

# DSP Xtreme PROCESSOR

## DSP Xtreme

The DSP Xtreme is the newest addition to BW Broadcast's DSPX range of audio processors and we've included a few new features you wouldn't normally expect in an audio processor.

The first thing you will notice is the 2RU form factor which now includes two colour screens - one of which is touch sensitive. As well as looking great, the touch screen removes the need for jog-wheels, joysticks and buttons allowing you to navigate, setup and control the DSP Xtreme with a touch of your finger.

Behind the stylish front panel you'll find we've included more of the features that have made the DSPX range of processors among the best in the world. If you don't need all the features, no problem, the DSP Xtreme is available in four different versions with tailored hardware and programming features: FM, AM, CD, HD.

For quality FM stereo broadcasting, the DSP Xtreme-FM includes the world class stereo encoder found in the DSPX and DSPXtra. As well as the standard processing features you'd expect in a top-line processor, the DSP Xtreme-FM has dual output paths allowing HD and

FM services to be processed simultaneously without compromise. Simulcasting of FM and HD services is not a problem using the diversity delay feature.

With 6-Bands of audio limiting, distortion controlled clipping and look-ahead limiting you will have everything you need at your fingertips to create your own distinct sound for broadcasting or audio production.

Remote configuration and monitoring is simple with numerous connectivity options. These include an Ethernet port for LAN or WAN access,

an RS232 serial port and an 802.11 (WIFI) Wireless interface. If you don't require a full user interface a remote trigger port is available that allows preset selection through contact closures.

You want more? No problem. The DSP Xtreme has a flexible 'flash' upgradeable architecture which means that as we continue to make enhancements and add features, you can continue to reap the rewards. You can simply download the upgrades from our website.



High Performance DSP Stereo Encoder with Composite Clipping Control

RS232 and TCP/IP Net Interfaces for Remote Control

24 DSP's Provide over 1.4 GIGA-MIPS of Processing

Real Time Clock for Preset Scheduling

Silence Monitoring / Input Switching

WiFi remote control facility

Intelligent RMS Leveller

Multiple User Levels

Preset Trigger Port

Security (password) Control

Stereo Enhancement Mode

6-Band Program Dependent Limiting

Diversity delay facility for HD broadcasting

Analogue and Digital (AES/EBU) input and outputs

Full Range of Factory and User Presets with A/B Switching

Dual Paths with Multi-Band Look ahead Limiting and Distortion Cancelled Clipping

**...the touch-screen navigation system makes setup, monitoring and control faster and simpler**

## SPECIFICATIONS

### PERFORMANCE

Frequency response	<±0.2dB 30Hz - 20kHz limited to 15kHz on FM output
System distortion	<0.02% THD de-emphasized
Stereo noise	>80dB de-emphasized
Separation	>70dB 30Hz - 15kHz
Main-Sub crosstalk	>75 dB
Sub-Main crosstalk	>75 dB

### ANALOGUE & DIGITAL IO

Analogue inputs	-12 to +24dBu XLR female, floating, EMI suppressed 24 bit D/A 128x oversampled
Analogue outputs	-12 to +24dBu XLR female, floating, EMI suppressed 24 bit D/A 128x oversampled
Digital input	32 - 96kHz XLR female, floating, EMI suppressed
Digital output 1	-12 to 0dBfs, XLR male, floating, EMI suppressed, 32, 44.1, 48kHz, follow input rate and follow sync input rate
Digital output 2	-12 to 0dBfs, XLR male, floating, EMI suppressed, 32, 44.1, 48kHz, follow input rate and follow sync input rate
Digital Sync input	32 - 96kHz XLR female, floating, EMI suppressed

### STEREO ENCODER

MPX output 1	-12 to + 12dBu BNC output, floating, EMI suppressed 24 bit D/A 768kHz Software level adjustable
MPX output 2	-12 to + 12dBu BNC output, floating, EMI suppressed 24 bit D/A 768kHz Hardware level adjustable
SCA input	BNC, floating, EMI suppressed, high pass filter fitted
Pilot output	BNC, floating, EMI suppressed 5V digital pilot waveform

### REMOTE CONTROL

Computer control	Rear panel DB9 RS232 Rear panel Ethernet port
Preset triggers	8 contact DB9 male

### OTHER

Power	Universal input (90-260 VAC) 50-60Hz (25W MAX)
Size	88mm x 482mm x 200mm
Weight	Less than 5kg for all models

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## DSPXtreme

AUDIO PROCESSOR

Extreme

# PROCESSING

The DSPXtreme is the new leader in the DSPX range of processors. The 2RU form factor contains two LCD colour screens - one of which is 'touch-sensitive' - making setup, control and monitoring easy. Combined with all the features you'd expect in a top of the range processor, the DSPXtreme is the new standard in broadcast processing

