

3780Link RJE Emulation

Demo Version User's Guide

Table of Contents

Notational Conventions	ii
Ordering Information	1
Technical Support	2
Introduction to 3780Link	3
3780Link Features	4
General Features	4
Script Language Features	4
Supported Standard BSC Protocol Features	4
Supported NON-Standard BSC Protocol Features	5
Installation for Windows	6
Installation for DOS and OS/2	7
Installation for UNIX and AIX	8
Media and Files	9
Running 3780Link GUI and Simulating an Interactive Session under Windows	11
Running 3780Link GUI and Simulating an Interactive Session under DOS, OS/2, UNIX, or AIX	12
Running 3780Link SO and Simulating an Unattended Session under Windows	13
Running 3780Link SO and Simulating an Unattended Session under DOS, OS/2, UNIX, or AIX	13
Simulating Sending and Receiving Files with the Demo	14
Script Files	15
Script Commands	15
Sample Script Files	15
3780Link Script Language	17
Command Line Options	20

Notational Conventions

The following notation is used in this guide:

- | | |
|--------------|---|
| 3780Link | Refers to the 3780Link package in general. |
| 3780Link GUI | Refers specifically to the menu-driven program
(i.e. “3780link.exe”) |
| 3780Link SO | Refers specifically to the script-only program
(i.e. “3780so.exe”) |

3780Link Demo Version User's Guide

Thank you for requesting the 3780Link demo diskette. This demo introduces you to the “look-and-feel” of 3780Link and to the extensive script file capabilities found within. The demo *simulates* online sessions and therefore does not require an adapter or modem to be present in your system.

Install the demo by following the instructions below and take 3780Link for a test drive. Remember you're running the full-blown product – only we've done little software “magic” that eliminates the need for another system to communicate with.

Ordering Information

To order 3780Link, call 800-634-3122 or 512-345-2211.

Technical Support

Once you've ordered 3780Link, Serengeti Systems provides technical support for as long as you use 3780Link at no additional cost to you. Support is available via the Internet from our web site or via e-mail, or by telephone.

- Access to Serengeti Technical Support is available from within the 3770Link GUI by way of your web browser or e-mail (assuming either or both of these are installed on the same PC as 3770Link.) Open the **Help** menu, click **Technical Support**, and follow the links to the Serengeti Web Page Technical Support or to access our support staff via e-mail.
- Visit the Serengeti Web Page (<http://www.serengeti.com>) directly and click on **Technical Support** to access our online technical database. You'll find answers to many of the most commonly asked questions at your fingertips.
- For fast response to your technical support issue, sum up your question or problem in writing and submit this via e-mail to Support@Serengeti.com. We'll respond to you by e-mail or a telephone call (if appropriate) as quickly as we can.
- If you cannot find the answers you're searching for online or you do not have e-mail access, you may call us at (512) 345-2211 and ask for technical support during our normal business hours of 9AM to 5PM Central Time Monday through Friday.

Introduction to 3780Link

3780Link is a full featured IBM 3780/2780 RJE data terminal emulator with a modern, easy-to-use user-interface and one of the most extensive script languages available for unattended operation.

3780Link's user-interface allows you to interactively initiate a communication session with the host computer through menu options such as Auto Dial or Direct Connect. Once connected, data can then be sent through menu options such as Send File or Send Message; in interactive mode, incoming data is automatically received by 3780Link if the line is connected. To terminate an interactive session, the Disconnect menu option is used.

For automated operations and unattended sessions, 3780Link incorporates a powerful script language. Script files can be executed directly from the operating system command line, a batch file, a parent process, or from a 3780Link GUI menu selection.

A detailed log file can be activated to record the events of your communication sessions. Each log file entry is stamped with the system date and time. The log can be activated during both menu-driven and script file sessions. Each log entry is immediately written to the log file so it is always up to date -- even if your system loses power or crashes.

3780Link includes a smart phone directory with up to 25 entries. Each entry includes a description, telephone number, and complete set of configuration parameters. This permits each entry to be tailored specifically for the remote system it calls. To support auto-dial modems, phone number modifiers can be added to entries so long distance access codes and trailing extension numbers are automatically included along with the phone number. 3780Link also maintains a message directory containing up to 25 of your most frequently sent messages.

3780Link Features

General Features

- Menu-driven or script file driven interface
- Mouse support (MS-DOS, Windows, and OS/2)
- Auto-dial & auto-answer with supported modems
- Up to 56K bps over dial-up or leased lines
- Built-in text editor and file viewer (MS-DOS, OS/2, and UNIX)
- Direct Notepad (or any other editor) access (Windows)
- Complete session log with date and time stamps
- Host selectable console for operator messages
- Built-in line trace for monitoring and diagnostics
- Multiple simultaneous BSC sessions from a single system
- Console message detection and display
- BSC↔async protocol conversion via a COM port (Windows 95/98 and Windows NT)
- Support for Hayes AutoSync 2 modems – sync connection via an async COM/TTY port (Windows 95/98, NT, HP/UX, Solaris)

Script Language Features

- Execute script files from the command line, batch file, or 3780Link GUI menu
- Perform completely unattended sessions
- Call scripts from within scripts
- Time activated commands
- Execute an external process and return
- Parameter substitution from menu or command line
- Accept commands from another process via inter-process communication (Windows, OS/2, and UNIX)

Supported Standard BSC Protocol Features

- IBM 3780 & 2780 point-to-point emulation
- Vertical Forms Control (VFC) recognition
- Device selection recognition
- Space compression/expansion (3780 only)
- Space truncation (2780 only)

- WACK, RVI & TTD support
- Handling of EBCDIC New Line (NL) character
- Transparent text mode
- Terminal identification
- Transmit & receive double buffering
- CRC-16 block checking

Supported NON-Standard BSC Protocol Features

- Binary mode for sending & receiving non-text files
- Optional stripping of VFC & device selection sequences
- Variable communications buffer sizes up to 4192 bytes
- Configurable ASCII↔EBCDIC translation tables
- Configurable in-bound record separators
- Optional suppression of inter-record separators

Installation for Windows

The following steps describe how to install the 3780Link demo on a hard disk from the distribution diskette:

- Insert the 3780Link diskette into a floppy drive.

For Windows 3.x:

- From the File menu in Program Manager, choose Run. Type **a:setup** and press <Enter> or click [OK].

For Windows 95/98/NT:

- Choose the “Add/Remove Programs” option from the Control Panel.

This runs the 3780Link demo installation program. This program is straight-forward and you just fill in the blanks.

- See the sections below on running 3780Link GUI and 3780Link SO.

Installation for DOS and OS/2

The following steps describe how to install the 3780Link demo on a hard disk from the distribution diskette:

- Insert the 3780Link diskette into a floppy drive and log to the drive containing the 3780Link diskette. For example, if the diskette is in drive **a:**, type: **a:**
- Type the following command and press <Enter>.

install c: \3780demo

- Be sure to put a space between the drive and the directory specification. If you wish to install to a different drive or directory, you may change the parameters as necessary.
- After a successful installation you will see the following message:

INSTALLATION Complete

- See the sections below on running 3780Link GUI and 3780Link SO.

Installation for UNIX and AIX

The following steps describe how to install the 3780Link demo on a hard disk from the distribution diskette:

- Insert the 3780Link diskette into a floppy drive.
- Change to the root directory by typing:

```
cd /
```

- Type the following command and press <Enter>.

```
tar -vxf /dev/fd0
```

- The 3780Link files will be installed in the “/usr/lib/3780demo” (UNIX) or “/usr/lpp/3780demo” (AIX) directory.
- For AIX only, you will need to run the “3780.install” program from the “/usr/lpp/3780demo” directory.
- See the sections below on running 3780Link GUI and 3780Link SO.

Media and Files

The Windows demo versions of 3780Link are shipped on a single diskette. The following files are copied to your hard drive when you install the demo:

W3780LNK.EXE	3780Link GUI demo program
W3780SO.EXE	3780Link SO demo program
SAMPLE.S	Sample script command file
3780LINK.HI	File used in the SAMPLE.S script
SERVER.S	Script file used to create a 3780 server
STANDARD.CNF	Configuration file for this demo
PHONEDIR.CNF	Phone directory file
MESSAGES.CNF	Saved messages file
MODEMS.INI	Modem configuration file
RCVFILE.TXT	Text file for simulating received files
XBSCDRVR.DLL	Windows dynamic link library
W3780DEM.HLP	Help file

The DOS and OS/2 demo versions of 3780Link are shipped on a single diskette. The appropriate files for the target system are copied to your hard drive when you install the demo. The files are:

3780LINK.EXE	3780Link GUI demo program
3780SO.EXE	3780Link SO demo program
3780LINK.HI	Text file for 3780Link GUI intro screen
SAMPLE.S	Sample script command file
STANDARD.CNF	Configuration file for this demo
PHONEDIR.CNF	Phone directory file
MESSAGES.CNF	Saved messages file
RCVFILE.TXT	Text file for simulating received files
INSTALL.BAT	Installation batch file (DOS)
INSTALL.CMD	Installation command file (OS/2)
ASK.EXE	Prompt program used during installation

The UNIX and AIX demo versions come on separate diskettes and consist of the following files:

3780link	Shell script to run 3780Link GUI demo
3780demo	3780Link GUI demo program
3780so	3780Link SO demo program
3780link.hi	Text file for 3780Link GUI intro screen
sample.s	Sample script command file
standard.cnf	Configuration file for this demo
phonedir.cnf	Phone directory file
messages.cnf	Saved messages file
rcvfile.txt	Text file for simulating received files
oat386.txt	Terminal definition file (UNIX)

After you use 3780Link, you may also see the following files in your 3780Link directory:

PRINTER.001	Default printer file
PUNCH.001	Default punch file
SSIREPLY.*	printer files created during demo

Running 3780Link GUI and Simulating an Interactive Session under Windows

To execute 3780Link GUI and see a simulated script file session in action, perform the following steps:

- Double click on the “3780Link DEMO” icon to start the w3780lnk.exe program
- Use the mouse or keyboard to select the **Transfers** menu.
- Select the **Run Script** menu.
- Click on the **Browse** button to select a script file to run.
- Choose the “sample.s” script file and click on the **OK** button.
- Click on the **OK** button from the Run Script dialog box.

The “sample.s” script file will then begin execution in the 3780Link Server window. This script file demonstrates basic concepts such as dialing the modem, sending and receiving files, error checking, and more. If you wish to stop script execution before it is complete, press the <Esc> key while in the 3780Link server window. Upon completion of script file execution, the 3780Link Server window will return to an icon. To review the simulated communications session, restore the server window to normal size and use the scroll bar to review the session.

After the script file completes, try some of the other menus which allow you to connect, dial, send, receive, etc.

Running 3780Link GUI and Simulating an Interactive Session under DOS, OS/2, UNIX, or AIX

To execute 3780Link GUI and see a simulated script file session in action, perform the following steps:

- Make sure that you are in the “3780demo” directory.
- Type **3780link** (DOS and OS/2) or **./3780link** (UNIX and AIX) and press **<Enter>**. If you are running from an X-window on UNIX specify the **-m** switch, if on AIX specify the **-b** switch. If you are using a monochrome display, be sure to include the **-m** switch on the command line.
- If you wish to read the initial message window, you may page down the screen, otherwise press **<Enter>** or **<Esc>** to proceed.
- Use the mouse or keyboard to select the **Transfers** menu.
- Select the **Run Script** menu.
- Highlight the **File Name** field.
- Press the space bar to pop up a list of script files.
- Choose the “sample.s” script file by pressing **<Enter>**.
- Select **OK**.

The “sample.s” script file will then begin execution. This script file demonstrates basic concepts such as dialing the modem, sending and receiving files, error checking, and more. If you wish to stop script execution before it is complete, press **<Esc>**.

After the script file completes, try some of the other menus which allow you to connect, dial, send, receive, etc.

Running 3780Link SO and Simulating an Unattended Session under Windows

To execute 3780Link SO and see a simulated script file session in action, double click on the “3780Link Script Only DEMO” icon to start the 3780Link SO program.

The “sample.s” script file will then begin execution. This script file demonstrates basic concepts such as dialing the modem, sending and receiving files, error checking, and more. If you wish to stop script execution before it is complete, press the <Esc> key.

Running 3780Link SO and Simulating an Unattended Session under DOS, OS/2, UNIX, or AIX

To execute 3780Link SO and see a simulated script file session in action, perform the following steps:

- Make sure that you are in the “3780demo” directory.
- Type **3780so -v -ssample.s** (DOS and OS/2) or **./3780so -v -ssample.s** (UNIX and AIX) and press <Enter>.

The “sample.s” script file will then begin execution. This script file demonstrates basic concepts such as dialing the modem, sending and receiving files, error checking, and more. If you wish to stop script execution before it is complete, press <Esc>.

You may also wish to try the user command mode of 3780Link SO, where script commands may be entered from a command line prompt. To do this, type **3780so -u** (DOS and OS/2) or **./3780so -u** (UNIX and AIX) and press <Enter>.

Simulating Sending and Receiving Files with the Demo

For the purposes of this demo, the following rules apply when sending or receiving files:

- You may send a file at any time you are connected. A connection is achieved through the **Auto-Dial**, **Auto-Answer**, **Manual Dial**, or **Direct Connect** menus in 3780Link GUI, or through the DIAL, CONN, or ANS script commands.
- You will automatically receive a single file after a brief pause when you connect through the **Auto-Answer**, **Manual Dial**, or **Direct Connect** menus in 3780Link GUI, or through the CONN or ANS script commands. 3780Link GUI is awaiting a transmission any time the line is connected, and is thus always ready to receive a file. With 3780Link SO, however, you must execute the RCV command in order to receive a file. The “rcvfile.txt” file included on the 3780Link diskette is used in the simulation of all received files.

Script Files

To accommodate unattended operation, 3780Link utilizes an extremely powerful script language.

There is a corresponding script command for most of the menu items available in interactive mode. In addition there are numerous commands to manage error checking, error recovery, looping, and branching.

Script files can be executed directly from the command line using 3780Link SO or from the **Run Script** menu in 3780Link GUI interactive mode. Use the **-v** switch when running from the command line so that 3780Link SO will echo log file entries to the terminal. In addition, DOS, OS/2, UNIX, and AIX users may use the **-u** switch to manually type script commands from the keyboard.

Script files are produced with a text editor or word processor. 3780Link GUI has a built-in editor for this purpose. Script files are assumed to have an extension of `‘.s’`.

Script Commands

For a list of the commands understood by 3780Link's script processor and valid command line options, see the last three pages of this guide.

Sample Script Files

The simple script file shown below attempts to dial up to three times, defines the Printer device to be a file named “testptr”, and sends a file named “login”. If the send completes normally, the script waits for a single file from the remote system and then disconnects and exits.

```
LOOPCOUNT 3
:dial_loop
DIAL 1-555-1212
IF dial_loop, connect
```

```
QUIT
:connect
PTR testptr
SEND login
IF sendfail
RCV
:sendfail
DISC
QUIT
```

This example script file dials a phone number and checks for numerous possible result codes. If the dial is successful, two files are transmitted consecutively and a RCV is executed to await the remote system's reply. The line is then disconnected.

```
:top
DIAL 1-512-555-1212
;; check for dialer not responding
IFERROR= 1045 top
;; check for line busy
IFERROR= 1051 top
;; check for no dial tone
IFERROR= 1048 no_tone
;; unknown dial error occurred
IFERROR exit
PTR con
;; send two files in a row
SEND login.dat
;; check for Bid Retry Error
IFERROR= 102 no_host
SEND newjcl
;; define auto-naming printer file
PTR newdata /n
;; wait for host reply
RCV
DISC
:exit
QUIT
:no_tone
```

```

**ATTENTION: Phone Line Not Connected
QUIT
:~no_host
**ATTENTION: Host Not Responding
QUIT
    
```

Note that the script commands are not case sensitive. Your script files may mix upper and lower case characters freely.

3780Link Script Language

Commands are not case sensitive, they are shown in upper case for clarity. Replace text in italics with the appropriate values. Parameters enclosed in square braces “[]” are optional. When two or more parameters are separated by a bar “|”, only one of them may actually be used at a time.

<u>Command Syntax</u>	<u>Description</u>
; [<i>comment</i>]	Ignore <i>comment</i> line
* [<i>comment</i>]	Ignore <i>comment</i> line
: <i>label</i>	Set <i>label</i> used for branching and looping
% <i>n</i>	Replace % <i>n</i> with <i>n</i> th parameter specified
%lastfile%	Replace %lastfile% with name of last file received
%nextfile%	Access the name of the file obtained by GETNEXTFILE
ANS [/t= <i>x</i>]	Wait for incoming call then auto answer /t= <i>x</i> - Time-out after <i>x</i> seconds
APPEND <i>source_file dest_file</i>	Append <i>source_file</i> to <i>dest_file</i>
CALL <i>scriptfile</i> /d[= <i>x</i>]	Execute <i>scriptfile</i> and return upon completion /d= <i>x</i> - Wait <i>x</i> seconds for a dropped file (Windows only)
CHAIN <i>scriptfile</i> /d[= <i>x</i>]	Transfer control to <i>scriptfile</i> /d= <i>x</i> - Wait <i>x</i> seconds for a dropped file (Windows only)
COMPRESS /on /off	Turn space compression on or off
CONN [/t= <i>x</i>]	Establish a direct connection /t= <i>x</i> - Time-out after <i>x</i> seconds
COPY <i>source_file dest_file</i>	Copy <i>source_file</i> to <i>dest_file</i>
DEL <i>filename</i>	Delete <i>filename</i>
DIAL <i>xxx-xxx-xxxx</i> [/t= <i>x</i>]	Auto-dial string <i>xxx-xxx-xxxx</i>
DIAL @" <i>name</i> " [/t= <i>x</i>]	Auto-dial number for directory entry <i>name</i>
DIAL # <i>n</i> [/t= <i>x</i>]	Auto-dial number for directory entry <i>n</i>

Command Syntax	Description
	/t=x - Time-out after x seconds
DISC [/l] [/s]	Disconnect the line
	/l - Leave DTR high
	/s - Suppress normal DLE-EOT sequence
ENDPIPE	Close a pipe
EXEC [/c] <i>filename</i> [<i>arguments</i>]	Execute <i>filename</i> with given <i>arguments</i>
	/c - Clear the screen before and after execution
EXPAND /on /off	Turn space expansion on or off
GETNEXTFILE <i>file</i> [/t=x /m=x]	Wait for existence of <i>file</i> , then set % <i>nextfile</i> % variable – creates “hot reader” functionality
GOTO <i>label</i>	Branch to <i>label</i>
IF <i>label</i> 1[, <i>label</i> 2]	If error, loop to <i>label</i> 1 until LOOPCOUNT exceeded
	If no error, branch to <i>label</i> 2
IFERROR <i>label</i>	If error, branch to <i>label</i>
IFERROR= <i>nnnn label</i>	If error code equal to <i>nnnn</i> , branch to <i>label</i>
IFERROR> <i>nnnn label</i>	If error code greater than <i>nnnn</i> , branch to <i>label</i>
IFERROR< <i>nnnn label</i>	If error code less than <i>nnnn</i> , branch to <i>label</i>
IFERROR>= <i>nnnn label</i>	If error code greater than or equal to <i>nnnn</i> , branch to <i>label</i>
IFERROR<= <i>nnnn label</i>	If error code less than or equal to <i>nnnn</i> , branch to <i>label</i>
IFERROR!= <i>nnnn label</i>	If error code not equal to <i>nnnn</i> , branch to <i>label</i>
IFFILE <i>filename label</i>	If <i>filename</i> exists, branch to <i>label</i>
IFNFILE <i>filename label</i>	If <i>filename</i> does not exist, branch to <i>label</i>
LOG <i>filename</i>	Send log information to <i>filename</i>
LOOP <i>label</i>	Loop to <i>label</i> until LOOPCOUNT exceeded
LOOPCOUNT <i>x</i>	Set loop count for LOOP and IF loops
MODEM 201 208	Set mode for UDS Sync-Up 4824 or 2/208/201
NATO <i>x</i>	Set no activity time-out to <i>x</i> seconds
PAUSE <i>hh:mm</i>	Suspend session until <i>hh:mm</i> (military time)
PAUSE # <i>x</i>	Suspend session for <i>x</i> seconds
PIPE [<i>pipename</i>]	Creates a named pipe
PRINT <i>file ptr</i>	Print <i>file</i> to <i>ptr</i>
PTR <i>name</i> [/n /b /a /s]	Set receive (printer) to device or file <i>name</i>
	/n - Use auto file naming
	/b - Receive in binary mode
	/a - Append to existing file
	/s - Use auto file naming, skip existing files
PTR /on /off	Turn printer device on or off
PTRRL <i>xx</i>	Set printer record length
PUN <i>name</i> [/n /s]	Set alternate receive (punch) to device or file
	/n - Use auto file naming
	/s - Use auto file naming, skip existing files
PUN /on /off	Turn punch on or off
PUNRL <i>xx</i>	Set punch record length

Command Syntax	Description
RENAME <i>filename1 filename2</i>	Renames <i>filename1</i> to <i>filename2</i>
QUIT [<i>/f</i>] [<i>/x=nn</i>]	Exit script processing <i>/f</i> - Terminate I/O and force disconnect <i>/x=nn</i> - Return exit code <i>nn</i> <i>/x</i> - Close the 3780Link window (Windows)
RCV [<i>/t=x</i> <i>/s=x</i>]	Wait to receive transmission from host <i>/t=x</i> - Time-out after <i>x</i> minutes <i>/s=x</i> - Time-out after <i>x</i> seconds
RDRRL <i>xxx</i>	Set reader record length
RECSBLK <i>xx</i>	Set the number of reader records per block
SEND [[<i>b</i>] [<i>t</i>]] <i>file</i> [+[[<i>b</i>] [<i>t</i>]] <i>file...</i>] [[<i>b</i>] [<i>t</i>]]& <i>file...</i> [<i>/p</i> <i>/t</i> <i>/b</i>] [<i>/d=x</i>]	Send single or multiple <i>files</i> + - Separate files with ETX & - Separate files with ETB <i>/p</i> - Select remote punch device <i>/t</i> - Transmit in transparent mode <i>/b</i> - Transmit in binary mode [<i>t</i>] - Transmit <i>file</i> in transparent mode [<i>b</i>] - Transmit <i>file</i> in binary mode <i>/d=x</i> - Wait <i>x</i> seconds for a dropped file (Windows only)
SEND " <i>text</i> " [<i>/p</i>]	Send single line <i>text</i> message <i>/p</i> - Select remote punch device
SIGNAL [<i>msg</i>] [<i>/t=x</i>] [<i>/a</i>]	Write to the named pipe <i>/t</i> - Time-out after <i>x</i> seconds <i>/a</i> - Do not wait for reply
SPEAKER <i>/on</i> <i>/off</i> <i>/on-carrier</i>	Set speaker mode on supported modems
STATS	Print session statistics
SUSP	Exit script, and leave DTR high (connected)
TDUMP <i>filename</i>	Dump contents of trace buffer to <i>filename</i>
TRACE <i>/on</i> <i>/off</i>	Turn line trace on or off
TRACE <i>/b=xxxx</i>	Set trace buffer size to <i>xxxx</i>
WAITSIG [<i>/t=x</i>] [<i>/a</i>]	Reads & executes a command from the pipe <i>/t</i> - Time-out after <i>x</i> seconds <i>/a</i> - Do not wait for a reply

Command Line Options

Non-Windows Versions

3780link [-cfile] [-ismid] [-l[file]] [-m | -o | -b] [-n string] [-t] [-px] [-xfile]
3780so -sfile | -u [-b] [-cfile] [-d] [-ismid] [-lfile] [-n string] [-px] [-t] [-v] [-xfile]
[&sub-parm& | %sub-parm%]
3780cfg [-cfile] [-m | -o | -b] [-px]

Windows Versions

w3780link [-cfile] [-d] [-lfile] [-n string] [-px] [-t] [-xfile]
[&sub-parm& | %sub-parm%]
w3780so [-sfile] [-cfile] [-d] [-lfile] [-n string] [-px] [-t] [-xfile]
[&sub-parm& | %sub-parm%]
w3780cfg [-cfile] [-px[:y]]

<u>Option</u>	<u>Description</u>
-b	Force monochrome mode & eliminate background pattern while running 3780link
-b	Run 3780so as a background process (UNIX only)
-c file or -d	Load configuration <i>file</i> other than "standard.cnf" "default#.cnf", where # is the port number Print debug information to log file (3780so & w3780link)
-i nnn	Set shared memory ID to nnn (UNIX only)
-l	Activate default log file "3780link.log"
-l file	Create log <i>file</i> and activate log
-m	Force monochrome mode
-n string	Set console messaging string
-o	Force color mode
-p port	Specify <i>port</i> number (Multi-Port only)
-s file	Load and execute script <i>file</i>
-t	Improve transmission speed (OS/2 and NT)
-u	Run in user command mode (3780so only)
-v	View messages on terminal display
-x file &sub-parm& %sub-parm%	Load custom translation table from <i>file</i> Pass substitution parameters to script file

Notes

Notes