

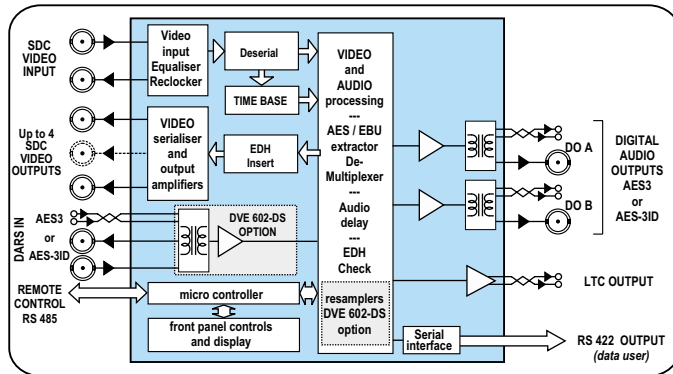
SDC Video to AES Audio Extractor De-Multiplexer/De-Embedder Outputs: 2 AES3 or 2 AES-3ID Digital Audio

The **DVE 602-D(S)** is a high-quality Video/Audio extractor. The **DVE 602-D(S)** extracts two embedded digital audio signals (AES) from serial component video signal (270 Mbit/s or 360 Mbit/s). The **DVE 602-D(S)** allows to extract one Longitudinal Time Code and one serial data user signals inserted in the SDC video.

With "S" option (**DVE 602-DS**), the AES digital audio outputs can be locked to the video or resampled and locked to the AES reference input (DARS).

The **DVE 602-D(S)** can be cascaded to extract more of 2 AES channels.

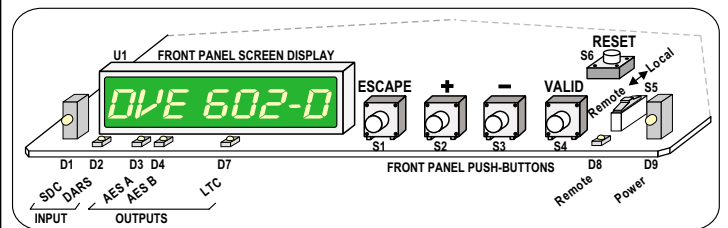
The **DVE 602-D(S)** is designed on an "Europe" 3U electronic board. Controls and screen display access from board's front side.



Functional block diagram

Features

- 1 SDC video input with relocked active loop-through output
- 4 SDC video outputs (2 on the S602/2 1U module rear panel)
- 2 AES3 or 2 AES-3ID digital audio outputs
- DVE 602-D: AES outputs locked to the video (48 kHz)
- DVE 602-DS: AES outputs locked to the video (48 kHz) or resampled (28 to 54 kHz) to the AES3/AES-3ID audio reference input (DARS)
- 1 differential LTC output
- 1 RS 422 serial data output
- 525/625-line video formats
- 270 Mbit/s or 360 Mbit/s operation
- EDH monitoring and insertion
- 20-bit / 24-bit de-embedded AES
- Programmable audio delay
- Controls, adjustments and screen display on front side of the board
- RS 485 remote control



Front end of the board

User Controls

FRONT PANEL PUSH-BUTTONS and STATUS LEDs

- | | | | |
|--|---|---|--|
| S1: ESCAPE returns to previous menu or submenu | S2: PLUS increases value of selected parameter or moves forward in parameters listing | S3: MINUS decreases value of selected parameter or moves backward in parameters listing | S4: VALID enables one of the parameters and stores the new value |
| S5: Remote / local selection | S6: Micro controller RESET | U1: Screen display | |
| D1: Lock SDC input | D2: AES reference input (DARS) | D3: AES A output | D4: AES B output |
| D7: LTC output | D8: Remote | D9: Power | |

FRONT PANEL DISPLAY: MAIN MENU PARAMETERS

- | | | | |
|---|--|---|--|
| AUDIO CONTROLS:
inter & intra group selection for each audio channel - muting - tone - delay adjustment - re-sampling (DVE 602DS) | AUDIO STATUS:
groups and channels used
de-embedded AES channels presence and main informations
DARS input presence & sample rate (DVE 602DS) | OTHER CONTROLS:
LTC muting
user data muting
remote control LAN address set up | OTHER STATUS:
SDC video input presence & main informations
EDH process reporting
LTC presence
user data presence
remote control activity |
|---|--|---|--|

All parameters are saved in NON-VOLATILE RAM

Technical Specifications

DIGITAL VIDEO INPUT / OUTPUTS

SERIAL INPUT
SIGNAL: 4:2:2 SMPTE 259M-C
270 Mbit/s or 360 Mbit/s
CABLE LENGTH: 250 m
IMPEDANCE: 75 Ω
RETURN LOSS: >15 dB up to 270 MHz

SERIAL OUTPUTS
SIGNAL: 4:2:2 SMPTE 259M-C
270 Mbit/s or 360 Mbit/s
IMPEDANCE: 75 Ω
RETURN LOSS: >15 dB up to 270 MHz
JITTER: < 0.2 UI p-p
RELOCKED OUT: 1
PROCESSED OUT: 4 (2 on the S602/2 1U module rear panel)

DIGITAL AUDIO REFERENCE INPUT

DARS input, only on the DVE 602-DS
SIGNAL: AES3 110 Ω balanced or AES-3ID 75 Ω unbalanced

LTC OUTPUT

SIGNAL: Balanced analogue signal
IMPEDANCE: 50 Ω
LEVEL: 3 Vp-p

DIGITAL AUDIO OUTPUTS

SIGNALS: 2 AES3 110 Ω balanced or 2 AES-3ID 75 Ω unbalanced
SAMPLE RATE FREQUENCY: DVE 602-D, 48kHz locked to the video input or DVE 602-DS, 48 kHz locked to the video input or 28 to 54 kHz resampled on the AES reference input (DARS)

PROCESSING PERFORMANCE

VIDEO
QUANTIZATION: 10-bit
AUDIO
QUANTIZATION: 24-bit
SAMPLING: 48 kHz
DELAY: Up to 340 ms
POWER: < 10 W

DVE 602-D DVE 602-DS

SDC Video to AES Audio Extractor De-Multiplexer Outputs: 2 AES3 or 2 AES-3ID Digital Audio

Overall Performances

Audio
Connectors: Sub-D type (AES3) or BNC (AES-3ID)
Outputs: 2 x 110 Ω balanced (AES3) or 2 x 75 Ω unbalanced (AES-3ID), transformer isolated
Quantization: 20-bit or 24-bit
Sample rate frequency output: DVE 602-D, 48 kHz locked to the video input
DVE 602-DS, 48 kHz locked to the video or 28 to 54 kHz locked to the AES input (DARS)

Audio
Audio delay: Up to 340 ms
test signal: 1 kHz sine wave
Video
Connectors: BNC
Input: 1 Serial 4:2:2 with 1 reclocked active loop-through output
Outputs: 4 Serial 4:2:2 (2 on the S 602/2 1U module rear panel)
Input output impedances: 75 Ω
Standard: 270 Mbit/s or 360 Mbits
Processing delay: < 2 μs

Mounting Frames

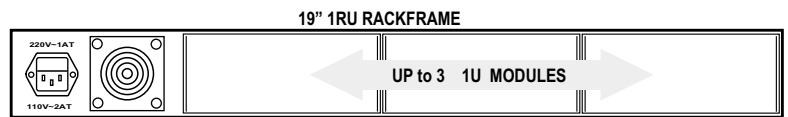
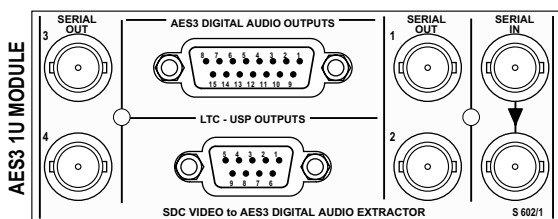
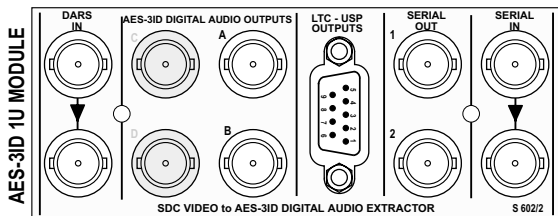
19" 1RU RACKFRAME

The 19" 1RU rackframe is divided into three identical parts meant to receive the electronic plug-in boards. Each part can hold two 3U Europe plug-in boards with modular rear panel and interconnection. The power supply is incorporated into the mechanical structure. Ventilation of the rack is performed by forced convection. Access is given to electronic plug-in boards by rocking down the front panel.

DIMENSIONS : 1RU x 380 mm deep
WEIGHT : < 5kg

TEMPERATURE RANGE : 0-40°C
ELECTRONIC PLUG-IN BOARDS : up to 6

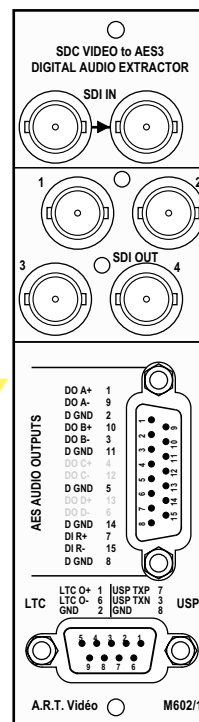
POWER INPUT RANGE : 97-240 V/50-60 Hz
POWER : 80 W max



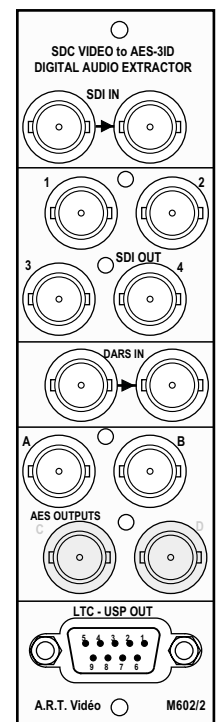
1U MODULE REAR PANEL

AES3 DIGITAL AUDIO OUTPUTS		LTC - USP OUTPUTS	
DO A+	1	LTC O+	1
DO A-	9	LTC O-	6
D GND	2	GND	2
DO B+	10	USP TXP	7
DO B-	3	USP TXN	3
D GND	11	GND	8
DO C+	4	NC	4
DO C-	12	NC	9
D GND	5	NC	5
DO D+	15		
DO D-	6		
D GND	14		
DI R+	7		
DI R-	15		
D GND	8		

AES3 OUTPUTS



AES-3ID OUTPUTS



19" 3RU RACKFRAME

The 19" 3RU rackframe holds up to 10 modules with single power supply unit and 9 modules with redundant power supply unit. Access is given to electronic modules by rocking down the front panel. Ventilation of the rack is performed by forced convection.

Each module includes : electronic plug-in board, rear interconnection board, and rear mechanical support with the connectors.

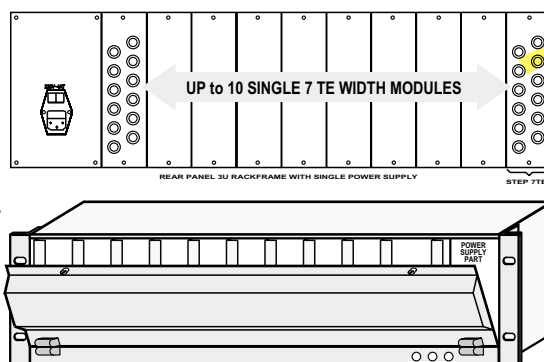
DIMENSION : 3RU x 410 mm deep
WEIGHT : < 15 Kg

TEMPERATURE RANGE : 0 - 40°C

ELECTRONIC MODULES : 10 with single power supply
9 with redundant power supply

POWER INPUT : 88 - 135 V or 185 - 264 V
50 / 60 Hz (Switchable)

POWER : 150 W max



3U MODULE REAR PANELS

Ordering informations

Electronic plug-in boards

B-DVE602-D: SDC video to 2 x AES extractor de-multiplexer
B-DVE602-DS: SDC video to 2 x AES resampler extractor de-multiplexer

3U modules for 19" 3RU rackframe (Electronic plug-in board and MOD 3U rear panel)

M-DVE602-D1: SDC video to 2 x AES3 extractor de-multiplexer
M-DVE602-D2: SDC video to 2 x AES-3ID extractor de-multiplexer
M-DVE602-DS1: SDC video to 2 x AES3 resampler extractor de-multiplexer
M-DVE602-DS2: SDC video to 2 x AES-3ID resampler extractor de-multiplexer

19" 1RU rackframe

RACK1U : 19" 1RU rackframe with power supply
INT-1U: interconnection unit for electronic board (AES3: S602/1 - AES-3ID: S602/2)

19" 3RU rackframe

RACK3U-1 : 19" 3RU rackframe with single power supply
RACK3U-2 : 19" 3RU rackframe with redundant power supply
MOD 3U : rear panel for 19" 3RU rackframe (AES3: M602/1 - AES-3ID: M602/2)
BPM-1 : blank rear panel unit

Specifications and designs are subject to change without notice