

# Articulated Trailer Camera System Install & Validation Checklist

Four-phase rollout guide for fleet operators — pilot, install, validate and maintain.

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Work through each phase in sequence. Tick each item on completion. Share with your Fleet Safety lead, Operations manager, Approved installer and Drivers' rep before starting.

## Phase 0 — Pre-procurement: Baseline & Decision

- ☐ Record current incident/near-miss data (incidents per 100,000 km)
- ☐ Document average trailer lengths and duty cycles
- ☐ Define measurable objective (e.g. reduce reversing incidents by X% in 12 months)
- ☐ Decide data retention policy and appoint GDPR contact
- ☐ Shortlist system types against use-case (see comparison table in guide)

## Phase 1 — Pilot (2–4 vehicles, 4 weeks)

### Vehicle selection

- ☐ 1–2 high-risk vehicles (urban / stop-start routes)
- ☐ 1–2 long-haul artics with regular trailer swaps
- ☐ At least one vehicle tested with loaded trailer

### Acceptance criteria

- ☐ Uptime ≥98% during duty hours
- ☐ Image clarity adequate for claim evidence (day and night)
- ☐ Driver sign-off on screen usability
- ☐ Trailer swap reconnect within 2 minutes (wireless) or documented for wired

### Pilot metrics to collect weekly

| Metric                    | Week 1 | Week 2 | Week 4 |
|---------------------------|--------|--------|--------|
| Reversing incidents       |        |        |        |
| Uptime % (duty hours)     |        |        |        |
| False alerts / week       |        |        |        |
| Driver usability score /5 |        |        |        |
| Footage retrievals tested |        |        |        |

## Phase 2 — Installation Checklist (per vehicle)

Vehicle ID / Reg: \_\_\_\_\_

Installer name: \_\_\_\_\_

Date / Time: \_\_\_\_\_

**Pre-install checks**

- ☐ Confirm VIN, vehicle type and battery topology documented
- ☐ Mounting positions agreed and marked on vehicle diagram
- ☐ Correct IP-rated connectors and conduit in stock
- ☐ Anti-vibration mounts confirmed for construction / rough terrain vehicles

**During installation**

- ☐ Cables routed with slack loops at coupling &#8212; no tight bends
- ☐ All connectors sealed and labelled
- ☐ Conduit and strain relief fitted at fifth-wheel / coupling
- ☐ Mounting brackets torqued to spec; photos taken
- ☐ SD card serial noted in asset register

**Post-installation sign-off**

- ☐ Image present on all channels: confirmed on monitor
- ☐ Recorded 30-second daylight reverse manoeuvre &#8212; clip saved
- ☐ Recorded 30-second night reverse manoeuvre &#8212; clip saved
- ☐ Trailer swap performed &#8212; auto-pair / reconnect confirmed
- ☐ Footage retrieval tested &#8212; time under 10 minutes
- ☐ 30-minute duty simulation uptime test: Pass / Fail
- ☐ Driver sign-off obtained
- ☐ Installation photographs filed with vehicle record

Driver signature: \_\_\_\_\_

**Phase 3 — Ongoing Maintenance Schedule**

| Frequency              | Task                                                                              | Done by     | ✓ |
|------------------------|-----------------------------------------------------------------------------------|-------------|---|
| Daily (driver)         | Screen powers on, image present on all channels, lens visually clear              | Driver      |   |
| Weekly (tech)          | Clean lenses, inspect mounts and coupling cables, review 5% footage sample        | Technician  |   |
| Quarterly (tech)       | Firmware update, replace worn cables, full KPI review vs baseline                 | Technician  |   |
| Incident (safety lead) | Extract footage, document chain-of-custody, share with insurer/police as required | Safety lead |   |

**Key red flags to watch for**

- Wireless link drops on long trailers — test before sign-off, not after.
- Cable chafing at the coupling — route with slack and sealed conduit.
- Drivers switching screens off — simplify UI and provide training.
- Footage unusable after spray — specify heated lenses and hydrophobic coatings.
- Install passes visual check but fails at night — always test in operational conditions.
- No maintenance SLA — downtime eats ROI faster than the hardware cost.

