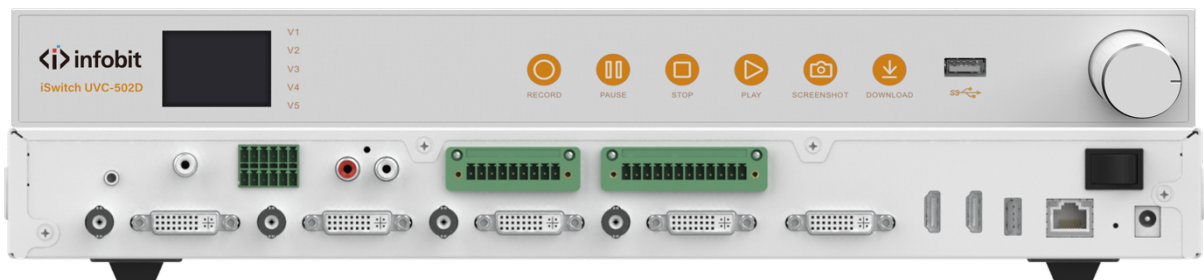# iSwitch UVC-502D

5x2 DVI/SDI to HDMI USB Streamer/Recorder

Application: Medical

Datasheet V1.0

1. INTRODUCTION

The **iSwitch UVC-502D** is an all-in-one 5x2 DVI/SDI to HDMI/USB streamer and recorder, it is an embedded high-performance recorder developed by INFOBIT AV. It integrates HD videos, audios, DVI, SDI, USB and other input and output interfaces, and automatically identifies signal source combinations. It records and generates universal MP4 video files. The system can easily realize multi-point collaborative management control of PC, laptops, etc. It is equipped with INFOBIT medical dynamic imaging platform and can easily share resources among multiple mobile terminals such as Android, IOS and so on.

2. FEATURES

- **Embedded Design with Pure Hardware Architecture**
  The iSwitch UVC-502D is developed on a Linux platform as an embedded pure-hardware recording device, featuring higher signal acquisition integration and stronger performance. It is compatible with the Infobit multimedia broadcasting control software for enhanced control capabilities.
- **Remote Broadcasting Control Functionality**
  The iSwitch UVC-502D supports remote broadcasting control. Simply install the corresponding control software on a remote computer to achieve this functionality.
- **Dual HDMI Output Design**
  Dual HDMI outputs allow one output for live streaming and another for video playback, with synchronized audio output.
- **Front Panel LCD Display**
  The front panel LCD displays essential device information, such as device IP and firmware version.
- **Diverse Front Panel Button Design**
  The front panel includes buttons for recording, pausing, stopping, and selecting download files
- **High definition signals synchronous recording and live streaming**
  Support up to 5 signal inputs at maximum, DVI or 3G-SDI input port optional.
- **Support interactive function**
  With INFOBIT equipment and software, can realize real-time remote interaction between operating room and control room or training room.
- **RTSP & RTMP Streaming**
  Support standard RTSP and RTMP protocol, can support push RTMP streaming to 3rd video platform or other cloud server for live broadcast.
- **Multi browsers supported**
  Supports Edge, Chrome, Safari and Firefox browser to access webpage to do configuration.
- **MP4 file format**
  Recorded video is in standard MP4 file format, embedded with audio.
- **Linux OS, dedicated hardware, it is more stable.**
- **USB Storage**
  Supports download recording videos to USB disk.
- **Integrated with control button on front panel**

Support one button to start/pause/stop recording, download files or local playback.
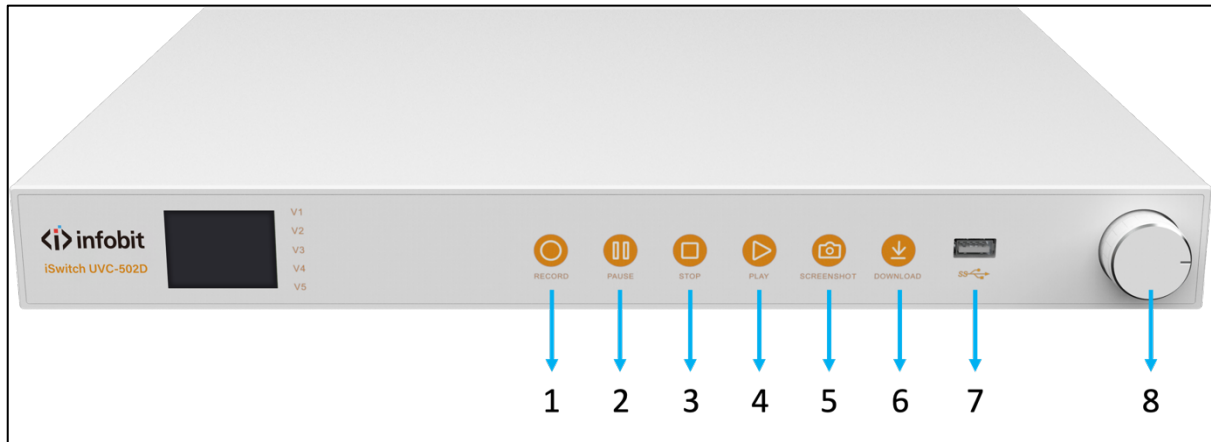
- **Integrated with 3rd Central Control System**
  Support Telnet and RS232 protocol, can integrate with 3rd Central Control System.
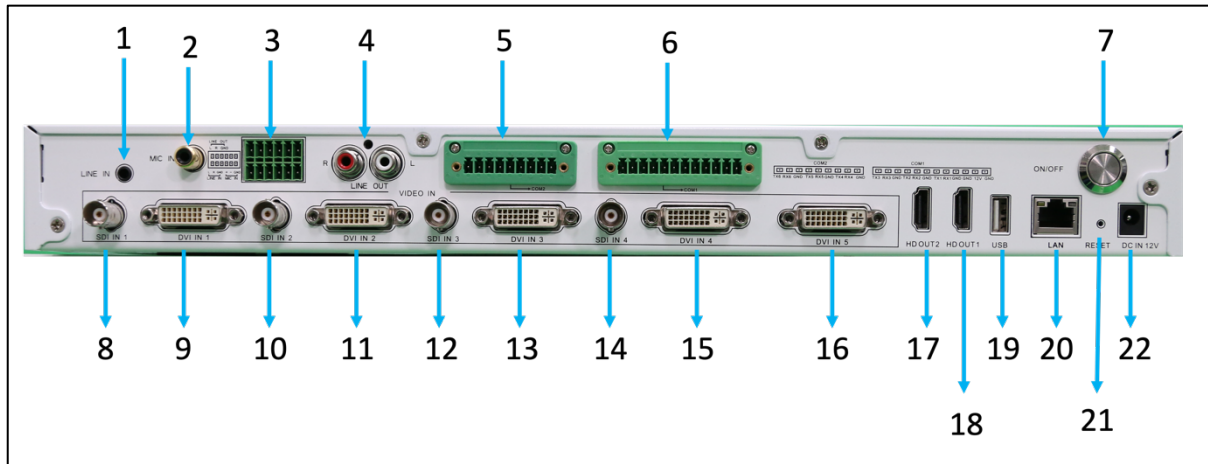
3. SPECIFICATION

Model	iSwitch UVC-502D
Name	5x2 DVI/SDI to HDMI USB Streamer/Recorder
Operation System	Linux OS
DVI Input Port 1-4 SDI Input Port 1-4	Support resolution: 720p@50@60, 1080i@50@60, 1080p@25@30@50@60
DVI Input Port 5	HDMI & DVI digit signal supported resolution: 800*600@60 to 1920*1080@60 VGA analog signal supported resolution: 800*600, 1024*768, 1280*800, 1366*768, 1400*1050, 1440*900
HDMI Output Port 1	1920*1080@50@60
HDMI Output Port 2	1280*720@60, 1920*1080@50@60
Audio Input Port	Mic in: Phoenix, RCA Line in: Phoenix, 3.5mm
Encoding	Video: H.264 High Profile Audio: AAC
File Format	MP4
Management	Webpage, Front Panel Button, Software Client, 3rd Central control system
Audio Bit Rate	64Kbps
Audio Sample Rate	48KHz
Language	English
Storage	2TB by default, can be upgraded to 8TB maximum
Power	DC12V, 3A
Dimensions	430mm*335mm*44.5mm (L*W*H)
Weight	5KG
Relative Humidity	10% to 90%
Working Temperature	-10°C to 50°C
Storage Temperature	-20°C to 60°C

4. FRONT PANEL

No.	Component	Statement
1	Record	Press to start recording
2	Pause	Press to pause recording or pause local playback
3	Stop	Press to stop recoding or stop local playback
4	Playback	Press to get the file list for playback
5	Screenshot	Reserved
6	Download	Download file to USB device from the local HDD
7	USB3.0	Connect to USB device for download files
8	Knob	Select file and confirm for playback and download

5. REAR PANEL

No.	Connector	Statement
1	Line IN	Line in audio input
2	MIC IN	Mic in audio input
3	Line IN/OUT	The above row is for 1* Line out The below row is for 1*Line in and 1* Mic in
4	Line OUT	Audio output
5, 6	COM2, COM1	RS232 control port for 3rd central control system and camera PTZ control
7	Power Switch	Power on/off
8	SDI IN 1	SDI signal input 1
9	DVI IN 1	DVI signal input 1
10	SDI IN 2	SDI signal input 2
11	DVI IN 2	DVI signal input 2
12	SDI IN 3	SDI signal input 3
13	DVI IN 3	DVI signal input 3
14	SDI IN 4	SDI signal input 4
15	DVI IN 4	DVI signal input 4
16	DVI IN 5	Connect with PC / laptop signal
17	HDMI OUT 1	Output live preview video
18	HDMI OUT 2	Output local video playback
19	USB Port	Connect USB mouse and keyboard
20	LAN	RJ45 for connect with LAN cable
21	Reset	Reset unit to backup system
22	Power IN	DV 12V / 3A power input

6. DIAGRAM

LINE IN Audio Input x 2
MIC IN Audio Input x 2
LINE OUT Audio Output x 2
Audio Input 4 selects 1 and needs
to be set on the webpage

RS232 control port for 3rd central
control system and camera PTZ
control

Presentation

Mouse/
Keyboard

Network
Switch

Power Switch
Power Input
Reserved

HD Camera
2 selects
1 input

HD Camera
2 selects
1 input

HD Camera
2 selects
1 input

HD Camera
2 selects
1 input

Playback

Live Preview