

AS 5156:2020



Electronic speed limit signs



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- Department of Planning, Transport and Infrastructure, SA
- Department of Transport and Main Roads, Qld
- Intelligent Transport Systems Australia
- Main Roads Western Australia
- Traffic Management and Safety — Roads ACT
- Transport for NSW
- VicRoads

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Preface

This Standard was prepared by Standards Australia Committee LG-006, Road Traffic Signals, to supersede AS 5156—2010.

The objective of this Standard is to specify requirements for the design, construction and performance of electronic speed limit signs (ESLS) based on light-emitting diode technologies. ESLS are intended for use in road traffic management.

Major changes in this edition are as follows:

- (a) Annulus size altered and its display redefined.
- (b) Numerals size redefined.
- (c) Luminous matching of colour added.
- (d) Chromaticity coordinates for white changed.
- (e) Civil twilight time information removed.

The use of any signs, including electronic speed limit signs, for road traffic management is subject to regulation by traffic control authorities. Guidance and requirements on their use is provided in the series of Standards AS 1742, *Manual of uniform traffic control devices and relevant Austroads guidelines*.

This Standard has been developed with reference to Austroads *Best practice for variable speed limits: Best practice recommendations*.

The terms "normative" and "informative" are used in Standards to define the application of the appendices to which they apply. A "normative" appendix is an integral part of a Standard, whereas an "informative" appendix is only for information and guidance.

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Section 1 Scope and general

1.1 Scope

This Standard covers electronic speed limit signs composed of discrete light-emitting elements intended to be permanently mounted or portable, adjacent to or over roadways, for the purpose of communicating speed restrictions to approaching road users. It specifies requirements for the design, construction, performance and certain aspects of the installation of electronic speed limit signs, including their associated control systems.

This Standard does not cover lane use management signs.

1.2 Application

It is intended that electronic speed limit signs conforming to this Standard be primarily used to provide regulatory control of traffic speed to road users. This includes school speed zones, shopping centre speed zones, roadwork speed zones and freeway speed limit systems. The speed signs may also be used to display auxiliary messages as shown in this Standard.

1.3 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document.

NOTE Documents referenced for informative purposes are listed in the Bibliography.

AS 1742, *Manual of uniform traffic control devices*

AS 1743, *Road signs — Specifications*

AS 1744, *Forms of letters and numerals for road signs (known as Standard alphabets for road signs)*

AS 2700, *Colour Standards for general purposes*

AS 4086.1, *Secondary batteries for use with stand-alone power systems, Part 1: General requirements*

AS 4086.2, *Secondary batteries for use with stand-alone power systems, Part 2: Installation and maintenance*

AS 4509.2, *Stand-alone power systems, Part 2: System design guidelines*

AS 60068.2.6, *Environmental testing, Part 2.6: Tests — Test Fc: Vibration (sinusoidal)*

AS 60529, *Degrees of protection provided by enclosures (IP Code)*

AS/NZS 1170.2, *Structural design actions, Part 2: Wind actions*

AS/NZS 1734, *Aluminium and aluminium alloys—Flat sheet, coiled sheet and plate*

AS/NZS 1768, *Lightning protection*

AS/NZS 3000, *Electrical installations (known as the Australian/New Zealand Wiring Rules)*

AS/NZS 3100, *Approval and test specification — General requirements for electrical equipment*

AS/NZS 3190, *Approval and test specification — Residual current devices (current-operated earth-leakage devices)*

AS/NZS 4680, *Hot-dip galvanized (zinc) coatings on fabricated ferrous articles*