TYPING TUTOR



Radio Shaek

TRS-80

COLOR COMPUTER TM

Typing Tutor



Typing Tutor Program: © 1980 The Image Producers, Inc. Licensed to Tandy Corporation. All Rights Reserved.

This applications software for the TRS-80 Color microcomputer is retained in a read-only memory (ROM) format. All portions of this software, whether in the ROM format or other source code form format, and the ROM circuitry, are copyrighted and are the proprietary and trade secret information of Tandy Corporation and/or its licensor. Use, reproduction or publication of any portion of this material without the prior written authorization by Tandy Corporation is strictly prohibited. The license for using this software is printed in the back of this manual.

Typing Tutor Program Manual:
© 1980 The Image Producers, Inc.
Licensed to Tandy Corporation
All Rights Reserved.

Reproduction or use, without express written permission from Tandy Corporation, of any portion of this manual is prohibited. While reasonable efforts have been taken in the preparation of this manual to assure its accuracy. Tandy Corporation assumes no liability resulting from any errors or omissions in this manual, or from the use of the information obtained herein.

Introduction

Typing Tutor is an instructional program that teaches you to type the alphabet, numbers and symbols. Consistent use of Typing Tutor will increase your typing ability whether you are a beginner or an experienced typist. You will build speed, and type more accurately because each lesson is created by the computer to exactly match your requirements.

The primary feature that makes Typing Tutor more valuable than a typing class or a series of regular lessons is the ability of the program to monitor your progress constantly. It uses this information to create new Letter Drills enabling you to learn new keys as you build speed on those you have already mastered.

Time Response Monitoring

Typing Tutor's Time Response Monitoring (TRM)* system monitors the keyboard sixty times a second. It is so responsive it can detect even the slightest pause that occurs. If you were to look at the keys, instead of keeping your eyes on the screen, the response would be monitored. The timing and memory abilities of your TRS-80 Color Computer are ideal for measuring and recording speed and accuracy.

^{*}Time Response Monitoring and TRM are registered trade marks of The Image Producers. Inc.

Typewriter and Computer Keyboards

There are some differences between your TRS-80 Color Computer and a standard typewriter of which you should be aware if you ever plan to use a standard typewriter.

The TRS-80 Color Computer displays all letters as capitals (or upper case), while a standard typewriter regularly types in small (or lower case) letters using the Shift key to make capital letters. You will only use the Shift key on your TRS-80 to type symbols. The locations of the keys that type symbols (= \pm) vary from computer keyboard to computer keyboard and from typewriter to typewriter. Every time you use a different type of keyboard, you will need to adjust yourself to the symbol location.

Conventional typists frequently use a lower case L (I) as the numeral (1) and the capital letter O as the numeral zero (\emptyset). Even though these letters and numbers look the same to you, they are not the same to the computer. Unlike some conventional typewriters, the computer does have a separate key for each numeral from one (1) through zero (\emptyset).

These differences are quite minor and once you are familiar with the keyboard of your TRS-80, whether you have used the program to learn to type or increase your speed, you will easily adapt to typing on any keyboard.

The Correct Hardware

Your computer, a natural teacher, takes full advantage of its capabilities. The TRS-80 Color Computer is equipped with a typewriter style keyboard. The only tools you will need are a TV and a Typing Tutor cartridge. Since you will be typing from material printed on your TV screen, it is important to see the characters clearly. Make sure there is no glare on the screen from lights or windows and that your computer is at a height comfortable for you; desk height or slightly lower will probably be the most comfortable.

Getting Started

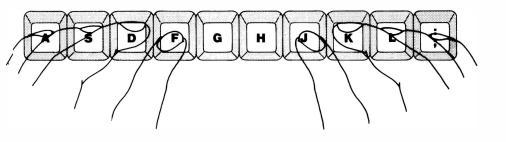
Before you proceed with the program, it is essential you realize the importance of not looking at the keyboard as you type. Train yourself to "glue your eyes to the screen" and concentrate on the characters you are typing. Each time you take your eyes off the screen, you lose time. You must learn to type by touch in the beginning if you want to develop speed and accuracy.

The program offers two different types of lessons, Letter Drills and Word Drills. When you are doing your Letter Drills, the computer will automatically insert new characters as you gain accuracy and speed. Only one new character is added at a time and your speed and accuracy is monitored before the computer allows you to proceed to another character. After practicing a few Letter Drills, you should try typing a Word Drill. The computer will select a list of random words made up from the letters you have already worked on in the Letter Drills. As you progress with the various exercises, the new letters you learn will be added to the Word Drills.

Home Keys

Your first Letter Drill will focus on the home keys which are A, S, D, and F. Position the fingers of your left hand lightly on these four keys. The home keys for your right hand are J, K, L, and ;. Place your right hand on these keys. Think of the home keys as "Home Base", as your fingers rest on these keys and reach out to the other characters on the keyboard.

Practice placing your fingers on the home keys and pressing them lightly. Only your fingertips should touch the keyboard. The palms of your hands should not rest on the front of the computer. Remember your fingers are going to be reaching to the other keys and the further they have to reach the less speed you will gain. Before you start typing, memorize the locations of the home keys.



Selecting a Program

Insert the cartridge in the slot on the right side of the computer. Now turn on the computer pressing the button on the back in the lower left-hand corner.

The screen will show:

- Letters
- Numbers
- 3. Symbols

Select keys to learn (1-3)

When you press the appropriate number you will select the characters you want to practice. Pressing 1 selects Letters, 2 selects Numbers and 3 selects Symbols. If you already know how to type the alphabet, you may want to start with 2 or 3.

Letter Drill

Begin your first Letter Drill by pressing 1 now. The screen will show:

- Letter Drill
- 2. Word Drill

Select (1-2)

To begin your first typing lesson, press 1 again for Letter Drill. The screen will show:



The heading, Fast represents those keys you are typing at a speed of approximately 25 words per minute. When you do this, the character will move under the Fast column.

Under the heading, Lesson Keys, are the letters ASDF which are the home keys for the left hand and the first Letter Drill you will practice. After you consistently type a letter at an acceptable speed, it will move under the Fast column. A new character will be added under Lesson keys and to the Letter Drill one at a time.

The column headed New represents those characters you will learn as you continue with the Letter Drill. It contains the rest of the characters on the keyboard. When you have mastered a character, and it moves under the Fast column, the last character listed under the New column will be moved into the Letter Drill for you to practice.

The small square under the S is called the cursor. This indicates the character you should type and will move from one character to the next as you type.

Typing Your First Drill

Look at the two groups of four letters in the center of the screen and concentrate on them. Type the first four letters as they are indicated by the moving cursor, **keeping your eyes on the screen**. Press the Space Bar, located just underneath the bottom row of keys, with either thumb. There is only one space between each group of words so only press the space bar one time. If you accidentally press the Space Bar more than once, or when you should have pressed the **ENTER** key, it will be scored as an error.

Now type the last four letters and press the **ENTER** key without moving your hands from the home position. Press the **ENTER** key with the little finger on your right hand without lifting your other fingers from the home keys. It may feel awkward at first but it's important to master this habit so you don't have to look at your hands everytime you end a line. The **ENTER** key which is similar to a carriage return on a conventional typewriter should be pressed after each completed line is typed.

Continue each successive drill in the same way as it reappears on the screen for you to practice again. It will repeat itself until you have practiced ten Letter Drills.

Letter Drill Evaluation

After you have completed the first Letter Drill and pressed **ENTER**, the computer will evaluate your typing as shown in the following example. (W.P.M. stands for Words Per Minute).

Fast	Lesson	New										
Keys AS DFJK	*	=	!	(")	#	,	\$			
		?	>	<	+	-	:	/	6	5	Ø	1
		9	2	8	3	7	4	@	Z	,	Χ	
		С	Ν	В	М	С	Υ	Ţ	Н	G	Р	Q
		0	W	٧	R	I	Ε	;	L			
	ERRORS 5											

W.P.M. 21

- Letter Drill
- 2. Easier Letter Drill
- 3. Harder Letter Drill
- 4. Word Drill Select (1-4)

Advancing to New Keys

Your first Letter Drill included only the home keys that you typed with the appropriate fingers. If your Evaluation included a letter under the Fast column, the computer has already promoted you and you have gone on to a new character in your Letter Drill. If there was no letter under the Fast column and the original home key letters were listed under Lesson Keys, you should practice the initial Letter Drill again. However, it is not necessary to practice the home key letters over and over before you proceed to a Word Drill as the Word Drill will be composed of words using the keys from the Letter Drill you have been working on.

Each time a new key is added, it will be in conjunction with the home key that is typed with the same finger. For example when the "E" key is introduced, the Letter Drill will also contain the home key "D". Take a look at where your fingers are positioned on the home key row and you will see that the middle finger of your left hand is on the "D" key. The "E" key is directly above the "D" key so it will feel natural for that finger to type "E".

New keys should be typed by moving the appropriate typing finger only. While you are typing characters that are not on the home row, keep your remaining fingers on the home keys and you will develop the ability to locate all of the keys by touch.

A diagram is included (see page 4) to help you remember the appropriate finger for each key. Keep this diagram next to your computer and refer to it if you cannot remember where the next key is. Do not look at your fingers.

Practicing Drill Options

After you have completed your first Letter Drill and evaluation, the computer will print another selection for you at the bottom of the screen. You may now decide if you want to practice another Letter Drill, an Easier Letter Drill, a Harder Letter Drill or a Word Drill. Select 1 for Letter Drill if you want to continue to the next Drill at the same rate of progression. You should select either this option or 4 for Word Drill as it indicates all is fine and you want to continue your Drills at the present rate of speed.

Press 2., Easier Letter Drill, if you want to quickly learn the locations of all the keys. By allowing a slower response time, the computer will let characters enter the Fast category more easily and introduce more New characters into the Letter Drill to replace them. If you press 2 after your first ten Letter Drills the computer will require a speed of fewer words per minute in order to move a key to the Fast category. To continue slowing the required rate of response, press 2 after every ten Drills. The program will quickly expand to include all the letters of the alphabet, with emphasis on the keys you type more slowly.

Press 3 , Harder Letter Drill, to build your typing speed by requiring a faster response time before a letter is shifted from the Lesson key category to the Fast key category. The effort is for you to gain speed by giving you additional practice on each of the keys. To continue raising your typing speed, press 3 after every ten Letter Drills.

If you would like to practice the keys you have just been learning rather than return to a Letter Drill, press 4 for Word Drill.

Word Drill

You can select the Word Drill by either pressing 4 at the end of a group of Drills or by pressing 2 (see page 3) after you choose Letters, Numbers, or Symbols at the beginning of the program. When you select this option, the program builds a Word Drill using the letters you know and the letters in your current Letter Drill. If you ask for a Word Drill at the beginning of the program, the program will consist of all the keys in the category you select.

Start typing the words as soon as they appear on the screen. Press the Space Bar between each word and press **ENTER** at the end of each line. As you type, your characters will appear on the screen under the computer generated characters.

If you make a mistake, the computer will make a low "beep". If you have made a spacing error and your letters aren't directly underneath the corresponding

characters on the computer, it will continue to beep. If this happens, type the letter that is directly above the cursor.

When you have completed typing the Word Drills, press **ENTER** and the computer will evaluate your performance.

Word Drill Evaluation

Below is an example of an evaluation after a Word Drill has been practiced:

KEYS MISSED: AGVN SPACE ENTER

SLOW KEYS: ZQU

ERRORS: 7 W.P.M.: 35

- Same Letter Drill
- 2. Easier Letter Drill
- 3. Harder Letter Drill
- 4. Word Drill Select (1 4)

You can judge your progress by the evaluation showing your errors and speed. While most typing tests subtract for errors in determining your speed, Typing Tutor does not, so the words per minute figure may be higher than you would get on a standard typing test.

Typing accuracy, not just speed, is important if you want to communicate your ideas quickly and clearly. If your evaluation indicates that you are making more than three or four errors, you may be pushing too fast. Try typing another Word Drill, focusing on the characters and typing more carefully. If you continue to have problems, you may want to select option 3 Harder Letter Drill in the lesson choices to get more practice on all keys. (See Practicing Drill Options, page 10.)

Shift Key

The Letter and Word Drills for learning the Numbers and Symbols operate the same as those for learning Letters with one exception. It is necessary to press the **SHIFT** key for many of the symbols. To determine the symbols requiring the **SHIFT** key, look at the keyboard. On some keys you will see more than one character. The lower character on these keys is typed without the Shift key; the upper characters require use of the **SHIFT** key.

There are two <code>SHIFT</code> keys, at the lower right- and left-hand corners of the keyboard, both serve the same purpose. When you wish to type a symbol that requires using the <code>SHIFT</code> key, for example "\$", first press the <code>SHIFT</code> key with the little finger of the hand you won't be using to type the symbol. In the case of the "\$", press the <code>SHIFT</code> key with the little finger on your right hand. While holding the <code>SHIFT</code> key down, press the desired key with the appropriate finger. Release both the Shift key and the symbol key and continue typing. Repeat this process each time a shift key character is required.

Break Key

If at any time during a lesson you wish to interrupt a Drill or return to another Drill, press the **BREAK** key located in the upper right corner of your keyboard.

Pressing **BREAK** during any Drill will end the Drill and offer you the choices of adjusting the level of difficulty of a Letter Drill or changing to a Word Drill. Pressing the **BREAK** key twice will return the program to the screen where you select a Letter Drill or Word Drill. Press **BREAK** a third time and you will return to the first screen in the program where you select the type of Drill you prefer — Letters, Numbers, or Symbols.

Continuing Your Lessons

When you return to your Typing Tutor for successive lessons, you will see that it quickly discovers the keys you know and the keys you don't. Just begin with the Letters, Numbers or Symbols and the program will rapidly adjust to your skill level. You can personalize your Drills even more by adjusting the response time ten percent in either direction, using the options at the end of every ten lessons.

The program is initially set up so that you need to type consistently at 25 words per minute. If you want to begin at an easier level, go to the lesson and press **BREAK** immediately, then select **2**, Easier Letter Drill. This will decrease the speed you are required to type before a character will be moved to the Fast column. You may press the **BREAK** key and the **2** key several times until you

are at a speed where you feel comfortable. The same procedure can be used to increase your speed by pressing the **BREAK** key and **3** for a Harder Letter Drill.

Word List

The following words will be used for the random word drills once the letter at the left has been used in a letter drill. All the words on or above that line will appear in the word drill.

Letters	Words			
ASDF	DAD	SAD	FADS	
J	JA	JAFFA	AD	ADD
K	KAD	SKADS	ASK	SAKS
L	LADS	LASS	FLASK	SAL
;	A;	DAD;	LADS;	SAD;
E	FADE	SEE	FEED	JADE
1	SAIL	FAIL	JAIL	FILL
R	RAIL	RIFLE	JERK	JARS
U	JULIE	FURL	FUSE	FULL
W	WALL	WAR	WIRE	WIFE
0	ROOF	ORE	DOOR	JOKE
Q	QUAIL	QUARK	QUILL	AUUA
P	PAD	PALS	PAIRS	RAP
G	GASP	GRIP	GRASS	GOLD
Н	HIPS	HURL	HARE	HERE

Words			
THE	THERE	HAT	STAR
YOU	WARY	JOY	TOYS
VAIL	VERY	WAVE	OVER
MAID	MAD	MIRE	ARMY
BALL	BILE	JIBE	BURL
THEN	THING	BRING	RING
CAT	CAD	COLT	CORK
PH.D	M.D.	P.S.	O.K.
EXIT	EXTRA	EXXON	XEROX
AND,	BYTE,	COMA	,CAL
ZERO	ZIP	ZOOM	JAZZ
@	@\$.95	@25	@.44
4	44	4.4	@.44
7	47	747	774
4.73	33	737	3.74
8	88	3.874	4.88
22	82	4.2	2.47
9	89	94.3	7.9
11	1.74	91	741
100	4Ø3	Ø.4	7Ø8
6	4Ø6	6.895	76
55	1945	5.95	5,000
5/2	10/5	8/4	9/3
1:3Ø	4:45	3:20	9:02
5–2	10-5	9-1	45-25
4+8	1Ø+3	53+89	4+77
	THE YOU VAIL MAID BALL THEN CAT PH.D EXIT AND, ZERO @ 4 7 4.73 8 22 9 11 100 6 55 5/2 1:30 5-2	THE YOU WARY VAIL VERY MAID MAD BALL BILE THEN THING CAT CAD PH.D M.D. EXIT EXTRA AND, BYTE, ZERO ZIP @ @\$.95 4 44 7 47 4.73 33 8 88 22 82 9 89 11 1.74 100 403 6 406 55 1945 5/2 10/5 1:30 4:45 5-2 10-5	THE YOU WARY JOY VAIL VERY WAVE MAID MAD MIRE BALL BILE JIBE THEN THING BRING CAT CAD COLT PH.D M.D. P.S. EXIT EXTRA EXXON AND, BYTE, COMA ZERO ZIP ZOOM @ @\$.95 @25 4 44 4.4 7 47 747 4.73 33 737 8 88 3.874 22 82 4.2 9 89 94.3 11 1.74 91 100 403 0.4 6 406 6.895 55 1945 5.95 5/2 10/5 8/4 1:30 4:45 3:20 5-2 10-5 9-1

Letters	Words			
<	1<2	2∅ <16	8 < 29	5 < 8
>	4 > 1	35≯29	9>4	7 > 3
?	WHAT?	WHY?	WHEN?	HOW?
\$	\$1.95	\$1000	\$8.73	\$7.48
,	CAN'T	WON'T	DON'T	O'C.
#	#1	#452	25#	97#
	ABS(COS(SIN(TAN(
"	"CAT"	"OH"	"NO"	"HI"
)	(NO)	(SO)	(YES)	(ME)
!	STOP!	GO!	HELP!	OUCH!
%	45%	95%	4.3%	100%
&	&	&	&	&
=	2+3=5	4+3=7	8+1=9	6+3=9
*	1 * 9 = 9	2*2=4	3*3=9	2*3=6

Sentences and Their Word List

The following words will be used to create sentences by selecting one word from each group. Sentences will replace word drills about a quarter of the time after the student has studied the alphabet.

Group Names	Words JANE BILL	LOUISE PAT	MARY LEAH	DICK AL	
Verbs	DANCED JUMPED	RAN SAT	WALKED PLAYED	LOOKED SWAM	
Prep	ON AT THE	OVER IN MY	BY ON HER	NEAR THE HIS	FOR OUR OUR
Adj	OLD LONG	NEW FAST	BLUE COLD	НОТ	RED
Nouns	T.V. TREE	HOME CAR	BOOK POOL	BOAT	Z00



- A. Radio Shack grants to CUSTOMER a non-exclusive, paid up license to use on CUSTOMER'S computer the Radio Shack computer software received. Title to the media on which the software is recorded (cassette and/or disk) or stored (ROM) is transferred to the CUSTOMER, but not title to the software.
- B. In consideration for this license, CUSTOMER shall not reproduce copies of Radio Shack software except to reproduce the number of copies required for use on CUSTOMER'S computer (if the software allows a backup copy to be made), and shall include Radio Shack's copyright notice on all copies of software reproduced in whole or in part.
- C. CUSTOMER may resell Radio Shack's system and applications software (modified or not, in whole or in part), provided CUSTOMER has purchased one copy of the software for each one resold. The provisions of this software License (paragraphs A, B. and C) shall also be applicable to third parties purchasing such software from CUSTOMER.

IMPORTANT NOTICE

ALL RADIO SHACK COMPUTER PROGRAMS ARE LICENSED ON AN "AS IS" BASIS WITHOUT WARRANTY.

Radio Shack shall have no liability or responsibility to customer or any other person or entity with respect to any liability, loss or damage caused or alleged to be caused directly or indirectly by computer equipment or programs sold by Radio Shack, including but not limited to any interruption of service, loss or business or anticipatory profits or consequential damages resulting from the use or operation of such computer or computer programs.

RADIO SHACK A DIVISION OF TANDY CORPORATION

U.S.A.: FORT WORTH, TEXAS 76102 CANADA: BARRIE, ONTARIO L4M 4W5

TANDY CORPORATION

5140 NANINNE

AUSTRALIA 200-316 VICTORIA ROAD RYDALMERE N.S.W. 2116 BELGIUM

PARC INDUSTRIEL DE NANINNE

BILSTON ROAD WEDNESBURY WEST MIDLANDS WS10 7JN