PRODUCTION DEVICE HANDLERS

- Handle up to 8,000 devices per hour — zero test time
- Incorporates a programmable 3-sleeve sort
- Reliable operation guarantees minimal intervention
- Built-in features for user-friendly operation
- Extremely durable to withstand hard use
- Backed by Data I/O's full range of Customer Support Services.

ONE SOURCE FOR PRODUCTION PROGRAMMING SUPPORT. With the introduction of the Handler 300 and 600, you now have one source for production programming support tools. Combine either model with a Data I/O interface package and programmer. Together, this integrated system delivers accuracy, speed and programming ease to yield the highest throughput of any production programming station. You'll find that our complete device programming and handling systems also decrease cost-per-device for programming today's popular devices.

DESIGNED TO QUICKLY HANDLE STANDARD DEVICE PACKAGES. The Handler 300 has been designed to accommodate standard 6- to 24-pin lead DIP devices with 300 mil bend centers. To handle 28- to 40-pin lead DIP devices with 600 mil bend centers, equip your production programmer with the Model 600. Both the 300 and 600 handle up to 8,000 devices per hour at zero test time. In addition, they incorporate a programmable three-sleeve sort which allows you to differentiate between failed devices.

DESIGNED FOR EASY PRODUCTION LINE PROGRAMMING. With a full sleeve of devices inserted into the Handler, operation is as simple as flicking a switch. By activating the automatic mode, the devices travel down the track where they are released for programming and testing into the contact set. For additional convenience, status indicators clearly display such conditions as ESCAPEMENT JAM/INPUT EMPTY, CONTRACTOR/OUTPUT JAM and TESTING. With these prompt lights, your operator can easily monitor more than one handler at a time.

PRE-PROGRAMMED SLEEVES FOR PART SORTING.
Once the device has been programmed and tested, it is released into one of three pre-programmed sort sleeves. If it passes all the tests, it enters the "OK" bin. Otherwise, it enters one of the two remaining bins. For example, if you have set the sleeves for "fatal error" and "backward device error," the handler will automatically sort blown devices from ones which can be reinserted into its input sleeve for reprogramming. Stop pins are located at the sort output to prevent unwanted devices from entering the wrong bin.

Each sort sleeve has a corresponding LED which illuminates when a preset number of devices has entered that sleeve. The sleeve capacity counter is automatically reset whenever the sleeve is removed or replaced.
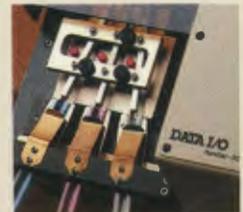
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ENGINEERED FOR EASY OPERATOR ADJUSTMENT.
Adjusting the handler to accommodate full or half lead devices is fast and simple. With its unique reprobe capability, you can also quickly adjust for device thickness and position. And to optimize the travel speed of specific package types, you can change the angle of the handler anywhere from 25 to 50 degrees.

RELIABLE HANDLING FOR MAXIMUM THROUGHPUT.
Use the Data I/O Handler 300 or 600 on your production line, and you'll discover that it jams less frequently than any comparable product. Therefore, with minimal downtime, you can optimize the investment you've made.

The handler's kelvinized contact set also guarantees system reliability. While you can depend on a minimum life of 500,000 programming cycles, field tests indicate that its life span is closer to three million.

SERVICE AFTER THE SALE. The Data I/O Handlers are fully backed by our complete range of contract services. These help you prevent unscheduled downtime and allow you to budget maintenance and repair costs for an entire year. With worldwide service centers and a vast network of specially-trained technicians, we offer the most comprehensive service package available from any device programmer manufacturer.

DATA I/O HANDLER SPECIFICATIONS

HANDLING RATE: Up to 8000 devices per hour at zero test time (leads up — dead bug).

DEVICE TYPE: (Model 300 only) 6- thru 24-lead dual in-line package with 300-mil bend centers. Adjustable for varying package thicknesses.

(Model 600 only) 24- thru 40-lead dual in-line package with 600-mil bend centers. Adjustable for varying package thicknesses.

INPUT: Single sleeve.

OUTPUT: 3 sleeve programmable sort with positive binning.

OPERATING MODE: Manual or automatic with automatic jam release.

CONTACTOR: 0.005 in. thick Paliney ribbon. Kelvin contacts with guaranteed life of 0.5×10^6 cycles.

CONTACTOR ASSEMBLY:
Resistance: Less than 45 milliohms.
Capacitance: Less than 2 pF. (between leads and any lead to ground)
Insulation Resistance: Greater than 2×10^{12} ohms at 500 VDC. (between leads and any lead to ground)
Contact Load Rating: 15 amps at 30 millisecond pulsewidth, 10% duty cycle with no adverse effect.
Voltage Breakdown: Greater than 1 kilovolt. (lead to lead)

BOARD INTERFACE: Distance from device to tester interface: 1 inch.

ELECTRICAL SPECIFICATION: All input/output signals are photo-coupled and are TTL compatible.

ACTUATION: All electrical solenoid.

DIMENSIONS: 21 in. (H) x 11 in. (W) x 16 in. (D) (including base plate) (53.3 x 27.9 x 40.6 cm).

HANDLER ANGLE: Adjustable in 5° increments from 25° to 50°.

POWER: 120 Vac, 60Hz, single phase, 2.5 amps. (208-240 Vac optional)

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