

# LED Area Luminaire



















## **Specifications**

(ft2@0°):

0.49 ft<sup>2</sup> 0.05 m<sup>2</sup>)

Length:

26.6" (67.64 cm) (SRA mount)

Width:

11.8" (30.0 cm)

Height:

2.8" (7.1 cm) Main Body 7.3" (18.5 cm) Arm

**Weight:** 13 lbs (5.9 kg)











## Introduction

Catalog Numbe

Notes

Туре

The EAX family provides the best combination of switchable technology including adjustable lumens, switchable CCT color temperature and exclusive four-optic SwitchOptics™ providing Type II, III, IV and V distribution patterns; all from a single luminaire. This vast feature-set allows maximum flexibility while managing the lowest possible SKU counts on the shelf or in-field on area lighting projects.

The EAX1 delivers 5,000 to 16,000 lumens. It is a great choice for lighting new sites and retrofit, including HID 50W to 400W area luminaires, while providing long service life and fast payback. Choice of six different modular mountings offer a variety of labor savings features including "no-drill" mounting arms that fit the majority of existing pole drillings.

## **EAX1 Stock Luminaires with Mount Included**

Catalog	Lumens (set on max)	Watts (set on max)	CCT (set on 40K)	Optics (set on T3)	Voltage	Mounting Type	Finish	CI Code	UPC	Pallet Qty
EAX1 ALO SWW2 SO UVOLT UPM PER DDB	5,000 -16,000	32 - 106	30K/40K/50K	T2, T3, T4, T5	120-347V	UPM ships included	Dark Bronze	*292P6U	00198934597748	21
EAX1 ALO SWW2 SO UVOLT IS PER DDB	5,000 -16,000	32 - 106	30K/40K/50K	T2, T3, T4, T5	120-347V	IS ships included	Dark Bronze	*292P6T	00198934597731	21

#### EAX1 Stock Luminaires Less Mount L/M (order mount separately, see mounting accessories)

Catalog	Lumens (set on max)	Watts (set on max)	CCT (set on 40K)	Optics (set on T3)	Voltage	Mounting Type	Finish	CI Code	UPC	Pallet Qty
EAX1 ALO SWW2 SO UVOLT L/M DDB	5,000 -16,000	32 - 106	30K/40K/50K	T2, T3, T4, T5	120-347V	order mount separately	Dark Bronze	*292P6E	00198934597601	48
EAX1 ALO SWW2 SO UVOLT L/M BL	5,000 -16,000	32 - 106	30K/40K/50K	T2, T3, T4, T5	120-347V	order mount separately	Black	*292P6K	00198934597663	48
EAX1 ALO SWW2 SO UVOLT L/M WH	5,000 -16,000	32 - 106	30K/40K/50K	T2, T3, T4, T5	120-347V	order mount separately	White	*292P6M	00198934597687	48

Notes: 1) PER NEMA photocell receptacle + shorting cap is standard on units shipped with mount included. 2) Units with L/M do not include mount in carton. Order mount on separate line (see accessories). 3) Acuity twist-to-lock type receptacle is standard on all luminaires. 4) Black (BL) and white (WH) finish only available on L/M type luminaires, held only at SEDC distribution center (check availability).

#### EAX Mounting Accessories (select one when ordering L/M luminaire - ships on separate line, match finish)

Catalog	Description	Finish	CI Code	UPC	Pallet Qty
EAX UPM DDB M6	Universal tilt arm square/round & pole top tenon mount	Dark Bronze	*292P92	00198934598424	240
EAX SRA DDB M6	Standard square and round pole arm	Dark Bronze	*292P95	00198934598431	240
EAX IS DDB M6	Adjustable slipfitter	Dark Bronze	*292P9E	00198934598530	360
EAX ASRP DDB M6	Adjustable tilt square and round pole arm	Dark Bronze	*292P9G	00198934598547	270
EAX WBA DDB M6	Wall bracket adapter	Dark Bronze	*292P9H	00198934598554	270
EAX YK DDB M6	Adjustable yoke	Dark Bronze	*292P9J	00198934598561	300
EAX UPM BL M6	Universal tilt arm square/round & pole top tenon mount	Black	*292P9M	00198934598639	240
EAX SRA BL M6	Standard square and round pole arm	Black	*292P9U	00198934598653	240
EAX IS BL M6	Adjustable slipfitter	Black	*292P9V	00198934598677	360
EAX ASRP BL M6	Adjustable tilt square and round pole arm	Black	*292PA5	00198934598752	270
EAX WBA BL M6	Wall bracket adapter	Black	*292PA7	00198934598783	270
EAX YK BL M6	Adjustable yoke	Black	*292PA9	00198934598806	300
EAX UPM WH M6	Universal tilt arm square/round & pole top tenon mount	White	*292PAC	00198934598820	240
EAX SRA WH M6	Standard square and round pole arm	White	*292PAF	00198934598851	240
EAX IS WH M6	Adjustable slipfitter	White	*292PAJ	00198934598868	360
EAX ASRP WH M6	Adjustable tilt square and round pole arm	White	*292PAK	00198934598882	270
EAX WBA WH M6	Wall bracket adapter	White	*292PAN	00198934598899	270
EAX YK WH M6	Adjustable yoke	White	*292PAR	00198934598943	300

Notes: 1) Mounting accessory required when ordering L/M type luminaires (available in master pack of 6, ships on separate line, match finish). 2) Mounting accessories include all necessary hardware to attach to and install luminaire. 3) Black (BL) and white (WH) finish only available on L/M type luminaires, held only at SEDC distribution center (check availability).





## **Ordering Information Configurable**

#### **EXAMPLE:** EAX1 ALO SWW2 SO XVOLT SRA PER DDB

EAX1								
Series	Package	Color Temperature	Distribution (Optics)	Voltage	Mounting			
EAX1	ALO¹ 16,000 lumens (default setting) P4 12,500 lumens P3 10,000 lumens P2 7,500 lumens P1 5,000 lumens (nominal lumens by setting)	SWW2 <sup>1</sup> 4000K (default setting) 30K 3000K 50K 5000K	SO¹ Switchable optics (default setting T3-Type III) T2 Type II T4 Type IV T5 Type V	UVOLT <sup>2</sup> 120-347V XVOLT <sup>3</sup> 277-480V	UPM Universal square/round pole, top tenon mount (fits 3.5" min SQ and 3" min dia. RND side mount, 2 3/8" OD pole top tenon)  IS Adjustable slipfitter (fits 2 3/8" OD tenon)  SRA Square/round pole standard arm (fits 3.5" min SQ and 3" min dia. RND poles)  ASRP Adjustable tilt square/round arm (fits 3.5" min SQ and 3" min dia. RND poles)  Choose (1) mounting (PER and mount ships included ) (dark bronze only) 6"  L/M7 Less mount  Order mount separately (PER not included) (available in dark bronze, black and white)			

chosen with one of these mounting options UPM, IS, SRA, ASRP)  DMG <sup>11</sup> 0-10V dimm  SPD10KV 10KV surge p  NLTAIR2 PIRH <sup>11</sup> nction/amb  PE12  Twist-lock PI	, , , , , , , , , , , , , , , , , , , ,

## Accessories

EAX1HSEGSBL M6 \*292PAT \*220XM7 DLL127F 1.5 CUL JU DLL347F 1.5 CUL JU \*219NHA \*219NHF DIT 480F 1 5 CUI III \*232TL4

EAX1 House side and external glare shield kit, black finish Photocell -SSI twist-lock (120-277V)

Photocell -SSL twist-lock (347V) Photocell -SSI twist-lock (480V)

DSHORT SBK U

\*251FY6 AS3-5 490 DDBXD Pole top tenon adapter 2 3/8" tenon 4 @ 90

#### NOTES

- See default settings under package, color temperature and optics. Other settings can be adjusted via switch in the field.

  UVOLT driver operates on any line voltage from 120-347V (50/60 Hz).

  XVOLT driver operates on any line voltage from 277-480V (50/60 Hz).

- YK and WBA mount can be purchased as accessories or combined on same order with (L/M) less mount luminaires.
- Acuity twist-to-lock type sensor receptacle is standard on all luminaires.
- PER + shorting cap standard on luminaires with mounting included in same shipping carton (available in dark bronze finish only). Not available with L/M, use PER7
- Units with L/M do not include mounting with luminaire. Order mount as separate line item (see accessories).

- Black (BL) and white (WH) finish only available on L/M type luminaires. Held only at select Acuity twist-to-lock type sensor.
- Luminaires including option PER and PER7 do not Luminaires including option PER and PER/ do not include photocell control / sensor as standard, order as an option included in carton or as accessory as separate line item (see other options). For units with option PER and PER7, the luminaire must be restricted to +/- 45° from horizontal aim per ANSI C136.10-2010.
- C136.10-2010.
  PER7 is compatible with standard twist-lock photocells for dusk to dawn operation or advanced control nodes that provide 0-10V dimming signals. Wire 4/Wire 5 wired to dimming leads on driver. Wire6/Wire7 capped inside luminaire. Not available for use with option NLTAIR2 PIRH or option DMG.
- 12 All EAX luminaires are to be installed and aimed facing downward, for down lighting only.



Items marked by a shaded background qualify for the Design Select program and ship in 15 days or less. To learn more about Design Select, visit <a href="https://www.acuitybrands.com/designselect">www.acuitybrands.com/designselect</a>. \*See ordering tree for details

### **External Shields**



#### **House Side / External Glare Shield Kit**

(Note: Shield is reversible, can be used rear and forward facing. Single back panel used as (HS) house side shield)



Three Sided External Glare Shield (EGSR rear facing)



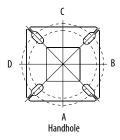
**House Side Shield** (HS)



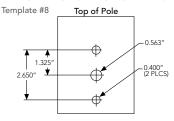
## **Pole/Mounting Informatiion**

Accessories including bullhorns, cross arms and other adapters are available under the accessories tab at Lithonia's Outdoor Poles and Arms product page. Click here to visit Accessories.

#### HANDHOLE ORIENTATION

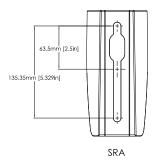


#### **EAX SRA AND ASRP POLE DRILLING**



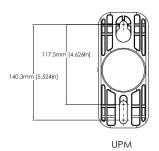
#### SRA STANDARD ARM AND ASRP ADJUSTABLE ARM

(on-center pole drilling range)



### **UPM ARM**

(on-center pole drilling range)



#### **Round Tenon Mount - Pole Top Slipfitters**

Tenon O.D.	EAX Mounting	Single	2 at 180°	2 at 90°	3 at 120°	3 at 90°	4 at 90°
2 - 3/8"	SRA, ASRP	AS3-5 190	AS3-5 280	AS3-5 290	AS3-5 320	AS3-5 390	AS3-5 490
2 - 7/8"	SRA, ASRP	AST25-190	AST25-280	AST25-290	AST25-320	AST25-390	AST25-490
4"	SRA, ASRP	AST35-190	AST35-280	AST35-290	AST35-320	AST35-390	AST35-490

#### **Drill/Side Location by Configuration Type**

		-					
Drilling Template	Mounting Option	Single	2 @ 180	2 @ 90	3 @ 120	3 @ 90	4 @ 90
	Head Location	Side B	Side B & D	Side B & C	Round Pole Only	Side B, C & D	Side A, B, C & D
#8	Drill Nomenclature	DM19AS	DM28AS	DM29AS	DM32AS	DM39AS	DM49AS

#### **EAX1 - Luminaire EPA**

\*Includes luminaire and integral mounting arm. Other tenons, arms, brackets or other accessories are not included in this EPA data.

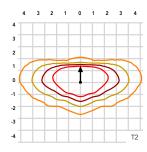
Fixture Quantity & Mount Configuration	ting	Single	2 @ 90	2 @ 180	3 @ 90	3 @ 120	4@90	2 Side by Side	3 Side by Side	4 Side by Side
Mounting Type		-	7			Y			•	•
SRA - Square / Round Pole Arm	0°	0.49	0.76	0.98	1.25	1.25	1.25	0.54	0.81	1.09
	0°	0.49	0.76	0.98	1.25	1.25	1.25	0.54	0.81	1.09
	10°	0.49	0.79	0.98	1.28	1.28	1.28	0.61	0.91	1.21
Covers following mounting types:	20°	0.49	1.08	0.98	1.57	1.57	1.57	1.19	1.79	2.39
IS - Adjustable Slipfitter	30°	0.49	1.36	0.98	1.85	1.85	1.85	1.74	2.62	3.49
ASRP - Adjustable Square / Round Pole Arm	40°	0.49	1.61	0.98	2.10	2.10	2.10	2.24	3.36	4.48
UPM - Universal Tilt Square / Round &	45°	0.49	1.72	0.98	2.21	2.21	2.21	2.47	3.70	4.93
Pole Top Tenon Arm	50°	0.49	1.82	0.98	2.31	2.31	2.31	2.67	4.01	5.34
	60°	0.49	2.00	0.98	2.49	2.49	2.49	3.02	4.53	6.04
	70°	0.49	2.13	0.98	2.62	2.62	2.62	3.28	4.92	6.55

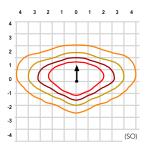
## **Photometric Diagrams**

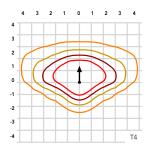
To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's RSX Area homepage.

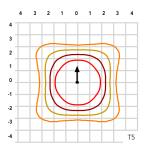
Isofootcandle plots for the EAX1 ALO SWW2. Distances are in units of mounting height (20').











## **Performance Data**

## **Lumen Output**

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

Performance	System Watts	Distribution			30K K, 70 CF	RI)		*40K (SWW2) (4000K, 70 CRI)				50K (5000K, 70 CRI)					
Package	(nominal)	Туре	Lumens	В	U	G	LPW	Lumens	В	U	G	LPW	Lumens	В	U	G	LPW
		T2	5,390	2	0	2	157	5,611	2	0	2	166	5,551	2	0	2	163
P1	34	*S0 (T3)	5,419	2	0	2	162	5,638	2	0	2	171	5,603	2	0	2	170
F1	34	T4	5,272	1	0	2	152	5,472	1	0	3	162	5,408	1	0	3	158
		T5	5,345	2	0	1	155	5,511	3	0	1	164	5,435	2	0	1	160
		T2	7,403	2	0	2	151	7,825	2	0	2	162	7,551	2	0	2	158
P2	48	*S0 (T3)	7,471	2	0	3	159	7,934	2	0	3	171	7,681	2	0	3	168
ΓZ	40	T4	7,188	2	0	3	147	7,629	2	0	3	158	7,350	2	0	3	154
		T5	7,237	3	0	1	150	7,673	3	0	2	161	7,367	3	0	2	155
		T2	9,319	3	0	3	145	10,029	3	0	3	159	9,514	3	0	3	152
P3	63	*S0 (T3)	9,543	2	0	3	156	10,259	2	0	3	169	9,807	2	0	3	165
12	03	T4	9,104	2	0	3	142	9,783	2	0	3	155	9,262	2	0	3	148
		T5	9,159	3	0	2	144	9,831	3	0	2	157	9,266	3	0	2	150
		T2	11,617	3	0	3	138	12,731	3	0	3	152	11,825	3	0	3	146
P4	82	*S0 (T3)	12,049	3	0	3	152	13,218	3	0	3	167	12,345	3	0	3	162
r4	02	T4	11,414	2	0	3	136	12,488	2	0	4	149	11,572	2	0	3	142
		T5	11,419	3	0	2	138	12,495	3	0	2	152	11,547	3	0	2	144
	*AIO 111	T2	14,654	3	0	3	130	16,208	3	0	3	145	14,671	3	0	3	137
*ALO		*S0 (T3)	15,198	3	0	3	146	16,888	3	0	4	163	15,490	3	0	3	157
ALU	111	T4	14,247	3	0	4	127	15,782	3	0	4	142	14,316	3	0	4	134
		T5	14,230	4	0	2	130	15,791	4	0	2	144	14,286	4	0	2	135

 $<sup>^{\</sup>star}$  Indicates default setting on luminaire configurations when ordered as ALO SWW2 SO



#### **Performance Data**

### ALO-Watts/ SWW2 CCT Switching Diagram

#### **Luminaire Default Settings**

ALO = Lumens / watts (set on high) SWW2 = 4000 CCT (set on 40K)



### SO SwitchOptics™ 4-Optic Switching

#### **Luminaire Default Settings**

SO = T3 (set on Type III)



#### Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from -30°C - 40°C (-22°F - 104°F)

Ambient Te	emperature	Lumen Multiplier
-30° C	-22° F	1.03
-20° C	-4° F	1.02
-10° C	14° F	1.02
0° C	32° F	1.01
10° C	50° F	1.01
20° C	68° F	1.00
25° C	77° F	1.00
30° C	86° F	0.99
40° C	104° F	0.98

#### **Projected LED Lumen Maintenance**

Data references the extrapolated performance projections for the platforms noted in a  $25^{\circ}$ C ambient, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11)

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Projected Lumen Maintenance									
0 Hrs	25,000 Hrs	50,000 Hrs	100,000 Hrs						
100%	92%	86%	74%						

## Electrical Load - UVOLT (120-347V)

Performance	System Watts		Current(A)								
Package	watts	120V	208V	240V	277V	347V					
P1	34W	0.27	0.19	0.18	0.17	0.15					
P2	48W	0.34	0.24	0.21	0.20	0.18					
P3	63W	0.52	0.33	0.29	0.26	0.23					
P4	82W	0.64	0.39	0.34	0.30	0.26					
ALO-Max	111W	0.89	0.52	0.46	0.40	0.33					

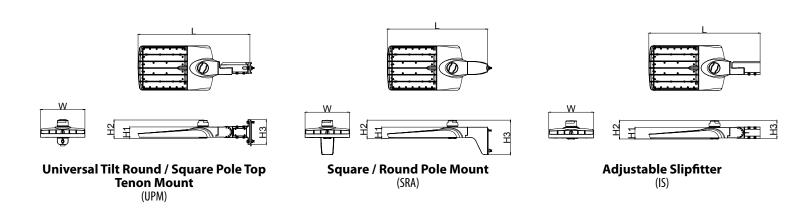
## Electrical Load - XVOLT (277 - 480V)

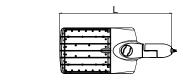
Performance	System Watts		Current(A)	
Package	Watts	277V	347V	480V
P1	34W	0.13	0.11	0.10
P2	48W	0.17	0.15	0.13
P3	63W	0.23	0.19	0.15
P4	82W	0.29	0.24	0.19
ALO-Max	111W	0.38	0.30	0.23

## **Dimensions and Weights**

				DIMENSIONS (inches)				
EAX1 Luminaire + Mounting Option	Mounting Description	Luminaire Total Weight (lbs)	lmage	Length	Width	Height (H1) (main body)	Height (H2) (w/ shorting cap)	Max Height (H3) (w/ arm & shrt cap)
L/M	Less mount	10	N/A	21.24		3.02	N/A	N/A
UPM	Universal pole mount arm with tilt, square / round & pole top 2-3/8" tenon mount	14		29.77			4.87	6.69
SRA	Square / round pole standard arm mount	13		26.60				9.13
IS	Adjustable slipfitter for 2-3/8" OD tenon	14		29.30	11.81			4.72
ASRP	Adjustable arm with tilt for square / round pole	14		28.83				9.02
WBA	Wall bracket with qty (4) 3/4" surface conduit taps	14		24.44				6.94
ҮК	Yoke mount	14	66	27.58				4.70

 $\textbf{Note:} \ \ \text{Line drawings for reference, see chart for weight overall dimensions by mounting type.}$ 



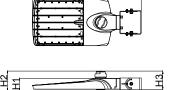












Adjustable Round / Square Mount
(ASRP)

Wall Bracket with Surface Conduit
(WBA)





**EAX1 with option NLTAIR2 PIRH** 

#### **FEATURES & SPECIFICATIONS**

#### INTENDED USE

The EAX family offers a site wide solution providing everything needed to light new exterior sites and retrofit existing HID area luminaires using the fewest amount of configurations. EAX features the broadest range of on-board switchable technology to adjust lumens, color temperature and now, uses exclusive SwitchOptics™, providing four-optic switching, including Type II, III, IV and V distributions, all from the same luminaire. This superior flexibility allows for fast and easy installation while helping reduce SKU counts and inventory costs. EAX is a great choice for pole mount and other applications including large area lighting, parking lots, storage areas, retail, office and other exterior spaces.

#### CONSTRUCTION

Die-cast aluminum housing with heat-dissipating fins enhances LED efficacy and component life. Driver is accessible through a hinged die-cast aluminum door for easy maintenance. The light engine and driver compartment is completely sealed against moisture and environmental contaminants and rated IP66. Housing features a unique modular arm mount system allowing easy installation, for fast and simple luminaire change-out through six different mounting types that accommodate the vast needs of existing equipment used throughout area lighting applications.

#### ELECTRICAL

Light engine consists of high-efficacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (up to L74/100,000 hours at 25°C). The 0-10V dimming, electronic driver has a power factor of  $>\!90\%$  and THD  $<\!20\%$ . Standard 6KV surge protection included, optional 10KV surge available.

#### ON-BOARD SWITCHABLE TECHNOLOGY

All luminaires provide this standard set of features providing maximum in-field adjustability to accommodate the vast needs of lighting jobs. All switches are protected yet accessible via exterior on the driver compartment. Adjustable Lumen Output (ALO): Provides 5-step dimming, allowing the contractor to adjust the lumen levels based on application needs. Luminaires ship on the maximum ALO setting and can easily be changed to other positions P4 / P3 / P2 / P1, when less light and/or more energy savings is desired. Switchable Correlated Color Temperature (CCT): Luminaires ship on the SWW2, 4000K setting and can easily be changed to 3000K or 5000K color temperature. SwitchOptics<sup>TM</sup> 4-Optic Switching This feature provides the benefit of using a single luminaire to provide four different photometric distributions. Luminaires ship on setting SO = T3 (Type III) distribution, and can easily be changed to other distribution patterns T2, T4 and T5.

#### CONTROLS

All EAX luminaires include an Acuity sensor-ready twist-to-lock receptacle. Luminaires can be configured to ship with nLight AIR™ Networked, Bi-Level motion / ambient sensors. Option (PER) 3-wire twist-lock photocell receptacle with shorting cap is included as standard on stock SKUs with mounting arm included. Luminaires can be configured with option (PER7) 7-wire twist-lock photocell receptacle with pins 4/5 connected to driver dimming leads and pins 6/7 capped

#### INSTALLATION

The EAX1 is light weight and easy to install by a single person. The vast assortment of mountings are easily interchanged using two bolts and do not require one to open the luminaire during installation. EAX features three types of "no-chill" arms that help save labor, time and money by accommodating the largest range of pre-existing pole drillings. Adjustable tilt (UPM / ASRP) and non-tilt (SRA) mounting arms are available and all three can be used on minimum 3" O.D. round and 3.5" minimum square poles. 2-3/8" adjustable slipfitter (IS), and adjustable yoke (YK) are available. A wall bracket (WBA) is available and includes qty (4) 3/4" conduit taps for surface conduit wiring. Some configurations include the mounting shipped in the same carton as the luminaire. Luminaires with less mount (L/M) must use/choose a separate mounting accessory ordered and shipped as a separate line item. All EAX luminaires are to be installed and aimed facing downward, for down lighting only.

#### LISTINGS

UL Listed to U.S. and Canadian safety standards for wet locations and IP66. Tested in accordance with IESNA LM-79 and LM-80 standards. Operating temperature -40C to 40C. DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at <a href="https://www.designlights.org/QPL">www.designlights.org/QPL</a> to confirm which versions are qualified.

#### WARRANTY

5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at:

ww.acuitybrands.com/support/warranty/terms-and-conditions

**Note:** Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

