

ADVANCED FM & DIGITAL RADIO, AES67 COMPATIBLE 4-BAND AUDIO PROCESSOR WITH RDS & BACKUP AUDIO PLAYER

Leveraging years of top-level broadcasting experience and the undeniable expertise of our engineering team, we proudly introduce the DB6410 FM and Digital Radio 4-Band Audio Processor.

Support for AES67 Audio Sources: The DB6410 fully supports AES67 audio sources, making it highly versatile and capable of seamless integration into modern audio environments. This feature ensures compatibility with a wide range of networked audio systems, enhancing its utility and flexibility.

This DSP-based Stereo Encoder ensures precise MPX signals with advanced peak control and two independently configurable composite MPX outputs. The DB6410 delivers impeccable audio clarity regardless of the source material. Its comprehensive processing architecture includes Wideband AGC with "Intelligent Gating," 4-band Parametric EQ, Advanced Bass and Treble Controls, 4-Band High-Quality Sound Processor with Fidelity Control and Sound Impact, 4-Band Limiter, FM Limiter with advanced distortion and pre-emphasis control, and HD Lookahead Limiter.

A standout feature of the DB6410 is its Fallback function. This state-of-the-art device detects signal loss and automatically switches to a backup source, ensuring uninterrupted audio. It also sends an email notification for immediate technical support response. You can update the backup content via a standard FTP client on any PC. The system automatically reverts to the main audio source once the default input is restored. All silence sense parameters are user-defined.

The DB6410 features a user-friendly, comprehensive, and well-organized interface. It is accessible through the front panel, remotely via TCP/IP, and through a web interface on iOS, Android, or any other mobile device.

This unique device represents the pinnacle of DEVA's engineering achievements, combining ease of use, affordability, and superior performance with an array of technical features unmatched in its class.



FEATURES

- Software Control (over local network or the Internet using any Windows® PC)
- L/R Analog inputs and outputs and two independent Composite MPX outputs.
- Extensive set of factory presets and several customizable user presets
- Built-in web server for remote control access via TCP/IP connection
- 4-Band Dynamic Processor with Fidelity and Sound Impact System
- Integrated digital stereo generator with advanced peak control
- Level Adjustable, Balanced Analog and Digital Audio Outputs
- Remotely upgradable firmware to ensure improved operation
- Embedded SNMP agent permitting full device management
- Notifications on input/preset change via E-mail and SNMP
- SNTP for automatic synchronization of the built-in clock
- LAN port for full TCP/IP remote control and monitoring
- Bright, wide view angle OLED and full-time LED meters
- USB communication interface for local connectivity
- Headphone output with front panel level control
- Ultra low latency, all-digital DSP based design
- 19" Professional Case for high RF immunity
- Externally synchronized output sample rate
- Wide operating voltage range: 100-240V AC
- Professional AES/EBU Digital audio inputs
- Easy setup and control via the front panel
- 4-Band Limiter
- Built-in MP3 Player
- 4-Band Parametric EQ
- HD Lookahead Limiter
- Variety of Audio Sources
- Easy to use WEB interface
- Advanced Wide Band AGC
- Intelligent Silence Detector
- Easy Installation and Setup
- Bypass and Test tone Mode
- Multi-format IP Audio Player
- Tight peak control at all outputs
- FM Controlled distortion Limiter
- EMI-suppressed XLR connectors
- Advanced Bass & Treble Controls
- AES67 and Dante Audio Interfaces
- SD Card for Audio Backup Storage
- Apple and Android devices support
- Built in DSP-based RDS/RBDS encoder
- Protected access to the device settings
- Fallback function in case of Audio Loss

SPECIFICATIONS

Analog Audio Input	
Connectors	Main - 2 XLR [1] [2]; Auxiliary - DB9 [1] [2]
Configuration	Stereo
Input level (0 dBFS)	[4] -8 dBu to +24 dBu peak
Impedance	Jumper selectable 600Ω / >10kΩ
A/D Conversion	24 bit; 48 kHz sample rate; Differential inputs

Analog Audio Output	
Connectors	2 XLR [1] [2]
Configuration	Stereo. [4] flat, pre- or de-emphasized
Out Level (0 dBFS)	[4] -12 to +24 dBu peak into ≥ 600Ω load
Source Impedance	20Ω
Load Impedance	≥ 600Ω, balanced/unbalanced
Signal-to-Noise	≥ 110 dB unweighted [5]
Distortion	≤ 0.01 THDN [5]
D/A Conversion	24 bit; 192 kHz rate; Differential outputs

Digital Audio Input	
Connectors	Main - XLR [1] [3]; Auxiliary - DB9 [1] [3]
Configuration	Stereo AES3 standard, up to 24 bit resolution
Sampling Rate	22 kHz to 192 kHz
Input Gain	-20 dB to 20 dB, referenced to 0 dBFS, [4]

Audio Over IP	
Live Protocol (AES67)	Ethernet 100Mbps; AES67, Ravenna, Livewire; 48kHz, 24 bits, stereo, ≥12 samp/packet (250μs), delay 1ms
Transport protocol (IP)	Ethernet 100Mbps; High quality stereo codec (32 to 200kbps) or linear; 2.5s compensation buffer

Remote Control Interface (GPI)	
Connector	DB-9 male
Configuration	8 LED optocoupler, current limited cathode inputs. Anodes are connected to VCC int.
Control	Selects corresponding user preset if connected to GND

Operating conditions	
Temperature	-15°C to 55°C
Humidity	< 95%, non-condensing
Altitude	0 to 5000m above sea level

- [1] - EMI suppressed
- [2] - Electronically balanced
- [3] - Transformer balanced and floating; 110Ω impedance
- [4] - Software selectable

Composite Baseband Output	
Connectors	BNC unbalanced, chassis floating, [1]
Configuration	2 outputs. Independent level control. MPX+MPX, MPX+PILOT or BYPASS
Source impedance	75Ω
Load impedance	50Ω or greater
Output level	-18dBu to +18dBu
Pilot level	0% to 15%
D/A conversion	24 bit, differential
SNR / THD	>80 dB [6] / <0.01% [6]
Stereo Separation	>60dB
Crosstalk	>70dB
Pilot protection	>90dB rel. to 9% pilot injection, ±250 Hz
38 kHz suppression	>80dB (referenced to 100% modulation)

Digital Audio Output	
Connector	XLR [1] [3]
Configuration	Stereo AES3 standard, 24 bit resolution. [4] flat, pre- or de-emphasized
Sample Rate	Internal - 32,44.1,48,88.2,96,176.4,192kHz. Ext. sync to Main AES3 DI @32+192 kHz. [4]
Word Length	24 bit
Output Ref. Level	-20 to 0 dBFS [4]

Remote Access Interface	
Configuration	TCP/IP via USB or Ethernet interface
USB Connector	USB type B connector
Ethernet Connector	Female RJ45, 10/100 Mbps CAT5

Size and Weight	
Dimensions (W;H;D)	483 x 44 x 180 mm / 19 x 1.875 x 7"
Shipping Weight	540 x 115 x 300 mm / 2.465kg

- [5] - Bypass mode, digital input, flat, 20Hz-15kHz bandwidth, referenced to +12dBu output level
- [6] - Bypass mode, flat, 20Hz - 15kHz bandwidth, digital input referenced to -10dBFS, unweighted



WE NEVER SPARE EFFORTS AND RESOURCES TO TURN OUR IDEAS INTO SUCCESSFUL PRODUCTS