

QUICK START GUIDE

SDI Series

HD Video Encoder

+2017
REV. 3

- Thank you for purchasing SDI Series video encoder. Before installing our product, please read this user manual carefully. Please strictly follow our manual to install and use our encoder, or install and use under guiding by professional person, to protect your body safety and to avoid the encoder damage from physical and electrical. The encoder may be damaged if incorrect electrical connection or the physical installation, even threaten the operator safety.



This manual is only for quick start guide.
Details please contact with supplier.

01 PACKING LIST

Packing list

Video encoder, two wireless antennas (some models don't have), one power supply (DC12V/1A), user manual and product certification.



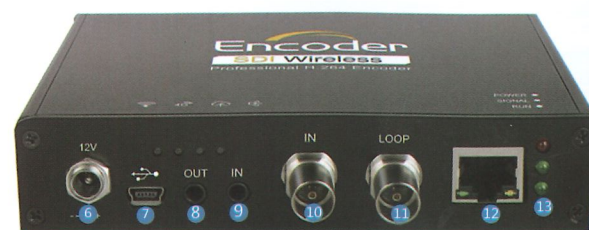
Note:

Due to products updating, packing lists will be a little difference.

02 DEVICE INTERFACES



- 1 WiFi Antenna(some models don't have)
- 2 USB Interface
- 3 SD/TF Card storage
- 4 Power Switch
- 5 Reset



- 6 Power input
- 7 Mini-USB
- 8 Audio output
- 9 Audio input
- 10 HD-SDI Input
- 11 HD-SDI Loop
- 12 Ethernet Interface
- 13 Status LEDs

Note:

USB interface can insert 4G USB Modem (some models don't support), USB storage device and USB to RS232/RS485 adapter.

03 INSTALLATION AND CONNECTION

Connect SDI signal

SDI signal to encoder's SDI input port through cable from the signal source (such as camera). Loop interface could loop out signal.



Connect audio signal

Through 3.5mm analog, it can be accessed analog audio signal. (For encoding usage, refer to analog audio output for extensible function).



Connect internet

Connect one end of the network cable to the encoder Ethernet port. The other end is connected to the network switch or the computer's Ethernet port.



04 LED INDICATOR LIGHT DESCRIPTIONS

① Power up

After connected, indicator lights will flashing alternately between "red and green". Signal/RUN off, POWER is on. When it works normally, indicator lights will go to below status, which lasts 10-15S.

② Indicator lights

Name	Color	States	Descriptions
RUN	GREEN	FLASHING	Device starts to encode, or restore device to factory settings (and LINK lights flashing simultaneously).
		OFF	Device not works properly, not started
SIGNAL	GREEN	ON	SDI signal input is normal
		FLASHING	When restore device to factory settings, SIGNAL light is flashing
POWER	RED	OFF	No SDI signal input/power failure
		ON	Power supply is connected
		FLASHING	Power supply is not connected Device failure

05 WORKING STATUS INDICATION

③ Working status indication

	OFF: No WiFi/4G connection	Always on	Flashing
	GREEN	Wifi connected	Wifi is connecting
	RED	Wifi connection failure	4G connection failure
	OFF: No SD/TF card	Always on	Flashing
	GREEN	SD/TF card inserted but not record	Recording
	RED	SD/TF not identified	SD/TF failure
	OFF: Stream media service is not open	Always on	Flashing
	GREEN	Stream media service is ready	Pushing to Internet
	RED	Stream media service abnormal	Abnormal pushing
	OFF: No audio supported	Always on	Flashing
	GREEN	SDI embedded audio	
	RED	Audio failure	
	YELLOW	No enough storage space	Warning for recording failure
	YELLOW	Analog audio	

06 SELECT VIDEO/AUDIO SIGNAL SOURCE

Click "Audio&Video Adjustments > Video Source and Adjustment" or "Audio&Video Adjustments > Audio Source and Adjustment" in the Web console, you can select video and audio source.

Video/Audio source options:

PARAMETER	OPTION	DESCRIPTION
Video source port	SDI video input	Input, loop
	Auto	SDI embedded digital audio
Audio source port	SDI embedded audio	SDI embedded digital audio
	Analog audio input	Line in

07 DEFAULT IP ADDRESS AND WEB LOGIN

The default IP address is 192.168.1.168 with subnet mask 255.255.255.0. You can login WEB console to change the addresses.

Login the WEB console

Open your web browser and access: <http://<device IP address>>
For example, the factory default IP address is 192.168.1.168, you can access <http://192.168.1.168>, to login the Web console.

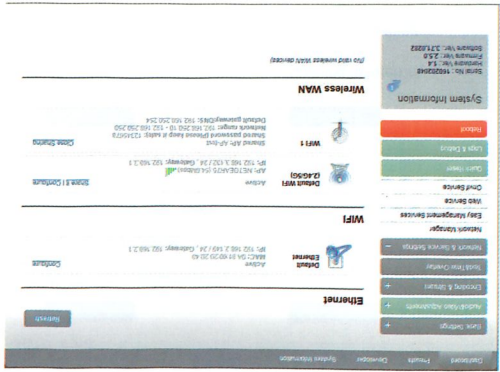
Login username : **admin**; password : **admin**

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CONNECT WIFI

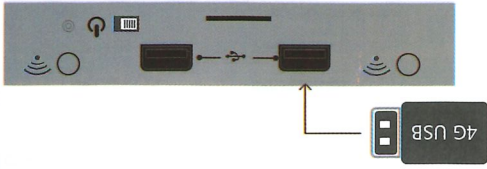
Click Web management interface "Network Settings>Network Manager" then click "configuration" under WiFi for WiFi setting interface. Users could configure according to related parameters of WiFi hotspots. After succeed, it could transmit through wireless network.

Connect WiFi (some models don't support)



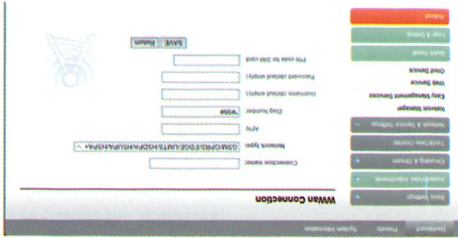
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CONNECT 4G NETWORK (Some models don't support)



Please insert 4G-LTE modem to USB interface.

- 1 Click "Network & Service Setting", pull downward, and select "Network Manager". There one 3G/4G device below of the Wireless WAN. If you found this device, it means 4G modem connected;
- 2 Click "configure", manually "add a new wireless network connection", then entering details according to your local 4G operators;
- 3 After configuration, go back to "Network Manager", 3G/4G device shows connected and got one IP address, which could be used for pushing stream by use of 4G connection.

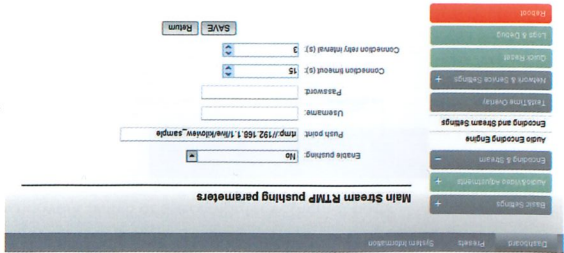


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RTSP AND RTMP LIVE STREAMING

RTSP streaming

The RTSP service is always enabled for the device. All the decoders which support RTSP protocol and H.264 decoding can connect and get stream from the device. The default RTSP accessing URL is:
Main: `rtsp://<encoder IP address>/ch01`
SUB: `rtsp://<encoder IP address>/sub01`
Note: "ch01", "sub01" is the RTSP session ID. You can change the session ID in the Web console.



Our device' s H.264 main/sub stream supports adding up to 8 same or different streaming media service, to meet your needs of adopting same/different stream media protocols for multi-goal pushing.
On the management interface of "Encoding&Stream-Encoding and Stream Settings", for main/sub stream to choose "add one stream service", users can add your needed service type. Currently main video live streaming platforms require "RTMP" service. After adding RTMP pushing service, click set icon to configure RTMP parameters.

RTMP live streaming

- 1 Choose "Basic Settings > Restore factory settings" on the web console
Hold the "RESET" button more than 3 seconds.
- 2 Hold "RESET" button:
Restoring factory setting will lead to the device reboot, and restarting course will last about 20s.

Restore factory settings

If users change parameters that lead encoder couldn't work (The typical situation is changed network address, so it couldn't be visited encoder by network), users could restore factory setting to default value.

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RESTORE FACTORY SETTINGS

Two methods for restoring factory settings:

- Streaming settings will be restored.
- All the video/audio encoding settings will be restored;
- The IP address will be restored to 192.168.1.168 and subnet mask is 255.255.255.0;
- Login username and password will be turned to admin;
- These parameters will be restored after restoring factory setting:

NOTE:

- Select "Quick Reset", current encoding will be suspended for a while;
- Select "Reboot", the encoder will 'warm' reboot.
- Under some circumstances, reboot may be with the help of 'cold' reboot: power down then power up the device.

Quick Reset and Reboot

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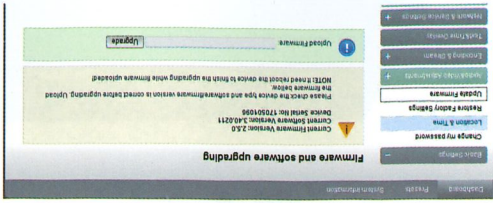
QUICK RESET AND REBOOT

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FIRMWARE UPGRADING

Firmware upgrading

This device supports online firmware upgrading for upgrading software. Select "Basic Settings", pull downward and click "Update firmware". On the page, click "Browse" to select the upgrading file, and click "Upgrade" to upgrade the device.

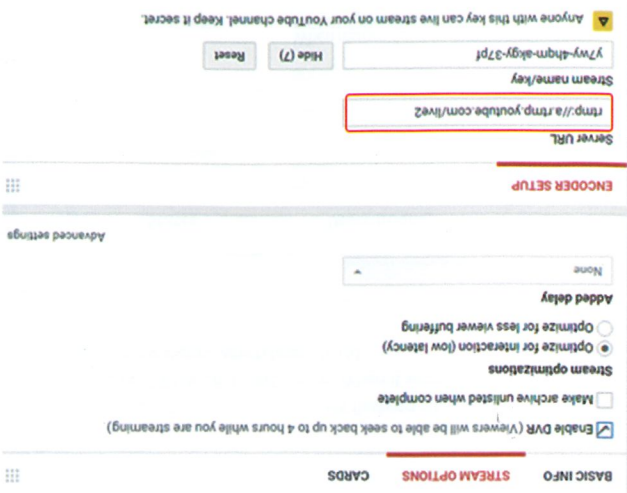


NOTES:

- After uploading firmware file successfully, the encoder will automatically restart, this process will take about 30s-60s (the time will be different according to upgrade content), and please be patient.
- After the upgrade is complete, via the Web interface "system information>version information" to check whether the latest version information in accordance with expected and confirm the upgrade succeeded.

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Take YouTube for an example RTMP LIVE STREAMING



- 1 Choose "LIVE STREAMING" and click "Get started". After verified successfully, it comes into LIVE STREAMING interface, choosing "Streaming options".
- 2 Then it will show two lines characters given by YouTube: the first line (Server URL) is RTMP address give by YouTube, copy and paste it to the encoder that you are using; the second line (Stream name/key) is streaming name and key served for verification, reveal it, copy and paste is to the encoder.
- 3 Entering into encoder, click Network settings-Media Publishing Parameters. Pushing point should be like Server URL+/-Stream name and key, for example: `rtmp://a.rtmp.youtube.com/live2/y7wy-4hqm-akgy-37pf`. Username and password should be blank.