Transport for London
London Taxi and Private Hire



# Guidelines for Aftermarket Electronic Devices and Equipment in Private Hire Vehicles

17 January 2013 (V2)

## 1. Introduction

- 1.1. Electronic Devices are any electrical device or equipment fitted to vehicles either at the time of manufacture or after the vehicle has been manufactured and registered. Any electronic device must meet with the requirements specified under the European Community Automotive Electromagnetic Compatibility (EMC) Directive 2004/104/EC (as amended).
- 1.2. There are two automotive type approval processes for electronic devices signified by; 'e' marking' and 'CE' marking.
- 1.3. Electronic devices which require 'e' marking are devices which are defined within the directive and described as 'immunity-related'. In general, 'e' marked devices and equipment covers areas which relate to:
  - the direct control of the vehicle
  - driver, passenger and other road user protection
- 1.4. Electronic devices which are 'non-immunity related' are in general terms electrical devices which are not related to the direct control of the vehicle and/or driver, passenger and other road users; these devices are required to comply with the EMC directive regarding 'CE' marking. However, in addition, electronic devices 'CE' marked must be supported by a declaration from the manufacture of the device stating that the device is suitable for use in an automotive environment by meeting the relevant requirements of the automotive directive 2004/104/EC (as amended).
- 1.5. For the purpose of this document and for the licensing of private hire vehicles, some examples of aftermarket electronic devices are listed below, please note, this is not an exhaustive list:-
  - Display Screens
  - DVD Players
  - Audible Speakers
  - Fridges
  - Games Consoles
  - Power Invertors
  - Lighting
  - Satellite navigation
  - Two-way radio
  - CCTV systems
  - Event/Incident data recorders

## 2. Installation

- 2.1. All newly manufactured vehicles have achieved M1 European Whole Vehicle Type Approval following comprehensive safety testing. Changing or adding to the interior of the vehicle can alter the 'type approval' of the vehicle and also have consequences as to what might happen inside the vehicle in the event of a collision.
- 2.2. The purpose of these guidelines is to provide private hire vehicle owners, drivers and operators with guidance as to TfL's requirements in relation to the installation of aftermarket electronic devices.
- 2.3. These guidelines apply to all electronic devices which are installed after the original manufacture and registration of the vehicle.

### 3. General requirements

- 3.1. Due to the wide and diverse variety of vehicles licensed in London and different types of electronic devices and equipment available it is not possible for TfL to offer specific purchase or installation advice in respect of these devices.
- 3.2. Whether an electronic device should be installed is a matter for vehicle owners, drivers and/or operators to consider. In making this decision, TfL considers that a number of matters should be considered including, but not limited to, the following:
  - i. Ensuring that all relevant safety, UK and European Community (EC) legislation is complied with. Appendix 1 contains a list of EC legislation which should be considered, however, this list is not exhaustive.
  - ii. Seeking advice from the original vehicle manufacturer to ensure that the installation of such devices do not affect the warranty or the designed performance or functionality of the vehicle manufacturer's M1 approved driver and passenger safety systems.
  - iii. Ensuring that this guidance is complied with.
  - iv. Consideration of health and safety responsibilities and personal liability to employees, hirers and passengers.
  - v. Informing insurers of the intention to fit such a device/s.

## 4. Specific Requirements

- 4.1. If an electronic device is installed in a vehicle being used for private hire purposes, TfL requires the following specific requirements to be satisfied:
  - i. The installation and/or design of the device must not adversely influence, change or interfere in any way with M1 type approval.
  - ii. Installation and maintenance of the device should be in full accordance with the manufacturer's specification and recommendations.
  - iii. The device installed should not be significantly changed or modified from the original manufactured design. In cases where it is necessary to modify the original design of the device (for example, to facilitate installation of the device in the vehicle), assurances should be sought from the supplier/installer that the modification does not raise any concerns in relation to safety of the device or compliance with the relevant UK or EC legislation.
  - iv. All equipment must be checked regularly and maintained to operational standards, including any repairs after damage.
  - v. Devices must not impede the drivers' all round visibility at any time when in control of the vehicle
  - vi. Devices should not impede entry or egress or present a trip hazard to passengers using the vehicle.

## 5. Compliance

- 5.1. Private hire vehicle owners, drivers and operators should seek to fully comply with these guidelines.
- 5.2. Any additional aftermarket electronic device or equipment installed in the vehicle will require a declaration form (Appendix 2) to be completed, signed and presented at the time of the annual licensing inspection.
- 5.3. If during the annual licensing inspection (or during a compliance inspection) of the vehicle, it is found that these guidelines have not been complied with the vehicle may not be licensed or an existing licence may be suspended.
- 5.4. Electronic device and equipment inspection criteria in Section 13 of the Licensing Inspection Manual will apply.

## **Relevant EC Directives**

TfL believes that the following EC directives (as amended) below are applicable to aftermarket electronic devices or equipment. This is not an exhaustive list but are just some examples of EC Directives which could be adversely influenced or changed following the installation of such a device.

- 1. Does the device have 'e' or 'CE' marking including a signed CE automotive use declaration (2004/104/EC)
- 2. Does the device design/material impose upon the forward/side field of vision? (90/630/EC)
- 3. Does the device design/material impose upon the rearward field of view? (2005/27/EC).
- 4. Are the safety belt anchorages used to secure the device? (2005/41/EC).
- 5. Does the device impose upon any part of a seat belt during normal operation? (2005/40/EC)
- 6. What will be the effect on the head restraints? (78/932/EC)
- 7. What will be the effect in the event of the deployment of a frontal offset airbag? (96/79/EC)
- 8. What will be the effect in the event of deployment of a side/thorax airbag? (96/27/EC)
- 9. Does the weight of the device affect the seat strength (e.g. impact reaction)? (2005/39/EC)
- 10. Are there any sharp edges on the device material or its fittings? (2000/4/EC)
- 11. Is the device material safe for use inside a vehicle? (92/22/EC)

### **Relevant UK Legislation**

- 1. Road Vehicle (Construction & Use) Regulations 1986
- 2. Road Vehicle Lighting Regulations 1989
- 3. Road Vehicle (Construction & Use) Regulations 1986 (Reg 109) (drivers' view of display screen)
- 4. Road Vehicle (Construction & Use) Regulations 1986 (Reg 100) (general safe construction and use of vehicle)

## Appendix 2

#### **Declaration Form**

I confirm that I have received assurances from the supplier/installer of the electronic device or equipment that the installation (and/or modification(s) made to facilitate the installation) of this device to the vehicle stated below will not in anyway contravene the relevant UK or EC legislation and/or will not interfere with or adversely affect the performance of the driver and/or passenger safety systems.

Date: \_\_\_\_\_