

Differences Between the SH-100-100 Cable and the SH-100-100F Cable

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Reported In 

Hardware

- SH100M-100M Flex Cable
- SH100M-100M Cable

Issue Details

I am trying to connect my devices with the SH100-100 (also called the SH100100 and SH100M-100M) cable, but pins 1 and 2 are shorted. I am not able to use the DIO pins on several devices or the counter of the NI 6624. Should I use the SH-100-100-F (also called the SH100M-100M Flex) cable instead?

What are the differences between the SH100M-100M and SH100M-100M Flex cables?

Solution

The difference between the SH100M-100M and the SH100M-100M Flex is whether or not pins 1 and 2 are shorted.

The SH100M-100M cables have pins 1 and 2 shorted to increase the noise reduction. This cable is primarily used with analog signals and comes in 1m, 2m, 5m, and 10m lengths.

The SH100M-100M Flex cables do not have pins 1 and 2 shorted. This cable is used for digital input output (DIO) and timing input output (TIO). The SH100M-100M Flex only comes in lengths up to 2m because if it were longer the signal could degrade giving false readings due to the lack of shielding.

Additional Information

Picking the correct cable for the application is crucial. For example, using the SH100M-100M cable with a PXI-6624 would prevent users from using Counter 0 for applications that require signals to be connected to the source (such as edge counting) since pins 1 and 2 are used as CTR0 SRC+ and SRC- respectively.

Related Links

- [SH100M-100M Flex and SH100100 Cable Specifications](#)
- [Products and Services: NI SH100100](#)
- [Products and Services: NI SH100-100-F](#)
- [Product Manuals: DAQ Accessories Selection Guide](#)

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