

RELEASE AND INSTALLATION NOTES

Lyrix™
for the
Radio Shack®
TRS-80® Model 16
running
TRS-XENIX® 1.3.2 or higher

The Santa Cruz Operation



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Product #BU-LYRIX-Tandy-X3.0-3.12



□ LYRIX

Release and Installation Notes

Product version:	3.12
Operating system:	TRS-XENIX 1.3.2 or higher
Computer:	Radio Shack TRS-80, Model 16
Media:	8" floppy (mountable filesystem)
Disk Usage:	1075 (512 byte) blocks
Release:	1.0
Date:	November 12, 1984

1. Introduction

Thank you for ordering the Lyrix Word Processing system. The version you have received runs on the Model 16 under the XENIX Operating System.

Software, other than limited capability demonstration copies, should be installed only on the machine that has been licensed. Additional machines must be licensed with unique software serial numbers, which must be registered to correspond to the unique hardware serial number of the machine. The software must not be transferred from one machine to another without re-registration.

We are always pleased to hear of user's experiences with our product, and recommendations of how it can be made even more useful. All written suggestions by users are given serious consideration.

2. About the Software Package

Your Lyrix software package includes the following items:

- The *Lyrix Primer, User's Guide, System Administrator's Guide* and a *Quick Reference Guide*.
- One floppy diskette. This is your distribution diskette; you'll use it to install Lyrix on your hard disk.
- A serialization card. This card contains the activation key necessary for installing Lyrix on your hard disk.
- A Customer Registration Form. Complete this form and send it in within five days of receiving your software package. Please provide all the information requested on the form so that you will be eligible for our support services.

Lyrinx for the Radio Shack Model 16

- A SoftCareSM Support Agreement Registration Form. Complete this form if you want SoftCare support beyond the first month.

You can choose from several levels of support. The available levels of support are described on an insert in the back of the Lyrinx User's Guide. The amount of your check lets us know which level of support you want. If you choose Level II Support, be sure to include on the card the name of the person you appoint as the support contact; this will be the person authorized to call our SoftCare "hotline".

3. Installing Lyrinx on the Model 16

The distribution diskette contains all the necessary files for running Lyrinx. Before you can work with Lyrinx, these program files need to be copied to your disk using the installation procedure below.

The installation procedure requires two items:

- The Lyrinx distribution diskette.
- An activation key. This is an alpha-numeric code printed on the serialization card in your product package.

You install Lyrinx while logged in as *root* at the console. (You are the Super User when you are logged in to the *root* account.) The Super User has access to all the XENIX system files. As Super User, care should be taken to preserve the system files.

The following installation procedure installs Lyrinx under the XENIX Operating System. To complete the installation, follow the procedure exactly as shown. When the procedure refers to the ENTER/RETURN key, you use the key labeled ENTER.

4. Installation Procedure

1. Login to the *root* account, that is, login as the Super User on the system console. If you need help, see the *XENIX Operations Guide* for the Model 16.

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2. The system displays the XENIX prompt (#) on the screen. To start the installation program, after the prompt type:

install

and press RETURN.

A menu appears on screen:

Installation Menu

- 1. to install
q. to quit

3. Select option 1, then this message appears:

Insert diskette in Drive 0 and press <ENTER>

Insert the diskette as directed. As files are extracted from the diskette, their names and associated information appear on the screen.

4. After all the files are extracted from the diskette, the system displays:

Enter activation key :

You need to enter your activation key before you can use Lyrix. Be sure to enter the key exactly as it appears on the serialization card, including capital letters. Enter your activation key and press RETURN. If you mistype your activation key, you are prompted to enter it again.

5. Lyrix utilizes the XENIX Spell program. The Spell program is part of the Text Processing System available for use with the XENIX operating system. The installation program automatically looks for Spell on your disk, and if Spell is not found, the installation procedure installs the spelling module files automatically. If you already have Spell on your system, the Lyrix installation does not attempt to reinstall it.

6. The system displays:

Installation complete – Remove the diskette, then press <ENTER>

Remove the diskette from the drive. At this point Lyrix returns to the installation menus where you type:

q

and press RETURN to quit.

The final installation message appears, and you are returned to the XENIX prompt. The system displays:

**Installation complete.
#**

- 7. For the safety of your files, do not use Lyrix when logged in as Super User. File permissions protect you from unintentionally overwriting certain files when using Lyrix while logged in as a normal user. However, when logged in as Super User you have the ability to overwrite any file. To leave Super User mode, type:**

logout

and press RETURN.

Lyrix is now installed on your hard disk and ready to use. To begin working with Lyrix, login to a user account, and refer to the *Lyrix User's Guide* for information about using Lyrix.

You are finished with the Lyrix distribution diskette, and should store it in a safe place. If an accident or hardware failure damages the copy of Lyrix on disk, you will need the distribution diskette to reinstall Lyrix.

5. The Lyrix Files

The following is a list of the Lyrix files on your distribution diskette. The files require a maximum of 1075 (512 byte) blocks of disk storage space.

- ./usr/bin/viewprint**
- ./usr/bin/vpc**
- ./usr/bin/lyrix**
- ./usr/bin/fprint**
- ./usr/bin/Rmerge**
- ./usr/bin/wp.filter**
- ./usr/lib/wp/Tcap**
- ./usr/lib/wp/prim1**
- ./usr/lib/wp/prim2**
- ./usr/lib/wp/prim3**
- ./usr/lib/wp/prim4**
- ./usr/lib/wp/primer.typos**
- ./usr/lib/wp/vmerge**
- ./usr/lib/wp/vmerge.vp**
- ./usr/lib/wp/vp.help**
- ./usr/lib/wp/vp.message**
- ./usr/lib/wp/vpc.message**
- ./usr/lib/wp/vprint**
- ./usr/lib/wp/vprint.vp**
- ./usr/lib/wp/wp.help**
- ./usr/lib/wp/wp.spell**
- ./usr/lib/wp/.wprc**
- ./usr/lib/wp/help/CP**
- ./usr/lib/wp/help/CP2**
- ./usr/lib/wp/help/PT**
- ./usr/lib/wp/help/SR**
- ./usr/lib/wp/help/alter**
- ./usr/lib/wp/help/cursor**
- ./usr/lib/wp/help/delete**
- ./usr/lib/wp/help/emphasis**
- ./usr/lib/wp/help/exit**
- ./usr/lib/wp/help/insert**
- ./usr/lib/wp/help/merge**
- ./usr/lib/wp/help/modes**
- ./usr/lib/wp/help/often**
- ./usr/lib/wp/help/rulers**
- ./usr/lib/wp/help/scroll**

**.brand
.install
./spell/spell
./spell/spellin
./spell/spellout
./spell/hlista
./spell/hlistb
./spell/hstop
./spell/dcroff**

Note

The Lyrix Command File, which contains most user-variable parameters (menus, messages, etc.), is called **.wprc**. It is installed in **/usr/lib/wp**.

Some Lyrix program files — **Tcap**, **fprint**, and portions of the command file **.wprc** — have been modified to use the special capabilities of Radio Shack terminals and printers.

Certain files, however, have not been modified from the standard configuration. For example, the online help files in **/usr/lib/wp/help** list the standard keystroke sequences for invoking commands. These files can of course be altered by the system administrator to list the keystrokes for the terminal in use. Refer to Chart A for a table showing keystrokes for Radio Shack terminals.

6. Features of this Lyrix Release

- The Model 16 console, Radio Shack DT-100 and DT-1 keyboards are configured for you, with Lyrix editing commands mapped to the function keys. Specific commands are discussed in Chart A. Lyrix has also been modified to adjust to Radio Shack printers. For example, when you designate print effects in Lyrix, it lists those available on Radio Shack printers.
- The file listing option, available on all menus, provides you with a list of the files in your current directory. The files are listed alphabetically. The listing distinguishes between files and subdirectories by appending the names of subdirectories with a slash (/).

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- These terminals have been allowed for in the Radio Shack customization:

trsl6(console)

DT1 (in adds25, adm5, and tvi910 emulation)

DT100

Actual keystrokes necessary to invoke a Lyrix command for each terminal are listed in Chart A. Access to the following printers through Lyrix has been arranged:

DMP110	DW11B
DMP200	DWP210
DMP2100	DWP410

Note

When you send a file to a Radio Shack printer through a Lyrix menu, the file is automatically run through a filter before printing. This filter, called **wp.filter** and installed in **/usr/bin**, is necessary due to the design of Radio Shack printer protocol.

To send a file at the operating system level to the printer spooler, use an **fprint** command of the following form:

```
fprint <flags> <filename> | wp.filter | lpr -F x
```

For example, to send the file *letter* to a Radio Shack dot matrix printer use:

```
fprint -p DMP letter | wp.filter | lpr -F x
```

To send a file at the operating system level interactively to the printer, use an **fprint** command of the form:

```
fprint <flags> <filename> | wp.filter > /dev/lp
```

taking care to turn the system spooler off before you do so. An example of interactive printing: first turn the spooler off, by typing:

```
spooler -off
```

Then use the command of the form:

```
fprint -p DMP letter | wp.filter > /dev/lp
```

After printing, turn the spooler back on by using the command:

```
spooler -on
```

Print effects generated by each printer and available for use through Lyrix are listed in Chart B.

Note

The keystrokes that invoke certain Lyrix commands have been changed from the standard configuration specifically for the terminals supported in this release.

Owing to this, the Lyrix documentation does not list the correct keystrokes for these commands for these terminals. Chart A has been provided for this purpose. The *Lyrix Primer*, *User's Guide*, and *Quick Reference Guide* are affected by these changes.

Some documentation pages, however, (in the *Primer*, *User's Guide*, and *System Administrator's Guide*) have been changed to reflect the Radio Shack Customization. Those pages are provided with the package, and are intended to replace the corresponding pages in the documentation.

See section 11, *Documentation Errata* for more information.

- Lyrix's character mapping feature gives you the ability to print some special characters, such as foreign language characters, even if your printer doesn't have an alternate character set. For example, this feature of Lyrix allows you to generate an accented 'e' on the printed page, though your printer may be lacking such a character. If your printer has an alternate character set, then you can take advantage of the character mapping feature to print such characters as mathematical symbols. Refer to the chapter on the *Tcap* file in the *System Administrator's Guide* for further information on character mapping.

7. The Lyrix Keyboard

Lyrix has been reconfigured to take advantage of Radio Shack terminal features. On some terminals, you can use function keys to perform Lyrix editing commands. For example, on the console (trs16) and the DT1, you can press F1 for help, and F2 to exit a file and save it (see Chart A). In addition, the keypad diagrams following Chart A and B show keyboard layouts for the DT100, Visual 55TM, Visual 200TM, DEC VT100TM, and Altos IITM terminals.

If you want to use Lyrix with a terminal that isn't already configured for Lyrix, you need to edit the XENIX termcap file to contain necessary information about the terminal. See *Lyrix's Use of termcap* for the information needed in the termcap file.

8. Lyrix's Use of termcap

Lyrix uses the information in the XENIX file */etc/termcap* to control the use of the terminal's keyboard and screen. Your terminal must be described in */etc/termcap* to be able to use Lyrix. A complete description of the Radio Shack terminals are provided in */etc/termcap* as part of the software package. However, if you use Lyrix on a terminal other than the Radio Shack trs16 console, DT-100, DT1 in adds25, tvi910, or adm5 emulations, make sure that the terminal is described in */etc/termcap*. If the terminal isn't described there, add the terminal and screen capabilities listed in the following tables to your */etc/termcap* file.

For information on using termcap, see *termcap(M)* in the *XENIX Operating System Reference* manual, or consult your system administrator.

Table 8.1: Required Capabilities

Capability	Termcap Capability Code
Cursor Motion	cm
Backspace	bs, bc
Clear Screen to End of Display	cd
Clear Screen to End of Line	ce

Table 8.2: Suggested Capabilities

Capability	Termcap Capability Code
Map these to your arrow keys:	
Move Cursor Up	ku
Move Cursor Down	kd
Move Cursor Left	kl
Move Cursor Right	kr
Others:	
Begin Standout Mode	so
End Standout Mode	se
Delete Line	dl
Add Blank Line	al
Insert Character	ic
Begin Function	
Keypad Mode	ks
End Function	
Keypad Mode	ke

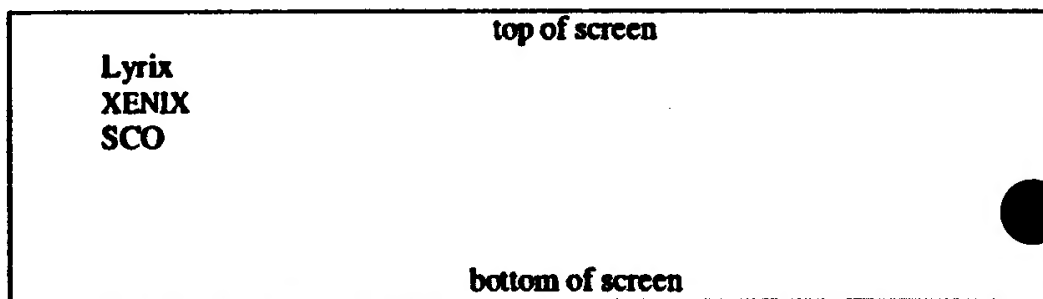
9. Adding Words to the Spell Program Dictionary

Lyrix uses the XENIX spelling utilities to check files for spelling and typing errors. You can add words to the dictionary used by the Spell program so that words not already in the dictionary, such as acronyms and proper names, are not considered misspelled.

To add words to the dictionary, follow these guidelines:

1. Make a list of the words you want to add. Making a list before entering the words in the dictionary helps you ensure the words are entered with the correct spelling.

The word list can be made in any user account. Note the full pathname of your word list; it is needed when entering the words into the dictionary. The words must be entered one word per line. For example, to enter the words "Lyrix", "XENIX", and "SCO" to your dictionary, your file would look like this:



2. Login as the Super User (log in to the *root* account). Remember that the usual file permissions and protections are suspended when you are Super User, so take care to preserve the system files.

The dictionary is in the file */usr/lib/spell/hlista*. The pathname of the word list used in this example is */tmp/words*. To put the original dictionary and the new words in the file *hlista.new*, type:

```
cd /usr/dict
```

Then type:

```
spellin hlista </tmp/words> hlista.new
```

Now move the original dictionary to the file *hlista.old*. Then make the new dictionary the default dictionary so the Spell program can use it. Type:

```
mv hlista hlista.old
```

Then type:

```
mv hlista.new hlista
```

Your new words are in the dictionary used by Spell.

10. Known Lyrix Bugs

- The maximum number of options you can have on a menu is 25. Hidden options (options that do not display on the menu screen but are available for use) are included in this number.
- The Search command and the Search and Replace command fail when you search for a word with blank spaces on either side, and the word occurs in the text at the beginning or end of a line.
- If you use a text editing program other than Lyrix to edit a file created with Lyrix, you may have problems with the lines in the file that contain Lyrix print effects. The line with the print effect symbols, which are invisible in Lyrix, appears.

11. Documentation Errata

The following documentation pages have been changed to reflect system modifications for the Radio Shack customization:

<i>Primer:</i>	47,48
<i>User's Guide:</i>	251-260
<i>System Administrator's Guide:</i>	6, 49-50, 55, 71-76, 89-110

TANDY TERMINAL SPECIFIC KEYSTROKES

CHART A

Command	adds25 (dt1 default)	trs16 (console)	dt100	adm5/ tv910	CASE SENSITIVE?
UP	Ctl-k Ctl-z	Ctl-k Esc A	Ctl-k	Ctl-k	
DOWN	Ctl-j	Ctl-j Esc B	Ctl-j	Ctl-j	
LEFT	Ctl-h	Ctl-h Esc D	Ctl-h	Ctl-h	
RIGHT	Ctl-l Ctl-f	Ctl-l Esc C	Ctl-l	Ctl-l	
FORMAT	Esc j/J	Ctl-f Esc j/J	Ctl-f Esc j/J	Ctl-f Esc j/J	
DESTRUCT. BACKSPACE	 Esc K	Esc K	 Esc K	 Esc K	CASE DEPENDENT!
CONVERT UPPER/LOWER	Esc ku Esc kl	Esc ku Esc kl	Esc ku Esc kl	Esc ku Esc kl	CASE DEPENDENT!
REPEAT	Ctl-y	Ctl-y	Ctl-a Ctl-y	Ctl-y	
HELP	Esc h/H Ctl-a(F1)	Esc h/H Ctl-a(F1)	Esc h/H	Esc h/H Ctl-a(F1)	
EXIT & SAVE	Esc e/E Ctl-b(F2)	Esc e/E Ctl-b(F2)	Esc e/E	Esc e/E Ctl-b(F2)	

TANDY TERMINAL SPECIFIC KEYSTROKES

CHART A, CONT.

Command	adds25 (dtl default)	trs16	dt100	adm5/ tvi910	CASE SENSITIVE?
BOTTOM OF SCREEN	Esc b	Ctl-z	Ctl-b	Esc b	CASE DEPENDENT!
BOTTOM OF FILE	Esc B	Esc b	Esc b/B	Esc B	CASE DEPENDENT!
CENTER	Esc c/C	Esc c	Esc c/C	Esc c/C	TRS16 CASE DEPENDENT!
ADD LINES	Esc al/AL	Esc al	Esc al/AL	Esc al/AL	TRS16 CASE DEPENDENT!
DELETE BLANK LINES	Esc db/DB	Esc db	Esc db/DB	Esc db/DB	TRS16 CASE DEPENDENT!
DELETE RIGHT/LEFT	Esc dr/DR Esc dl/DL	Esc dr Esc dl	Esc dr/DR Esc dl/DL	Esc dr/DR Esc dl/DL	TRS16 CASE DEPENDENT!
RETURN TO OVERSTRIKE MODE	Esc o/O Esc 3	Esc o/O Esc 3	Esc o Esc 3	Esc o/O Esc 3	dt100 CASE DEPENDENT!

TANDY SPECIFIC PRINTER EFFECTS

CHART B

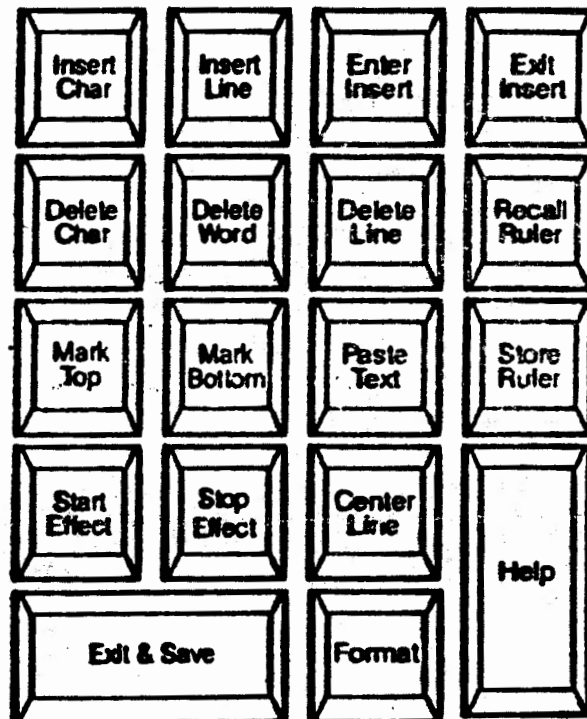
PRINT EFFECT	DMP2100	DMP110	DMP200	DW11B/DWP210/410
A = Bold	SW / HW	SW / HW	SW / HW	SW
B = Double Strike	SW	SW	SW	SW
C = Underline	SW / HW	SW / HW	SW / HW	SW / HW
D = Underline Text	SW	SW	SW	SW
E = Bold & Under.	SW / HW	SW / HW	SW / HW	SW
F = Superscript	HW	HW	HW	HW
G = Subscript	HW	HW	HW	HW
H = Condensed	HW	HW		
I = Compressed			HW	
J = Elongation	HW	HW	HW	
K = Correspondence 10 pitch	HW	HW	HW	
L = 12 pitch	HW	HW	HW	HW
M = Italics		HW		

SW = Software supported

HW = Hardware supported

RADIO SHACK (TM) DT100

DEC VT100 (TM)



QUIT FILE	PREVIOUS WORD	LAST CHAR ON SCREEN	END OF FILE
GO TO PAGE	GO TO PAGE	END	TOP OF FILE

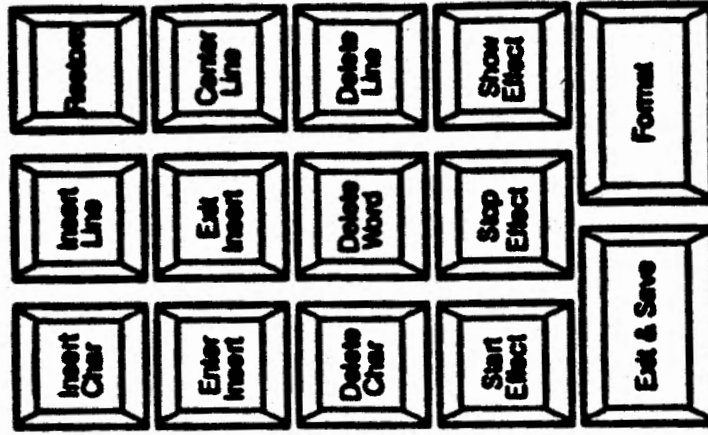
USE RULER	FIND NEXT	GLOBAL FIND	MARK BOTTOM
GO TO PAGE	FIND	GLOBAL FIND	CP MARK TOP

MERGE TEXT	MODE OFF	CONVERT LOWER	EMPHASIZE TEXT	LINE SPLIT	DELETE TO END LINE	DESTRUCTIVE BACKSPACE	RESTORE COMMAND	REVIEW SCREEN
PASTE TEXT	MODE ON	CONVERT UPPER	CENTER					

ALTOS II (TM)

Insert Char	Insert Line	Enter Insert	Exit Insert
Delete Char	Delete Word	Delete Line	Recall Ruler
Start Effect	Stop Effect	Show Effect	Store Ruler
Mark Top Bot	Mark & Remove	Insert Text	Merge Insert
Exit & Save		Format	

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VISUAL 200 (TM)

VISUAL 200 is a trademark of Visual Technology Inc.