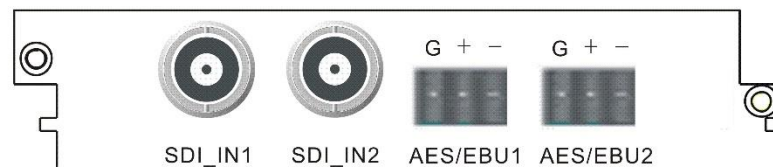# MPEG-2/H.264 Digital Encoding Card (C130DS)

User Guide

1. Product Introduction

This is the operation guide for C130DS card, which can realize 2 digital program encoding. This card can support digital MPEG-2/H.246 video encoding and MPEG-1 Layer II, AC-3, AAC-LC, HE-AAC audio encoding.

- SDI_IN1: the first digital video and embedded audio input.
- SDI_IN2: the second digital video and embedded audio input.
- AES/EBU1: the first digital stereo audio input.
- AES/EBU2: the second digital stereo audio input.
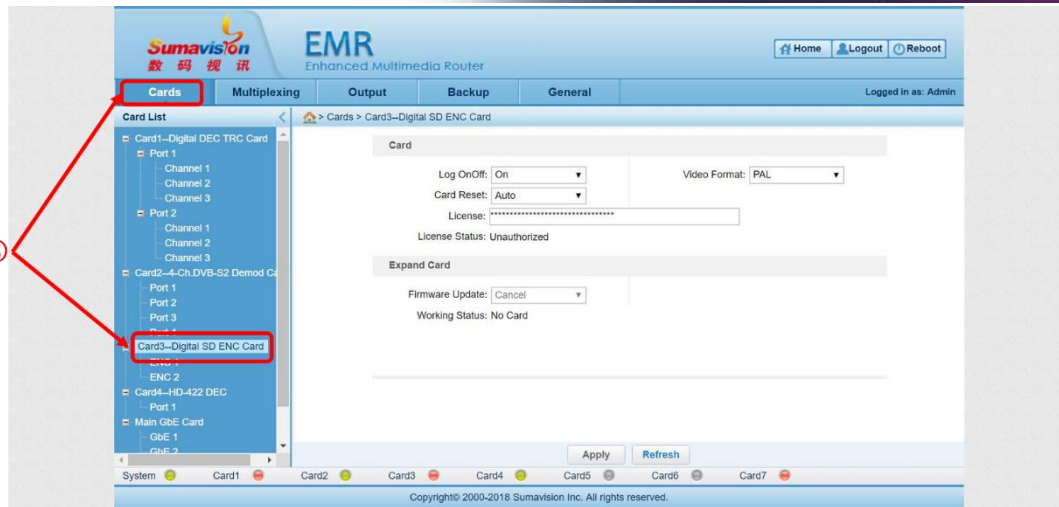
2. Web Management Configuration

Step①: Open the web browser (e.g. IE 8 or above, Firefox, Chrome recommended), enter IP address of EMR 3.0 (check it from the front panel by pressing the button near the LCD display about 4 seconds) in the address bar, then type in a valid username and password to login.

Default username and password are as follows:
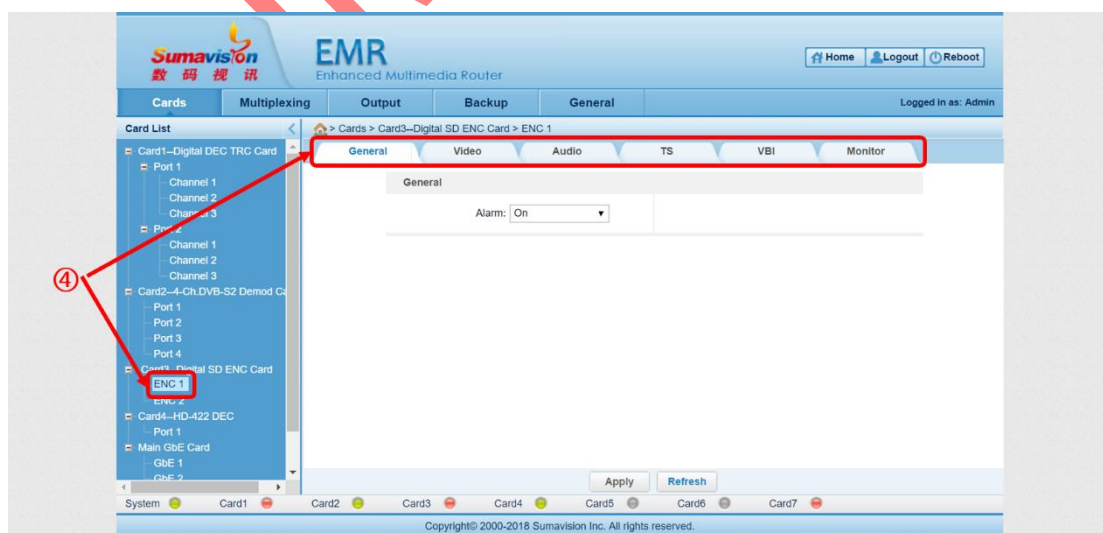
Username: Admin

Password: sumavisionrd

Step②: Choose a language, for example **[English];**

Step③: Click **[Cards]** to get the card list of EMR 3.0, choose **[Digital SD ENC Card]**.

● Turn on **[Log OnOff]** to enable normal working.

● Choose **[Video Format]**, PAL or NTSC.

● Choose **[Card Reset]**, cancel, reset or auto. Auto is recommended.

● License needs authorization.

After that, please press " Apply " to save.

Contact Us

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Tel: +86-10-82345859/69/70   Fax: +86 10 62978800
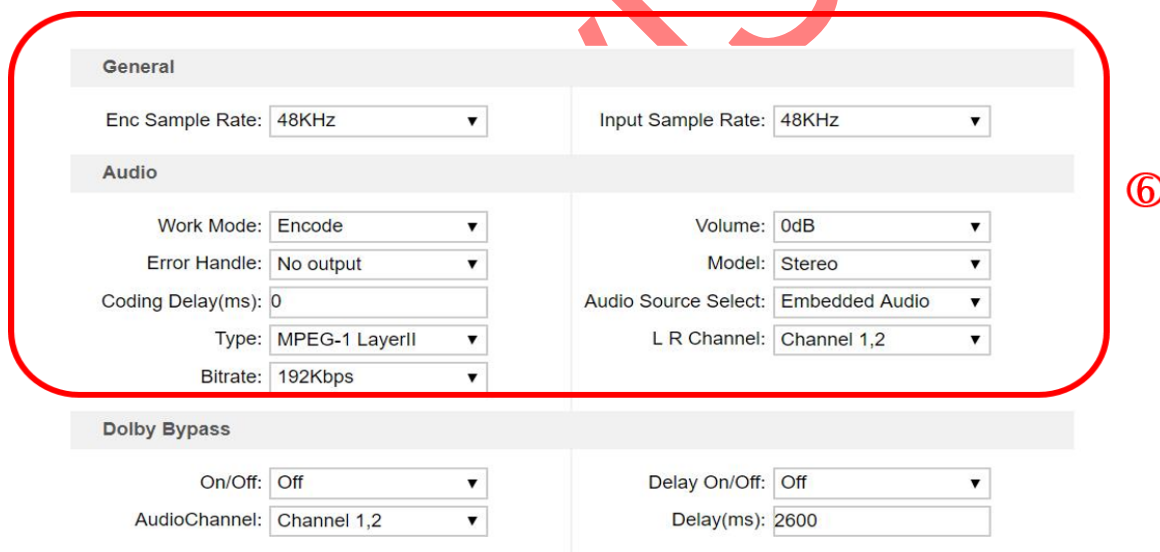Email: worldmarket@sumavision.com   Website: www.sumavision.com   **Sumavision Confidential**

Step④: Take the first channel as example, click the **[ENC 1]** and the subtitles are as follows, including **[general]**, **[Video]**, **[Audio]**, **[TS]**, **[VBI]** and **[Monitor]**.

Step⑤: **[Video]**

- Keep the status of **[On/Off]** on to enable video encoding.

- Choose **[Error Bar]**, color bar, black screen, no output, freeze. Color bar is recommended.

- Turn off the **[Down Scaling On/Off]**.

- Choose **[Scale Method]**, letterbox or full screen.

- Choose **[Encoding Format]**, H.264 or MPEG-2 based on the demands of customers.

- Choose **[H264 Profile]**, main or high. Main is recommended.

- Choose **[Resolution]**, based on the actual situation. D1(704x576, 720x576) is fairly common.

- Type in a value on **[Bitrate (bps)]**, around 4200000 is recommended, especially for CBR bitrate mode.

- Choose **[GOP Structure]**, IBBP is recommended.

- Type in **[GOP Size]**, 12 is recommended.

- Choose **[GOP Type]**, open GOP or closed GOP. Open GOP is recommended.

- Choose **[Aspect Radio]**, based on the actual situation.

- Choose **[Flied Order]**, top flied first or bottom flied first.

- Choose **[IDR Frequency]**, no IDR, one IDR every one I-frame, one IDR every two I-frames or one IDR every three I-frames.

- Choose **[Entropy Coding]**, CAVLC or CABAC, based on the actual situation.

Step⑥: **[Audio]**

- Choose **[Enc Sample Rate]** and **[Input Sample Rate]**, 32KHz, 44.1KHz or 48KHz.

- Keep the status of **[Work Mode]** as encode.

- Type in a value of **[Coding Delay(ms)]**, based on the actual situation.
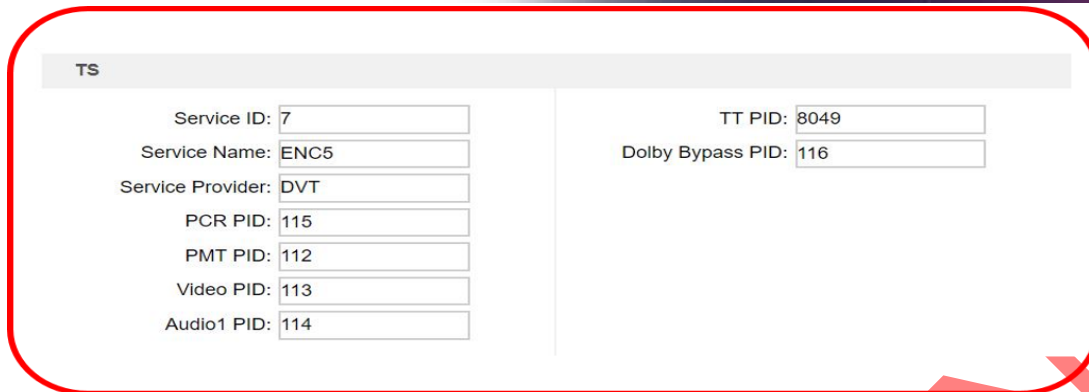
- Choose audio encoding **[Type]**, MPEG-1 Layer II, AAC-LC, HEAAC-V1 or HEAAC-V2.

- Choose **[Bitrate]** for audio bitrate. 192Kbps is recommended.

- Choose **[Volume]** for output gain.

- Choose **[Model]**, stereo is fairly common.

- Choose **[Audio Source Select]**, embedded audio or digital audio, based on the actual situation.

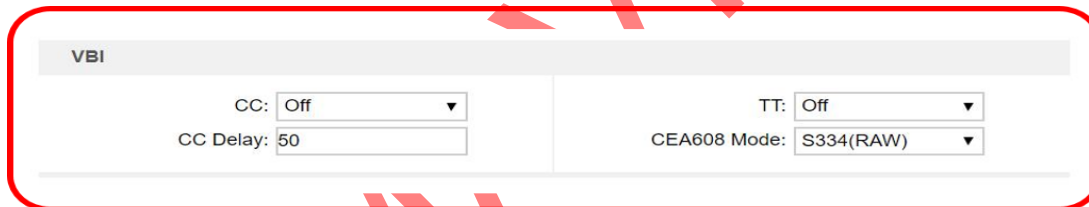- Choose **[L R Channel]** based on the actual situation.

Step⑦: **[Dolby Bypass]**

- Choose the switch **[on/off]**, on or off, based on the actual demands.

- Choose **[Audio Channel]** based on the actual situation.

- Choose the **[Delay On/Off]**, on or off.

- Type in a value of **[Delay(ms)]** from 100 to 6000 based on the actual situation.

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⑧

Step⑧: **[TS]**

According to the operation of multiplexing, make some relevant edit of Transport-Streaming. Type in **[Service ID]**, **[Service Name]**, **[Service Provider]**, and PID for PCR, PMT, Video, Audio, TT and Dolby Bypass.
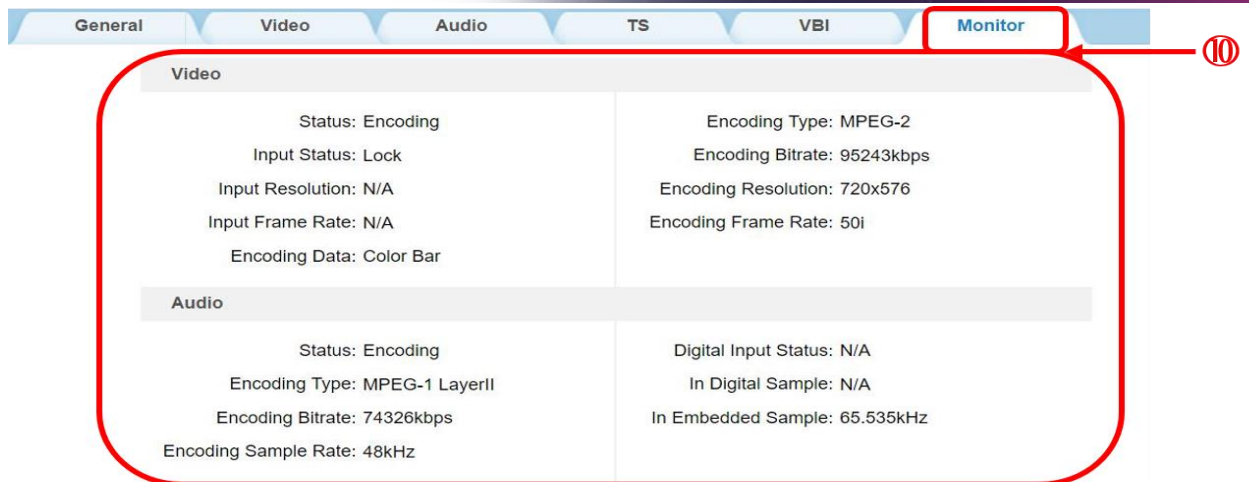

⑨

Step⑨: **[VBI]**

When CC or TT function is needed, please switch it on. And also you can type in a value of **[CC Delay]** based on the actual situation.

Note: CC and TT can not be switched on at the same time.

When all the settings finished, press **[Apply]** at the bottom of the page to save.

Step⑩: **[Monitor] (Advanced function)**

Support video and audio monitor function, which could keep the encoding processing normal. Provide various monitor modes including encoding type, encoding bitrate, resolution, encoding frame rate and so on.

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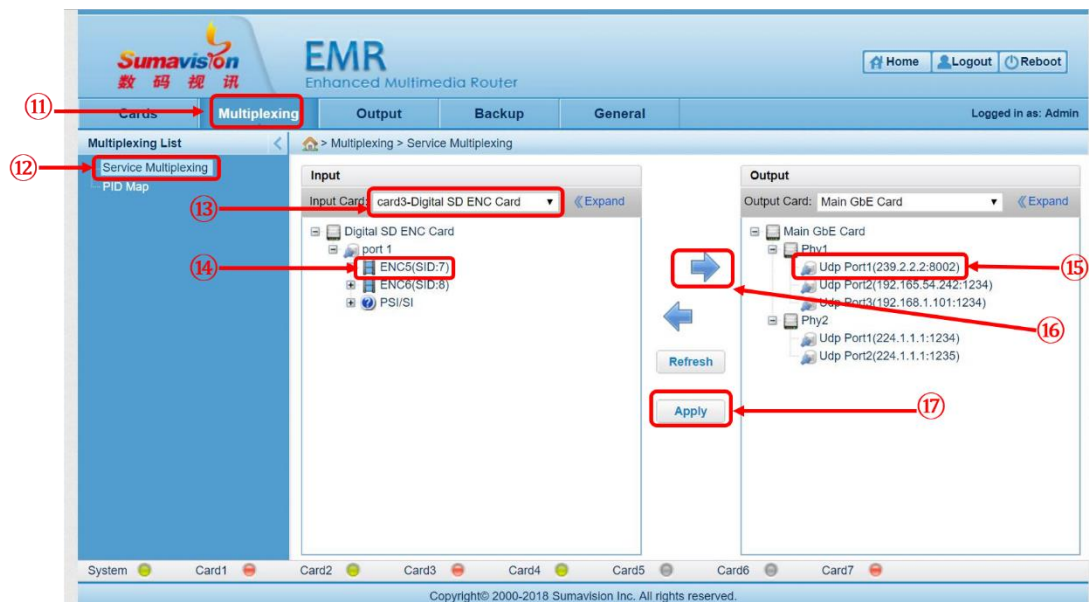Tel: +86-10-82345859/69/70   Fax: +86 10 62978800
Email: worldmarket@sumavision.com   Website: www.sumavision.com   **Sumavision Confidential**

3. Program Multiplexing

Step⑪: Press **[Multiplexing]**.

Step⑫: Press **[Service Multiplexing]**.

Step⑬: Choose the encoding card.

Step⑭: Choose the encoding program.

Step⑮: Choose the output port.

Step⑯: Click" ➡ "to multiplex the program to output.

Step⑰: Click **[Apply]** to save.