

270 Mb/s SDI Digital Audio Extractor Type DAX-3206

Features:

- Standard 75 Ω 270 Mbit/s video input
- Standard 75 Ω 270 Mbit/s video output
- Extracts embedded audio
(Supports 48 kHz Synchronous and Asynchronous level A & D audio packet decoding)
- Supports 525 & 625 line standards
- Indicators / external alarms for loss of carrier & audio
- Automatic input equaliser to > 250 m
- Four high quality analogue audio outputs
- Two 110 Ω balanced or 75 Ω unbalanced AES outputs
- IRT Eurocard format
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General:

The DAX-3206 is a high performance embedded audio extractor for 270 Mbit SDI video signals. It is primarily designed to operate with IRT's DAI-3206 digital audio inserter but will work on any embedded SDI source.

A typical SDI signal may contain up to eight audio pairs arranged in four groups. Each DAX-3206 is capable of extracting one audio group (2 AES / 4 analogue) from those available. Selection is made via a front panel local control switch.

The DAX-3206 supports AES/EBU synchronous and asynchronous audio at 48 kHz, 20-bit audio data packets.

Both analogue and digital audio outputs are provided so that the one module may be used for all applications in monitoring and processing.

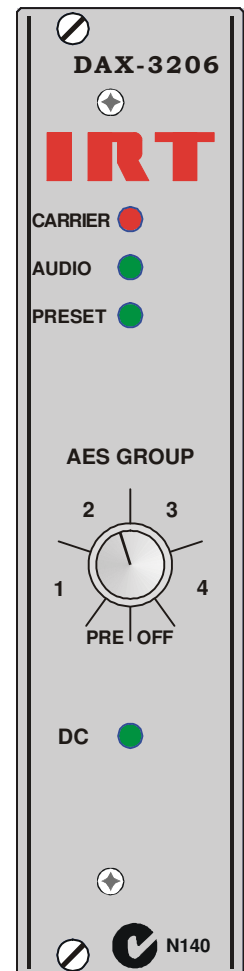
The use of digital audio filtering and 20-bit digital to analogue converters produce studio quality analogue audio and the AES/EBU digital interface allows digital interconnection in either balanced or unbalanced formats.

An audio presence indicator is provided for each group output. If no audio is detected the corresponding output is muted.

The DAX-3206 complements the DVC-4112 SDI to analogue video converter for full conversion of SDI signals to analogue video and audio.

The DAX-3206 comes configured standard with 110 Ω balanced AES/EBU outputs. 75 Ω unbalanced outputs are available by insertion of links on the rear assembly.

The DAX-3206 is fabricated in IRT's standard Eurocard format and may be housed in a variety of IRT Eurocard frames alongside other standard modules.



DAX-3206 Technical Specifications

SDI input:

Number 1 (BNC).
 Impedance 75 Ω terminated.
 Equalisation Automatic for cables lengths >250 m (Belden 8281).
 Format 270 Mbit/s video with embedded audio serial data to SMPTE 272M-A & D.

SDI outputs:

Number 1 (BNC).
 Impedance 75 Ω terminated.
 Format 270 Mbit/s video with embedded audio serial data to SMPTE 272M-A & D.

Analogue outputs:

Number 4 (1 Group).
 Impedance (balanced) <60 Ω .
 Output Level +24 dBu at Full Scale.
 SNR unweighted 90 dBFS.
 Frequency response 0.5 dB (20 Hz to 20 kHz).
 THD 0.05 % (20 Hz to 20 kHz).
 IMD 0.05 % SMPTE at +4 dBu.
 Crosstalk between channels 95 dB
 At unity gain, 20 Hz to 20 kHz and relative to +24 dBu.

AES/EBU outputs:

Number 2 (1 group).
Balanced outputs:
 Output impedance 110 Ω balanced.
 3.5 V \pm 1 V_{p-p}.
 Rise and fall times 10 ns typical.
 Data jitter < \pm 20 ns.

Balanced outputs: (when configured)

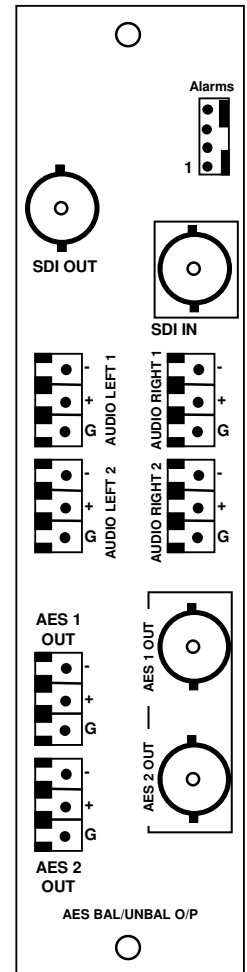
Output impedance 75 Ω unbalanced
 Signal amplitude 1 V_{p-p} \pm 20%.
 Data jitter < \pm 20 ns.

Alarms:

Contact closure on loss of SDI input, or loss of power.

Other:

Power requirements 28 Vac CT (14-0-14) or \pm 16 Vdc.
 Power consumption <7 VA.
 Temperature range 0 - 50° C ambient.
 Connectors Phoenix plug-in terminal blocks unless otherwise noted.
 Mechanical Suitable for mounting in IRT 19" rack chassis with input output and power connections on the rear panel.
 Finish: Front panel Grey background, silk-screened black lettering & red IRT logo.
 Rear assembly Detachable silk-screened PCB with direct mount connectors to Eurocard and external signals.
 Dimensions 30 mm x 3 U x 220 mm IRT Eurocard.
 Accessories supplied with module Rear connector assembly including matching connectors for audio, alarms and controls.



Due to our policy of continuing development, these specifications are subject to change without notice.

Detailed specifications available from:

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