MX-Stream

High-end zero jitter audio optimized streamer and network bridge

General Description

Musical Fidelity has always been driven by the vision to create musically engaging audio products which can hold this standard of fidelity for many generations to come. Many MF classics are still in the hands of their proud owners and have proven the success of our design philosophy.

Streaming in Musical Fidelity Tradition

The MX-Stream is developed with the same goal in mind as everything else at Musical Fidelity. Technically correct design that not only measures like a dream but also sounds like it. In order for it to be true to the original Musical Fidelity spirit it has to have our warm yet transparent and incredibly detailed signature sound and not just be technical wizardry for the sake of clean technical measurements. We have to hear it, we have to feel it, and we have to be moved by it.
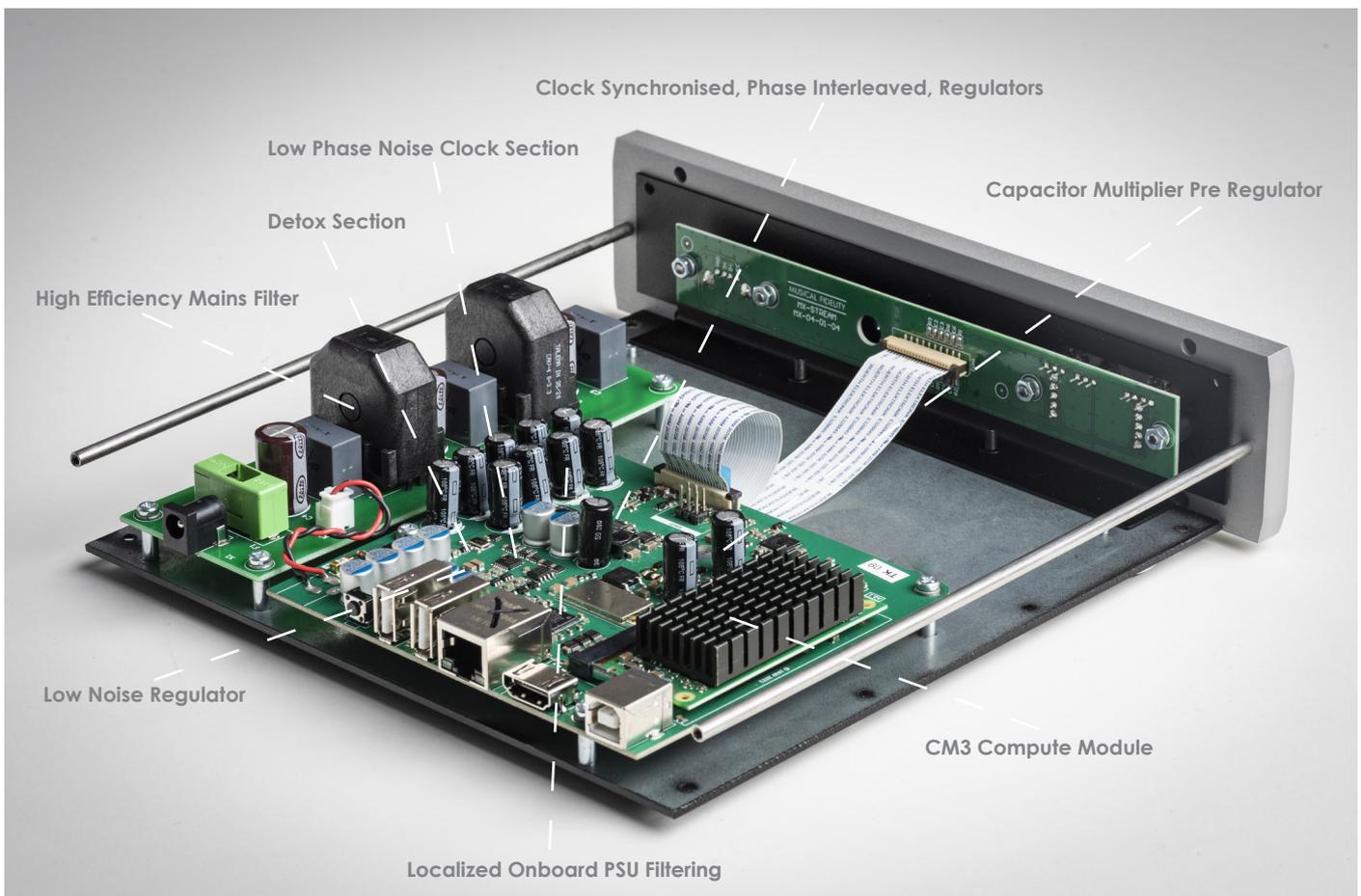
There are audio products of the past that did not necessarily measure so well, but people still grew to love them. This can also be done with close to perfect technical specifications and the same dedication to the actual perceivable sound qualities. And Musical Fidelity have done exactly this – always.

As a result, these pieces of audio gear are elevated to the highest levels and become the true entries into affordable, no nonsense high-end. The MX-Stream is yet another prime example in our long-lasting design philosophy.

Overview and Hardware Design

Our MX-Stream is a universal, transport-only network device that can take any online or network streaming service to your integrated amplifier or DAC. All you need is an existing USB Class 2.0 Audio input. The MX-Stream's digital audio circuitry is a complete custom design from scratch. A huge part inside the chassis is dedicated to the extensive power supply section. We have PSUs and high-end voltage stabilization components for all the different PCB units. We have advanced re-clocking – even the main CPU is operated by an audio optimized clock, which is completely unheard in typical streaming solutions, as they typically run with standard CPU clocks like those in regular computers. Every incoming digital signal is cleaned up from the very beginning. All audio files that come in and out, are the best they can be by eliminating all unwanted noise that can be found in common streaming solutions. With an optimized software, we were able to push this high-tech hardware design to its absolute limits. All of this resulted in the first near-zero jitter streamer we have ever seen.

Clock Synchronised, Phase Interleaved, Regulators

Low Phase Noise Clock Section

Detox Section

High Efficiency Mains Filter

Capacitor Multiplier Pre Regulator

Low Noise Regulator

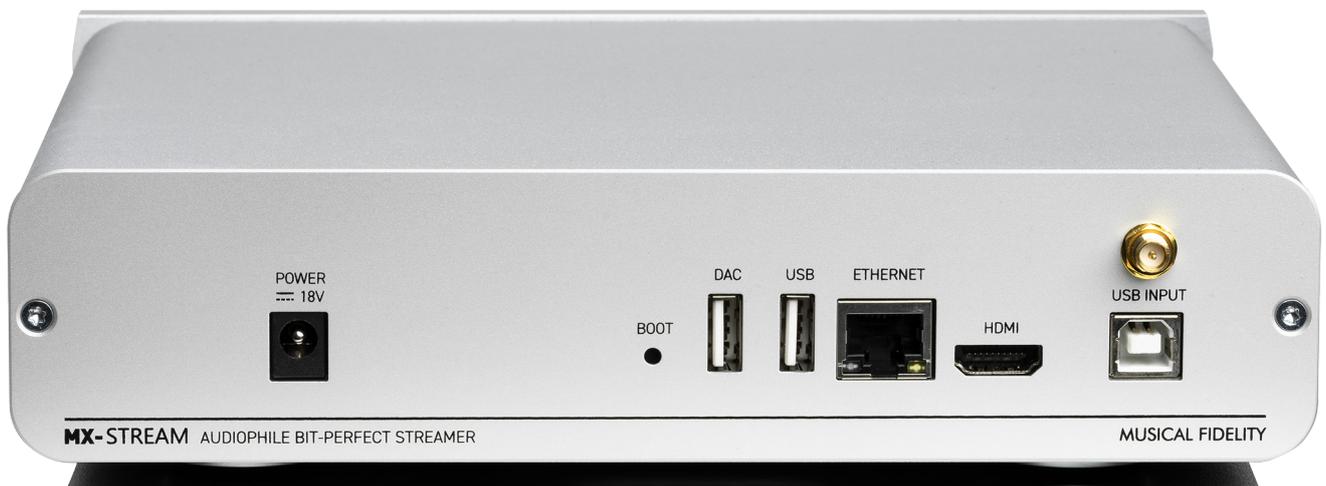CM3 Compute Module

Localized Onboard PSU Filtering

Bit-perfect and Open Software Design

Its design makes it future proof by keeping the architecture open. In 10 years' time, your MX-Stream will be as relevant as today because it can run any open source software that you are willing and able to throw at it. It will use the same revelatory hardware design and continue to be the perfect streaming transport. Of course, for now you can just unpack the unit and set it up and it will be perfectly plug&play ready and you can immediately stream ahead. The on-board operating system and playback software - by default - is set up to enable you 1:1 bit-perfect digital audio transfers to your USB DAC of choice right from the start. You do not need to worry about anything, we have done all the engineering and configuration for you. You are free to enjoy the Musical Fidelity signature sound without in-depth knowledge of digital audio technology. However, all the expert-users will find advanced options available to tailor the experience to their exact specifications and gain complete and transparent control of what their system is doing. Truly accessible high-end at your fingertips.

Flexibility and Control Options

The MX-Stream can be controlled via mobile App, in any web-browser and you can connect HDMI- and touchscreens for a full, haptic touch screen experience. A full Roon-Ready certification, support for all lossless high-resolution streaming services that are available right now and hi-res formats (up to 32bit/384kHz and DSD256) and standard network features like NAS support, USB-hard drive support, UPNP/DLNA, Bluetooth, Shareport (for iOS-devices), web-radio, CD-ripping with automated tagging and automatic music library indexing bring unparalleled versatility to the table.

The Perfect Streaming Companion

As a standalone device, the MX-Stream is the perfect add-on for any integrated amplifier or DAC with USB B input. Not only is the technology inside the MX-Stream complete cutting-edge high-end, every analog circuit in integrated analog amps displays increased performance, when digital circuits and power supplies are kept separate from the analog circuitry. By squeezing in a lot of digital circuits, additional high frequency distortion across the entire system can be observed. Coming from the other direction, huge power supplies for pre and power amps with lots of magnetic radiation impact digital circuit performance negatively. By keeping streaming and amplification separate we can achieve our true high-end sound vision to greater effect and at a more affordable cost, while also guaranteeing the longest lifetime of our amplifiers and streamers.

Perfect Companion: MX-Stream with MX-DAC

MX-Stream

SPECIFICATION

Features
- High resolution network bridge
- Network-enables and compatible with any modern DAC with USB input
- Completely optimised for bit-perfect audio:
  - Audiophile playback software
  - Low Noise regulation and detox section
  - USB & Wifi low phase noise clock section
  - Clock synchronised, phase interleaved, capacitor multiplier pre regulators
- Complete Detox: cleans up all incoming and outgoing audio signals for zero jitter and noise
- CD ripping (requires external USB CD drive)
- Controllable via smart devices and PC/Laptop

Streaming Services
- Spotify, Tidal, Qobuz, HIGHRESAUDIO, TuneIn
- Fully Roon Ready and certified
- Shareport(Airplay), UPNP/DLNA, Bluetooth

Inputs
- 2 x USB A
- 1 x Micro USB B (PC-Detox)
- Network (Ethernet, Wifi 802.11 b/g/n/d/e/h/i)
- Bluetooth (Bluetooth Classic + EDR v2.1, v3.0, v4.0 and Low Energy)
- Audio formats: PCM 32bit/352.8kHz, DSD256
- Internal storage: 16GB

Outputs
- Audio optimized USB A
- HDMI (video)

General Information
- Accessories: Wifi antenna
- Outboard power supply: 18V/1A DC (included)
- Dimensions (WxHxD): 220 x 56 x 215 mm
- Weight: 1.91 kg net