



GPS/Precision Farming Equipment Calibration Checklist

Pre-Calibration Assessment & Planning

Initial checks and planning before commencing any calibration procedures. This includes reviewing documentation, checking equipment health, and setting expectations.

Last Calibration Date

Brief Description of Equipment Usage Since Last Calibration

Equipment Type

- ☐ Tractor
- ☐ Combine
- ☐ Sprayer
- ☐ Planter
- ☐ Other

Hours of Operation Since Last Calibration

Observed Issues or Concerns Prior to Calibration

Write something...

Calibration Method

- ☐ Manual
- ☐ Automated/Software-Driven
- ☐ Combination

Upload Previous Calibration Records (if available)

 Upload File

GPS Receiver Calibration

Focuses on calibration specifically for the GPS receiver unit, including antenna alignment and error correction.

GPS Antenna Elevation Angle (Degrees)

Enter a number...

GPS Receiver Firmware Version

Enter a number...

Differential Correction Source (e.g., RTK, DGPS, WAAS)

- ☐ RTK
- ☐ DGPS
- ☐ WAAS
- ☐ Other

Baseline Length (for RTK systems, in meters)

Enter a number...

Notes on Initial Signal Strength & Satellite Visibility

Write something...

Time Since Last Calibration (Days)

Enter a number...

Antenna Connection Type

- ☐ SMA
- ☐ TNC
- ☐ Other

Date of Calibration

Enter date...

Guidance System Calibration (Steering/Implement)

Covers calibration of the steering system (if applicable) and the implement guidance system (e.g., planter, sprayer).

Steering System Offset (cm)

Implement Working Width (m)

Steering System Type

- ☐ Autosteer
- ☐ Manual Steering with Guidance Lines

Implement Track Offset (cm)

Guidance Mode

- ☐ Point to Point
- ☐ Swath Following
- ☐ Free-hand

Describe any observed steering drift or inaccuracies.

Last Calibration Date of Steering System

Implement Speed Calibration Factor

Variable Rate Application (VRA) Calibration

Specific calibration procedures for variable rate application equipment, including planter, sprayer, and fertilizer applicators.

Target Application Rate (lbs/acre or similar)

Ground Speed During Calibration (mph or km/h)

Calibration Flow Rate (gallons/minute or liters/minute)

Nozzle Spacing (inches or centimeters)

Application Method

- ☐ Sprayer
- ☐ Planter
- ☐ Fertilizer Applicator
- ☐ Other

Describe Calibration Procedure Followed (e.g., catch can method, simulated field)

Write something...

Actual Application Rate (lbs/acre or similar) – Post Calibration

Enter a number...

Calibration Adjustment Required?

- ☐ Yes
- ☐ No

Notes on Calibration Results & Adjustments Made

Write something...

Sensor Calibration (Yield/Moisture/NDVI)

Focuses on calibration of any sensors integrated with the precision farming system (yield monitors, moisture sensors, NDVI sensors, etc.).

Yield Monitor Clean Grain Loss Percentage (Set Point)

Enter a number...

Yield Monitor Moisture Setting (for grain type)

Enter a number...

Yield Monitor Test Weight Setting

Enter a number...

Describe the calibration procedure for the yield monitor (including grain standards used)

Write something...

Moisture Sensor Calibration Factor (if adjustable)

Enter a number...

Moisture Sensor Type (e.g., Capacitance, Dielectric)

- ☐ Capacitance
- ☐ Dielectric
- ☐ Other

NDVI Sensor Calibration Offset (if adjustable)

Enter a number...

Record any observed anomalies during sensor calibration

Write something...

Date of Sensor Calibration

Enter date...

Field Verification & Accuracy Testing

Post-calibration checks and verification in the field to ensure accuracy and performance.

Verification Field Location

 [Set My Current Location](#)



Known Distance (e.g., Swath Width)

Enter a number...

Measured Distance (GPS System)

Enter a number...

Distance Error (Measured - Known)

Enter a number...

Swath Overlap (if applicable)

Enter a number...

Guidance Line Straightness Assessment (Visual)

- ☐ Excellent
- ☐ Good
- ☐ Fair
- ☐ Poor

Observations & Notes on Field Performance

Write something...

Date of Field Verification

Enter date...

Overall Accuracy Result

- ☐ Acceptable
- ☐ Needs Adjustment
- ☐ Unacceptable

Documentation & Record Keeping

Maintaining records of calibration dates, procedures, and results for future reference and troubleshooting.

Calibration Date

Enter date...

Calibration Start Time

Equipment Serial Number

Write something...

Calibration Procedures Performed (Detailed Notes)

Write something...

GPS Accuracy (Horizontal)

Enter a number...

GPS Accuracy (Vertical)

Enter a number...


Calibration Method Used

- ☐ RTK Base Station
- ☐ WAAS
- ☐ SBAS
- ☐ Other (Specify)

Notes/Observations

Write something...

Calibration Data Files (e.g., logs, screenshots)

 Upload File

Calibrator Signature