

UPS DIAD V Usability Test Plan

Moderated task-based evaluation of the DIAD V handheld device

STUDY	UPS DIAD V Usability Evaluation	METHOD	Moderated, task-based usability testing
PARTICIPANTS	6-8 UPS delivery drivers	SESSION	60-75 minutes per participant
LOCATION	Controlled environment or field simulation	MODERATOR	UX Researcher

1. Study Purpose

This study evaluates the usability, efficiency, learnability, and error recovery of the UPS DIAD V during common delivery-driver workflows. The goal is to understand how easily drivers can complete representative tasks, where they encounter friction or confusion, and which aspects of the experience may negatively affect delivery efficiency or driver confidence.

2. Research Objectives

1. Can drivers efficiently complete common delivery tasks using the DIAD V?
2. Can drivers easily understand the information presented on the screen?
3. Are navigation, menus, buttons, icons, and terminology intuitive?
4. Can drivers quickly locate the information they need while working under time pressure?
5. How easily can drivers recover from errors?
6. Are scanning and package-processing workflows efficient?
7. Can drivers accurately enter delivery outcomes and exception information?
8. Are signature and recipient workflows understandable?
9. Does the device support drivers' mental model of the delivery process?
10. Which areas create the greatest risk for errors, delays, or repeated actions?

3. Key Workflows to Evaluate

- Device login and start-of-day
- Reviewing route information
- Locating a specific stop
- Reviewing package information
- Scanning a package
- Entering delivery status
- Handling a delivery exception
- Finding additional information about a stop
- Navigating between screens
- Correcting an incorrect entry

- Processing a delivery
- Capturing recipient and signature information
- Completing end-of-day activities

4. Participants

Recruit 6-8 participants who are current or former UPS delivery drivers with experience using the DIAD or comparable delivery handheld devices. Participants should represent a range of experience levels and, where possible, include drivers from different route types: residential, commercial, urban, and rural.

Experience Level	Target Count
Less than 2 years	1-2
2-5 years	2-3
5+ years	2-3

5. Test Environment

The study should simulate a realistic delivery environment as closely as practical. The moderator should avoid helping participants complete tasks unless they become completely blocked.

- DIAD V device
- Representative route data
- Sample packages and barcodes
- Simulated addresses
- Sample recipient information
- Signature scenarios
- Delivery exception scenarios

6. Session Structure

1	Introduction Explain the study purpose and establish rapport with the participant.	5 min
2	Background Interview Understand participant experience with delivery devices and daily workflow.	5-10 min

3	Task Testing Participants complete realistic delivery scenarios while the moderator observes.	40-50 min
4	Debrief Discuss overall impressions, frustrations, strengths, and opportunities for improvement.	10 min

7. Measurement Framework

Quantitative Measures

- Task completion: Success / Partial / Failure
- Time on task
- Number of errors
- Number of prompts needed
- Number of incorrect selections
- Number of backtracks
- Number of repeated actions
- Number of moderator interventions
- Confidence rating (self-reported)

Qualitative Measures

- Confusion and hesitation
- Misunderstanding of terminology or icons
- Frustration or positive reactions
- Workarounds and unexpected behavior
- Mental-model mismatches
- Information hierarchy problems

8. Success Criteria

A task is considered successful when the participant completes the intended outcome without moderator assistance.

Rating	Label	Description
0	No issue	Participant completes the task easily.

1	Minor	Small hesitation or inefficiency with no meaningful impact.
2	Moderate	Participant struggles but eventually succeeds.
3	Major	Participant requires substantial effort, repeated errors, or moderator assistance.
4	Critical	Participant cannot complete the task, or the problem could result in a significant operational error.

9. Observation Guidelines

The moderator should observe and note:

- Where participants look first when a new screen appears
- How long they hesitate before acting
- Which controls they select and whether they match the expected path
- Whether they understand the terminology and icon labels
- Whether they discover functions independently
- Whether they remember steps from earlier in the session
- How they attempt to recover from errors
- Whether they develop workarounds for unclear steps

Do not correct participants immediately after an error. Allow them to attempt recovery first.

10. Analysis

After testing, findings should be grouped into themes. Each finding should document:

- Navigation
- Scanning
- Delivery confirmation
- Signatures
- Terminology
- Device interaction
- Information architecture
- Data entry
- Exceptions
- Error recovery
- Efficiency

Finding	What happened during the session
Evidence	What participants did or said
Impact	Why it matters to the delivery workflow
Severity	0-4 using the rating scale above

Recommendation	A potential improvement to address the issue
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11. Deliverables

- Usability test plan and moderator script
- Participant profile summary
- Task-level success metrics
- Usability findings with severity ratings
- Key participant quotes
- UX recommendations
- Prioritized improvement opportunities
- Executive summary