

## HDMI CABLES

# 4K UHD HDMI with HDR – Are you Ready?

In the spirit of the true cinephile, Gordon J Gow Technologies, Inc. developed Tributaries UHD HDMI cables, the most advanced line of Ultra High Definition HDMI cables available today. Designed by film lovers for film lovers, Tributaries UHD HDMI cables were developed using meticulous electronic engineering designed to exceed HDMI specifications by a minimum 20% providing headroom to overcome possible system inadequacies.

### UHD HDMI Cable Design

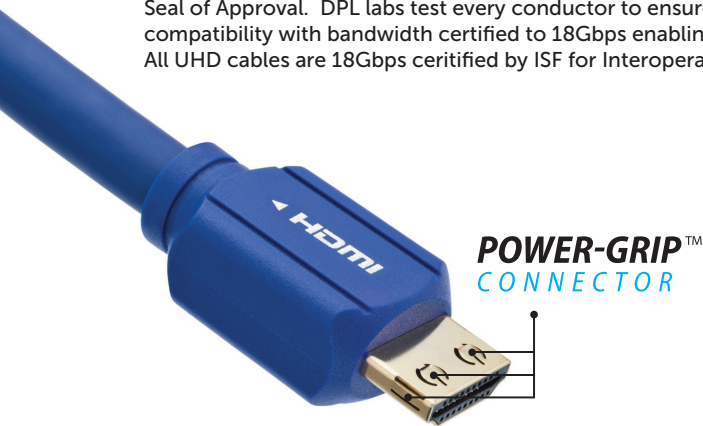
Tributaries offers the most advanced line of UHD HDMI cables available today. These cables have been custom designed to provide optimal operational 18Gbps performance. Every conductor in each cable length was electronically analyzed for its data rate capability with the result balanced against its gauge and flexibility. To guarantee optimal performance, VEGA, TITAN, X-TEND, PRO and SLIM models have undergone rigorous testing by DPL Labs and have earned the coveted 18Gbps Seal of Approval. DPL labs test every conductor to ensure 4K compatibility with bandwidth certified to 18Gbps enabling HDR. All UHD cables are 18Gbps certified by ISF for Interoperability.

### Focus on DDC

When a source and sink are connected the Display Data Channel (DDC) line communicates the EDID information and a HDCP handshake takes place. This handshake is required at start-up and is repeated continuously; if there is an error, the system will stop operation. The EDID data is transmitted via signal pulses. Due to the effect of capacitance, these pulses will degrade when they pass through a cable. The longer the cable, the greater the degradation. A cable with excessive capacitance will slow down the voltage Rise Time for each pulse, effectively degrading the data to the point of error and signal failure. All Tributaries UHD HDMI cables are designed with low capacitance on the DDC line to ensure error-free performance.

### Stay Connected

**Power-Grip:** Every Tributaries VEGA, TITAN, X-TEND, PRO and SLIM cable have the patented Power-Grip™ connector. Multi-locational raised elements provide proper tension top-to-bottom and side-to-side. We guarantee our connector will not shift in the electronics causing signal drop outs.



### Testing HDMI Cables

At Tributaries, testing cables is taken very seriously. We are the only cable company in the industry that tests every HDMI cable after it arrives from the factory using the Murideo Fresco Six-G HDMI 2.0 and HDCP 2.2 generator. This portable hand held UHD generator will produce an HDMI 2.0, 18Gbps signal of 2160p/60Hz with 8-bit color and 4:4:4 color sampling. In addition, the Fresco Six-G also tests the recessed pin #19: Hot Plug Detect. We confirm HDMI 2.0 and HDCP 2.2 compliance of every cable. Tributaries: Totally Tested, Tried and Trusted!



### DPL Labs Seal of Approval

Tributaries VEGA, TITAN, X-TEND, PRO and SLIM models have received DPL Labs 4K Cable Certification. The certification has 2 levels: 10.2Gbps and the coveted 18Gbps level. Tributaries is proud to be one of the first cable companies to receive this prestigious 18Gbps certification. To learn more about DPL Labs go to: [www.dpllabs.com](http://www.dpllabs.com)

## PASSIVE HDMI CABLES

HDMI (High-Definition Multimedia Interface) is a propriety interface for transmitting video/audio/control data between HDMI compliant devices. HDMI is the digital replacement for analog video. Why is passive so important? Passive HDMI cables are always preferred over active. In addition to incompatibility issues with other electronics, active cables are directional and will not work if reversed. The active cable requires power to supply the on-board electronics; typically, these cables harvest their power from unused TMDS voltages. This method works well if the source which drives the 5V line has an adequate output. If the source voltage is too low, it will draw down the vital 5-volt line. Passive cables are bi-directional and voltage agnostic, making any installation simpler and more stable. HDMI cables are sold in each.



### TITAN SERIES PASSIVE HDMI CABLE

#### MODEL: UHDT

Titan 18G UHD HDMI cable

Tributaries UHDT TITAN 18G HDMI cable is available in a passive version from 6 meters to 10 meters. Why is passive such a big deal? Passive is always preferred over active because of possible incompatibility issues with other electronics. Active cables are directional and will not work if reversed. The active end of the cable will require power to supply the on-board electronics. The power needed is either provided by adding another cable or typically, active cables harvest their power from unused TMDS voltages. This method works well as long as the source which drives the 5V line has an adequate output. If the source voltage is too low it will draw down the vital 5 volt line causing signal failure. Passive cables are bi-directional and voltage agnostic, making any long run installation simpler and more stable. The TITAN passive HDMI cable is a result, in part, of Tributaries' development and application of patented, advanced metallurgical engineering. This new copper formulation has high-frequency conduction characteristics far beyond standard copper. TITAN's advanced high-conductivity copper results in lower losses than with standard oxygen-free copper. This design has provided a method of extending the length of an 18G Passive HDMI cable from a previous longest length of 5 meters to the industry's new, longest length of 10 meters. The Titan Series Active HDMI cable is stocked in each in lengths from 12 meter to 30 meter.

The Titan Series Passive HDMI cable is stocked in each in lengths from 6 meter, 8 meter and 10 meter

#### Model UHDT Highlights

Made in China. Designed, packaged and tested in Orlando Florida, USA

Patented advanced metallurgy for stable high frequency signal transfer

Certified to pass 18Gbps to support 4K/60 HDR Signals

Earned 18G certification from 2 independent test labs: ISF and DPL Labs

Power Grip connectors are tight fitting without the death grip of locking connectors

Flexible UL CL2/FT4 rated jackets appropriate for in-wall use



“My wife is a formidable COD player, and she explained to me in detail how much more she was able to see, and how much easier long-distance shots were, given the clarity in the finite details she was able to see now,. I was impressed!”

Nick Scudero | Technology Professional