# Talk to Your PC: Easy Voice Control Hacks

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# Control Your PC Just by Speaking, Or Easily Dictate a Document!

#### This article shows you how to:

- Get started with Windows' Speech Recognition feature
- Skip the mouse and control your PC with voice commands
- Dictate text into any program or window

We're suddenly living in an age of voice control. Just by using your voice, you can give commands to your phone, your TV and your car, and even buy little household devices that respond to spoken commands. So why should your PC be any different?

Have a rest from your mouse and keyboard, and try using Speech Recognition in Windows. At its simplest, it lets you dictate documents by speaking rather than typing, but by learning a few commands you'll be able to give your mouse hand a break too! Read on to learn how it works.



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## The First Step: Setting Up Your Microphone

Available in Windows 10, 8.1 and 7 It might seem remarkably 'high-tech', but the Speech Recognition feature we'll explore in this article has been built into Windows for some years now: it's included in Windows 10, Windows 8.1 and Windows 7, and it's almost identical in every version.

That means there's nothing you'll have to download or install. With just a couple of provisos, you can simply start it up and begin using it straight away.

It understands you better the more you use it What are those provisos? Well, nothing too unexpected. One is that your PC will need a little time to get used to your voice. Since it has to deal with such a variety of dialects and accents, it needs to learn how you speak. That means its accuracy may be a little shaky to start with, but you can speed things up by giving it some training, as I'll explain later in this article.

You just need a microphone

The second proviso is probably obvious: you'll need a microphone! It doesn't have to be anything flashy, so you can buy one for as little as £5–10 from any computer shop or some large supermarkets.



Computer microphones generally come in two types. There's the desktop microphone, a stick-like affair that sits on your desk. These are the cheapest, but they don't offer the best quality for speech recognition – you may find you have to pick it up and hold it, or lean forward into it, to make yourself heard. The alternative is a headset microphone – a pair of earphones with an attached microphone on a stalk that's positioned beside your mouth. This allows you more freedom of movement without finding yourself moving out of range of the microphone, and it also allows you to speak at a more natural volume. If you can, plump for a wireless headset so that you're not at the mercy of a (possibly very short) cable!

The first thing we need to do is to make sure your microphone is set up and working. Of course, you may have been using a microphone with your PC for other things and you already know it works, in which case you can skip ahead to page 5. If you haven't, begin by following these steps:

Setting up your microphone

 Plug your microphone into your PC's microphone socket. On modern PCs, the audio sockets are colour-coded, and the microphone socket is the pink one. You'll almost certainly have one of these on the back of your PC (which is probably fine for a desktop mic), but it's worth checking whether you have a more-accessible one at the front or top of the PC if you're using a headset mic.



- 2. Now let's make sure it's working and picking up your voice at a good-enough volume. Start by opening Control Panel:
  - In Windows 10 or Windows 8.1, press the Win key, type control and click the link to Control Panel.
  - In Windows 7, open the Start menu and click Control Panel.

Click the **Hardware and Sound** heading, then the **Sound** heading, which opens the 'Sound' dialog.

3. Switch to the Recording tab, pictured on the next page, which contains a list of your PC's 'recording devices'. Among these you'll see a Microphone item ① and it should have a green-and-white tick in a circle beside its icon. If it doesn't, click the Microphone item to select it and then click the Set Default button ②.

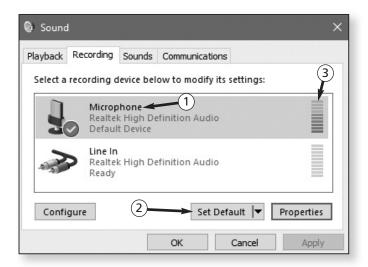
is set to use your microphone

Make sure Windows

4. Now position your microphone (and yourself if it's a desktop mic) somewhere comfortable and natural and try speaking into the microphone at a normal

## Check the audio level

volume. As you speak, keep an eye on the level indicator ③ at the right of the **Microphone** item. You should see its bars light up, and ideally peak in the upper half of the indicator.



## Turn it up if necessary

5. If the level indicator didn't move, or only the lowest bar or two were lighting up, we need to increase the volume level. Double-click the **Microphone** item and a 'Microphone Properties' dialog will open. In this dialog, switch to the **Levels** tab and drag the slider in the 'Microphone' section further to the right.



You may also see a 'Microphone Boost' section in this dialog with its own slider. If you do, dragging that to the right will also work wonders for increasing the mic volume if the slider above doesn't do the trick alone.

**6.** Click **OK** to close the 'Microphone Properties' dialog and try speaking into the mic again. Still not a great reaction from that level indicator? Go back to step 5 again to increase the level some more.

If you're getting no reaction at all from that **Microphone** item's level indicator, regardless of how you increase its level sliders, check whether there are two **Microphone** items in the list. If so, it means your PC has two microphone inputs and your mic is plugged into the other one. Select the other **Microphone** item, click the **Set Default** button, and go back to step 4.



7. Finally, click OK in the 'Sound' dialog and you've finished. If necessary, of course, you can return to this dialog again whenever you like to adjust the levels some more, as you may need to do if you find Windows can't hear you clearly or if you decide to relocate your desktop microphone.

Done

## **Getting Started with Speech Recognition**

Now you're ready to get started. However, as I hinted earlier, you're not being thrown in at the deep end: you'll begin by following a few straightforward steps to set up speech recognition and then run through a tutorial to pick up the basics. Here's what to do:

Set up Speech Recognition

- 1. Start by opening the Windows Control Panel:
  - In Windows 10 or Windows 8.1, press the Win key and type the word control, then click on Control Panel.



- In Windows 7, open the Start menu and click Control Panel.
- 2. In the Control Panel window, click the large words Ease of Access. On the next page, click the large words Speech Recognition.
- 3. This leads you to a page containing five clickable options, each with a brief description below it. I'll

Start Speech Recognition

- mention several of these over the course of this article, and you can come back here whenever you like and use them again. For now, though, click the topmost item, **Start Speech Recognition**.
- 4. You may see a little message telling you that 'Speech Recognition is optimised for speakers of English (United Kingdom)'. If so, click OK.
- 5. This leads you to a new window titled 'Set up Speech Recognition' which guides you through the process a step at a time. Click the Next button to move past its introductory text.

# Select your microphone type

6. Click the type of microphone that best matches the one you're using and then click Next. This leads to a few pointers about how to position and use your microphone: read these and click Next again.

## Check the volume

7. Now it's time to start talking to your PC! You arrive at the step pictured below which asks you to recite a couple of sentences into your microphone to check the input levels. Read those sentences at a normal volume and then click Next.





If you arrive at a page headed 'Is the microphone positioned correctly?', it means your microphone's level is too low. You don't want to have to shout at your PC (tempting though it may be at times!), so I recommend repeating the steps on page 4 to

increase the input level of your microphone. When you've done that, come back to this 'Set up Speech Recognition' window, click the little left-pointing arrow at its top-left and repeat step 7.

- **8.** When you've read the text sufficiently loudly, and Windows feels that you're microphone's input level is high enough, you'll arrive at a page headed 'Your microphone is now set up'. Click **Next**.
- 9. Now you're asked whether you'll allow Windows to examine your documents and email to get an idea of the words and phrases you use. This is entirely up to you, and if you don't feel comfortable with letting Windows do this, it's fine to disallow it by choosing Disable document review. When you've made a choice, click Next.

Can Windows learn words from your documents?

10. In this step you're asked to choose an 'activation mode'. As you'll discover a little later, you can tell Windows to stop reacting to your voice by saying 'Stop listening'. When you want it to start paying attention again, you can either click a button or say 'Start listening' and this is where you choose which of those you'd prefer. If you're undecided, my suggestion is to choose Use voice activation mode (so Windows will start taking notice of your voice again when you say the words 'Start listening'). Having made a choice here, click Next.

Make Windows listen using a voice command

11. Here you're offered the opportunity to print out a 'Reference Card' (or 'Reference Sheet') of voice commands you can use with Windows. I definitely recommending printing this list at some point – it's very useful – but you don't necessarily have to do it now. If you'd like to do it straight away, click the View Reference Sheet button; if you'd like to leave it until later, you can repeat steps 1 and 2 on page 5 and then click on Open the Speech Reference Card.

A long, useful list of voice commands to print

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In Windows 10, this reference sheet opens in your web browser and you can print it using your browser's usual Print command.

In Windows 8.1 and 7, it opens in a 'Help and Support' window where, initially, all you see are the blue headings of the sheet's sections but none of the text within each section. Printing that page as it is wouldn't give you anything useful, so begin by clicking the words **Show all** (above the headings in Windows 8.1, and at the top of the window in Windows 7) to display all that text. Next, click the printer icon at the top of the window to send this sheet to your printer.

Incidentally, although it's termed a 'sheet' or a 'card', it will run to about a dozen pages of A4, so make sure you have enough paper!

**12.** After printing the reference sheet, if you chose to do so, and closing the window in which it opened, you're back to the 'Set up Speech Recognition' window we've been using. Click **Next** again.

Should Speech Recognition start automatically?

- 13. The simple page you reach lets you choose whether the Speech Recognition program should run automatically every time you start your PC. If you choose not to let it do this, you can start it yourself with a couple of clicks, as I'll explain later. It largely depends on how much you expect to use it, so if you're simply experimenting with it for now, you might like to remove the tick beside Run Speech Recognition at start-up. After choosing which option you'd prefer, click Next.
- 14. That's it you've finished all the basic setting-up and your PC is ready to use Speech Recognition. Now you can opt to take the tutorial I mentioned earlier, and you'll see a choice between Start Tutorial and Skip Tutorial buttons. I'll explain this tutorial next, as well as the optional 'voice training' you can follow to improve your PC's speech recognition skills.

# Basic Training: Ensure Windows Can Understand You!

In the final step of setting up Speech Recognition, you're facing a choice between taking the tutorial or skipping it. The choice here is entirely yours, and if you decide to skip it now, you can easily get back to it later: just follow steps 1 and 2 on page 5 to return to the 'Speech Recognition' page in Control Panel and click **Take Speech Tutorial**.

Take the tutorial now or later

But what actually is it? Well, it varies hugely according to which version of Windows you're using:

#### Speech Tutorial in Windows 10 and Windows 8.1

In these versions of Windows, there's really not much to it at all. If you click **Start Tutorial** in the step you've just reached, or **Take Speech Tutorial** on the Control Panel page, your web browser will open and take you to a web page on Microsoft's website.

This page essentially contains just two videos, running to about 7 minutes in total. The first explains the basics of getting around Windows using your voice; the second tells you how to dictate a document, using Microsoft Word as an example. These are worth watching, but they don't tell you very much of use. (Another catch, if you're using Windows 10, is that these videos are based on Windows 8.1, although the commands they cover are still much the same.)

In Windows 10 and 8.1, it's just two videos

### Speech Tutorial in Windows 7

In Windows 7, the tutorial is very helpful indeed, and I thoroughly recommend running through it. It will take 20–30 minutes, but it's definitely time well spent. When it starts, it will fill your whole screen, and you work through its steps entirely by speaking (although you can 'cheat' and click certain things with the mouse if you want to!).

A real tutorial in Windows 7

You learn and practise at the same time

This tutorial is rather clever: not only does it explain how to use Speech Recognition and give you a chance to try things out for yourself, it also uses this opportunity to learn how you speak, thus giving its accuracy a head start. I'll give you several quick tips to keep in mind while you follow this tutorial:

Read each step and try the commands

- Be sure to read each step's text and examine the pictures. Every step introduces one small aspect of speech recognition and then asks you to say something. (The blue text tells you what to say.)
- Every so often you'll see a silver Next button. Although the instructions don't say so explicitly, you should say the word Next when you see this (or, if you prefer, click it with the mouse) to move on to the next step.

Speak in a normal voice!

 Speak as naturally as you can, so that the computer learns your normal mode of speech rather than a 'put on' voice. There's no need to pause between words, and the computer often does better if you speak in phrases and sentences, since it can often decipher a certain word by recognising the other words in the phrase.

You can stop and continue later

You can jump between the six sections of the tutorial using the buttons at the bottom of the screen. So, if you don't have time to finish the whole tutorial in one sitting, just note which section you've reached and click the x button in the top-right corner of the window to close it. On the 'Speech Recognition' page in Control Panel you can choose Take Speech Tutorial at any time and then click the section you want to run through.

### Training: improved accuracy for dictation

Help Windows understand you better On a similar topic, you can also run through a 'training programme' to help Windows understand you better when you're dictating text into documents, email messages and so on. There's no need to do this straight away – and you're probably keen to put Speech Recognition to some practical use, which we'll come to in a moment – but it's worth doing when you have a few minutes to spare. Not only does it make a big difference to Windows' understanding of your voice, but it should help you feel more comfortable about talking to a machine:

1. Go back to the 'Speech Recognition' page in Control Panel by following steps 1 and 2 on page 5.



- 2. Click the words Train your computer to understand you better.
- 3. This opens a window titled 'Speech Recognition Voice Training'. Click the **Next** button at the bottom to move past its introductory text and start the training session.
- 4. Now you'll see a sequence of sentences in bold text to read aloud. After you read one sentence, the next will appear in its place (possibly after a short pause). If the same text remains on the screen, as will quite likely happen at least a few times, wait a couple of seconds and then read it again.

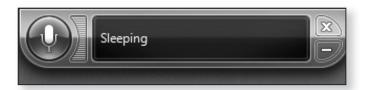
Read each sentence that appears

5. It should only take about 10 minutes to work through the training session, but you can click **Cancel** at any time if you've had enough.

## Start Controlling Your PC Just by Speaking

When you've finished the initial setup of the Speech Recognition feature (and finished or closed the full-screen tutorial if you use Windows 7), the Speech Recognition program starts automatically. This consists of two elements, and the first is unmissable: you'll see its main console sitting at the top of your screen:

The main console...



... and an icon near the clock

The other element is a little icon near the clock on the taskbar, pictured to the right. Clicking this icon displays a menu containing a variety of



options for Speech Recognition. In fact, though, you can ignore this little icon since right-clicking the circular 'microphone' button at the left of the main console displays exactly the same menu.

Start it yourself whenever you need it If you opted to start Speech Recognition automatically every time Windows starts, you'll see this console and icon every time you sign into Windows. If you prefer to start it yourself when you want to use it, that's easily done. Just open the Start menu and type the word speech: you'll see an item named Windows Speech Recognition which should be selected for you. If it is, you can just press Enter. If it isn't, either use the downarrow key to select it and then press Enter or click it with the mouse.

Tell Windows to listen to your microphone When the console first appears, its black panel will show the word 'Sleeping', as in the screenshot above. This means that Windows isn't taking any notice of your microphone: when you want to start giving voice commands or dictating text, say the words **Start listening** (or click the circular 'microphone' button at the left of the console).

Stop it when you want to avoid accidental commands When you do this, the black panel will change to show the word 'Listening', and from this point anything you say will be interpreted either as a voice command or as text to be dictated into the program you're currently using. When you want the console to go back to sleep, ignoring your voice again, say the words **Stop listening** (or, once again, click the circular button in the console).

Every so often, particularly while you and Speech Recognition get to know each other, you'll see the words 'What was that?' displayed in the console and the circular button will turn orange rather than its usual blue. This means Windows didn't understand what you said, so try repeating yourself a little more slowly or clearly.



Now let's try a little tutorial of our own to get you started. You say the words shown in **bold type** and the text below each command explains what should happen as a result. I'll assume the console currently says 'Sleeping'; if it says 'Listening' you can skip the first command below.

Try this tutorial to get started

#### Start listening

Tells Windows to listen to your microphone. The console should now say 'Listening'.

### **Open Paint**

Opens the Paint program.

## **Open WordPad**

Opens the WordPad program, which will partly (or completely) cover the Paint window you just opened.

#### Maximise WordPad

Maximises the WordPad window to fill your screen.

#### **Switch to Paint**

Brings the Paint window back to the foreground and makes it active.

#### Minimise that

Minimises the program you're using (in this case, Paint; you could have said 'Minimise Paint').

#### Restore WordPad

Restore the WordPad window to its previous size and position.

#### **Switch to Paint**

Switches to the Paint window again. (This still works even though we'd minimised Paint a moment ago.)

#### **Close Paint**

Closes the Paint program. (You could have said 'Close that', of course.) This brings us back to the WordPad window again.

#### Click File

Click anything by displaying numbers Performs a 'click' on the 'File' tab in WordPad, opening its menu. (If Windows doesn't understand one of these 'Click' commands, it will usually place little numbers over the possible items: say the appropriate number – such as Two – and then say OK. You can also say Show numbers to make this happen, and then say Click six or Double-click nine or Right-click four followed by OK.)

#### Click Exit

Clicks the 'Exit' item at the bottom of the 'File' menu, thus closing the WordPad program.



Perhaps you ended up with some text displayed in the WordPad window, either because you typed it or because Windows misunderstood one of the last commands and typed it for you. If so, you're now seeing a dialog asking whether you want to save the changes. Say **Click Don't Save** to tell Windows to 'click' the Don't Save button in this dialog.

### Right-click desktop

The desktop's context menu appears. You could use a 'Click' command to select something on this menu, but we won't...

### **Double-click Recycle Bin**

The context menu disappears and Windows doubleclicks the Recycle Bin icon, opening its window.

#### Close that

The Recycle Bin window closes, returning you to the desktop again.

#### Stop listening

The speech recognition feature stops paying attention to your microphone and the console shows 'Sleeping'.

We didn't do anything terribly useful, but that should have given you a little experience of speech recognition in action and taught you some of the basic voice commands. (The 'Reference Sheet' I mentioned on pages 7 and 8 will give you many more. Once you've mastered the basics, try using and learning a few more at a time.)

You've learned the basic Windows commands

### **Forget Typing! Dictate Your Documents** and Emails

What we could have done after starting WordPad in the tutorial above was to dictate some text, and that's obviously a popular use for Speech Recognition. You can simply sit back in your chair and speak rather than working up a sweat over the keyboard!

Speak instead of typing

Let's try another quick tutorial to demonstrate the basics. Say **Start listening** if the console is currently sleeping, then say Open WordPad to launch the WordPad program again. (Of course, you could say Open Notepad or Open Microsoft Word if you prefer to use one of these programs instead.)

Start a word processor...

The WordPad window appears and you simply start ... and just speak! speaking. Say this:

## Once upon a time comma there were three little birds full stop

Punctuation must be spoken too

You'll notice that you have to say what punctuation you want ('comma', 'full stop', 'open/close double quote', 'new paragraph' and so on).

A wrong word?

Hopefully every word was understood correctly (if it wasn't, the accuracy will improve over time), but I've given you an intentional mistake to correct. We didn't mean 'birds' but 'bears', so let's fix that. Say **Correct birds**. The word 'birds' will be highlighted and a dialog will appear containing similar-sounding words, each with a number beside it.

Have it corrected

Is the words 'bears' in this list? If it is, say the number beside it followed by **OK**. If it isn't, try saying **bears** to see if it then appears in the list. If it doesn't, we'll try it another way. Say **Spell it** and another little dialog will appear in which you can spell out the word a letter at a time, saying **OK** when you've finished.



Windows learns from its mistakes

I've invented this 'mistake', of course, but for other misunderstandings it's a good idea to correct them this way if you can, rather than switching back to the keyboard – it tells Windows it got the word wrong and helps it to learn how you say certain words and sounds more quickly.

That said, don't make life difficult for yourself unnecessarily. Just as you don't try to do everything on your PC from the keyboard, don't feel you have to do everything using your voice now!