



Variable message signs

Part 1: Fixed signs



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



Variable message signs

Part 1: Fixed signs

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

COPYRIGHT

© Standards Australia Limited 2019

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher, unless otherwise permitted under the Copyright Act 1968 (Cth).

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

Preface	ii
Section 1 Scope and general	1
1.1 Scope	1
1.2 Application	1
1.3 Normative references	1
1.4 Terms and definitions	2
Section 2 Design	5
2.1 General	5
2.2 Design life	5
2.3 Markings and labels	5
2.3.1 General	5
2.3.2 On sign controller	5
2.3.3 On inside of sign controller housing	5
2.3.4 On rear of sign controller housing	6
Section 3 Mechanical requirements	7
3.1 Sign enclosure	7
3.1.1 Construction material	7
3.1.2 Surface finish	7
3.1.3 Viewing area	7
3.1.4 Access doors	7
3.1.5 Double-socket outlet	7
3.1.6 Mounting	8
3.1.7 Border	8
3.2 Roadside cabinet	8
3.2.1 General	8
3.2.2 Construction and finish	8
3.2.3 Access doors	8
3.2.4 Ventilation	9
3.2.5 Protection against vandalism	9
3.2.6 Provisions	9
3.2.7 Facility switch	9
Section 4 Electrical requirements	11
4.1 Conformance to standards	11
4.2 Operating voltage	11
4.3 Battery backup	11
4.4 Lightning protection	11
4.5 Electromagnetic compatibility (EMC)	11
4.5.1 Immunity	11
4.5.2 Electromagnetic emissions	11
4.6 Communications equipment	12
4.7 Real-time clock	12
Section 5 Display and optical requirements	13
5.1 Display requirements	13
5.1.1 General	13
5.1.2 Display dimensional requirements	14
5.1.3 Light axis	17
5.1.4 Character formats	18
5.1.5 Display changes	18
5.1.6 Display changes due to facility switch operation	19
5.1.7 Display changes due to external inputs	19
5.1.8 Graphics requirements	20
5.1.9 Sign dimming control	20
5.1.10 Conspicuity devices	22

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

-
- Looking for additional Standards? Visit Intertek Inform Infostore
 - Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation
-