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XIO 9010DES-4AUD analog to digital video embed module

User Manual V1.0

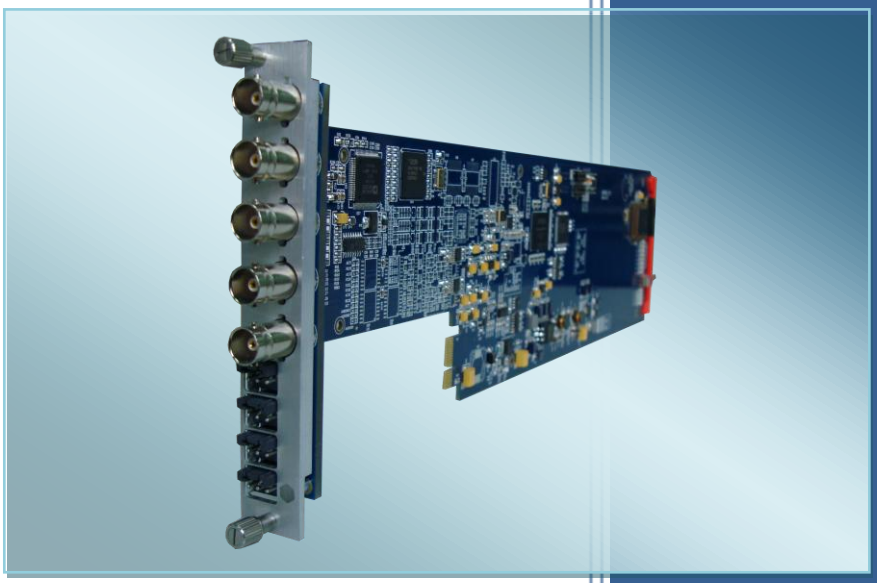

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Table Content

XIO 9010DES-4AUD analog to digital video embed module

Ⅰ Description

XIO 9010DES-4AUD is an embed module of converting analog to digital video which based on the newly XIO video& audio processing platform with high performance. The modular platform can be used to various processes, such as convert, display and distribution of 3G, SD/HD.

XIO 9010DES-4AUD is a high-quality composite analog video with embedded 4 analog audio to 2 SD-SDI signals which supports frame synchronization. The module supports one ex-phase locking interface as well as XIO platform overall phase locking. The LED indicator shows signal information directly. The amplifier can be used together with XIO NET of managing network because of its inner setting SNMP protocol, it is also dedicated in real-time communication with third party monitoring via Ethernet to enable operator get working status easily.

Ⅱ XIO 9010DES-4AUD Input& output

Input: 1 channel CVBS, PAL&NTSC

1 BB signal, PAL&NTSC

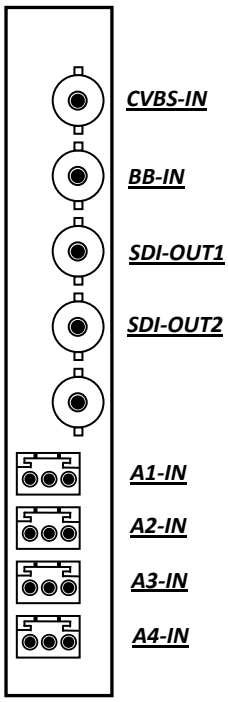
4 channels balanced analog audio

Output: 2 channels embedded SD-SDI, 525i60& 625i50

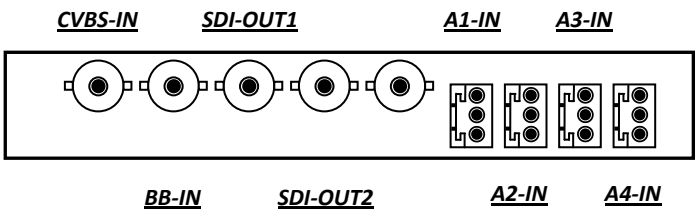
- Synchronization, Adjustment of H-phase and V-phase are supported

Ⅲ XIO 9010DES-4AUD rear panel

3.1 XIO 9010DES-4AUD 3U rear panel diagram

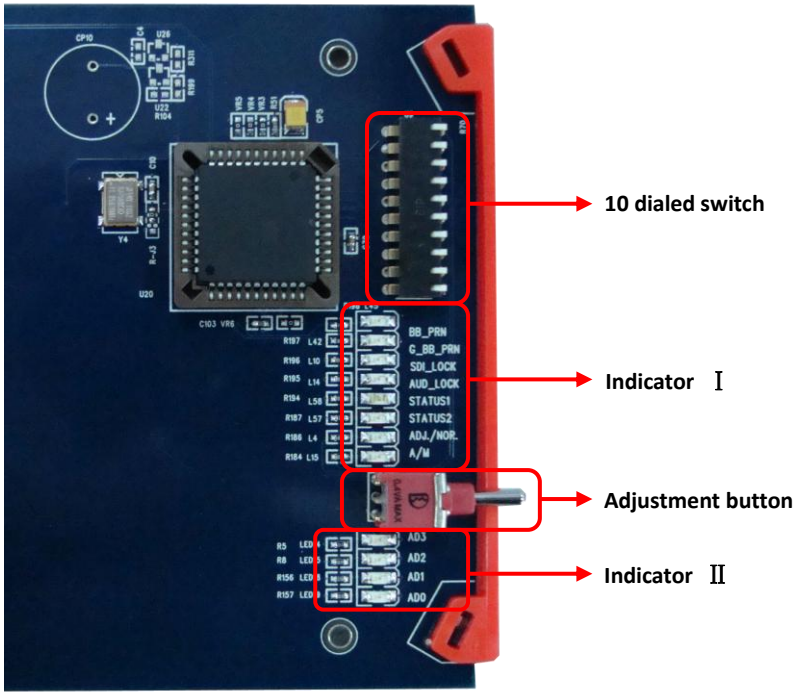


3.2 XIO 9010DES-4AUD 1U rear panel diagram



Remarks: A1-IN is the left channel of track A; A2-IN is the right channel of track A; A3-IN is the left channel of track B; A4-IN is the right channel of track B.

Ⅳ XIO 9010DES-4AUD detailed description



1. Indicator Ⅰ

Name	Color	Meaning
BB_PRN	**Green**	On: the access of external sync. signal is normal Off: the access of external sync. signal is abnormal, or the status is inner sync.
G_BB_PRN	**Green**	On: the access of overall extra sync. signal (XIO NET BB) is normal and it is under external sync. working status Off: the access of overall external sync. signal (XIO NET BB) is abnormal and it is under inner sync. working status
SDI_LOCK	**Green**	On: the access of composite analog signal is normal Off: the access of composite analog signal is abnormal
AUD_LOCK	**Green**	On: the embedded audio works normal Off: the embedded audio works abnormal
STATUS1	----	--------
STATUS2	----	--------

ADJ./NOR.	**Green**	On: the tenth dialed switch is on “ON”(Adjustment status) Off: the tenth dialed switch is on “OFF”(Working status)
A/M	**Green**	On: the first dialed switch is on “ON”(Auto status) Off: the first dialed switch is on “OFF”(Manually status)

2. Indicator Ⅱ

Name	Color	Meaning
AD0	**Green**	On: 1; Off: 0
AD1	**Green**	On: 2; Off: 0
AD2	**Green**	On: 4; Off: 0
AD3	**Green**	On: 8; Off: 0

This indicator sequence is used to indicate the current module in the specific slots. It displays up to 16 slots by the combination of the “ON” and”OFF”.

3. 10 dialed switch and adjustment/ select button

To accomplish every function by apply the combination of these two switches.

10 is a dialed switch: To choose different function by set the various combination of “ON” &“OFF”. Press-“ON”, Up-“OFF”

Adjustment/select: makes sure the setting is done by click the switch upward or downward. Click upward for continuous settings, click downward clicked for single-step settings.

4. XIO 9010DES-4AUD function setting:

序号	DIP switch:	1	2	3	4	5	6	7	8	9	10
1	**Steplength is 1**	M/A	OFF	OFF	OFF	OFF	OFF	+/-			Adj/Normal
2	**Steplength is 20**	M/A	OFF	OFF	OFF	OFF	ON	+/-			Adj/Normal
3	**Overall extra phase lock**	M/A	OFF	OFF	OFF	ON	ON	+/-			Adj/Normal
4	**Inner phase lock**	M/A	OFF	OFF	ON	OFF	OFF	+/-			Adj/Normal
5	**Single extra phase lock**	M/A	OFF	OFF	ON	OFF	ON	+/-			Adj/Normal
6	**H-phase adjustment**	M/A	OFF	OFF	ON	ON	OFF	+/-			Adj/Normal
7	**V-phase adjustment**	M/A	OFF	OFF	ON	ON	ON	+/-			Adj/Normal
8	**Embed to audio group 1**	M/A	OFF	ON	OFF	OFF	OFF	+/-			Adj/Normal
9	**Embed to audio group 2**	M/A	OFF	ON	OFF	OFF	ON	+/-			Adj/Normal
10	**Embed to audio group 3**	M/A	OFF	ON	OFF	ON	OFF	+/-			Adj/Normal
11	**Embed to audio group 4**	M/A	OFF	ON	OFF	ON	ON	+/-			Adj/Normal
12	**Original audio output of channel A**	M/A	OFF	ON	ON	OFF	OFF	+/-			Adj/Normal
13	**L/R channel interchange of track A**	M/A	OFF	ON	ON	OFF	ON	+/-			Adj/Normal
14	**Left channel output of track A**	M/A	OFF	ON	ON	ON	ON	+/-			Adj/Normal
15	**Right channel output of track A**	M/A	OFF	ON	ON	ON	OFF	+/-			Adj/Normal
16	**Mixed output of track A**	M/A	ON	OFF	OFF	OFF	OFF	+/-			Adj/Normal
17	**Right channel gain of track A**	M/A	ON	OFF	ON	ON	OFF	+/-			Adj/Normal
18	**Left channel gain of track A**	M/A	ON	OFF	ON	ON	ON	+/-			Adj/Normal
19	**Direct output of track A**	M/A	ON	ON	OFF	ON	OFF	+/-			Adj/Normal
20	**Output after adj of track A**	M/A	ON	ON	OFF	ON	ON	+/-			Adj/Normal
21	**Original output of track B**	M/A	ON	OFF	OFF	OFF	ON	+/-			Adj/Normal
22	**L/R channel interchange of track B**	M/A	ON	OFF	OFF	ON	OFF	+/-			Adj/Normal
23	**Left channel output of track** B	M/A	ON	OFF	ON	OFF	OFF	+/-			Adj/Normal
24	**Right channel output of track B**	M/A	ON	OFF	OFF	ON	ON	+/-			Adj/Normal
25	**Mixed output of track B**	M/A	ON	OFF	ON	OFF	ON	+/-			Adj/Normal
26	**Right channel gain of track B**	M/A	ON	ON	OFF	OFF	OFF	+/-			Adj/Normal
27	**Left channel gain of track B**	M/A	ON	ON	OFF	OFF	ON	+/-			Adj/Normal
28	**Direct output of track B**	M/A	ON	ON	ON	OFF	OFF	+/-			Adj/Normal
29	**Output after adj of track B**	M/A	ON	ON	ON	OFF	ON	+/-			Adj/Normal
30	**Save parameters**	M/A	ON	ON	ON	ON	OFF	+/-			Adj/Normal
31	**Access to users' parameters**	M/A	ON	ON	ON	ON	ON	+/-			Adj/Normal
32	**Set the serial number in auto mode**	ON	X	X	X	X	OFF	OFF			Adj/Normal
33	**Initial setting**	ON	X	X	X	X	ON	OFF			Adj/Normal
34	**Set PAL**	ON	OFF	OFF	OFF	OFF	OFF	ON			Adj/Normal
35	**Set NTSC**	ON	OFF	OFF	OFF	OFF	ON	ON			Adj/Normal

36	**Auto Gain**	ON	OFF	OFF	OFF	ON	+/-	ON			Adj/Normal
37	**Gain adj(Light gain alignment)**	ON	OFF	OFF	ON	OFF	+/-	ON			Adj/Normal
38	**Separate adjustment of luma and chroma**	ON	OFF	OFF	ON	ON	+/-	ON			Adj/Normal
39	**The gain adjustment of luma**	ON	OFF	ON	OFF	OFF	+/-	ON			Adj/Normal
40	**The gain adjustment of chroma**	ON	OFF	ON	OFF	ON	+/-	ON			Adj/Normal

Remarks: i Set the “Bit 1” at “ON”, Bit 0（10）at ”Off”, at the external network automatic management mode（Parameters can be adjusted by network control）;

ii Set the Bit 10 at “ON”, the module at adjustment mode;

iii Set Bit 10 at “OFF” when it is working, or the signal stability will be influenced.

iv If users need to adjust the gain of any audio track, please choose “track* output after the adjustment” mode. Otherwise, it will be useless.

v The interchange of left and right audio channel is just the change of original audio without the gain.

Ⅴ XIO 9010DES-4AUD Technical specification

Analog video input:

Input interface: 1*CVBS, BNC connection

Impedance: 75Ω

Format: PAL/NTSC

Return loss: > 40dB to5.8MHz

Reference input:

Signal style: analog composite video signal

Input: 1*CVBS, BNC

Format: PAL/NTSC

Impedance: 75Ω

Digital video output：

Output interface: 2*SD-SDI, BNC connection

Impedance: 75Ω

Format: 525i60/625i50

Format: SMPTE 259M-C；270Mb/s

Return loss: > 15dB to 270MHz

Signal amplitude: 800mV±10%

Overshoot: < 80mV

Jitter: < 740ps

Risen and fallen time: < 1500ps

Differential of risen and fallen time: < 500ps

Dc level displacement: 0V±500mV

Analog audio input:

Input interface: 4*3pin, 3pin balanced audio

Impedance: 600Ω

Max input level: +24dBu (0dbFS)

Sampling rate: 48KHz

Amplitude frequency:	< ±0.04dB @ 20Hz to 20KHz
SNR:	>80dB
THD+N：	-90dB @ 1KHz

Ⅵ Contact Us

Technical support

Tel:010-58858188

Fax:010-58858189

Website

www.gefei-tech.com

E-mail：support@gefei-tech.com

Address

Beijing Gefei Tech. Co., Ltd

A-603 Power Creative Plaza

NO.1 Shangdi E.Rd.

Haidian District Beijing 100085

To find more information, please visit www.gefei-tech.com