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INTERNATIONAL STANDARD

colour inside

3D display devices –
Part 1-2: Generic – Terminology and letter symbols

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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FOREWORD

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IEC 62629-1-2 has been prepared by IEC technical committee 110: Electronic displays. It is an International Standard.

This second edition cancels and replaces the first edition published in 2013. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

a) added new terms related to holographic display and light field display;
b) added new terms on the performance specifications used in other IEC 62629 series documents;
c) added Annex C to explain the depth perception in 3D displays in more detail.

The text of this International Standard is based on the following documents:

Draft	Report on voting
110/1287/CDV	110/1330/RVC

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

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. The main document types developed by IEC are described in greater detail at www.iec.ch/standardsdev/publications.

In this standard, the following print types are used:

- *Terms defined within Clause 3: in italics type.*

A list of all the parts in the IEC 62629 series, under the general title *3D display devices*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

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3D DISPLAY DEVICES –

Part 1-2: Generic – Terminology and letter symbols

1 Scope

This part of IEC 62629 provides a list of the terminologies that are frequently used in describing 3D display technologies in the IEC 62629 series. Terms for various 3D display technologies on stereoscopic, autostereoscopic, volumetric, and holographic displays are included.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at http://www.electropedia.org/
- ISO Online browsing platform: available at http://www.iso.org/obp

3.1 General terms

3.1.1
3D display
display device giving depth perception with physiological depth cues

Note 1 to entry: Physiological depth cues include accommodation, convergence, binocular parallax, and motion parallax. The 3D display provides users with all or some of the physiological depth cues so that they can perceive depth. Physiological depth cues should be distinguished from pictorial depth cues which can also be provided by the usual 2D displays. Pictorial depth cues are features in an image that give a hint of the depth. Examples of pictorial depth cues are texture gradient, shadow, occlusion, and vanishing lines. See Annex C.

3.1.2
stereoscopic display
3D display providing binocular parallax

Note 1 to entry: See *autostereoscopic display* (3.1.3). For classification of the 3D displays, see Annex B.

3.1.3
autostereoscopic display
stereoscopic display that requires no viewing aids

Note 1 to entry: See *stereoscopic display* (3.1.2). For classification of the 3D displays, see Annex B.

3.1.4
two-view display
two-view autostereoscopic display
autostereoscopic display providing one stereoscopic view

Note 1 to entry: See *multi-view display* (3.1.5).