

Subject: Re: Sensor update

From: Giacomo Ciani <ciani@phys.ufl.edu>

Date: 5/20/2012 10:15 PM

To: "Barbet,Mark C" <mbarbet@ufl.edu>

CC: Mindy Jacobson <mjacobso@ligo.caltech.edu>, Guido Mueller <mueller@phys.ufl.edu>, Eric Deleeuw <edeleeuw@ufl.edu>

Great. It might also be that it was a casuality, but connecting it the wrong way is certainly something that is better to avoid.

If you find a way of mechanically preventing a wrong connection (I believe there are connectors of the type used on computer motherboards that are small enough for our purposes and still prevent a wrong connection), that would be best, but if you don't... never mind: we are a reasonably small number of people working at the experiment and once we are aware of the problem, we should be able to avoid it (especially if the right pin is clearly marked).

Thanks for the update.

Giacomo

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On Sun, 20 May 2012 17:28:41, Barbet,Mark C wrote:

Hi,

We have an idea of what may have caused it. Not absolutely certain about it though. When we installed the new rig, we had to change the connector (make it smaller) as you know, so that it could fit through the hole in the center of the wheel. Unlike the old connector, the new one had nothing preventing it from being plugged in the wrong way around. In other words, that 5-volt pin on the power supply end likely got plugged into a pin on the thermal sensor which isn't supposed to have a voltage across it of more than 0.3-volt. At the time, we did not realize this, and we did plug it in the wrong way once or twice. However, each of these times we simply turned the connector around and it worked fine. It was working as it is supposed to up until the point where we re-assembled the rig after it froze up, which is the main cause of my uncertainty. At any rate, this is something we need to pay a bit more attention to in future...

For the time being, we have marked which pin supplies the 5-volts, and I plan to try to modify the pin so that it can only fit one way around.

Mark

On Fri, 18 May 2012 11:32:11 -1000, Giacomo Ciani wrote:

Agreed, let's wait a few more days and put the original sensor in. It should be a piece of cake to get going again...

BTW, did you guy figured out what happened to the other sensor, or at least have good hypothesis? If it has been an operation error, no big deal, but we should know so we avoid damaging the new sensor(s)...

Giacomo

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On Fri, 18 May 2012 09:16:38, Mindy Jacobson wrote:

On 5/18/2012 12:03 PM, Barbet,Mark C wrote:

Hi,

Just letting everyone know, I picked up the sensors. I have just been looking at them a bit, and they we would need to physically modify the holder for the device.

Can you please confirm you're speaking of model "HIS-EU" or "HIS-EC"?

Yes, I think we agreed not to make any modifications (in the near term) to incorporate "HIS" sensors.

However, this may not matter, as I just received word that Boston Electronics has just received the correct sensor

I believe this means model "HTIA-EC"

And, yes, we agreed to incorporate these exact replacements (asap).

that we have been using, and are shipping it to us today. I think at this point it is better to wait for these to arrive rather than tear apart the system we have, only to put it back together on Monday.

Thanks,

Mark