Advanced Modular Receiver

Broadcasters’ requirements for differing equipment configurations and the many and varied ways in which receivers are used is driving the need for a flexible receiver platform. The Ericsson RX8200 Advanced Modular Receiver has been designed to precisely meet these requirements.

By allowing each individual RX8200 to be configured and tailored to the user’s precise needs the perfect balance of functionality and cost can be achieved, resulting in a unit having only the required features without the additional expense of superfluous connectivity or functionality.

The RX8200 offers a vast and sophisticated array of configuration possibilities allowing it to cover a broad range of applications. The RX8200 can be tailored to standard definition or high definition uses with MPEG-2 or MPEG-4 decode technology in both 4:2:0 and 4:2:2 modes while connectivity into the receiver is achieved with DVB-S2 satellite, IP, ATM and ASI options.

The high powered processing capabilities of the RX8200 enable the unit to be simply and easily upgraded in the field with additional software options to increment the functionality at any point after initial installation.
CONFIGURATION PHILOSOPHY

The RX8200 Advanced Modular Receiver offers ultimate configurability at the point of order allowing the unit to be tailored to your precise needs incorporating just the functionality you require thus allowing an individual and optimal balance of price against functionality.

To configure your individual receiver follow this simple configuration philosophy to allow easy selection of all the features that you require.

INPUT OPTIONS

The RX8200 Advanced Modular Receiver has a single ASI input as standard and can be configured with one additional choice of inputs type.

Satellite Input options

The RX8200 satellite input modules come with DVB-S QPSK support as standard. The unit can optionally be licensed to support the new highly efficient DVB-S2 satellite transmission standard.

DVB-S2 Capable Satellite Demodulator (RX8200/HWO/DVBS2, FAZ 101 0113/5)
- 4x L-band inputs
- DVB-S QPSK demodulation
- DVB-S2 QPSK, 8PSK demodulation with license keys

Second Generation DVB-S2 Capable Satellite Demodulator (RX8200/HWO/DVBS2/2, FAZ 101 0113/6)*
- 4x L-band inputs
- DVB-S QPSK demodulation
- DVB-S2 QPSK, 8PSK, 16APSK demodulation with license keys
- DVB-S2 multi-transport stream capability with license key

DVB-S2 QPSK License (RX82XX/SWO/DVBS2/QPSK, FAZ 101 0113/32)
- Adds DVB-S2 QPSK capability to DVB-S2 input option card

DVB-S2 8PSK License (RX82XX/SWO/DVBS2/8PSK, FAZ 101 0113/30)
- Adds DVB-S2 8PSK capability to DVB-S2 input option card

DVB-S2 16APSK License (RX82XX/SWO/DVBS2/16APSK, FAZ 101 0113/29)
- Adds DVB-S2 QPSK, 8PSK and 16APSK capability to DVB-S2 input option card
- Second generation DVB-S2 card (RX8200/HWO/DVBS2/2, FAZ 101 0113/6) only

DVB-S2 VCM License (RX82XX/SWO/DVBS2/VCM, FAZ 101 0113/56)
- Provides DVB-S2 Multi-transport stream input capability
- Single transport stream output from receiver
- Second generation DVB-S2 card (RX8200/HWO/DVBS2/2, FAZ 101 0113/6) only

DVB-S2 Low Symbol Rate License (RX82XX/SWO/DVBS2/LSYM, FAZ 101 0113/31)
- Enables DVB-S2 symbol rate of 1 Msym/s to 5 Msym/s

IP Transport Stream Input Options

The RX8200 may be configured with IP transport stream input connectivity via the following options.

100/1000BaseT Input (RX8200/HWO/IP/GIGE, FAZ 101 0113/12)
- MPEG transport stream over IP
- 2x 100/1000BaseT input
- Very low latency

SMPTE 2022 Pro-MPEG FEC License (RX8200/SWO/IP/PROMPEG, FAZ 101 0113/37)
- Enables SMPTE 2022 Pro-MPEG FEC capability for the IP input card
- Requires IP input card

G.703 ATM Input Option

The RX8200 may be configured with G.703 ATM connectivity.

G703 ATM Input (RX8200/HWO/G703, FAZ 101 0113/8)
- E3 or DS-3 inputs
- 34 Mbps or 45 Mbps rates

Input Redundancy

The RX8200 Advanced Modular Receiver offers as standard automatic redundancy switching between ASI input and the additional input option. This redundancy switching capability may be further enhanced with the following option.

Null Packet Detection Redundancy Switching (RX82XX/SWO/NULL, FAZ 101 0113/48)
- Redundancy switching from primary to secondary input triggered by presence of null packets in the incoming stream
- User definable percent of null packets to trigger redundancy switch
VIDEO AND TRANSPORT STREAM OUTPUT OPTIONS

The RX8200 Advanced Modular Receiver offers the option of an SD only or HD and SD capable video output card. Both video output card options also provide ASI transport stream output connectivity. IP transport stream output capability may additionally be specified.

SD Video and ASI Output (RX8200/HWO/SD, FAZ 101 0113/18)
- 2x composite video outputs
- 2x switchable ASI/SDI outputs

3 Gbps HD and SD Video and ASI Output (RX8200/HWO/HD/3G, FAZ 101 0113/10)
- 1x composite video output
- 1x RGB/YPrPb analog video output
- 3x switchable ASI/SDI/HD-SDI outputs
- 3 Gbps HD-SDI output compatible with MPEG-4 4:2:2 1080p50/60 capability

IP Transport Stream Output (RX8200/HWO/IP/OUT, FAZ 101 0113/14)
- Encapsulation of transport stream output into IP multicast
- MPTS or single SPTS output stream with licence key
- 2x Gigabit Ethernet RJ-45 interfaces capability

CONDITIONAL ACCESS OPTIONS

The RX8200 Advanced Modular Receiver supports many types of widely used conditional access systems to allow for secure transmission of content. By default the RX8200 is fitted with the capability to accept a Conditional Access Module. Alternatively the RX8200 may be ordered with the capability to directly accept NDS BSkyB CA smart cards.

Director by Ericsson (RX8200/SWO/DIR, FAZ 101 0113/27)
- Director CA
- Director over-air control
- Director over-air software downloads

Director by Ericsson Multi-service Decryption (RX8200/SWO/DIRS/MSD, FAZ 101 0113/28)
- Multi-service decryption for Director by Ericsson

DVB Common Interface (RX8200/SWO/CI, FAZ 101 0113/25)
- Enables support for Conditional Access modules

DVB Common Interface Multi-service Decryption (RX8200/SWO/CI/DIRS, FAZ 101 0113/46)
- Multi-service decryption DVB Common Interface

BISS CA (RX8200/SWO/BISS, FAZ 101 0113/23)
- BISS Mode 1 and BISS Mode E descrambling

BISS Multi-service CA (RX8200/SWO/BISS/MSD, FAZ 101 0113/24)
- Multi-service decryption for BISS

NDS BSkyB CA (RX8200/HWO/BSKYB, FAZ 101 0113/4)
- Single service decryption for BSkyB services
- Mutually exclusive with other CA types

Ericsson RAS CA (RX8200/SWO/RAS, FAZ 101 0113/52)
- Ericsson RAS 1

Ericsson Signal Protection CA (RX8200/SWO/SP, FAZ 101 0113/58)
- Ericsson Signal Protection CA

SECURITY OPTIONS

Password Protection of Web Browser (RX8200/SWO/PW, FAZ 101 0113/51)
- Protects Web browser from malicious or accidental changes

STREAM PROCESSING OPTIONS

The RX8200 Advanced Modular Receiver offers as sophisticated choice of transport stream processing capability allowing the unit to operate as a cost effective network interface into a headend or transport stream turn-around system

Single Service Filtering (RX8200/SWO/SING/SERVFILT, FAZ 101 0113/53)
- Filter multiple services to output a single service
- Re-map PIDs for the outgoing service

Multi-Service Filtering (RX8200/SWO/MULT/SERVFILT, FAZ 101 0113/47)
- Filter N multiple incoming services to M outgoing services
- Re-map PIDs for a single service
- CBR MPTS transport stream output
- Service splitting for multiple IP SPTS output

VIDEO DECODING OPTIONS

The RX8200 Advanced Modular Receiver provides capability to decode every video compression standard in use today including support for the highest quality MPEG-4 AVC 4:2:2 standard.

In order to offer ultimate cost effectiveness and flexibility 4:2:2 and 4:2:0 video standards are ordered separately.

4:2:0 Decode Options

MPEG-2 SD 4:2:0 Decoding (RX8200/SWO/MPEG2/SD, FAZ 101 0113/45)
- Enables MPEG-2 SD 4:2:0 decoding

MPEG-2 HD 4:2:0 Decoding (RX8200/SWO/MPEG2/HD, FAZ 101 0113/44)
- Enables MPEG-2 SD and HD 4:2:0 decoding

MPEG-4 AVC SD 4:2:0 Decoding (RX8200/SWO/MP2/MP4/SD, FAZ 101 0113/40)
- Enables MPEG-2 and MPEG-4 AVC SD 4:2:0 video decoding

MPEG-4 AVC HD 4:2:0 Decoding (RX8200/SWO/MP2/MP4/SD/HD, FAZ 101 0113/41)
- Enables MPEG-2 SD and HD, MPEG-4 AVC SD and HD 4:2:0 decoding
4:2:2 Decode Options
MPEG-2 4:2:2 Decoding Hardware
(RX8200/HWO/MP2/422, FAZ 101 0113/15)
- Dormant hardware for MPEG-2 4:2:2 decoding
- Enable MPEG-2 4:2:2 decoding with additional options

MPEG-2 SD 4:2:2 Decoding
(RX8200/SWO/MP2/422/SD, FAZ 101 0113/59)
- Enables MPEG-2 SD 4:2:2 decoding
- Requires MPEG-2 4:2:2 only hardware or MPEG-2 & 4 4:2:2 hardware
  (RX8200/BAS/2, FAZ 101 0113/2)

MPEG-2 HD 4:2:2 Decoding
(RX8200/SWO/HDSDI/3G, FAZ 101 0113/34)
- Enables MPEG-2 HD 4:2:2 decoding
- Requires MPEG-2 HD 4:2:2 decoding option

MPEG-2 and MPEG-4 AVC SD 4:2:2 Decoding
(RX8200/SWO/MP4/422/SD, FAZ 101 0113/43)
- Enables MPEG-4 AVC SD 4:2:2 decoding
- Enables MPEG-2 SD 4:2:2 decoding
- Requires RX8200/BAS/2, FAZ 101 0113/2 unit

MPEG-2 and MPEG-4 AVC HD 4:2:2 Decoding
(RX8200/SWO/MP4/422/HD, FAZ 101 0113/42)
- Enables MPEG-4 AVC HD 4:2:2 decoding
- Enables MPEG-2 HD 4:2:2 decoding
- Requires MPEG-2 and MPEG-4 AVC SD 4:2:2 option

MPEG-4 AVC HD 4:2:2 1080p 50/60 Decoding
(RX8200/SWO/HSDSDI/3G, FAZ 101 0113/34)^
- Enables MPEG-4 AVC HD 4:2:2 1080p50/60 decoding
- Enables 3Gig HD-SDI output
- Requires MPEG-2 and MPEG-4 AVC HD 4:2:2 decoding option
- Requires 3Gig HD-SDI output card option

VIDEO PROCESSING OPTIONS

The RX8200 offers a wide range of video processing options to allow the decoded video to easily interface to HD and SD infrastructures.

High Quality Down-conversion
(RX8200/HWO/HQDCONV, FAZ 101 0113/60)
- Grade 1 quality Down-conversion of HD to SD
- Provides broadcast quality down-conversion allowing one HD transmission to address both HD and SD distribution needs
- Simultaneous presentation of HD and SD on video output interfaces

Down-conversion (RX8200/SWO/DCONV, FAZ 101 0113/26)
- Grade 2 quality Down-conversion of HD to SD
- Simultaneous presentation of HD and SD on video output interfaces

Up-conversion (RX8200/SWO/UPCONV, FAZ 101 0113/54)
- Up-conversion of SD to HD resolution
- Non-simultaneous up-conversion to 720p or 1080i resolution

Cross-conversion (RX8200/SWO/XCONV, FAZ 101 0113/55)
- Conversion of HD video from 720p to 1080i or from 1080i to 720p

Low Latency Decode (RX8200/SWO/LDELAY, FAZ 101 0113/38)
- Low latency video decode (4:2:0 and 4:2:2 modes)
- Compatible with MPEG-1 Layer-Ill, Dolby® Digital or AAC audio options

Frame Sync Input (RX8200/SWO/FSYNC, FAZ 101 0113/33)
- Synchronizes the IRD to the house black and burst reference
- Frame Sync functionality often partners 4:2:2 decoding applications

DATA AND CONTROL OPTIONS

The RX8200 Advanced Modular Receiver can be further enhanced by a range of data pass-through and remote control capabilities.

RS232 Remote Control and Data
(RX8200/HWO/RS232, FAZ 101 0113/17)
- RS232 remote control - Alteia protocol
- RS232 data output

High speed IP data output (RX8200/SWO/IP/DATA, FAZ 101 0113/35)
- MPE based data de-encapsulation of IP data
- Requires IP TS output option (RX8200/HWO/IP/OUT, FAZ 101 0113/14)

AUDIO OPTIONS

The RX8200 Advanced Modular Receiver provides many different audio capabilities to allow optimal connectivity for many wide-ranging and varied applications.

Capability for MPEG-1 Layer II audio is provided with any video decode license. Decoded audio will be embedded in (HD)SDI outputs and output via physical audio interfaces if ordered.

Balanced Audio Output (RX8200/HWO/BAL/AUD, FAZ 101 0113/3)
- 2x stereo pairs of balanced analog and digital outputs
- Order QTY two for 4x stereo pair capability

Unbalanced Audio Output
(RX8200/HWO/UNBAL/AUD, FAZ 101 0113/19)^
- 2x stereo pairs of unbalanced digital outputs
- Order QTY two for 4x stereo pair capability

Dolby® Digital Decode (RX8200/SWO/AC3, FAZ 101 0113/22)
- Enables decoding or pass-through of Dolby Digital Audio
- 2x 5.1 decode and down-mix to 2.0 (stereo)
- 2x 2.0/5.1 pass-through -compressed and embedded in (HD)SDI

AAC Audio decode (RX8200/SWO/AAC, FAZ 101 0113/21)
- 2x AAC-LC and HE-AAC decoding

Phase Aligned Audio (RX8200/SWO/PA, FAZ 101 0113/49)
- Phase aligned MPEG-1 Layer II audio - 4x stereo pairs
- Requires 4x Audio license (RX8200/SWO/4AUD, FAZ 101 0113/20)

4x Audio Capability (RX8200/SWO/4AUD, FAZ 101 0113/20)
- Enables up to six decodes
- Enables pass-through of audio services three and four
- Compatible with MPEG-1 Layer II, Dolby Digital, AAC, Dolby®E and linear audio
- Embeds up to six channels of audio into the (HD) SDI video output
- Requires QTY two audio output cards if four stereo pairs of physical audio interfaces are desired

XLR Terminal Audio Break-Out Cable
(RX8XXX/CABLE/XLR, FAZ 101 0108/24)
- Provides XLR terminal connections for analogue and digital audio output
- 1x stereo pair per breakout cable via 2x XLR connectors

Screw Terminal Audio Break-Out Cable
(RX8XXX/CABLE/SCRTRM, FAZ 101 0108/23)
- Provides screw terminal connections for analogue and digital audio output
- 1x stereo pair per breakout cable via 2x Screw terminal connectors

*Check availability
**ERICSSON RX8200 ADVANCED MODULAR RECEIVER**

**SAMPLE CONFIGURATION**

Sample configuration with: Satellite input, frame sync, HD video output, IP transport stream output and 2x Audio output modules installed

**SPECIFICATIONS**

**Standard Features**

**Input Interfaces**

**ASI Transport Stream Input**
- Connector: 1x BNC (F) 75 Ohm
- Max. input rate: 160 Mbps
- Packet length: 188/204 byte packets
- Standard: EN50083-9

**Features**
- Program selection for ATSC, DVB and MPEG-only streams
- One alarm relay, two relays under SCTE 35 control
- Service cycling through all decodable services

**Control**
- Front panel keypad and LCD
- SNMP control, traps and alarms
- Web browser

**Input Options**

**Satellite Input Options**
- **Satellite Input (FAZ 101 0113/5) and (FAZ 101 0113/6)**
  - Connector: 4x F-Type (F), 75 Ohm
  - Modulation: DVB-S QPSK
  - Standard: EN300 421
  - Frequency range: 950 MHz to 2150 MHz
  - Input level: -25 dBm to -65 dBm
  - Symbol rate: 1 Msyms to 45 Msyms (DVB-S), 1(5) Msyms to 31 Msyms
  - Bit rate: 81Mbps
  - FEC, DVB-S: 1/2, 1/3, 2/3, 3/4, 5/6, 7/8
  - LNB Power: 13V, 18V or off, 22 kHz on/off

- **Satellite Input (FAZ 101 0113/6)**
  - Provides the following additional functionality:
    - DVB-S2 FEC frame: Short & Normal frames
    - Physical layer scrambling
    - Symbol rate: 1°(5) Msyms to 60Msyms on inputs 1, 2
    - Bit rate: 170Mbps Max
    - FEC DVB-S2 QPSK: 1/4, 1/3, 2/5
    - 16APSK via additional licence
    - DVB-S2 multi-transport stream via additional licence

**DVB-S2 QPSK**
- **(FAZ 101 0113/32)**
- Modulation: DVB-S2 QPSK
- Standard: EN302 307
- Symbol rate: 5 to 31 (60) Msyms
- FEC DVB-S2 QPSK: 1/2, 3/5, 2/3, 4/5, 5/6, 8/9, 9/10

**DVB-S2 8PSK**
- **(FAZ 101 0113/30)**
  - Includes DVB-S2 QPSK functionality
  - Modulation: DVB-S2 8PSK
  - FEC, DVB-S2 8PSK: 3/5, 2/3, 3/4, 5/6, 8/9, 9/10

**DVB-S2 16APSK**
- **(FAZ 101 0113/29)**
  - Includes DVB-S2 QPSK and 8PSK functionality
  - Modulation: DVB-S2 16APSK
  - FEC, DVB-S2 16APSK: 2/3, 3/4, 4/5, 5/6, 8/9, 9/10
  - Requires FAZ 101 0113/6 option

**DVB-S2 Low Symbol Rate**
- **(FAZ 101 0113/31)**
  - Symbol rate - extended to 1 to 31 (60) Msym/s
  - Applies to DVB-S2 modes only

**IP Input Options**

**MPEG over Gigabit Ethernet IP input**
- **(FAZ 101 0113/12)**
  - Connector: 2 x RJ 45
  - Format: 100/1000BaseT
  - Max. input rate: 208Mbps

**SMPTPE 2022 Pro-MPEG FEC**
- **(FAZ 101 0113/37)**
  - SMPTPE 2022 (Pro-MPEG) FEC

**G703 Input Options**

**Ericsson G.703 (FAZ 101 0113/8)**
- Connector: BNC (F)
- Network: G.703 compliant PDH
- Input: E3 or DS-3 (selectable)
- Bit-rates: 34 Mbps or 45 Mbps versions

**Video and TS Output Options**

**Video Output Options**
- **SD Video Output (FAZ 101 0113/18)**
  - Connector: 2x BNC (F) 75 Ohm
  - Format: PAL / NTSC

- **SDI/DVB ASI-C (Switchable)**
  - Connector: 2x BNC 75 ohms
  - SD-SDI standard: SMPTE 259M
  - Embedded Audio: SMPTE 272M (SD)
  - Embedded Audio Channels: two, four or six stereo pairs
  - ASI standard: EN50083-9

**HD and SD Video Output**
- **(FAZ 101 0113/10)**
  - Connector: 1x BNC (F) 75 Ohm
  - Format: PAL / NTSC

**Video RGB-HD (SVGA)**
- Connector: 1x 15-pin D-type
- Format: RGB H/V/YPrPb (switchable)

**SDI/HD-SDI/DVB ASI-C (switchable)**
- Connector: 3x BNC 75 ohms
- 3 Gbps HD-SDI standard: SMPTE 424M
- HD-SDI standard: SMPTE 292M
- SD-SDI standard: SMPTE 259M
- Embedded Audio: SMPTE 299M (HD)
- SMPTE 272M (SD)
- Embedded Audio Channels: two, four or six stereo pairs
- ASI standard: EN50083-9

**TS Output Options**
- For ASI Output See HD and SD video output options

**IP Output (FAZ 101 0113/14)**
- Transport encapsulation into IP
  - MPTS/IP/UDP
  - SPTS/IP/UDP with single service filtering - CBR mode
- IP output VBR mode - Null packets dropped
- 2x Gigabit Ethernet outputs, 100/1000 auto-sensing
Video Decoding Options

4:2:0 Decoding

MPEG-2 SD Decode (FAZ 101 0113/48)
Profiles: MP@ML
Max video rate: 15 Mbps (MP@ML)
Video format: 480i and 576i 29.97, 25 fps

MPEG-2 HD Decode (FAZ 101 0113/44)
Includes MPEG-2 HD 4:2:0
Profiles: MP@HL
Max. video rate: 80 Mbps (MP@HL)
Video format: 1080i at 29.97, 30 and 25 fps
720p at 59.94, 60 and 50 fps

MPEG-4 AVC SD Decode (FAZ 101 0113/40)
Includes MPEG-4 AVC 4:2:0
Profiles: MP@L3
Max. video rate: 12 Mbps
Video format: 480i and 576i 29.97, 25 fps

MPEG-4 AVC HD Decode (FAZ 101 0113/41)
Includes MPEG-2 SD and HD 4:2:0
Includes MPEG-4 AVC HD 4:2:0
Profiles: MP@L4, HP@L4
Max. video rate: 25 Mbps
Video format: 1080i at 29.97, 30 and 25 fps
720p at 59.94, 60 and 50 fps

MPEG-4 AVC HD 4:2:2 Decode (FAZ 101 0113/42)
Requires RX8200/BAS/2 unit
Includes MPEG-2 HD 4:2:2
MPEG-4 Profiles: HIGH / HIGH10 / HIGH422@L4.2
Sampling: 8-bit and 10-bit
Max. video rate: 50 Mbps CABAC, 85 Mbps CAVLC
Video format: 1080p at 29.97 and 25 fps 720p at 59.94 and 50 fps

MPEG-4 AVC HD 4:2:2 1080p 50/60 decode (FAZ 101 0113/34)
Profiles: 422HP@L4.2
Max video rate: 85 Mbps CAVLC
Video format: 1080p at 59.94 and 50fps

VBI with 4:2:2 decoding modes
Closed Captions, VITC, VBI in PIX

Video Processing Options

High Quality Down-conversion (FAZ 101 0113/60)
Grade 1 quality down-conversion
Simultaneous Down-conversion (HD to SD): center cut out, manual/AFD controlled

Down-conversion (FAZ 101 0113/26)
Grade 2 quality down-conversion
Simultaneous Down-conversion (HD to SD): full frame, center cut out, letter box, anamorphic - manual/AFD controlled

Up-Conversion (FAZ 101 0113/54)
Non-simultaneous up-conversion (SD to HD): To 720p or 1080i (4:2-0 modes only)

Cross-Conversion (FAZ 101 0113/55)
Non-simultaneous cross-conversion 720p to 1080i or 1080 to 720p
No frame rate conversion

Aspect ratio conversion
16:9 to 4:3 center cut ARC in SD modes

Frame Synchronization (FAZ 101 0113/33)
Enables Frame Sync
Connector: 1x BNC (F) 75 Ohm
Input signal: Analog SD Hayse (black & burst)
## Specifications

### Data and Control Options
- **RS232 remote control and data (FAZ 101 0113/17)**
  - Remote control connector: 1x 9-pin D-type
- **Ericsson Altea protocol**
- **RS232 data connector: 1x 9-pin D-type**
- **RS232 asynchronous data**
- **RS232 data rate**: Max. 38.4 kbps

### IP high speed data (FAZ 101 0113/35)
- **MPE based data de-encapsulation**
- **Max. bit-rate**: 100 Mbps
- Requires IP TS output card

### Audio Options
- **Balanced Audio Output (FAZ 101 0113/3)**
  - Connector: 2x 9-Pin D-type
  - Analog audio: two balanced stereo pairs
  - Digital audio: two balanced stereo pairs
  - Order QTY 0, 1 or (2 - requires RX8200/SWO/4AUD)

- **Unbalanced Audio Output (FAZ 101 0113/19)**
  - Connector: 2x BNC (F) 75 Ohm
  - Digital audio: two balanced stereo pairs
  - Order QTY 0, 1 or (2 - requires RX8200/SWO/4AUD)

### Standard with any video decode option:
- 2x MPEG-1 Layer-II audio decode
- 2x Dolby® Digital Plus Pass-through
- 2x Dolby®E pass-through
- 2x Linear PCM decode
- Audio sampling rate: 48 kHz
- Decoded audio gain adjustment

### Dolby® Digital (FAZ 101 0113/22)
- 2x Dolby Digital 5.1 decode and down-mix to 2.0
- 2x Dolby® Digital 2.0/5.1 pass-through compressed and embedded in (HD)SDI

### Dolby® Digital Plus*
- 2x Dolby Digital Plus 2.0/5.1 pass-through compressed and embedded in (HD)SDI

### AAC Audio (FAZ 101 0113/21)
- 2x 5.1 down-mix to 2.0
- 2x 2.0 decode
- 1x 5.1 decode

### Phase Aligned Audio (FAZ 101 0113/49)
- MPEG-1 Layer II audio
- 4x stereo pairs, Phase aligned to enable 5.1 carriage
- 2x stereo pairs, non phase aligned audio
- Requires 4x audio licence FAZ 101 0113/20

### 4x Audio Capability (FAZ 101 0113/20)
- Extends licensed audio decodes to more channels
  - 6x MPEG-1 Layer II audio decode
  - 6x Dolby® Digital 2.0 decode, 5.1 to 2.0 down-mix
  - 4x Dolby® Digital 2.0/5.1 pass-through - compressed and embedded in (HD)SDI
  - 4x Dolby® Digital Plus 2.0/5.1 pass-through - compressed and embedded in (HD)SDI
  - 6x 5.1 AAC down-mix to 2.0
  - 6x 2.0 AAC decode
  - 4x Dolby®E pass-through
  - 4x Linear PCM pass-through

### Physical and Power
- **Dimensions (W x D x H)**
  - 442.5 x 545 x 44mm (17.5" x 20.7" x 1.75" approx.)
- **Input Voltage**
  - 110 VAC / 240 VAC
- **Power Consumption**
  - 120W Max. (depending on options fitted)
- **Cooling**
  - Integrated fan

### Environmental Conditions
- **Operating Temperature**
  - 0°C to +50°C (32° to 122°F)
- **Storage Temperature**
  - -20°C to +60°C (4° to 140°F)
- **Relative Humidity**
  - 5% to 95%

### Compliance
- CE marked in accordance with EU Low Voltage and EMC Directives
- **EMC Compliance**
  - EN55022, EN61000-3-210, EN61000-3-310, EN55024, CISPR22, FCC CFR47 Part 15B Class A
- **Safety Compliance**
  - EN60695-1, IEC60695-1, UL60950-1

*Check availability