

Biometrix Series 2600™
USB Fingerprint Scanner
Access Control Systems



Hardware
Technical Manual

Version: 060626.0-USC

COPYRIGHT 2006 ©
CONTROL LAN S.A.

TABLE OF CONTENTS

COPYRIGHT ©3

DISCLAIMER3

TRADEMARKS3

FFC STATEMENT3

ABOUT THIS MANUAL5

INTRODUCTION5

CAUTION AND WARNING NOTICES5

CHAPTER I - HARDWARE COMPONENTS6

I.1 FRONT6

 I.1.2.a RELIABILITY8

 I.1.2.b ROBUSTNESS8

 I.1.2.c BIOMETRIX PROPRIETARY ENHANCEMENTS9

I.1.3 INDICATOR LEDs9

CHAPTER II - HARDWARE INSTALLATION10

II.1 PHYSICAL LOCATION10

II.2 HARDWARE REQUIREMENTS10

II.3 DRIVER INSTALLATION11

II.4 FINGERPRINT SENSOR CALIBRATION15

IMPORTANT SAFEGUARDS16

INSTALLATION16

ELECTRICAL SAFETY16

ATTACHMENTS16

CLEANING SAFEGUARDS16

SERVICING17

REPLACEMENT PARTS17

CLEANING INSTRUCTIONS17

LIMITED WARRANTY AND LIMITATION OF REMEDIES18

SOFTWARE END USER LICENSE AGREEMENT (EULA)20

APPENDIX 1 - CALIBRATION23

COPYRIGHT ©

All rights reserved. No part of this document may be copied, reproduced or translated. It shall not otherwise be recorded, transmitted or stored in a retrieval system without the prior written consent of Control LAN.

DISCLAIMER

The content of the present document has been checked for consistency and accuracy. However Control LAN and its writers provides this manual “as is” and do not assume any responsibility for inaccuracies or typographical errors. Control LAN can make improvements and/or changes to the product(s), including hardware, accessories, Software and/or Software media, mentioned in this publication at any time without notice. Our goal at Control LAN is to supply accurate and reliable documentation to better serve you. If you discover any inconsistencies in the document, please e-mail your comments to:

customerservice@controllan.com

TRADEMARKS

‘Biometrix’, ‘Biometrix Series 2600’, ‘Control LAN’, ‘Alufinger’ and other brands named in this manual or supplied Hardware and/or Software could be trademarks, logos or registered trademarks and logos of Control LAN in the United States and/or other countries. Third party trademarks, trade names, product names and logos are the trademarks or registered trademarks of their respective holders. You may not remove or alter in any way any trademark, trade names, product names, logo, copyright or other proprietary notices, legends, symbols or labels in the supplied Hardware or Software. All brand and product names mentioned in this manual serve as comments or examples and are not to be understood as advertising for the products or their manufacturers.

FCC STATEMENT

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This page intentionally left blank

ABOUT THIS MANUAL


INTRODUCTION

This manual describes the technical characteristics and installation procedures for Biometrix Series 2600 devices and is updated for the latest model marketed at the date of its publication.

This manual has been divided into three main chapters for a better understanding of Biometrix Series 2600 components and functions:

- I. Hardware Components
- II. Installation
- III. Safety Instructions

CAUTION AND WARNING NOTICES

The  symbol is used in this manual to bring your attention to important information which could denote instances, conditions or procedures which if not handled or followed properly could result in damage to the unit and/or the rest of the associated installation and/or could result in serious injury or death.



Read Instructions Before Installing Or Using This Device

- **BEFORE INSTALLING, USING AND/OR ADDING DEVICES TO ONE OR MORE OF CONTROL LAN'S PRODUCTS, PLEASE BE SURE TO HAVE READ ALL THE INFORMATION CONTAINED IN THIS AND ALL OTHER MANUALS AND CDS INCLUDED IN THE PRODUCT'S PACKAGING.**
- **PLEASE BE CAREFUL TO READ THE "SAFETY INSTRUCTIONS" AT THE END OF THIS MANUAL BEFORE INSTALLING OR USING THIS DEVICE.**
- **THE SAFETY AND OPERATING INSTRUCTIONS SHOULD BE RETAINED FOR FUTURE REFERENCE**
- **BE SURE TO READ THE "LIMITED WARRANTY AND LIMITATION OF REMEDIES" AND THE "END USER LICENSE AGREEMENT" CONDITIONS AT THE END OF THIS MANUAL BEFORE INSTALLING OR USING THIS DEVICE.**

Chapter I - HARDWARE COMPONENTS

I.1 FRONT

The Biometrix Series 2600 is a high quality and performance standards fingerprint scanner. It was designed with multiple application field robustness and performance in mind. It includes diverse state of the art technologies allowing it to work flawlessly even where other devices fail to perform because of activity type, user population, lighting conditions, electrostatic discharges or environmental conditions among other things.

Its exceptional performance is based on the following characteristics:

- Latest generation Fingerprint Scanner Chip (e-field)
- Proprietary finger guide
- LED indicators
- High impact ABS plastic case
- Image improvement software (FlexImage)

HARDWARE DESCRIPTION:

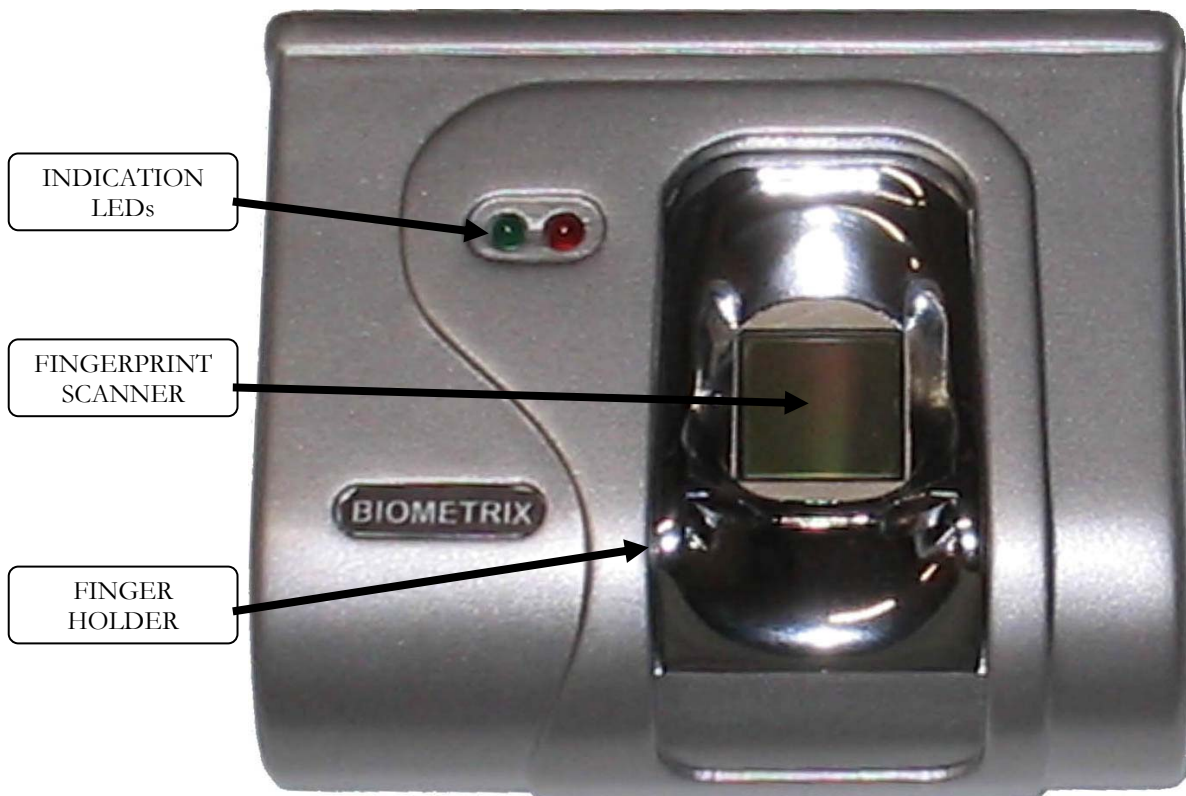


Fig. H – S2600 Front View

I.1.1 FINGER HOLDER

One of the main issues for obtaining satisfactory results in fingerprint matching is consistent positioning between the enrollment and the authentication processes.

Biometrix's proprietary finger holder, **Alufinger**, has been designed for such purpose with two unique features:



An ergonomic design that comfortably fits most fingers and acts as a cradle to guide the user when positioning his finger each time he wants to be authenticated in a Series 2600.

A tiny wedge, mounted on the top, which fixes the first joint of the user's finger in place. This wedge has two functions: a) prevents the finger from moving during the scanning process and b) guides the person in placing his finger in the same position every time he uses the system.

Fig. I – Finger Holder

Additionally, **Alufinger** acts as a signal enhancer for the fingerprint sensor, providing an accurate image to the system to optimize the performance of the matching process.

Finger lying on Cradle



Finger's Joint

Wedge

Correct Finger Placement

TIP: To avoid distorting the fingerprint image the finger should be directly positioned on the finger cradle instead of being slid into place. Once the finger is touching the sensor the first knuckle must be leaned on **AluFinger's** wedge.

I.1.2 Fingerprint Scanner

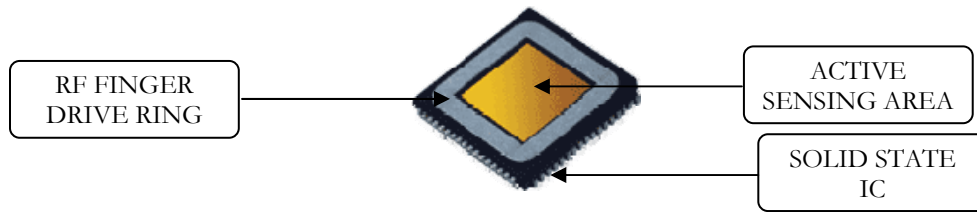


Fig. J – Fingerprint Sensor

S2600's fingerprint reader is a state-of-the-art solid state sensor. Using AuthenTec's proprietary "TruePrint Technology", this sensor uses a patented radio frequency (RF) technique that allows to generate an image of the live layer of the skin that is buried beneath the surface of the finger. This live subsurface layer is the source of the fingerprint pattern, and unlike the finger's surface it is rarely affected by external agents. This protected subsurface "true print" image is what "TruePrint Technology" captures. The image is generated by sending a very small RF signal through a peripheral Drive Ring on the chip and sensing the resulting effects on the portion of the finger touching the active sensing area of the chip.

A separate presentation explaining in detail how TruePrint Technology works can be downloaded from our web site at: www.biometrix.net

I.1.2.a RELIABILITY

TruePrint Technology sensors, due to their exceptionally strong ability to acquire accurate fingerprint images, can be used in heavy duty commercial applications -where failure to perform for even a small percentage of the population means a large number of unsatisfied customers-. TruePrint Technology differentiates itself from other fingerprint authentication technologies by its ability to work for everyone across a wide range of finger conditions and environments.

I.1.2.b ROBUSTNESS

TruePrint Technology gives the following advantages to AuthenTec's sensors:

- Thicker protective surface coatings
- Higher electrostatic discharge (ESD) resistance
- Higher scratch and abrasion resistance
- Exceptional resistance to chemical and environmental hazards

I.1.2.c BIOMETRIX PROPRIETARY ENHANCEMENTS

Alufinger: acts as a signal enhancer for AuthenTec's sensors, producing a superb fingerprint image quality through TruePrint Technology.

FlexImage: enhances the dynamical calibration of AuthenTec's sensors to obtain accurate images.

Multiple Devices: Series 2600 drivers support multiple sensors in a single PC. The use of more than one sensor simultaneously depends exclusively on the application software.

I.1.3 INDICATOR LEDs

Two indicator LEDs give additional feedback to the user. Its functionality is entirely programmable for each application.

The following are the usual functions programmed for these LEDs:

- The left green LED is meant to indicate a successful authentication with a granted access
- The right red LED should indicate an unsuccessful authentication with a denied access

CHAPTER II - HARDWARE INSTALLATION

II.1 PHYSICAL LOCATION

The series 2600 is a PC peripheral with characteristics similar to that of a mouse. Install it next to the PC, in a position where users can reach the device comfortably.



IMPORTANT

- **THOUGH THE S2600 IS A RUGGED DEVICE, IT IS NOT WEATHERPROOF.
(CURRENTLY NONE OF THE FINGERPRINT SCANNERS IN THE MARKET ARE WATER RESISTANT)**

II.2 HARDWARE REQUIREMENTS

The series 2600 requires a 700MHz or better PC with an available USB port and running Windows XP, Windows 2000 or Windows 98SE.

For correct operation of the S2600, the host PC must be connected to ground.

A standard three prong cable will be enough if the wall plug is correctly wired and has a grounding connection.



IMPORTANT

IF YOU NOTICE THAT YOU NEED TO PRESS HARD ON THE READER FOR IT TO DETECT THE PLACEMENT OF A FINGER, MAKE A TECNICIAN VERIFY YOUR BUILDING'S GROUNDING CONNECTION AND MAKE SURE NO NOISE IS ENTERING YOUR PC THROUGH IT. THE SERIES 2600 FINGER DETECTION CIRCUIT WILL NOT OPERATE CORRECTLY IN THE PRESENCE OF ELECTRICAL NOISE.

II.3 DRIVER INSTALLATION

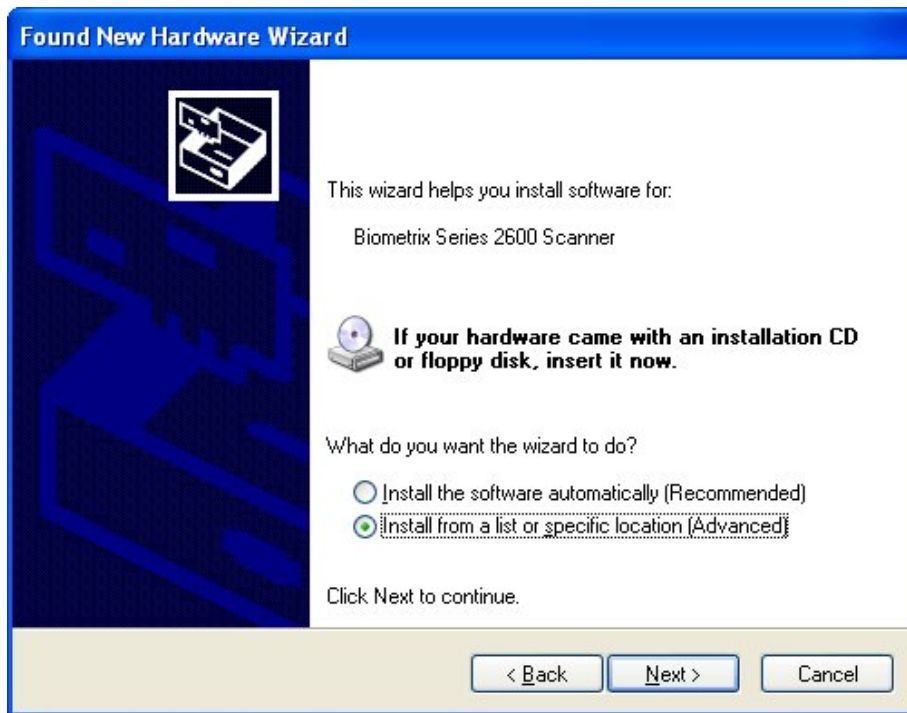
Turn on the PC. Wait until Windows has started and plug the S2600 to an available USB port. The “Found New Hardware Wizard” will pop-up:



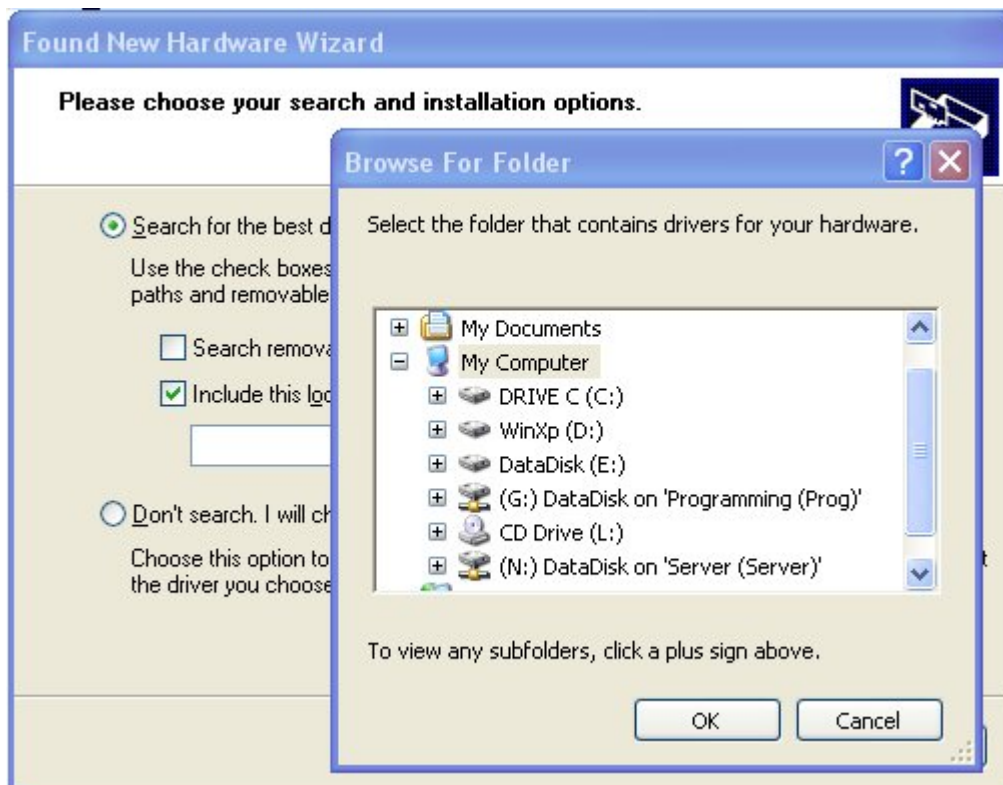
When asked to connect to Windows Update select “No, not at this time” and click on Next>:



Select "Install from a list or specific location (Advanced)" and click on Next>:

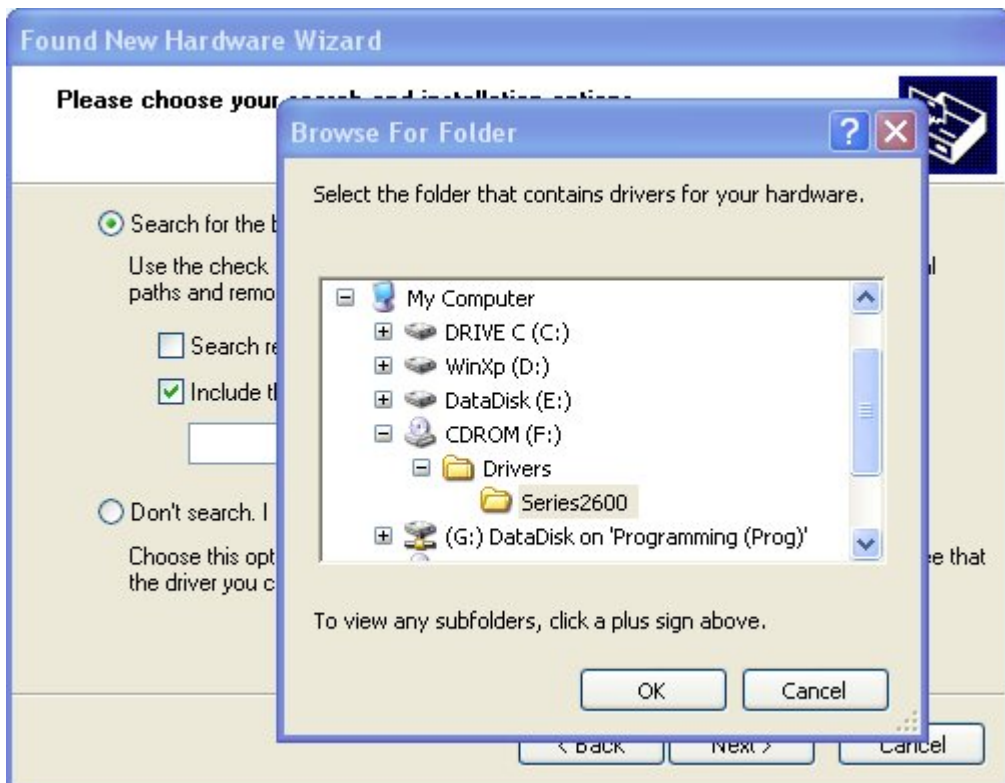


Click on "Search for the best driver in these locations" then deselect "Search Removable Media", select "Include this location in the search:" and click on Browse:

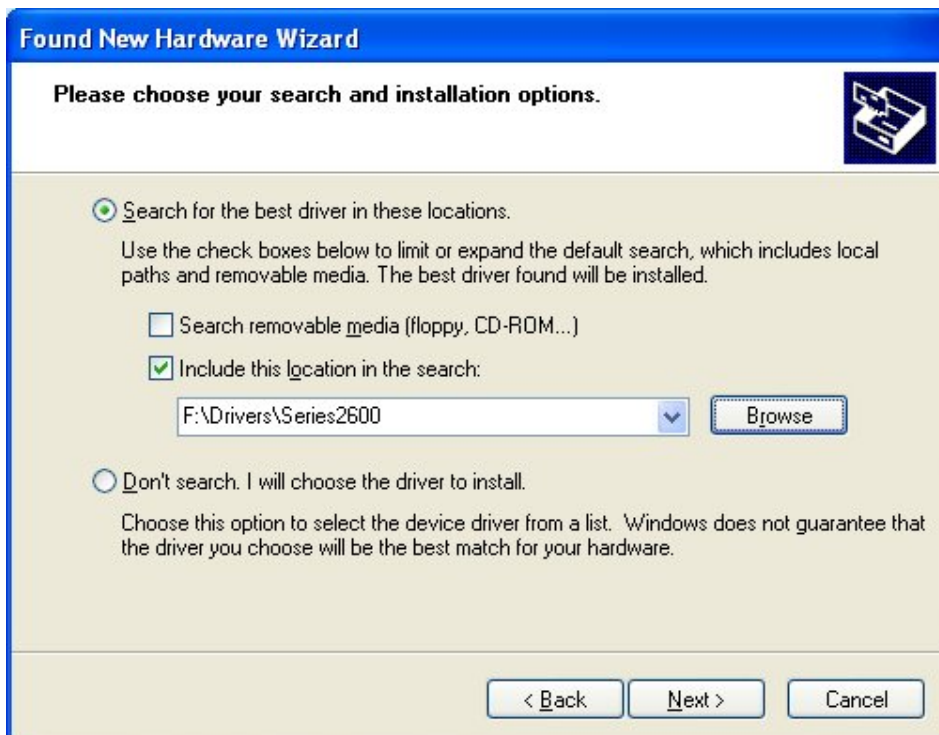


Insert the Series 2600 drivers CD and open the Drivers\Series2600 directory.

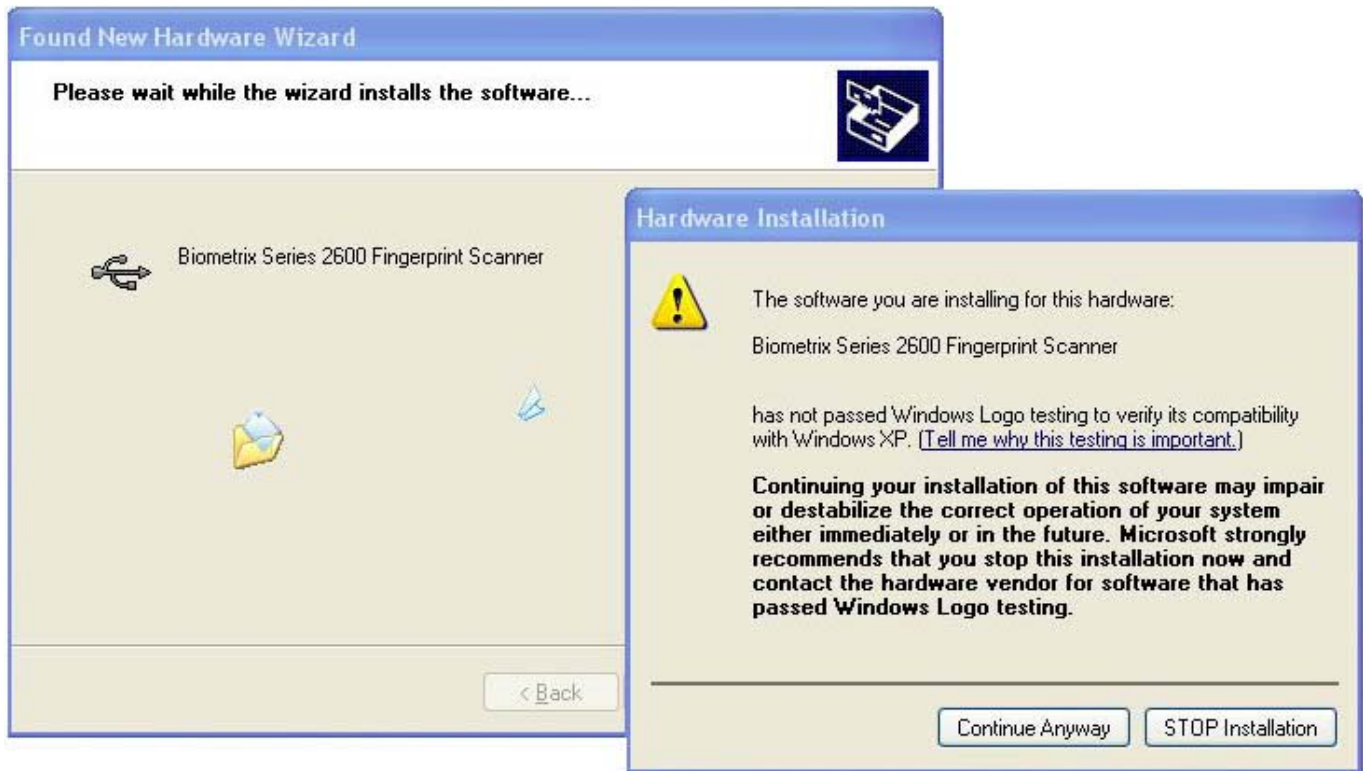
If you downloaded the drivers from the Internet, create a directory, decompress the drivers in the new directory and choose that directory:



The full path to the drivers will appear in the "Search options" window, click Next>:



If driver signing is enabled, the following screen will appear:



Click on "Continue Anyway".

Windows will copy the drivers to the corresponding folders and the following window will appear:



Click on "Finish" to complete the driver installation.

Notice:

THE SYSTEM WILL RUN THE DESCRIBED INSTALLATION PROCESS EACH TIME YOU:

- **INSTALL THE SAME SERIES 2600 DEVICE IN A DIFFERENT USB PORT.**
- **INSTALL A NEW SERIES 2600 DEVICE IN THE PC.**
- **INSTALL AN ADDITIONAL SERIES 2600 IN THE SAME PC.**

II.4 FINGERPRINT SENSOR CALIBRATION

The fingerprint sensor used by the S2600 has been pre-calibrated for optimal performance. This calibration becomes the reference value for future fingerprint scans.



ATTENTION: Excessive use of the calibration program can negatively affect the Series 2600 useful life.

In the case that you need to reset the pre-calibration, follow the instructions below:

- Unplug all S2600s from the PC. As you know, more than one device can be connected to a single PC.
- Run S2600Calib.exe
- Plug only the S2600 you want to factory-recalibrate to the USB port.
- The serial number for the device will be listed on the Calibration Software screen and will be automatically selected.
- Make sure that no finger is present and nothing is touching the finger holder.
- Click on “Calibrate Device” and wait until the “Device successfully calibrated” window appears.
- Close the calibration program.

Chapter III - SAFETY INSTRUCTIONS

CAREFULLY READ ALL THE INSTRUCTIONS

- All the safety and operating instructions should be read before the product is operated.
- All the operating and use instructions should be followed.
- The safety and operating instructions should be retained for future reference.

IMPORTANT: HEED WARNINGS

- All warnings on the product and/or in the operating instructions should be adhered to.

IMPORTANT SAFEGUARDS

- All the devices, cables, accessories, software media and the rest of the pieces of this product(s) (all of them in a whole or any part or a subset of parts referred from now on as “the product”) have been manufactured and tested with your safety in mind.
- However, improper use can result in potential damages, electrical shocks or fire hazards.
- To avoid defeating the safeguards that have been built into the product, please read and observe the following safety points when installing and using the product and save them for future reference. Observing the simple precautions discussed herein can help you get a safe operation of the product.

INSTALLATION

The following are safety instructions regarding the installation of the product.

- Do not place this product on a slippery or tilted surface, or on an unstable table, cart, stand, tripod, bracket and the like.
- The product should be situated away from heat sources such as radiators, heaters, stoves, or other products (including amplifiers) that produce heat.
- Do not use this product near water or bath tubs, wash bowls, kitchen sinks or laundry tubs.
- Set the unit away from rain, snow, direct sunlight, excessive dust and extreme temperatures.
- This product should not be placed in a built-in installation (i.e. a bookcase, a rack, etc.) unless proper ventilation is provided or the manufacturer’s instructions have been adhered to.

ELECTRICAL SAFETY

- To prevent electrical shock hazard, disconnect the power cable from the electrical outlet before relocating the system.
- Before using the product, make sure all cables are correctly connected and the power cables are not damaged. If you detect any damage, contact your dealer immediately.
- Seek professional assistance before using an adapter or extension cord
- Operation at currents, voltages, cycles, amperages other than the recommended by the manufacturer will shorten the life of the unit, and might even cause a fire hazard.
- For products intended to operate from battery power or other sources not provided by the manufacturer of this product, refer to the operating instructions given by the corresponding suppliers.
- Do not overload wall outlets, power-supplies, or extension cords as this can result in a risk of fire or electric shock.
- To prevent fire or shock hazards, do not expose this product to rain or moisture.
- Never spill liquid of any kind on the product. It is very important to protect the inside of the unit from liquids and small objects.
- Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock.
- In case of accidental liquid or small objects introduction to the interior of the product, unplug the unit immediately and have the product serviced by an authorized dealer.

ATTACHMENTS

- Do not use any kind of attachments not certified or recommended by the manufacturer as they may cause hazards.

CLEANING SAFEGUARDS

- Unplug this product from the PC before cleaning.
- Do not use liquid cleaners or sprays cleaners.
- Refer to section “Cleaning Instructions” for additional cleaning recommendations.

SERVICING

- Do not attempt to service or repair the unit. The manufacturer is not liable for any body harm or damage caused if unqualified persons attempt or perform test, service or alteration of the product or of any of its parts or open the back cover.
- Refer all service to authorized manufacturer's dealers.

REPLACEMENT PARTS

- When spare parts are required, be sure the service technician has used spare parts specified by the manufacturer or that have the same characteristics as the original parts.
- Unauthorized substitutions may result in fire, electric shock or other hazards.

SAFETY CHECK

Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper and safe operating condition.

CLEANING INSTRUCTIONS

- Unplug the device from the PC before cleaning.
- Normally a dry, non-abrasive cloth will clean your product.
- If deeper cleaning is needed, please follow these guidelines: gently wipe down the front and sides of the product with a soft, non-abrasive cloth (cotton, etc.) lightly moistened with water. Dry with a second dry, soft, non-abrasive cloth. Let dry thoroughly before plugging it back.
- DO NOT apply pressure to the case, LEDs, sensor or any other exposed part of the product.
- DO NOT allow liquid directly touch sensors, or to enter the product through the ventilation slots, cables slots or any crevice.
- DO NOT use any strong or abrasive cleaners because they can scratch the exposed parts of the product, including LEDs, the sensor and the case.
- DO NOT use any cleaners that contain ammonia, bleach, alcohol, benzene, acetone or thinners because they can damage and dull the surfaces.
- DO NOT scrub or rub the device or case. Wipe it gently.

IMPORTANT: For further information or assistance related to safety or cleaning instructions please refer to your nearest authorized dealer or contact the manufacturer at:

CUSTOMERSUPPORT@CONTROLLAN.COM

LIMITED WARRANTY AND LIMITATION OF REMEDIES

This warranty is exclusive and in lieu of all others, whether oral or written, expressed or implied. Nothing included in this document should be construed as constituting an additional warranty.

From now on "Control LAN" shall refer to Control LAN, its suppliers and licensors, if any and "The Product" shall stand for all of the hardware, cables, Software, accessories, Software media or the rest of the pieces of the product(s) accompanying the present document.

No oral or written information or advice given by Control LAN, its dealers, distributors, agents or employees shall create a warranty or in any way increase the scope of any warranty provided herein. No Control LAN representative, dealer, agent or employee is authorized to make any modification, extension or addition to this warranty. Control LAN makes no warranty or representation, expressed, implied, or statutory, with respect to its product, documentation and all accompanying Software, and specifically disclaims its quality, performance, merchantability, or fitness for any particular purpose. Non-infringement of third party rights (including, but not limited to, copyrights, patents or titles for the Software, hardware or firmware, if any) is also expressly excluded from this warranty. Control LAN reserves the right to revise or update its hardware products, Software, or documentation without obligation to notify any individual or entity. In no event shall Control LAN be responsible or liable for any special, incidental, or consequential damages incurred by the buyer or any third party arising out of the use or inability to use the product. In no event will Control LAN or its suppliers or licensors be liable for any costs or procurement of substitute products or services, lost profits, loss of information or data, or any other special, indirect, consequential, or incidental damages arising in any way of the sale of, use of, or inability to use of any Control LAN product or service, or resulting from any breach of warranty, or under any other legal theory, even if Control LAN has been advised or may otherwise have reason to know the possibility of such damages. In no case shall Control LAN's liability exceed the actual money paid for the products at issue. Control LAN does not warrant that the Software or firmware is error-free or will operate without interruption. No rights or remedies referred to in article 2a of the UCC will be conferred on you unless expressly granted herein. The Software is not designed, intended or licensed for use in hazardous environments requiring fail-safe controls, including without limitation, the design, construction, maintenance or operation of nuclear facilities, aircraft navigation or communication systems, air traffic control, and life support or weapons systems. Control LAN specifically disclaims any express or implied warranty of fitness for such purposes. The Software provided to you free of charge is on an "as-is" basis. Control LAN provides no technical support, warranties or remedies for that Software.

Some states in the U.S. do not allow the exclusion of implied warranties, so the above exclusion may not apply to you. This warranty gives you specific legal rights and you may also have other legal rights that vary from state to state. The limited warranty provided herein extends only to products manufactured, sold or certified by Control LAN, originally purchased from Control LAN or an authorized reseller and only for personal or business use -not for resale purposes-; hence this warranty extends to the first and original end-user purchaser, and is nontransferable.

CONTROL LAN WARRANTS THAT ANY HARDWARE PRODUCT(S) ACCOMPANYING THIS DOCUMENTATION WILL BE FREE FROM SIGNIFICANT DEFECTS IN MATERIALS AND WORKMANSHIP UNDER NORMAL USE FOR A PERIOD OF ONE (1) YEAR FROM THE ORIGINAL DATE OF PURCHASE.

CONTROL LAN WARRANTS THAT IF ANY SOFTWARE IS INCLUDED IN THE PRODUCT(S), IT WILL PERFORM SUBSTANTIALLY IN ACCORDANCE WITH THE APPLICABLE DOCUMENTATION, AND THAT ITS MEDIA WILL BE FREE FROM DEFECTS IN MATERIAL AND WORKMANSHIP FOR A PERIOD OF NINETY (90) DAYS FROM THE DATE OF ORIGINAL PURCHASE.

Control LAN's entire liability and sole obligation, and the Licensee's or purchasers exclusive remedy for any breach of warranty, shall be, at Control LAN's option, either (a) return of the price paid, if any, (b) repair or replacement of the hardware or Software, provided that the hardware or the Software is returned to the original point of purchase, with a copy of the sales receipt. In this last case Control LAN will decide at it's sole discretion to repair the product using new or remanufactured components. Any replacement of a part of the product, hardware or Software, will be warranted for the remainder of the original warranty period or thirty (30) days, whichever is longer. Any replacement of an accessory included with the product (i.e., cables, power supplies, etc.) will be warranted for the remainder of the original warranty period. The replaced parts will become Control LAN's property. These remedies are void if failure in the product has resulted from accident, abuse, misapplication or any of the reasons detailed at the end of this section. Without limiting the foregoing, under no circumstances shall Control LAN be held liable for any delay or failure in performance resulting directly or indirectly from acts of nature or causes beyond its reasonable control, including, without limitation, Internet failures, computer equipment failures, telecommunication equipment failures, other equipment failures, electrical power failures, strikes, labor disputes, riots, insurrections, civil disturbances, shortages of labor or materials, fires, floods, storms, explosions, acts of God, war, terrorism, governmental actions, orders of domestic or foreign courts or tribunals, non-performance of third parties, or loss of or fluctuations in heat, light, or air conditioning.

Warranty Service. To obtain your remedy under this warranty you must deliver the defective product and the original sales receipt to the place of purchase. For purchases made directly from Control LAN, please contact a Control LAN Customer Support Center and obtain a Return Merchandise Authorization (RMA number) before returning the product to Control LAN. You must pre-pay shipping charges to return the product to Control LAN and insure the

shipment or accept the risk of loss or damage during shipment. Control LAN shall not be responsible for any returned product that is not packaged properly or is returned without a valid and visible RMA number.

Product Failures Not Covered By This Warranty. This warranty covers only defects in manufacturing that arise during normal use and proper care in an office or home environment. It does not cover, among others:

- Defects or damage that result from:
 - (a) use of the Products in a manner that is not normal or customary;
 - (b) improper operation or misuse;
 - (c) accident or neglect such as dropping the Products onto hard surfaces or improper cable plugging or pulling
 - (d) contact with water, rain, extreme humidity or heavy perspiration
 - (e) contact with sand, dirt or the like
 - (f) storage or operation under environmental conditions different from the specified by Control LAN
 - (g) contact with extreme heat or cold, or spills of food or liquid or
 - (h) use of corrosive, abrasive, or improper cleaning materials.
- Physical damage to the surface of the product(s), including scratches, cracks or other damage to the case, LEDs, USB cable, sensor, or other externally exposed parts.
- Cords that are stretched or that have any broken modular tabs.
- Software that is not tangibly embodied in media and that is purchased separately from products; such Software as the downloaded from the Internet comes "as is" without warranty.

The present limited warranty shall also be automatically void for:

- Product(s) that someone other than Control LAN (or its authorized resellers or service centers) has tested, adjusted, maintained, altered, modified or serviced in any way.
- Product(s) exposed to any misuse, improper modifications or repair, activity intended to circumvent the security devices incorporated into the hardware(s) or Software product(s), or criminal activity.
- Product(s) exposed to water, or moisture or temperature other than the specified by Control LAN for shipping or operation. The product(s) are designed to be weather proof but no fingerprint sensor currently supports all weather conditions, including direct rain or snow exposure.
- Product(s) exposed to high voltage surges from external sources such as power lines or other connected equipment.
- Product(s) with broken seals or evidences of tampering. Also opening the device(s) for purposes different from its installation as directed in this document automatically voids this warranty.
- Product(s) operating in combination with ancillary or peripheral equipment or Software not furnished or otherwise certified by Control LAN for use with the products ("ancillary equipment"), or any damage to the product or ancillary equipment as a result of such use. Among other things, "ancillary equipment" includes Software, batteries, chargers, adaptors, and power supplies not supplied or certified by Control LAN.
- Product(s) that has: (a) serial numbers or date tags removed, defaced, altered or obliterated; (b) board serial numbers that do not match each other, or board serial numbers that do not match the housing; or (c) nonconforming or non-Control LAN housings or parts.
- Product(s) with damage caused by the absence of ESD protection as recommended by Control LAN, if any.
- Product(s) that has been exposed to a current type or voltage other than the specified by Control LAN for the product(s).

Basis of Bargain

Warranty Disclaimers and Limited Liabilities set forth herein are fundamental elements of the basis of the agreement between Control LAN and you. Control LAN would not be able to provide the product on an economic basis without such limitations. Such Warranty Disclaimer and Limited Liability inure to the benefit of Control LAN's providers and licensor's.

SOME OF THE DAMAGES REQUIRING SERVICE

Warning: Do not hit or scratch the cabinet surface or exposed parts of the product as this causes permanent flaws on its operation and voids the warranty described in the Limited Warranty and Limitation of Remedies statement included in this document.

Unplug this product from the wall outlet and refer servicing to an authorized CLSC under the following conditions:

- If the power-supply cord or plug is damaged.
- If liquid has been spilled, or objects have fallen into the product.
- If the product has been exposed to rain or water.
- If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.
- If the product has been dropped or the cabinet has been damaged.
- If the product exhibits a distinct change in performance.

PLEASE DIRECT ANY INQUIRES REGARDING LIMITED WARRANTY ISSUES TO: CUSTOMERSUPPORT@CONTROLLAN.COM

SOFTWARE END USER LICENSE AGREEMENT (EULA)

Important: this Software End User License Agreement ("EULA") is a legal agreement between you (either an individual or, if purchased or otherwise acquired by or for an entity, an entity) and Control LAN. Read it carefully before completing the installation process and using the Software. It provides a license to use the Software. For warranty information and liability disclaimers please see the limited warranty and limitation of remedies section above. By installing or using the Software, you are confirming your acceptance of the Software and agreeing to become bound by the terms of this agreement. If you do not agree to be bound by these terms, then do not install, copy or use this Software.

Definitions

-For this agreement purposes "Control LAN" means CONTROL LAN and its licensors, if any, and "Software" means the CONTROL LAN Software program(s) and third party Software programs, in each case, supplied herewith, and corresponding documentation, associated media, printed materials, and online or electronic documentation, and all updates or upgrades of the above that are provided to you.

License Grants

-You may install and use the Software on a single desktop computer that has any of the following Microsoft Windows PC operating systems: 98 (Second Edition), 2000 (Service Pack 4+), NT (Service Pack 6+), XP (Service Pack 1+), Small Business Server 2000+; notwithstanding anything contrary contained herein, you may not use the Software on any non-PC final application product or any embedded version of the above operating systems, including, but not limited to, mobile devices, internet appliances, set top boxes (STB), handhelds, PDAs, phones, web pads, tablets, game consoles, TVs, DVDs, gaming machines, home automation systems, ATMs, multimedia kiosks or any other consumer electronics devices or mobile/ cable/satellite/television or closed system based service.

-A license for the Software may not be shared, installed or used concurrently on different computers.

-You agree that Control LAN may audit your use of the Software for compliance with these terms at any time, upon reasonable notice. In the event that such audit reveals any use of the Software by you other than in full compliance with the terms of this Agreement, you shall reimburse Control LAN for all reasonable expenses related to such audit in addition to any other liabilities you may incur as a result of such non-compliance.

-Your license rights under this EULA are non-exclusive.

-Certain rights are not granted under this Agreement, but may be available under a separate agreement.

License Restrictions

-You may not make or distribute copies of the Software, or electronically transfer the Software from one computer to another or over a network.

-You may not alter, merge, modify, adapt or translate the Software, or decompile, reverse engineer, disassemble, or otherwise reduce the Software to a human-perceivable form.

-You may not sell, rent, lease, or sublicense the Software.

-You may not modify the Software or create derivative works based upon the Software.

-You may not export the Software into any country prohibited by the United States Export Administration Act and the regulations there under.

-In the event that you fail to comply with this EULA, Control LAN may terminate the license and you must destroy all copies of the Software (with all other rights of both parties and all other provisions of this EULA surviving any such termination).

-You shall not use the Software to develop any Software or other technology having the same primary function as the Software, including but not limited to using the Software in any development or test procedure that seeks to develop like Software or other technology, or to determine if such Software or other technology performs in a similar manner as the Software, without written authorization by Control LAN.

Ownership

-All title and intellectual property rights corresponding to the Software (including source code, images, photographs, animations, video, audio, music, text, etc.), the accompanying printed materials, and any copies of the Software are owned by Control LAN or its suppliers, and may be protected by applicable copyright and/or other intellectual property laws. All title and intellectual property rights in and to the content which may be accessed through the use of the Software is the property of the respective content

owner and may be protected by applicable copyright or other intellectual property laws and treaties. This EULA grants you no rights to use such content.

-The foregoing license gives you limited license to use the Software. Control LAN and its suppliers retain all right, title and interest, including all copyright and intellectual property rights, in and to, the Software and all copies thereof. All rights not specifically granted in this EULA, including Federal and International Copyrights, are reserved by Control LAN and its suppliers.

NO WARRANTY: The Software is provided without warranty of any kind and any use of the software product is at your own risk. To the maximum extent permitted by applicable law, Control LAN and its licensors and suppliers disclaim all warranties and conditions, either express or implied, including, but not limited to, implied warranties and conditions of merchantability, fitness for a particular purpose, title, and non-infringement, with regard to the Software.

NO LIABILITY FOR CONSEQUENTIAL DAMAGES: To the maximum extent permitted by applicable law, in no event shall Control LAN or its suppliers be liable for any special, incidental, indirect, or consequential damages whatsoever (including, without limitation, damages for loss of business profits, business interruption, or any loss of business information or money) arising out of the use of or inability to use the software product, even if Control LAN has been advised of the possibility of such damages. IN ANY CASE, CONTROL LAN'S ENTIRE LIABILITY UNDER ANY PROVISION OF THIS EULA SHALL BE LIMITED TO THE GREATER OF THE AMOUNT ACTUALLY PAID BY YOU FOR THE SOFTWARE PRODUCT OR U.S. \$10.00. Because some states and jurisdictions do not allow the exclusion or limitation of liability for consequential or incidental damages, the above limitation may not apply.

Basis of Bargain

The terms and conditions set forth in the Limited Warranty and Limitation of Remedies section of this document are fundamental elements of the basis of the agreement between Control LAN and you. Control LAN would not be able to provide the product on an economic basis without such limitations. The included Warranty Disclaimer and Limited Liability inure to the benefit of Control LAN's licensors.

U.S. Government Restricted Rights

Software provided to the U.S. Government pursuant to solicitations is provided with the commercial license rights and restrictions described elsewhere herein. All rights not expressly granted are reserved.

Third Party Software

-The Software may contain third party Software which requires notices and/or additional terms and conditions. Such required third party Software notices and/or additional terms and conditions can be solicited at customersupport@controllan.com and are made a part of and incorporated by reference into this EULA. By accepting this EULA, you are also accepting the additional terms and conditions, if any, set forth therein.

General

-This EULA shall be governed by the internal laws of the State of Florida, without giving effect to principles of conflict of laws. You hereby consent to the exclusive jurisdiction and venue of the state courts sitting in Miami Dade County, Florida or the federal courts in Florida to resolve any disputes arising under this EULA. In each case this EULA shall be construed and enforced without regard to the United Nations Convention on the International Sale of Goods.

-This EULA contains the complete agreement between the parties with respect to the subject matter hereof, and supersedes all prior or contemporaneous agreements or understandings, whether oral or written. You agree that any varying or additional terms contained in any purchase order or other written notification or document issued by you in relation to the Software licensed hereunder shall be of no effect. The failure or delay of Control LAN to exercise any of its rights under this EULA or upon any breach of this EULA shall not be deemed a waiver of those rights or of the breach.

-No Control LAN dealer, agent or employee is authorized to make any amendment to this EULA.

-If any provision of this EULA shall be held by a court of competent jurisdiction to be contrary to law, said provision will be enforced to the maximum extent permissible and the remaining provisions of this EULA will remain in full force and effect.

-Biometrix, Series 2600, Control LAN and other trademarks, included their logos, contained in the Software are trademarks and logos or registered trademarks and logos of Control LAN in the United States and/or other countries. Third party trademarks, trade names, product names and logos may be the trademarks or registered trademarks of their respective owners. You may not remove or alter any trademark, trade names, product names, logo, copyright or other proprietary notices, legends, symbols or labels in the Software. This EULA does not authorize you to use Control LAN's or its licensors' names or any of their respective trademarks.

PLEASE DIRECT ANY INQUIRES REGARDING THIS EULA TO: CUSTOMERSUPPORT@CONTROLLAN.COM

APPENDIX 1

CALIBRATION

The calibration of a fingerprint scanner sets its configuration values to properly detect the contact of a finger.

A correct calibration is essential for the proper operation of the fingerprint sensor.

There are three different types of calibration processes:

- 1) Factory Calibration
- 2) Runtime Calibration
- 3) Error Recovery Calibration

The sensor does a runtime calibration when it's first open for use; hence it's essential that no finger (or any other part of the body) is in touch with it when it's being opened for use, either during the Application Program startup or when the Application opens the sensor on demand.

In case that a finger touches the scanner while it's being opened from the Application Program, the driver will not be able to perform the runtime calibration and will return an Error 5015 message. This function is properly documented in Series 2600 Programmer's Reference Manual.

The only case in which it's necessary to recalibrate a scanner is when the driver returns error 5015 even though no finger is touching the sensor (provided the sensor is clean and dry).

1) Factory calibration:

During factory calibration, the necessary values for the mentioned balance are calculated and saved into a non volatile memory contained in the Series 2600.

Since the non-volatile memory has a life cycle of about 1000 rewrites, you must not factory calibrate a Series 2600 if it's not necessary.

During factory calibration it's essential that no finger is touching the sensor and that the sensor is clean and dry.

2) Runtime Calibration

Runtime calibration is performed each time the scanner is opened for use.

The calibration routine is very similar to the factory calibration, except that the obtained values are checked against the ones stored in non-volatile memory (by the factory calibration) to see if they are within a predefined range. If they are outside that range it's because either something (most probably a finger) is touching the scanner or the sensor is dirty or wet. In these cases, the driver will return an error (Error 5015).

However, this error is not critical and the application program should display a message requesting the user to remove his finger and retry the operation.

3) Error recovery calibration:

Error recovery calibration is performed automatically and is transparent to software operation. It is explained in depth in the Series 2600 Programmer's Reference Manual.