

SafetyPulse | Indoor Install Guidance

Overview

This document provides general guidance for installing our [TrackMix Wifi](#) indoors on your site.

For outdoor Installation: see relevant [document](#).

Safety Pulse Outdoor Installation Guide:

The **Reolink TrackMix LTE Plus 2** is a 4G LTE dual-lens PTZ camera designed for solar/battery-powered operation. It is ideal for construction sites with no reliable power or WiFi infrastructure. Key strengths include IP65 weather resistance, cellular connectivity, long battery life (up to weeks in motion-triggered mode), and auto-tracking for monitoring dynamic outdoor environments.

Camera Specifications to Consider:

These features directly influence placement to maximize coverage, tracking effectiveness, connectivity, and reliability:

- **355° pan range + 90° tilt with adjustable speeds.**
- **Field of View (FOV):** Wide-angle lens provides up to 104° horizontal / 60° vertical, narrowing when zoomed. This supports wide-area surveillance from elevated or central positions.
- **DC 12V power adapter:** Requires proximity to a standard AC outlet or use of a suitable extension cable.
- **Auto-Tracking and Smart detection** (person/vehicle/animal).
- **Color night vision (spotlights) + IR (up to 30m):** Effective in low-light indoor areas; spotlights can deter unauthorized activity or illuminate dark corners.
- **Wall or ceiling mounting** via included template and base supports versatile positioning; avoid upside-down installation to maintain proper function (though less critical indoors).
- **Compact size** and operating temp (-10°C to +55°C).

Guidance on Best Installation locations:

Aim for elevated, central or corner placements (typically 10–15 ft high on walls or ceilings) to provide an unobstructed overview, reduce tampering/vandalism risk, improve tracking accuracy over distance, and minimize blind spots from worker height or equipment.

- Mount in **central or corner locations** within open workspaces, aisles, or main floors to maximize the 355° pan coverage of high-traffic or activity-heavy areas.
- Select locations with **strong WiFi coverage**; test signal strength (prefer 5 GHz where possible for performance); avoid metal-heavy areas or far corners that weaken the signal.
- For multi-camera setups, ensure **overlapping coverage** in critical safety zones for redundancy and continuous monitoring.
- Ensure **clear line-of-sight** for tracking: Avoid beams, overhead pipes, tall machinery, moving parts, or shelving that could block pan/tilt rotation or obscure the target during auto-tracking.
- Option to position over or near **entrances, exits, loading docks, or access points** to monitor worker entry/exit, material movement, and potential safety incidents.
- Option to factor in a clear view of **machinery, workstations, hazardous zones, or conveyor systems** to track operator activities, detect anomalies, and support safety compliance.
- Option to cover **storage areas, material handling zones, or inventory racks** to monitor for theft, improper stacking, or access issues.
- Don't ignore **blind spots or high-risk areas**, such as corners, stairwells, or temporary work zones on construction sites.
- Place **near a reliable AC power outlet** to keep cabling short and safe (secure cables to prevent trips or damage in industrial settings).
- In dusty environments, plan for **occasional lens cleaning**.

Guidance on Installation Distance:

The Reolink TrackMix WIFI features a dual-lens system:

- Wide-angle lens: 102° horizontal FOV – used for broad overview and initial detection.
- Telephoto lens: 37° horizontal FOV – provides zoomed-in detail when auto-tracking a person/vehicle.

The table below for installing the camera at distance shows:

- Recommended distances required for the wide-angle lens to fully cover the listed worksite viewing area.
- What width the telephoto lens covers when the camera is placed at those same distances.

Dist. from Worksite	W-A Width Cov.	Telephoto Width Cov.	Typical Indoor Apps
10 ft	26 ft	7 ft	Small rms, workst., tight corners
15 ft	38 ft	10 ft	Narrow aisles, doorways, entry points
20 ft	51 ft	14 ft	Std. bays, assembly stations
25 ft	64 ft	17 ft	Med. storage racks, machine areas
30 ft	77 ft	21 ft	Wider mfg floors, conveyor lines
35 ft	90 ft	24 ft	Large open workspaces
40 ft	102 ft	28 ft	Hallways, loading zones
50 ft	128 ft	34 ft	Large mfg floors
60 ft	154 ft	41 ft	Whse aisles, inventory sections
75 ft	192 ft	52 ft	Expansive indoor areas
100 ft	256 ft	69 ft	Very large halls or full site overviews

Questions?

Contact your CompScience representative or email helpdesk@compscience.com.