I SCAN AOI

Automatic Optical Inspection System

The iScan Automatic Optical Inspection system offers an entry level scanner based system for the verification of assembled printed circuit boards. Using a high resolution standard flatbed scanner, iScan provides a rapid and repeatable inspection process at an affordable cost.

In recent years, Automated Optical Inspection (AOI) has become an integral tool to aid the manufacturing and quality assurance processes. AOI systems complement manual inspection and product testing. In comparison to human visual inspection, AOI is much faster, more accurate, more reliable and consistent.
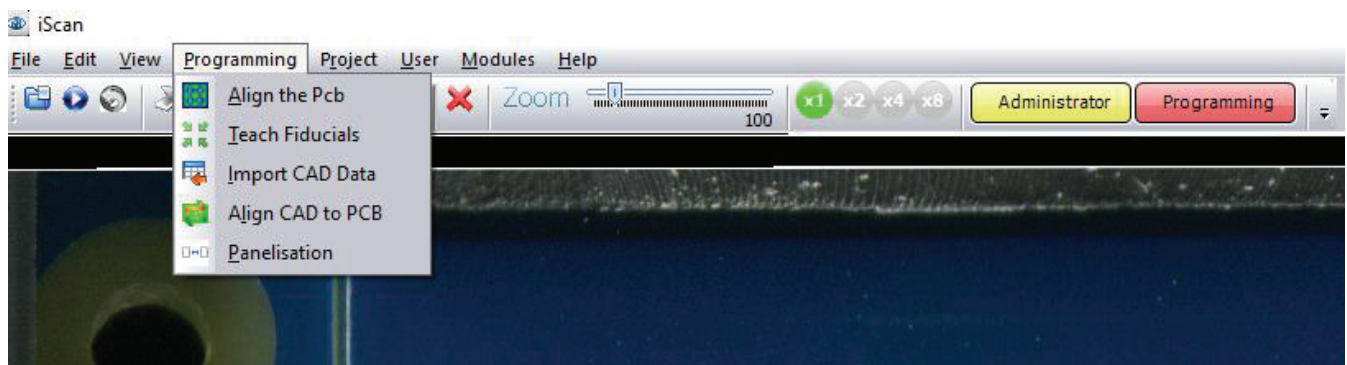
I SCAN AOI

Automatic Optical Inspection System

iScan has been designed specifically to detect defects such as skewed or missing, wrong, misplaced, incorrect polarity and other imperfections. AOI is suitable for both the final inspection/quality assurance step and for use as a process monitor to identify, control and reduce the total number of defects being generated.

In addition, the iScan AOI system may be used both as a post-reflow final inspection tool to verify quality before shipment or pre-solder reflow (or wave soldering) to improve processes and reduce the cost of re-work.

Easy Programming

Using the simple step by step programming mode Cad information is easily imported and merged to the board and component images. Depending on the board complexity a new program can be created within 30 minutes.

Easy Loading

PCB's can be simply loaded to the rail slots and slid into position ready for AOI. The side rail is easily adjustable by means of a slide mechanism.

The system is also supplied with a centre board support and back rail support to ensure that the boards are positioned flat and parallel to the scanner head.

A number of slots are available at various heights to compensate for higher component clearance on top and bottom side.

I SCAN AOI

Automatic Optical Inspection System

Faults Identification

Skewed, incorrect polarity, missing, tombstone, incorrect part, bridging, misplaced, bent leads. The software is also designed to allow some flexibility to identify non standard components.

Data Logging

Test data and images are stored after each test allowing for future traceability.

Comparator option

Using the comparator mode, the user can very quickly identify missing or misplaced through hole components. A new PCB can be scanned and visually tested against a stored golden board within minutes. Faults can be categorised and logged and linked to a rework report if required.

SPECIFICATION

Dimensions	800mm x 742mm x 310mm
Product size	640mm x 475mm
Scan area	420mm x 330mm
Component height	60mm max
Power requirements	240,110VAC 5/13 AMP
Software	i-scan Comparator software
	i- scan AOI Software
PC	Windows 10, i5 4Gb, 500Gb HD
	lcd Monitor

I SCAN AOI
Automatic Optical Inspection System