

# geratech<sup>®</sup>

## EGE-6UHD-1410

1x10 HDMI 4K UHD Splitter with 6G Capability

HDR 4Kx2K<sup>†</sup> HDCP 2.2





# EGE-6UHD-1410

1×10 HDMI 4K UHD Splitter with 6G Capability



## DISCLAIMERS

The information in this manual has been carefully checked and is believed to be accurate. Geratech assumes no responsibility for any infringements of patents or other rights of third parties which may result from its use.

Geratech assumes no responsibility for any inaccuracies that may be contained in this document. Geratech also makes no commitment to update or to keep current the information contained in this document.

Geratech reserves the right to make improvements to this document and/or product at any time and without notice.

## COPYRIGHT NOTICE

No part of this document may be reproduced, transmitted, transcribed, stored in a retrieval system, or any of its part translated into any language or computer file, in any form or by any means—electronic, mechanical, magnetic, optical, chemical, manual, or otherwise—without express written permission and consent from Geratech.

© Copyright 2015 by Geratech.

## TRADEMARK ACKNOWLEDGMENTS

All products or service names mentioned in this document may be trademarks of the companies with which they are associated.

# EGE-6UHD-1410

1x10 HDMI 4K UHD Splitter with 6G Capability



## SAFETY PRECAUTIONS

Please read all instructions before attempting to unpack, install or operate this equipment and before connecting the power supply.

Please keep the following in mind as you unpack and install this equipment:

- Always follow basic safety precautions to reduce the risk of fire, electrical shock and injury to persons.
- To prevent fire or shock hazard, do not expose the unit to rain, moisture or install this product near water.
- Never spill liquid of any kind on or into this product.
- Never push an object of any kind into this product through any openings or empty slots in the unit, as you may damage parts inside the unit.
- Do not attach the power supply cabling to building surfaces.
- Use only the supplied power supply unit (PSU). Do not use the PSU if it is damaged.
- Do not allow anything to rest on the power cabling or allow any weight to be placed upon it or any person walk on it.
- To protect the unit from overheating, do not block any vents or openings in the unit housing that provide ventilation and allow for sufficient space for air to circulate around the unit.

## REVISION HISTORY

VERSION NO.	DATE (DD/MM/YY)	SUMMARY OF CHANGE
RDV1	25/08/15	Preliminary release
RDV2	17/03/16	Add HDMI Cable Spec.
	31/05/16	Add texts.

# EGE-6UHD-1410

1x10 HDMI 4K UHD Splitter with 6G Capability



## CONTENTS

<b>1. Introduction</b> .....	<b>1</b>
<b>2. Applications</b> .....	<b>1</b>
<b>3. Package Contents</b> .....	<b>1</b>
<b>4. System Requirements</b> .....	<b>1</b>
<b>5. Features</b> .....	<b>2</b>
<b>6. Operation Controls and Functions</b> .....	<b>3</b>
6.1 Front Panel.....	3
6.2 Rear Panel.....	4
<b>7. Connection Diagram</b> .....	<b>5</b>
<b>8. Specifications</b> .....	<b>6</b>
8.1 Technical Specifications .....	6
8.2 Supported Resolutions .....	7
<b>9. Acronyms</b> .....	<b>8</b>

# EGE-6UHD-1410

1×10 HDMI 4K UHD Splitter with 6G Capability



## 1. INTRODUCTION

The 1 by 10 HDMI Splitter with HDCP 2.2 is an advanced solution for splitting a single HDMI input to 10 HDMI outputs. It provides high performance audio and video output up to 4K2K@60Hz (YUV444) resolution and is capable of provide high end of audio and video performance. This unit also support HDR (High Dynamic Range Imaging) function, which allows giving more luminance radiance contrasting and colourful pictures for better experience. It supports high resolution digital audio formats such as LPCM 7.1CH, Dolby TrueHD, Dolby Digital Plus, Dolby Atmos and DTS-HD Master Audio, audio sampling rate up to 192kHz. There are input and outputs indications on panel, which will illuminate when detected, system reset function allows the unit to set the TV to it's default HDMI input.

## 2. APPLICATIONS

- Entertainment Room / Home Theater
- Lecture Room/Hall Presentation
- Show Room/Demo Room
- Public Commercial Display

## 3. PACKAGE CONTENTS

- 1×1 by 10 HDMI splitter
- 1×5 V/4A DC Power Adaptor
- 1×Operation Manual

## 4. SYSTEM REQUIREMENTS

Input source equipments such as Blu-ray/DVD/PS3/PS4 player or Set-Top-Box or any 6G with HDCP2.2 source. And output with 6G HDMI TV/Display and or audio amplifier with connection cables.

**Note:** To achieve 6G performance will need to collocation with particular HDMI cable to get the better quality.

# EGE-6UHD-1410

1x10 HDMI 4K UHD Splitter with 6G Capability



## 5. FEATURES

- 4Kx2K 6G supported, HDCP 2.2, HDMI2.0 and DVI compliant.
  - 1 HDMI input and 10 HDMI outputs
  - System Reset function supported (CEC active source command)
  - Displays any of 1 Ultra High-Definition sources on 10 UHDTV displays simultaneously
  - 3D pass-Through
  - Supports UHDTV resolutions up to 4Kx2K (3840x2160@24/25/30/50/60 & 4096x2160 @24/25/30/60)
  - Supports LPCM 2/5.1/7.1CH, Dolby Digital 2~5.1CH, DTS 2~5.1CH, Dolby TrueHD, Dolby Atmos and DTS-HD Master Audio
  - HDCP 2.2 and HDCP 1.4 compliant
  - Input port EDID support Standard (1080p and PCM 2 channel) and TV mode
- Note:** When displaying HDMI 4Kx2K signal, equivalent source signal, output display and HDMI cables are required in order to secure the best image display.
- HDR Pass Through supported.

**Note:** To active HDR function, input source and output device should also equip and support HDR function.

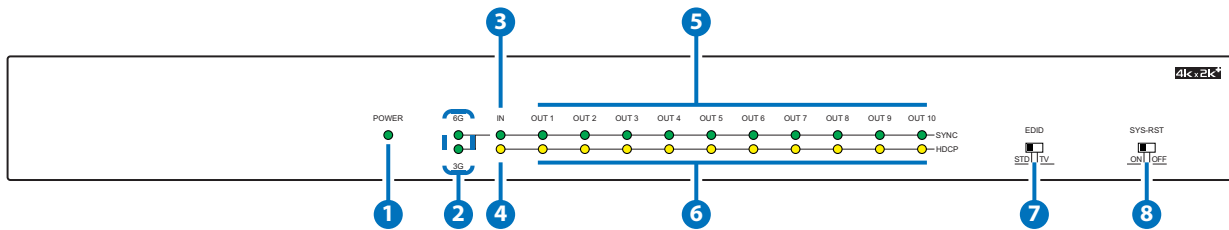
# EGE-6UHD-1410

1x10 HDMI 4K UHD Splitter with 6G Capability



## 6. OPERATION CONTROLS AND FUNCTIONS

### 6.1 Front Panel



- 1 **POWER:** This LED will illuminate when the device is connected to an active power supply.
- 2 **6G/3G:** When input source bandwidth is 6G, the 6G LED will illuminate, when input source detect as 3G, the 3G LED will illuminate.
- 3 **IN SYNC:** When input detected, the LED will illuminate, the LED will flicker when detected abnormal, for example, when source signal not stabled, and when input is not connected, the LED light will off.
- 4 **IN HDCP:** When Input HDCP has been detected, the LED will illuminate, the LED will flicker when HDCP abnormal, for example when HDCP version is not supported, and when no HDCP detected, the LED will off.
- 5 **OUT 1~10 SYNC:** When output detected, the LED will illuminate, the LED will flicker when detected abnormal, for example, when output connected but the output sense is off, and when output is not connected, the LED will off.
- 6 **OUT1~10 HDCP:** When output HDCP working, the LED will illuminate, the LED light flicker when HDCP abnormal, for example, when HDCP version is not supported, and when no HDCP detected, the LED will off.
- 7 **EDID:** Switch the dip could choose EDID mode to Standard (STD) mode or TV mode. When on TV mode, the unit will automatically detect and store output 1 sink EDID data, if switch to STD mode, the unit will set to standard 1080p and PCM 2 channel.
- 8 **SYS-RST:** Switch the dip from off to on, the unit will trigger TV to its HDMI input1 immediately, when dip stays in on, the unit will trigger cycle in every 8~10 minutes. (\*The purpose of this function is to guarantee output display the corresponding image, for example, at the display user use may switch to different HDMI input or other sources connected to display and this reset function will force the display to switch back to the HDMI input1 which TV shall support CEC.)

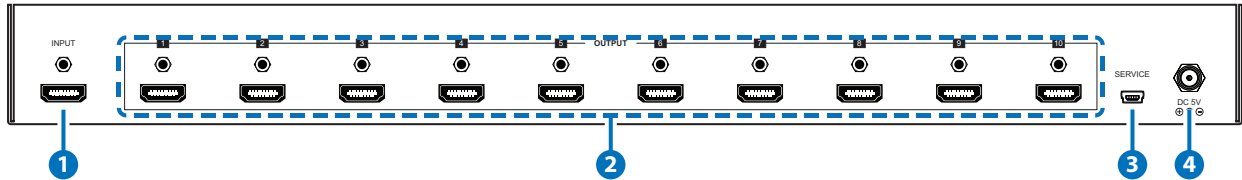


# EGE-6UHD-1410

1×10 HDMI 4K UHD Splitter with 6G Capability



## 6.2 Rear Panel



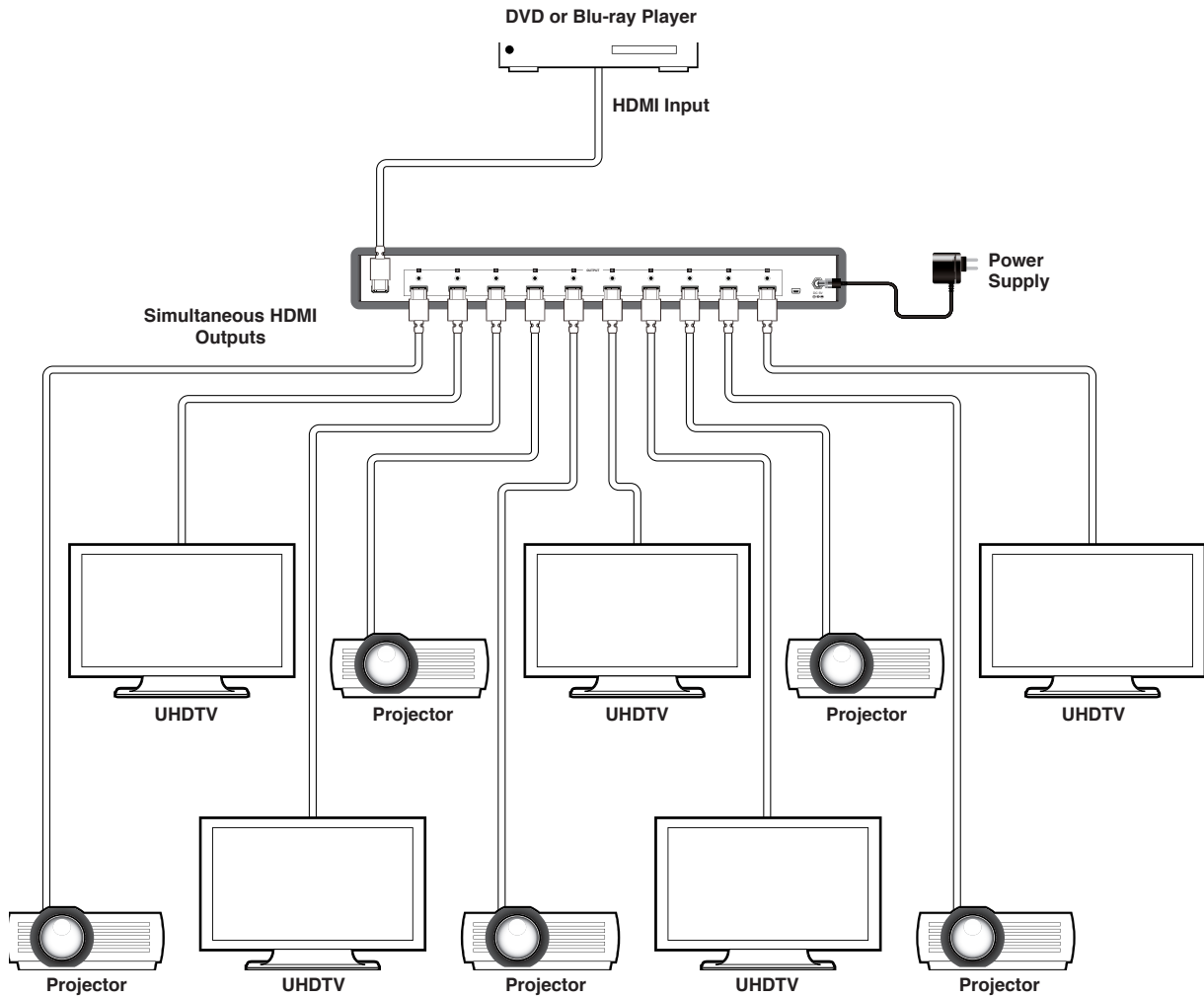
- 1 **INPUT:** Connect with HDMI source equipment such as DVD/Blue-ray players and or PC/Laptop devices.
- 2 **OUTPUT 1~10:** Connect to HDMI TV / display or HD amplifier for output display.
- 3 **SERVICE:** This is reserved for firmware update use only.
- 4 **DC 5V:** Connect the adapter which included in the package and connect to AC wall outlet for power supply.

# EGE-6UHD-1410

1x10 HDMI 4K UHD Splitter with 6G Capability



## 7. CONNECTION DIAGRAM



# EGE-6UHD-1410

1x10 HDMI 4K UHD Splitter with 6G Capability



## 8. SPECIFICATIONS

### 8.1 Technical Specifications

<b>Video Bandwidth</b>	600 MHz/18 Gbps
<b>Input Ports</b>	1xHDMI, 1xUSB (Service only)
<b>Output Ports</b>	10xHDMI
<b>HDMI Resolutions</b>	VGA~WUXGA (RB), 408i~1080p@24/50/60, 4K@24/25/30, 4K@50/60 (YUV444)
<b>HDMI Cable I/O Distance</b>	15m@1080p/8-bit, 10m@1080p/12-bit, 3m@4K2K/60_YUV444 5m@4K2K/30
<b>Power Supply</b>	5V/6A DC (US/EU standards, CE/FCC/UL certified)
<b>ESD Protection</b>	Human body model: ±8 kV (air-gap discharge) ±4 kV (contact discharge)
<b>Dimensions</b>	436 mm (W)×160 mm (D)×44 mm (H)/ Jack Excluded 436 mm (W)×165.5 mm (D)×48 mm (H)/ Jack Included
<b>Weight</b>	1964 g
<b>Chassis Material</b>	Metal
<b>Color</b>	Black
<b>Operating Temperature</b>	0°C~40°C/32°F~104°F
<b>Storage Temperature</b>	-20°C~60°C/-4°F~140°F
<b>Relative Humidity</b>	20~90% RH (non-condensing)
<b>Power Consumption</b>	11.38 W

# EGE-6UHD-1410

1x10 HDMI 4K UHD Splitter with 6G Capability



## 8.2 Supported Resolutions

Resolution	Input	Output
640x480@60/72/75/85	✓	✓
720x400@85	✓	✓
800x600@56/60/72/75/85	✓	✓
1024x768@60/70/75/85	✓	✓
1152x864@75	✓	✓
1280x720@60	✓	✓
1280x768@60/75/85	✓	✓
1280x800@60	✓	✓
1280x960@60	✓	✓
1280x1024@60	✓	✓
1360x768@60	✓	✓
1366x768@60	✓	✓
1400x1050@60	✓	✓
1440x900@60	✓	✓
1600x900@60	✓	✓
1600x1200@60	✓	✓
1680x1050@60	✓	✓
1920x1080@60	✓	✓
1920x1200@60	✓	✓
1920x1440@60	✓	✓
2560x1600@60	✓	✓
1440x576i@50	✓	✓
1440x480i@59.94/60	✓	✓
720x480p@59.94/60	✓	✓
720x576p@50	✓	✓
1280x720p@50/59.94/60	✓	✓
1920x1080i@50/59.94/60	✓	✓
1920x1080p@23.97/24/25/29.97/30/50/59.94/60	✓	✓
3840x2160@24/25/30/50/60	✓	✓
4096x2160@24/25/30/50/60	✓	✓

# EGE-6UHD-1410

1x10 HDMI 4K UHD Splitter with 6G Capability



## 9. ACRONYMS

ACRONYM	COMPLETE TERM
<b>CEC</b>	Consumer Electronics Control
<b>DTS</b>	Digital Theater System
<b>DVI</b>	Digital Visual Interface
<b>EDID</b>	Extended Display Identification Data
<b>HDCP</b>	High-bandwidth Digital Content Protection
<b>HDMI</b>	High-Definition Multimedia Interface
<b>HDTV</b>	High-Definition Television
<b>IR</b>	Infrared
<b>USB</b>	Universal Serial Bus
<b>VGA</b>	Video Graphics Array
<b>WUXGA (RB)</b>	Widescreen Ultra Extended Graphics Array (Reduce Blanking)

# geratech®



[www.geratech.com.tr](http://www.geratech.com.tr)  
[www.egerate.com](http://www.egerate.com)  
[www.egerate-store.com](http://www.egerate-store.com)