APPLICATION		REVISIONS		
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|
|    RELEASE AND UPDATE INFORMATION, BASIC
|    RELEASE 4.1.0-990
|
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```

TEXAS INSTRUMENTS INCORPORATED DATA SYSTEMS GROUP	drawing number 2239938-9901
	REV. ** SHEET 1 OF 7

SECTION 1

INTRODUCTION

This document contains information about the characteristics
and operation of DX BASIC, release 4.1.0. This release consists
of the following components:

1. An object disk (volume name DXBOBJ or DNBOBJ).

2. A batch stream to install BASIC (filename = .INSTALL on
   the installation disk).

SECTION 2

CONVERSION

In order to convert a BASIC program to BASIC version 4.1 from SBC BASIC, TX5 BASIC, or DX BASIC V3.2 or earlier, it is necessary to SAVE the program using the LIST option under the original version of BASIC. The program can then be accessed normally under BASIC version 4.1. No conversion of any kind is required for programs which execute under 4.0 BASIC.

SECTION 3

IMPROVED I/O PERFORMANCE

The major enhancement to BASIC version 4.1 over version 4.0 and before is improved I/O performance, both to the screen and to files.   Screen output is increased by about 25%, and file I/O is increased by anywhere from 5 to 50%.

All new features introduced with version 4.0 are supported, as is the overlay structure.

SECTION 4

O. S. SPECIFIC INFORMATION

BASIC version 4.1 is released under the following two
Operating Systems:

1. DX10

2. DNOS

Both forms of the BASIC interpreter are almost identical — the
only differences are in some aspects of the operating system
interface. Because of this similarity, migration of programs
from one operating system to another will rarely require any
programmer intervention.

DX BASIC prior to version 4.0 used to require that assembly
language subprograms be linked using the TXXLE linker. Like
version 4.0, version 4.1 uses the standard XLE linker.

SECTION 5

KNOWN BUGS

The following are the known bugs. See your customer
representative for patches, which are available for all of them.

1. The tab key will not tab to the end of a line which is
    longer than 40 characters. If the tab key is used, the
    line is truncated at the tab key.

2. DISPLAY with a negative size of a null string displays
    a   very   large   quantity   of   spaces.   EXAMPLE:
    S$="""::DISPLAY SIZE(-24):S$

3. PRINT of some negative numbers causes a BASIC ERROR 172
    (task error 05). EXAMPLES: N=-1::PRINT N or PRINT -1

4. Task error messages are not always reported properly to
    SCI.

5. NUM does not always scroll properly.

6. DISPLAY with both SIZE and USING phrases does not
    display properly.

SECTION 6

MISCELLANEOUS NOTES

The following are some miscellaneous notes on this product:

1. All screen I/O for version 4.1 was completely re-written. Therefore, some slight differences may be noted in this version. As an example, the down arrow key does not scroll before displaying the line.

2. The SIZE phrase in the DISPLAY statement previously concatenated items which were separated by semicolons. In version 4.1, the SIZE phrase applies only to the first item in the DISPLAY list. To achieve concatenation as before, the semicolon (";") must be replaced by the ampersand ("&"). See section 6.5.3.3 in the BASIC reference manual for a discussion of the SIZE phrase.