

**axicon**

FOR BARCODE QUALITY

**AXICON**

**LINEAR BARCODE VERIFIERS**

**DOCUMENTATION BOOKLET**



[www.axicon.com](http://www.axicon.com)



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# YOUR AXICON VERIFIER PASSWORDS





## INTRODUCTION

Thank you for purchasing an Axicon Verifier. This short guide will enable you to get started with your Axicon Verifier quickly and easily. A full manual is available in electronic form on the software CD

The Axicon Verifier is designed to work with any PC running Windows 95 or later and with any Apple Macintosh computer running Mac OS X version 10.2 or higher.

## IMPORTANT INFORMATION

1. Your Axicon verifier is a piece of high precision quality control equipment and should be handled with due care.
2. Please retain the plastic transit case. It will protect the equipment in transit.
3. Only use power and data cables supplied by Axicon. Use of non-approved accessories will invalidate the warranty.
4. If the verifier is dropped (or subjected to similar misuse) the accuracy of the results may be affected. The unit should be returned to Axicon immediately for servicing.
5. Axicon recommends that the verifier is factory recalibrated annually. The unit should be returned to Axicon or to your approved Axicon reseller for this check to be performed.
6. As the owner of an Axicon Verifier you are entitled to free software updates for life. The latest copy of the software is always posted on our website ([www.axicon.com](http://www.axicon.com)).
7. Subject to the terms of the license you are permitted to make additional copies of the Axicon Verifier software.
8. For further, detailed information, including a trouble-shooting guide, please read the manual which is available on the software CD.

## WHAT'S IN THE TRANSIT CASE?

Please ensure that the following items are present upon receipt.

One of the following verifiers and the relevant cables:

- Axicon 6000 Series - CCD verifier with USB cable attached.
- Axicon 6500 Series - CCD verifier with USB cable attached.
- Axicon 7000 Series - CCD verifier with USB cable attached.
  
- Software CD.
  
- Wallet containing Documentation Booklet (includes Start Up Guide) and Calibration Sheet



## SOFTWARE INSTALLATION

### WINDOWS 95, 98, NT 4.0, ME, 2000, XP AND VISTA

1. Ensure that your computer is running Windows 95, 98, NT 4.0, ME, 2000, XP or Vista (see next page for Vista installation instructions).
2. Insert the CD into the CD drive
3. The Install Program should now start automatically. (If not, open the CD using Windows Explorer and double-click the Autorun Program.)
4. Click "Install Axicon Verifier"
5. Follow the on-screen installation instructions for the next four windows (Select a language, Welcome, Software License Agreement and choose destination location) until you get to the "Select Components to install" window.
6. If you have purchased password-protected features (Application Identifier Checker or Product Look-up) you should click the check box next to the relevant item and click "Next".
7. Click "Next" again to pass the "Select folder in start menu" window
8. If you have selected any password-protected features you will be prompted to enter your serial number and passwords now. The description appears in bold for the features you have chosen to install and the passwords are at the front of this booklet.

*If you have more than one verifier with password protected features you should enter the serial number and passwords for the first unit, then click "Enter Another" to enter the serial number and passwords for the additional verifiers.*

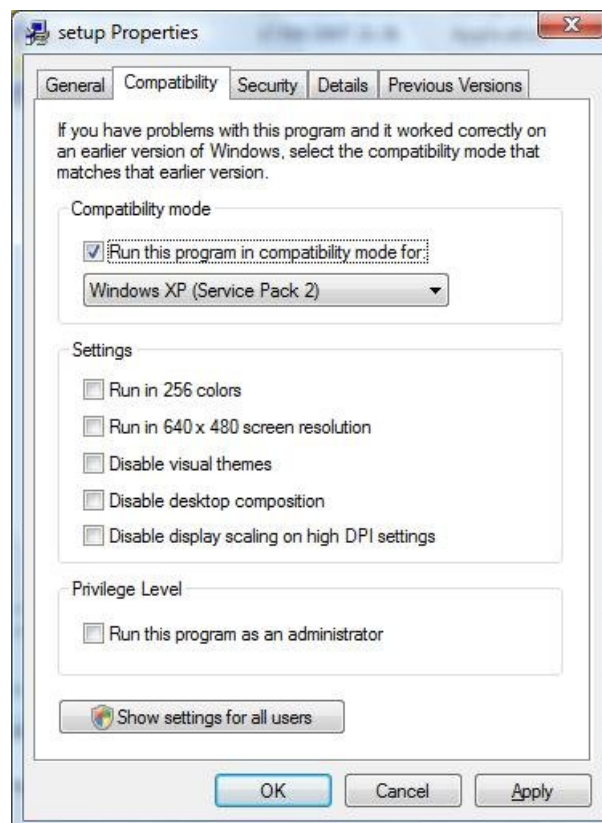
Click on "Next"

9. The software will now be installed.
10. Leave the software CD in the PC in order to install the USB drivers.

## SOFTWARE INSTALLATION FOR WINDOWS VISTA®

The software installation on PCs using Windows Vista requires a specific installation procedure that we recommend you follow. It works using a compatibility feature of Vista that enables programs to run as they would in earlier versions of Windows.

On the installation CD, locate the Setup.exe for the installation of the Axicon verifier software. Right click on the application and select the properties option to open the properties dialogue. Choose the **Compatibility** tab and tick the option to run the program in compatibility mode as shown on the image below (it should be sufficient to leave the version of Windows set to XP). Apply this change and then run the install again.



## HARDWARE INSTALLATION FOR WINDOWS

### LOADING USB DRIVERS

1. Plug the verifier into any available USB port directly on the computer.
2. When prompted to install the drivers, make sure the CD is inserted into the CD driver and follow the instructions.

After installation is completed you will find the "Axicon Verifier" directory in "Start Menu/Programs" and a shortcut to the program on your desktop.

- Double clicking the Axicon Verifier shortcut icon will now start the software.
- Two windows will open: the Command window and the Summary window.
- The LED array of your CCD should now be lit and the text in the bottom right hand corner of the Command window should read "Ready to scan". If not, refer to the troubleshooting section of the manual on the CD.

# INSTALLATION FOR APPLE MACINTOSH

## SOFTWARE

1. Insert the CD and double click on CD icon
  2. Install USB Driver by double-clicking the USB Driver\* icon. You will need an administrator password. Installer will need to restart your Mac after it has installed the driver.
  3. To install the Verifier application, drag the icon to wherever you want it.
  4. To run the application double-click the Verifier icon.
- \* If you are using OS X 10.2 the text "You cannot install this software on this disk (null)" may appear. If it does, click the "Go Back" button and then the "Continue" button again and the driver should install.

## HARDWARE

Plug the verifier into any available USB port.

## USER CALIBRATION

Calibration with known reflectance values is essential to ensure the accuracy of this equipment. It should be carried out after installation and at regular intervals. Under normal operating conditions Axicon recommends calibrating the verifier monthly (the verifier software is set up to remind you when it is time to calibrate). In variable light and temperature conditions we recommend more frequent calibration.

When the software detects an uncalibrated reader the following dialogue box will appear "Reader XXX has not been calibrated". You must click OK to continue.

- ◆ Please switch on your verifier at least five minutes before you start to calibrate.
- ◆ To calibrate you will need your calibration sheet, which you will find in the wallet.
- ◆ Take the calibration sheet out of the wallet and place it on a flat surface.

For the Axicon 6000 Series use the small calibration code at the top of the sheet.

For the Axicon 6500 and 7000 Series use the large calibration code at the bottom of the sheet.

- ◆ Select the calibrate option.  
For Windows versions: This is located in the "Options" menu  
For Mac versions: This is located in the "Reader" menu

- ◆ You will see a window with two edit boxes for minimum and maximum reflectance values. Ensure that the values shown in the window match the values printed at the bottom of the calibration sheet.
  
- ◆ With the Calibration window open scan the calibration barcode 10 times. Then click the OK button.
  
- ◆ The verifier is now calibrated and ready to use.

After calibration is completed, store the calibration sheet in its wallet, away from light and physical damage. If your calibration sheet should ever become damaged or discoloured in any way, please contact Axicon or your supplier for a replacement.

**NB:** During the calibration process the software displays the uncalibrated data and therefore reflectance values and grades displayed *behind* the calibration window can be ignored.

## **AXICON SOFTWARE LICENCE AGREEMENT**

This software is Copyright © 1995-2008 Axicon Auto ID Limited

Use of the Software is subject to the Axicon Software Licence terms set forth below. Using the Software indicates your acceptance of these Licence terms. If you do not accept these Licence terms within 14 days, you may return the entire unused product for a full refund.

### **AXICON SOFTWARE LICENCE TERMS -LICENCE GRANT**

- ◆ Axicon grants you a Licence to use any number of copies of the Software, but only for Use in conjunction with the Axicon hardware product that accompanied the Software.
- ◆ "Use" means storing, loading, installing, executing or displaying the Software.
- ◆ You may not modify the Software or disable any licensing or control features of the Software.

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### **COPIES**

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- ◆ You must reproduce all copyright notices in the original Software on all copies.
- ◆ You may not copy the Software onto a bulletin board or similar publicly accessible system.

## **NO DISASSEMBLY OR DECRYPTION**

- ◆ You may not disassemble or decompile the software without prior written consent from Axicon.

## **TRANSFER**

- ◆ Your Licence will automatically terminate upon any transfer of the Software. Upon transfer, you must deliver the Software, including any copies and related documentation, to the transferee.
- ◆ The transferee must accept these Licence Terms as a condition of the transfer.

## **TERMINATION**

- ◆ Axicon may terminate your Licence upon notice of failure to comply with any of these Licence Terms.
- ◆ Upon termination, you must immediately destroy the Software, together with all copies, adaptations and merged portions in any form.

## **EXPORT REQUIREMENTS**

- ◆ You may not export or re-export the Software in contravention of any applicable laws or regulations.

This agreement should be construed in accordance with the laws of England.



## DISCLAIMER

In the following the expression "Verifier" means the verifier hardware and the associated software.

We have taken care to ensure that this Verifier is free from defects. However since we have no control over the circumstances in which you might use the Verifier you must satisfy yourself that the performance of the Verifier is suitable for your needs. Neither Axicon Auto ID Limited nor the vendor of this Verifier can accept any liability for any loss or damage (consequential or otherwise) which may be caused by use of this Verifier. If the Verifier or any part of it is defective in any way, or in some other way does not meet your expectations, the liability of Axicon Auto ID Limited is limited to the cost of the product. You should bear this limitation in mind if you use this Verifier in any situations where the acceptance or rejection of shipments of goods or your reputation may depend upon the quality of a bar code.

Under no circumstances is this Verifier licensed or authorised for use in any situation whatsoever where the health or safety of humans or animals might be put at risk

## AXICON WARRANTY AND SERVICE CONTRACT

### WARRANTY ON ALL PRODUCTS

- ◆ All Axicon verification equipment is sold with a two year parts and labour warranty against manufacturing defects.
- ◆ This is a Return to Bench warranty with shipping costs in one direction being borne by the customer/distributor.
- ◆ Should you need to return the unit to Axicon the original transit case (plus appropriate packaging) must be used. If the equipment is returned without the original transit case, Axicon will automatically charge an additional sum for the replacement of this case.
- ◆ Axicon's standard repair turn-around is 7-10 working days from receipt of the defective unit.
- ◆ Our standard warranty does not include the provision of a loan unit. Loan units can only be supplied if you have a Service Contract.
- ◆ Axicon reserves the right to charge an inspection fee for any equipment returned under warranty for which no fault is found.
- ◆ Please contact Axicon to obtain an RMA number before returning any equipment. This number must be quoted on all documentation. Axicon cannot accept responsibility for equipment returned without a RMA number.

## SERVICE CONTRACT

A Service Contract may be purchased within 30 days from the date of dispatch.

The service contract period will start from the date of dispatch of the unit. You may select the number of years for which you want the Service Contract to run (up to a maximum of 10 years). The appropriate payment must be made in full prior to the unit(s) being accepted as being covered by the Service Contract.

The Service Contract covers the following:

- ◆ All parts and labour to repair the unit except where damage has been caused by misuse of the equipment, in which case labour will be included but not parts.
- ◆ The availability of a swap-out unit to be used while the customer's unit is being repaired.

NOTE: Please see your Service Contract for full details including hire charges.

For current cost of a Service Contract or equipment hire please contact either Axicon or your approved Axicon reseller.

## RECALIBRATION REQUIREMENT

### WHY DO CCD BASED VERIFIERS REQUIRE A FACTORY RECALIBRATION?

Axicon 6000, 6500 and 7000 verifiers all use linear CCD sensors to capture scan reflectance profiles of barcodes. These CCD sensors work very much like digital cameras in the manner in which they capture an image, but they only image a single line scan across a barcode, similar to the scan line that you see with a hand held laser scanner.

The accurate measurement of reflectance across the full width of the scan relies on the barcode symbol being imaged as if the illumination were perfectly uniform and the sensor element equally sensitive at all points along the scan line. In practice this is not necessarily the case, however, the electronics within the head of these units applies a function that enables the units to perform as if this were the case, so that when the scan reflectance profile reaches the PC or Macintosh computer the application can make this assumption and proceed with analysis. To achieve this, the heads need to undergo a factory calibration process.

This calibration is not the same as the calibration that is performed by the software application on the computer. The calibration that occurs within the application assumes that a uniform profile is already achieved by the scanning head and simply shifts the overall signal so that the maximum and minimum reflectance reading with a scan taken of a known calibration, or reference test sheet gives the correct reading for that sheet. This process is the user calibration.

After many thousands of hours of use, the intensity of the LEDs that illuminate the barcode symbol will gradually change.

If this gradual dimming is not completely uniform then a factory recalibration would be required to re-establish the situation of creating uniform scan reflectance profiles from the scanning heads.

If a uniform profile is not being achieved then a barcode symbol may start to achieve lower grades, particularly for modulation, than it should be getting. However, this may not always be obvious to the user when simply trying to verify barcodes symbols.

## **VERIFIER SERVICING AND FACTORY RECALIBRATION**

Axicon equipment is designed and manufactured to the highest specifications and complies with all relevant international standards.

Barcode verifiers are precision measuring and testing devices. It is normal practice for all inspection, measuring and test equipment to be regularly checked and recalibrated and a precision quality control instrument such as a barcode verifier is no exception.

To ensure that your equipment is working correctly, we recommend that you return your verifier annually for servicing / factory recalibration (please note that a factory recalibration is different to the user calibration procedure explained in the Quick Start Section of this booklet). Axicon Auto ID Ltd offers a high quality verifier factory recalibration service to ensure that your Axicon verification equipment provides only the best results and complies fully with GS1 standards. We recommend that this service is carried out annually on verifiers aged 12 months or older. Please contact us (or your reseller) for details of costs.

There is a silver sticker on your verifier which will tell you when it was last factory recalibrated.

Should you decide not to take advantage of this service, we must remind you that Axicon Auto ID Ltd is unable to accept any responsibility for non-compliance to the appropriate GS1 STANDARDS once your verifier has exceeded the standard guarantee period provided on date of purchase.

To arrange for your verifier is to be factory calibrated.

1. Contact the Axicon Auto ID Ltd on  
Telephone: 01869 351155  
Fax 01869 352404  
Email: [vcas@axicon.com](mailto:vcas@axicon.com)
2. We will provide you with a RMA number (Return to Manufacturer Authority) for your authorisation.
3. Please fill in all details requested on the RMA form enclosed with this letter, including the RMA number.
4. Return the verifier (including all cables) in its original case, the completed RMA form, purchase order, your payment details and this documentation booklet to our VCAS Bureau at Axicon Auto ID Ltd, Unit 1, Staplehurst Farm, Oxfordshire, OX25 3QU.

Axicon Auto ID Ltd cannot take responsibility for units returned in alternative packaging.

5. Axicon Auto ID Ltd will normally complete the service and re-calibration of your verifier within 7-10 days from the date received.

#### **OTHER FAULTS OR DAMAGE**

If, during the service /re-calibration of your equipment other faults or damage are found additional costs may be applicable. We will automatically send you details of the necessary repair and an estimate of cost.

#### **EQUIPMENT RENTAL SCHEME**

Axicon Auto ID Ltd also offers an equipment rental scheme for customers who require replacement equipment for the duration of the service Please contact us for further details.







## DECLARATION OF CONFORMITY

We Axicon Auto ID Ltd  
of Church Road, Weston on the Green, Oxfordshire, OX25 3QP, UK

Declare under our sole responsibility that the product has been designed and manufactured at our address in the year 2008 to perform verification of barcode quality in accordance with the following standards:

ANSI X3. 182  
ISO/IEC 15416  
ISO/IEC 15420  
ISO/IEC 16388  
ISO/IEC 16390  
ISO/IEC 15417  
ISO/IEC 24724

We also certify that this equipment conforms to ISO/IEC 15426-1 VERIFIER  
CONFORMANCE STANDARD

We further declare that the verifier has been designed and manufactured to ensure conformance to Primary Reference Test Symbols available from N.I.S.T. and Traceable Reflectance Standards available from N.P.L. in accordance with ISO/IEC 15426-1.

Tolerances:                      Decodability:  $\pm 8\%$   
   Rmin:  $\pm 3\%$   
   Rmax:  $\pm 5\%$   
   Defect:  $\pm 8\%$   
   Modulation:  $\pm 12\%$





FOR BARCODE QUALITY

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## DECLARATION OF CONFORMITY

We Axicon Auto ID Ltd

of Church Road, Weston on the Green, Oxfordshire, OX25 3QP, UK

Declare under our sole responsibility that the product manufactured at our above address in the year 2008 to which this declaration relates is in conformity with the following standards:

Barcoding: ISO/IEC 15426-1

European Safety EN 60950

Electromagnetic Compatibility EN 55022  
EN 55024

We also certify that the standards EN 60825 is not applicable to the product.

The equipment meets the requirements of the directives 89/336/EEC (Electromagnetic Compatibility), 73/23/EEC (Low Voltage), based on our own relevant test reports.

Axicon Auto ID Ltd also certifies that this equipment, when used in conjunction with the latest verifier software, is 21CFR Part 11 compliant.





## CALIBRATION SHEET

### CERTIFICATE OF CONFORMANCE

This is to certify that the following Calibration Master sheet

Serial Number:

Tested on: .....

has been manufactured and tested in accordance with our ISO 9001 procedures, which ensure traceability back to National Standards and complies with all of the requirements necessary to be regarded as a Calibration Standard for the range of Axicon Verifiers.

Under the manufacturer's recommended storage conditions this Calibration Standard will be accurate for a minimum to twelve months from the date of testing shown above. However, if the standard is subject to physical damage or prolonged exposure to sunlight it should be replaced at an earlier date.

Note: It is strongly recommended that if the Calibration Standard is observed to be damaged the user should NOT attempt to calibrate the verifier using this faulty or damaged Calibration Standard. A replacement Calibration Standard should be used to recalibrate the verifier.





## HOW TO CONTACT AXICON

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Email : info@axicon.com

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Technical Support: support@axicon.com

Website: www.axicon.com

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## YOUR AXICON DISTRIBUTOR

