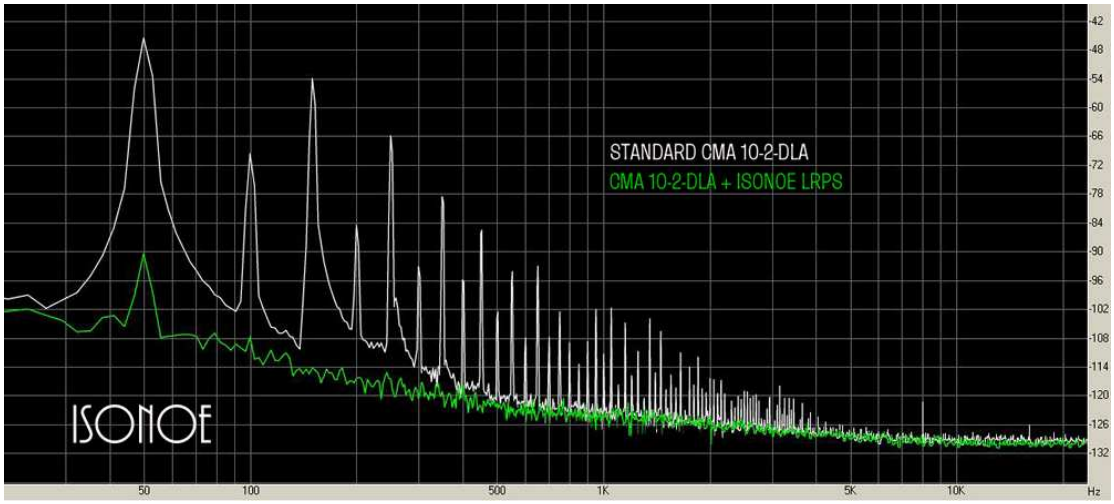
ISONOE®

# LINEAR REGULATED POWER SUPPLY


## Bozak CMA10-2-DLA Noise Comparison



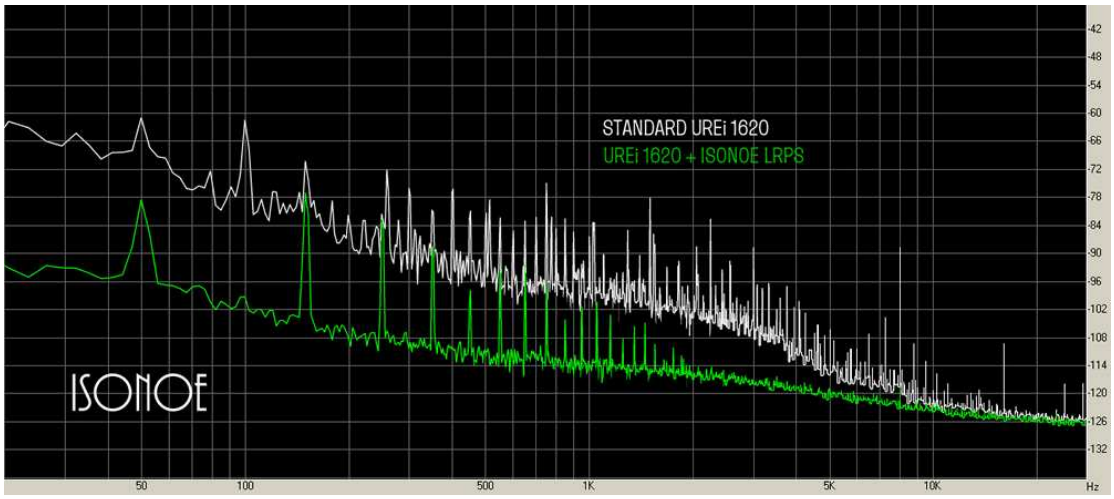

The above plot shows a converted DLA, measured from via a single Phono channel, with all others muted. Note the presence of a large spike at 100Hz (this will be 120Hz in the USA). This is due to the Bozak's PSRR (power supply ripple rejection), enabling rectified AC to find its way into the signal path. Simply fitting an external transformer, or a power supply with lesser filtering, will not improve the Bozak's ability to reject this rectified AC. By fitting an Isonoe LRPS, one sees the 100Hz spike reduce by around 40dB. The highly audible 150Hz spike's amplitude drops by a jaw-dropping 60dB (this also drops by around 50dB when using the Line Inputs). 50/60Hz mains hum is reduced by around 44dB. As can be seen, a Bozak CMA 10-series with original power supply has mains harmonics extending all the way into the crucial midrange, potentially masking low-level information. The difference in sound

quality and detail is so dramatic that one could say that a person has never truly heard a Bozak CMA 10-2-DL-series until it's been fitted with an Isonoe LRPS. If you think the figures on paper are impressive, wait until you hear the difference.

Note that we are only too happy to personally demonstrate the improvements to clients who wish to present their mixers in person to us for conversion. If truth be told, we were surprised to see how radical the improvement was. We were reluctant to publish any figures until numerous mixers had been fitted with the LRPS and it could be seen that the benefits were the same regardless of model.

All data presented is taken from Connecticut-made Bozak units that have been fitted with brand-new electrolytic capacitors in all circuits.

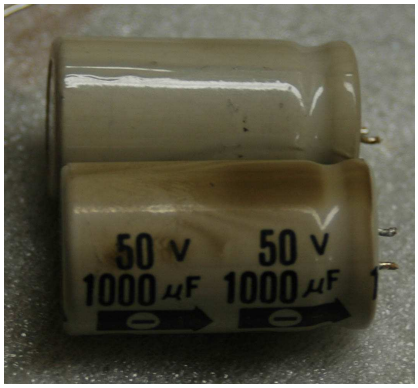
## UREi 1620 Noise Comparison

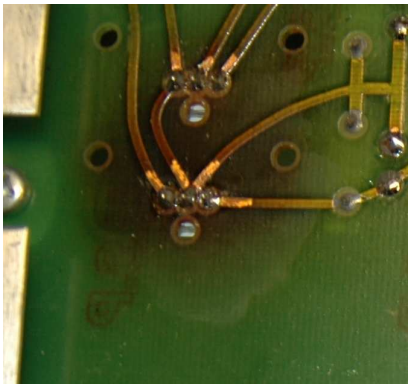



The upper plot shows the noise trace of a standard UREi 1620 mixer with its original power supply, measured from Phono Input to Master Output. The lower plot shows the noise trace of the same 1620 mixer having been fitted with an Isonoe power supply. Note that the highly audible 100Hz rectified AC frequency (120Hz in the USA) is attenuated by nearly 40dB.

In the case of the 1620, depending on mains line voltage variations and mains transformer manufacturing tolerances, the standard 7800-series regulators can get, in our opinion, dangerously hot – leading to scorching of the main PCB and the filter capacitors. Scorch marks are very common in 1620s and we strongly suggest that you have a look inside your 1620 for evidence. A couple of photos

are below for reference's sake. Aside from the blatant improvement in sound, the LRPS obviates this potentially dangerous issue:



## Specifications:

- Massive 18,300 microfarads of total filter capacitance per voltage rail (over 32x as much filtering as a standard UREi 1620)
- Hand-built and hand-wired with Teflon-insulated, Silver-plated wire
- Heavy-duty nickel-plated steel case
- Noise + ripple virtually immeasurable
- Soft-start circuit gently ramps up voltage, preventing stress to the mixer
- Mechanically-silent toroidal transformer
- Flanged case design maximises EMC performance, meeting EC and FCC EMC directives
- Filtered mains inlet
- Switches between 115v / 60hz or 230v / 50hz
- Dual DC Outputs via Neutrik XLR jacks allow for the powering of ancillary devices such as outboard preamps and isolators