



4KCHANGER-TC2

4K MULTI INPUT CONVERTER



GENERAL SAFETY INSTRUCTIONS

When using electronic products, please review the following safety precautions before installing or using the products.

- i. Read these instructions.
- ii. Keep these instructions.
- iii. Follow all instructions.
- iv. Heed all warnings.
- v. Be sure all cables and equipment are connected to the unit as described in the manual.
- vi. Do not use this product near water.
- vii. Do not place the product on top of any easily combustible materials such as carpet or fabric.
- viii. Do not stacking the product on top of a hot component such as a power amplifier.
- ix. Do not use liquid or aerosol cleaners to clean the product. Clean only with a dry cloth and always unplug the power to the device before cleaning.
- x. Do not block any ventilation openings. Blocking the airflow could cause damage. Arrange components so that air ca flow freely. Ensure that there is adequate ventilation if the product is placed in a stand or cabinet. Install or place the product in a properly ventilated area, away from direct sunlight or any source of heat such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- xi. Power cord must be accessible to allow for the removal of the power from the product.
- xii. Only use attachments/accessories specified by the manufacturer.
- xiii. To reduce the risk of electric shock and/or damage to this product, never handle or touch this unit or power cord if your hands are wet or damp.
- xiv. To avoid electric shock, never stick anything in the slots on the case or remove the cover.



Be careful with electricity:

- **Power outlet:** To prevent electric shock, be sure the electrical plug used on the product power cord matches the electrical outlet used to supply power to the HPC product. Use only the power adapter and power connection cables designed for this unit.
- **Power Adaptor:** Be sure the power adaptor is 24V/1.5A, please matching the rating of the power voltage.
- **Lightning:** For protection from lightning or when the product is left unattended for a long period, disconnect it from the power source.
- **ESD:** Handle the product with proper ESD care. Failure to do so can result in failure.

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INTRODUCTION

4KCHANGER-TC2 with us allows one HDMI, Bi-direction IR and Bi-direction RS232 to be connected up to 30meters via single CAT.6 cable for Computer, Laptop, BD Player, Game Console and others HDMI source devices. Supporting 4Kx2K/60Hz UHD resolution with 12 bit deep color and lossless compressed audio that make 4KCHANGER-TC2 a smart choice for home entertainment, company conference, commercial advertising and other applications.

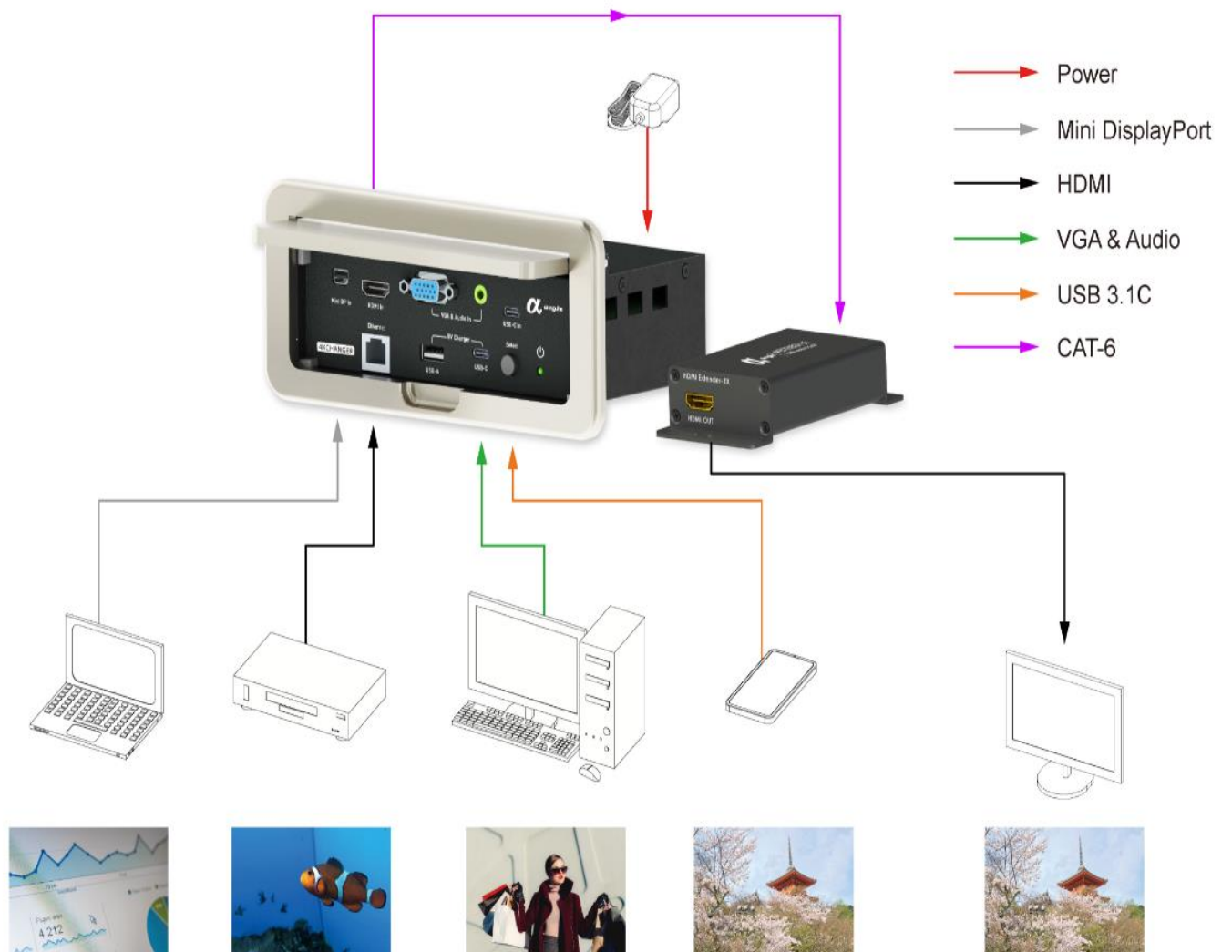
PACKAGE CONTENTS

- 4KCHANGER-TC2 Transmitter X 1 PCS
- 4KCHANGER-TC2 Receiver X 1 PCS
- 24VDC / 1.5 Amp Locking Power adapter X 1 PCS (US, UK, EU Power plug.)
- Rack Ear & Screw X 2 PCS
- Template X 1 PCS
- User Manual X 1 PCS

SYSTEM REQUIREMENTS

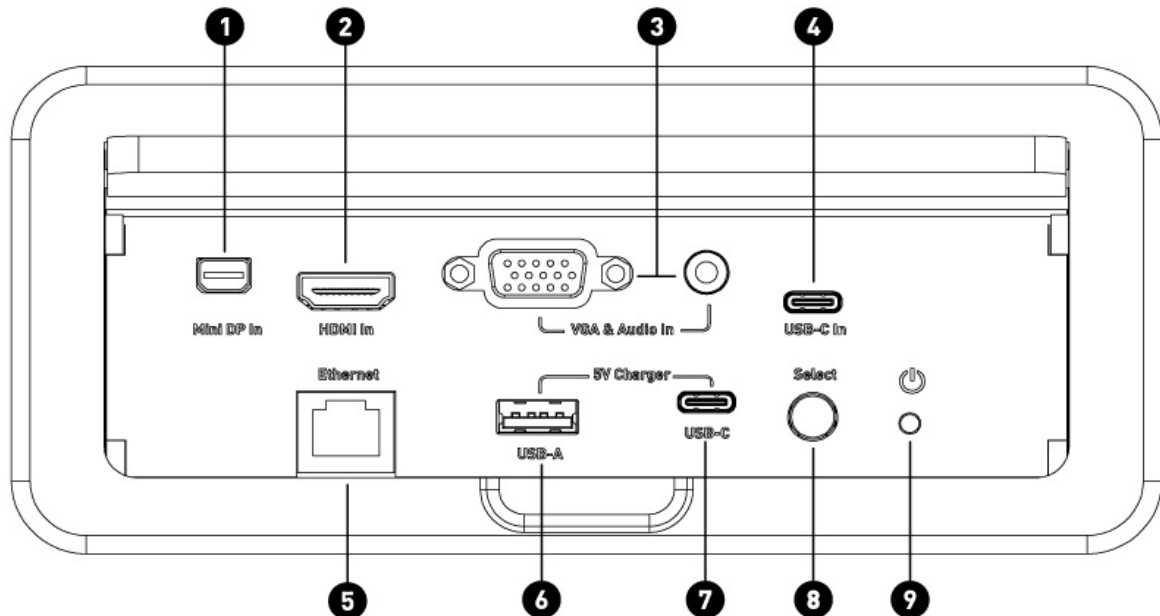
- HDMI Source device includes SetTop Box, BD Player, Computer, Laptop, Game Console, Media Player and Camcorder.
- HDMI Sink device includes LED/LCD Monitor, LED/LCD TVs, Projector and AV Receiver.
- Mini DisplayPort Source device includes Computer, Laptop and Tablet.
- VGA Source device includes Computer and Laptop.
- USB 3.1 Type C Source device includes Computer, Laptop, Tablet and Mobile Phone.
- HDMI 2.0 Premium Certified Cable-Highly recommended
- Mini DisplayPort 1.2 Certified Cable-Highly recommended.
- USB 3.1C Certified Cable-Highly recommended.

CONNECTION DIAGRAM



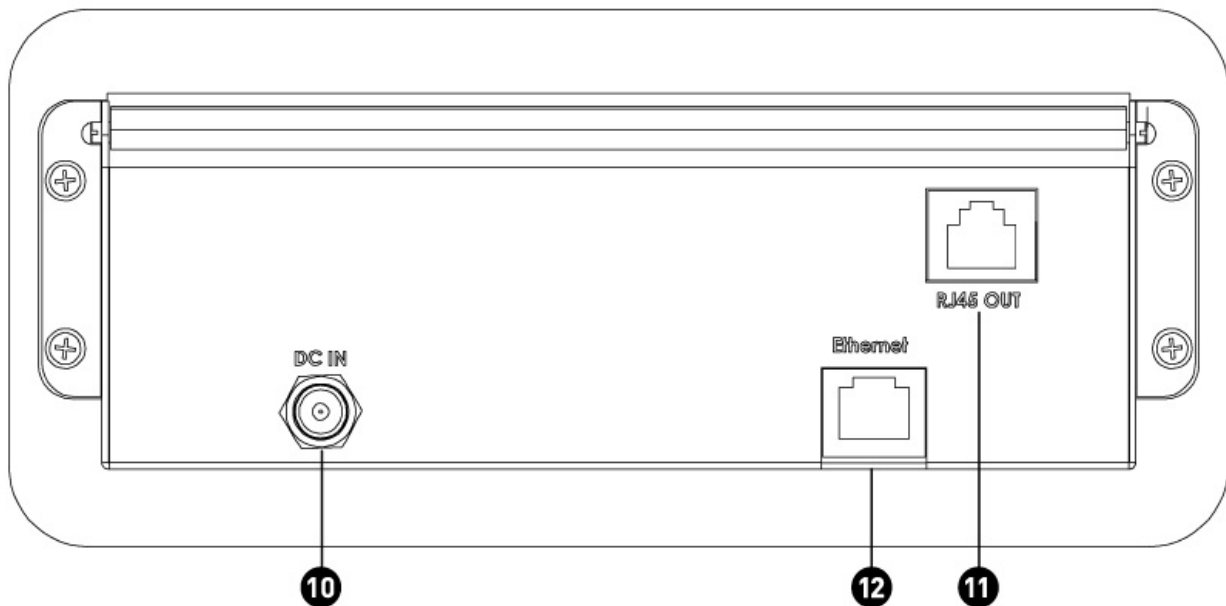
DEVICE FUNCTION

Transmitter Front Panel



1. **Mini DP In:** Connect to Mini DisplayPort source device, such as Computer, Laptop and Tablet.
2. **HDMI In:** Connect to HDMI sink devices, such as LED/LCD Monitor, LED/LCD TVs, Projector and AV Receiver.
3. **VGA & Audio In:** Connect to VGA & Audio source device, such as Computer and Laptop.
4. **USB-C In:** Connect to USB 3.1 C source device, such as Computer, Laptop, Tablet and Mobile Phone. These devices must provide video signal output.
5. **Ethernet:** Connect local Internet network system. Computer and Laptop can use Cat.5e/6 cable to connect Ethernet for internet service.
6. **USB-A:** Support 5V / 1.5 Amp power charging to Mobile Phone.
7. **USB-C:** Support 5V / 2.0 Amp power charging to Mobile Phone.
8. **Select:** Switching different video input sources, such as Mini DP, HDMI, VGA & Audio and USB-C.
9. **Power LED:** This LED will illuminate when power adapter plug in 4KCHANGER-TC2.

Transmitter Rear Panel



10.DC IN: 24VDC / 1.5 Amp Locking Power jack.

11.RJ45 Out: Connect to 4KCHANGER-TC2 Receiver with single Cat.6 cable.

12.Ethernet: to connect local Internet network system to provide internet service.

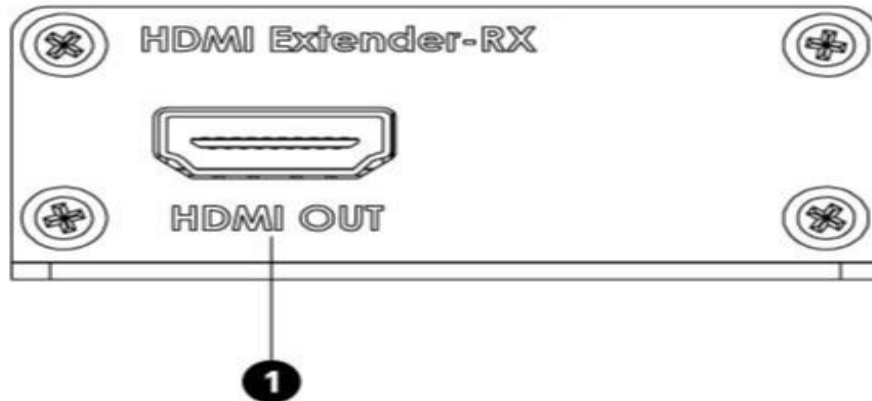
Note:

4KCHANGER-TC2 supports Auto-detect for 4 different AV input sources. When you plug in HDMI cable to 4KCHANGER-TC2 from HDMI device, 4KCHANGER-TC2 will automatically connect HDMI signal and show video on the HDMI Display.

When HDMI cable plug in 4KCHANGER-TC2 from HDMI device by first end-user, second end-user can plug in USB 3.1C cable to 4KCHANGER-TC2 from Mobile Phone, 4KCHANGER-TC2 will automatically connect USB 3.1C signal and show video on the HDMI Display.

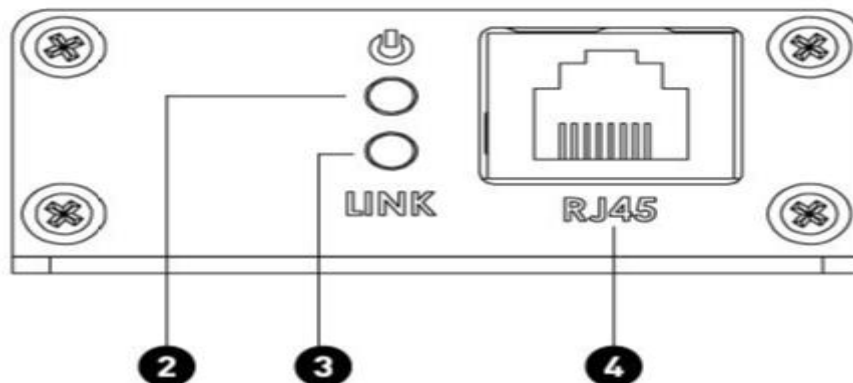
4KCHANGER-TC2 also design a select button to switch 4 different AV input sources .You just press select button to switch one of AV input source as you want.

Receiver Front Panel



1. **HDMI OUT:** Connect to HDMI sink devices, such as LED/LCD Monitor, LED/LCD TVs, Projector and AV Receiver.

Receiver Rear Panel



2. **Power LED:** This LED will illuminate when power delivery (POC) from 4KCHANGER-TC2.
3. **LINK LED:** This LED will illuminate when Receiver connect 4KCHANGER-TC2 Transmitter and all signal start to transmission.
4. **RJ45:** Connect to 4KCHANGER-TC2 Transmitter with single Cat.6 cable.

TECHNICAL SPECIFICATION

Transmitter Specification

HDMI Bandwidth	600MHz / 18.0Gbps
HDMI Resolution	480P,720P,1080P/24,30,50,60Hz, 4Kx2K/24,30,60Hz.
Mini DisplayPort Resolution	800x600, 1024x768, 10280x1024,1600x900, 1600x1200, 1920x1080, 1920x1200, 2560x1440, 3840x2160, 4096x2160
VGA Resolution	1024x768, 1280x1024, 1600x900, 1600x1200, 1920x1080
USB 3.1 C Resolution	1024x768, 10280x1024,1600x900, 1600x1200, 1920x1080 1920x1200, 2560x1440, 3840x2160, 4096x2160
HDMI Output Resolution	480P,720P,1080P/24,30,50,60Hz, 4Kx2K/24,30,60Hz. VGA video in only supports 1920x1080p as output resolution
Audio Format	PCM 2 Channel at 48KHz
HDCP	2.2
Input Port	Mini DisplayPort X 1 HDMI X 1 VGA X 1 Audio X 1 -3.5mm Stereo Jack USB 3.1 C X 1 Ethernet X 1 - RJ45 at Cat.5e/6 (Pass Thru)
Output Port	RJ45 X 1 USB 2.0 A X 1 -5V/ 1.5 Amp -BC 1.2 USB 3.1 C X 1- 5V/ 2.0 Amp Ethernet X 1 - RJ45 at Cat.5e/6 (Pass Thru)
Control Port	Select button X 1 -
Power Supply	24VDC / 1.5 Amp (US,UK,EU Power Plug)
Power Consumption	36 W - Max.
Chassis Material	Metal
Panel Color	Silver
Operating Temperature	0°C -40°C / 32°F -104°F
Storage Temperature	-15°C -55°C / 5°F -131°F
Humidity	5 - 85% RH (Non-Condensing)
Dimension LXWXH	7.2 in (184 mm) X 3.1 in (80 mm) X 3.6 in (90 mm)
Weight	1,270 g

Receiver Specification

HDMI Bandwidth	225MHz / 6.75Gbps
HDMI Output Resolution	480P,720P, 1080P/24,30,50,60Hz, 4Kx2K/50,60Hz. VGA video in only supports 1920x1080p as output resolution
Audio Format	PCM 2 Channel at 48KHz
HDCP	2.2
Input Port	RJ45 X 1
Output Port	HDMI X 1
Power Supply	POC
Chassis Material	Metal
Chassis Color	Black
Operating Temperature	0°C -40°C / 32°F -104°F
Storage Temperature	-15°C -55°C / 5°F -131°F
Humidity	5 - 85% RH (Non-Condensing)
Dimension LXWXH	4.3 in (110 mm) X 2.17 in (55 mm) X 0.94 in (24 mm)
Weight	125 g

Resolution Specifications

Mini DisplayPort Port Resolution

Supported Resolutions (Hz)	Mini DisplayPortInput
<u>800x600p@60 75</u>	V
<u>1024x768p@60 75</u>	V
<u>1152x864p@75</u>	V
<u>1280x720p@60</u>	V
<u>1280x768p@60</u>	V
<u>1280x800p@60</u>	V
<u>1280x960p@60</u>	V
<u>1280x1024p@60 75</u>	V
<u>1360x768p@60</u>	V
<u>1366x768p@60</u>	V
<u>1600x900p@60</u>	V
<u>1600x1200p@50 60</u>	V
<u>1680x1050p@60</u>	V
<u>1920x1080p@60</u>	V
<u>1920x1200p@60</u>	V
<u>1920x1440p@60</u>	V
<u>2560x1440p@60</u>	V
<u>2560x1600p@60</u>	V
<u>3840x2160p@60</u>	V

HDMI Port Resolution

Supported Resolutions (Hz)	HDMI Input
<u>720x400p@70 85</u>	V
<u>640x480p@60 72 75 85</u>	V
<u>720x480i@60</u>	V
<u>720x480p@60</u>	V
<u>720x576i@50</u>	V
<u>720x576p@50</u>	V
<u>800x600p@56 60 72 75 85</u>	V
<u>848x480p@60</u>	V
<u>1024x768p@60 70 75 85</u>	V
<u>1152x864p@75</u>	V
<u>1280x720p@50 60</u>	V
<u>1280x768p@60RB/60 75 85</u>	V
<u>1280x800p@60RB/60 75 85</u>	V
<u>1280x960p@60 85</u>	V
<u>1280x1024p@60 75 85</u>	V
<u>1360x768p@60</u>	V
<u>1366x768p@60RB 60</u>	V
<u>1400x1050p@60RB 60</u>	V
<u>1440x900p@60RB 60 75</u>	V
<u>1600x900p@60RB</u>	V
<u>1600x1200p@60</u>	V
<u>1680x1050p@60RB 60</u>	V
<u>1920x1080i@50 60</u>	V
<u>1920x1080p@24 25 30</u>	V
<u>1920x1080p@50 60</u>	V
<u>1920x1200p@60RB</u>	V
<u>2560x1440p@60RB</u>	V
<u>2560x1600p@60RB</u>	V
<u>2048x1080p@24 25 30</u>	V
<u>2048x1080p@50 60</u>	V
<u>3840x2160p@24 25 30</u>	V
<u>3840x2160p@50 60 (4:2:0)</u>	V
<u>3840x2160p@50 60</u>	V

VGA Port Resolution

Supported Resolutions (Hz)	VGA Input
<u>800x600p@60 75</u>	V
<u>1024x768p@60 75</u>	V
<u>1280x720p@60</u>	V
<u>1280x800p@60</u>	V
<u>1280x960p@60</u>	V
<u>1280x1024p@60 75</u>	V
<u>1360x768p@60</u>	V
<u>1440x900@60</u>	V
<u>1600x900p@60</u>	V
<u>1600x1200p@60</u>	V
<u>1680x1050p@60</u>	V
<u>1920x1080p@60</u>	V

USB 3.1C Port Resolution

Supported Resolutions (Hz)	USB 3.1C Input
<u>800x600p@60 75</u>	V
<u>1024x768p@60 75</u>	V
<u>1152x864p@75</u>	V
<u>1280x720p@60</u>	V
<u>1280x768p@60</u>	V
<u>1280x800p@60</u>	V
<u>1280x960p@60</u>	V
<u>1280x1024p@60 75</u>	V
<u>1360x768p@60</u>	V
<u>1366x768p@60</u>	V
<u>1600x900p@60</u>	V
<u>1600x1200p@50 60</u>	V
<u>1680x1050p@60</u>	V
<u>1920x1080p@60</u>	V
<u>1920x1200p@60</u>	V
<u>1920x1440p@60</u>	V
<u>2560x1440p@60</u>	V
<u>2560x1600p@60</u>	V
<u>3840x2160p@60</u>	V

Cable Specifications

Cable Length-Input	1080p/60Hz 8 bit	4K/30Hz 8 bit 4:4:4	4K/60Hz 8 bit 4:4:4
HDMI High Speed Cable	10m	5m	2m
Mini DisplayPort Cable	5m	3m	2m
VGA Cable	7m	X	X
USB 3.1 Type C Cable	1m	1m	1m

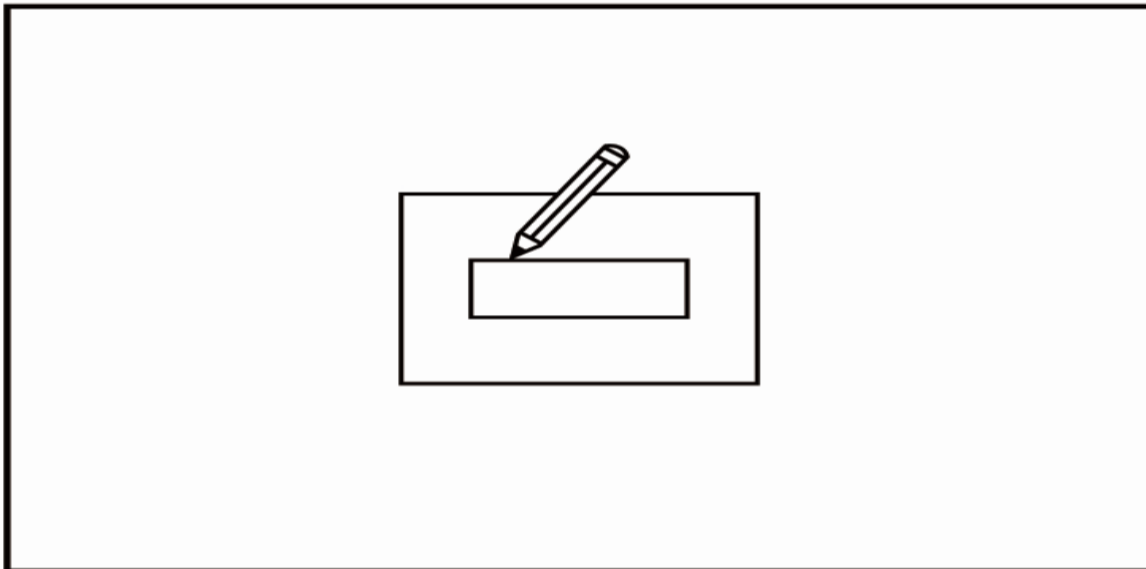
Cable Length-Output	1080p/60Hz 8 bit	4K/30Hz 8 bit 4:4:4	4K/60Hz 8 bit 4:4:4
HDMI High Speed Cable	4m	3m	2m
Cat.6/6e/7	60m	50m	35m

INSTALLATION

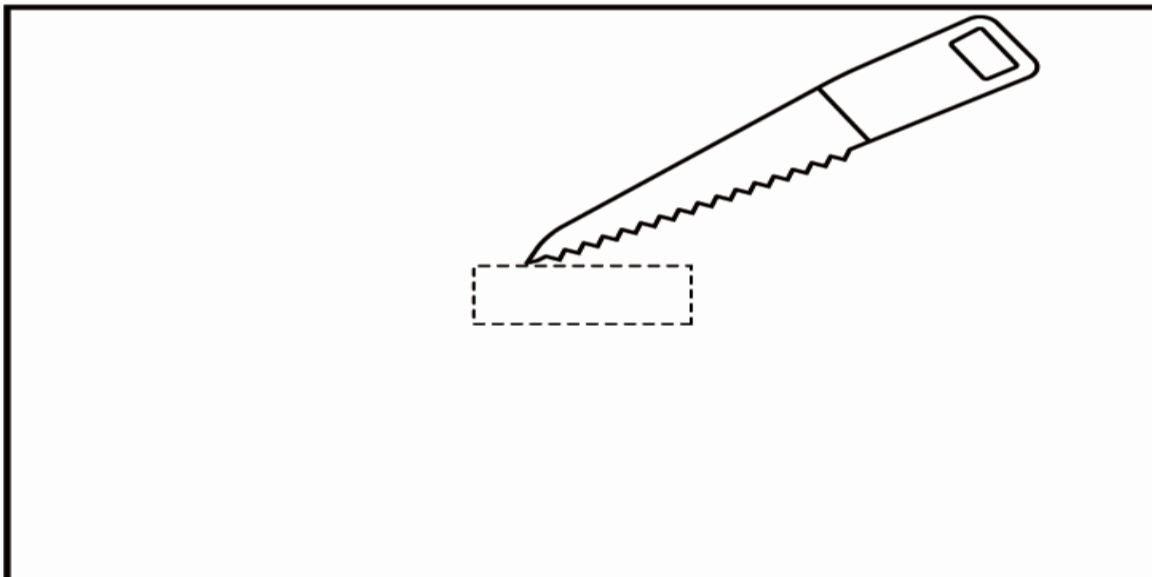
Caution: Before installation, Please test the 4KCHNGER-TC2 box functionality with your equipment to make sure compatibility.

Note: aegis Multimedia Inc. is not responsible for damage of your table surface. Be ensure to the following instruction, when cutting your table surface.

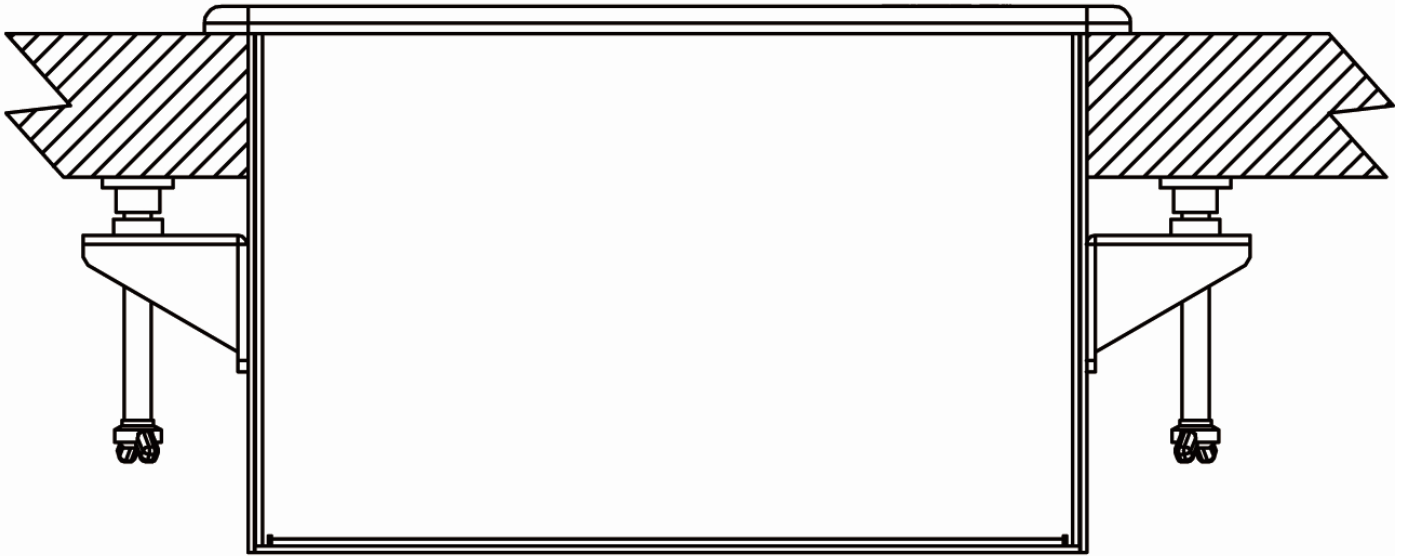
1. Using the Template card to trace the inner rectangle on the table surface in your location.



2. Carefully cut the inner rectangle hole in your desired location.



3. Install the 4KCHANGER-TC2 Transmitter to the rectangle hole in your table.



4. Under the rectangle hole of table, using each mounting screw slot on either side of 4KCHANGER-TC2 Transmitter.
5. Twist the mounting screw in a counterclockwise direction. Be ensure the head of screw are fixed tightly. Please do not overtighten the screw.
6. From RJ45 output port of 4KCHANGER-TC2 Transmitter to connect RJ45 port of 4KCHANGER-TC2 Receiver by single Cat.6/6e/7 cable. (Sold separately).
7. From Ethernet port of 4KCHANGER-TC2 Transmitter to connect your local Network device by single Cat.5e/6 cable (Sold separately).
8. From locking power port of 4KCHANGER-TC2 Transmitter to connect your local power outlet by Universal locking power adapter.
9. From HDM output port of 4KCHANGER-TC2 Receiver to connector your HDMI display device by single HDMI cable. (Sold separately).

ACRONYMS

ACRONYM	DESCRIPTION
AV	Audio/Video
EDID	Extended Display Identification Data
HDMI	High Definition Multimedia Interface Cable
HDCP	High Bandwidth Digital Content Protection
USB	Universal Serial Bus
VGA	Video Graphics Array
mDP	Mini DisplayPort
LCD	Liquid-Crystal Display
LED	Light-Emitting Diode
RJ45	Local Area Network
UHD	Ultra High Definition

WARRANTY

Limited 1 Year Warranty

aegis Multimedia INC. (“Manufacturer”) warrants that this product is free of defects in both materials and workmanship for a period of 1 years as defined herein for parts and labor from date of purchase. This Limited Warranty covers products purchased in the year 2019 and after. During the warranty period, and upon proof of purchase, the product will be repaired or replaced (with same or similar model) at our option without charge for parts or labor for the specified product lifetime warranty period.

This warranty shall not apply if any of the following:

- A. The product has been damaged by negligence, accident, lightning, water, or mishandling.
- B. The product has not been operated in accordance with procedures specified in operating instructions.,
- C. The product has been repaired and or altered by other than the manufacturer or authorized service center.
- D. The product's original serial number has been modified or removed.
- E. External equipment other than supplied by the manufacturer, in the determination of a manufacturer, shall have affected the performance, safety or reliability of the product.
- F. Part(s) are no longer available for the product.

If the product needs repair or replacement during the specified warranty period, the product should be shipped back to Manufacturer at Purchaser's expense. Repaired or replaced product shall be returned to Purchaser by standard shipping methods at Manufacturer's discretion. Express shipping will be at the expense of the Purchaser.

No other warranty, express or implied other than Manufacturers shall apply.

The manufacturer does not assume any responsibility for consequential damages, expenses or loss of revenue or property, inconvenience or interruption in operation experienced by the customer due to a malfunction of the purchased equipment. No warranty service performed on any product shall extend the applicable warranty period. This warranty does not cover damage to the equipment during shipping and Manufacturer assumes no responsibility for such damage. This product warranty extends to the original purchaser only and will be null and void upon any assignment or transfer.

NOTES