

gambit series HYDRA / HYDRA-X

double-sampling AES3 interface converter / de-jitterer



Front (L) and rear (R) of the Weiss Gambit Series HYDRA / HYDRA-X

A new box from Weiss to cover a new problem in digital audio.

The Hydra takes care of the arising problem to interface various double-sampling (88.2kHz / 96kHz) digital audio equipment. Some manufacturers furnish their units with two AES/EBU connectors for a double sampling link, i.e. each connector carries one channel at normal frame rate, while other manufacturers prefer the single connector solution at twice the normal frame rate.

Both methods are standardized in the AES3-1992 Amendment 3-1999.

The Hydra unit is a small box with two AES/EBU inputs and two AES/EBU outputs. The following format conversions can be selected via a switch:

- A) single channel (two connectors / fs) to double channel (one connector / 2fs).
- B) double channel (one connector / 2fs) to single channel (two connectors / fs).
- C) bypass of one connector to two connectors (Y - function).

An option for the Hydra is a VCXO based PLL for efficient dejittering purposes.

"...the sound became... well, you know the drill, insert 6 audiophile buzzwords here... even at double-sampling rates."

**Alan Silverman, Arf! Digital
about the HYDRA-X**

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HYDRA / HYDRA-X

Processing

- Auto detection of input sampling frequency
- Supported input and output sampling frequencies and frame rates: 44.1 / 48 / 88.2 / 96 kHz
- 24 bit transparent
- The HYDRA-X model has VCXO based PLLs built in. This means that the input frame rates are restricted within a tolerance of about +-80ppm.

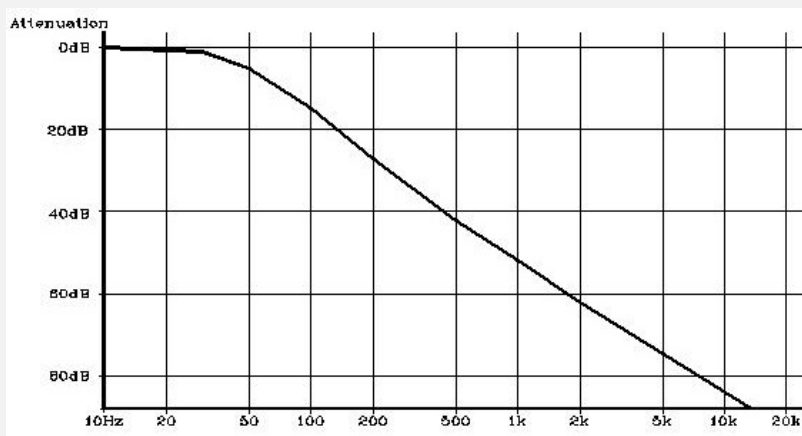
Display

- LED for display of three different operating conditions
- Power-on LED

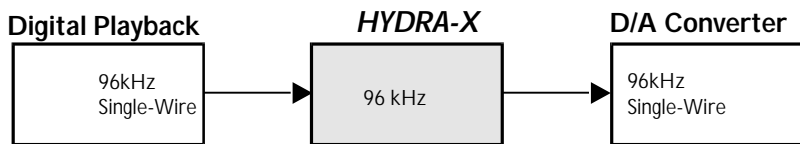
Operation

- Switch for 1>2 / 2>1 / 1>1 conversion mode selection

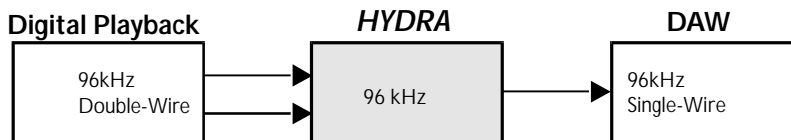
Jitter attenuation graph:



Application examples for the HYDRA:



De-jittering and AES signal repeating before D/A stage



AES3 Double- To Single-Wire Conversion