

**LED Wand****Models: LW640A Red, LW520A Green, LW467A Blue**

10/01/13

Type	Light Emitting Device			
Application	Plugs directly into the Ultra Powered by the Ultra			
Configuration	Unbalanced, Floating			
Energy type	Model HW640A Red 640nm light Model HW520A Green 520 nm light Model HW467A Blue 467 nm light			
Frequency	Modes of Operation	Single or Mixed Frequencies with or without Variable Frequency Carrier Square Drive frequencies and Carrier		
	Waveform Types	Squarewave Sinewave Square Sweep Trapezoid Triangle	Hoyland Linear Ramp Up Linear Ramp Down Exponential Ramp Up Exponential Ramp Down	Equal Odd Order Harmonics Equal Even Order Harmonics Custom 1 Custom 2 Custom 3
	Range	1 to 100,000 Hz		
	Resolution	1.00000 to 9.99999 Hz (0.00001 Hz) 10.0000 to 99.9999 Hz (0.0001 Hz) 100.000 to 999.999 Hz (0.001 Hz) 1,000.00 to 9,999.99 Hz (0.01 Hz) 10,000.0 to 99,999.9 Hz (0.1Hz) and 100,000 Hz		
	Maximum Simultaneous Frequencies	2 Individual 6 Equal Intensity Harmonic Multipliers Multiple with Pulse and Frequency Harmonics Multiple with Custom Arbitrary Waveforms		
Duty Cycle, Modulation & Gate	Modes of Operation	Variable Duty Cycle 1 to 100% Single or Multiple Frequencies Square or Linear Drive Frequencies		
	Waveform Types	Squarewave Sinewave Square Sweep Trapezoid Triangle	Hoyland Linear Ramp Up Linear Ramp Down Exponential Ramp Up Exponential Ramp Down	Equal Odd Order Harmonics Equal Even Order Harmonics Custom 1 Custom 2 Custom 3
	Range	1 to 10,000 Hz		
	Resolution	1.0000 to 9.9999 Hz (0.0001 Hz) 10.000 to 99.999 Hz (0.001 Hz) 100.00 to 999.99 Hz (0.01 Hz) 1,000.0 to 9,999.9 Hz (0.1 Hz) and 10,000 Hz		
	Maximum Simultaneous Modulation Frequencies	1 Individual 2 Equal Intensity Harmonic Multipliers Multiple with Pulse and Frequency Harmonics Multiple with Custom Arbitrary Waveforms		
Intensity	1 to 100%			
Power Output	Model LW640A Red 24,000 mcd Max. Model LW520A Green 108,000 mcd Max. Model LW467A Blue 21,600 mcd Max.			