Operating Systems and Languages Library

## MS-PASCAL under MS-DOS

User Guide



olivetti

**Operating Systems and Languages Library MS-PASCAL** under MS-DOS User Guide olivetti

## CONTENTS

1.	GETTING STARTED	
	SYSTEM REQUIREMENTS	1-1
	SOFTWARE	1-1
	OPTIONAL PASKEY	1-4
	PRELIMINARY PROCEDURES	1-4
	BACKING UP YOUR SYSTEM FILES	1-4
	PREPARING YOUR RUNTIME LIBRARY	1-4
	SETTING UP YOUR SYSTEM DISKS	1-5
	IF YOUR HAVE AN 8087 COPROCESSOR	1-6
	PROGRAM DEVELOPMENT	1-7
	VOCABULARY	1-11
2.	A SAMPLE SESSION	
	INTRODUCTION	2-1
	CREATING AN MS-PASCAL SOURCE FILE	2-2
	COMPILING YOUR MS-PASCAL PROGRAM	2-2
	PASS ONE	2-2
	PASS TWO	2-5
	PASS THREE	2-6
	LINKING YOUR MS-PASCAL PROGRAMS	2-7
	EXECUTING YOUR MS-PASCAL PROGRAM	2-10
3.	MORE ABOUT COMPILING	
	FILES WRITTEN BY THE COMPILER	3-1

	THE OBJECT FILE	3-1
	THE SOURCE LISTING FILE	3-1
	THE OBJECT LISTING FILE	3-2
	THE INTERMEDIATE FILES	3-2
	FILENAME CONVENTIONS	3-3
	STARTING THE COMPILER	3-7
	GIVING NO PARAMETERS ON THE COMMAND LINE	3-7
	GIVING ALL PARAMETERS ON THE COMMAND LINE	3-8
	GIVING SOME PARAMETERS ON THE COMMAND LINE	3-9
	PASS ONE COMPILER SWITCHES	3-9
4.	MORE ABOUT LINKING	
	FILES READ BY THE LINKER	4-1
	OBJECT MODULES	4-1
	LIBRARIES	4-4
	FILES WRITTEN BY THE LINKER	4-5
	THE RUN FILE	4-5
	THE LINKER LISTING FILE	4-5
	VM.TMP	4-6
	LINKER SWITCHES	4-7
5.	USING A BATCH COMMAND FILE	
	USING A BATCH COMMAND FILE	5-1

6.	COMPILING AND LINKING LARGE PROGRAMS	
	AVOIDING LIMITS ON CODE SIZE	6-1
	AVOIDING LIMITS ON DATA SIZE	6-1
	WORKING WITH LIMITS ON COMPILE TIME MEMORY	6-3
	IDENTIFIERS	6-3
	COMPLEX EXPRESSIONS	6-6
	WORKING WITH LIMITS ON DISK MEMORY	6-6
	PASS ONE	6-7
	PASS TWO	6-8
	LINKING	6-9
	A COMPLEX EXAMPLE	6-10
	MINIMIZING LOAD MODULE SIZE	6-12
	1/0	6-12
	RUNTIME ERROR HANDLING	6-13
	REAL NUMBER OPERATIONS	6-13
	ERROR CHECKING	6-13
7.	USING ASSEMBLY LANGUAGE ROUTINES	
	CALLING CONVENTIONS	7-1
	INTERNAL REPRESENTATIONS OF DATA TYPES	7-2
	INTERFACING TO ASSEMBLY LANGUAGE ROUTINES	7-6

8.	ADVANCED TOPICS	
	THE STRUCTURE OF THE COMPILER	8-1
	THE FRONT END	8-2
	THE BACK END	8-4
	AN OVERVIEW OF THE FILE SYSTEM	8-6
	RUNTIME ARCHITECTURE	8-9
	RUNTIME ROUTINES	8-9
	MEMORY ORGANIZATION	8-10
	INITIALIZATION AND TERMINATION	8-14
	ERROR HANDLING	8-19
	MICROSOFT PASCAL AND THE 8087 COPROCESSOR	8-22
	FLOATING-POINT OPERATIONS	8-23
	DYNAMIC FIXUPS	8-23
	"SHORT" ARITHMETIC	8-24
	LONG HEAP MODULE	8-25
	EXTENDED NON-DECIMAL NUMBERS	8-26
	ENVIRONMENT CONTROL AND EXCEPTION HANDLING FOR 8087 MATH.	8-26
A.	VERSION SPECIFICS	
	IMPLEMENTATION ADDITIONS	A-1
	IMPLEMENTATION RESTRICTIONS	A-5

	UNIMPLEMENTED FEATURES	A-6
В.	CUSTOMIZING i8087 INTERRUPTS	
	CUSTOMIZING 18087 INTERRUPTS	B-1
C.	MS-LINK ERROR MESSAGES	
	MS-LINK ERROR MESSAGES	C-1