



40-Channel Advanced USB Audio Interface

The Fireface UCX II is a highly integrated pro audio solution in an ultra-compact format for studio and live recordings. It continues RME's long tradition of designing compact advanced interfaces, packing into a half-rack size unit what usually would be spread out over two or three 19 inch panels.

This unique audio system is capable of transferring analog and digital audio data directly to Windows and Mac computers. The latest Plug and Play technology guarantees a simple installation, even for the inexperienced user. Numerous unique features like a well thought-out Settings dialog and an integrated routing solution realize a quick, comfortable and efficient operation of the Fireface UCX II.

The Fireface UCX II houses two mic/line preamps in XLR combo configuration on the front panel, along with two digitally controlled line/instrument inputs, followed by a headphone jack, various control buttons, a display, and the main volume knob. At the rear is a set of ten analogue balanced line inputs and outputs, MIDI I/O, ADAT I/O, AES/EBU and SPDIF I/O, USB 2.0 as well as a switchable word clock I/O. With the SteadyClock FS, the Fireface UCX II features the latest clock and jitter rejection technology from RME. Based on a femtosecond clock, SteadyClock FS reduces the intrinsic jitter when converting from and to analogue over all digital formats to a new all-time low.

Overview of the Fireface UCX II most important features:

- · All settings can be changed in real-time
- · Buffer sizes/latencies from 48 up to 8192 samples selectable
- · 4 channels 96 kHz/24 bit Record/Playback via ADAT optical (S/MUX)
- · 2 channels 192 kHz/24 bit Record/Playback via ADAT optical (S/MUX4)
- · Clock modes slave and master
- · Automatic and intelligent master/slave clock control
- $\cdot~$ 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: 800 channel mixer with 46 bit internal resolution
- $\cdot~$ TotalMix FX: 3-band EQ, Low Cut, Reverb, Echo, Compressor, Expander, Auto Level
- · 1 x MIDI I/O, 16 channels high-speed Low-Jitter MIDI
- · 1 x Hi-power low impedance headphone output
- $\cdot~$ DIGICheck DSP: Level meter in hardware, peak- and RMS calculation

Connectivity

- · 2 x Mic/Line Input
- · 2 x Line/Inst Input
- 4 x Line Input
- 6 x Line Output
- 1 x Phones Output
- · 1 x AESI/O
- 1 x SPDIF I/O
- · 1 x ADATI/O
- 1 x Word Clock I/O
- 1 x MIDI I/O
- · USB 2.0



AD, Line In 5-8, rear:

- Resolution AD: 24 bit
- Signal to Noise ratio (SNR): 112 dB RMS unweighted, 115 dBA
- Frequency response @ 44.1 kHz, -0.1 dB: 5 Hz 20.8 kHz
- Frequency response @ 96 kHz, -0.5 dB: 3 Hz 45.8 kHz
- Frequency response @ 192 kHz, -1 dB: 2 Hz 92 kHz
- THD: < -110 dB, < 0.00032 %
- THD+N: < -104 dB, < 0.00063 %
- Channel separation: > 110 dB
- Input: 6.3 mm TRS jack, electronically balanced
- Input impedance: 8 kOhm unbalanced, 12 kOhm balanced
- Input sensitivity switchable to +19 dBu and +13 dBu
- Variable gain: 0 to +12 dB
- Minimum level for 0 dBFS: +1 dBu, -1.2 dBV

Line In 3-4, front:

As above, but:

- Additional Gain stage: 0 up to +12 dB
- Maximum input level, +19 dBu, Gain 0 dB: Line +19 dBu, Inst +13 dBu
- Maximum input level, +13 dBu, Gain 12 dB: Line +1 dBu, Inst -5 dBu
- Input impedance: Instrument 1 MOhm. Line 13 kOhm balanced, 9 kOhm unbalanced
- Input Gain Inst: +6 dB
- Input mode: Line balanced (TRS), Inst unbalanced (TS)

Microphone In 1-2, front:

As above, but:

- Input: XLR, electronically balanced
- Input impedance: 5.4 kOhm
- Gain range: 75 dB
- Maximum input level, Gain 0 dB: +18 dBu
- Maximum input level, Gain 75 dB: -57 dBu
- EIN: -128 dBu A-weighted, 60 dB gain,150 Ohm, 20 Hz – 20 kHz

Line In 1-2:

As above, but:

- Input: TRS, electronically balanced
- Input impedance: 10 kOhm balanced, 5 kOhm unbalanced
- Maximum input level, Gain 0 dB: +24 dBu
- Maximum input level, Gain 75 dB: -51 dBu

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 (2.4 kHz)

SPDIF coaxial:

- 1 x RCA, according to IEC 60958
- High-sensitivity input stage (< 0.3 Vpp)
- Accepts Consumer and Professional format, copy protection will be ignored
- Lock Range: 27 kHz 200 kHz
- Jitter suppression: > 50 dB (2.4 kHz)

ADAT Optical:

- 1 x TOSLINK, format according to Alesis specification
- Standard: 8 channels 24 bit, up to 48 kHz
- Double Speed (S/MUX): 4 channels 24 bit 96 kHz
- Quad Speed (S/MUX4): 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 (2.4 kHz)
- 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 (2.4 kHz)

MIDI:

- 1 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



DA, Line Out 1-6, rear:

- Resolution: 24 bit
- Dynamic range (DR): 112 dB RMS unweighted, 115 dBA
- Frequency response @ 44.1 kHz, -0.5 dB: 5 Hz 20.8 kHz
- Frequency response @ 96 kHz, -0.5 dB: 5 Hz 45 kHz
- Frequency response @ 192 kHz, -1 dB: 5 Hz 89 kHz
- THD: < -108 dB, < 0.0004 %
- THD+N: < -104 dB, < 0.00063 %
- Channel separation: > 110 dB
- Maximum output level: +19 dBu
- Output: 6.3 mm TRS jack, servo-balanced
- Output impedance: 75 Ohm
- Output level switchable +19 dBu, +13 dBu, +4 dBu

DA - Stereo Monitor Output Phones (7-8):

As above, but:

- Output: 6.3 mm TRS stereo jack, unbalanced
- Maximum output level at 0 dBFS, High: +19 dBu
- Maximum output level at 0 dBFS, Low: +4 dBu
- Output impedance: 1 Ohm
- Max power per channel @ 32 Ohm load, 0.1% THD: 210 mW (2.6 Vrms, +10.5 dBu)

AES/EBU:

- XLR, transformer-balanced, galvanically isolated, according to AES3-1992
- Output level Professional 4.5 Vpp, Consumer 2.6 Vpp
- Format Professional according to AES3-1992
 Amendment 4
- Format Consumer (SPDIF) according to IEC 60958
- Single Wire mode, sample rate 28 kHz up to 200 kHz

SPDIF coaxial:

- 1 x RCA, according to IEC 60958
- Output level Professional 1.2 Vpp, Consumer 0.6 Vpp
- Format Professional according to AES3-1992 Amendment 4
- Format Consumer (SPDIF) according to IEC 60958
- Single Wire mode, sample rate 28 kHz up to 200 kHz

ADAT:

- 1 x TOSLINK
- Standard: 8 channels 24 bit, up to 48 kHz
- Double Speed (S/MUX): 4 channels 24 bit 96 kHz
- Quad Speed (S/MUX4): 2 channels 24 bit 192 kHz

Word Clock:

- BNC
- Max. output voltage: 5 Vpp
- Output voltage @ 75 Ohm termination: 4.0 Vpp
- Output impedance: 10 Ohm
- Frequency range: 27 kHz 200 kHz



EAN:	4 26012336 337 6
Weight:	910 g (2.0 lbs)
Dimensions:	(WxHxD): 215 x 44 x 130 mm (8.5" x 1.73" x 5.1") without rack ears/body depth
Package dimensions	(WxHxD): 352 x 93 x 195 mm (13.9" x 3.7" x 7.7")
Package Contents:	 Fireface UCX II Cable USB 2.0, 1.8 m (6 ft) Optical cable (TOSLINK), 2 m (6.6 ft) B0968 Digital breakout cable (XLR/RCA) External switched power supply, lockable connector, DC 12 V 24 W Power cord

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