

## DigiTerm Commands

To learn how to use Help press F1 or choose How to Use Help from the Help menu.

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Setup

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Scripts

About DigiTerm

# DigiTerm

DigiTerm Ver1.0 - Simply the best little terminal program for Windows

1994, Northern Electronics -- Written by Douglas Southcott

## *Ready for tomorrow's technology*

With DigiTerm, You can access data service networks such as Compuserve, Canada Remote Systems, or MCI. You never have to see a terminal window - simply have DigiTerm call the service, do its thing, and hang up.

### **Registration:**

DigiTerm Version1.0 is being released as SHAREWARE, as such there are some items which do not work until you register the program. These include the host mode, external protocols, and Zmodem. Registering will turn all these features on, as well as get rid of the annoying nag screen. The price to register DigiTerm is currently \$50.00 Canadian. I will accept money orders, or cheques, however cheques will need to clear your bank before I send out the key keys to you. Orders with money orders will be sent out the same day.

Send orders to:

Mr. Douglas Southcott  
Northern Electronics  
47 James Street  
Barrie, Ontario  
L4M 6Y3

I am currently working on setting up the ability to accept credit card orders but have not finalized those arrangements yet.

The Programers Guild BBS at (705)733-5055 is the support BBS for any questions regarding the software. My FIDO address is 1:252/102 and my Nanet address is 81:705/107. I can be reached at either of these.

This program is guaranteed only to take up space on your hard drive. I will in no way be held liable for any damages incurred by the use of this software to your machine or software. Use of this product denotes acceptance of these terms. It works for me here and thats all I know. Also several friends have used it on their machines and no damages resulted - all use went properly without bugs of any kind.

### Record Script:

When you record a script, DigiTerm logs all your keystrokes and received data, and writes a script for you, which you can then play back, reproducing your actions as you log into a host system.

Pick where you want to record your script and the name you want the file to have. From then on all input from the modem and the keyboard will be recorded to the file. To stop recording simply click on record script again.

Call the host system either manually by typing in "ATDT XXX-XXXX" <ENTER> (where XXX-XXXX is the phone number) or by selecting Phone Book from the Communications menu. If you selected the phone book option, you can add the host system to your phone book and click the Dial button.

If for any reason you wish to abort the process at any time, you can press escape. Once you've connected, do whatever you want to record (i.e. log in, download a file, etc.) and hang up if you want. Once you've completed the task or you simply want to stop recording, select Record Script from the Script menu again to stop recording.

### Play Script:

Select from the scripts you have recorded to have it play back. You can set scripts to start as soon as the number is dialed by putting it in with the number its for in the phone book.

### Edit Script:

Brings the selected script up into the Windows Notepad. From here you can edit the script, clean it up so its easier to read, add commands, etc. You may notice that some SEND commands are broken up among two or more commands. For example, if you entered a password and the host system echos back a period for every character you type, your script might look like this:

```
SEND "Passw"  
WAITFOR "..."
```

```
SEND "ord^M"  
WAITFOR "....."
```

The script will work, but you may want to clean it up so that others could read it and understand how the script works. Here is a cleaner version of the above example:

```
SEND "Password^M"  
WAITFOR "....."
```

You can edit your script file with any text editor.

### Script Commands:

Scripts can be setup to call BBSs, do a screen capture of all the new files, download your mail packets, grab the files you want, then hang-up and call another BBS all while youre asleep! Then you can get up in the morning read and reply to your mail so its ready to be sent up automatically the next time your computer calls out by itself. The possibilities are endless.

DigiTerm includes a powerful script language. Non-programmers can record and edit scripts to accomplish such tasks as calling a host system, reading mail, and transferring files. The idea behind DigiTerm is that by adding a few lines to your script, you will be able to make calls that automatically handle the intricacies of modems. These are the DigiTerm routines:

### Script commands include the following:

|              |                 |         |
|--------------|-----------------|---------|
| PORT         | SETTINGS        | DIAL    |
| TIMEOUT      | WAITFOR         | SEND    |
| HANGUP       | PROTOCOL        | UPLOAD  |
| DOWNLOAD     | PAUSE           | STOP    |
| END          | INPUT           | CAPTURE |
| CLOSECAPTURE | ON_TIMEOUT_GOTO |         |

With these commands you should be able to do pretty well anything you want to through your terminal. The following is an example script for use with DigiTerm.

### Interfacing with a BBS

This guide is useful in helping you design a remote system which is to dial a host computer and communicate with it. Just follow the simple rules outlined here, and you'll be dialing up in no time.

### Defining the task

The first thing you must do is define the task. For example, let us say that the task is to call a host system, such as a BBS, and download a file. You must manually log on to the BBS system and make a note of all of the prompts after which you must enter something, and also make a note of what you have to enter to complete the task.

Write it down on paper as you go. For example, you may end up with an outline that looks like this:

```
Get "Name:"  
Send "Doug Southcott"
```

```
Get "Password:"  
Send "SFA"
```

```
Get "Menu:"  
Send "Download"
```

```
Get "FileName:"  
Send "ALLFILES.ZIP"
```

```
Download the file  
Hangup
```

It doesn't matter how you document the prompts and associated commands as long as you can understand what text needs to be received and what text needs to be sent in response.

### Implementing a Script

You can go about writing the script in one of two ways. The first way is to record the script while you're on-line and play it back later. The second is to record or write an external script file to do the job, and play it back with the play script routine.

You can record scripts with DigiTerm or write one with a text editor. The supported script commands are documented elsewhere in this manual, but you can get the idea from the following example which is a script file implementation of the above sample task:

```
PORT 3                                '-- Use COM3:  
SETTINGS "2400,N,8,1"                 '-- 2400 baud, no parity, 8 data bits, 1 stop bit.  
TIMEOUT 60                             '-- Wait up to 1 minute (WaitFor)  
  
DIAL "733-5055"                         '-- Dial the phone number  
WAITFOR "CONNECT"                       '-- Wait until the modems connect  
  
PAUSE 3                                 '-- Pause 3 seconds to allow  
                                         '   modems to completely connect.  
  
WAITFOR "Name:"  
SEND "jeff windat^M"  
  
WAITFOR "Password:"  
SEND "sfa^M"
```

```
WAITFOR "Menu:"  
SEND "Download^M"
```

```
WAITFOR "FileName:"  
SEND "ALLFILES.ZIP^M"
```

```
PAUSE 1  
PROTOCOL "ZMODEM"      '-- Use Zmodem  
DOWNLOAD               '-- Download files.
```

```
HANGUP  
END
```

Download (PgDn): Internal transfer protocols include X/Y/Zmodem and several others, along with the external ones you add yourself. Tell the BBS to start the download, hit PgDn, pick your protocol, and there you go - here comes your files. A box pops up on screen to tell you the percent of file transferred, etc.

Upload (PgUp): Tell the BBS you want to upload, hit PgUp, click on the protocol and choose the filename - there you go you're uploading a file. NOTE: You have to put in a filename (click to highlight the filename). Transferred are aborted by clicking Cancel.

Internal Protocols: Selects your default internal protocol. Available protocols include X/Y/Zmodem as well as ASCII, CompuServe B+, and Kermit.

External Protocols: Use your arrow keys to scroll through the available choices. I am assuming you have some currently set up with Telix (or whatever). I also decided why should you, the end user of my product, have to have the necessary files in two places on your hard drive so you can use them with my program - why waste the drive space for duplicate files? Thus the setup is as follows:

- 1) Click on ADD.
- 2) Type in the protocols name - whatever you want to show up in the entries list window.
- 3) Then type in the FULL command line. As most are written to run under DOS you type as follows:  
COMMAND.COM /C <path.filename>  
See the provided bimenu choice to clarify any doubts as to how.
- 4) Click on OK.

From then on you simply use your arrow keys to scroll through the listed entries then click Run to run the protocol. Its that easy.

Delete: This will delete the listed entry (NOT the protocol files themselves). It is polite enough to ask if you're sure before it deletes the entry.

OK: Clicking here simply closes the external protocols form.

Hot Keys: Getting to the phone book can be done by pressing Alt+C then P, by clicking on the Communications menu followed by clicking on Phone Book, or by using the Ctl+D combination to bring it up on screen in one quick shot. Ctl+D is the fastest and easiest of the methods.

The phone book is an Access1.1 database where you can store the information about all the numbers you call. From here you can add, delete, and dial the numbers you choose. Scripts can also be linked so you can execute the script as soon as the number is dialed.

Host Mode: Sets your modem to answer the phone on the first ring and establish a connection at the best settings for the caller. This toy is real handy when using a call back verifier with BBSs youre calling.

Port Open: Opens or closes the Com port.

Hang Up: Hangs up the phone - breaks the connection with the remote system.

Interval: Sets the interval in Msec. that the I/O buffer is read to a file. Helps keep out those bad CRC messages you get from a corrupted zip file because you did the transfer in the background.

Clear the Screen: Clears off the screen in the terminal window. Good in case you got a screen full of garbage due to line noise, a bad connection, etc.

Port  
Terminal  
Modem  
FastKeys



These are shortcut keys you use while on-line in the terminal program. You use them to send strings out of the modem port, this could be your name, password, whatever you'd like it to be. I have three different passwords for different systems so this way I simply hit the button to send out my name then whatever password I need for the BBS I'm on. It speeds things up a lot for me here.

This brings up a form where you can choose from over 445 modems. Dont worry - if you pick the wrong one it WILL tell you! Scroll up and down to pick the make of your modem, then choose the particular model you have. Type in your port number and click OK and youre all set with the factory settings. Included modem strings are available for Zyxel, Zoom, Boca, Cardinal, etc., etc. From the modem form you can choose to edit your settings, add a modem, and pack the database.

Edit Settings: You can change the make, model, init. strings, etc. Clicking on OK will save your altered settings to the database.

Add a Modem: Design your own fancy strings for your modem and save them to the database. Looking at some of the choices (or your modems manual) could help you figure better settings than those in the available database.

Delete Modem: This deletes the currently highlighted model under model. BE CAREFUL! If you accidentally delete a modem you can go to DOS and copy modems.bak to modems.dat but any changes youve made since installing the program will be lost.

Pack Database: This is an Access1.1 style database (as is the external protocols setup). If youve made lots of changes to the database you should pack it to be as compact as possible.

This will bring up a form where you can choose your foreground and background colors, your font, **font size** (good if youre eyesight isnt 20/20), bold, etc. Here you can also say whether your monitor is color, gray scale, or monochrome. You can use any font that you have installed under Windows but you should try to be sure you use one like terminal that allows the use of upper ASCII characters.

Clicking on Port will bring up a form where you choose your port, baud rate, etc. Ports currently range from 1 to 4 and speeds up to 57,600 Baud. Not many people currently go faster than that right now. I am working on improvements at the present time for the next version of DigiTerm.

Open Capture  
Close Capture  
File Manager (Ctl+M)  
Exit

This option quits the DigiTerm application itself and exits back to Windows.

The built-in file manager lets you run your other software while you're on-line with the terminal program. You can have the software running foreground or background, minimized, maximized, etc. You can run DOS or Windows apps and the file manager will do the time slicing for you. You should not lose any files in transfers because you were running a different application at the same time as long as you run the app through the terminal program's file manager.

You can access any drive - even over a network - then select any directory and file. The selected file shows up in (of all places) under the title Selected Dir. or File. The chosen file can then be edited, erased, copied, or moved. A selected directory can be deleted. As you change drives and directories, delete files, toast off directories, etc. the appropriate windows are updated automatically.

Hot Keys

Make Directory

Kill Directory

Copy or Move Files

Click on any file and it shows up in Selected Dir. or File. Then, where the form says Selected Dir. or Dest type in the drive and path where you want the file copied or moved to. Clicking on Copy will copy the file and leave the original where it was at. Clicking on Move will move the file to the new location which means the one in the original location will be deleted.

Example: Move a:\temp\ati.cfg to a:\

Click on the drive, then the directory to see the files, click on ati.cfg so it shows up under Selected Dir. or File

Go to Selected Dir. or Dest and type in a:\

Then click on the Move button.

The file ati.cfg has now been moved from a:\temp to a:\. Its that easy.

To make it easier to find the file you wanted the file manager has the ability to show only the files with the extensions you want to see in the files list box. You can show all, only .exe, etc. OR the files with whatever extension you want. Clicking on the dot below \*.com then typing in the box beside it \*.grp will make the file manager show only the files with the .grp extension. There are so many exotic extensions I could have made the list go on forever, the easiest way to do it and to allow the best use of screen space was to simply allow you - the user to put in whatever extension you want to look for if it wasnt already in the short list.

Any file listed in Selected File can be run foreground, background, etc. You can also run DOS apps by clicking on **Run DOS app**. You can then type in the path and filename of the program you want to run and hit ENTER to run it.

When you choose to erase files or delete directories you will be prompted to be sure you really did want to do that.



Where, on the file manager, it says Selected Dir. or File you can type in the name of the directory you want to get rid of then click on Kill Dir. to get rid of it. You will be prompted to be sure you REALLY did want to get rid of that directory.

Where Selected Dir. or File is on the file manager you can type (for example) a:\temp then click on Make Dir. to create the directory named temp on a: drive. Ive tried my best to make the program as self explanatory as possible.

Getting to the File Manager can be done by pressing Alt+F then M, by clicking on the File menu followed by clicking on File Manager, or by using the Ctl+M combination to bring it up on screen in one quick shot. Ctl+M is the fastest and easiest of the methods.

The default extension is .txt.

Both Open and Close capture should be self explanatory for anyone who has used any kind of a terminal program for any length of time. They simply start (and stop) whatever you see on the screen going to a file you can review later. That way you can capture all the lists of new files, review them when youre off-line, then have the machine call the BBS back in the middle of the night and grab the files youve put into a list. Then have it log off that BBS and call the next one in the script file to get the files you want from there. More on this later in the section on script files.

