

SYSTEM OVERVIEW

TheStake is a rugged positioning and documentation device for square archaeological excavation units. One device stake and three additional corner stakes establish a four-point field geometry.

- Use exactly four stakes around a square excavation unit.
- Place every stake immediately outside an excavation corner.
- The projected capture grid covers the complete excavation floor.

CONTROLS

The top controls mirror the companion app and provide direct field operation.

- Power: starts and shuts down the device.
- Set DTR: records the initial datum/reference corner.
- Set Points: begins sequential corner placement.
- Set Stake: confirms the currently projected point.
- Capture: records the selected image and/or LiDAR data.
- Grid Size: selects 18, 24, or 36 inch setout mode.

FIELD SETUP

Install the device on the keyed magnetic mount at the chosen reference corner. Pair the app and create the project before beginning setout.

- Verify battery and storage status.
- Select the grid size.
- Press Set DTR and confirm timestamp, GPS, temperature, and weather status.
- Follow the audible sequence to place the three remaining stakes.

EXCAVATION CAPTURE

Capture records should be made consistently so changes through the excavation are defensible and comparable.

- Capture at every 10 cm level.
- Choose image, LiDAR, or both.
- Optional timed capture intervals are 15, 30, and 60 minutes.
- Review the capture log before leaving the unit.

STORAGE AND REPORTING

A high-speed microSD card supports local storage. Without a card, data transfers to the paired app over Bluetooth.

- Maintain a daily project backup.
- Preserve original image and point-cloud files.
- Generate a project report containing grid geometry, coordinates, captures, environmental data, and notes.