

## HD-SDI H.264 Decoder



NOTE: The casing design is subject to change without notice.

DECODE SD/HD - SDI decoder is one product. Can change IP video decoding output for SD/HD SDI signal transmission equipment, through and ENCODE SD/HD SDI encoder to cooperate, can realize SD/HD SDI signal based on the network long distance extension. In addition, ENCODE can also direct decoding IP Camera video coding, and to realize the HDcctv IPCamera system and system integration.

DECODE support two way SD/HD SDI output interface, support up to 1080p30 HD video and AES/EBU embedded audio. DECODE can perfect compatible in most market based on h.264 coding, use RTP transmission protocol video encoder products, IP Camera products and DVR products, through the optimization of the network buffer strategies and video decoding strategy, DECODE can control the whole decoding delay in 100 milliseconds, within reach of the industry leading level.

DECODE can let HDcctv SDI system and IP system to realize the perfect combination, can be widely used in hd video monitoring, HDcctv system and media program remote purchasing& cataloging, etc.

### Features

- Support SD/HD-SDI interface and AES/EBU embedded audio.
- Support analog audio (Line-in) input and analog audio output (Line-out)
- Support various formats of 1080p30/25, 1080i60/50, 720p60/50, 480i, 576i.
- Compatible H.264 Base line/Main profile/High Profile encoding. Support h.264 compression dividing the decoding

R0121309-V3.1

**⚠ Please read the Manual before attempting to use this product.**  
Specifications and appearance are subject to change without notice.



TO REDUCE THE RISK OF ELECTRICAL SHOCK, DO NOT OPEN COVERS (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



**Disposal of Old Electrical & Electronic Equipment (Applicable in the European Union and other European countries with separate collection systems).**  
This symbol on the product or on its packaging indicates that this product shall not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources. For more detailed information about recycling of this product, please contact your local city office, your household waste disposal service or the shop where you purchased the product.

### ⚠ Caution

- 1. Handle this product with care**  
Avoid any shock or bumping of the product. Improper handling could damage the product. Do not handle the unit with wet hands. Provide proper ventilation and air circulation and do not use near water.
- 2. Requires a proper operating environment**  
This product is not waterproof and is designed for indoor use. The allowable temperature range for operation of this product is between 0°C~40°C / 32°F~104°F.
- 3. Check the power source voltage**  
The power source voltage should be within the specified range. (Product must meet the specifications).

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### 4. Objects and liquid entry

Never push objects of any kind into this product as this may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill any kind of liquid on the product.

### 5. Cleaning

Do not use liquid or aerosol cleaners to clean this unit. Always unplug the power to the device before cleaning.

### 6. Servicing

Do not attempt to service this product by yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all service to qualified servicing personnel.

### Package Contents

1. One (1) HD SDI Series Encode
2. One (1) User Manual
3. One (1) AC Adapter



For any returns, please include all components listed above with original packaging in **Resalable Condition**. Absolutely No Returns will be accepted if any component is missing/damaged.

### Parts & Functions

Top View

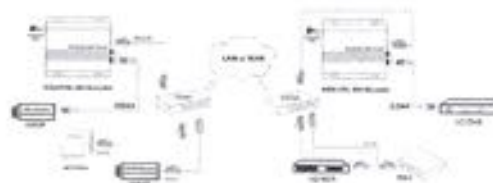


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### Front of Decoder



### Application Diagram



⚠ See page 24 for Important Notes about Cable and Connector for SDI HD Camera

### Hardware Installation

1. Connecting the video signal to SDI-In port of the product through a 75 ohm coax cable with BNC plug.
2. If want to use Loop back signal ,Please connect SDI loop back output to the target by coax cable
3. Connect the decoder to switch by network cable with RJ-45 plug
4. Connect to the AC adapter .Then debug and use.

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## Technical Specifications

Type	Encoder
Video Input	2*BNC SD/HD-SDI
Analog audio Input	1* Industrial terminal blocks, unbalanced connection
Analog Voice Frequency Input / Output	1x Industrial Terminal Block Unbalanced Connection
Alarm Semaphors	1x Industrial Terminal Block
RS-485 Connector	1x Industrial Terminal Block
Network Connector	1x RJ45, Ethernet Connected
Output Signal Type	SD-SDI (270Mfps), HD-SDI (1.485Gbps)
Support Format	1080p24/25/30, 1080i60/50, 720p60/50, 480i/p, 576i/p
SDI Signal Range	0.8V p-p
SDI Impedance	75 ohms
SDI Coupling Type	AC Coupling
Video Compression Standard	H.264 base line/main profile/high profile, Support Slice
Audio Compression Standard	AAC, G.711
Decoding delay	<= 100ms
Video code rate range	512Kbps ~ 40Mbps auto
Audio encoding Code Rate	8Kbps ~ 128Kbps
Media Transmission Protocols	RTP/RTSP, Compatible RTP over TCP Transmission Mode
Signal Protocol	TCP
Network Management	HTTP
Management Interface	Web
Remote Management / Remote Firmware	Yes
Power Consumption	6 Watts (max)
Operating Temperature	32°F ~ 104°F / 0°C ~ 40°C
Storage Temperature	-4°F ~ 140°F / -20°C ~ 60°C
Relative Humidity	20~90%RH (Non-condensation)
Dimension	175 x 155 x 30mm / 6.89 x 6.10 x 1.18 inches

\*Specifications are subject to change without notice

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Picture 1 Login authentication dialog box

### Languages switch

DECODE's management soft would support language switch between Chinese and english. There would show current language and login information ect information bars an upper right corner of management interface . Please click the Language bar to switch to English or Chinese e.f Picture8-2



### Alter the logon password

To prevent from logging in the device by illegal visitor , we strongly suggest that you should alter the default user name and password once you logged in .

The revising steps are that firstly click to "Basic Setting">"User Management",then it would arise following interface (picture8-3) to alter the password .



Picture -2 Alter password

Note: Current version soft could not support the altering of the user name .it only recognize user name :admin.

### Work status

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## Key Components

### Components Made in USA for this product:

Name of Component	Manufacturer
Multi-Rate SDV Adaptive Cable Equalizer	Gemnum
Multi-Rate SDV Automatic Recloner	Gemnum
Multi-Rate Dual-Slew-Rate Cable Driver	MindSpeed & Gemnum
SDI SPD	Bourns
MDM ESD Protection	Seventech
Micro Controller Unit	Texas Instruments

### Components Made in China for this product:

Name of Component	Manufacturer
DC/DC Converter	Richtek

\*Key components are listed by the manufacturer and are subject to change without notice

## Configuration and management

ENCODE could be configured and managed through web-browser ENCODE

### Default IP address

NDA320 default IP is 192.168.1.169, Subnet mask is 255.255.255.0 You could alter the IP address through web-browser.

### Logon management interface by web- browser

- Please ensure following network connection before log on the web browser
- Ensure that the network is working if the computer and ENCODE Net-port is connected well physically.
- Please set your computer's IP address in same network segment of the ENCODE's IP address.
- Try to use Ping ect. network test tool to ensure that it could connect to NDA320 base on TCP/IP protocol .
- After you make sure all of these, you could log in following IP address through Web browser.

<http://<device's IP address >>

For example device default IP address is 192.168.1.169. So we could log in by <http://192.168.1.169>. Then it would arise Login authentication dialog box ( Like Picture8-1 )

Default Logon user name is admin and default password is admin.

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Once entry Decode web browser management interface ,firstly it would arise the device work status page . Or you also could click "Setting" in menu of the management interface by manual to arise work status page.

The work status page would show current Encode following status informations.

system basic status	
Device start time	The time after device start to power on
Duration operation time	Duration operation time after power on
The links of decoder user end	Current linked quantity to decoder end
Processor load	DECODE Host processor load percentage
Available memory	DECODE system balance memory
SDI video and audio signals status	
SDI signal output	Indicate if SDI input signal is ok or not . LED indicator status imply the meaning as following : ok (LOCK indicator is bright) No signal (LOCK indicator is off )
SDI signal system	Display SDI signal mode ( SD/HD/3G )
SDI video format	Display current SDI input signal format
SDI audio format	Display current audio format ( sampling rate)
Decoding status	
Connection encoder address	It currently connected encoder (or IP Camera or other coding system) network address
Duration	The current connection to the encoder and continuous decoding time
Video decoding format	The current decoding video encoding (currently only support h.264)
Audio decoding format	The current decoding audio coding mode (G - 711, AAC)
Real-time code rate	The current input decoder audio media real-time code rate
Already decoding video frame number	The current already decoding of video frame number
Already decoding audio frame number	The current already decoding audio frame number
Video packet loss	The current input to the video decoder coded data packet loss number
Audio packet loss	The current input to the decoder audio coding data packet loss number
Decoding frame rate	Real-time decoding frame rate
Network status	
Address acquiring mode	Display the current TCP/IP network address acquisition mode (DHCP dynamic acquisition or manually specify)
IP address	Device IP address
Subnet mask	Device sub-net mask
Default gateway	Device default gateway
DNS	Device setted DNS server address

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## Connected to the encoder (IP Camera)

DECODE using standard RTSP media transmission protocol connects to the encoder (such as ENCODE), IP Camera, DVR, streaming media server and other coding system. At present the test can be connected to the coding products include: ENCODE encoder, Axis IP Camera, Dahua IP Camera, Dahua high clear DVR, Hikvision IP Camera, Wowza media server, etc.

To connect to encoder and coding system, please open the WEB management interface "Network Settings > Encoder Connection parameter" function interface can be set.



Connected to the encoder

<b>Transmission mode</b>	RTP/UDP: default RTSP through the RTP over UDP manner media transmission. Based on UDP media transmission of good real-time performance, but not be able to avoid the network packet loss, random sequence, when DECODE and encoder is not the same network segment inside, it may because the firewall/NAT equipment blocked lead to UDP data cannot penetrate firewall/NAT, RTP over RTSP (TCP): the media data based on RTSP (TCP) connection for transmission. Because based on TCP transmission
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	media, transmission process need to shake hands, TCP acknowledgement and retransmission mechanism, such as the real time by certain influence, especially in poor network environment, may lead to network congestion, delay problems such as increased. But RTP over RTSP (TCP) model can well through the firewall/NAT.
<b>Encoder address</b>	Connected to the encoder (or IP Camera and coding system) network address. Can use the domain name
<b>Server Port</b>	Encoder RTSP service port. RTSP service port default for 554, if the encoder RTSP service port not 554, designated the port must be correct
<b>Conversation ID</b>	Designated RTSP Session ID (Session ID). Note: some coding system RTSP URL is longer, such as RTSP://192.168.5.1/media/main/h.264?Channel=1, this kind of circumstance, session ID to address all of the content (not including "/" character), namely media/main/h.264?Channel=1. Session ID please note that case.
<b>Identity authentication</b>	Anonymous access: RTSP coding system does not need to identity authentication, the user name and password are ignored. For identity authentication: RTSP coding system requirements identity authentication, now please in the "user name" and "password" correct place for RTSP identity authentication user name and password.
<b>User name</b>	RTSP identity authentication user name
<b>Password</b>	RTSP identity authentication code

Set or modification to the encoder connection parameters, DECODE will be automatically reset try to reconnect the designated encoder, probably need to wait for 3 to 5 seconds.

## System time set

DECODE built-in RTC clock, can be in power environment to maintain the system time. But DECODE first use, need to manually calibration system time. In addition, due to the RTC clock error of the system, every period of time (3 to 6 months), the

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clock will several seconds of error, at this time may also need to time calibration.

Choose function "basic Settings > system time Settings" can be time calibration. Time calibration there are several ways:

### Automatic synchronization time

<b>From the current computer synchronization time</b>	The automatic acquisition of the current computer system time, and will be set to the DECODE equipment
<b>From the NTP server synchronization time</b>	Through the Internet standard network GPS clock service, automatic from DECODE built-in NTP server access time and set to DECODE. The need to pay attention to: (1) DECODE must be correct and Internet networking (2) DECODE network configuration of the default gateway, DNS must be properly set.

### Manual setting equipment time

Please click "YYYY - MM - DD HH: NN: SS" format input time (YYYY representative on behalf of the month, year, MM DD representative on behalf of the hour, day, HH NN representative points, SS representative seconds), and then submitted to the time set.

### Restore factory settings

If the user modify the parameters of the DECODE lead to equipment can't work normally (the most typical case is to modify the network address that can't through the network access DECODE), can restore equipment factory Settings, make DECODE configuration recovery factory default value.

There are two way to restore factory settings:

- 1.through the WEB interface "basic Settings > factory default" function;
- 2.through the WEB interface "basic Settings > factory default" function;

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Put DECODE equipment K1 switch from the current position of the moving in the opposite position (such as the current K1 is located in the closed position, will K1 dial the to position; on the other hand, will K1 dial the to the closed position), wait for 5 seconds, equipment lock and link indicator light will flicker; Continue to wait for 5 seconds until the lock and link light at the same time put out, said equipment has successfully factory default.

Notice:if due to your wrong operation and snap the K1 switch,please in the LOCK and LINK light not at the same time put out the K1 switch dial the back and can cancel the factory default operation.

Factory default will lead to equipment hard to restart, restart process needs probably lasts for 1 minute.

Factory default, the following parameters will change to the default value:

- Login user admin password will restore for admin;
- The network address of the equipment acquisition modes will restore for manual;
- IP address of the equipment will resume for 192.168.1.169, subnet mask will restore as 255.255.255.0;
- IP address of the equipment will resume for 192.168.1.169, subnet mask will restore as 255.255.255.0;
- RS - 485 port parameters will restore to factory default value;

Factory default, the following parameters will remain unchanged:

- System time;
- Default gateway;
- DNS Setting;

### Firmware Update

DECODE support online firmware upgrade, used to update DECODE versions of software. Through the WEB management interface "basic Settings > the firmware

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upgrade" function, can upload manufacturers provide the firmware update file online upgrade firmware.

**Notice:**

- Because the original software BUG, If DECODE software version 3.0 (including 3.0) ,Please send the firmware update file must be placed in the name of no Spaces, no Chinese character folder (pay special attention to not placed in Windows desktop).And then upload the firmware update file.In the magnitude 3.1 software version does not need to pay attention to this problem.
- The firmware update file upload speed is slow, please wait.
- The firmware update file upload after the success of the DECODE will automatically restart equipment to upgrade, this process needs probably lasts for 1 to 2 minutes (according to the content of the upgrade how much time different), please wait patiently.
- Please don't upload unofficial released the firmware update file or other illegal file, lest cause permanent damage of equipment.
- After the upgrade is complete, please through the WEB interface "system information > version information" to see the latest version information is consistent with the expected, confirm upgrade success.

**Network configuration**

Through the DECODE Web management interface function "network Settings > network address and parameter", can be configured DECODE IP address and related network parameters, these parameters include: IP address and subnet mask, default gateway, main DNS server address and auxiliary DNS server address.

DECODE support DHCP dynamic access IP address and subnet mask, default gateway and DNS address, etc. In the "network address and parameter" configuration interface, select "address access method" for the "DHCP dynamic access", IP address and subnet mask, default gateway and the main DNS server, auxiliary DNS server parameter will ban the modification

Note : access to the address set for "DHCP dynamic acquisition", please manually

to display video and audio output.

Above three steps will cause decoding delay. Therefore, reasonable buffer Settings will balance time delay and the pictures show/audio output of fluency.

**Network receive buffer size settings**

ENCODE through the network receive buffer to receive network data, then the buffer data combination, adjust the sequence (when the network environment in random sequence possible situations, such as Internet application), and then into the decoder to decode. The network receive buffer for decoding system is very important, it can effectively balance the network transmission time jitter, decoding display more smooth. In the Internet and complicated network environment, it still can the data be group package and random sequence adjustment, in order to avoid data caused by the error decoding display flowers screen, stagnation phenomenon such as.

Of course, the greater the receive buffer will bring greater decoding delay, we need according to the actual network conditions to set the reasonable buffer strategy, in order to make balance between effect and time delay.

In the local area network (LAN) conditions, because the network transmission jitter is small, high quality, won't happen packet random sequence, etc. the network receive buffer can be set to a small value, in order to enhance the real-time display; In the wide area network (WAN) conditions, network transmission jitter, and packet may be random sequence, the network receive buffer must set the value of the larger the impact of decoding delay is increased.

Normal network receiving buffer time	Also called "target buffer time" means in normal circumstances, the network receive buffer system will control goal time delay (unit: milliseconds). To the decoding system is concerned, the network receive buffer average delay by the parameters will be decided.
Largest network receiving buffer time	Refers to, when coding system data delivery faster, and decoders decoding is relatively slow, the decoder's largest Internet receiving buffer time (unit: milliseconds). More than

restart ENCODE equipment refresh the DHCP address access.

**With encoder two-way voice talkback**

Note: DECODE two-way voice talkback function is limited to use with ENCODE pairing.

DECODE support and ENCODE (encoder) between two-way voice talkback. Two-way voice talkback will also open a TCP/IP service channel receive send each other of speech, this service channel interception port in the network Settings > connection encoder network parameter > two-way audio speaker "Settings, the default port for 1260.

Also you can select close in the two-way audio speaker function.

**SDI Audio output settings**

DECODE can be set by the user to decode the output to SDI interface video format (resolution). When the actual code of video format and setting the output format is not consistent, DECODE will be automatically enabled scale (Scaler) function, will the original video scale to the target set format. Choose WEB management interface "Decoding Settings > SDI Output Format " output Settings.

Video format	you can choose the candidate for the output of the video formats, including 1080p30, 1080p25, 1080p60, 1080i50, 720p60, 720p50 etc.
AES/EBU Audio format	Set the SDI embedded into audio formats. Note: the current SDI standard only supports and 48K sampling (double track) audio.

**Decoding parameters and time delay control**

To achieve the smooth of audio decoding effect, DECODE to network audio media decoding need to pass three important steps: 1.receiving and buffer network packets; 2.implement decoding, restore video frame and audio frame;3.will stay display video and audio buffer, is the timer under the control of the frame by frame

	the buffer time data will be discarded, the effects of image is flower screen, stagnation.
Minimum network receiving buffer time	When the network condition good, network low jitter, countless according to random sequence phenomenon occurs, the network receive buffer system will be reduced buffer time, reduce buffer time delay. Reduce the lower limit of buffer delay for the set value.

Some typical network condition network receiving buffer value set sample

Typical network environment	Normal receiving buffer	Maximum receiving buffer	Minimum receiving buffer
LAN	0	50	0
Enterprise unit	50	200	30
Business private network	100	500	50
WAN	150	800	100

**Picture buffer settings**

Support for audio and video synchronization output, the decoding of video/audio still need further buffer, in order to achieve smooth smooth output effect. Large screen display buffer will bring better effect, but will cause more delay.

"The picture buffer" can choose picture shows the size of the buffer for the following options:

Normal	The default screen display buffer strategy. At this time will cause display delay about 75ms.
Moderate	About 60ms display delay.
Small	Display delay for 45 ms. This option for advice of smaller value, unless you after verification, we strongly do not recommend setting "small", "little" image display buffer; because this will be shown by the dithering phenomenon, while the smaller the buffer will further reduce the delay.
Smaller	About 30 milliseconds display time delay. For special

	circumstances choose, generally is not recommended.
Very small	About 15 ~ and millisecond display time delay. For special circumstances choose, generally is not recommended.

Note: reasonable network receiving buffer and pictures display buffer settings can be very good control decoding delay, after setting, ENCODE can effectively control the code to decode the whole process of the delay in about 120ms, decoding delay less than 90ms, can reach the leading level.

#### Alarm signal

DECODE support all the way alarm signal (switch quantity) input and the alarm signal (switch quantity) output. Alarm signal interface is mainly used for ENCODE encoder and between signaling through preaching, but also can according to user needs extended definition alarm signal interface effect, specific please contact negotiations with the dealer or manufacturer.

In the WEB management interface "alarm Settings" function interface can view and set alarm state.

Interface can display the current alarm signal level (high/low level), and can be set output alarm signal default level (high/low).

Open "and encoder through the alarm signal", DECODE will ENCODE and between automatic through the alarm signal (i.e., DECODE alarm signal input state will be in ENCODE alarm signal output, and the reaction ENCODE alarm signal input state will be in DECODE alarm signal output response).

#### RS485 and PTZ control

Choose WEB management interface "RS485 and yuntai control Settings" function, can set up the DECODE RS - 485 interface baud rate parameter. If open "and encoder through the RS - 485 signaling", the DECODE decoder of RS - 485 input signal from the ENCODE encoder of the RS - 485 output interface.

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#### Fast reset

"Rapid reset" function for quick restoration of DECODE video decoding function. When unable to connect to the encoder, parameter Settings and cause DECODE decoding function abnormal, please try to implement the equipment fast reset. Rapid reset probably need to wait for 3 seconds of time.

#### Equipment to restart

"Equipment to restart" for DECODE executive hot restart, when the equipment function abnormalities, through the rapid reset still can't solve the problem, please try to restart the equipment. Restart the equipment needs to wait for about 1 minute of time.

In some cases, the equipment to restart may need to restart with cold, the first DECODE pulling the power input, and then turn on the power.

Warning: do not recommend that you use frequently cold restart to restart the equipment. Cold restart way for equipment hardware and software might have caused bad effect.

#### Common problems and solutions

##### Equipment POWER on, the POWER light not bright

Please check the power adapter are switched on. Please must use the original manufacturer of power adapter, not the original power adapter voltage standard, the current standard, connector specification can be and DECODE equipment can't adapter, leading to can't normal power supply.

Eliminate POWER adapter fault, such as equipment after electric POWER indicator light is still not bright, please and contact the supplier or manufacturer for repair or replacement.

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including address is correct, the session ID is correct, identity authentication parameters, such as whether it is right.

##### LINK Light is blinking or go out

In DECODE electric start on 1 minutes time, LINK light go out or flicker is normal phenomenon. DECODE start after the success, if the Ethernet connection normal, LINK light ChangLiang. Or go out.

If the LINK light has gone out, please check the equipment to connect to the network.

If the LINK lamp has been flashing, may be because DECODE fault and can't the normal starting. The fault detection method for trying to ping DECODE equipment IP address, or use WEB browser open DECODE management interface. If you can correct ping to DECODE equipment IP address, or WEB access is normal, it means DECODE equipment normal; Otherwise DECODE said equipment failure, please contact the manufacturer or supplier.

##### Unable to access DECODE Web management interface

Please try to use ping tool detection DECODE IP address of the connectivity.

If DECODE IP address can't connected, please check the network connection is normal or not, or DECODE network address set correctly (if necessary, please restore equipment factory Settings; through the toggle switch K1, see chart 8.8).

If DECODE IP address can be connected but have no access to the WEB management interface, first of all, please check the WEB browser Settings is normal or not (such as browser proxy server Settings); Eliminate the browser problem, then please make sure whether DECODE in firewall/NAT equipment after, if yes, please in firewall/NAT equipment normal port mapping. The above problems are ruled out, if you still cannot access DECODE WEB interface, please try to restore the equipment factory Settings (through the toggle switch K1, see chart 8.8).

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#### Equipment POWER on, the POWER light flicker

Normal POWER on, the POWER indicator light should be DECODE ChangLiang. POWER indicator light flashing please make sure POWER adapter, including:

- Whether to use the original equipment of the power adapter;
- Check the power adapter voltage standard DECODE support 5v-24v DC wide voltage input range, but is best to use 12v DC input.
- The output power of the power adapter DECODE whether accord with the use requirement. DECODE maximum power (full load) for 6w.

Eliminate POWER adapter fault, if the POWER indicator light is still shining, it may be DECODE equipment failure or through illegal caused by maintenance. Please contact with the manufacturer or supplier for repair or replacement.

#### LOCK lamp has been flashing

DECODE power on 1 minutes time, LOCK light flicker (or go out) as normal. DECODE power on the starting up process probably need 1 minutes time. Start after completion, if DECODE properly connected to the encoder, normal decoding audio and output, the LOCK indicator should be ChangLiang. Or should be put out.

LOCK lamp has been flashing there are two possible:

- DECODE fault and can't the normal starting. The fault detection method for trying to ping DECODE equipment IP address, or use WEB browser open DECODE management interface. If you can correct ping to DECODE equipment IP address, or WEB access is normal, it means DECODE equipment normal; Otherwise DECODE said equipment failure, please contact the manufacturer or supplier.
- Decoding output anomaly. Common problems including the encoder sent data is not normal (or occasionally abnormal), decoding error, no video, etc.

#### LOCK Light go out

No normal decoding. Please check the encoder connection parameters Settings.

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Above debugging method are used (including factory default), still can't access DECODE WEB management interface, please contact the manufacturer or supplier.

### WEB management interface prompt login but not through the identity authentication

Fault phenomenon performance for: open the DECODE WEB management interface, tips for identity authentication, but to enter your user name and password can't through the authentication into the management interface. Please check and try to:

1. Input user name and password is correct or not;
2. The keyboard is case lock or not;
3. Please try to cold restart equipment then login again;
4. Recovery equipment factory settings.

### WEB management interface display abnormal

The fault phenomenon performance: WEB management interface can normal login, but pictures showed abnormal, or page layout chaos. Please check and try to:

1. The fault phenomenon performance: WEB management interface can normal login, but pictures showed abnormal, or page layout chaos. Please check and try to;
2. After verification can be normal use WEB browser include: IE 7.0 and above version, Firefox, Google Chrome, Apple Safari. The validation browser may appear display abnormal.
3. Check the browser installed third party card does this affect WEB display, such as antivirus software plug-ins, JS script stop card, etc.
4. Please try to delete the browser's temporary files, and then refresh the page.

### Can not receive encoder

First of all, please check the encoder connection parameters Settings (see section 8.6) that is correct, especially encoder address, session ID (check session ID case is consistent), RTSP service port, identity authentication options and encoder is

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### Analog audio output have noise

DECODE analog audio output for non equilibrium mode of connection, please correct ground.

### Analog audio track around the dislocation

Please exchange analog audio output of the left and right channel attachment.

### Forget the IP of the equipment to connect and management equipment

Please snap K1 switch recovery equipment factory Settings (see section 8.8)

### Wrong to modify the DECODE parameters that can't work normally

Please recovery equipment factory Settings.

### DECODE Decoding output flowers screen, stagnation or crash

1. Network environment is bad, data transmission packet loss serious and cause DECODE decoding anomaly;
2. Encoder code rate caused by high transmission congestion;
3. DECODE limit environment temperature for minimum - twenty degrees Celsius, the highest 80 degrees Celsius. Not the right environment temperature will trigger a DECODE work abnormal;
4. In poor network environment, DECODE use RTP over RTSP (TCP) way connection encoder, because the network transmission of repeated retransmission and lead to network throughput overload and appear crash.

required.

If the encoder is located in firewall/NAT later, or between the encoder and decoder by routers, firewalls or NAT equipment, first of all, please make sure whether the encoder can through the network normal connected, encoder is in the firewall/NAT equipment on the correct port mapping; if it is determined that the correct, please try to use RTP over RTSP (TCP) way connection encoder.

Try to fast reset decoder or restart decoder.

### Decoding delay

Please refer to section 8.13 adjustment network receiving buffer and screen display buffer parameter Settings.

### Audio and video out of synchronization

Please refer to section 8.13 adjustment network receiving buffer and screen display buffer parameter Settings (network receiving buffer and pictures display buffer appropriate sp).

In addition, if your network environment jitter, and packet loss serious, can also cause audio not synchronous phenomenon.

### Decoding with audio no video or with video no audio

First of all, please check the encoder (or IP Camera, etc.) setting.

DECODE support h. 264 base line/main profile/high profile of the video decoding, and g. 711, AAC - LC audio decoding. Don't correct video/audio coding method may lead to DECODE cannot decoding.

### Decoding output audio for noise

Encoder output audio for DECODE does not support the coding method.

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**IMPORTANT NOTE: Cable & Connector for SDI HD Camera**

In order to achieve the **Best Quality** and **Long Range** coax cable run of up to 200m / 600ft, you will need:

1. **Good Quality Cable:** We suggest using RG6 Belden 1694A (Low Loss Serial Digital) coax cable because RG6 cables have better grounding than RG59 cables. RG6 is for Digital Signal and RG59 is for Analog Signal.
2. **Good Quality BNC Connectors:** Contact Plating Gold plated pins provide exceptional conductivity.
3. **Good Quality Installation:** Do not over cut the braid because it will affect the grounding. The image will have lines and noise.



### Limited Warranty

#### LIMITED ONE (1) YEAR WARRANTY AND EXCLUSIONS

Manufacturer warrants to the original consumer purchaser and not for the benefit of anyone else that this product at the time of its sale by Manufacturer is free of defects in materials and workmanship under normal and proper use for one (1) year from the purchase date. Manufacturer's only obligation is to correct such defects by repair or replacement, at its option, if within such one (1) year period the product is returned prepaid, with proof of purchase date, and a description of the problem. This warrant excludes and there is disclaimed liability for labor for removal of this product or reinstallation. This warranty is voided if this product is installed improperly or in an improper environment, overloaded, misused, opened, altered, or altered in any manner, or is not used under normal operating conditions or not in accordance with any labels or instructions. There are no other implied warranties of any kind, including merchantability and fitness for a particular purpose, but if any implied warranty is required by the applicable jurisdiction, the duration of any such implied warranty, including merchantability and fitness of or a particular purpose, is limited to one (1) year. Manufacturer is not liable for incidental, indirect, special, or consequential damages, including without limitation, damage to, or loss of use of, any equipment, loss sales or profits or delay or failure to perform this warranty obligation. The remedies, provided herein are the exclusive remedies under this warranty, whether based on contract, tort or otherwise.