

# READ THIS FIRST

## RSX-11D

### Documentation Directory

Order No. DEC-11-OXUGA-C-D

December 1975

RSX-11D Version 6B (Version 6.1)

This Documentation Directory describes the manual set that is part of the RSX-11D Version 6B (Version 6.1) distribution kit. It defines the intended readership of each manual and provides a brief synopsis of the manual's content.

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## RSX-11D DOCUMENTATION DIRECTORY

The RSX-11D distribution kit consists of RSX-11D software and documentation. The RSX-11D System Generation Reference Manual contains a list of the software components contained in the kit. This directory describes the documentation portion of the kit, which consists of the following items.

- 5 binders
- 5 spine inserts for binders
- 5 sets of red tabs
- 1 set of manuals

### 1.0 ORGANIZING THE MANUALS

The document set is divided into four volumes that are contained in five binders, as follows:

- Volume 1 -- System Reference Information,
- Volumes 2A and 2B -- System Procedures,
- Volume 3 -- Language Manuals,
- Volume 4 -- System Maintenance Information.

Five spine inserts are provided to identify the manuals to be placed in each binder. The manual titles also appear on the red tabs to locate manuals easily within each volume.

Place a spine insert in the pocket on the back of each binder. Use the spine insert as a guide for placing manuals and tabs in individual binders. Table 1 lists the manuals by volume and indicates the intended readership of each manual.

Table 1  
RSX-11D Documentation Set

VOLUME	DOCUMENT TITLE	READERSHIP (see Key)			
		Operator	System Manager	System Programmer	Applications Programmer
	RSX-11D Documentation Directory	X	X	X	X
	RSX-11D System Release Notes		X	X	
Volume 1 System Reference Information	RSX-11D Executive Reference Manual			X	
	IAS/RSX-11 I/O Operations Reference Manual			X	
	IAS/RSX-11D Device Handlers Reference Manual		X	X	
	IAS/RSX-11D Guide to Writing a Device Handler Task		X	X	
Volume 2A System Procedures	RSX-11D User's Guide	X	X	X	X
	RSX-11D Batch Reference Manual	X		X	X
	IAS/RSX-11 ODT Reference Manual			X	
Volume 2B System Procedures	RSX-11D Utility Programs Procedures Manual	X	X	X	X
	RSX-11D Task Builder Reference Manual			X	
<p>KEY: Operator is responsible for routine handling of system operation under direction of the system manager.</p> <p>System Manager is responsible for the overall operation of the system.</p> <p>System programmer (system analyst) is a MACRO-11 language user.</p> <p>Applications programmer is a high-level language user (COBOL or FORTRAN).</p>					

Table 1 (Cont.)  
RSX-11D Documentation Set

VOLUME	DOCUMENT TITLE	READERSHIP (see Key)			
		Operator	System Manager	System Programmer	Applications Programmer
Volume 3 Language Manuals	IAS/RSX-11 MACRO-11 Reference Manual			X	
	PDP-11 FORTRAN Language Reference Manual				X
	FORTRAN IV User's Guide				X
	RSX-11D FORTRAN Special Subroutines Reference Manual				X
Volume 4 System Maintenance Information	RSX-11D System Manager's Guide		X		
	RSX-11D System Generation Reference Manual		X		
	RSX-11D Diagnostics Reference Manual		X		
	RSX-11D System Test Procedures Manual		X		
Volume 5 Optional Software (Separately Priced)	FORTRAN IV-PLUS Installation Guide		X		
	FORTRAN IV-PLUS User's Guide			X	X
	FORTRAN IV-PLUS OTS Reference Manual			X	X
	PDP-11 COBOL Language Reference Manual				X
	PDP-11 COBOL User's Guide				X
	PDP-11 SORT User's Guide				X
	PDP-11 COBOL Reference Card				X
	PDP-11 COBOL Installation Guide		X		
<p>KEY: Operator is responsible for routine handling of system operation under direction of the system manager.</p> <p>System Manager is responsible for the overall operation of the system.</p> <p>System programmer (system analyst) is a MACRO-11 language user.</p> <p>Applications programmer is a high-level language user (COBOL or FORTRAN).</p>					

## 2.0 DOCUMENT DESCRIPTIONS

The following paragraphs provide summaries of the information contained in each manual in the document set. The first four documents are listed in the recommended reading order for the system manager. The remaining documents can be read in any order that is suitable to one's interests.

### 2.1 RSX-11D System Release Notes (DEC-11-OXRNA-D-D)

The System Release Notes describes new features of the release, provides information needed to install the system, and summarizes known bugs and documentation errors. Read this document before attempting to use the system.

### 2.2 RSX-11D User's Guide (DEC-11-OXDUA-B-D)

The User's Guide contains basic system and operating information for both the general and privileged user. Appendices of the User's Guide contain command summaries and error messages for major system tasks. An understanding of the introductory information in this manual is a prerequisite to all other documentation and to effective use of the system.

### 2.3 RSX-11D System Manager's Guide (DEC-11-OXSMA-B-D)

The System Manager's Guide contains information needed by the person responsible for the overall operation of the system. It defines the distinction between general and privileged users and describes the following system features: accounting, spooling, checkpointing, shared libraries and common areas, core dump analyzer, error logging, time-scheduled partitions, Executive debugging aids, and parity support.

### 2.4 RSX-11D System Generation Reference Manual (DEC-11-OXDIA-D-D)

The System Generation Reference Manual provides information needed to bootstrap the system, transfer the distribution medium onto the system disk, and perform a system generation to custom-tailor the software to a particular applications and hardware environment. It also provides a guide to the contents of the system distribution media.

2.5 RSX-11D Executive Reference Manual (DEC-11-OXERA-B-D) and Update (DEC-11-OXERA-B-DN1)

The Executive Reference Manual and the associated update document provide programming reference information needed for user-written MACRO-11 programs that call the RSX-11D system directives and use event flags and synchronous and asynchronous system traps.

2.6 IAS/RSX-11 I/O Operations Reference Manual (DEC-11-OIORA-A-D)

The IAS/RSX-11 I/O Operations Reference Manual provides programmer reference information needed to use the RSX-11D file control services (FCS) at the macro level, file control routines, and the command string interpreter (CSI). File structures for disk and magnetic tape are also detailed. This manual is common to the IAS, RSX-11D, and RSX-11M operating systems.

2.7 IAS/RSX-11D Device Handlers Reference Manual (DEC-11-OIHRA-A-D)

The IAS/RSX-11D Device Handlers Reference Manual details the functions performed by the device handler tasks that service standard Digital peripheral devices. It contains programmer reference information that is common to Version 6B (Version 6.1) of the RSX-11D operation system and Version 2 of the IAS operating system.

2.8 IAS/RSX-11D Guide to Writing a Device Handler Task (DEC-11-OIDHA-A-D)

The IAS/RSX-11D Guide to Writing a Device Handler Task contains information needed by a user to write a device handler task to service a peripheral device that is not supported by the standard system. Information in it is common to RSX-11D Version 6B (version 6.1) and IAS Version 2.

2.9 RSX-11D Utility Programs Procedures Manual (DEC-11-OXUPA-B-D) and Update (DEC-11-OXUPA-B-DN1)

The RSX-11D Utility Programs Procedures Manual and the associated update document detail the functions performed by and the operations of the following RSX-11D utility programs:

Peripheral interchange utility program (PIP),  
File transfer utility program (FLX),  
File dump utility program (DMP),



Line text editor utility program (EDI),  
Source language input utility program (SLP),  
Librarian utility program (LBR),  
Squeeze utility program (SQZ),  
File verification utility program (VFY),  
ZAP utility program (ZAP),

2.10 RSX-11D Task Builder Reference Manual (DEC-11-OXDLA-C-D) and Update (DEC-11-OXDLA-C-DN1)

The RSX-11D Task Builder Reference Manual and the associated update document describe the use of the task builder, the overlay descriptor language, and the cross reference capability. Both programmer reference information and operational information are provided in this manual.

2.11 RSX-11D Batch Reference Manual (DEC-11-OXBRA-B-D)

The RSX-11D Batch Reference Manual provides programmer reference information and operational information needed to submit jobs to RSX-11D by means of the batch input stream.

2.12 IAS/RSX-11 ODT Manual (DEC-11-OIODA-A-D)

The IAS/RSX-11 ODT Manual is intended for use in program development. It is for the MACRO-11 user who is confident of his ability to make on-line alterations to a program. It is not recommended for the novice. The manual also contains a description of the task trace capability. This manual is common to the IAS, RSX-11D, and RSX-11M operating systems.

2.13 RSX-11D Diagnostics Reference Manual (DEC-11-OXLDA-B-D)

The RSX-11D Diagnostics Reference Manual is primarily intended for the Digital Field Service Engineer to aid in the diagnosis of hardware malfunctions. However, it can be used by the system manager to determine the cause of a hardware error in advance of the field service engineer's arrival.

2.14 RSX-11D System Test Procedures Manual (DEC-11-OXSTA-C-D)

The System Test Procedures Manual details the functions and the use of the system test package that is provided for system (hardware and software) checkout. Both descriptive and operational information is included.

2.15 IAS/RSX-11 MACRO-11 Reference Manual (DEC-11-OIMRA-A-D)

The IAS/RSX-11 MACRO-11 Reference Manual describes the assembler language supported by RSX-11D and includes sections on position-independent code and programming standards. Both programmer reference information and operational information are provided. This manual is common to the IAS, RSX-11D, and RSX-11M operating systems.

2.16 PDP-11 FORTRAN Language Reference Manual (DEC-11-LFLRA-C-D)

The PDP-11 FORTRAN Language Reference Manual contains the language elements of both FORTRAN-IV and FORTRAN IV-PLUS<sup>1</sup> as implemented on the PDP-11. Shading in the manual indicates the FORTRAN IV-PLUS features.

2.17 FORTRAN IV User's Guide (DEC-11-LMFUA-B-D)

The FORTRAN IV User's Guide provides the information necessary to compile, task build, execute, and debug a FORTRAN IV program.

2.18 RSX-11D FORTRAN Special Subroutines Reference Manual (DEC-11-LFSMA-B-D)

The RSX-11D FORTRAN Special Subroutines Reference Manual provides information for using RSX-11D subroutines that are designed to be used by FORTRAN programs. These subroutines perform process control and RSX-11D system directive operations.

2.19 FORTRAN IV-PLUS User's Guide (DEC-11-LFPUA-B-D)<sup>1</sup>

This document provides the information necessary to compile, task build (link), execute, and debug a FORTRAN IV-PLUS program under the RSX-11M, RSX-11D, and IAS operating systems. The document consists of four chapters:

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<sup>1</sup>Available under separate license.

- Chapter 1 presents operating procedures,
- Chapter 2 describes the Object Time System (OTS),
- Chapter 3 describes the system-dependent information not included in the PDP-11 FORTRAN Language Reference Manual, and
- Chapter 4 describes methods for effectively utilizing the FORTRAN IV-PLUS system.

The appendices provide information on FORTRAN internal data representations, system subroutines, error diagnostics, mathematical library algorithms, and compatibility of FORTRAN IV-PLUS with other PDP-11 FORTRAN processors.

This manual should be used only after some knowledge of the PDP-11 FORTRAN language has been acquired (via the PDP-11 FORTRAN Language Reference Manual). However, an understanding of the information in this document is a prerequisite to effective use of the processor. The user is assumed to be familiar with the local operating system and its associated documentation.

## 2.20 FORTRAN IV-PLUS Installation Guide (DEC-11-LFPGB-B-D)<sup>1</sup>

This document describes the procedures for installing the FORTRAN IV-PLUS system on the RSX-11M Version 2, RSX-11D Version 6, and IAS Version 1 operating systems from the components supplied with the distribution media. This document also describes the minimal system requirements, the files distributed in the kits, options available for planning and tailoring the system to user needs, the release notes, and a system build verification procedure.

It is strongly recommended that the system manager read this document in its entirety before attempting to install FORTRAN IV-PLUS.

## 2.21 FORTRAN IV-PLUS OTS Reference Manual (DEC-11-LFPOA-A-D)<sup>1</sup>

This document describes the FORTRAN IV-PLUS Object Time System (OTS). This document supplies more detail than is provided in the FORTRAN IV-PLUS User's Guide. The information in this document is not needed for normal use of FORTRAN IV-PLUS. However, this document should be especially useful for programmers who wish to combine MACRO-11 and FORTRAN routines.

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<sup>1</sup>Available under separate license.

The user is assumed to be proficient in MACRO-11 and FORTRAN programming and to be familiar with the contents of the FORTRAN IV-PLUS User's Guide.

2.22 PDP-11 COBOL Language Reference Manual (DEC-11-LCOBA-C-D)<sup>1</sup>

The COBOL language elements, as implemented for the PDP-11 computer, are described in this document. It is based on the document American National Standard COBOL, X3.23 - 1974, both for organization and content. Shading in the manual denotes PDP-11 extensions.

2.23 PDP-11 COBOL User's Guide (DEC-11-LCUGA-B-D)<sup>1</sup>

The information required by the applications programmer to compile, execute, and debug COBOL programs in any PDP-11 operating environment is provided in this document. Also, it contains additional information on the compiler, the run-time system, COBOL utility programs, and a complete list of the COBOL error messages.

2.24 PDP-11 COBOL Installation Guide (DEC-11-LCIDA-B-D)<sup>1</sup>

This document provides complete instructions for preparing and installing the COBOL system for use in any PDP-11 operating environment from the components supplied with the distribution media. Information about using different COBOL configurations is supplied in addition to a description of the standard installation method.

2.25 PDP-11 COBOL Reference Card (DEC-11-LCRCA-A-D)<sup>1</sup>

The PDP-11 COBOL Reference Card is a handy pocket reference card containing the COBOL statement formats, a list of the compiler's reserved words, constants, picture symbols, and an ASCII code chart.

2.26 PDP-11 SORT Reference Manual (DEC-11-USTMA-A-D)<sup>1</sup>

The PDP-11 SORT Reference Manual describes the features and the operation of the SORT utility program. The SORT utility sorts data files into ascending or descending order.

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<sup>1</sup>Available under separate license.

READER'S COMMENTS

NOTE: This form is for document comments only. Problems with software should be reported on a Software Problem Report (SPR) form.

Did you find errors in this manual? If so, specify by page.

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Did you find this manual understandable, usable, and well-organized? Please make suggestions for improvement.

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Is there sufficient documentation on associated system programs required for use of the software described in this manual? If not, what material is missing and where should it be placed?

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Please indicate the type of user/reader that you most nearly represent.

- Assembly language programmer
- Higher-level language programmer
- Occasional programmer (experienced)
- User with little programming experience
- Student programmer
- Non-programmer interested in computer concepts and capabilities

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