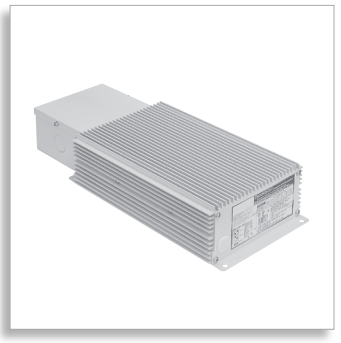
e-Vision®



DynaVision®

CosmoPolis™

MasterColor CDM™ Elite MV

ELECTRONIC HID BALLASTS

Electronic HID Overview

Just as electronic ballast technology enhanced fluorescent lighting systems, electronic HID ballasts bring significant performance improvements to HID lighting systems:

- Higher efficiency
- Longer lamp life
- Greater lumen maintenance
- Enhanced color control

e-Vision®

Low frequency electronic ballasts are recommended by lamp manufacturers to drive the new generation of ceramic, low wattage metal halide lamps. These ceramic lamps have superior color rendition and can potentially maintain that color over the life of the lamps when operated with electronic ballasts. Since color is dependent on proper lamp wattage, the electronic ballast must be able to maintain lamp wattage precisely at its rated point throughout the rated average life of the lamp. Low frequency electronic HID ballasts such as the Philips Advance e-Vision® line constantly measure and adjust the wattage, optimizing delivery of the ceramic lamps' superior color properties. This makes metal ceramic halide operated by e-vision ballasts the premier choice for many applications previously lit by either tungsten halogen or incandescent sources, such as retail lighting.

Operational improvements are gained as greater efficiency and cooler running electronic ballasts lead to energy savings. In addition, ballasts run quieter, weigh less and have compact footprints.

DynaVision®

Improved lumen maintenance — the lamp/ballast system's ability to minimize light output depreciation over the life of the lamp — is the most fundamental and significant benefit of electronic HID ballasts, especially medium wattage, high frequency ballasts such as the Philips Advance DynaVision® ballast. DynaVision delivers a 30-50% improvement in lumen maintenance over conventional HID systems (magnetic ballasts driving probe-start metal halide lamps) and a 19% improvement over pulse-start systems. Conventional HID systems typically experience a 50-60% fall-off in light output over the published life of the lamp. By maintaining higher light levels across the rated average life of the lamp, electronic HID ballasts reduce the need for frequent re-lamping.

With more maintained lumens the overall fixture count can be significantly reduced. For example, a 400W DynaVision system produces up to 56% more mean lumens over a 400W probe-start system with magnetic ballasts. Taking advantage of this performance benefit, the fixture count can be reduced by up to 36% without sacrificing light levels. Fewer fixtures also lead to much lower operating costs in terms of both energy savings and maintenance.

The DynaVision ballast provides dimming (to 50% power) using lighting controls such as relays, occupancy sensors, building management systems (BMS) and, other 0-10V controls. Also included is a 120V output for quartz auxiliary lighting during restrike. The microprocessor-based technology incorporated in this ballast provides comprehensive lamp and ballast parameter control and is a solid platform for the future.

CosmoPolis™

CosmoPolis presents a major step forward in outdoor lighting and was developed specifically to meet the challenges of the 21st century. The CosmoPolis system simplifies outdoor lighting with the combination of a compact lamp and an optimized, rugged electronic ballast system. This highly efficient system provides end users the ability to convert to a warm white light without sacrificing color rendering or system lifetime.

MasterColor Elite

The MasterColor CDM Elite MW system offers an unrivalled level of light quality and performance. The lamp's sparkling white light creates a natural ambiance and brings out the best in all different types of colors. The high efficiency of the lamp and ballast together means reduced energy use and a lower cost of ownership compared to traditional 400W Metal Halide HID systems. This new system is ideal for indoor lighting in both high-bay and recessed applications, as well as outdoor lighting for street and area installations.

Catalog Number Explanation

I	ZT	_	MH	_	_	100	_	A	_	BLS	_	ID

Additional Options:
Blank = None 6 = 6 hours* 8 = 8 hours* 10 = 10 hours*
ID = Integral 120V output to supply power to a 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 (RMH-G20-K, RMH-20-K and RMH-39-K 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	K = Metal case with dim. 4.75" L x 1.3"W x 1.2" H
C = Metal case with dim. 8.0" L x 3.6"W x 1.5" H	M = Plastic case with dim. 5.9" L x 2.6"W x 2.6" H
D = Metal case with dim. 5.0" L x 3.0"W x 1.5" H	N = Plastic case with dim. 5.3" L x 2.6"W x 2.6" H
E = Metal case with dim. 5.5" L x 1.75"W x 1.2" H	R = Metal case with dim. 8.2" L x 4.9"W x 2.2" H
G = Metal case with dim. 3.9" L x 3.0"W x 1.2" H	T = Plastic case with dim. 6.3" L x 3.9"W x 2.4" H
H = Metal case with dim. 6.4" L x 3.7"W x 1.5" H	

Max Lamp Wattage: :

G20 = 20W Lamp	P39 = 39W Lamp+	70 = 70W Lamp	140 = 140W CW Lamp	210315 = 210 W/315W MCE
20= 22 W Lamp^	50 = 50W Lamp	90 = 90W CW Lamp	150 = 150W Lamp	
39 = 39 W Lamp	60 = 60W CW Lamp	100 = 100W Lamp	175 = 175W Lamp	

Number of Lamps: Blank = 1 Lamp Operation 2 = (2) Lamp Operation

Primary Lamp Type:
MH = Metal Halide SN = High Pressure Sodium
WSN = Mini white SON (100 W Only) CW = CosmoWhite

Dimming Scheme: Blank = Fixed Light Output ZT = 0-10V Dimming L = LumiStep

Input Voltage:
1 = Intellivolt (accepts input of 120 thru 277V, 50/60 Hz nominal) R = 120V, 50/60 Hz nominal)

^ Philips 20W MiniMaster Color Lamp
+ Philips 39W MiniMaster Color Lamp
* Dimming time with LumiStep

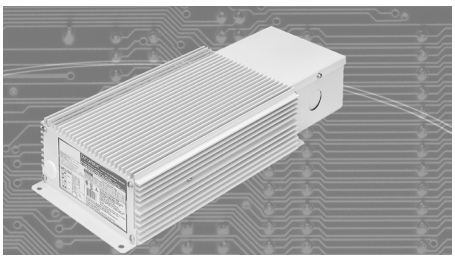
The Philips MasterColor Elite MW system offers an unrivalled level of light quality and performance. The lamp's sparkling white light creates a natural ambiance and brings out the best in all different types of colors. Additionally the high efficiency of the lamp and ballast together means reduced energy use and a lower cost of ownership compared to a 400W Metal Halide HID system.

Philips "Green Flagship Product"

- Low mercury, no lead
- Up to 120 lm/W
- 92% ballast efficacy

Light quality

- Excellent color rendering of CRI 90+
- Crisp, white light in 3000K and 4200K CCT
- Stable color performance over the rated average life of the lamp
- New socket design enhances higher optical efficiency



Product Benefits

- Significant upgrade opportunity over traditional HID systems.
- Viable alternative to fluorescent options.
- Excellent color quality and consistent light output from beginning to end.
- Being 50% smaller than traditional metal halide lamps gives freedom in optic and luminaire design.
- Greater harmony in lighting design due to availability of Elite lamps in various wattages and two color temperatures.
- Sparkling properties of white light create a more natural and inviting ambience.
- High system energy efficacy: sound TCO.
- A Green Flagship product to minimize environmental impact and CO^2 emission.
- Long life for low maintenance cost.
- True universal operation with no effect on life and color.

Applications

- **Outdoor:** Architectural façade lighting, illumination of roads and pedestrian areas, public spaces, and parking garages
- **Indoor:** High-Bay retail, Grocery stores, warehouses, manufacturing facilities

Lamp Data		Input Volts	Catalog Number	Certifications			Line Current (Amps)	Input Power ANSI (Watts)	Max. Case Temp.	Wiring Diag.	Fig.	Weight (lb)	Max. Distance to Lamp (ft)	Dip Switch Settings
Number	Watts			E	UL	SA								
210W MasterColor CDM Elite MW Lamp, ANSI Code C183 Minimum Starting Temp -20°C/-4°F														
1	210	200 277	IZTMH-210315-R-LF[1]	✓	✓	✓	1.2 0.82	229 227	85°C	9	R	4.5	30	New ON
315W MasterColor CDM Elite MW Lamp, ANSI Code C182 Minimum Starting Temp -20°C/-4°F														Preset at Factory
1	315	200 277	IZTMH-210315-R-LF[1]	✓	✓	✓	1.8 1.25	343 341	85°C	9	R	4.5	30	New ON

1 200-277V

DIP switches are "on" in the down position