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SignWriter® Reference Manual

A Manual by Richard Gleaves

SignWriter version 4.4

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About This Manual

This manual is about SignWriter, a word processing program for writing signed languages on the IBM PC and compatibles. Part 1, Learning SignWriter, shows you how to type and print your first sign. It explains the basics of typing and editing with SignWriter.

Part 2, Using SignWriter, tells how to perform most of the word processing tasks you will do. Be sure to read the section named Things You Should Know About.

Part 3, Setting Up SignWriter, shows you how to set up the SignWriter program. It also explains how to print SignWriter dictionaries.

This manual assumes you are familiar with MS-DOS. If terms like —file—, —directory—, and —backup disk— are unfamiliar, you should read the MS-DOS User's Guide for an introduction to these and other basic concepts.



PART 1: LEARNING SIGNWRITER

This part of the manual leads you step-by-step through typing and printing your first sign. It then explains the operations you performed.

When you finish part 1 of this manual, you will know how to do basic things like typing and editing symbols. For more advanced editing tasks, see part 2.

GETTING STARTED

To start SignWriter from MS-DOS, type:

SW

and then press the Return key.

NOTE - On some keyboards the Return key is labeled "Enter".

After a few moments, SignWriter should start

C∶∖SW					
welcome swintro swhands swcont swmove1 swmove2 swmove3 swdynam swface swbody Pswpunc	:1 :2	1	SignWri 4.3 © 19 'he Center for Movement Wri	iter 995 Sutton iting	
grammar email		 File	Directory	Setup	Qui

NOTE - If this does not appear on your screen, turn to part 2 of this manual and read the section named Things You Should Know About.

The tall box that appears on the left side of the screen is called the —file box— . The file box displays the name of the current file directory, along with a list of all the Sign Writing files stored in the directory. NOTE - Because it displays the file box, this part of the SignWriter program is sometimes called the —file screen—. Along with the file box, a line of words appears across the bottom of the screen; this is called the —command line—. The words are the names of commands available at this point in SignWriter.

First Time Setup

If you just installed SignWriter on your computer, there are a couple of things you need to do at this point:

>> Set up SignWriter to work with your printer
>> Print out the SignWriter keyboard card

This section explains how to do these things.

NOTE - If someone has already set up SignWriter for you, go ahead and skip to the next section.

NOTE- If you don't have a printer, you can skip ahead to the next section; however, remember that you'll eventually need to have a printed copy of the keyboard card in order to use SignWriter properly. See if you can borrow someone else's computer to print it out.

1. Hold down the Alt key and press the 'S' key (for 'Setup'). The command line is replaced by the following message:

Setup | Printing Country Dictionary

2. Press the 'P' key (for 'Printing'). The Setup command line is replaced by the Printing command line:

Setup | Printer Interface Format Numbers Lines

3. Press the 'P' key again. The following command line appears:

Setup | Epson *Hewlett-Packard PostScript

4. Press the 'E' key if you have an Epson-compatible printer. Press the 'H' key if you have a Hewlett-Packard printer. Press the 'P' key if you have a PostScript printer.

After you do this, SignWriter's original command line reappears.

NOTE - You just set up SignWriter to work with your printer model. The next thing to do is to set up SignWriter to work with your computer's printer interface.

5. Hold down the Alt key and press the 'S' key again. Then press the 'P' key. The Printing command line appears as it did before:

Setup | Printer Interface Format Numbers Lines

6. This time press the 'I' key. The following command appears:

Setup | 1-COM1 2-COM2 *3-LPT1 4-LPT2

7. Press the number key which corresponds to the printer interface your printer is connected to (COM's are serial interfaces, LPT's parallel interfaces). Check your printer manual if you don't know which interface to choose.

After you press a number key, SignWriter's original command line appears again.

NOTE - SignWriter is now set up for printing. The next thing to do is print out the keyboard card.

8. If your printer isn't already on, turn it on.

9. Hold down the Alt key and press the 'P' key. The command line is replaced by the following message:

Print | Print what file?

10. Type the word KEYBOARD and press the Return key. The file box disappears from the screen, and is replaced by Sign Writing symbols. The keyboard card should start printing out on your printer.

NOTE - If you encounter printing problems, turn to part 2 of this manual and read the section named Things You Should Know About.

11. When the file is finished printing, the file box reappears on the screen. You have now printed out the SignWriter keyboard card.

NOTE - If you want to leave the SignWriter program now, hold down the Alt key and press 'Q'; then press the 'Y' key.

12. Keep the keyboard card next to your computer for easy reference. It shows you where the Sign Writing symbols are on your keyboard.

Now you are ready to type your first sign.

YOUR FIRST SIGN

This section leads you step-by-step through typing and printing your first sign. Your job here is to just do the commands and watch what happens; you don't need to understand everything that's going on.

1. Hold down the Alt key and press the 'N' key. The command line is replaced by the following message:

New | Name of new file?

2. Type the word HELLO and press the Return key.

NOTE - If you make a typing error, use the Backspace key to backspace over the error.

The screen changes to show three large blank lines, with a new command line across the bottom. A small, blinking angle symbol appears on the first line; this symbol is called the — cursor—.

3. Press the '7' key. A row of boxes appears across the bottom of the screen. The boxes contain Sign Writing symbols.



4. Press the 'A' key. The boxes now show eight different rotations of the same head symbol.



5. Press the 'D' key. The key boxes disappear and the symbol appears on the screen where the cursor was. The cursor is gone, and the symbol is shimmering.

6. Press the 'M' key. The cursor reappears to the right of the symbol, and the symbol stops shimmering.



NOTE - You just typed your first symbol.

7. Press the 'G' key.



Press the 'J' key.



Then press the 'S' key. A hand symbol appears to the right of the head symbol.



8. Press the 'N' key once; then press the 'M' key three times. The cursor now appears above the hand symbol.

9. Press the 'R' key.



Then press the 'A' key,



Press the A key again. A movement symbol appears above the hand symbol.



10. Press the space bar and the cursor reappears to the right of your first sign. You have just typed the ASL sign for HELLO:

The next thing to do is save your work

11. Hold down the Alt key and press the 'Q' key. The command line is replaced by the following message:

Quit | Save Write Backup Exit

12. Press the 'S' key. The word Saving appears on the command line. Then the screen changes back to show the file box. Press the PgDn key and you'll see that the word HELLO now appears in the file box; this is the name of the file you just made.

NOTE - The PgUp and PgDn keys are used to scroll the list of file names in the file box.

The next thing to do is print your sign.

13. If you have a printer connected to your computer, turn it on. If you don't have a printer, skip ahead to step 16.

14. Hold down the Alt key and press the 'P' key. The command line is replaced by the following message:

Print | Print what file?

15. Type the word HELLO and press the Return key. The file box disappears, and the sign you just typed appears at the top of the screen. The sign should start printing out on the paper.

NOTE - If you encounter printing problems, turn to part 2 of this manual and read the section named Things You Should Know About.

16. When the sign is finished printing, the file box reappears on the screen. You have now typed and printed your first sign.

NOTE - If you want to leave the SignWriter program, hold down the Alt key and press 'Q'; then press the 'Y' key.

The next few sections explain the commands you just used.

OPENING A FILE

The Open and New commands are used to open files for typing and editing. New creates new files; you just used it to make a file named HELLO. Open is used to choose an existing file for editing.

1. To see how the Open command works, press Alt-'O'.

NOTE - This means to press the 'O' key while holding down the Alt key.

The command line is replaced by the following message:

Open | Open what file?

2. Press the Escape key. The message disappears, replaced by the command line.

NOTE - You can escape from any SignWriter command message by pressing the Escape key.

3. Press Alt-'O' again, and type the word SAILBOATS. Note that the last letter does not appear; SignWriter does not allow file names longer than eight characters. Press and hold the Backspace key until all the characters are gone.

4. Type the word HELLO and press the Return key. The screen now shows the sign you just typed.

The next thing to try is typing more symbols.

TYPING SYMBOLS

Before you type any more symbols, try moving the cursor around on the screen. The cursor is controlled by four keys: — the Left arrow key moves the cursor left — the Right arrow key moves the cursor right — the Up arrow key moves the cursor up — the Down arrow key moves the cursor down To make the cursor move continuously, hold down the arrow key. 1. Use the cursor moving commands to move the cursor to the right of the sign for "hello".

 Now choose a symbol key on the SignWriter keyboard card and press it. As before, the row of boxes appears across the bottom of the screen; these are called —key boxes—.
 Press the Escape key. The key boxes disappear, replaced by the command line.

NOTE - Whenever you press the wrong symbol key, use the Escape key to make the key boxes disappear.

4. Now press the 'E' key.

The key boxes display a Sign Writing symbol and its variations. The symbol on the left is the —base symbol—; note that it appears on the 'E' key of the keyboard card's sign keyboard. The other symbols displayed are —variations— of the base symbol.

The ten boxes correspond to ten keys on the keyboard:



5. To choose the symbol in the 'A' box, press the 'A' key.

The key boxes now show the eight —rotations— of the symbol you just chose. The symbol rotations are chosen the same way as the variations. Choosing a rotation causes the key boxes to disappear and the chosen symbol to appear on the screen where the cursor was.

6. Press the 'J' key. The symbol rotation you just chose appears on the screen.

7. Now press the Delete key (this is called the Del key on most keyboards). The symbol disappears, and the cursor reappears in its place.

NOTE - Pressing the Delete key removes the symbol you just typed. To get back a deleted symbol, press the Undo command (Alt-'U').

The symbols you have typed so far display symbol variations, then rotations. Some symbols, however, do not have any rotations; pressing the symbol key causes the symbol to appear on the screen immediately.

8. Pick a few symbols from the keyboard card and try them out to see what happens. Press the Delete key to remove them. Sometimes, the symbol you choose will not fit on the screen at the current cursor position. When this happens, the —alert box— blinks at the bottom of the screen. To fix this problem, use the arrow keys to move the cursor away from the edges, then choose the symbol again.

9. Move the cursor to the top of the screen and try typing a symbol. The alert box blinks to show you that the symbol won't fit on the screen. Move the cursor back down and try again. When you type in a symbol, it appears to shimmer on the screen; this means it is —selected—. Selected symbols can be changed a number of ways. The next section explains how.

CHANGING SYMBOLS

To change a symbol on the screen, it must first be selected. If you've just typed in a symbol, the symbol is already selected. The symbol shimmers to show that it is selected.

To select a symbol that you typed in earlier, move the cursor until its corner is touching the symbol, then press the Select command (Alt-'S'). The symbol starts shimmering to show that it is selected. Once a symbol is selected, there are many ways you can change it:

Arrow keys	 move the symbol around
Change key	- changes the symbol's appearance
Mirror key	- changes the symbol to its mirror image

Size key - changes the symbol's size Rotate key - changes the symbol's rotation Copy (Alt-'C') - copies the symbol Erase (Alt-'E') - erases the symbol

Be sure to learn these commands; they are used all the time when you type Sign Writing. The keyboard card shows you where they are on the keyboard.

NOTE - Sometimes, when you try to change a symbol, the alert box blinks at the bottom of the screen. When this happens, use the arrow keys to move the symbol towards the center of the sign, then try changing the symbol again.

Arrow Keys

You can move the selected symbol around by pressing the arrow keys. To move the selected symbol in bigger jumps, hold down the Alt key when you press the arrow keys. >> Type a symbol and try the arrow keys to see what happens.

Press the Delete key when you are done.

Change Key

You can change the appearance of a selected symbol by pressing the 'N' key; this is called the —Change key—. On hand symbols, you can change the palm facing. On movement symbols, you can change the arrowhead. On face symbols, you can often change the expression.

NOTE - Pressing Shift-Change displays the symbol changes in the opposite order.

>> Type a hand or movement symbol and press the Change key (the 'N' key) several times to see what happens. Press the Delete key when you are done.

Mirror Key

You can change the selected symbol to its mirror image by pressing the ',' key; this is called the —Mirror key—. The Mirror key is used for doing things like changing right hands to left hands.

NOTE - The Mirror key does not change some symbols, since they look the same either way.

>> Type a symbol and try the Mirror key (the ',' key) to see what happens. Press the Delete key when you are done.

Size Key

If the selected symbol is a movement symbol, then it may have more than one size. You can change its size by pressing the '.' key; this is called the —Size key—.

NOTE - Not all movement symbols have different sizes.

>> Type a movement symbol and try the Size key (the '.' key) to see what happens. Press the Delete key when you are done.

Rotate Key

If the selected symbol has more than one rotation, you can rotate it by pressing the '/' key; this is called the —Rotate key—

NOTE - Pressing the Rotate key rotates the symbol counterclockwise; pressing Shift-Rotate rotates the symbol clockwise.

>> Type a symbol and try the Rotate key (the '/' key) to see what happens. Press the Delete key when you are done.

NOTE - On some symbols, the Change, Size and Rotate keys will reveal hidden symbol variations.

Erase Command

You can erase the selected symbol by pressing the Erase command (Alt-'E').

NOTE - To erase any symbol, first use the Select command to select it, then use the Erase command to erase it.

>> Type a symbol, then press the Erase command to see what happens.

Copy Command

You can copy the selected symbol by pressing the Copy command (Alt-'C').

NOTE - Copy is useful because many signs contain two of the same kind of symbol.

>> Type a symbol, then press the Copy command to see what happens.

Now that you have tested each of these commands, you should try them with symbols on the keyboard card; it's a good way to learn the Sign Writing symbols.

GETTING THE CURSOR

After you type a symbol, you may wonder how to get the cursor back so you can type the next symbol. There are two ways to do this.

One way is to press the Select command (Alt-'S'). The cursor reappears on top of the symbol, and the symbol stops shimmering to show that it is no longer selected.

A better way to get the cursor is to press the 'M' key; this is called the —Cursor key—. The Cursor key lets you choose where to type the next symbol.

1. To see how the Cursor key works, type a symbol onto the screen and then press the 'M' key. The cursor reappears to the right of the symbol, and the symbol is no longer selected.

2. Press 'M' again. The cursor moves to the upper right of the symbol. Press the key a few more times; each time, the cursor moves to a new place around the symbol.

Note that the cursor changes shape as it moves around the symbol; this shows you where the next symbol will go when you type it.

3. Press the Cursor key (the'M' key) until the cursor is to the lower right of the symbol. Now type a new symbol. The new symbol appears on the screen at the lower right of the old symbol.

As you have seen, pressing the Cursor key moves the cursor around the symbol; by holding down the Shift key while you press the Cursor key, you can make the cursor move in the opposite direction.

4. Press the Cursor key to make the cursor reappear. Press it a few more times; the cursor moves around the symbol as before. Now press Shift-Cursor (Shift-'M') a few times; the cursor starts moving in the opposite direction.

When a symbol is selected, pressing the Cursor key makes the cursor reappear to the right of the symbol. If you press Shift-Cursor instead, the cursor reappears directly below the symbol.

5. Try this out for yourself.

TYPING SIGNS

When you finish typing a sign, press the space bar. The cursor jumps to the right, and a small mark appears at the bottom of the line. This mark shows the left-hand boundary of the new sign you are about to type. NOTE - Pressing Delete removes a space you just typed.

You can type a number of spaces in a row to indent lines or to make lots of space between two signs. Each space is actually an empty sign you can type symbols into.

If the idea of an empty sign seems confusing, try thinking of each sign on the screen as an imaginary box containing Sign Writing symbols. The line boundaries show the box top and bottom. The small marks along the bottom line (made with the space bar) show the boundaries between signs:

Sign 1 . Sign 2 . Sign 3 . Sign 4 .

To type a new sign, you first create a new box by pressing the space bar, then you type symbols into it.

When you reach the right side of the screen (either by typing or changing a symbol), SignWriter moves the sign you are working on down to the next line. This gives you more room to type in symbols.

If you make an existing sign longer (either by typing or changing a symbol), SignWriter splits the line you are working on, moving any signs on the right down to the next line. This gives you more room to edit the sign.

NOTE - To fix up any split lines in your file, use the Margin command. For details, see the section named Fixing the Margins in part 2.

To add a blank line (or split an existing line), press the Return key. Because of SignWriter's automatic "sign wrap", you don't need to use the Return key at the end of each line.

>> Try these commands out in the file named WELCOME.

SAVING YOUR WORK

When you finish working on a file, press the Quit command (Alt-'Q'). The command line is replaced by the following message:

Quit | Save Write Backup Exit

To save your work, press the 'S' key (for 'Save'). Your file is saved on the disk, and the screen changes to show the file box.

NOTE - From the file screen, you can now print the file, or open another file, or use the file screen's Quit command to leave SignWriter.

If you decide to not save the work you have just done, press the Quit command and then press the 'E' key (for 'Exit'). The following message appears:

Quit | Exit without saving changes? (Y/N)

Pressing the 'Y' key changes the screen to the file box without saving your file on the disk. Pressing 'N' (or the Escape key) cancels the Quit command and returns you to editing the file. Files are normally saved under the same name they started with; the new version of the file replaces the old version. If you decide to save your work under a different file name, press the Quit command and then press the 'W' key (for 'Write'). The following message appears:

Quit | Write to what file?

Type the new file name and press the Return key. The file is written to disk with the name you typed, and the screen changes to show the file box.

If you spend a long time working on a file, you should save your work every 15 minutes or so. To quickly save a file, press the Quit command and then press the 'B' key (for 'Backup'). After the file is saved, the original command line reappears, and you can continue working on the file.

WHAT TO DO NEXT

You've now finished the tutorial part of this manual.

There's still a lot to learn. The rest of SignWriter's commands are described in the next part of this manual. These are fairly easy to learn; however, to make full use of SignWriter, you need to learn some other things too: namely, the Sign Writing symbols, their placement on the keyboard, and the grammar rules for writing ASL.

To make all this a little easier, here is a list of things to do with SignWriter. Things at the top of the list are easier to do; things at the bottom are harder.

>> Use SignWriter to print out the Lessons in Sign Writing files: SWINTRO, SWHANDS, etc. (Print them with page format 3 if your printer supports it.) These files will serve as your main main reference to Sign Writing. Please note that they will not teach you American Sign Language; you should already know ASL, or at least be learning it.

>> Browse through SignWriter's built-in sign dictionary. This gives you the chance to look up signs you already know, and to see how they are spelled in Sign Writing. You might want to print out the dictionary; it's useful to have around if you're learning ASL vocabulary.

>> Type fingerspelling. This is easy, because all you have to do is type as if you were typing English, and finger-spelling appears. Reading and writing fingerspelling is a good way to learn the Sign Writing hand symbols.

>> Read the Sign Writing file named GRAMMAR. It contains lessons on writing ASL grammar. Note that the lessons themselves are written in ASL, with the English translation appearing beneath each paragraph.

>> Add signs to the dictionary. To do this, you need to have some idea of how to spell a sign; one of the best ways to learn is

to study the signs already in the dictionary. You also need to know how to type Sign Writing symbols.

>> Write your own ASL text. This is a lot easier to do when the signs you need are already stored in the dictionary; however, you still need to know the grammar rules in order to write correct ASL sentences.



PART 2: USING SIGNWRITER

In part 1, you learned how to do basic things like typing and editing symbols. Part 2 tells you how to perform more advanced editing tasks.

When you finish part 2, you will know how to use all the SignWriter commands. To learn more about setting up SignWriter, see part 3.

MOVING AROUND IN A FILE

The arrow keys are good for moving around between symbols, but they are too slow for moving from sign to sign. To move the cursor more quickly, hold down the Alt key when you press the arrow keys.

To move the cursor in even bigger jumps, use the following commands:

Tab key	- moves cursor from sign to sign
Home key	- moves cursor to the start of the line
End key	- moves cursor to the end of the line
PgUp key	- shows the previous three lines of text
PgDn key	- shows the next three lines of text
Next (Alt-'N')	- moves cursor to the line below
Previous (Alt-'	P') - moves cursor to the line above

When you are editing a long file, you can only see part of it on the screen at any one time. To see the rest of the file, just move the cursor off the top or bottom of the screen; Sign Writer changes the screen to show the text that was hidden before.

NOTE - The alert box blinks if you try to move the cursor past the beginning or end of a file.

To move to the front of a file, press the Jump command (Alt-'J'). The command line is replaced by the following message:

Jump | Beginning End Marker

Press the 'B' key. The screen changes to show the beginning of the file. To move to the end of the file, press the Jump command and then press the 'E' key (for 'End'). To move to a marker that marks a selected sign, press the Jump command and then press the "M' key (for 'Marker').

NOTE - For more information about markers, see the section named Selecting Signs.

NOTE - Press Alt-'?' to see the Jump, Next, and Previous commands on the command line:

Undo Get Jump Next Previous Adjust Type Dictionary ?

Press Alt-'?' again to see the original command line:

Select Copy Erase Find Replace Margin Quit ?

TYPING FINGERSPELLING

SignWriter lets you type fingerspelling as well as signs. Typing fingerspelling is just like typing English; the only difference is that as you type, hand symbols appear on the screen instead of alphabetic characters.

1. To type fingerspelling, press the Type command (Alt-'T'). The command line is replaced by the following message:

Type | Sign Fingerspell Alphabet

2. Press the 'F' key. The original command line reappears, but an 'F' handshape symbol appears on the lower left corner of the screen. This symbol shows you that SignWriter is ready to type fingerspelling.

3. Type "This is my first sentence in fingerspelling." As before, press the space bar when you want to start a new word. Note that you don't have to press the Return key when you get to the end of a line; just keep typing, and SignWriter moves the word down to the next line for you.

NOTE - Pressing the Backspace key deletes the last fingerspelling symbol you typed. To get back a deleted symbol, press the Undo command (Alt-'U').

4. To change back to typing signs, press the Type command again and then press the 'S' key (for 'Sign'). Note that the 'F' handshape symbol disappears from the screen.

NOTE - The keyboard card shows where the fingerspelling symbols are on the keyboard.

TYPING ENGLISH

SignWriter also lets you type English. This is useful for typing the English translation underneath signs and fingerspelling.

NOTE - SignWriter is not designed for typing a whole sentence of English underneath a sentence of signs; it works best when you type a few words under each sign. For example, see the Sign Writing file named WELCOME.

1. To type English, press the Type command (Alt-'T'). The command line is replaced by the following message:

Type | Sign Fingerspell Alphabet

2. Press the 'A' key. The original command line reappears, but the letter A appears on the lower left corner of the screen. This letter shows you that SignWriter is ready to type English.

3. Type "This is my first sentence in English." As before, press the space bar when you want to start a new word.

NOTE - Pressing the Backspace key deletes the last letter you typed. To get back a deleted letter, press the Undo command (Alt-'U').

After you type a few English words, you can see that the space bar now puts an English-sized space between each word; it does not start a new sign. What if you want to start a new sign while typing English?

Try pressing Alt-space instead of just space; Alt-space starts a new sign while you are typing English.

4. To change back to typing signs, press the Type command again and then press the 'S' key (for 'Sign'). Note that the letter

A disappears from the screen.

NOTE - For information on typing paragraphs of English, see the section named Things You Should Know About.

MOVING SYMBOLS IN A SIGN

When you are typing a sign, sometimes you'll need to move all the symbols in the sign by a certain amount: either to make room for typing a new symbol, or to center the completed sign. To move symbols in a sign, use the following commands:

Ctrl-Home - centers the sign Ctrl-left arrow - moves all symbols to the left Ctrl-right arrow - moves all symbols to the right Ctrl-up arrow - moves all symbols up Ctrl-down arrow - moves all symbols down Adjust (Alt-'A') - moves some of the symbols

1. To use the Adjust command, first move the cursor so it is above and to the left of the symbols you wish to move.

NOTE - If you're going to move symbols up or to the left, be sure the cursor is above and to the left of where you want the symbols to end up.

2. Press the Adjust command (Alt-'A'). The command line is replaced by the following message:

Adjust | Press Return to finish.

Note that the cursor changes shape; this helps you to see which symbols will move. Imagine two lines extending out from the ends of the cursor: one stretches down to the bottom of the sign; the other extends to the right. These two lines form the upper left corner of an imaginary box.

All symbols that are completely inside the imaginary box will move as a group. Symbols outside the box will not move. NOTE - If the wrong symbols move, press the Escape key, then reposition the cursor and press Adjust again. You can also use the Undo command (Alt-'U') to undo the adjust.

3. To move the symbols, press the arrow keys. Each time you press an arrow key, the group of symbols moves in the specified direction.

When any of the moving symbols reaches one of the imaginary lines, the alert box blinks to let you know that you cannot move the symbols any further in that direction.

4. When you are finished moving the symbols, press the Return key. The original command line reappears, and you can continue with editing.

SELECTING SIGNS

You have already seen how the Select command is used to select symbols. It is also used to select signs for copying or erasing.

1. To select signs, move the cursor to the front of the signs and press Select (Alt-'S'). A large bracket symbol appears on the screen.

2. Move the cursor to the end of the signs and press Select again; a second bracket appears. The signs between the brackets are now selected.

NOTE - The Tab key is the best way to move the cursor from sign to sign.

When you press Select, the cursor must be positioned in between signs; if it is inside a sign, Select either selects a symbol or does nothing. The cursor will always be positioned properly if you use the Tab, Home, and End keys.

There are a few restrictions you need to know about. You cannot put a right bracket at the beginning of a line, a left

bracket at the end of a line, or a right bracket in front of a left bracket. To get rid of brackets, move the cursor on top of them and press Select (Alt-'S').

NOTE - A quick way to move the cursor to the brackets is to press the Jump command and then press 'M' (for 'Marker'). This is useful when the brackets are many lines apart.

COPYING AND ERASING SIGNS

Signs are copied and erased the same way as symbols: first you select, then you copy or erase.

To erase signs, first select them, then press the Erase command (Alt-'E'). The screen is updated showing the selected signs removed from the file.

NOTE - You can restore the erased signs by pressing the Undo command (Alt-'U').

To copy signs, first select them, then move the cursor to where you want them copied and press the Copy command (Alt-'C'). The screen is updated showing the selected signs copied into the file.

NOTE - You can erase the copied signs by pressing the Undo command.

When the Copy command finishes, the original signs remain selected, so you can make multiple copies just by pressing Copy over and over. (Remember that Undo undoes only the last copy.)

To move signs from one place to another in a file, copy them to the desired location, then press Erase to erase the originals.

Erasing Spaces

To quickly erase a space, move the cursor on top of the space and press the Delete key.

Erasing Lines

To quickly erase an entire line, move the cursor onto the line and press Alt-Delete. You can restore an erased line or space with the Undo command.

COPYING SIGNS FROM ANOTHER FILE

SignWriter lets you copy signs from other files into the one you are working on. You can copy a whole file or just part of it.

1. To copy signs from another file, first move the cursor to where you want the signs copied.

2. Press the Get command (Alt-'G'). The command line is replaced by the following message:

Get | Get text from what file?

3. Type the name of the file and press Return. The words "Getting text" appear on the command line. Then the screen is updated showing the other file's signs copied into the file you are working on.

NOTE - You can erase the copied signs by pressing the Undo command.

If you want to copy only part of a file, you must first open the file, select the signs you wish to copy, and then save the file. The signs remain selected after the file is saved. The Get command will then copy only the selected signs into the file you are working on.

FINDING AND REPLACING SIGNS

SignWriter can search through a file and find all the places where a certain sign or symbol appears. It can also search for a sign and replace it with a new sign.

1. To search for a sign, press the Find command (Alt-'F'). A window appears on the screen and the command line is replaced by the following message:

Find | Enter search sign and press Return.

2. Type the sign into the window. A few SignWriter commands work differently in the window: Erase erases the contents of the window, Copy copies a previously selected sign into the window, and Undo undoes both.

NOTE - To escape from the Find command, press the Escape key.

3. When you finish typing the sign, press the Return key. The window disappears and the following message appears on the command line:

Find | Next Part Stop

4. To find the sign, press the 'N' key; the screen changes to show the cursor on the next occurrence of the sign in the file.

NOTE - Since SignWriter's search method ignores the relative positioning of symbols, it will stop at signs which have the same symbols as the search sign, but in a different arrangement. In practice, this happens very rarely.

5. To stop searching, press the 'S' key; the original command line reappears, and you can continue with editing.

Finding Symbols

The Find command normally searches for whole signs, but it can also search for specific symbols. To do this, enter the

symbols into the window, press Return, then press the 'P' key (for 'Part'). The Find command message changes to look like this:

pFind | Next Part Stop

The little "p" next to the word "Find" shows that SignWriter will perform a "partial" search the next time you press 'N'; it will stop at any sign containing the symbols you typed into the window. You can turn off partial searching by pressing 'P' again.

NOTE - Sometimes you may need to use Part to find all the occurrences of a sign, since the normal search will miss signs containing extra symbols (such as punctuation or English).

Replacing Signs

1. To replace signs, press the Replace command (Alt-'R'). A double window appears on the screen and the command line is replaced by the following message:

Replace | Enter search sign and press Return.

2. Typing into the window works the same way as in Find. When you press Return, the cursor moves to the bottom window and the following message appears on the command line:

Replace | Enter replace sign and press Return.

3. When you press Return the second time, the double window disappears and this message appears:

Replace | Change Next All Stop

4. To find the next occurrence of the sign, press the 'N' key. To change the sign, press the 'C' key. To stop searching, press the 'S' key.

If you want SignWriter to automatically change all the occurrences it can find, press the 'A' key (for 'All').

The command line is replaced by the following message:

Replace | Replace all? (Y/N)

Pressing the 'Y' key replaces all occurrences. Pressing 'N' (or the Escape key) cancels the All command.

NOTE - The All command should be used with caution; since SignWriter's search method ignores the relative positioning of symbols, there is a remote chance that you will accidentally replace a sign which has the same symbols as the search sign, but in a different arrangement.

NOTE - The Replace command replaces whole signs only; it cannot replace specific symbols in a sign.

NOTE - The Undo command does not work with Replace, so be careful when you use the Replace command.

USING THE DICTIONARY

SignWriter has a built-in sign dictionary. To get a sign from the dictionary, you type in the sign name, then copy the sign into your file. You can also add new signs to the dictionary.

1. To get a sign from the dictionary, press the Dictionary command (Alt-'D'). A double window appears on the screen, and the command line is replaced by the following message:

Dict | Enter name of sign and press Return.

2. Type the name of the sign you want and press Return. If the name you typed matches an entry in the dictionary, the sign appears in the top window. To copy this sign into your file, press Return; the sign is then copied into your file at the current cursor position.

NOTE - To leave the dictionary, press the Escape key.

3. If the name you typed does not match an entry in the dictionary, the top window remains blank. You can then browse through the dictionary.

Browsing Through The Dictionary

To browse through the dictionary, use the PgUp and PgDn keys; they display the next and previous signs stored in the dictionary. If you find a sign you want, press Return to copy it into your file.

Adding New Signs

If the sign you want is not stored in the dictionary, you can type it directly into the empty window. A few SignWriter commands work differently in the dictionary window. Erase erases the contents of the window, Copy copies a previously selected sign into the window, and Undo undoes both.

When you finish typing the sign, press Return to copy it into your file, or press Escape to leave the dictionary. In either case, the sign you typed will be added to the dictionary.

Deleting Old Signs

To delete a sign from the dictionary, use the Erase command to clear the top window. The sign will be deleted from the dictionary.

Changing Existing Signs

To change an existing sign in the dictionary, use the normal symbol commands to add, change, or delete symbols in the sign.

To change the name of a sign, use the Window command (Alt-'W') to move the cursor to the bottom window. In the bottom window, you can type in text and use the following edit commands:

arrow keys	- move the cursor
Home key	- moves cursor to the start of the line
End key	- moves cursor to the end of the line
Backspace key	y - deletes letter to the left of the cursor
Delete key	- deletes letter under the cursor
Undo (Alt-'U	') - undoes the last Backspace or Delete

When you are finished editing a sign name, you can use the Window command (Alt-'W') to move the cursor back to the top window.

NOTE - The edit commands listed above can also be used when you first enter a sign name in the Dictionary command. NOTE - For more information on dictionaries, see the sections named Things You Should Know About, and Using the Dictionary Manager.

FIXING THE MARGINS

While you are editing a sign, SignWriter will sometimes split the current line to make room for your changes. When you finish editing, your file contains a broken line: the two parts reach only halfway across the screen.

1. To fix a broken line so it reaches the right margin, first place the cursor anywhere on the line.

2. Press the Margin command (Alt-'M'). SignWriter rearranges the signs on the screen to fix the broken line.

The Margin command actually fixes as many broken lines as it can find; it starts rearranging signs on the line under the cursor, and goes until it hits a blank (or indented) line.

NOTE - The Margin command only fixes right margins. To fix a left margin, use the Erase command to erase any leading spaces.

PRINTING

SignWriter prints out files just as they appear on the screen.

1. To print a file, first save it, then press the Print command (Alt-'P'). The command line is replaced by the following message:

Print | Print what file?

2. Type the name of the file and press Return. The word "Reading" appears on the command line. Then the screen changes to show the first few lines of the file, and the word "Printing" appears on the command line.

SignWriter displays the file on the screen as it prints. When the file is done printing, the screen changes back to the file box and original command line.

NOTE - If you are using a printer that requires you to manually line up the paper before you print, be sure to align the paper so that printing begins at the very top of the page. (You don't need to worry about this if you're using a laser printer, which automatically feeds the paper while printing.)

NOTE - You can cancel the Print command by pressing the Escape key. This is very useful when something goes wrong while a file is printing. When you press the Escape key, there's often a short delay before the printing actually stops: don't worry if something doesn't happen right away.

NOTE - For more information on printing, see the sections named Things You Should Know About, and Setting Up Print Options.

WORKING WITH FILES

SignWriter lets you perform basic file management: you can copy, rename, and delete files. (For more advanced file management, use the MS-DOS file commands.)

Copying Files

1. To copy a file, use the Open command (Alt-'O') to open the file you want to copy.

2. Use the Write option in the Quit command (Alt-'Q') to copy the contents of the original file to a new file.

Renaming Files

1. To rename a file, press the File command (Alt-'F') on the file screen. The command line is replaced by the following message:

File | Delete Rename Export

2. Press the 'R' key. The following message appears:

File | Rename what file?

3. Type the name of the file and press Return. This message appears:

File | to what name?

4. Type the new name and press Return. The file box is updated to show the file with its new name.

Deleting Files

1. To delete a file, press the File command (Alt-'F') and then press the 'D' key (for 'Delete'). The following message appears on the command line:

File | Delete what file?

2. Type the name of the file and press Return. This message appears:

File | Delete NAME? (Y/N)

3. Pressing the 'Y' key deletes the file. Pressing 'N' (or the Escape key) cancels the Delete command.

EXPORTING FILES

SignWriter can translate Sign Writing files into graphics files that you can use in other programs. This translation process is called —exporting—.

For instance, to include a diagram of Sign Writing in a word processing document, first type the signs into a Sign Writing file and use the Export command to export the file (SignWriter exports graphics files in the commonly-used "PCX" format.) Then use a paint program (such as Microsoft Paint) to resize the graphics file before you use it. Finally, start your word processing program and copy the graphics file into your document.

1. To export a file, press the File command (Alt-'F') on the file screen. The command line is replaced by the following message:

File | Delete Rename Export

2. Press the 'E' key. The following message appears on the command line:

File | Export what file?

3. Type the name of the file and press Return. The word "Exporting" appears on the command line. The screen changes to show the lines of the file as they are exported.

When the file is finished exporting, the screen changes back to the file box and original command line.

The exported file is written to the current directory. Its file

name is the same as the Sign Writing file, but it ends with ".PCX".

NOTE - If a Sign Writing file is longer than one printed page, it is exported as a series of graphics files. For instance, exporting a file named LONG creates graphics files named LONG.PCX, LONG2.PCX, LONG3.PCX, and so on.

NOTE - For more information on exporting files, see the section named Things You Should Know About.

CHANGING DIRECTORIES

SignWriter lets you change the current MS-DOS file directory without having to leave the SignWriter program itself. This allows you to keep your Sign Writing files in separate directories, which is useful when you have a lot of files.

1. To change the directory, press the Directory command (Alt-'D') on the file screen. The command line is replaced by the following message:

Dir | Change to what directory?

2. Type the path name of the directory you want to change to, then press Return. The file box is updated to show the contents of the new directory.

The path name you type can include a drive prefix; for instance, typing just B: as a path name changes the current directory to the root directory on the disk in drive B.

NOTE - Changing the directory may cause the sign dictionary to become unavailable. For more information, see the section named Things You Should Know About.

LEAVING SIGNWRITER

1. When you are done using SignWriter, save your file and then press the Quit command (Alt-'Q') on the file screen. The command line is replaced by the following message:

Quit | Leave SignWriter? (Y/N)

2. Pressing 'N' (or the Escape key) cancels the Quit command. Pressing 'Y' terminates the SignWriter program and causes the MS-DOS prompt to reappear on the screen.

WARNING - Do not turn off the computer while you are editing a file. If you do, your work will be lost, and you may damage the sign dictionary. Always use the Quit command when you are done using SignWriter.

NOTE - For more information on damaged dictionaries, see the next section.

THINGS YOU SHOULD KNOW ABOUT

This section describes various things you should know about SignWriter. Some are helpful hints, some general information; the rest have to do with things going wrong.

Blank Screen at Startup

If your computer screen goes blank when you start the SignWriter program, this means that your computer cannot display CGA graphics. SignWriter requires the CGA graphics display mode to work properly. Fortunately, you may still be able to use SignWriter.

Virtually all IBM PC's and compatibles support either CGA graphics or Hercules graphics. If your computer supports Hercules graphics, you can purchase a special program named SIMCGA which will allow you to run SignWriter (or any other CGA graphics program) on your computer.

SIMCGA (short for "Simulate CGA graphics") loads into memory when you start your computer; it automatically translates all CGA graphics commands into Hercules graphics. This program has been used with success by SignWriter users.

Error Message at Startup

SignWriter requires a computer with at least 640K bytes of memory. If there is not enough memory to start SignWriter, the following message will appear on the screen:

Not enough memory to start SignWriter.

If a SignWriter program file is damaged, one of the following messages may appear while SignWriter is starting up:

Error reading key file Error reading symbol file Error reading message file Error reading dictionary Invalid message

If one of these messages appears, you will need to reinstall SignWriter.

Missing File at Startup

If the SignWriter program cannot find all of the files it needs, one of the following messages may appear:

Key file not found Symbol file not found Message file not found

This problem may be caused by one of two things. First, SignWriter may not be properly installed on your computer. If this is the case, you will need to reinstall the SignWriter program onto your hard disk. Second, you may have changed the current DOS directory to somewhere other than where the SignWriter program files are stored. There are two ways to deal with this problem. The first (and easiest) way is change the current directory back to the directory containing SignWriter; everything should then work OK.

The second way to deal with this problem is to modify the MS-DOS PATH command. For information on how to do this, see the section named Setting Up Pathnames in part 3 of this manual.

Missing Dictionary

If the SignWriter program cannot find the current dictionary, the following message appears on the screen while SignWriter is starting up:

Dictionary not found...

After a few seconds, SignWriter will start up anyways; however, the dictionary will not be available.

If the "Dictionary not found" message appears while you are using the Setup Dictionary command, this means that SignWriter could not find both of the required dictionary files. You may need to reinstall SignWriter (or at least find out what happened to the dictionary files.)

If the message "Dictionary not available" appears after you use SignWriter's Directory command, this means that SignWriter could no longer find the current dictionary files. For details on how to fix this problem, see the section named Setting Up Pathnames in part 3 of this manual.

Duplicate Dictionary Entry

If you change the name of a sign so it matches another entry in the dictionary, the following message appears:

Duplicate entry created. press Return

This means that the dictionary now contains two entries with the same name. This is not actually a problem: SignWriter will continue to work properly with a dictionary containing duplicate entries. However, it is a good practice to maintain unique names for each sign in a dictionary.

Empty Dictionary Entry

If you discover a permanent dictionary entry with an empty sign, this means the Delete key was used to delete all of the sign's symbols. You can delete an empty dictionary entry by using the Erase command to erase the (empty) sign window.

Damaged Dictionary

If you discover that one or more signs in a dictionary have mysteriously changed, your dictionary file may be damaged. Another symptom of a damaged dictionary is the appearance of "linked" dictionary entries; that is, two entries which seem to share the same sign. When you change the sign in one of the linked entries, the same change appears in the other entry.

Dictionary files can become damaged if you (or someone else!) turns off your computer in the middle of editing a Sign Writing file.

Normally, if a computer program's data file becomes damaged, you have to delete the file, and then reconstruct any lost data from a backup copy of the damaged file. However, SignWriter's Dictionary Manager program includes a special command which may be able to repair a damaged dictionary file with a minimum of data loss. See the section named Using the Dictionary Manager in part 3.

Dictionary Alphabetic Order

SignWriter dictionaries are alphabetized according to rules defined for each country. Since these rules differ slightly from country to country, different dictionaries are alphabetized in different ways.

A dictionary's alphabetic order is defined when the dictionary file is first created. SignWriter assigns the current country code to a newly created dictionary, and this country code determines how the dictionary will be alphabetized, regardless of what country SignWriter is currently set to.

NOTE - To see what a dictionary's country code is, use the Dictionary Manager's Info command.

You can change the alphabetic order of an existing dictionary by merging it into a dictionary that has the right country code. To do this, first start up SignWriter, switch to the country code you want, and use the Setup Dictionary command to create a new empty dictionary file. Then leave the SignWriter program and start the Dictionary Manager. Use the Merge command to merge the old dictionary into the new dictionary. The resulting dictionary file will contain all of the signs from your old dictionary, but in the new alphabetic order.

NOTE - For this procedure to work properly, in the Merge command you must enter the name of the new empty dictionary first, and the name of the old dictionary second. Type 'Y' to the "Skip duplicates?" question.

Gray Box in Printed Dictionary

If in a printed dictionary you discover a sign that has a gray box printed next to it, this means that the sign was too long to fit on the page.

NOTE - Sometimes it is quite obvious when a too-long sign sticks into the next column; other times, however, parts of a sign may quietly disappear off the edge of the page.

To fix this problem, either go into the SignWriter dictionary and edit the sign to make it shorter, or use a different dictionary print format to allow more room for the sign to appear in the printed dictionary.

Exported File Contains Distorted Symbols

SignWriter exports graphics files that are created with CGA graphics. If you try to work with these files in a paint program set up for VGA graphics, the Sign Writing symbols will appear distorted.

There are two ways to deal with this problem. The first is to set up your paint program to work with CGA graphics. The second is to use your VGA paint program to stretch the symbols back into shape: in particular, applying a vertical scale factor of 200% to the symbols should fix the problem.

Exported File Missing

If you export a large Sign Writing file named BIGFILE2, SignWriter creates a series of graphics files named BIGFILE2.PCX, BIGFILE3.PCX, and so on. These names are created by adding a digit to the end of the file name.

However, since the original name BIGFILE2 is already eight characters long, SignWriter has to delete the last character in the name in order to add the digit. This means that both the first and second graphics files are named BIGFILE2.PCX. The end result is that the first graphics file gets accidentally deleted by the Export command.

To avoid this problem, do not export large files with long names ending in numbers. Change their file names before you export them.

Current Printer Settings

The Setup Printer and Setup Interface commands both display an asterisk character '*' next to their current settings. To preserve the current settings in these commands, press the Escape key.

Nothing Prints Out

If nothing comes out of your printer when you use the Print command, SignWriter may not be set up to work with your printer interface. For more information, see the section named Setting Up Printing in part 3.

Garbage Prints Out

The current version of SignWriter requires a Postscript, Hewlett-Packard, or Epson-compatible printer to print out Sign Writing files. Attempts to print with an incompatible printer model will most likely produce garbage.

What the garbage usually looks like is one or two alphabetic characters printed on each page of paper; note also that the paper may start coming out of the printer at an alarming rate! If this happens, check your printer manual to see whether you have to set switches on your printer to make it compatible with one of the printers listed above. Also be sure to avoid using page formats 3 thru 7 with HP DeskJets.

Gaps Print Out

Another problem that can arise during printing is when Sign Writing files seem to print out perfectly, but with gaps of white space breaking up the symbols on each line. If this happens, you will have to change the setting on one of your printer's switches; specifically, the "Line feed after carriage return" ("LFCR") printer switch must be changed to its "off" setting. See your printer manual for details.

Printer Error

If the message "20 ERROR" appears in the status window of your Hewlett-Packard printer while you are printing out a file using page formats 4 or 5, the problem is caused by your printer not having enough memory to print a full page of 300 dots-perinch graphics. See your printer manual for details. There are four ways to deal with this problem. The first (and easiest) way is to avoid using page formats 4 or 5. The second is to only print files containing 40 lines or less (this gives you one or two columns of text, but never a full page). The third is to use the Lines command to set a short enough page length that no more than 40 lines will be printed on a single sheet of paper (this gives you the full number of text columns, but they are shorter than usual). The fourth way is to buy a memory upgrade for your printer.

Alternate Cursor Commands

SignWriter contains a few commands which have not yet been described; they can speed up your typing a lot.

For instance, instead of the arrow keys, you can use the following commands to move the cursor or selected symbol:

Ctrl-'I' - moves up Ctrl-'J' - moves to the left Ctrl-'K' - moves to the right Ctrl-'M' - moves down

Ctrl-'J' means to press the 'J' key while holding down the Ctrl key.

NOTE - When used with the Shift key, these commands let you move the cursor or selected symbol in bigger jumps.

Alternate Dictionary Commands

In the Dictionary command, the Next and Previous commands (Alt-'N' and Alt-'P') work as alternate versions of the PgUp and PgDn keys. You can use Next and Previous to browse through the dictionary.

Alternate Find & Replace Commands

In the Find and Replace commands, the Return key works as an alternate version of the Stop command. You can use the Return key to stop searching.

Type Command Shortcuts

To quickly change between typing signs, fingerspelling, and English, use the Alt-'X', -'Y', and -'Z' keys. These allow you to change the typing style without having to go through the Type command.

Typing Paragraphs of English

When you are typing English, press Alt-Return to start a new line of English text in the current sign. This command is useful when you are typing short paragraphs of text into a file; for example, see the Sign Writing file named NORWAY. NOTE - Alt-Return only works in signs already containing some English. It will not cross a sign boundary; the alert box flashes when you reach the bottom of the current sign.

Keyboard Auto-repeat

Be sure you know about your keyboard's "auto-repeat" feature when you use the cursor-moving commands. By holding down the keys, you can go a lot faster.

Automatic Deselect

Most cursor-moving commands (space, tab, Jump, etc.) automatically deselect a selected symbol when you press them. This means you don't have to get the cursor back to move to another sign.

Undo Command

The Undo command works after the Backspace and Delete keys, and after the Copy, Erase, Get, Dictionary, and Adjust commands. It does not work after the Margin or Replace commands.

Window Command

The Window command, which moves the cursor between windows in the dictionary, does not appear on the command line. It is defined as Alt-'W', regardless of what country SignWriter is set to.

Delete Key

The Delete key is normally used to delete the last symbol you just typed, but with care it can be used as a fast erase command. The Delete key is defined to erase the last symbol typed into the current sign. Thus, if you move the cursor onto a sign that was typed in earlier and press Delete three times, the last three symbols typed into that sign will be automatically erased without having to be selected first.

This feature is useful only when you know which symbols in a sign were typed in last (for instance, the English translation typed in under a sign). To find out, press the Delete key once and see if the "right" symbol gets deleted; if the wrong one gets deleted, press the Undo command to put it back, and use the Erase command to manually delete the symbols.

SignWriter Files

The SignWriter disk files include the SignWriter program file SW.EXE, the SignWriter symbol file SW.SYM, the SignWriter key file SWxxx.KEY, and the SignWriter message file SWxxx.MSG. The key and message file names contain a three digit number representing the country code. For example, SW001.KEY is the United States key file, and SW045.MSG is the Danish message file.

NOTE - For more information on country codes, see the section named Setting Up the Country in part 3.

SignWriter dictionaries are stored in two separate files: SWxxx.DIC and SWxxx.DIN. The dictionary file names contain the (up to six characters long) dictionary name used within the SignWriter program. For example, a dictionary named 001 in SignWriter appears in MS-DOS as the two files SW001.DIC and SW001.DIN.

SignWriter data file names end with .SGN; for example, a data file named HELLO in SignWriter appears in MS-DOS as HELLO.SGN.

File Size

If a Sign Writing file gets larger than SignWriter can edit, one of the following messages will appear on the command line:

No more room for entering symbols Not enough room to copy Not enough room to get text

When this happens, you will have to split the file into two separate files if you wish to continue entering new signs. (To split a file, make a copy of it, then erase the appropriate half of the text from each file.)

SignWriter displays a "fuel gauge" to show how much room is left when you are editing a file. The short vertical line that appears on the command line has a small mark on it: the mark is at the top of the line when the file is empty, and at the bottom when the file is full.

Disk Errors

If a disk error occurs while SignWriter is reading or writing a file, one of the following messages appears on the command line:

Disk full Error opening MYFILE Error closing MYFILE Error reading MYFILE Error writing MYFILE

If one of these appears while SignWriter is reading a file, you

will need to check the disk to see what is wrong; see the MS-DOS User's Guide for details.

If one of these appears while SignWriter is saving a file, you have a more immediate problem: namely, how to save the work you have just done.

SignWriter has a special feature for handling this problem. If you cannot save a file on your current disk drive, you can write it to a different disk.

NOTE - This feature presumes that you have a backup disk available (which is a good idea in general).

1. To save a file on another disk, press the Quit command and then press 'W' (for 'Write'). The following message appears:

Quit | Write to what file?

2. Put your backup disk in the disk drive. Type the MS-DOS drive prefix, followed by a short name under which you will save the file. For instance, if the backup disk is in drive B, type:

Quit | Write to what file? B:RESCUE

3. When you press the Return key, the file is written to the disk in drive B with the file name RESCUE.

Because the drive prefix takes two characters, the name of the file you save to can only be up to six characters long. You can change the file name later.

Blank Lines at the End of a File

When you are typing or editing a file, SignWriter always allows you to move the cursor onto the blank line at the end of the file so you can type symbols there. Note, however, that you can't move the cursor past the blank line. If you want to type below this line, press the Return key to insert a new blank line. If for some reason your file has a bunch of blank lines at the end, SignWriter will automatically erase them when you save the file.

Editing Lists

Sometimes you may want to type in a list of items; for instance, a list of signs with one sign per line. In this case, be sure to indent each sign with a blank space. This will prevent SignWriter from accidentally remargining the list when you need to edit it.

File Box

The file box can display up to 15 file names at once. If the current directory contains more than 15 Sign Writing files, you must scroll the file box display to see all the file names. To scroll the file box downwards, press the PgDn key; to scroll it upwards, press the PgUp key.

Alert Box

When SignWriter cannot perform a command, the alert box blinks at the lower left hand corner of the screen. Some of the places where this can happen include the Undo command (when there is nothing to undo) and the Adjust command (when the cursor is between signs).

Most of the time, the alert box blinks because you attempted to type or change a symbol that wouldn't fit on the line at the current position. To fix this problem, use the arrow keys to move the cursor or symbol away from the edges.

Bookmarks

SignWriter offers an easy way to save your place in a Sign Writing file.

Before saving a file, use the Select command to put a single selection bracket at your current position. The next time you

open the file, you can use the Jump Marker command to move the cursor right to where you were working before.

NOTE - Since you type only one selection bracket, you don't have to worry about accidentally erasing any selected text.

Combination Keys

The SignWriter keyboard includes a couple of keys which are actually combinations of symbols: these are called — combination keys—.

Combination keys make it easier to type certain signs; however, they work best when you type them first, before the other symbols in the sign. This allows you to use the Control-arrow keys to move the combination symbols around as a unit.

NOTE - The reason you need to do this is because after you type a combination key, only one of its symbols is selected.

Missing Cursor Position

The Cursor key ('M') will sometimes not allow you to choose all eight positions around a symbol. This happens because the symbol is too close to the edges (the Cursor key skips cursor positions that are too close to the edges). If this happens to you, use the Ctrl-arrow keys to move the symbol away from the edge.

Face Symbol Cursor Position

When a symbol is selected and you press the Cursor key, the cursor appears to the right of the symbol. There is one exception to this rule: the face symbol that displays a contact area at one of eight positions. (It appears on the '7' key of the sign keyboard.) When you press the Cursor key with this symbol, the cursor automatically appears next to the contact area. This saves you a few keystrokes.



PART 3: SETTING UP SIGNWRITER

This part explains how to set up the SignWriter program to work with your computer.

The first section, Setting Up Printing, tells how to set up SignWriter to work with your printer. If you just installed SignWriter, be sure to read this section before proceeding.

The other sections in part 3 explain how to set print options and pathnames, and how to manage sign dictionaries. These are advanced features; you won't need to read them until you finish parts 1 and 2 of this manual.

SETTING UP PRINTING

If you just installed SignWriter on your computer, you need to set it up to work with your printer.

To set up printing, go back to the section named Getting Started in part 1 of this manual. It explains how to do this.

SETTING UP PRINT OPTIONS

This section explains how to use SignWriter's print options to control the appearance of your printed files.

Page Numbers

SignWriter lets you print page numbers at the bottom of each printed page. It also lets you choose a starting page number other than 1; this is useful when you are creating long documents from a number of separate Sign Writing files.

1. To print page numbers, press the Setup command (Alt-'S') on the file screen. Then press the 'P' key. The Printing command line appears:

Setup | Printer Interface Format Numbers Lines

2. Press the 'N' key (for 'Numbers'). The following message appears on the command line:

Setup | Print page numbers? (Y/N)

3. Pressing the 'N' key causes page numbers to not be printed out. Pressing the 'Y' key causes page numbers to be printed out; it also makes the following message appear on the command line:

Setup | Starting page number is 1. New number:

4. Press Return to keep the current starting page number. Otherwise, type the new starting page number and press Return.

Page Formats

If you have a PostScript or Hewlett-Packard printer, SignWriter lets you choose various page formats for printing out your files. The page formats are:

1 -	24 pt type	1 columns	7 lines	tall page
2 -	16 pt type	1 columns	10 lines	tall page
3 -	16 pt type	2 columns	8 lines	wide page
4 -	8 pt type	3 columns	22 lines	tall page
5 -	8 pt type	4 columns	16 lines	wide page
6 -	32 pt type	1 columns	4 lines	wide page
7 -	16 pt type	2 columns	11 lines	tall page

NOTE - Page formats 3 thru 7 do not work with HP DeskJet printers; they do work with LaserJet printers.

NOTE - Page format 7 is specifically designed for printing converted dictionary files. It does not work well with regular Sign Writing files.

NOTE - Page formats are not available when SignWriter is configured to work with Epson printers.

1. To choose a page format, press the Setup command (Alt-'S') on the file screen. Then press the 'P' key. The Printing command line appears:

Setup | Printer Interface Format Numbers Lines

2. Press the 'F' key (for 'Format'). The following message appears on the command line:

Setup | Page format code is 1. New code:

3. Press Return to keep the current page format. Otherwise, type the new page format code and press Return.

Page Lines

SignWriter lets you control the number of lines of text printed on a page.

NOTE - This option is provided mainly for people using Epsoncompatible printers that print graphics either larger or smaller than usual.

1. To change the number of lines per page, press the Setup command (Alt-'S') on the file screen. Then press the 'P' key. The Printing command line appears:

Setup | Printer Interface Format Numbers Lines

2. Press the 'L' key (for 'Lines'). The following message appears on the command line:

Setup | Number of lines printed per page is 6. New number: 3. Press Return to keep the current number of page lines. Otherwise, type in the new number of page lines and press Return.

SETTING UP PATHNAMES

To set up a DOS pathname for SignWriter, you need to add a special command to the MS-DOS file AUTOEXEC.BAT. The command has the following form:

PATH C:\SIGN

This command lets the SignWriter program know where to find the other SignWriter files. The example shown above shows that the SignWriter program files are stored in a subdirectory named SIGN on the C: drive.

When the PATH command is installed in AUTOEXEC.BAT, and MS-DOS is restarted, you will be able to start up SignWriter no matter what the current directory is set to.

You will also be able to use SignWriter's Directory command without having to worry about the sign dictionary becoming unavailable.

For more information on how to use the PATH command, see your MS-DOS manual.

SETTING UP THE COUNTRY

SignWriter is an international program: it works with the languages of several countries.

To do this, SignWriter stores the information for each country in separate disk files. Thus, SignWriter includes key files (SWxxx.KEY), message files (SWxxx.MSG) and dictionary files (SWxxx.DIC and SWxxx.DIN). The names of these files include a three-digit number representing the country code. For example, SW001.KEY is the name of the US key file, while SW045.MSG is the Danish message file.

The country codes used by SignWriter generally correspond to the codes used in the international telephone system. Here is a list of the countries currently supported:

- 001 USA
- 032 Belgium
- 033 France
- 034 Spain
- 039 Italy
- 044 UK
- 045 Denmark
- 046 Sweden
- 047 Norway
- 052 Mexico
- 351 Portugal
- 353 Ireland
- 505 Nicaragua

If you want to switch back and forth between countries, you first have to copy the appropriate key, message, and dictionary files onto your hard disk. Once you've done this, you can use the Setup Country command to switch countries.

>>> NOTE - This shareware package supports only the US version of SignWriter. International versions are available from the Deaf Action Committee for Sign Writing.

1. To switch countries, press the Setup command (Alt-'S') on the file screen. The command line is replaced by the following message:

Setup | Printing Country Dictionary

2. Press the 'C' key. The Setup command line is replaced by the following message:

Setup | Country code is 001. New code:

3. Type the three-digit country code for the language you want to work with. For country codes, see the list above.

4. After you type the country code, press Return. SignWriter changes the keyboard layout, fingerspelling, and command messages to the language of the country you chose.

When you enter a new country code, SignWriter looks on the disk for the key file and message file for that country. If the files are not on your disk, one of the following messages will appear:

Key file not found. press Return. Message file not found. press Return.

If either of these messages appear, pressing Return cancels the Setup command and restores the original country setting.

NOTE - The Setup Country command searches for a dictionary named after the new country code. If the dictionary is found, it becomes the current dictionary; otherwise, the dictionary is not changed.

SETTING UP THE DICTIONARY

SignWriter is already set up to work with the dictionary for your country, so you don't have to perform any special setup procedures.

However, if you want to switch to a different dictionary, or create a new empty dictionary of your own, this section explains how.

Switching Dictionaries

1. To switch dictionaries, press the Setup command (Alt-'S') on the file screen. The command line is replaced by the following message:

Setup | Printing Country Dictionary

2. Press the 'D' key (for 'Dictionary'). The following message appears on the command line:

Setup | Current dictionary is 001. New dictionary:

3. Press Return to keep the current dictionary. Otherwise, type the name of the dictionary you want to switch to, then press Return.

The contents of the new dictionary will appear when you next use the Dictionary command.

Creating New Dictionaries

When you use the Setup Dictionary command to switch to a new dictionary, typing the name of a dictionary that does not exist causes the following message to appear:

MYDICT not found. Create new dictionary with this name? (Y/N)

Pressing the 'N' key (or Escape) cancels the command, keeping

the current dictionary. Pressing 'Y' creates a new empty dictionary with the name you typed, and makes it the current dictionary.

NOTE - Dictionary names can be up to six characters long, and can consist of either numbers or letters. The standard dictionary name is a three-digit number representing the country code.

USING THE DICTIONARY MANAGER

This section explains how to use the Dictionary Manager, a utility program that lets you print or merge SignWriter dictionaries.

Before you start using it, there are a few things you need to know about the Dictionary Manager (which is named "DICT").

>> DICT cannot print dictionaries on HP DeskJet or Epsoncompatible printers; it only works with HP LaserJet and PostScript printers. (To print a dictionary on a DeskJet or Epson printer, you need to use the Convert command; for details, see "Converting Dictionaries" in this section.)

>> DICT uses SignWriter's current printer settings to determine which printer to use. Be sure to set up SignWriter properly before you use DICT.

>> DICT's commands and messages appear in English, regardless of what country SignWriter is set to.

Printing Dictionaries

The Dictionary Manager lets you print out the contents of a dictionary. Print options include the choice of 16 or 24 point symbol size, and one or two column page format. Lookup words are printed at the top of each page.

1. To print a dictionary, you need to start the Dictionary Manager. (If you're still in SignWriter, you first need to leave the SignWriter program.) Type the following command at the MS-DOS prompt:

DICT

and then press Return.

The startup message should appear on the screen after a few moments. Below this appears the following command line:

Print Merge Convert Repair Info

2. To choose the Print command, press 'P'. The following message appears below the command line:

Print what dictionary?

3. Type the name of the dictionary to be printed (e.g. 001) and press Return. The following message then appears:

Starting page number?

Type the starting page number and press Return.

NOTE - Page numbers will not be printed if you type "0" as the starting page number.

After you press Return, the following message appears:

Print size 16 or 24 points?

4. Type the print size you want and press Return. Another message appears:

Print 1 or 2 columns?

5. Type the number of columns you want and press Return. Another message appears: Print how many copies?

6. Type the number of copies you want printed of the dictionary and press Return. At this point, the Print command is ready to begin. The following message appears for a few moments:

Setting up printing...

The screen then changes to show the first sign on the screen. Each sign is displayed on the screen as it is printed. During printing, the following mesage appears at the bottom of the screen:

Press the Escape key to cancel printing.

Note that if you press Escape, it is normal for DICT to take a few moments before the printing actually stops.

Merging Dictionaries

The Dictionary Manager lets you merge the contents of two separate dictionaries into one big dictionary.

It also lets you decide what to do if the "same" entry appears in both dictionaries: you can either skip over duplicate entries, or you can have the Dictionary Manager mark duplicate entries in the merged dictionary.

NOTE - Two dictionary entries are considered duplicates if they have the same text in their lower windows. (Note that upper and lower case letters are considered the same; so are accented and unaccented letters.) Two entries with the same signs but different text are not duplicates; two entries with different signs but the same text are duplicates.

1. To merge dictionaries, you need to start the Dictionary Manager program. (If you're still in SignWriter, you first need to leave the SignWriter program.) Type the following command at the MS-DOS prompt:

DICT

and then press Return.

The startup message should appear on the screen after a few moments. Below this appears the following command line:

Print Merge Convert Repair Info

2. To choose the Merge command, type 'M'. The following message appears below the command line:

Name of main dictionary?

3. Type the name of your main dictionary (e.g. 001) and press Return. The following message then appears:

Name of other dictionary?

4. Type the name of the other dictionary to be merged and press Return. Another message appears:

Name of new dictionary?

5. Type the name of the new dictionary to be created and press Return.

NOTE - You can either type a name different from the first two dictionaries (which creates a new, merged dictionary), or you can type the same name as one of the first two (which causes the merged dictionary to replace one of the original dictionaries). The following message then appears:

Skip duplicate entries? (Y/N)

6. When you merge two dictionaries together, you have to decide what to do if the same entry appears in both dictionaries. In this case, DICT is asking if it should skip over any entries in the second dictionary that also appear in your main dictionary. Pressing 'Y' tells DICT to skip duplicate entries from the second dictionary.

Pressing 'N' tells DICT to include duplicate entries in the merged dictionary.

NOTE - DICT marks duplicate entries in the merged dictionary by adding an exclamation point "!" to the end of their text.7. At this point, the Merge command begins merging the dictionaries. When it finishes, the following message appears:

Dictionaries merged.

8. If the new dictionary has a different name, use SignWriter's Setup command to set it up as the current dictionary.

Converting Dictionaries

The Dictionary Manager's Convert command lets you convert a dictionary into a regular Sign Writing file.

Converted dictionaries have a number of uses. You can use SignWriter's Find command to search (by Sign Writing symbols) through a converted dictionary. Or you can makes changes to a converted dictionary, and then print it out with SignWriter's Print command.

NOTE - If you have an HP DeskJet or Epson-compatible printer, you need to convert a dictionary before you can print it, because the Dictionary Manager can't print out dictionaries on DeskJet or Epson printers.

1. To convert a dictionary, you need to start the Dictionary Manager. Type the following command at the MS-DOS prompt:

DICT

and press Return.

The startup message should appear on the screen after a moment. Below this appears the following command line:

Print Merge Convert Repair Info

2. To choose the Convert command, press 'C'. The following message appears below the command line:

Convert what dictionary?

3. Type the name of the dictionary to be converted (e.g. 001) and press Return. When the Convert command finishes, the following message appears:

Dictionary converted.

The converted file has the same name as the dictionary, but its file name ends with .SGN. It will appear in the file box the next time you start SignWriter.

NOTE - If a dictionary is too large to convert into a single Sign Writing file, it is converted into a series of files. For instance, converting a dictionary named LONG creates Sign Writing files named LONG.SGN, LONG2.SGN, LONG3.SGN, and so on.

4. To print a converted dictionary, start the SignWriter program. You will see that the converted dictionary file is now listed in the file box. Use SignWriter's Print command to print the dictionary file.

NOTE - If you have a Postscript or Hewlett-Packard printer, you may want to use the special page format for printing out converted dictionaries. For more information, see the section named Setting Up Print Options.

Repairing Dictionaries

The Dictionary Manager's Repair command lets you check a SignWriter dictionary for linked entries, which are a common symptom of a damaged dictionary file.

NOTE - For more information on linked dictionary entries, see "Damaged Dictionary" in the section named Things You Should Know About.

1. To check a dictionary, you need to start the Dictionary Manager. Type the following command at the MS-DOS prompt:

DICT

:

and press Return.

The startup message should appear on the screen after a moment. Below this appears the following command line

Print Merge Convert Repair Info

2. To choose the Repair command, press 'R'. The following message appears below the command line:

Repair what dictionary?

3. Type the name of the dictionary to be checked and press Return.

The next message to appear is "Checking dictionary". If the Repair command finds any linked dictionary entries, it prints out their names and indicates which of the entries was deleted to unlink the linked pair. If these messages appear, be sure to write down the names of all linked entries, as you will be responsible for re-entering their signs into the dictionary.

If the Repair command does not find any linked entries, it finishes with the message "Dictionary OK".

WARNING - If the Repair command displays garbage (i.e. random characters) for any of the names of the linked entries, this means that the dictionary is too damaged for the Repair command to successfully repair. While you may be able to salvage individual signs out of such a dictionary, it won't be reliable enough for subsequent normal use; it should therefore be deleted.

Dictionary Information

If you want to know how big a dictionary is, use the Dictionary Manager's Info command. It works much like the other commands, and it displays the number of signs stored in a dictionary, along with the dictionary's country code.

When you use the Info command, you can see that a single dictionary file stores up to 10,800 entries. Note, however, that the dictionary itself consists of two 5400 entry volumes, with all the entries from A-L going into the first volume, and all the signs from M-Z going into the second. This means, for instance, that you cannot store more than 5400 signs starting with 'A' in a single dictionary.

MACINTOSH NOTES

Although it is designed to work on IBM PC-compatible computers, SignWriter can be used on Macintosh computers. To use SignWriter on the Macintosh, you need to have a program named SoftPC Universal installed on your Mac. SoftPC is available in various flavors (such as SoftWindows); SignWriter works with all of them, but SoftPC Universal is the cheapest. SoftPC is available at Mac software stores.

Printing is not a problem, since SoftPC can make any Mac printer work like an Epson printer. However, you'll get better quality printing if you have a PostScript printer.

Because of a software problem in some versions of SoftPC, you may have to use the keypad cursor keys for cursor movement in SignWriter. The Mac's non-keypad cursor keys don't always work properly when used with the Alt and Control keys.

NOTE - For SignWriter to work well with SoftPC, you should have a Macintosh with at least a 68030 processor and a 640 x 400 dot screen. While SignWriter will run on slower and/or smaller-screen models such as the Mac Classic, the Sign Writing symbols will appear somewhat distorted, and the performance may be annoyingly slow.

SIGNWRITER COMMAND SUMMARY

Press Alt key + <first letter> for named commands (e.g. Alt-'O' for Open) Press Esc key to cancel commands

File Screen Commands

Open - open an existing file New - create a new file Print - print a file File - delete, rename, or export a file Directory - change the current file directory Setup - change the printer, country, or dictionary Quit - leave SignWriter PgDn key - scroll file box downwards PgUp key - scroll file box upwards

Edit Commands

Select	 select symbol or signs
Сору	- copy symbol or signs
Erase	- erase symbol or signs
Find	- search for symbols or signs
Replace	- replace signs
Margin	- remargin a paragraph
Quit	- close the file
Undo	- undo last edit command
Get	- get text from another file
Jump	- move to beginning or end of file
Next	- move to next line
Previous	- move to previous line
Adjust	- move group of symbols within a sign
Туре	- type signs, fingerspelling, or English
Dictiona	ry - enter sign dictionary
Alt-'?'	- show other commands
Space ke	y - start new sign or word
Return k	ey - add or split line
Delete k	ey - delete last symbol typed
Alt-Dele	te - delete line

Symbol Commands

N key - change symbol M key - cursor around symbol Comma key - mirror symbol '. Period key - resize symbol ? key - rotate symbol

Cursor Commands

arrow keys - move symbol or cursor Alt-arrow - move symbol or cursor quickly Ctrl-arrow - move symbols within a sign Ctrl-Home - center symbols within sign Home key - move to line start End key - move to line end Tab key - move to next sign PgDn key - move to next three lines PgUp key - move to previous three lines

Dictionary Commands

Copy - copy selected sign from text Erase - erase current sign Undo - undo copy or erase Alt-'W' - move cursor to other window PgDn key - show next sign PgUp key - show previous sign Return key - copy dictionary sign into text Escape key - leave dictionary

Shortcut Commands

Alt-'X' - type signs
Alt-'Y' - type fingerspelling
Alt-'Z' - type English
Alt-Space - start new sign (while typing English)
Alt-Return - start new line of English (within sign)
Shift-Tab - move to previous sign