

Driving in the Dark

KAIXEN
Xenon Light System

ecoucdusa

Europe



XENON LIGHT SYSTEM

6,000K CRYSTAL DIAMOND 6,500K CRYSTAL PURPLE
7,500K CRYSTAL WHITE 8,500K CRYSTAL BLUE
Kaiser xenon xe 54 KAIXEN

www.kaixen.co.kr

XENON LIGHT SYSTEM
KAIXEN XENON XE 54 KAIXEN
HIGH QUALITY & LOW PRICE
www.kaixen.co.kr

High Intensity Discharge

Coming By

Since 1998

KAIXEN
HID system

ecoucdusa

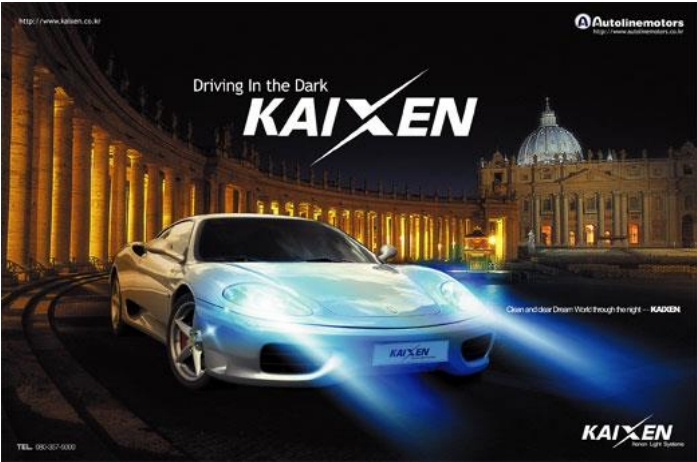
Europe

http://www.kaixen.co.kr

Autolinemotors
http://www.autolinemotors.co.kr

Driving In the Dark

KAIXEN



Clear and clear Dream Walk Through the night - KAIXEN

TEL. 051-027-0000

KAIXEN
Xenon Light System



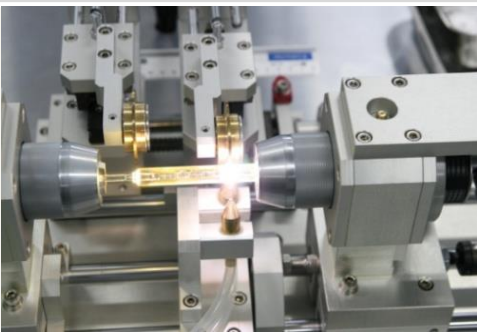
1. 회사개요

회사명	오토라인
대표이사	공학박사 丁 豊 起
설립연도 및 자본금	1998.04 (유)오토라인 설립
사업장 소재지	전북 전주시 덕진구 팔복동 2가 265-1(산업 1공단)
사원규모	관리 및 생산 36명
연락처	대표전화: +82-63-221-4040 Fax:+82-63-227-1881
홈페이지 / 관리메일	www.Kaixen.co.kr / kaixen@korea.com



2. 생산 설비현황

UCD램프 제조라인	아르곤 상태하 초진공 크린룸 자동설비구축
자동제어시스템	생산 및 검수라인 자동시스템
램프연간 생산량 / 제품	200만개 이상가능-35W, 50W
안정기 및 생산량	200만개 이상가능-전자식 UCD전용 12V~24V겸용 직류안정기(7.5V~30V)
캔슬러 생산	5여종의 HID전용 캔슬러 개발공급
검사장비	에이징머신/비전램프자동검수기/항온항습기 및 적분구/광도측정기 등 다수보유
A/S 순회점검 차량	A/S차량 소유 및 전문 관리팀 전국 순회 정기점검 운영





특허증
CERTIFICATE OF PATENT

특허 제 10-0993398 호
(PATENT NUMBER)

발명의명칭 (TITLE OF THE INVENTION)
H I D 램프를 적용한 자동차 상향/하향등 전환장치

특허권자 (PATENTEE)
동북사항련에 기계

발명자 (INVENTOR)
정종기 (581019-1*****)
전북 전주시 완산구 중화산동2가 688-3 19/4

위의 발명은 「특허법」에 의하여 특허등록원부에 등록되었음을 증명합니다.
(THIS IS TO CERTIFY THAT THE PATENT IS REGISTERED ON THE REGISTER OF THE KOREAN INTELLECTUAL PROPERTY OFFICE.)

2010년 11월 03일

특허청
KOREAN INTELLECTUAL PROPERTY OFFICE

본사등록료 납부일은 출원일로부터 4년차부터 매년 11월 03일까지이며 등록원부로 권리관계는 확인 가능합니다.

第 5547516 号

商标注册证

KAIXEN
开 恩

核定使用商品(第 11 类)
车灯; 自行车灯; 车辆转向指示灯; 灯; 照车器; 安全灯; 照顶灯 (照顶灯宽); 汽车雾灯 (截止)

注册人 丁主起 381019-1-181422
POONG-GIL JEONG

注册地址 韩国全罗北道全州市安山区中华山第2街 688-3
688, JUNGWASANDONG2-GA, WANSAN-GU, JEONJU-SI, JEONJUK-DO, KOREA

注册有效期限 自公元 2009年07月28日 至 2019年07月28日

局长签发 李建昌

CERTIFICATE OF CONFORMITY

CERTIFICATE NO.: CE-C-6262-44-24

NAME / TYPE / SPECIFICATION OF THE CERTIFIED PRODUCTS:
Automotive HID Ballast
Model: HIK252-1245

TESTED ACCORDING TO:
EN61347-2-8:2007
EN61347-1:2001

THIS IS TO CERTIFY, BASED ON THE REVIEW OF THE TECHNICAL FILE, THAT THE APPROXIMATION TWO-PRODUCT MEETS THE REQUIREMENTS, ON THE APPROXIMATION OF THE LAWS OF THE MEMBER STATES, OF COUNCIL DIRECTIVES 76/211/EEC AND 90/269/EEC RELATING TO LOW VOLTAGE DIRECTIVE (LVD).

Join: This certificate is only valid for the above-mentioned model type/specification of the product with the configuration specified in the testing report. ZDC-616262.

PRESTONBENTONCCQS UK Ltd.
16 Clifford Road, London W3 3RP, UK

우수산업디자인상품선정증

제 04G0022 호

과 시 명 : 오도라임
장 류 명 : HID LAMP 패키지
분 류 명 : 조명기구
설 계 명 :
디자이너 : 박봉식
조 례 승
최 대 호

위 상품은 산업디자인진흥법 제6조의 규정에 의하여 우수산업디자인상품으로 선정되었음을 증명합니다.

2004년 9월 22일

산업자원부장관
한국디자인진흥원장 위촉서장



What is H.I.D ?

HID stands for High Intensity Discharge.

It refers to lighting technology that relies on an electrical charge to ignite xenon gas contained in a sealed bulb.

The technology of HID automotive lamps is similar to that of common vapor-filled street lamps. HID lighting doesn't have a filament but instead creates light by igniting an arc between two electrodes.

HID lights get their name from the intense white light produced by the electrical discharge.

HID lamps are also called xenon lamps, referring to a gas inside the lamps.

HID general lighting has been used for years in sports arenas and stadiums around the country.



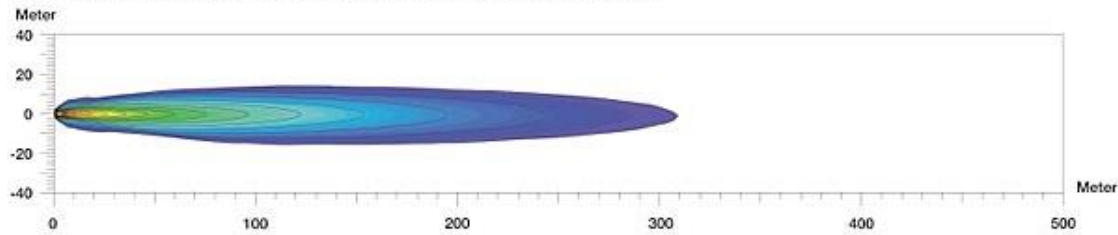


Why H.I.D ?

Some auto experts cite the almost complete darkness on isolated highways as a reason for why HID lighting is becoming popular. HID lights promote safety by providing a better overall view of the roadway and the ability to see upcoming objects quickly and more clearly.

For example, road signs and objects on the road are easier to see when illuminated by HID headlights.

Isolux-Diagramm DE Xenon Fernscheinwerfer



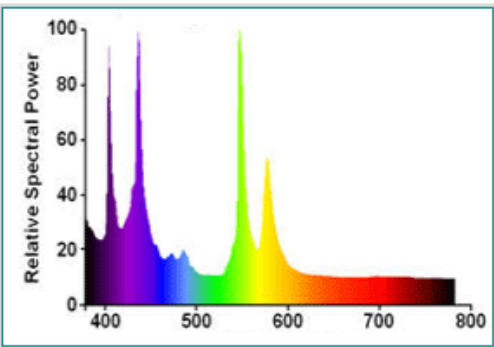
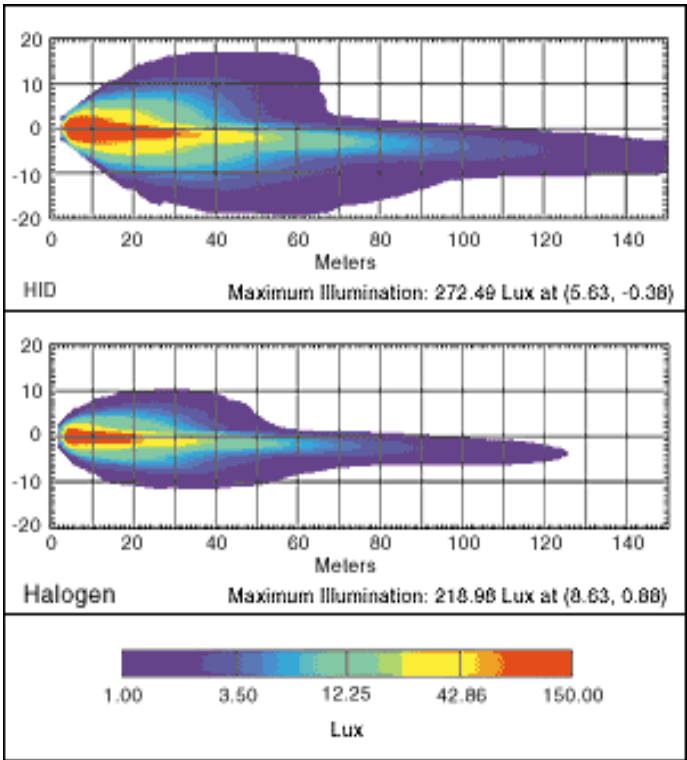
Clean and Clear Dream World through the night
KAIXEN HID SYSTEM
www.kaixen.co.kr





How is HID Different?

HID lighting provides about three times the light output of standard halogen headlights while using less energy. HID lights are designed to last up to ten times longer than standard halogen lamps. Graphic depicts the performance levels of standard HID (4,100K) versus standard halogen light in a low beam application



Driving in the Dark

KAIXEN
Xenon Light System

HALOGEN

5,000K CRYSTAL NATURAL

6,000K CRYSTAL WHITE

6,500K CRYSTAL PURPLE

8,500K CRYSTAL BLUE

www.kaixen.co.kr

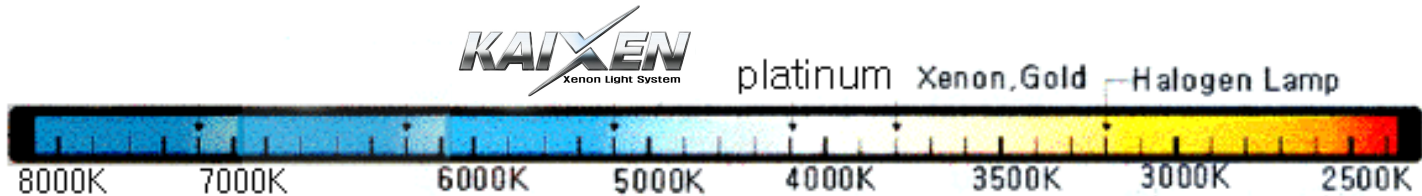
Multiple Variation

XENON LIGHT SYSTEM
KAISER XENON XE 54 KAIXEN
HIGH QUALITY & LOW PRICE
www.kaixen.co.kr



What about HID's color ?

The color of the light source is expressed as its color temperature. As the color temperature increases, the color of the light moves from yellow to white to blue-white. HID headlights provide light at a higher color temperature than standard halogen headlights, which gives them a crisp white appearance. The table below shows the color temperature of various light sources. As a reference, sunlight at noon is 5250°K.



4,000K



5,000K



6,000K



6,500K



8,500K



Are HID headlights better, brighter, safer?

HID lighting provides the brightest illumination available.

The more intense, higher color temperature light results in three times the output of standard halogen lighting, which means improved peripheral vision and enhanced down-road visibility.

The end result is safer driving for everyone on the road.



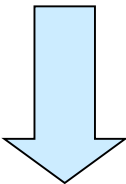


Comparison H.I.D Lamp with Halogen Lamp

Divide	Halogen	Normal H.I.D	KAIXEN H.I.D
Candela	20,000 cd	60,000 cd	200,000 cd
Consumption	12V / 55W	12V / 35W	12V / 35W
Lumen/W	28 Lm/W	70 Lm/W	88 Lm/W
Kelvin	2,800K	3600~6500K	4,000~8,500K
Longevity(hr)	400hr	1,300hr	2,500hr
Bulb Product	None	Normal	Vacuum(Argon)



Information





KAIXEN HID Products

KAIXEN High Intensity Discharge lighting represents a new dimension in driving - a technological breakthrough uniting a passion for automotive lighting performance and a commitment to safety.

It is the new standard, delivering more light while requiring less maintenance.

KAIXEN is true HID, the innovative illumination that was once the exclusive domain of high-end imports.

KAIXEN HID is brilliant.

It is legal. And it is here now.





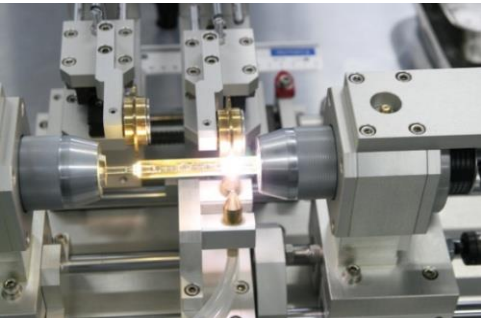
Light Artist - KAIXEN

Splendid Light World! World renowned Light system! It's the KAIXEN

No dazzling white! Only a light of brilliant white, you can't imagine the true color of KAIXEN.
There is no light but has some faults except for KAIXEN. It's what we call PERFECT.
KAIXEN is the world best car light system

■ The merits of H.I.D (KAIXEN)

Safety	If you can see more clearly, you will be a safer driver. You will also find night driving far less tiring. It really is like driving in sunlight. Other drivers will also see you coming sooner
Efficiency	Kaixen H.I.D systems draw only 35 watts compared to 55 watts of the standard system. Less wasteful by far!
Longevity	Kaixen H.I.D bulbs last up to ten times as long as halogen
U/V Safety	Kaixen H.I.D systems emit no harmful UV rays. (Can-bus System)





Just KAIXEN can make you feel the real speed through the shadows of night

It's the beginning of white and promising word with KAIXEN. Well-known H.I.D KAIXEN, for the domestic and Imported cars!
Many sided base kits, colors and intensity of illumination: crystal purple, white & blue.
Very proud releasing the world famous H.I.D KAIXEN.

❖ KAIXEN Product

Type	Model	Color	OEM Lamp	OEM Ballast
Single Type	H1,H3,H4S,H7,H11,H13,H27(881) 9004, 9005, 9006, 9007.	Crystal Yellow (4000K) Crystal Natural (5000K) Crystal White (6000K) Crystal Purple (6500K) Crystal Blue (8500K)	D2C(R/S) D1C(R/S) D4C(R/S)	D1C
Double Type	H4D(9003D/HB2D), H13D(9008D), 9004D(HB1D), 9007D(HB5D)			



Halogen Lamp



CRYSTAL WHITE / 6,000K



CRYSTAL PURPLE / 6,500K



CRYSTAL BLUE / 8,500K



■ The manufacturing characteristics of KAI XEN

Division	Main Characteristics
Manufacturing Environment	<ul style="list-style-type: none">○ The first established latest factory(1998.04)○ 100% environment manufacture of Argon and vacuum
Equipment	<ul style="list-style-type: none">○ The best capsule facility instruction from Germany & Japan
Quality and Inspection	<ul style="list-style-type: none">○ The two steps Aging test of All products○ Shipping Inspection : Sampling test by random





■ The special features of KAIXEN and comparison against other products

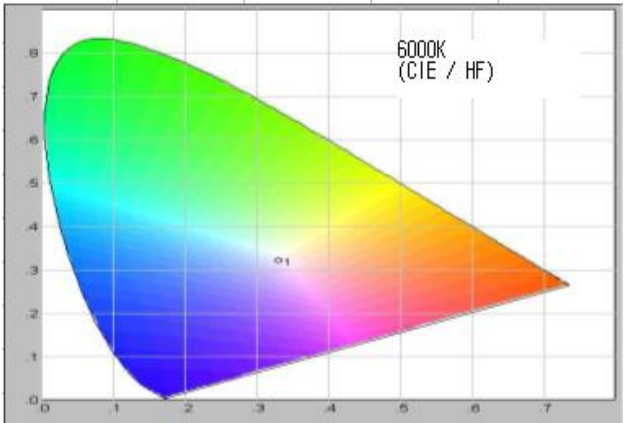
Division	KAIXEN H.I.D	Others H.I.D
Bulb (Capsule)	<ul style="list-style-type: none"> ◆ Established the newest factory and facility introduction(1998.04) ◆ The first completion of the KAIXEN capsule facilities-KAIXEN capsule has improved initial lighting system, clear focus and better arc lamp which are the world first ◆ Ballast and Bulb durability, for KAIXEN capsule switches on a lamp at 18,000V ◆ The largest amount stockpile-10,000 per month, Max 20,000 	<ul style="list-style-type: none"> ❖ Manufactured by the capsule and initial lighting at 23,000V ❖ $\pm 5,000V$ different voltage than the KAIXEN ❖ Delayed initial lighting system
Ballast	<ul style="list-style-type: none"> ◆ Distinguished Ballast in Domestic (Korea) ◆ Equal quality with Hella (Germany) ◆ Operated 12~24VCombination(7.5V~30V) / -40°C ~120°C / Built-in Can-bus function(Optional-Canceller) 	<ul style="list-style-type: none"> ❖ Products which made in China and Taiwan (No inspection products in Korea) Low priced goods
Cable	<ul style="list-style-type: none"> ◆ Using a high voltage cable certified by UL & CE ◆ Using high voltage connector housing certified by KS and the application of a special design ◆ Using a high voltage silicon wiring kit to protect the conduction current. 	<ul style="list-style-type: none"> ❖ To use the non-standardized products (Substandard with UL, CE, KS)
Bulb Base	<ul style="list-style-type: none"> ◆ Using a high voltage PPS quality Base to protect both the outflow of high voltage and conduction 	<ul style="list-style-type: none"> ❖ To use the common polyurethane quality (Weak in the high voltage)

* The specification of Others H.I.D is followed by ordinary H.I.D product's details.
(There may be some points of differences in specific products.)



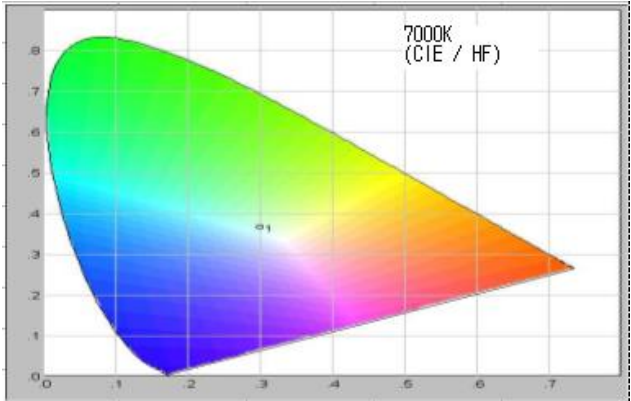
KAIXEN H.I.D Lamp Test Result

6,000K (Average)	Electronic Spec.			Light Spec		Color(HF)	
	V	mA	W	K	Lm	X	Y
	85.25	407.6	35.29	5,621	2,513	0.3302	0.3206
	82.76	417.6	34.54	5,468	2,547	0.333	0.3237



- * Report No.:AUTO-3627-1
 - * Description : LAMP (85V 35W)
 - * Lot Size : 210 PCS
 - * Sample Size : 2 PCS
- * Test Voltage : 13.5V
 - * Inspection Date : 2010.7.4

7,000K (Average)	Electronic Spec.			Light Spec		Color(HF)	
	V	mA	W	K	Lm	X	Y
	87.01	393.9	34.32	6,810	2,164	0.2998	0.3667
	87.25	407.6	35.29	6,542	2,108	0.301	0.382



- * Report No.:AUTO-3627-1
 - * Description : LAMP (85V 35W)
 - * Lot Size : 210 PCS
 - * Sample Size : 2 PCS
- * Test Voltage : 13.5V
 - * Inspection Date : 2010.7.4



KAIXEN H.I.D Ballast “license”

GRAND-DUCHÉ DE LUXEMBOURG

MINISTÈRE DES TRANSPORTS

REFERENCE: E13*10R00*10R02*1490*00

ANNEXES: Documentation technique

Luxembourg, le 29 janvier 2003

19-21, Boulevard Royal

L-2910 Luxembourg

Tél 478-1 – Télécopieur 241 817 – Télés 1465 CIVAIR LU

Communication concernant⁽²⁾:

Communication concerning:

- délivrance d'une homologation approval granted
- l'extension d'homologation approval extended
- le refus d'homologation approval refused
- le retrait d'homologation approval withdrawn
- l'arrêt définitif de la production production definitively discontinued

E13

d'un type de sous-ensemble⁽²⁾ électrique/électronique en ce qui concerne le Règlement N° 10

of a type of electrical/electronic with regard to Regulation N° 10

Numéro d'homologation: E13*10R00*10R02*1490*00

Approval number:

Marque d'homologation: E13 10R-02 1490

Approval mark:

1. Fabricant: (marque commerciale du constructeur):

Maka (trade name of manufacturer):

2. Type: NRB-33

Type:

Dénomination(s) commerciale(s) générale(s):

General commercial description(s):

3. Moyens d'identification du type, s'ils sont marqués sur le véhicule / composant / unité technique⁽²⁾ ;

Means of identification of type, if marked on the vehicle / component / separate technical unit

3.1. Emplacement de ce marquage: Label on top of the chassis

Location of that marking:

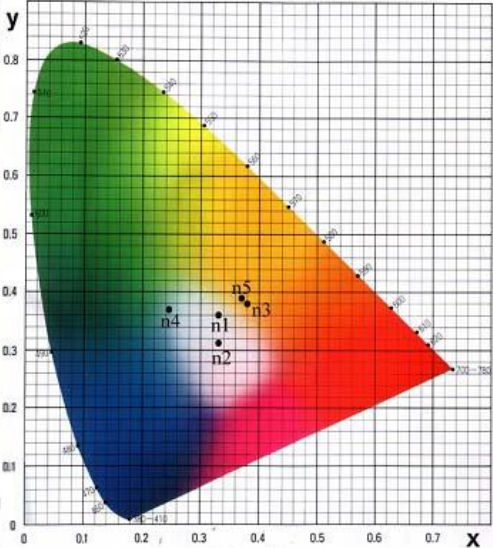
4. Catégorie du véhicule: Not applicable

Category of vehicle:

5. Nom et adresse du constructeur: KOREA

Name and address of manufacturer:

Unit No.	Test Report					
	n1 (A corp. 6000K)	n2 (B corp. 6000K)	n3 (B corp. 4300K)	n4 (B corp. 9000K)	n5 (C corp. 4100K)	
Classi- fication						
Input Vol(V)	12.8	13.5	13.5	13.5	13.5	
Input Cur (A)	3.315	3.078	3.043	3.026	3.035	
Input Watt (W)	42.3	41.5	41.1	40.8	40.9	
Lumen (lm)	2,810	2,510	3,730	1,760	3,320	
Color temp (K)	5,488	5,361	4,103	20,918	4,286	
Color Coord.	X	0.333	0.335	0.378	0.242	0.372
	Y	0.364	0.317	0.383	0.270	0.387

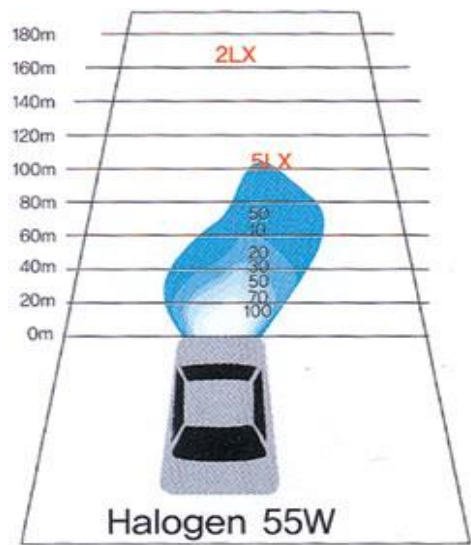


KAIXEN Ballast

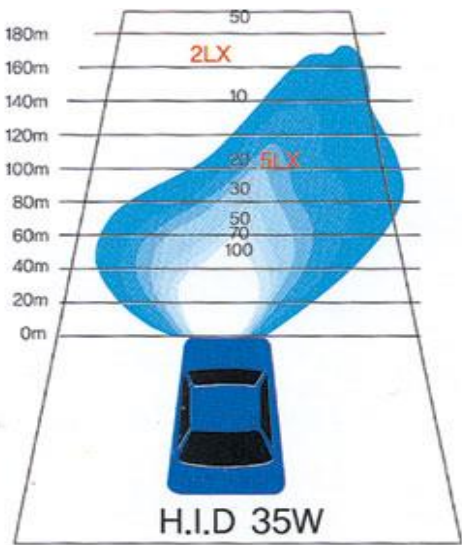
Manufactured goods & License

Lamp durability of Halogen Lamp & H.I.D system

Halogen beam

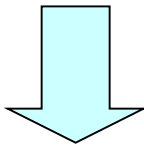


HID Xenon beam

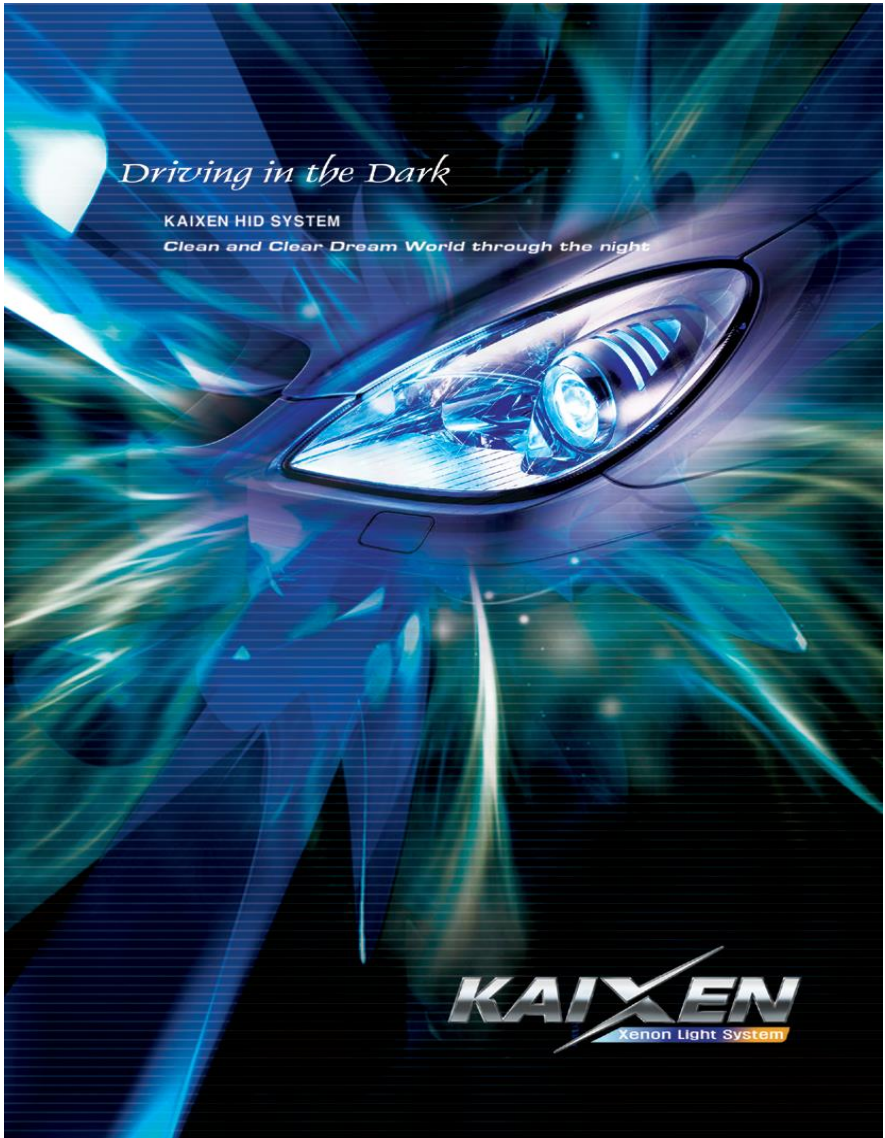




Products



Next Pages





KAIXEN Composition



Sample : H7

- ☐ Box Size : 315 x 263 x 68mm
- ☐ Weight : Average of 1 BOX
 - Single type : 1,180g
 - Double type : 1,450g





Model Line-up



H4D(Hi-Low)



H1,H3,H4S,H7,H11,H13,881,
9004,9005,9006,9007.



D2C/D1C/D4C





KAIXEN H.I.D Explanation

Bulb



Ballast



Remark

- The inner part of KAIXEN Ballast is very resistant both vibration and damp proof owing to filled with an insulator.
- KAIXEN Bulb is produced by the perfect vacuum condition (Argon).
 - Oxygen : Bulb made from less than 0.1 PPM condition.
 - Hydrogen : Keep the clean condition less than 0.1 PPM.
- KAIXEN H.I.D has a strong point in comparison to other company in that KAIXEN has a high watts to light up.

KAIXEN Attach Sample ①

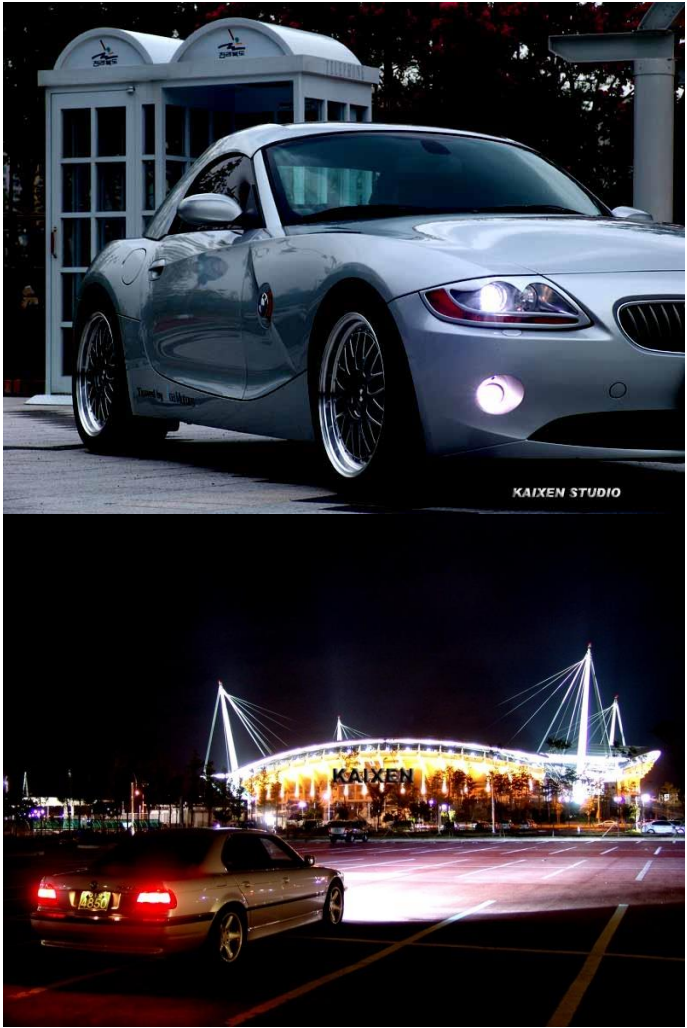


KAIXEN Attach Sample ②



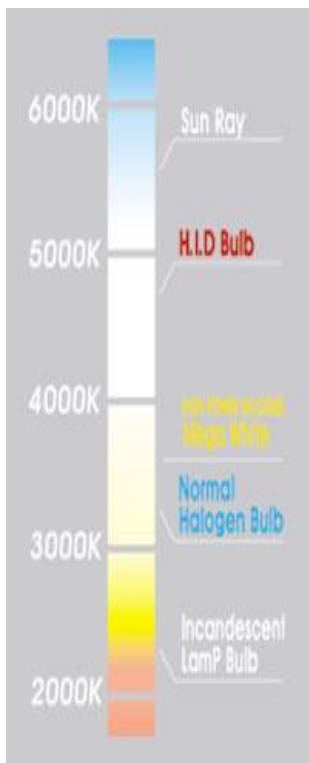


Light Beam Pattern



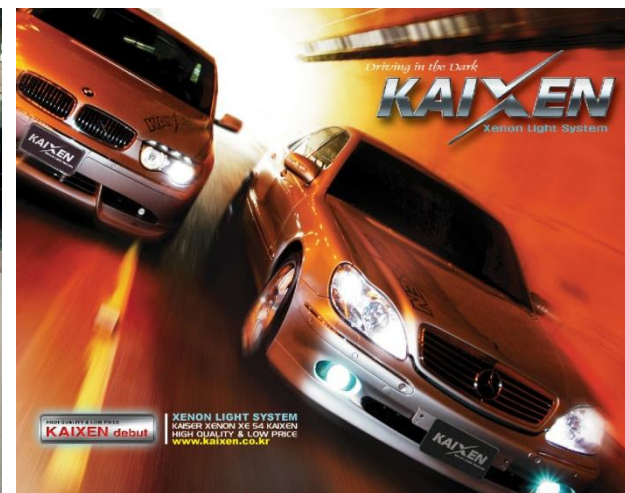


Get the latest and brightest technology available anywhere - for your vehicle.



HID Light stimulates driver concentration and makes night time driving less tiring and it reflects much better on road markings and signs, further contributing to safety and comfort.

They are produced to the very lightest standards of reliability and quality specification that have made HID lighting the number one choice of discerning drivers everywhere.



D2C-6,500K



**“KAIXEN” Xenon Light system
is the world renowned and
perfect quality light system,
which improves the weak points
of other H.I.D system.**

Thank you.!



By



Driving out darkness

Made by Kaixen Studio 2015.07.01