| PART NUMBER | |
|---------------|--|
| SERIAL NUMBER | |



Bluetooth QUBE Inflator Quick Start Manual

Please read these instructions carefully before attempting to assemble, install, operate or maintain the product. Protect yourself and others by observing all safety information. Failure to do so could result in personal injury and/or damage to property. Retain these instructions for future reference.

Safety Guidelines



Please read and follow the accompanying Safety Instructions before continuing.

Please ensure all operators are familiar with the Safety Instructions.

General Specifications

Min recommended air supply: 0.7 bar above the max target

max air supply: 16 bar 12 Volt units 12 bar

Max operating pressure: 10 bar or 5.5 bar

(see product rating label)

Min operating pressure: 0.3 bar
Display resolution: 0.1 bar
Max outlet hose length: 20m
Max permissible error (MPE): 0.08 bar

Voltage: 230V 50/60Hz - 12V dc

Power: 18VA max.

IP rating: IP31 For indoor use only

Operating temperature range: -10 °C to +55 °C
Bluetooth operating range: 14 meters (with aerial attached)

Bluetooth Version: Bluetooth V4.2

Bluetooth Max Transmit Power: 2.50 dBm Android compatibility 9—14

Installation

Please ensure all safety information is visible to the operator.

Wall mounted products should be secured to the wall using 4 screws onto the wall brackets. The mass of the product is $1.8\ kg$ (excluding hoses).

Electrical supply (for models not fitted with a standard electrical plug)

For safe operation the equipment should be connected to an approved disconnect device such as a mains isolator or switched spur that is correctly rated according to local national standards and regulations. The unit must be earthed and protected with a HBC type F fuse or circuit breaker rated at 3 A and approved and rated according to local national standards and regulations. The disconnect device must be marked as the disconnecting device for the equipment, it must be located close to the equipment and be accessible at all times.



Air supply

Ensure the air supply is filtered and dry. This will minimise the accumulation of dirt and water in the inflator line filters.

For efficient tyre inflation, ensure that the air supply is at least 10 psi / 0.7 bar above the intended maximum target pressure.

It is recommended that when tightening any hose connections to the unit, two spanners are used. Hold the filter housing with one spanner, to ensure it does not spin, then tighten the hose connection with the other spanner.

Contact details

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Control Panel



Key Legend

4 user touch type buttons

- - Increase or decrease to set pressure
 - Start flat tyre inflation
 - Switch pressure unit

Note that the key legend above is for the standard PCL decal, symbols used may vary by individual part number but the functionality of the keys remains the same Buzzer



All units have a filter housing inlet and outlet port, G1/4 (or NPT for US Market).

Start-up

Do not connect the outlet hose to the tyre during start-up or E5 and/or E16 will show

- 1. Turn on power supply.
- 2. Display will show all LCD digits check.
- 3. Display will show the current Firmware version number.
- Display will show Program model variant. 4.
- Display will show the application e.g. 'Std'.
- 6. After 10 seconds the display will show 'PCL'.
- The unit will then display the default set pressure. 8 The QUBE will reboot into the desired application and will
- remain in this mode until an alternative mode is selected with Application Mode Selection.

Standard (manual) Operation

Inflation and deflation

- Set desired pressure, by touching either ___or __
- 2. Connect the hose to the tyre.
- 3. Press twice to start inflation
- If the pressure in the tyre is below 2 psi / 0.15 bar the 4. process will not commence until o is touched twice.
- To halt inflation while inflating, press any of the four blue 5 buttons. Press otwice to restart inflation
- 6. When the set pressure is reached, the buzzer will sound and the display will show 'END' with the final pressure measurement and the red light will illuminate.
- 7. Remove the hose from tyre.
- For selection of alternative pressure units touch 8



For adjustments to the inflators parameters please refer to your Distributor or PCL.

Refer to the vehicle manufacturers recommended pressure when setting the required pressure.

User Inspection Mode

It is possible to set the inflator to act as a pressure gauge. The display resolution is changed and can be used to reference the inflator against a calibrated pressure source. The inflator automatic cycle is inhibited.

To access

- Ensure the outlet hose is disconnected from the tyre. 1
- 2. Touch and together.
- 3. The unit will beep but the display will not change.
- 4. Touch 5 times. (if this is not done within 10 seconds, the inflator reverts to the standard mode)
- 5 Display will show the pressures to the minimum resolution: psi = 0.1 / bar = 0.01.
- 6. Connect the hose to the tyre and the display will show the pressure in the tyre.
- 7. When complete, touch any button to return to the standard

BLUETOOTH Operation



- Download the 'PCL Workshop Connect' APP from the Google play store.
- Ensure you allow permissions when prompted. This will usually be the first use of the APP.
- Ensure the aerial is attached to the brass screw boss on the top of the QUBE. There are 2 x aerials (1 x spare) provided. This will ensure you have the maximum range (14m) for BLUETOOTH connection.
- Instructions for APP use are located on the PCL platform. Using your phones camera scan the QR code located on the



BLUETOOTH Operation (con't)

- Ensure your device has BLUETOOTH enabled. The MAC address is located on the rating label on the side of the QUBE.
- The BLUETOOTH QUBE will not operate with Tyre shop/ Nitrogen mode. The BLUETOOTH QUBE will only work in 'STANDARD' mode. Part numbers affected are at the top of the page.
- There is no Auto-inflate mode on the BLUETOOTH QUBE.
 Follow the APP instructions for inflation sequences.
- To enable secure encryption you can pair the device with the QUBE. Go to the settings of your device and press Bluetooth. Find the QUBE you require and press pair. Your device will ask you for a number that is displayed on the QUBE window. The number will range from 1-9999. You will need to enter a 6 digit number to proceed. All numbers should be prefixed with '44'. If you miss the number on the screen you will have to restart the QUBE.

E.g.

| Number on QUBE screen | Number to key into device |
|-----------------------|---------------------------|
| 1 | `44'0001 |
| 12 | `44′0012 |
| 192 | `44 ′0192 |
| 1938 | `44′1938 |



Scan the QR code to take you to the PCL 'Workshop Connect' site.

You can view in 'APP' instructions and a video tutorial.

- Safety!! all users must follow all safety instructions delivered with the QUBE and must never leave an inflating tyre unattended.
- Intended audience! this App is intended for those using the QUBE in a commercial setting who have undertaken the appropriate training and should be used in accordance with the operator's own policies (for example privacy policy, health and safety policy, mobile phone use policy and any other related policy which the operator deems appropriate).
- The App can be used in conjunction with the following devices:
- DIG16 Bluetooth Interface Board
- QUBE0B QUBE Tyre Inflator 230V, No Plug, Bluetooth
- QUBE1B QUBE Tyre Inflator 230V, UK Plug, Bluetooth
- QUBE6B QUBE Tyre Inflator 12V, No Plug, No Hose, Bluetooth
- QUBE9B QUBE Tyre Inflator 230V, EU Plug, Bluetooth
- Warnings !!- any warnings which are produced when operating the QUBE through the App are for the user to check in accordance with the vehicles' condition and any relevant policies. PCL do not accept any liability for accidents occurring through user error or negligence.

Terms & Conditions of use:

- Pneumatic Components Ltd, identified as 'PCL' is a worldwide registered trademark.
- Personal data collected via the App will be stored securely as per GDPR regulations. PCL only accepts liability for any data breach occurring through their storage of the data and as such, users should ensure that any data collected via the App is controlled and stored in accordance with their data protection policy. PCL accepts no liability for the misuse of data by users.
- The intellectual property rights in all software and content (including photographic images) made available to you on or through this Website remains the property of 'PCL'.
- 'PCL' reserve the right to remove the App from general use. Access to this App is permitted on a temporary basis, and we reserve the right to withdraw or amend the Services without notice.
- All safety notices on the App and the QUBE operating manual should be adhered to. Any deviation from this will result in possible injury. 'PCL' accept no liability for any injuries sustained following incorrect, inappropriate, or negligent use of the App. Incorrect use is defined as not adhering to safety messages automatically flagged to the user or the instructions provided by PCL for both her App and the QUBE. Inappropriate use is defined as 'horseplay' or not using the device in a fashion it is designed for.
- Any recommendations, warnings or information given and received through the App are based on statistics and probabilities and are therefore estimations only. The user should always check that everything they input into the App is correct.
- The instructions for the App and QUBE should be read and thoroughly understood by the user.
- You should not use the App or QUBE when under the influence of drink or drugs.
- Children and anyone who has not received the appropriate training should not use the App or QUBE.
- The App, QUBE and their hardware are designed to inflate vehicle tyres only.
- The tyre being inflated should not be left unattended during inflation.
- Do not use to inflate other products, toy's, dinghy's etc.
- 'PCL' accept no liability to user input error or negligence.
- Final reports are not admissible as official vehicle documentation for DVLA purposes.
- The use of 'other notes' in the App are purely down to the user's views/considerations. 'PCL' accept no liability for the information recorded.

General Disclaimer

This App should only be used by those who have received the appropriate training. PCL accept no liability with respect to any product which has been subjected to misuse, negligence or accident or has been used in a manner contrary to the relevant instructions provided in relation to use of the App and the QUBE device. These manuals, the terms and conditions and acceptance of any other documentation from PCL are intended as noncontractual documents and PCL reserves the right to amend these documents without notice.

Cybersecurity Disclaimer

• The App uses Bluetooth which is an unsecured network interface which can be susceptible to cybersecurity risks. It is the user's sole responsibility to ensure the security of the connection in accordance with their privacy policy. The user shall establish and maintain appropriate measures (such as but not limited to the installation of firewalls, prevention of physical access, installation of anti-virus programmes etc) to protect the App, the network and interface against any kind of security breaches (including but not limited to unauthorised access, interference and/or theft of data or information). PCL are not liable for damages and/or losses related to such security breaches.



Trouble Shooting Guide/Error Messages

| Problem | Possible Cause | Solution | |
|------------------------------------------------|---------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--|
| No display | No power connected | Switch power on | |
| No inflation process | Tyre is below 2 psi Faulty connector | Press flat tyre button Replace faulty connector | |
| Buzzer does not sound | Buzzer volume has been turned off Buzzer is damaged | Turn buzzer on Replace buzzer | |
| Inflation process starts but does not complete | Low or no supply pressure Leaks exist | Check supply pressure Confirm leaks do not exist | |
| Supply pressure leaks out input | Input and tyre hoses are incorrectly fitted (reversed) | Ensure input connection is to offset port, tyre connection is central between input and exhaust | |
| Inflating or deflating is very slow | Check that mesh filters under input and output port fittings are blocked | Clean and or replace mesh filters | |
| Connector will not seal to the tyre stems | Connector worn | Replace connector | |
| Connector leak while not connected to tyres | Connector worn | Replace connector | |
| Cannot see Bluetooth MAC address | Bluetooth not switched on at device | Switch on Bluetooth | |
| E1 | Unstable or insufficient supply pressure | Check the supply pressure | |
| E4 | Small volume, caused inflator to check pressure > 2bar / 29psi over target pressure | Check hose is not kinked or blocked, ensure a OPEN END connector is installed | |
| E5 | Inflator started under pressure i.e. is connected to tyre or a CLOSED END connector is being used | Remove hose from tyre and allow inflator to reset Change connector to OPEN END type | |
| E6 | Pressure sensor drift out | New sensor required - Refer to authorised repairer | |
| E8 | Pressure sensor disconnected from PCB or faulty | New sensor required - Refer to authorised repairer | |
| E9 | Pressure sensor failure - high | New sensor required - Refer to authorised repairer | |
| E10 | Under voltage | Check power supply | |
| E11 | Over voltage | Check power supply - Refer to authorised repairer | |
| E12 | Checksum corrupted | New PCB required - Refer to authorised repairer | |
| E13 | Lost or corrupted calibration settings | New PCB required - Refer to authorised repairer | |
| E16 | Unit started under pressure | Unit started when connected to a tyre or new sensor required - Refer to authorised repairer | |
| E17 | Calibration settings corrupt | Recalibrate unit - Refer to authorised repairer | |
| E18 | Runtime error | New PCB required - Refer to authorised repairer | |
| E19 | Touch screen error | New PCB required - Refer to authorised repairer | |
| E20 - E23 | Startup sequence error(s) | New PCB required - Refer to authorised repairer | |



PCL LIMITED WARRANTY

PCL warrants the components of each unit to which this Limited Warranty applies against defects in materials and workmanship for a period of twelve (12) months from date of sale (as evidenced by bill of sale or equivalent) or for a period of eighteen (18) months from date of shipment from PCL manufacturing facility (identifiable by the serial number and noted on original bill of lading from the manufacturing facility), whichever period is shorter. During this warranty period and subject to the conditions set forth in this statement, PCL will, at its option, repair or replace component parts that were defective at the time of shipment from PCL manufacturing facility, subject, however, to the following specific EXCLUSIONS: hoses and connections.

Repair or replacement will not extend the warranty period.

Customer must give PCL timely notice of any warranty claim by contacting an authorized PCL service centre. Claims must be accompanied by (1) evidence, by a bill of sale or equivalent, which clearly establishes date of purchase of the unit and (2) the serial number, found on the unit. Customers must properly pack parts in their original or equivalent packaging, prepay shipping charges, and insure the shipment or accept the risk for loss or damage in shipment. Return shipment to customer will be freight collect unless otherwise agreed. For service at a customers location, customer will be charged the then prevailing service rates.

The Limited Warranty applies to PCL manufactured units only. Items listed in the applicable operators manual under routine maintenance are not covered by this or any other warranty. Failure to complete maintenance as stated in any applicable maintenance schedule will void the Limited Warranty. The Limited Warranty is expressly conditioned upon proper and normal use and service of the unit and upon strict compliance by customer with all of PCL instructions and recommendations for installation, operation and maintenance. The Limited Warranty does not apply to the unit or parts that are damaged or become defective due to improper handling, maintenance, storage, use, or operation, and does not cover ordinary wear and tear, corrosion, or erosion.

THE LIMITED WARRANTY SET FORTH IN THIS STATEMENT CONSTITUTES PCL'S SOLE WARRANTY FOR THE UNIT AND THE REMEDIES SET FORTH HEREIN CONSTITUTE CUSTOMERS SOLE REMEDIES FOR BREACH OF WARRANTY. THIS LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, IN FACT OR BY LAW, INCLUDING WITHOUT LIMITING THE GENERALITY OF THE FOREGOING, ANY WARRANTY OR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Determination of the suitability of the unit for the use contemplated by the customer is the sole responsibility of the customer. PCL shall not, under any circumstances, be liable in contract, tort or otherwise (including negligence and strict liability) for indirect, special, incidental, or consequential damages, and PCL's total liability shall not exceed the net purchase price for the unit PCL shall be excused for delay or inability to perform obligations due to events beyond its reasonable control.



Warranty Registration

Please complete and mail this form to activate warranty Or visit us at www.pclairtechnology.com

Mail to:

Warranty Department PCL Holbrook Rise Holbrook Industrial Estate Sheffield S20 3GE United Kingdom

| Name | | Title |
|------------------|------|-----------|
| Company Name | | |
| Type of Business | | |
| Address | | |
| | | Post Code |
| Telephone | | |
| | | |
| Purchased From | | |
| Purchase Date | | |



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Calibration Certificate

This unit has been calibrated on test equipment that is traceable to national standards and meets the accuracy requirements for maximum permissible error in BS EN 12645:2014.

| READING | SET PRESSURE | | ACTUAL PRESSURE | |
|---------|--------------|-----|--------------------|--|
| 1 | BAR | psi | КРА | |
| 2 | BAR | psi | КРА | |

| PART NUMBER | |
|---------------|--|
| SERIAL NUMBER | |
| TESTED BY | |
| DATE | |