



Communicating in Noisy Environments

On construction sites, high noise makes verbal communication unreliable and increases the chance of errors. This guide summarizes clear, practical steps to ensure critical information is sent, received, and confirmed. Use it during pre-job briefings, lifting/rigging operations, and any task where machinery or tools raise noise levels.

Why it matters

- Noise (often >85 dB on sites) masks speech, alarms, and warnings.
- Misheard instructions lead to rework, near-misses, and injuries.

Before work begins (Plan & prep)

- Pre-job brief: Identify noisy tasks and who needs to communicate.
- Assign roles: Lead signaler/spotter; backup.
- Channels: Set primary radio channel and a backup channel.
- Test gear: Radios, headsets, batteries, chargers.
- Signals: Agree on hand signals and light/beacon meanings.
- Zones: Mark hazard and exclusion zones with signage.

During work (Operate)

- Keep it short: One idea per message. Use plain words.
- Closed-loop communication: Sender gives instruction → receiver repeats back → sender confirms.
- Standard phrases: STOP / HOLD / CLEAR / UP / DOWN / SLOW / EMERGENCY.
- Authority to stop: Anyone can call STOP if unsure.

Two-way radio tips

- Press PTT, wait 1 second, then speak clearly.
- Use call signs: "Crane One, this is Rigging Lead...".
- Keep 10-15 cm from mic; shield from wind.
- Confirm receipt: "Copy/Received". If not clear, say "Say again."

Hand signals (core set)

- Stop: One hand up, palm out.
- Emergency stop: Both arms crossed overhead.
- Hoist/Up: Index finger circles upward.
- Lower/Down: Index finger circles downward.
- Swing/Rotate: Arm extended, hand rotates.

- Come toward me / Move away: Hands beckon / push away.

PPE & tech aids

- Use hearing protection with communication (earmuffs/earplugs with ambient listen-through or comms).
- Consider noise-canceling or bone-conduction headsets.
- Use visual aids: LED beacons, cue lights, message boards.

Emergencies & alarms

- Pre-define signals (e.g., 3 whistle blasts = STOP & muster).
- Keep one radio channel reserved for emergencies.
- Point out muster location in the pre-job brief.

Training & culture

- Toolbox talks: practice radio protocol and hand signals.
- Run drills in real noise conditions.
- After-action reviews; capture lessons learned.

Quick reference — Do

- Face the person, reduce distance, and use gestures.
- Repeat back and wait for confirmation.
- Pause noisy tools during critical instructions.

Quick reference — Don't

- Guess what was said — stop and clarify.
- Use personal earbuds/phones while working.
- Overload messages — keep them short.