

**DW08-A**

**BUS CONVERSION (POSITIVE) OPTION  
INSTALLATION INSTRUCTIONS**

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## DW08A

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

\* M903 is for Flexprint; for coaxial cable use M904.

\*\* W011 is for coaxial cable; for Flexprint use W031.

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

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