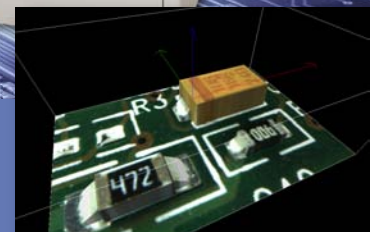


AOI solutions you  
can count on.

Now with  
**3D inspection!**



## FX-940 AOI

In-line PCB inspection

Nordson YESTECH's advanced megapixel color camera imaging technology offers high-speed PCB inspection with exceptional defect coverage. With one top down viewing camera, four side viewing cameras and 3D inspection, the FX-940 inspects solder joints and verifies correct part assembly enabling users to improve quality and increase throughput.

Programming the FX-940 is fast and intuitive. Operators typically take less than 30 minutes to create a complete inspection program including solder inspection. The FX-940 utilizes a standard package library to simplify training and ensure program portability across manufacturing lines.

Advanced Fusion Lighting and newly available image processing technology integrates several techniques, including 3D inspection, color inspection, normalized correlation and rule-based algorithms, to provide complete inspection coverage with an unmatched low false failure rate.

Configurable for all line positions, the FX-940 is equally effective for paste, pre / post-reflow and final assembly inspection. Off-line programming maximizes machine utilization and real-time SPC monitoring provides a valuable yield enhancement solution.

### Features:

- Proprietary megapixel color imaging
- Capture on the fly technology
- 1 top-down and 4 side angle cameras
- Quick set-up
- High speed
- High defect coverage / low false failure
- Optional 3D inspection

### Automated Inspection for:

- Solder defects
- Lead defects / lifted leads
- Component presence and position
- Correct part / polarity
- Through-hole parts
- Co-planarity of chips, BGAs and other height sensitive devices

# FX-940 AOI In-line PCB inspection

## Specifications

### Model

#### FX-940

Optional Upgrades:

Multi-function system with top-down viewing,  
Capture on the fly technology  
4 side angle cameras  
Digital Fringe Projection 3D Inspection

### Specifications

Throughput:

Up to 30 sq. in./sec. > 1.5 million components per hour

Maximum Board Size:

20" x 21" (500mm x 525mm)

Clearance:

2" (50mm) top and bottom

Minimum Component Size:

0201; 01005 with high magnification option

False Calls:

<500 PPM (<0.05% typical)

Defects Detected:

Part: position, missing, wrong, polarity,  
skew, tombstone  
Lead: bent, lifted, bridging  
Solder: open, insufficient, short, solder balls

### Software

Algorithms:

Color, OCV, OCR, barcode recognition, both image and  
rule-based algorithms. Optional 3D

Data Requirements:

ASCII Text, X-Y position, part #, ref. #, polarity

CAD Translation Package:

Aegis, Unicam, Fabmaster, YESTECH CAD Utility

Programming Skill Level:

Technician or operator

Operating System:

Windows 7

Off-line Software:

Optional - Rework, Review and Program Creation

SPC Software:

Optional - Real-time local and remote monitoring of first  
pass yield, defect trends, and machine utilization.

Data Outputs:

Text, SQL, ODBC, MS Access

### Hardware

Material Handling:

SMEMA, dual direction auto width conveyor,  
pass / fail signals, board clamping

Lighting:

Proprietary Fusion Lighting™ multiangle LED

Imager:

Up to 18 megapixel color camera sensor  
25, 12 or 8 micron pixel size

### Options

Conveyor:

Dual lane conveyor, heavy duty chain conveyor and 3 stage

Large Board Option

Optional 48" x 21" (1219mm x 510mm)

Bottom Side Camera:

Optional for bottom side bar codes

Board Supports:

Bottom side

### Facilities

Power:

110-220VAC, 50/60 Hz, 15 amps

Air input:

60 PSI min., 1/4" air hose, 2 CFM

Footprint:

39" x 52" x 60" (1000mm x 1329mm x 1531mm)

Weight:

950 lbs (430 kg)

Machine Installation:

< 1 hour

### Nordson YESTECH

USA Headquarters  
2762 Loker Ave. West  
Carlsbad, CA USA 92010

+1.760.918.8471 **Phone**  
+1.760.918.8472 **Fax**  
sales@nordsonyestech.com  
www.nordsonyestech.com

Copyright © 2015 Nordson YESTECH

### Nordson YESTECH

USA Headquarters:

2762 Loker Ave. West  
Carlsbad, CA USA 92010  
+1.760.918.8471 **Phone**  
+1.760.918.8472 **Fax**

China:

#137 Guoshoujing Road  
Zhangjiang Hi-Tech Park  
Pudong,  
Shanghai 201203, P.R.China  
+86.21.3866.9166 **Phone**  
+86.21.3866.9199 **Fax**

SE Asia:

2 Corporation Road  
#03-11/12  
Corporation Place 618494  
Singapore  
+65 6749 0538 **Phone**  
+65 6552 7116 **Fax**

Europe:

62 Basepoint  
1 Winnall Valley Road  
Winchester  
Hampshire, SO23 0LD, UK  
+44 (0) 1962 832654 **Phone**  
+44 (0) 1962 832501 **Fax**

Japan:

TOC Ariake Building  
West Tower 17F  
3-5-7 Koto-ku Ariake  
Tokyo, 135-0063, Japan  
+81 3 5762 2801 **Phone**  
+81 3 5762 2802 **Fax**

