ANDROID + WINDOWS

POS Barcode Scanner

From device label to spreadsheet entry.

A practical mobile-to-Excel workflow for capturing POS device serial numbers with less repetitive typing.



Conceptual workflow illustration - not an app screenshot.

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POS maintenance / practical automation

01 / THE OPERATIONAL PROBLEM

The bottleneck was data entry.

Repeatedly typing device serials into spreadsheets adds repetitive work and creates opportunities for transcription mistakes.

The objective is a more consistent capture workflow. Time savings and error reduction have not been quantified in this portfolio.

MANUAL STEP	DESIGN RESPONSE
Read the device label	**Capture a supported serial**
Type the serial manually	**Check input and prefix rules**
Return to the worksheet	**Transfer to the Excel workflow**

Preserve the existing spreadsheet workflow while improving how serial data reaches it.

Design principle: make capture convenient, keep the validation scope explicit, and verify the destination separately.

02 / FROM CAMERA TO WORKSHEET

Four steps. Two devices. One connected workflow.

An Android scanning interface connects the physical device label with a Windows-based Excel entry workflow.

01

CAPTURE

Phone camera scans the barcode; manual entry provides a fallback.

02

CHECK

Apply supported-prefix and input-format checks.

03

TRANSFER

Send through the Bluetooth connection to Windows.

04

RECORD

Insert the serial into the configured Excel workflow.

Serial prefixes, not barcode types. PB, PE, H3R and supported numeric prefixes identify accepted serial patterns. They do not describe barcode symbologies.

Validation boundary. A format check does not establish device authenticity or maintenance eligibility.

03 / AN ILLUSTRATIVE HANDOFF

Show the destination, not just the scan.

Synthetic records and simplified UI. This is a workflow explanation, not a screenshot or a live transfer test.

SERIAL CAPTURE

PB00000000001

Camera capture or manual entry
Supported-prefix check
Bluetooth transfer to Windows

EXCEL WORKFLOW / SYNTHETIC DATA

ROW	DEVICE SERIAL	SOURCE
1	**PB00000000001**	Camera
2	**PE00000000002**	Manual entry

Sample identifiers demonstrate presentation only; they do not certify the exact live validation rules.

Capture is one stage; successful worksheet entry is another. Confirm the connection and destination behavior during setup and testing.

04 / MY CONTRIBUTION & PROJECT STATUS

Built around real maintenance work.

MY CONTRIBUTION

Workflow requirements and solution design

Android interface and scanning iteration

Windows / Excel connectivity testing

Field-led troubleshooting and refinement

PROJECT CAPABILITIES

Barcode-based serial capture

Supported-prefix filtering

Manual input fallback

Android-to-Windows transfer

Development approach. Practical implementation with AI assistance, guided by maintenance requirements and field feedback.

Status. Practical prototype developed and tested in an Android / Windows environment, as reported by the project owner. Device compatibility and transfer reliability require continued validation.

Public summary. Internal records and company data excluded. No independently verified savings, adoption figures or universal device support are claimed.

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