

# Software Product Description

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**PRODUCT NAME: DIGITIZER UTILITIES, Version 1.0**

**SPD 15.51.0**

## **DESCRIPTION:**

The Digitizer Utilities are a set of FORTRAN callable subroutines, available under RSX-11M and VAX/VMS, for acquiring data from a TALOS digitizer.

The TALOS digitizers range in size from 11" square to 44" X 60" and provide a means of accurately capturing graphic information through the position of either a hand-held pen or a tracking "mouse" having a twelve-button keypad.

The Digitizer Utilities communicate with the TALOS digitizer via an asynchronous serial interface.

The Digitizer Utilities include calls such as:  
TABINI — initialize tablet and common area  
TABSCAL — set arbitrary user scale, origin, rotation angle

### *To digitize a point:*

DIGPTI — Integer digitizer coordinates (e.g., values of 0 to 11,000 for an 11" surface)

DIGPTP — Physical inches (cm.) (e.g., values of 0.0 to 11.0 for an 11" surface)

DIGPTF — User coordinates (e.g., values of 0.0 to 550.0 ft. when scale set to 1" = 50 ft. for an 11" surface)

ECHOPT — Echo coordinates of point on user terminal

### *To get cursor button, scale:*

DIGBTN — Wait for button press

TARGET — Get current user scale, origin, rotation

### *And coordinate system conversions:*

TABUI — Convert user to digitizer units

TABUP — Convert user to physical

TABIU — Convert digitizer to user

TABPU — Convert physical to user

TABPI — Convert physical to digitizer

TABIP — Convert digitizer to physical

In addition to the basic calls above the package includes a set of higher level commands for menu definition, calculating lengths and areas, etc.:

MENDEF — Define a rectangular menu subdivided into menu elements

DIGMEN — Digitize a menu point

LENGTH — Calculate a digitized length

AREA — Calculate a digitized area

DEFKEY — Define a numeric keyboard menu

DIGNUM — Digitize a number from the keyboard menu

### *And interactive scaling:*

SCALE2 — User sets scale by digitizing two points

SCALE3 — User sets scale by digitizing three points

## **MINIMUM HARDWARE REQUIRED:**

One of the following:

- Any valid RSX-11M Version 3.1 or later system configuration
- Any valid VAX/VMS Version 1 or later system configuration

Also required:

- 500 blocks of disk space
- 2K bytes to 10K bytes of main memory (depending on routines used)
- DL11, DZ11, DH11 (EIA version) serial interface

The following hardware is also required, and must be obtained directly from Talos Corporation:

- One TALOS digitizer (any model) with
  1. EIA serial interface option
  2. Pen or cursor unit
  3. DIGITAL/TALOS status modification to digitizer EIA Serial Interface.

## **OPTIONAL HARDWARE:**

None

## **PREREQUISITE SOFTWARE:**

### *For RSX-11M systems:*

- RSX-11M Version 3.1 or later operating system and one of the following language processors:
  1. FORTRAN IV/IAS-RSX, Version 2 or later
  2. PDP-11 FORTRAN IV-PLUS, Version 2.5 or later

### *For VAX/VMS systems:*

- VAX/VMS, Version 1 or later
- VAX-11 FORTRAN IV-PLUS, Version 1 or later

## **OPTIONAL SOFTWARE:**

None

## **TRAINING CREDITS:**

None

## **SUPPORT CATEGORY:**

C — Software Support will be provided as stated in the Software Support Categories Addendum to this SPD.

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**UPDATE POLICY:**

Software Updates, if any, released by DIGITAL, will be provided to the customer for the then current charge for such updates.

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All binary licensed software, including any subsequent updates, is furnished under the licensing provisions of DIGITAL's Standard Terms and Conditions of Sale, which provide in part that the software and any part thereof may be used on only the single CPU on which the software is first installed, and may be copied, in whole or in part (with the proper inclusion of the DIGITAL copyright notice and any DIGITAL proprietary notices on the software) only for use on such CPU. All source licensed software is furnished only under the terms and conditions of a separate Software Program Sources Agreement between Purchaser and DIGITAL.

The following key (D, Q, V) represents the distribution

media for the product and must be specified at the end of the order number, e.g., QS050-YD = sources on 9-track magnetic tape.

D = 9-track Magnetic Tape  
Q = RL01 Disk Cartridge  
V = RK07 Disk Cartridge

*Standard Options*

QS050 -Y— Single-use license, source license, sources, documentation, no support services (media: D, Q, V)

**ADDITIONAL SERVICES:**

None

**ADDENDUM****SOFTWARE SUPPORT CATEGORIES**

Each software product (hereinafter 'SOFTWARE') with a designated Support Category A or B in the applicable Software Product Description (SPD) existing at the time of order will be the current release at the time of delivery and will conform to the SPD. DIGITAL's sole obligation shall be to correct defects (nonconformance of the SOFTWARE to the SPD) as described below. Any SOFTWARE with a designated Support Category C will be furnished on an 'as is' basis.

For SOFTWARE with a designated Support Category A or B, DIGITAL will provide the services set forth below without additional charge.

**CATEGORY A**

1. Upon notification by customer to the nearest DIGITAL office that the computer system, including all required prerequisite hardware and software, is ready for the installation of the SOFTWARE, DIGITAL will install such SOFTWARE in any location within the contiguous forty-eight (48) United States, the District of Columbia, or a country in which DIGITAL or a subsidiary of DIGITAL has a software service facility. The notification must be received by DIGITAL and the system must be ready for installation within thirty (30) days after the delivery of the SOFTWARE to customer or DIGITAL will have no obligation to install. Installation will consist of: (1) verification that all components of the SOFTWARE have been received by customer, (2) loading the SOFTWARE, and (3) executing a DIGITAL sample procedure.
2. During the ninety (90) day period after installation, if the customer encounters a problem with the current unaltered release of the SOFTWARE which DIGITAL determines to be a defect in the SOFTWARE, DIGITAL will provide the following remedial service (on site where necessary): (1) if the SOFTWARE is inoperable, apply a temporary correction (TC) or make a reasonable attempt to develop an emergency by-pass, and (2) assist the customer to prepare a Software Performance Report (SPR) and submit it to DIGITAL.
3. During the one (1) year period following installation, if the customer encounters a problem with the SOFTWARE which his diagnosis indicates is caused by a SOFTWARE defect, the customer may submit an SPR to DIGITAL. DIGITAL will respond to problems reported in SPRs which are caused by defects in the current unaltered release of the SOFTWARE via the Maintenance Periodical for the SOFTWARE, which reports SPRs received, code corrections, temporary corrections, generally useful emergency by-passes and/or notice of the availability of corrected code. Software Updates, if any, released by DIGITAL during the one (1) year period, will be provided to the customer on DIGITAL's standard distribution media as specified in the applicable SPD. The customer will be charged only for the media on which such updates are provided, unless otherwise stated in the applicable SPD, at DIGITAL's then current media prices.

**CATEGORY B**

During the one (1) year period following delivery, the services provided to the customer will be the same as set forth in 3 above.

**CATEGORY C**

SOFTWARE is provided on an 'as is' basis. Any software services, if available, will be provided at the then current charges.

DIGITAL shall have the right to make additional charges for any additional effort required to provide services resulting from customer use of other than current unaltered release of the SOFTWARE operated in accordance with the SPD.