

ACCESSIBILITY AUDIT REPORT

1inch Web Application

app.1inch.io

Auditor: Abbas Ali

Audit Method: Manual Screen Reader Testing — Android TalkBack (Single-finger gestures)

Device: Android Mobile (Chrome Browser)

Date: April 2026

Standard: WCAG 2.1 (Web Content Accessibility Guidelines)

Severity Scale: Critical / High / Medium / Low

1. Executive Summary

This report presents findings of a manual accessibility audit conducted on the 1inch decentralized exchange aggregator (app.1inch.io). The audit was performed using Android TalkBack with single-finger swipe gestures, simulating the real-world experience of a blind or visually impaired user.

1inch is a leading DeFi aggregator routing trades across multiple decentralized exchanges. As a complex multi-section platform, its accessibility is critical for enabling blind users to participate in decentralized finance independently.

The audit identified 6 accessibility issues across multiple sections. Issues range from unlabeled buttons to navigation and focus order problems. While core trading functions are labeled, several interactive elements remain inaccessible to screen reader users.

Overall Accessibility Rating: Poor — Significant Barriers Present

2. Audit Scope

The following sections of the 1inch web application were tested:

- Main navigation and header elements
- Navigation drawer and side menu
- Trade section — Swap, Limit, Market, Terminal tabs
- Portfolio section and wallet connection flow
- Cookie consent banner
- Wallet connection modal — all wallet options
- Full-page scroll from top to bottom

Areas not tested in this audit:

- Token swap transaction flow (requires connected wallet)
- Chart and Active Tx sections

- History section
- Advanced DeFi features — Fusion and Limit Orders

3. Testing Methodology

All testing was conducted manually using the following tools and techniques:

- Screen Reader: Android TalkBack — latest version
- Navigation Method: Single-finger swipe gestures (standard TalkBack navigation)
- Browser: Chrome for Android
- Heading Navigation: Tested using TalkBack heading-by-heading navigation mode
- Button Check: Focus placed on each element to verify TalkBack announcement
- Focus Order Verification: Sequential swipe through entire page
- Wallet Connection Flow: Accessed via Portfolio section

No automated testing tools were used. All findings are based on direct screen reader interaction by a blind auditor with lived experience using TalkBack daily.

4. Positive Findings

The following elements passed accessibility testing and function correctly with TalkBack:

| Element | TalkBack Announcement | Status |
|---------------------|--------------------------------------|--------|
| Swap Tab | Announces correctly as tab | Pass |
| Limit Tab | Announces correctly as tab | Pass |
| Market Tab | Announces correctly as tab | Pass |
| Terminal Tab | Announces correctly as tab | Pass |
| Portfolio Tab | Announces correctly as tab | Pass |
| Get Started Button | Announces as button with label | Pass |
| Ledger Wallet | Announces correctly in wallet screen | Pass |
| Binance Wallet | Announces correctly in wallet screen | Pass |
| WalletConnect | Announces correctly in wallet screen | Pass |
| Trust Wallet | Announces correctly in wallet screen | Pass |
| More Wallets | Announces correctly | Pass |
| Terms of Use Link | Announces as link | Pass |
| Privacy Policy Link | Announces as link | Pass |

| | | |
|----------------|--------------------------------------|------|
| I Agree Button | Announces correctly in cookie banner | Pass |
| Decline Button | Announces correctly in cookie banner | Pass |

5. Accessibility Issues Found

A total of 6 accessibility issues were identified. Each is documented below with location, impact, and recommended fix.

Issue 1 — Two Unlabeled Buttons on Main Interface (Critical)

| Field | Details |
|-----------------|---|
| Location | Main interface — near top navigation area |
| Element Type | 2 interactive buttons — purpose unknown |
| TalkBack Output | Announces Unlabeled for both buttons |
| WCAG Criterion | 4.1.2 Name, Role, Value (Level A) |
| Severity | Critical |
| Impact | Users encounter two buttons immediately on page load with no indication of their purpose. Activating them produces unpredictable results. |
| Recommended Fix | Add descriptive aria-label to each button explaining its function clearly. |

Issue 2 — Unlabeled Swap Direction Button in Trade Section (Critical)

| Field | Details |
|-----------------|--|
| Location | Trade section — between Pay and Receive token fields |
| Element Type | Swap direction toggle button |
| TalkBack Output | Announces Unlabeled — no descriptive label |
| WCAG Criterion | 4.1.2 Name, Role, Value (Level A) |
| Severity | Critical |
| Impact | This button controls the direction of the token swap — a core trading function. A blind user cannot identify or use this button confidently. |
| Recommended Fix | Add aria-label such as Swap token direction to this button. |

Issue 3 — Unlabeled Buttons Near Price Options in Trade Section (High)

| Field | Details |
|-----------------|---|
| Location | Trade section — near Spot, plus 1 percent, plus 5 percent price options |
| Element Type | Multiple unlabeled interactive buttons |
| TalkBack Output | Announces Unlabeled |
| WCAG Criterion | 4.1.2 Name, Role, Value (Level A) |
| Severity | High |
| Impact | Users navigating the trade section cannot understand these buttons. This prevents blind users from setting price conditions for their trades. |
| Recommended Fix | Add clear aria-label to each button describing its trading function. |

Issue 4 — Unlabeled Close Button in Portfolio Section (High)

| Field | Details |
|-----------------|---|
| Location | Portfolio section — top of page close button |
| Element Type | Close button (X icon) |
| TalkBack Output | Announces Unlabeled |
| WCAG Criterion | 4.1.2 Name, Role, Value (Level A) |
| Severity | High |
| Impact | Blind users cannot dismiss or navigate away from the Portfolio section using this button as its purpose is not announced. |
| Recommended Fix | Add aria-label such as Close portfolio or Go back to this button. |

Issue 5 — Unlabeled Buttons Near Privacy Policy in Wallet Connection (High)

| Field | Details |
|-----------------|---|
| Location | Wallet connection screen — near Privacy Policy and Last Update text |
| Element Type | 2 unlabeled interactive buttons |
| TalkBack Output | Announces Unlabeled for both buttons |

| | |
|-----------------|---|
| WCAG Criterion | 4.1.2 Name, Role, Value (Level A) |
| Severity | High |
| Impact | Users attempting to connect a wallet encounter unlabeled buttons near legal text. This creates confusion in a critical user flow. |
| Recommended Fix | Add descriptive aria-label to each button. Use aria-hidden if they serve no interactive purpose. |

Issue 6 — Focus Order and Heading Navigation Issues (Medium)

| Field | Details |
|-----------------|---|
| Location | Site-wide — entire page |
| Element Type | Focus order and heading navigation |
| TalkBack Output | Heading navigation jumps unexpectedly, skipping content sections |
| WCAG Criterion | 2.4.3 Focus Order (Level A) and 1.3.2 Meaningful Sequence (Level A) |
| Severity | Medium |
| Impact | When navigating by headings, TalkBack jumps from top sections directly to bottom content, skipping important middle sections. Slide indicators do not announce current position. This makes page structure confusing. |
| Recommended Fix | Review heading hierarchy and ensure all content sections have proper heading markup. Add aria-label to slide indicators showing current position. |

6. Issues Summary

| Issue | Location | Severity |
|------------------------------------|--------------------------------------|----------|
| 1. Two Unlabeled Buttons | Main interface — top navigation area | Critical |
| 2. Unlabeled Swap Direction Button | Trade section — Pay/Receive fields | Critical |
| 3. Unlabeled Price Option Buttons | Trade section — Spot/+1%/+5% area | High |
| 4. Unlabeled Close Button | Portfolio section — top of page | High |
| 5. Two Unlabeled | Wallet connection — Privacy Policy | High |

| | | |
|--------------------------------------|-----------|--------|
| Wallet Screen Buttons | area | |
| 6. Focus Order and Navigation Issues | Site-wide | Medium |

7. Recommendations

To improve TalkBack accessibility on the 1inch web application, the following actions are recommended:

- Audit all icon-only and visual-only buttons across the platform and add descriptive aria-label attributes.
- Implement a strict accessibility labeling policy — every interactive element must have a meaningful accessible name before deployment.
- Fix heading hierarchy to ensure logical sequential structure across all sections.
- Add proper aria-label or aria-current attributes to carousel and slide indicators.
- Test all critical user flows with a real screen reader user before each release.
- Follow WCAG 2.1 Level AA as the minimum standard across all interactive components.

8. Auditor Note

This audit was conducted by Abbas Ali, a blind accessibility specialist and TalkBack user based in Pakistan. All findings are based on direct first-hand experience navigating the 1inch application using TalkBack as the primary means of device interaction.

1inch is a powerful DeFi tool, but its current accessibility barriers prevent blind users from using it independently and safely. With targeted fixes, 1inch can become a truly inclusive platform for all DeFi participants.

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End of Report