OMRON
MICROSCAN

LVS® 95XX Series

Software Installation Guide

GS1 Solution Partner

Disclaimer

The information and specifications described in this manual are subject to change without notice.

Latest Manual Version or Technical Support

For the latest version of this manual, or for technical support, see your local Omron website. Your local Omron website can be located by visiting **https://www.ia.omron.com** and selecting your region from the Global Network panel on the right side of the screen.

Security Measures

Anti-Virus Protection
Install the latest commercial-quality antivirus software on the computer connected to the control system and maintain to keep the software up to date.

Security Measures to Prevent Unauthorized Access
Take the following measures to prevent unauthorized access to our products:
- Install physical controls so that only authorized personnel can access control systems and equipment.
- Reduce connections to control systems and equipment via networks to prevent access from untrusted devices.
- Install firewalls to shut down unused communications ports and limit communications hosts and isolate control systems and equipment from the IT network.
- Use a virtual private network (VPN) for remote access to control systems and equipment.
- Adopt multifactor authentication to devices with remote access to control systems and equipment.
- Set strong passwords and change them frequently.
- Scan for viruses to ensure safety of USB drives or other external storage devices before connecting them to control systems and equipment.

Data Input and Output Protection
Validate backups and ranges to cope with unintentional modification of input/output data to control systems and equipment.
- Check the scope of data.
- Check validity of backups and prepare data for restore in case of falsification or abnormalities.
- Safety design, such as emergency shutdown and fail-soft operation in case of data tampering or abnormalities.

Data Recovery
Back up and update data periodically to prepare for data loss.
When using an intranet environment through a global address, connecting to an unauthorized terminal such as a SCADA, HMI or to an unauthorized server may result in network security issues such as spoofing and tampering.
You must take sufficient measures such as restricting access to the terminal, using a terminal equipped with a secure function, and locking the installation area by yourself.
When constructing an intranet, communication failure may occur due to cable disconnection or the influence of unauthorized network equipment. Take adequate measures, such as restricting physical access to network devices, by such means as locking the installation area.
When using a device equipped with the SD Memory Card function, there is a security risk that a third party may acquire, alter, or replace the files and data in the removable media by removing or unmounting the removable media. Please take sufficient measures, such as restricting physical access to the controller or taking appropriate management measures for removable media, by means of locking the installation area, entrance management, etc.

Software
To prevent computer viruses, install antivirus software on the computer where you use this software. Make sure to keep the antivirus software updated.
Keep your computer's OS updated to avoid security risks caused by a vulnerability in the OS.
Always use the latest version of this software to add new features, increase operability, and enhance security. Manage usernames and passwords for this software carefully to protect them from unauthorized uses.
Set up a firewall (e.g., disabling unused communication ports, limiting communication hosts, etc.) on a network for a control system and devices to separate them from other IT networks.
Make sure to connect to the control system inside the firewall.
Use a virtual private network (VPN) for remote access to a control system and devices from this software.

Safety Instructions

The LVS-95XX system has been carefully designed to provide years of safe, reliable performance. However, as with all electrical equipment, there are some basic precautions you should follow to avoid personal injury or damage to the system:

- Before using the system, carefully read all the installation and operating instructions.
- Observe all warning instruction labels on the system.
- Never insert anything into the openings of the system.
- Do not use the system near water or spill liquid into it.
- All components used to create your system are UL and CE approved. All circuits were designed to incorporate maximum safety. However, any equipment using electrical voltages may cause personal injury if improperly handled.
- Do not attempt to work on the system with the main power lines connected.
- Ensure that the AC power source matches the ratings listed for the system. If unsure, check with your dealer or local utility provider.
- Do not place the AC power cord where it can be stepped on. If the AC power cord becomes damaged or frayed, replace it immediately.
- Avoid looking directly into any system lights. If you need to examine the lights, or look at any component near the lights, be sure to first turn off the lights. If the lights cannot be turned off, then wear polarized/UV blocking sunglasses while examining the lights.
- To avoid damaging the system, turn off and unplug the system before cleaning.
- If the system ever needs repair, consult Omron representative or your Omron distributor.

Table of Contents

Important – Read Prior to Installation

Please read the information below before installing the LVS-95XX system.

- The LVS-95XX system arrives to your site packaged in a specially designed shipping carton. DO NOT discard this shipping carton in case you must ship or store the system for any reason. Failure to use this carton when returning your product to Omron Microscan will void warranty.

- The LVS-95XX software is currently supported on Windows® 10 Professional and Windows 10 Enterprise operating systems. When this documentation refers to Windows 10, it is meant to refer to either of these two editions of Windows 10 and excludes all other editions.

- All LVS-95XX systems must use the calibration card and installation flash drive issued with the system. The LVS-95XX system, calibration card and installation flash drive use the same serial number and must be used in conjunction with each other to obtain correct calibration results. Failure to use the calibration card and installation flash drive issued with the system will result in incorrect calibration results.

- If a USB device fails to load automatically, manually load the USB device using Device Manager. Consult your Systems Administrator for assistance, if required.

- If using an LVS-9510:
  - Minute imperfections may be seen in the LVS-9510 glass. These imperfections are minor and caused by the anti-reflective coating process. The imperfections will not affect the operation of the LVS-9510.
  - Treat the LVS-9510 as laboratory equipment, meaning that extreme care and delicacy should be used when servicing the equipment.
  - Do not place the LVS-9510 near any machinery that vibrates. This external vibration may result in software constantly re-grading symbols within the field of view.
  - Routine cleaning of the viewing window is recommended weekly to maintain optimum performance. To maintain a clean and clear appearance, use a soft, lint-free, non-abrasive towel or cloth and clean only the outside of the viewing window. Use a commercially available household glass cleaner, such as Windex®, Glassex®, VISS®, and Mr. Muscle®. Do not use an industrial-strength glass cleaner. Do not clean the inside of the viewing window due to an anti-reflective coating.
  - If you have any questions or concerns about the performance of this equipment, please call your local Omron Microscan distributor or Omron Microscan technical support.

System Manuals

All LVS-95XX system manuals are stored in the following locations:

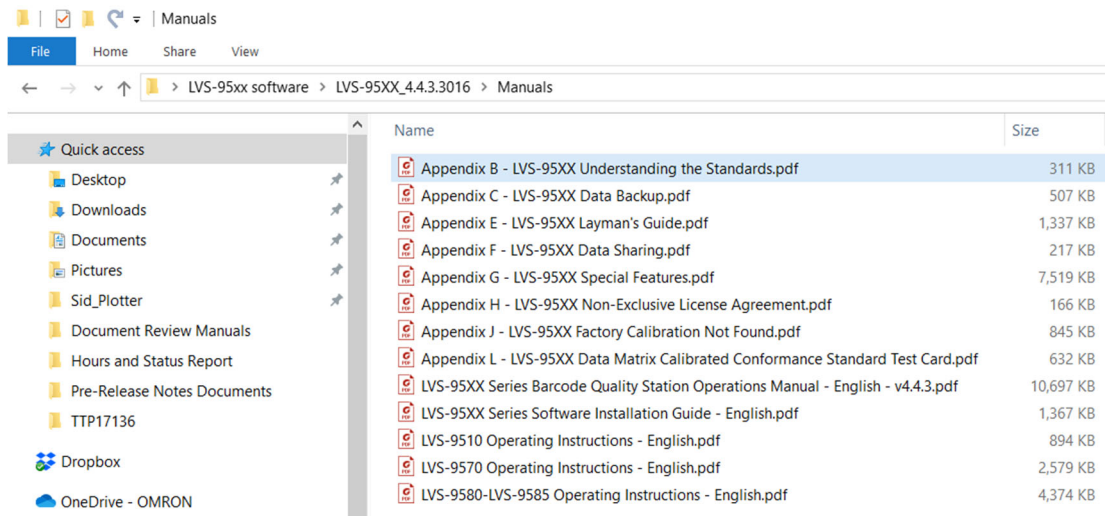| Installation Flash Drive	Each system purchase is supplied with an installation flash drive containing installation software and system manuals.
Host Computer	After successful installation of the LVS-95XX software, the system manuals are located at the paths below: **Windows® 10:** C:\Program Files (x86)\Microscan\LVS-95XX\Manuals

System manuals are also located on the installation flash drive. If you would like to view or print the manuals located on the installation flash drive prior to installing LVS-95XX software, follow the steps below.

Accessing documentation prior to installation

1. If you are installing the software from the USB drive that came with your 95XX unit, insert the installation flash drive into the USB port. If you have downloaded the software distribution zip file from the web, extract the zip file to a convenient location on your hard drive. The file and folder structure of either the USB drive or the zip file will look similar to what's illustrated below. This may vary slightly from one release to another.

Name	Date modified	Type	Size
Inno	8/5/2021 5:14 PM	File folder	
Manuals	8/5/2021 5:14 PM	File folder	
OtherSetup	8/5/2021 5:14 PM	File folder	
AutoRun.inf	8/5/2021 5:14 PM	Setup Information	1 KB
LVS-95XX Series Software Installation Guide - English.pdf	8/5/2021 5:14 PM	PDF Document	1,367 KB
Setup.exe	8/5/2021 5:14 PM	Application	48 KB
StampBuild.txt	8/5/2021 5:14 PM	Text Document	1 KB
Updates.sql	8/5/2021 5:14 PM	SQL File	754 KB

2. Click on the "Manuals" folder to view and access documentation.

The LVS-95XX Series Barcode Quality Station Operations Manual-English gives an overall view of all features and functions available. Other Manuals listed contain specific instructions for Software Installation, Operating Instructions, Barcode Quality information, and other available Features.

Installation Checklist

Please ensure you have the required items listed below before installing the LVS-95XX system. Contact your Omron Microscan sales representative if any items are missing.

- LVS-95XX system
- USB cable
- EAN/UPC NIST traceable Calibrated Conformance Standard Test Card used for calibrating the LVS-95XX system (1.75" FOV, 3.0" FOV, 4.0" FOV, 4.5" FOV)
- GS1-128 NIST traceable Calibrated Conformance Standard Test Card used for calibrating the LVS-9510-6.250" FOV.
- ISO/IEC Data Matrix NIST traceable Conformance Calibration Standard Test Card used for calibrating the LVS-958x-DPM-HD system.
- Installation flash drive (includes LVS-95XX software andthe core LVS-95XX documentation set.)
- "LVS-95XX Series Software Installation Guide" (this document)

> **IMPORTANT:** All LVS-95XX systems must use the calibration card and installation flash drive issued with the system. The LVS-95XX system, calibration card and installation flash drive use the same serial number and must be used in conjunction with each other to obtain correct calibration results. Failure to use the calibration card and installation flash drive issued with the system will result in incorrect calibration results.
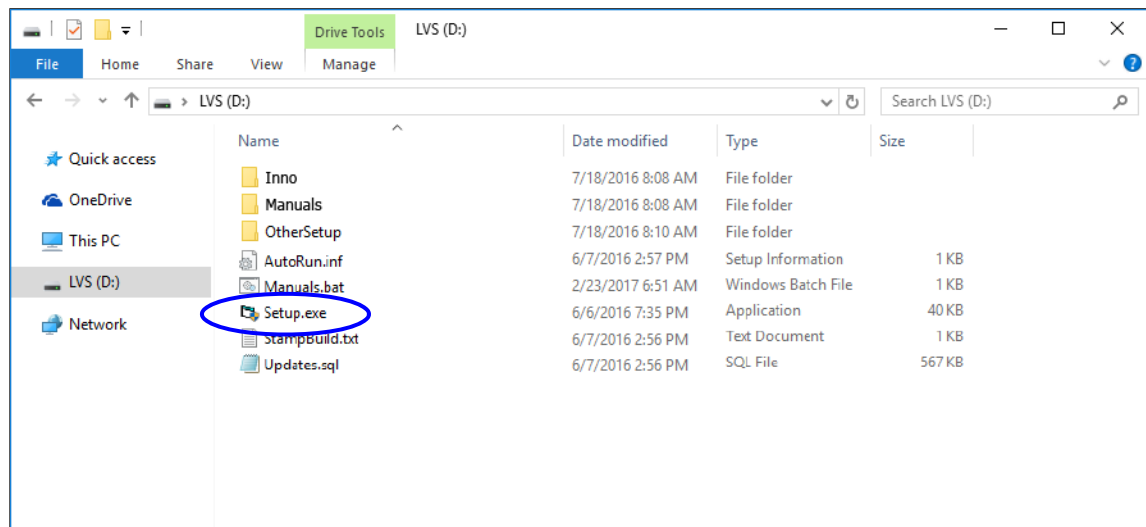
Installation Steps – Read Prior to Installation

This section documents the software installation steps for Windows® 10

Before installing the LVS-95XX software, ensure that no USB cables are plugged into the LVS-95XX USB ports. You are directed at a particular step in this guide when to plug in the USB cable.
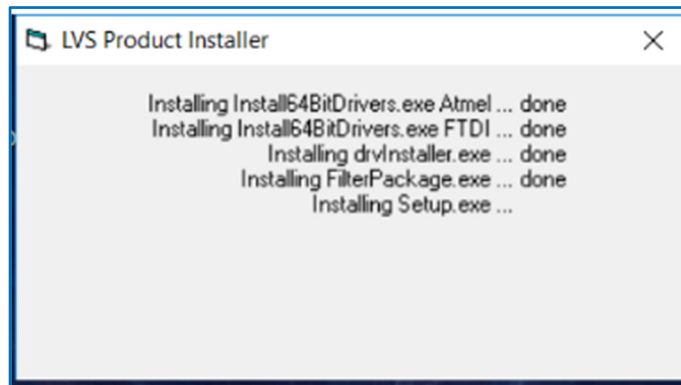
Windows® 10 Installation Steps

Follow the steps below to install the LVS-95XX software on a Windows® 10 operating system.

1. If you are installing the software from the USB drive that came with your 95XX unit, insert the installation flash drive into the USB port. If you have downloaded the software distribution zip file from the web, extract the zip file to a convenient location on your hard drive. Double-click the "Setup.exe" file to begin the LVS-95XX software installation process.
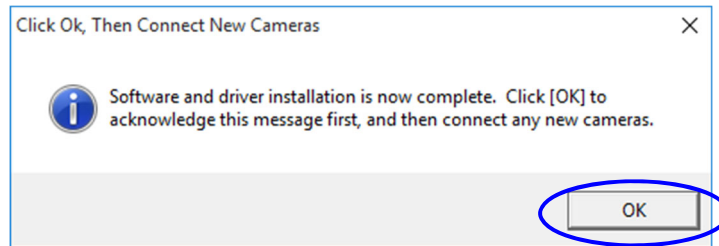

A note about Windows Security: A Windows 10 computer may display a popup message indicating the software being installed is not a Microsoft-verified app. The LVS-95XX software is not available in the Windows Store. If this message appears, it will be necessary to configure Windows to allow software installations from anywhere. To do this open Settings from the Windows desktop, go to Apps and in the 'Choose where to get apps' section, select Anywhere.
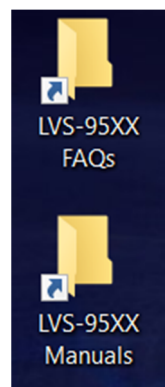
2. The following screen appears indicating that the LVS-95XX software is installing.

3. When the software installation is complete, the following screen appears. Click "OK".

NOTE: When software installation is complete, the latest LVS-95XX Manuals and Frequently asked Questions ICONS are automatically installed onto the desktop.

4. Using the supplied USB cable, insert one end of the USB cable into the computer's USB port. Insert the other end of the USB cable into the USB port on the LVS-95XX verifier.

> **IMPORTANT:** The LVS-9570 must connect to a dedicated USB port on the computer; the LVS- 9570 cannot connect to an external USB Hub unless the Hub is externally powered. Failure to comply with these rules results in abnormal contrast readings.
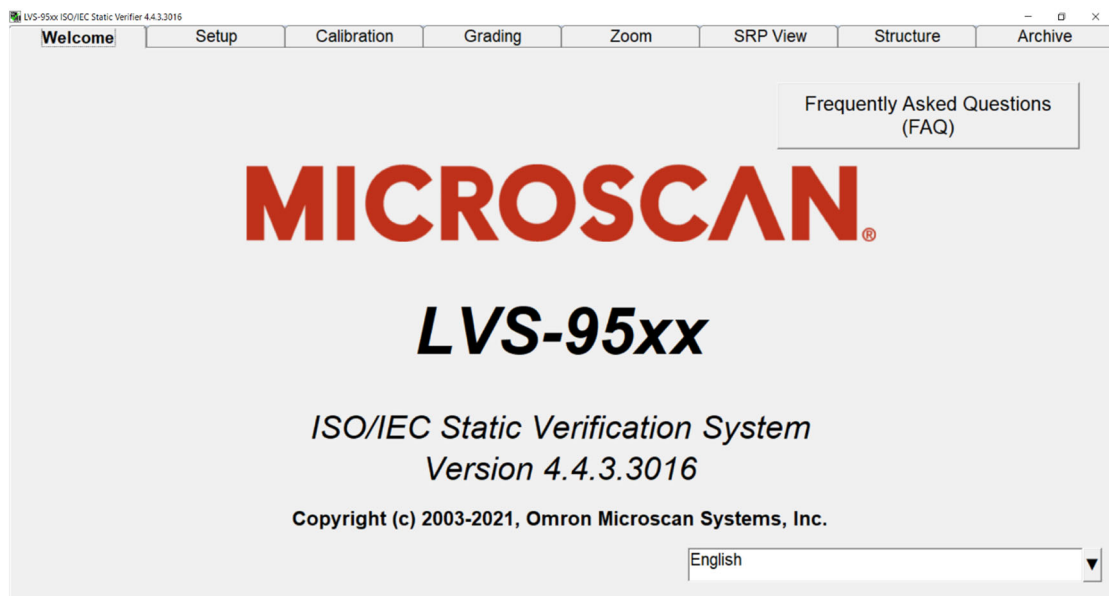
Note: A green light on the back of the LVS-9570 turns on after LVS-95XX software is installed.

5. Remove the installation flash drive from the USB port.
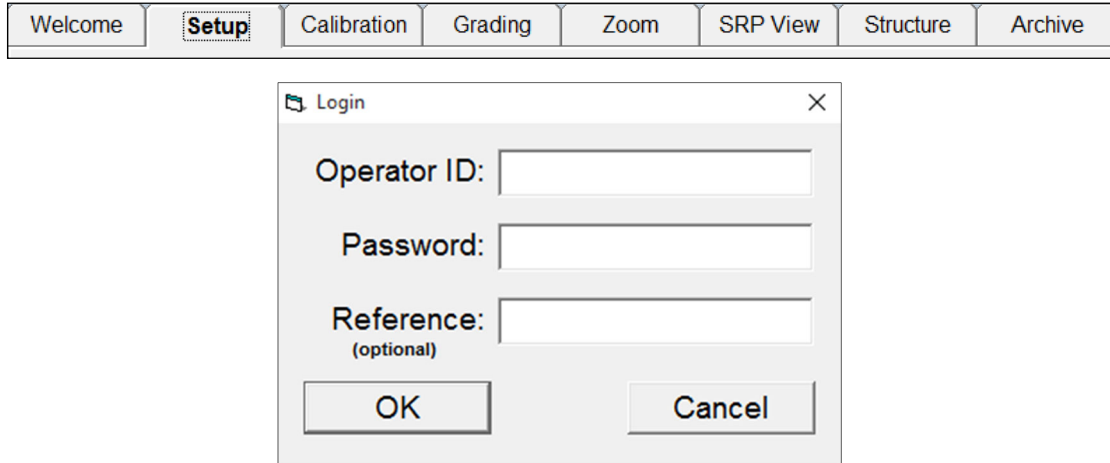6. During the LVS-95XX installation process, an Icon was placed onto the Desktop.

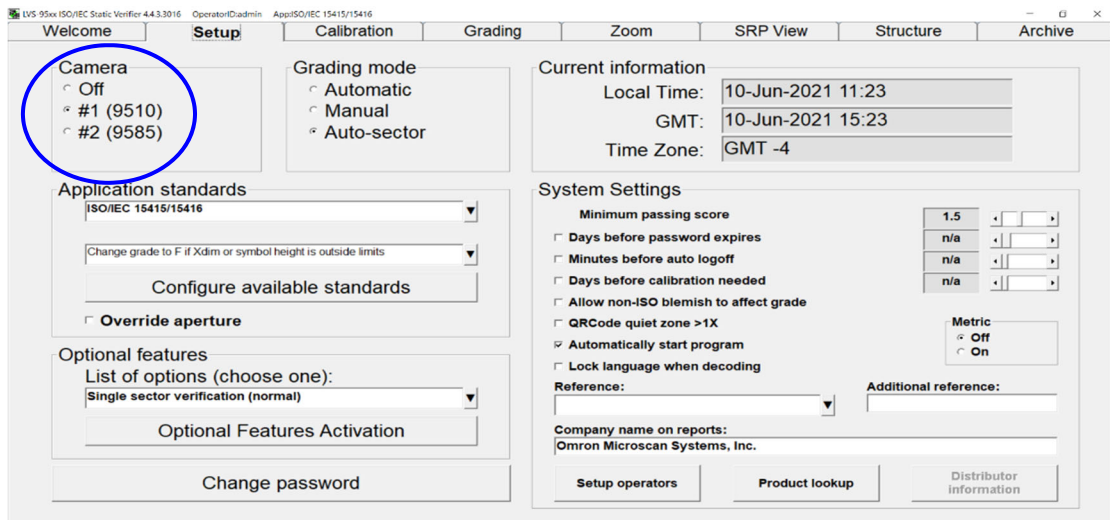Double-click on this Icon. The LVS-95XX software will launch.

7. The "Welcome" screen automatically appears if the software loaded correctly. If the software does not launch correctly, contact your local Omron Microscan Distributor or Omron Microscan Technical Support.

8. Click the "Setup" tab. The "Login" box appears. Enter "admin" (not case sensitive) in the "Operator ID" field and "admin" (not case sensitive) in the "Password" field, and then click "OK."

9. In the "Camera" section, select the desired camera. Your screen may look differently depending on which cameras are being used.

10. Installation is complete. The system you are using must now be calibrated. Read the information below for next steps.

- **LVS-9570 Systems:** Calibration steps are outlined in the following documents:
    - *LVS-9570 Operating Instructions* (see "LVS-95XX Software Steps" section). This manual is located on the installation flash drive supplied with your LVS-9570 system.
    - *LVS-95XX Series Barcode Quality Station Operations Manual* (see "Calibration Tab" section). This manual is located on the installation flash drive supplied with your LVS-9570 system.

- **LVS-9580 and LVS-9585 Systems:** Calibration steps are outlined in the following guides:
    - *LVS-9580/LVS-9585 Operating Instructions* (see "LVS-95XX Software Steps" section). This manual is located on the installation flash drive supplied with your LVS-9580 or LVS-9585 system.
    - *LVS-95XX Series Barcode Quality Station Operations Manual* (see "Calibration Tab" section). This manual is located on the installation flash drive supplied with your LVS-9580 or LVS-9585 system.

- **LVS-9510 Systems:** Calibration steps are outlined in the *LVS-95XX Series Barcode Quality Station Operations Manual* (see "Calibration Tab" section). This manual is located on the installation flash drive supplied with your LVS-9510 system.