The Dvorak Simplified Keyboard!!!

The Dvorak Keyboard

1. Stand this Zine up like a tent next to your computer.
2. Refer to the key-map above as you learn to type Dvorak!
3. Visit our site: DVzine.org for typing tutorials, FAQs, help files, and much more!!!

FREE! DVzine.org STREET TEAM EDITION

The Dvorak Zine

"Changing the world... one keyboard at a time!"

Narrated by

Ale, Frunch, & GCB

AOEUUHIDTNS-
;QJKXBmWvz

PYFGCRL"
Table of Contents

I'll start by talking about the history of the typewriter and how the first keyboard was developed.

Next, I'll explain the Dvorak simplified keyboard layout and some of its benefits!

Then I'll give you all the information you'll need to start typing Dvorak today!

Dedicated to Dr. August Dvorak 1894 - 1975

Please contact us if you have any questions about learning Dvorak.
Also, we'd love to hear your stories about learning and typing Dvorak!

www.DVzine.org

Typing tutors, help files, FAQs, tutorials and much more to help you set up and learn Dvorak.
Also ordering and distribution information!

Citations

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1.6 - U.S. Patent # 2,926,65 http://patft.uspto.gov/netahs/html/search_bak.html
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11.1 - see 10.9 / 11.2 - see 9.1-9.2, 9.9
12.3 - 12.4 - "The Curse of QWERTY" by Jared Diamond, Discover Magazine Vol. 18 No. 4 April 1997
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13.5 - see 7.3-7.5 / 13.9 - see 12.3-12.4

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WE REALLY HOPE WE’VE CONVINCED YOU TO GIVE DVORAK A TRY!
WE KNOW SOMETIMES IT’S HARD TO LEARN NEW THINGS.

LEARNING DVORAK CAN BE A LOT LIKE ALL THOSE OTHER THINGS YOU KEEP MEANING TO DO...

BIKING TO WORK BUYING LOCAL PRODUCE QUITTING SMOKING

BUT LEARNING DVORAK IS REALLY WORTH IT!

HAVE YOU EVER REALLY LOOKED AT A KEYBOARD THOUGH?

I MEAN, HOW DID WE COME UP WITH SUCH A RANDOM ARRANGEMENT OF KEYS?

WELL, IT ALL BEGAN WITH AN INVENTOR NAMED CHRISTOPHER LATHAM SHOLES.

IN 1868 SHOLES SECURED A PATENT FOR HIS NEW INVENTION, THE "TYPWRITER."

HIS PROTOTYPE, AS YOU’D EXPECT, HAD THE KEYS ARRANGED ALPHABETICALLY.

PLUS, WITH ALL THE TYPING WE DO THESE DAYS A FEW EXTRA WORDS PER MINUTE MIGHT GIVE YOU SOME EXTRA TIME TO DO THE THINGS YOU LOVE.

VIVA LA DVORAK

WELL, THAT’S OUR ZINE!

TYPING IS REALLY IMPORTANT THESE DAYS.

WITH TECHNOLOGY THE WAY IT IS, MOST OF US TYPE EVERY SINGLE DAY.

YOUR HANDS ARE IMPORTANT YOU SHOULD TAKE CARE OF THEM!

IT COULD BE THE DIFFERENCE BETWEEN WORKING IN YOUR GARDEN WHEN YOU’RE 70 OR WEARING WRIST BRACES WHEN YOU’RE 40.

WHEN THE USER STRUCK A KEY, IT SWUNG A "TYPE BAR" UP TO THE PAPER, STAMPING IT WITH A LETTER OF PRINTING TYPE.

BUT THESE ORIGINAL TYPE BARS DIDN’T WORK VERY WELL BECAUSE THEY FELL SLOWLY BACK INTO PLACE BY GRAVITY.

*PUN INTENDED!!!
As a result, when two neighboring keys were struck in rapid succession, the typewriter would jam. But instead of improving the type bars’ lever design, Sholes became preoccupied with rearranging the keys. Hmm... that’s going to be a problem!

If I can separate these keys on the keyboard, they won’t jam!

Excited by the potential of his invention, Sholes enlisted the help of a machinist, Carlos Glidden and a business man, James Densmore.

Their main goal for improving the next typewriter model was to physically separate keys that were frequently struck in sequence.

Their main goal for improving the next typewriter model was to physically separate keys that were frequently struck in sequence.

Densmore’s brother, Amos, an educator, prepared data on common letter pairs, or “digraphs.”

Using this data, Sholes moved the keys around experimentally while trying to separate as many digraphs as possible.

As you can see here...

This is kind of fun!

Totally random.

He decided his new keyboard would not need a number 1 key. They can just type an 1 instead!

And supposedly Densmore suggested he put all the letters in the word “typewriter” on the top row.

Ha ha! Good idea!

It’ll all the salesmen later on...

Charlotte: I learned Dvorak by cutting out little pieces of paper with all the letters on them and taping them to my keyboard.

It seemed like I learned Dvorak really fast. A lot faster than QWERTY.

Sam: Maybe it was wayy faster learning Dvorak because it was my second layout? Or because it makes more sense? Probably both.

And I can totally still type QWERTY.

Nobody worries that their English gets worse because they learned Spanish! I can still “speak” QWERTY even though Dvorak is now my “native tongue.”

Pete: I consider typing Dvorak on my machine a security measure.

I use Dvorak at work and if someone tries to type on my computer they get a bunch of gibberish!

Gwyn: In college I had this ten page paper to write. I decided to teach myself Dvorak by typing the whole paper with it.

It took longer, but it was worth it!

At the end of the year I typed my entire senior honors thesis in Dvorak with ease!
I was a quick “hunt-and-peck” QWERTY typer. I could do about 45 words per minute.

Then, one fall break at college, I decided to learn Touch Typing with Dvorak.

After nine days I was typing 30 words per minute and after two weeks I was typing 60! Thus was created...

The Sholes keyboard layout—also known as “QWERTY” (because of the first six letters on the top row)

I’ve now been happily typing Dvorak for seven years, at about 70 words per minute!

Frunch is the real speed demon though!

I can type about 95 words per minute with Dvorak!

Now hold on for a second. I want to reinforce something here.

Most QWERTY critics will tell you that Sholes rearranged the keyboard to slow down “all the people” who were typing “too fast.”

And yes, I can still type QWERTY at about 90 words per minute.

“Grr!”

“Aggh!”

“Now listen to similar success stories from our real friends!”

“You said it Frunch!”

“When Sholes rearranged the keys he didn’t eliminate the jamming problem but he greatly reduced it. Enough so that his invention could now actually be used to type! Can you believe that?! QWERTY is designed to be inefficient!!!

Even I believed this before doing the research for this zine:

But check it out, there were no typists to slow down! Sholes developed QWERTY before typewriters were even available to the public!
With the completion of the new prototype, Sholes’s team turned from design to production. But Sholes was no businessman, so after five years of working on the typewriter he sold all his rights to Densmore.

Densmore went straight to Remington, the famous gun manufacturer. And so, in 1873 the “Sholes & Glidden typewriter” was released to the public.

The type bars struck the paper from underneath, so you couldn’t even see what you were typing! The stand design based on Remington sewing machines!

As a result, the first typewriter did not sell very well. From 1873 to 1878, Remington only sold 5,000 typewriters in the U.S.A.

Most of the other good consonants are on the right side of the top row. Most of your punctuation marks are on the left side of the top row.

And then all that other stuff we don’t use as much is on the hard-to-reach bottom row.

You can find typing tutors and exercises plus all kinds of other helpful stuff at our website.

Try writing a short email in Dvorak. It takes a bit of concentration at first. But pretty soon it will become second nature to you!

www.DVzine.org

“Changing the world... one keyboard at a time”
As with most things, the easiest way to learn Dvorak is to start typing Dvorak! "But Gabe!" "How will I know where the letters are?"

"I can't look at the keyboard, it's got QWERTY all over it!"

"Cough!"

Well Alec, if you've ever taken a typing class, you'll know that you're not supposed to look at your fingers. "I'm not??!

You may have noticed that the back of this zine has a nice big Dvorak key map on it!

Stand up this zine like a tent next to your keyboard. Then refer to this map as you teach yourself the layout!

Hmm... where is "E"? Aha! There it is.

"But Gabe!" "Okay Alec... enough with the script!"

"That's so easy!"

Heh... cough! Remember! Start with the home row! Vowels are on the left, the most popular consonants are on the right.

But then, in 1878 the Remington number two was released! The no. 2 had lots of improvements, including the ability to see what you were typing!

The no. 2 also introduced the shift key, allowing upper and lower case letters. The no. 2 also reincorporated the number 1 key.

Most importantly though, the no. 2 had spring mounted type bars which quickly snapped back into place after typing.

KLAK!

This eliminated key jams for all but the fastest typers!

And since his original layout was developed to combat the very problem, Sholes now designed a new, more logical layout.

But Sholes found that Remington had no desire to alter his old invention.

You see, by 1900 Remington was selling 100,000 typewriters a year.
AND EVERY SINGLE ONE OF THOSE MILLIONS OF TYPEWRITERS WAS SOLD WITH THE QWERTY KEYBOARD LAYOUT!!!

PEOPLE ALL ACROSS AMERICA BEGAN MEMORIZING THIS RANDOM ARRANGEMENT OF KEYS!

PRETTY SOON PEOPLE HAD DEVELOPED METHODS TO TOUCH TYPE WITH ALL TEN FINGERS!

IT WAS NOT UNTIL 30 YEARS LATER THAT SOMEONE REALLY TRIED TO CHANGE THE MODERN KEYBOARD LAYOUT...

AND BY THEN QWERTY HAD SUNK ITSELF INTO THE AMERICAN SUBCONSCIOUS.

DO YOU SEE HOW FRUSTRATING THIS IS?? RIGHT WHEN QWERTY BECAME OBSOLETE IT BEGAN TO BE WIDELY DISTRIBUTED!!!

IF NOT, PLEASE FEEL FREE TO EMAIL ME WITH ANY QUESTIONS ABOUT SETTING UP DVORAK ON YOUR COMPUTER!

HOW'S THAT FOR PERSONAL ATTENTION?

IF YOU USE LINUX

...YOU'RE AWESOME!!

THERE ARE LOTS OF WAYS TO SET UP DVORAK IN LINUX. HERE'S ONE SIMPLE METHOD...

IN XWINDOWS, RUN "SETXKBMAP DVORAK" AND "SETXKBMAP US" TO SWITCH BACK AND FORTH

~DATE~ setxkbmap dvorak
~DATE~ setxkbmap us-

BOTH KDE AND GNOME HAVE EASY KEYBOARD SWITCHING FUNCTIONS. CHECK THEM OUT!

OKAY! PF EW! DID EVERYONE MAKE IT?

IF YOU NOW KNOW WHY IT'S AWESOME AND YOU'VE GOT IT ALL SET UP ON YOUR

COMPUTER...

NOW IT'S TIME TO TYPE SOME DVORAK!

FRUNCH!

TAKE OVER FOR ME. I'M GETTING SO DEPRESSED.

YOU NOW KNOW WHY IT’S AWESOME AND YOU’VE GOT IT ALL SET UP ON YOUR COMPUTER...

CLAPS

DVzine@gmail.com
IF YOU USE A MAC

USE THESE DIRECTIONS!

1. SELECT "SYSTEM PREFERENCES" FROM THE DOCK.
2. NEXT, SELECT THE "INTERNATIONAL" ICON.
3. UNDER THE "INPUT MENU" TAB YOU WILL FIND A WHOLE SLEW OF LAYOUTS.
4. SELECT "DVORAK" AND YOU ARE ALL SET!
5. A SMALL MENU WILL APPEAR UP NEXT TO YOUR CLOCK. YOU CAN USE IT TO SWITCH BETWEEN QWERTY AND DVORAK.

OR, USING OLDER MAC OS VERSIONS...

1. IN THE APPLE MENU FIND THE "CONTROL PANELS"!
2. SELECT THE "KEYBOARD" CONTROL PANEL
3. THEN FOLLOW STEPS 3, 4 & 5 FOR MAC OS X!
4. ALSO WITH MACS YOU CAN SET UP TOGGLE BETWEEN DVORAK AND QWERTY

LADIES AND GENTLEMEN, PLEASE MEET DR. AUGUST DVORAK!

A DISTANT RELATIVE OF THE FAMOUS CZECH COMPOSER ANTONIN DVORAK!

DR. DVORAK WAS AN EDUCATIONAL PSYCHOLOGIST AND PROFESSOR OF EDUCATION AT THE UNIVERSITY OF WASHINGTON, IN SEATTLE.

IN 1932, WITH FUNDS FROM THE CARNegie FOUNDATION, DVORAK SET OUT TO CREATE A NEW KEYBOARD LAYOUT BASED ON RESEARCH AND LOGIC.

NOT ONLY DID HE RESEARCH LETTERS, DIGRAPHS AND WORDS, BUT HE ALSO EXAMINED ACTUAL TYPISTS AND THEIR PRACTICES.

LATER THAT YEAR DVORAK FILED A PATENT FOR THE DVORAK SIMPLIFIED KEYBOARD LAYOUT.

Hooray!

Um... cough? So let's take a look at the LOGIC behind DVORAK's LAYOUT.

The foundation of the design is based on the "home row"
THE "HOME ROW" IS THE ROW OF KEYS THAT THE TYPIST'S FINGERS ARE OVER IN THE RESTING POSITION.

FINGERS START HERE

THE TYPIST THEN "REACHES OUT" FROM THE HOME ROW TO STRIKE THE OTHER "OUTER KEYS."

RESTING REACHING

IF YOU ARE TYPING QWERTY ONLY 31% OF YOUR KEYSTrokes ARE ON THE HOME ROW.

WITH DVORAK, THOUGH, 70% OF YOUR KEYSTrokes ARE ON THE HOME ROW!

HOW IS THAT POSSIBLE?

WELL, AS YOU KNOW, QWERTY WAS DEVELOPED EXPERIMENTALLY TO OVERCOME MECHANICAL PROBLEMS, SO THE HOME ROW IS JUST AS RANDOM AS THE REST OF THE LAYOUT!

DVORAK HOWEVER, PUT A GREAT DEAL OF THOUGHT INTO THE DESIGN OF HIS HOME ROW.

DVORAK PUT ALL OF THE MOST COMMONLY TYPED CONSONANTS ON THE HOME ROW, AS WELL AS ALL OF THE VOWELS.

A O E U I D H T N S

NOW LET'S SEE... WHICH LETTERS ARE USED THE MOST?

THIS WAS SMART, BECAUSE EVERY WORD HAS AT LEAST ONE VOWEL IN IT!

IF YOU USE WINDOWS
Use THESE DIRECTIONS.

USING WINDOWS XP...

1. Click on "START" and find the "CONTROL PANEL UNDER "SETTINgS.""  
   Settings > Control Panel > Run...  
   All Programs > Control Panel  
   http://Dvorak.org

2. Select the "REGIONAL CONTROL PANEL."  
   Regional and Language Options
   Regional Options

3. In the "LANGUAGES" Tab, click the "DETAILS" button.
   Language: Danish
   Keyboard Layout:
   United States-Dvorak

4. Then click "ADD" and select Dvorak from the options.
   Installed Services
   "Add" the service that you want for each input language shown in the list. Use the "Add" and "Remove" buttons to modify this!
   English (United States)
   English (United States - Dvorak)

5. Hit "APPLY" and "OK" and a blue icon will appear by your clock which lets you switch from Qwerty to Dvorak.

OR, USING OLDER WINDOWS VERSIONS...

1. First follow step 1 for Windows XP and find the "KEYBOARD" CONTROL PANEL.

2. In the "LANGUAGES" Tab, click "ADD."
   - Speed
   - Language
   - Installed Languages and layouts
   - English (United States)
   - Add Properties Remove

3. You can choose any language (we use Panish.) just make sure you set the "properties" to "UNITED STATES-DVORAK"

4. Then follow step 5 for Windows XP and you’re all set!

ALSO: In windows, you can set up
ALT + SHIFT
To toggle between Dvorak and Qwerty.
IT'S JUST THAT EASY!

WELL... FOR THE COMPUTER

BUT ACTUALLY, IT'S NOT TOO HARD FOR US HUMANS EITHER!

BECAUSE DVORAK IS AN OFFICIALLY RECOGNIZED KEYBOARD LAYOUT IT NOW SHIPS WITH EVERY PERSONAL COMPUTER!

HOORAY FOR THE ANSI!

IT DOESN'T MATTER IF YOU ARE USING A MAC, WINDOWS OR EVEN RUNNING LINUX! DVORAK IS ALREADY ON YOUR COMPUTER RIGHT NOW!

YOU JUST HAVE TO SET IT FREE!

OR, WELL... SET IT UP!

BUT I CAN SHOW YOU HOW TO DO THAT! IT'S NOT TOO DIFFICULT...

SERIOUSLY FOLKS, GABE IS PRETTY GOOD AT EXPLAINING THIS STUFF. IT'S HOW HE MAKES HIS LIVING!

HEH... COUGH! THANKS ALEC.

OKAY, NOW PLEASE TAKE THIS ZINE OVER TO YOUR COMPUTER!

IN FACT, IF YOU USE ONLY THE LETTERS ON THE DVORAK HOME ROW, YOU CAN TYPE MORE THAN 3,000 WORDS!

WITH THE QWERTY HOME ROW YOU CAN ONLY TYPE ABOUT 300 WORDS.

SEE, THERE IS ONLY ONE VOWEL ON THE QWERTY HOME ROW.

ASDFGHJKL;

AND SEMI-COLON IS ON THE HOME ROW!!??

WELL I MEAN, COME ON! HOW OFTEN DO YOU TYPE A SEMI-COLON?? IT'S A WASTED KEY! ON THE HOME ROW NO LESS!

OKAY, OKAY. SORRY I INTERRUPTED.

AUGH... WHERE WAS I?

OH, RIGHT! THE HOME ROW

WELL, BY KEEPING 70% OF THE KEYSTROKES ON THE HOME ROW, DVORAK REDUCES FINGER MOVEMENT BY A FACTOR OF THREE!
AND THAT REDUCTION IN FINGER MOVEMENT MEANS MORE COMFORTABLE AND ERGONOMIC TYPING.

THINK ABOUT IT!

WITH QWERTY YOU START BY PLACING YOUR FINGERS ON THE HOME ROW...

BUT FIRST, LET’S WRAP UP THE HISTORY OF THE KEYBOARD, BRINGING IT INTO THE PRESENT DAY...

THEN YOU SPEND 69% OF YOUR TIME REACHING FOR KEYS THAT ARE NOT ON THE HOME ROW.

THAT’S WHY SO MANY QWERTY TYPISTS DEVELOP REPEATED STRESS INJURIES? OUCH!

QWERTY IS SIMPLY UNCOMFORTABLE TO TYPE!

COMPUTERS ARE GREAT!

AND NOT ONLY BECAUSE THEY ARE IMPOSSIBLE TO JAM!

COMPUTERS ARE ALSO HIGHLY ADAPTABLE.

WITH DVORAK THOUGH, YOU PLACE YOUR HANDS ON THE HOME ROW AND THEY STAY THERE FOR 70% OF YOUR KEYSTROKES.

BUT COMFORT IS NOT THE ONLY ADVANTAGE OF DVORAK, IT ALSO LETS YOU TYPE FASTER AND MORE ACCURATELY.

TO CHANGE THE KEYBOARD LAYOUT ON A TYPEWRITER, YOU'D HAVE TO PHYSICALLY CHANGE ALL OF THE LETTERS ON THE TYPE BARS!

BUT WITH COMPUTERS IT CAN ALL BE DONE SUPER EASILY WITH A PIECE OF SOFTWARE!

ONE WAY DR. DVORAK ACHIEVED THIS WAS BY TAKING ADVANTAGE OF VARYING FINGER STRENGTHS.

DR. DVORAK ADJUSTED HIS LAYOUT SO THAT THE MOST POPULAR LETTERS ARE IN THE MIDDLE, WHILE THE LESSER-USED LETTERS ARE PUSHED TO THE OUTSIDE CORNERS.

LIKE THE SEMI COLON!

WHAT A PAIN!

WHEN YOU PUSH A KEY ON THE KEYBOARD, THIS SOFTWARE TELLS THE COMPUTER WHICH CHARACTER SHOULD BE DISPLAYED.

HERE MR. SOFTWARE, READ THIS INSTEAD!

HE HIT THE SEMI COLON!

HERE! HA!

MORE!

WAIT! HE’S HITTING THE SAME KEY BUT NOW IT’S THE LETTER “S”!

MR. SOFTWARE

DVORAK
In 1982, seven years after his death, Dr. Dvorak's simplified keyboard layout was officially recognized by the American National Standards Institute.

That at least made sure that Dvorak would not be forgotten.

During his research, Dr. Dvorak also discovered that people can type much faster when they alternate between hands.

You can easily see this for yourself.

Klak klak klak

HMM!

Take one finger and tap it on a table as fast as you can.

Tap tap tap

It's so frustrating though! GCB! It's a better layout and people still don't use it!

Now take one finger from each hand and tap them alternately.

Tap - a - ta tap - pitty tap - tap - a - ta!

See?

So Dvorak has all of the vowels under your left hand...

But there is still hope! Frunch!

New people are learning about Dvorak every day!

Cough

Cough

And all of the most common consonants under your right.

That practically guarantees at least one alternation per word.

Let's take an example...

Hey Alec, what's something you type every day?

Well, I'll let you try to convince them.

Thanks, Frunch!

Hi, my name is Gabe Carleton-Barnes.

I'm going to show you how to start typing Dvorak today!

Starwars.com!

Dr. Dvorak's 1932 study found that QWERTY typers who switch to Dvorak improve their speed by 20% and their accuracy by 50%!
As part of his study, Dr. Dvorak trained two separate groups of people who had never typed before: one with QWERTY... and one with Dvorak.

It took the QWERTY students 56 hours of training to achieve a typing speed of 40 words per minute.

The Dvorak students, however, achieved 40 words per minute after only 18 hours of training.

Dr. Dvorak also took a third group of people, who were already proficient QWERTY typists and retrained them using the Dvorak layout.

It took only 52 hours of training for the typists to achieve their previous QWERTY typing speeds!

In 1936 Dr. Dvorak tried to gain some public interest in his layout by writing the book "Typing Behavior." It provided an in-depth look at the psychology and physiology of typing.

In the 1940s Dvorak developed his last keyboard layout for one-handed typing.

He died in 1975 a bitter old man...

"I'm tired of trying to do something worthwhile for the human race, they simply don't want to change!"

Typewriter manufacturers, still doing just fine, thanks!

Even so, Dr. Dvorak met with great resistance everywhere he tried to implement his new creation.

Typing classes, but we'd have to retrain all of our instructors!

Even the U.S. Government! Accuracy, heh! Efficiency, hah! The government needs not these things.

This is my new simplified keyboard layout.

The benefits of Dvorak are obvious! You type faster and more accurately and more comfortably, plus it's easier to learn!