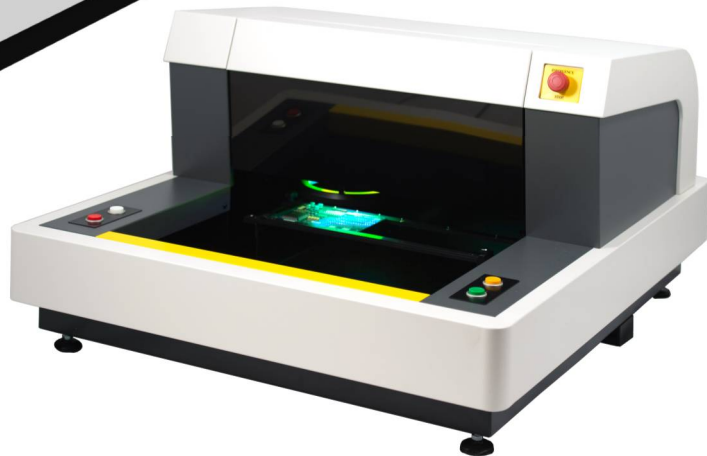


# iSpector



JK520V

JK350V



## AOI system

√ Automatic Optical Inspection of PCB assemblies

√ Inspects:

- Components: missing, type, polarity, offset, text, colours etc
- Soldering: Post Reflow, Post Wave, Selective, Manual

√ Flexible classification and MES integration Scenarios via SQL or XML (option)

√ Online self training and installation via iMentor

√ RGB angular lighting system with 3D Meniscus Profiler

√ Low Noise Large CCD 5 Mega Pixel 24 bit Colour Camera High Speed USB3 Vision interface

√ Programmable from library or Golden Components

√ Prototype mode for 1st off inspection

√ High Speed inspection

*Test your PCB's optically and replace manual inspection*

*Full inspection coverage at an entry level price. Powerful algorithms to achieve an optimal balance between defect detection and false reject levels in shortest time*

*Integrate AOI efficiently in your existing operations and factory IT systems*

*Comprehensive and easy to use online training suite*

*Reliable solder joint and slope analysis*

*Capture card free design. 1.5x faster than Camera Link*

*Be flexible; from manual to full library programming depending on your product*

*Program in minutes to verify your production line is set-up correctly before starting full production*

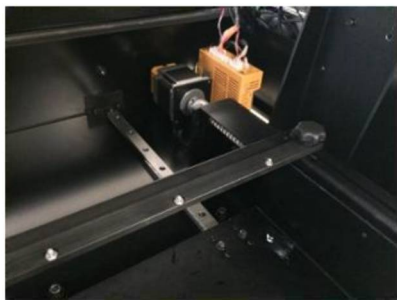
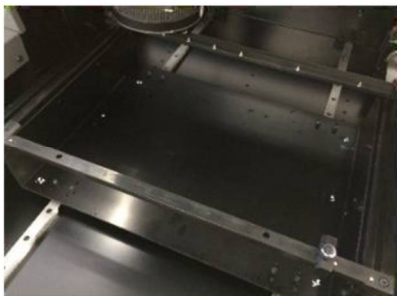
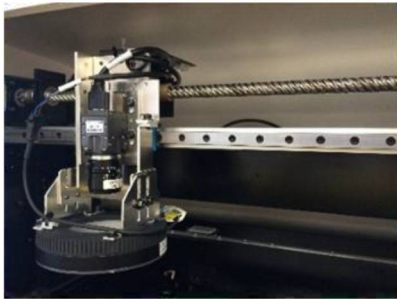
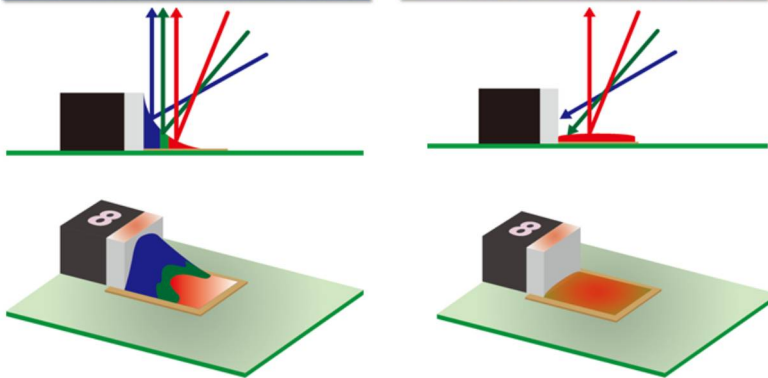
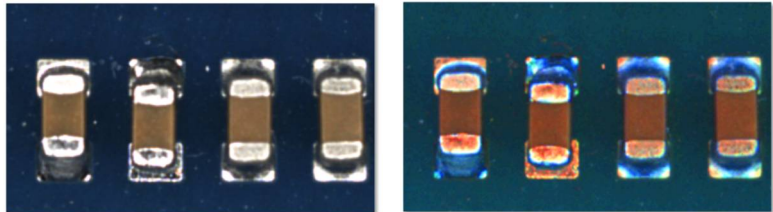
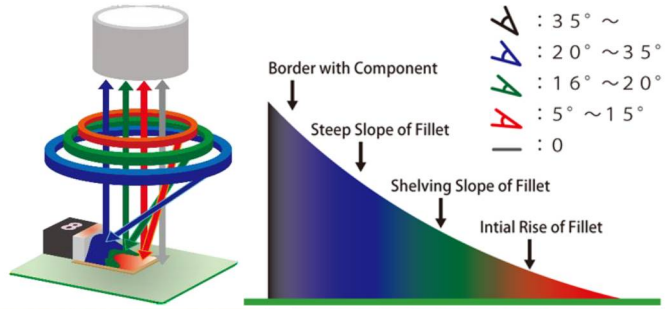
*Up 60% faster than previous generation of iSpector EK*

# iSpector

The latest generation Mek iSpector desktop AOI is designed as an entry-level system for customers with low volume, high mix production requiring high-quality AOI with a low price tag.

iSpector is able to inspect component bodies and solder joints by use of RGB LED light sources from three different angles. Creating a meniscus profiling light pattern.

Using our Colour Histogram analysis provides accurate and reliable inspection results, With low false calls.



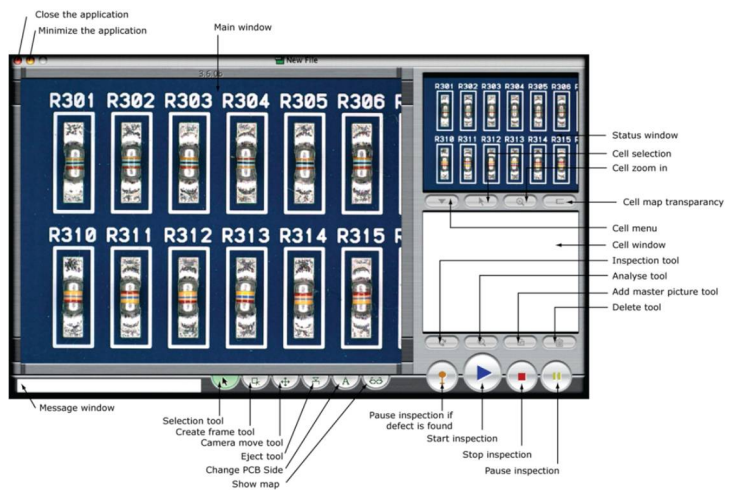
Providing a rapid and repeatable inspection process, at an affordable cost, the entry-level AOI system combines high performance and the lowest cost of ownership.

It is fast to install with the help of the iMentor online training and is exceptionally easy to program.

iSpector a full fledged AOI system, Lead screw and Servo drive system. Designed to be the ultimate in value for money. Utilizing software which has been developed for over 20 years.

Clean and Simple Interface  
With powerful features. Full programming capabilities, Solder inspection, Component presence/absence, Polarity and Value.

Import NC Data from your pick and place system or most popular CAD/CAM software. Utilizing our extensive custom Libraries to provide fast programming times and reliable results with low false fails.



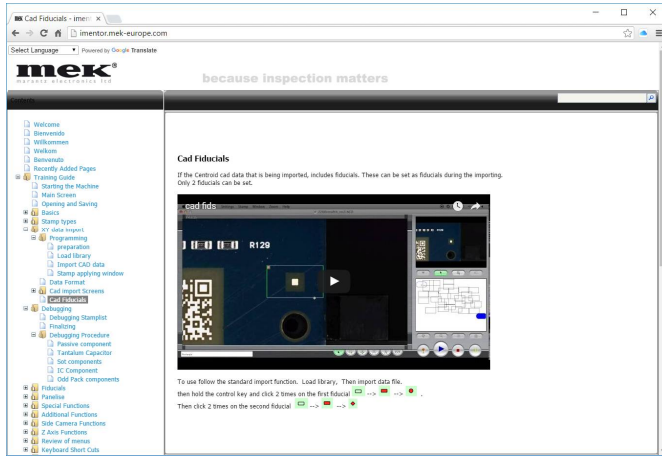
because inspection matters

# iSpector



## iMentor

iMentor is MEK's extensive and exclusive online training system that covers all aspects of the MEK AOI software. From basic to advanced operation including videos. It is frequently updated to covers new features in the latest software.

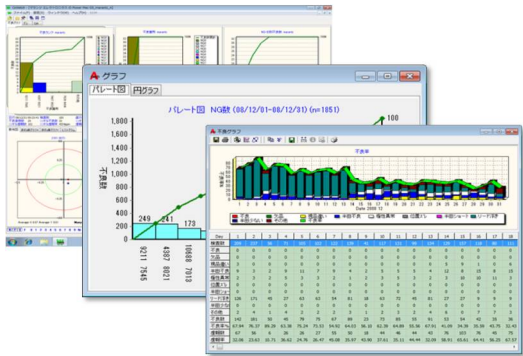


Instructions on how to install updates, make backups and Special application notes. Latest software releases and Inspection library updates. Searchable topics. Also available in multiple languages.

A unique Login is provided for each customer. As well as access to our user forum.

Optional on site training is also available.

Optional Data collection, Offline Repair/ Review and SPC Analysis. The **Catch system** which comprises **CSCenter** data collection and remote monitoring, **CSRepair** Offline defect review and repair software, and **CSAnalyzer** SPC and trend analysis. **PostgreSQL** enterprise grade database storage. Catch is a fully scalable solution from single AOI stations to 40 plus machines



Inspection can be tracked and recorded. Assigned to Barcode read from the PCB's at the AOI. Base formats including Datamatrix, QRcode, Code 128 and Code 39. As well as allowing multiple barcodes per panel.



Optional Offline programming and Debug. **OLT22X** Uses images captured from the AOI to create full AOI programs and can also be used in conjunction with the AOI to do live offline programming debug.

The offline programming software Simulates the machine and can therefore perform almost all the same functions during programming that are available on the AOI system.



because inspection matters

# iSpector

because inspection matters

Desktop Series Specifications	iSpector JK 350V	iSpector JK 520V
Maximum PCB Size	350x250mm (13.8" x 9.8")	520x460mm (20.5" x 18")
<b>Characteristics</b>		
Product type	Automatic Optical Inspector	
In-line/Off-line	Off-Line	
Movement type	Camera X, Table Y	Camera X, Y
PCB movement	Moving table	Static table
PCB fixation	Support one side with plunger. North South Clamping	
Parts inspection	Presence, Polarity, Offset, Correctness, Soldering	
Distinction principle	Synthetic Imaging, Spectral Analysis, Greyscale limits	
Distinction parameters	Brightness, Hue, Saturation via Filters	
Camera type	UXGA CCD digital with USB 3 Vision	
Camera Field Of View/Resolution	36mm x 30mm (1.42"x1.18") 15µm	
Lens	High Resolution Macro Lens	
Lighting system	Triple LED Rings: Red, Green, Blue	
<b>Specifications</b>		
Minimum inspection component size	0201" (15 µm resolution)	
Positioning accuracy	Pixel Related Feedback Loop	
Component clearance (top/bottom)	+30mm (1.18")/-60mm (-2.4")	
Movement speed	720mm/s	
Inspection capacity typical	2500cps/min 4.45 FOV/sec	
Mains	100-240 Vac / 150W	
<b>Interfacing</b>		
Control PC type (not included)	Apple Mac Mini or iMac	
Control / Imaging interface	USB / USB 3.0 Vision	
Programming Interface	CSV Centroid file (Placement Data)	
Repair/Monitor/SPC System/MES-interface	Mek Catch System (Windows 7/8/10) (option)	
3rd party Interfacing (MES-if) & Data Storage	Enterprise SQL DB/XML Files/Socket (Catch System Option)	
<b>General</b>		
Operating temperature	15-30 degr C	
Operating humidity	15-80 % RH	
External size	W760 x D860 x H450 mm (30.3" x 34.3" x 18")	W 1030 x D 1060 x 410 mm (W 40.5" x D 41.7" x 16.1")
Weight	45kg (99lbs)	95 kg (529 lbs)

Marantz Electronics reserves the right to change the design and specifications without notice. © Mek Europe BV, October 2019

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