1 Functions Menu 33

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15 Self-Check....34
16 UPGRADE SOFTWARE....35
16.1 Saving software into the USB stick....35
16.2 Installing the update on your Centurion....35
16.3 Checking the software version in your Centurion....37
17 CALIBRATION....38
18 Epsom TM20 Printer Setup....39
19 Troubleshooting....39

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1 INTRODUCTION

This User Manual details the operation of the Alcolizer Technology, Centurion, alcohol breath testing instrument. This manual is divided into various Sections and Sub-sections to enable the user to access the required information with ease. It includes Warnings, Cautions and Notes applicable to the Centurion instrument and a detailed table outlining the specifications.

2 DESCRIPTION OF CENTURION

2.1 The Instrument

Centurion is equipped with the latest technology, and is designed to accommodate a wide range of uses across many industries. This Breathalyzer is designed for high volume, fixed point commercial and industrial alcohol breath testing applications where you need a “Go” or “No Go”. This is the ideal tester where you have Zero Tolerance, and just need an Alcohol detected or alcohol not detected. The Alcolizer Centurion incorporates innovative and patented replacement module technology, so no more returning your Breathalyzer to base for service, we simply ship you an exchange module.

If you have Zero Tolerance for Alcohol this is the device for you, and when used in conjunction with a quality police grade Breathalyzer like the LE5 or the HH3 will deliver a total solution for your business.

2.2 Specifications

Item	Specification
Power	100-240V ∿50/60Hz 75W
9V Back up Battery	Required to retain the date and time when disconnected from mains power. DO NOT REMOVE.
Housing	Steel construction, power coated to AS????
Sensor	Alcohol specific electrochemical fuel cell – Police Grade
Response Time	Within 3-5 seconds for a 0.100g/100ml BAC reading
Display - Type	25cm (10”) colour graphics LCD
Operating Temp	0 to 50°c
Measurement Display	Alcohol detected or not detected.
Accuracy	Absolute accuracy to better than +/- 0.005 g/100ml (BAC)
Calibration	Completed by an Alcolizer Technician on a 6 monthly service via a module exchange program.
Warranty	24 months and a life time guarantee on the electrochemical fuel cell

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WARNING

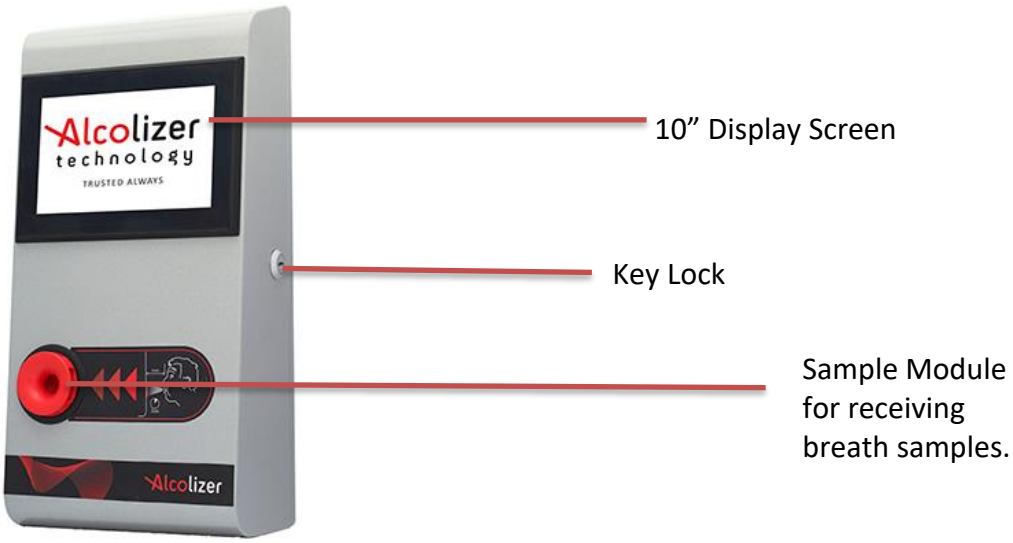
If the supply cord is damaged, a risk of electrocution exists. It must be replaced by the manufacturer, an approved service agent or similarly qualified persons.

Should the instrument be damaged or require servicing, contact Alcolizer on 1300 789 908.

2.3 Equipment Overview

With a long lasting and durable steel construction, Centurion is manufactured to withstand long-term use. Weighing under 10kg, Centurion can be wall mounted in multiple, accessible locations. A large display screen also makes for clearer and easier reading of displayed results. There are no extra accessories associated with providing a breath sample, which is therefore beneficial in not having to replenish items and maintain stock for breathalyzing.

2.3.1 External view



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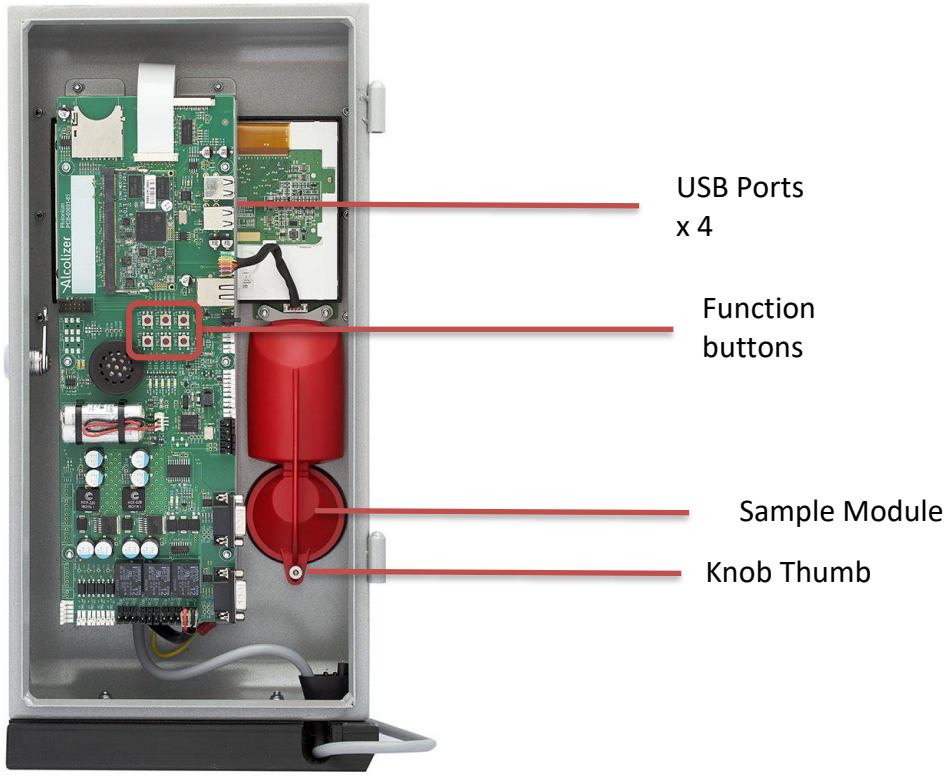
2.3.2 Internal view



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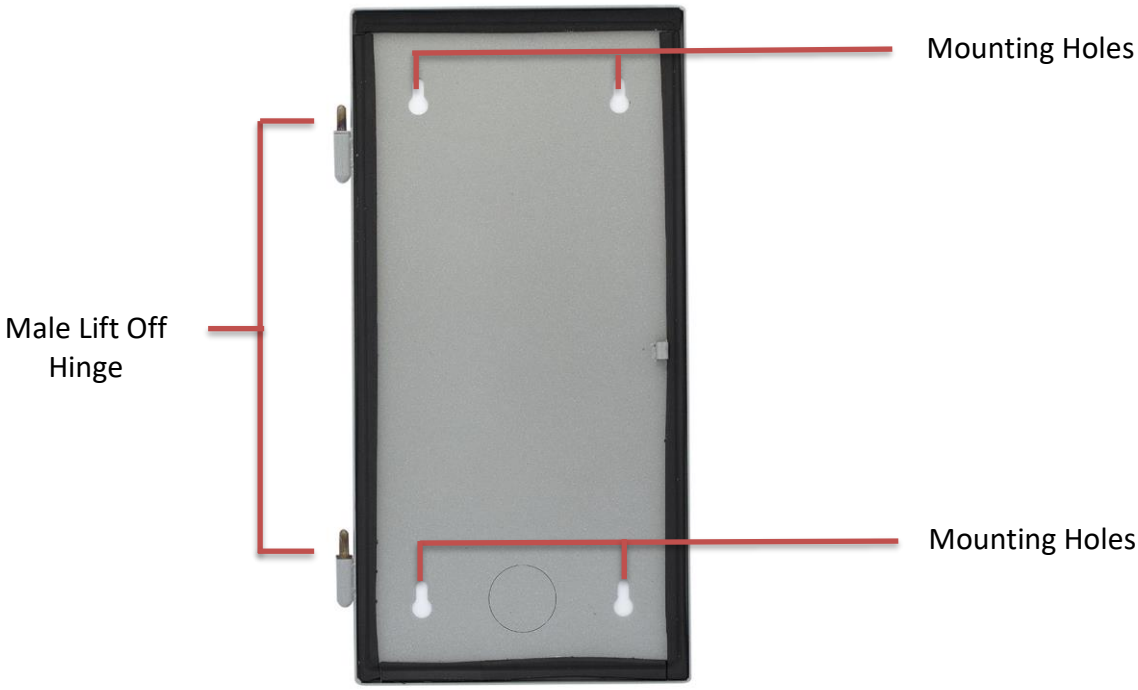

3 INSTALLATION PROCEDURE

3.1 Installing the Back Plate

3.1.1 Mounting location

When choosing a suitable mounting location, the following factors should be considered:

- The instrument must be mounted on a wall or structure that can support the weight of the instrument.
- The instrument must not be exposed to rain or water.
- The instrument should be mounted near to a mains power socket to allow for easy connection and network point if advanced connectivity functions are being used.
- The instrument must not be exposed to extreme temperatures outside of the defined operating range (See Specifications).

3.1.2 Mounting height and position

The instrument must be mounted and positioned at a height to accommodate the majority of users and in such a way to allow access to the key lock and to allow the machine to swing open.

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WARNING

When the unit is open or not installed on the back plate, electrical components are exposed. Ensure electrical power is isolated at the supply power point whenever the unit is open unless specifically required for special troubleshooting requirements.

3.1.3 Mounting instructions

Mount the back plate in accordance with the following procedures:

1. Unpack and remove the instrument from the packaging. Unlock the instrument and remove the back plate from the unit.
2. Choose a suitable mounting site as described previously.
3. Remove any cutaway portions on the back plate to permit cable access if applicable, such as an Ethernet cable.
4. Fix the back plate to the wall using masonry fixing hardware (e.g. medium duty anchors).
5. The fixings should be strong enough to support the instrument (at least 20kg) and any incidental loading such as a person leaning or pulling on the instrument.

WARNING

Do not use adhesives (Liquid Nails) as the method of fixing as these are not considered to be a reliable or safe fixing means for the Centurion.

3.2 Mounting and Starting the instrument

3.2.1 Mounting

Mount the instrument in accordance with the following procedures:

1. Using an assistant if required, hang the instrument onto the back plate by aligning the male lift off hinge pins on the back plate with the main instrument female hinge tubes.
2. Confirm the instrument swings effectively and does not impact any other fixtures.
3. Route any cables to avoid damage and trip hazards.
4. Visually check that there are no loose components from transportation.
5. Remove any packing materials.
6. Remove the screen protector film from the front of the display screen.

3.2.2 Initial starting

Perform the following steps for the initial start-up:

1. The Centurion will automatically begin the start-up process once you plug it into the mains power.

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2. The instrument will take several minutes to start up. The loading screen will be visible.
3. The instrument is ready to use when the display screen is visible and ready to receive a sample.

4 OPERATING INSTRUCTION

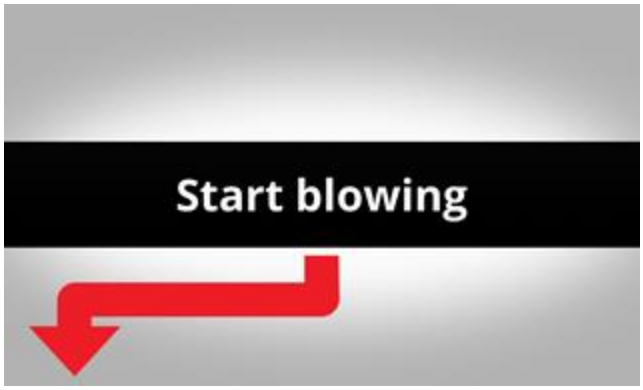
4.1.1 Providing a breath sample

Perform a breath test in accordance with the following procedures:

1. Ensure the instrument is ready to take a sample. This is indicated with a welcome screen and instructions on how to provide a breath sample. There may be a specific customer welcome screen.
2. The screen will indicate to **START BLOWING.**

NOTE

For accurate results, food or drink must not be consumed for the 10 minutes prior to testing.



a. Start blowing and continue blowing until the progress bar reaches 100%. During the blow sequence, a beeping sound will be heard.

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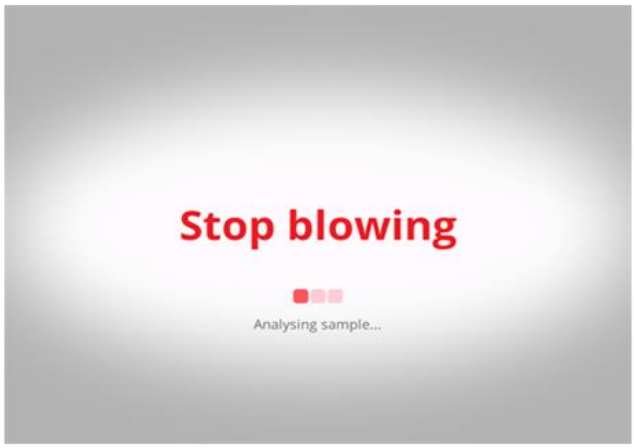

b. Stop blowing when the display shows **STOP BLOWING**.

4.2 Analysing the breath sample

The instrument will perform an analysis after the breath sample has been received and then display the result. If the BAC (Breath Alcohol concentration) detected is zero, the display will be green, indicating no alcohol was detected and stating just that result on the screen. When the BAC is greater than zero, the display will be red and clearly indicate alcohol has been detected in the breath sample.

The result will continue to be displayed while the instrument resets itself ready for the next test. For zero readings this will typically be about five seconds.

4.3 Invalid sample

The invalid blow screen is displayed if the user stops blowing half way through a sample being taken, they blow too softly, blow too hard or not blowing directly into module as indicated on the front of the Centurion .

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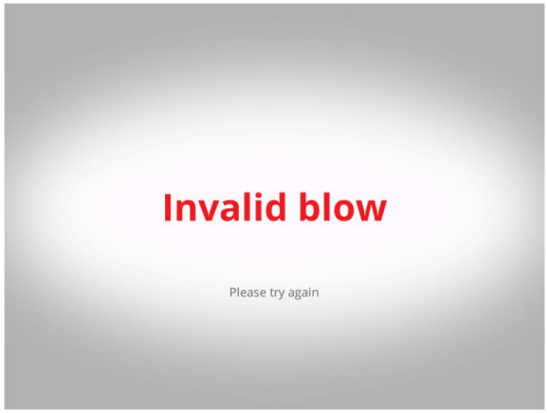
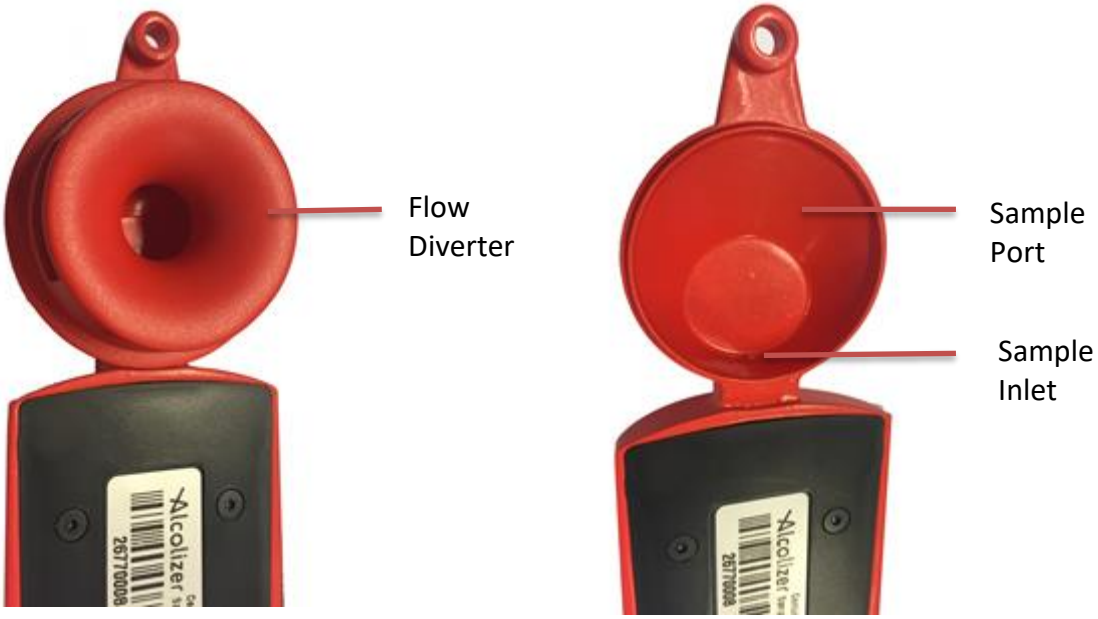


If the blow is invalid, cease blowing, wait until the device returns to the main screen and then provide another sample.

5 OWNER SERVICING

5.1 Cleaning

1. The instrument should be cleaned with a soft cloth and antibacterial spray. It is recommended that the instrument is turned off before cleaning.
2. Main body – the outside of the machine can be cleaned by wiping it over with a soft moist cloth followed by a soft dry cloth.
3. Sample Module – Disconnect the sample module by unscrewing the Knob Thumb. Remove the Flow Diverter to have access to the Sample Port. Then, the Sample Port can be cleaned by wiping inside with a soft moist cloth ensuring any residual material is removed.
4. Ensure the Sample Inlet is not blocked.



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5. Screen – the screen of the machine can be cleaned by wiping it over with a soft moist cloth followed by a soft dry cloth.
6. **Do not** use alcohol based cleaners.
7. **Do not** use harsh cleaning agents, abrasive cleaning pads or chemicals.
8. Rubber cloves should be used during cleaning of the instrument.

5.2 Cleaning Frequency

1. The Sample Port should be cleaned daily or as required based on the volume of testing and local conditions.
2. The Main Body of the instrument and the Screen should be cleaned weekly.

6 USER CONTROLS

6.1 Buttons

Inside the Centurion are buttons which can be used to access certain menus during setup and fault finding. Users should not access the machine and press these buttons unless specifically requested to by instructions in this manual or verbally when in contact with your Alcolizer Technology technical representative.

Access the buttons by unlocking the Centurion and swinging it open. The buttons are located on the main circuit panel.

WARNING

When the unit is open or not installed on the back plate, electrical components are exposed. The following steps require the user to open the Centurion with power applied. During the procedures ensure only the buttons mentioned are activated. Do not come in contact with any exposed components.

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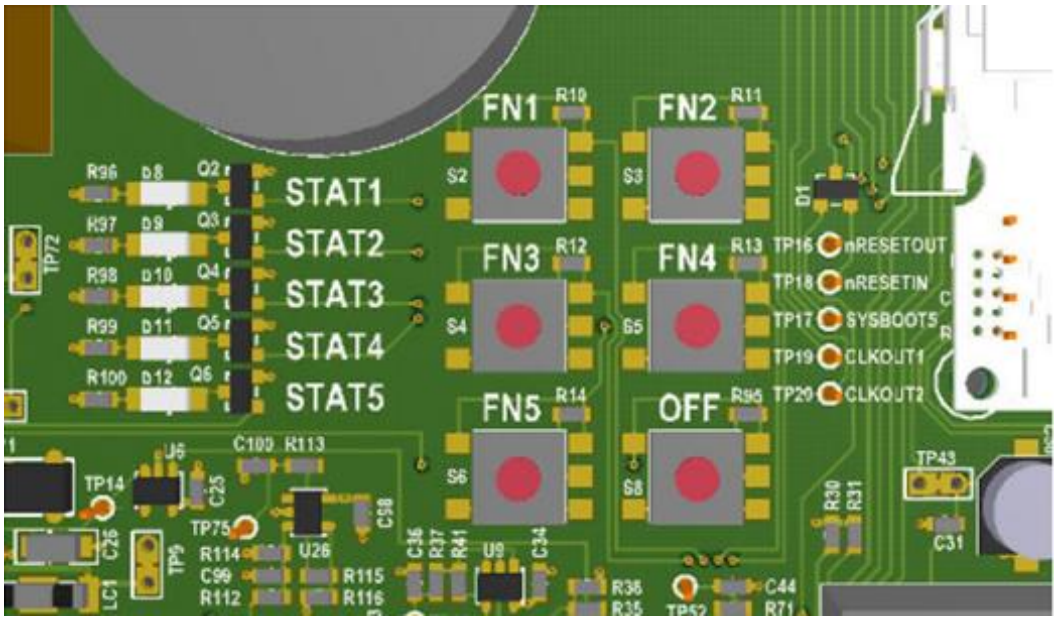

The only buttons that users need to operate are **FN1**, **FN4** and **OFF**. **Do not touch the other buttons.**

The buttons have the following functions:

- **FN1:** Show/hide the Status page. Does the same as pressing F1 on the keyboard.
- **FN4:** Show/hide the Functions page to export the event log to a USB flash memory.
- **OFF:** Power-off and power-on the instrument.

  If the instrument is running, press once to **power down**.
  If the instrument is powered off, press once to **start up**.

WARNING

Pressing and holding the **OFF** button **may cause irreparable damage** to the instrument and should only be performed by an Alcolizer Technician.

DO NOT PRESS AND HOLD THE OFF BUTTON.

6.2 Keyboard

A standard 101 style keyboard (with a standard USB connection) or a wireless keyboard can be connected to the Centurion to access certain menus during setup and fault finding. Users should not access the machine and attach a keyboard unless specifically requested to by instructions in this manual or verbally when in contact with your Alcolizer Technology technical representative.

Access the USB ports by unlocking the Centurion and swinging it open. There are four ports located on the main circuit panel.

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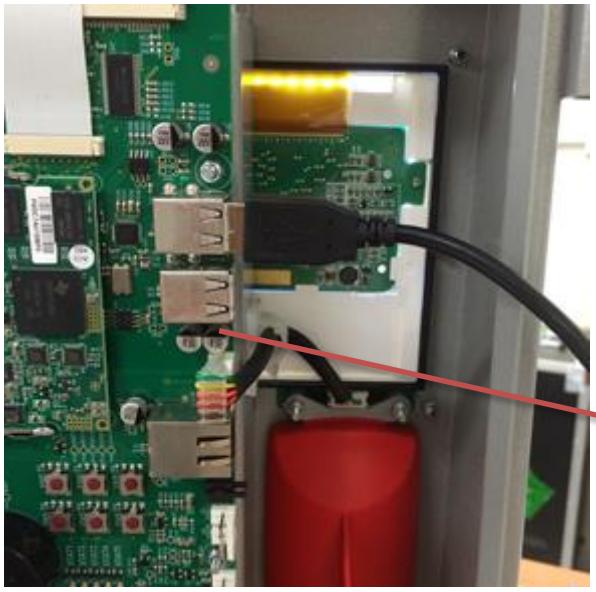
WARNING

When the unit is open or not installed on the back plate, electrical components are exposed. The following steps require the user to open the Centurion with power applied. During the procedures ensure only the ports mentioned are touched. Do not come in contact with any other exposed components.

CAUTION

Use care when inserting the connector to the port to ensure neither are damaged.



Once the keyboard is connected, access to the menu is available.

The keyboard functions are as follows:

- **F1**: Toggle Status screen
- **F4:** Save event log
- **Alt:** toggle instrument configuration menu
- **Esc:** Toggle instrument configuration menu
- **Alt+up:** Switch to previous configuration page
- **Alt+down:** Switch to next configuration page
- **Alt+left:** Switch to previous tab or page
- **Alt+right:** Switch to next tab or page
- **Ctrl+Alt+P:** Write screen shot to USB

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- **TAB:** used to navigate within the page across different sections.

NOTE

Use only the left Alt key. The right Alt key has no function.

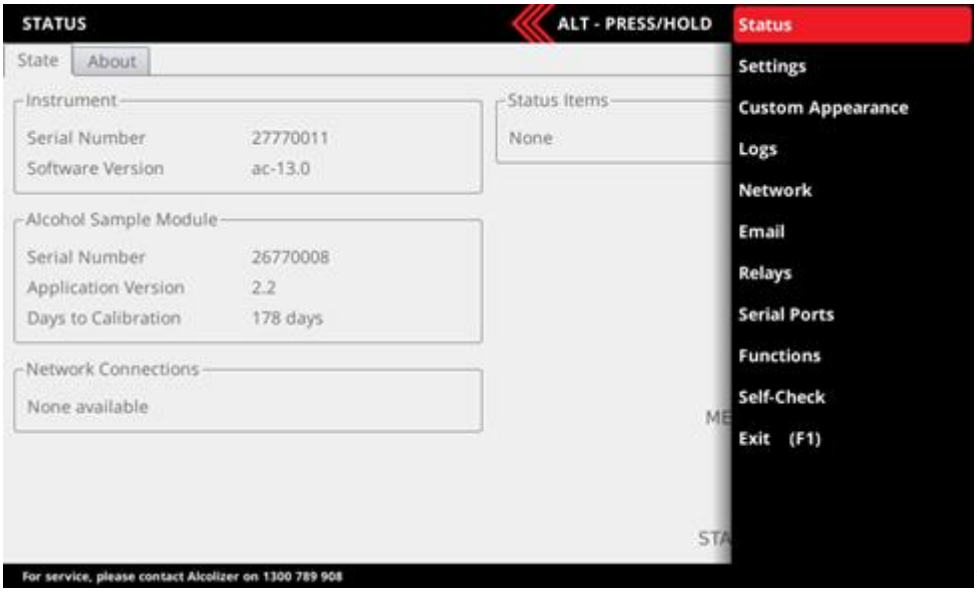
The spacebar has the same functionality as the Enter key in normal usage. When entering data, use the spacebar not the Enter key.

7 USER INTERFACE

7.1 Accessing the user menu

To access the User Menu, perform the following steps:

1. Connect a keyboard in accordance with paragraph 6.2.
2. Press the F1 key to access the Centurion User Menu area.
3. Press the left Alt key to bring up available menu choices.
4. Press the down key and move down to the required menu (e.g. Settings).
5. Press left Alt to hide the menu and give clear access to the selected page.



NOTE

A mouse can be used to operate the various User Interface menus. Connect the mouse or

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mouse wireless connector in the same manner as the keyboard.

7.2 Status

The status page will provide a variety of information for the user:

7.2.1 Instrument

- **Serial Number:** A number that uniquely identifies the Centurion. This number is also printed on the side panel safety label located on the side of the instrument.
- **Software Version:** The version of software running in the Centurion (e.g. ac-13.0).

7.2.2 Alcohol Sample Module

- **Serial Number:** A number that uniquely identifies the Sample Alcohol Module.
- **Application Version:** The version of software running in the Sample Alcohol Module (e.g. 2.2).
- **Days to Calibration:** Total days till next calibration.

7.2.3 Status Items

The status items page will provide a variety of information for the user. Each status item is classified as one of the following.

- **Fault:** The instrument has encountered a critical error and is unable to perform breath analysis. The fault must be manually cleared (or repaired) by an authorised Alcolizer service technician on **1300 789 908.**

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- **Alert:** The instrument has encountered a temporary condition that is preventing the unit from performing breath analysis. The alert will clear automatically. Breath analysis is disabled if an alert is active.
- **Warning:** The instrument has discovered a problem but is able to function normally (for the time being).
- **Notice:** Information that might be useful to a technician but in no way represents a problem with the instrument. Breath analysis is enabled if a notice is active.
- **Disabled:** Breath testing is disabled for a reason other than a fault or alert. For example, no reference gas.

NOTE

Status items are displayed to the user on the Status page in the instrument's current language. Each status item also includes a unique code to help identify the status item when the instrument is in a different language.

7.2.4 Network Connections

The Network Connections area shows status information for the Centurion Ethernet port.

- A valid network connection is not required for the instrument to operate correctly, however if a Centurion has an internet connection, the date and time will be automatically adjusted.
- If connected to a valid network the instrument's IPv4 address is displayed (e.g. 192.168.15.133).
- If not connected to a valid network, **none available** is displayed.

WARNING

When the instrument is open or not installed on the back plate, electrical components are exposed. The following steps require the user to open the Centurion with power applied. Do not come in contact with any exposed components.

7.3 About

This page has further detailed information about the Centurion device divided into two parts:

- The Instrument
- The Alcohol Sample module

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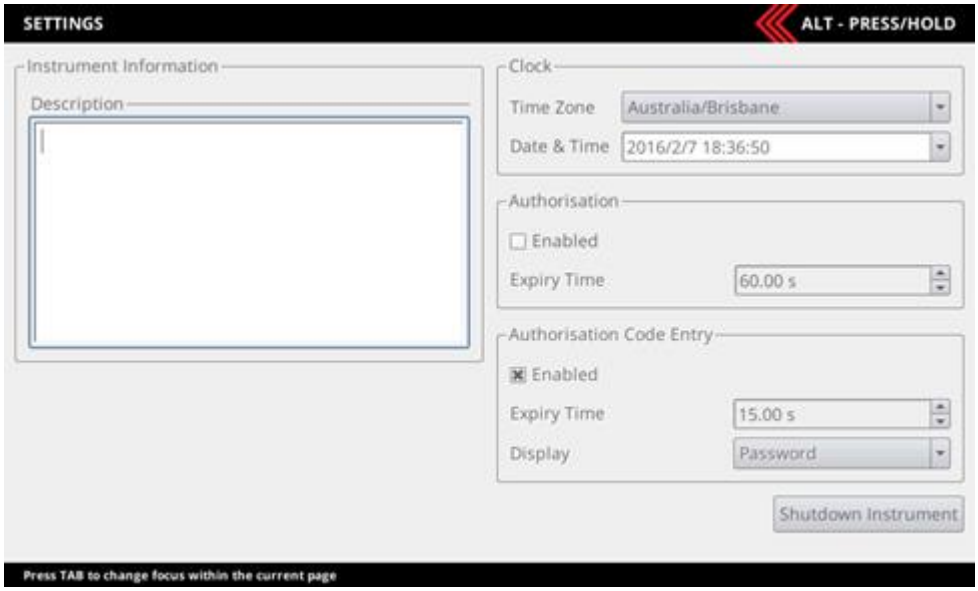
8 Settings

The settings page provides the configuration options available for the user:



8.1 Instrument Information

The instrument information feature allows a customer to add user-specific descriptions of the instrument (e.g. “Site 13, Gate B”). This description is included in all email reports by default.

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8.2 Clock

The date and time can be set manually or automatically if the instrument is connected to the internet (via the wired Ethernet connection). There is no need to manually adjust it if connected to the internet.

In order for the Centurion to display the correct date and time, the time zone must be set correctly. The display format is set to **YYYY-MM-DD HH:MM:SS** and cannot be changed.

8.3 Authorisation

The authorisation feature when enabled prevents the Centurion from performing a breath test until it has received authorisation, by entering a code for example. This is used where you want to identify the person who is doing the breath test. For example you may be able to integrate you security access card to your Centurion. Please contact your account manager for more details.

- **Enabled**: Check to enable breath test authorisation.
- **Expiry Time**: Once a single breath test is authorised, the test analysis must be completed within this time or the authorisation expires and a new authorisation is required.

8.4 Authorisation Code Entry

These settings are only accessible if breath test authorisation is enabled. They apply to authorisation code entry using a USB input device (keyboard, etc.).

- **Enabled**: Check to allow authorisation codes to be entered using a USB input device.
- **Expiry Time**. Amount of time a user has to accept the input code (by pressing ENTER) before the code entry expires and the user must start again.
- **Display**. Specify how password characters entered on the screen should be displayed.

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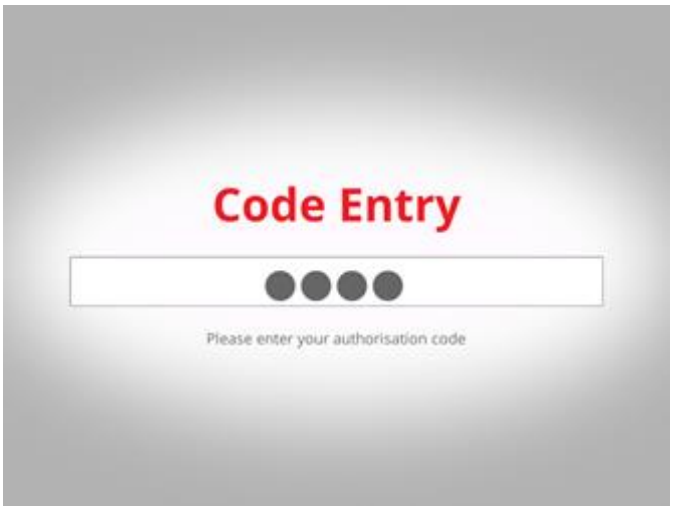
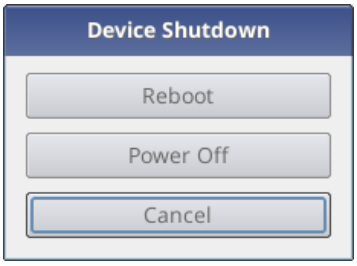


8.5 Shutdown Instrument

When the Shutdown Instrument button is pressed the following options are presented to the user:

- **Reboot*:*** Restart the instrument.
- **Power Off*:*** Shutdown the instrument so that mains power can be removed. This method or the OFF button on the back of the board localised internally in the Centurion, are the only two ways to correctly power off the instrument.



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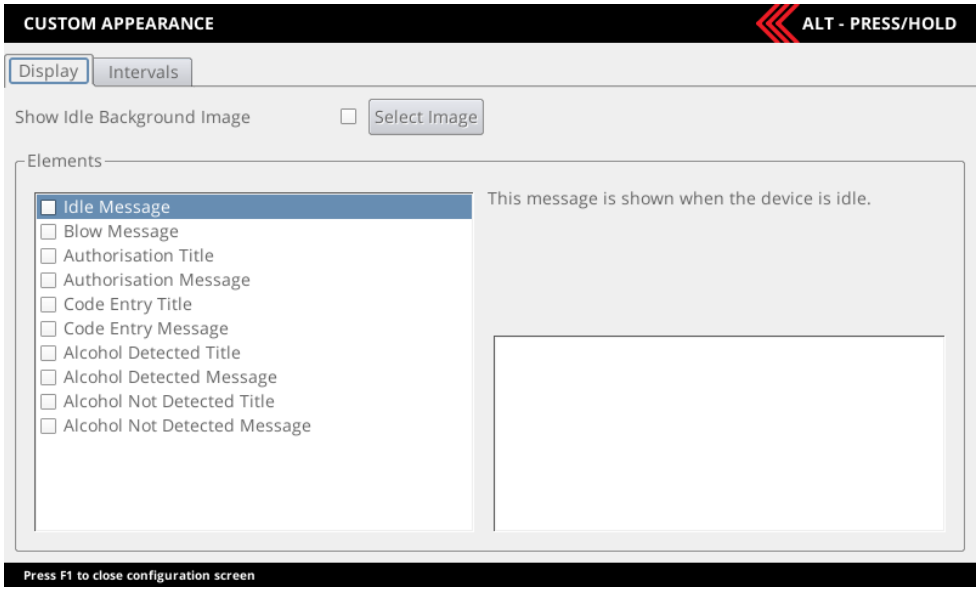
9 CUSTOM APPEARANCE



9.1 Background Image

To import a background image, proceed as follows:

1. Connect a keyboard and access the User Menu in accordance with the procedures at paragraph 7.1.
2. From the User Menu, access the custom appearance screen by scrolling down to Custom Appearance and press enter. The Custom Appearance screen will appear.
3. Tick the **Show Idle Background Image** box using the space bar.
4. Inset a USB storage device (thumb drive) with the desired image into an available USB port.
5. Select Image button.
6. Select the required graphic from the Select Image page and click OK.
7. That image will now appear on the screen.

9.2 Custom Text

The Elements area allows customisation of the user interface text for a variety of breath testing screens. Display custom text on the instrument introductory screen as follows:

1. Connect a keyboard/mouse and access the User Menu in accordance with the procedures at paragraph 7.1.
2. From the User Menu, access the custom appearance screen by scrolling down to Custom Appearance and press enter. The Custom Appearance screen will appear.
3. Select the desired screen.
4. Type the required text in the free text field for the highlighted screen.
5. To activate a free text of a specific screen, tick the box beside the screen name.

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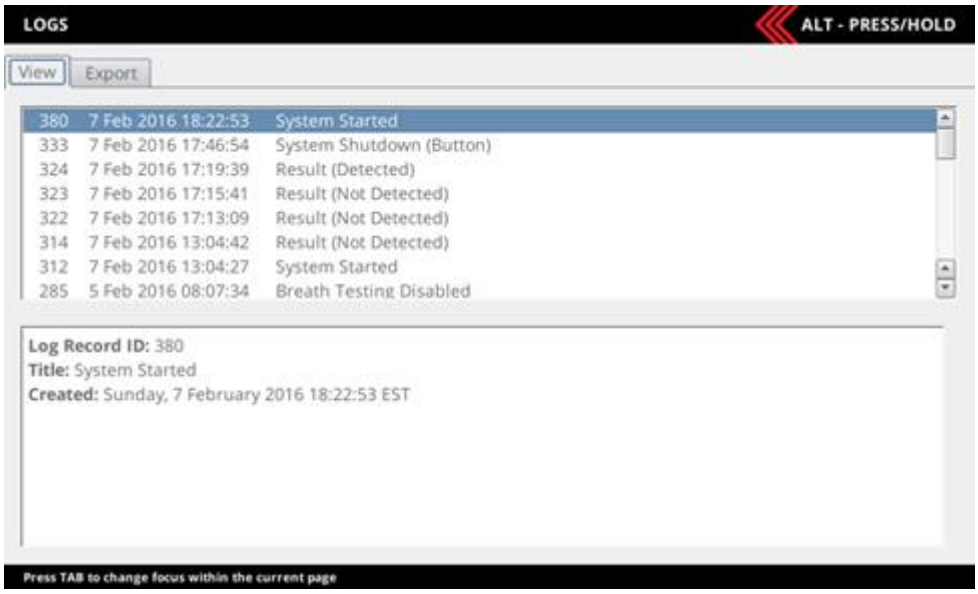
9.3 Intervals

It is possible to adjust the timings for some screen display intervals. Descriptions of how the timings apply to the display are presented for each adjustable interval.

10 Logs

10.1 View

The View contains the log records which consist of one or more pieces of information. Each record will show a unique log record ID entry followed by the date and time and a brief description of the logged event.
By selecting an item in this panel, a more detailed view of the selected log record is presented below the list of log records



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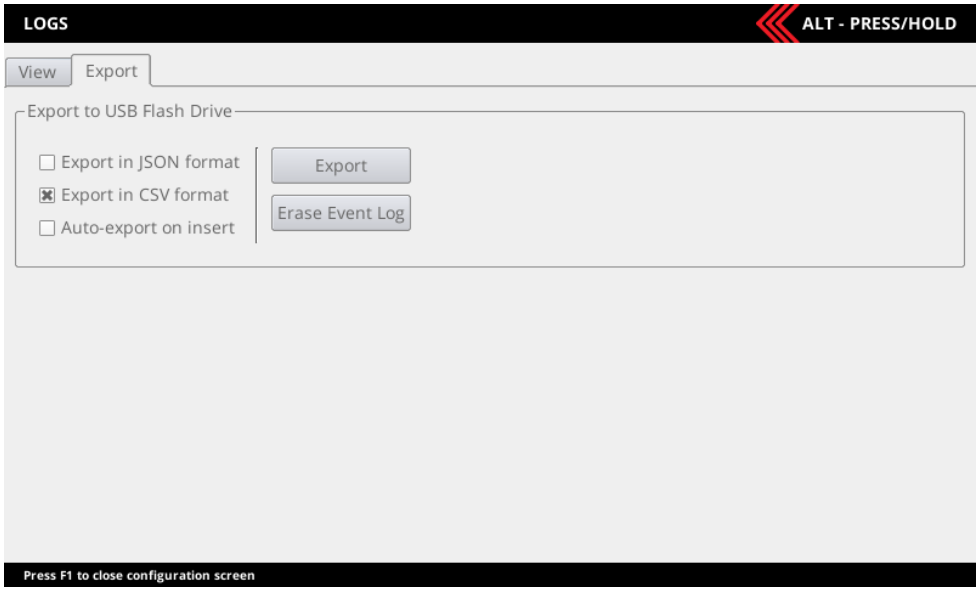
The log record can contain the below events but not limited to:

- **Result**. The result of a breath test.
- **System Shutdown**. The instrument was shut down (to be powered off or rebooted).
- **System Started**. The instrument was started.
- **System Time Changed**. The instruments time or date was changed.
- **Fault Cleared**. A fault status item cleared.
- **Fault Set**. A fault status item set.
- **Alert Cleared**. An alert status item cleared.
- **Alert Set**. An alert status item set.
- **Warning Cleared**. A warning status item cleared.
- **Warning Set**. A warning status item set.
- **Notice Cleared**. A notice status item cleared.
- **Notice Set**. A notice status item set.
- **Breath Analysis Block Set**. Data analysis is disabled.
- **Breath Analysis Block Cleared**. Data analysis enabled.

10.2 Export

Logs can be exported from the instrument into USB flash drive both by using different options.

- Logs / Export Menu
- Functions Menu



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10.2.1 Exporting

Logs can be exported from the instrument into USB flash drive both by using the *Save* button on the *Export* page or automatically when a USB flash drive is inserted if configured to do so.

Alternatively, the records can be exported by inserting a USB flash drive and pressing FN4 on the PCBA. Refer to paragraph to see button location.
These are the formats which logs can be exported:

- **CSV:** Comma Separated Values with one log record per row and record fields separated by commas within rows. This is suitable for import into most spreadsheet applications.
- **JSON:** JavaScript Object Notation in a format suitable for integration with automated systems.

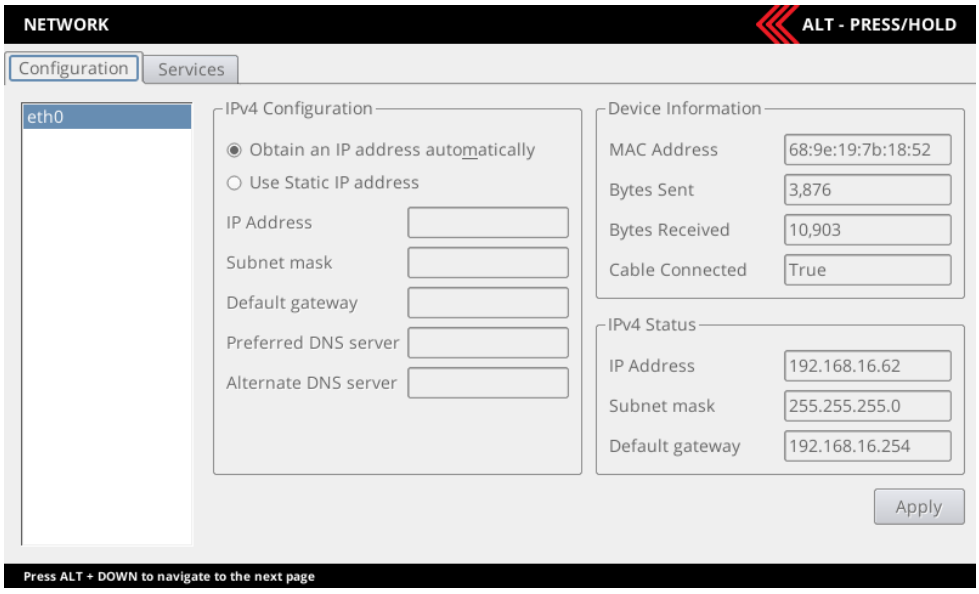
10.3 Erase Event Logs

To erase the current event log records on the device, go to Logs / Export menu and use the *Erase Event Log* button.

11 NETWORKS

11.1 Configuration

The configuration panel provide general information about the network connection and device.



 © Alcolizer Technology

11.1.1 Network Setup

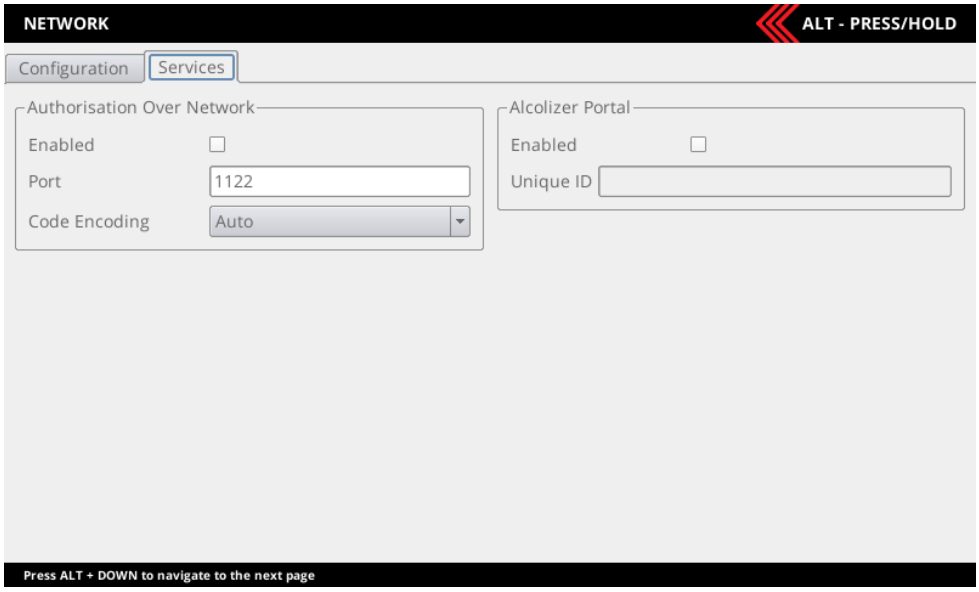
The network IPv4 Configuration can be set to obtain an IP address automatically or use a static IP address.

Establish an internet connection as follows:

1. Connect the Centurion to an internet receptacle via the Ethernet cable.
2. Connect a keyboard/mouse and access the User Menu in accordance with the procedures at paragraph 7.1.
3. From the User Menu, access the network configuration screen by scrolling down to Network and press enter. The Network Configuration page will appear
4. Complete the Configuration page with the required details to establish the network connection if a Static IP address will be used. Alternatively select “Obtain an IP address automatically”.

11.2 Services

The services panel provide access to enable Authorisation Over Network and Alcolizer Portal.



11.2.1 Authorisation Over Network

A breath test authorisation over the network can be enabled through the americium serial protocol on a TCP/IP port. The operation of this feature is identical to the protocol operating over the serial ports. There is no limit to the number of network clients that can connect simultaneously.

- **Enabled:** Whether the instrument accepts network connections on the specified port. This is disabled by default.
- **Port:** The TCP port number.

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The americium serial protocol operates on both serial ports with the following settings:

- **Protocol version:** am-spec-02
- **Date/Time:** local time (not UTC)

Please contact your Alcolizer Technology representative for further advice.

11.2.2 Alcolizer Portal

The Alcolizer Portal enables your device to post logs and status information from the instrument to the portal which is a Cloud service. This portal provides a real-time solution with analytical and statistical tools.

NOTE

Please, contact your Alcolizer Technology representative for further information about Alcolizer Portal – AlcoCONNECT. This allows you to monitor many remote sited from a single dash board, and remotely monitor compliance of your Breathalyzer testing assets.

12 EMAIL

12.1 Email Settings

The Centurion is equipped for forwarding email notifications of status and logs. To configure the email function, perform the following steps:

1. Establish an internet connection via the Ethernet cable. This step is not required if the instrument has a GSM modem.
2. Connect a keyboard/mouse and access the User Menu in accordance with the procedures at paragraph 7.1.
3. From the User Menu, access the email configuration screen by scrolling down to Email and press enter.
4. The email screen has two tabs: Settings and Reports.

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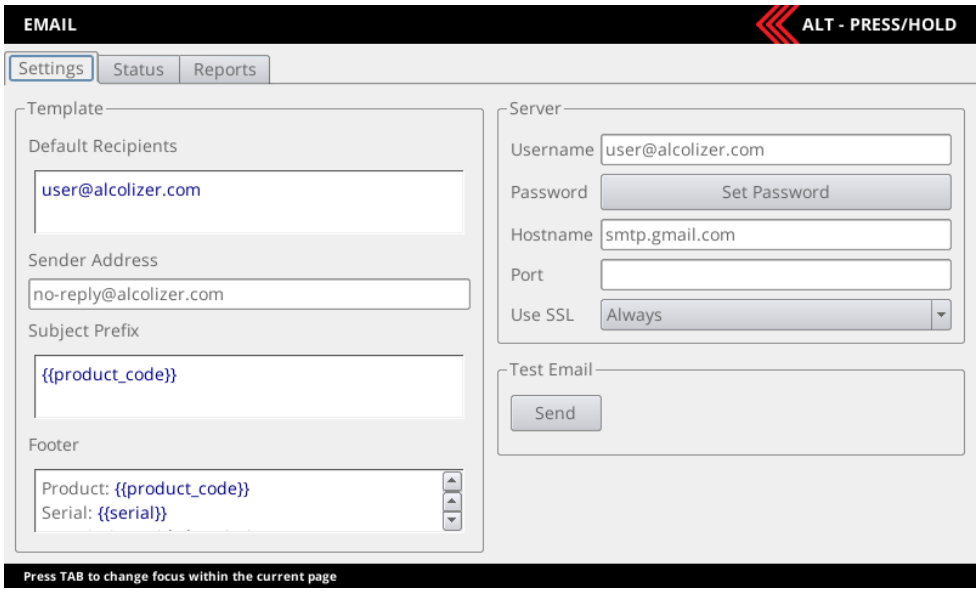

12.1.1 Settings – Template

The Mail Template panel allows configuration of the format and recipients of emails sent from the instrument.

- **Default Recipients:** A list of email recipients for emails produced by the instrument. e.g. someone@bigmine.com.au. Add additional recipients as required separating each with a space.
- **Sender Address:** This is the email address used to send the notifications and seen by the recipients.
- **Subject Prefix:** Text to be prepended to the subject line of emails produced by the instrument. It is also possible to use text replacement allowing real data to be inserted into the text when the email is sent.
- **Email Footer:** Text to be appended to the body of emails produced by the instrument. It is also possible to use text replacement allowing real data to be inserted into the text when the email is sent.

12.1.2 Settings – Server

The Mail Server panel allows configuration of the email account used by the instrument to send emails. This must be a valid email account as it would be configured in a desktop email program.

- **Username:** The username (typically an email address) used to log into the SMTP server.
- **Password:** Password associated with the specified username. Pressing the password button clears the current password and shows a text editor to enter a replacement password. The password characters are obscured by default; press the “eye” icon to temporarily display the password characters.

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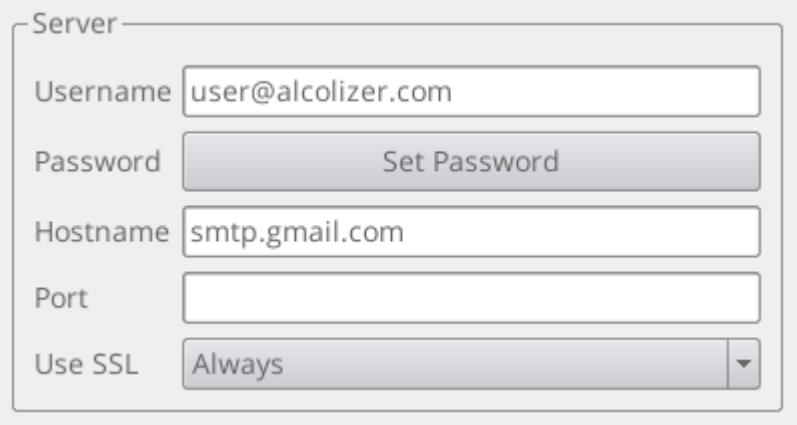
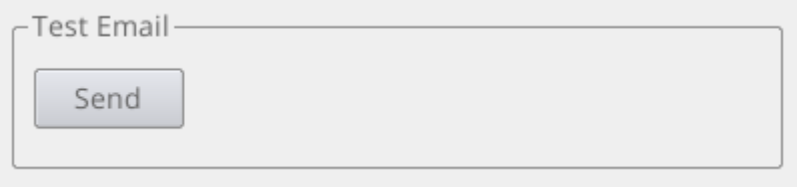
- **Hostname:** URL of the SMTP server (e.g. smtp.gmail.com).
- **Port:** The TCP/IP port number used by the SMTP server. Leave blank to use a default value.
- **Use SSL:** If enabled then use secure sockets layer to connect to the SMTP server.



12.1.3 Test Mail

The Test Email panel allows sending a test email from the system, confirm email settings and provide feedback on any issues the instrument has sending emails.

Activating **Send** will initiate a test email with the current configuration. The Test Email panel will then report the status of sending the email and if it fails, indicate information about how sending the test email failed. Due to the very long time out periods specified for email configuration, if there is an issue with the Mail Server settings, it can take a very long time for the test email to fail and this can also block further test emails being sent until the time out for the previous email has sent.



12.2 Email Status

This feature has two panels:

- **Status:** indicates the status of the email/s being sent.
- **Queue:** emails can be seen in the queue that are ready to send; the queue can be cleared by selecting the “Clear Email Queue” tab at the bottom.

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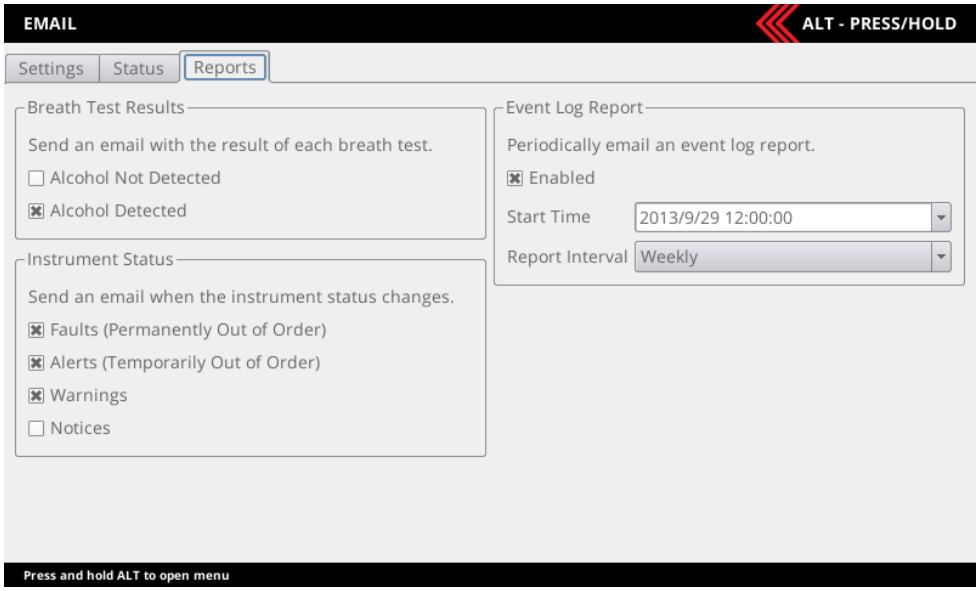
12.3 Email Reports

The Reports panel allows setup the breath test results and instrument status that will be sent via email. The frequency that the report will be sent can be setup on this panel.



12.3.1 Breath Test Results

The instrument can be configured to send an email detailed results of a breath test. This can be done for both negative and positive results. If instrument authentication is enabled, the report can also include information about previous breath tests from the same authentication code.

 © Alcolizer Technology

12.3.2 Instrument Status

Notification about changes in instrument status can be sent from the instrument for various types of status information. The report includes information on all currently active status items, not just the status item that changed state. The status options are:

- **Faults (Permanently Out of Order)** – send an email if a fault is raised or cleared.
- **Alerts (Temporarily Out of Order)** – send an email if an alert is raised or cleared.
- **Warning** – send an email if a warning is asserted or cleared.
- **Notice** – send an email if a notice is asserted or cleared.

12.3.3 Event Log Report

The instrument can be configured to send periodic emails containing log information for the given period. The interval for the report can be configured from hourly through to monthly and the day or hour the report will occur on is dependent on the start date. For example:

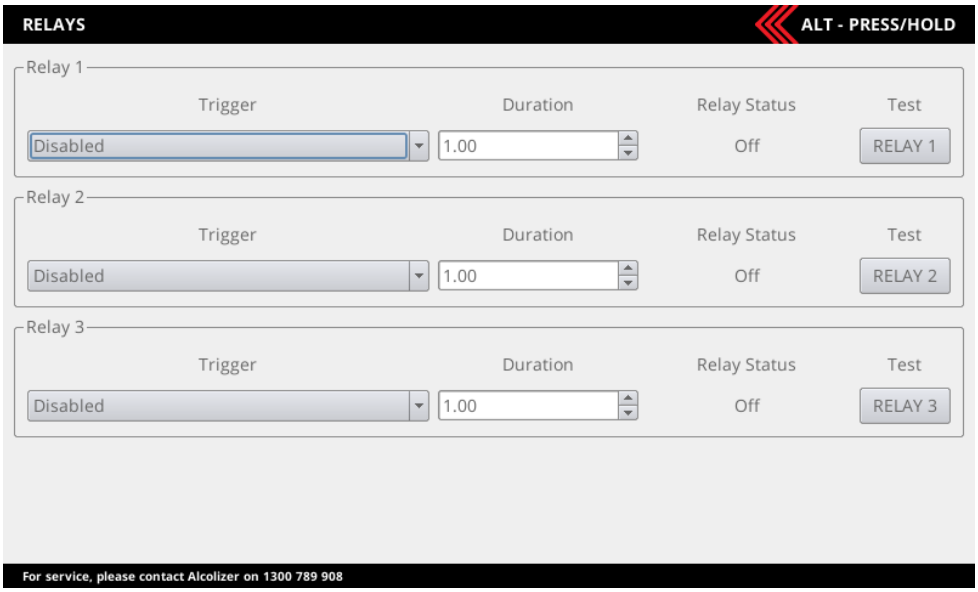
- The current date is the 3rd of October 2013.
- The Start Time chosen is on the 29th of September 2013, 12 noon.
- The Report Interval is Weekly.
- The next email will be sent on the 6th of October 2013, 12 noon. And every week thereafter until the configuration is changed.

13 Relays

The Centurion is equipped with three relay outputs on the circuit board and their outputs can be configured to trigger in response to a breath test result. To access the Relays Menu, refer to paragraph 7.1.

If a relay output is enabled, the relay will trigger for the specified duration.

 © Alcolizer Technology

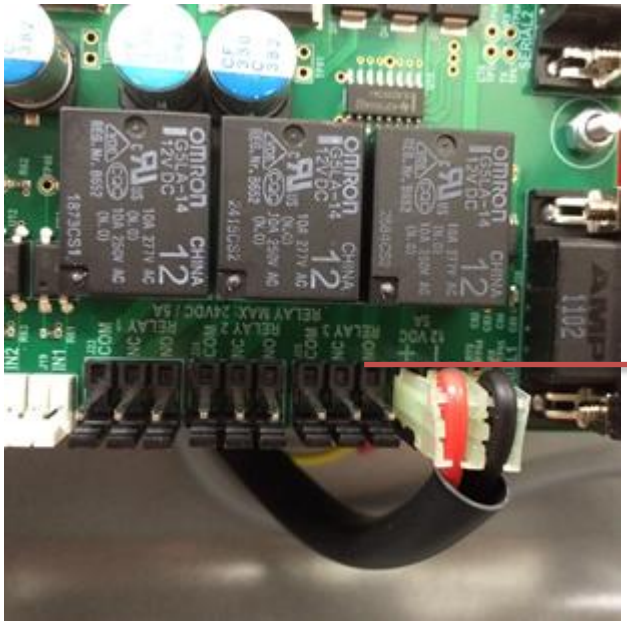


13.1 Hardware

The relay outputs are labelled on the circuit board as Relay1, Relay2 and Relay3.

Each relay output has three terminals:

- **COM:** Common connection.
- **NC:** Normally Closed, the COM/NC circuit is *closed* (passes current) when the relay is *not* triggered and *open* when the relay is triggered.
- **NO:** Normally Open, the COM/NO circuit is open when the relay is not triggered and closed (passes current) when the relay is triggered.



 © Alcolizer Technology

13.2 Configuration

There are three relays available and their behaviour can be configured on the *Relays* page. For each relay the following properties can be configured:

- **Enabled:** If checked, indicates that the relay should respond to breath test results and enables remaining configuration items for the relay.
- **Duration:** If the relay is enabled and a breath test result falls within its configured range, the relay should fire for a number of seconds equal to the configured duration.

The *Relay Status* indicates if the relay is currently **ON** or **OFF**.

There are three buttons on this page that briefly activates the relays. (Located under TEST)

14 Functions

This page shows a visual description of the user buttons that will access the main menu.

14.1.1 Functions Menu

1. Connect a USB flash drive to an available USB port.
2. Press FN4 key. Then, Functions screen will be displayed.

3. Having the “Export logs” option selected, press FN4 to start the download.
4. Use the Menu button to select “Exit” and press FN4 to return to the operational screen.
5. On the operational screen you should see a progress bar.

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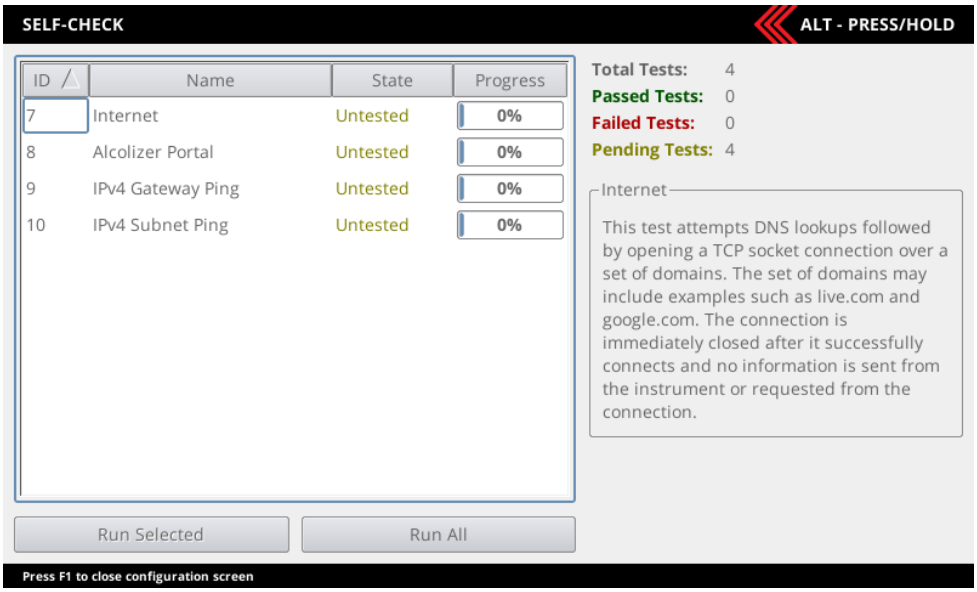
Note: If the log data to download is small, you may not see the progress bar when back on the operational screen. The download time will differ depending on log data size.

15 Self-Check

This page allows running some automated self-checks of the instrument to validate the instrument configuration and behaviour.

Each test indicates whether it has been recently tested and lists a title as well as provides a description of what the test does. One, many, or all tests can be run. Some tests require a degree of user interaction and if this occurs instructions will appear on the screen indicating how to proceed.

 © Alcolizer Technology



16 UPGRADE SOFTWARE

To upgrade the software on your Centurion, you will need a USB stick. Follow instructions below to receive/download the latest software version.

NOTE

Contact Alcolizer to receive the latest software version or access our website for further information.

16.1 Saving software into the USB stick

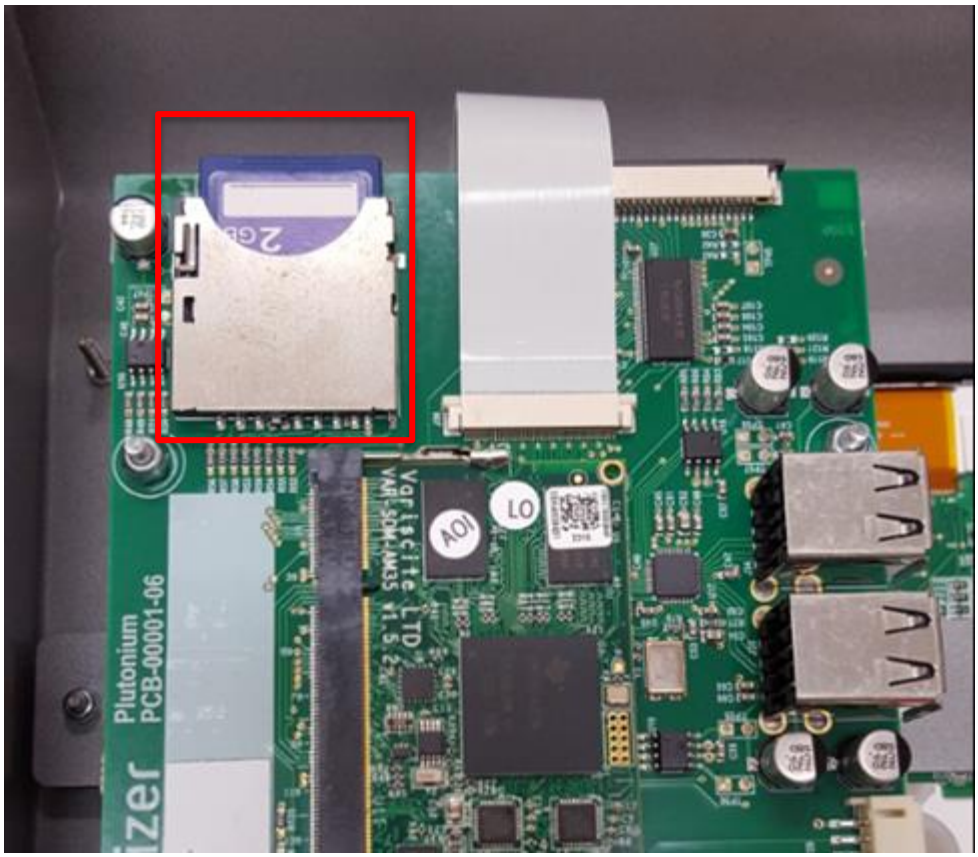
1. Download the software to your computer.
2. Copy the software file (eg. ac-13.1-rc2.software) to a USB stick.

16.2 Installing the update on your Centurion

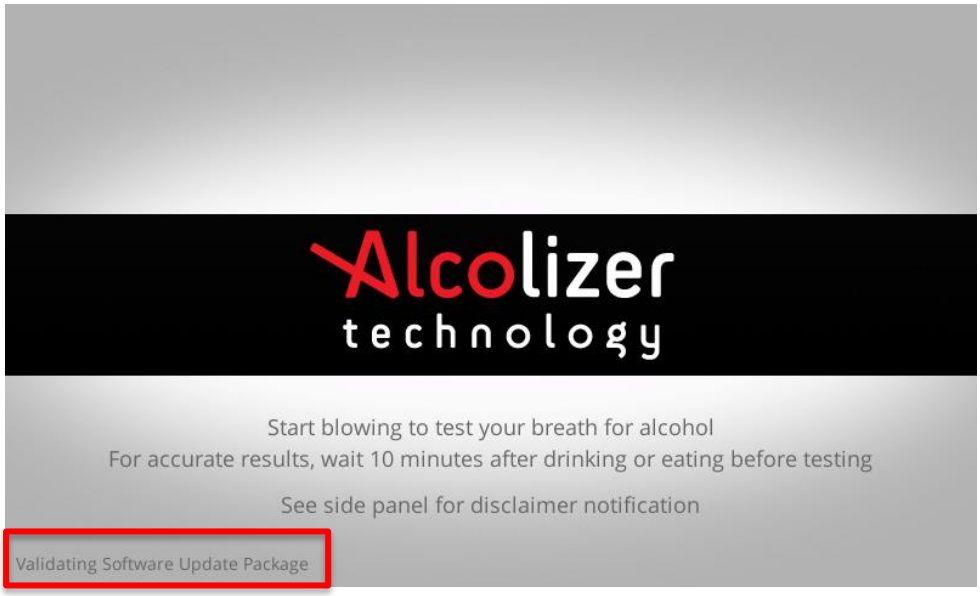
1. Open the Centurion to have access to the hardware and verify if there is a SDHC card present. If not, contact Alcolizer to provide this card.

Note: The card must be a SDHC type with 2GB capacity or more. It must be formatted as FAT32.

 © Alcolizer Technology

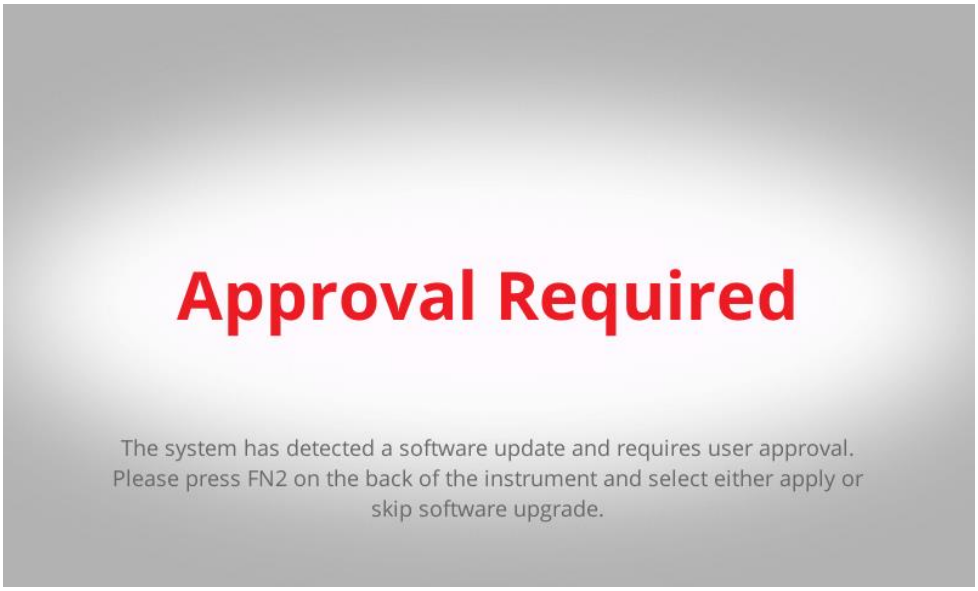


2. Turn the Centurion on.
3. Ensure the device has started correctly. It should display the message “Start Blowing” on the screen.
4. Insert the USB stick with the software to any of 4 USB ports. On the main screen a message will appear “Verifying Software Upgrade Package” for around 15 seconds.



5. Then, the message below will appear on the main screen. Follow instructions on the screen.

 © Alcolizer Technology



Note: If **FN**2 switch is not pressed within 45 seconds, update process will be aborted. To restart upgrade process, remove USB stick and reconnect it.

6. Ensure “Apply Software Update” is highlighted. Press “Select” button (FN4 Button)” on the Centurion board to accept software update.

Note: The Centurion will restart and apply the software update. It will take several minutes to complete. **DO NOT REMOVE THE USB STICK DURING UPGRADE SOFTWARE PROCESS!**

16.3 Checking the software version in your Centurion

Once centurion has restarted and is displaying the normal idle screen confirm the installed firmware version in the configuration status page.

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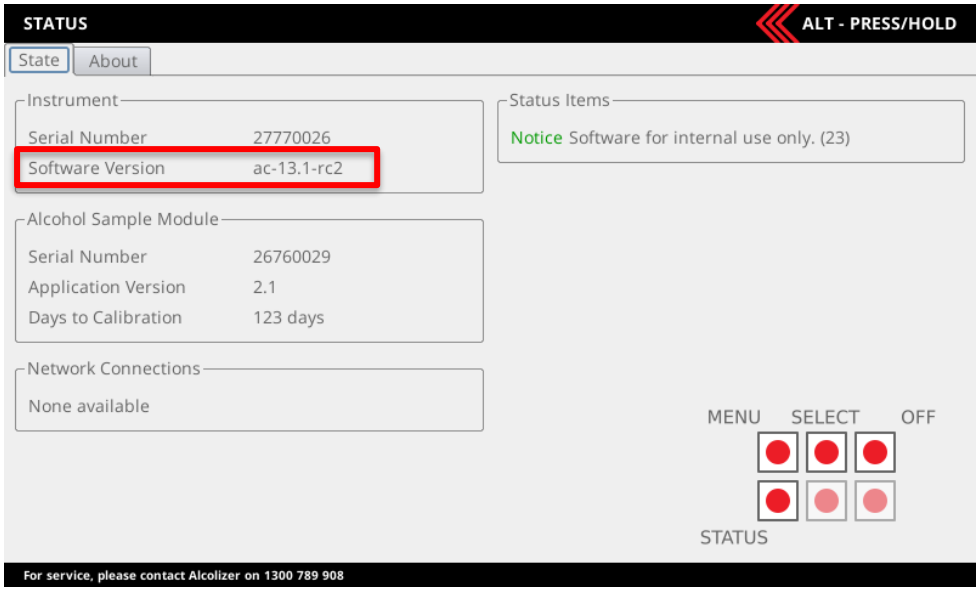
To access the status page, press FN1 switch on the back of the unit.



17 CALIBRATION

Each breathalyzer device needs to undergo regular calibration and maintenance to maintain its accuracy, provide reliable results and comply with Australian Standards. Calibration is the process of checking and adjusting the internal settings of a breath analyser by comparing and adjusting its test results to a known alcohol standard. Calibration requires specialized equipment and factory trained technicians. It is not a procedure that can be conducted by untrained users without the proper equipment.

The Centurion instrument will require calibration services every six months. This service is to be completed by a trained Alcolizer Technology service technician, however due to our patented technology and design only the Alcohol Sample Module (ASM) is required to be exchanged during the calibration process.

Turn off the instrument by selecting the shutdown option (see section 10.5) or pressing the OFF button once (see section 6); and then unplug it from the mains power supply. Open the back of the Centurion instrument and locate the ASM.

Remove the ASM by unscrewing the thumb bolt located towards the lower end of the ASM. Gently remove the sample module by lowering it slightly then pulling it out. A pre-calibrated sample module will be sent to you prior to your current sample modules expiry. To replace your pre-calibrated ASM, the same method applies in reverse. Ensuring the thumb bolt is not screwed in too tightly.

The sample module that was removed needs to be sent to your nearest Alcolizer Pty Ltd distributor in the packaging supplied as per the instructions accompanying your replacement module.

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18 Epsom TM20 Printer Setup

Alcolizer Centurion supports only the Epson TM-T20 USB model. There are some similar models such as TM-T20ii, however these are not supported.

To setup the Epson TM-T20 USB model:

1. Unpack printer.
2. Remove any tape used to secure parts for transport, then fit paper roll.
3. It is recommended to turn the Centurion off.
4. Carefully open the Centurion.
5. Connect printer to the Centurion using USB cable supplied with the printer. Use any available USB port located on the board.
6. Close the Centurion. Then, turn on the Centurion and the printer.

The printer should now be operational. Please refer to printer specifications for printer configuration.

19 Troubleshooting

In the event the instrument may malfunction or a warning message should appear on the screen, consult Alcolizer Technology in the first instance.

Contact Alcolizer Technology by any of the following means:

T: 1300 789 908

E: service@alcolizer.com

W: www.alcolizer.com

 © Alcolizer Technology

Frequently Asked Question	Suggested Action
My Centurion is displaying an Out of Order message on the screen after initial start-up. 	Contact Alcolizer Technology. **T: 1300 789 908** **E: service@alcolizer.com** **W: www.alcolizer.com**
My Centurion continues to display Out of Order message on screen after initial start-up.	Contact Alcolizer Technology. **T: 1300 789 908** **E: service@alcolizer.com** **W: www.alcolizer.com**
My instrument is displaying a warning icon in the bottom left corner. 	Either there are status items requiring attention (press “FN1” to identify items requiring attention), or the service life may shortly be about to expire. Contact Alcolizer immediately to arrange service. **T: 1300 789 908** **E: service@alcolizer.com** **W: www.alcolizer.com**
How do I locate FN buttons to access menu.	FN buttons are located on the circuit board – SEE PARAGRAPH 6 USER CONTROLS
My instrument is displaying “Service Life has Expired”. 	The instrument’s service life has expired and requires its service. Contact Alcolizer immediately to arrange replacement module replacement and have your serial number ready to quote. **T: 1300 789 908** **E: service@alcolizer.com** **W: www.alcolizer.com**

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