TECHNICAL MANUAL SPECIFICATION

FUNCTIONALLY INTEGRATED DOCUMENTATION SYSTEM (FIDS)

FOR EQUIPMENT AND SYSTEMS

DOLCH
LOGIC INSTRUMENTS

TABLE OF CONTENTS

TABLE OF CONTENTS (Cont.)

SECTION 1.0

TECHNICAL MANUAL SPECIFICATION

FUNCTIONALLY INTEGRATED DOCUMENTATION SYSTEM (FIDS)

FOR EQUIPMENT AND SYSTEMS

1.1 SCOPE

This specification sets forth the requirements for the content and preparation of FIDS. These manuals contain instructions for installation, operation, maintenance, and repair of electrical, electronic, and mechanical equipment or systems produced by DOLCH. The manuals can also be used as a baseline by instructors for training of personnel.

FIDS consists fundamentally of illustrations supported by narrative and is a complete technical data base for the equipment or system it supports. FIDS manuals present data in a disciplined manner that shows clearly the functional and physical relationships that exist in an equipment or system. FIDS illustrations consist of logically arranged functional block diagrams, blocked schematics, with keyed text, and maintenance dependency charts (MDC). These illustrations use symbols and distinctively shaped line art blocks to convey maximum information in a minimum of space. Shading techniques may be used to denote the physical and functional relationships of systems and hardware. The maintenance dependency charts provide a comprehensive method for determining equipment/system performance status and give positive direction for fault isolation.

The FIDS is arranged to segregate (normally by separate Operator's Manual Volumes and Troubleshooting/Service Manual Volumes), the data required to troubleshoot and repair the equipment from that information required to install, operate and understand the functional operation of the equipment. This approach addresses the "Technicians Handbook" concept, which is intended to provide the qualified technician during troubleshooting and repair in one volume only that information he requires to maintain the equipment without being encumbered by baseline data needed for other purposes. Further, all information required for the maintenance and repair of the equipment is arranged into hardware data packages and indexed sequentially by unit, assembly, and subassembly number. Thus all data required to troubleshoot, maintain, and repair a given unit or assembly is in a single work package that can be used without reference to other parts of the manual. Hardware data packages can be bound separately, if desired, and placed at the location of the respective assembly when equipment units are installed in different rooms or compartments. In addition, this specification covers the requirements for an approximate 4 by 10 inch sized reprinting of the "Troubleshooting/Service Volume" so that a technician can carry this volume in his pocket.

1.2 MANUAL PRODUCTION REVIEW PHASES

1.2.1 Preliminary Manual

The preliminary manual should include all data required for the final manual but need not comply with the production requirements for a final manual.

1.2.2 Revisions

A revision can be issued as an "Original" manual to cover one or more different models of an equipment or system when the basic manual can be supplied for use as a baseline. In this case, reference can only be made to the models covered unless the data applies to all models. Unique identification numbers shall be assigned to all volumes and no supersedure notice shall be included.

1.2.3 Updated Revision

An updated revision may incorporate configuration modifications and all previous data issued as interim (temporary) changes to the existing manual, and can be prepared in accordance with the content and format arrangement of the manual being revised and this specification. All changes should be validated and certified complete and accurate by appropriate designated review personnel.

1.2.4 Complete Revision

A complete revision is a completely rewritten manual and should comply with all of the content and format requirements of this specification. It should be completely validated and certified accurate by appropriate designated review personnel.

1.2.5 Changes

Changes should incorporate corrections and additions resulting from modifications to the equipment or to correct deficiencies or errors in the existing manuals. Changes may be accepted by Customer through a system of comment cards provided with documentation.

1.3 LEVEL OF WRITING AND DEPTH OF COVERAGE

The level of writing and development of text for operational and service test use, must be in accordance with the following:

1. As a general guide, the level of writing should be for a high school graduate having specialized training as a technician in training courses.

2. Operating instructions should generally not be written to the level of an operator having previous experience in the operation of similar or related equipment. Instead, operating instructions should present, as much as possible, a function-oriented step-by-step approach.

3. The level of writing for other portions of the manual should be to that of a technician having previous maintenance experience with similar or related equipment.

1.4 STYLE OF WRITING

The style of writing should be factual, specific, concise, and comprehensive. Descriptive writing should be third person, present tense, active voice, and indicative mood. Instructions should be second person, present tense, active voice, and imperative mood.

1.5 ORGANIZATION

A FIDS Manual is arranged into two volumes, an "Operator's Manual" and a "Troubleshooting/Service Manual." The operator's volume is designated Volume 1 and includes all use support information. The troubleshooting/service volume is designated Volume 2 and includes all data necessary to troubleshoot, align and repair the equipment. Further division of the manual is by parts, with covers and title pages (e.g., Volume 1, Part 1, Volume 2, Part 3). When specified, the "Technicians Pocket Manual" can be provided as a 4 by 10 ½ inch reduced size reprint of the troubleshooting/repair volume and is issued with an unique publication number on the cover and the title page only.

1.5.1 Hierarchy

Hierarchy of text is as follows:

A) SECTION X - GENERAL DESCRIPTION

B) X.1 INTRODUCTION

C) X.1.2 Display Modes

D) X.1.2.3 Timing Diagram. The timing diagram...

E) 1.

F) A.

G) 1)

H) a)

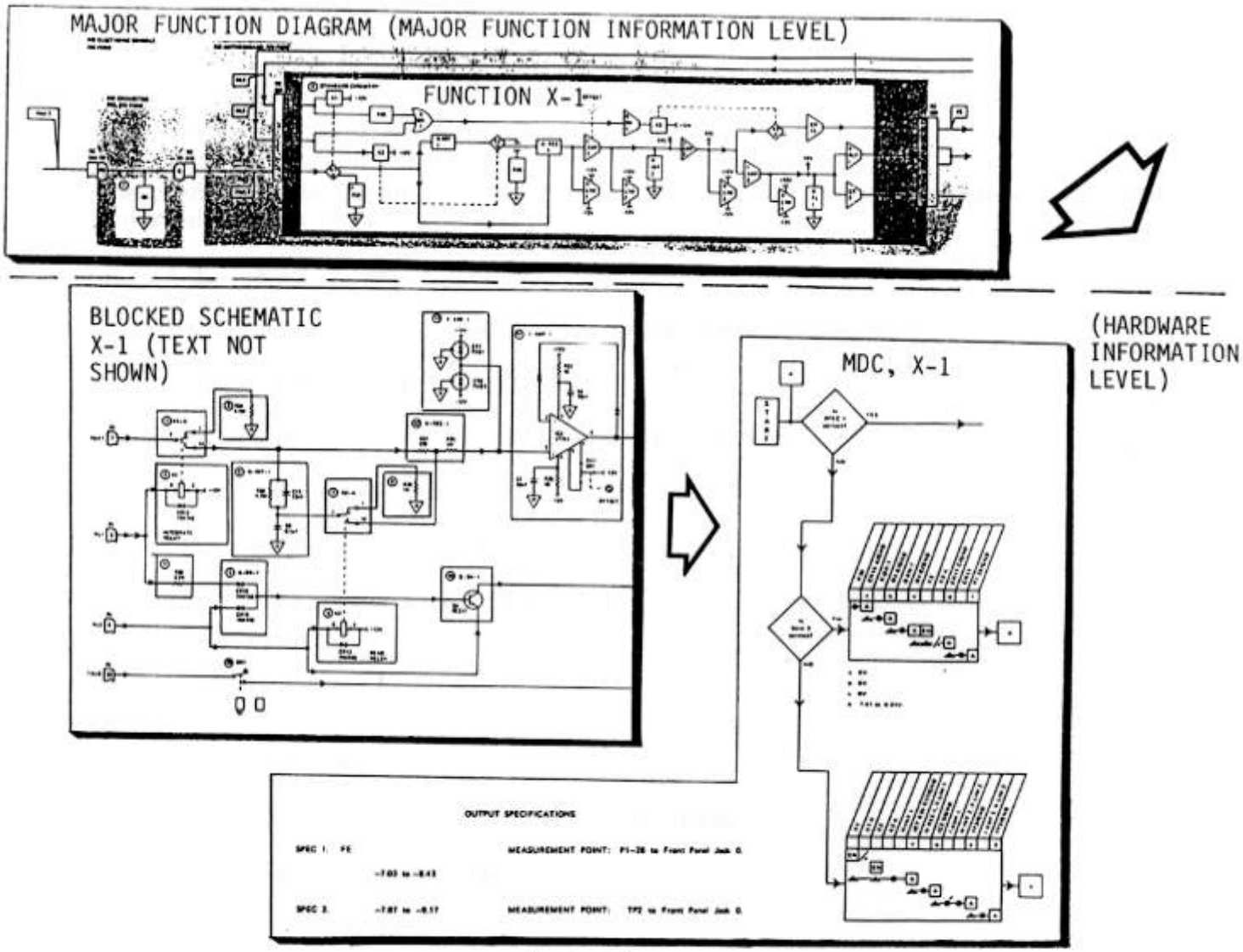

Figure 3-2 DATA FLOW THROUGH DOCUMENTATION LEVELS