

4KCHANGER-TC1

4K MULTI INPUT CONVERTER



User Manual

Version: 20241024

Introduction

4KCHANGER-TC1 is a multi-format connectivity box that provides AV , Networking and USB charging connectivity in a conference room or classroom. 4KCHANGER-TC1 with Auto-detect source function to switching proper AV signal input. You also can press select button to switching four different AV input sources. 4KCHANGER-TC1 also supports Ethernet port to connect local network system for internet service.

Features

- 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.

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	Dolby True HD, DTS HD, Dolby, Atoms, Dolby Digital 5.1, Dolby Digital Plus, DTS 5.1, LPCM
HDCP	1.3, 1.4 and 2.2

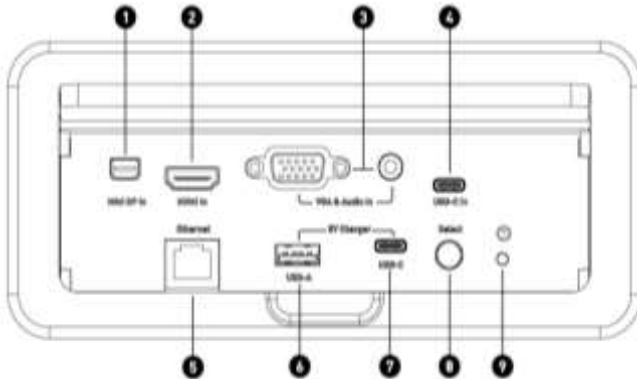
Input Port	Mini DisplayPort X 1 HDMI X 1 VGA X 1 Audio X 1 -3.5mm Stereo Jack USB 3.1 C X 1 Ethernet X 1 - RJ45 at Cat.5e/6 (Pass Thru)
Output Port	HDMI X 1 USB 2.0 A X 1 -5V/ 1.5 Amp BC 1.2 USB 3.1 C X 1- 5V/ 2.0 Amp Ethernet X 1 - RJ45 at Cat.5e/6 (Pass Thru)
Control Port	Select button X 1 -
Power 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	738 g

CONNECTION DIAGRAM



PANEL INTRODUCTION

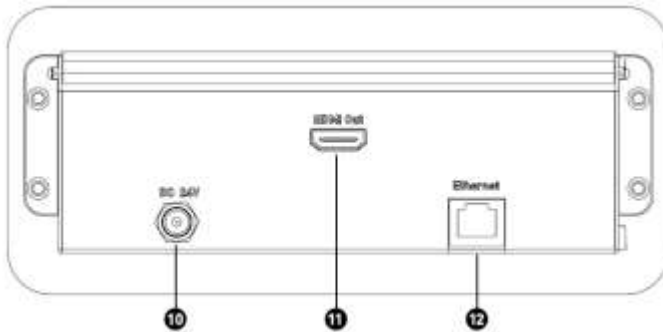
Front Panel



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-TC1.

Rear Panel



- 10. DC 24V: 24VDC / 1.5 Amp Locking Power jack.
- 11. HDMI Out: Connect to HDMI sink devices, such as LED/LCD Monitor, LED/LCD TVs, Projector and AV Receiver.
- 12. Ethernet: to connect local Internet network system to provide internet service.

Note:

4KCHANGER-TC1 supports Auto-detect for 4 different AV input sources.

When you plug in HDMI cable to 4KCHANGER-TC1 from HDMI device, 4KCHANGER-TC1 will automatically connect HDMI signal and show video on the HDMI Display.

When HDMI cable plug in 4KCHANGER-TC1 from HDMI device by first end-user, second end-user can plug in USB 3.1C cable to 4KCHANGER-TC1 from Mobile Phone, 4KCHANGER-TC1 will automatically connect USB 3.1C signal and show video on the HDMI Display.

4KCHANGER-TC1 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.

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

1920x1200p@60	V
1920x1440p@60	V
2560x1440p@60	V
2560x1600p@60	V
3840x2160p@60	V
4096x2160p@60	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

VGA Port Resolution

Supported Resolutions (Hz)	VGA Input
800x600p@60 75	V
1024x768p@60 75	V
1280x720p@60	V
1280x800p@60	V
1280x960p@60	V
1280x1024p@60 75	V
1360x768p@60	V
1440x900@60	V
1440x1050@60	V
1600x900p@60	V
1600x1200p@60	V
1680x1050p@60	V
1920x1080p@60	V

USB 3.1C Port Resolution

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

2560x1600p@60	V
3840x2160p@60	V
4096x2160p@60	V

Cable Specifications

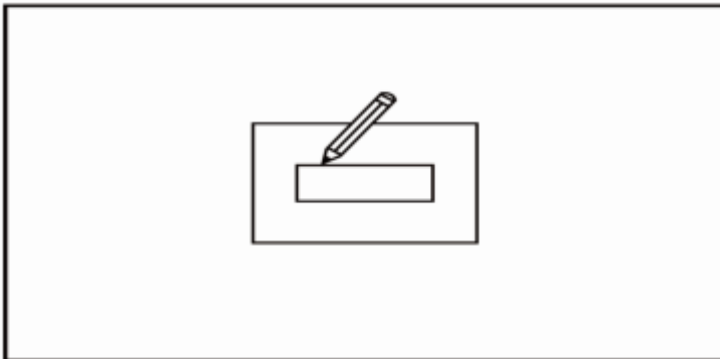
Cable Length-Input	1080p/60Hz	4K/30Hz	4K/60Hz
	8 bit	8 bit 4:4:4	8 bit 4:4:4
HDMI High Speed Cable	10m	5m	2m
Mini DisplayPort Cable	5m	3m	2m
VGA Cable	7m	X	X
USB 3.1 Type C Cable	1m	1m	1m
Cable Length-Output	1080p/60Hz	4K/30Hz	4K/60Hz
	8 bit	8 bit 4:4:4	8 bit 4:4:4
HDMI High Speed Cable	10m	5m	2m

INSTALLATION

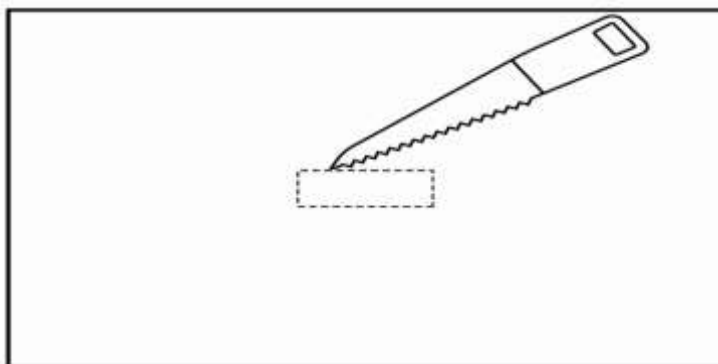
Caution: Before installation, Please test the 4KCHNGER-TC1 box functionality with your equipment to make sure compatibility.

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

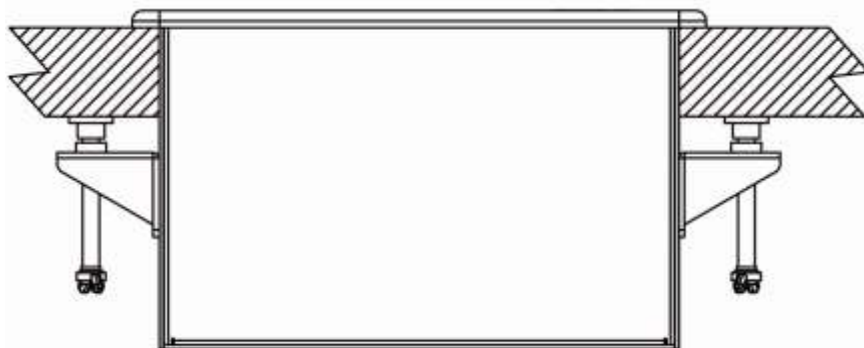
1. Using the Template card to trace the inner rectangle on the table surface in your location.



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



3. Install the 4KCHANGER-TC1 box to the rectangle hole in your table.



4. Under the rectangle hole of table, using each mounting screw slot on either side of 4KCHANGER-TC1 box.
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 HDMI output port of 4KCHANGER-TC1 box to connect your HDMI display by single HDMI cable (Sold separately).
7. From Ethernet port of 4KCHANGER-TC1 box to connect your local Network device by single Cat.5e/6 cable (Sold separately).
8. From locking power port of 4KCHANGER-TC1 box to connect your local power outlet by Universal locking power adapter.