

# ELECTRONIC FLUORESCENT CONTROLLABLE BALLASTS

## Fluorescent Ballasts - Dimming - Mark 7 0-10V

0-10V Electronic Dimming Ballasts for Linear Fluorescent and 4-Pin Compact Fluorescent Lamps

The Mark 7 0-10V series of dimmable electronic ballasts offer maximum versatility by incorporating separate control leads for use with a wide array of controllers, including occupancy sensors, daylight harvesting controls, and building management systems from more than 30 manufacturers.

When paired with linear fluorescent and 4-pin compact fluorescent lamps, Mark 7 0-10V ballasts optimize the benefits of such popular sustainable lighting techniques as daylight harvesting, occupancy sensors, and load shedding to satisfy the need for an affordable, flexible and versatile controllable lighting solution

Available in linear fluorescent and 4-pin compact fluorescent models

Making this ideal for a variety of applications

Full range continuous dimming (100% light output down to 5% - T5/HO to 1%)

Provides task appropriate comfort only where necessary to increase potential energy savings while supporting LEED performance standards

Programmed start operation

Potentially extends lamp life in frequent switching applications such as occupancy sensors and daylight harvesting

IntelliVolt technology (120 - 277V, 50/60Hz)

Enhances accuracy and ease of ordering while reducing stocking/SKU requirements

Mark 7 0-10V

Controllable  
Ballasts



The following ballasts meet NEMA Premium®:

IZT-132-SC, IZT-2S32-SC, IZT-3S32-SC,  
IZT-4S32, VZT-4S32-HL, VZT-4S32-G, VZT-4PSP32-G

As a licensee in the NEMA Premium Ballast Program, Philips Lighting Electronics N.A. has determined that these products meet the NEMA Premium specification for premium energy efficiency.

**Note:** Easy way to test dimming functionality of 0-10V dimming ballasts is to 'short' together the violet and grey control wires. If the lamps go to full dim, then the ballast is dimming fine.



## For 14 - 28W T5 Lamps

HIGH POWER FACTOR SOUND RATED A



## Mark 7 0-10V Electronic Dimming Ballast

No. of Lamps	Input Volts	Lamp Starting Method	Ballast Family	Catalog Number	Max/Min		Full Light Output		Min. Starting Temp. (°F/°C)	Dim.	Wiring Dia.
					Input Power ANSI (Watts)	Ballast Factor	THD %	Line Current (Amps)			
F14T5 (14W)											
1	120	PS	Mark 7 0-10V	IZT-128-D	19/6	1.00/0.03	10	0.15-0.07	50/10	D	55A
2	277			IZT-2S28-D	34/9			0.29-0.12			56A
F21T5 (21W)											
1	120	PS	Mark 7 0-10V	IZT-128-D	25/6	1.00/0.03	10	0.20-0.09	50/10	D	55A
2	277			IZT-2S28-D	49/10			0.42-0.18			56A
F28T5 (25W)											
1	120	PS	Mark 7 0-10V	IZT-128-D	30/7	1.00/0.03	10	0.25-0.11	50/10	D	55A
2	277			IZT-2S28-D	59/12			0.51-0.21			56A
F28T5 (28W)											
1	120	PS	Mark 7 0-10V	IZT-128-D	32/7	1.00/0.03	10	0.27-0.12	50/10	D	55A
2	277			IZT-2S28-D	63/12			0.57-0.22			56A

Ballasts utilizing poke-in connectors can accept wire gauge AWG 16-20.

Some lamp manufacturers recommend burning in new lamps 100 hours at full light output prior to dimming. Consult lamp manufacturer.

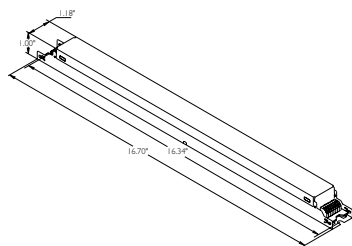
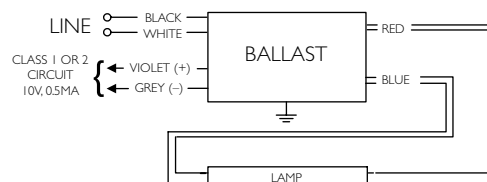


Fig. D

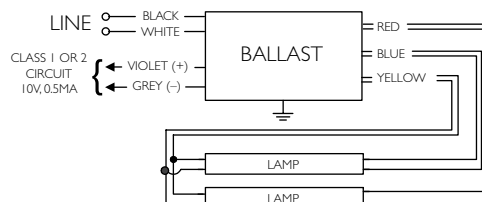
Includes connectors with no leads

## Mark 7 0-10V Control Wiring (Grey and Violet)

Wire Size	Maximum Length (Ft.)
AWG-16	800
AWG-18	500
AWG-20	320



Diag. 55A



Diag. 56A

## ONLY USE RAPID-START SOCKETS

Refer to pages 1-15 to 1-19 for information on remote/tandem wiring and lead length extension

Refer to pages 2-32 &amp; 2-33 for compatible low voltage controls

Refer to pages 9-23 to 9-27 for lead lengths and shipping data

Catalog Number Explanation

												Additional Features:		
I	ZT	—	MH	—	—	100	—	A	—	BLS	—	ID	Blank = None	
													ID = Integral 120V output to supply power to a 4-Wire Self Heating Thermal Protector (39W, 70W, 100W)	
Lead Exit / Mounting Options:														
BLS = Bottom Leads with Studs														
LF = Leads (side exit) with mounting Feet														
LFS = Leads (side exit, lead exit from same end) with mounting Feet (K metal case models only)														
LS = Connector (side exit) with mounting Feet														
Can Material / Size: (Dimensions include mounting feet)														
A/B = Metal case with dim. 5.5" L x 3.6"W x 1.5" H														
C = Metal case with dim. 8.0" L x 3.6"W x 1.5" H														
D = Metal case with dim. 5.0" L x 3.0"W x 1.5" H														
E = Metal case with dim. 5.5" L x 1.75"W x 1.2" H														
G = Metal case with dim. 3.9" L x 3.0"W x 1.2" H														
H = Metal case with dim. 6.4" L x 3.7"W x 1.5" H														
K = Metal case with dim. 4.75" L x 1.3"W x 1.2" H														
M = Plastic case with dim. 5.9" L x 2.6"W x 2.6" H														
N = Plastic case with dim. 5.3" L x 2.6"W x 2.6" H														
R = Metal case with dim. 8.2" L x 4.9"W x 2.2" H														
T = Plastic case with dim. 6.3" L x 3.9"W x 2.4" H														
Max Lamp Wattage:														
G20 = 20W Lamp, ANSI C156/M156														
P39 = 39W Lamp+														
60 = 60W Lamp														
100 = 100W Lamp														
175 = 175W Lamp														
315 = 315W Elite Lamp														
20= 22 W Lamp^														
45 = 45W Lamp														
70 = 70W Lamp														
140 = 140W Lamp														
210315 = 210 W or 315W Lamp														
39 = 39 W Lamp, ANSI C130/M130														
50 = 50W Lamp														
90 = 90W Lamp														
150 = 150W Lamp														
210 = 210W Elite Lamp														
Number of Lamps: Blank = 1 Lamp Operation 2 = (2) Lamp Operation														
Primary Lamp Type:														
MH = Metal Halide														
CW = CosmoPolis														
Dimming Scheme: Blank = Fixed Light Output ZT = 0-10V Dimming D = Programmable DALI Interface														
Input Voltage:														
I = Intellivolt (accepts input of 120 thru 277V, 50/60 Hz nominal)‡ R = 120V, 50/60 Hz nominal														

^ Philips 22W MiniMaster Color Lamp, ANSI C175/M175, with PGj5 base.

+ Philips 39W MiniMaster Color Lamp, ANSI C179/M179, with PGj5 base

‡ For some models, Intellivolt is limited to 208 thru 277V

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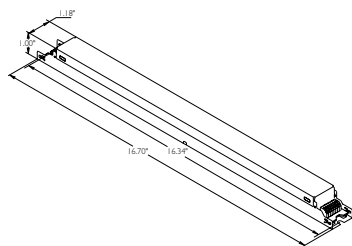
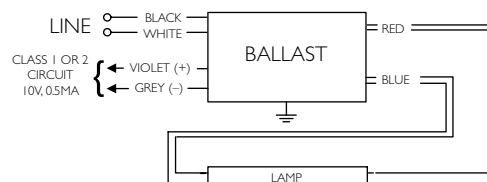


Fig. D

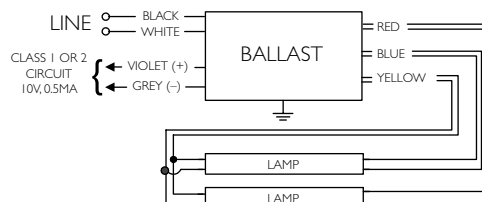
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