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PLOT 10

4010A06

GRAPHICS TABLET UTILITY ROUTINES

INSTALLATION GUIDE

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PRODUCT 4010A06 PLOT 10 GRAPHICS TABLET UTILITY ROUTINES

This manual supports the following versions of this product: Level 1 and above

MANUAL REVISION STATUS

REV.	DATE	DESCRIPTION
@	5 '77	Original Issue

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INTRODUCTION

The 4010A06 PLOT 10 Graphics Tablet Utility Routines provide an easy way of using the 4953 and 4954 Graphics Tablet in conjunction with a 4010-Series Computer Display Terminal and a host computer. The software support consists of six FORTRAN IV subroutines which are designed to be used with the Terminal Control System (TCS).

INSTALLATION PROCEDURE

1. If you have Release 3.0 (or above) of TCS load and compile the Graphics Tablet Utility Routines (GTUR). Routines necessary to run the GTUR are TINSTR, TOUTST and LEFTIO. If your TCS package does not include these routines (part of Release 3.0 and later) follow step 2.

2. If you do not have TCS (or have a version lower than Release 3.0) write the three routines as shown below.

TOUTST

TOUTST outputs ADE* characters, including control characters, in an array.

Calling sequence:

```
CALL TOUTST (NCHAR, IARRAY)
```

Parameters entered:

NCHAR	number of characters in array to be output
IARRAY	array containing ADE characters to be output

TINSTR

TINSTR accepts input characters and stores them in a buffer (IBUFF). The length of this buffer is limited only by the maximum length of the computer system input buffer. The input is delimited by a carriage return (CR), and it is not necessary that control characters be input. The subroutine must keep count of the number of characters (NUM) in IBUFF, not including trailing blanks. New characters should be input only if NUM=0, and the output buffer should be dumped before the next request for input.

***ADE (ASCII Decimal Equivalent) code is the integer representation of the ASCII character set. The ADE characters are the numbers from 0 to 127. For example, 48 represents 0, 65 "A", 90 "Z", etc.**

Calling Sequence:

CALL TINSTR (LEN, IARRAY)

Parameters entered:

LEN	the number of characters requested
IARRAY	ADE array into which the input characters are placed

NOTE

If LEN>NUM>0, IARRAY must be padded with spaces. If LEN <NUM, characters remaining in the buffer should be retained for the next access of TINSTR, and NUM should be updated to NUM – LEN.

LEFTIO

LEFTIO returns to number of characters left in the TINSTR buffer (NUM above).

Calling Sequence:

CALL LEFTIO

When the above routines are written you should be able to load, compile, and run the GTUR.

3. Subroutine MULPNT contains a comment line which allows the user to insert a subroutine BUFFUL for buffer overflow:

C * IF(NGOT.GT.NWNT) CALL BUFFUL

By replacing "C *" with spaces and writing BUFFUL, the user may create a routine which will handle buffer overflow. The standard GTUR package discards any input points in excess of the limits of the buffer. BUFFUL could be used to call a terminal bell routine to alert the user when the buffer overflows.

INSTALLATION CHECKLIST

- ☐ 1. Determine if you have Release 3.0 or higher of TCS.
- ☐ 2. If necessary add routines to bring system up to level of Release 3.0.
- ☐ 3. Load and compile the GTUR routines.
- ☐ 4. Insert subroutine BUFFUL if desired.
- ☐ 5. Enjoy your new Tektronix software.