3G/HD/SD-SDI
Digital Audio Extractor
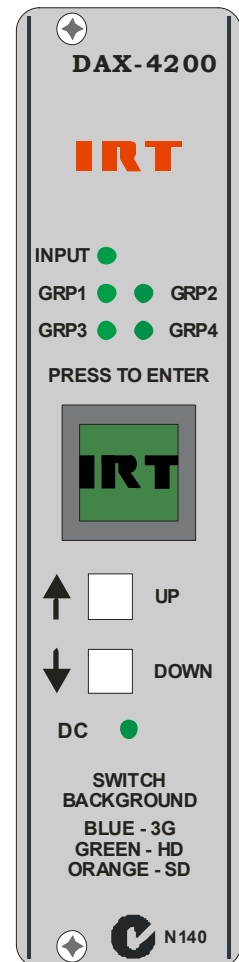# Type DAX-4200

Features:

- **270 Mb/s SD-SDI, 1.485 Gb/s HD-SDI or 2.97 Gb/s 3G-SDI input and output**

- **Extracts up to 4 AES signals from 2 groups**

- **Indicators for presence of input (SDI) & audio within group (GRP)**

- **Four 75 Ω unbalanced AES outputs**

- **External AES reference input**

- **Cascadable - SDI output for connection to additional units**

- **Front panel Status and Configuration controls**

- **Simple Network Management Protocol (SNMP) capable**

DAX-4200

INPUT ●

GRP1 ● ● GRP2

GRP3 ● ● GRP4

PRESS TO ENTER

↑ UP

↓ DOWN

DC ●

SWITCH
BACKGROUND
BLUE - 3G
GREEN - HD
ORANGE - SD

N140

General:

The DAX-4200 is a high performance embedded audio extractor for either 270 Mb/s SD-SDI, 1.485 Gb/s HD-SDI or 2.97 Gb/s 3G-SDI video signals. It is primarily designed to operate with IRT's DAI-4200 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-4200 is capable of extracting two audio groups (AES 1&2, and AES 3&4) from those available. Selection is made via a front panel local control switch, or via SNMP.

The DAX-4200 supports AES synchronous and asynchronous[*] audio at 48 kHz, 24-bit audio data packets.

A group presence indicator is provided for each group containing audio data. If no audio is detected in the selected group the corresponding outputs are muted.

Simple Network Management Protocol (SNMP) monitoring and control is possible when mounted in an IRT frame fitted with SNMP capability.

The DAX-4200 is fabricated in IRT's standard Eurocard format and may be housed in a variety of IRT Eurocard frames alongside other standard modules.

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* Asynchronous mode possible for HD-SDI & 3G-SDI only.

DAX-4200 Technical Specifications

SDI input:

Number	1 (BNC).
Impedance	75Ω terminated.
Equalisation	Automatic for cables lengths <250 m (Belden 8281).
Format	270 Mbit/s (SD-SDI) video with or without embedded audio serial data to SMPTE 259M; or
	1.485 Gbit/s (HD-SDI) video with or without embedded audio serial data to SMPTE 292M; or
	2.97 Gb/s (3G-SDI) video with or without embedded audio serial data to SMPTE 424M.

Reference AES input:

Number	1.
Impedance	75 Ω unbalanced.
Signal amplitude	1 V_{p-p} ± 20%.

SDI output:

Number	1 (BNC).
Type	75Ω sourced.
Format	Regenerated and re-clocked, as per input type.

AES outputs:

|	
Number	4 (2 groups).
Impedance	75 Ω unbalanced.
Signal amplitude	1 V_{p-p} ± 20%.
Audio pair 1	AES 1 & AES 2.
Audio pair 2	AES 3 & AES 4.

Front Panel Indicators:

INPUT	SDI input present (Green).
GRP1	Audio present in Group 1 position (Green).
GRP2	Audio present in Group 2 position (Green).
GRP3	Audio present in Group 3 position (Green).
GRP4	Audio present in Group 4 position (Green).
Control Switch Indicator Blue	SDI input type – 3G.
Control Switch Indicator Green	SDI input type – HD.
Control Switch Indicator Orange	SDI input type – SD.

Front Panel Controls:

Group select	AES 1 & AES 2, or AES 3 & AES 4.

Other:

Power requirements	28 Vac CT (14-0-14) or ± 16 Vdc.
Power consumption	<6 VA.
Temperature range	0 - 50° C ambient.
Mechanical	Suitable for mounting in IRT 19" rack chassis with input output and power connections on the rear panel.
Finish: Front panel	Grey background, 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.
Related Modules	DAI-4200 digital audio inserter.
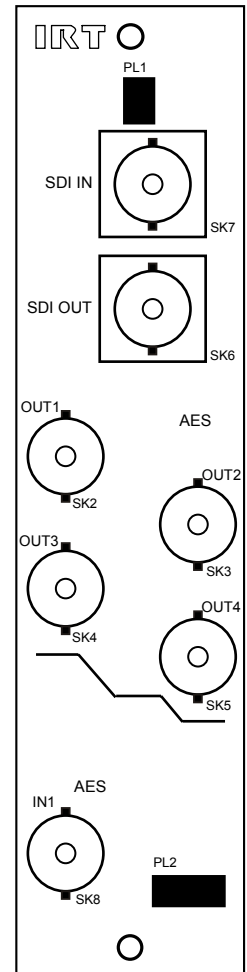
Due to our policy of continuing development, these specifications are subject to change without notice.

Detailed specifications available from:

Manufacturer:	Local Agent:	IRT can be found on the Internet at:
IRT Electronics Pty Ltd		**http://www.irtelectronics.com**

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