

## 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!

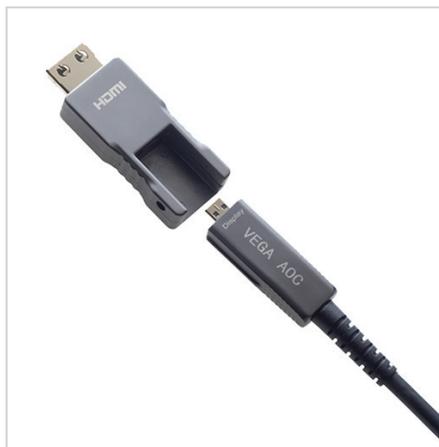


### DPL Labs Seal of Approval

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)

## ACTIVE HDMI CABLES

HDMI signals suffer from signal degradation over longer lengths due to natural attenuation in copper cable. As more video content with HDR, Deep Color, Wide Color Gamut (WCG) and 120fps becomes available, the requirement for 18Gbps HDMI cables, especially cables longer than of 4 meters (13ft), capable of fulfilling the promise of HDMI v2.0 becomes critical. Tributaries Active HDMI cables will fulfill that promise. Using the most advanced active electronics, Tributaries guarantees optimal operational performance of 18Gbps HDMI up to 50 meters (164 feet). HDMI cables are sold in each



### VEGA SERIES ACTIVE UHD HDMI CABLE

#### MODEL: UHDTV

VEGA 18G Hybrid Fiber Optic UHD HDMI cable

Tributaries UHDTV VEGA is an Active Optical (AOC) Hybrid HDMI cable. This is the ultimate solution for running long distances behind walls. VEGA is a marvel of electro-optical engineering combining the best of both worlds, glass and copper. Glass fiber transports the 4 TMDS video/audio/clock and control signals while copper carries the 2-way communication of the EDID and HDCP data. Fiber Optic cable is immune to Electromagnetic Interference (EMI) and is capable of sending signals instantly without perceptible signal loss at longer distances than copper; the TMDS information arrives instantly without losing detail. The EDID data is transmitted in pulses, which degrade when passing through long lengths of copper cable effectively slowing the Rise Time for each pulse to a point where the signal fails. Understanding this, Tributaries developed Rise Time Restorative (RTR) Technology, a proprietary electronic circuit designed to preserve the integrity of the DDC Signal. Embedded in the display end connector, RTR Technology provides zero latency in transmitting the crucial DDC signal. VEGA has the patented Power-grip connectors. The display end is terminated with a Micro Type D HDMI connector and a Type D to A Adapter that can be removed for easy installation thru conduit. A handy pulling tool is included in the box. VEGA requires external power only at the display end. A USB power cable and AC power supply are also included.

The UHDTV VEGA Series Active HDMI cable is stocked in each in lengths from 10 meter to 50 meter

#### Model UHDTV Highlights

- Made in China. Designed, packaged and tested in Orlando Florida, USA
- Hybrid AOC technology; OM3 multi-mode glass fiber for video and copper for EDID & HDCP
- Tributaries exclusive RTR Technology preserves crucial DDC signal
- Certified to 18Gbps to support UHD HDMI 4K/60 HDR signals
- Earned 18G certification from two independent test labs: ISF & DPL Labs
- Power Grip connectors are tight fitting without the death grip of locking connectors
- Flexible UL CM Fiber optic cable appropriate for in-wall use

“Tributaries VEGA did what no other 50 meter AOC cable could do: provide consistent signal transfer. We tried 3 other brands before we found VEGA”

Ralph Frank | Technology Professional