

# digital

# Software Product Description

**PRODUCT NAME: MINC/BASIC, Version 1.2**

**SPD 14.47.3**

## **DESCRIPTION:**

BASIC is a conversational language developed at Dartmouth College that uses simple English language-like statements and familiar notations to perform computer programming operations. MINC/BASIC is an implementation of BASIC designed specially for the MINC system. It operates as a computational, graphics and laboratory data acquisition and control package for scientific and clinical applications.

MINC/BASIC can be used to control all MINC system resources. All features of the operating system are accessible from BASIC. MINC/BASIC systems are distributed in a pregenerated form so the user is in BASIC when the system is turned on. No knowledge outside of BASIC is required to operate this system. With MINC/BASIC, even users previously unfamiliar with computers are able to quickly and easily program successful laboratory and data acquisition applications.

MINC/BASIC has a variety of features for writing, editing, and running user programs. The screen text editor uses special function keys to make program editing easier.

The graphics calls in MINC/BASIC plot two single-valued functions on the console CRT with a resolution of 512 points on the X-axis and 190 points on the Y-axis. Other graphics features include automatic scaling, shading, and interpolation.

MINC/BASIC includes commands for the control and monitoring of experiments through the standard IEEE-488 Interface or optional MINC plug-in modules for

- Analog to digital conversion
- Analog preamplification
- Analog multiplexing
- Digital to analog conversion
- Digital input
- Digital output
- Timekeeping (crystal clock)

MINC/BASIC commands display characters on the console CRT screen in a variety of formats including reverse video, flashing, boldface, underline, and combinations.

There are a total of four serial line ports: the first is used for the VT105 console terminal; the second, an optional line printer; and, the remaining two are for general ASCII instrument support.

Included with MINC/BASIC is the MINC Applications Package that provides stand-alone applications programs written in BASIC. These programs are useful computational aids that can serve as a basis for user program development. Each program is selected from a simple menu list. The package is divided into five sections:

- Numerical
- Statistical
- Regression Analysis
- Financial
- Miscellaneous

## **MINIMUM HARDWARE REQUIRED:**

MNC11-B  
MNC11-C  
MNC11-E

## **OPTIONAL HARDWARE:**

A maximum of eight MNC laboratory modules can be supported at one time. The maximum number for any individual module is given below. In no case can the total number of installed modules be greater than eight. However, modules can at any time be interchanged, subject to nine configuration guidelines.

The total number of A/D channels (single-ended or differential) supported by the software is 64.

The LA34, LA35-H or LA38 (EIA only) is supported as an optional line printer.

<b>MODULE</b>	<b>DESCRIPTION</b>	<b>MAXIMUM NUMBER</b>
MNCKW	Programmable Real-Time Clock	2
MNCAD	A/D Converter	1
MNCAM	Dual Multiplexer	7*
MNCAG	Preamplifier	5*
MNCAA	D/A Converter	4
MNCDI	Digital Input	4
MNCDO	Digital Output	4

\*MNCAD required

## **PREREQUISITE SOFTWARE:**

None

## **OPTIONAL SOFTWARE:**

None

-2-

**TRAINING CREDITS:**

None

**SOFTWARE INSTALLATION:****CUSTOMER INSTALLED**

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

**SUPPORT CATEGORY:****DIGITAL SUPPORTED**

MINC/BASIC is a DIGITAL Supported Software Product.

**SOFTWARE PRODUCT SUPPORT:**

The Customer is entitled to free telephone support by the MINC Product Service Center (PSC) for a 90-day period commencing either from the date of first use by the Customer or thirty (30) days after delivery, whichever occurs first.

The MINC Applications Package is offered as Customer Supported/Customer Installed software. The above telephone support does not apply for the MINC Applications Package.

**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.

The following key (X, Z) represents the distribution media for the product and must be specified at the end of the order number, e.g., QJV31-HX = binaries on RX02 Double Density Diskette.

X = RX02 Double Density Diskette

Z = No hardware dependency

MNC11 -B—MINC03 Hardware single-use license, binaries, documentation, support services

MNC11 -E—MINC23 Hardware single-use license, binaries, documentation, support services

*Update Options*

Users of MINC/BASIC whose specified Support Category warranty has expired may order under license the following software update at the then current charge for such update. The update is distributed in binary form on the appropriate medium and includes no installation or other services unless specifically stated.

QJV31 -H— Binaries, documentation (media: X)

QJV31 -H— Right to copy for single-use (under existing license), no binaries, no documentation (media: Z)

*Miscellaneous Options*

QJV31 -G— Documentation only kit (media: Z)

**ADDITIONAL SERVICES:**

None