

303A-011A
CMOS/BIPOLAR P/T ADAPTER

User Note

984-0045-016

July 1989

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The following information is provided to supplement the 303A-011A Operator's manual. This document provides important reference information that must be used in conjunction with the 303A-011A Operator's manual. The numbers listed in the table below are part numbers and version numbers used by Data I/O to identify the configuration of the equipment shipped to you.

SUMMARY OF CHANGES

The 303A-011A Device Support List has been revised to reflect current 303A-011A P/T Adapter device support.

Configuration Cross Reference

The numbers listed in the table below are part numbers and version numbers used by Data I/O to identify the configuration of the equipment shipped to you.

Manual Part Number	Model Number	Version Number
981-0045-007 and up	303A-011A	V10.0

The Device Support List accompanying this User Note provides logic device information specific to the 303A-011A P/T Adapter. Important operating information is contained in this list, such as family/pinout codes and the number of device pins for supported devices.

Also included with this package is an ADDRESS CHANGE FORM. Keep this form on hand so you can notify us if your mailing address changes, or if another person becomes the principal user of the 303A-011A P/T Adapter. Customers inside the United States can mail the postage-paid form back to Data I/O. Customers outside the United States should consult the map on the back of the form for the phone number of their nearest Data I/O Representative.

CONTENTS OF THIS USER NOTE:

1. User Note
2. Acceptance Test Procedure (ATP)
3. Device Support List
4. Address Change Form

Page Replacement Procedure

Replace any previous 303A-011A Device Support List with the one attached to this User Note. Discard any previous lists. Use the ATP (Acceptance Test Procedure) to ensure proper functioning of the P/T Adapter and then discard the test procedure.

Warranty and Customer Support

Data I/O maintains customer support centers throughout the world, each staffed with factory-trained technicians to provide prompt, quality service. This includes not only repairs, but calibration of all Data I/O products.

Data I/O Corporation warrants its products against defects in materials and workmanship for a period of ninety (90) days for software and one (1) year for hardware unless specified otherwise, which begins when the equipment is shipped. Refer to the warranty card at the back cover of the Operator's Manual for information on the length and conditions of the warranty. For warranty service, contact your nearest Data I/O Customer Support Center. If you return the unit for service, please return the disks with the unit. If you do not have a name or phone number for your nearest office, the following is a list of Data I/O offices:

United States

Data I/O Corporation
10525 Willows Road N.E.
P.O. Box 97046
Redmond, WA 98073-9746
Telephone: (206) 881-6444
(800) 426-1045
Fax: (206) 882-1043
Telex: 152167 (Domestic)
4740166 (International)

Data I/O Europe

World Trade Center
Strawinskylaan 633
1077 XX Amsterdam
Telephone: +31 (0)20-6622866
Fax: +31 (0)20-6624427
Telex: 16616 DATIO NL

U.S. Customer Resource Center

(800) 247-5700

Data I/O Japan

Sumitomoseimei Higashishinbashi Bldg. 8F
2-1-7, Higashi-Shinbashi
Minato-Ku, Tokyo 105, Japan
Telephone: (03) 432-6991
Fax: (03) 432-6094 (Sales)
(03) 432-6093 (Other)
Telex: 2522685 DATAIO J

Data I/O Canada

6725 Airport Road, Suite 302
Mississauga, Ontario
L4V 1V2 Canada
Telephone: (416) 678-0761
Fax: (416) 678-7306

Contacting Customer Support

If you require technical assistance with your Data I/O product there are two different ways to contact Customer Support: one for users inside the United States, and one for users outside the United States.

In the United States, the Data I/O Customer Resource Center is staffed with Support Engineers between 6:00 AM and 5:00 PM Pacific Time. The phone number of the Customer Resource Center is (800) 247-5700. Outside the United States, you should call your local Data I/O representative. For the phone number of your local Data I/O representative, refer to the map on the Address Change Form included in the package with this User Note.

Regardless of whether you call Data I/O or your local Data I/O representative, you can ensure quick and accurate phone assistance by following the steps below:

- Have your programmer (and terminal) in front of you.
- Have the 303A-011A Adapter Operator Manual available.
- Be ready to provide the following information:
 - Manufacturer and part number of the device you are using
 - Error codes, exactly as they appeared
 - Detailed explanation of the problem you are experiencing
 - Version number of your 303A-011A Adapter; to display this number on your programmer screen, press the programmer keys as shown below:

(for further instructions, refer to the Select Functions section of the LogicPak Operator Manual).

303A-011A/B
CMOS/BIPOLAR P/T ADAPTER

Acceptance Test Procedure

Data I/O Corporation warrants to the original purchaser of the product described by this manual that the product was fully functional to the extent of its specification at the time of shipment from the factory. Data I/O further certifies that the equipment used to test the product was calibrated to standards that are traceable to the National Bureau of Standards, as appropriate. Data I/O has made every attempt to ensure that the information in this document is accurate and complete. However, Data I/O assumes no liability for errors, or for any damages that result from use of this document or the equipment that it accompanies.

This acceptance test procedure is for use with the LogicPak and the following P/T adapters:

303A-001	IFL P/T Adapter
303A-007	Harris CMOS P/T Adapter
303A-008A	32R16 P/T Adapter (DIP + LCC)
303A-008B	32R16 P/T Adapter (DIP + NLCC)
303A-010	CMOS P/T Adapter
303A-011A	CMOS Bipolar P/T Adapter
303A-011B	CMOS Bipolar P/T Adapter
303A-012	AIM P/T Adapter

INTRODUCTION

This procedure is provided for customers whose company policy requires that a receiving inspection test be performed before the unit may be accepted.

Your LogicPak and/or P/T adapter was tested both electrically and mechanically before it was shipped, and was carefully packaged to prevent shipping damage. It should arrive free of any defect, without marks or scratches, and in perfect operating condition. However, carefully inspect the instrument for any damage that may have occurred in transit. If you note any damage, file a claim with the carrier and notify Data I/O. A list of sales and Customer Support Centers is located at the back of the LogicPak Operator's manual.

The LogicPak performance check consists of a brief self-check procedure to check supply current/voltages to the socket pins to verify proper operation.

Before beginning this test procedure, you must have the following equipment:

- LogicPak
- P/T adapter (see the Compatibility Table)
- Data I/O Programmer (see the Compatibility Table)

The following table lists applicable programmers and the minimum RAM required for each P/T adapter.

Compatibility Table

P/T Adapter	Programmer	Minimum Programmer RAM
303A-001	29A, 29B, System 19, Model 100A	8K
303A-007	29A, 29B, System 19, Model 100A	8K
303A-008A/B	29A, 29B	64K
303A-010	29A, 29B	64K
303A-011A	29A, 29B, System 19	16K
303A-011B	29A, 29B, System 19	16K
303A-012	29A, 29B, System 19	16K

Check for additional programmer compatibility requirements in the LogicPak Operator's Manual and your P/T adapter User Note.

Table 1-1. Test Procedure. LogicPak 303A with Any P/T Adapter*

For proper setup and connections refer to either the LogicPak Operator's Manual, the P/T adapter User Note, or the manual supplied with your programmer.

Step	Test Name Key Selection/ Procedure	Programmer Display	Programmer	Test Performed/ Comments
NA	Power-up test	Switch the power to the programmer ON and confirm that no error messages are displayed on the front panel.	If any errors occur, contact your local Data I/O Customer Support Center.	When the system is powered-up, an internal self-test is performed. This test ensures that the firmware in the LogicPak is functioning correctly and that the various voltage supplies are also functioning correctly.

* Ensure that you are using one of the programmers listed for your P/T adapter (see the Compatibility Table).

Table 1-1. Test Procedure. LogicPak 303A with Any P/T Adapter* (cont.)

The following procedure takes the equipment through a series of self-tests to ensure the equipment is functioning properly. No readings or measurements are required. Possible errors for a given step are shown in the last column of this table.

Step	Test Name	Key Selection/ Procedure	Programmer Display	Test Performed/ Comments
NA	NA	<input type="button" value="SELECT"/>	SELECT CODE ^	Selects the calibration mode.
		<input type="button" value="C"/> <input type="button" value="1"/>	SELECT CODE ^ C 1	
1	All pins go to 0 volts	<input type="button" value="START"/>	CAL STEP ^ 01	Checks supply and current voltages.
		<input type="button" value="START"/>	CAL STEP ^ 01	
2	TTL driver self-check	<input type="button" value="START"/>	CAL STEP ^ 02	TTL driver self-check. Possible errors are 9F-DF.
3	Calibration levels	<input type="button" value="START"/>	CAL STEP ^ 03	Levels for calibration.
4	Source driver self-check	<input type="button" value="START"/>	CAL STEP ^ 04	Source driver self-check. Possible errors are E0-FF.

NOTE

If any errors do occur, note the calibration step number in which the error was detected and the error code that was displayed. Then contact your local Data I/O Customer Support Center or refer to the calibration procedure for the specific P/T adapter in Appendix B of the LogicPak Maintenance Manual.

If your acceptance requirements dictate a full calibration of the unit, contact Data I/O for the maintenance manual for the product.

This procedure, if performed with no detected errors, provides an adequate functional test of a new LogicPak and/or P/T adapter. Should programming yields become unacceptable, calibration of the unit may be required. For calibration, contact your nearest Data I/O Customer Support Center.

