

nT19AX04 | SC6D0N4 HDMI 4 CHANNEL STREAMING



Operation Manual

TABLE OF CONTENTS

1. PRODUCT INTRODUCTION.....	4
1.1. PRODUCT BRIEF	4
1.2. SPECIFICATION	5
1.3. SUGGEST TEMPERATURE/HUMIDITY.....	7
2. HARDWARE INSTALLATION.....	8
2.1. PACKAGE CONTENTS	8
2.2. DEVICE SIZE.....	8
2.3. FRONT PANEL BUTTON FUNCTION.....	9
3. IP FINDER.....	10
4. WEB UI.....	11
4.1. LANGUAGE / FIRMWARE.....	11
4.2. SOURCE.....	11
4.2.1. Video Source (HDMI).....	12
4.2.2. Video Source (NDI).....	12
4.2.3. Video Source (IP Stream).....	12
4.2.4. Internal File (Video, Picture).....	14
4.2.5. Audio Source.....	14
4.2.6. Input Signal Status.....	15
4.3. ENCODER	16
4.3.1. Main Encoder/Sub Encoder.....	16
4.4. RECORD	20
4.4.1. Main Record/Sub Record.....	21
4.4.2. UploadNFS.....	22
4.4.3. UploadFTP.....	23
4.4.4. UploadOther Settings.....	23
4.5. STREAMING.....	24
4.5.1. RTSP Streaming.....	24
4.5.2. NDI Streaming (30 min.).....	27
4.5.3. SRT Streaming.....	28
4.5.4. TS Streaming.....	32
4.5.5. RTMP Streaming.....	32
4.5.6. YouTube Streaming.....	33
4.6. SNAPSHOT	35
4.6.1. Snapshot.....	35
4.7. CG	36
4.7.1. OSD Setting.....	36
4.7.2. OSD Example.....	37
4.8. PGM.....	38
4.9. MIXER.....	42
4.10. MONITOR	43
4.11. NETWORK.....	44
4.12. SYSTEM.....	45
4.12.1. Device name setting.....	45
4.12.2. Disk Format.....	45

4.12.3. Device Config Setting.....	45
4.12.4. Firmware Update.....	46
4.12.5. System Control.....	46
4.12.6. Debug Mode.....	46
4.13. STATUS.....	47
5. VERSION.....	48
5.1. VERSION 1.0.....	48
5.2. VERSION 1.1.....	48
5.3. VERSION 1.2.....	48
5.4. VERSION 1.3.....	48
5.5. VERSION 1.4.....	48
5.6. VERSION 1.5.....	48
5.7. VERSION 1.6.....	48
5.8. VERSION 1.7.....	48
5.9. VERSION 1.8.....	48
5.10. VERSION 1.9.....	48
5.11. VERSION 2.0.....	48
5.12. VERSION 2.1.....	48
5.13. VERSION 2.2.....	48
5.14. VERSION 2.3.....	48
5.15. VERSION 2.4.....	48

1. PRODUCT INTRODUCTION

1.1. Product Brief

SC6D0N4 HDMI provides 4 x HDMI input for HDMI multiviewer and PGM feature in one device, it can reception 4 HDMI inputs and 2 HDMI outputs. For 1st HDMI output, it can provide commercial interface for local monitor usage; for 2nd HDMI/PGM output, it can provide PGM feature and transfer it to broadcasting equipments. It also provides 4 x 3.5mm analog audio input for audio embedded and a 3.5mm analog audio output for audio deembedded.



In front panel, SC6D0 provides PGM / feature button for user to control it locally. USB3.0 interface provides user to record input in various format. It also provides record / snapshot / stream / connectivity button in front panel.




In back panel, SC6D0 provides RJ45 for internet connectivity. It also provides RS232 and 2 USB2.0 for user to connect with industrial / commercial controlling method.

For audio and video, SC6D0 provides 4×HDMI、 4×3.5mm audio jack for input and HDMI(PGM)、 HDMI(Multiview)、 3.5mm for output.

User can void local UI interface by USB mouse right click, and control SC6D0 by USB keyboard/mouse. The UI interface will appear at HDMI(Multiview).

1.2. Specification

Model	SC6D0N4 HDMI
Max. FPS	1920×1080p@300fps(4 HDMI + 1 PGM Channels)
Recording Mode	Hardware Compression
Product Photo	
Input Interfaces	Video 4×HDMI Audio 4×3.5mm
Output Interface	Video 1×HDMI (Multiview / PGM) 1×HDMI (PGM) Audio 1×3.5mm
Video Feature	H.264 baseline/main/high profile Support input / output resolutions 1920×1080 (P60/P50/P30/P25/P24/i60/i50) 1280×720 (P60/P50), 1280×1024 (P60), 1280×960 (P60) 1024×768 (P60), 800×600 (P60), 720×480 (P60/i60) 640×480 (P60), 720×576 (P50/i50)
Audio Feature	AAC-LC Configurable bit rate range from 32Kbps to 384Kbps Sample rate : 48KHz, 16bit
Network Feature	1×RJ45 for 10/100/1000Mbps Ethernet DHCP client
Support Streaming protocol	RTSP over UDP/TCP/Multicast/HTTP RTMP (Publish) TS over IP HLS
Misc. Features	Web UI for system configuration Firmware upgradable LED indicator

	<p>Status with Power Recycle Main function switch Record Snapshot Stream PGM mode switch Full screen Quadview Picture by picture Picture in picture PGM Loop Full screen switch Channel 1 Channel 2 Channel 3 Channel 4 2×USB2.0 (For Keyboard and mouse usage) 1×USB3.0 (For external storage usage) 1×RS232 + 1×RS485</p>
<p>Record Format</p>	<p>MP4 / TS / MOV</p>

1.3. Suggest Temperature/Humidity

Working Temperature	0~70°C
Storage Temperature	-20~70°C
Working Humidity	0%~90% Non- Condensing
Storage Humidity	0%~90% Non- Condensing

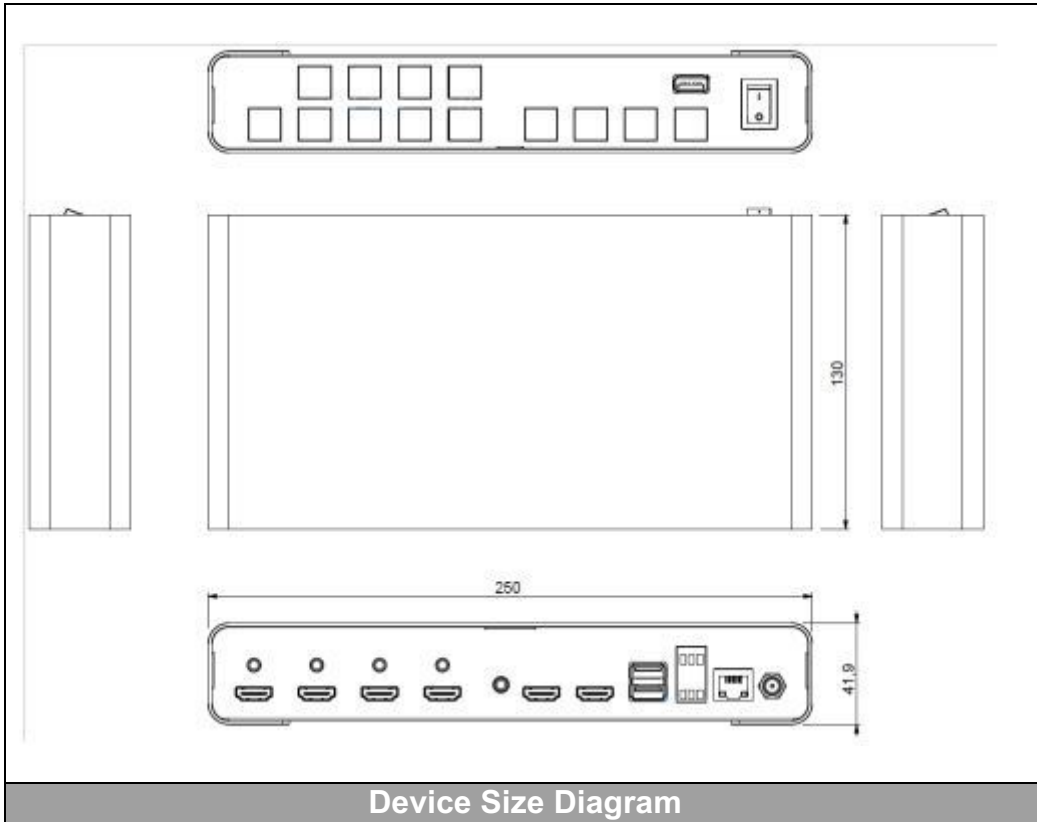
2. HARDWARE INSTALLATION

2.1. Package Contents

Item	Amount
SC6D0N4 HDMI	1
Adapter	1

2.2. Device Size

Figure below is the device size of SC6D0N4 HDMI.



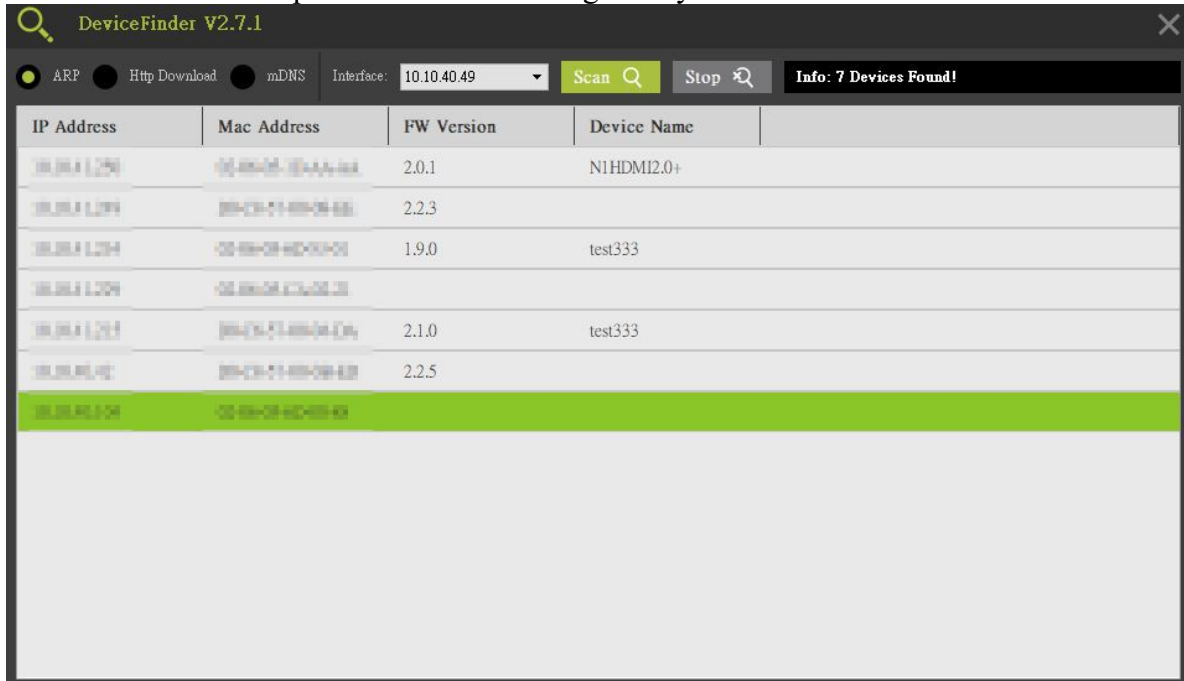
2.3. Front Panel Button Function



Main function switch	
Icon	Feature
	Record
	Snapshot
	Stream
PGM mode switch	
Icon	Feature
	Full screen
	Quadview
	Picture by picture
	Picture in picture
	PGM Loop
Full screen switch	
Icon	Feature
	Main channel selection on Full screen, PBP and PIP

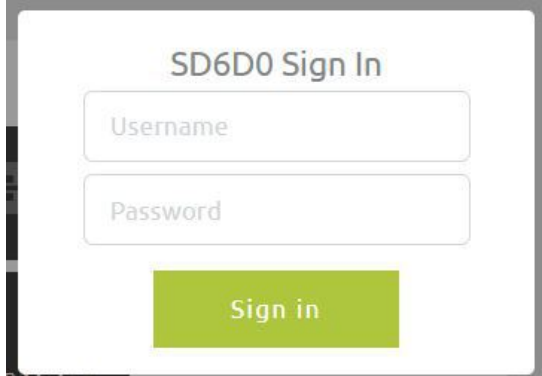
3. IP Finder

For using SC6D0 Web UI, please open IP finder and search for the ip address to open control interface. The correct ip address can be distinguish by MAC address.



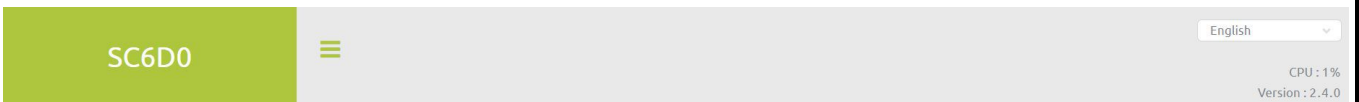
4. WEB UI

Web UI is the internet interface for user to control SC6D0 more convenient, users can control them via normal PC or portable devices (EX: Android, iPhone, iPad...etc.)



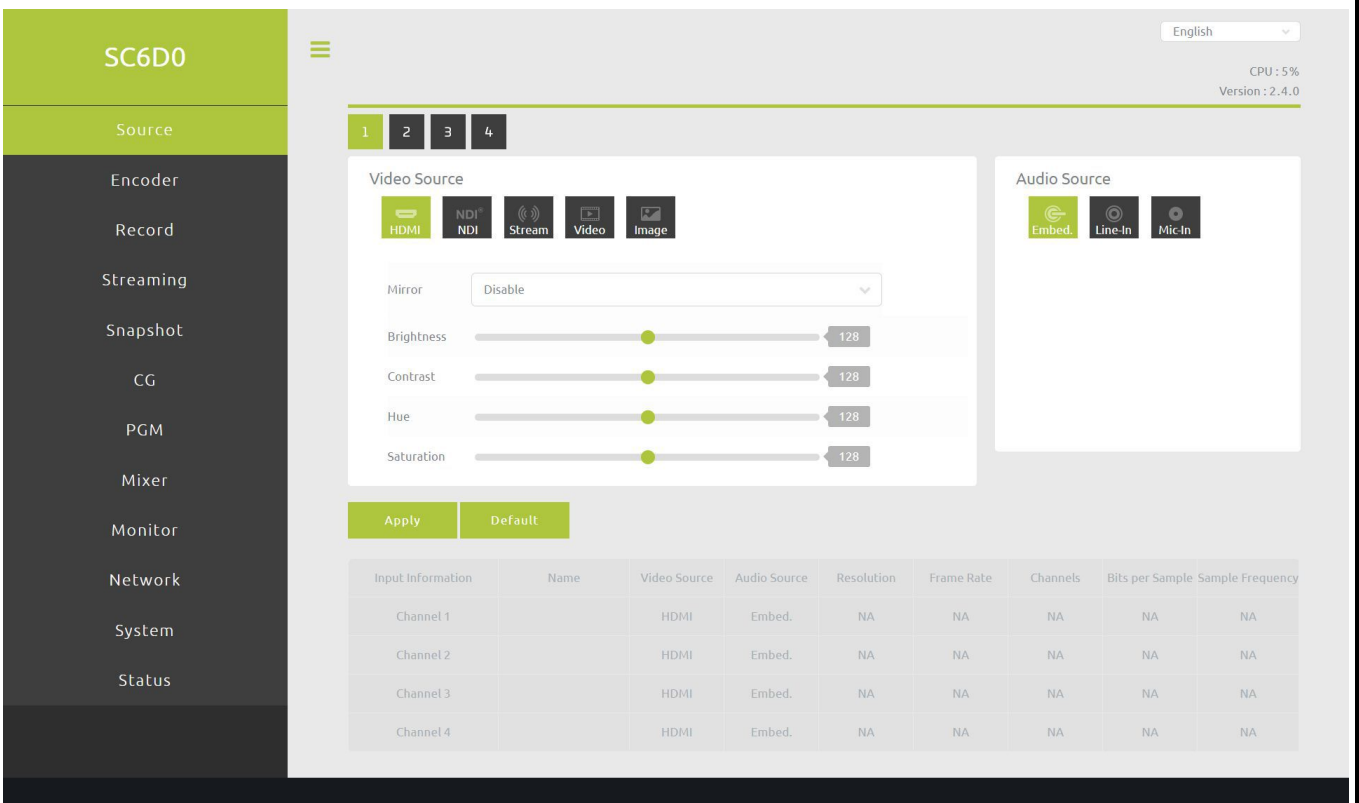
Username: admin
Password: 0000

4.1. Language / Firmware



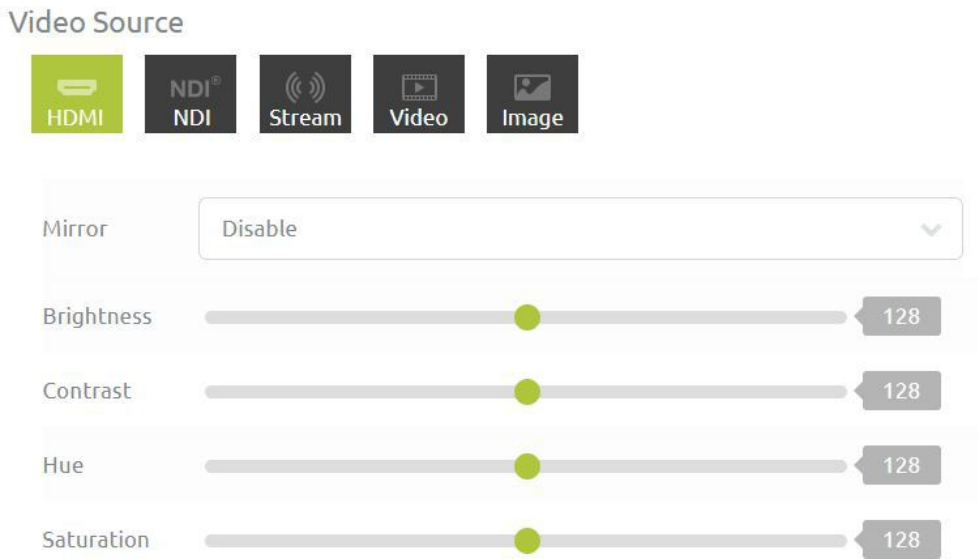
On the top, here are web UI language selection and Firmware version / MCU version. User can change Web UI language here.

4.2. Source



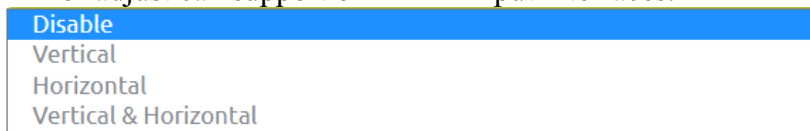
This page contains **input signal status**, **input Video Source** and **Audio Source** selection. Users can change input video property, source and check input video information here. User can select on the top 1/2/3/4 icons to change the channel that willing to adjust.

4.2.1. Video Source (HDMI)

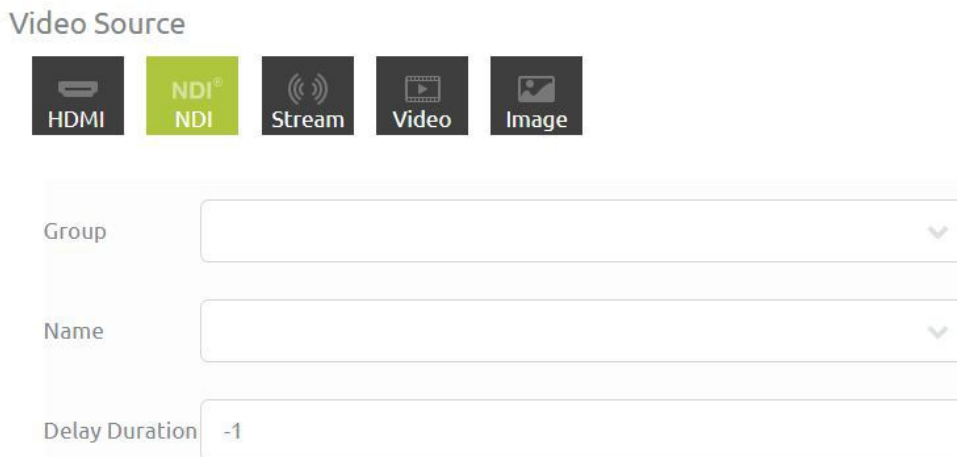


Here displayed usable video input interfaces and adjustable HDMI video quality.

Mirror adjust can support on HDMI input interfaces.

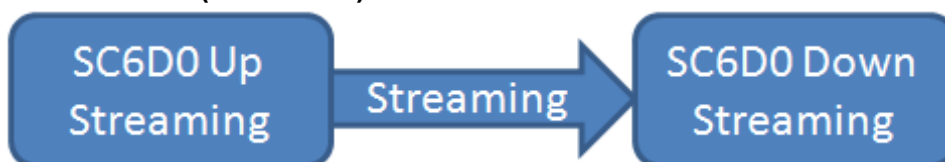


4.2.2. Video Source (NDI)



When enter NDI feature, SC6D0 will automatically scan the same domain, NDI stream will automatically appears here.

4.2.3. Video Source (IP Stream)



For SC6D0 up streaming please enter the **Streaming** page and follow the following information (The IP address will vary by environment, please check IP finder to make sure the IP address.).

Video Source



Source URL

UDP ▾

Account

Password

Delay Duration

Reconnection Timeout (ms)

Here are different stream receiving setting. All supported formats are listed as below.

1.RTSP

rtsp://[account]:[passwd]@[ip]:[port]/[session name].mpg

Example: rtsp://root:root@10.10.41.228:556/session0.mpg

2.RTMP

rtmp://[ip]/[session name]

Example: rtmp://10.10.41.189/live

3.HLS

http://[ip]/hls/[CH]/[Session name].m3u8

Example: http://10.10.41.228/hls/3/session0.m3u8

4.TS Unicast

udp://[localhost]:[port]

Example: udp://10.10.41.189:556

5.TS Multicast

udp://234.0.0.1:[port]

Example: udp://234.0.0.1:556

6.NDI

NDI Name

7.SRT Listener

srt://[ip]:[port]

Example: srt://10.10.41.228:1202

Delay Duration Select delay latency for reception.

-1ms: Ultra low latency (RTSP only)

0ms: Low latency

1~1000ms: Latency

Reconnection Timeout (ms) Select time duration for timeout reconnection.
Please set the value more than 500ms

※ For Streaming example, please check **chapter 4.5** for further information.

4.2.4. Internal File (Video, Picture)

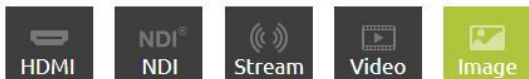
Video Source



File Source

File Replay

Video Source



File Path

Show No Signal Picture

SC6D0 can also play files inside flash disk, please attach the flash disk and select the file to play it.

Support format: H264

File type: mp4, mov, ts

Audio format: AAC

Support image file type: jpg, png.

4.2.5. Audio Source

Audio Source



In audio source block, user can select audio input source from **Embedded**HDMI audio or 3.5mm audio source (Embedded audio is the same as selected video interface).

4.2.6. Input Signal Status

Input Information	Name	Video Source	Audio Source	Resolution	Frame Rate	Channels	Bits per Sample	Sample Frequency
Channel 1		Video	Embed.	NA	NA	NA	NA	NA
Channel 2		Video	Embed.	NA	NA	NA	NA	NA
Channel 3		Video	Embed.	NA	NA	NA	NA	NA
Channel 4		SDI	Embed.	NA	NA	NA	NA	NA

In input information block, user can check signal status and signal format.

4.3. Encoder

Encoder page contains **Main Encoder** and **Sub Encoder** parts, which allows user to change video and audio encode, this page also provides user to change sub streaming encoder.

4.3.1. Main Encoder/Sub Encoder

Resolution For encoders here, we provide Same as input, 1920*1080, 1280*720 and some other popular resolutions.

Same as Input
1920 * 1080
1280 * 720
960 * 540
720 * 576
720 * 480
640 * 480
640 * 360
576 * 324
480 * 320
384 * 216
320 * 240
160 * 120

FrameRate SC6D0 have Same as input, 60, 50, 30, 25, 20, 15, 12.5, 10, 5, and 1 framerates for user to select

Same as Input
60.00
50.00
30.00
25.00
20.00
15.00
12.50
10.00
5.00
1.00

Profile User can adjust here for H.264 profile selection, it supports high, main and baseline.

Level H264 level support, SC6D0 provides 41, 40, 32, 31, 30, 22, 21, 20, 13, 12, 11, 10, and 1b.

Level 41
Level 40
Level 32
Level 31
Level 30
Level 22
Level 21
Level 20
Level 13
Level 12
Level 11
Level 10
Level 1b

Entropy Entropy encoding selection, SC6D0 can support both CAVLC and CABAC.

GOP: H264 group of pictures setting (from 255~1).

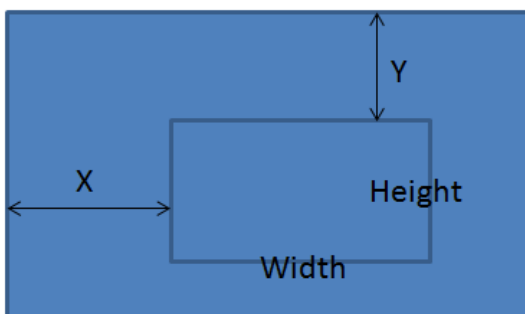
- 255
- 240
- 200
- 120
- 100
- 60
- 50
- 30
- 25
- 20
- 15
- 10
- 5
- 3
- 2
- 1

VideoBitrate (bps) Video bitrate select (44K~64M)

- 64 M
- 32 M
- 24 M
- 16 M
- 12 M
- 8 M
- 6 M
- 4 M
- 2 M
- 1 M
- 512 K
- 256 K
- 44 K
- Custom Video Bitrate (K bps)

Customize Video BitrateUser select bitrate.

Crop-X/Y/Width/Height Crop the needed video and display.



AudioFrequencyAudio frequency select

- 16kHz
- 44.1kHz
- 48kHz

Audio Bitrate(bps) Audio bitrate select

- 384 K
- 256 K
- 128 K
- 64 K
- 32 K

ColorRangeSelect between Full Color or Limited Color.

- Full Color
- Limited Color

4.4. Record

Record page allows user to change the video format that recorded to USB3.0 disk drive. On the top 1/2/PGM is the channel that desired to record; and the 2 block in the middle is the main/sub record format.

CIFS NFS FTP

SC6D0 also provide upload feature, on the right hand side, user can check 3 icons for upload usage.

4.4.1. Main Record/Sub Record

Main Record

Encoder Source

Main Encoder

File Name

CH01_MAIN_%Y%M%D_%h%m%s_%i

Type

MP4

Duration (min)

120

Content

Video and Audio

Here are the parameters that allow user to adjust their record format.

Encoder source Select the encoder that willing to record, here are Main Encoder, Sub Encoder and disable selections.

File name The file name setting, this would be the file name recorded.

Type: Decide needed file type, we offer MP4, TS, and MOV at present time

Duration Setting recording time. Recording will automatically stopped when the time is up.

Content Record content includes audio+video, video only or audio only.

4.4.2. Upload-NFS

NFS is a distributed file system protocol, for user to access files via network.

Setting

Host

Account

Password

Storage Mode

Record to Device ▼

Storage Path

Storage Mode User can select save mode here.

Storage Mode

Record to Device ▼
Record to Device
Remove Record File after Upload
Record to Device and FTP

4.4.3. Upload-FTP

SC6D0 can save files to FTP, please setup FTP site, password and accounts then select your save method.

FTP Setting

Host

Account

Password

FTP Mode

Storage Mode

Storage Path

FTP mode PASV or EPSV

PASV

EPSV

Storage Mode User can select save mode here.

Storage Mode

- Record to Device**
- Remove Record File after Upload
- Record to Device and FTP

4.4.4. Upload-Other Settings

On other setting block, user can check upload status and select server, check local USB disk content and filter for the file browser.

Other Setting

Uploading Status:

Server

Upload **Cancel** **Delete** **Refresh**

Filter Type

Local USB

Filter Type Filter record files or picture only.

Filter Type

- All**
- Record file only
- Picture file only

4.5. Streaming

This page contains SC6D0 streaming settings; user can decide which encoder's stream will send out and select streaming type here. On the top 1/2/3/4/PGM is the channel that desired steaming; and the 2 block in the middle is the main/sub streaming format.

4.5.1. RTSP Streaming

Main Streaming

Encoder Source
Main Encoder

Stream Type
RTSP

RTSP Port
554

RTSP HTTP Port
8554

Account
root

Password
root

Session Name
session0.mpg

Multicast
Disable

Content
Video and Audio

Play URL
rtsp://root:root@10.10.80.111:554/session0.mpg

Encoder Source User can select between main encoder and sub encoder.
Streaming Type Here are RTSP, RTMP, TS, HLS, NDI, SRT and Youtube streaming type SC6D0 available.

RTSP port RTSP server port

RTSP HTTP Port RTSP HTTP server port

Account RTSP account, setting this for other users to link with RTSP mode.

Password RTSP password, setting this for other users to link with RTSP mode.

Session Name RTSP Session name.

Multicast Enable or disable multicast.

Enable: Enable multicast, using broadcast to transfer package. When multiple clients are receiving package, this setting can reduce CPU usage.

Disable: Disable multicast, using unicast to transfer package. When multiple clients are receiving package, this setting will increase CPU usage.

Content Select the willing streaming data content.

Play URL: Streaming address for other devices to receiving.

RTSP format listed as below.

rtsp://(Account)(Password)@(Source IP address)(port)/(Session name)

The screenshot shows a configuration window titled "Main Streaming" with the following fields and values:

- Encoder Source: Main Encoder
- Stream Type: RTSP
- RTSP Port: 554
- RTSP HTTP Port: 8554
- Account: root
- Password: root
- Session Name: session0.mpg
- Multicast: Disable
- Content: Video and Audio
- Play URL: rtsp://root:root@10.10.41.242:554/session0.mpg

After the setting as above, the streaming address will be **rtsp://root:root@10.10.41.242:554/session0.mpg**
(IP may differ by environment)

For **down streaming** side, please enter **source video source IP Stream**

Video Source



Source URL

rtsp://192.168.1.200:554/session0.mpg

UDP ▾

Account

root

Password

root

Delay Duration

0

After enter the Web UI, please setting as below (The IP address will vary by environment, please check IP finder to make sure the IP address.).

Source URL : **rtsp://root:root@10.10.41.242:554/session0.mpg**

Account : root

Password : root

User can key in Account and Password info into Source URL or key in Account and Password information on the below block.

Decode video format: H264

Decode audio format: AAC

4.5.2. NDI Streaming (30 min)

Main Streaming

Encoder Source
Main Encoder

Stream Type
NDI

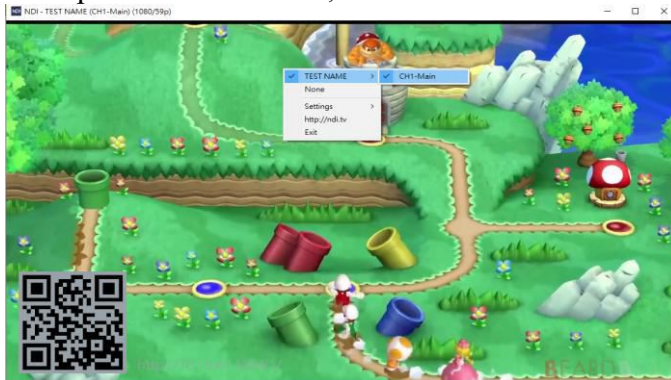
NDI Group
test name

NDI Name
CH1-Main

NDI Group: Device name

NDI Name: NDI streaming name

After press **Start Stream** the NDI stream can be received by NDI Tools



SC6D0 had build-in trial version of NDI streaming, which can provide user to transfer NDI streaming for 30 minutes.

4.5.3. SRT Streaming

Here are 2 modes available on SRT streaming, Caller and Listener.

SRT Listener mode turn SC6D0 into a sender, send SRT stream directly to other receivers.

SRT Format `srt://10.10.41.201:[port]`

Stream Type

SRT

Stream Type

Listener

SRT Port

1200

Passphrase

Play URL

`srt://10.10.41.201:1200`

Stream Type User can select caller or listener (Listener here)

SRT Port Setting port for streaming out.

Passphrase Setting the password for this stream.

Press to get a URL for receives; enter the URL at access point to receive the streaming

Example: `srt://10.10.41.201:1200`

SRT Caller mode turn target device as a portal, SC6D0 send SRT stream to target then the target will send device to other receivers.

SRT Format `srt://[ip]:[port]`

Stream Type

SRT

Stream Type

Caller

SRT Port

10000

Caller IP Address

Latency (20~8000 ms)

1000

Passphrase

Stream Type User can select caller or listener (Caller here)

SRT Port Setting port for streaming out.

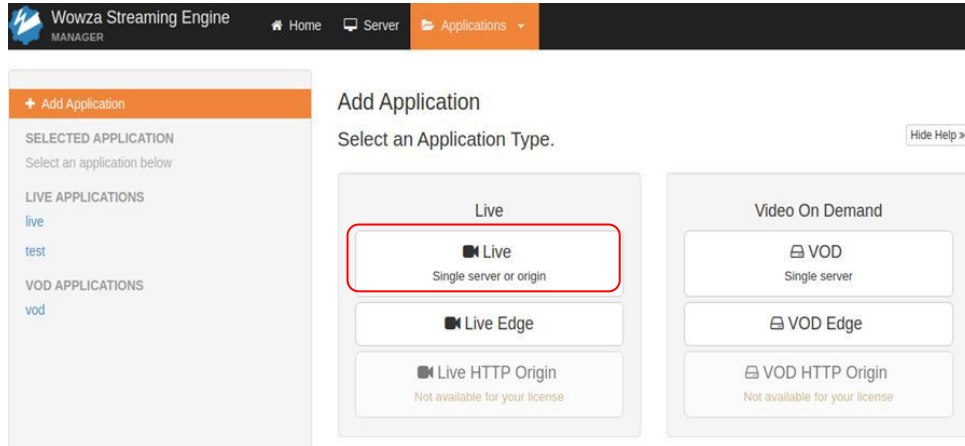
Caller IP Address Setting streaming out IP address.

Latency Video latency time (20~8000ms)

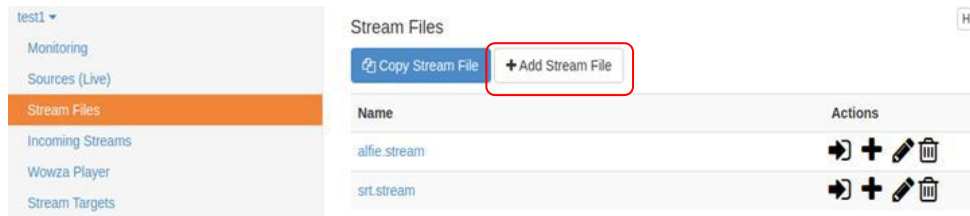
Passphrase Setting the password for this stream.

We've take Wowza as an example for demonstration on SRT Caller

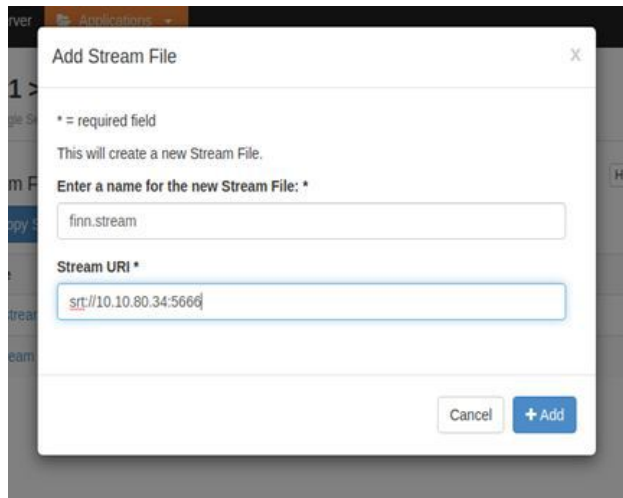
1. Select Live



2. Add Stream File

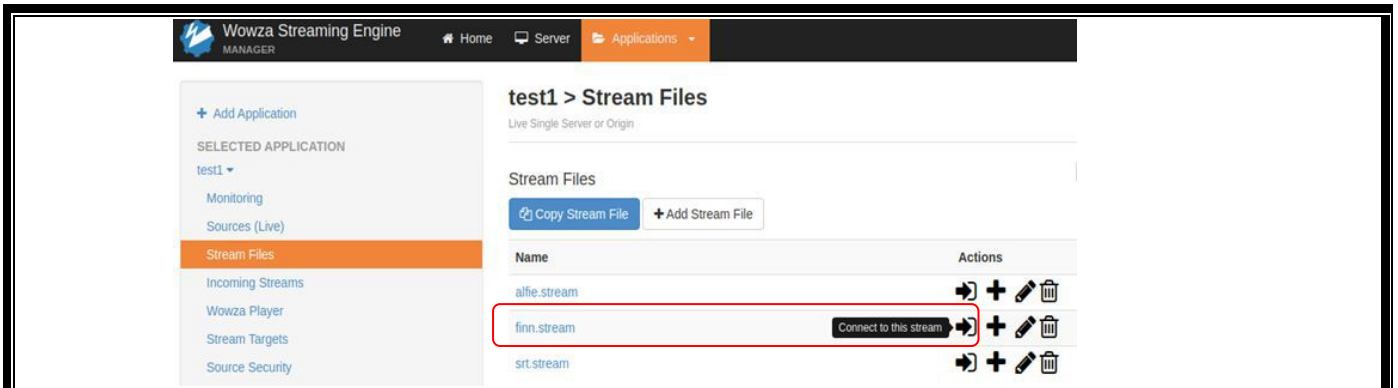


3. Set Stream File and Stream URL

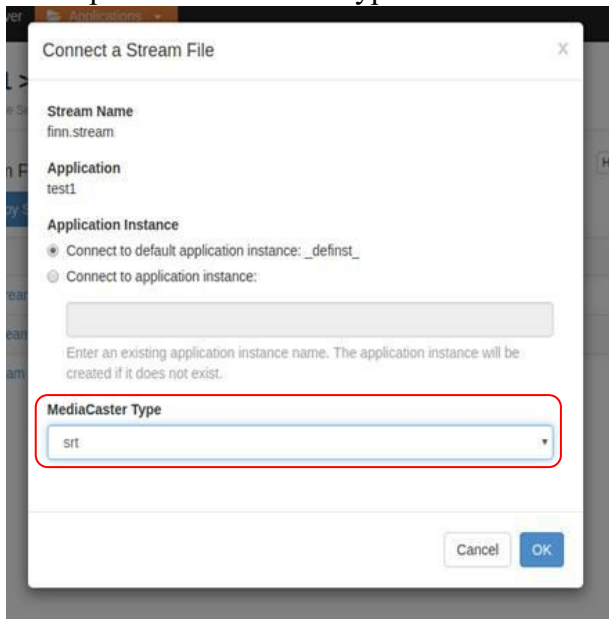


※ Stream URL is the current platform IP address.

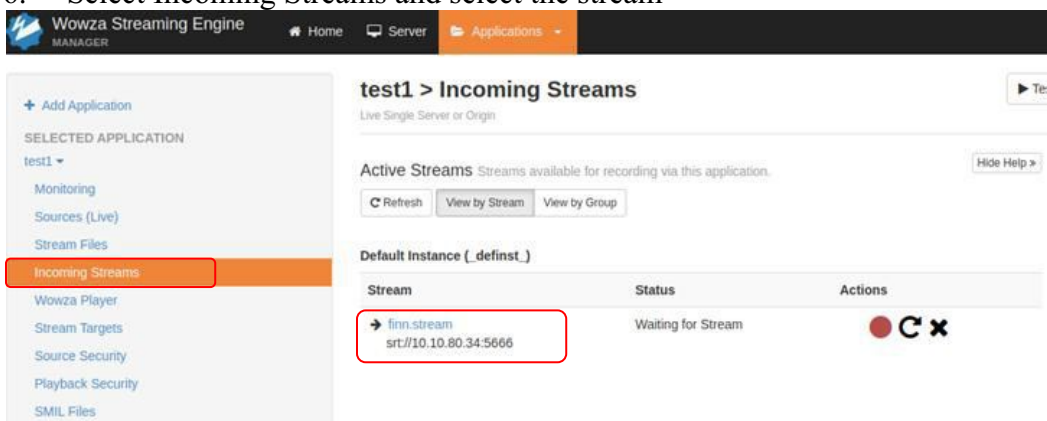
4. Select Stream and Connect



5. Update MediaCaster Type to SRT



6. Select Incoming Streams and select the stream



7. Set Caller IP Address and SRT Port to SC6D0

Main Streaming

Encoder Source
Main Encoder

Stream Type
SRT

Stream Type
Caller

SRT Port
5666

Caller IP Address
10.10.80.34

Latency (20~8000 ms)
1000

Passphrase

8. Press Start Stream and SC6D0 will start to stream the video to Wowza Server.

Stream Type
SRT

Stream Type
Caller

SRT Port
5666

Caller IP Address
10.10.80.34

Latency (20~8000 ms)
1000

Passphrase

Stream Type

RTSP Port

Account
root

Session Name

Multicast

Content

Apply Default Start Stream Stop Str

4.5.4. TS Streaming

Here are two formats TS streaming support, unicast and multicast.

For unicast, user need to provide “Client Side” IP address for TS URL, and setting a port for it.

TS unicasFormat udp://[localhost][port]

Example: Streaming TS to device 10.10.41.288, user need to add TS URL as below. (user can change port to willing value)

Main Streaming

Encoder Source
Main Encoder

Stream Type
TS

TS URL
udp://10.10.41.228:8888

Play URL
udp://10.10.41.228:8888

For multi cast, user needs to fill ipaddress for TS URL and giving it a port value.(The IP address range can be 224.XX.XX.XX~239.XX.XX.XX), Here is a example with 234.0.0.1.

TS multicasFormat udp://234.0.0.1:[port]

Example: User can set TS URL to udp://234.0.0.1:8888 for multicast.

Main Streaming

Encoder Source
Main Encoder

Stream Type
TS

TS URL
udp://234.0.0.1:8888

4.5.5. RTMP Streaming

Main Streaming

Encoder Source
Main Encoder

Stream Type
RTMP

RTMP URL
ex: rtmp://192.168.1.88/live/stream_main_01

Account

Password

Content
Video and Audio

RTMP URL: For RTMP server address usage.

4.5.6. YouTube Streaming

Main Streaming

Encoder Source
Main Encoder

Stream Type
Youtube

Add Account

After select **Streaming Type YouTube** and press start streaming, SC6D0 will automatically generate **USER CODE** for user to connect with YouTube account. (Remember to allow the browser popup window for connecting YouTube)

Main Streaming

Encoder Source
Main Encoder

Stream Type
Youtube

User Code
PJR-JW

Sign in - Google Accounts - Google Chrome

https://accounts.google.com/signin/oauth/usercode?as=hidELrYxThgD...

Google

Connect a device

Enter the code displayed on your device

Enter code
PJR-JW

Next

English (United States) Help Privacy Terms

After press **NEXT**, the connectable user account will appear for user to select.

Sign in - Google Accounts - Google Chrome

https://accounts.google.com/signin/oauth/chooseaccou...

Sign in with Google

Choose an account to continue to ENCODER

Yuan Yuan @gmail.com signed out

Use another account

English (United States) Help Privacy Terms

Sign in - Google Accounts - Google Chrome

https://accounts.google.com/signin/oauth/consent?authuser=0&part=...

Sign in with Google

ENCODER wants to access your Google Account @gmail.com

This will allow ENCODER to:

- Manage your YouTube account

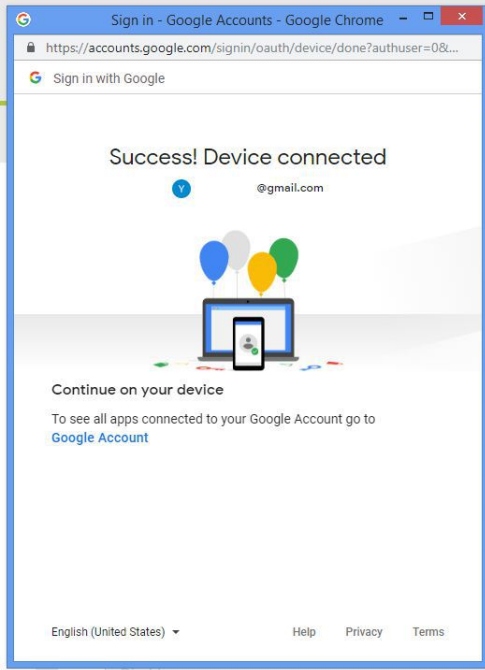
Make sure you trust ENCODER

You may be sharing sensitive info with this site or app. Learn about how ENCODER will handle your data by reviewing its terms of service and privacy policies. You can always see or remove access in your Google Account.

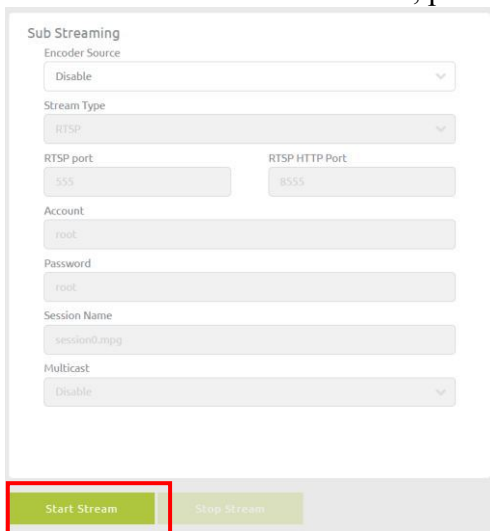
Learn about the risks

Cancel Allow

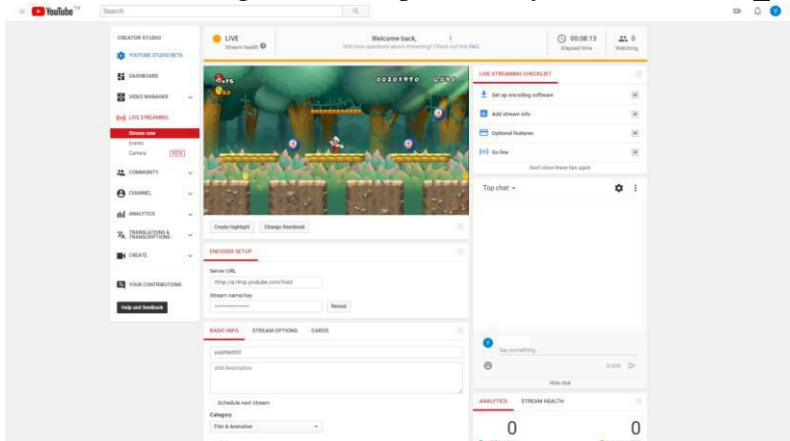
English (United States) Help Privacy Terms



When the connection is succeed, please start streaming.



YouTube live video streaming will automatically generates after the setting is completed.
 YouTube streaming website https://www.youtube.com/live_dashboard



4.6. Snapshot

4.6.1. Snapshot

Snapshot

Capture

Enable

File Name

CH01_%Y%M%D_%h%m%s_%i

Type

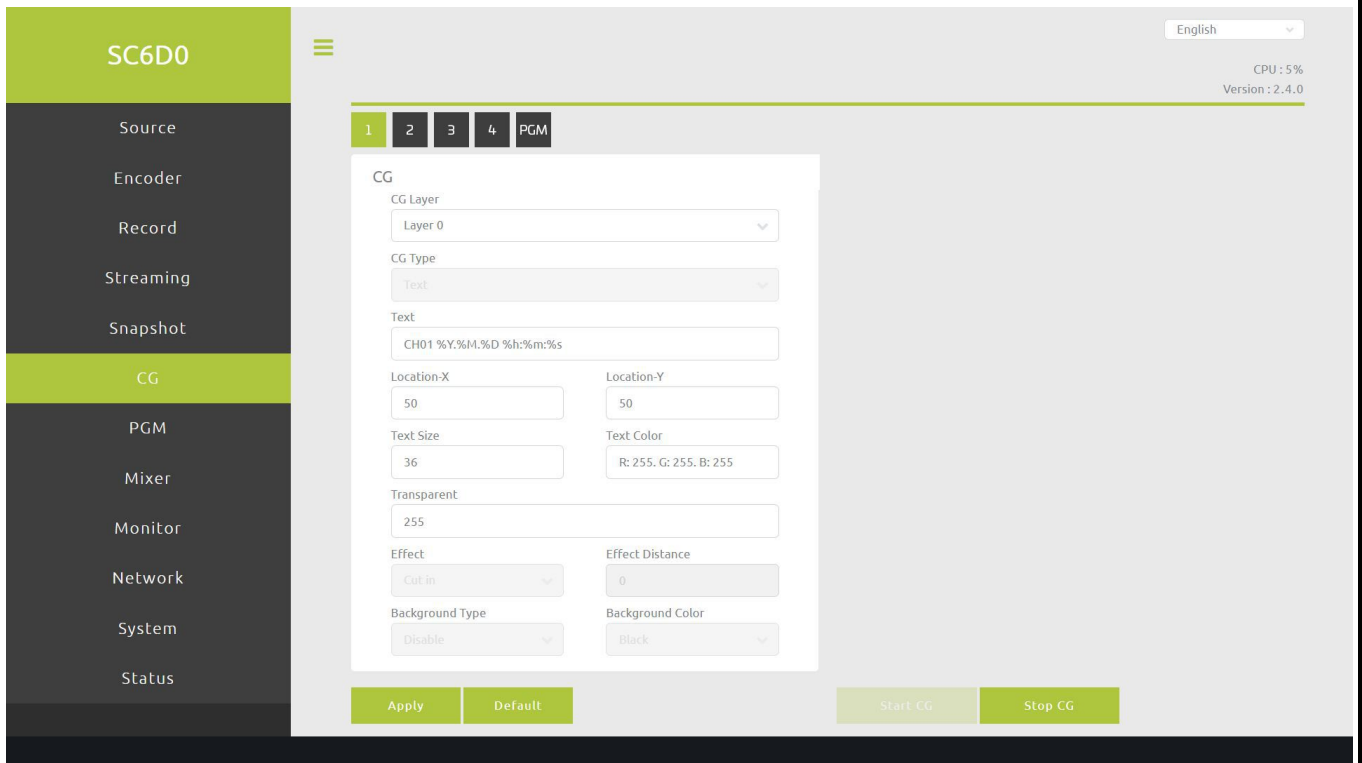
BMP

Capture Select Enable or Disable capture feature.

File Name User may decide willing capture file name.

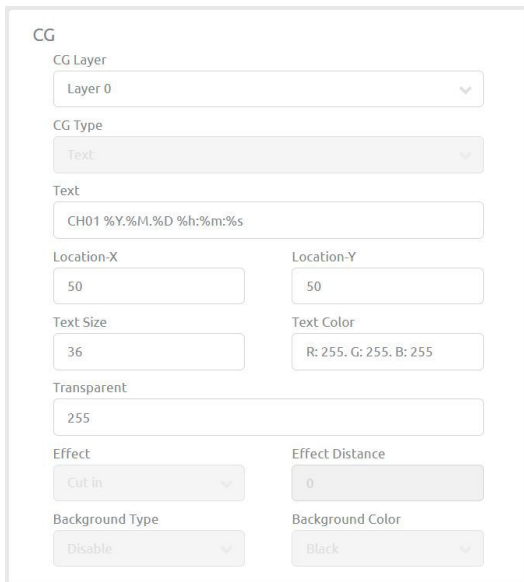
Type Select snapshot file format, SC6D0 provides BMP and JPEG for user to select

4.7. CG



User can change OSD contents here, including **Text** label, place (**LocationX**, **LocationY**) and color (**Background Color**, **Foreground Color**)

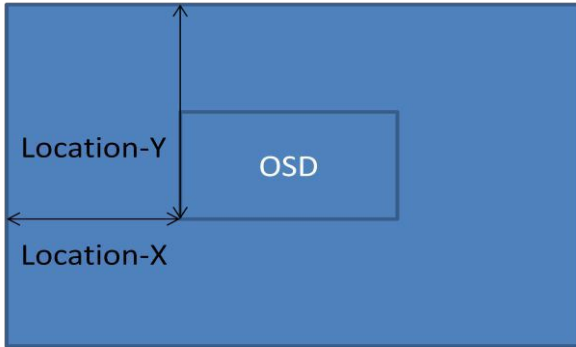
4.7.1. OSD Setting



OSD Layer Select willing modify OSD layer (SC6D0 has 4 OSD layers)

OSD Type Type of OSD, user can select between picture and text.

Text Text label for channel 1~4 and PGM



LocationX: OSD offset of X axis.

LocationY: OSD offset of Y axis.

Text Size OSD text size.

Text Color OSD text color.

Transparent Adjust transparent value (0~255)

Effect OSD display method

- Cut in
- Scroll left to right
- Scroll right to left

EffectDistance OSD effect distance (Unit: Pixels)

Back Ground Type Enable text background to Font Border, Fill or disable.

- Disable
- Font Border
- Fill

Back Ground Color Decide text background color.

- Black
- Blue
- Red
- White
- Yellow

4.7.2. OSD Example

Example:Effect->Cut in; Back Ground Type->Font Border; Back Ground Color->Black.

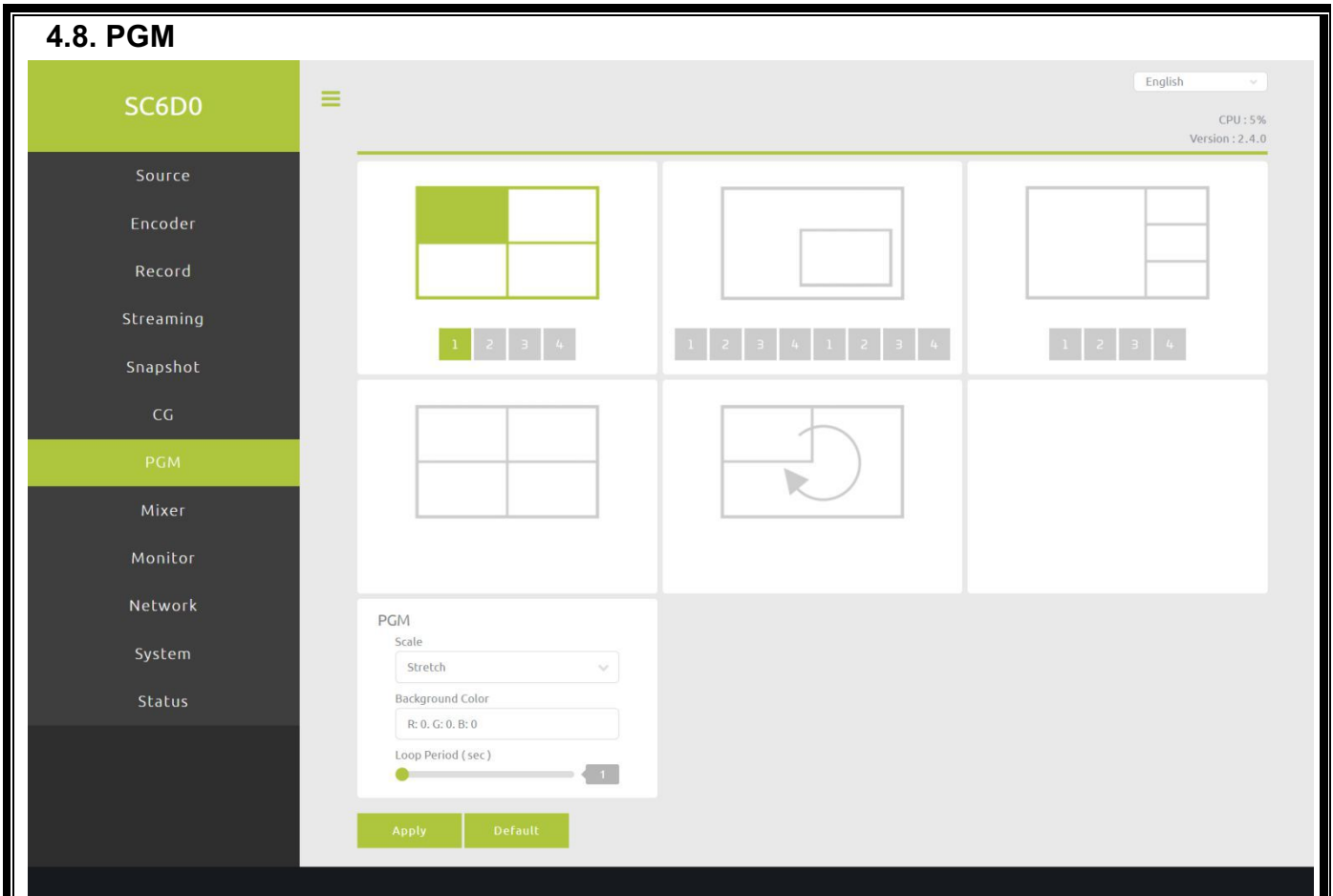


Example:Effect->Cut in; Back Ground Type->Fill; Back Ground Color->Black.

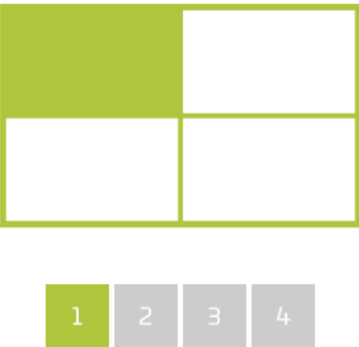


Example:Effect->Scroll left to right; Back Ground Type->Fill; Back Ground Color->Black.





This page contains PGM port video output layout selections.

<p>Full Screen Mode</p>	 <p>Full screen mode will display whole input video into one PGM output.</p>
--------------------------------	---

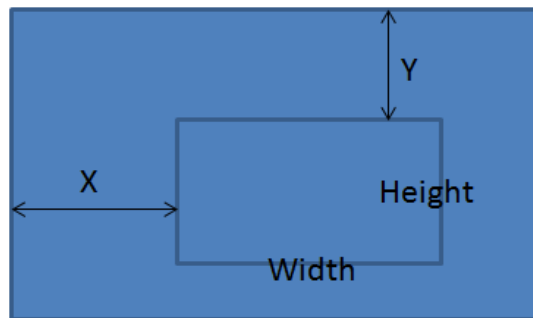
Picture in Picture Mode



For picture in picture mode, first channel select is the main channel, the second channel selection is the minor channel. This mode also provide PGM Advance mode for user to adjust their video layout.

PGM Advance					
	Layer	Location-X	Location-Y	Width	Height
Window 1	Layer 0	0	0	1920	1080
Window 2	Layer 1	1240	610	480	270

The PGM Advance layout is listed as below.



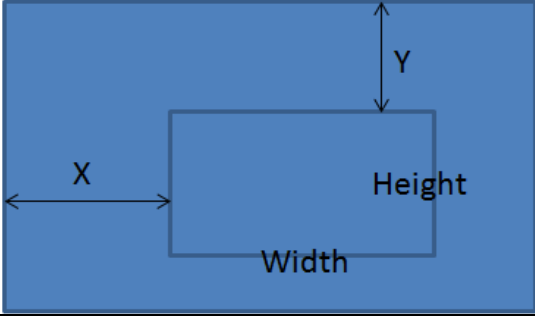
Picture by Picture Mode



Picture by picture mode will display all 4 channels in one screen, but there will be a main channel in the right. There also a main channel selection in the bottom. This mode also provide PGM Advance mode for user to adjust their video layout.

PGM Advance					
	Layer	Location-X	Location-Y	Width	Height
Window 1	Layer 0	0	0	1400	1080
Window 2	Layer 1	1400	0	520	360
Window 3	Layer 2	1400	360	520	360
Window 4	Layer 3	1400	720	520	360

The PGM Advance layout is listed as below.



Quadview Mode



This mode will display all 4 channels in one screen.

PGM Loop Mode



PGM Loop mode will automatically loop all channels.

PGM

PGM Scale

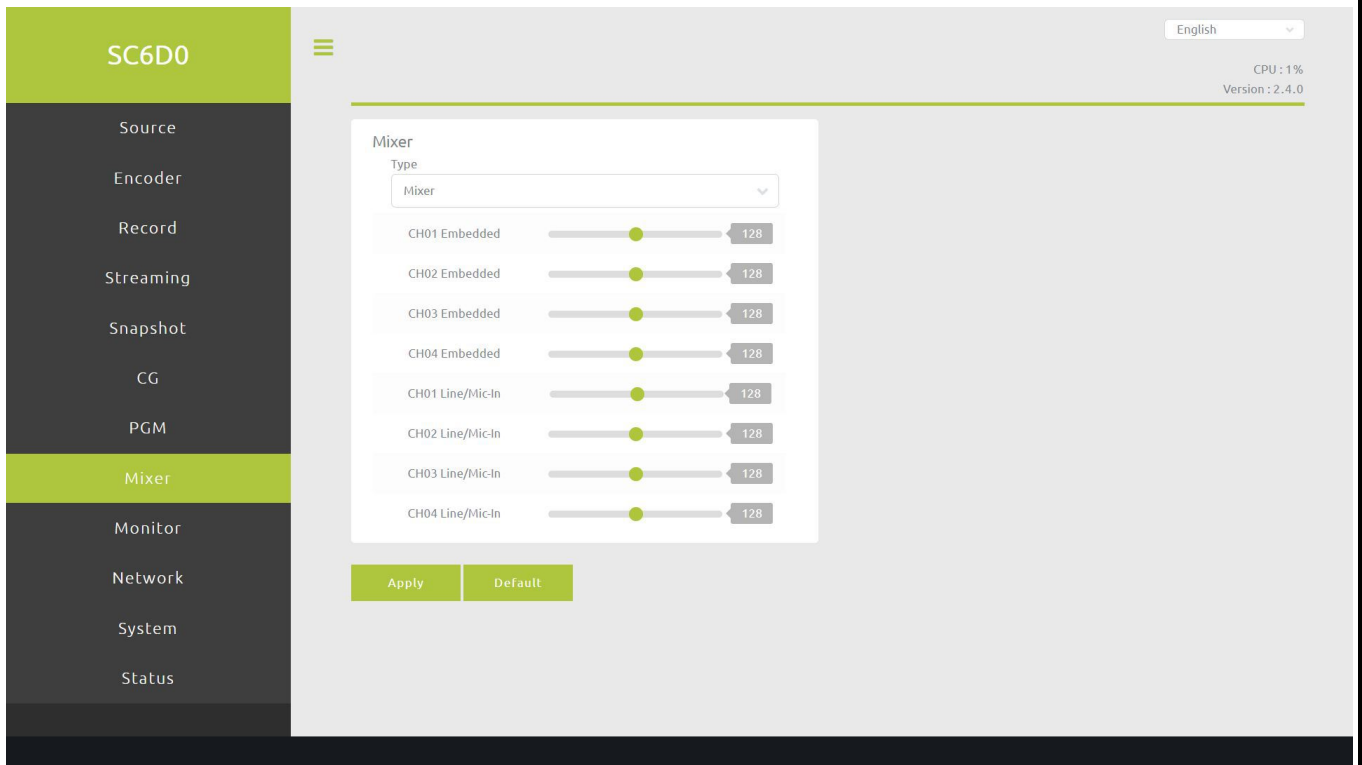
stretch
stretch
fit
full

PGM: PGM video scale setting.

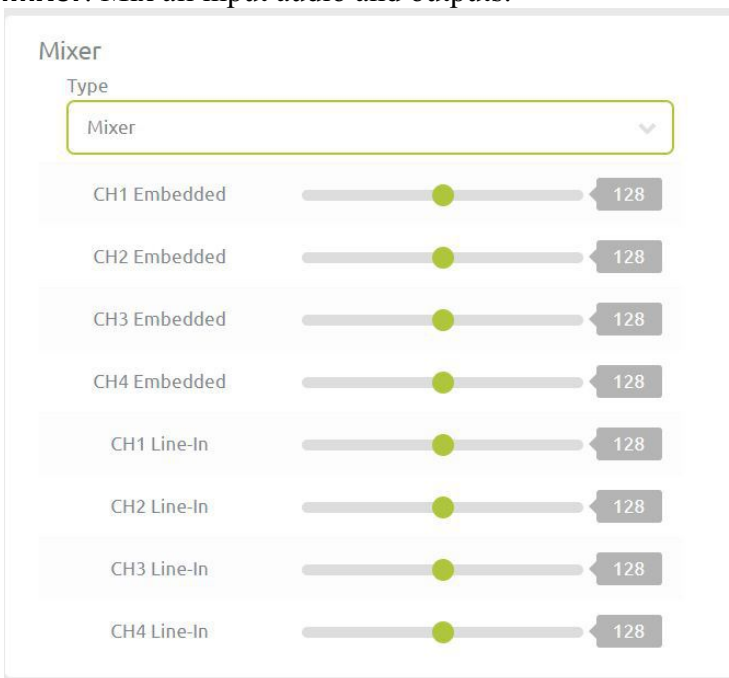
PGM Background Color Change when no video input, displayed PGM background color.

PGM Loop Period (sec) The time can setting to 1~60sec.

4.9. Mixer



Select PGM audio to Mixer or follow PGM
Mixer: Mix all input audio and outputs.



Follow PGM Mix audio input source that channels displayed by PGM mode.
Channel 1/2/3/4 Sound Set output audio as channel 1/2/3/4.

4.10. Monitor

The screenshot displays the 'Monitor' configuration page for the SC6D0 device. On the left is a vertical sidebar menu with the following items: Source, Encoder, Record, Streaming, Snapshot, CG, PGM, Mixer, Monitor (highlighted in green), Network, System, and Status. The main content area is divided into two panels: 'HDMI1 (MultiView)' and 'HDMI2 (PGM)'. Each panel contains a 'Frame Rate' dropdown menu set to '60.00' and a 'Volume' slider set to '128'. The HDMI1 panel also includes a 'Display Mode' dropdown menu set to 'PGM'. At the bottom of the configuration area are two buttons: 'Apply' and 'Default'. In the top right corner, there is a language dropdown set to 'English', and system status indicators for 'CPU : 1%' and 'Version : 2.4.0'.

HDMI : PGM Channel, user can select PGM mode or Multiview mode for it.

4.11. Network

DHCP: Enable/disable DHCP feature. When disable DHCP, please provide necessary internet parameters for SC6D0.

Static IP. Setting SC6D0 static IP

Subnet MaskSetting SC6D0 subnet mask

Default GatewaySetting SC6D0 default gateway

Primary DNS Setting SC6D0 primary DNS

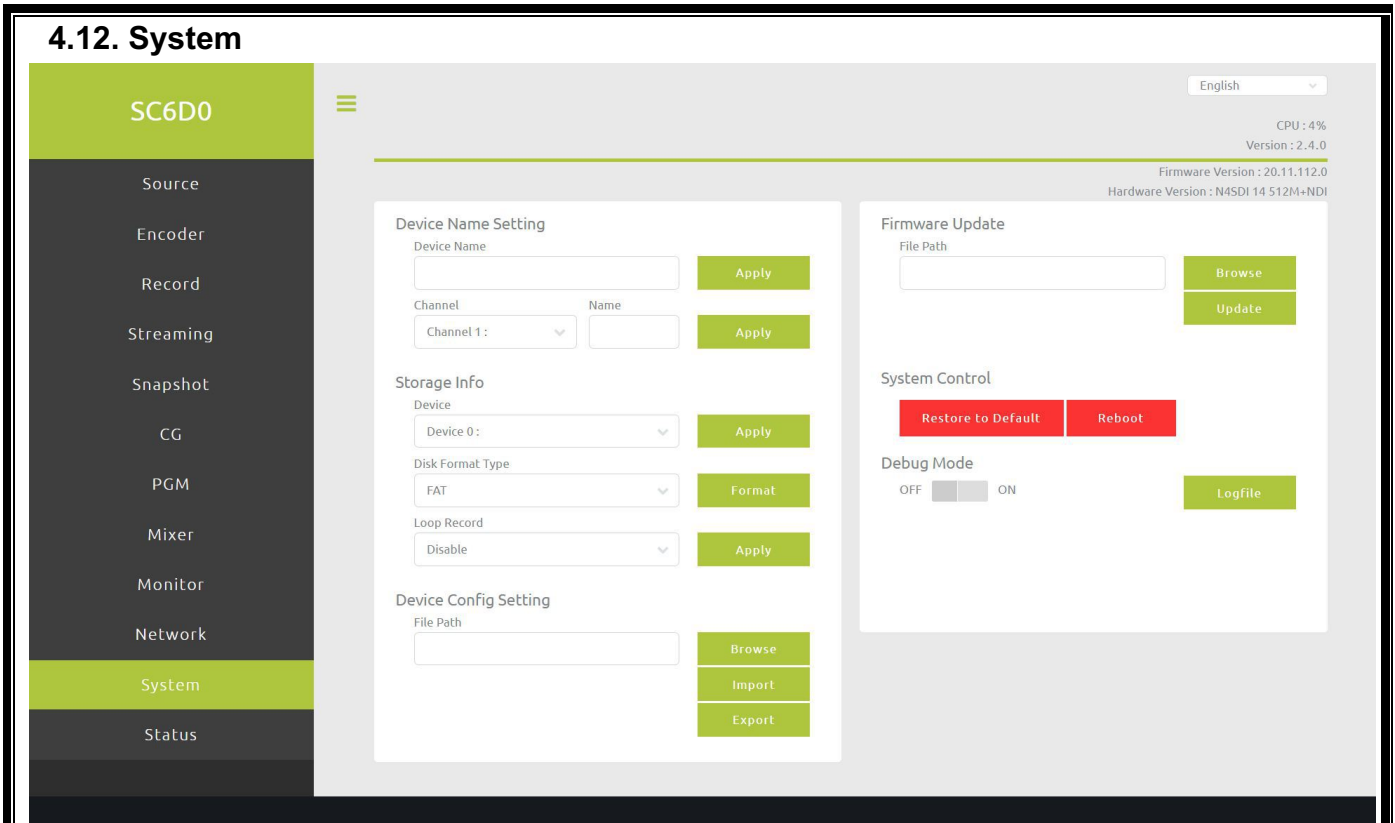
Secondary DNSSetting SC6D0 secondary DNS

NetworkStatus Here presents IP address and network status

Time SettingSet time server and sync type.

Account and Passworduser can assign new account and password here.

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



In system page, user can set account /password, system reboot, format attached USB disk, check network status/setting and **Firmware Update** here.

4.12.1. Device name setting

Device Name Setting

Device Name

Channel Name

Channel 1:

User can set device and channel name here.

4.12.2. Disk Format

Disk Format

Device Format Type

Device 0 : USB (25.81G) FAT

User can format attached USB disk drive here, supported formats are listed as below.

- FAT
- NTFS
- exFAT
- EXT4

4.12.3. Device Config Setting

Device Config Setting

File Path

User can save the setting or load previous settings here.

4.12.4. Firmware Update

Firmware Update

File Path

Browse

Update

Please press **Browse** button to select firmware and **Update** button to update it, **during update firmware, please do not turn off power and wait until upgrade progress complete.**

4.12.5. System Control

System Control

Restore to Default

Reboot

Restore to default will erase all settings and back to original, and Reboot button will restart the SC6D0.

4.12.6. Debug Mode

Debug Mode

OFF ON

4.13. Status

SC6D0

English

CPU : 10%
Version : 2.4.0

Source

Encoder

Record

Streaming

Snapshot

CG

PGM

Mixer

Monitor

Network

System

Status

Input Information

	Name	Video Source	Audio Source	Resolution	Frame Rate	Channels	Bits per Sample	Sample Frequency
Channel 1		HDMI	Embed.	NA	NA	NA	NA	NA
Channel 2		HDMI	Embed.	NA	NA	NA	NA	NA
Channel 3		HDMI	Embed.	NA	NA	NA	NA	NA
Channel 4		HDMI	Embed.	NA	NA	NA	NA	NA

Record Status

		Encoder Source	Resolution	Frame Rate	Video Bitrate (bps)	Audio Bitrate (bps)
Channel 1	Main	NA	NA	NA	NA	NA
	Sub	NA	NA	NA	NA	NA
Channel 2	Main	NA	NA	NA	NA	NA
	Sub	NA	NA	NA	NA	NA
Channel 3	Main	NA	NA	NA	NA	NA
	Sub	NA	NA	NA	NA	NA
Channel 4	Main	NA	NA	NA	NA	NA
	Sub	NA	NA	NA	NA	NA
PGM	Main	NA	NA	NA	NA	NA
	Sub	NA	NA	NA	NA	NA

Stream Status

		Encoder Source	Resolution	Frame Rate	Video Bitrate (bps)	Audio Bitrate (bps)
Channel 1	Main	NA	NA	NA	NA	NA
	Sub	NA	NA	NA	NA	NA
Channel 2	Main	NA	NA	NA	NA	NA
	Sub	NA	NA	NA	NA	NA
Channel 3	Main	NA	NA	NA	NA	NA
	Sub	NA	NA	NA	NA	NA
Channel 4	Main	NA	NA	NA	NA	NA
	Sub	NA	NA	NA	NA	NA
PGM	Main	NA	NA	NA	NA	NA
	Sub	NA	NA	NA	NA	NA

Disk Information

	Name	Size	Format Type	Time Left	Status
Device	NA	NA	NA	NA	NA

User can check SC6D0N4 status here (Including input signal, streaming status, etc.)

5. VERSION

5.1. Version 1.0

Initial version.

5.2. Version 1.1

Add network setting.

Fix typo.

Update PGM available modes.

Fix OSD block diagram.

5.3. Version 1.2

Update network setting.

5.4. Version 1.3

Update Web UI.

FW:1.95 - 1.2.3

MCU:17.9.11.0

Add login part.

5.5. Version 1.4

Update Web UI.

SW:1011.2.7 Beta

FW:17.12.19.0

5.6. Version 1.5

Update spec to V3.31

5.7. Version 1.6

Update spec to V1.3.1

5.8. Version 1.7

Update spec to V1.3.6

5.9. Version 1.8

Update spec to V1.4.1

5.10. Version 1.9

Update SDI information

5.11. Version 2.0

Update YouTube streaming

5.12. Version 2.1

Update FTP chapter

5.13. Version 2.2

Update 4.2.3 Video Source chapter

Update 4.5 Streaming chapter

5.14. Version 2.3

Add Front panel button info

5.15. Version 2.4

Update spec to V2.4.0