


**THE NETHERLANDS
(N E D E R L A N D)****COMMUNICATION**Concerning ⁽¹⁾:


- approval granted
- ~~approval extended~~
- ~~approval refused~~
- ~~approval withdrawn~~
- ~~production definitely discontinued~~

of a type of device for the illumination of rear registration plates of motor vehicles (except motor cycles) and their trailers pursuant to Regulation number 4.

Approval number: E4-4R-0024273**Extension number: 00**

1. Trade name or mark of the device : 
2. Manufacturer's name for the type of device : DF-TRS004
3. Manufacturer's name and address : Zhejiang Dahao Automotive Co., Ltd.
Xiaotian Village, Duqiao Town, Linhai City,
Taizhou City, Zhejiang Province, P.R. China
317000
4. If applicable, name and address of manufacturer's representative : Not applicable
5. Submitted for approval on : 19 June 2015
6. Technical service responsible for conducting approval tests : TÜV SÜD Auto Service GmbH
Westendstraße 199
D-80686 München
7. Date of report issued by that service : 1 July 2015
8. Number of report issued by that service : 15-00438-CX-SHA-00



9. Concise description ⁽²⁾
- Device for illuminating : ~~a tall plate/a wide plate/a plate for agricultural or forestry tractor~~ ⁽¹⁾
- Number and category(ies) of light source(s) : Not applicable (Lamp consists of 4 LEDs)
- Light source module : ~~yes/no~~ ⁽¹⁾
- Light source module specific identification code : Not applicable
- Geometrical conditions of installation (position(s) and inclination(s) of the device in relation to the space to be occupied by the registration plate and/or different inclinations of this space) : See manufacturer's information document
10. Position of the approval mark : On the lens
11. Reason(s) for extension (if applicable) : Not applicable
12. Approval : ~~granted/refused/extended/withdrawn~~ ⁽¹⁾
13. Place : Zoetermeer
14. Date : 28-JUL-2015
15. Signature : 
Uwe Löbig
16. The list of documents deposited with the Administrative Service which has granted approval is annexed to this communication and may be obtained on request.
- Information document: DF-TRS004-00, 5 pages dated 19 June 2015

⁽¹⁾ Strike out what does not apply.

⁽²⁾ For lamps with non-replaceable light sources indicate the number and the total wattage of the light sources.



Technical Report No.: 15-00438-CX-SHA-00
Manufacturer: Zhejiang Dahao Automotive Co., Ltd.
Type: DF-TRS004

TECHNICAL REPORT

No.: 15-00438-CX-SHA-00

Test according to ECE regulation relating to

Registration plate lamps


ECE Regulation No. 4

Supplement 16 to the 00 series of amendments

Approvals granted up to now		
ECE	Number of approval	Date
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I. Technical description

- 0.1. Make (trade name of manufacturer) : 
- 0.2. Type : DF-TRS004
- 0.2.1. Variants : N/A
- 0.3. Means of identification of type : By digits and letters
- 0.4. Location of the trade mark : On the lens
- 0.5. Concise description
- Device for illuminating : ~~A tall plate/a wide plate/a plate for agricultural or forestry tractor~~
- Number and category(ies) of light source : N/A (Lamp consists of 4 LEDs)
- Voltage and wattage : 12V/24V and 2.25W
- Light source module specific identification code : N/A
- Light source module : Yes/no
- Light source module specific identification : Yes/no
- Geometrical conditions of installation (position(s) and inclination(s) of the device in relation to the space to be occupied by the registration plate and/or different inclinations of this space) : See manufacturer's information document

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Manufacturer: Zhejiang Dahao Automotive Co., Ltd.
Type: DF-TRS004

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Application of an electronic light source
control gear/variable intensity control : N/A

0.6. Name and address of manufacturer : Zhejiang Dahao Automotive Co., Ltd.
Xiaotian Village, Duqiao Town, Linhai
City, Taizhou City, Zhejiang Province,
P.R. China 317000

0.8. Name and address of assembly plant : See 0.6.

0.9. Location of the approval mark : On the lens

0.10. If applicable, name and address of the
manufacturer's representative : N/A

II. Test record

1. Test conditions

1.1. Technical data of the test samples : Two samples are tested.
For information about the form of the
lamp, the position of the reference point
and the reference axis, see information
document.

1.2. Test procedures used : According to ECE Regulation No. 4.00.

1.3. Measuring and test equipment : The above equipments on which the
tests were carried out fulfilled the re-
quirements of ECE Regulation No. 4.00.

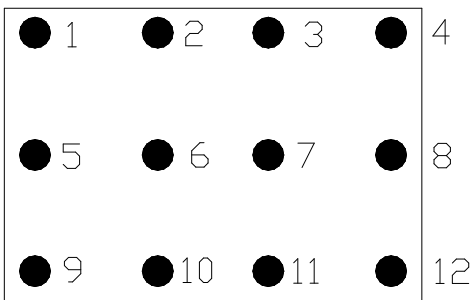
2. Test results

2.1. General Specifications

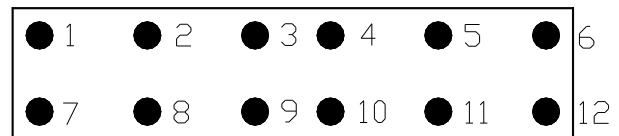
The devices for the illumination of registration plates have been constructed that the whole surface of the plate are visible within the angles.

2.2. Intensity of light emitted

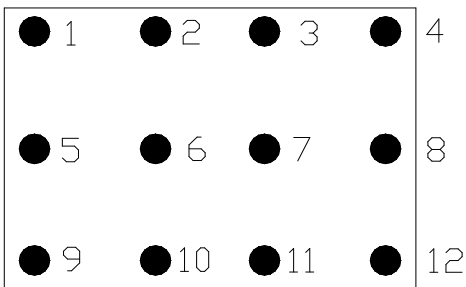
Tall Plate (340mm x 240mm)



Wide Plate (520mm x 120mm)



Tractor Plate (240mm x 165mm)



2.2.1. Sample No. 1, test voltage 13.50V, after 1 minute of operation (LUMINANCE \geq 2.5cd/m²)

Luminance Measurements (B)	1	2	3	4	5	6
	44.60	13.70	7.40	7.40	13.40	46.80
	7	8	9	10	11	12
	46.70	14.20	7.60	7.80	13.80	49.60
Corrected Luminance Meas. (B) x CF	1	2	3	4	5	6
	N/A					
	7	8	9	10	11	12
	N/A					

2.2.2. Sample No. 1, test voltage 13.50V, after 30 minutes of operation (LUMINANCE \geq 2.5cd/m²)

Luminance Measurements (B)	1	2	3	4	5	6
	42.90	12.30	6.60	6.60	11.90	45.00
	7	8	9	10	11	12
	45.80	12.90	6.70	6.80	12.40	48.30
Corrected Luminance Meas. (B) x CF	1	2	3	4	5	6
	N/A					
	7	8	9	10	11	12
	N/A					

2.2.3. Sample No. 2, test voltage 13.50V, after 1 minute of operation (LUMINANCE \geq 2.5cd/m²)

Luminance Measurements (B)	1	2	3	4	5	6
	45.40	13.70	7.80	7.80	13.90	49.20
	7	8	9	10	11	12
	48.30	14.00	8.00	8.20	13.90	53.10
Corrected Luminance Meas. (B) x CF	1	2	3	4	5	6
	N/A					
	7	8	9	10	11	12
	N/A					

2.2.4. Sample No. 2, test voltage 13.50V, after 30 minutes of operation (LUMINANCE \geq 2.5cd/m²)

Luminance Measurements (B)	1	2	3	4	5	6
	44.10	12.80	7.00	7.00	13.00	47.50
	7	8	9	10	11	12
	47.20	13.10	7.10	7.20	13.00	51.20
Corrected Luminance Meas. (B) x CF	1	2	3	4	5	6
	N/A					
	7	8	9	10	11	12
	N/A					



Technical Report No.: 15-00438-CX-SHA-00
 Manufacturer: Zhejiang Dahao Automotive Co., Ltd.
 Type: DF-TRS004

	Sample No. 1	Sample No. 2
$\text{Gradient of luminance: } \frac{B_2 - B_1}{d_1 - d_2 \text{ (cm)}} \leq 2 \times B_0 / \text{cm}$	$\frac{48.30 - 12.40}{10} \leq 2 \times 6.60$	$\frac{51.20 - 13.00}{10} \leq 2 \times 7.00$
	Complies	Complies

2.3. Incidence of the light

Incidence of the light on the surface of the plate is not exceed 82° at any point of the surface to be illuminated

Complies

2.4. Colour of the light

The light of the lamp used in the illuminating device is sufficiently colourless not to cause any appreciable change in the colour of the registration plate

Complies

3. Specimen submitted to test on: 19.06.2015 (DD.MM.YYYY)

4. Place of test: Jiangsu Huacheng Vehicle Inspection Co., Ltd.,
 Zhenjiang City, P.R. China

Date of test: 25.06.2015 (DD.MM.YYYY)

III. Enclosures

Manufacturer's information document

No.: DF-TRS004-00

Dated on: 19.06.2015 (DD.MM.YYYY)





Technical Report No.: 15-00438-CX-SHA-00
 Manufacturer: Zhejiang Dahao Automotive Co., Ltd.
 Type: DF-TRS004

IV. Statement of conformity

The information folder as mentioned under No. III and the type described therein are in compliance with the test specification mentioned above. The worst-case was selected in accordance with document "Preparation of Test Reports".

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München, 01.07.2015

(DD.MM.YYYY)



Gu, Qing

Test Laboratory / DIN EN ISO 17025

Genehmigungsbehörde/ Approval authority	Land/Country	Registriernummer/ Registration-number	Aktueller Benennungsumfang/ Actual scope list
Kraftfahrt-Bundesamt (KBA)	Deutschland/ Germany	KBA-P 00100-10	www.kba.de
Vehicle Certification Agency (VCA)	Vereintes Königreich/ United Kingdom	VCA-TS-006	http://ec.europa.eu/enterprise/se ctors/automotive/approval- authorities-technical- services/technical- services/index_en.htm
Approval Authority of the Netherlands (RDW)	Niederlande/ The Netherlands	RDWT-082-01	
National Standards Author- ity of Ireland (NSAI)	Irland/ Ireland	Technical Service Number: 49	
Vehicle Safety Certification Center (VSCC)	Taiwan/ Taiwan	DE04-06-2	http://www.vsc.org.tw/English/D efault.aspx



Zhejiang Dahao Automotive Co., Ltd.
Xiaotian Village, Duqiao Town, Linhai City,
Taizhou City, Zhejiang Province, P.R. China 317000

June 19, 2015

Dear Sirs,

We would like to apply for the type approval according to ECE.

Function	ECE approval number
License plate lamp	E4-4R-0024273
Rear direction indicator lamp	E4-6R-0124273
Stop lamp	E4-7R-0224273
Rear position lamp	E4-7R-0224273

Trade name or mark	:	
Manufacturer's name for type of device	:	DF-TRS004
Name and address of manufacturer	:	Zhejiang Dahao Automotive Co., Ltd. Xiaotian Village, Duqiao Town, Linhai City, Taizhou City, Zhejiang Province, P.R. China 317000

We confirm that the above mentioned application has not been submitted to any other EC member state nor has any other member state granted a corresponding approval.

Sincerely




Mr. Wang Ping
Zhejiang Dahao Automotive Co., Ltd.



Information folder No. : DF-TRS004-00

First application date : June 19, 2015

1. Specification data

Type		DF-TRS004			
Function		Rear group lamp			
		License plate lamp	Rear direction indicator lamp	Stop lamp	Rear position lamp
Color		Colorless	Amber	Red	Red
Rated	Voltage	12V/ 24V	12V/ 24V	12V/ 24V	12V/ 24V
	Wattage	2.25W	1W	1W	0.55W
Application Regulation ECE		R4.00 L	R6.01 Cat. 2a	R7.02 Cat. S1	R7.02 Cat. R1
Location of marking	Number and category of light source	4*LED	6*LED	6*LED	9*LED
		Non-replaceable light source			
	Marked on housing				
	Trade mark				
	Marked on lens				
Approval mark		Marked on lens			

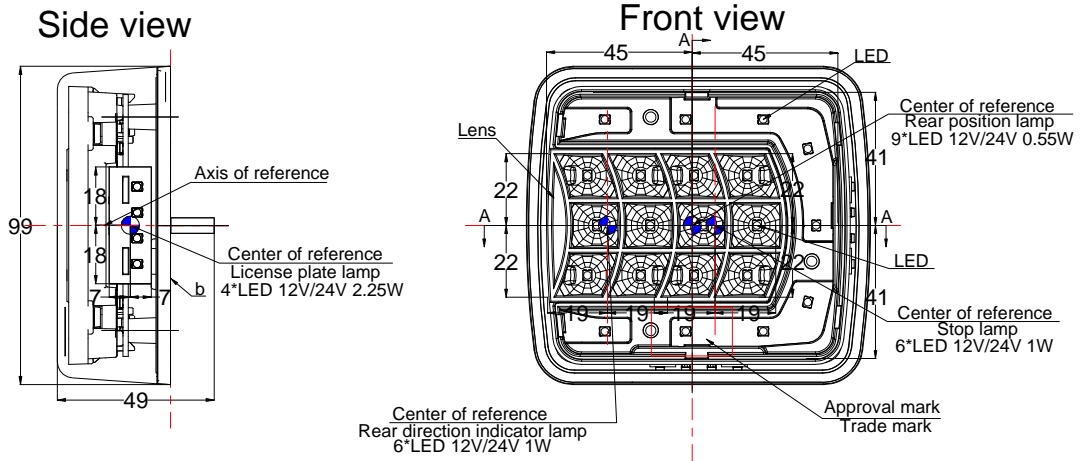
2. Construction and material

Construction	Material	Remarks
Outside Lens	PMMA	License plate lamp: Clear Rear direction indicator lamp: Clear Rear position lamp and Stop lamp: Clear
Inner Lens	PC	Rear position lamp: Red
Reflector	ABS	Painting on the inside surface Color: Metal silver
Housing	ABS	--
Electrical Wiring	Copper covered with insulation	--

3. Name and address of manufacturer : Zhejiang Dahao Automotive Co., Ltd.
Xiaotian Village, Duqiao Town, Linhai City,
Taizhou City, Zhejiang Province, P.R. China 317000

4. Name and address of the manufacturer's representative : N/A

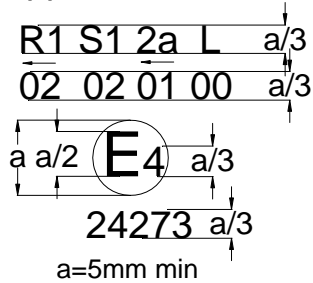




NOTE:

1. "a": Horizontal Plane of Vehicle
2. "b": Longitudinal Plane of Vehicle

Approval mark

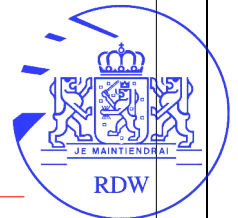
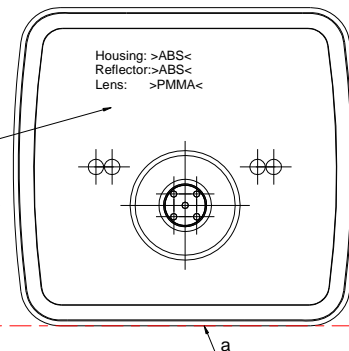


Trade mark

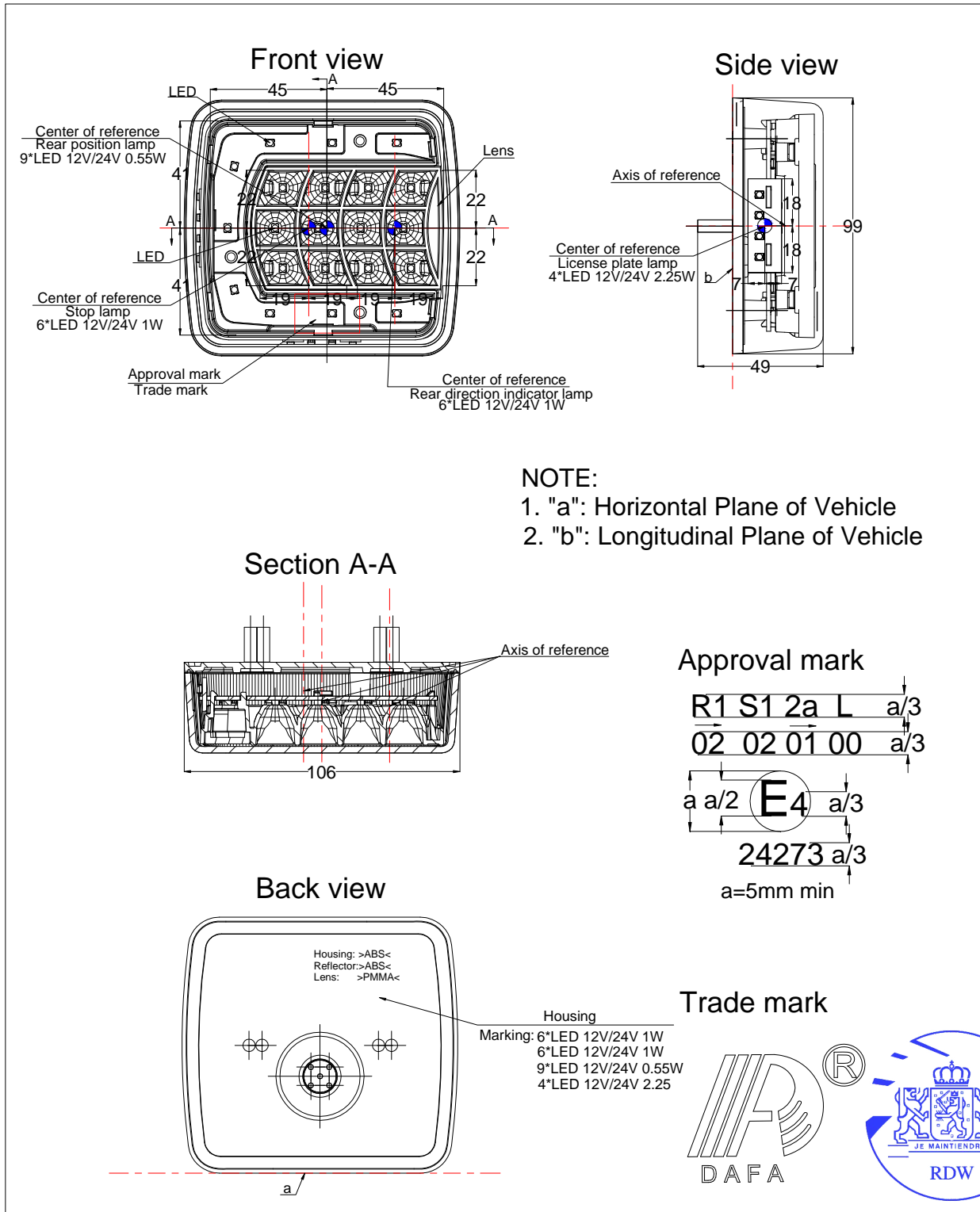


Housing
Marking: 6*LED 12V/24V 1W
6*LED 12V/24V 1W
9*LED 12V/24V 0.55W
4*LED 12V/24V 2.25W

Back view



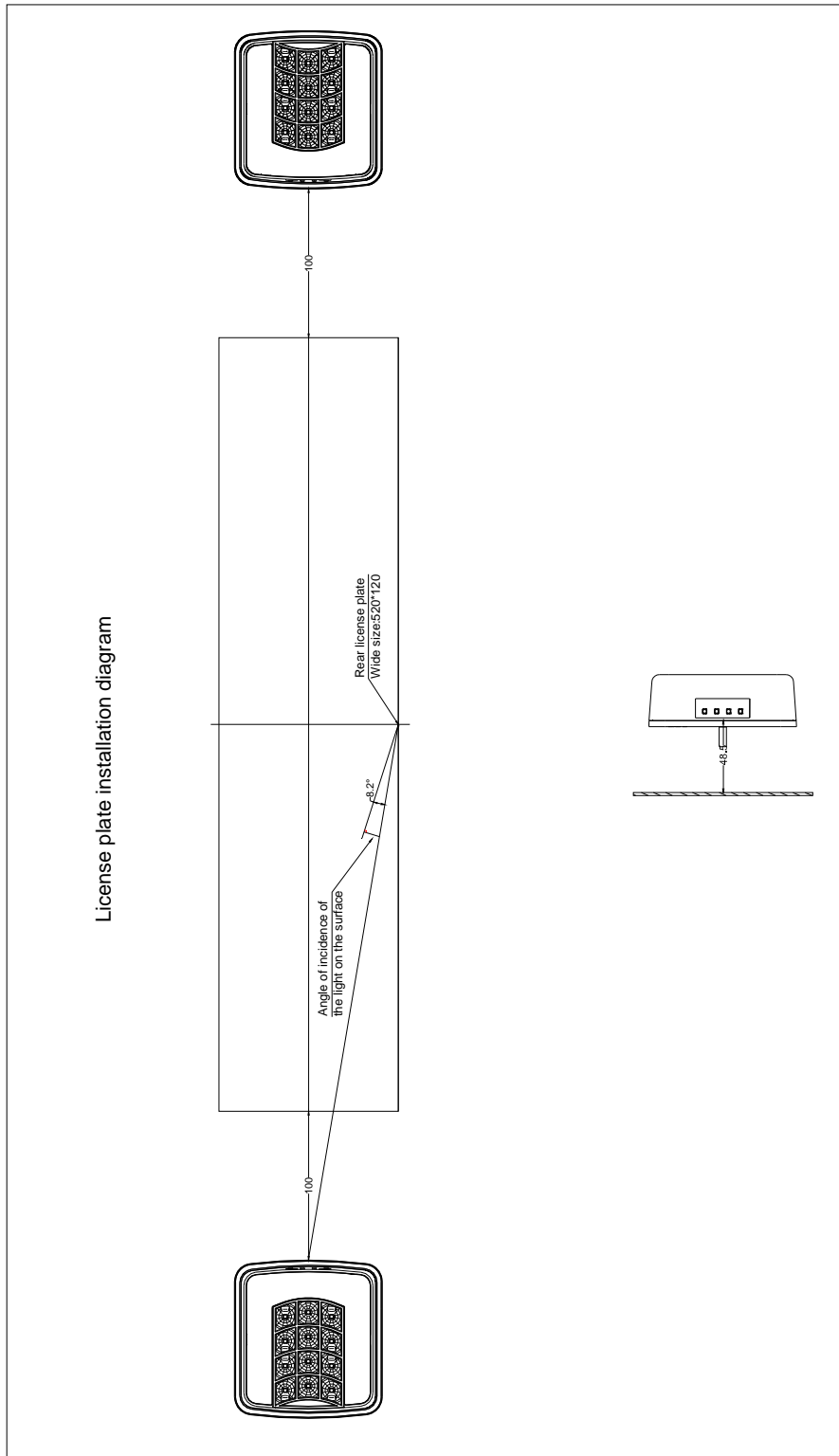
Product Type	DF-TRS004
General assembly drawing (Left side)	
Drawing No.	DF-TRS004-01



NOTE:
 1. "a": Horizontal Plane of Vehicle
 2. "b": Longitudinal Plane of Vehicle

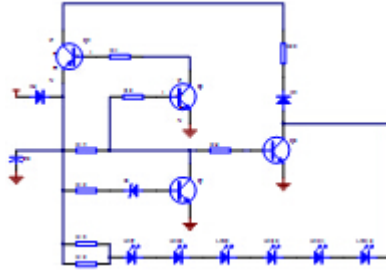
Product Type	DF-TRS004
General assembly drawing (Right side)	
Drawing No.	DF-TRS004-02

License plate installation diagram

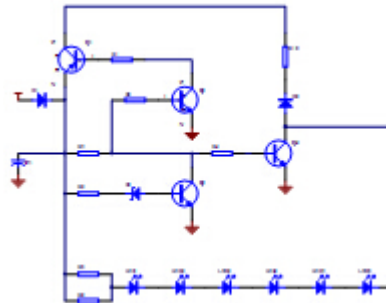


Product Type	DF-TRS004
Installation diagram	
Drawing No.	DF-TRS004-03

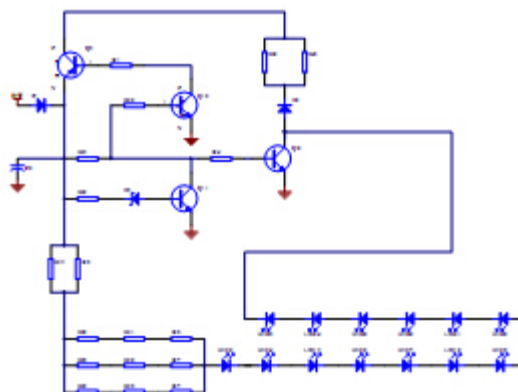
Rear direction indicator lamp
 6*LED 12/24V 1W



Stop lamp
 6*LED 12/24V 1W



Rear position lamp
 9*LED 12/24V 0.55W
 License plate lamp
 4*LED 12/24V 2.25W



Product Type	DF-TRS004
Led circuit diagram	
Drawing No.	DF-TRS004-04