



English

RSYNC

synchronization card



A U D I O E X C E L L E N C E



event of a switchover or failure of a sync source, so that there are never dropouts or crackles in the audio. In conjunction with a cleverly defined sync hierarchy, the board offers a wide range of connection options that ensure that the NEXUS system synchronizes itself to the current application, stabilizes this sync and passes it on to other systems.

Inputs for word clock and video sync

The NEXUS network can be synchronized via the RSYNC card using word clock or video sync signals; dedicated inputs are provided for this purpose.

Automatic detection of the video format

When a video sync signal is connected, the RSYNC module automatically recognizes which format is present.

Support of Bi- and Tri-Level-Sync

The video input accepts a selection of different signals, such as composite, component. In addition, modern tri-level sync signals can also be used for synchronization.

Configuration option for 75 and 500

Ohm

To enable the serial connection of several loads to a word clock source, the input impedance can be adjusted from 75 to 500 ohms by jumper.

Synchronization to AES/EBU signals

In addition to the BNC connectors, there is a 15-pin Sub-D connector on the front panel for connecting AES/EBU signals. The audio signal is not evaluated by the RCX.

Connections			
RSYNC_1	1x 4TE		
BNC	1x	Bi- und Tri-Level Sync	Input
BNC	1x	Wordclock	Output
BNC	1x	Wordclock	Input
BNC	1x	AES/EBU	Output
BNC	1x	AES/EBU	Input
D-Sub 15 Socked female	1x	AES/EBU	bidirektional

Technical specifications	
Features	
Inputs	video, wordclock, and AES/EBU
Outputs	Word Clock and AES/EBU
Video input	
Design	galvanic isolation
Sensitivity	1 V nom. (0.5...2 VPP)
Impedance	75 ohm
Required stability	< ±100 ppm (typ. ±50 ppm, AES 11, Grade 2 compliant)
SD formats (NTSC, PAL)	525 lines interlaced, 59,94/60 Hz (NTSC) 525 lines progressive, 59,94/60 Hz (NTSC) 625 lines interlaced, 50 Hz (PAL) 625 lines progressive, 50 Hz (PAL)

Technical specifications	
HD formats (SMPTE 296M)	720 lines progressive, 50, 59.94 and 60 Hz
HD formats (SMPTE 274M, SMPTE 260M)	1035 lines interlaced, 59,94/60 Hz 1080 lines interlaced, 50, 59,94 und 60 Hz 1080 lines progressive, 23,98, 24, 25, 29,97, 30, 50, 59,94, 60 Hz
Wordclock in	
Design	balanced, electrically separated
Sensitivity	TTL, 1...5 V
Impedance	75/500 ohm (jumper-configurable)
Sample Rates	44,1 kHz, 48 kHz, 88,2 kHz, 96 kHz
Required stability	< ±150 ppm (typ. ±50 ppm, AES 11, Grade 2 compliant)
Wordclock out	
Design	balanced, electrically separated
AC/DC-coupled	jumper-configurable
Level	≥ 2,4 V an RL = 75 ohm
Impedance	75 ohm
Sample rates	44,1 kHz, 48 kHz, 88,2 kHz, 96 kHz
NEXUS frequency stability	min. ±10 ppm, typ. ±5 ppm (when using internal generator)
AES/EBU input	
Design	balanced, electrically separated
Ground connection	configurable on D-Sub port
Input voltage	±0,2...7 V
Impedance	75 ohm (BNC), 110 ohm (D-Sub)
Sample rates	44,1 kHz, 48 kHz, 88,2 kHz, 96 kHz
Required stability	< ±150 ppm (typ. ±50 ppm, AES 11, Grade 2 compliant)
AES/EBU output	
Design	balanced, electrically separated
Ground connection	configurable for D-Sub connectors
Impedance	75 ohm (BNC), 110 ohm (D-Sub)
Level	1 VPP nom. on RL = 75 ohm (BNC output), > 2 VPP on RL = 110 ohm (D-Sub out)
Sample rate	44,1 kHz, 48 kHz, 88,2 kHz, 96 kHz
Frequency stability	min. ±10 ppm, typ. ±5 ppm (when using internal generator)
Operation conditions	
Temperature range	0 °C bis +50 °C
max humidity	max. 90 %, non-condensing
Storage conditions	
Temperature range	-35 °C bis +70 °C
max humidity	max. 90 %, non-condensing
Power supply	
Voltage	+4,75...5,25 V
Current	ca. 0,4 A
Mechanical data	
Weight	0,43 Kg

Stage Tec NEXUS: A global reference!*



*The map shows selected reference locations. To date more than 1,000 Stage Tec NEXUS systems have been delivered and installed worldwide.

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