

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE



**Multimedia systems and equipment for vehicles – Surround view system –  
Part 1: General**

**Systèmes et équipements multimédias pour véhicules – Système de vision  
panoramique –  
Partie 1: Généralités**





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IEC Secretariat  
3, rue de Varembe  
CH-1211 Geneva 20  
Switzerland

Tel.: +41 22 919 02 11  
[info@iec.ch](mailto:info@iec.ch)  
[www.iec.ch](http://www.iec.ch)

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SURROUND VIEW SYSTEM –****Part 1: General****FOREWORD**

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This first edition cancels and replaces IEC TS 63033-1 published in 2017. This edition constitutes a technical revision.

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Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

A list of all parts in the IEC 63033 series, published under the general title *Multimedia systems and equipment for vehicles – Surround view system*, can be found on the IEC website.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at [www.iec.ch/members\\_experts/refdocs](http://www.iec.ch/members_experts/refdocs). The main document types developed by IEC are described in greater detail at [www.iec.ch/standardsdev/publications](http://www.iec.ch/standardsdev/publications).

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## INTRODUCTION

The purpose of this document is to specify the model for generating the surrounding visual image of the surround view system, which provides drivers with an image of the car's surroundings. The surround view system is characterised by audio-visual monitoring and recording, which is part of the car's multimedia equipment.

When manoeuvring, the driver relies on the images provided by the rear-view monitor for parking assistance, the blind spot monitor for displaying views of the blind spots at intersections with poor visibility, and the bird's-eye view monitor. But each surround view system provides a different viewpoint to the driver. It's a heavy burden for a car driver to switch between these systems and quickly recognize the multiple fields of view. And the fields of view are limited to these camera systems, and they cannot freely change the viewpoint depending on the driving situation. Thus, the usage range of these systems is limited to such manoeuvres as parking assistance. Furthermore, on commercial vehicles such as trucks and buses, and special vehicles such as construction machinery and agricultural machinery, the usage range of these systems is even more limited. Nobody can assist drivers of large vehicles in ensuring the car's correct position.

With a surround view system, it is possible to quickly ensure the car's proper positioning in various driving situations. And not only for passenger cars, but good positioning can also be quickly ensured for commercial vehicles and special vehicles.

This document specifies the model for generating the surrounding visual image of the surround view system. IEC 63033-2 specifies the information sets that are provided by the surround view system, and recording methods for that information and visual images. IEC 63033-3 specifies the measurement methods of surrounding visual images for the surround view system.