

End-User Documentation

Android Barcode Scanner – TDMSBarcodeScannerAndroid

1. Overview

The Android Barcode Scanner component (TDMSBarcodeScannerAndroid) provides a simple way to integrate barcode and QR code scanning functionality into your Android application.

It launches a ready-made scanner UI, captures barcodes using the device camera, and returns results in JSON format through events.

2. Key Features

- Launches a native barcode scanner interface.
- Supports multiple barcode types, including:
 - QR, Aztec, DataMatrix, PDF417
 - Codabar, Code39, Code93, Code128
 - EAN-8, EAN-13, ITF, UPC-A, UPC-E
- Auto-zoom functionality for faster detection.
- Provides success, canceled, and failure events.

3. Requirements

- Platform: Android (32-bit ARM or 64-bit ARM).
- Delphi Versions: Compatible with FireMonkey mobile projects with RAD Studio 12.3 and up.
- Permissions:
 - Camera access.
- Libraries: DM.Android.Barcode (.aar) library must be available in your Android app build.

4. Component Properties & Events

Properties:

- Formats – TBarcodeFormats – Defines which barcode formats to scan (empty = all formats).

- AutoZoom – Boolean – Enables auto-zoom to improve scanning speed and accuracy. Default: True.

Events:

- OnSuccess – procedure(Sender: TObject; const BarcodeJson: string) – Triggered when a barcode is successfully scanned.
 - BarcodeJson: JSON string with barcode details.
- OnCanceled – procedure(Sender: TObject) – Triggered when the user cancels scanning.
- OnFailure – procedure(Sender: TObject; const ErrorMessage: string) – Triggered when scanning fails.
 - ErrorMessage: Short description of the failure (e.g., "Unknown scan error").

5. Usage

Step 1 – Add the Component

Place TDMSBarcodeScannerAndroid on your form or create it in code.

Step 2 – Configure Properties

- Choose supported barcode formats via the Formats property (optional).
- Enable or disable AutoZoom as needed.

Step 3 – Assign Event Handlers

- OnSuccess – Handle scanned results.
- OnCanceled – Handle user cancellation.
- OnFailure – Handle scanning errors.

Step 4 – Start the Scan

Call StartScan to open the Android scanner UI.

Step 5 – Handle Results

- OnSuccess: Use the provided JSON string to process barcode results.
- OnCanceled: Implement user feedback or fallback behavior.
- OnFailure: Handle error messages gracefully.

6. Trial Version Behavior

If compiled in trial mode:

- A dialog appears before scanning with a trial message.

- A toast message also displays after scanning.
- Scanning functionality remains identical to the full version.
- Moving from trial to full version does not affect projects negatively.

7. Tips for Best Results

- Ensure good lighting conditions.
- Hold the device steady for faster recognition.
- Position barcodes clearly within the camera frame.
- Inform users about granting camera permissions before scanning.

8. Support

For trial removal or technical assistance:

- Email: office@dmonst.com
- Website: fmxcomponents.com