

**nT**n - TECH SOLUTIONS
SOLUTIONS FOR GROWTH

PART NO : nT18BX03
DESCRIPTION :
HDMI + SDI UVC GRABBER

All to USB3.0 Video Capture Dongle



User Manual

VER 1.0

Thank you for purchasing this product

For optimum performance and safety, please read these instructions carefully before connecting, operating or adjusting this product. Please keep this manual for future reference.

Surge protection device recommended

This product contains sensitive electrical components that may be damaged by electrical spikes, surges, electric shock, lighting strikes, etc. Use of surge protection systems is highly recommended in order to protect and extend the life of your equipment.

Table of Contents

1. Introduction.....	1
2. Features.....	1
3. Package Contents.....	1
4. Specifications.....	2
5. Operation Controls and Functions.....	3
6. Software Instruction.....	4
7. Device Source Logic.....	7
8. Application Example.....	8

1. Introduction

This product has a superior performance, superior compatibility, easy to carry, simple installation and many other features. It can capture HDMI, DVI (VGA, YPbPr, AV) and SDI input and output signal, video resolution the maximum up to 1920×1200. It compatibles Windows, Linux, Mac OS X operating system and USB3.0 interface. It compatibles USB3.0 chipset (Intel, Renesas, ASMedia, Fresco Logic etc.), compatible with PCIe Gen 1.1 x1 expansion via USB3.0 interface. The product meets UVC and UAC standard. Simple plug and play, no driver and setting installation required.

2. Features

- ☆ Supports AV, YPbPr, VGA, DVI, HDMI and SDI video input capture.
- ☆ Supports input interface automatic recognition.
- ☆ Supports resolution 480i~1920×1200 input format video capture.
- ☆ Supports AV, YPbPr, VGA and DVI analog stereo audio inputs.
- ☆ Compatibles Windows, Linux, OS X operating systems.
- ☆ Compatibles USB3.0 about transmission rate up to 300~350MB/s.
- ☆ Compatibles VLC, OBS, XSPLIT and AMCAP etc. PC capture software.
- ☆ It can automatically detect the input video format, adjust the set output size and frame rate.
- ☆ Simple plug and play, no drive and setting installation required

3. Package Contents

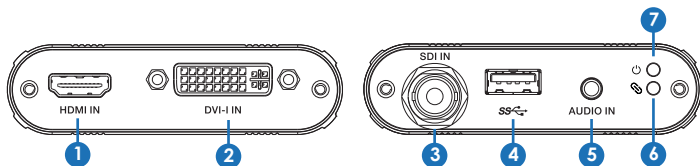
- ① 1× All to USB3.0 Video Capture Dongle
- ② 1× USB3.0 male to Type-A male Cable
- ③ 1× YPbPr/AV female to DVI male convert connector
- ④ 1× VGA female to DVI male convert connector
- ⑤ 1× User Manual

4. Specifications

Technical	
Host port	1×USB [USB Type A, USB3.0 — 300~350MB/s]
Input ports	1×DVI IN [DVI-I, Attention: This is a common interface, it can also connect VGA/YPbPr/ AV source input though converter joint.] 1×HDMI IN [19-pin female] 1×SDI IN [BNC] 1×AUDIO IN [3.5mm Stereo Mini-jack]
HDMI input resolution	480i, 480p, 576i, 576p, 720p50/60, 1080i50/60, 1080p24/25/30/50/60
SDI input resolution	480i, 576i, 720p50/60, 1080i50/60, 1080P24/25/30/50/60
VGA input resolution	640×480,800×600,1024×768,1280×1024,1400×1050, 1600×1200
DVI input resolution	720×480i/p60Hz, 720×576i/p50Hz, 1280×720p50Hz, 1280×720p60Hz, 1920×1080i/p50Hz, 1920×1080i/p60Hz
YPbPr input resolution	480i, 576i, 480p, 576p, 720p50/60, 1080i50/60
AV input resolution	480i, 576i
Output resolution	640×360, 640×480, 720×480, 720×576, 800×600, 856×480, 960×540, 1024×576, 1024×768, 1280×720, 1280×1024, 1280×960, 1280×800, 1368×768, 1440×900, 1600×1200, 1680×1050, 1920×1080, 1920×1200
Frame Rate	25/29.97/30/50/59.94/60fps
Audio and video capture	UVC (USB video class) and UAC (USB audio class) standard
Supports OS	Windows 7/8/10, Linux (Kernel version 2.6.38 and above), OS X (10.8 and above)
Software compatibility	Windows Media Encoder (Windows), Adobe Flash Media Live Encoder (Windows, OS X), Real Producer Plus (Windows), VLC (Windows, OS X, Linux), QuickTime Broadcaster (OS X), QuickTime Player (OS X), Wirecast (Windows, OS X) and Potplayer (Windows) etc.
Mechanical	
Housing	Metal Enclosure
Color	White
Dimensions	114mm [W] x 82mm [D] x 22mm [H]

Weight	168g
Power Consumption	3.9W
Operating Temperature	32 - 104°F / 0 - 40°C
Storage Temperature	-4 - 140°F / -20 - 60°C
Relative Humidity	20 - 90% RH (no condensation)

5. Operation Controls and Functions

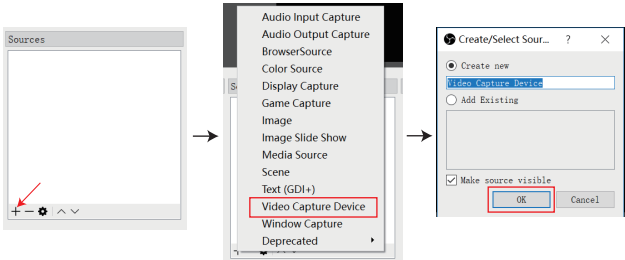


Number	Name	Function description
1	HDMI IN	Connect to the HDMI source device such as a DVD player or a Set-top Box with a HDMI cable.
2	DVI-I IN	Connect to the DVI source device such as a DVD player or a Set-top Box with a DVI-I cable. (Note: This is a common interface, it can also connect VGA/YPbPr/ AV source input though converter joint.)
3	SDI IN	Connect to the SDI source device such as a DVD player or a Set-top Box with a SDI cable.
4	USB3.0 Capture out	USB3.0 output port, connect to PC or Notebook.
5	AUDIO IN	Analog stereo audio input. (When the input source is DVI/VGA/YPbPr/AV, the USB voice capture from external AUDIO input.)
6	Action LED	This LED will illuminate when the device captures video normally.
7	Power LED	This LED will illuminate when the device has connected PC's or Notebook's USB port.

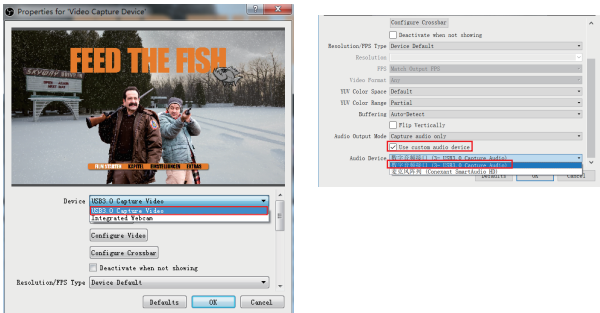
6. Software instruction

For example: OBS (Open Broadcaster Software) software, windows10 system.

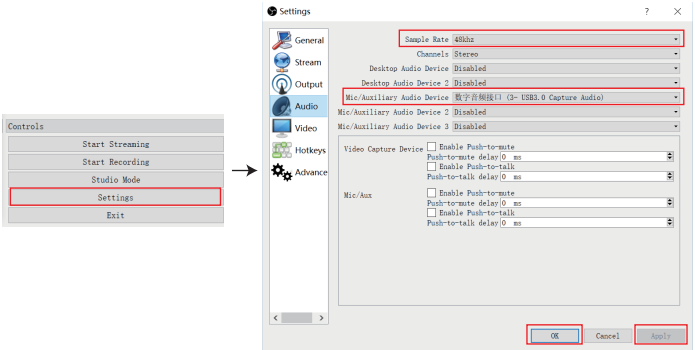
1. Install "OBS" application software on the computer.
2. Double click "OBS Studio" shortcut to open the application.
3. Click the "+", you can see a up-down menu and select "Video Capture Device", and then click "OK" button.



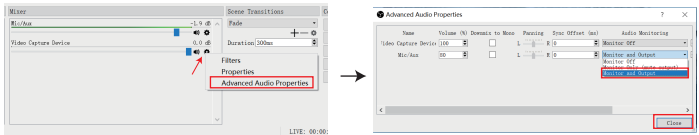
4. In the Device option box to select "USB3.0 Capture Video", at the bottom of the box to option for "Use custom audio device", and select "USB3.0 Capture Audio". Then click "OK" button.



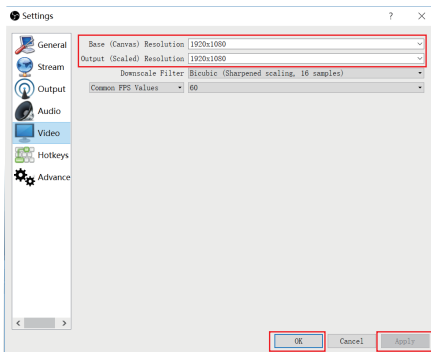
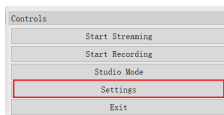
5. In the Setting page, you can select “Audio” option. In the page, you need select “Sample Rate” and the “Mic/Auxiliary Audio Device” to select “USB3.0 Capture Audio”. Then click “Apply” button and “OK” button.



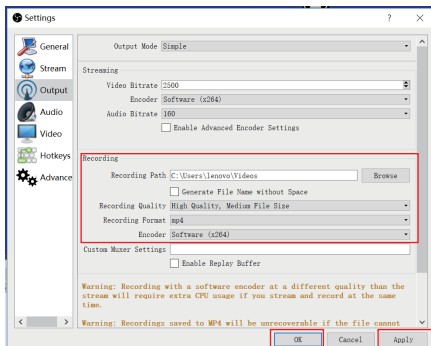
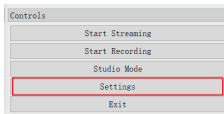
6. Use your mouse to click the Setting icon, you need select “Advanced Audio Properties” option. In the Advanced Audio Properties page, you need select “Monitor and Output” option. Then click “Close” button.



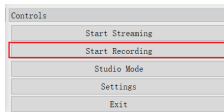
7. In the Setting page, you can select “Video” option. In the page, you can select “Base Resolution” and “Output Resolution”. Then click “Apply” button and “OK” button.



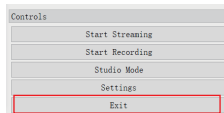
8. Open Setting page, you can select “Output” option. In the page, you can browse recording path for capture video, select the recording quality, select recording format etc. Then click “Apply” button and “OK” button.



9. When you have finished all settings, you need click the “Start Recording” button to starting video capture. If it has finished, click this button again to stop video capture.



10. When the video capture is over, you can click the “Exit” button to close the software.



Attention: The all instruction of the software is only about video capture settings at the above content. You can brower other related settings function.

7. Device source logic

- ① Insert Interface Logic: The video capture will display the last insert interface signal.
- ② Pull out Interface Logic: When pull out current interface signal, the signal displays priority order about SDI->HDMI->DVI->VGA(YPBPR/AV).
- ③ Power on/off Logic: Before power off, displaying the last dispalgy signal. After power off, if the signal has pulled out, the signal displays priority order about SDI->HDMI->DVI->VGA(YPBPR/AV).
- ④ Sound logic: When the HDIM/SDI is input source, the sound is built-in audio. When the DVI/VGA (YPbPr, AV) is input source, the sound is from external analog stereo audio input.

8. Application Example

