Subject: Strange behavior in PC/TV monitor
Posted by gofar99 on Thu, 22 Dec 2022 02:58:35 GMT
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Hi, Anyone have some thoughts on the following...I use a PC monitor that has two HDMI inputs to share on a PC scope and a catv box. All was good until a few days ago and the scope apparently had a spike and the monitor lost the picture. After rebooting the PC and catv box the monitor works fine on the PC but the cable box can not access the monitor. It keeps looking, but doesn't ever find how to make the connection work. I tried all the various settings on each of them but nothing worked. It is not a resolution / scan issue as I tried all of them. It almost seems as if the monitor lost the ability to talk back to the catv box. It is a bi-directional one on COX. A Cisco 4742HDC. The monitor is a LG 24GN50W. The PC apparently is not bi-directional and really doesn't care what is hooked up. All this stuff worked fine for a long time.

Subject: Re: Strange behavior in PC/TV monitor
Posted by Wayne Parham on Thu, 22 Dec 2022 16:39:29 GMT
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You know the drill - process of elimination. Gotta swap the CATV and the monitor with known good units 'til you find which of them is at fault.

Seems like pretty easy to find another monitor with HDMI. But for the CATV box, you might have to call the service provider.

You didn't say the spike was caused by a storm, but I have some interesting experiences with lightning damage. For a while in the 1980s, I was asked to design lightning protection systems. They always involved lightning rods as primary protection, so I could expect strikes at the rods and both air-gap and solid-state surge protectors (MOVs and surge-clamping diodes) as secondary protection.

One site had annual storms - mostly in the summertime - that would include lightning strikes with such intensity that they would destroy dozens of trees from direct strikes. They would literally bulldoze the trees to a central location and burn them after every storm. So naturally, electronics on this site were regularly damaged too.

Most systems' failures aren't from direct strikes. And frankly, many don't even come through the power lines. The power grid in America already has great surge protection. But the interconnections between devices - especially long cable runs - easily spike from inductive coupling. So I always put secondary surge protectors on those.

Use lightning rods placed some distance from protected buildings to draw the direct strikes there, and use surge clamping devices on each end of a signal interface cable run. That approach works very well. Storms still happen, trees still get struck, but the electronics survive.

Subject: Re: Strange behavior in PC/TV monitor
Posted by gofar99 on Fri, 23 Dec 2022 22:10:49 GMT
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Hi, I tried it on a different CATV box.....no go. Tried a different monitor on the original CATV box, works fine. That is what is so odd. My best guess is that the CATV system expects some sort of return signal from the monitor (or TV if used) and the monitor no longer responds. Possibly a return signal telling the box what sort of refresh rate and resolution it should send. It would seem logical to have a default and then work from there...but there doesn't seem to be one. Just very strange. PCs don't really care. You set the refresh rate and size and it will send it. If you get it wrong then you have to revert to something that will works. It is up to the user not the PC. All is not lost as I can use the monitor on my stereo replacing a diminutive 15 inch one. A new Dell should be here today.

Subject: Re: Strange behavior in PC/TV monitor
Posted by Wayne Parham on Fri, 23 Dec 2022 22:46:20 GMT
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So it was the monitor. There you go.

That was a weird one though, wasn't it? The monitor works in most cases. It's just that one sliver of an edge-case used by the CATV that doesn't work.

Those kinds of problems drive me crazy! You don't want to pitch it 'cause mostly, it works. But that one little thing is a gotcha.