

# CoordyNavi

## Product Release Notes

**Version 1.2.0**    Release Date: June 9<sup>th</sup> 2026    Platform: Android

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### What's New in CoordyNavi 1.2.0

CoordyNavi 1.2.0 delivers significant improvements across surveying workflows, data reliability, and field usability. The headline addition is full Local Coordinate support — sites can now be created and operated entirely in a local coordinate system, with no drawn boundary required. This release also adds Total Station heighting in stakeout (completing the X, Y, Z result set) and a more flexible Resection (Zero Set) workflow. Other improvements include earlier report generation, smarter offline-to-online data sync, flexible alphanumeric Point ID naming, a unified CAD engine for DWG and DXF, and a range of bug fixes.

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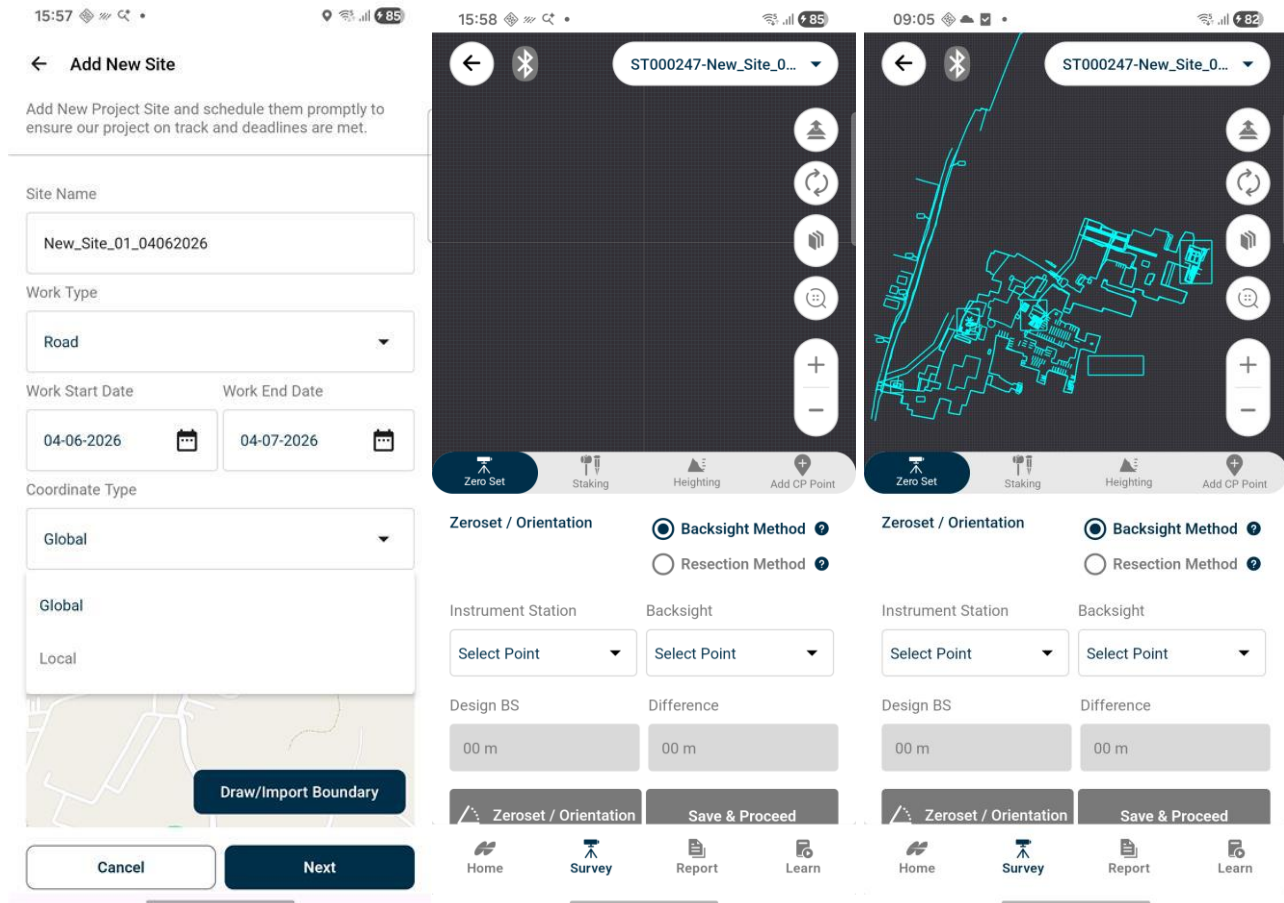
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## 1. Local Coordinate Support

CoordyNavi previously operated in a global coordinate system. Version 1.2.0 introduces full Local Coordinate support, allowing sites to be created and operated in a local coordinate system. This is a major new capability for workflows where global positioning is unavailable or not required.

### What's Included

- New Coordinate Type selector during site creation: choose between Global and Local before creating a site.
- The Draw Boundary step is not required for Local sites — users can proceed directly to the survey workflow after selecting Local mode.
- All core surveying features — stakeout, measurement, data collection, sync, and reporting — work identically in Local mode as in Global mode.
- Local coordinates are stored and displayed in the local coordinate system throughout; no UTM conversion is applied for Local sites.



## 2. Stakeout Heighting by Total Station

Stakeout mode now supports saving height (Z) measurements when Total Station heighting is enabled, completing the XYZ result set for stakeout operations.

### What's Included

- When TS heighting is enabled, saving a stakeout result stores X, Y, and Z. When disabled, only X and Y are stored — no change to existing behaviour.
- Existing stakeout records and the existing stakeout flow are fully preserved — this change is additive only.

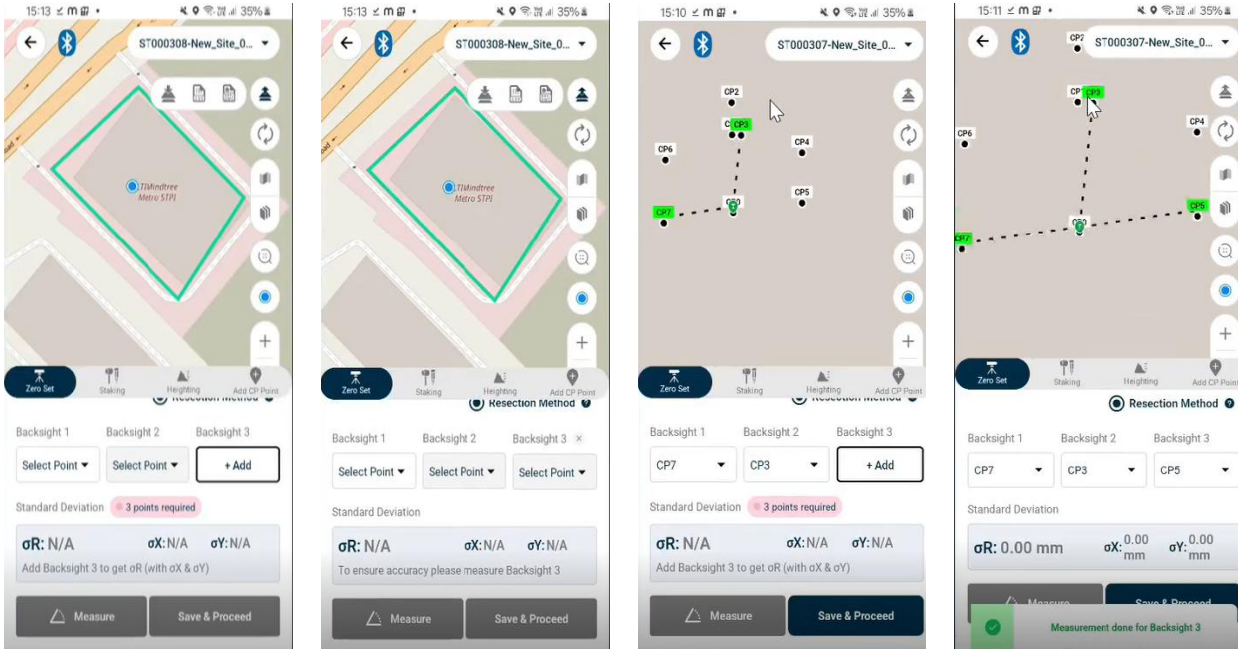
## 3. Resection (Zero Set) — Greater Flexibility

Building on the Resection (Zero Set) capability introduced in 1.1.0, version 1.2.0 makes the workflow more flexible and more robust. Surveyors can now add an optional third backsight point — useful when only limited control points are available or when the geometry of two points is weak — and the calculation has been upgraded for more stable position results.

### What's Included

- Optional third backsight point: Bacsight 1 and 2 remain the standard setup; a third point can be added with a single tap and removed at any time. 'Save & Proceed' is available with either two or three points.
- Precision indicators: when three points are used, CoordyNavi shows precision values to help you compare the relative quality of different setups. These reflect the internal consistency of the observations and are intended for relative comparison only — they are not a measure of absolute positional accuracy, which also depends on your control points and their geometry.

- Recommended setup: for the most reliable result, spread the backsight points well around the instrument — roughly 90° apart with two points, and evenly distributed (about 120° apart) with three — and keep them at similar distances from the instrument.
- Geometry alerts: CoordyNavi now warns you when the chosen control points are likely to weaken the result — for example, two points that are too narrow (intersection angle below ~30°) or too wide (above ~150°), or three points that are too close together (adjacent angle below ~20°) or nearly in line — and suggests how to improve the setup.
- The Rodman map now shows the additional sight line when a third point is used.



## 4. Reporting Enhancements

Report generation is now available earlier in the workflow, and the report layout clearly separates fully completed data from work in progress.

### What's Included

- Reports can now be generated as soon as at least one X,Y pair is complete — Z no longer needs to be present for every point.
- The report now displays two separate tables:
  - Table 1 — Completed Points (X, Y, Z): all three values present and validated.
  - Table 2 — Partially Completed Points (X, Y only): Z measurement pending.
- A built-in integrity check confirms your data is consistent after delete and report actions, ensuring a reliable state before downstream processing.

## 5. Offline Data Sync Improvements

Data sync is now smarter and more reliable. CoordyNavi 1.2.0 automatically triggers sync when returning from the background and when switching or adding sites, protecting field data without requiring manual intervention.

### What's Included

- Auto-sync on app resume: sync triggers automatically on the Map screen and Dashboard when the user returns from another app or background state. It only fires when un-synced data exists and runs in the background without blocking the UI.

- Sync prompt on Site Switch / Add New Site: when connectivity is restored and un-synced data exists, a 'Sync Now' prompt appears before the user changes site context.
- If no un-synced data exists, an 'All data synced' confirmation is shown and the user proceeds immediately.
- Sync failures are handled gracefully with a non-blocking indicator; data remains queued for retry with no risk of duplicate records.

## 6. Point ID Naming

Coordynavi now supports a formally defined, flexible Point ID naming convention that aligns with construction site workflows. Alphanumeric Point IDs (e.g. CP10, A, BM-01) are fully accepted during CSV import, and conflict resolution (renumbering) has been updated to handle them correctly.

### What's Included

- Flexible Point ID format: 1–6 characters using A–Z, 0–9, hyphen (-), and underscore (\_). The first character must be a letter or number.
- Lowercase letters are automatically converted to uppercase on import — no manual correction required.
- Conflict renumbering handles all ID types correctly:
  - Purely alphabetic IDs (e.g. A) → conflict produces A1.
  - Alphanumeric IDs (e.g. CP10) → conflict increments the numeric portion only: CP11.
  - Purely numeric IDs continue to work as before (e.g. 10 → 11).
- Existing Point IDs are never modified during conflict renumbering.

## 7. CSV Import & File Handling

Coordynavi now handles a wider range of CSV files and gives clearer feedback while importing.

### What's Included

- CSV files exported directly from Excel now import without errors. Excel adds a hidden marker at the start of the file, which Coordynavi now handles automatically — no action required.
- CSV validation now uses clear colour-coded feedback (filled / error / success), so you can see the status of each value at a glance.

## 8. Unified CAD Engine for DWG and DXF

Coordynavi now processes DWG and DXF drawings through a single, unified CAD engine, so both formats render consistently — with the same layer handling, geometry rendering, and coordinate placement regardless of file type.

### What's Included

- DWG and DXF files now render identically, with consistent layers, geometry, and coordinate placement across both formats.
- No change to the import workflow — select your DWG or DXF file exactly as before.
- For smooth performance, drawings of approximately 50 MB or smaller are recommended. This size has been verified to run smoothly even on lower-spec supported devices; larger drawings may still load, but performance will depend on the device.

## 9. Bug Fixes Summary

Coordynavi 1.2.0 includes fixes for the following issues identified after version 1.1.0:

- Map options (Download/Upload Map) remained enabled after tapping outside the active map area on the Survey / Draw Boundary screen. Behaviour is now consistent with the Add New Site screen — map options are dismissed on an outside tap.

- The refresh icon on the Site List screen showed no animation when tapped by a Rod Man user. The icon now animates during refresh.
- The Work Type 'Others' text field on the Add New Site screen allowed special characters with no validation. Input is now restricted to alphanumeric characters, with a clear validation message on invalid entry.
- The CSV validation popup displayed behind background screen elements. It now renders as a proper modal with a dimmed background.
- Map point navigation arrows did not change the displayed point when multiple points shared the same coordinates but different Point IDs, and the selected point was not highlighted. Navigation now correctly cycles through Point IDs and highlights the active point.