188-Channel, 24-Bit/192kHz high-end USB 3 Audio Interface

The Fireface UFX III is the center of any multitrack studio, handling up to 94 channels I/O with ease. Its unprecedented flexibility, compatibility, the inclusion of DURec (Direct USB Recording) and RME's famous low latency hardware and driver designs guarantee flawless operation in any mode and application.

Packed with professional features, including SteadyClock FS, MADI I/O (64 channels), a powerful DSP, USB 3.0 (full 94 channel I/O Class Compliant ready), TotalMix FX, Direct USB Recording, and support for the Advanced Remote Control USB (available separately), the Fireface UFX III is the professional's preferred tool for multitrack recording, mixing and mastering.

The Fireface UFX III is based on a newly developed analog and digital board. While the analog board offers, for example, DC-coupled analog outputs as well as new AD and DA converters with improved THD+N value, the digital board also enables interesting new features thanks to updated high-tech components.

Overview of the Fireface UFX III most important features:

· All settings can be changed in real-time
· Buffer sizes/latencies from 32 up to 8192 samples selectable
· 8 channels 96 kHz/24 bit Record/Playback via ADAT optical (S/MUX)
· 4 channels 192 kHz/24 bit Record/Playback via ADAT optical (S/MUX4)
· Professional 64-channel MADI I/O
· Clock modes slave and master
· Automatic and intelligent master/slave clock control
· Unsurpassed Bitclock PLL (audio synchronization) in ADAT mode
· SteadyClock FS: Jitter-immune, super-stable digital clock
· DDS technology for free setting of the sample rate
· SyncAlign guarantees sample aligned and never swapping channels
· SyncCheck tests and reports the synchronization status of input signals
· TotalMix for latency-free submixes and perfect ASIO Direct Monitoring
· TotalMix: 4096 channel mixer with 46 bit internal resolution
· TotalMix FX: 3-band EQ, Low Cut, Reverb, Echo, Compressor, Expander, Auto Level
· 2 x MIDI I/O, 32 channels high-speed Low-Jitter MIDI
· 2 x MIDI over MADI I/O
· 2 x Hi-power low impedance headphone output
· DIGICheck DSP: Level meter in hardware, peak- and RMS calculation

Connectivity

· 4 x Mic/Line/Inst Input
· 8 x Line Input
· 2 x XLR Output
· 6 x Line Output
· 2 x Phones Output
· 1 x AES I/O
· 2 x SPDIF I/O
· 2 x ADAT I/O
· 1 x Word Clock I/O
· 1 x MADI I/O
· 2 x MIDI I/O
· 2x MIDI over MADI
· USB DURec
· USB 3.0 / USB 2.0 compatible

RME

AD, Line In 1-8, rear:

- Input: 6.3 mm TRS, electronically balanced
- Signal to Noise ratio (SNR) @ LoGain: 116 dB (AES17), 118 dBA
- Signal to Noise ratio (SNR) @ +4 dBu: 115 dB (AES17), 117 dBA
- Frequency response @ 44.1 kHz, -0.1 dB: 8.9 Hz – 20.4 kHz
- Frequency response @ 96 kHz, -0.5 dB: 4.3 Hz – 45.2 kHz
- Frequency response @ 192 kHz, -1 dB: 3 Hz – 89 kHz
- Filter: Short Delay Sharp, 5 / 5 / 6 samples delay
- THD @ -1 dBFS: < -120 dB, < 0.0001 %
- THD+N @ -1 dBFS: < -110 dB, < 0.00032 %
- Channel separation: > 110 dB
- Maximum input level: +19 dBu
- Input: 6.3 mm TRS jack, electronically balanced
- Input impedance @ 1 kHz: 10 kOhm unbalanced, 10.6 kOhm balanced
- Input sensitivity switchable between Lo Gain and +4 dBu
- Input level for 0 dBFS @ Lo Gain: +19 dBu
- Input level for 0 dBFS @ +4 dBu: +13 dBu
- Variable digital gain: 0 to +12 dB
- Minimum level for 0 dBFS: +1 dBu, -1.2 dBV

Microphone In 9-12, front:

As above, but:

- Input: XLR, electronically balanced
- Input impedance @ 1 kHz: 3.4 kOhm
- Signal to Noise ratio (SNR) @ 0 dB Gain: 117 dB (AES17), 119.5 dBA
- THD+N @ -1 dBFS, Gain 20 dB: < -110 dB, < 0.00032 %
- Frequency response @ 44.1 kHz, -0.1 dB: 10.7 Hz – 20.3 kHz
- Frequency response @ 96 kHz, -0.5 dB: 5.1 Hz – 45.0 kHz
- Frequency response @ 192 kHz, -1 dB: 3.5 Hz – 88 kHz
- EIN @ 60 dB Gain, 150 Ohm, A-Weighted: -129.8 dBu
- Gain range: 75 dB
- Maximum input level, Gain 0 dB: +18 dBu
- Maximum input level, Gain 75 dB: -57 dBu
- CLIP LED: 0 dBFS
- SIG LED: -60 dBFS

Instrument In 9-12, front :

As above, but:

- Input: 6.3 mm TS jack, unbalanced
- Input impedance @ 1 kHz: 1 MOhm
- Signal to Noise ratio (SNR): 116 dB (AES17), 118.5 dBA
- Frequency response @ 44.1 kHz, -0.5 dB: 2.4 Hz – 20.0 kHz
- Frequency response @ 96 kHz, -1 dB: 1.6 Hz – 28 kHz
- Frequency response @ 192 kHz, -3 dB: 0.8 Hz – 54 kHz
- THD+N @ -1 dBFS, Gain 20 dB: < -107 dB, < 0.00045 %
- Gain range: 42 dB
- Maximum input level, Gain 8 dB: +21 dBu
- Maximum input level, Gain 50 dB: -21 dBu

MADI:

- Optical via FDDI duplex SC connector
- 62.5/125 and 50/125 compatible
- Coaxial via BNC (Word Clock input), 75 Ohm
- High-sensitivity input stage (< 0.2 Vpp)
- Accepts 56 channel and 64 channel mode, plus 96k Frame
- Standard: up to 64 channels 24 bit 48 kHz
- S/MUX: up to 32 channels 24 bit 96 kHz
- S/MUX4: up to 16 channels 24 bit 192 kHz
- Lock range: 25 kHz – 54 kHz
- Jitter suppression: > 50 dB (> 1 Hz)

AES/EBU:

- 1 x XLR, transformer-balanced, galvanically isolated, according to AES3-1992
- High-sensitivity input stage (< 0.3 Vpp)
- SPDIF compatible (IEC 60958)
- Accepts Consumer and Professional format
- Lock range: 27 kHz – 200 kHz
- Jitter suppression: > 50 dB (> 1 Hz)

ADAT Optical:

- 2 x TOSLINK, format according to Alesis specification
- Standard: 2 x 8 channels 24 bit, up to 48 kHz
- Double Speed (S/MUX): 2 x 4 channels 24 bit 96 kHz
- Quad Speed (S/MUX4): 2 x 2 channels 24 bit 192 kHz
- Bitclock PLL ensures perfect synchronisation even in varispeed operation
- Lock range: 31.5 kHz – 50 kHz
- Jitter suppression: > 50 dB (> 1 Hz)

SPDIF optical (ADAT 2):

- 2 x optical, according to IEC 60958
- Accepts Consumer and Professional format
- Lock range: 27 kHz – 200 kHz
- Jitter suppression: > 50 dB (> 1 Hz)

Word Clock:

- BNC
- Internal termination 75 Ohm switchable
- Automatic Double/Quad Speed detection and internal conversion to Single Speed
- SteadyClock guarantees super low jitter synchronization even in varispeed operation
- Not affected by DC-offsets within the network
- Signal Adaptation Circuit: signal refresh through auto-center and hysteresis
- Overvoltage protection
- Level range: 1.0 Vpp – 5.6 Vpp
- Lock Range: 27 kHz – 200 kHz
- Jitter suppression: > 50 dB (> 1 Hz)

DA, Line Out 3-8, rear:

- Output: 6.3 mm TRS jack, servo-balanced
- Signal to Noise ratio (SNR) @ HiGain: 116.5 dB (AES17), 118.5 dBA
- Signal to Noise ratio (SNR) @ +4 dBu: 116 dB (AES17), 118 dBA
- Signal to Noise ratio (SNR) @ -10 dBV: 107 dB (AES17), 109 dBA
- Frequency response @ 44.1 kHz, -0.1 dB: 0 Hz – 20.2 kHz
- Frequency response @ 96 kHz, -0.5 dB: 0 Hz – 44.6 kHz
- Frequency response @ 192 kHz, -1 dB: 0 Hz – 77.5 kHz
- THD+N: < -110 dB, < 0.00032 %
- Channel separation: > 110 dB
- Output level switchable Hi Gain, +4 dBu, -10 dBV
- Output level at 0 dBFS @ Hi Gain: +19 dBu
- Output level at 0 dBFS @ +4 dBu: +13 dBu
- Output level at 0 dBFS @ -10 dBV: +2 dBV (+4.2 dBu)
- Output impedance: 75 Ohm

DA - Stereo Monitor Output XLR (1-2):

As above, but:

- Output: XLR, balanced
- Output level switchable 24 dBu, Hi Gain, +4 dBu, -10 dBV
- Output level at 0 dBFS @ 24 dBu: +24 dBu
- Output level at 0 dBFS @ Hi Gain: +19 dBu
- Output level at 0 dBFS @ +4 dBu: +13 dBu
- Output level at 0 dBFS @ -10 dBV: +2 dBV (+4.2 dBu)
- Output impedance: 150 Ohm

DA - Stereo Monitor Output Phones (9-12):

As above, but:

- Output: 2 x 6.3 mm TRS stereo jack, unbalanced
- Maximum output level at 0 dBFS, High: +19 dBu
- Maximum output level at 0 dBFS, Low: +2 dBV
- Max power per channel @ 32 Ohm load, 0.02% THD: 200 mW (2.5 Vrms, +10 dBu)
- Signal to Noise ratio (SNR) @ High: 116.5 dB (AES17), 118.5 dBA
- Signal to Noise ratio (SNR) @ Low: 115 dB (AES17), 117 dBA
- Output impedance: 2 Ohm

MADI:

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- Coaxial via BNC (Word Clock input), 75 Ohm
- High-sensitivity input stage (< 0.2 Vpp)
- Accepts 56 channel and 64 channel mode, plus 96k Frame
- Standard: up to 64 channels 24 bit 48 kHz
- S/MUX: up to 32 channels 24 bit 96 kHz
- S/MUX4: up to 16 channels 24 bit 192 kHz
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- Lock Range: 27 kHz – 200 kHz
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MIDI:

- 2 x MIDI I/O via 5-pin DIN jacks
- Galvanically isolated by optocoupled input
- Hi-speed mode: Jitter and response time typically below 1 ms
- Separate 128 byte FIFOs for input and output

- 1 x MIDI I/O via MADI
- Invisible transmission via User bit of channel 56 (up to 48 kHz)
- Invisible transmission via User bit of channel 28 (up to 96 kHz)

EAN:	42 6012336 340 6
Weight:	Weight: 2.8 kg (6.2 lbs)
Dimensions:	(WxHxD): 440 x 44 x 210 mm (17.3" x 1.73" x 8.3") without rack ears/handles
Package dimensions	(WxHxD): 565 x 111 x 315 mm (22.2" x 4.37" x 12.4")
Package Contents:	- Fireface UFX III - Cable USB 3.0, 1.8 m (6 ft), USB-A/B - Cable USB 3.0, 1.8 m (6 ft), USB-C/B - Optical cable - 4 rubber feet, self-adhesive - Power cord - Manual