DIP

SDI IN

HDMI IN

DVI-I / VGA IN

S-VIDEO/CVBS
YPBPR IN

AUDIO
IN

AVMATRIX

MULTI-SIGNAL TO USB3.0 CAPTURE

UC7018

USB-C

UC7018

Multi-Signal to USB3.0 Capture Card

1. Simplification

UC7018 Multi-signal to USB 3.0 capture card is a broadcast-grade, professional, and convenient device designed for capturing uncompressed SDI/HDMI/DVI-I/VGA/CVBS/S-VIDEO/YPbPr input signals via USB 3.1 Gen1 for audio/video capture, live streaming, and recording on a computer. It supports video resolutions up to 1080p60Hz and is compatible with various systems, including Windows and Linux. UC7018 is ideal for live broadcasting, streaming, professional audio and video work, web conferencing, video production.
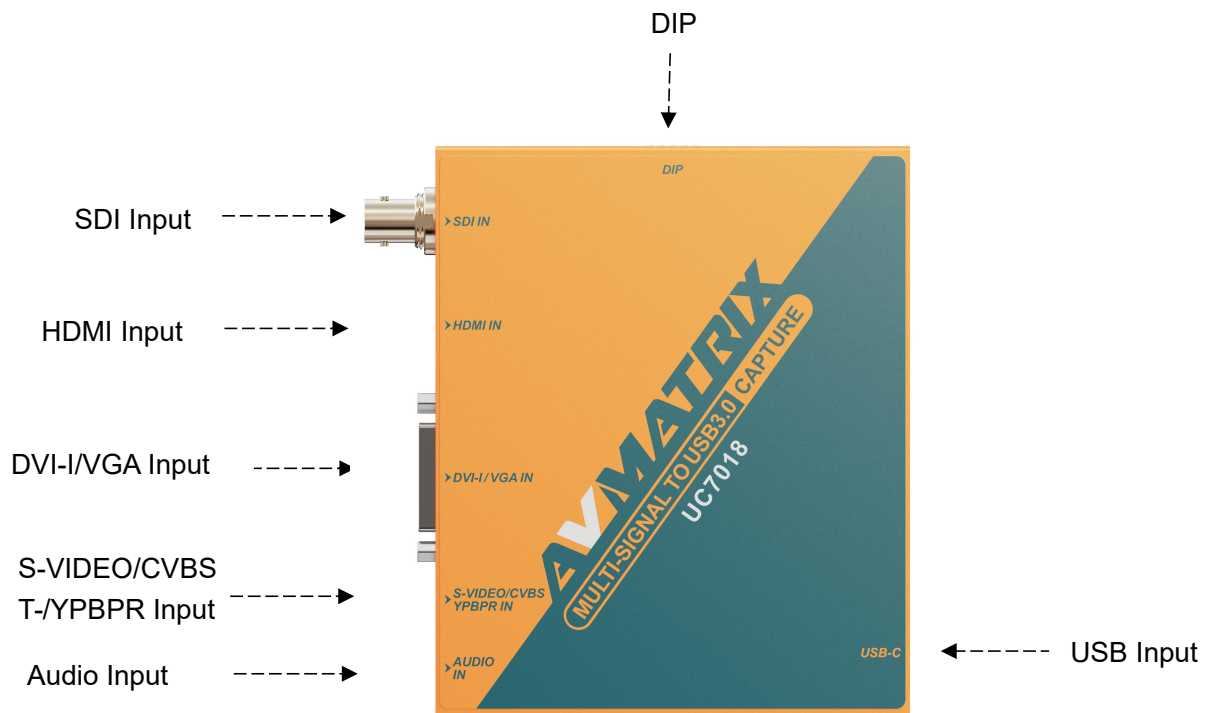

2. Main features

- Input: SDI/HDMI/DVI-I/VGA/CVBS/S-VIDEO/YPbPr input, analog audio input

- Output: USB 3.1 Gen1 (USB3.0) output

- Automatic input signal detection up to 1080p60

- Plug and play, no driver or power supply required

- Uncompressed audio and video capture, UVC and UAC compliant, supports RGB, YUY2, NV12

- With video and power signal LED indicators

- USB Type-C for capture, power and upgrades

- Easily controlled by dip switches and PC software

- Compatible with Windows, Linux and MacOS.

- Compatible with OBS, ZOOM, Teams, Twitch, Vmix and other live streaming softwares.

3.Specification

INTERFACE	
Video Interface	1×SDI input 1×HDMI input 1×DVI-I/VGA input 1×S-VIDEO/CVBS/YPBPR input 1×3.5mm（analog audio input）
Output Interface	1×USB3.0 type C(USB 3.1 Gen1, up to 200MB/s)
FORMAT	
SDI Input Format	1080p 60/59.94/50/30/29.97/25/24/23.98 1080sf 30/29.97/25/24/23.98 1080i 50/59.94/60 720p 60/59.94/50/30/29.97/25/24/23.98
HDMI Input Format	1080p 60/59.94/50/30/29.97/25/24/23.98 1080i 50/59.94/60 720p 60/59.94/50/30/29.97/25/24/23.98
S-VIDEO/CVB Input Format	710×484i, 702×576i
YPBPR Input Format	1920×1080p, 1920×1080i, 1280×720p, 1024×576p, 720×576p, 720×483p, 710×484i, 702×576i
DVI Input Format	1920×1080, 1600×1200, 1280×1024, 1280×960, 1280×720, 1152×900, 1152×870, 1152×864, 1024×768, 800×600, 720×400, 640×480, 640×400
VGA Input Format	1920×1080, 1600×1200, 1280×1024, 1280×960, 1280×720, 1152×900, 1152×870, 1152×864, 1024×768, 800×600, 720×400, 640×480
USB Capture Resolution	1920×1080, 1600*900, 1440×900, 1368×768, 1280×960, 1280×720, 1024×768, 960×540, 800×600, 640×360
Audio & Video Capture	UVC (USB Video Class) Standard UAC (USB Audio Class) Standard
Audio Codec	2 channel, 16 bit PCM, 48kHz, 1536 kbps
Video Color Space	RGB, YUY2, NV12
OPERATING SYSTEM AND SOFTWARE COMPATIBILITY	
Supported Operating Systems	Windows 7/8/10/11, Linux (kernel version 2.6.38 and above), macOS (10.8 and above)
Software Compatibility	OBS studio, Skype, ZOOM, Teams, Google Meet, Youtube Live, QuikcTime Player, Face time, etc.

Compatible SDK	DirectShow(Windows), DirectSound(Windows)
POWER	
Power	USB Type-C
power Consumption	≤5W（5V，1A）
Voltage	5V
OTHER	
Dimension	104×125.5×24.5mm
Weights	Net weight: 473g　Gross Weight: 830g
Operating Temperature	-20~60°C
Storage Temperature	-30~70°C
Relative Humidity	20~90% RH (non-condensing)
Warranty	3 years
ACCESSORY	
Accessory	1×USB3.0 A to C Cable, 1×DVI to VGA Adapter 1×S-Video/CVBS/YPBPR 3-in-1 Cable, Bracket (Optional)

4.Interfaces

DIP

SDI Input ----→

HDMI Input ----→

DVI-I/VGA Input ----→

S-VIDEO/CVBS
T-/YPBPR Input ----→

Audio Input ----→

USB Input

5.Operating Instructions

UC7018 is based on the UVC (USB Video Class) and UAC (USB Audio Class) standards. No additional drivers need to be installed. After installation in the operating system, the relevant video and audio devices will be added. For example, in the Windows Device Manager, new devices will appear

- Under Camera: Switcher Capture

- Under Audio Input and Output: Switcher Capture

6.Audio Inputs

UC7018 capture card has Line audio inputs, making audio configuration more flexible.

7.Output

USB3.0 Capture Output: Using third-party software such as OBS, Vmix, Zooms, Teams, Potplayer, etc. Capture SDI/HDMI/DVI-I/VGA/CVBS/S-VIDEO/YPbPr input video for live game broadcasting, broadcasting, vlogging, distance education, conference and other live events. Captured video resolution up to 1080p60.

8.Dip Switch

UC7018 SDI/ HDMI to USB3.0 Video Capture DIP switch provides the following settings (1=ON, 0=OFF)：

Multi-signal to USB3.0 Capture Box

DIP SWITCHES (1=ON, 0=OFF)					
Video In	SW1	SW2	SW3	Audio In	SW4
SDI	1	1	1	Follow Video In	1
HDMI	1	1	0	Analog Audio	0
DVI	1	0	1	Controls	SW5
VGA	1	0	0	DIP	1
YPbPr	0	1	1	PC	0
S-Video	0	1	0		
CVBS	0	0	1		

1.DIP SW 1-3 -Video Input

Setting switch to select video input source SDI/HDMI/DVI-I/VGA/CVBS/S-VIDEO/YPbPr.

2.DIP SW 4 Audio Input

Set the switch for the incoming audio to follow the video or analog plus embedding.

When set to 1, the input audio follows the video input.

When set to 0, the input audio follows the video analog plus embedding.

3.DIP SW 5 Control

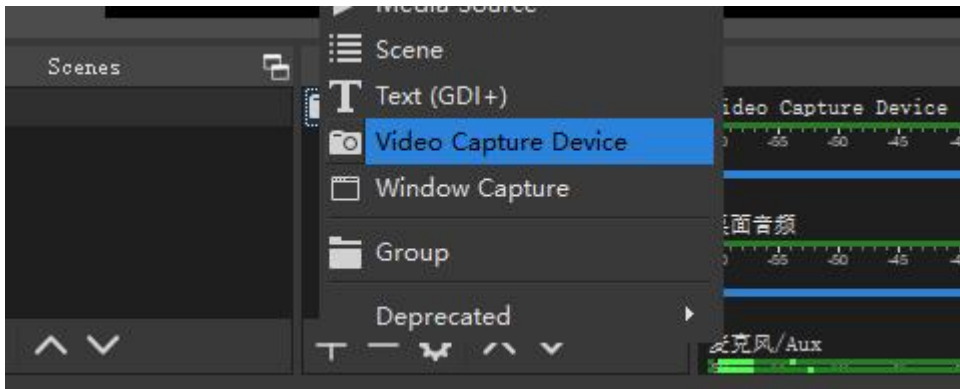Setting switch to select dial code control or PC software control.

When set to 1, dial code control.

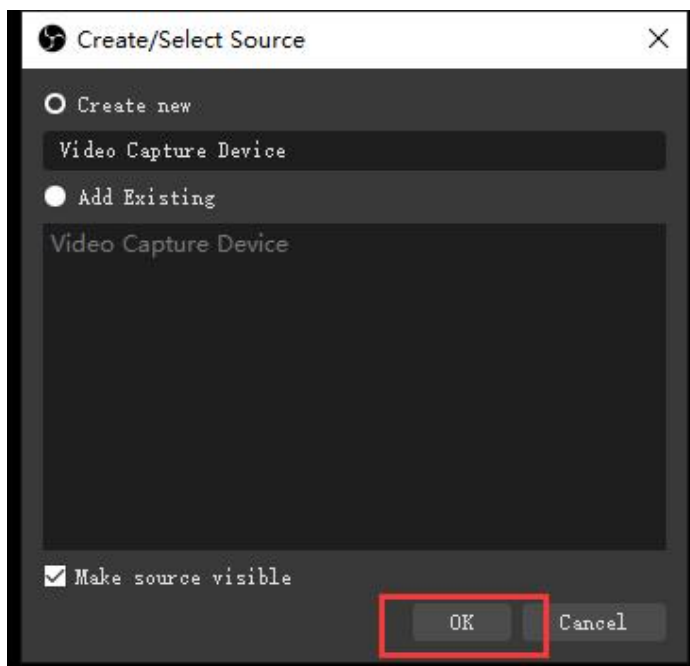When set to 0, connect to USB and control with PC control software.

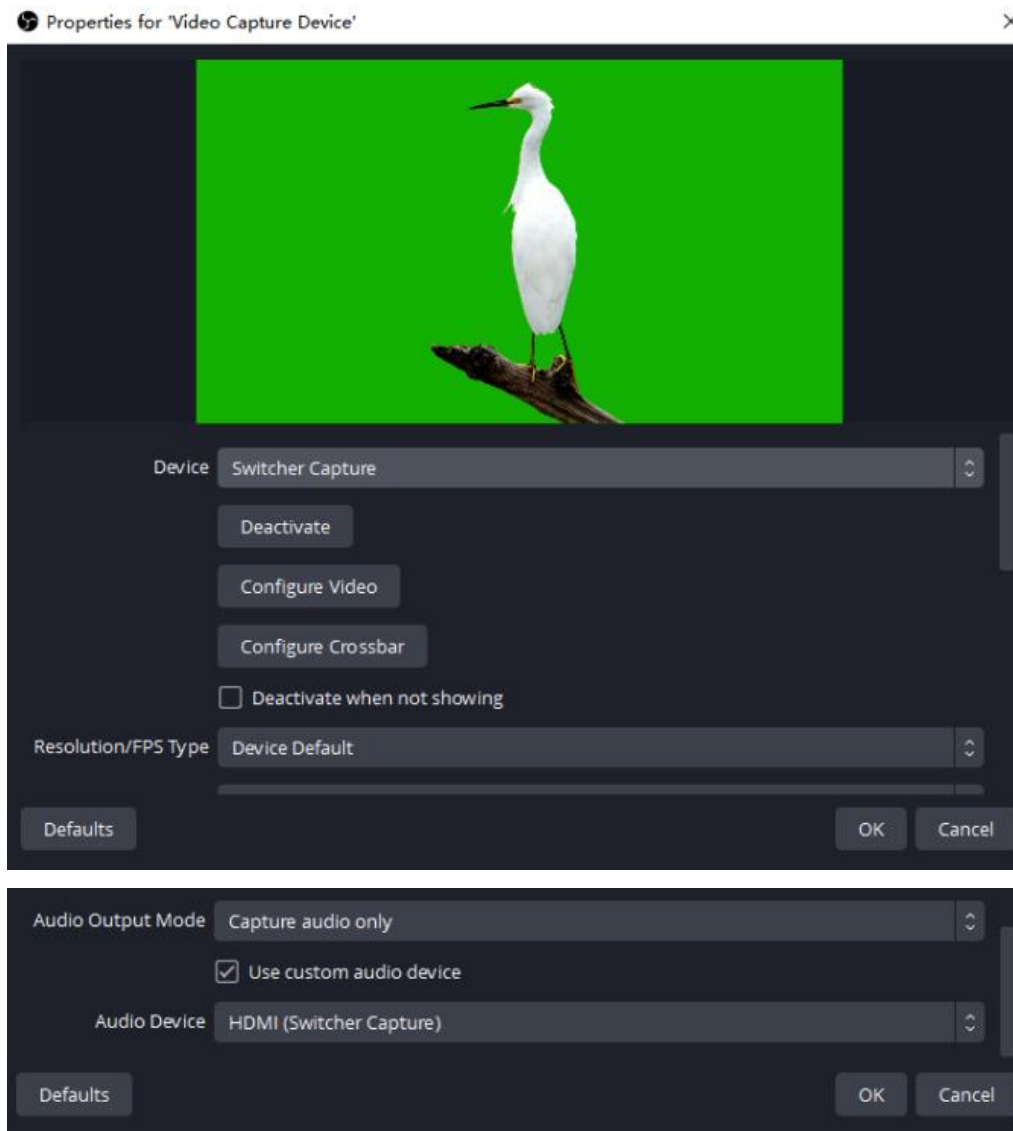## 9.OBS & Potplayer Operating Instructions

● **OBS Software Setup：**

Step 1: Open OBS Studio , click "+" and select "Video Capture Device"

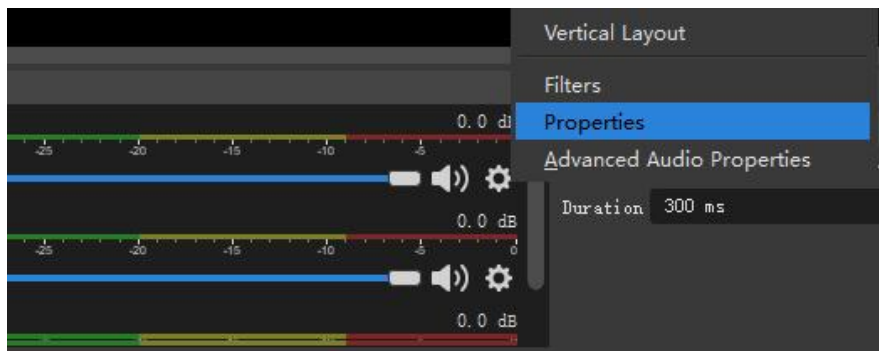
Rename the name of the signal source and click OK.

Step 2: Right-click "Video Capture Device" and select Properties to enter the Properties screen and select the signal source as your device. Users can set other parameter settings in the Properties page, then click OK.
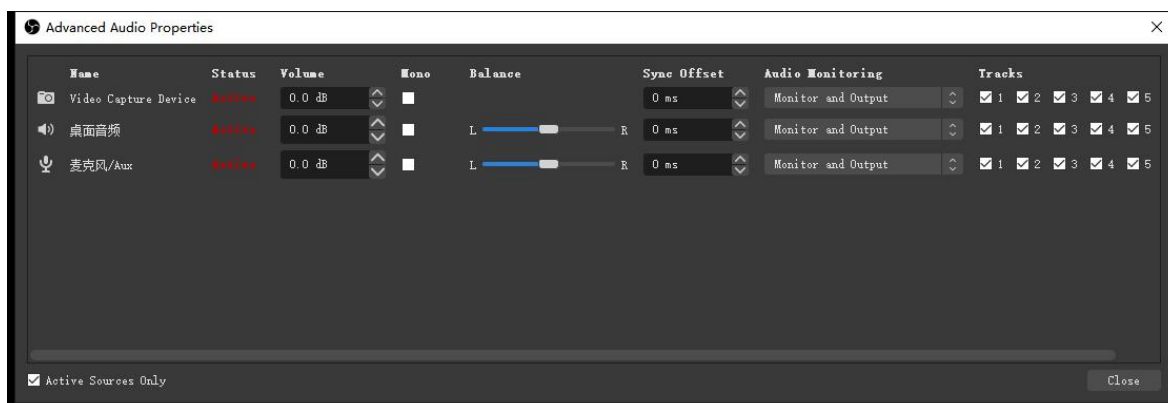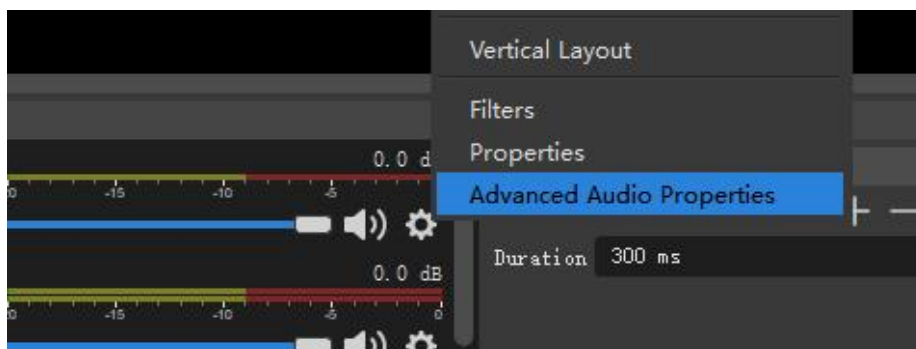
Properties for 'Video Capture Device'   ✕

Device   Switcher Capture

Deactivate

Configure Video

Configure Crossbar

☐ Deactivate when not showing

Resolution/FPS Type   Device Default

Defaults   OK   Cancel

Audio Output Mode   Capture audio only

☑ Use custom audio device

Audio Device   HDMI (Switcher Capture)

Defaults   OK   Cancel

Step 3: Click on the Audio Settings icon to set the audio as shown in the picture. Then enter Properties and select Device.

Audio Mixer

Video Capture Device   0.0 dB
-60   -55   -50   -45   -40   -35   -30   -25   -20   -15   -10   -5   0

桌面音频   0.0 dB
-60   -55   -50   -45   -40   -35   -30   -25   -20   -15   -10   -5   0

麦克风/Aux   0.0 dB

Step 4: Go to "Advanced Audio Properties" to modify settings about volume, balance, audio monitoring, and audio tracks.

Step 5: Set the output resolution. (HDMI output resolution will change according to USB output).