Arec DS-H2U UVC HDMI 4K Capture USB 3.0 Video Capture Device Installation Guide

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Contents

INTRODUCTION

The DS-H2U USB-C 4K Video Capture with Scaler, HDMI 2.0 loop-out, Audio & HDR10 to SDR Conversion provides a professional way to capture HDMI video signals. It adopts USB 3.1 Type-C Gen 1 (USB 3.0) interface, which can realize high-speed transmission. In addition, the HDMI input and loop-out can support up to 4K2K@60. Users can connect DS-H2U to 4K2K@60 source and capture Ultra HD(4K2K@ 30) video by this capture device. In addition, DS-H2U can capture and display original uncompressed HDMI video with a more realistic color rendition. DS-H2U also uses large-volume image buffer technology which effectively avoids video tearing. The high sampling rate and high sampling accuracy assure the captured videos with high sharpness, rich details, and

fewer color edges. Also, with HDR10 to SDR conversion, PS4/Xbox players can enjoy 4K2K@60 HDR games on 4K TV thru the loop-out HDMI port and record the real-time 4K2K@30/1080P@120 video streams with SDR quality through USB 3.0 port at the same time.

⊙ * PS5 & Xbox Series X also support 1080P120

FEATURES

- HDMI video and audio streams over USB 3.1 Type-C Gen 1
- Supports UVC1.0/1.1/1.5
- Supports video resolution up to 4K2K@30/1080P@120 (Video stream over USB-C)*
- Supports HDMI input & loopout up to 4K2K@60
- Supports deinterlacer & scaler**
- Supports mic in mix with HDMI audio
- Supports HDMI audio extraction
- Supports HDR10 to SDR conversion***
- Supports playing 4K HDR on HDMI out while streaming perfect 4K2K@30/1080P@120 with SDR colors for gameplay capture
- Auto-detection on video format to ensure plug-play operations
- Recording Video Format: Software Compression
- Works on multiple operating system platforms (Windows 7/8.1/10, Mac and Linux OS)
- Compatible with most 3rd party software such as OBS Studio and AMCap
- Supports USB 3.1 Gen 1 (RGB/YUY2/NV12) (capture up to 4K2K@30) and USB 2.0 (YUY2/NV12) (capture up to 720P@30)
- Low Latency (3~4ms at 1080P)
- USB-C reversible
- System Requirements (Recommanded)
    – Windows® 7(SP1) / Windows 8.1 / Windows 10
    – PC: Intel® CoreTM i5-4440 3.10GHz + NVIDIA® GeForce® GTX 660 or higher
    – Laptop: Intel® Core i7-4810MQ + NVIDIA GeForce GTX 870M or higher
    – 4GB RAM or higher

1. ⊙ Video quality is apparently related to the capability of computer and software setting.
2. Please use the included USB 3.0 cable in the box to protect the device and avoid further compatible issues.
3. Video resolution change may require restarting software.
4. Video output format is related to the software limitation. For example, the AMCap software does not support NV12 format

⊙ * ONLY NV12 supports 4K2K@30/1080P@120
** Scale-up supports up to 1080P@120
*** NOT supports HDR10 plus, HLG, and Dolby Vision to SDR conversion

SPECIFICATIONS

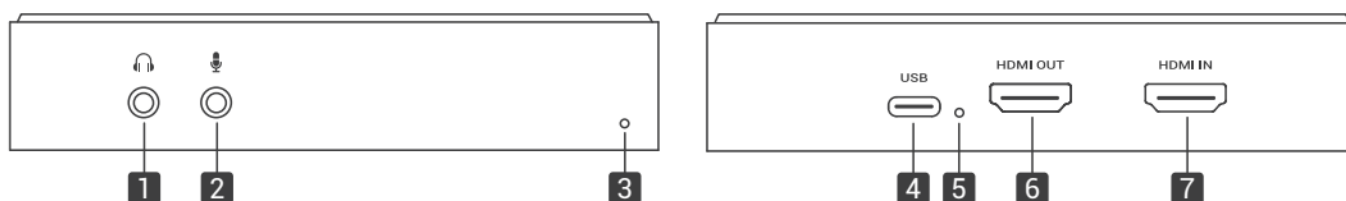|	
Model Name	DS-H2U
Technical	
Role of usage	Video Capture Device
Input Video bandwidth	600MHz
Output bandwidth	Up to 350Mbps (USB-C)
Video support (USB-C)	Up to 4K2K@30/1080P@120
Video support (Loopout)	Up to 4K2K@60
Audio Input	HDMI Embedded Audio & Stereo audio Input
Audio Format	2CH 16bit PCM
Recording Mode	Software Compression
Recording Video Format	RGB/YUY2/NV12 (USB3.1 Gen 1), YUY2/NV12 (USB2.0)
ESD protection	Human body model — ±15kV [air-gap discharge] & ±8kV [contact discharge]
PCB stack-up	4-layer board [impedance control — differential 100Ω; single 50Ω]

Firmware update	Feasible via USB-C Port
Input	1x HDMI+ 1x 3.5mm
Output	1x USB-C + 1x HDMI + 1x 3.5mm
HDMI connector	Type A [19-pin female]
USB connector	USB 3.1 Type C (SuperSpeed USB)
Software compatibility (not complete list)	OBS Studio (Windows, Linux, MAC), AMCap (Windows), Potplayer (Windows), VLC (OS X, Linux), XSplit Boardcast (Windows), Skype (Windows, OS X), Zoom (Windows), Hangout (Windows), TeamViewer(Windows)
OS Support	Windows 7 /8.1 /10, Mac and Linux OS
Mechanical	
Housing	Metal enclosure
Dimensions [L x W x H]	Model : 116 x 63 x 23mm [4.6″ x 2.5″ x 0.9″] Package : 230 x 95 x 41mm [9″ x 3.7″ x 1.6″]
Weight	187g
Power supply	Via USB-C

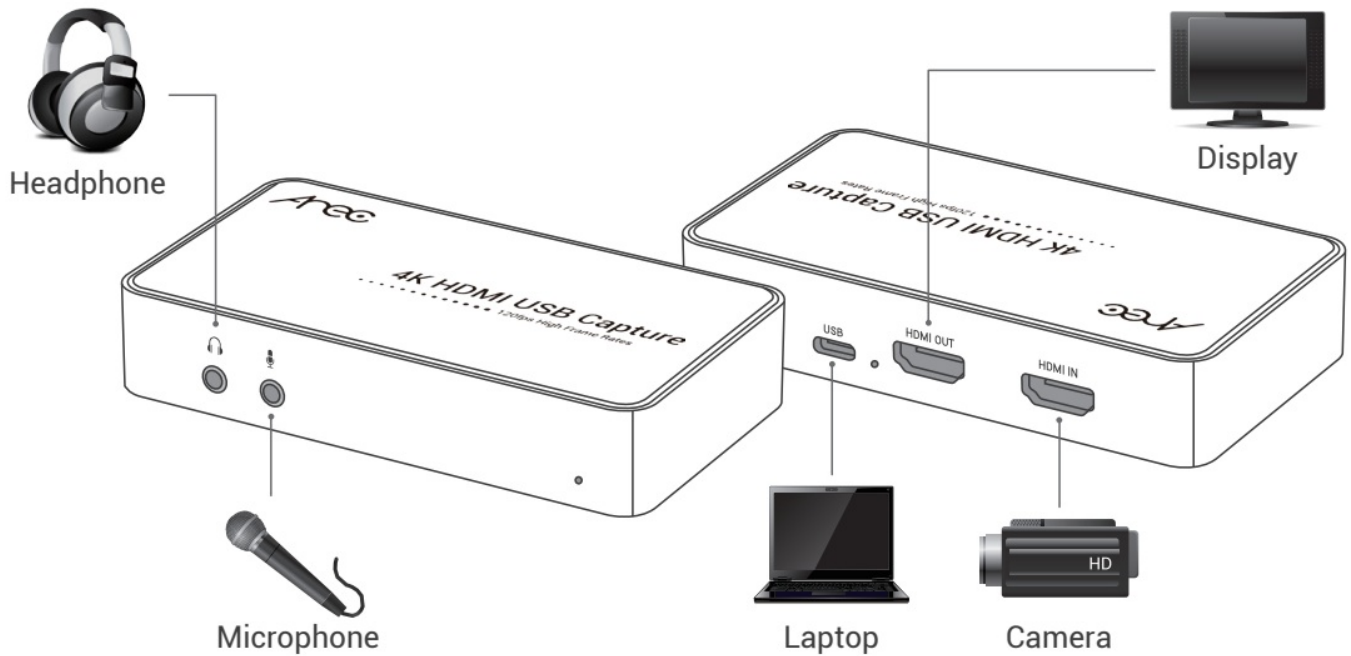|	
Power consumption	3.5 Watts [max]
Operation temperature	0~40°C [32~104°F]
Storage temperature	-20~60°C [-4~140°F]
Relative humidity	20~90% RH [no condensation]

PACKAGE CONTENTS

- 1x DS-H2U
- 1x USB 3.0 A to C Cable (host to device)
- 1x Quick Installation Guide

PANEL DESCRIPTIONS

1. STEREO AUDIO OUT : Audio extracts from HDMI input
2. STEREO AUDIO IN : Connect to analog stereo audio source
3. LED INDICATOR : HDMI input signal indicator LED
4. USB-C OUT : Connect to a USB host (PC, NB, MAC…)
5. LED INDICATOR : USB-C signal indicator LED

   [Red] Connect the device to the USB 2.0 port on the host

   [Blue] Connect the device to the USB 3.0 port on the host
6. HDMI OUT : Connect to a HDMI display
7. HDMI IN : Connect to a HDMI source

PANEL DESCRIPTIONS

Customer Service

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Documents / Resources

 Arec DS-H2U UVC HDMI 4K Capture USB 3.0 Video Capture Device [pdf] Installation Guide
DS-H2U UVC HDMI 4K Capture USB 3.0 Video Capture Device, DS-H2U UVC HDMI 4K, Capture USB 3.0 Video Capture Device, Video Capture Device, Capture Device

References

- **AREC I AV over IP Solutions I Media Capture, Live Streaming, and Video Recording**