



# iBright™ E48i T8 LED Tube

## Family Model

HFL-8000N-060600-00

HFL-8000N-120600-00

HFL-8000N-150600-00

For more comfortable viewing and brighter lighting, choose iBright™ E48i.

iBright™ E48i T8 LED Tubes are the best replacements currently on the market for conventional fluorescent T8 tubes. A frosted lens allows iBright™ E48i to emit light that is very comfortable to the eye in an even pattern of brightness. Lighting is provided by SMD LEDs in large quantities, which allows iBright™ E48i to maintain competitive levels of brightness.

iBright™ E48i achieves a high luminous efficacy of min. 95 lm/W at a lower price point by adopting LEDs with high LPW (lumens per watt) as a lighting source, which greatly raises the performance to cost ratio.

iBright™ E48i utilizes an external power supply and patented thermal technology to achieve more stable performance and excellent thermal properties. They are well-suited for retail and commercial lighting and are widely used in shopping malls, supermarkets, offices, restaurants, and in other public and professional locales.

## Performance Summary

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Length: 1.96 ft (600 mm), 3.93 ft (1200 mm), 4.92 ft (1500 mm)

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Power consumption: 8W±1W, 17W±1W, 20W±1W

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Luminous efficacy: >95 lm/W

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Lumens: 750-800 lm, 1600-1700 lm, 1800-1900 lm

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CCT:  
2800-3200 K  
4250-4750 K  
5500-6500 K

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CRI: >75

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## Recommended Applications

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General illumination for homes, offices, restaurants, hotels, malls, buses, trains, warehouses, parking lots etc;

Task lighting for cabinets, cupboards etc in your homes, restaurants, and kitchens or any other places where accent lighting is required.

Retail display lighting for the articles in your stores and shops;  
Back lighting for square billboards or advertisement boards.

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## Ordering Information

Typical Order Example: T8E412L360F000

SERIES	GENERATION	SIZE	VOLTAGE	CCT	Lens Type	OPTION A	OPTION B
T8=T8 Tube	E4=G4 EPS	06=0.6m/2ft 12=1.2m/4ft 15=1.5m/5ft	L3=36VDC	30=3000K 45=4500K 60=6000K	F=Frosted Lens	0=Default	00=Default

## Product Specifications

CONSTRUCTION & MATERIALS			
Length	1.96 ft (600 mm)	3.93 ft (1200 mm)	4.92 ft (1500 mm)
Housing	Extrusion Aluminum and PC Diffuser		
Tube Type	T8		
Base Type	G13		
Lens Type	Frosted		

ENVIRONMENTAL SYSTEM	
Work Environment	Indoor use (applicable for dry environments)
Operating Temperature	-20~40°C (-4~104°F)

OPTICAL SYSTEM			
Type	1.96 ft (600 mm)	3.93 ft (1200 mm)	4.92 ft (1500 mm)
Luminous Flux	750-800 lm	1600-1700 lm	1800-1900 lm
Luminous Flux (Emergency) *	525-560 lm	1120-1190 lm	1080-1140 lm
Color Temperature	2800-3200 K, 4250-4750 K, 5500-6500 K		
CRI	>75		
Beam Angle	140°		

\*For more information about emergency application, please check the catalog for ATG Emergency Driver.

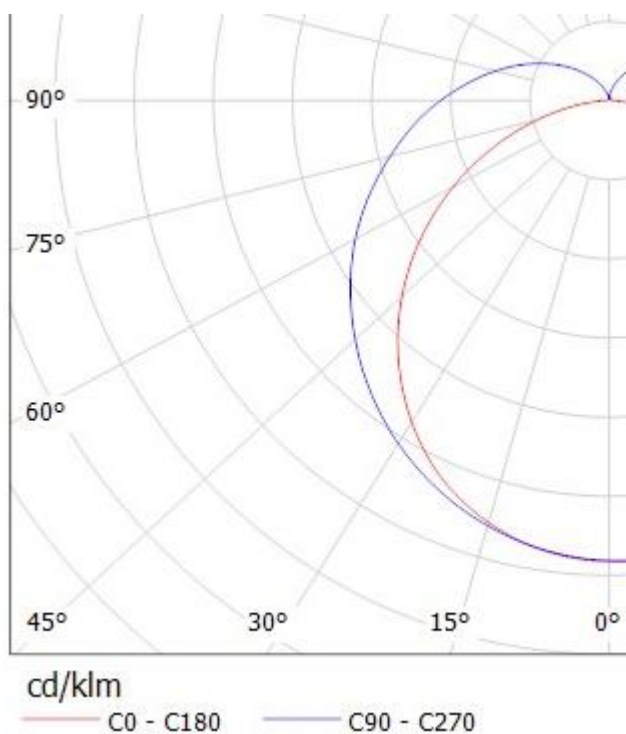
ELECTRICAL SYSTEM			
Type	1.96 ft (600 mm)	3.93 ft (1200 mm)	4.92 ft (1500 mm)
Power Consumption	8W±1W	17W±1W	20W±1W
Input Voltage	100-277 VAC		
Frequency	50-60 HZ		
Power Factor	>0.95		

REGULATORY & VOLUNTARY QUALIFICATIONS	
UL, cUL	
CE, RoHS	
UL, cUL, CE listed external power supply	



ATG ELECTRONICS

# Photometric



ZONAL LUMEN SUMMARY			
ZONE	LUMENS	% LAMP	% LUMINAIRE
0-30	284.8	18.30%	18.30%
0-40	472.4	30.40%	30.40%
0-60	875	56.40%	56.40%
60-90	434.1	28%	28%
70-100	338.6	21.80%	21.80%
90-120	183.8	11.80%	11.80%
0-90	1,309.00	84.30%	84.30%
90-180	243.6	15.70%	15.70%
0-180	1,552.60	100%	100%

LUMINOUS INTENSITY									
Gamma	C 0°	C 45°	C 90°	C 135°	C 180°	C 225°	C 270°	C 315°	C 360°
0.0°	233	233	233	233	233	233	233	233	233
15.0°	223	227	230	227	223	224	224	223	223
30.0°	194	209	217	206	195	201	206	198	194
45.0°	148	179	194	173	150	169	180	163	148
60.0°	92	142	166	133	94	131	149	123	92
75.0°	35	106	133	94	38	94	116	83	35
90.0°	2.46	74	101	61	2.38	62	85	51	2.46

ILLUMINANCE AT A DISTANCE					
CENTER BEAM		BEAM SPREAD(FT)		FIELD SPREAD(FT)	
HEIGHT(FT)	FOOTCANDLE	HORIZONTAL	VERTICAL	HORIZONTAL	VERTICAL
2	90.3 FC	20	5.7		27.4
4	22.6 FC	39.9	11.4		54.8
6	10.0 FC	59.9	17.1		82.2
8	5.6 FC	79.8	22.8		109.6
10	3.6 FC	99.8	28.5		137
		BEAM ANGLE		FIELD ANGLE	
		157.3°	109.9°	N/A	163.4°







# USER GUIDE

## Note:

Please read this entire manual to fully understand and safety use this product.

Specifications are subject to change without notice. Please visit [www.atgelectronics.com](http://www.atgelectronics.com) for the most recent user guide versions.

## Warning:

**WARNING** – Risk of fire or electric shock. iBright™ E48i T8 LED Tube installation requires knowledge of luminaires electrical systems. If not qualified, do not attempt installation. Contact a qualified electrician.

**WARNING** – Risk of fire or electric shock. Install this kit only in the luminaires that have the construction features and dimensions shown in the photographs and/or drawings.

**WARNING** – To prevent wiring damage or abrasion, do not expose wiring to edges of sheet metal or other sharp objects.

Lamp replacement instructions shall indicate the manufacturer's custom lamp part number, and a method to order replacement lamps by phone, website and/or mail. These instructions shall be included on an information sheet packaged with each unit.

## Included in this box

**ATG Electronics iBright™ E48i T8 LED Tube, 1 Pc**

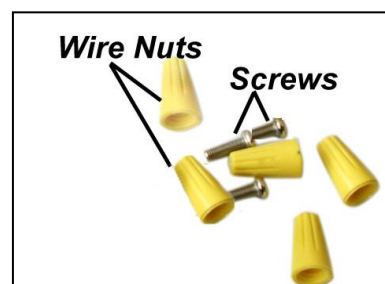
**User Guide, 1 set**

**Accessory Kit, 1 Set, including:**

**-External Power Supply, 1Pc**

**-Wire Nuts, 5 Pcs**

**-Screws, 3 Pcs**



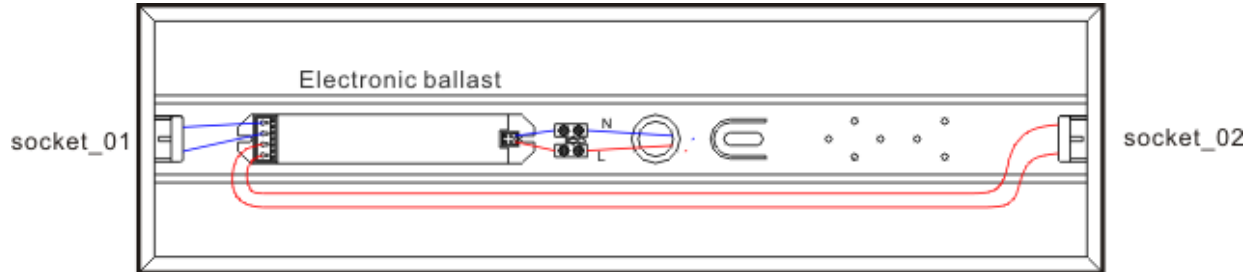
**iBright™ E48i T8 LED Tube ONLY work with specific matching external power supplies. Power supplies that do not match specifications will cause the iBright™ E48i to burn out.**



## ● Retrofit Luminaire with Electronic Ballast

Before

Figure 1



### Installation Steps

Step 1: Turn off main power before installation

For safety, make sure main power source is switched off before attempting to install.

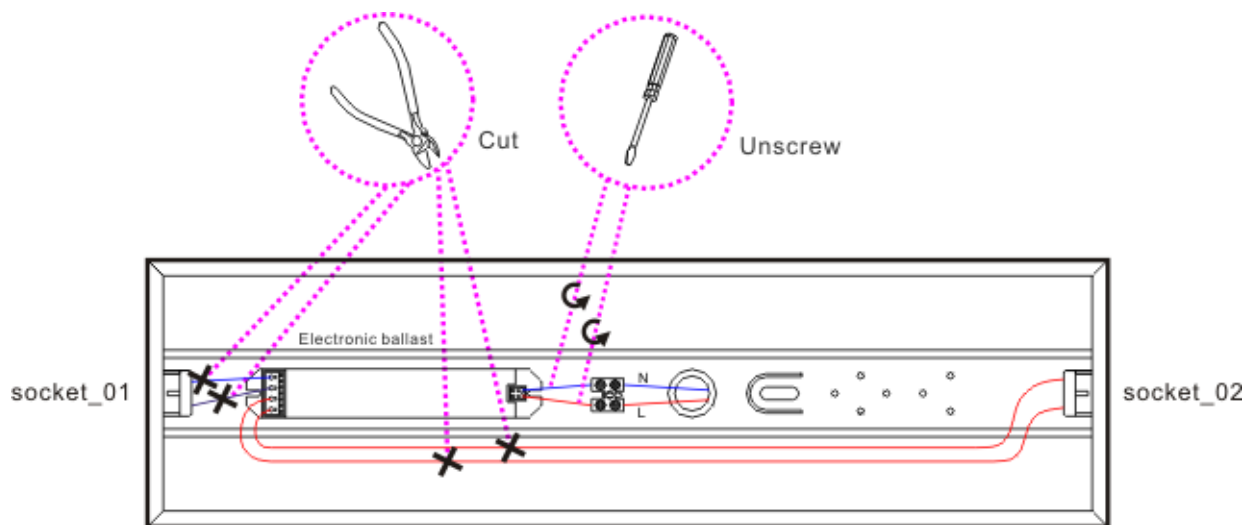
Step 2: Remove existing fluorescent light.

The existing fluorescent light is not needed and should be recycled as appropriate.

Step 3: Open the ballast cover, disconnect all power wires from the ballast, and take the ballast out of the fluorescent luminaire, as shown in Figure 2 below.

Keep one wire from each socket to connect to the external power supply. The other wire should be cut off at the socket.

Figure 2



Step 4: Install the MATCHING external power supply, as shown in Figure 3 below.

The external power supply is sized to match the luminaire and should be installed near the middle of the luminaire using the 3M tape and screws provided.

Connect the input wires of the external power supply to the main power outlet.

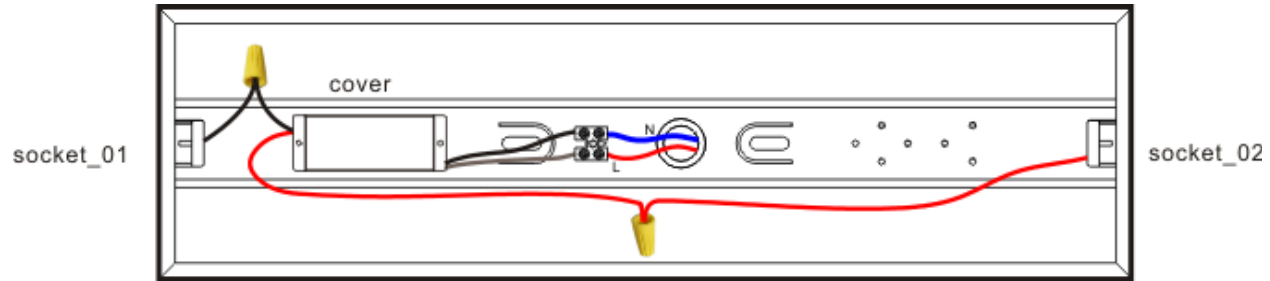
Using wire nuts, connect the output wires of the external power supply to one wire at both of the T8 sockets.

Place the existing cover back to protect the external power supply.



After

Figure 3

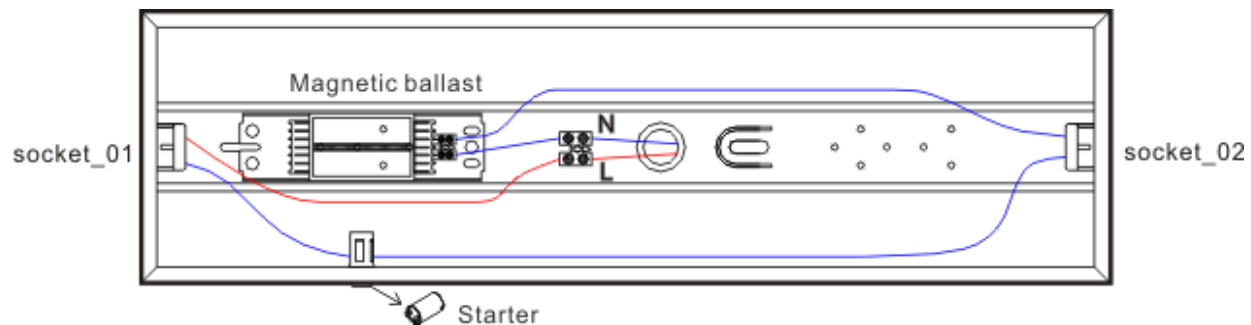


Step 5: Drop the iBright™ E48i into the fluorescent luminaire. Switch main power on to light it up.

## ● Retrofit Luminaire with Magnetic Ballast

Before

Figure 4



### Installation Steps

Step 1: Turn off main power before installation

For safety, make sure the main power source is switched off before attempting to install.

Step 2: Remove existing fluorescent light.

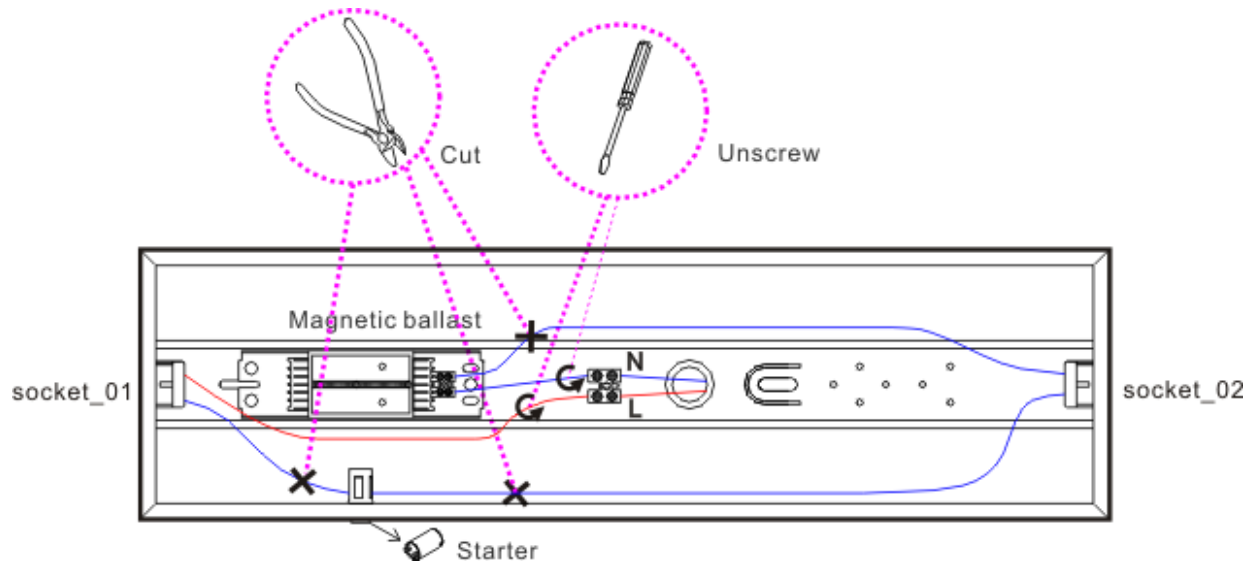
The existing fluorescent light is not needed and should be recycled as appropriate.

Step 3: Open the ballast cover, disconnect all wires from the ballast, and disconnect the starter from the T8 sockets as shown in Figure 5 below. Remove the ballast from the fluorescent luminaire and recycle it as appropriate. Keep the starter in position. Keep one wire from each socket to connect to the external power supply. The other wire should be cut off at the socket.





Figure 5



Step 4: Install the MATCHING external power supply as shown in Figure 6 below.

The external power supply is sized to match the luminaire and should be installed near the middle of the luminaire with the 3M tape and screws provided.

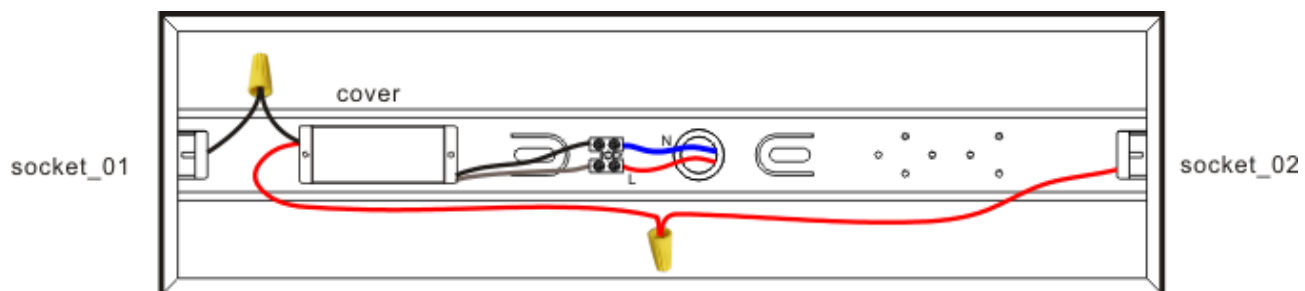
Connect the input wires of the external power supply to the main power outlet.

Using wire nuts, connect the output wires of the external power supply to one of wire at both T8 sockets.

Place the existing cover back to protect the external power supply.

After

Figure 6



Step 5: Drop the iBright™ E48i into the fluorescent luminaire. Switch main power on to light it up.

