27 GDS Helpsheet

Software

GDS Triaxial Testing Software GDSTTS Gen. 5

IBM PC and 100% Compatible Installation Procedures

HTB Ver. 2

1. Introduction

GDS software has been extensively used for about 10 years now. This means that our software fulfills the requirement of the First GDS Law of Software i.e. "The only good software is software that is well used"!

GDS software was originally developed for the Hewlett Packard HP80 (now obsolete) and the new powerful HP9000 computers. This software is written in HP (Rocky Mountain) Basic. To enable this software to run in the MSDOS environment of the IBM PC requires HP emulation software. This is provided by the HTBasic package produced by TransEra. This package also provide the IEEE 488 parallel interface.

2. Installing HTBasic

Install HTBasic onto your hard disc using the procedures given in the HTBasic handbook in Chapter 1 "Getting Started" .

3. Installing GDSTTS

The GDS files have been supplied on one or two disks depending on the type of disk used. Place each floppy disk in the drive and execute the copy command

COPY A:*.* C:\HTB

This will install the GDSTTS files on your hard disc in the directory called "HTB" i.e. in the same directory that contains the HTBasic files.

4. Changing the AOTUST File

HTBasic contains an autostart file called "AUTOST". This automatically runs a demonstration of the graphical and other features of HTBasic. To avoid this happening every time you invoke HTBasic you need to delete this autostart program and put in the GDS one.

While you are at the DOS level move to the hard disc by typing C: followed by pressing the ENTER key. Then move into the HTB directory by typing CD \HTB followed by ENTER. Remove

the existing HTBasic supplied AUTOST by typing DEL AUTOST followed by ENTER.

Make use of the GDS autostart file by typing COPY GDSTRT AUTOST followed by ENTER. Do not simply re-name GDSTRT just in case you want to refer to the original version later.

5. How to Edit the AUTOST File

Now when you invoke HTBasic your new AUTOST file will run. If your configuration does not match the CONFIGURE statements in the GDS supplied AUTOST file you will need to change this file accordingly.

While in HTBasic LOAD "AUTOST" and press the EDIT key. The AUTOST file will be displayed on the screen and you can change it. Do not forget to press ENTER for each line that you change. If you do not do this your changes will disappear.

The items that you are likely to want to change are to do with the printer and the directory names. For example if you have an GPIB (IEEE 488) printer like the HP thinkjet then you might CONFIGURE PRT TO 710 and CONFIGURE DUMP TO "HP-PCL". This is only a quick guide. There is no substitute for reading the HTBasic handbook!

6. How to Run GDSTTS

To run GDSTTS you must first change into the HTB directory by typing

CD \HTB

 followed by ENTER.

Now run HTB by typing

HTB

 followed by ENTER.

You are now in HTBasic and to load GDSTTS you type

LOAD "GDSTTS"

 followed by ENTER.

To run GDSTTS you type

RUN

 followed by ENTER.

GDSTTS will now run by announcing

GDSTTS GEN 5
PRINTER IS 1
PLOTTER IS 1
DO YOU WISH TO CHANGE THIS (Y OR N)

You reply Y. The program will then prompt

DO YOU WISH TO HAVE RESULTS ON
SCREEN OR PLOTTER (S or P)?

If you are in the testing stage you reply

S

and the prompt replies

IS THERE A SYSTEM PRINTER ATTACHED (Y or N)?
Y
ENTER PRINTER ADDRESS; e.g. 711?

The example given is for a printer on the GP-IB. If you have a printer attached to the parallel port enter 10.

7. How to Plot Saved Results

To plot saved results select 9 from the test and pretest menus. This will return you to the dialogue in which you can choose to have the results on the screen or plotter. To review results it is a good idea to plot on the screen until you are satisfied with the form and content of presentation. Then you can go back to select the plotter by choosing 9 from the menus again.

The screen will then prompt

GDSTTS GEN 5.0
PRINTER IS 10
PLOTTER IS 1
DO YOU WISH TO CHANGE THIS (Y or N)?

To review plotted results on the screen you will reply "N". This is because the screen has address "1".

To plot results on the plotter you will reply

Y
DO YOU WISH TO HAVE THE RESULTS ON
SCREEN OR PLOTTER (S or P)?
P
ENTER PLOTTER IEEE ADDRESS: e.g. 710?

The prompt is for a plotter on the GP-IB which will have an IEEE address. For a plotter on the first serial port of your IBM PC compatible you will reply 9:

9
IS THERE A SYSTEM PRINTER ATTACHED (Y or N)?
Y
ENTER PRINTER IEEE ADDRESS: e.g. 711?
10
PRINTER IS 10
PLOTTER IS 9
DO YOU WISH TO CHANGE THIS (Y or N)
N

If the system hangs up at this stage then you have not switched on the printer and plotter.

8. Setting the FUNCTION Keys

GDS software uses the FUNCTION keys K1, K2, K3 etc in some circumstances e.g. terminating a test, dumping graphics and so on. The computer keys can be labelled K1, K2, K3... or F1, F2,

F3... depending on the computer. The prompts on the screen and references in the handbook use K1, K2, K3...

Before pressing any FUNCTION key select USER function by pressing SHIFT and F10 together. Then press F1 (for K1) and so on.

DON'T FORGET TO USE YOUR PURPLE HTBASIC KEYBOARD FUNCTIONS QUICK REFERENCE CARD!

9. TransEra IEEE-488 Card

Check that switch 8 is ON so that the card will operate as the system controller. Also check that the jumpers at J1 are set to 3 for the HTBasic IEEE-488 bus controller to work correctly.