# DW08-A BUS CONVERSION (POSITIVE) OPTION INSTALLATION INSTRUCTIONS

1st Edition, June 1969 2nd Printing, June 1970 3rd Printing, May 1971 4th Printing, November 1972 5th Printing, July 1973

Copyright © 1969, 1970, 1971, 1972, 1973 by Digital Equipment Corporation

The material in this manual is for informational purposes and is subject to change without notice.

Digital Equipment Corporation assumes no responsibility for any errors which may appear in this manual.

The following are trademarks of Digital Equipment Corporation, Maynard, Massachusetts:

DEC

PDP

FLIP CHIP

FOCAL

DIGITAL

**COMPUTER LAB** 

UNIBUS

# **DWO8A**

# BUS CONVERSION (POSITIVE) OPTION

#### PURPOSE OF OPTION

The DW08A option provides the PDP-8/L Programmed Data Processor with the capability of using options or peripheral equipment that require negative logic levels.

## **APPLICABILITY**

This installation instruction is applicable to any properly functioning PDP-8/L.

#### PARTS LIST

The parts supplied with this option are listed in Table 1.

## SPECIAL TOOLS AND TEST EQUIPMENT

No special tools are required to install this option. To verify that the option has been properly installed, the diagnostic programs listed in Table 2 of the Installation Instructions for the specific option are required.

# INSTALLATION PROCEDURE

# a. Unpacking

The DW08A Bus Conversion option is shipped in a cardboard box. Carefully open the box and remove its contents. Check each item against the packing memo to insure that all hardware, software, and cables are there. The container and packing should be saved in case it is necessary to return the bus conversion option for service.

The DW08A should be installed in the H960-B cabinet below the PDP-8/L (or BA08 if present) with a 1-3/4 in. filler panel between them.

# b. Connections and Installation

Determine the proper location for each cable card either from Table 1 or from DEC drawings D-MU-PDP8-L-18 and D-MU-DW08-A-MU (Module Utilization). These cables should be fed through the openings in the side of the PDP-8/L frame. The DW08A ac power cable should be plugged into an ac receptacle in the rear of the PDP-8/L.

#### CAUTION

Use great care when installing the cards in their respective connectors to prevent breaking either the cards or the connectors.

After all cable cards are installed and the modules are checked to insure that they are properly seated in their connectors, the DW08A Bus Conversion option is ready for testing.

#### CHECKOUT PROCEDURE

## a. Initializing

Before operating the power switch, check the modules in both the PDP-8/L and the DW08A to insure that each module and cable is securely seated in its connector. Turn the power switch on the PDP-8/L ON (the switch key vertical). The computer panel lights will light in some random pattern, the fans in the computer will come on, and the Teletype will come on. (Refer to document DEC-8L-HRZA for detailed computer checkout if necessary.)

#### b. Preliminary

Since the DW08A option is not required unless some other option is connected to it, the checkout procedure used from this point consists of testing the other options connected to the DW08A.

# c. Diagnostic Tests

The diagnostic tests for all options connected to the DW08A should be performed at this time.

This concludes the installation and testing of

the DW08A Bus Conversion option. If the above tests show problem areas refer to documents DEC-8/L-HR1A-D and DEC-8L-HR2A-D for the proper maintenance procedures to be followed in correcting all problems.

Table 1
List of Parts Required for Option Installation
[Parts mounted in DW08A Bus Conversion (Positive)]

Quantity	Module Type	Use	Location in PDP-8/L		Location in DW08A	
	Number		Row	Slot	Row	Slot
1 8 6 8 1 1 1 1 1	M101 M507 M650 M650 M907 M907 M903* M903 M903 M903	Bus Data Interface Bus Converter Negative Output Converter Negative Output Converter Diode Clamp Diode Clamp Connector (Flexprint) Connector (Flexprint) Connector (Flexprint) Connector (Flexprint) Connector (Flexprint)	D D D C C	36 35 34 36 35	B B A B A(B) A(B) A(B) A(B) A(B)	6 16-23 7-12 8-15 6 7 1 2 3 4 5
			Location in DF-32			
			Row	Slot		
1 1 1 1 1 1 1 1	W011** W011 W011 W011 W011 W011 W011 W01	Signal Cable Connector	00000000000	09 10 11 12 13 14 15 16 17 18	A A A A A A A A	13 14 15 16 17 18 19 20 21 22 23

<sup>\*</sup> M903 is for Flexprint; for coaxial cable use M904.

NOTE: See Table 2 of Installation Instructions for specific option connected to the DW08A.

<sup>\*\*</sup> W011 is for coaxial cable; for Flexprint use W031.

Cable length, both input and output, must not exceed 23 ft (14 ft for Flexprint)