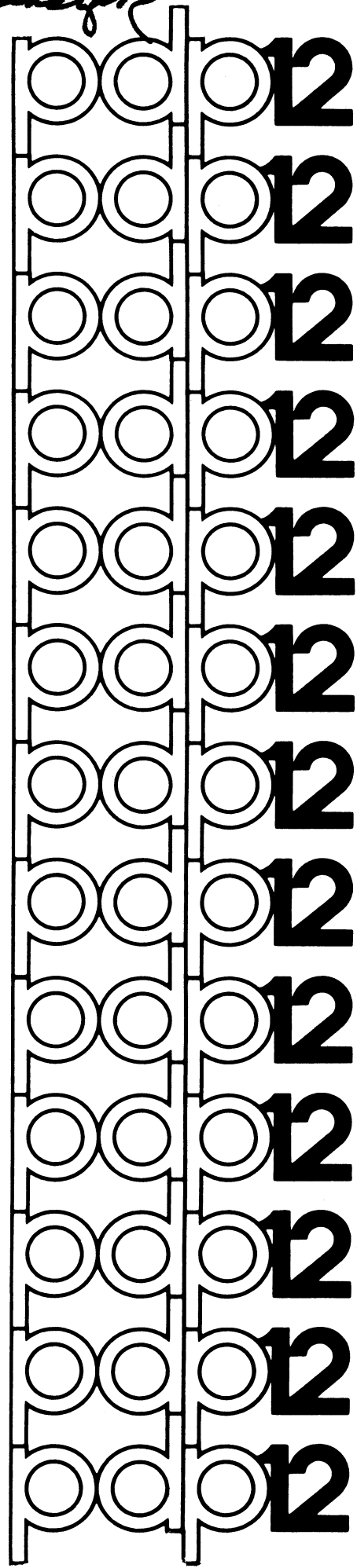


digital

Z. Bonaszk

FOCAL-12



FOCAL-12

PROGRAMMING MANUAL

For additional copies, order No. DEC-12-AJAA-D from
Program Library, Digital Equipment Corporation,
Maynard, Massachusetts 01754 Price \$3.00

1st Edition December 1970

Copyright © 1970 by Digital Equipment Corporation

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

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

DEC

FLIP CHIP

DIGITAL

PDP

FOCAL

COMPUTER LAB

TABLE OF CONTENTS

	<u>Page</u>
1.0 INTRODUCTION	1
1.1 FOCAL-12	1
1.2 Hardware Configuration	1
1.3 Required Reading	1
1.4 Loading FOCAL-12	1
2.0 USING THE DISPLAY SCOPE	2
2.1 FDIS	2
2.2 OUTPUT	2
2.2.1 OUTPUT SCOPE	2
2.2.2 OUTPUT TELETYPE	3
2.2.3 OUTPUT DELAY	3
2.2.4 OUTPUT CLEAR	4
2.2.5 OUTPUT ERASE	4
3.0 DATA STORAGE AND RETRIEVAL	4
3.1 LIBRARY MAKE	5
3.2 LIBRARY OPEN	6
3.3 LIBRARY CLOSE	7
4.0 FOCAL-12 PROGRAM STORAGE	8
4.1 LIBRARY SAVE	8
4.2 LIBRARY LOAD	9
4.3 LIBRARY GO	9
5.0 ANALOGUE INPUT AND TIMING	10
5.1 Sampling	10
5.2 Timing Using the OUTPUT INTERVAL Command	10
6.0 DATA ACQUISITION USING FOCAL-12	11
6.1 Memory	11
6.2 LINtape	12
6.3 Disk	12
6.4 \$THRUFØ	12
7.0 IMPLEMENTATION OF USER FUNCTIONS (FNEW,FX,FZ)	14
7.1 Summary	14
7.2 Example of User Implementation of FX	16
7.3 Special Requirements for FOCAL-12	18
7.4 FOCAL-12 Tag Table	19