

MPX over AES

The Wow! Interface

Jeff Keith, CPBE, NCE

Common Names for The Wow! Interface

Baseband192™

Omnia Direct

Digital Composite

Digital MPX

MPX over AES



Nautel is
100%
Compatible!

The Wow! Interface?

Wheatstone calls it Baseband192TM

Feedback from customers
usually starts with the same word...

Wow...!

*“...Baseband192 into a Nautel transmitter
is as easy as could be.”*

*“...we now have an all-digital signal path and
the station has never sounded better!”*

Kevin Buente – Z92 – Zanesville, OH

Wow...!

*“...we’re early adopters of Baseband192.
It’s as easy as analog composite with
the precision of digital.”*

*“...it works right out of the box and
the audio quality is stellar!”*

Rob Goldberg – Radio DNA – Minneapolis, MN

Wow...!

“...we even use Baseband192 on translators with Nautel transmitters and Wheatstone FM55 Processors.”

“...the clarity and stereo separation are amazing!”

Tom Lawler – Beach Radio Network – Wilmington, NC



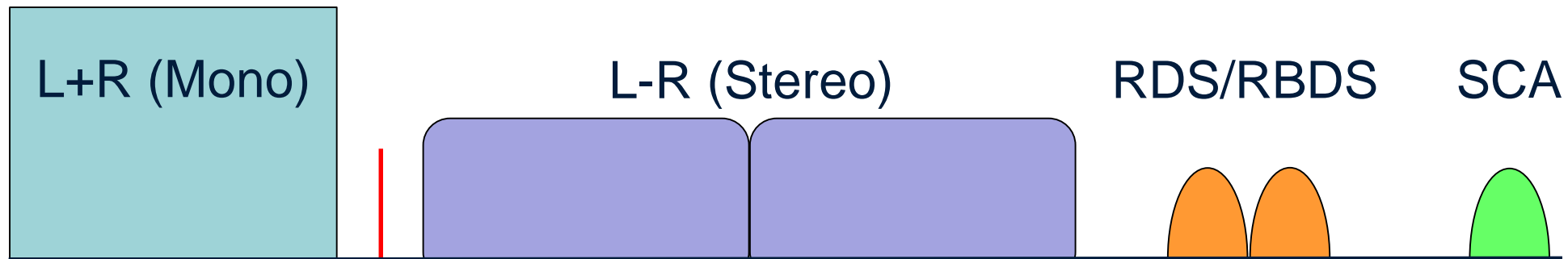
Making Digital Broadcasting **Work.**

The Wow! Interface

- MPX over AES – or – Baseband192™



– One cable carries stereo baseband and subcarriers!



The Wow! Interface

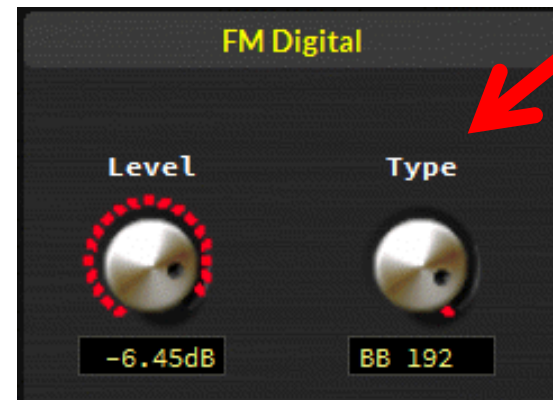
- FM audio processor performs all signal conditioning, including composite clipping or other MPX processing
- 24-bit resolution guarantees pristine audio
- 192kHz sample rate permits subcarriers up to ~80kHz

The Wow! Interface

- DC Coupled – No low frequency tilt
- Wide Bandwidth – No high frequency overshoot
- MPX audio stays in the digital domain

Selecting Baseband192 On a Wheatstone Processor

- Wheatstone FM Products w/Baseband192™
 - X4 FM+HD Processor
 - FM-55e FM Processor
 - FM-25 FM Processor
 - SG-192 Precision FM Stereo Generator



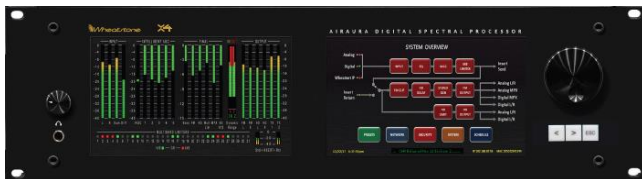
Selecting Baseband192 On a Nautel FM Transmitter

The screenshot displays the Nautel transmitter control interface. At the top, there are sections for 'Date & Time' (Thu Aug 1 2013, 15:14:34), 'Transmitter (NV5 ENG Lab)' (0 kW, 98.10 MHz, Reflected 0 W, Set Point 5.500 kW, Preset: Preset 1), and 'Exciter' (Active Exciter A, FM Modulation 0% to 160%). Below this is a 'Presets: * Current Settings' section with a red 'X' icon. The 'Main Audio' tab is selected, showing 'Audio Source' set to 'MPX Over AES' and 'Digital Level' set to '-4.0 dBFS'. A red oval highlights the 'MPX Over AES' dropdown and the '-4.0 dBFS' input field. On the left side of the interface, there are buttons for 'Load', 'Save', 'Save New', and 'Delete'. At the bottom, there are buttons for 'RF On', 'RF Off', 'Menu', 'Status', 'Logs', 'Remote', 'Reset', and 'Log Out'. The status bar at the bottom indicates 'Logged in as: Nautel'.

- Main Audio Tab
- Audio Source
- Select MPX Over AES
- Set Digital Level for desired modulation

The 'Wow' Interface

- Digitally perfect interface between processor and FM modulator
- No analog limitations – no hum, noise, separation loss
- Whatever the processor creates gets on the air



Thank You

48

years of

WHEATSTONE

1970

2018

49

years of

NAUTEL

1969

2018



Making Digital Broadcasting **Work.**