ISO/DTS TS 8231

ISO/TC 22/SC 35/WG 2/ WG3

Secretariat: CUNI UNI

Date: 2025-04-14

Road vehicles – Visibility – Requirements and recommendations for automotive interior display systems

DTS stage

Warning for WDs and CDs

This document is not an ISO International Standard. It is distributed for review and comment. It is subject to change without notice and may not be referred to as an International Standard.

Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

Véhicules routiers — Visibilité — Exigences et recommandations pour les systèmes d'affichage dans l'habitacle des véhicules

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: + 41 22 749 01 11
EmailE-mail: copyright@iso.org
Website: www.iso.orgwww.iso.org

Published in Switzerland

Contents

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documentsdocument should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawnISO draws attention to the possibility that some of the elementsimplementation of this document may beinvolve the subjectuse of (a) patent(s). ISO takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, ISO had notreceived notice of (a) patent(s) which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at www.iso.org/patents. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 22, *Road Vehiclesvehicles*, Subcommittee SC 35, *Lighting and Visibilityvisibility*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

Display systems are increasingly replacing traditional instrument clusters in cars, trucks and other vehicles. Transportation information and vehicle control systems (TICS) are now being integrated with one or two digital display systems to provide vital information to drivers and passengers.

This display system can be located anywhere in front of the driver as the instrument cluster display, in the centre of the vehicle, in front of the passenger on front or rear seats, or throughout the dashboard, or anywhere in the vehicle.

The display system is intended to provide vehicle data, navigation, infotainment and other information such as comfort and warning systems.

In the past, display systems were designed for static applications in the home or workplace, such as TV screens or computer monitors. Mainly There are many IEC TC 110 and IEC TC 108 have workedstandards on electronic display systems and established many standards.

An in-vehicle display system is not only exposed to the elements, but also to constant shock and vibration. A touch screen will assemble fingerprint marks. Therefore, it is important that it can withstand cleaning solutions, beverage and food spills. In addition, the display is subjected to misuse like scratches and dents. Large displays put a significant area of glass in front of the passenger. The glass should not cause any bodily injury if it breaks for any reason. The in-vehicle display system should function in all the environmental operating and storage conditions for which the vehicle is designed. The display should also remain readable and operable even after years of use.

The IEC has published standards for display device systems for video, TV and IT, covering operational, optical and safety requirements. IEEE has published reports and articles about in-vehicle display technology, recognizing the special requirements for displays as information systems in vehicles. The German Display Forum (DFF) has established a European Original Equipment Manufacturer (OEM)) specification for in-vehicle displays. Another source of information about optical measurements can be found in the Society for Information Displays (SID) and its International Committee for Display Metrology (ICDM) standard.