

# Software Product Description

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**PRODUCT NAME: RGL/11, Version 1.1**  
ReGIS Graphic Library for RT-11 and RSX-11M

SPD 14.62.1

## **DESCRIPTION:**

RGL/11 is a FORTRAN callable graphics library for RT-11 Single Job (SJ), Foreground/Background (FB), and XM Monitors, and RSX-11M Operating Systems supporting the VT125. RGL/11 is a subset of and upward compatible with the VAX ReGIS Graphics Library product. RGL/11 features picture drawing and data plotting facilities. RGL/11 replaces, and is compatible with RGL/FEP.

### **Picture Drawing Facilities**

- Primitives for drawing arcs, circles, regular polygons and figures defined by sets of coordinates
- Shade and character fill to a horizontal line
- User-defined world coordinates
- Alternate Greek character font
- Ability to save and recall the ReGIS (Remote Graphics Set) commands generated during the creation of an image
- Cursor control permits the user to locate points on the screen and return their coordinates to the program
- Hardcopy support via the LA34-VA
- Color support provides four shades of gray on the VT125. If an auxiliary color monitor is slaved from a VT125, the four shades of gray appear as red, blue, green, and black.

### **Data Plotting Facilities**

- Graph "paper" — User defines the type of paper on which to plot as either linear or logarithmic (base 10)
- Graph — Subroutines to plot data arrays and points or add data to an existing plot
- Cursor support — Digitizes information within a graph "paper". The cursor is moved by arrow keys on the keyboard.
- Axis Labeling — Labels the axis with either numeric values or characters
- Data Scaling — Minimum and maximum axis values can be explicitly chosen or left to the system auto-scale routine

## **MINIMUM HARDWARE REQUIRED:**

One of the following:

- Any valid RSX-11M system configuration with
  - At least 128 KB of memory
  - At least 1140 contiguous free blocks of disk space available to build and contain the object library
  - Hardware capable of reading at least one type of distribution media upon which the product is offered
  - One VT125 terminal
- Any valid RT-11 system configuration with
  - At least 56KB of memory
  - Dual RX02 or larger disk mass storage to support the SJ, FB, or XM monitors. RX02 systems require 800 contiguous free blocks to install and verify the software
  - Any hard disk requires 1800 contiguous free blocks for installation and verification
  - One VT125 terminal

## **OPTIONAL HARDWARE:**

One LA34-VA graphics printer

## **PREREQUISITE SOFTWARE:**

One of the following:

- RT-11, Version 4.0 with FORTRAN IV/RT-11, Version 2.5
- RSX-11M with PDP-11 FORTRAN-77/RSX (Refer to the RSX-11M Optional Software Cross Reference Table (20.98.xx) for the required versions.)

## **OPTIONAL SOFTWARE:**

None

## **TRAINING CREDITS:**

None

## **SUPPORT CATEGORY:**

DIGITAL SUPPORTED

RGL/11 is a DIGITAL Supported Software Product.

**digital**  
software

September 1982

AE-M802B-TC

### SOFTWARE INSTALLATION: CUSTOMER-INSTALLED

RGL/11 is a software product engineered to be installed by the customer and includes other Software Product Support services listed below.

### SOFTWARE PRODUCT SUPPORT:

RGL/11 includes standard warranty services as defined in the Software Support Categories Addendum of this SPD.

### ORDERING INFORMATION:

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 License Agreement between Purchaser and DIGITAL.

Options with no support services are only available after the purchase of one supported license.

A single-use, license-only option is a license to copy the software previously obtained under license.

The following key (D, E, H, M, Q, X, Y, Z) represents the distribution media for the product and must be specified at the end of the ordering number, e.g., QJ122-AD = binaries on 9-track 800 BPI Magtape (NRZI).

D = 9-track 800 BPI Magtape (NRZI)  
E = RK05 Disk Cartridge  
H = RL02 Disk Cartridge  
M = 9-track 1600 BPI Magtape (PE)  
Q = RL01 Disk Cartridge  
X = RX02 Double Density Diskette  
Y = RX01 Floppy Diskette  
Z = No hardware dependency

NOTE: RX01 and 9-track magtape are for distribution only and cannot be used as system devices.

#### For RT-11

QJ122 -A— Single-use license, binaries, documentation, support services (media: D, E, H, Q, X, Y)

QJ122 -D— Single-use license-only option, no binaries, no documentation, no support services (media: Z)

#### For RSX-11M

QJ123 -A— Single-use license, binaries, documentation, support services (media: D, E, H, M, Q)

QJ123 -D— Single-use license-only option, no binaries, no documentation, no support services (media: Z)

#### For RT-11 and RSX-11M

QJ126 -D— Quantity of 25, single-use license-only option, no binaries, no documentation, no support services (media: Z)

QJ127 -D— Quantity of 50, single-use license-only option, no binaries, no documentation, no support services (media: Z)

#### Update/Unsupported Options

Users of RGL/FEP whose specified Support Category warranty has expired may order under license the following software options as an update to an earlier version. These options may also be purchased for use on a second or subsequent CPU, in conjunction with a binary, single-use, license-only option. Options are distributed in binary form on the appropriate medium and include no installation or other services unless specifically stated.

#### For RT-11

QJ122 -H— Binaries, documentation (media: D, E, H, Q, X, Y)

QJ122 -H— Right to copy for single-use, no binaries, no documentation (media: Z)

#### For RSX-11M

QJ123 -H— Binaries, documentation (media: D, E, H, M, Q)

QJ123 -H— Right to copy for single-use, no binaries, no documentation (media: Z)

#### Terminal/Software Options

RGL/11 is also available as part of a hardware/software package. Options available include:

#### RT-11 Package

VT125 -H— VT125 video terminal, 120 volts, and RGL/11 software, single-use license, binaries, documentation, support services (media: D, E, H, Q, X, Y)

VT125 -H— VT125 video terminal, 120 volts, RGL/11 single-use license-only option, no binaries, no documentation, no support services (media: Z)

VT125 -J— VT125 video terminal, 240 volts, and RGL/11 software, single-use license, binaries, documentation, support services (media: D, E, H, Q, X, Y)

VT125 -J— VT125 video terminal, 240 volts, RGL/11 single-use license-only option, no binaries, no documentation, no support services (media: Z)

**RSX-11M Package**

- VT125 -L— VT125 video terminal, 120 volts, and RGL/11 software, single-use license, binaries, documentation, support services (media: D, E, H, M, Q)
- VT125 -L— VT125 video terminal, 120 volts, RGL/11 single-use license-only option, no binaries, no documentation, no support services (media: Z)
- VT125 -M— VT125 video terminal, 240 volts, and RGL/11 software, single-use license, binaries, documentation, support services (media: D, E, H, M, Q)
- VT125 -M— VT125 video terminal, 240 volts, RGL/11 single-use license-only option, no binaries, no documentation, no support services (media: Z)

**Upgrade from VT100 or VT105****RT-11 Packages**

- VT100 -H— Terminal upgrade and RGL/11 software, single-use license, binaries, documentation, support services (media: D, E, H, Q, Y, 0)
- VT105 -H— Terminal upgrade and RGL/11 software, single-use license, binaries, documentation, support services (media: D, E, H, Q, Y, 0)

**RSX-11M Packages**

- VT100 -L— Terminal upgrade and RGL/11 software, single-use license, binaries, documentation, support services (media: D, E, H, M, Q)
- VT105 -L— Terminal upgrade and RGL/11 software, single-use license, binaries, documentation, support services (media: D, E, H, M, Q)

**Miscellaneous Options****For RT-11**

- QJ122 -G— Documentation-only kit (media: Z)

**For RSX-11M**

- QJ123 -G— Documentation-only kit (media: Z)

**ADDITIONAL SERVICES:**

The following post-warranty Software Product Services for this software product are available to licensed customers:

- Self-Maintenance Service
- Basic Service
- DECsupport Service

The prerequisite being the purchase of the equivalent level RT-11 and FORTRAN IV/RT-11, or RSX-11M and PDP-11 FORTRAN-77/RSX Software Product Service. Customers should contact their local DIGITAL office for additional information on the availability of these services.