Biwin

Biwin Intelligence User Guide

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1.Introduction

Welcome to Biwin Intelligence! This multifunctional SSD management software is designed to support Biwin consumer-brand SSD products. For a more convenient and more secure storage experience, this software helps users manage their drives with features like Performance Test, Data Migration, Firmware Update, and more. This guide provides detailed installation and usage instructions to help you fully leverage the powerful features of this software.

1.1 Supported Models

- SSD：LN960 / LN950 / LN860 / LS800
- PSSD：LP100

1.2 Connection type

PCIe or SSD Enclosure
Supported SSD Enclosures: JMS583 / ASM2362 / ASM2364 / ASM2464PD / RTL9210B

2. Installation Guide

2.1 System Requirements

- Operating System: Windows 10/11
- Minimum RAM: 4 GB
- Storage Space: At least 500 MB of free space available

2.2 Download Link

Visit the Biwin Consumer-Grade Website: **https://www.lenovo-storage.com/biwin-intelligence/**

3. Basic Features

3.1 Feature Modules

Description: Drive Information, S.M.A.R.T., Error Scan, Performance Test, Performance Optimization, Drive Erase, Data Migration, Drive Cloning, Firmware Update, System Information, Settings.

3.2 Drive Information

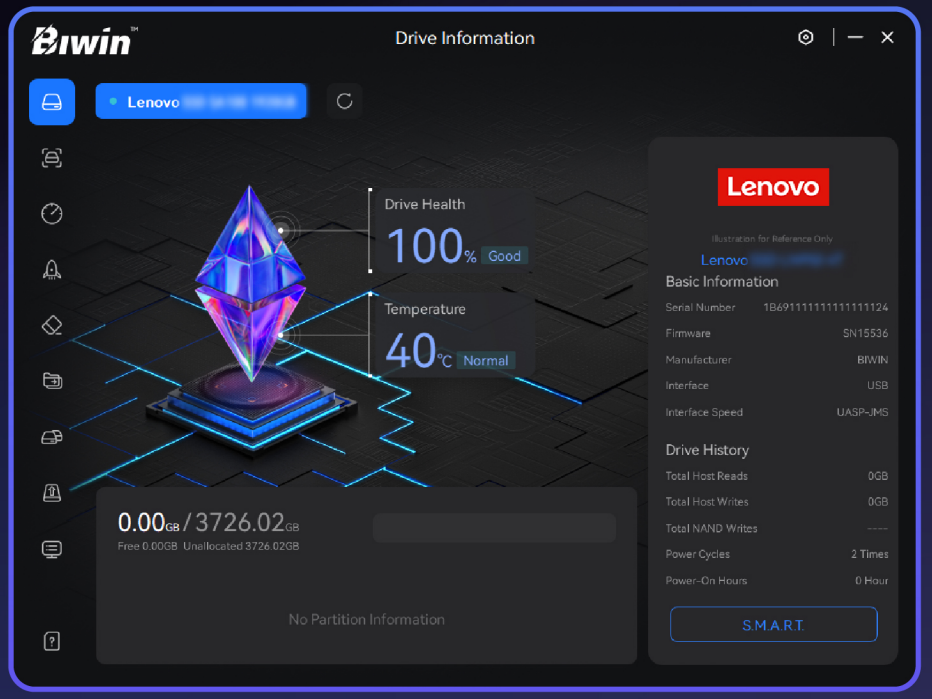
Description: Provides detailed data to help you quickly understand your drive's status.

Information displayed includes:

- Basic Information: Serial Number, Firmware, Manufacturer, Interface, Interface Speed;
- Drive History: Total Host Reads, Total Host Writes, Total NAND Writes, Power Cycles, Power-On Hours;
- Drive Status: Health, Temperature;
- Drive Partition: Total Capacity, Used Capacity, Unallocated Capacity.

Steps:

- Open the software, and the Drive Information page will appear by default;
- Select the drive to view (if multiple drives are connected);
- Check the detailed information and status of the drive on the right side.

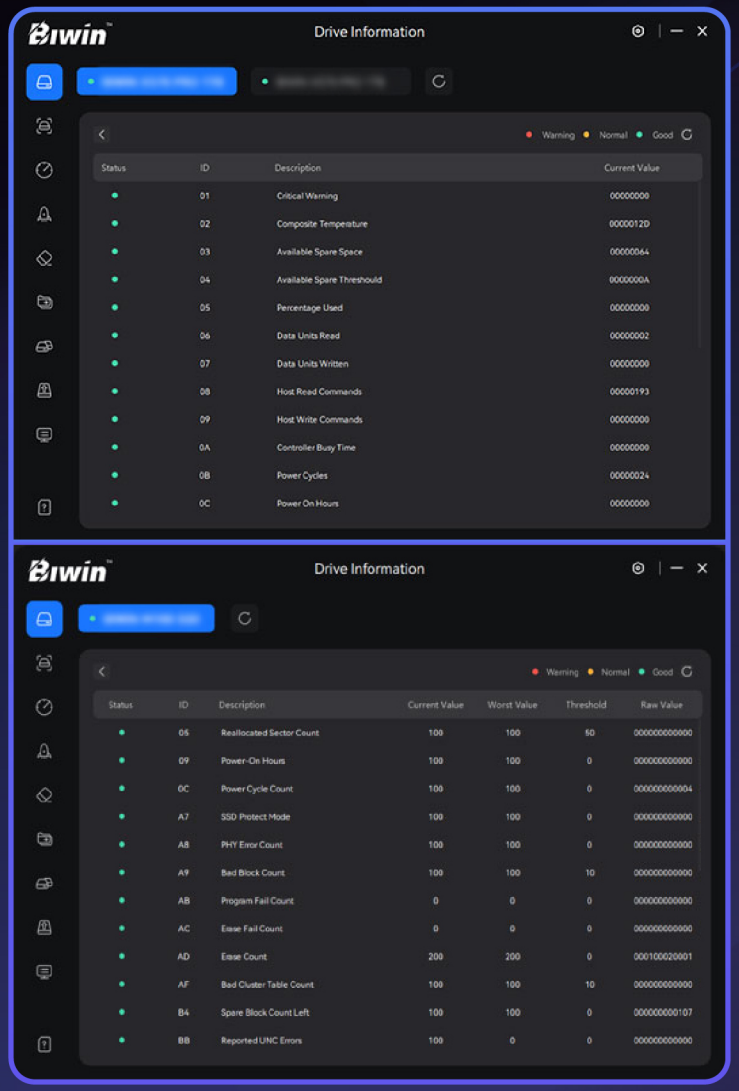


3.3 S.M.A.R.T.

Description: S.M.A.R.T. (Self-Monitoring, Analysis and Reporting Technology) monitors and analyzes your drive to detect possible failure early.

Steps:

- Click the “Drive Information” icon and then the “S.M.A.R.T.” button in the bottom-right corner of the Drive Information page;
- View the S.M.A.R.T. parameters and their current values;
- Check the health status using the status indicator (green = good, yellow = normal, red = warning);
- Click the refresh button next to the status indicator to update the S.M.A.R.T. information.



3.4 Error Scan

Description: Provides Quick Scan and Deep Scan modes to detect potential drive faults.

Steps:

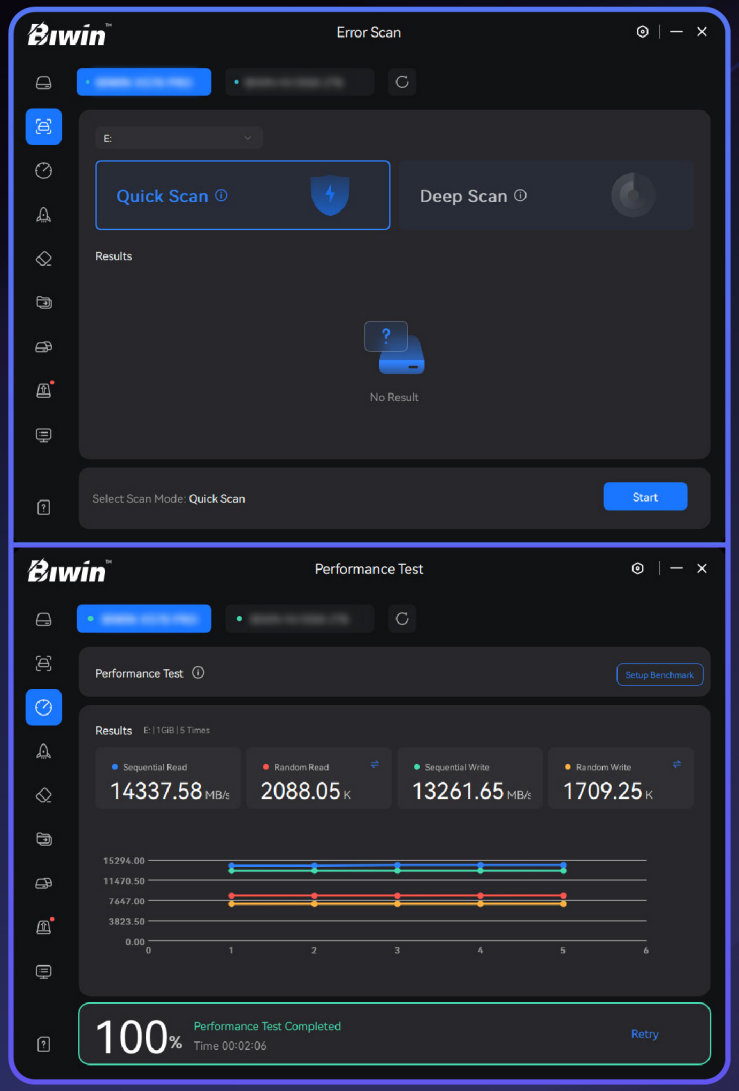
- Click the “Error Scan” icon;
- Select Scan Mode: Quick Scan or Deep Scan;
- Click the "Start" button;
- After the update, follow the shutdown prompt to complete the firmware update. The firmware will be updated to the latest version after restarting.

3.5 Performance Test

Description: Provides the drive's read and write performance and detailed data.

Steps:

- Click the “Performance Test” icon;
- Set the “Setup Benchmark” with the performance indicators;
- Click the "Start" button. After the test is complete, you can view the results. If needed, you can click the "Retry" button to run it again.



3.6 Drive Erase

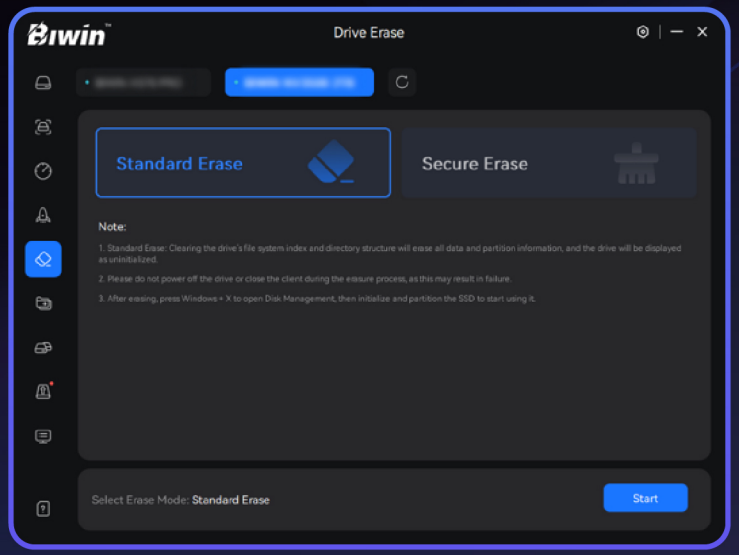
Description: Erases the file system index and directory structure or resets the drive to its factory settings.

Steps:

- Click the “Drive Erase” icon;
- Select the drive to erase and choose the erasure method;
- Click the "Start" button and confirm the risk;
- After completion, view the results and click the "Retry" button to run it again.

Notes:

- Standard Erase: Erases the drive’s file system index and directory structure, losing the original data and partition information, and the drive will be uninitialized;



3.7 Data Migration

Description: Transfers data from the source drive to the target drive.

Steps:

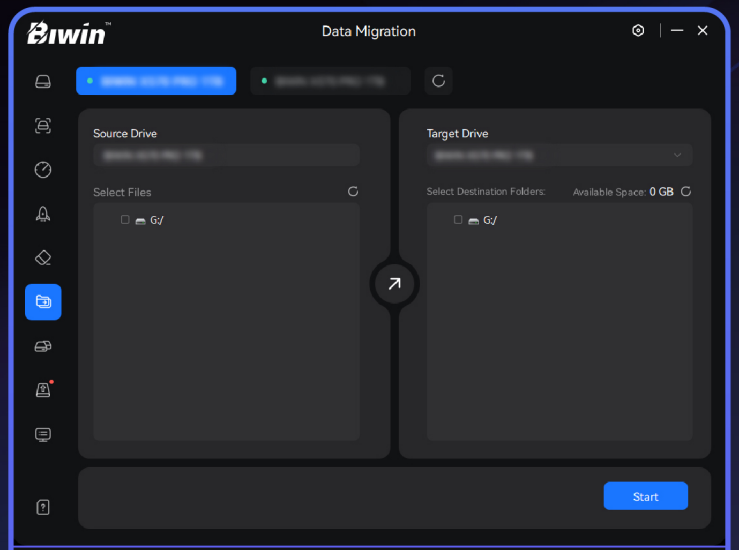
- Click the “Data Migration” icon;
- Select the source and target drives;
- Choose the files to migrate and the target directory;
- Click the "Start" button. After the migration is complete, you can view the results. If needed, you can click the "Retry" button to run it again.

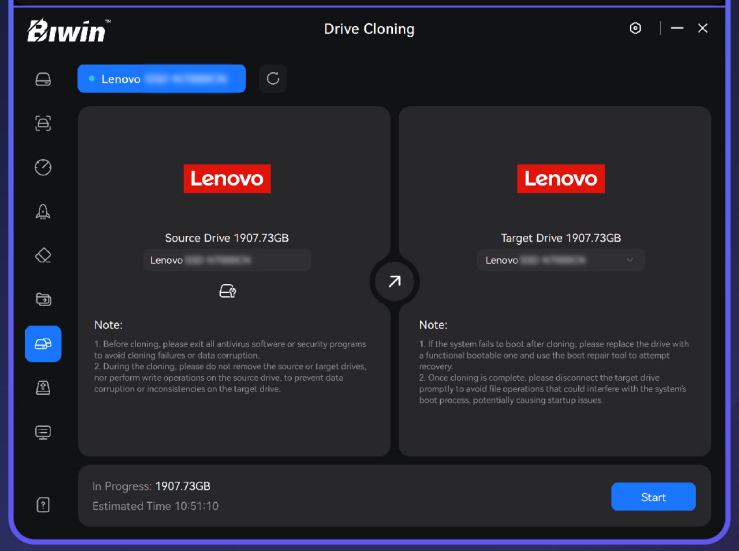
3.8 Drive Cloning

Description: Duplicates data from the source drive to the target drive. This feature is recommended for system cloning.

Steps:

- Click the “Drive Cloning” icon;
- Select the source and target drives;
- Click the "Start" button;
- After cloning is complete, you can view the results. If needed, you can click the "Retry" button to run it again.



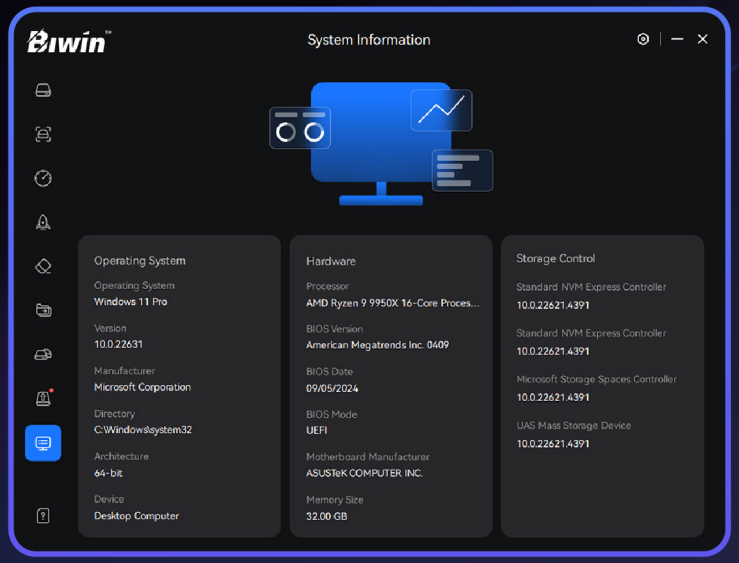


3.9 System Information

Description: Provides details about the system configuration.

Steps:

- Click the “System Information” icon;
- The interface will display information about the current host, including operating system information, hardware specifications and storage controller details.



3.10 User Guide

Description: Provides detailed instructions, usage notes, and solutions to common issues for reference.

Steps:

- Click the "User Guide" button to view detailed content.

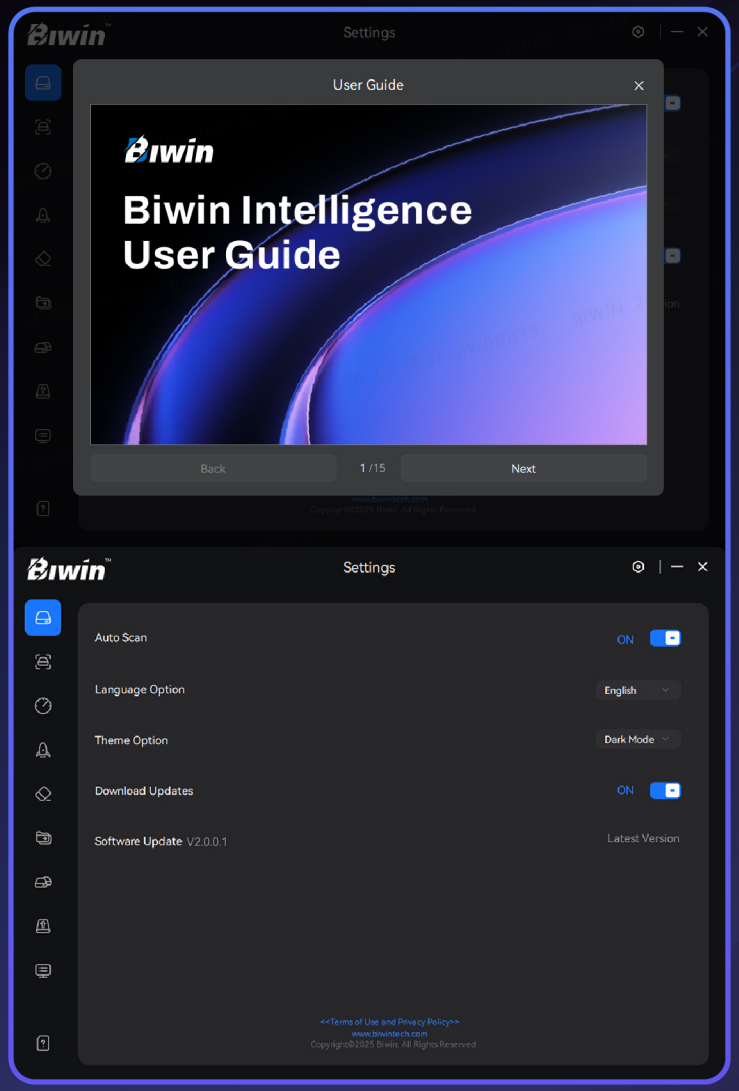
3.11 Settings

3.11.1 Auto Scan

Description: Allows users to choose whether to enable the Auto Scan feature.

3.11.2 Language Option

Description: Supports a multilingual interface with Simplified Chinese, Traditional Chinese and English for global users.



3.11.3 Theme Option

Description: Supports Light/Dark mode, allowing users to switch between themes based on their preference.

3.11.4 Download Updates

Description: Allows users to choose whether to enable the automatic download of software updates.

3.11.5 Software Update

Description: Allows users to update the software to access the latest features.

4. Notes

4.1 Drive Detection & Identification

- 4.1.1 If the drive fails to load in Biwin Intelligence, please check its status under "Disk Management" to confirm it is properly mounted.
- 4.1.2 If a partition lacks a drive letter or is identified as a partition of another system type, Biwin Intelligence will classify it as a Vol partition with an available capacity of 0 MB and mark the drive as unsupported.
- 4.1.3 If "No Partition Detected" is displayed, press WIN+X to open the “Disk Management” interface, initialize the SSD and create partitions before proceeding.
- 4.1.4 S.M.A.R.T. values are displayed in hexadecimal format.

4.2 Error Scan & Performance Test

- 4.2.1 The duration of the Deep Scan increases exponentially as the remaining free space grows. Error Scan does not support partition operations, which may result in failure.
- 4.2.2 Deep Scan includes a preparation phase followed by the actual scanning phase.
- 4.2.3 During the normal testing process, the drive must not be abnormally removed or the testing tool forcibly turned off; otherwise, it will cause abnormal functions of the drive.

4.3 Drive Erase

- 4.3.1 Before performing Drive Erase, please ensure that all important data has been backed up.

4.4 Data Migration & Drive Cloning

- 4.4.1 Before performing Drive Cloning, please ensure that all important data has been backed up.
- 4.4.2 Before performing Data Migration or Drive Cloning, please ensure that the target drive has sufficient storage capacity.
- 4.4.3 During Data Migration, a new folder will be created in the selected path of the target drive to store the migrated data.
- 4.4.4 The source drive for Drive Cloning and Data Migration is selected from the drive list, while the target drive is chosen from a dropdown menu.
- 4.4.5 Data Migration may fail if the source drive is the system drive due to read permission issues.

5. FAQs

Q Why is the Drive Information not displayed?

- Ensure the hard drive is correctly connected via PCIe or the required enclosure.
- Restart the software and try again.

Q What should I do if yellow or red warnings appear in S.M.A.R.T.?

- Yellow: Back up important data and perform regular checks.
- Red: Immediately back up data and replace the hard drive.

Q Why are the Performance Test results lower than expected?

- Check if the hard drive is under high load.
- Ensure the drive is connected to a high-speed interface (e.g., PCIe).
- Verify the Performance Test is running with default settings.
- Close other programs running in the background.

Q What should I do if Firmware Update fails?

- Check your network connection.
- Restart the system and try again.
- Contact technical support for assistance.

Q What happens if the Drive Erase is interrupted?

- Data may not be completely erased.
- Restart the Drive Erase process to ensure complete data removal.

Q What should I do if the hard drive health is low or if many bad sectors are detected during the Deep Scan?

- Back up your data immediately and replace the hard drive. For further assistance, please contact technical support.

With Biwin Intelligence, users can efficiently manage their hard drives and enhance their device experience. For further assistance, please visit the Biwin website or contact technical support.