27 GDS Helpsheet World Leaders in Computer Controlled Testing Systems for Geotechnical Engineers and Geologists



Software

HTB Ver 3

GDS Triaxial Testing Software GDSTTS Gen 5 IBM PC and 100% compatible installation procedures

1. Introduction

GDS software has been extensively used for about 10 years now. This means that our software fulfils 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.

Setting up HTBasic for the TransEra GP-IB card

To run HTBasic 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.

First ensure that the IEEE interface (TransEra GP-IB card) and the I.D. Module are installed.

Then type:

LOAD "AUTOST" EDIT 300

You will see that this line says:

300 !LOAD BIN "GPIB" !TransEra GPIB Board

You must change this to say:

300 LOAD BIN "GPIB" !TransEra GPIB Board

i.e. remove the first exclamation mark. This activates the statement. When you have made the change do not forget to press ENTER (i.e. the return key) or your change will disappear. To check that it is still there press the UP arrow cursor control key a couple of times and then look at line 300 again. If you have not done it properly it will have changed back to the original version.

When you are happy that all is OK type:

RE-STORE "AUTOST"

4. 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.

5. 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.

6. Setting of 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.