

Drive Validation Report

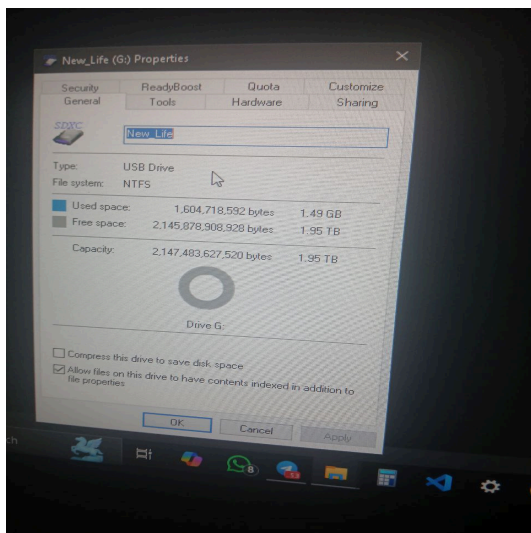
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Test Summary

- Test Date and Time: 1/26/2025 at 8:56 AM
 - Drive Format: NTFS
 - Reason for Validation:
 - Boost upload speed.
 - Confirm declared and validated memory size accuracy.
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Drive Information

- Declared Drive Size: 2,147,483,648,000 bytes (2.15TB)
- Validated Drive Size: 1,048,576 bytes (1.05MB)
- Highest Valid Region: 7,470,551,040 bytes (7.47GB)
- Drive Vendor: Generic
- Drive Product: Storage_Device
- Serial Number: GL



Performance Analysis

Read Performance:

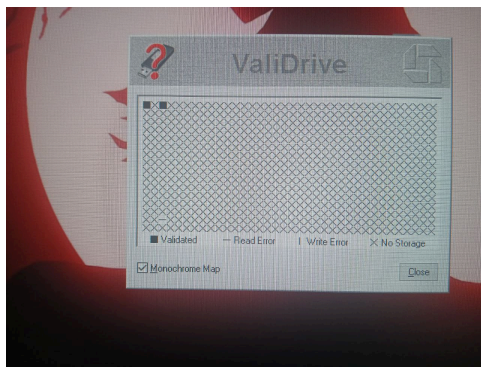
- Samples Taken: 1,150
- Minimum Read Speed: 50,463 μs
- Maximum Read Speed: 2,067,634 μs
- Average Read Speed: 71,396 μs
- Median Read Speed: 59,285 μs
- Standard Deviation: 92,617
- Variance: 1.297

Write Performance:

- Samples Taken: 1,150
- Minimum Write Speed: 50,670 μs
- Maximum Write Speed: 1,466,399 μs
- Average Write Speed: 70,784 μs
- Median Write Speed: 61,328 μs
- Standard Deviation: 66,053
- Variance: 0.933

Total Time (Microseconds):

- Read Time: 82,106,025 μs (50.22%)
- Write Time: 81,402,530 μs (49.78%)



Findings and Observations

1. **Discrepancy in Drive Size:**
 - Declared drive size was 2.15TB, but the validated size is only 1.05MB.
 - The highest valid region is limited to 7.47GB, which indicates a misreporting issue with the drive.
 2. **Performance Analysis:**
 - Both read and write speeds show significant variations, as evidenced by high standard deviation values.
 - The drive's performance does not align with expectations for a 2.15TB storage device.
 3. **Drive Misreporting:**
 - Misreported drives are commonly modified to display incorrect storage capacity.
 - Files stored beyond the highest valid region (7.47GB) may be corrupted or inaccessible.
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Why Drive Validation is Important

- **Accuracy of Data Storage:** Validation ensures that the declared drive size matches the actual usable space.
 - **Preventing Data Loss:** Files written beyond the valid storage region may be lost or irretrievable.
 - **Performance Monitoring:** Helps identify if the drive is suitable for intended tasks (e.g., high-speed uploads).
 - **Avoiding Fraudulent Devices:** Misreported drives are often counterfeit or low-quality products.
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Conclusion

The drive in question does not meet the declared specifications and shows significant issues with both storage size and performance. It is recommended to avoid using this drive for critical data storage. For secure and reliable storage, consider verified alternatives.