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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB 14886-2016

Replacing GB 14886-2006

Specifications for road traffic signal setting and installation

道路交通信号灯设置与安装规范

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Foreword

4.3.1,6.1.1,6.1.2,6.1.3,7.1.7,7.5.3,8.4.3,8.4.4,9.1.1,

9.3.1 this standard are mandatory, others are recommended Nature. This standard was drafted in accordance with GB/T 1.1-2009 given rules. This standard replaces GB 14886-2006 "Road traffic lights setup and installation specifications." Compared with GB 14886-2006, except series Series modifications outside the main technical changes are as follows:

- Modify the scope of this standard (see Chapter 1, Chapter 1 of the 2006 edition);
- Modify the normative references (see Chapter 2, Section 2 of the 2006 edition);
- Remove the motor vehicle lights, directional lights, lights and other non-motorized definitions; modify equivalent car (PCU) to shrink Abbreviations, acronyms increase LED, BRT; increased security stopping sight distance triangle, variable guide lanes, tidal lanes, pedestrian crossing Street pedestrian refuges and secondary by defining the street (see Chapter 3, 2006 edition of Chapter 3);
- Increasing the general provisions set lights, including lights setup and installation of the basic requirements, signal selection requirements and display requirements Etc. (see Chapter 4 and Appendix A); an increase of motor vehicle lights and direction indication lights yellow when the long, yellow flashing warning lights Flash frequency signal and crosswalk lights flashing green signal frequency requirements (see 4.3.4,4.3.5);
- Modify the settings of lights junction type conditions (see 511, 2006 edition 4.2.);
- Modify the conditions of an integrated set of lights (see 514, 2006 edition 4.10.);
- Modify the non-motor vehicle lights, crosswalk lights, lane lights setting conditions (see 5.1.5,5.1.6,5.2.1, . 522, 2006 edition of 4.4,4.5,
- Increased ramp crossing and traffic signal installation conditions (see
- Modifications combination lights, will modify the original seven lights arranged in the order of two kinds of conventional composition and three special combination (See 6.1.2 6.1.3 Tables 5 and 6, 2006 edition Table 3);
- Increased motor vehicle lights, directional lights, non-motor vehicle lights and the ramp lights combinations set conditions (See 6.1.4,6.1.5,6.1.7,6.2,
- 6.3 and Appendix C); increased signal lights signal priority control setting conditions (See 6.1.6);

1 Scope

GB 14886 governs where a traffic signal may be installed and how. It sets the conditions that justify signalling a junction or a crossing in the first place, the permitted combinations of signal heads and their meaning, the mounting position, height and orientation for post, cantilever and gantry installations, the visibility and the sight distance, the requirements for pedestrian and cycle signals, and the qualifications required of those who design and build the installation. It is the companion to GB 14887, which specifies the lamp itself. Issued on 13 December 2016, in force since 1 July 2017, replacing GB 14886-2006. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the edition it replaces are

taken from there. The clause text, the tables and the numeric limits are not reproduced on this page - they are in the document itself, which is delivered in full in English translation.

This standard specifies the conditions for setting road traffic lights, signal combinations, lights installation, design and construction quality, etc. Requirements. This standard applies to road traffic lights setup and installation. Other places traffic lights setup and installation can be implemented by reference.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document.

GB 14887 road traffic lights

GB/T 18226 highway traffic engineering and technical conditions corrosion of steel components

GB/T 31418 Road traffic signal control systems -

GB 50647-2011 Code for planning of urban road intersections GA/T 743-2007 solar yellow flashing lights JTGD20-2006 Road Design Specification

3.1 Terms and Definitions

GB/T 31418 and defined by the following terms and definitions apply to this document.

3.1.1 Flashing warning lights flashsignal It consists of a round yellow unpatterned units of road traffic lights. Job status flashes, indicating that the vehicle, pedestrians should pay attention to traffic Outlook, to ensure safety after the adoption.

3.1.2 Safe stopping sight distance triangle sighttriangle Crossroads Department to either import the outermost lane road centerline and the right side of the road intersects the innermost lane road import midline Vertex intersection, two lanes along the midline with their speed limits required for the safe stopping sight length on both sides of the triangle formed area.

3.1.3 Reference axis referenceaxis Perpendicular to the surface of the horizontal plane of projection surface and a straight line through the geometric center. [

GB 14887-2011, the definition 3.2]

3.1.4 Lights installation height instalationheightofsignal Lights from the lowest point of the vertical distance to the road surface.

3.1.5 Lights boom length cantileverlengthofsignal By the lights from the poles to the pole lights farthest point.

3.1.6 Variable guide lane reversible lane At intersections, traffic flow requirements may vary according to the vehicle forward direction guide lanes.

3.1.7 Tide lane tidal flow lane In the section of road, depending on traffic flow requirements can change the direction of vehicle travel lane.

3.1.8 Pedestrian refuges pedestrian refuge island To provide pedestrian crossing stop the space provided on the road surface in a variety of island facilities.

3.1.9 Pedestrian twice crossing two-stage crossing Pedestrians crossing the street to wait once or more than once in the case of pedestrian refuges.

3.2 Acronyms The following abbreviations apply to this document. BRT bus rapid transit BRT LED light emitting diode light-emitting diodes PCU passenger car unit equivalent car

4.1 Basic requirements

4.1.1 road traffic lights (hereinafter referred to as signal) setup and installation, you should be sure that lights motor vehicle drivers, non-motorized Drivers and pedestrians clearly observed.

4.1.2 set the lights, it should set the appropriate supporting road traffic signs, markings and traffic monitoring equipment.

4.1.3 or life beyond the lights appear insufficient brightness, color distortion and lack of LED dot matrix and other phenomena affect the use, should be promptly replace.

4.2 Signal selection requirements

4.2.1 selected lights should be consistent with the provisions of GB 14887 of.

4.2.2 The combination lights should be based on command objects, control objectives and control conditions determined comprehensively.

4.2.3 Stop lights line a distance greater than 70m or road speed limit greater than or equal 60km/h, should use light-emitting unit size translucent surface As $\Phi 400$ mm semaphore.

4.3 Lights display requirements

4.3.1 provided with directional lights crossing, easement directional traffic lights and other traffic streams are directed not conflict.

4.3.2 Signal light emitting unit has lights flicker on and off the three states.

4.3.3 Signal light color conversion shall meet the following requirements.

a) Traffic Signal. red -> green -> yellow -> red, see Appendix A in Figure A.1;

b) directional lights. red -> green -> yellow -> red, see Appendix A in Figure A.2, red or