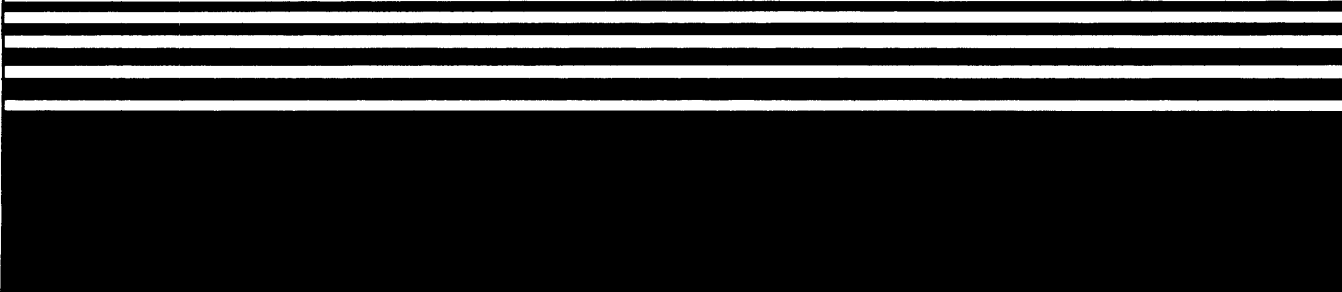


# **DNOS BASIC** ***Object Installation***

Part No. 2308771-9701 \*A  
1 December 1983

**READ**  
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**FIRST**  
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Contents

Title	Page
Section 1 -- Introduction . . . . .	1-1
Section 2 -- Preparing for Installation . . . . .	2-1
Section 3 -- Completing the Installation. . . . .	3-1
Section 4 -- Executing BASIC . . . . .	4-1

```

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|
| READ THIS DOCUMENT BEFORE ATTEMPTING TO USE THIS OBJECT KIT.
| IT DESCRIBES THE DNOS BASIC OBJECT INSTALLATION MEDIA, PART
| NUMBERS 2308812-1601 AND 2308812-1602. YOU SHOULD ALSO READ
| THE PRODUCT RELEASE INFORMATION, PART NUMBER 2239938-9901,
| PRIOR TO INSTALLATION.
|
| TEXAS INSTRUMENTS ASSUMES NO RESPONSIBILITY FOR MODIFICATIONS
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|
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```

Section 1  
Introduction

### 1.1 GENERAL INFORMATION

This document describes the procedures for installing the DNOS BASIC(\*) interpreter, Version 4.1.0.

Be sure to copy and/or write protect this master. For copy procedures refer to the DNOS Operations Guide, part number 2270502-9701.

All SCI commands in this document appear in abbreviated form. You can enter commands as shown or enter them in long form by entering the command name and responding to the prompts that appear at the interactive terminal. Refer to the DNOS System Command Interpreter (SCI) Reference Manual, part number 2270503-9701 for instructions on how to use the SCI procedures.

### 1.2 FILE SECURITY

If you are installing this package on a system that uses file security, be sure to log on with a user ID that is a member of the SYSMGR access group. The proper ID allows you or the installation batch streams running under your user ID to create and delete files. Refer to the DNOS Security Manager's Guide, part number 2308954-9701, for more information on file security.

(\*) BASIC is a registered trademark of the trustees of Dartmouth College, Hanover, New Hampshire.

### 1.3 MEDIA DEFINITION

Object media shipments are made on one of three formats:

- \* Disk -- A DS10, CD1400, DS80, DS300, or 8-inch double-sided double-density diskette
- \* Magnetic Tape -- An 800- or 1600-bpi magnetic tape reel or 1600-bpi magnetic tape cartridge
- \* Add-On -- A DS80, DS300 or CD1400 disk pack that contains the object and one or more other products on the same disk pack

The object files should be accessible by a synonym or synonyms. Section 2 describes the procedures for preparing the object media for this type of access.

### 1.4 INSTALLATION PROCEDURES

The object media contains files and batch streams to perform these functions:

- \* Install the BASIC interpreter in a program file
- \* Verify the installation

### 1.5 SYSTEM REQUIREMENTS

To install the BASIC interpreter, you need to have a DNOS system, Version 1.2.0 or later, and a system disk with the standard development utilities.

## Section 2

## Preparing for Installation

## 2.1 INTRODUCTION

Before executing the installation instructions, you must prepare the object files so that the batch stream can access them. This section contains the instructions for preparing the files based on the media on which the object is received.

## 2.2 DISK MEDIA

When the object is received on disk, load the object disk in an available disk drive and install the object disk using the command:

```
IV U=DSxx, V=DNBOBJ
```

where:

DSxx is the device name of the disk drive  
where you loaded the object disk (eg, DS01).

Proceed to Section 3 for instructions on completing the installation.

### 2.3 MAGNETIC TAPE FORMAT

When the object ships on magnetic tape reel or cartridge, you must transfer the object files to a disk volume before beginning the installation process. Perform these steps to move tape files to disk:

1. Create a directory on the target disk by entering the command:

```
CFDIR P=<volume name>.DNBOBJ, ME=10
```

where:

<volume name> is the name of the disk where you created the directory.

2. Assign the DNBOBJ synonym to the directory by entering the command:

```
AS S=DNBOBJ, V=<volume name>.DNBOBJ
```

3. Load the tape or cartridge on an available drive.
4. Restore the tape or cartridge to the directory by entering the command:

```
RD S=MTxx, D=DNBOBJ, L=.LISTING
```

where:

MTxx is the drive where you loaded the tape or cartridge.

The file .LISTING contains a listing of the directory restored from the tape or cartridge. You can print the file by entering the Print File (PF) command or display it by entering the Show File (SF) command.

5. Remove the tape or cartridge from the device drive after the restore directory operation completes. Proceed to Section 3 for instructions on completing the installation.

## 2.4 ADD-ON PACKAGE

When you receive the object as an add-on package, perform these steps to prepare for installation:

1. Load the add-on disk in an available disk drive and determine the volume name of the add-on disk as follows:

```
SVS D=DSxx
```

where:

DSxx is the number of the disk drive where you loaded the add-on disk.

2. Install the add-on disk by entering the command:

```
IV U=DSxx, V=<volume name>
```

where:

<volume name> is the name of the add-on disk volume.

3. Assign the DNBOBJ synonym to the directory <volume name>.DNBOBJ on the add-on disk by entering the command:

```
AS S=DNBOBJ, V=<volume name>.DNBOBJ
```

Proceed to Section 3 for instructions on completing the installation.



## Section 3

## Completing the Installation

## 3.1 GENERAL

This section describes how to complete the installation of BASIC. You can access the BASIC object files by the name DNBOBJ.

## 3.2 INSTALLING THE OBJECT

Perform these steps to complete the installation from disk.

1. Assign the synonym DSC to the system disk using the command:

```
AS S=DSC, V=<volume name>
```

where:

volume name is the name of the installed system disk.

2. Execute the installation batch stream using the command:

```
XB I=DNBOBJ.INSTALL, L=.INSTLST
```

The batch stream normally takes about three to five minutes to complete. During this time, you can monitor batch stream execution by issuing a WAIT or SBS command. When the batch stream completes successfully, the following message appears:

```
DNOS BASIC INSTALLATION COMPLETE -- 0 ERRORS
```

## 3.3 CHECKING THE BATCH STREAM LISTING

The output generated by the batch stream goes to the listing file .INSTLST. When the batch stream has completed execution, you can examine this file by entering the Show File (SF) or Print File (PF) command to be sure that BASIC is properly installed.

When the batch stream completes successfully, the elements of BASIC are installed as follows:

- \* The program file DSC.S\$BASIC.PROG contains TI BASIC
- \* The relative record file DSC.S\$BASIC.OV400 contains the BASIC overlays
- \* The directory DSC.S\$BASUB contains the keyed file and sort routines
- \* The .S\$CMDS directory contains a new procedure named BASIC

You can confirm the success of the installation as follows:

1. Enter the List Directory (LD) command to list the contents of the BASIC program file:

```
LD P=DSC.S$BASIC
```

The DSC.S\$BASIC directory should contain a relative record file and a program file, as follows:

```
OV400          (Relative record file)
PROG           (Program file)
```

2. Enter the LD command again to list the KIF and sort subroutines:

```
LD P=DSC.S$BASUB
```

The DSC.S\$BASUB directory should contain the following eleven program files:

```
BLDBUF
KFCLOS
KFCREA
KFDELR
KFGET
KFINIT
KFOPEN
KFPUT
KFREAD
KFWRIT
SORT
```

3. You can delete the synonym DSC, if desired, using the Assign Synonym (AS) command as follows:

```
AS S=DSC, V=""
```

## Section 4

## Executing BASIC

To execute BASIC, enter the BASIC command and respond to the prompts as follows:

```
EXECUTE BASIC
      WORKSPACE SIZE(KB): 32
NUMBER OF OVERLAY BUFFERS: 8
      WORK FILE VOLUME NAME:
      INITIAL PROGRAM NAME:
      MODE (F,B): FOREGROUND
```

BASIC is now ready for use. Refer to the TI BASIC Reference Manual, part number 2308769-9701, for details on program development and execution.