

**H.265 HEVC/H.264 AVC/MPGE4**

**FHD Video/Audio Live Encoder**

# **Manual**

## 1.Interface



**Power:** DC 9-12V 1A

**HDMI IN:** HDMI Video Input Port

**Reset:** Recovery to Default setting

**LAN:** 1000M Ethernet Port

**WIFI:** it is AP when it is blink, it is connected it is always bright.

**ANT:** HG WIFI

**Power:** Power Light(Red)

**LAN:** Lan Status Light(Green)

**Video:** Video Signal Light(Blue)

### Instructions:

A. Power ----9-12 V/DC 1A;

B. Reset----- it is used to reset the equipment; after the equipment is started, press the button for 10 seconds, the equipment IP is recovery to the default IP, 192.168.1.168.

C. Video input --- it is used to input high-definition HDMI

D. LAN ---- 100M or 1000M Ethernet connection.

## 2.Specification

### Input

Video	1.4 HDMI HDCP
HDMI resolution ratio	1920x1200_60P,1920x1080_50/60P,1920x1080_50/60i,1280x720_50/60p 720x576i/p 720x480i/p.
Encoding	H.265 HEVC or H.264 AVC Profile 4.2
Bitrate	16kbit/s~32Mbit/s
Bitrate control	CBR/VBR
GOP	Adjustable

### Audio:

Encoding	AAC AAC+ AAC++ MP3 MP2 AC3 G.711A/U
Re-Sampling rate	44100/48000
Bitrate	48K, 64K, 96K, 128K, 160K, 192K, 256K
Sampling precision	24 bit
Bitrate	64Kb/s~384Kb/s

### System:

Network	100M/1000M Base-T Ethernet /WIFI 2.4G
Stream	UTP,HTTP,FLV,HLS,RTSP,RTMP RTP UDP(Multicast,Unicast) and ONVIF
Configuration interface	WEB operation interface or CGI Command
Updating	Software update

### General

Size	89*103*29mm
Net Weight	0.3KG
Temperature range	-20~55℃(workable)
Power supply	9-12V/1A or 5V/2A
Power consumption	5W

### 3. System Setting :

#### 3.1 Reset

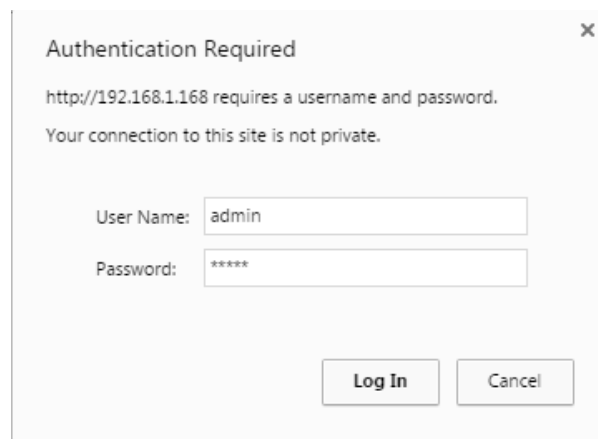
there is a RST hole on the front panel which is used to conduct initialization reset for the high-definition encoder. When the equipment is powered on, press the button and hold for 12 Seconds, when the power light is off, release the button, and all the parameters will be initialized. The initialized IP is 192.168.1.168.

#### 3.2 Computer IP Address Setting

Computer IP can be set as 192.168.1.\*. Note: anyone from 1—254, except for 168

#### 3.3 Open IE Explorer

Fill <http://192.168.1.168> to address bar, Default user name: [admin](#) Pass: [admin](#)

A screenshot of a web browser's authentication dialog box. The title bar says "Authentication Required" with a close button (X) in the top right corner. The main text reads: "http://192.168.1.168 requires a username and password. Your connection to this site is not private." Below this, there are two input fields: "User Name:" with the text "admin" entered, and "Password:" with "\*\*\*\*\*" entered. At the bottom right, there are two buttons: "Log In" and "Cancel".

Authentication Required

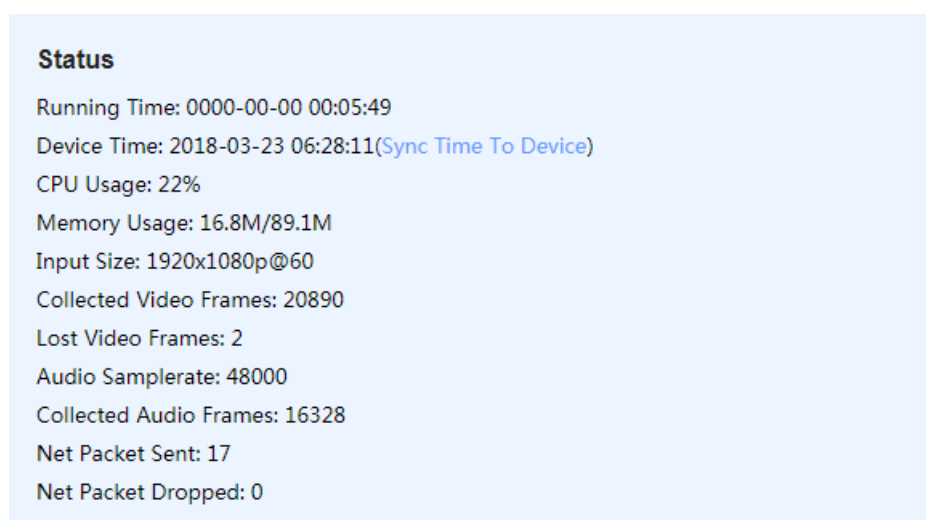
http://192.168.1.168 requires a username and password.  
Your connection to this site is not private.

User Name:

Password:

#### 3.4 Status Display

**3.4.1 status:** when there is video input, it will display resolution of the input, and if there is not status info, input is not correct, please check your video source or video cable.

A screenshot of a status display panel with a light blue background. The title "Status" is in bold. Below it, various system metrics are listed in a plain font.

**Status**

Running Time: 0000-00-00 00:05:49

Device Time: 2018-03-23 06:28:11([Sync Time To Device](#))

CPU Usage: 22%

Memory Usage: 16.8M/89.1M

Input Size: 1920x1080p@60

Collected Video Frames: 20890

Lost Video Frames: 2

Audio Samplerate: 48000

Collected Audio Frames: 16328

Net Packet Sent: 17

Net Packet Dropped: 0

**3.4.2 main stream** : it shows main Stream Encoding Type,Resolution,Bitrate and access address

#### **Main Stream**

Encoding Type: H.264

Encoded Size: 1920x1080@30

Bitrate(kbit): 2800

TS URL: <http://192.168.1.168/0.ts>

HLS URL: <http://192.168.1.168/0.m3u8>

FLV URL: <http://192.168.1.168/0.flv>

RTSP URL: <rtsp://192.168.1.168/0>

RTMP URL: Disable

RTMP PUSH URL(Not Connected): <rtmp://192.168.1.50/live/0>

Multicast URL: <udp://@238.0.0.1:1234>

[Preview----->Click](#)

**3.4.3 Sub stream:** it shows Sub-Stream Encode Type ,Resolution Bitrate and access address

#### **Substream1**

Encoding Type: H.264

Encoded Size: 1280x720@30

Bitrate(kbit): 1800

TS URL: <http://192.168.1.168/1.ts>

HLS URL: <http://192.168.1.168/1.m3u8>

FLV URL: <http://192.168.1.168/1.flv>

RTSP URL: <rtsp://192.168.1.168/1>

RTMP URL: <rtmp://192.168.1.168/live/1>

RTMP PUSH URL: Disable

Multicast URL: Disable

[Preview----->Click](#)

#### **3.3.4 Preview:**

a.Click [Preview](#) ,it will play stream in browser

### Main Stream

Encoding Type: H.264

Encoded Size: 1920x1080@30

Bitrate(kbit): 2800

TS URL: <http://192.168.1.168/0.ts>

HLS URL: <http://192.168.1.168/0.m3u8>

FLV URL: <http://192.168.1.168/0.flv>

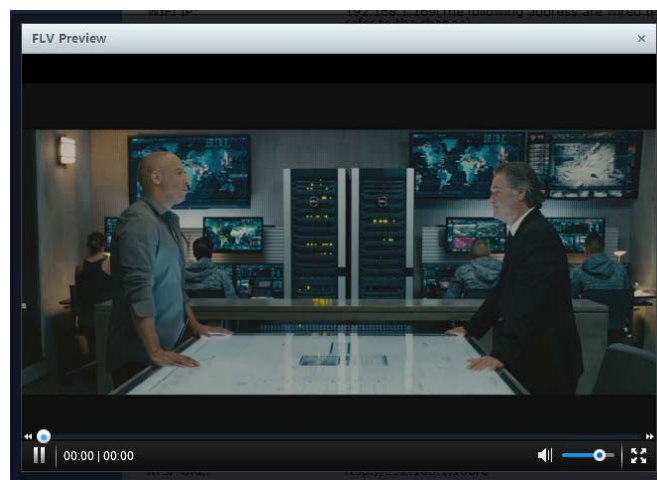
RTSP URL: <rtsp://192.168.1.168/0>

RTMP URL: Disable

RTMP PUSH URL(Not Connected): <rtmp://192.168.1.50/live/0>

Multicast URL: <udp://@238.0.0.1:1234>

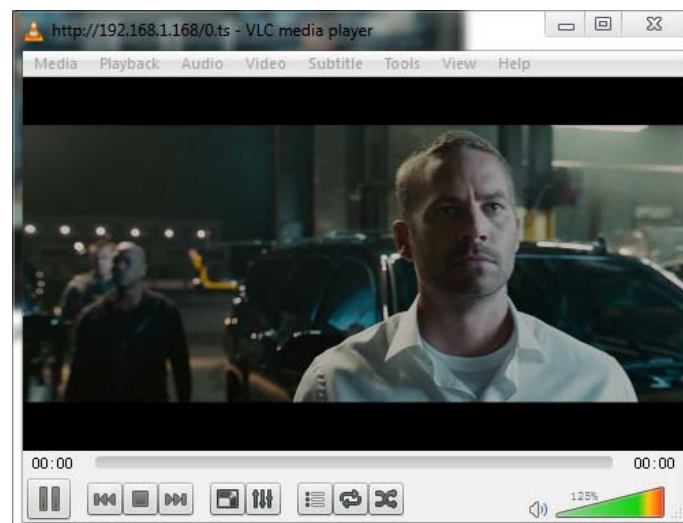
[Preview](#)----->[Click](#)



b.open VLC software to play stream

default http stream address: <http://192.168.1.168/0.ts>

default rtsp stream address: <rtsp://192.168.1.168/0>



## 4. Network Setting

### 4.1 Ethernet Port

**Network**

**LAN**

**DHCP:**

**IP:**

**Netmask:**

**Gateway:**

**MAC:**

**DNS**

**DNS1:**

**DNS2:**

**NTP**

**NTP Enable:**

**NTP Server:**

**Time Zone:**

**Port**

**HTTP Port:**  [1-65500]

**RTSP Port:**  [1-65500]

**Apply**

Instructions: in terms of IP address of the equipment, the factory default is 192.168.1.168. If you forget the IP address after modification, you can reset the equipment by pressing the rest button for 12 seconds when the equipment is powered on, and restore the factory default ip.

## 4.2 WIFI/AP SETTING

### 4.2.1 AP Mode

WIFI

WIFI

Wifi: Enable

Wifi mode: AP

AP

Wifi Essid: AP\_Encoder\_47752

Wifi password: 12345678

Wifi band: 2.4G

Wifi channel: 6

Apply

AP (Access Point) mode is default wireless status.

Default AP name is AP\_Encoder\_XXXX, you can search hotspot on smartphone or laptop. Default pass is 12345678.

Wifi band supports 2.4G/5.8G

Wifi channel: if wireless transmit is jam, you can try to switch channel

WIFI Status

WIFI SSID: AP\_Encoder\_47752

WIFI IP: 192.168.8.8

WIFI MAC: 7C:A7:B0:35:5C:1C

You also can check ap information on status page.

## 4.2.2 WIFI Mode

WIFI

WIFI

Wifi: Enable

Wifi mode: WIFI

WIFI Main Profile

Wifi List: unisheen\_5G(00:5A:13:46:55:1C/46dB/5805MHz) Refresh

Wifi Essid: unisheen\_5G

Wifi password: UNISHEEN715

Wifi DHCP: Disable

Wifi IP: 192.168.0.168

Wifi netmask: 255.255.255.0

Wifi gateway: 192.168.0.1

Select WIFI mode, you can click Refresh to scan hotspot after reboot



Fill correct hotspot name and pass and wifi ip. Click Apply button, reboot  
You will check the connection information on status page.

### WIFI Status

WIFI: COMPLETED  
WIFI SSID: HUAWEI-040M0N\_5G  
WIFI IP: 192.168.0.168  
WIFI MAC: 7C:A7:B0:35:5C:1C  
WIFI Level: 71%  
WIFI Freq: 5.745 GHz  
WIFI Max Bit Rate: 270 Mb/s

If the wifi level is under 60%, please check environment, it is better to visual range away from router.

## 5. Main Stream Encoding Setting

### 5.1 Encoding Setting of Main Stream

**Main stream**

Encoding Type: H.264 ▾

FPS:  [5-60]

GOP:  [5-300]

Bitrate(kbit):  [32-32000]

Encoded Size: same as the input ▾

H.264 Level: baseline profile ▾

Bitrate Control: cbr ▾

TS URL:  Enable ▾

HLS URL:  Disable ▾

FLV URL:  Enable ▾

RTSP URL:  Enable ▾

RTMP URL:  Disable ▾

RTMP/RTSP PUSH URL:  Disable ▾

Multicast IP:  Disable ▾

Multicast Port:  [1-65535]

Apply

5.1.1 Encoding Type: H.264 or H.265 or Mjpeg

5.1.2 Encode level: baseline profile / main profile / high profile

5.1.3 Encoding frame rate: 5-60 frames (it can output 60p When Input is 60p)

5.1.4 Bitrate control: VBR(quality priority) and CBR(bandwidth Priority)

5.1.5 GOP: 30

5.1.6 Encoding size: 1920x1080, 1680x1050, 1280x720, 1024x576, 850x480, 720x576, 720x540, 720x480, 720x404, 704x576, 640x480, 640x360, 608x488,

544x480,480x480,480x384,480x360,480x320,480x272,480x720,400x320  
,400x224,352x480,352x228,320x256,320x240,320x180,240x180,176x  
144

5.1.7 Video bit rate: 16-32000K

## 5.2 Main Stream Protocol Setting

UTP protocol(Private) ,Default address <http://192.168.1.168/0.utp>

HTTP protocol,Default address <http://192.168.1.168/0.ts>

HLS protocol,Default address <http://192.168.1.168/0.m3u8>

FLV protocol,Default address <http://192.168.1.168/0.flv>

RTSP protocol,Default address <rtsp://192.168.1.168/0>

RTMP pull stream address:

Default address <rtmp://192.168.1.168/live/0>

default port :1935

RTMP push stream address:

<rtmp://ip:port/xxx/xxx>

or

<rtmp://user:pass@ip:port/xxx/xxx>

RTMP default port: 1935

Multicast protocol,Default address <UDP://@238.0.0.1:1234>

Unicast protocol,Default address: <UDP://@192.168.1.50:1234> (Note:192.168.1.50  
is received device)

## 5.3 OSD Setting

Main stream

Alpha: 100 [0-128]

Zone 1

Zone: Enable ▾

Type: txt ▾

X: 10 [0-1920]

Y: 10 [0-1080]

Text:

Font Size: 36 [8-72]

Background Color: white ▾

Color:   [select color](#)

Zone 2

Zone: Disable ▾

Zone 3

Zone: Disable ▾

Zone 4

Zone: Disable ▾

[Apply](#)

5.3.1 Zone 1-4,you can enable max to 4 image or txt

Text, support English/number Character

Image, support 24bit BMP file ,less than 500KB,transparency color is **R:241 G:241 B:241**

5.3.2 X coordinate: the left and right positions displayed by 0-1920 text.

Y coordinate: the up and down positions displayed by 0-1080 text.

5.3.3 font: the size of 8-72 text display in the display screen.

5.3.4 Alpha: 0-128 , transparency

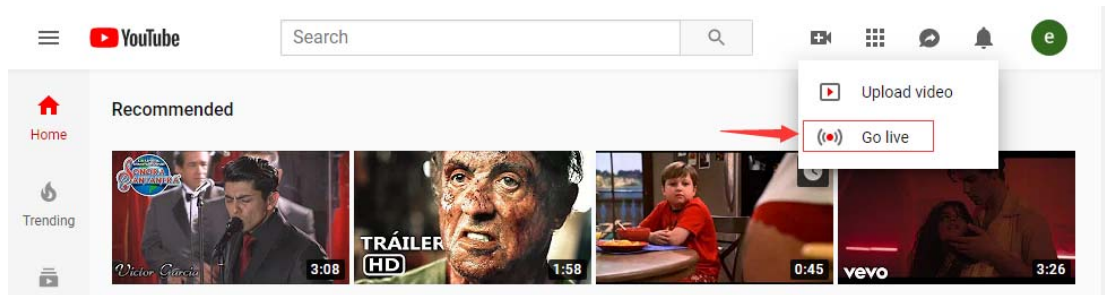
5.3.5 Logo: select logo files

## 5.4 Sub Stream Encoding Setting

**Note:** the setting method is as same as that of main stream

## 6. Instructions for Youtube Streaming

1.Open live streaming page on Youtube



2.Create a live stream channel

3.Copy rtmp address from Youtube

The whole address(part 1+part 2) is\_

***rtmp://a.rtmp.youtube.com/live2/87gg-dtd0-7atc-8zww***

4.Paste whole rtmp address into encoder

TS URL:	<input type="text" value="/0.ts"/>	Enable ▼
HLS URL:	<input type="text" value="/0.m3u8"/>	Disable ▼
FLV URL:	<input type="text" value="/0.flv"/>	Enable ▼
RTSP URL:	<input type="text" value="/0"/>	Enable ▼
RTMP URL:	<input type="text" value="/0"/>	Disable ▼
RTMP/RTSP PUSH URL:	<input type="text" value="rtmp://a.rtmp.youtubeve.com/live2/87gg-dtd0-7at"/>	Enable ▼
Multicast IP:	<input type="text" value="238.0.0.1"/>	Disable ▼
Multicast Port:	<input type="text" value="1234"/>	[1-65535]
<input type="button" value="Apply"/>		

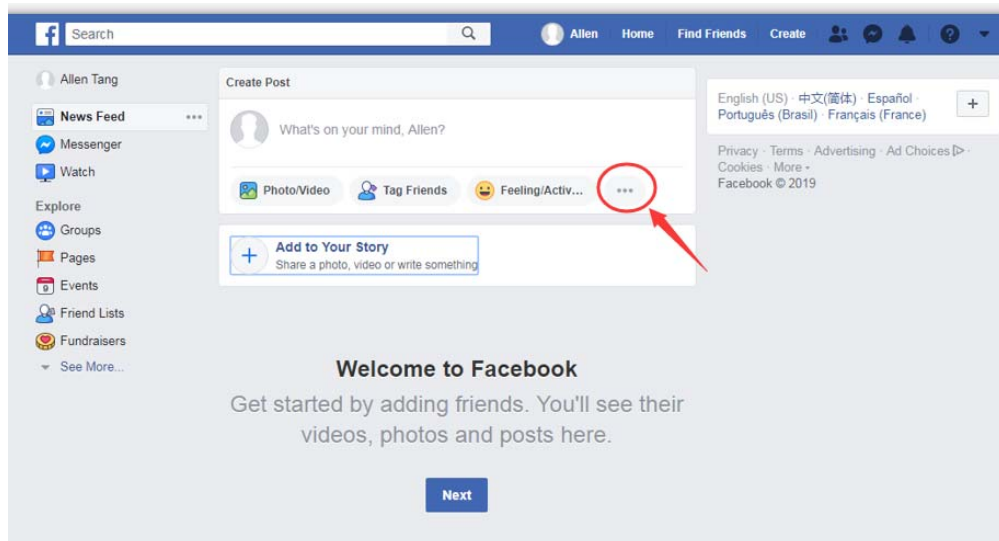
Paste whole rtmp address

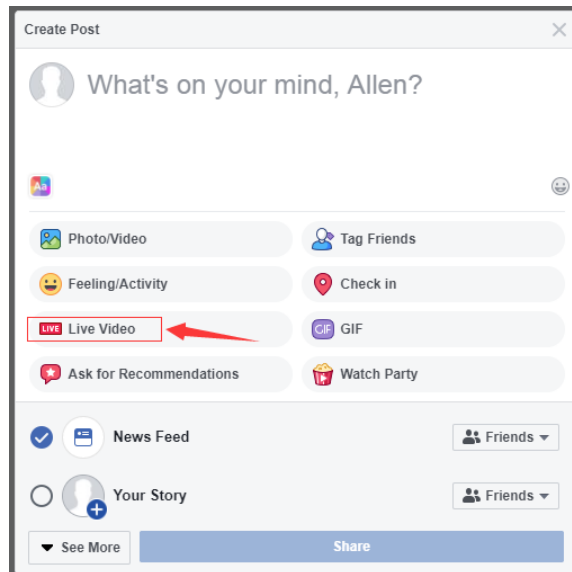
Enable it

Click Apply button

## 7. Instructions for Facebook Streaming

1. Open live streaming page on Youtube





2. Copy rtmp address from Facebook

**Connect Your Live Stream to the Live API**  
Use live streaming software or a hardware encoder. [Learn more](#)

1. Choose where you want to post your broadcast on the right.
2. Preview your broadcast with a stream key or paired encoder.

☒ **Stream Key** ☐ Paired Encoder

Enter the information below into your software's settings.

☒ Use a secure connection (SSL) ⓘ

☒ Use a persistent stream key ⓘ

☒ Use a backup stream ⓘ

Server URL ⓘ

1  [Copy](#)

Stream Key ⓘ

2  [Copy](#)

3. Select **Go Live** in the bottom right corner.

The whole address(part 1+part 2) is\_  
**rtmps://live-api-s.facebook.com:443/rtmp/143998560119176?s\_bi=1&.....DIGXA**

TS URL:	<input type="text" value="/0.ts"/>	Enable ▼
HLS URL:	<input type="text" value="/0.m3u8"/>	Disable ▼
FLV URL:	<input type="text" value="/0.flv"/>	Enable ▼
RTSP URL:	<input type="text" value="/0"/>	Enable ▼
RTMP URL:	<input type="text" value="/0"/>	Disable ▼
RTMP/RTSP PUSH URL:	<input type="text" value="rtmps://live-api-s.facebook.com:443/rtmp/14399"/>	Enable ▼
Multicast IP:	<input type="text" value="238.0.0.1"/>	Disable ▼
Multicast Port:	<input type="text" value="1234"/>	[1-65535]

**Apply**

Paste whole rtmp address

Enable it

Click Apply button

## 8. Audio Encoding Settings

<b>Audio</b>	
Audio Input:	HDMI Audio ▼
Sampling Rate:	44100 ▼
Encoder:	AAC ▼
Audio Channel:	L+R ▼
Bitrate:	<input type="text" value="128000"/> [48000~320000]
Digital Volume:	<input type="text" value="0"/> [-50~50]
G711A Over UTP:	Enable ▼
<b>ONVIF Audio</b>	
G711A Over RTSP:	Disable ▼
G711:	G711A ▼
<b>Apply</b>	

Audio Bit rate: 48K, 64K, 96K, 128K, 160K, 192K and 256K

Audio type: AAC,AAC+,MP3, MP2,AC3,G711A,G711U

Audio resample: 44100,48000

## 9. System Settings

9.1 User name and password change

Password

Old password:

New password:

Confirm new password:

Apply

## 9.2 Software upgrade

Language: English

Version : 3.34

Upgrade:

选择文件 未选择任何文件

(Upgrade file name is up.bin.Please don't upload by different people at the same time,don't power off or refresh the page during upload.)

Upload

## 9.3 System settings: Device reset and initialization default settings

Reset

Restore the device to factory settings.

Reset



This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

-Reorient or relocate the receiving antenna.

-Increase the separation between the equipment and receiver.

-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

-Consult the dealer or an experienced radio/TV technician for help.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.