

# Falcon X7

Broadcast Audio Processor for FM & HD Radio



AxelTech

FALCON X7  
DIGITAL AUDIO PROCESSOR

## Falcon X7 Makes Your Radio Sound Great!

Falcon X7 is the top level unit among AxelTech's Audio Processors.

Falcon X7 features powerful DPSs, 5-bands architecture, dual bands AGCs, 3-bands equalizer, stereo enhancer, speech detector and 5 limiters.

Falcon X7 is an all-in-one equipment: Audio Processor, MPX Generator, RDS Encoder, Loudness Control, Change Over. It works for FM and DAB, HD Radio, Sirius XM, Web.

# // Overview

## **Clarity of sound**

Falcon X7 high-quality hardware design and software algorithms produces a detailed, crystal-clear sound on any speaker system, always preserving original audio signature.

## **Complete Set of Inputs**

Extended Changeover/Silence Detector with configurable source priorities out of the following sources: 1xAnalog, 2xAES/EBU, 2xIP, 2xMPX, 1xMPX-AES192, 2x Dante™ (Optional), 1xInternal Player. Sampling rate from 32 kHz TO 192 kHz.

## **Complete Set of Outputs**

1xAnalog, 2xAES/EBU, 1xIP, 2xMPX, 1xMPXAES192, 1x Dante™ (Optional).

## **Voice Processor**

A dedicated processing section boosts presence of voice delivering a soft, silky sounding effect. Vocals are always on top of the mix, making lyrics comfortably audible. Each instrument and vocalist gains dominium of its own space.

## **Extreme Density**

Falcon processors deliver full impact sound at the highest volume density preserving original audio detail, identity and mood. The dedicated 'Bass Enhancer' stage delivers a strong and effective 'Drum Punch' for a deep musical emotion.

## **Built-in Audio Player**

Suitable like a backup source or for test purposes. A Test Signal Generator is also available.

# // Overview

## **Advanced SNM (Simple Network Management Protocol)**

Allows data interchange and simplified configuration of third-party appliances connected in the same LAN using shared datasets MIB.

## **MPX Changeover**

Manages the routing of MPX signals for Advertisement Area Splitting.

## **Advanced RDS (Optional)**

Dynamic RDS fully supported, UECP Input implemented, 8 Datasets available. Suitable for network infrastructures.

## **Upgradable and Reliable**

Internal microSD card with OS for Disaster Recovery. Easily Upgradable via WEB or Windows application.

## **Built-in Audio Encoder and Streamer**

Can manage two audio streams like an input, can generate an output audio stream.

## **Web Based Control Panel**

The whole system can be managed through a WEB page generated by the internal web Server. The main functions can be managed through the physical panel.

# // Overview

## Advanced features

### Processing delay

A configurable delay (from 0 to 3.5") can be applied to the FM process to synch with those distribution channels having a significant latency like the DAB.

### Dual Processing

15 kHz processing allows to use it as FM Audio Processor.  
20 kHz processing for digital broadcasting, allows to use it as DAB Audio Processor, HD Radio Audio Processor, Sirius XM Audio Processor, Web Radio Audio Processor.

### MPX Loudness Processing

ITU BS.412 MPX Power Loudness Recommendations available for MPX processing chains compliant with every country loudness rules.

### MPX Over AES 192 (AES3)

This is the standard for exchange the digital MPX+RDS signals between professional audio devices. 192 kHz standard is supported by several transmitter manufacturers.

## Advanced Changeover

The Advanced Audio Changeover/Silence Detector can switch between any available input source: Analog, Digital, MPX, FM, IP, Dante™, Internal Audio Player.

## Real Time Monitor

Processing delay is quite non audible, 10 to 30mS depending on the processing complexity.

## The Falcon X Series

Different users have different needs: that's the reason why AxelTech features a whole line up of processors with different models suitable for different workflows. Falcon X7 is the full option unit while Falcon X5 is entry level unit with the same processing power of the Falcon X7 and a simplified I/O and changeover section.

For more information  
about Falcon X7,  
visit our website



# // Falcon X7

