# **OPTO-DX Installation**

April, 2020

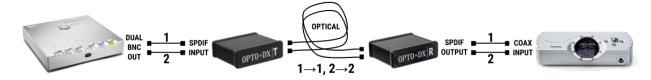
OPTO•DX is easily configured in the DX signal path between upsampler and DAC. The transmitter ('T') connects to the upsampler with coax cables. Similarly, the receiver ('R') connects to the DAC with coax cables. Remove the optical fibre cable protective red caps and connect the fibre cable between the transmitter and receiver. Make sure the ferrule is inserted and the screw is fully threaded with a snug fit. All signal paths are digital, which means that functional operation is assured if the cables are sound and connections secured.

### **Chord Electronics Hugo2, Hugo TT2, Qutest**

Newer DX DACs have no issues regarding operation and require no special consideration for proper and reliable operation of high speed dual-bnc (DBNC) signals. These DACs are also agnostic regarding DX channel alignment and everything is plug and play. The only concern logged has been the reliability of DBNC signals to Hugo2 caused by a low quality dual RCA/BNC to mini 3.5mm connection. Hence, Audiowise recommends using adapters from Audioquest or Black Dragon digital cables from Moon Audio.

#### **Chord Electronics Dave**

DAVE, being the original DX compatible DAC, uses a DBNC detection mode that requires synchronization at the channel and signal level. This means that DAVE requires channel alignment for proper DBNC operation - that is, the channel #1 signal must be consistent from the upsampler through the OPTO•DX transmitter/receiver and to the channel signal #1 input of DAVE. And similarly for channel #2. This also requires that the optical cables connecting the TX and RX are channel aligned as well. OPTO•DX optical cables are marked to help facilitate proper connection. Please connect Dave as below:



### **DACs with Coaxial Audio Input**

OPTO•DX is compatible with any DAC that supports SPDIF digital audio on coaxial inputs. OPTO•DX can support two independent audio streams in this case. Connection from source to DAC is made using coax patch cables.

# **Troubleshooting**

If you have OPTO•DX properly configured and cannot hear audio or are experiencing problems please follow the steps below to troubleshoot the issue.

#### 1. Ensure all cable connections are secure

Ensure all coax BNCs fully couple the bayonet and the optical connections are fully threaded. Avoid tight loops, extreme bends or strain on connections. Avoid long cables (> 10 meters). Avoid coax cables loaded with ferrites or exotic RF filtering construction. Tap or lightly manipulate the cables and connections to confirm.

#### 2. Confirm OPTO•DX Power

OPTO•DX requires 12V DC nominal power. Voltages below ~11V may not be sufficient. Voltages over ~15v will generate more heat and may cause problems. Use a voltmeter or otherwise confirm valid power.

### 3. Confirm Ambient Temperature

OPTO•DX is rated for performance below 60 degrees celsius (140 F). If OPTO•DX is very warm to the touch, consider reconfiguring to allow for better cooling.

# **Audiowise Technical Support**

If you are still experiencing issues, please email <a href="mailto:support@audiowise.ca">support@audiowise.ca</a> or text +1 905 407 8144.