# TOKISTAR

PRODUCT GUIDE EXHIBITOR LED EX SOCKET SYSTEM



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GALLERY



### **#01** MARINE & WALK YOKOHAMA



## **EXHIBITOR LED**

EXBK-500-VI-WW-G60C

▶ Page 3-5

## **#02** PABLO COFFEE Shinsaibashi OPA & OPA Kireikan



## **EXHIBITOR LED**

EXBK-100-VI-WW-S45C (Custom spacing)

Design : Supermaniac Inc. Lighting Design : L.GROW lighting planning room Inc.

Page 3-5

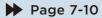
**#03** Maruhon MakiArt Terrace Ishinomaki Cultural Complex



## **EX SOCKET SYSTEM**

EXSS-L4000-WH (Custom white wire)

Architectural Design : Sou Fujimoto Architects Lighting Design : LIGHTDESIGN INC. Photographer : Akito Goto



## **EXHIBITOR LED**

OUTDOOR

Voltage = 24VAC

Wattage = 1.4W/LED

Weight = EXBK-300 : 270g/m EXBK-500 : 210g/m Main Materials = PBT, PVC & PC

Cable = AWG12 x 2 (AWG12 : eq. 3.3mm<sup>2</sup>)

24VAC



## EXBK-000-00-00-0000

LED Spacing	LED Color	Globe Style
300 : 300mm 500 : 500mm *Custom spacing is available	VI-WW : 2400K UB-WW : 2400K VI-27K : 2700K UB-27K : 2700K VI-30K : 3000K UB-30K : 3000K	S45 : S φ45 G45 : G φ45
	%VI = Virtual Incandes UB = Ultra Bright	scent

Globe Style	Globe Color
G60: G	C : Clear
S45∶S φ45	F : Frosted
G45: G φ45	R : Red
G35:G	G : Green
	A : Amber
	B : Blue
cent	%S45, G45 and in Clear and Fro

Catalog#	Power	LED Q'ty/run
EXBK-300-VI	4.7W/m	2 ~ 120 LEDs
EXBK-500-VI	2.8W/m	2 ~ 100 LEDs
EXBK-300-UB	4.7W/m	2 ~ 120 LEDs
EXBK-500-UB	2.8W/m	2 ~ 100 LEDs

CRI85

CUT OK

PHASE CONTROL

IP65

### 100 LED Spacing End cap Φ60 82 83 65 Globe type : G60 Globe type : S45 Globe type : G45

### **Globe Selection**

**Specifications** 



## System Features

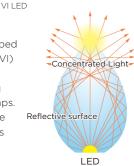


A Classic and **Refined Appearance** 

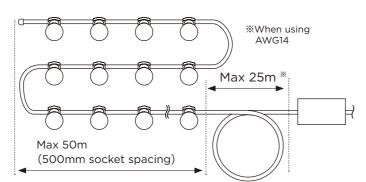


Incandescent lamp

By using virtual filament technology, we have developed our Virtual Incandescent™ (VI) LEDs. These LEDs do a remarkable job of emulating traditional incandescent lamps. Our proprietary Light Source Moving Technology transfers light to tip of the lens.



Point Dependable Design and Construction



Exhibitor sockets are permanently sealed to flexible cable at on center intervals. Continuous lengths of Exhibitor with up to 120 LEDs at 300mm on center (36m) can be used in large scale applications



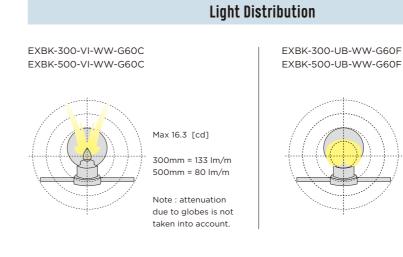
## **Exhibitor is wet-location** listed with an IP65 rating

The Exhibitor Series uses polycarbonate globes and has been safety tested for wet-locations. The globes are weather resistant, will not crack and safe to the touch. Exhibitor fixtures have been prominently featured in theme parks worldwide.

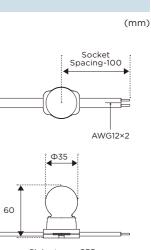


3





4





## Light Sources

VI : Virtual Incandescent



Not for use with Frosted Globes

#### UB : Ultra Bright





Colors

Red



G60G Green

#### G60A Amber

G60B Blue



Max 4.46 [cd]

300mm = 150 lm/m 500mm = 90 lm/m

Note : attenuation due to globes is not taken into account.

### LED Colors, Im

VI-WW	:	40 lm/LED
UB-WW :		45 lm/LED
		42 lm/LED
UB-27K :		48 lm/LED
		44 lm/LED
		50 lm/LED

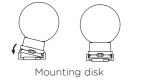
### Instructions

#### Surface Mounting with Disks



Exhibitor Series can be surface mounted to structures using mounting disks. One disk is required for mounting each socket. The socket can be snapped into the disk first, and the entire assembly screwed in place to the structure.

1. Exhibitor fixture snaps directly into the Mounting Disk and locks in place.



2. Mounting Disks attach

with screws.

Screw holes

EXBK-MD/5 Mounting disks % 5pcs/set

※ One Mounting disk is required for each socket. Please check the required number of LEDs before placing an order.

### Festoon Mounting with Wire-rope Adaptors



Wire Rope Wire-rope adaptor Socket

For festoon applications to a catenary cable, our wirerope adaptors securely hold each socket in place to a 3~5mm diameter wire rope.

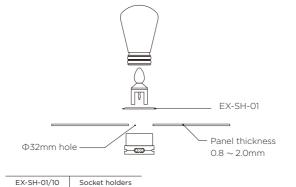
Wire rope and all the associated mounting hardware is not provided with the system.

EXBK-MDW/5 Wire-rope adaptors

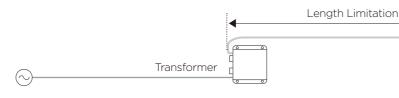
% 5pcs/set ※ A wire-rope adaptor is required for each socket. Please check the required number of LEDs before placing an order.

#### Panel-Extrusion Mounting with Socket Holder

For installations to flat panels or extrusions up to 0.8  $\sim$ 2.0mm, we offer stainless-steel socket holders. The socket assembly is inserted from below, then the socket holder is pressed in place from above.



% 10pcs/set % Socket holders are required for each LED. Please check the required number of LEDs before placing an order.



#### **Recommended Lead Wire Size and Length Limitation**

The distance from the power supply to the fixture, and the load of the fixture, will determine the proper size of secondary wire. Fixtures require an individual lead. If additional wire needs to be attached, refer to the recommendation in this chart.

Wire Size	Total Length
AWG14	Within 25m
AWG12	Within 44m

It is possible to connect the lighting fixtures and a remotely set power supply with an appropriate lead wire. Refer to the table for lead wire sizes and length limitation. The extension distance is a guideline distance for the fixture's maximum capacity. Depending on the type of power supply, lead wire, and number of LEDs, it may be possible to extend it further. Please contact us for more information.

#### **Power Supplies**

#### Exhibitor LED series operate with 24VAC magnetic transformer.

Electronic transformers may not be used.

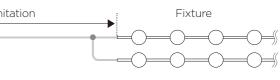
The primary input to the transformer may be dimmed from industry standard phase-control dimmers, also referred to as triac dimmers. While most show very favorable results, there may be compatibility issues with certain makes and models. The following guidelines should be taken into account in selecting the proper dimming device:

- 1. Make sure the dimmer used is suitable for use with magnetic low-voltage transformers, not electronic low-voltage transformers.
- 2. Some dimmers have a minimum-load requirement. Since LEDs consume so little power, this should be given serious consideration in the selection of the dimmer.
- 3. Some dimmers not only require a minimum load, but may not function properly at certain levels/loads because they do not interpret an LED load as they do a standard incandescent load. In such cases, some dimming companies offer a "synthetic load" device to resolve this issue. Check with the dimmer manufacturer in such cases.

#### A PRECAUTIONS

1. Read all instructions completely before beginning installation. 2. Turn off electricity before beginning installation. 3. All wiring is to be performed by a qualified electrician.

Wiring Diagram



#### A PRECAUTIONS

- Do not extend the lead wire too much, as it is very dangerous.
- Please contact us if you want to extend beyond the length of the table
- Select a cable with a capacity, according to the site conditions. Select a cable that conforms to water and weather resistance standards, according to the site environment.

- 4. Tokistar has evaluated a wide range of dimmers, but cannot promise perfect dimming results with every make and model on the market. Additionally, manufacturers of dimmers occasionally make changes to their specifications without notice. Some older generations of a certain model might actually work more fluidly than a newer generation.
- 5. If there is any question on compatibility, consult with us on a case-by-case basis. We work closely with many dimming companies, and can provide samples of our fixtures for compatibility testing if necessary.

4. Installation must comply with the National Electrical Code, or related applicable regulations.

5. Turn main supply to magnetic down transformer on only after all connections have been made and tested.

6. Use only appropriate magnetic down transformer.

## **EX SOCKET SYSTEM**



#### OUTDOOR CRI 85 A IP65 24VAC PHASE CONTROL

Voltage = 24VAC Wattage = 1.4W/LED Weight = (Refer to each item) Main Materials = PBT, PVC & PC 

Point

### **System Features**

Ceiling and Panel Point **02** mounted fixtures have a refined appearance



The Standard is ideal

for thin panel

installation

EXSS-L000 (Standard)

Point

The Standard is for both outdoor and indoor use.It is ideal for installation on thin panels such as built-in fixtures, signboards (panel mounting method), and metal panels.



EXSS-CMPM/ (Ceiling & Panel Mounting)

Dedicated design for ceiling and panel mount applications. A small-diameter fixture trim provides a finished look.



This newly launched

Cord Pendant creates a

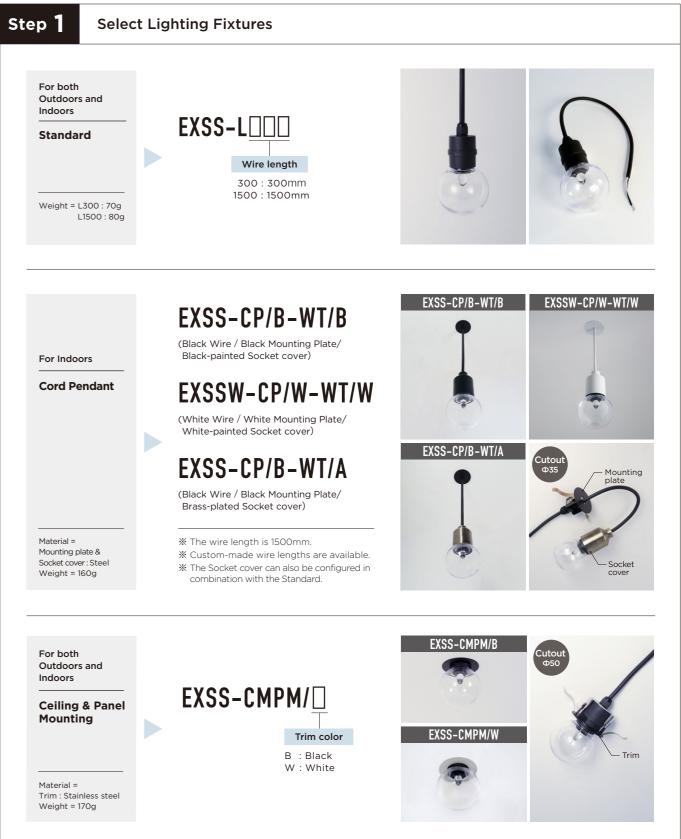
decorative canopy of light

#### EXSSO-CP/O-WT/O (Cord Pendant)

Exclusively designed as a Cord Pendant. The decorative mounting plate can easily be installed in ceiling applications. The socket cover has a classical, refined finish. It is possible to produce a space with a feeling of floating in indoors.  $\ensuremath{\mathbbmath{\mathbb{X}}}$  Custom-made wire lengths are available. Please contact us for more information.



A system is comprised of "Lighting Fixtures" + "LEDs & Globes" + "Options". Please follow the 3 steps below.

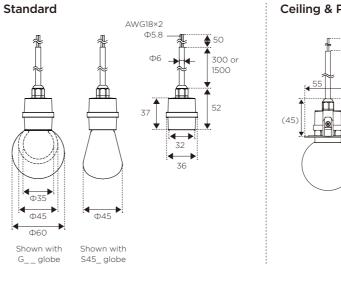




## How to Order



Ne recommend using V	/I I EDs with Clear clobes ar	nd UB LEDs with Frosted globes.	
we recommend using	TEEDS with clear globes at	id OB LEDS with Flosted globes.	
<b>X-</b> <u>00-00</u>	EXGL-		
LED Color	Globe Style & Color		
VI-WW : 2400K	G60C : Φ60 Clear		
UB-WW : 2400K VI-27K : 2700K	G60F : Ф60 Froste S45C : Ф45 Clear	ed	
UB-27K : 2700K	S45E : Φ45 Froste	ed	
VI-30K : 3000K	G45C : Φ45 Clear		
UB-30K : 3000K	G45F : Ф45 Froste G35C : Ф35 Clear	a	
	G35F : Ф35 Froste	d	
_ight Sources		Globes	
'I : Virtual Incandescent	UB : Ultra Bright	Clear	Frosted
oltage : 24VAC	Voltage : 24VAC	G60C 545C G45C G35C	G60F S45F G45F G35F
Vattage : 1.4W/LED	Wattage : 1.4W/LED	G60C 545C G45C G35C	G60F 545F G45F G35F
p <b>3</b> Option	15		
p <b>3</b> Option	IS		
p <b>3</b> Option	IS		
EXGL-G45_ Replace	nent globes	Socket holders for the S	tandard (for thin panel)
EXGL-G45_ Replacer EXGL-G60_ Replacer			tandard (for thin panel) er (panel thickness 0.8~6.0mm)
EXGL-G45_ Replace	nent globes		er (panel thickness 0.8~6.0mm)
EXGL-G45_ Replacer EXGL-G60_ Replacer Please specify the symbol of	nent globes	EXSS-SH Socket hold % Required for the number of	er (panel thickness 0.8~6.0mm) LEDs. e when installing the Standard





EXSS-SH Socket holder

₩ 1pc/unit

When press-fitting

Í

Press-fit the socket holder

from the surface

– Washer

- EXSS-SH

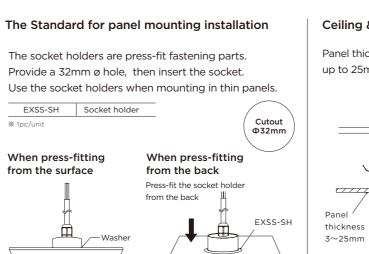
Panel

thickness

0.8~6.0mm

from the surface

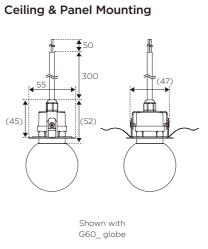
## Instructions



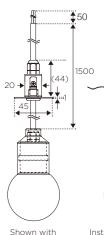
Washer

**Specifications** 

(mm)







G60\_globe

Installation diagram for Socket cover

### LED Colors, Im





Max 4.46 [cd]

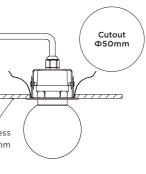
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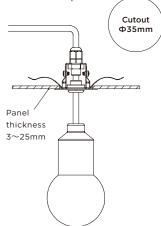
#### **Ceiling & Panel Mounting**

Panel thickness can be from 3mm, up to 25mm with 2 pasted boards.

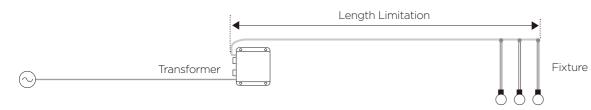


#### Cord Pendant

This Cord Pendant is inserted into the 35mm  $\Phi$  ceiling opening. The flange becomes a decorative plate.



### Wiring Diagram



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