

Northern Territory Taxi & Minibus Security Camera Specifications

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1. Introduction

The following specifications identify the minimum requirements necessary for a Camera System that is supplied and installed into a point to point commercial passenger vehicle in the Northern Territory, including a taxi and minibus. All Camera Systems installed in compliance with these specifications must continue to comply with all specifications contained herein for the life of the approval of the Camera System. Where a system is deemed as no longer compliant, any new system installed shall comply with the specifications that are current at the time.

Only Camera Systems which are approved by the Director of Commercial Passenger (Road) Transport can be installed and used to record images and audio of passengers of the vehicle.

For information on how to apply for approval of a Camera System, please refer to Information Bulletin CPV28 "Security Cameras in Taxis and Minibuses".

2. System Construction and Fitting

- 2.1. The Camera System is not to have any sharp edges or protrusions, which may cause injury to the driver or any passenger when fitted to a vehicle.
- 2.2. The Camera System must be capable of functioning as originally intended anywhere within the Northern Territory, having regard to possible temperature and humidity extremes experienced by in-service taxis and minibuses as well as variations in road conditions, such as heavily corrugated unsealed roads and dusty environments.
- 2.3. The Camera System including all connection points and exterior camera components must meet or exceed an IP67 rating¹.
- 2.4. All components of the Camera System must be resistant to impact, shock, vandalism, accidental damage and able to withstand vibrations experienced through the operation of a taxi or minibus.
- 2.5. The Camera System must be fixed securely in place, hardwired to the vehicle's electrical system and resistant to any tampering.
- 2.6. The Camera System must not be affected by, or cause any, electromagnetic or power interference to or from any other in-vehicle system.
- 2.7. The Camera System must have a self-checking function with at least one discernible visual indicator which shows when the system is functioning and at least one discernible indicator which shows when there is a fault with the system.
- 2.8. All Camera Systems installed on or after 1 January 2020 must be capable of clearly recording and storing uninterrupted audio captured from within the vehicle. This audio must synchronise with captured images.
- 2.9. The recording of audio should be designed to record only conversations involving the driver of the vehicle e.g. audio recording functionality is to be active on the Primary Camera only (closest to the driver) and not on any secondary or Exterior Cameras.

¹ Australian Standard - AS 60529-2004

- 2.10. If the Camera System has only one Exterior Camera, this must be fitted above the driver's door and be positioned so that it captures images of any person outside of the vehicle and within proximity to the driver's side window.
- 2.11. All Camera Systems installed on or after 1 January 2020 must have the capability for the recordings to be:
 - 2.11.1. accessible and retrievable (downloadable) remotely via mobile phone network or other similar means whilst the vehicle is operating for hire or reward; or
 - 2.11.2. uploaded and stored remotely in real time (or near to) to a cloud-based storage database.
- 2.12. The Camera System must include the facility to clearly communicate to all persons entering, or considering entering the vehicle, that recorded images and audio may be captured of any person in or near to the vehicle. As a minimum, appropriate signage should be affixed to all passenger ingress points of the vehicle which provides sufficient information to alert persons that images and audio may be captured inside the vehicle. Consideration should also be given to providing appropriate advice to persons living with a disability, including those who are vision impaired.

3. Camera System Operation

- 3.1. The Camera System must be fully operational and recording images in compliance with these specifications at all times while the vehicle is operating for hire or reward, including, for example, when the vehicle is positioned at a taxi rank for extended periods. To comply with this clause, Camera Systems should be programmed and wired to the vehicle's electrical system in such a way to allow continued recording when the vehicle's engine is not running.
- 3.2. When operating for hire or reward, the Camera System must not have the capacity to be switched off, disabled or otherwise prevented from capturing recordings in accordance with the specifications.
- 3.3. Camera System recordings must be capable of being recovered in the event of loss of power, damage or destruction to the Camera System.
- 3.4. The Camera System must, at all times, capture a clear view of the driver and all passengers from their waist up when seated. Images of all occupants of the vehicle must be of sufficient quality to enable easy identification of any occupant when viewed on readily available equipment e.g. computer monitor.
- 3.5. The Camera System must record images at a minimum of five (5) frames per second at all times.
- 3.6. The Camera System must transfer (download) 24 hours of recorded images and audio to an external storage device within 15 minutes, for each camera fitted.
- 3.7. The Camera System must operate so that the oldest recordings are automatically overwritten first.
- 3.8. The Camera System must self-test for faults and automatically detect and report any functional or operational faults, including loss of image or audio capture.

3.9. The Camera System (including any integrated remote storage device, such as cloud storage) must keep a log of all events for a minimum of 12 months including, but not limited to:

- 3.9.1. system faults;
- 3.9.2. times that the system was accessed, the reasons for access and by whom;
- 3.9.3. the time the system was activated and deactivated;
- 3.9.4. software updates; and
- 3.9.5. image and/or audio downloads (retrievals).

NOTE: These event logs must be accessible/retrievable only by authorised persons, Police and Inspectors and must not have the capacity to be deleted or altered.

3.10. When fitted to a taxi, the Camera System must log each time the taximeter is engaged by the driver at the start of each journey involving a passenger and each time it is disengaged i.e. the system must monitor the status of the taximeter.

4. Images and Audio

- 4.1. The Camera System must be of 720P resolution or higher and record images at the Australia and New Zealand Police Advisory Agency (ANZPAA) recommended resolution standard for facial recognition for CCTV systems, being a standard of Face Identification of 120%.²
- 4.2. The resolution and clarity of image components in recordings must be consistent in all lighting conditions from darkness (0 lux) through to bright sunlight (50,000 lux).
- 4.3. All recordings must have the following imprinted on them (without obstructing the image of any person seated in the vehicle):
 - 4.3.1. Vehicle registration number which the Camera System is installed in;
 - 4.3.2. Date and time in Australian Central Standard Time (CST) within 1 second; and
 - 4.3.3. Location in coordinates with latitude and longitude accurate within a 10 metre distance at least 95% of the time.
- 4.4. The Camera System must record audio of a quality and volume so that the contents of any conversation between the driver and a passenger is easily discernible when played with image recordings. Audio recording components must have the capacity to clearly record such conversations, irrespective of any background noise which may be experienced by a taxi or minibus such as road, traffic, wind noise and electrical interference.
- 4.5. Audio recordings must be time synchronized with recorded images to within 20 milliseconds.
- 4.6. Images and audio must be able to be converted to commonly used video files using the proprietary software or download facility supplied with the camera system.

² [Australia and New Zealand Police Advisory Agency Recommendations for CCTV Systems](#)

5. Storage, Security and Access to Recordings

- 5.1. Access to recordings (and any proprietary software/equipment) must be restricted to:
 - 5.1.1. Authorised persons;
 - 5.1.2. The supplier or agents of the supplier (for installation and maintenance purposes only); and
 - 5.1.3. Police members and Inspectors appointed under the *Commercial Passenger (Road) Transport Act 2018*.
- 5.2. The software and/or download system must be password protected or otherwise encrypted to prevent unauthorised access to recordings. Recordings must not be readily decrypted without using the proprietary/download software.
- 5.3. If a recording, including a downloaded image, is stored on any remote storage device such as a computer or through a cloud-storage provider, appropriate systems must be in place which prevents any unauthorised access to the recording or the removal of the storage hardware from a secure site.
- 5.4. All video/audio recordings are to be retained in the Camera System (in-vehicle) for at least 288 hours (12 days).
- 5.5. All video/audio recordings stored remotely using a cloud-based storage provider, must be retained for a period of 30 days from date of capture. Recordings that may be of evidentiary value should be labelled accordingly and retained for 12 months. All other recordings should be deleted no later than 60 days from the date of capture.
- 5.6. The download system must be capable of being easily accessed without removal of any vehicle components. Where the download system is not readily accessible, a remote hardwired port or local wireless access may be installed, providing these access points have the same level of access protection as specified for the Camera System.
- 5.7. If the Camera System has removable memory, it must be designed so that it prevents unauthorised access to, or removal of, that memory.

6. Supplier Obligations

- 6.1. For any installed Camera System, an operator must ensure the Supplier of the Camera System continues to be capable of:
 - 6.1.1. Providing 'in-country' technical support during normal business hours for any faults or complaints relating to the Camera System; and
 - 6.1.2. Supporting hardware and software components of the Camera System through the reliable (in-country) supply of spare parts and software updates required to maintain the system in accordance with these specifications.
- 6.2. The Supplier of the Camera System must provide to Police and the Department, at no cost, all things necessary for accessing and downloading recordings and event logs. Any supplied software etc. must be able to operate on a commercial, off-the-shelf computer device, using common Microsoft Windows software.

7. Definitions

Term	Definition
Authorised persons	Means any person authorised under regulation 27J of the Taxis Regulations and regulation 18J of the Minibus Regulations
Camera System	Means an approved taxi/minibus security camera system as defined in the Taxis Regulations and Minibus Regulations, and includes, but is not limited to, a control unit, recording unit, camera heads, cables and any other components, including advisory decals, required to make the system operate correctly
CCTV	Closed Circuit Television
CST	The time reference used by GPS receivers (Central Standard Time)
Exterior Camera	Any camera forming part of the camera system which is affixed to the exterior of the vehicle and records images outside of the vehicle
Functioning	Has the same definition as that in the Taxis Regulations and Minibus Regulations
IP67	IP67 Rating means that the device has an ingress protection rating that is resistant against water ingress to a maximum of 1 metre of water for up to 30 minutes, as well as protection against dust ingress
Primary Camera	The main camera attached to the control unit situated in closest proximity to the driver (usually located near to the centre rear view mirror) and the only camera on which any audio recording function is permitted to be active
Recordings	Any images and/or audio captured from the Camera System
Supplier	Any entity which manufactures and/or supplies any Camera System