AS 4852.1:2019

Australian STANDARD®

Variable message signs

Part 1: Fixed signs

STANDARDS Australia

AS 4852.1:2019

This Australian Standard® was prepared by LG-006, Road Traffic Signals. It was approved on behalf of the Council of Standards Australia on 26 November 2019.

This Standard was published on 13 December 2019.

The following are represented on Committee LG-006:

Australian Industry Group
CIE Australia
Department of Planning, Transport and Infrastructure (SA)
Department of Transport and Main Roads, Qld
Hire and Rental Industry Association of Australia
Intelligent Transport Systems Australia
Main Roads Western Australia
Roads and Maritime Services
Traffic Management and Safety — Roads ACT
VicRoads

This Standard was issued in draft form for comment as DR AS 4852.1:2019.

Keeping Standards up-to-date

Ensure you have the latest versions of our publications and keep up-to-date about Amendments, Rulings, Withdrawals, and new projects by visiting:
www.standards.org.au

ISBN 978 1 76072 665 2

Australian STANDARD®

Variable message signs

Part 1: Fixed signs

First published as AS 4852.1—2009.
This edition 2019.

Preface

This Standard was prepared by the Standards Australia Committee LG–006, Road Traffic Signals, to supersede AS 4852.1—2009, *Variable message signs, Part 1: Fixed signs*.

The objective of this Standard is to specify the requirements for the design and performance of variable message fixed signs.

The AS 4852 series covers requirements for the construction and performance of electrically powered variable message signs based on light-emitting diode technologies in a matrix configuration that are intended to be used for road traffic management. These signs are expected to provide real-time information on the oncoming road in the transportation network.

The series consists of two standards:

AS 4852.1, *Variable message signs, Part 1: Fixed signs*

AS 4852.2, *Variable message signs, Part 2: Portable signs*

The major changes in this edition are as follows:

(a) Type A sign reduced from 4 to 3 text rows.

(b) Options for increased resolutions.

(c) Changes to methods of specifying text dimensions.

(d) Dimming level values aligned with sign illuminance.

(e) Upwards light not required.

(f) Dimming step duration changed to 5–15 s.

(g) Operating voltage range defined as 205 V to 264 V.

(h) Local control port may also be RS485 or Ethernet.

(i) Alarm and Event logs to be readable via Product Host Control system.

(j) Sign only required to be provided with standard size font sets 1 and 2.

(k) For the pixel element service life, luminance degradation below the minimum tabled values is not permitted.

The use of any signs, including variable message signs, for road traffic management is subject to regulation by traffic control authorities. Guidance on and requirements relating to their use are provided in the AS 1742 series.

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

Contents

Australian Standard®

Variable message signs

Part 1: Fixed signs

Section 1 Scope and general

1.1 Scope

This Standard covers electrically powered, on-road, variable message signs (VMS) used for traffic management and/or driver information applications. Part 1 of this series covers fixed signs, where the display is mounted in a permanent position above or adjacent to the roadway, and Part 2 of this series covers portable signs, where the display is mounted and deployed on a re-locatable trailer.

This Standard specifies the requirements for the design, construction, performance and certain aspects of the installation of electrically powered, variable message signs, including their associated control systems.

The following types of message signs are not covered in this Standard:

(a) Passenger information signs at bus stops, on train stations etc.

(b) Variable message signs intended to advertise products and services to road users.

(c) Signs that are only capable of displaying either a single message or a blank face.

1.2 Application

Variable message signs conforming to this Standard will be used to provide traffic-related information to motorists, cyclists and pedestrians. This includes road safety messages and real-time traffic information relating to incidents, roadworks and travel times.

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.

AS 1742.1, *Manual of uniform traffic control devices, Part 1: General introduction and index of signs*

AS 1743, *Road signs — Specifications*

AS 1744, *Standard alphabets for road signs*

AS 2700, *Colour Standards for general purposes*

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, *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)*