

NanoRam[®]-1064 Software NOS-1064 1.02.294.0 Release Notes

Date of release: 07/08/2024

This document provides release notes for software supporting the NanoRam-1064 handheld Raman spectrometer. These release notes detail the changes incorporated into the release version NID EX_1.02.222.0.

• NID EX_1.02.222.0 is the PC-based software that supports data management for NanoRam-1064 units with NOS-1064_1.02.291.0

Compatibility Chart

Software Version	NOS-1064_1.02.281.0	NOS-1064_1.02.291.0	NOS-1064_1.02.294.0
NID EX 1.02.222.0	Not Compatible	Compatible	Compatible

For installations of NID EX:

Compatible with Windows 11.

System requirements (in addition to the Windows 11 system requirements):

- Storage: 100 GB minimum, 500 GB recommended
- USB connectors: USB 3.0
- Mouse and keyboard: Required, USB, PS/2 style, or wireless
- Screen resolution 1024 × 768 or higher
- System backup: Network or local backup required for data archiving.



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Date of Release: 2/19/2024

This document provides release notes for software supporting the NanoRam-1064 handheld Raman spectrometer. These release notes detail the changes incorporated into the release version NOS-1064 1.02.294.0

• NOS-1064 1.02.294.0 is the Device-based software that supports operation of NanoRam-1064.

Compatibility Chart

Software Version	NOS-1064_1.02.281.0	NOS-1064_1.02.291.0	NOS-1064_1.02.294.0
NID EX 1.02.209.0	Compatible	Not Compatible	Not Compatible
NID EX 1.02.222.0	Not Compatible	Compatible	Compatible

For software upgrade:

- 1. User must use a compatible version of NID EX to update NOS-1064_1.02.294.0
- 2. User is not required to perform IQ/OQ/PQ after this software update.

Key changes in NOS-1064:

1. Adjusted the response delay time for the physical SCAN button to prevent user error and improve user experience during scan operations.





NanoRam[®]-1064 Software NID EX 1.02.222.0 Release Notes

Date of Release: 5/26/2022

This document provides release notes for software supporting the NanoRam-1064 handheld Raman spectrometer. These release notes detail the changes incorporated into the release version NID EX_1.02.222.0.

- NID EX_1.02.222.0 is the PC-based software that supports data management for NanoRam-1064 units with NOS-1064_1.02.291.0
- NID EX_1.02.220.0 version is obsoleted effective immediately.

Compatibility Chart

Software Version	NOS-1064_1.02.281.0	NOS-1064_1.02.291.0
NID EX 1.02.209.0	Compatible	Not Compatible
NID EX 1.02.222.0	Not Compatible	Compatible

Installation updates

For new installations of NID EX:

1. For installation of this version of NID EX on a computer where this software has never been installed or uninstalled, please refer to "290020406-D NID EX Software Installation and Setup Guide".

For software upgrade:

1. To upgrade from previous matching NID/NOS versions, the user must first update the NOS-1064 on the unit using the compatible version of NID EX, then upgrade NID EX on the PC where it is installed.

2. User is **NOT required to uninstall the previous NID EX version**. Users can directly upgrade from previous NID EX versions by right-clicking **setup.exe** in the NID EX software folder and **Run as administrator**.

For detailed step-by-step software update/upgrade instructions, please refer to "NID EX Software Installation and Setup Guide".

3. User is not required to perform IQ/OQ/PQ after this software update.



Key changes in NID EX compared to NID EX 1.02.209.0:

1. Increased the maximum length of the run name field from 50 to 1024 to prevent potential synchronization crashes.

2. Changed the unit of automatic backup from months to days with the default of 30 days.

3. Added a function to check compatibility between software version of NOS and that of NID when the device is logged in.

4. Added audit trail message for the initial login of the NID EX software.

5. Added audit trail message for the logging out of the NID EX software;

6. Enlarged the button of E-signature suitable for international language display;

7. Improved the restore function to accommodate backup files that are transferred through USB drives or cloud media.

8. Revised the data display format of HQI and p-values in summary reports to have 4 digits after decimal to be consistent with those in individual reports;

9. Fixed the bug that the timezone information was not displayed clearly in timestamps; Timestamp format is now consistent with previous NID EX versions;

10. Fixed the bug that sometimes direct printing of a report will print a report with bottom information cut off;

11. Fixed the bug that when software is configured to German, E-signature line will be displayed in two lines.

12. Fixed the bug that restoring the database may fail due to large files.

13. Fixed the bug that custom logo did not show up in both Identification and Investigation reports.

14. Fixed the bug that Audit trail contents from the second page on NID EX may not be included automatically in the pdf report.

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NanoRam[®]-1064 Software NOS-1064_1.02.291.0 and NID EX_1.02.220.0 Release Notes

Date of Release: 3/17/2022

This document provides release notes for software supporting the NanoRam-1064 handheld Raman spectrometer. These release notes detail the changes incorporated into the release version of NOS-1064_1.02.291.0 and NID EX_1.02.220.0

- NOS-1064_1.02.291.0 supports the NanoRam-1064 handheld device
- NID EX_1.02.220.0 is the PC-based software that supports data management for NanoRam-1064 units with NOS-1064_1.02.291.0

Compatibility Chart

Software Version	NOS-1064_1.02.281.0	NOS-1064_1.02.291.0
NID EX 1.02.209.0	Compatible	Not Compatible
NID EX 1.02.220.0	Not Compatible	Compatible

Installation updates

For new installations of NID EX:

 For installation of this version of NID EX on a computer where this software has never been installed or uninstalled, please refer to "290020406-D NID EX Software Installation and Setup Guide"

For software upgrade:

1. To upgrade from previous matching NID/NOS versions, the user must first update the NOS-1064 on the unit using the matching version of NID EX, then upgrade NID EX on the PC where it is installed.

2. User is **NOT required to uninstall the previous NID EX version**. Users can directly upgrade from previous NID EX versions by right-clicking **setup.exe** in the NID EX software folder and **Run as administrator**.

For detailed step-by-step software update/upgrade instructions, please refer to "NID EX Software Installation and Setup Guide".

3. User is not required to perform IQ/OQ/PQ after this software update.



Key Changes in NOS-1064:

- 1. Added a noise check function to automatically restart the spectrum acquisition in rare cases when the acquired spectral noise is abnormally high.
- 2. Added a default value of 5 seconds to the manual integration time function.
- 3. Added support of additional BSP version NR5_A.
- 4. Optimized synchronization method to improve the speed for instruments that have a large library or a large number of methods.
- 5. Fixed the bug that warning messages were missing if an operation preset without a library is selected and used.
- 6. Fixed the bug that selecting unfinished runs might not result in the correct one when there are more than 3 unfinished runs available.
- 7. Fixed the bug that device might freeze when saving a new method that was paused during the method creation.

Key changes in NID EX:

- 1. Increased the maximum length of the run name field from 50 to 1024 to prevent potential synchronization crashes.
- 2. Changed the unit of automatic backup from months to days with the default of 30 days.
- 3. Added a function to check compatibility between software version of NOS and that of NID when the device is logged in.
- 4. Added audit trail message for the initial login of the NID EX software.
- 5. Improved the restore function to accommodate backup files that are transferred through USB drives or cloud media.
- 6. Fix the bug that restoring the database may fail due to large files.
- 7. Fixed the bug that custom logo did not show up in both Identification and Investigation reports.
- 8. Fix the bug that Audit trail contents from the second page on NID EX may not be included automatically in the pdf report.



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NanoRam[®]-1064 Software NOS-1064_1.02.281.0 and NID EX_1.02.209.0 Release Notes

Date of Release: 01/29/2021

This document provides release notes for software supporting the NanoRam-1064 handheld Raman spectrometer. These release notes detail the changes incorporated into the release version of NOS-1064_1.02.281.0 and NID EX_1.02.209.0

- NOS-1064_1.02.281.0 supports the NanoRam-1064 handheld device
- NID EX_1.02.209.0 is the PC-based software that supports data management for NanoRam-1064 units with NOS EX_1.02.281.0

Compatibility Chart

Software Version	NOS-1064_1.02.257.0	NOS-1064_1.02.281.0
NID EX 1.02.187.0	Compatible	Not Compatible
NID EX 1.02.209.0	Not Compatible	Compatible

Installation updates

For new installation of NID EX:

3. For installation of this version of NID EX on a computer where this software has never been installed or uninstalled, please refer to "290020406-D NID EX Software Installation and Setup Guide"

For software upgrade:

1. The new software released introduced a new set of performance validation criteria, in compliance with the latest release of USP chapter <858> and <1858>. A new polystyrene performance validation reference file must be created by developers if the polystyrene reference file does not fulfill the latest validation criteria. New PQ document and a new polystyrene cap are required following the upgrade, and will be provided for free to units that are within warranty. Customers must contact B&W Tek support before proceeding with the upgrade.

2. To upgrade from previous matching NID/NOS versions, the user must first update the NOS-1064 on the unit using the matching version of NID EX, then upgrade NID EX on the PC where it is installed.

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3. User is **NOT required to uninstall the previous NID EX version**. Users can directly upgrade from previous NID EX version by right-clicking **setup.exe** in the NID EX software folder and **Run as administrator**.

For detailed step-by-step software update/upgrade instructions, please refer to "NID EX Software Installation and Setup Guide".

Key Changes in NOS-1064:

- 1. Added additional Raman shift peak position checks and relative intensity precision check as recommended by USP chapter <858> and <1858>.
- 2. Added method transfer function allowing users to transfer methods created on one unit via NID EX to another unit.
- Added a camera function at the identification and investigation result screen. User can
 now record up to 3 pictures after each scan and add them to the report. This function is
 turned off by default and can be enabled by ADMIN user under Setup -> General ->
 Camera.
- 4. Added a warning message if there's no qualified polystyrene performance reference file after software upgrade.
- 5. User now must click the "Finish" button to finish an investigation or identification run.
- 6. Added reminders after login, if the user's password is set to expire within 7 days.
- 7. Added a manual integration time option under Setup/Measurement/Generic Setting for investigation scans.
- 8. Fixed the bug where synchronization might fail if there are too many library validation scans.
- 9. Fixed the bug where sometimes a user cannot enter barcode due to false duplicates;
- 10. Provided additional protection mechanism to the performance validation record.

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Key Changes in NID EX:

- 1. Added method tranfer function under NID EX. User can now transfer methods between different NanoRam-1064 units. Transferred method will be specially marked on the device and must be re-validated before use.
- 2. Updated performance validation report format according to the change made in NOS-1064 in support of USP<858> and <1858>.
- Added scheduled database backup function under IT ADMIN account. After clicking Backup, user can choose between 1 month to 12 months for scheduled backup, or manually backing up the database immediately.
- 4. Changed the idling time of Synchronization from 5 minutes to 15 minutes.
- 5. Reduced the synchronization time for users who have a large amount of methods and libraries.
- 6. Added software upgrade, database backup and restore messages in the audit trail.
- 7. Added Run names to the Scan Summary reports.
- 8. Fixed a bug where synchronization might fail if there are too many library validation scans.





NanoRam[®]-1064 Software NOS-1064_1.02.257.0 and NID EX_1.02.187.0 Release Notes

Date of Release: 04/21/2020

This document provides release notes for software supporting the NanoRam-1064 handheld Raman spectrometer. These release notes detail the changes incorporated into the release version of NOS-1064_1.02.257.0 and NID EX_1.02.187.0

- NOS-1064_1.02.257.0 supports the NanoRam-1064 handheld device
- NID EX_1.02.187.0 is the PC-based software that supports data management for NanoRam-1064 unit with NOS EX_1.02.257.0

Compatibility Chart

Software Version	NOS-1064_1.01.189.0	NOS-1064_1.02.235.0	NOS-1064_1.02.257.0
NID EX 1.01.151.0	Compatible	Not Compatible	Not Compatible
NID EX 1.02.178.0	Not Compatible	Compatible	Not Compatible
NID EX 1.02.187.0	Not Compatible	Not Compatible	Compatible

Installation updates

For new installation of NID EX:

11. For installation of this version of NID EX on a computer where this software has never been installed or uninstalled, please refer to "290020406-D NID EX Software Installation and Setup Guide"

For software upgrade:

1. To upgrade from previous matching NID/NOS versions, the user must first update the NOS-1064 on the unit using the matching version of NID EX, then upgrade NID EX on the PC where it is installed.

2. User is **NOT required to uninstall the previous NID EX version** (1.02.178.0 or 1.01.151.0). Users can directly upgrade from previous NID EX version by right-clicking **setup.exe** in the NID EX software folder and **Run as administrator**.

3. Before updating to the newest software, customers can request new IQ/OQ/PQ based on their needs.

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For detailed step-by-step software update/upgrade instructions, please refer to "NID EX Software Installation and Setup Guide".

Key changes in NOS-1064 1.02.257.0:

- 1. Added a record of account logout into Audit trail if the device is powered off normally when still logged in;
- 2. Added a record of account logout into Audit trail if the device is powered off improperly;
- 3. In Identification mode, users are no longer able to retry the last sample scan of a run or retry a sample scan if the run only contains one sample. The retry function is still available for all other scans of a run in identification mode.
- 4. Added a function that users are able to adjust laser power when creating Performance Validation Reference file;
- 5. Corrected typo of "superviser" to be "supervisor" when disabling an account;
- 6. Fixed the bug that when developer creates a new custom setting in the Operation Preset, then an Operator views the Operation Preset and exits, it will show the message of "save setting" even though the Operator user has no privilege to save a setting;
- 7. Fixed the bug where the software will crash when deleting the first scan during method building;
- 8. Fixed the bug that activity record of Enable account / Disable account in Audit trail will be displayed reversely;
- 9. Fix the bug that Raman shift calibration will remove the data of last calibration therefore in NID report this last record will be displayed as NA;
- 10. Fix the bug that in Audit trail method name and associated barcode information are not displayed;
- 11. Updated multiple language display, which now supports English, Simplified Chinese, Traditional Chinese, Japanese, Korean, German, and French.

Key changes in NID EX 1.02.187.0:

- 1. Added the scan index of the reference file in the Perf.Validation report;
- 2. Fixed the bug that the LIMS report for identification does not include p-value;

3. Fixed the bug that the display of E-signature status for administrator accounts is enable even though the administrator does not have E-signing capability;

4. Fixed a typo in the pop-up message when E-signing reports;

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5. Updated multiple language display, which now supports English, Simplified Chinese, Traditional Chinese, Japanese, Korean, German and French. The audit trail will always be dispayed in the language that was used in NOS-1064 at time of data collection.



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Key changes in Library:

- 1. Updated NanoRam-1064 USP library to V2. The following 11 items have been added:
 - Cellulose
 - Cellulose acetate
 - Methyl cellulose
 - Sodium carboxymethyl cellulose
 - Ethyl cellulose
 - Gelatin
 - Polysorbate 20
 - Polysorbate 80
 - Opadry- Green
 - Opadry- Orange
 - Opadry-Clear

Known Issues:

- 1. Messages may show up with incomplete display or overlay when using multi-languages display in NOS-1064 and NID EX.
- 2. Though signature lines exist for performance validation reports, there is not the capability to sign these reports in NID EX.



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NanoRam[®]-1064 software NOS-1064_1.02.233.0 and NID EX_1.02.178 Release Notes

Date of Release: 12/20/2019

This document provides release notes for software supporting the NanoRam-1064 handheld Raman spectrometer. These release notes detail the changes incorporated into the release version of NOS-1064_1.02.235.0 and NID EX_1.02.178

- NOS-1064_1.02.235.0 supports the NanoRam-1064 handheld device
- NID EX_1.02.178 is the PC-based software that supports data management for NanoRam-1064 unit with NOS EX_1.02.178

Compatibility Chart

Software Version	NOS-1064_1.01.189.0	NOS-1064_1.02.235.0
NID EX 1.01.151	Compatible	Not Compatible
NID EX 1.02.178	Not Compatible	Compatible

Installation updates

For new installation of NID EX:

12. For installation of this version of NID EX on a computer where this software has never been installed or uninstalled, please refer to "290020406-B NID EX Software Installation and Setup Guide"

For software upgrade:

1. To upgrade from previous matching NID/NOS versions, the user must first upgrade NOS on the unit using NID EX 1.02.178, then upgrade NID EX on the PC where it is installed.

2. User is **NOT required to uninstall the previous NID EX version** (1.02.178.0). Users can directly upgrade from previous NID EX version by right-clicking **setup.exe** in the NID EX software folder and **Run as administrator**.

3. Before updating to the newest software, customers can request new IQ/OQ if necessary.

Regional Language Support Strategy

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The language support for this version NOS-1064 software includes English, Traditional Chinese and Simplified Chinese. The official versions of NOS-1064 software in other languages are available upon request. Please contact us at <u>www.bwtek.com/support/</u> for additional information.

Key Changes in NOS-1064

- 1. Added a feature that administrator can enable/disable password strength for all users. When password strength is enabled, the rules for passwords are:
 - a. Password must be 6-12 characters long accepting 26 characters which is case sensitive, 0-9 digits and the symbols ~!@#\$%^&*()_+. Space will be ignored if detected anywhere in the password.
 - b. Password must contain at least one lower case character, one upper case character, one digit and one symbol.

When the password strength is disabled, the rules for passwords are:

a. Password must be 6-12 character length accepting 26 characters which is case sensitive, 0-9 digits and symbols "~!@#\$%^&*()_+". Space will be ignored if detected anywhere in the password.

Changing the password strength will automatically reset all users' passwords to default. Please refer to user manual for more details.

- 2. Added a feature that administrator can enable/disable password display while typing password. This feature allows all users to display typed password in dots or plain text.
- 3. Added a feature that allows user to resume an unfinished method building if the instrument was shut down accidentally during method building.
- 4. Added a feature that developers can perform Raman shift calibration when instrument fails performance validation.
- 5. Enhanced the function of sleep mode so that the screen returns to where it was before going into sleep mode when the device is woken up and the user logs in.
- 6. Enhanced the scan function to have better signal to noise level for collected scan data.
- 7. Fixed the bug that when a method is selected, the associated barcode is not updated accordingly.
- 8. Fixed the bug that sometimes when finish method building, audit trail may show this record twice.
- 9. Fixed the bug that in the Identification mode user has to first click barcode field to have input focus there.



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Key Changes in NID EX

- 1. Added a feature allowing IT Administrator to restore database to a previous backup file.
 - 2. Optimized the display of Performance Validation report and Audit Trail History report.
 - 3. Improved the search by date function in NID EX. Now the search by date criteria is better matched with the search result.
 - 4. Added the validation scan section under method. User can search for method validation scans with their related information such as scan index, date, integration times, etc.
 - 5. Fixed the bug that when computer language and format are set to German, the numbers format in exported CSV file includes quotations.
 - 6. Fixed the bug that reading database during login will cause error messages in the Audit trail record.
 - 7. Fixed the bug that sometimes viewing validation scan of a disabled method will cause software crash.
 - 8. Fixed the bug that if a method is e-signed in NID while the same method is updated in NOS, synchronization may fail.

