

AC7600 4K HDMI USB-C Video Capture Card



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# **1.0 Introduction**

The AC7600 is a HDMI capture card and can capture a single 4K HDMI signal at a 30Hz refresh rate while supporting 4K30Hz HDMI passthrough on the HDMI output, the HDMI input supports up to 4K60Hz. The AC7600 is compatible with Windows 7/8/8.1/10/11, Mac OS. The USB 3.0/Type-C interface connects to the computer and enables your live stream or video conferencing software to add the AC7600 as a camera or video input source. There is no need to install additional drivers.

#### 1.1 Packing contents

The following parts need to be present in the packing:

- AC7600 4K HDMI USB-C Video Capture Card
- USB-C to USB-A with USB-C adapter
- HDMI Cable
- Quick Install

#### 1.2 Features

- 4K60Hz input support and HDMI out capture and recording at 4K30Hz.
- Recording video formats: NV12/8bit, RGB/24bit, YUY2/16bit.
- UAC and UVC protocol is supported with 48Khz audio sampling rate.
- No driver installation is required.
- Microphone and line audio input.
- 40ms low latency.

# 2.0 Specifications

USB-C	USB 3.	.0, 5Gb/s transfer bandwidth, USB 2.0 compatible		
Input	1x HDMI video input, 1x Line in audio input, 1x Microphone audio input			
Output		1x HDMI, 1x USB-C		
		STANDARD		
Capture	Compliant with l	UVC(USB Video Class) and UAC (USB Audio Class) standards		
Input Format		HDMI 2.0		
Capture Video Format		RGB, YUY2, NV12		
	4	80p, 576p, 720p, 1080p, 4K@30Hz,4K@60Hz		
Input Resolution	640x480,80 1920x1200 1	00x600,1024x768,1600x1200,1280x1024,1680x1050, ),1600x900,1440x900,1366x768,1360x768,1280x960, .152x864, 1280x800,1920x1080,3840x2160		
	NV12 8bit	Maximum support 4K/30Hz resolution capture, backward compatible.		
USB3.0 Capture Video Format		Note: When the input is 4K/60Hz or 1080P/60Hz, the highest capture resolution is 1080P/60Hz. When the input video signal is 4K/30Hz, the highest capture is 4K/30Hz resolution.		
	YUY2 16bit	Support 1080P/60Hz resolution capture, backward compatible.		
	RGB 24bit	Uncompressed, high color, up to support 1080P/60Hz resolution capture, backwards compatible.		
HDR	4K/60Hz HDR input + passthrough			
Chroma		YCbCr 4:4:4 with 16 bpc		
	SYST	EM SUPPORT		
Operating System	W	/indows7/8/8.1/10/11, and Mac OS		
	W	Vindows Media Encoder, Microsoft Teams		
Compatible Soltware	OBS Stu	dio, QuickTime Player, VLC, OBS, vMix, Resolume		
	OPERATIN	IG ENVIRONMENT		
Power Consumption		3.5W		
Operating Temperature		<b>0-70</b> ℃		
Storage Temperature		-20-70 ℃		
Storage Humidity	5%-90%			

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### **3.0 Device connections**



## 4.0 Connection diagram



- 1) Connect external audio to the Line in.
- 2) Connect an external microphone to the Mic in.
- 3) Connect your computer or laptop to the USB-C port
- 4) Connect an external HDMI monitor to the HDMI Out from the AC7600 to monitor the loop-out signal form the device connected to the HDMI in.
- 5) Connect a HDMI device to the HDMI input of the AC7600, max supported resolution is 4K60Hz.

# 5.0 How to add the AC7600 to OBS (Windows)

#### 5.1 OBS Studio

OBS Studio (also Open Broadcaster Software) is a free and open-source cross-platform livestream software. All information and free download of OBS can be found on their website: www.obsproject.com . ACT cannot provide support for OBS, please refer to the OBS website if you have questions. In the simple steps below we show how to add the AC7600 to OBS studio. During making this manual we used OSB Studio version 30.0.2.

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#### 5.2 Add capture input (Windows)



Device AC7600 Choose device: AC7600

Set the right resolution in the example below we used 3840x2160 at 30 fps. Make sure to select the right settings for Video Format, Color Space and Audio Output Mode click OK to add the AC7600 to OBS.



### 5.3 Add audio to OBS (Windows)

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Create/Select Source  Create new	×				
Audio Input Capture		Give the audio	source a name		
Mic/Aux					
✓ Make source visible	OK Cancel				







# 6.0 How to add the AC7600 to OBS (Mac)

6.1 Add capture input (Mac)

	Audio Input Conture				
± 0	Blackmagic Device				
©	Browser				
	Color Source				
	) Image				
Ţ.	Image Slide Show				
(۵)	) macOS Audio Capture				
No source selected	macOS Screen Capture				
G Scenes G	Media Source	Audio Mixer		G Scene Transitions	
Scène	Scene			Fade	
	Syphon Client				start streaming
	Video Capture Device		2 Add a Video Capture	Device	Start Recording
	VLC Video Source				Start Virtual Camera
B	, ne.				Studio Mode
	Depresated				Settings
+ 🗉 🗈 ^ 🗸 +		* :	1. Click the "plus" icon to add	a new source	Exit

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• • •	Properties for 'Video Capture Device'	
Device	AC7600	Choose AC7600 as device
	Use Preset 🚽	Linchook "Linc Drocot"
Resolution		Oncheck Ose Preset
Frame rate	Simple FPS Values 30 FPS Fra	Match the resolution and frame rate with the input source
Input format	Auto (autoselect: NV12 - 420YpCbCr8BiPlanar)	
Color space	Rec. 709	Use these settings
Video range	Full	
	Use Buffering	
Defaults		Cancel OK

## 6.2 Add audio source (Mac)

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	👲 Audio Input Capture		2. Add "/	Audio Input	Capture"				
	D Blackmagic Device								
	Browser								
	Color Source								
	Image Slide Show								
	♦) macOS Audio Capture								
AC7600 AC7600	macOS Screen Capture								
	Media Source	=							
Scenes	C Scene	Audio Mixer			4	Scene Transitions		ntrols	
Scéne	Syphon Client					Fade		Start Streaming	
	Video Canture Device					Duration 300 ms	Ç.	Start Recording	
	VLC Video Source							Start Virtual Camera	•
	Group							Studio Mode	
	Deprecated							Settings	
+ 🗊 🗈 🔺 🗸	+ • • • • •	* :	1. Click	the "plus" icc	on to add a i	new source		Exit	
						, (e)	00:00:00	0:00:00 CPU: 4.3% 60.00 / 60.	00 FPS

Audio Input Capture		
Add Existing		
Make source visible		
	Cancel	ОК

Give the audio capture device a name like AC7600 Audio





### 7.0 Service and support

This user manual has been carefully written by ACT's technical experts. If you have problems installing or using the product, please check the **support** link at the website <u>www.act-connectivity.com</u>.

### 8.0 Warning and points of attention



Always follow up the instructions in the manual\*, especially where it concerns devices which need to be assembled.

Warning: In most cases this concerns an electronic device. Wrong/improper use may lead to (severe) injuries!

When you connect the device to the mains, make sure it will not be damaged or subject to (high) pressure.

A power socket is needed which should be close and easy accessible from the device.

Repairing of the device should be done by qualified ACT staff. Never try to repair the device yourself. The warranty immediately voids when products have undergone self-repair and/or by misuse. For extended warranty conditions, please visit our website at <u>www.act-connectivity.com</u>

Dispose of the device appropriately. Please follow your countries regulation for the disposal of electronic goods.

Please check below safety points carefully:

- Do not apply external force on the cables
- Do not unplug the device by pulling the power cable
- Do not place the device near heating elements
- Do not let the device come in contact with water of other liquids
- If there is any strange sound, smoke or odor, remove the device immediately from the power outlet.
- Do not put any sharp objects into the venting hole of a product
- Do not use any damaged cables (risk of electric shock)
- Keep the product out of reach of children
- Wipe off the product with soft fabric, not water mop.
- Keep the power plug and outlet clean
- Do not unplug the device form the power outlet with wet hands
- Unplug the device when you don't use it for a long time
- Use the device at a well ventilated place

\*Tip: ACT manuals are written with great care. However, due to new technological developments it can happen that a printed manual does not longer contain the most recent information. If you are experiencing any problems with the printed manual or you cannot find what you are looking for, please always check our website <u>www.act-connectivity.com</u> first for the newest updated manual.

Frequently asked questions (FAQ). Consult **support** on our website <u>www.act-connectivity.com</u> and see if you can find the right information about your product here. It is highly advisable to consult the FAQ section first, the answer is often here.



#### 9.0 Warranty conditions

The ACT warranty applies to all ACT products. After buying a second-hand ACT product the remaining period of warranty is measured from the moment of purchase by the product's initial owner. ACT warranty applies to all ACT products and parts, indissolubly connected or mounted to the product it concerns. Power supply adapters, batteries, antennas and all other products not directly integrated in or connected to the main product or products of which, without reasonable doubt, can be assumed that wear and tear during use will show a different pattern than the main product, are not covered by the ACT warranty. Products are not covered by the ACT warranty when exposed to incorrect/improper use, external influences or when opening the service parts of the product by parties other than ACT. ACT may use refurbished materials for repair or replacement of your defective product. ACT cannot be held responsible for changes in network settings by internet providers. We cannot guarantee that the ACT networking product will keep working when settings are changed by the internet providers. ACT cannot guarantee the working of web services, apps and other third party content that is available through ACT products

#### When my product gets defective

Should you encounter a product rendered defective for reasons other than described above: Please contact your point of purchase for taking care of your defective product.



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