IZ Appendix
RADAR 24
UFC-24

Memo Date: November 14, 2000

UFC-24 UNIVERAL FORMAT CONVERTER

Format Overview

The UFC-24 is a stand-alone box capable of accepting 24-track, 24-bit audio in any one of five distinct multitrack digital audio formats and simultaneously outputting this audio in all five formats. The formats handled by the box include:

1. ADAT
2. PD
3. SDIF
4. TDIF
5. AES

Configuring the UFC-24

Because there are so many combinations and permutations of setups for the UFC-24, a dedicated "UFC-24 Application Guide" has been written to assist in the physical setup and front-panel configuration of the box. Discussions of specific setup details are beyond the time limits of this presentation.

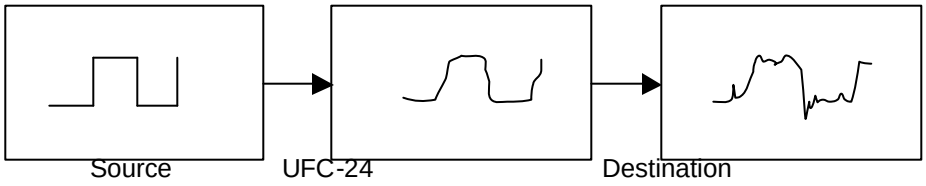
However, a specific operational problem is frequently encountered when the UFC-24 is used: clicks and pops in the audio. The root of this problem is often a daisy chain of phase-locked loops that accumulates jitter and noise in a system, during a digital audio transfer.

It is important to remember the golden rule of audio transfers – *if at all possible, sync all digital boxes to a single clean house clock*. Two setups for a digital audio transfer are shown below. The ideal setup uses a single house clock, so that jitter cannot accumulate in the system, causing pops and clicks in the destination audio box.

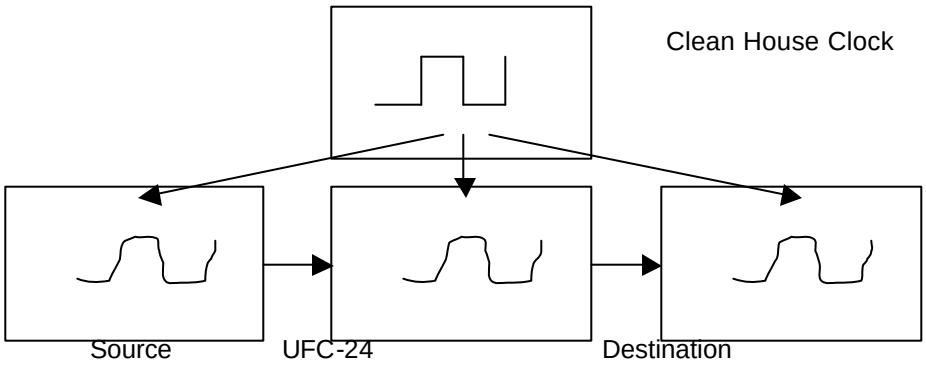
IZ Appendix
RADAR 24
UFC-24

Memo Date: November 14, 2000

WRONG – Each box bcks to the previous box, causing noise to accumulate in the internal clocks.



CORRECT – Each box locks to a clean house clock. Noise, although present, does not accumulate in the daisy-chain of digital boxes during the transfer.



Power Supply Problems

The UFC-24's power supply has a history of literally blowing up, taking out much of the internal circuitry of the UFC-24. We have addressed this issue with the manufacturer of the supply and have been assured that all supplies manufactured in the last 1.5 years are free of this defect.

Work continues on this issue to ensure that the problem is fixed.