

DVDO



DVDO-StreamRec-1

Single Channel HDMI/SDI Streamer Recorder

User Manual

Version v1.0

TABLE OF CONTENTS

1. PRODUCT INTRODUCTION	3
1.1. Description	3
1.2. Connectivity.....	3
1.3. Specifications	4
2. HARDWARE INSTALLATION	6
2.1. Package Contents	6
2.2. Device Dimensions.....	6
2.3. Front Panel Button Functions	7
3. IP Address	8
4. WEB GUI.....	8
4.1. Language / Firmware.....	9
4.2. Source.....	9
4.2.1. Video Source (HDMI / SDI) & Audio Source	9
4.2.2. UVC Camera	10
4.2.3. NDI	10
4.2.4. IP Stream.....	11
4.3. Encoding	13
4.4. Recording.....	14
4.5. Streaming.....	14
4.5.1. RTSP	15
4.5.2. NDI-HX.....	15
4.5.3. HLS	15
4.5.4. RTMP.....	15
4.5.5. SRT	16
4.5.6. TS	16
4.6. Monitor.....	17
4.7. Image Processing.....	17
4.8. Network.....	18
4.8.1. Network Settings	18
4.8.2. Network Status.....	18
4.8.3. Time Setting	19
4.9. System	19
4.9.1. Device Name Setting	19
4.9.2. Device Config Setting.....	19
4.9.3. Firmware Update.....	20
4.9.4. Account and Password.....	20
4.9.5. Timeout Period.....	20

1. PRODUCT INTRODUCTION

1.1. Description

DVDO-StreamRec-1 is a single channel live streaming and recording system.

It can stream incoming HDMI or SDI signals up to Full HD resolution to various streaming platforms such as Facebook Live, YouTube or others.

It can also record incoming HDMI or SDI signals as well as IP content from the network on external storage devices via the USB 3.0 port on the front panel and play the content through the HDMI output.

It can be controlled over IP with a user-friendly web GUI. It also has physical buttons on the front panel to turn on and off streaming and recording and for source selection.

1.2. Connectivity



The back panel includes 1 x HDMI 2.0 + 1 x SDI inputs, 1 x HDMI 2.0 + 1 x SDI loop-outs, 1 x HDMI 2.0 output, 1 x 3.5mm analog audio input for audio embedding and 1 x 3.5mm analog audio output for de-embedded audio.

It also includes an RJ45 port to connect to the network as well as 2 x USB 2.0 ports allowing the unit to be controlled by a keyboard and mouse.



The front panel includes physical buttons for Recording, Streaming and Source selection as well as USB 3.0 port allowing content to be recorded on external storage devices.

1.3. Specifications

Model	DVDO-StreamRec-1
Max. FPS	1920×1080p@60/50fps
Recording Mode	Hardware Compression, Real-Time Mode
Input Interfaces	Video . 1×HDMI . 1×SDI Audio . 1×3.5 mm Phone Jack
Output Interface	Video . 1×HDMI2.0 (PGM) . 1×HDMI (Loop-through) . 1×SDI (Loop-through) Audio . 1×3.5 mm Phone Jack

Video Feature	H.265/H.264/AVC, Baseline/Main/High Profile Support input / output resolutions ➤ 3840×2160p@60/50fps (Output only) ➤ 3840×2160p@30/25/24fps (Output only) ➤ 1920×1080p@60/50fps ➤ 1920×1080p@30/25/24fps ➤ 1920×1080i@60/50fps ➤ 1280×720p@60/50fps ➤ 1280×1024p@60fps ➤ 1280×960p@60fps ➤ 1024×768p@60fps ➤ 800×600p@60fps ➤ 640×480p@60fps ➤ 720×480p@60fps ➤ 720×576p@50fps ➤ 720×480i@60fps ➤ 720×576i@50fps
Audio Feature	Input Audio Stream: AAC
Network Feature	1×RJ45 for 10/100/1000Mbps Ethernet DHCP Client
Support Streaming protocol	NDI Support (Separate License with NDI Required) TS Over UDP (Unicast & Multicast) RTSP Over HTTP/TCP/UDP (RTSP Elementary Stream) RTMP (Publish) HLS
Misc. Features	Web GUI for System Configuration Firmware Upgradable LED Indicator 1×USB 3.0 Host for USB Storage 2×USB 2.0 (For keyboard and mouse usage)
Record Format	MP4 / TS / MOV

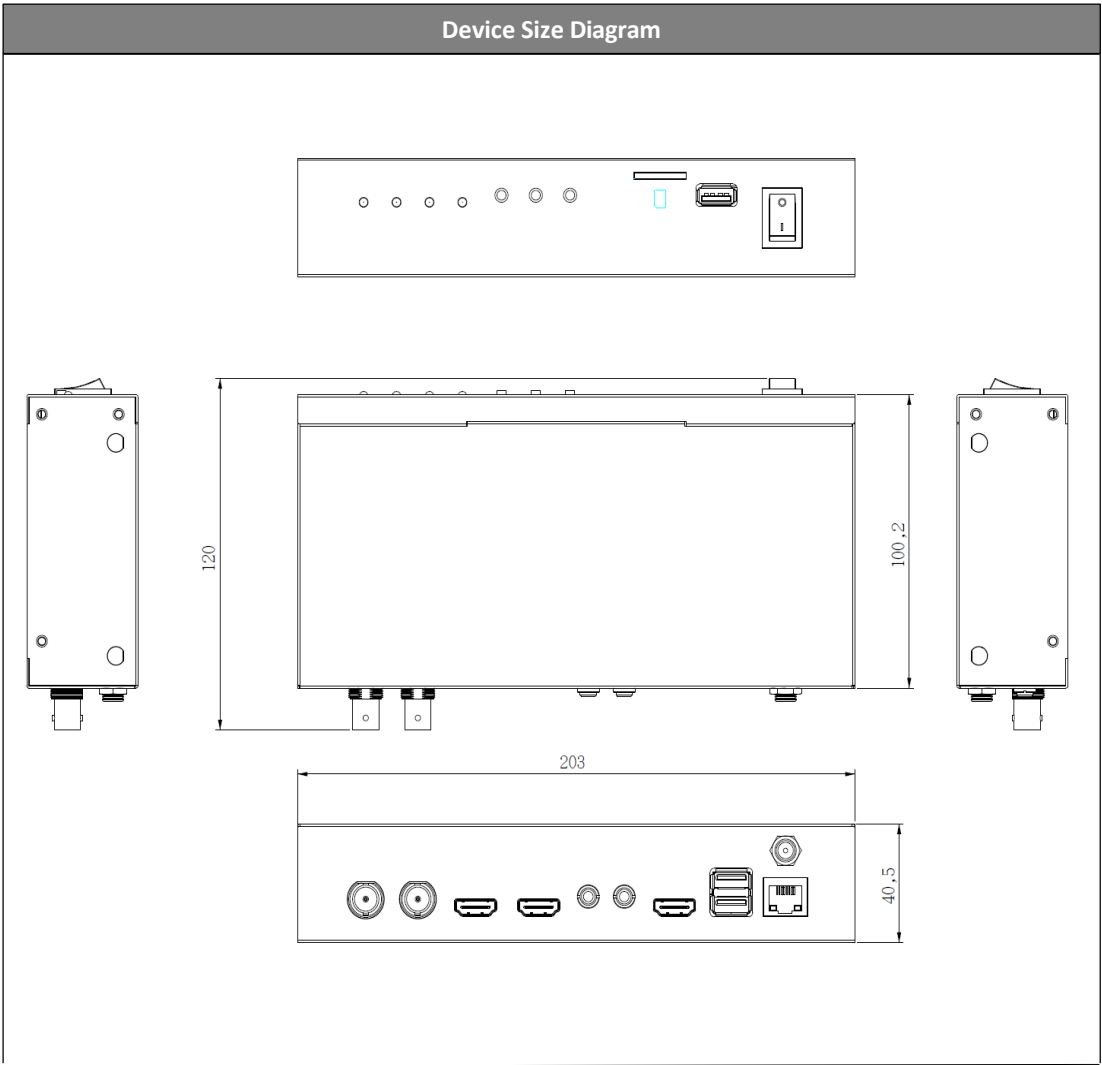
2. HARDWARE INSTALLATION

2.1. Package Contents

Item	Amount
DVDO-StreamRec-1 Streamer Recorder	1
Power Adapter	1

2.2. Device Dimensions

Below are the DVDO-StreamRec-1 dimensions:



2.3. Front Panel Button Functions

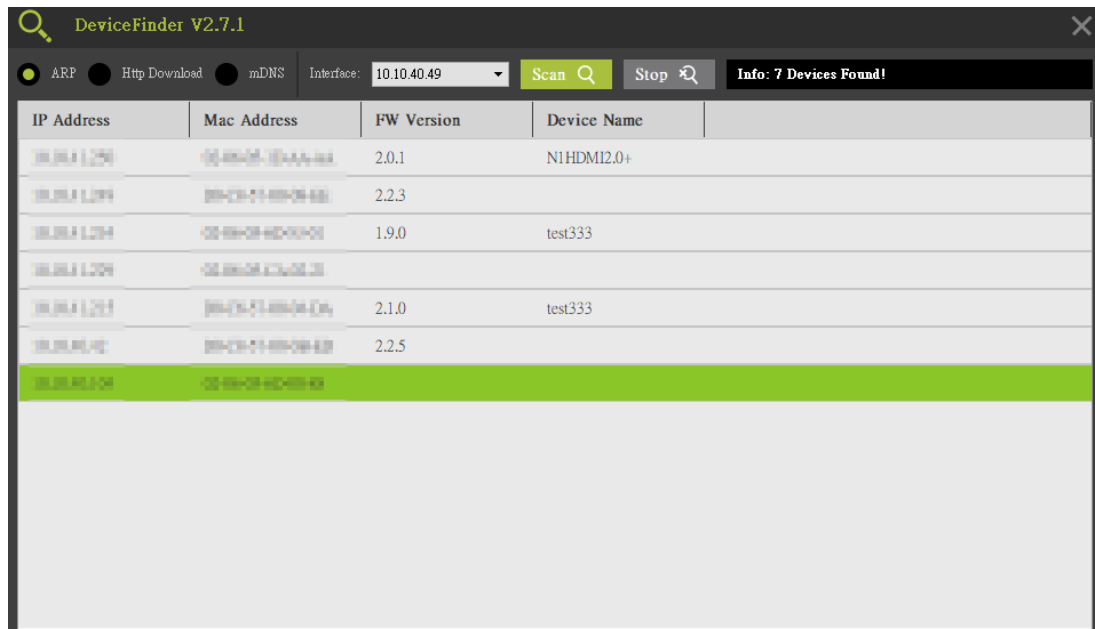


Physical buttons	
Icon	Function
	Record
	Stream
	Source Selection

3. IP Address

The default IP address for DVDO-StreamRec-1 is 192.168.1.200.

You can also use an IP Finder program or app to look up the IP address if DVDO-StreamRec-1 is connected to a network with a DHCP server.



4. WEB GUI

DVDO-StreamRec-1 can be controlled with a web graphical user interface (web GUI) using a computer or a mobile device (Android, iPhone, iPad, etc...)

Username: admin

Password: 0000

The image shows a web browser window displaying a 'USER LOGIN' form. The form has a title 'USER LOGIN' in bold. Below the title are two input fields: 'Account' and 'Password'. At the bottom of the form is a blue 'Login' button.

4.1. Language / Firmware

The firmware version is displayed at the top of the web GUI where the language option can also be selected.

MCU Version : 23.7.17 FPGA Version : 22.08.24 SW Version : 2.0.0.7.5.5.9 CPU : 6% English  

4.2. Source

This page contains information about the source signal, including video and audio input selection.



4.2.1. Video Source (HDMI / SDI) & Audio Source

User can adjust the picture settings in the video source menu option.



User can also adjust the audio source here.

Audio Source



4.2.2. UVC Camera

Below are the UVC Camera settings:

Camera Name	Device name
Resolution	Resolution setting

HDMI SDI **UVC Camera** NDI IP Stream

Camera Name

Resolution

Apply

4.2.3. NDI

Below are the settings for the NDI option:

Group	Device name
Name	The name of NDI stream

***Need NDI Separate License**

Video Source

HDMI SDI UVC Camera **NDI** IP Stream

Group

Name

Delay Time

Apply

4.2.4. IP Stream

There are two types of IP Streams.

(1) Normal IP Stream

Source URL	For source URL, the following is the format: rtsp://[account]:[passwd]@[ip]:[port]/[session name].mpg Example: rtsp://root:root@10.10.41.228:556/session0.mpg
Delay Time	Select delay latency for reception. (ms)
Reconnection Timeout (ms)	When the video is drop out, this value decides the reconnection duration.
Passphrase (SRT)	If user want to check the passphrase, please tap Hide and change it to Show .

HDMI

SDI

UVC Camera

NDI

IP Stream

Type

Normal IP stream

Source URL

UDF

Delay Time (ms)

0

Reconnection Timeout (ms)

3000

Passphrase (SRT)

Hide

Apply

(2) ONVIF

ONVIF Dev List	The system will search ONVIF devices automatically.
ONVIF Name	Enter device name.
ONVIF Password	Enter device password.
Source URL	The system will show the address after login the device.
Source URL	Please copy the address above.
Delay Time	Select delay latency for reception. (ms)
Reconnection Timeout (ms)	When the video is drop out, this value decides the reconnection duration.
Passphrase (SRT)	If user want to check the passphrase, please tap Hide and change it to Show .

HDMI

SDI

UVC Camera

NDI

IP Stream

Type

ONVIF

ONVIF Dev List

http://SRV-18017xs:5357/ad36930d-6ed5-4b89-99e8-9130f690b75a

ONVIF Name

ONVIF Password

Source URL

Source URL

UDP

Delay Time (ms)

0

Reconnection Timeout (ms)

3000

Passphrase (SRT)

Show

Apply

4.3. Encoding

The video encoding resolution and bitrate can be adjusted in the Encoder section. DVDO-StreamRec-1 supports resolutions ranging from 160x120 to 1920x1080 and bitrates ranging from 44K to 100M.

DVDO-StreamRec-1 offers dual encoding with main and sub encoding functions. The dual encoding allows the unit to stream a signal up to 1920x1080 resolution (main encoding) and record the same signal on an external storage device at a resolution up to 640x480 (sub encoding) simultaneously.



4.4. Recording

We recommend the use of external storage devices with USB3.0, FAT32 or NTFS.

Users can change the file format of the recording here.

Click "Start" to start recording.

The screenshot shows the DVDO web interface with the 'Record' tab selected in the left sidebar. The main content area is titled 'Record' and features a 'Start' button. Below this is the 'Main Record' section with the following fields:

Field	Value
File Name	RecordCh01_%Y%M%D%H%M%S
Type	TS
Duration (min)	120
Content	Video and Audio

At the bottom of the 'Main Record' section are 'Default' and 'Apply' buttons.

4.5. Streaming

In the Streaming section, user can start/stop streaming and select stream type at this page, and setting each streaming format parameters.

The screenshot shows the DVDO web interface with the 'Streaming' tab selected in the left sidebar. The main content area is titled 'Streaming' and features a 'Start' button. Below this is the 'Main Streaming' section with the following fields:

Field	Value
Stream Type	RTSP
RTSP Port	554

4.5.1. RTSP

Below is a description of each setting:

Stream Type	RTSP
RTSP Port	RTSP server port
RTSP HTTP Port	RTSP HTTP server port
Account	RTSP account, which is for other users to link with RTSP mode.
Password	RTSP password, which is for other users to link with RTSP mode.
Session Name	RTSP Session name.
Multicast	Enable or disable multicast. Enable: Use broadcast to transfer package. When multiple clients are receiving package, this setting can reduce CPU usage. Disable: Use unicast to transfer package. When multiple clients are receiving package, this setting will increase CPU usage.
Content	Select the willing streaming data content.

4.5.2. NDI-HX

Below is a description of each setting:

Stream Type	NDI-HX
NDI Group	Device name
NDI Name	NDI streaming name

***Need NDI Separate License**

4.5.3. HLS

For HLS streaming, please directly select HLS and click “Start”, DVDO-StreamRec-1 will start HLS streaming automatically.

4.5.4. RTMP

The following are the setting description:

Stream Type	RTMP
RTMP URL	For RTMP server address usage.
Account / Password	If you set the account and password, audience should enter them before watching on streaming.
Content	Set data content you want to stream out.

4.5.5. SRT

There are two SRT Streaming modes: Listener and Caller. Below is a description of the settings for both modes.

(1) SRT Listener

Stream Type	SRT
SRT Mode	Listener
SRT Port	Enter the SRT Port.
Passphrase	To set a passphrase.

(2) SRT Caller

Stream Type	SRT
SRT Mode	Caller
SRT Port	Enter the SRT Port.
Caller IP address	Enter the Caller IP.
Latency (20~8000ms)	Set the latency.
Stream ID	Set the ID.
Passphrase	To set a passphrase.

4.5.6. TS

Below are the TS Streaming settings:

Stream Type	TS
TS URL	For TS server address usage.

4.6. Monitor

User can adjust the monitor here.

HDMI Output

Auto Output	Disable
Resolution	4096 * 2160
Volume	50

Default

Apply

4.7. Image Processing

The picture settings can be adjusted in the Image Processing section.

Image Processing

Mirror	Disable
Brightness	50
Contrast	50
Hue	50
Saturation	50

Default

4.8. Network

4.8.1. Network Settings

Below is a description of the network settings:

DHCP	Enable/disable DHCP feature. When disable DHCP, please provide necessary internet parameters for Transceiver.
Static IP	Setting static IP
Subnet Mask	Setting subnet mask
Default Gateway	Setting default gateway
Primary DNS	Setting primary DNS
Secondary DNS	Setting secondary DNS

Network Settings

DHCP	Disable
Static IP	192.168.1.200
Subnet Mask	255.255.255.0
Default Gateway	192.168.1.1
Primary DNS	192.168.1.100
Secondary DNS	0.0.0.0

Default

Apply

4.8.2. Network Status

The IP address and network status can be found in the Network Status section.

Network Status

Host IP Address	
Network Status	

4.8.3. Time Setting

Set time server and sync type.

Time Setting

Type	Automatically from the internet
NTP Server	ex:cn.pool.ntp.org

Default

Apply

4.9. System

4.9.1. Device Name Setting

User can set device name here.

Device Name Setting

Device Name	DVDO-StreamRep-1
-------------	------------------

Default

Apply

4.9.2. Device Config Setting

User can save the setting or load previous settings here.

Device Config setting

File Path	No File Chosen	Browse
-----------	----------------	--------

Import

Export

4.9.3. Firmware Update

Press the Browse button to select firmware and Update button to update it.

During update firmware, please don't turn off power and wait until the upgrade has been completed.

Firmware Update

File Path	No File Chosen	Browse
-----------	----------------	--------

Update

4.9.3. System Control

The “Restore to default” button will erase all saved settings and revert back to the original settings. The “Reboot” button will restart the DVDO-StreamRec-1 unit.

System Control



4.9.4. Account and Password

User can assign new account and password here.

Account and Password

New Account	
New Password	
Apply	

4.9.5. Timeout Period

Set user using time after log in, when the time is up, the user will be logout.

Timeout Period

Type	Never
Apply	

D V D O

Follow us

