Utility Software

D

D.1 ADAM-4000 Utility Software

Together with the ADAM modules you will find a utility disk containing utility software with the following capabilities:

- Module configuration
- Module calibration
- Data Input and Output
- Alarm settings
- Autoscan of connected modules
- Terminal emulation

The following text will give you a brief instruction how to use the program.

Main menu

The main screen consists of a menu bar at the top side of the screen and a status field which displays information about the connected modules. When you first start the program, it will automatically scan for any attached modules and display their data. The status field lists module characteristics, module configuration parameters and in or output values.

Figure D-1 *Main screen*

Normally you will use the Search command to scan the network. Highlight the Search command on the menu bar and press <Enter> (or simply press the “s” key). The “Search Installed Modules” window will then appear to prompt you to enter the range it should scan. Input a value 0 and 256 decimal.

NOTICE: When changing configuration, calibration or alarm parameters, you should always make sure that a window appears notifying you that the target module has confirmed the changes.

An asterix sign “” before the modules address indicates that the module is in the INIT* state*

Setup

Select Setup from the top bar and a selection bar will appear in the status field. First, move the selection bar over the module you wish to configure and select it by pressing <Enter>. A configuration screen will appear with the settings available for its module type and the current values of its inputs. An example is shown in Figure D-2 for an ADAM-4011 module.

Figure D-2 *Setup options*

Here there are three different options, Configure, Edit-data and Alarm/ Counter. To change the basic settings, select Configure and press <Enter>. (To return to the previous screen without making any changes, press <ESC>. This works for most screens in the program.)

Highlight the parameter you wish to change and press <Enter>. A window will appear with the configuration options for that parameter. Highlight the proper value and hit <Enter>. For some parameters, such as alarm high and low limit values, you will need to type in a specific value after selecting the parameter.

The Checksum and Baud rate options need special attention since they can only be changed when an ADAM module is in the INIT* state. To place a module in INIT state, its INIT terminal should be connected to its GND terminal (see Baud rate and Checksum in Chapter 2). When the ADAM

module is not in INIT mode, an error message will appear. When it is in INIT mode, a window to change the Checksum or an option window showing you the valid baud rates will appear, depending on your choice.

After you have made the changes for a block of parameters, press <ESC>. You will be asked if you are satisfied with the changes you have made or not. Answer y to keep the changes you have made, n to escape without changing the values.

A similar procedure applies for alarm settings. Note that only the ADAM-4011 and ADAM-4012 analog input modules provide alarming and event counting.

If you wish to set the values of the module's outputs, select from the configuration screen menu and press <Enter>. Next highlight the output channel and toggle its value with the spacebar. Note that the digital outputs cannot be used when alarming functions are activated.

After you have made all necessary changes to the module configuration, you must issue the Run command to send the data to the Modules and let the changes take effect. If you select Quit instead of Run, the changes you have just made will not take effect and you will leave the program.

Calibration

Press <Enter> on the Calibrate option on the top bar and a selection bar appears in the status field. Move the selection bar over the module you wish to configure and select it by pressing <Enter>. Only analog input and output modules can be calibrated. If the module is an analog input module, you will be able to choose, for example, Zero Calibration. The screen will then look like Figure D-3.

To learn what steps should be taken to calibrate both input and output modules, refer to Chapter 5, Calibration.

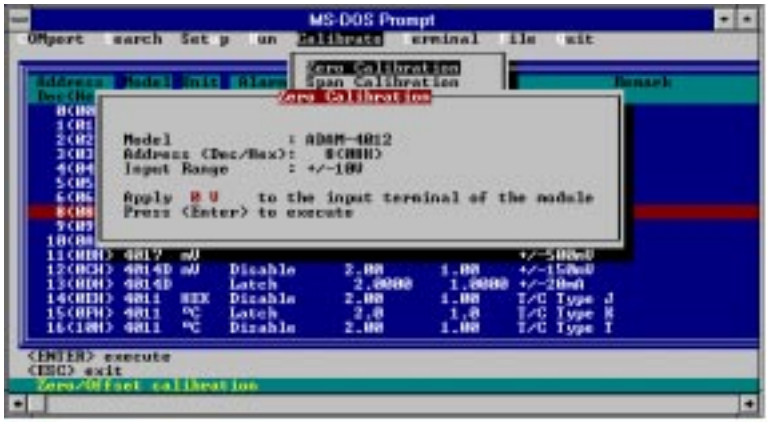


Figure D-3 *Zero Calibration*

File

This option allows you to update the status field and can gives you a hardcopy of all the connected modules that are shown on the screen. You can also print this information.

Terminal

This option allows you to directly send and receive commands on the RS-485 line. It has two options: Command Test and Terminal Emulation.

With Command Test you send commands one at a time by typing them into the top blank and pressing <Enter>. The response appears in the bottom blank. To send the command again, simply press <Enter> again.

Terminal Emulation is a full screen version of Command Test. (See Figure D-4, below.) Previous commands and their responses stay on the screen for you to refer to. If you want to repeatedly send a command, press <F10> and a dialogue box will appear into which you can enter the command. Press <Enter> to send the command. To stop the repeating command, press any key.

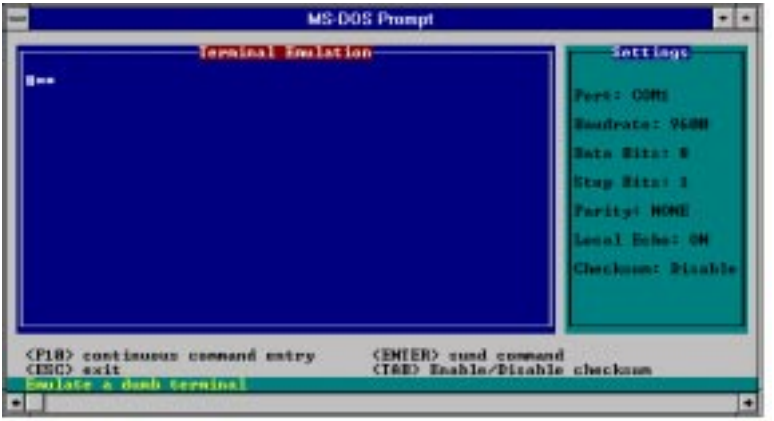


Figure D-4 *Terminal Emulation*

A box on the right hand side of the screen shows the communication parameters for the serial line such as the baud rate and number of stop bits.

Quit

Choosing the Quit option ends the ADAM utility program.

D.2 ADAM-4018M Utility Software

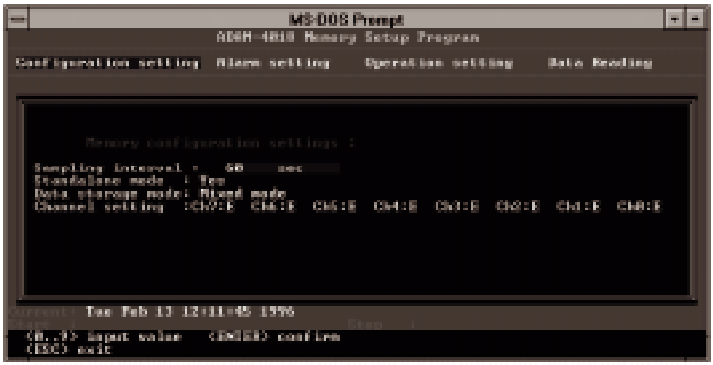
The ADAM-4018M is designed to add memory to the ADAM-4018. To simplify matters, it uses the same software utility as the ADAM-4018, but with a few additional memory function settings:

Configuration setting
Alarm setting
Operation setting
Data reading

The following text provides a brief introduction on software usage.

Configuration setting

The configuration setting allows you to set the sampling interval, standalone mode, data logger mode and channel enable/disable status. The sampling interval can be set from 2 to 65,535 seconds. To operate the ADAM-4018M in the field, you must power on the memory module by setting the standalone mode as "YES". Otherwise, the data will not be recorded.



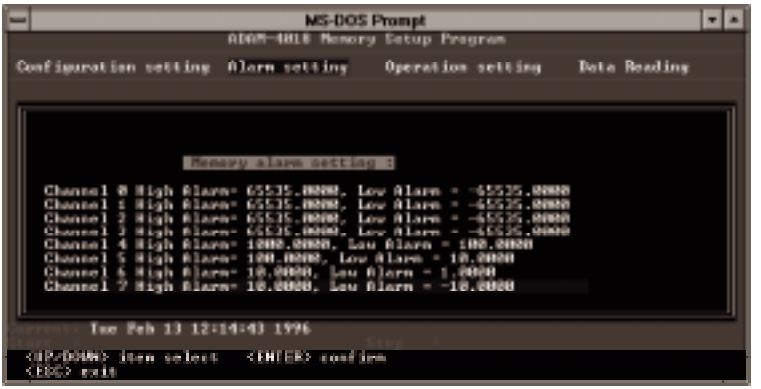
There are three data logging modes.

1. **Standard Mode:** All eight channels serve as the standard logger to record normal data according to the sampling interval.
2. **Event Mode:** All eight channels serve as the event logger in cases when the data recording value either exceeds the High Alarm limit or goes below the Low Alarm limit.
3. **Mixed Mode:** Channels 0-3 serve as the standard logger, while channels 4-7 serve as the event logger.

NOTE *For channel setting, "E" means Enable the channel to record data, "D" means to Disable.*

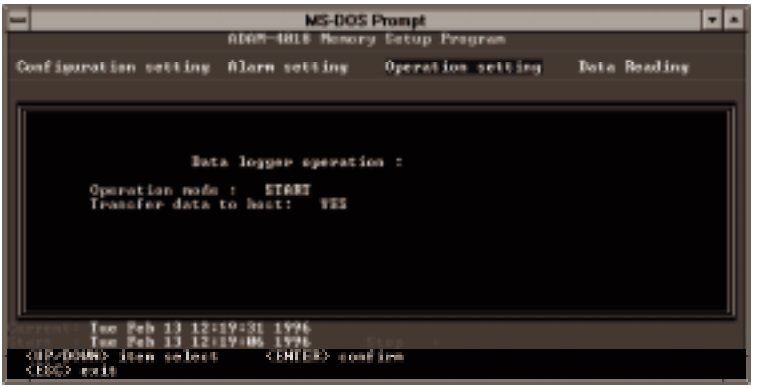
Alarm setting

This screen allows users to set the high/low alarm limit. Its range is from -65,535 to +65,535.



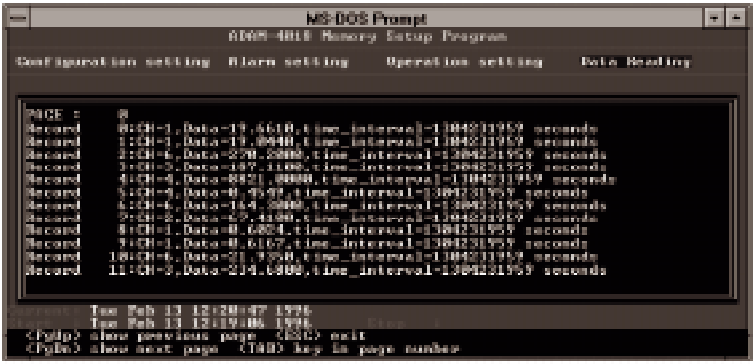
Operation setting

This screen allows users to "START/STOP" the storage function of the memory module and to select the option to transfer ADAM-4018M memory data to the host.



Data reading

This screen allows users to read data stored in the memory, after the data has been transferred to the host.



NOTE *1.When standalone mode (in Memory Configuration Settings) is set to "NO" and you want to read data from the data logger, you MUST set the operation mode to "STOP" before you read data.*

NOTE *2.In standalone mode, if an LED light begins to blink once per second, 15 seconds after power is turned on, this means that the memory is not working. Turn the power off, then back on, and check the memory.*