



AvaLight-XE Operating Manual

The **AvaLight-XE Pulsed Xenon Lamp** is a high flash rate, short-arc xenon lamp for applications requiring absorbance, reflection, fluorescence and phosphorescence measurements. The AvaLight-XE operates at speeds up to 100 Hz and offers critical pulse-to-pulse stability.

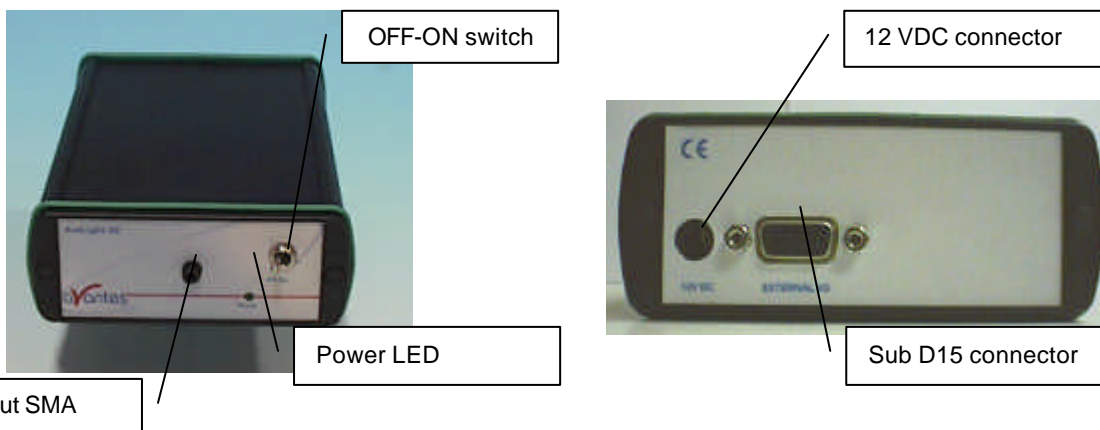
Parts Included

1. AvaLight-XE Pulsed Xenon Lamp
2. IC-DB15-2 or IC-DB26-2 15-pin cable for connecting the AvaLight-XE to the AvaSpec spectrometer (should have been ordered separately).
3. PS-12V/1.0A 100-240VAC wall transformer for supplying power to the AvaLight-XE

Caution! UV Radiation and High Voltage!

Never look directly into the light source. The ultraviolet radiation coming from the light source is capable of causing serious eye injury.

The AvaLight-XE uses high voltages. Never operate the AvaLight-XE without it's housing intact. The SMA connector will get HOT during operation. Handle with care



Operation

The lamp is triggered with TTL pulses delivered through the 15-pin connector located at the rear of the unit. These pulses are supplied by our AvaSpec spectrometers and AvaSoft software, or any other source of TTL signals. The lamp is powered by a 12V DC transformer, or from a 12V battery if field use is desired.

1. Plug the 12 VDC wall transformer. Plug the other end of the cord into the jack at the rear of the AvaLight-XE.
2. Install the 15-pin or IC-DB26-2 cable into the rear of the AvaLight-XE. Connect the other end to the 15-pin connector on an AvaSpec spectrometer. Connect an optical fiber to the SMA-terminated fiber optic port on the front panel.
3. Turn the power switch located at the front of the source to the "ON" position.
4. AvaSoft software automatically operates the AvaLight-XE and gives one flash or multiple flashes per scan. The flash should fire with a clearly audible "ping."



15 pin dB Connector Pinout AvaLight-XE

Pin	Description
1	Strobe fire
10	GND

Specifications

Power requirement	12 VDC/550 mA (6 W)
Total Optical Power output (max.)	39 μ J per pulse, 3.9 mW(average)
Optical power in 600 μ m fiber	1.8 μ J per pulse, 180 μ W(average)
Synchronization Input	15 pin sub D connector, TTL level
Pulse Duration	5 μ sec (at 1/3 height)
Pulse duration	6 μ sec
Pulse rate (max.)	100 Hz
Bulb Life	min. 10 ⁹ pulses
Spectral Output	200 nm to 1000 nm
Connector	SMA-905 connector
Dimensions	175 x 110 x 44 mm

Ordering information

AvaLight-XE	Xenon Light Source (200-1000nm), incl. IC-DB15-2 interface cable
AvaLight-XE-DUV	Xenon Light Source for DUV (160-1000nm), incl. IC-DB15-2 interface cable
AvaLight-XE-B	Spare bulb for the AvaLight-XE (200-1000nm)
AvaLight-XE-B-DUV	Spare bulb for the AvaLight-XE-DUV (160-1000nm)
IC-DB15-2	Interface cable AvaSpec-USB1 platform to AvaLight-XE
IC-DB26-2	Interface cable AvaSpec-USB2 platform to AvaLight-XE
CUV-XE	Direct attach cuvette holder for AvaLight-XE
PS-12V/1.0A	Power supply 100-240VAC/12VDC, 1.0A for AvaLight-XE