



The Leader in Video Distribution

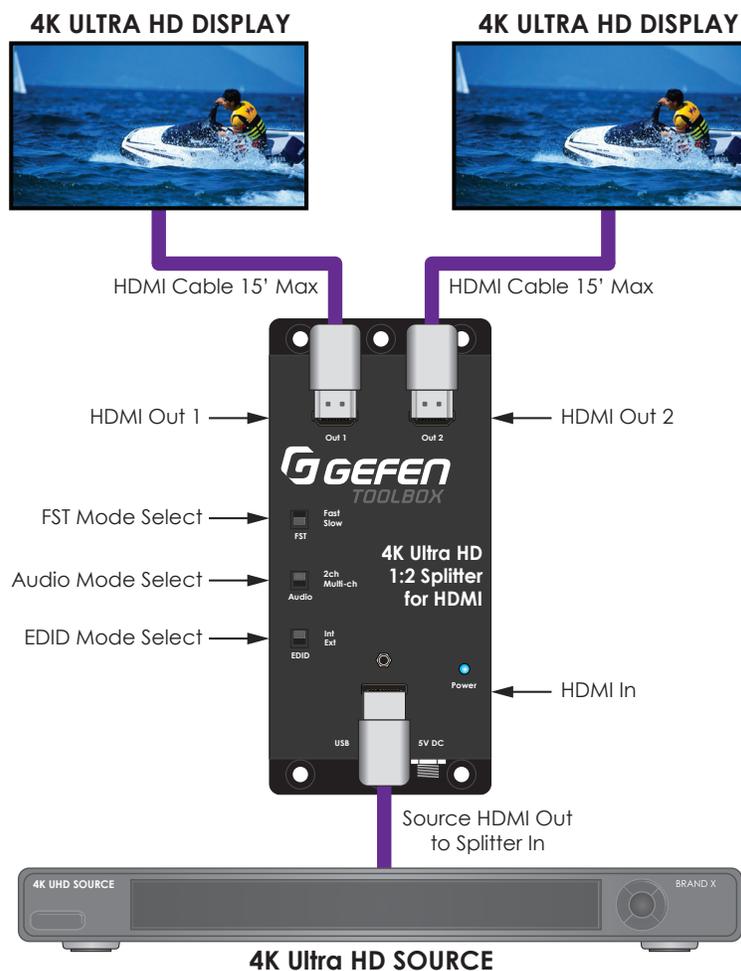
Splitters

2/4/8 Way 4K Ultra HD HDMI Splitters

Gefen 4K Ultra HD Splitters route a single 4K Ultra HD source to multiple 4K Ultra HD displays. Available in 2, 4 and 8-way configurations, these splitters provide simple and reliable solutions for residential and commercial applications. Split a single Ultra HD source to multiple 4K Ultra HD displays in adjoining common areas.

Mount two 4K Ultra HD displays at either end of a bar. Provide digital signage messaging in hotel lobbies and larger facilities. All models can split, daisy-chain and cascade, making Gefen splitters the high performance and capable choice for any small or large 4K Ultra HD video distribution system.

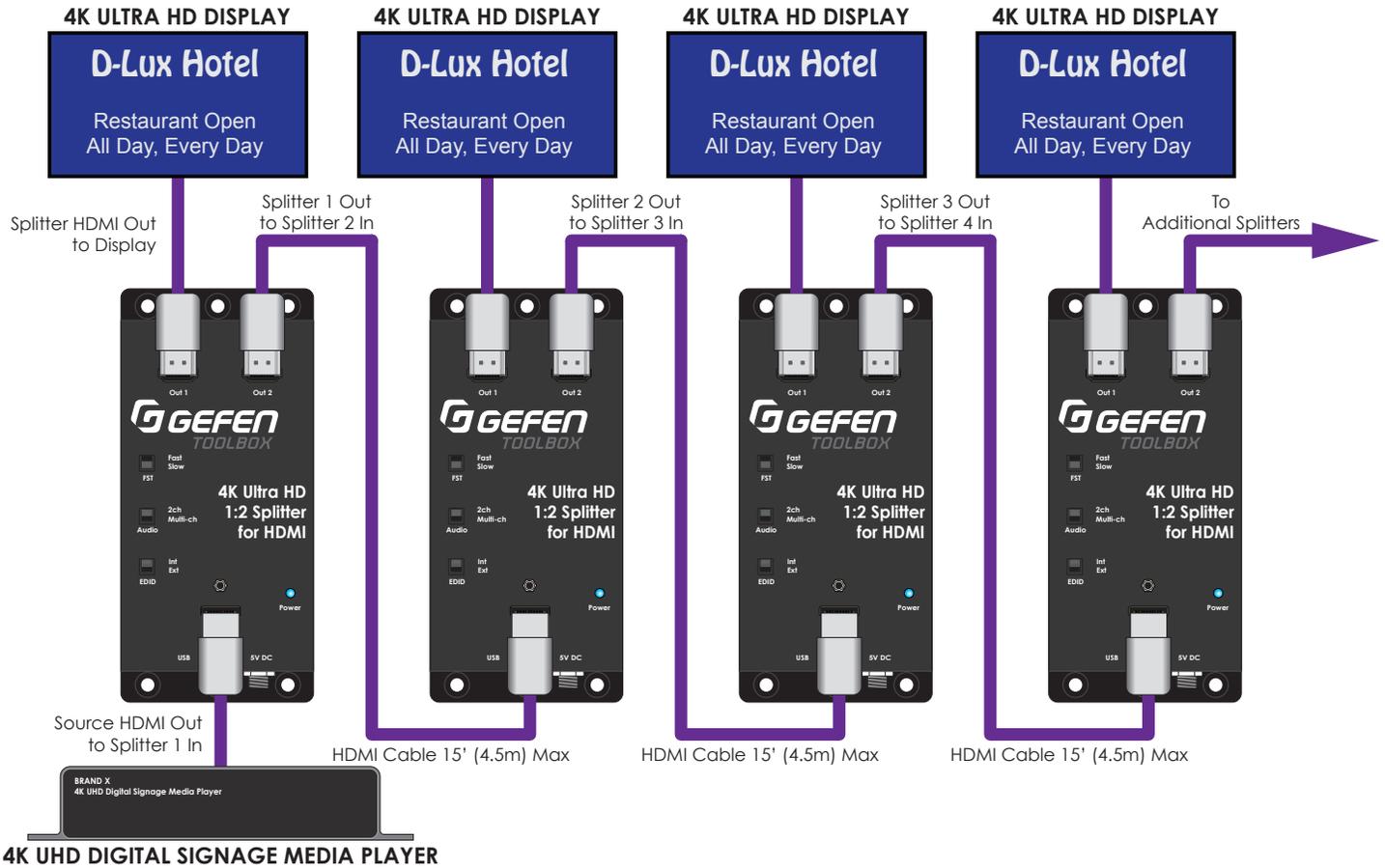
Application 1 - Single 4K Ultra HD Source to Two 4K Ultra HD Displays



The illustration shows the most basic application for a Gefen 4K Ultra HD Splitter. This application features a Gefen **GTB-HD4K2K-142C-BLK** two-way splitter distributing a single 4K Ultra HD source to two 4K Ultra HD displays. This type of application is perfect for residential applications in common areas such as an adjoining kitchen and family room. It is also a simple and reliable application for a small sports bar or other lounge area where a single 4K Ultra HD video source is going to be shared on two displays.

Gefen 4K Ultra HD Splitters

Application 2 - Two-Way Splitters Daisy-Chained For Digital Signage (10 Displays)

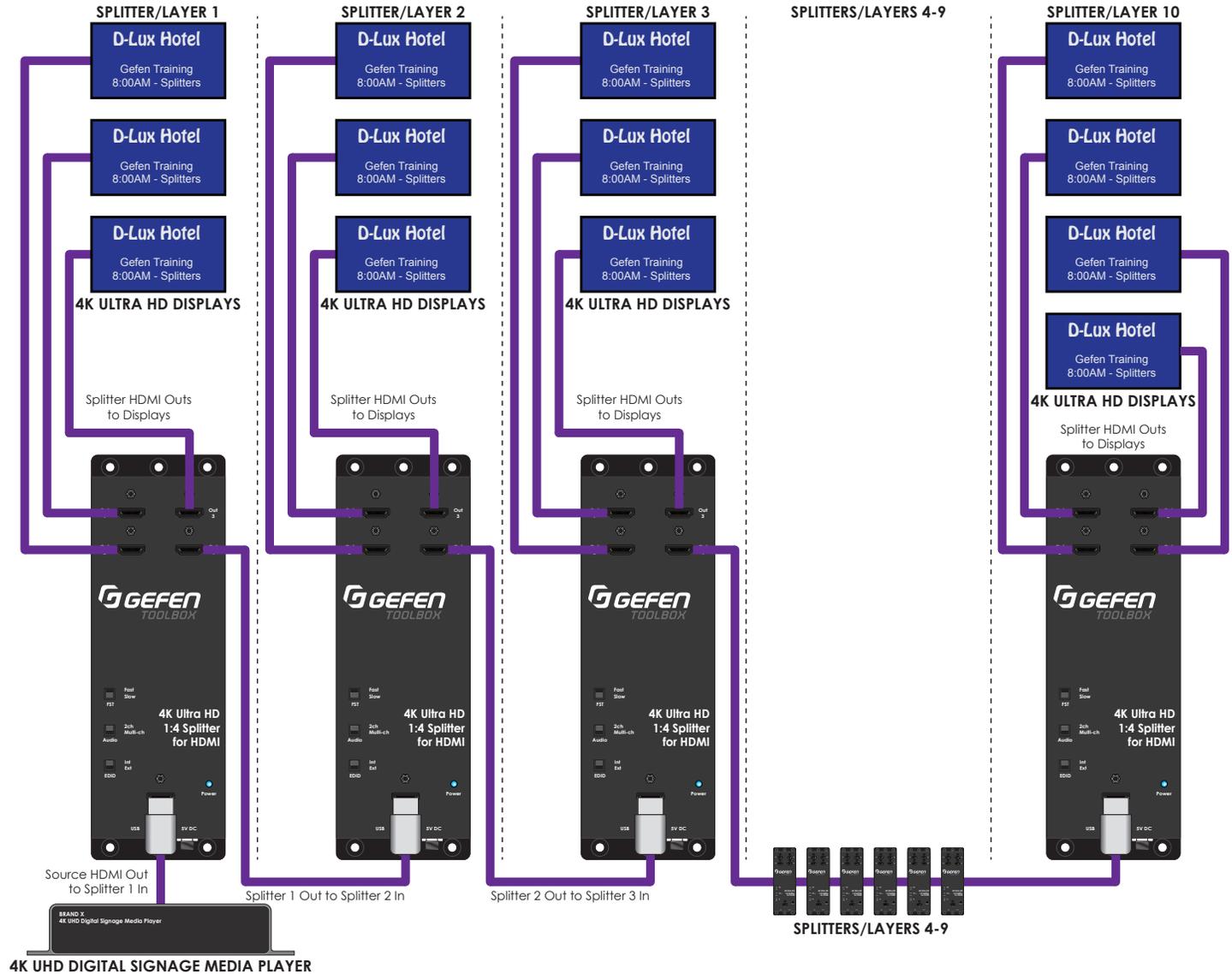


This application distributes a single 4K Ultra HD video source to multiple 4K Ultra HD Displays by daisy-chaining multiple Gefen **GTB-HD4K2K-142C-BLK** two-way splitters. The source in the example is a 4K Ultra HD digital signage media player, but could be any Ultra HD or HD source. The example shows an application for the D-Lux Hotel lobby, displaying information about the day's schedule of events, with the current screen calling attention to the hotel restaurant being open all day.

This is a very simple application to design and install. Simply connect the HDMI output on the source to the HDMI input on Splitter 1. Connect one HDMI Out on Splitter 1 to a 4K Ultra HD display. Connect the other HDMI Out on Splitter 1 to the HDMI In on Splitter 2 and repeat for the number of required displays. Each 'split' in a daisy-chain or cascade system (page 4) is called a 'layer'. The maximum number of layers for Gefen GTB 4K UHD Series Splitters is ten. The maximum number of displays for this application is ten. For more displays, daisy-chain four-way or eight-way splitters, (next page) or use just about any combination of two, four and eight-way splitters to accommodate the number of displays needed to show a single source.

Gefen 4K Ultra HD Splitters

Application 3 - Four-Way Splitters Daisy-Chained For Digital Signage (31 Displays)



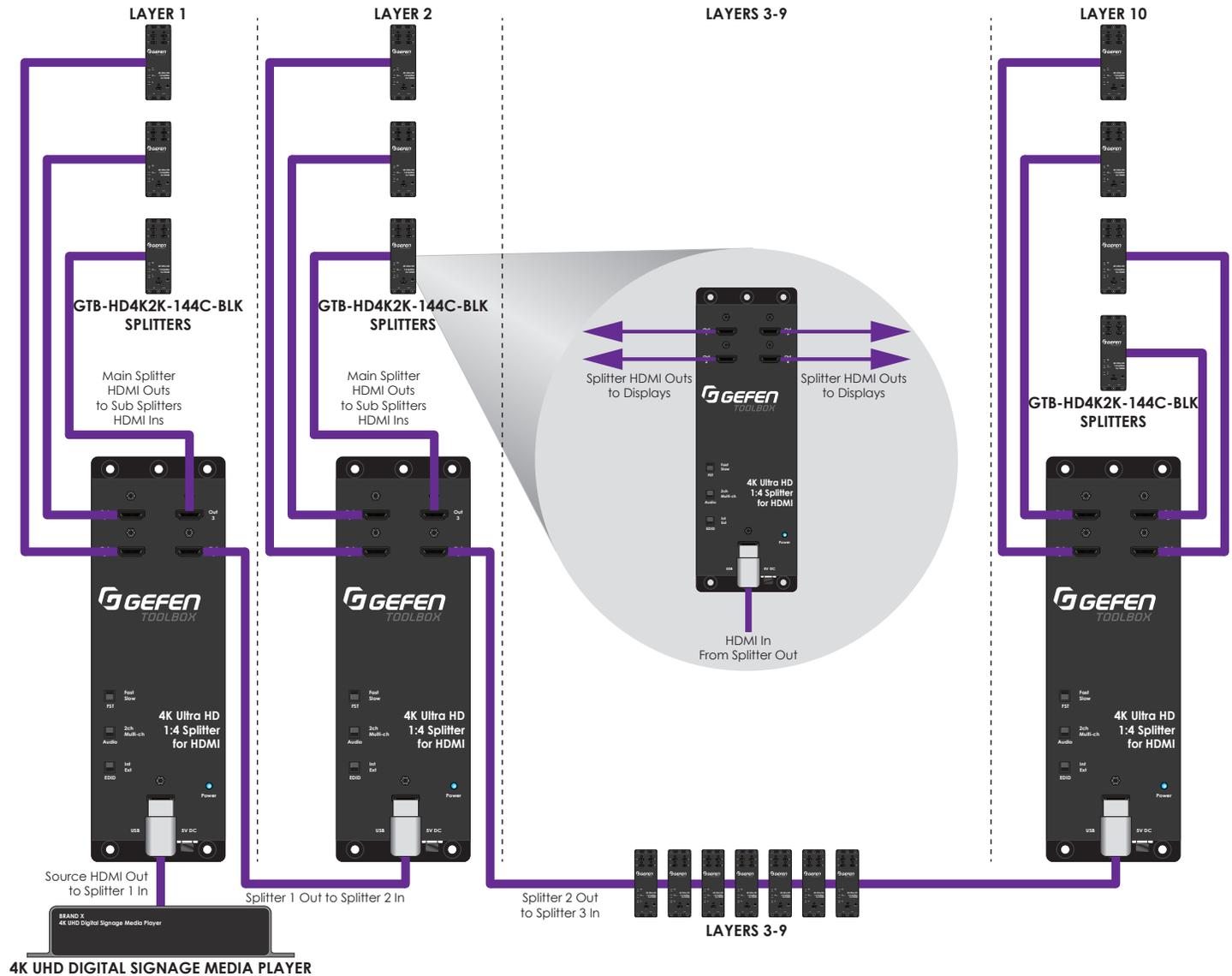
This application shows multiple Gefen **GTB-HD4K2K-144C-BLK** four-way splitters in a daisy-chain application. In this application, each splitter uses three outputs to feed three displays with the fourth output feeding the next splitter. The last splitter in the system can use all four outputs to feed displays.

This application is also easy to design and install, and the four-way splitters will allow connection of up to 31 displays. If more displays are required, Gefen **GTB-HD4K2K-148C-BLK** eight-way splitters can be configured in a similar configuration with each splitter feeding up to seven displays, with the last splitter being able to feed up to eight displays, for a total of up to 71 displays.

Ultimately, just about any combination of two, four and eight-way splitters can be used to accommodate the required number of displays. For applications that require even more displays... see the next page...

Gefen 4K Ultra HD Splitters

Application 4 - Four-Way Splitters Cascaded in a 124 Display System



The illustration shows **GTB-HD4K2K-144C-BLK** four-way splitters cascaded to create a 4K Ultra HD distribution system for up to 124 displays.

In this application the ten 'main' splitters are daisy-chained as shown in Application 3 but this time, rather than feeding three displays and the next splitter in the chain, each of the daisy-chained splitters is feeding three additional 'sub' splitters and the next splitter in the chain.

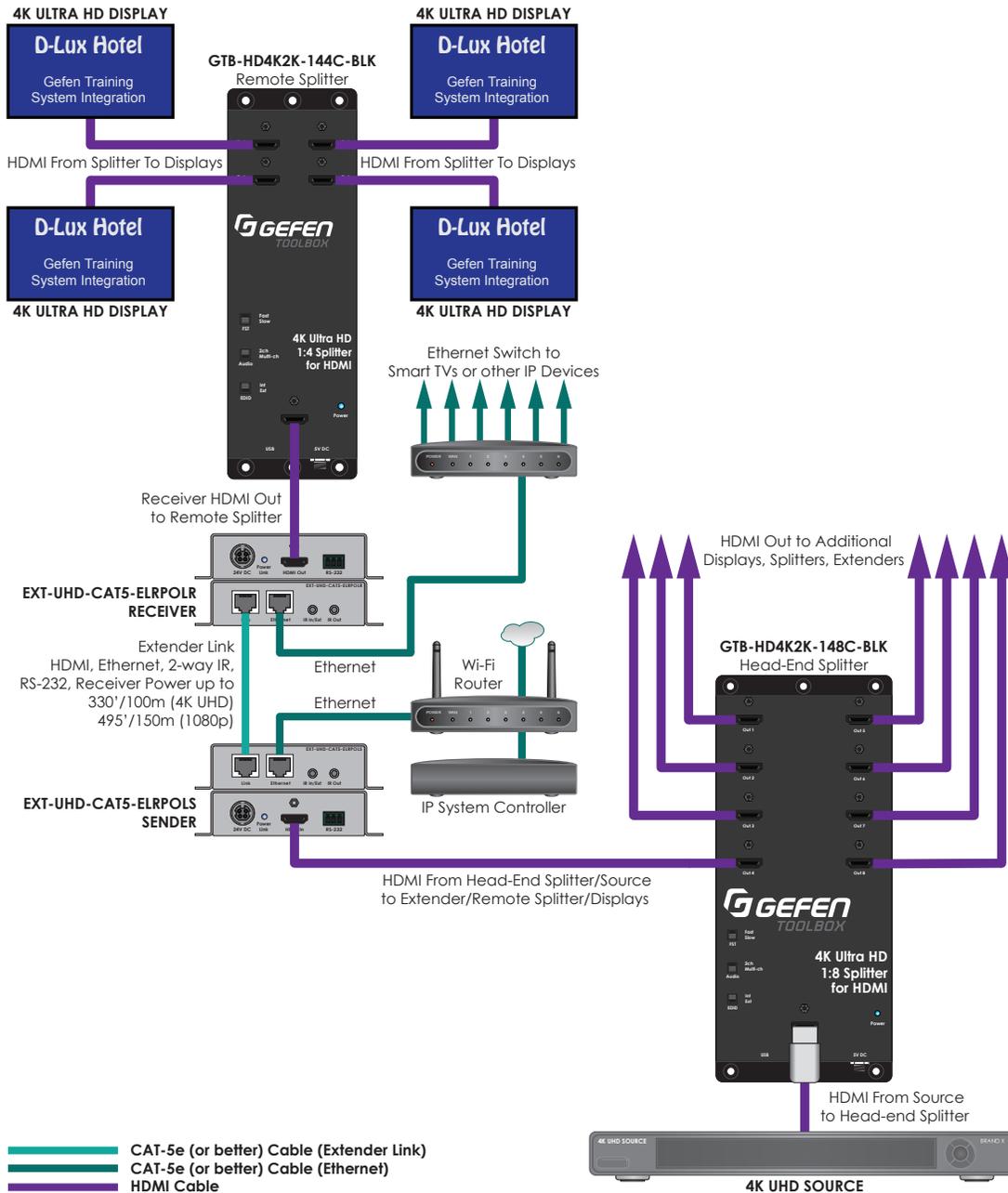
The enlarged detail shows how each of the 'sub' splitters would then feed up to four displays.

In the same configuration, Gefen **GTB-HD4K2K-148C-BLK** eight-way splitters, would net a total of 224 displays.

But what do we do when the displays are needed in locations farther than the typical, even daisy-chained runs of HDMI cable will allow? Keep reading...

Gefen 4K Ultra HD Splitters

Application 5 - Using Splitters & Extenders for Remote Ultra HD Display Clusters with IP Control



This application shows how to incorporate splitters and extenders to create a 4K Ultra HD distribution system with remote 4K Ultra HD display clusters and IP control for Smart TVs or other IP controlled devices.

Inserting a Gefen **EXT-UHD-CAT5-ELRPOL** Extender between the Head-end Splitter and Remote Splitter can extend HDMI, Ethernet, two-way IR, RS-232 and Receiver Power up to 330' (100m) for 4K Ultra/4K Cinema (8-bit) or 1080p Full HD (12-bit Deep Color). 1080p Full HD (8-bit color) can be extended up to 495' (150m). The 2, 4 and 8-way splitters can be implemented at either the head-end or remote locations as needed.

Incorporating a third-party IP System system controller will provide discreet system-wide control of Smart TVs and other IP controlled devices in remote locations.

Gefen 4K Ultra HD Splitters

Settings

Gefen GTB-HD4K2K-142/4/8C-BLK Splitters feature three settings that help improve performance and stability in HDMI distribution systems.

FST - Fast Switching Technology (FST) **Fast Mode** improves performance when connecting/disconnecting HD sources, and powering HD displays ON/OFF. **Slow Mode** will follow the standard authentication process based upon the HDMI and HDCP specifications. Slow Mode is recommended when the source does not support multiple devices.

Audio- As part of EDID management, splitter audio output can be set to 2-channel or multi-channel when EDID is set to Int (Internal). **2ch Mode** is used when *all* displays and/or sink devices support *only* 2-channel LPCM audio. **Multi-ch Mode** is used when *all* displays and/or sink devices are capable of multichannel audio.

EDID- Extended Display Identification Data (EDID) contains the A/V capabilities of a display device in regard to video resolutions and audio formats supported. This information is used by the source device to determine the format of the A/V signals on the outputs. In **Ext Mode** (External) the splitter 'builds' an EDID based upon the highest common video resolution and most superior audio format supported by *all* displays. This EDID is then transmitted to the source device. In **Int Mode** (Internal) the built-in internal EDID provides the source device with a 'generic' EDID that can be used by all displays.



Features & Benefits

Features

- Simultaneously display a 4K Ultra HD source on up to 2, 4 or 8 Ultra HD displays (depending on splitter model)
- Specifically designed to support 10 layers of splitting/ cascading in large video distribution and signage applications, supporting hundreds of displays
- Support resolutions up to 4K Cinema (4096 x 2160 @ 24 and 30 Hz), 4K Ultra (3860 x 2160 @ 60 Hz 4:2:0 color space), 1080p Full HD and 1920 x 1200 WUXGA
- 12-bit Deep Color at 1080p, 3DTV pass-through, Lip Sync pass-through
- Fast Switching Technology (FST) speeds up HDCP authentication
- EDID management and Audio Mode selectors for rapid integration of source and displays
- Supports LPCM7.1, Dolby® TrueHD, Dolby Digital® Plus and DTS-HD Master Audio™
- Field upgradeable firmware via Mini-USB port

Benefits

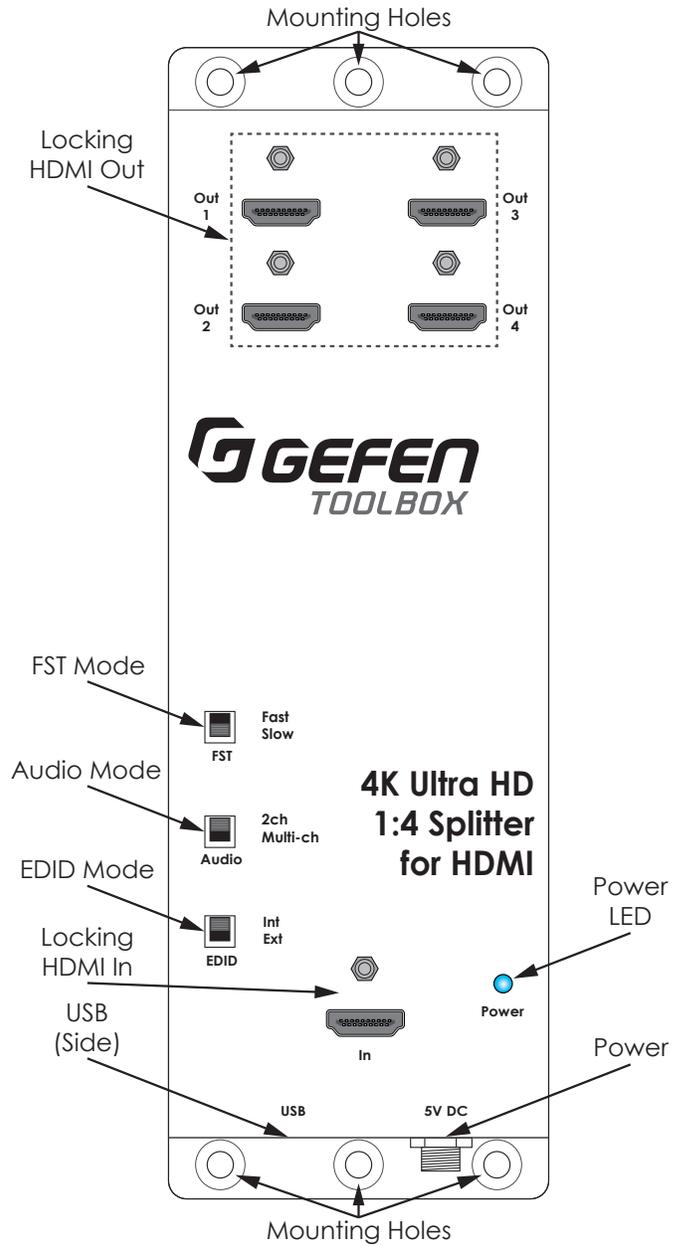
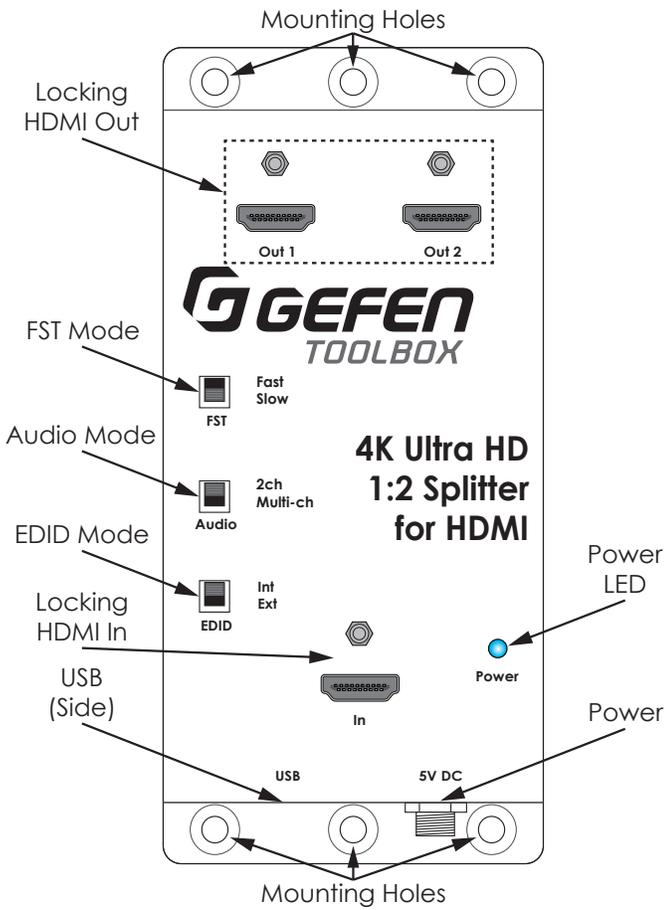
- Flat pack surface-mountable...splitters mount almost anywhere
- FST eliminates the lengthy HDMI authentication process
- FST allows disconnecting, reconnecting, or powering down HDTV displays without causing picture loss on other displays within the same distribution system
- EDID management allows the choice between built-in and passed-through EDIDs
- Daisy-chain/cascade capability allows connection of up to hundreds of displays
- Incorporating splitters with extenders can create simple to design and install video distribution systems with remote display clusters with IR, RS-232 or IP control of remote displays or other devices
- Support the use of DVI sources and DVI displays with HDMI-to-DVI adapters (not included)

Gefen 4K Ultra HD Splitters

Connections & Controls

GTB-HD4K2K-142C-BLK

GTB-HD4K2K-144C-BLK

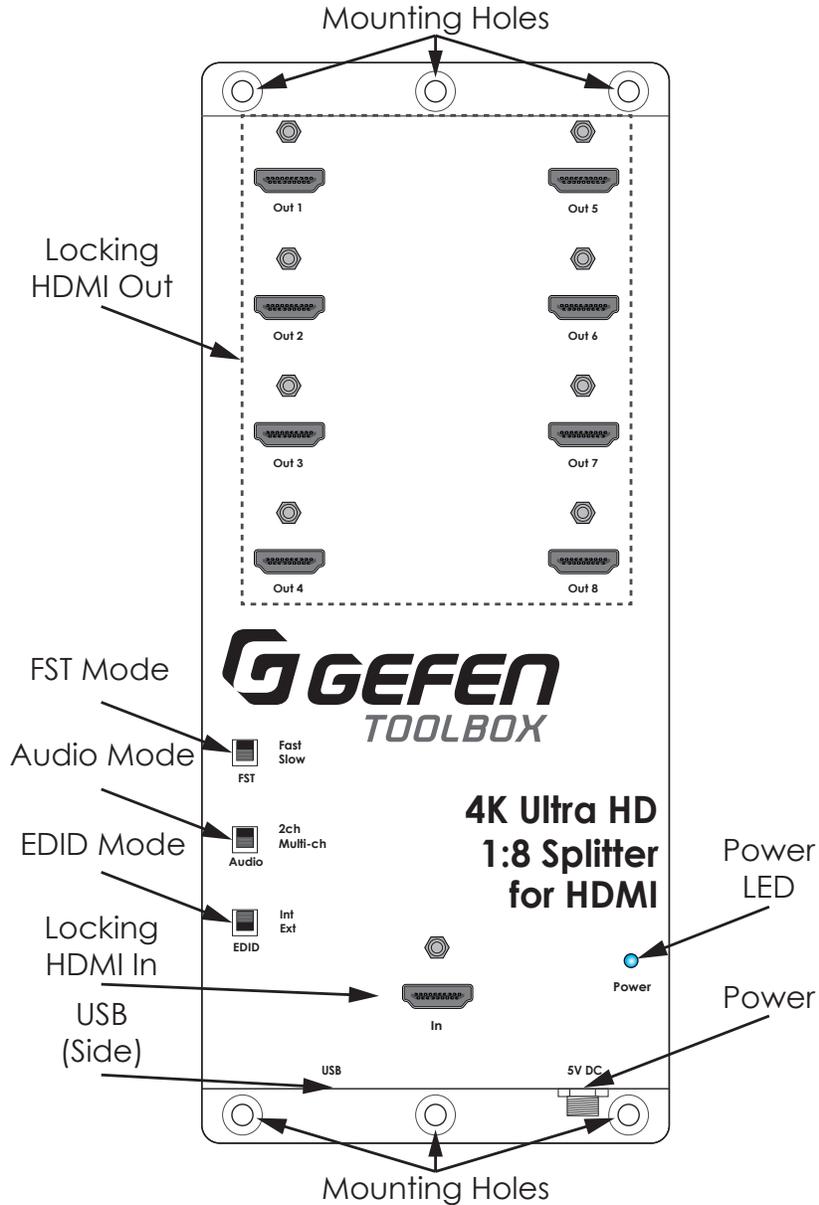




The Leader in Video Distribution

Gefen 4K Ultra HD Splitters

GTB-HD4K2K-148C-BLK



800-472-5555 | 1800 S McDowell Blvd | Petaluma, CA 94954 | www.gefen.com

Features and Specifications are subject to change without notice.

All trademarks and registered trademarks are properties of their respective owners.

©2016 Core Brands, LLC. All rights reserved. Gefen is a registered trademark of Core Brands, LLC, a Nortek company.