



## HDMI Repeater (By CAT-5E/6E cable)

Model No. EX0101-3U1

**Operating Instructions** (P/N of this Instructions is INSEX0101-3U1)



### FEATURES

- Use with EX0101-U30/31, EX0101-U32/33, EX0101-U50/51, EX0101-U52/53, MX0404-310/312/313/U08 and MX0402-310 made by Grandbeing Technology, plug-and-play.
- Use UTP LAN cable (CAT-5E/6) to substitute HDMI cable to achieve long distance transmission.
- UTP cable termination follows the standard of IEEE-568B.
- Transmission distance reaches up to 50 meters under the video format of 1080P.
- Auto-adjustment of feedback, equalization and amplify, the user does not need to care about the length of the cable.
- HDMI V1.3b supported.
- Each port supports HDMI or DVI inputs.
- HDCP compliant.
- One dual cat5e input, One dual cat5e output, One HDMI output.
- With LED indicators to show the power and video signal status.
- With ESD protection inside.
- Mounting ears supplied.
- Infrared control signal together with the HDMI signal.
- This model could be cascaded.

**Dear customer:**

**Thank you for purchasing this product. For optimum performance and safety, please read these instructions carefully before connecting, operating or adjusting this product. Please keep this manual for future reference.**

## **NOTICE**

**We Inc. reserves the right to make changes in the hardware, packaging and any accompanying documentation without prior written notice.**



### **WARNING:**

#### **TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK OR PRODUCT DAMAGE:**

- 1) DO NOT EXPOSE THIS APPARATUS TO RAIN, MOISTURE, DRIPPING OR SPLASHING AND THAT NO OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES, SHALL BE PLACED ON THE APPARATUS.
- 2) DO NOT INSTALL OR PLACE THIS UNIT IN A BOOKCASE, BUILT-IN CABINET OR IN ANOTHER CONFINED SPACE. ENSURE THE UNIT IS WELL VENTILATED.
- 3) TO PREVENT RISK OF ELECTRIC SHOCK OR FIRE HAZARD DUE TO OVERHEATING, DO NOT OBSTRUCT THE UNIT'S VENTILATION OPENINGS WITH NEWSPAPERS, TABLECLOTHS, CURTAINS, AND SIMILAR ITEMS.
- 4) DO NOT INSTALL NEAR ANY HEAT SOURCES SUCH AS RADIATORS, HEAT REGISTERS, STOVES, OR OTHER APPARATUS (INCLUDING AMPLIFIERS) THAT PRODUCE HEAT.
- 5) DO NOT PLACE SOURCES OF NAKED FLAMES, SUCH AS LIGHTED CANDLES, ON THE UNIT.
- 6) CLEAN THIS APPARATUS ONLY WITH DRY CLOTH.
- 7) UNPLUG THIS APPARATUS DURING LIGHTNING STORMS OR WHEN UNUSED FOR LONG PERIODS OF TIME.
- 8) PROTECT THE POWER CORD FROM BEING WALKED ON OR PINCHED PARTICULARLY AT PLUGS.
- 9) ONLY USE ATTACHMENTS/ACCESSORIES SPECIFIED BY THE MANUFACTURER.
- 10) REFER ALL SERVICING TO QUALIFIED SERVICE PERSONNEL.

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## INTRODUCTION

EX0101-3U1 is a HDMI Repeater while using CAT-5E/6 cable as transmission media.

Benefits from using EX0101-3U1:

- 1) The length of HDMI cable is fixed and unchangeable after it is produced. Because the HDMI connector can only be soldered or terminated by professional worker in factory, the users can not reduce or increase by themselves. However CAT-5E/6 cables are available everywhere and be processed easily by the user or installer.
- 2) By using EX0101-3U1, the transmission distance for 1080P reaches 50 meters, 60 meters for 1080I. For general HDMI cables, cables must be customized when the length over 10 meters.
- 3) EX0101-3U1 has the ability of buffering and amplifying. Series connection of EX0101-3U1 achieves long distance transmission of HDMI signal. When two pairs or more EX0101-3U1 are sacked together, they can be used to create a larger distribution(Daisy chained.)
- 4) *The IR system ctrl back the source at the end of destination*

EX0101-3U1 offers solutions for digital entertainment center, HDTV retail and show site, HDTV, STB, DVD and Projector factory, noise, space and security concerns, data center control, information distribution, conference room presentation, school and corporate training environments.

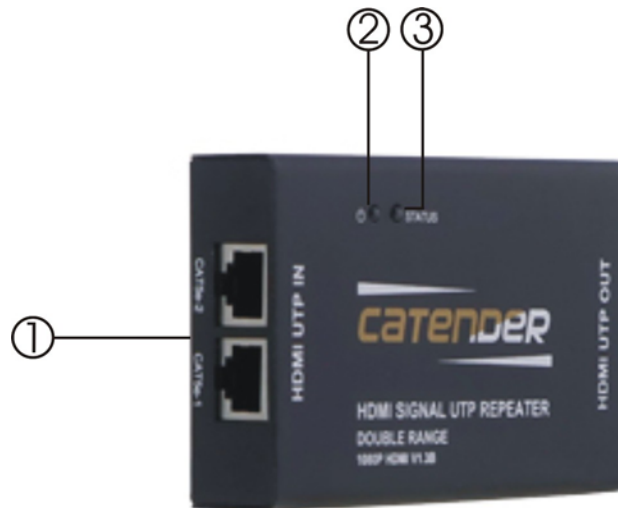
## PACKAGE CONTENTS

1. Main unit NO.1. P/N\_EX0101-3U1.
2. Mount ears.
3. Operating Instructions. P/N\_INSEX0101-3U1.
4. 5VDC power supply.
5. IR RX UNIT

\*PART NUMBER (Abbreviation as P/N).

## PANEL DESCRIPTIONS

Input panel



## output panel



1. CAT-5E input1 and input2.
2. Status of power input. When power input on, the LED inside lights
3. Status of signal connection. When this works well, the LED inside lights
4. IR RX INPUT
5. HDMI OUTPUT
6. Power input, 5VDC
7. CAT-5E output1 and output2.

## CONNECT AND OPERATION

- 1) Connect two CAT-5E cables with both the outputs of EX0101-U30/32/50/52、MX0404-310/312/313/U08、MX0402-310 and the inputs of EX0101-3U1. Please pay attention to the correct connection way of the two cables, CAT5e-1->CAT5e1,CAT5e-2->CAT5e2, (The cables must follow the standard of EIA/TIA 568B )
- 2) Connect two CAT-5E cables with both the outputs of EX0101-3U1 and inputs of EX0101-U31/33/51/53. Please pay attention to the correct connection way of the two cables, CAT5e-1->CAT5e1, CAT5e-2->CAT5e2 (The cables must follow the standard of EIA/TIA 568B )
- 3) Connect the HDMI output(such as : HD-LCD、HD-DLP) with EX0101-3U1.
- 4) Connect the IR RX UNITwith EX0101-3U1 IR RX

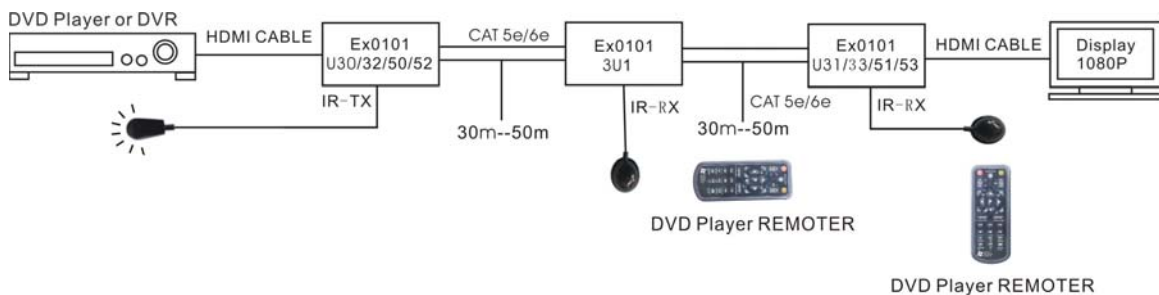
**Attention:** Insert/Extract cables gently.

## SPECIFICATIONS

Operating Temperature Range	-5 to +35°C (-41 to +95 °F)
Operating Humidity Range	5 to 90 % RH (no condensation)
Input Video Signal	0.5-1.0 volts p-p
Input DDC Signal	5 volts p-p (TTL)
Video Format Supported	DTV/HDTV; 1080P/1080i/720P/576P/480P/576i/480i
Output Video	HDMI 1.3+HDCP (repeat the source to the sink)
Maximum Transmission Distance	50m
Power Supply	5VDC
Power Consumption	1.5Watts (Max)
Dimensions	68mmW×111mmH×23mmD/1.8"W×3.3"H×0.9"D
Mass (Main unit)	0.26Kgs (Pairs)/0.58lb
IR wavelengh & frequency	wavelength :940nm IR frequency:38KHZ

**\*Note: Specifications are subject to change without notice. Mass and dimensions are approximate.**

## TYPICAL APPLICATION



## MAINTENANCE

Clean this unit with a soft, dry cloth. Never use alcohol, paint thinner or benzine to clean this unit.

## PRODUCT SERVICE

- 1) **Damage requiring service:** The unit should be serviced by qualified service personnel if:
  - (a) The DC power supply cord or AC adaptor has been damaged;

- (b) Objects or liquids have gotten into the unit;
  - (c) The unit has been exposed to rain;
  - (d) The unit does not operate normally or exhibits a marked change in performance;
  - (e) The unit has been dropped or the cabinet has been damaged.
- 2) **Servicing Personnel:** Do not attempt to service the unit beyond that described in these operating instructions. Refer all other servicing to authorized servicing personnel.
  - 3) **Replacement parts:** When parts need replacing ensure the servicer uses parts specified by the manufacturer or parts that have the same characteristics as the original parts. Unauthorized substitutes may result in fire, electric shock, or other hazards.
  - 4) **Safety check:** After repairs or service, ask the servicer to perform safety checks to confirm that the unit is in proper working condition.

## WARRANTY

If your product does not work properly because of a defect in materials or workmanship, We Company (referred to as “the warrantor”) will, for the length of the period indicated as below, (**Parts (1) Year, Labor(90) Days**) which starts with the date of original purchase (“Limited Warranty period”), at its option either (a) repair your product with new or refurbished parts, or (b) replace it with a new or a refurbished product. The decision to repair or replace will be made by the warrantor.

During the “Labor” Limited Warranty period there will be no charge for labor. During the “Parts” warranty period, there will be no charge for parts. You must mail-in your product during the warranty period. This Limited Warranty is extended only to the original purchaser and only covers product purchased as new. A purchase receipt or other proof of original purchase date is required for Limited Warranty service.

### Mail-In Service

When shipping the unit, carefully pack and send it prepaid, adequately insured and preferably in the original carton. Include a letter detailing the complaint and provide a day time phone and/or email address where you can be reached.

IF REPAIR IS NEEDED DURING THE LIMITED WARRANTY PERIOD THE PURCHASER WILL BE REQUIRED TO FURNISH A SALES RECEIPT/PROOF OF PURCHASE INDICATING DATE OF PURCHASE, AMOUNT PAID AND PLACE OF PURCHASE. CUSTOMER WILL BE CHARGED FOR THE REPAIR OF ANY UNIT RECEIVED WITHOUT SUCH PROOF OF PURCHASE.

### LIMITED WARRANTY LIMITS AND EXCLUSIONS

- 1) This Limited Warranty ONLY COVERS failures due to defects in materials or workmanship, and DOES NOT COVER normal wear and tear or cosmetic damage. The Limited Warranty ALSO DOES NOT COVER damages which

occurred in shipment, or failures which are caused by products not supplied by the warrantor, or failures which result from accidents, misuse, abuse, neglect, mishandling, misapplication, alteration, faulty installation, set-up adjustments, misadjustment of consumer controls, improper maintenance, power line surge, lightning damage, modification, or service by anyone other than a Factory Service center or other Authorized Servicer, or damage that is attributable to acts of God.

- 2) THERE ARE NO EXPRESS WARRANTIES EXCEPT AS LISTED UNDER "LIMITED WARRANTY COVERAGE". THE WARRANTOR IS NOT LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THIS PRODUCT, OR ARISING OUT OF ANY BREACH OF THIS WARRANTY. (As examples, this excludes damages for lost time, cost of having someone remove or re-install an installed unit if applicable, travel to and from the servicer, loss of or damage to media or images, data or other recorded content. The items listed are not exclusive, but are for illustration only.)
- 3) PARTS AND SERVICE, WHICH ARE NOT COVERED BY THIS LIMITED WARRANTY, ARE YOUR RESPONSIBILITY.



**Thank you for your purchase.**

**We appreciate your business. Please contact us with your question and comments.**

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