

AOI & X-Ray solutions  
you can count on.



## BX Benchtop AOI

Benchtop automated PCB inspection

Nordson YESTECH's advanced 5 megapixel color camera imaging technology offers benchtop PCB inspection with exceptional defect coverage. This benchtop system inspects solder joints and verifies correct part assembly enabling users to improve quality and increase throughput. The optional four side viewing cameras add additional inspection capabilities found only on in-line systems.

Programming the BX is fast and intuitive. Operators typically take less than 30 minutes to create a complete inspection program including solder inspection. The BX utilizes a standard package library to simplify training and ensure program portability across manufacturing lines. Programs created with the BX are also compatible with Nordson YESTECH's complete line of AOI systems.

Advanced Fusion Lighting™ and newly available 5 megapixel image processing technology integrates several techniques, including color inspection, normalized correlation and rule-based algorithms, to provide complete inspection coverage with an extremely low false failure rate.

The BX is equally effective for paste, pre / post-reflow and even final assembly inspection. Remote programming maximizes machine utilization and real-time SPC monitoring provides a valuable yield enhancement solution.

### Features:

- 5 megapixel color imaging
- 1 top-down and 4 side angle cameras
- Quick set-up
- High speed
- High defect coverage
- Low false failure rate

### Automated Inspection for:

- Solder defects
- Lead defects
- Component presence and position
- Correct part / polarity
- Through-hole parts
- Paste

# BX Benchtop AOI Benchtop automated PCB inspection

## Specifications

### Model

**BX** Multi-function system with top-down viewing,  
5 megapixel camera

Optional Upgrade: 4 side angle cameras

### Inspection Capabilities

Throughput: Up to 10 sq. in./sec. > 500,000 components per hour

Maximum Board Size: 18" x 20" (457mm x 508mm)

Clearance: 2" (50mm) top and bottom

Minimum Component Size: 0201; 01005 with high magnification option

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

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 XP Professional

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

Lighting: Proprietary Fusion Lighting™ multiangle LED

Imager: 5 megapixel color camera

Resolution 2448 x 2048; 25, 12 or 8 micron pixel size

### Facilities

Power: 110-220 VAC, 50/60 Hz, 10 amps

Footprint: 34" x 39" x 17" (864mm x 991mm x 432mm)

Weight: 170 lbs (77 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**

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

Europe:  
Bergerstraat 8  
6226 BD Maastricht  
The Netherlands  
+31.352.4466 **Phone**  
+31.352.7722 **Fax**

UK  
Charwell House  
Wilsom Road, Alton  
Hampshire, UK GU34 2PP  
+44 (0) 1420 540254 **Phone**  
+44 (0) 1420 544098 **Fax**

