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TRAFFIC SIGNAL LANTERNS



STANDARDS ASSOCIATION OF AUSTRALIA

Incorporated by Royal Charter



THE FOLLOWING SCIENTIFIC, INDUSTRIAL AND GOVERNMENTAL organizations and departments were officially represented on the committee entrusted with the preparation of this standard:

Australian Automobile Association

Australian Road Research Board

Confederation of Australian Industry

Department of Transport

National Association of Australian State Road Authorities

National Capital Development Commission

Railways of Australia Committee

State Police Departments

State Traffic Authorities

University of Melbourne, Department of Optometry

University of New South Wales, School of Transport and Highways

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In order to keep abreast of progress in the industry concerned, Australian standards are subject to regular review. Suggestions for improvements, addressed to the head office of the Association, are welcomed.

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March 1980

STANDARDS ASSOCIATION OF AUSTRALIA
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to
AS 2144—1978
TRAFFIC SIGNAL LANTERNS

SUMMARY: The following sections of the standard are covered by this amendment: Clause 1.2.9; Tables 2.1, 6.1.

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PREFACE

This standard was prepared by the Association's Committee on Road Traffic Signals. It applies particularly to traffic signal lanterns intended for the control of vehicles and pedestrians, and it supersedes AS E32—1947, Road Traffic Control (Electric) Light Signals, which was the endorsement of BS 505 : 1939.

For pedestrian signal lanterns the standard prescribes requirements for symbolic presentations consisting of the illuminated form of a walking or stationary pedestrian, as appropriate, to indicate 'WALK' and 'DON'T WALK' intervals. This is in keeping with the international trend to the use of symbolic signs to minimize language difficulties and is in accordance with a United Nations Convention on road signs and traffic signals. Symbolic pedestrian signals of the type prescribed in this standard are currently in wide use in a number of countries.

The photometric requirements for vehicular traffic signal lanterns have been derived from the considerable body of research which has been conducted in Australia into factors affecting the visibility of these signals (see references in the Bibliography).

The standard gives detailed requirements for the dimensions of traffic signal lanterns and associated components; this is in accordance with a specific desire on the part of road and traffic authorities that there be as great a degree of uniformity of practice throughout Australia as possible, in order to minimize variations in the appearance of traffic signalling equipment to the road user.

The standards and other publications to which reference may be required in the application of this standard are listed in the bibliography.

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STANDARDS ASSOCIATION OF AUSTRALIA

Australian Standard Specification for TRAFFIC SIGNAL LANTERNS

SECTION 1. SCOPE, DEFINITIONS AND MARKING

1.1 SCOPE. This specification applies to traffic signal lanterns which are primarily designed for the control of road vehicles and/or pedestrians. It does not apply to the control equipment which may be necessary for the functioning of the lanterns.

For vehicular traffic signal lanterns two basic levels of performance are specified, one for general purpose lanterns and one for extended range lanterns. Requirements are also specified for a variety of special purpose lanterns which may be derived by masking either of the two basic types.

For pedestrian signal lanterns, requirements are prescribed for symbolic signal presentations consisting of the illuminated form of a walking or stationary pedestrian, as appropriate, to indicate 'WALK' and 'DON'T WALK' intervals.

1.2 DEFINITIONS. For the purpose of this specification, the following definitions apply:

1.2.1 Traffic signal lantern — an assembly comprising one or more aspects, together with means of connecting them to the power supply and facilities for mounting the complete assembly.

NOTE: For the purpose of this specification a traffic signal lantern is hereinafter referred to as a 'lantern'.

1.2.2 Vehicular lantern — a lantern which is primarily intended for the control of road vehicles.

1.2.3 Pedestrian lantern — a lantern which is primarily intended for the control of pedestrians.

1.2.4 Aspect — a single optical system capable of being illuminated on a signal face at any given time.

1.2.5 Signal face — a group of aspects on a lantern which applies to traffic approaching from one direction.

1.2.6 Optical system — an assembly of components designed to produce a light or light pattern of specified size, colour, intensity and shape.