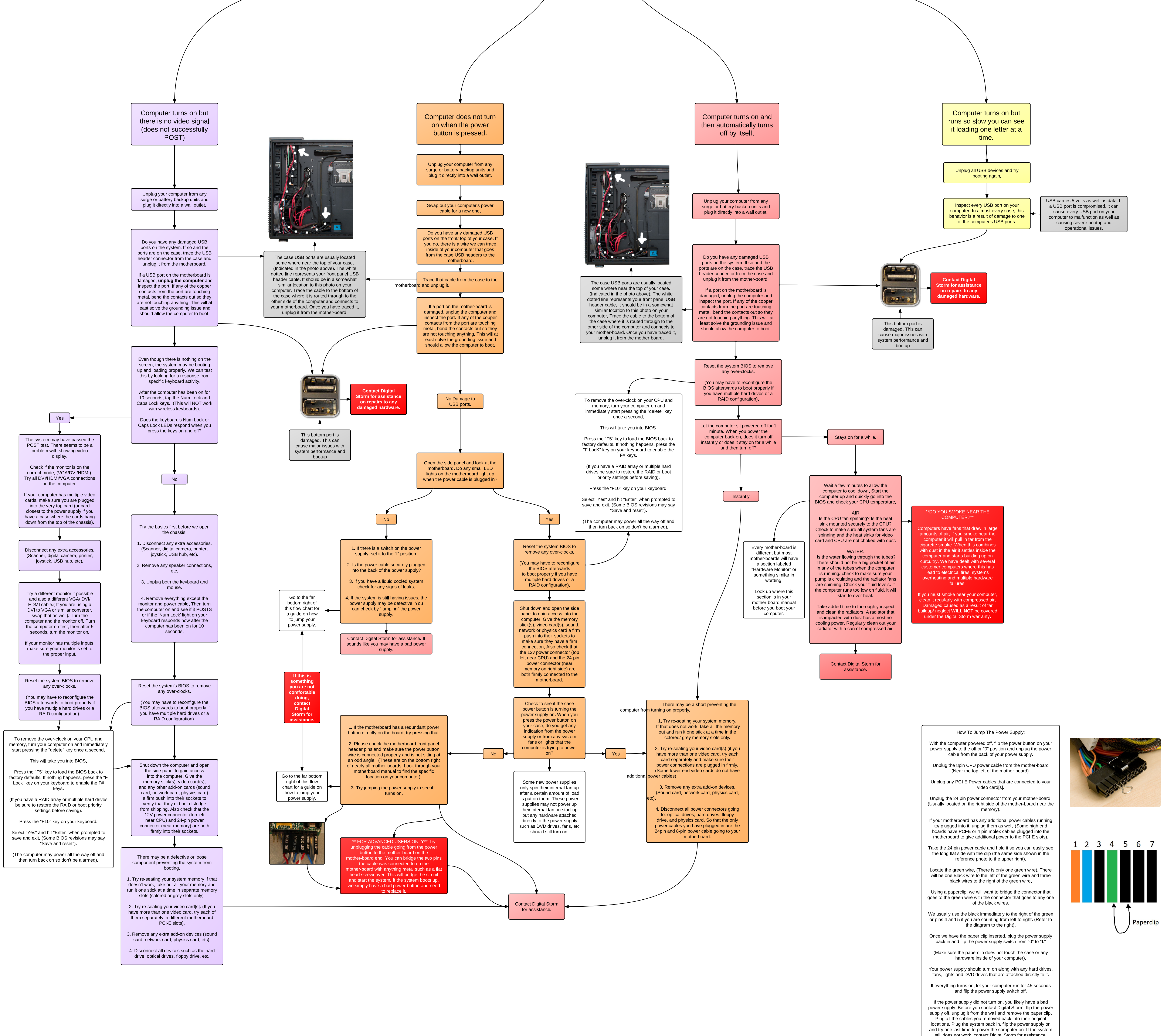


Issues Booting Computer
(Before Loading Windows)



Computer turns on but there is no video signal (does not successfully POST)

Unplug your computer from any surge or battery backup units and plug it directly into a wall outlet.

Do you have any damaged USB ports on the system. If so and the ports are on the case, trace the USB header connector from the case and unplug it from the motherboard.

If a USB port on the motherboard is damaged, unplug the computer and inspect the port. If any of the copper contacts from the port are touching metal, bend the contacts out so they are not touching anything. This will at least solve the grounding issue and should allow the computer to boot.



The case USB ports are usually located some where near the top of your case. (Indicated in the photo above). The white dotted line represents your front panel USB header cable. It should be in a somewhat similar location to this photo on your computer. Trace the cable to the bottom of the case where it is routed through to the other side of the computer and connects to your motherboard. Once you have traced it, unplug it from the motherboard.

Even though there is nothing on the screen, the system may be booting up and loading properly. We can test this by looking for a response from specific keyboard activity.

After the computer has been on for 10 seconds, tap the Num Lock and Caps Lock keys. (This will NOT work with wireless keyboards).

Does the keyboard's Num Lock or Caps Lock LEDs respond when you press the keys on and off?

The system may have passed the POST test. There seems to be a problem with showing video display.

Check if the monitor is on the correct mode. (VGA/DVI/HDMI). Try all DVI/HDMI/VGA connections on the computer.

If your computer has multiple video cards, make sure you are plugged into the very top card (or card closest to the power supply if you have a case where the cards hang down from the top of the chassis).

Disconnect any extra accessories. (Scanner, digital camera, printer, joystick, USB hub, etc).

Try a different monitor if possible and also a different VGA/ DVI/ HDMI cable. (If you are using a DVI to VGA or similar converter, swap that as well). Turn the computer on first, then after 5 seconds, turn the monitor on.

If your monitor has multiple inputs, make sure your monitor is set to the proper input.

Reset the system BIOS to remove any over-clocks.

(You may have to reconfigure the BIOS afterwards to boot properly if you have multiple hard drives or a RAID configuration).

To remove the over-clock on your CPU and memory, turn your computer on and immediately start pressing the "delete" key once a second.

This will take you into BIOS.

Press the "F5" key to load the BIOS back to factory defaults. If nothing happens, press the "F" Lock" key on your keyboard to enable the F# keys.

(If you have a RAID array or multiple hard drives be sure to restore the RAID or boot priority settings before saving).

Select "Yes" and hit "Enter" when prompted to save and exit. (Some BIOS revisions may say "Save and reset").

(The computer may power all the way off and then turn back on so don't be alarmed).

Shut down the computer and open the side panel to gain access into the computer. Give the memory stick(s), video card(s), and any other add-on cards (sound card, network card, physics card) a firm push into their sockets to verify that they did not dislodge from shipping. Also check that the 12V power connector (top left near CPU) and 24-pin power connector (near memory) are both firmly into their sockets.

There may be a defective or loose component preventing the system from booting.

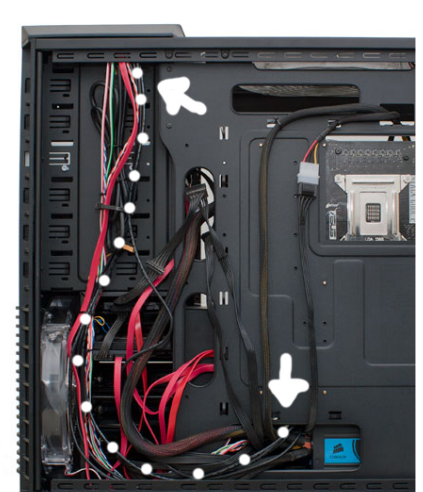
1. Try re-seating your system memory. If that doesn't work, take out all your memory and run it one stick at a time in separate memory slots (colored or grey slots only).
2. Try re-seating your video card(s). (If you have more than one video card, try each of them separately in different motherboard PCIe slots).
3. Remove any extra add-on devices (sound card, network card, physics card, etc).
4. Disconnect all devices such as the hard drive, optical drives, floppy drive, etc.

Computer does not turn on when the power button is pressed.

Unplug your computer from any surge or battery backup units and plug it directly into a wall outlet.

Swap out your computer's power cable for a new one.

Do you have any damaged USB ports on the system. If so and the ports are on the case, trace the USB header connector from the case and unplug it from the motherboard.



The case USB ports are usually located some where near the top of your case. (Indicated in the photo above). The white dotted line represents your front panel USB header cable. It should be in a somewhat similar location to this photo on your computer. Trace the cable to the bottom of the case where it is routed through to the other side of the computer and connects to your motherboard. Once you have traced it, unplug it from the motherboard.

Trace that cable from the case to the motherboard and unplug it.

If a port on the motherboard is damaged, unplug the computer and inspect the port. If any of the copper contacts from the port are touching metal, bend the contacts out so they are not touching anything. This will at least solve the grounding issue and should allow the computer to boot.

No Damage to USB ports.

Open the side panel and look at the motherboard. Do any small LED lights on the motherboard light up when the power cable is plugged in?

1. If there is a switch on the power supply, set it to the "I" position.

2. Is the power cable securely plugged into the back of the power supply?

3. If you have a liquid cooled system check for any signs of leaks.

4. If the system is still having issues, the power supply may be defective. You can check by "jumping" the power supply.

Contact Digital Storm for assistance. It sounds like you may have a bad power supply.

Reset the system BIOS to remove any over-clocks.

(You may have to reconfigure the BIOS afterwards to boot properly if you have multiple hard drives or a RAID configuration).

Shut down and open the side panel to gain access into the computer. Give the memory stick(s), video card(s), sound, network or physics card a firm push into their sockets to make sure they have a firm connection. Also check that the 12V power connector (top left near CPU) and the 24-pin power connector (near memory on right side) are both firmly connected to the motherboard.

Check to see if the case power button is turning the power supply on. When you press the power button on your case, do you get any indication from the power supply or from any system fans or lights that the computer is trying to power on?

1. If the motherboard has a redundant power button directly on the board, try pressing that.

2. Please check the motherboard front panel header pins and make sure the power button wire is connected properly and is not sitting at an odd angle. (These are on the bottom right of nearly all motherboards. Look through your motherboard manual to find the specific location on your computer).

3. Try jumping the power supply to see if it turns on.

Some new power supplies only spin their internal fan up after a certain amount of load is put on them. These power supplies may not power up their internal fan on start-up but any hardware attached directly to the power supply such as DVD drives, fans, etc should still turn on.

There may be a short preventing the computer from turning on properly.

1. Try re-seating your system memory. If that does not work, take all the memory out and run it one stick at a time in the colored/ grey memory slots only.
2. Try re-seating your video card(s) (if you have more than one video card, try each card separately and make sure their power connections are plugged in firmly. (Some lower end video cards do not have additional power cables).
3. Remove any extra add-on devices. (Sound card, network card, physics card, etc).
4. Disconnect all power connectors going to: optical drives, hard drives, floppy drive, and physics card. So that the only power cables you have plugged in are the 24pin and 8-pin power cable going to your motherboard.

To remove the over-clock on your CPU and memory, turn your computer on and immediately start pressing the "delete" key once a second.

This will take you into BIOS.

Press the "F5" key to load the BIOS back to factory defaults. If nothing happens, press the "F" Lock" key on your keyboard to enable the F# keys.

(If you have a RAID array or multiple hard drives be sure to restore the RAID or boot priority settings before saving).

Select "Yes" and hit "Enter" when prompted to save and exit. (Some BIOS revisions may say "Save and reset").

(The computer may power all the way off and then turn back on so don't be alarmed).

Let the computer sit powered off for 1 minute. When you power the computer back on, does it turn off instantly or does it stay on for a while and then turn off?

Wait a few minutes to allow the computer to cool down. Start the computer up and quickly go into the BIOS and check your CPU temperature.

AIR: Is the CPU fan spinning? Is the heat sink mounted securely to the CPU? Check to make sure all system fans are spinning and the heat sinks for video card and CPU are not choked with dust.

WATER: Is the water flowing through the tubes? There should not be a big pocket of air in any of the tubes when the computer is running. Check to make sure your pump is circulating and the radiator fans are spinning. Check your fluid levels. If the computer runs too low on fluid, it will start to over heat.

Take added time to thoroughly inspect and clean the radiators. A radiator that is impacted with dust has almost no cooling power. Regularly clean out your radiator with a can of compressed air.

Every motherboard is different but most motherboards will have a section labeled "Hardware Monitor" or something similar in wording.

Look up where this section is in your motherboard manual before you boot your computer.

Wait a few minutes to allow the computer to cool down. Start the computer up and quickly go into the BIOS and check your CPU temperature.

AIR: Is the CPU fan spinning? Is the heat sink mounted securely to the CPU? Check to make sure all system fans are spinning and the heat sinks for video card and CPU are not choked with dust.

WATER: Is the water flowing through the tubes? There should not be a big pocket of air in any of the tubes when the computer is running. Check to make sure your pump is circulating and the radiator fans are spinning. Check your fluid levels. If the computer runs too low on fluid, it will start to over heat.

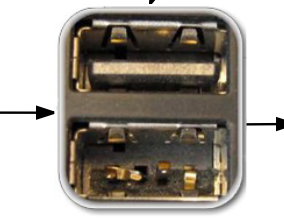
Take added time to thoroughly inspect and clean the radiators. A radiator that is impacted with dust has almost no cooling power. Regularly clean out your radiator with a can of compressed air.

Computer turns on but runs so slow you can see it loading one letter at a time.

Unplug all USB devices and try booting again.

Inspect every USB port on your computer. In almost every case, this behavior is a result of damage to one of the computer's USB ports.

USB carries 5 volts as well as data. If a USB port is compromised, it can cause every USB port on your computer to malfunction as well as causing severe bootup and operational issues.



This bottom port is damaged. This can cause major issues with system performance and bootup.

Contact Digital Storm for assistance on repairs to any damaged hardware.

Reset the system BIOS to remove any over-clocks.

(You may have to reconfigure the BIOS afterwards to boot properly if you have multiple hard drives or a RAID configuration).

Let the computer sit powered off for 1 minute. When you power the computer back on, does it turn off instantly or does it stay on for a while and then turn off?

Wait a few minutes to allow the computer to cool down. Start the computer up and quickly go into the BIOS and check your CPU temperature.

AIR: Is the CPU fan spinning? Is the heat sink mounted securely to the CPU? Check to make sure all system fans are spinning and the heat sinks for video card and CPU are not choked with dust.

WATER: Is the water flowing through the tubes? There should not be a big pocket of air in any of the tubes when the computer is running. Check to make sure your pump is circulating and the radiator fans are spinning. Check your fluid levels. If the computer runs too low on fluid, it will start to over heat.

Take added time to thoroughly inspect and clean the radiators. A radiator that is impacted with dust has almost no cooling power. Regularly clean out your radiator with a can of compressed air.

Every motherboard is different but most motherboards will have a section labeled "Hardware Monitor" or something similar in wording.

Look up where this section is in your motherboard manual before you boot your computer.

Wait a few minutes to allow the computer to cool down. Start the computer up and quickly go into the BIOS and check your CPU temperature.

AIR: Is the CPU fan spinning? Is the heat sink mounted securely to the CPU? Check to make sure all system fans are spinning and the heat sinks for video card and CPU are not choked with dust.

WATER: Is the water flowing through the tubes? There should not be a big pocket of air in any of the tubes when the computer is running. Check to make sure your pump is circulating and the radiator fans are spinning. Check your fluid levels. If the computer runs too low on fluid, it will start to over heat.

Take added time to thoroughly inspect and clean the radiators. A radiator that is impacted with dust has almost no cooling power. Regularly clean out your radiator with a can of compressed air.

"DO YOU SMOKE NEAR THE COMPUTER?"

Computers have fans that draw in large amounts of air. If you smoke near the computer it will pull in far from the cigarette smoke. When this combines with dust in the air it settles inside the computer and starts building up on curcullery. We have dealt with several customer computers where this has led to electrical fires, systems overheating and multiple hardware failures.

If you must smoke near your computer, clean it regularly with compressed air. Damaged caused as a result of tar buildup/ neglect WILL NOT be covered under the Digital Storm warranty.

How To Jump The Power Supply:

With the computer powered off, flip the power button on your power supply to the off or "0" position and unplug the power cable from the back of your power supply.

Unplug the 8pin CPU power cable from the motherboard (Near the top left of the motherboard).

Unplug any PCIe Power cables that are connected to your video card(s).

Unplug the 24 pin power connector from your motherboard. (Usually located on the right side of the motherboard near the memory).

If your motherboard has any additional power cables running to/ plugged into it, unplug them as well. (Some high end boards have PCIe or 4 pin molex cables plugged into the motherboard to give additional power to the PCIe slots).

Take the 24 pin power cable and hold it so you can easily see the long flat side with the clip (the same side shown in the reference photo to the upper right).

Locate the green wire. (There is only one green wire). There will be one Black wire to the left of the green wire and three black wires to the right of the green wire.

Using a paperclip, we will want to bridge the connector that goes to the green wire with the connector that goes to any one of the black wires.

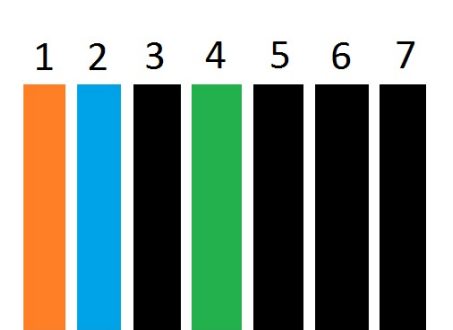
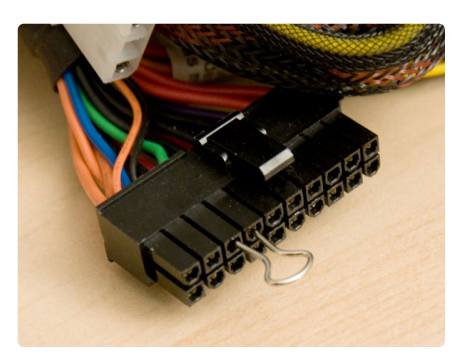
We usually use the black immediately to the right of the green or pins 4 and 5 if you are counting from left to right. (Refer to the diagram to the right).

Once we have the paper clip inserted, plug the power supply back in and flip the power supply switch from "0" to "I". (Make sure the paperclip does not touch the case or any hardware inside of your computer).

Your power supply should turn on along with any hard drives, fans, lights and DVD drives that are attached directly to it.

If everything turns on, let your computer run for 45 seconds and flip the power supply switch off.

If the power supply did not turn on, you likely have a bad power supply. Before you contact Digital Storm, flip the power supply off, unplug it from the wall and remove the paper clip. Plug all the cables you removed back into their original locations. Plug the system back in, flip the power supply on and try one last time to power the computer on. If the system still does not work, contact Digital Storm for assistance.



Paperclip

