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Your Service Professionals!

## Concerning Firewire...

One of the most popular features of modern video is the IEEE1394 or *firewire* connector. Just connect one cable between devices and your digital data flows effortlessly in both directions. The computer controls the deck, the video goes both ways, and it's always compatible. Sound too good to be true? Hang on, here comes the real world...

Driver issues between devices may require installation or upgrades. Sometimes equipment still doesn't get along. Audio flowing in the same wire is not tightly synced, and after several transfers, may be way off. Wire length is limited, making a camera link to your control room iffy. And the link is, in a word, *fragile*.

The plug and cable is fragile, the jack even more so, and as for the electronics inside the box ...wow! In order to boost data transfer, the interface goes to the heart of DV processing quickly, with little buffering. Something complex and delicate is relatively accessible to the harsh, cruel world. When that plug goes into the jack, bad things can happen. When they do, it's expensive.

The classic story centers around Mac's upgrade to OSX. (In cell-phone years, over a century ago!) With nothing connected, the voltage on the computer plug rose until the device plugged in blew smoke. Naturally, that issue was fixed a long time ago, but there still might be a few 'hot' Macs out there lurking.

More common today is the careless plug-pusher, also known as *the friend from hell*. This is the bigger hammer mentality that takes the large 1394 plug, turns it upside down, and tries to cram it in anyway. It won't go, but it can cross link enough power onto the data lines to produce what some PC aficionados refer to as a *virtual Mac*. Bring the marshmallows; it's a barbeque. (BTW, Buddy Hamfist is equally deadly with PC or Mac boxes, Intel processor notwithstanding).

Another issue is the possibility of voltage potentials related to ground faults or even static electricity. Ever wonder why some VCRs say *For Commercial Use Only* in big letters on the case? It's because of their three wire, hard grounded plug. If you connect it up to your two wire, floating home entertainment system and smoke rolls because even though it was working fine it was hotter than a firecracker, they did warn you. In DV applications we often see a mix of two wire and three wire plugs as people work between consumer, prosumer, and professional gear.

So do yourself and your budget a favor. Power down before connecting firewire, and if it's a two wire (ungrounded) power cord, plug that in last. Be especially wary of a home system with a cable coax coming in, as that can be a rouge element in grounding. It's also worthwhile to get an outlet checker and check both your outlets and your plug strips once in awhile too.

Despite your best efforts, you'll probably blow one once in a while if you use firewire regularly. It is, after all, fragile. But not too often, huh? And as to repeat failures- manufacturers will not warranty them, we can't either. Be careful.