Video-Audio Generator and Distribution Modules

UR-200 with xxx-200 modules and two power supplies

BTESA's modular series of Video and Audio equipment for broadcast applications is based on a 19"/2U frame (**UR-200**) capable of housing up to eight modules in any combination and one or two power supply modules.

When fitted with two power supply modules, they provide power redundancy for all the modules in the frame.
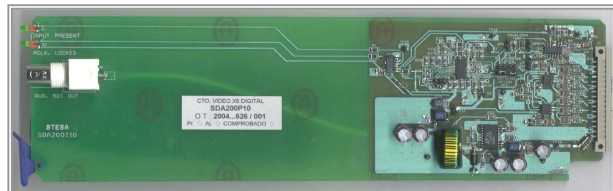
The current complement of modules consists of a Video-Audio Generator, a Digital Video Distribution Amplifier, an Analogue Video Distribution Amplifier, an Analogue Audio Distribution Amplifier, an AC Power Supply and a 48VDC Power Supply.

MAIN FEATURES

- 19" / 2 RU Frame (19" / 1 RU frame planned)
- Up to eight modules and two power supplies in the frame.
- Power Redundancy with two power supply modules

SDA-200   Digital Video Distribution Amplifier

BTESA's SDA200 is a digital video distribution amplifier that meets the most demanding requirements of ITU-R and SMPTE recommendations for 525 and 625 lines digital systems.
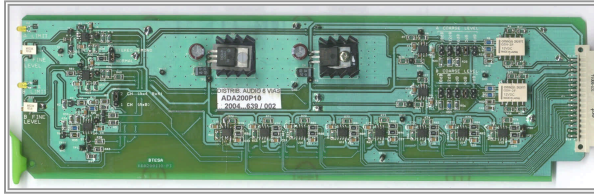
It provides 8 outputs (one of them at the front), terminated input (AC coupled) with reclocking, automatic equalization up to 300m and bit rate auto detection of 143, 177, 270 and 360 Mbps.

MAIN FEATURES

- 8 outputs per module (one of them at front)
- AC coupled, 75Ω terminated input with auto equalization up to 300m.
- Input reclocking at 143, 177, 270 and 360 Mbps with bit rate auto detection.
- Front LED indication of input signal presence and reclocking lock.
- Low power consumption.
- Rear connector panel included with each module.

ADA-200 Analogue Audio Distribution Amplifier

BTESA's ADA200 is a dual channel analogue audio distribution amplifier which can be configured for stereo distribution, mono distribution or for stereo summed mono output (factory fitted option)
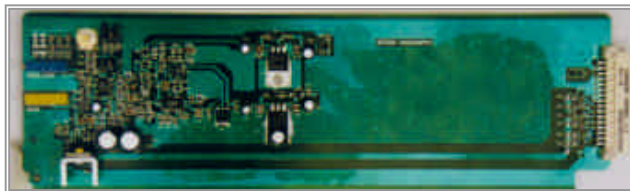
Gain adjustment potentiometers (1 per channel) are accessible at the module front. Channel clipping is indicated by an LED close to channel gain potentiometer.

MAIN FEATURES

- Configurable: 2 channels x 4 outputs per channel or 1 channel x 8 outputs
- Balanced inputs and outputs.
- Mono output by stereo summing (factory fitted option)
- Front LED indication of output limiting.
- Low power consumption.
- Rear connector panel included with each module.

VDA-200 Analogue Video Distribution Amplifier

BTESA's VDA200 is a state of the art distribution amplifier for composite and component analogue video signals that meets the most demanding requirements of ITU-R recommendations for PAL and NTSC standards.

It provides 6 outputs, loop-though input (AC coupled) with hard / soft campling selection and equalization up to 300m cable.

MAIN FEATURES

- 6 outputs per module.
- AC coupled loop-through input.
- Balanced input selection by jumper.
- Cable equalization up to 300m.
- Front panel gain adjustment.
- Separate signal and protective ground (can be linked by jumper)
- Low power consumption.
- Rear connector panel included with each module.

SPECIFICATIONS

SDA-200

Signal type	SMPTE 259M serial digital video)	Number of outputs	8 (one at front of module)
Input impedance	75Ω ±1%	Output amplitude (Impedance)	800mVpp ±10% (75Ω ±1%)
Input Cable Equalization	Automatic 0 – 300m Belden 8281 or equivalent	Reclocking	Automatic for 143, 177, 270 and 360 Mbps
Input return loss	Better than 15dB (5 to 270MHz)	Output return loss	Better than 15dB (5 to 270MHz)
LED indications	Input signal present Reclocking locked	Output jitter	< 0.3 ns pp @ 270Mbps
Power consumption	< 2 W		
Temperature range	0ºC to 55ºC	Dimensions	1 slot in UR-200 frame

Models and specifications subject to change without notice

SPECIFICATIONS

VDA-200

Input type (impedance)	AC coupled, Differential, Looping (75Ω ±1%)	Number of outputs (impedance)	6 (75Ω ±1%)
Input return loss	> 40dB (to 8MHz)	Output return loss	> 36dB (to 8MHz)
Input Cable Equalization	Up to 300m Belden 8281 or equivalent	Isolation between outputs	> 35dB (to 10MHz)
CMRR	> 60dB (50Hz)	Black level	0 V ±20mV
Frequency response	±0.05dB to 5 MHz ± 0.1 dB to 10 MHz	Gain adjustment	-1.5dB to +2.5dB
Input-Output delay	20ns ± 2ns	Kpb	< 0.1%
Differential gain	< 0.1% (1 Vpp output)	Kb	< 0.1%
Lum/chroma delay	< 1ns	Differential phase	< 0.1º (1 Vpp output)
Clamping	Soft / Hard (selectable)	Lum/chroma gain	< 0.02 dB
Serial Hum rejection	> 20dB (hard clamping)	S/N unweighed (40Hz-10MHz)	70dB
Power consumption	< 4W		
Temperature range	0ºC to 55ºC	Dimensions	1 slot in UR-200 frame

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SPECIFICATIONS

ADA-200

Input impedance	40kΩ , balanced	**Output impedance**	66Ω, balanced
Maximum input level	+24dBu (gain jumper in 0dB) +30dBu (gain jumper in -6B)	**Number of outputs** - **Dual channel** - **Single channel** - **Mono converter**	4 outputs per channel 8 outputs Stereo input to 8 mono outputs
Maximum output level	+24dBu	**Frequency response**	±0.05dB 20Hz to 20kHz (relative to 1kHz)
CMRR	> 73dB @ 50Hz > 60dB @ 20KHz	**Common mode range**	± 12 V
S/N	> 85dB, unweighted (20Hz to 20KHz)	**THD+N**	< 0.01%, 20Hz to 20KHz @ max. level
Channel to channel crosstalk	< -70dB, 20Hz to 20KHz	**Total gain control**	-14 to +26dB
Coarse gain setup	-6 to +18dB in 6dB steps (jumper selectable)	**Continuous gain trim**	> ± 8dB by front panel potentiometer
Overload warning LED	**ON** at 0.5dB below clipping	**Power consumption**	< 5 W
Temperature range	0ºC to 55ºC	**Dimensions**	1 slot in UR-200 frame

0dBu = 0.775V unloaded

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