



TRIBUTARIES®

Bringing it all **together**

HDMI™

HIGH-DEFINITION MULTIMEDIA INTERFACE

CABLE

EXTENDER



HX102

Extends 1080p/12bit color HDMI 98 feet

www.tributariescable.com

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EXTENDER****HX102**

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1. Introduction

The Tributaries® HX102 is an active HDMI Extender that is designed to be connected at the end of a long run of in-wall 28AWG (or larger) HDMI cable to ensure high speed HDMI signal transmission. This new HDMI cable extender is manufactured in the form of a “Dongle” with a size and weight that can easily be hidden behind a flat screen or velcroed to any flat surface.

Designed to be used with the Tributaries IHEC cables that are 12 meters and longer, the HX102 will ensure a 1080p 12-bit deep color HDMI signal up to 98ft (30m). There are three TMDS equalizers that auto adjust to skin effect losses in copper cable. Consisting of 4 input buffers, loss of clock signal detector, 4 amplifiers and 4 output buffers, the HX102 improves jitter performance at low amplitude to ensure High Speed performance HDMI with 24AWG cable up to 98 ft. Equipped with two performance LEDs, the green LED indicates the HX102 is powered while the red LED illuminates if the HX102 loses the clock signal.

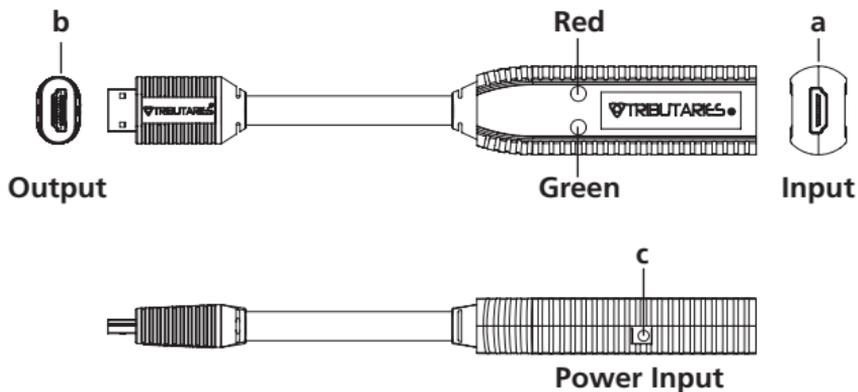
2. Features

- HDMI High Speed HEC cable transmission 1080p 12-bit color:
 - 24AWG HDMI cable to 98ft (30m)
 - 26AWG HDMI cable to 82ft (25m)
 - 28AWG HDMI cable to 65ft (20m)
- HDMI Standard Speed HEC cable transmission 1080i 8-bit color:
 - 24AWG HDMI cable to 130ft (40m)
 - 26AWG HDMI cable to 114ft (35m)
 - 28AWG HDMI cable to 82ft (25m)
- Compliant with HDMI 1.4
- Supports Resolutions of 480i, 480p, 720p, 1080i, 1080p, 4K2K
- Supports 8 channel LPCM; 192KHz, 24-bit
- Supports 3D
- Supports ARC (Bypass), CEC (Bypass) and HDCP (Bypass)
- Patent Pending

3. Package Contents

- (1) HX102 HDMI Cable Extender
- (1) 3.5mm DC barrel plug to USB B cable
- (1) 5 volt DC Power Supply
- Operation Manual

4. Connection and Installation



- Connect an HDMI cable from the source to the input of the HX102.
- Connect the male HDMI output cable from the HX102 into the proper display input.
- Connect 3.5mm Barrel plug into the HX102 and then plug the USB A into a powered 5V 1 amp power supply (optional).
- With the green LED on and the red LED off, the HX102 is operating properly.

Note: The HX102 can be operated without the external power supply. The electronics of the HX102 are designed to use the power from the HDMI signal, however to ensure the best performance Tributaries recommends using the USB cable to supply power via either the TV's USB jack or the provided 5 volt 1 amp USB charger.

5. LED Trouble shooting

Green LED	Red LED	Possible Cause	Solution
ON	OFF	Normal Operation	Enjoy!
OFF	ON	The HX102 is connected backwards	Reverse the direction of the HX102
ON	ON	HDMI cable is too long	Reduce the cable length
ON	ON	The HX102 is connected at the beginning of a long run of HDMI cable	Connect the HX102 at end of long run of HDMI cable
ON	ON	The Source and/or the Sink is turned off	Power on the connected devices
ON	ON	The HX102 is not connected to the sink	Connect the HX102 to the sink
OFF	OFF	The HX102 is not connected to the source	Connect the HX102 to the source

6. Specifications

- Frequency Bandwidth: 10.2Gbps
- HDMI Input Connector: (1) HDMI female connector
- Power Input Connector: (1) female 3.5mm DC barrel plug connector
- HDMI Output Connector: (1) HDMI male connector
- Power Cable: 3.5mm DC barrel plug to USB A cable, 4 feet
- Power Supply: 5V/1A DC 100-240v USB charger
- Power Consumption: 750mW
- Dimensions: 12" L X 1.125" W X .75" H
- Weight: 1.0 oz.
- Storage Temperature: -4°F to 185°F / -20°C to +85°C
- Storage Humidity: 20% to 90% (Non-condensing)
- Chassis Material: Rubberized Plastic molding

7. HDMI Electronics 2 Year Warranty

This Warranty only applies to products purchased and used in the United States of America. Products purchased or used outside the United States are subject to such warranties, if any, as are provided by the Tributaries distributor in the respective countries.

Scope and Duration of Warranty

Subject to the terms and conditions stated below, Gordon J. Gow Technologies, Inc., ("Gow") warrants that this Product shall be free from defects in workmanship or materials for a term of two (2) years from the date when it was purchased from an Authorized Gow Dealer.

What Gow Will Do Under the Warranty

In the event of any defect covered by this warranty, Gow shall without charge provide all parts, materials, and labor necessary to restore the Product to its original specifications, and shall return the Product to its owner at Gow's expense. In the alternative, Gow may at its sole option either replace the Product without charge, or if replacement is not commercially practicable or repair or replacement cannot be accomplished within a reasonable time, Gow may refund the purchase price of the Product, subject where appropriate to reasonable depreciation for use in accordance with applicable laws, in full satisfaction of its warranty obligations. Gow will undertake to complete the repair and return of the Product as soon as circumstances permits, unless prevented by causes beyond its reasonable control.

LIMITATIONS ON GOW'S OBLIGATIONS UNDER THE WARRANTY

GOW'S SOLE OBLIGATION UNDER THIS WARRANTY SHALL BE TO REPAIR OR REPLACE THE PRODUCT, OR AT ITS OPTION REFUND THE PURCHASE PRICE, AS PROVIDED FOR HEREIN ABOVE. GOW DOES NOT WARRANT AGAINST, NOR SHALL IT BE LIABLE FOR, ANY OF THE FOLLOWING: REMOVAL OR INSTALLATION CHARGES: SHIPPING EXPENSES TO GOW OR ITS AUTHORIZED SERVICE FACILITY: PROPERTY DAMAGE OF ANY KIND: OR OTHER INCIDENTAL OR CONSEQUENTIAL DAMAGES OR LOSSES OF ANY KIND.

Note: Some states do not allow exclusion or limitation of consequential damages, so the foregoing exclusion may not apply.

Exclusions:

Parts and Occurrences That Are Not Covered by the Warranty

This Warranty does not cover any of the following: (A) glass panels, cabinetry, trim, or any other appearance items (except) where they are defective at the time of original sale and the Product is delivered for repair within the first thirty (30) days thereafter; (B) batteries, or failure of or damaged to the Product caused by batteries; (C) failures arising from catastrophe, misuse, neglect, or failure to properly connect or operate the Product in accordance with the accompanying instructions; (D) failures arising from improper installations of the Product or incompatibility of other components in the system of which the Product is a part; (E) failures of any kind in Products (I) which have been purchased from other than an Authorized Gow Dealer, or (II) which evidence any tampering, alteration, or attempted servicing by anyone other than Gow or an Authorized Gow Service Facility, or (III) which are not delivered or shipped to Gow or an Authorized Service Facility within the two (2) year Warranty term; and Gow shall have no liability or obligation of any kind with respect to any of the foregoing types of failures.

What the Owner Must Do to Obtain Service Under This Warranty

To obtain service under this warranty, the owner must at the owner's expense (I) arrange for any necessary de-installation of the Product, and (II) return the Product to the Authorized Gow Dealer from which it was purchased. If return to the Authorized Gow Dealer is impracticable, the owner must deliver or ship the Product, properly packaged, prepaid, and insured, to Gow at the address below, or to an Authorized Gow Service Facility. In addition, the owner must provide evidence that the Product is a the time of delivery with the scope of this Warranty, by either having completed and submitted to Gow on a timely basis the Warranty Registration Card, if one is included with the Product, or by including the original or a legible copy of the dated sales receipt with the Product when submitted for repair. All Products must also be accompanied by the owner's name, address, and telephone number.

What the Owner Must Pay For

As noted above, the owner must arrange and pay any expense for removing the Product from its installation and delivering it to Gow or the Authorized Gow Service Facility. Upon return of the Product to the owner following repair, it shall be the owner's responsibility to arrange and pay for any reinstallation which may be required. In addition, it shall be the owner's obligation to pay for any repairs made to Products for which the owner has neither completed and submitted (where one is included) the warranty Registration Card at the time of purchase nor include a legible copy or the original of the dated sales receipt with the Product when delivered for service, or which are otherwise subject to the exclusions noted above, at Gow's or its Authorized Service Facility's then current repair rates.

How to Learn Where the Nearest Authorized Gow Service Facility is, or Obtain Answers to Other Questions Concerning This Warranty

In order to learn the name and address of the nearest Authorized Gow Service Facility, obtain instructions for shipment of a covered Product to Gow, or obtain the answers to any other questions you may have concerning this Warranty, you may telephone Gow between the hours of 9:00a.m. and 5:00p.m. Eastern Time, Monday through Friday, at 1.888.554.2514, or write to Service Department, Gordon J. Gow Technologies, Inc. 6448 Pinecastle Blvd; Suite 101, Orlando, FL 32809, (Fax 1.800.553.1366).

This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state.



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