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GAMBIT
HYDRA-C
OPERATING MANUAL

Software Version: OS: 1.0

INTRODUCTION

Congratulations on purchasing the Weiss Gambit Series HYDRA-C!

The Hydra-C unit is a small box with two AES/EBU inputs and two AES/EBU outputs.

The purpose of the Hydra-C is to de-jitter AES/EBU signals in order to solve problems with sonic degradation in D/A converters, sampling frequency converters etc.

For operation input 1 / output 1 have to be connected. Optionally input 2 / output 2 may be used as well for de-jittering e.g. dual wire 96kHz or dual wire 192kHz signals. The clock master always is input 1, this means that the signal at input 2 must be synchronous and in phase (AES/EBU preamble start) with input 1.

Frontpanel / backpanel elements are:

A total of four XLR connectors, a power on LED, a PLL locked LED and a power connector to connect an external +12V wall type power supply.

Features

* Auto detection of input sampling frequency
* Supported input and output sampling frequencies and frame rates: 44.1 / 48 / 88.2 / 96 kHz, 192kHz with dual wire scheme (i.e. 96kHz each wire)
* 24 bit transparent
* LED for display of two different operating conditions
* Power-on LED

OPERATION

Power Supply

Connect a +12V / 400mA power supply to the appropriate connector. It is a 3.5mm Jack connector, tip positive. The unit won't work with false polarity (no damage occurs though).

Operation

For operation input 1 / output 1 have to be connected. Optionally input 2 / output 2 may be used as well for de-jittering e.g. dual wire 96kHz or dual wire 192kHz signals. Input 1 always is the clock master. This means that the signal at input 2 must be synchronous and in phase., i.e. the AES/EBU preamble start oocurs at the same time, with input 1.

Locked LED:

- "On" if frame rate and AES/EBU format at input valid.

- "Off" if no or wrong signal present at the input.

Note that the sampling frequency must be within a range of +-80ppm of the nominal sampling frequency.

Jitter attenuation curve: (attenuation vs. jitter frequency)