

Changelog

Version 2.7.10

Release Version: 2.7.10

Release Date: Sept 26, 2025

MWLib version: 3.9.11 (Check General release notes (<https://cmbdn.cognex.com/download/changelog/group/8>) and Android specific release notes (<https://cmbdn.cognex.com/download/changelog/mw/android-library>))

cmbSDK Toolkit version: 1.0.4

General

- Update decoder lib to 3.9.11

Version 2.7.9

Release Version: 2.7.9

Release Date: July 10, 2025

MWLib version: 3.9.9 (Check General release notes (<https://cmbdn.cognex.com/download/changelog/group/8>) and Android specific release notes (<https://cmbdn.cognex.com/download/changelog/mw/android-library>))

cmbSDK Toolkit version: 1.0.4

General

- Update decoder lib to 3.9.9
- Raise Android API level to 35

cmbSDKToolkit

- Fixed missing preview on target decoding screen.
- Raise Android API level to 35

Version 2.7.8

Release Version: 2.7.8

Release Date: May 6, 2025

MWLib version: 3.9.8 (Check General release notes (<https://cmbdn.cognex.com/download/changelog/group/8>) and Android specific release notes (<https://cmbdn.cognex.com/download/changelog/mw/android-library>))

cmbSDK Toolkit version: 1.0.3

General

- Update decoder lib to 3.9.8

Version 2.7.7

Release Version: 2.7.7

Release Date: Sep 12, 2024

MWLib version: 3.9.7 (Check General release notes (<https://cmbdn.cognex.com/download/changelog/group/8>) and Android specific release notes (<https://cmbdn.cognex.com/download/changelog/mw/android-library>))

cmbSDK Toolkit version: 1.0.3

General

- Update decoder lib to 3.9.7
- Raise Android API level to 34

Version 2.7.6

Release Version: 2.7.6

Release Date: June 13, 2024

MWLib version: 3.9.6 (Check General release notes (<https://cmbdn.cognex.com/download/changelog/group/8>) and Android specific release notes (<https://cmbdn.cognex.com/download/changelog/mw/android-library>))

cmbSDK Toolkit version: 1.0.2

General

- Update decoder lib to 3.9.6

Version 2.7.5

Release Version: 2.7.5

Release Date: March 8, 2024

MWLib version: 3.9.5 (Check General release notes (<https://cmbdn.cognex.com/download/changelog/group/8>) and Android specific release notes (<https://cmbdn.cognex.com/download/changelog/mw/android-library>))

cmbSDK Toolkit version: 1.0.2

General

- Update decoder lib to 3.9.5

Version 2.7.4

Release Version: 2.7.4

Release Date: Oct 27, 2023

MWLib version: 3.9.4 (Check General release notes (<https://cmbdn.cognex.com/download/changelog/group/8>) and Android specific release notes (<https://cmbdn.cognex.com/download/changelog/mw/android-library>))

cmbSDK Toolkit version: 1.0.1

General

- Update decoder lib to 3.9.4
- Raise Android API level to 33

Bugfixes

- Fixed mishandling of Code25 and Interleaved 2 of 5 sub-types: COOP, MATRIX and INVERTED barcodes are returned as Code 25 base symbology, while IATA and ITF14 barcodes are returned as Interleaved 2 of 5

Version 2.7.3

Release Version: 2.7.3

Release Date: July 21, 2023

MWLib version: 3.9.3 (Check General release notes (<https://cmbdn.cognex.com/download/changelog/group/8>) and Android specific release notes (<https://cmbdn.cognex.com/download/changelog/mw/android-library>))

cmbSDK Toolkit version: 1.0.0

General

- Starting from this release the bundle contains cmbSDK Toolkit as well. cmbSDK Toolkit is a UI kit that may speed up your app development and integration with Cognex hardware. You can read further details in our knowledge base article: <https://cmbdn.cognex.com/knowledge/cmb-sdk-toolkit>

Initial version contains the following elements:

- Pairing UI and Logic for establishing connection with Bluetooth Direct Connect Enabled Cognex readers.
- Dynamic Symbologies that can be used with Cognex readers and also with our camera API. In both cases it shows all the available symbologies and their settings.

New features

- Camera driver errors can be configured to show them as toast messages or only add them to logcat (*readerDevice.showCameraDriverErrorAsToast*, *readerDevice.isCameraDriverErrorShownAsToast*)

Bugfixes

- Fixed identification of IMB barcode type
- Stabilize BT connection handling
- Improve overall stability

Version 2.7.2

Release Version: 2.7.2

Release Date: March 10, 2023

MWLib version: 3.9.1 (Check General release notes (<https://cmbdn.cognex.com/download/changelog/group/8>) and Android specific release notes (<https://cmbdn.cognex.com/download/changelog/mw/android-library>))

General

- Increase targetSDKVersion to 31, minSDKVersion to 21

New features

- Result XML is extended with a new node *symbologyExtra*, and ReadResult object is extended with *resultExtras*. This field may contain information like exact sub-type (symbology) in case of UPC/EAN.
- New DMCC commands to set check digit option for Code 25 and Interleaved 2 of 5 sub-types independently:
 - GET|SET COOP.CHKCHAR [ON|OFF]
 - GET|SET IATA.CHKCHAR [ON|OFF]
 - GET|SET MATRIX.CHKCHAR [ON|OFF]
 - GET|SET INVERTED.CHKCHAR [ON|OFF]
 - GET|SET C25.CHKCHAR [ON|OFF]

Note there is no check digit option for ITF-14 (as a check digit is always required).

Bugfixes

Camera API

- Fix overexposure problem that occurs with Nokia X20 devices
- Overall stability improvements

Version 2.7.1

Release Version: 2.7.1

Release Date: October 27, 2022

MWLib version: 3.8.7 (Check General release notes (<https://cmbdn.cognex.com/download/changelog/group/8>) and Android specific release notes (<https://cmbdn.cognex.com/download/changelog/mw/android-library>))

New features

Camera API

- New preview option added to work with Quad HD (2K) resolution devices:
PreviewOption.QHD_RESOLUTION

Bugfixes

Camera API

- Number of threads defaults to 2
- Fixed distortion if display aspect ratio is different than selected camera resolution aspect ratio
- Improve overall stability

Version 2.7.0

Release Version: 2.7.0

Release Date: July 22, 2022

MWLib version: 3.8.7 (Check General release notes (<https://cmbdn.cognex.com/download/changelog/group/8>) and Android specific release notes (<https://cmbdn.cognex.com/download/changelog/mw/android-library>))

New features

- Added Bluetooth communication to support Cognex handheld readers
- Add the following DMCC commands to the camera API to retrieve codesize for each symbology:
 - C11.CODESIZE-RANGE

- C25.CODESIZE-RANGE
- I205.CODESIZE-RANGE
- C39.CODESIZE-RANGE
- C93.CODESIZE-RANGE
- CODABAR.CODESIZE-RANGE
- MSI.CODESIZE-RANGE
- Some package names were changed to be aligned with our iOS library. This may result an update in current solutions. Android Studio supports this process by offering the new imports.
- New DMCC CONFIG.SAVE is available for camera API to store the current setting. Saved configuration can be loaded with loadCameraConfig() function

Bugfixes

Camera API

- Fixed imageResult and svgResult handling in portrait reversed orientation
- Fixed keep exposure settings for next reading session
- Fixed scanning session can't be started again if preview container is changed while scanning is active
- Improve overall stability

Version 2.6.1

Release Version: 2.6.1

Release Date: February 14, 2022

MWLib version: 3.8.6 (Check General release notes (<https://cmbdn.cognex.com/download/group/changelog/8>) and Android specific release notes (<https://cmbdn.cognex.com/download/changelog/mw/android-library>))

Bugfixes

Camera API

- Fixed occasional crashes on certain Android devices

Version 2.6.0

Release Version: 2.6.0

Release Date: August 30, 2021

MWLib version: 3.8.3 (Check General release notes (<https://cmbdn.cognex.com/download/group/changelog/8>) and Android specific release notes (<https://cmbdn.cognex.com/download/changelog/mw/android-library>))

Important note: If you are using the cmbSDK with MX mobile terminals and the targetSDK of your app is 30 or higher, you will need to add the following queries to your application's manifest to allow it to connect to MX terminal via MX Connect:

New features

Camera API

- Two new functions added to get and to set exposure compensation. (getCameraExposureCompensationRange, setCameraExposureCompensation). Exposure settings persist until the cameraReader is closed.

- Added support for tuning the quiet zone for weak 1D symbologies. By default, the camera API only requires 1D barcodes to have 50% of the recommended quiet zone for a 1D barcode (while MX mobile terminals default to 100%). The following DMCC commands can be used to increase or decrease (not recommended) the quiet zone strictness the SDK uses:

```
GET | SET C11.QZ-SIZE [0-100]
```

```
GET | SET C39.QZ-SIZE [0-100]
```

```
GET | SET C128.QZ-SIZE [0-100]
```

- New preview option, `KEEP_PREVIEW_IN_PAUSED_STATE`, allows the camera preview to stay on the screen after a read session has finished. This means that scanning session can be restarted with a software button if a barcode is scanned or the scan timeout expires. If used in conjunction with continuous triggering, this Paused state has higher priority: the paused state will occur after every successful scan.

Bugfixes

Camera API

- Fixed SDK so `onConnectionStateChanged` listener is only called once
- Fixed memory leak in `ResultCollector`
- Fixed memory leak in full screen preview.

Version 2.5.0

Release Version: 2.5.0

Release Date: June 9, 2021

MWLib version: 3.8.2 (Check General release notes (<https://cmbdn.cognex.com/download/group/changelog/8>) and Android specific release notes (<https://cmbdn.cognex.com/download/changelog/mw/android-library>))

Important note: If you are using the `cmbSDK` with MX mobile terminals and the `targetSDK` of your app is 30 or higher, you will need to add the following queries to your application's manifest to allow it to connect to MX terminal via MX Connect:

```
<queries>
  <package android:name="com.cognex.mxconnect" />
</queries>
```

If you are only using the camera API, no changes are necessary.

New features

General

- New encoding options:
 - Auto encoding option is added to support codes with encoding information included (e.g. QR codes). If Auto is set for encoding then read result is encoded according to encoding information stored in the barcode or UTF8 otherwise.
 - Added a new encoding option, `US_ASCII_SHOW_NON_PRINTABLE`, that shows non-printable characters as hex codes.
- Old factory methods for instantiating `DataManSystem` are deprecated (ex. `CreateDataManSystemOverCamera`). Using `ReaderDevice` is the preferred method.

- Location of `com.cognex.mobile.barcode.sdk.ReaderDevice.Symbology` and `com.cognex.mobile.barcode.sdk.ReaderDevice.ReadStringEncoding` enums are changed to `com.cognex.mobile.barcode.sdk.Symbology` and `com.cognex.mobile.barcode.sdk.ReadStringEncoding` that may require import fix

Camera API

- Added DMCC to support QR micro codes: `GET|SET QR.MICRO [ON|OFF]`
- Added DMCC to set forcing numeric reading for TELEPEN symbology: `GET|SET TELEPEN.FORCE-NUMERIC [ON|OFF]`
- Added option to set verification for 1D symbologies:
 - `GET|SET TELEPEN.VERIFICATION [ON|OFF]`
 - `GET|SET C11.VERIFICATION [ON|OFF]`
 - `GET|SET C128.VERIFICATION [ON|OFF]`
 - `GET|SET C25.VERIFICATION [ON|OFF]`
 - `GET|SET C93.VERIFICATION [ON|OFF]`
 - `GET|SET C39.VERIFICATION [ON|OFF]`
 - `GET|SET CODABAR.VERIFICATION [ON|OFF]`
 - `GET|SET I205.VERIFICATION [ON|OFF]`
 - `GET|SET UPC-EAN.VERIFICATION [ON|OFF]`
 - `GET|SET MSI.VERIFICATION [ON|OFF]`
- Added support for tuning the quiet zone for weak 1D symbologies. By default, the camera API only requires 1D barcodes to have 50% of the recommended quiet zone for a 1D barcode (while MX mobile terminals default to 100%). The following DMCC commands can be used to increase or decrease (not recommended) the quiet zone strictness the SDK uses:
 - `GET | SET C25.QZ-SIZE [0-100]`
 - `GET | SET CODABAR.QZ-SIZE [0-100]`
 - `GET | SET I205.QZ-SIZE [0-100]`
 - `GET | SET MSI.QZ-SIZE [0-100]`

Note that `C25.QZ-SIZE` and `I205.QZ-SIZE` are the same setting for the camera API.

Bugfixes

General

- Fixed security error that was reported when an app that using cmbSDK was uploaded to Internal testing in Play Store.
- Fixed `ReaderDeviceListener` is null when `onReadResultReceived` is called.

Camera API

- Fixed MSI checksum option setting (`GET | SET MSI.CHKCHAR-OPTION [0-5]`) to behave the same as MX mobile terminals:
 - 0 - Mode 10

1 - Mode 11 IBM

2 - Mode 1010

3 - Mode 1110 IBM

4 - Mode 11 NCR (camera API only)

5 - Mode 1110 NCR (camera API only)

- Fixed NPE if full screen preview is hidden immediately after it was shown
- Fixed disabling functionality for TELEPEN symbology
- Fixed start reading button disappears in full screen with the second reading

Version 2.4.2 (mw lib 3.8.0) March 1, 2021

New features

Camera API

- Set/get scanning rectangle accepts MWB_CFG_MASK_ALL (or zero) to select all symbologies
- PDF417 enhanced to handle additional types of code damage
- Enhanced QR decoder to prevent MicroQR misreads

Bugfixes

Camera API

- Fixed distortion problem when orientation is changed
- Fixed crashes when partial view was stopped/started multiple times in very short interval
- Fixed GS1 DataBar Expanded parsing
- Fixed re-read timer to be handled consistently
- Fixed 1D location verification for Code 128
- Fixed DataBar related crash

Version 2.4.1

Bugfixes:

Camera API:

- Fixed crash in Camera2CognexCameraManager
- Fixed preview orientation change problem when reader is created in one activity and camera container is set in another activity
- Fixed NPE in CameraManager
- Fixed overlay is not added on first scanning session and location layer is not cleared after showing location
- Fixed crash that happens on slower devices where the camera driver loaded slower when result image is created
- Fixed Databar handling:
 - Camera API uses the same three subtypes as the MX: GROUP, LIMITED, and EXPANDED
 - Camera API supports GETSET DATABAR.GROUP ONIOFF (same as DATABAR.RSS14).
 - When the cmbSDK is initialized, it's default to GROUP (RSS14), LIMITED, and RSS14 Stacked on, but EXPANDED and SYMBOL.DATABAR as off
 - SET SYMBOL.DATABAR ON turns on reading Databar codes according to subtypes settings
 - DATABAR.RSS14STACK and DATABAR.RSS14 are deprecated, use DATABAR.GROUP instead.

Version 2.4.0

New features

Camera API:

- Added DMCC for centered target decoding: `DECODER.USE-CENTERING`
- Added DMCC to access Australian Mail symbology: `SYMBOL.4STATE-AUS`
- Added DMCC to handle C39 to C32 conversion: `SYMBOL.C39-CONVERT-TO-C32`
- Added DMCC to set duplicate code delay : `DECODER.REREAD-TIME`
- The zoom level can now be changed while actively scanning with `SET CAMERA.ZOOM` (it is no longer required to configure it before starting the scanner).

Bugfixes:

General:

- Fixed memory leaks which occurred under certain conditions
- General stability and security enhancements
- When an MDM invokes an MX Connect intent for managing the MX's configuration or firmware, an application's connection to the MX may be interrupted. When the intent completes, MX Connect sends `com.cognex.mxconnect.status.READER_AVAILABLE` so that the `onAvailabilityChanged` method is called by the application's `ReaderDeviceListener` (which will automatically reconnect the app to the MX). Reference the sample application for how this is accomplished.

Version 2.3.2

Bug fixes

Camera API:

- Fixed sporadic crash when `stopPreview` is executed

Version 2.3.1

Bug fixes

Camera API:

- Fixed image scanning with camera API (DMCC: `IMAGE.LOAD`)
- Fixed "BufferQueue has been abandoned" and/or high CPU usage issue on certain devices that happened after scanning session ended

Version 2.3.0

Version 2.3.0 of the Cognex Mobile Barcode SDK for Android now supports the Camera2 API and includes significant performance enhancements for scanning 1D barcodes with a mobile phone/tablet as well as number of minor bug fixes and enhancements. The complete release notes follow.

New features

Camera API

- Enhanced performance for 1D barcode scanning
- `cmbSDK` uses camera2 API if it is supported by the device

Bug Fixes

General

- Sample app fixed to turn off light after read finished
- Sample app scan button fixed on Android 4.4

Camera API

- SET DECODER.1D-SYMBOLORIENTATION DMCC is fixed to set decoder orientation
- Fixed camera freeze on Moto Z2 Force with Android9
- Fixed crash in search finder patterns function
- VIN validator: consider country codes 6 and 7 as valid

Version 2.2.1

Bug fixes

Camera API:

- Limit camera preview to 60 FPS to prevent freeze on some devices
- IMAGE.LOAD DMCC is fixed
- Added support for AI 714 to GS1 parser
- Fixed AI 8018 in GS1 parser

Version 2.2.0

New features

General:

- Industry standard parsers: the SDK now includes industry standard parsers for post processing of scan results. Support for AAMVA (US and Canadian driver's licenses), GS1, HIBCC, ISBT 128, IUID, and SCM (MaxiCode) are implement for all supported devices.
- Better sample applications: the sample applications have been updated to provide clearer examples of many of the SDK's features, including more robust comments, examples of devices specific configuration, and the recommended approach for handling device reconnection (e.g., after the app has been suspended then resumed).
- Support for Gs1 results: the ReadResult class now includes a isGS1 flag indicating when a Gs1 formatted barcode has been read. This feature works for all supported devices

Camera API:

- Target decoding: this allows for more precise aiming by defining a region of the image which at least a portion of the scanned barcode must be within to be decoded. When in use, an additional "target window" (in yellow) will be displayed on the preview, indicating the limits of the target region.
- Multi-code support: just like the MX mobile terminals, the camera API can now read multiple barcodes in a single scan.
- Region of interest (RoI): users can now define a region of interest to limit the area of the image the decoder searches for a barcode to increase performance, especially when multiple symbologies are enabled, multi-code is enabled, or higher decoder effort levels are being used.
- Improved Data Matrix and QR decoding: significant improvements for omnidirectional Data Matrix code reading as well as overall QR code decoding have been made.
- TELEPEN: the TELEPEN symbology is now supported by the camera API (not MX-1xxx scanners).

Bug Fixes

MX Mobile Terminals:

- Fixed connection issues to MX mobile terminals that can happen when an application starts before the MX device. This issue primarily effects Android 8 and later.

Camera API:

- DMCC “BEEP” command corrected to have two parameters (same as on iOS), repetition and level.
- DMCC interpreter was changed to be strict with the number of required parameters. Providing fewer or additional parameters will now result in an error.
- DMCC command LIGHT.INTERNAL-ENABLE behavior has been changed so that it now effects an active scan session (that is, it can be used to toggle illumination while scanning is active).
- DMCC command UPC-EAN.SUPPLEMENT has been corrected to work as documented (0 to disable, 1-4 to turn on supplement code reading).
- C11, C25, C39, C93, Codabar, MSI CODESIZE settings are changed to OFF by default to keep the same behavior as MX mobile terminals has. OFF means in this case that the codesize is limited for that symbology group according to the given parameters (2nd and 3rd) that is 4-50 range by default. However it is possible to set lower codesize (2 or 3), we do not suggest as it can result misreadings. ON means any length of code.
- DMCC command SET C39.CODESIZE has been changed to permit a range of 2 to 50; however, less than 4 should still be used with caution (as it can lead to misreads).
- Visibility of the “Close” button is now configurable on a partial-view preview (not just full-screen preview).
- Fixed bug where a blue/dark preview could appear in the case a new scan occurs too quickly after a successful scan.
- Fixed Data Matrix 144x144 scan issue.
- Fixed Code 39 extended scan issue.
- Fixed Code128 UTF issue.
- Fixed issue when decoding an all-white image.

Version 2.1.2

Improvements in phone’s camera decoder

- Fixed Aztec code exceptions
- Updated Gs1 parser for AI93
- Corrected identification of Gs1 Dotcode
- FNC2 in Gs1 Code 128 barcodes are now stripped (message append is not supported)
- Now supports 4:1 wide:narrow ratio for Codabar

Version 2.1.1

- PartialView class allows to change camera flash state if Illumination button is removed from overlay
- Change camera driver handling to optimize performance and preserve camera focus.

Version 2.1.0

New Mobile Camera features

- cmbSDK using Mobile Camera sends cmbSDK version to the licensing server
- Custom text can be attached to each license during registration to ease the tracking for customers
- Analytics module was removed from MW library
- Number of threads used by the decoder can be controlled with new DMCC commands: GET DECODER.MAX-THREADS, GET/SET DECODER.THREADS-USED

- New preview option for 1080p and 60 fps
- A new overlay was added for the Phone Camera that uses an improved design. It is very customizable by using the xml files in the Resources dir. The old overlay is still available by setting "MWOverlay.overlayMode = OM_LEGACY" before initializing the reader device
- Image graphic and pixel per module information (PPM) added to Phone Camera reader (PPM works with DM, C39, EAN, UPC, C128, PDF417, QR, AZTEC, CODABAR, C25, I2O5, Micro PDF417)
- The rectangle around a successfully read barcode is made configurable. (MWOverlay.locationLineColor(float) and MWOverlay.locationLineColor(int))
- New constructor was added that allows the registration key to be set instead of AndroidManifest (Android)
- New method was added in the ReaderDevice class: "setCameraPreviewContainer". It allows the camera preview container to be set or changed in a later time instead of just in the constructor for the phone camera.
- Two DMC commands were added for controlling the camera zoom "GET/SET CAMERA.ZOOM", "SET CAMERA.ZOOM-PERCENT"

Bugfixes:

- AndroidManifest is extended with a new permission to enable vibration on successful scan for Mobile Camera. New DMCC commands to control vibration: GET/SET VIBRATION.GOOD [ON/OFF]
- MSI.CHKCHAR and C11.CHKCHAR commands are working properly with Phone Camera (Android only)
- setDuplicatesTimeout is fixed to work properly for Phone Camera

Version 2.0.1

- Camera permission request is only checked but SDK is not requesting it.
- Android Studio support
- Improve discovering of network devices
- Improve stability for large data transfers
- More detailed logging
- Handle multicode
- Code32 and Australian Post added to decoder
- Refactor sample app
- Stability improvements with MX Connect app
- Improve CameraConnector image result cropping
- Performance enhancements
- Documentation updates

Version 2.0.0

- Introduce an easy API layer that can be used for reading with MX- mobile terminals and phone camera.