

# DS.X

## Intuitive Video Wall Processing over IP & Dynamic KVM over IP

Low Bit Rate H.265 4:4:4 8K

All-in-one Command & Control Centre Solutions by AVCiT



### Introduction to the AVCiT






AVCiT provide Integrated IP Based KVM Solutions and Distributed & Fiber KVM Matrix System for Command & Control Room, with revolutionary technologies such as Intuitive Video Wall Processing over IP & Dynamic KVM over IP, which greatly add more value on your Meeting and Control Room Design.

With 3 marketing centers, more than 23 offices, Sales and service network is around the world; AVCiT assists army to set up Joint Operations Center for mission critical task, build Security Operations Center for Smart City, establish an efficient, transparent and unblocked information system for Air Operations Center, Build Emergency Operations Center for disaster prevention authority; Meanwhile, innovations for Network Operations Center are made, More value are created for varieties of industry;

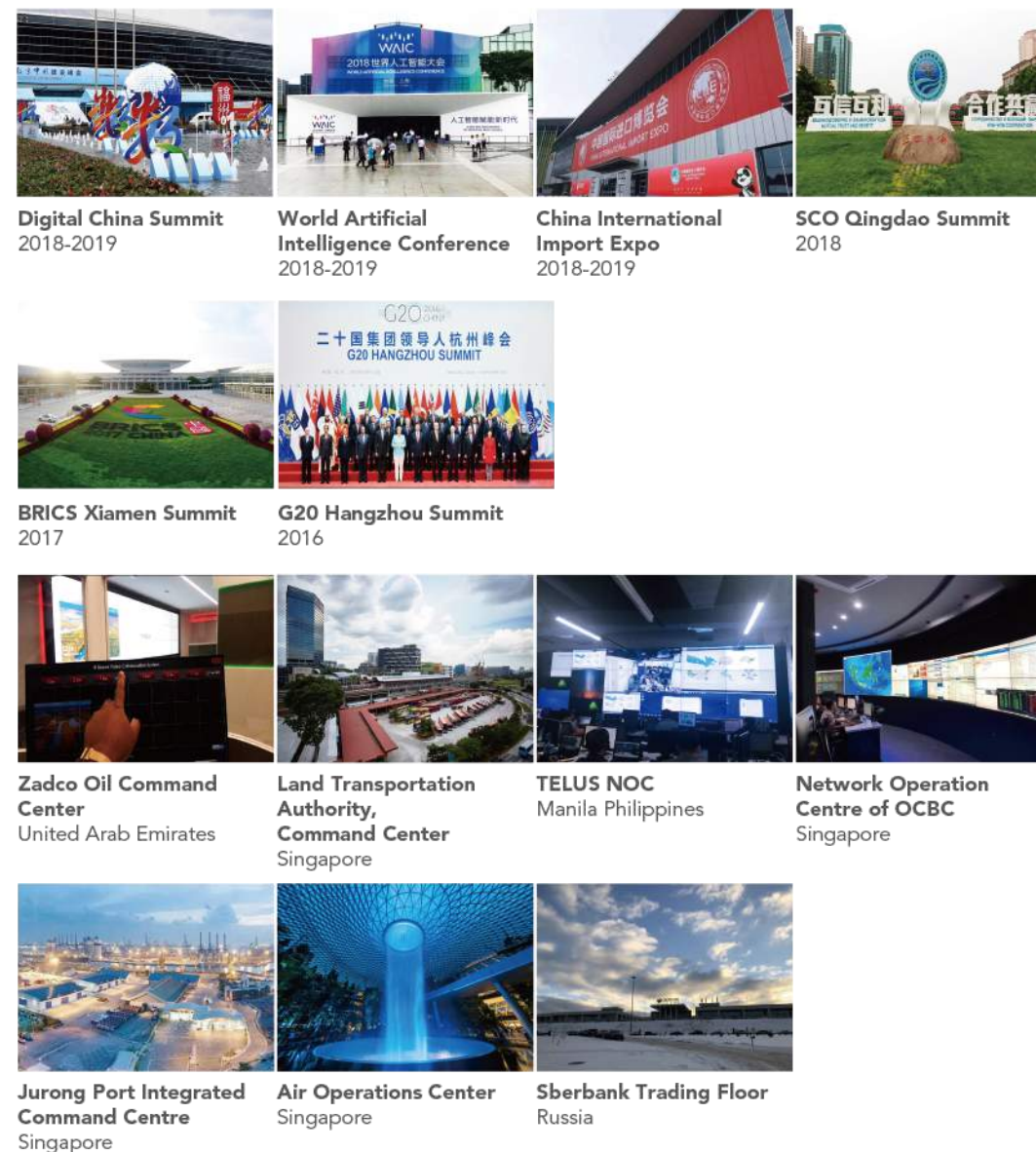
AVCiT's IP Based KVM has been installed for 2018+2019 World Artificial Intelligence Conference, 2018 China International Import Expo, Digital China Summit 2018, SCO Qingdao summit in 2018, BRICS Xiamen Summit, G20 Hangzhou Summit 2016, and won wide acclaim.

### Leading Technologies

### FOCUS™

- 
**Follow me**  
 User's personal configuration will follow the workspace wherever he log in, so that the chief can fast access the computers/sources when he login by his user account in crisis room.
- 
**One touch**  
 Presets recalling, scenarios switching, environment controlling and task multi-casting etc. All these operations are intuitively done by one touch. Hence, the operator can have control over all scenarios efficiently.
- 
**Cross platform Cross regional**  
 The computers/sources can be shared among multiple isolated locations/regions and multiple platform(Windows, Android, Linux, Mac) Therefore, the operators can access and share any dynamic information for fast decision-making.
- 
**User defined**  
 The computers/sources can be shared among multiple isolated locations/regions and multiple platform(Windows, Android, Linux, Mac) Therefore, the operators can access and share any dynamic information for fast decision-making.
- 
**Smart mouse**  
 Simply by one mouse and keyboard, operator can control unlimited computers intuitively just by moving mouse cursor from one monitor to another, what's more, up to eight computers can be displayed simultaneously on one monitor, simplify work flow and improve efficiency.

### References





# All-in-one Command & Control Centre Solutions

Command & Control Center is the critical information infrastructure that integrates video, pictures, audio, three-dimensional maps and other information, by integrating various system and creating a collaborative command platform, to increase the efficiency of unified collaboration, rapid response and decision making and joint action command.

## Highlights & Benefits by KVM over IP Solution

- No Video Wall Matrix or LED/LCD Wall Controller or KVM Server or Extender required;
- Decentralized architecture, no central processing server required, without single node of failure;
- Scalability & Connectivity, by using H.265 coding technology to complete 4:4:4 chroma over low bitrates (4-20 Mbps);
- Follow Me technology, break workspace desk appointed limitation for operator;
- Natively compatible with 3rd party system and advanced technology, I.E. CCTV VMS, AI, 5G etc.

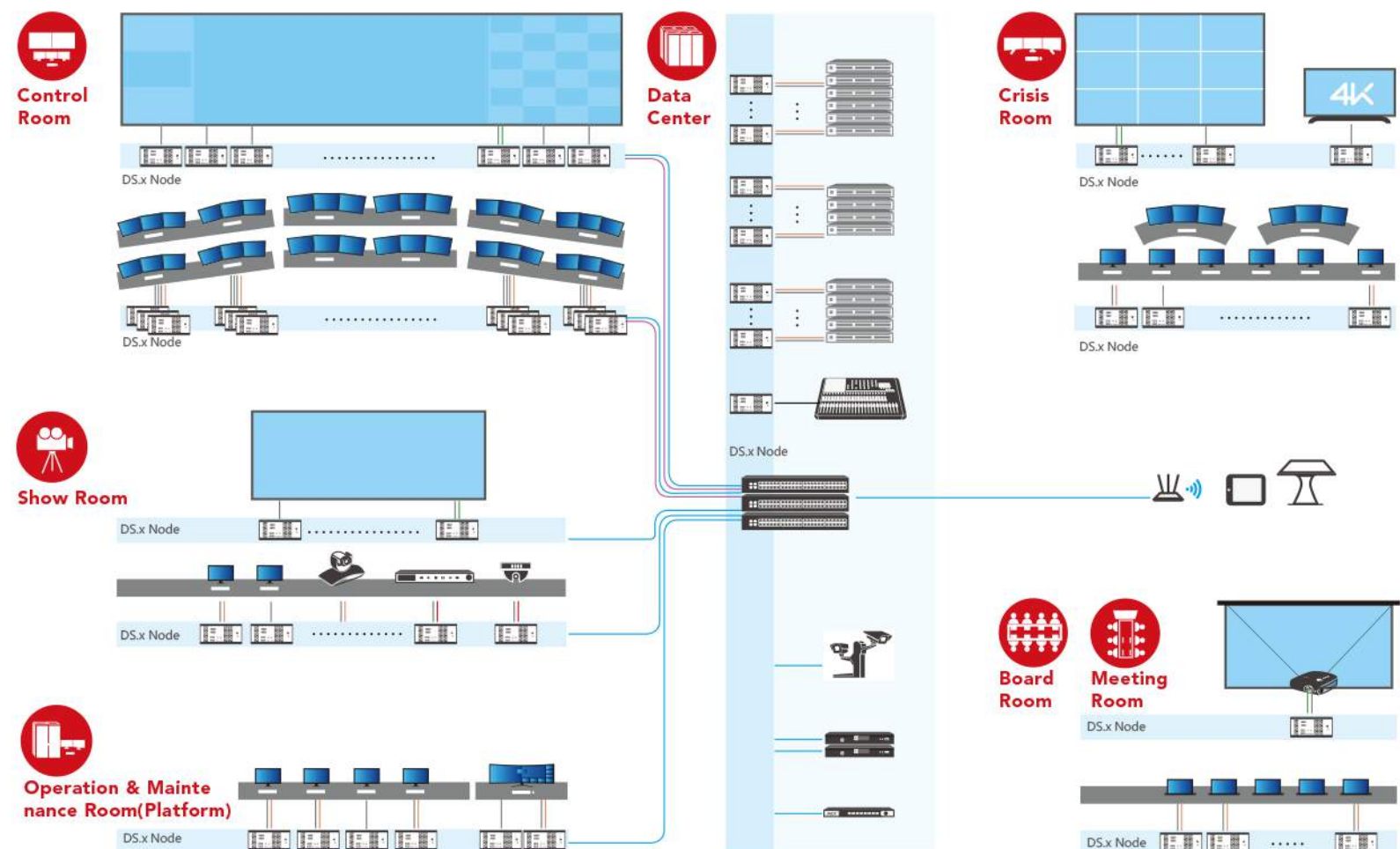
## Application Industries

- Public Security: 911 Call Center, Police Joint Operation Center etc;
- Traffic & Aviation: AOC, ATC, TOCC;
- Government: Justice, Procuratorate, Disaster Command Center;
- Defense: Military, Armed Force, Civil Defense;
- Energy: Oil & Gas, Power Grid, Water Company Smart City Operation Center
- Telecommunication Network Operation Center;
- Social Media: Fusion Center;
- Commercial: Corporate, Hotel, Exhibition Hall;

More...

## SYSTEM SCHEMATIC

IR USB FO RS232 CAT HDMI



## Control Room

### High Lighting Features:

#### Visualized Video Wall Control

- Visualized User Interface, allow to preview all the source content and video wall content, ensure the correct source can be always switched to the video wall intuitively.

#### Intuitive Control Platform

- Video wall layout and control scenario preset & recall as limitless scenarios, preset and recall control button can be re-named;
- Operator can quickly search and find the video source by typing source ID, grouping source or dragging to favorite folder;
- Free resize, re-position and overlap pictures by drag/drop control.

#### Visualized & Intuitive KVM OSD

- User-friendly interface, user can get started quickly after simple training;
- Visualized OSD interface, able to preview the source content;
- User-define hotkey to get access and push.

#### Storing Computers In Data Center

- Source devices can be separated from workspace and stored in the data center where they are safe, air conditioned, so that heat and noise emissions in the office can be eliminated.

#### Natively Compatible With CCTV VMS

- Able to decode IP Camera streaming (H.264, H.265) directly;
- Support most of VMS platform, such as Hikvision, Dahua etc;
- No require additional IP Camera converter, decoder.

### Smart Mouse

- Each workspace console can be equipped with multiple monitors;
- Operator can switch and control between PCs intuitively just by moving mouse cursor from one monitor to another;
- Monitor with OSD mouse cursor will be marked by red box.

### Smart Workspace, Multi-View Feature

- Operator can customize their own monitor layout and access up to eight sources desktop simultaneously;
- Any source windows can be resized, re-positioned and overlapped on one monitor or cross two monitors;
- Operator can view eight source or double click the source to project it to another monitor quickly.

### Excellent Collaboration

- Workspace operator can access computers / sources seamlessly, and share/cast them to other operator or videowall by hotkey;
- Allow operator to push desktop content to another's monitor;
- Operator can choose to receive or reject the desktop pushed from others.

### Environment Control

- Able to control 3rd party device by RS232, RS485, IR, IO or Relay etc;
- I.E. AV equipment, lighting system, display projector, DVD, switcher, and alarm system etc.

### Multi-Location Video Collaboration

- The sources can be shared among multiple locations over low bitrates (control room meeting room, board room etc.) Therefore, the chief can watch any dynamic information for fast decision-making.

## Meeting Room

### High Lighting Features:

#### One Touch

- Presets recalling, scenarios switching, environment controlling and task multicasting etc, all these operations are intuitively done by one touch. Hence, the chairman can control the meeting efficiently.

#### Smart & Soft KVM Control

- Allow to control source PC by multi-touch or mouse on video wall controlling Pad except switching it to video wall, such as opening the PPT slide, video etc.

#### Video Wall Annotation

- Operator can annotate and highlight the content on video wall by controlling Pad.

## Operation & Maintenance Room

### High Lighting Features:

#### Operation & Maintenance Platform

- User-friendly and Intuitively Interface to monitor system's health and manage all the devices;
- Based on B/S structure, allow to manage the system locally or remotely, make user easier to monitor and maintain the system.

#### Monitoring System Health

- System Flow & Bandwidth;
- User online/offline quantity; Etc...

#### Manage All The Encoder/Decoder

- Encoder/decoder online/offline;
- Node's CPU & RAM Utilization; Etc...

## Data Center

### High Lighting Features:

#### System Redundancy

- There are both ethernet and fiber port on each node, so that two independent and redundant system (ethernet + fiber) can be configured and available for 24/7 continuous operation.

#### Dynamic Feedback

- Status feedback of room device and environment control will be displayed on control tablet dynamically, such as power ON/OFF, temperature, humidity etc.

#### User Logs (for KVM)

- All the operation by keyboard & mouse will be automatically recorded and stored in your dedicated server, including login, logout, get & push operations etc.

## Board Room

### High Lighting Features:

#### Video Call

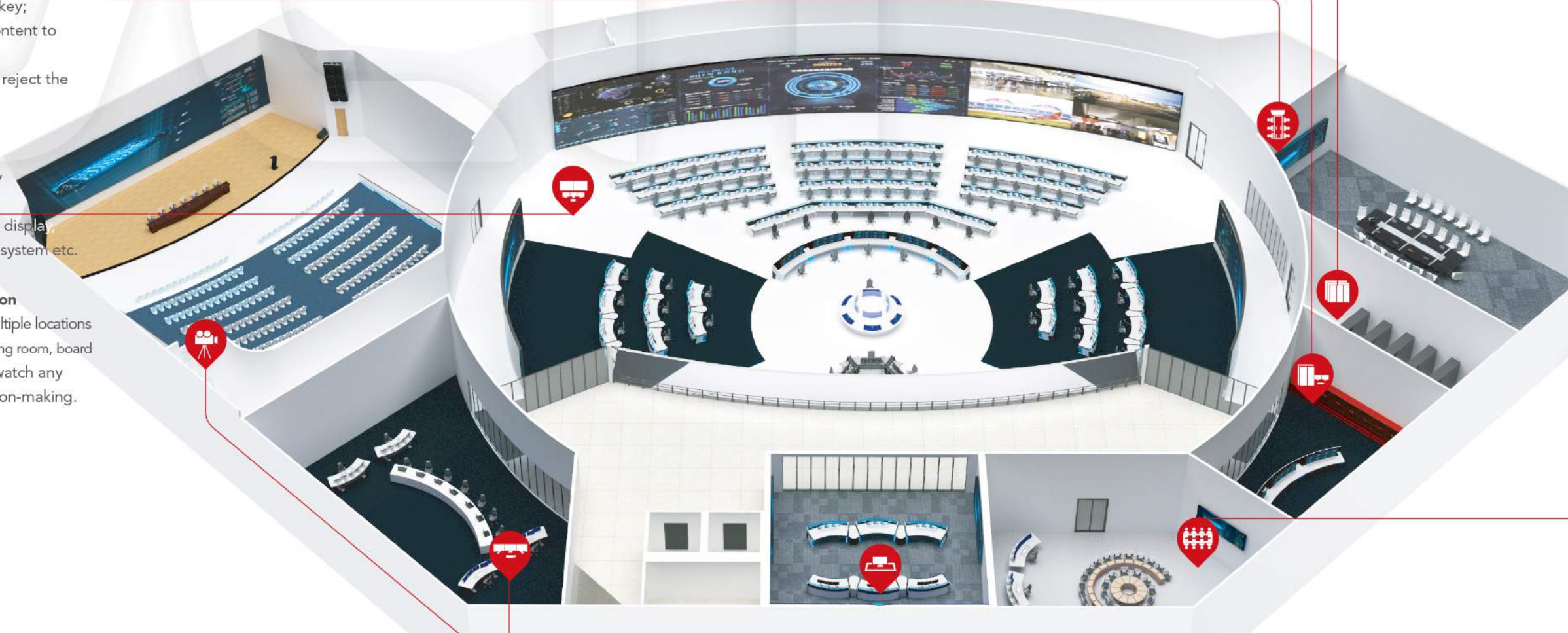
- Chairman can make video call with the operator of control room or other room via KVM OSD for better collaboration.

#### Video Wall Simultaneously Displaying

- What displaying on control room's video wall can be simultaneously displayed on board room or other room's video wall.

#### Multi-Touch KVM

- Operator can control the PC by touch feature of multi-touch screen, instead of keyboard & mouse.



## Show Room

### High Lighting Features:

#### Extraordinary H.265 Coding Tech With 4:4:4 Chroma

- Realize 4:4:4 chroma to keep the image quality by H.265 coding technology over low bitrates (4-20 Mbps per streaming);
- Requires 1 Gigabit Switch only, more flexible to build network.

#### Interactive Experience

- User-friendly and interactive interface. Free resize, re-position and overlap pictures by drag/drop control.

#### Video Auto Scheduling

- Flexible to schedule the sources and switch them on video wall automatically, scheduling time can be user-defined.

## Crisis Room

### High Lighting Features:

#### Permissions Configuration

- User are created by administrator on OSD, who has full permissions to control all the computers/sources;
- Each user is configured with a type of access permissions to each computer;
- Supervisor can create secondary user and configure the access permission.

#### Temporary Permissions

- Operator can share his user permissions to others by creating a temporary password, when he need to leave his workspace;
- Temporary account will logout automatically if the original account was logged in.

### Follow Me

- User's personal configuration will follow the workspace wherever he login, so that the chief can quickly access the computers / sources when he login by his user account in crisis room.

#### Login System by Biological Recognition

- Operator can login KVM system via fingerprint and face recognition except the ID and password.

#### Video Source Encryption

- Support to encrypt the video source streaming to avoid 3rd party device accessing it.