

56 GDS Helpsheet



*World Leaders in Computer Controlled Testing
Systems for Geotechnical Engineers and Geologists*

Software

MIMIDYN

Investigating IEEE Error Conditions on System Start

1. Introduction

The MINIDYN software can be used in a minimum system configuration. If you appear to be having problems with communication errors when you start the system you should start the system in this minimum configuration.

The minimum configuration is computer, software, axial actuator and one controller only. The controller pressure outlet should be connected to a closed valve.

1. Power off the computer. Remove all devices from the computer - this includes printer, plotter and all controllers.
2. Connect one controller to the IEEE bus using one cable. Set the IEEE address of this controller to 7 (use the key sequence RESET ZERO ONE SEVEN ENTER RESET NINE RESET)
3. Power on the computer. Start HTBasic. Load and run MINIDYN.
4. At start up ensure that the software shows PRINTER = 1, and PLOTTER = 1. If not then go through the procedure to tell the software that there is not a printer connected and there is not a plotter connected.
5. Change the addresses in the software to

Back pressure controller IEEE address = 99
Cell pressure controller IEEE address = 7

This tells the software that only the cell pressure controller is present on the IEEE bus (99 means not present)

6. Choose the option in the first menu to "RUN TESTS". The system should tell you that there is only one controller connected. If you get a timeout at this stage check that the IEEE address for the connected controller is properly set up on the controller and in the software. If you still get an IEEE error then power off the controller and system and wait two minutes and then power on again. Check the IEEE address for the controller immediately after power on. If you still get IEEE timeouts change the controller to a different controller and go through the whole procedure again. If you still get IEEE timeouts change the IEEE cable that you are using and try the whole procedure again. Finally you could change the computer or return the IEEE card to GDS to check. You should note that if the system works with one controller and not another the problem is likely to be with the controller or the IEEE cable.
7. If the system starts up OK choose to run a UU test with a strain rate of 0.01 mm/hr. If this

runs OK then proceed to the next step.

8. Power off all devices and the computer and add a second controller and IEEE cable. Set the IEEE address of this controller to 8 (use the key sequence RESET ZERO ONE EIGHT ENTER RESET NINE RESET)
 9. Power on the computer. Start HTBasic. Load and run MINIDYN.
 10. Repeat the steps 4 - 7 above but in this case set the IEEE addresses as follows
 - Back pressure controller IEEE address = 8
 - Cell pressure controller IEEE address = 7
 11. If this is OK you can add back the printer (if you have one).
 12. If this is OK you can add back the plotter (if you have one).
- If you get this far the system should work OK without problems.