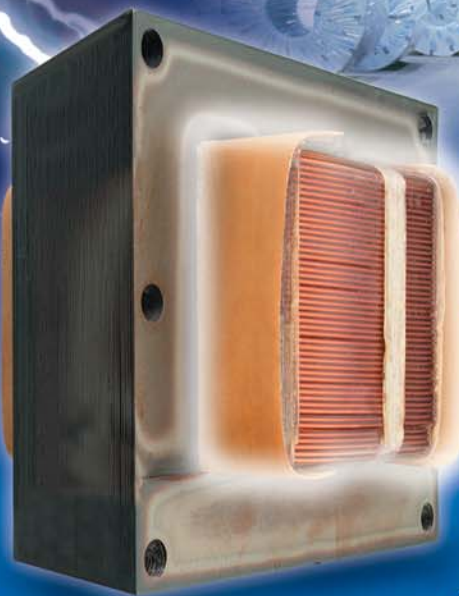


Bright Ideas, Bold Innovations

Harness the Power Behind the Performance



**A Venture Lighting®
Ballast Guide**



**VENTURE®
LIGHTING**

The Power Behind the Performance

Venture Lighting® Ballasts

Did you know that Venture Lighting International is one of the largest manufacturers of HID ballasts in the world? Venture applies a high level of passion for quality and performance in its full line of high performance ballasts for metal halide and high-pressure sodium lamps. Our Opti-Wave® family of ballasts is designed especially for Uni-Form® pulse start metal halide lamps.

All ballast specifications are in compliance with North American and International safety, performance and design standards, including UL, CSA and ANSI. Our factories are ISO 9001 certified.

Venture Lighting Ballast Features:

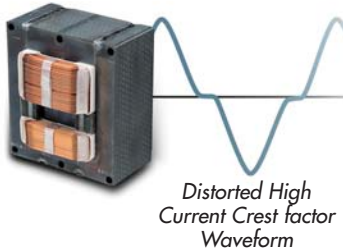
- Vacuum impregnation for cooler operation of optimized insulation system
- UL Temp Codes equal to or better than the competition
- User Friendly Installation - Color coded wires for ease of installation - just follow the diagram on each ballast
- Excellent Warranty
- The core size that you're looking for - same size as competitors in the same ballast type
- Customer support - all specs are available on the web
- Dry capacitors rated up to 100° C
- Flexibility - Kits, prewired, brackets - all in the configuration you need

Ventronic™ Electronic

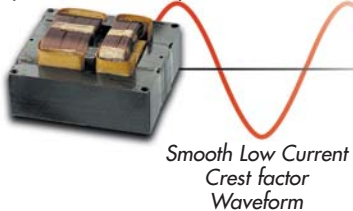
Available in 320W, 350W, 400W and 450W:

- Perfect for programmable constant lumen systems
- Continuous dimming of Uni-Form pulse start lamps
- Dimming down to 35% power with Venture's e-Lamp®
- Dimming down to 50% power with Uni-Form pulse start lamps
- Highest system efficacy due to lower ballast losses and improved lumen maintenance
- Improved lamp color uniformity due to optimized lamp power regulation

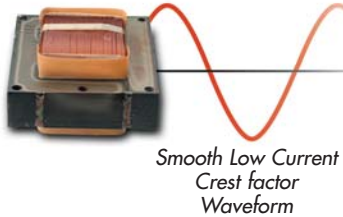
Dual Coil CWA



Dual Coil HX (Opti-Wave® Multi-tap)



Single Coil Reactor (Opti-Wave® 277V)



Ventronic™ Electronic



Opti-Wave® 277V

- Single coil, smaller and lighter than HX or CWA/CWI ballasts
- Low losses with high efficiency
- Smooth current waveform to improve lamp performance
- More consistent lamp color

Opti-Wave Multi-tap HX Ballasts

These are two coil ballasts (also referred to as "lag"), consisting of a primary winding for voltage transformation, coupled with a secondary coil for limiting current.

- Smooth current waveform
- Operates off of multi-line voltages (two, three and four tap)
- Improved lamp lumen maintenance
- More consistent lamp to lamp color than CWA

CWA/CWI Ballasts

These ballast are also referred to as "lead" ballasts. CWA ballasts date back to the 1960's and are the most common ballasts in North America. Sharing the same features as the CWA versions, CWI ballasts have electrically isolated secondary coils to meet the Canadian Electrical Code. Benefits are the following:

- Operation off of multi-line voltages
- Good line voltage regulation
- Good dip tolerance

Ballast Comparison: 320 Watt Example

Characteristic	Ventronic™ (HF) Electronic	Opti-Wave® 277V (Reactor)	Opti-Wave Multi-tap (HX)	CWA
Ballast Efficiency	Excellent	Excellent	Good	Good
Input Watts (System Watts)	342	349	360	368
Input Line Voltage	208-277	277	120/208/240/277	120/208/240/277
Circuit Loading	Excellent	Excellent	Excellent	Excellent
Current Crest Factor (Low Number is Better)	1.0 Excellent	1.5 Excellent	1.5 Excellent	1.6 – 1.8 Good
Dimming	Yes	No	No	No
Lumen Maintenance	86%	80%	80%	75%



Venture® Ballasts

The Ballast Difference

Over the life of a lighting system, the ballast makes a significant impact on overall performance. The starting characteristics of a ballast affect lamp electrodes. Venture's Ventronic™ electronic ballast starts the lamp in a way that minimizes sputtering and reduces arc tube blackening. Less damage to the electrodes results in longer lamp life and higher lumen maintenance.

Close-up of electrodes



CWA

Electronic



Probe Start
Lamp on a
Standard
CWA Ballast



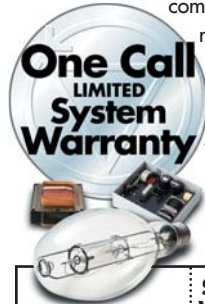
Pulse Start
Lamp on a
Pulse Start
CWA Ballast



Pulse Start
Lamp on a
Ventronic™
Electronic
Ballast

Warranty

Venture's "One Call" limited warranty program is the first in the industry in its comprehensive system coverage. It doubles the warranty period on lamps and ballasts purchased and installed as part of the Uni-Form® pulse start system. Customers who purchase a complete system need to make only "One Call" to receive full service on any component from Venture's team of technical experts.



Product Type	Standard Warranty Period	"One Call" System Warranty
Magnetic Ballasts	Two Years	Five Years
Electronic Ballasts	Two Years	Three Years

(800) 451-2606
or (440) 248-3510

Fax: (800) 451-2605
10295 Philipp Parkway
Streetsboro, Ohio 44241 USA
E-mail: venture@adlt.com

VentureLighting.com



VENTURE®
ILLUMINATION