

Station 4 Ringdown Replacement

Executive Summary

Station 4's alerting system was still operating on its **original wiring and speakers (25+ years old)**. Those components had begun to fail, putting reliable call alerting at risk. This project replaces that aging infrastructure so **every call is promptly and consistently delivered to all areas of the station**.

Work is well underway—**re-wiring is nearing completion and speakers are being installed now**. We expect the system to be **live no later than November 21, 2026**.

Background & Need

- **Aging, failing infrastructure:** Original wiring and speakers had reached end-of-life, creating reliability risks for call alerting.
- **Continuity of operations:** The core objective is to **ensure every call reaches all areas of the station without delay**, day and night.
- **Modernization with crew input:** The replacement leverages **modern, proven technology** and was **designed with line personnel input** gathered during station walk-throughs to determine practical device locations.

What We're Installing (Plain Language)

- **Networked powered speakers throughout the station** (dorms, common areas, apparatus bay) so **all areas receive calls**.
- **Paging/bridge device** that **takes the audio from the ringdown and properly disperses it to the speaker system**.
- **Managed PoE network switch** sized with adequate power headroom for current endpoints and future growth.
- **LED can lights** in dorms/private areas for a clear, calm visual cue.

- **Clean, labeled cabling and a small wall rack** to simplify future service and minimize downtime.

Roles & Responsibilities

- **Planning & ordering:** District IT (Sukh Singh).
- **Implementation (co-worked):** Acco Electric and District IT are jointly handling installation, configuration, final testing, and training.
- **Algo (Support Only):** Providing advice, support, and guidance on best practices; not directly performing implementation.

Engagement with Line Personnel

- Conducted walk-throughs with crews to determine practical placement for speakers and lights.
- Final volume and timing adjustments will be made during commissioning with on-shift crews.

Current Status & Schedule

- **Re-wiring:** Nearing completion.
- **Device installation:** In progress; speakers are being mounted and brought online.
- **Commissioning:** Room-by-room tuning, live call tests, brief training, and handover.
- **Go-Live Target: No later than November 21, 2026.**

Budget to Date (Itemized)

We have **aimed to be cost-effective while utilizing best-available, proven technologies**. We also **spoke with neighboring departments** undertaking similar work; our total cost is **well below** what they report for comparable projects.

- Acco Electric — Station 4 ringdown wiring and terminations: **\$14,602.02**
- **PoE switch (purchased by Acco Electric): \$700.00**
- ALGO 8180G2 IP audio alerters (8 units): **\$3,117.60**
- ALGO 8301 paging/bridge device: **\$430.19**
- ALGO 8198/1198 ceiling + satellite speakers: **\$4,112.66**
- ALGO 1204 in-room volume control buttons (10 units): **\$2,768.40**
- LED can-light kits and accessories: **\$448.55**

Total to date: \$26,179.42

(Supporting quotes and invoices are included in the packet.)

Expected Outcomes for Station 4

- **Reliable, consistent alerting to all areas** of the station.
- **Straightforward maintenance** via labeled cabling, standard parts, and organized documentation.
- **Scalable design** that accommodates future room or device additions with minimal disruption.

Risks & Mitigations

- **Audio comfort and clarity:** Tune room-by-room with crews during commissioning; adjust as needed.