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DOUBLE MOUSE

by **fi5e** on October 26, 2006

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Author:fi5e   author's website
Agent 005 of the Graffiti Research Lab

Intro: DOUBLE MOUSE

Double your productivity by connecting a single mouse to two computers! It's simple: one mouse, two USB connections, infinite possibilities. Each click of your pointer finger will be twice as powerful with this mouse mod. This is a low cost, no soldering, HOW TO that will double your clicks per hour in minutes.

Step 1: MATERIALS / PARTS LIST

Part: PS/2 Mouse (serial)
Vendor: Radio Shack
Cost: $9.97 or less
Notes: You only really need one mouse but you need two serial cables. I ended up just buying an extra mouse because at RadioShack they are cheaper then a serial cable. Old serial mice are just llaying around everywhere waiting to be used, they can often be found on ebay.com for $1 or less.

Part: QVS USB-PS2Y USB to Dual PS/2 "Y" Converter
Vendor: J&R
Cost: $14.99
Notes: You are going to need two of these. There are cheaper options but this is the only one that I know works for sure.

Part: Duct tape
Vendor: Any will do.

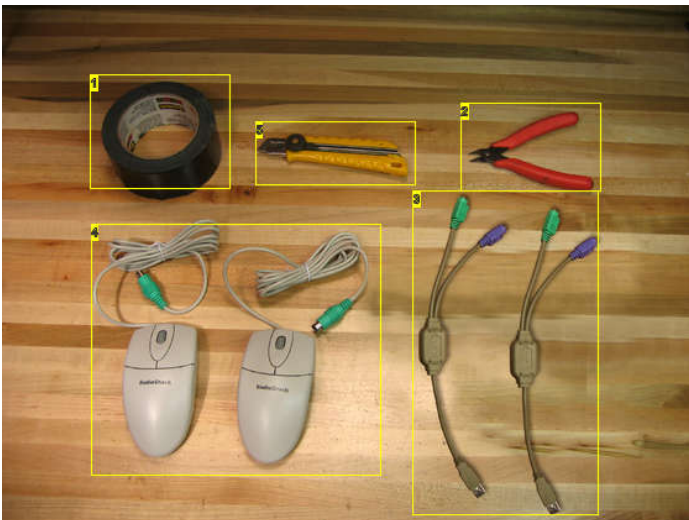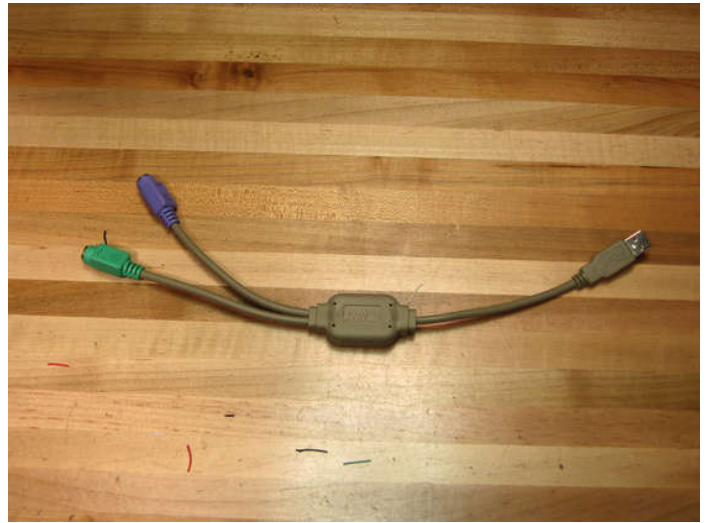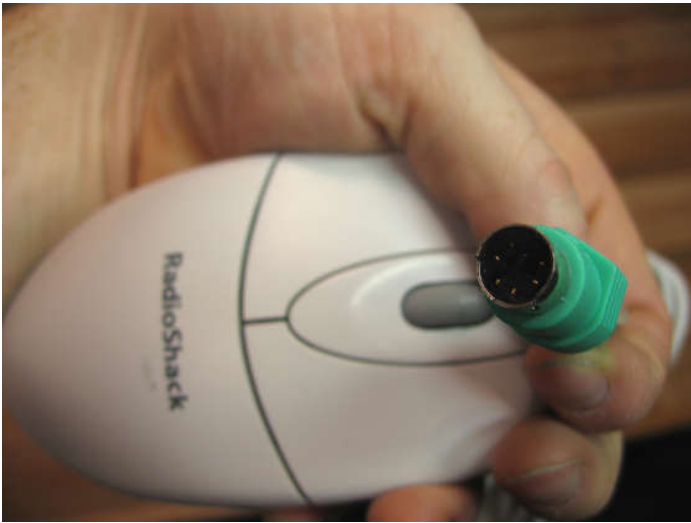Tools: A sharp Xacto blade and/or wire cutters.

Image Notes
1. duct tape
2. wire cutters
3. USB to PS/2 Keyboard and Mouse Adaptor (made by QVS)

4. serial mouse
5. sharp blade


Step 2: CUT CABLES

- Cut one mouse cable at the midpoint.

- Cut the second mouse cable an inch or so away from the mouse. This mouse is no longer needed, hide it in a drawer for later use.

- You should now be left with one longer serial cable, one shorter serial cable, and one mouse. Cut away 1.25" of the outer cable from the ends of all three cables.
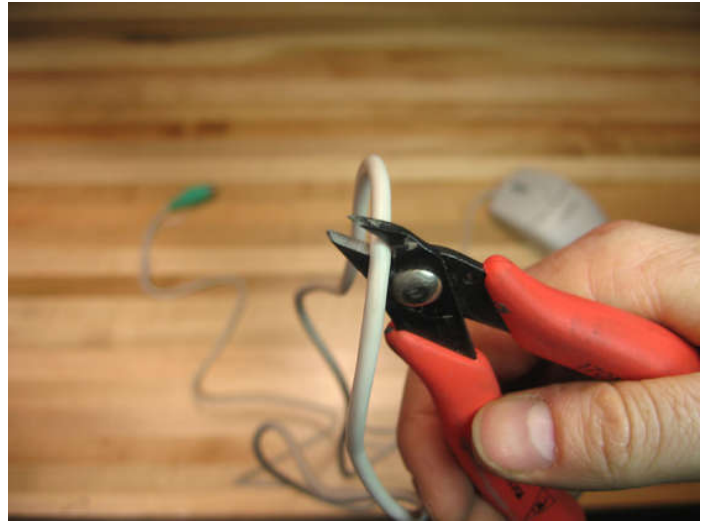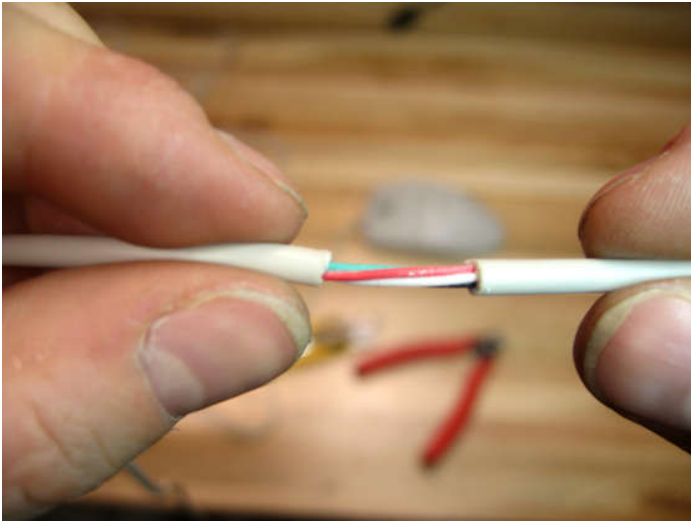
Step 3: EXPOSE WIRES

Inside the serial cable you will find smaller red, black, white, and green cables. Cut away 3/4" of the outer rubber and twist the exposed copper for each of the individual 12 cables.
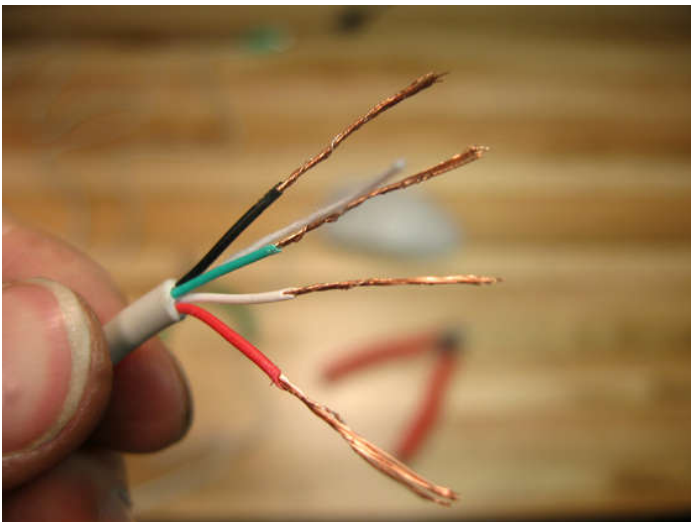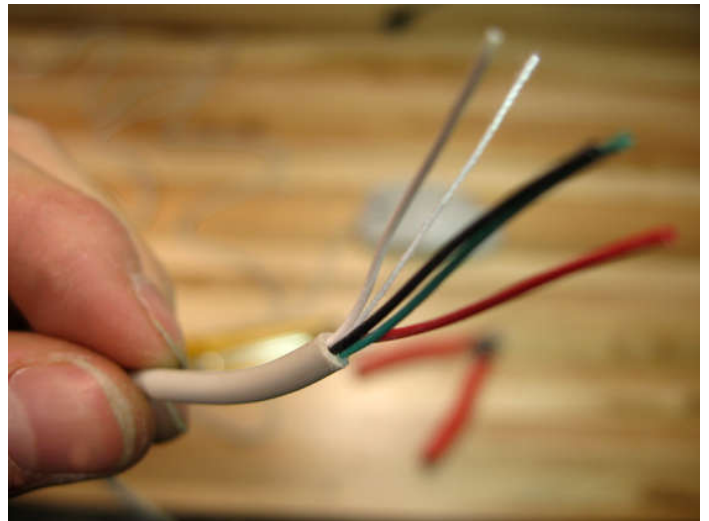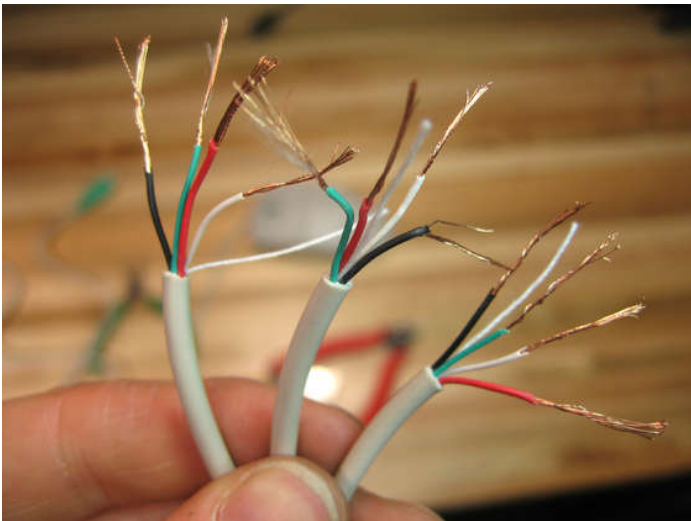
Step 4: TWIST AND TAPE

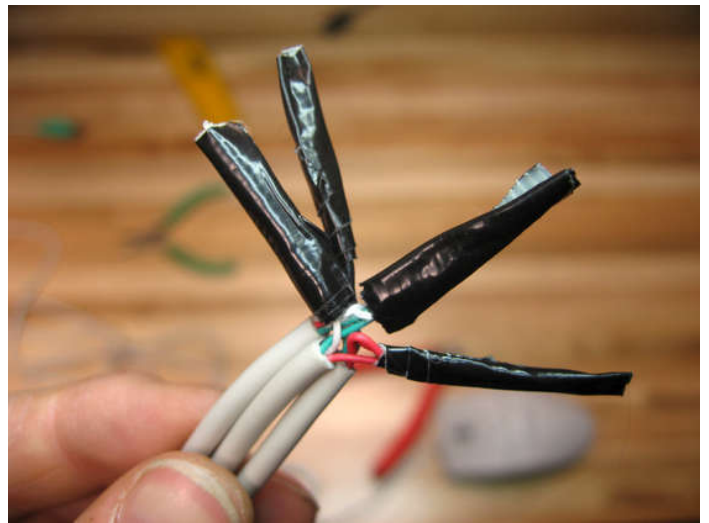Twist together groups of three wires consisting of the same color. Tightly wrap them in tape so that none of the copper is showing. If you have a soldering iron handy you can make a better connection, however I've been using a tapped version for weeks and it seems to works fine.
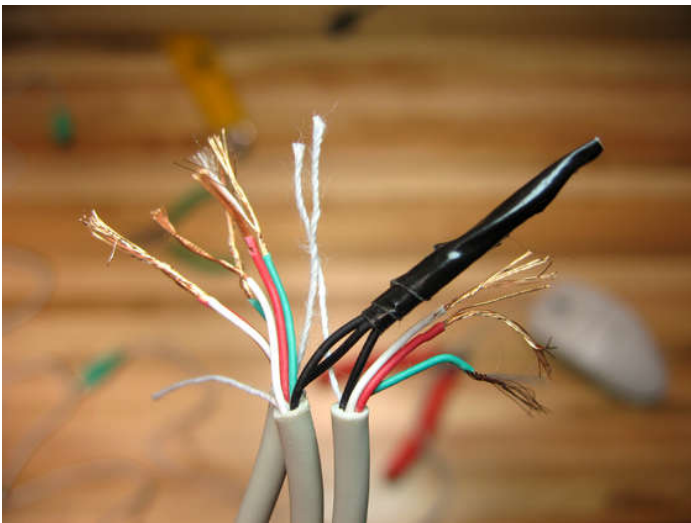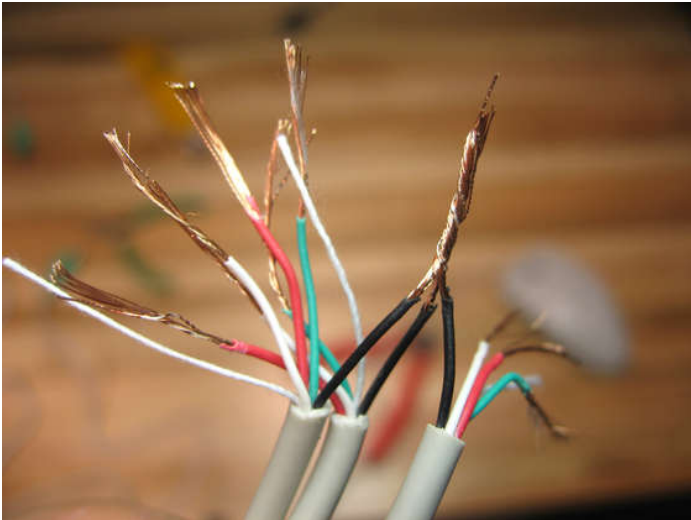
Step 5: WRAP CONNECTIONS

Once all four groups of red, white, black, and green wires are wrapped together tightly wrap them all in tape. When you're done you should have a dirt style Y cable.
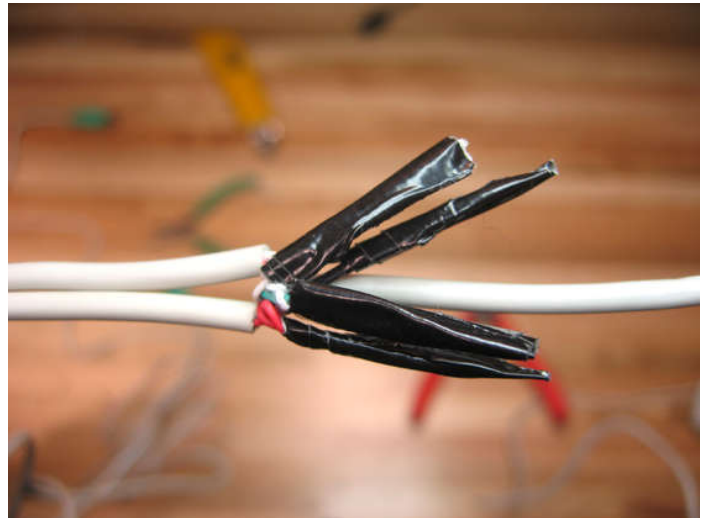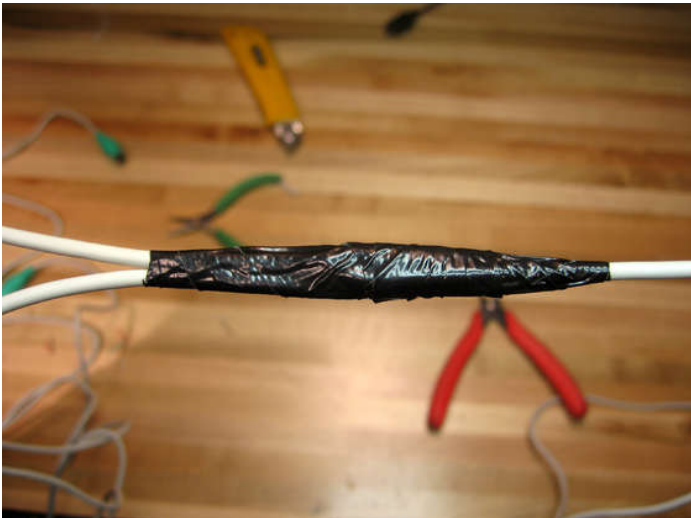
Step 6: CONNECT USB ADAPTERS

Connect the adapters to the serial cables. The connection for the keyboard will just remain empty for the purposes of this tutorial (yes, I'm leaving room for the DOUBLE KEYBOARD sequel instructable). Plug in one of the USB connections into a PC. When you have one cursor moving properly then plug the other USB connection into another PC. If everything goes as planned then you should now have the power of two PC's in the palm of your hand.... use this power wisely.

You can match the mouse speeds between your two PCs by opening the Mouse Properties:
Start Menu -> Settings -> Control Panel -> Mouse, and then hit the Motion tab.

Step 7: USES?
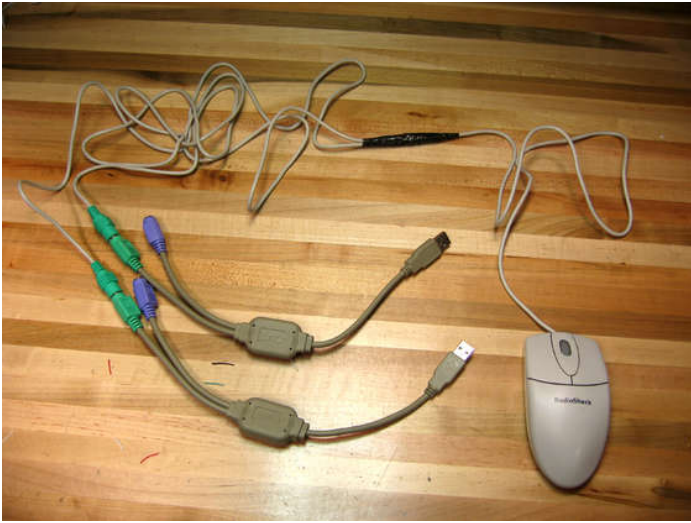**9 to 5 Paintings**

There are many possible uses for the Double Mouse ranging from useless to pointless. The first series I have done using this new technology is the *9 to 5 Paintings* . I, like much of the working world, find myself with less and less time for creative projects and more and more time spent writing emails. *9 to 5 Paintings* are a way to create art and send emails, write reports, and do work all at the same time!

The set up is simple, you will need two computers connected to one Double Mouse. On one computer run a drawing / painting application at full screen. GIMP is an open source free image editing program that can be downloaded for free . On the other computer just go about your daily business. As you click and drag your way around email, the internet, and your regularly frequented applications you will leave brush strokes on the other computer. 9 to 5 paintings are a visual representation of your daily computing routines.

You can see a screen capture of the process in the attached .mov file.
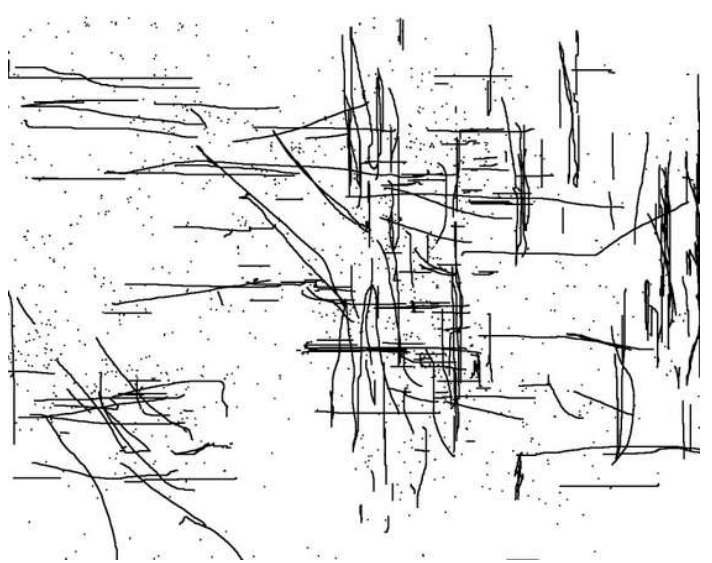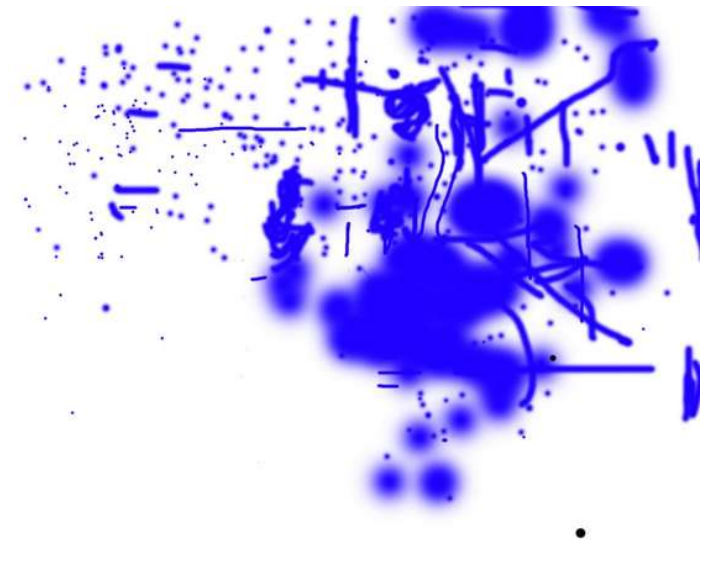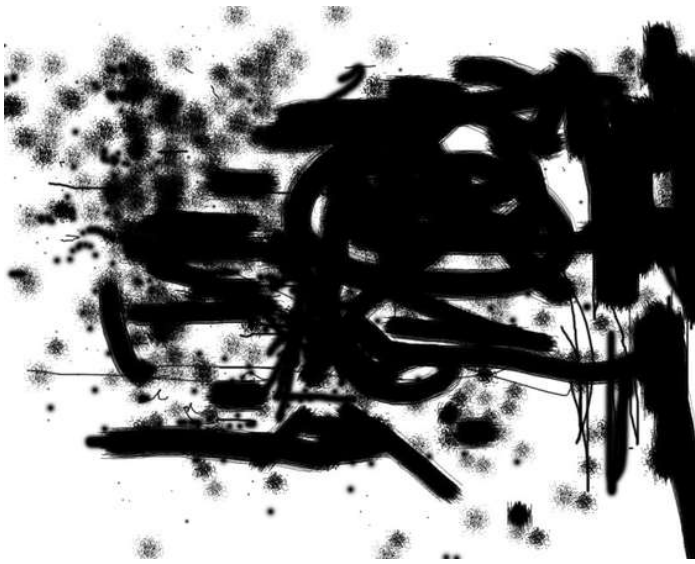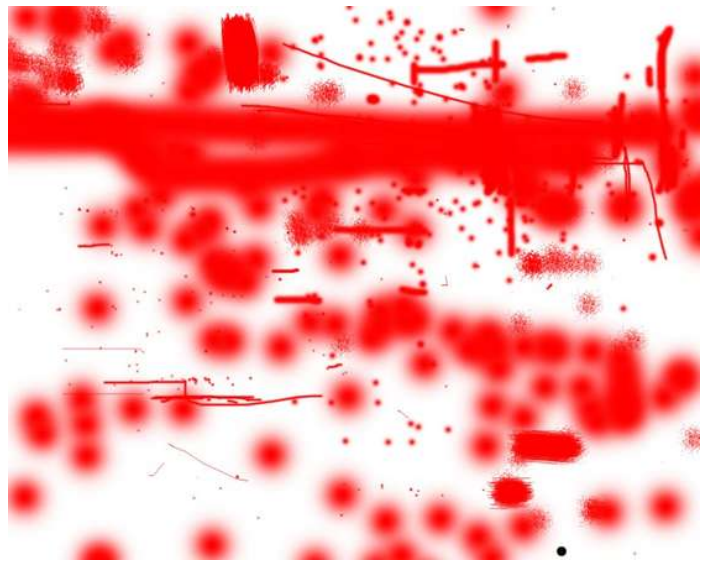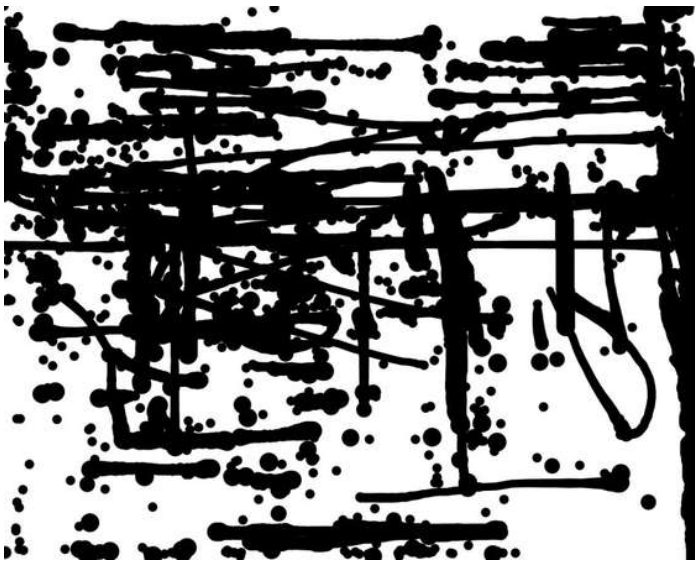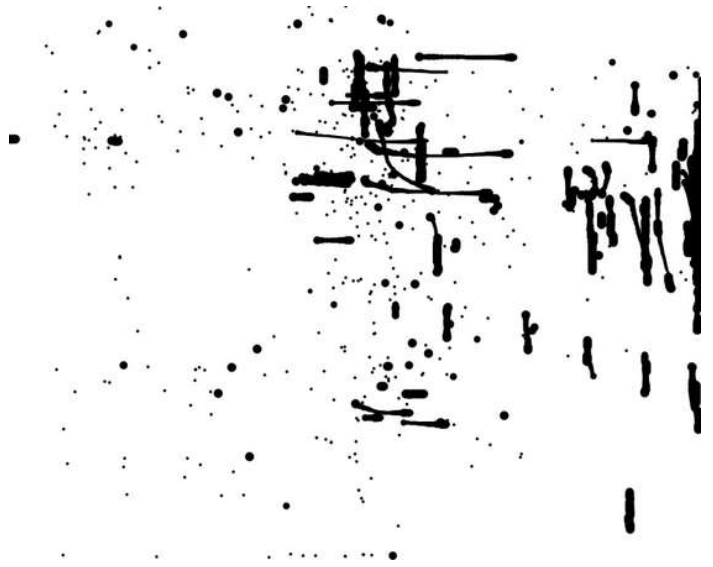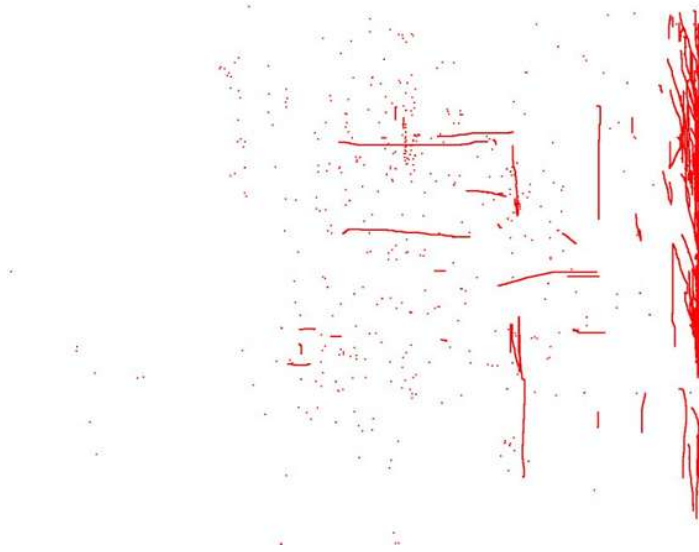
Step 8: THINGS THAT DON'T WORK

The smaller PS/2 USB adapters didn't work for me. I'm not sure why this is but if anyone knows please feel free to leave a comment. A common error for a non-functioning Double Mouse is for both computers to go into a cycle of mouse recognition and non-recognition. It will work on one computer for a few seconds and then on the other for a few seconds, etc. etc.

Related Instructables

USB Mouse Flash Drive Hack by fairypenguin22

Apple 1988 Mouse USB by fredlb

USB Stick Mouse by Dascooby

MouseMod Project by pasteler0

Tri- color LED Mouse Makeover by pmetro

PROJECTION BOMBING by fi5e

Comments

50 comments   **Add Comment**

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Shark500 says:
Nov 28, 2006. 11:30 AM **REPLY**

CPU = central processing unit
Motherboard = main board that everything connects to including the CPU
Monitor = the visual interface (the screen)
Computer = housing for the motherboard, drives, and component interface cards i.e. the video card.

i hope that cleared things up.

also you may want to only connect one set of power wires to the mouse. right tnow you are giving it double what it needs and that aint too good. atleast you had pictures so PROPS! =D

---

freakyqwerty says:
Jul 3, 2010. 8:52 AM **REPLY**

Yeah but instead of merging the two voltage cables(red) cut one out. Simples!

---

n0ukf says:
Mar 19, 2008. 9:57 PM **REPLY**

Connecting the power wires together doesn't double the voltage going to the mouse, so the mouse won't be bothered, but the **regulated** 5v from the two computers might not be exactly the same and try to fight each other. Though being on the USB ports, that fight would be limited to 500mA or less. Doubling the current sources won't hurt the mouse, as it will only draw what it needs from the available 5v supply. Now if you tried to feed the mouse 10v or more, then it might get heart burn and die on you. ;)

---

maker12 says:
Dec 3, 2007. 2:45 PM **REPLY**

no no no its

CPU = brain
Motherboard = spine
Monitor = the visual interface (the screen)
Computer = skull or body!

---

shveet says:
Jun 22, 2010. 4:50 PM **REPLY**

actually this one guy binded 6 computers and 6 mice together and played some good old WOW

TheCheese9921 says:
Nov 28, 2006. 6:17 PM **REPLY**

now I wana hook up to mice to one computer

---

javandyck says:
Mar 3, 2010. 12:14 PM **REPLY**

I saw an adaptor for this a couple years back. It was intended as a teaching aid. It put two independant arrows on the screen at the same time.

LiaLinda says:
Mar 19, 2010. 10:35 PM **REPLY**

I also need to be able to have two arrows on a screen each working independantly... do you recall where you saw this adaptor? Was it at an educational facility? Or at a store (and if it was a store, do you recall which one)?

Madrias357 says:
Apr 9, 2009. 7:10 PM **REPLY**

done it. Doesn't do anything cool.

---

syme says:
Mar 12, 2010. 2:41 AM **REPLY**

Idea unsure whether it would work as usb work on a set voltage and it may be damaging to devices, but why not do this with a USB extender i.e. a female usb to two male usb's, then a single usb stick can be accessed on two pc.

note. i dunno whether it would cause files to corrupt be good for someone to try with a cheap tacky usb stick lol

---

AT says:
Mar 6, 2010. 9:04 AM **REPLY**

That is useless to pointless; I like it.

---

bmlbytes says:
Apr 27, 2009. 7:46 PM **REPLY**

I just wanted to point out that you repeatedly said serial mouse. While technically these run over a serial bus, they are not considered serial mice. They are PS/2 mice. A serial mouse would have a DB9 connector on it.

Master Of Hacks says:
Jul 7, 2009. 6:11 AM **REPLY**

Error, Windows has malformed due to lack of patience. To resolve this problem, please install un-genuine software.

TyMan210 says:
Jan 9, 2010. 12:25 AM **REPLY**

Error, Windows has malformed due to boot up. To resolve this problem, please reinstall Windows

---

Redgerr says:
Mar 3, 2010. 11:14 AM **REPLY**

"MASTER OF HACKS" ERROR: CANNOT COMPUTE

Master Of Hacks says:
Jul 7, 2009. 6:09 AM **REPLY**

PLAYSTATION 2 MICE!

---

stephenniall says:
May 10, 2009. 9:32 AM **REPLY**

was just about to say that Lol

---

bmlbytes says:
Apr 27, 2009. 7:47 PM **REPLY**

Although I do give you points for a good instructable!

---

dodo91 says:
Mar 14, 2009. 7:46 PM **REPLY**

i have an idea. have you ever had two computers, and wanted to put a document on both of them. you dont have anything tho take it from one to the other to have it on both. so, ou use this concept, but with the keyboard. you put word on both computers, then type. you only have to look at one screen. this is because if you made a mistake on one, it will be on the other. you can also do the mouse, so when you click somewhere, it will click on the other computer. thats what i call killing two birds with one stone!

Kazeem says:
Apr 16, 2009. 2:27 PM **REPLY**

or you pay £5 for a memory stick instead of mutilating a set of computer equipment, and taking longer than it takes to transfer a file :P good idea all the same.... lol

---

Derin says:
Sep 6, 2008. 7:26 AM **REPLY**

PS/2 is not hotpluggable,even on USB.the BIOS only checks for the mouse at startup,and that is why it wont work

---

bwpatton1 says:
Feb 26, 2009. 2:16 PM **REPLY**

ya this is frustrating when you are working on computers and forget to plug into the mouse, then you have to turn off the computer restart etc.....

---

collard41 says:
Sep 18, 2008. 8:21 AM **REPLY**

complete rubbish. the mouses drivers are installed (or are already there) when plugged in so you di not have to restart your computer

---

Derin says:
Sep 18, 2008. 10:07 AM **REPLY**

meh.it does not check for new equipment unless you restart,I tried it by trying to plug my USB mouse to PS/2 with the supplied adapter,it did not regocnize the PS/2 compatible mouse

---

tristan993 says: Sep 18, 2008. 3:23 PM **REPLY**

this is a nice instructable but u could also just plug a keyboard and mouse into a usb adapter strip and plug that into a computer, and when u need to use the other computer just use an extension usb cord and plug that into the usb adapter

---

roystonlodge says: Aug 26, 2008. 1:09 PM **REPLY**

This is such a genius idea that, if only you hadn't posted this idea for free on this site, I'm SURE you could have made a WHACK of money off a grant from the National Endowment for the Arts. But, you posted it for free on the Internet, so no taxpayer-funded art money for you! ;-)

DIY Dave says: May 21, 2008. 4:43 PM **REPLY**

Does anyone know how to make a PS/2 USB adapter?

---

jeffconnelly says: Aug 22, 2008. 2:18 PM **REPLY**

There's an instructable on it

=SMART= says: Aug 16, 2008. 6:59 PM **REPLY**

Haha those 9 - 5 drawings are great :P

EnigmaMax says: May 27, 2008. 5:00 PM **REPLY**

couldn't you just connect two monitors to the computer?

Spencerr says: Jul 8, 2008. 9:37 AM **REPLY**

the whole point was to work on separate computers.

Sullen70 says: Apr 22, 2007. 10:59 AM **REPLY**

I appreciate the 9-5 paintings as 'process art', but I think any UI/human factors specialist might retrieve some value in the images as data. Clever concept.

---

jeffconnelly says: Apr 24, 2008. 9:38 AM **REPLY**

no, I think it's pretty secure, seeing as you can't tell **when** he put each dot on the screen.

---

patricksanford says: May 21, 2008. 8:07 PM **REPLY**

actually, it can help ergonomics. the the more "dense" the image, the less he had to move the mouse, the less dense, the more he had to move the mouse assuming that the paint program was set to trace all mouse movements. it could be useful in designing GUI's in a manner that can minimize the need to move the mouse about, and thus help to avoid repetitive motion injury. set it to track the density of mouse clicks and you might be able to find out which tools in a program are used the most, and lessen the number of clicks needed to access that tool. lots of uses for this actually.

DELETED_toolazy2p says: Mar 16, 2007. 9:49 PM

(removed by author or community request)

Toulouse says: Oct 23, 2007. 8:32 PM **REPLY**

i was going to suggest synergy. it's pretty neat

Squee says: May 31, 2007. 3:43 AM **REPLY**

I've used realVNC before, I might have to give synergy a try. I tried to do something simlar using a demo of a pay program but it never worked and I wasn't willing to shell out the $80 for a full copy+tech support when I could use realVNC for free. Although what I was really looking for was essentially a software KVM switch.

---

heav says: May 21, 2007. 2:15 PM **REPLY**

yeah, I just don't understand how fi5e does control in which computer he wants the click, since didn't saw the switch part, still, software controlled mouse/ keyboard is much more elegant and practical than messing around cutting cables, etc... but any ways that's for real use, this approach is for creating some kind of strokes logger, mmmm still some software from synaptics touchpad can do the same.

Mr. Smart Kid says: Jun 7, 2007. 1:37 PM **REPLY**

step 8" reason it did not work they come with certin duail usb/ps2 mice

---

earthstation says: May 14, 2007. 1:59 PM **REPLY**

this is certainly an interesting project. i think i might just have to go make one sometime...

---

randofo says: Nov 30, 2006. 11:45 AM **REPLY**

Soldering! It's the future. Pretty awesome. Have you tried this with a keyboard yet?

---

fi5e says: Nov 30, 2006. 12:01 PM **REPLY**

I'm anti-solder for now. I just got the keyboard finished and will update it shortly. (PS, I see you have been busy, nice work) Thanks to Grendel for dropping some needed knowledge on this post. And as for all the picture comments, it's just a Cannon PowerShot on a tri-pod in portrait mode (eg close up mode) with a lot of light on the table. I usually do a little brightness contrast adjustments in GIMP (I don't remember if I did that here). The real issue here, however, is the window of opportunity that opens when you double your mouse productivity!

---

zachninme says: Dec 5, 2006. 2:35 PM **REPLY**

Double keyboards would be stupid to hook up to a single computer, as it would double your strokes, or do nothing new...

Grendel says: Nov 29, 2006. 4:51 PM **REPLY**

The reason the small adapters don't work is because they are just connector converters and you can't have 2 USB Hosts on the same bus. The larger units interpret the PS/2 signal, reformat the data into USB HID packets, and send them on to the PC. The reason you can split the PS/2 mouse this way is the clock and data come from the mouse. The only time the PC sends data to the mouse is at startup, and if you have some special drivers for the mouse. Since the adapters mask the mouse, theres no data going from PC to mouse. Not very useful of a hack, but interesting non the less. Good work!

Myself says: Nov 30, 2006. 12:54 PM **REPLY**

You should still be careful, since this arrangement bridges two PC power supplies. If one machine is on while the other is off, badness can happen. If they're plugged into different outlets or otherwise don't share a ground reference, badness will almost certainly happen.

---

cry_wolf says: Nov 29, 2006. 4:23 PM **REPLY**

Amazing pictures, by far the best i have seen on Instructables. I like the mouse, very clean and easy, and i have GIMP too =]

---

theRIAA says: Nov 27, 2006. 11:43 PM **REPLY**

those pics look surreal! what kind of camera do you have?

Clevinger says: Nov 28, 2006. 2:03 PM **REPLY**

He's shooting natural light with a fast f/stop; like f/2.8 or lower. The blur you see in the background is known as bokeh. He probably has a tripod and is doing a pre-metered, delayed shot.

---

theRIAA says: Nov 28, 2006. 10:32 PM **REPLY**

f/stop has nothing to do with speed, and thats not what im talking about. Im talking about how he has crisp, perfectly colored pictures, with eerie lighting that look like their photoshoped (but obviously arnt). must be the lighting... which is a lamp, and is in no way natural

---

paanta says: Nov 29, 2006. 8:05 AM **REPLY**

A large (physically, small numerically) aperture does get referred to as a fast one, because you can use shorter shutter times. So yes, he used a fastish f/stop.

---

view all 54 comments