

GENERAL Specifications



CP462

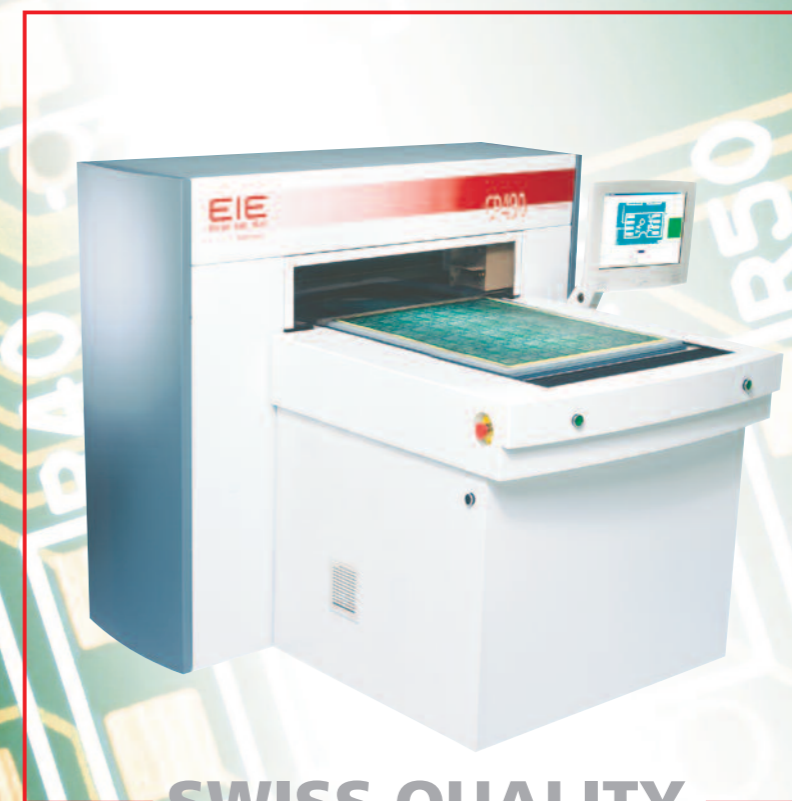
CP492

Printing unit	Max. Panel and image size	660 x 610 mm (26" x 24")	•	•
		660 x 914 mm (26" x 36")		
	Panel Thickness	0.1 to 12 mm (0.004" to 0.47")	•	•
	Substrate type	Most common Solder Masks	•	•
	Panel holding	Vacuum / First EIE Clamping System	•	•
	Printing Device	First EIE IMH 512	•	•
Legend Ink	Ink Type	UV or thermal curable. See specific technical data sheets	•	•
UV pinning system	On-the-fly UV curing system for liquid ink	Option	Option	Option
Built in Raster image processor	Data input formats	RS274D, RS274X, EIE RPL and DPF	•	•
	Optional input formats	ODB++, Image 5000, TIFF, PACKBITS	•	•
	Via third party software	HPGL, DXF	•	•
	Network compatibility	NetBEUI, TCP-IP	•	•
User interface	Windows based, including First EIE MPS and Print Queue Manager Software	•	•	
Wizards	For equipment self calibration and adjustment	•	•	
Panel alignment and Registration	Manual with locating pins	Option	Option	
	Fully automatic registration and alignment using on-board CCD camera and motorized table rotation	•	•	
Dynamic Panel Warp Compensation	Automatic head to panel distance adjustment	•	•	
Elevation table	Customized according to panels size	Option	Option	
Panel Unloader	Integrated system unloading on most compatible UV Curing equipment or conveyor installed in-line	Option	Option	
Serialization Dynamic legend	Serial numbers, time, barcodes, etc... by D-code mapping with First EIE Serimark Software	Option	Option	
Print modes	High quality	Minimum line width : 75 μ	•	•
	Standard	Minimum line width : 100 μ	•	•
	High speed	Minimum line width : 100 μ	•	•
	Safe	Minimum line width : 100 μ	•	•
Print time (image size : 20" x 16")	High quality	UV ink	56 sec	56 sec
		Thermal ink	78 sec	78 sec
	Standard	UV ink	48 sec	48 sec
		Thermal ink	64 sec	64 sec
	High speed	UV ink	32 sec	32 sec
		Thermal ink	42 sec	42 sec
Overall accuracy	$\pm 30 \mu\text{m}$ ($\pm 1.2 \text{ mil}$)	•	•	
Repeatability	$\pm 10 \mu\text{m}$ ($\pm 0.3 \text{ mil}$) (Standard resolution)	•	•	
Operating conditions	Temperature - Relative humidity	23 \pm 5° C - 50% \pm 10% (non-condensing)	•	•
	Power requirements	230 VAC \pm 10%, 1400 W	•	•
	Compressed air	Minimum : 4 bars, 56L/min (60 psi, 2 cfm)	•	•
Size and weight	Width x Depth x Height	1580 x 1830 x 1414 mm (62.2" x 72" x 55.7")	•	•
		1580 x 2450 x 1414 mm (62.2" x 97" x 55.7")		
	Weight	850 kg (1873 lbs)	•	•
		950 kg (2093 lbs)		

Legend Printer

CP400

IMH series



SWISS QUALITY

660 x 610 or 660 x 914 mm
26" x 24" or 26" x 36"

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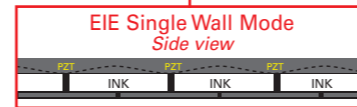
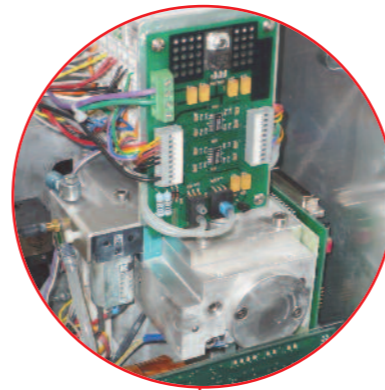
FIRST EIE SA

LEGEND PRINTER SERIES CP400 IMH512 Simplicity - Reliability - Self Maintenance - Accuracy - Data Processing Experience

NEW IMH512 Printed Head

These new models integrate the newly released proprietary IMH 512 Print Head based on a reliable Drop on Demand System of 512 jets. Controlled by an advanced electronic technology, this engine jets the legend ink at very high frequency in "single wall" mode allowing to fire 512 jets at the same time. The drop alignment is optimal; the printing speed is very fast while keeping low the number of jets and therefore the risk of jet failure.

- Main features**
- Ink Recycling System
 - Modular design for easy maintenance
 - Heating System adaptable to UV / Thermal Legend Inks
 - UV Pinning System Option
 - Electronic anti collision device



UV OR THERMAL CURABLE LEGEND INK



The new IMH 512 Print Head is compatible with several kinds of Legend Inks, UV or thermal curable, of different colors. Extensive in-house and production tests have shown very good legibility, remarkable ink whiteness and contrast without multiple printing passes.

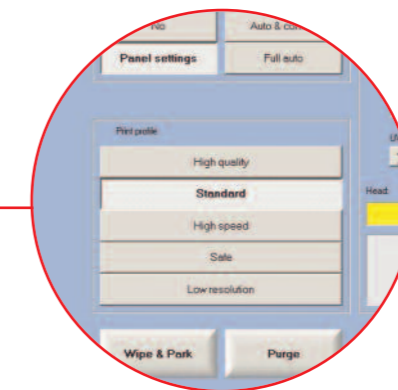


See specific technical data sheets



Wizards for Equipment self Calibration and adjustment

FIRST EIE MPS Software and User Interface



The latest CP400 series software offers a very user-friendly interface and superior flexibility. It brings to the CP400 the vast experience of First EIE in Data interpretation and processing. A number of software wizards are available to safely and quickly perform re-calibrations and adjustments when necessary. The system integrates automatic head maintenance and ink recycling.

4 Print modes

- High Quality - High resolution for the finest line with the best contrast
- Standard - Best compromise between Resolution and Speed
- High Speed - For Simple job with High throughput
- Safe - To be able to print very warped panels

NEW First EIE Clamping System

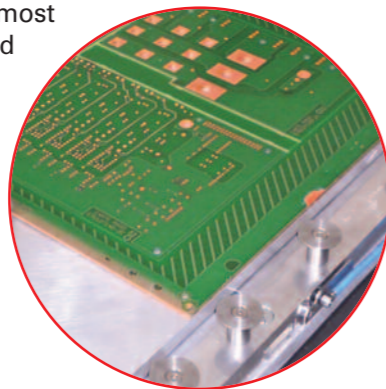
Warpage compensation



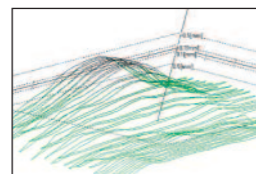
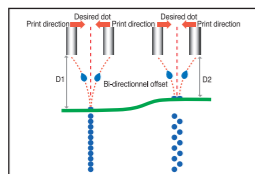
Panel warpage control is, after ink adhesion the second most critical point concerning Legend printing with ink jet.

First EIE has successfully addressed this issue with its new Elevation table that clamps the panels edges and keep the print surface at the same height whatever the panel thickness.

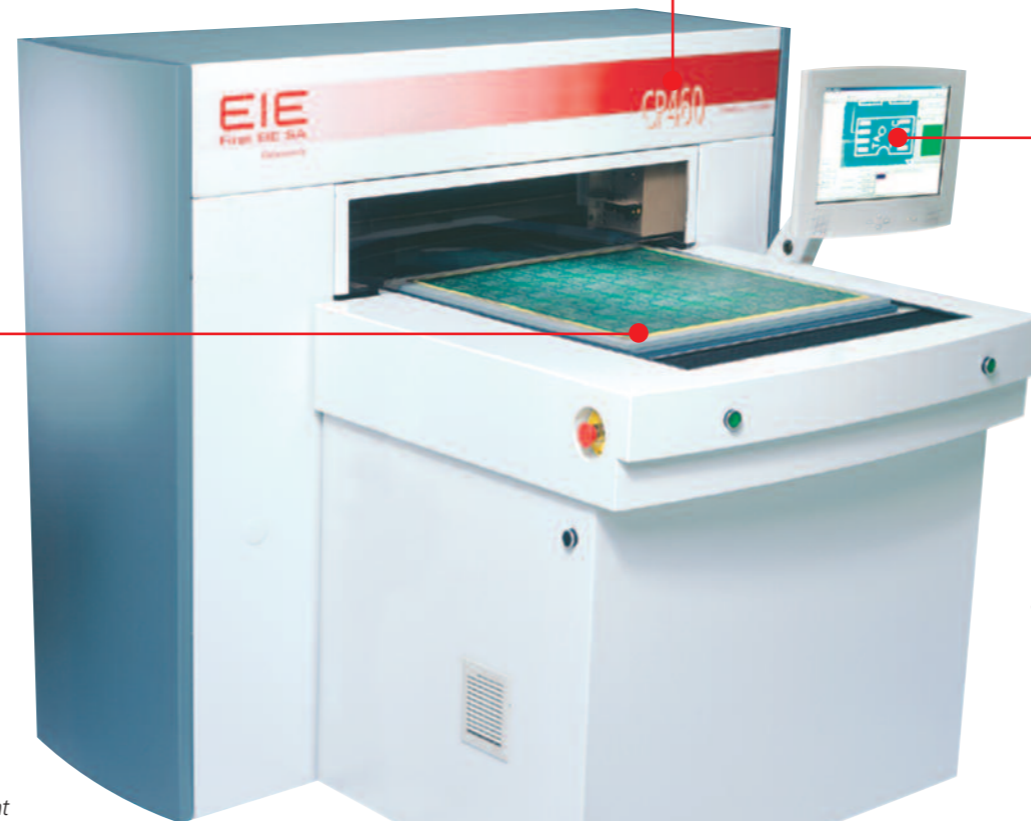
Fully automatic registration and alignment using on-board CCD camera and motorized table rotation



Together with an improved Dynamic Auto Height adjustment Laser system all risks of head crash are avoided and the printing distance is well controlled to ensure good ink drop alignment and best print quality.



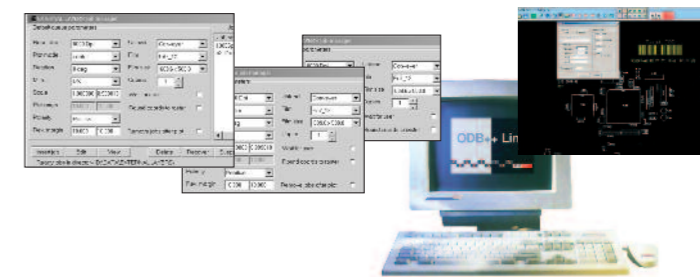
The Auto height adjustment system is capable of absorbing planarity defects up to 0.04" in 7" traverse distance which reduces drop placement errors to nearly zero.



The new CP462 and CP492 fitted with the IMH512 print head benefits from the experience of the original CP400 series which has been in production for over 6 years, working in some places 24 hours a day. The mechanical accuracy remains the same and is characterized by an excellent repeatability and perfect image registration.

Serialization - Dynamic legend

The CP400 is able to add dynamic markings to legend files. The markings are easily programmed by D-code mapping or by use of SERIMARK, a dedicated software interface.



- Markings supported :
- Date, Time
 - Scale factor
 - Serial Number
 - Keyboard inputs
 - Text, 1D, 2D barcodes

MPS and Print Queue Manager Software

INK JET LEGEND PRINTING ADVANTAGES

Flexibility - Quick Set up - No Tooling - Scaling/Registration - Serialization - No Skilled Operator