

# adelco Laser V

A cutting-edge solution that enables direct **computer-to-screen** processing, offering exceptional **precision** and **productivity**. The straightforward procedure of this advanced **laser exposure system** guarantees **flawless** screen plates.

Linear Motor Motion

DMD Exposure System

Compatible with conventional processes

High resolution

No Consumables Needed

Adelco's **Laser V** system utilizes direct screen laser exposure technology to achieve **impeccable screen plate production**. It operates by directly reading data files through the computer to screen (CTS) system, converting them into images, and transmitting them onto screens using laser beams facilitated by the DMD and lens components.

By employing Digital Imaging Technology and **without the need for additional consumables**, this innovative system generates images utilizing the DMD (digital micro-mirror device), which boasts an impressive array of over 800 thousand or 2 million micrometer micro-mirrors. This advanced configuration ensures the production of **crisp and well-defined square dots**. As a result, this cutting-edge digital exposure system has swiftly emerged as the prevailing benchmark within the screen printing industry.

#### ● High Precision and Resolution

Effortlessly and swiftly achieve a raster of 133LPI and obtain **high-quality screen dots** through the utilization of an optical resolution of 1270dpi. Alternatively, with an optical resolution of 2540dpi, attain impeccable FM screen dots and high-definition curved lines.

#### ● High Efficiency

The exposure process for a screen size of 1000mm x 1000mm can now be completed in just **three minutes**. This remarkable reduction in time, coupled with precise exposure alignment and decreased labor requirements, has significantly enhanced the efficiency of stencil making.

#### ● Low Cost

**Elimination of film positives**. Litho film is becoming increasingly expensive, and the suppliers on the market are decreasing. One procedure of CTS digital screen making, **replaces five procedures of using the conventional process**.

#### ● Excellent laser piercing power

Two laser powers are optional: **20W** and **25W**, the thickness EOM (emulsion over mesh) pf 120µm with solvent resistant emulsions and an EOM of 220µm with water resistant emulsion can be achieved for special screen making such as carbon oil and capillary.

#### ● Compatible processes with the conventional process

**The CTS directly reads data files** and subsequently converts them into images. These images are then transmitted onto screens using **laser beams**, facilitated by the DMD and lens components.

## Specifications

	Adelco Laser V	Adelco Laser V- XL
<b>Application</b>	Textile, Decals, Labels, Decorations, etc.	Textile, Decals, Labels, Decorations, etc.
<b>Max Screen Size (mm)</b>	1000 x 1000 mm	1200 x 1300 mm
<b>Min Screen Size (mm)</b>	400 x 250 mm	400 x 250 mm
<b>Max exposure Size (mm)</b>	1100 x 1200 mm	1100 x 1200 mm
<b>Screen frame thickness</b>	20 - 50 mm	20 - 50 mm
<b>Imaging System</b>	DMD DLP Technology	DMD DLP Technology
<b>Emulsion thickness (EOM)</b>	Solvent resistant emulsion 3µm - 150µm Water resistant emulsion 3µm - 350µm	Solvent resistant emulsion 3µm - 150µm Water resistant emulsion 3µm - 350µm
<b>Exposure time</b>	120 - 240s / m <sup>2</sup> , 350 mesh yellow screen	120 - 240s / m <sup>2</sup> , 350 mesh yellow screen
<b>Resolution</b>	1270dpi / 2540dpi (Optional)	1270dpi / 2540dpi (Optional)
<b>Raster</b>	133LPI	133LPI
<b>File Format</b>	1_ bit tiff	1_ bit tiff
<b>Focus system</b>	UVLD laser, wavelength 405 5±nm	UVLD laser, wavelength 405 5±nm
<b>Laser Power</b>	20W/25W (Optional)	20W/25W (Optional)
<b>Machine size mm</b>	1900 x 1417 x 2300 mm / 74.8 x 55.9 x 90.6"	1900 x 1417 x 2300 mm / 74.8 x 55.9 x 90.6"
<b>Equipment net weight</b>	1400 KG	1400 KG
<b>Equipment Conditions</b>	Yellow light room with cleanliness class, temperature 22±2°C, 40 - 70% relative humidity (no condensation)	Yellow light room with cleanliness class, temperature 22±2°C, 40 - 70% relative humidity (no condensation)
<b>Connections</b>	Single Phase 110V/ 220V, 50/60HZ 4KW, Compressor air 0.5 mpa	Single Phase 110V/ 220V, 50/60HZ 4KW, Compressor air 0.5 mpa