

DigitalMedia™ infrastructure wiring should be tested before connecting DM equipment. Outlined below are the basic steps needed to certify your cable plant for DigitalMedia. The methods described below are very *typical* certifications for an Ethernet style data network (most of the terminology and values are functions and vocabulary of the test equipment).

Videos

Click on the various hyperlinks in this document to watch videos related to each step of cable testing.

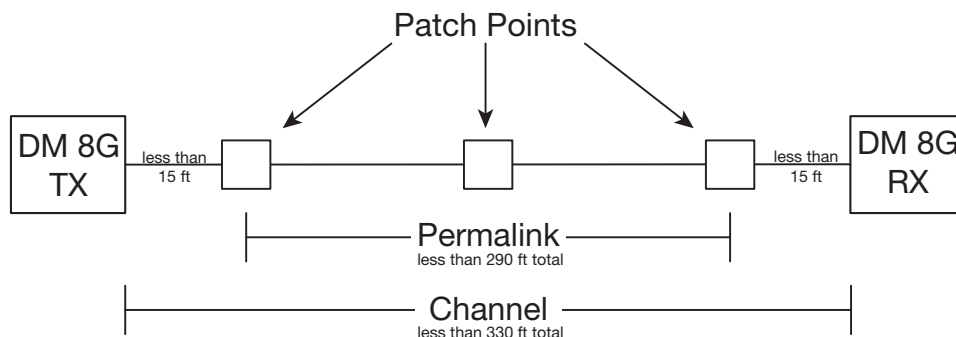
Note: Original DM cable (DM-CBL) cannot be tested using these methods.

DM 8G STP Cable (DM-CBL-8G)

The cables should be certified to “EIA/TIA-568-B.2 Category 5e” with a **Fluke DTX-1800** using the following settings:

- “Cat5e Channel” or “Cat5e Permalink” test (see below for when to use each)
- FTP (foil twisted pair) cable with the shield test
- Nominal Velocity of Propagation 69%
- T568B wiring recommended (however, use T568A if that is your plant’s wiring)

If you are certifying patch points then use the “Cat5e Permalink” test, which assumes that short (less than 40 ft total) patch cables may be used on either end. If you are certifying the entire 8G communications channel from port to port then use the “Cat5e Channel” test.



DM Fiber and 8G Fiber (CRESFIBER8G)

Each fiber end should be inspected with a 100x-200x microscope and cleaned if necessary before testing. Each fiber should be tested for optical loss as follows:

Test using the ‘IEC 61280-4-1 single reference cable method’ or ‘TIA 526-14 OFSTP-14 Method B’ with the acceptable link attenuation (insertion loss) on each fiber end-to-end link of

- <4dB @ 850nm
- <4dB @ 1300nm

Equipment Used:

- Fiber Optic Microscope (ex. SPCfiber DI-200 Fiber Optic Inspection Scope)
- Fiber Optic Cleaning Wipes (ex. MicroCare Fiber Wipes or wipes included with CRESFIBER-TK)
- Multimode Fiber Optic Loss Test Kit (ex. Noyes CKM-2)

Testing HDMI Cables

HDMI cables should be tested using a Quantum Data 780 ‘Wire test’ function.