

# Forum:[Hack Forums](#)

Thread: [VGA Cables](#)

**Yac1ne** - October 5, 2019, 12:06 am

Hello everyone , i recently came across a problem with a vga cable of a friend's computer while repairing it , you see , the monitor doesn't display its native resolution , i confirmed after a while using another cable that the problem actually lies within the other cable , and i couldn't figure out why , do some cables have more bandwidth than others ? i really appreciate your help ?

**Natas** - October 5, 2019, 12:10 am

Optic fiber wire will have more bandwidth then copper wire.  
It really is just how the wire is made and what its made to do.  
And when it was made as well back in my day I used only vga  
I loved it besides it not supporting audio most hard ware now  
days is all hdmi witch is really better.

**Bastille** - October 5, 2019, 12:11 am

Interesting thread, here waiting for an answer if someone can tell us ?

**datguy.dev** - October 5, 2019, 7:06 pm

I'm unaware of any variations of a VGA cable. (It is VGA right? Not DVI or anything?) The only thing that comes to mind is cable length and attenuation.

What about the GPU drivers?

**Leroy Jethro Gibbs** - October 5, 2019, 7:09 pm

(Oct 5, 2019 07:06 PM)datguy.dev Wrote: [\[CITE\]](#) I'm unaware of any variations of a VGA cable. (It is VGA right? Not DVI or anything?) The only thing that comes to mind is cable length and attenuation.

What about the GPU drivers?

Maybe just a faulty cable as well?

I've personally never had issues with VGA cables. I have had issues with drivers and monitors not seeing each other correctly. I guess it could have been cable related but for the most part I just switched monitors and it works fine.

**datguy.dev** - October 5, 2019, 7:21 pm

(Oct 5, 2019 07:09 PM)Leroy Jethro Gibbs Wrote: [\[CITE\]](#) Maybe just a faulty cable as well?

I've personally never had issues with VGA cables. I have had issues with drivers and monitors not seeing each other correctly. I guess it could have been cable related but for the most part I just switched monitors and it works fine.

In my experiences, a VGA cable displays something or not at all.

I used to work for a computer refurbisher. We had like 200 stations set up with VGA, ethernet, and USB to test the systems in bulk etc. We used those cables on thousands of computers a week so you can get a gist on the wear those cables endured. It was an everyday thing to maintain them and we didn't want to if possible. We;d bend pins back into place. Shoving the VGA in regardless of bent pins. Multiple pins touching inside the connector etc. I cannot recall a single resolution anomaly to

the question in the OP.

**Leroy Jethro Gibbs** - October 5, 2019, 7:49 pm

(Oct 5, 2019 07:21 PM)datguy.dev Wrote: [\[CITE\]](#) In my experiences, a VGA cable displays something or not at all.

I used to work for a computer refurbisher. We had like 200 stations set up with VGA, ethernet, and USB to test the systems in bulk etc. We used those cables on thousands of computers a week so you can get a gist on the wear those cables endured. It was an everyday thing to maintain them and we didn't want to if possible. We'd bend pins back into place. Shoving the VGA in regardless of bent pins. Multiple pins touching inside the connector etc. I cannot recall a single resolution anomaly to the question in the OP.

I personally think its usually the machine or the monitor. Cables I don't imagine have ever been the issue. I have also done the same thing with bending pins.

**datguy.dev** - October 5, 2019, 8:32 pm

(Oct 5, 2019 07:49 PM)Leroy Jethro Gibbs Wrote: [\[CITE\]](#) I personally think its usually the machine or the monitor. Cables I don't imagine have ever been the issue. I have also done the same thing with bending pins.

Yeah, there were situations where computers would not display to certain monitors even with a proven good VGA cable. I never found out why.... We'd just move them to the next station until they displayed something. However, the monitors were all the same model, same cables etc. It made no logical sense and thus we never knew why.

**Yac1ne** - October 6, 2019, 12:10 am

(Oct 5, 2019 08:32 PM)datguy.dev Wrote: [\[CITE\]](#) Yeah, there were situations where computers would not display to certain monitors even with a proven good VGA cable. I never found out why.... We'd just move them to the next station until they displayed something. However, the monitors were all the same model, same cables etc. It made no logical sense and thus we never knew why.

Perhaps i didn't explain the problem with enough clarity , the presumed faulty VGA cable does actually work , the problem lies within the display , the monitor doesn't display its NATIVE RESOLUTION , when i try to change it either in nvidia CP or widows screen resolution setting , i get a list of weird resolutions that are not supposed to be there , there's even higher resolutions than the monitor's native , and also there's the option to change the refresh rate up to 120 Hz ( while the monitor's max is 60 Hz ) , and it doesn't even work if i select it , the resolution isn't as sharp as it's supposed to be ( it's kind of blurry ) , there's ABSOLUTELY no driver or MONITOR or GRAPHICS CARD related problem , i can tell because when i tried my own old vga cable , it worked like a charm ( like i mentioned i was repairing a friend's computer , i no longer use VGA or DVI ) , i can illustrate with some pictures once i get a hold of the faulty VGA cable , and thanks a lot for your attention

**datguy.dev** - October 6, 2019, 3:30 pm

(Oct 6, 2019 12:10 AM)Yac1ne Wrote: [\[CITE\]](#) Perhaps i didn't explain the problem with enough clarity , the presumed faulty VGA cable does actually work , the problem lies within the display , the monitor doesn't display its NATIVE RESOLUTION , when i try to change it either in nvidia CP or widows screen resolution setting , i get a list of weird resolutions that are not supposed to be there , there's even higher resolutions than the monitor's native , and also there's the option to change the refresh rate up to 120 Hz ( while the monitor's max is 60 Hz ) , and it doesn't even work if i select it , the resolution isn't as sharp as it's supposed to be ( it's kind of blurry ) , there's ABSOLUTELY no driver or MONITOR or GRAPHICS CARD related problem , i can tell because when i tried my own old vga cable , it worked like a charm ( like i mentioned i was repairing a friend's computer , i no longer use VGA or DVI ) , i can illustrate with some pictures once i get a hold of the faulty VGA cable , and thanks a lot for your attention

We all understand your issue from the OP. I was having a separate discussion with Leroy. Don't

use CAPs, it makes YOU sound ANNOYING. PREACHING and PRETENTIOUS. :D

This is the pinout for VGA:

If you're going to blame the cable, then you have to know what each pin of the cable does. The only pins of remote relevance are horizontal and vertical sync. But that is a stretch as those handle the synchronisation of the video displayed. The syncing process to be explained in short deals with the refreshing of the pixels. Instead, consider what provides the monitor's details and capabilities to the system? The monitor's driver and it's firmware. I don't claim to have a fix for you. But my best guess is that information is being sent and or interpreted wrong which could explain the strange resolutions.

**Yac1ne** - October 7, 2019, 3:39 am

(Oct 6, 2019 03:30 PM)datguy.dev Wrote: [\[CITE\]](#) We all understand your issue from the OP. I was having a separate discussion with Leroy. Don't use CAPs, it makes YOU sound ANNOYING. PREACHING and PRETENTIOUS. :D

This is the pinout for VGA:

If you're going to blame the cable, then you have to know what each pin of the cable does. The only pins of remote relevance are horizontal and vertical sync. But that is a stretch as those handle the synchronisation of the video displayed. The syncing process to be explained in short deals with the refreshing of the pixels. Instead, consider what provides the monitor's details and capabilities to the system? The monitor's driver and it's firmware. I don't claim to have a fix for you. But my best guess is that information is being sent and or interpreted wrong which could explain the strange resolutions. I found out using a multimeter that some of those pins don't pass electrical current , i don't recall wich ones though , i think that concludes the problem , thanks a lot buddy , that photo was really helpful ?

Update : the pins 1 , 2 , 9 and 14 pass no electric current , but the weird thing is , the colors are completely NORMAL , sorry for using CAPS again LOL , my guess is , the cable is probably a fake , which means it's likely that it doesn't follow the vga schematic , thanks again

**datguy.dev** - October 7, 2019, 11:48 am

(Oct 7, 2019 03:39 AM)Yac1ne Wrote: [\[CITE\]](#) I found out using a multimeter that some of those pins don't pass electrical current , i don't recall wich ones though , i think that concludes the problem , thanks a lot buddy , that photo was really helpful ?

Update : the pins 1 , 2 , 9 and 14 pass no electric current , but the weird thing is , the colors are completely NORMAL , sorry for using CAPS again LOL , my guess is , the cable is probably a fake , which means it's likely that it doesn't follow the vga schematic , thanks again

It can be a bit more complicated to read some of the pins. The RGB pins are indeed readable having an analog voltage (float) less than 1v. Doable with a multimeter if you have the monitor connected and display a solid image of a certain color. The sync pins use a very fast frequencies where you'd need something like an oscilloscope to capture. I only know this crap because I tried to read VGA data with a Teensy. The Teensy was too slow to do so.

What it sounds to me is you read a no signal screen with a blue box being displayed. Black equals 0v. the 3 pin is blue. Whereas, if you cut the sheath off the connector, inserted into a monitor, then read them. You should see voltages on those other pins. Pain in the butt right?

If you want to test the pinout, use the continuity setting and test each pin to make sure it follows the standard VGA pinout.

