CAMERAS

Camera placement and angles for counting

Where to mount cameras for people, vehicle and face counting, the angles each profile expects, and the smallest object it sees.

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Angles each profile expects

Angles are measured from straight down (0°) to looking straight ahead (90°).

- Basic motion, overhead: 0–20°.
- Basic motion, tilted: 20–70°.
- AI people and vehicles: 20–90°.
- AI people: 0–90°.
- AI faces: 80–90°.

Choose the profile from the angle the camera actually has, not from what the space is called.

People at doors and gates

- The most accurate count is from directly overhead, because people cannot hide behind each other. Use an overhead profile with it.
- A wall-mounted camera works too: mount it high, looking along the direction people walk, so each person is seen for a few metres before and after the line.
- Keep the doorway away from the edge of the frame. Objects need to be tracked for a moment either side of a line.

Vehicles

- Look along the road or driveway rather than straight across it, so vehicles stay in view for longer.
- Front or rear views need the vehicle to be smaller in the frame than a side-on view does (see below).

- For speed, leave room for two lines several metres apart, well inside the frame.

Faces (age and gender estimates)

Faces need a near face-on view: the camera close to head height, looking along the direction people walk, and the stream at 720p or 1080p. See **Age and gender estimates** (crowdsense.events/knowledge-base/desktop/face-gender-age) before you plan one.

The smallest object it will count

- AI, vehicle front or back: at least 4% of frame width
- AI, vehicle side-on: at least 10% of frame width
- AI, person: at least 3% of frame width
- AI, face: at least 4% of frame width
- Basic motion, any moving object: at least 3% of frame width, absolute minimum

Below these sizes, counts fall away. Move the camera closer, zoom in, or put the line where objects look bigger.

Avoid

- Glare: windows, low sun and wet surfaces that wash the picture out.
- The far side of a steep angled view, where people and vehicles are tiny.
- Counters, shelves, pillars or signs that hide most of an object as it crosses.
- Automatic doors, lifts, trees and screens in view: exclude them with the area of interest.

Still stuck?

Email **support@crowdsense.events** with your account reference (it starts CS-D-), the computer's name and a screenshot of what you see. For sales questions, **contact us** (crowdsense.events/contact).