



Based on a newly developed RME Hammerfall core the Fireface UC provides revolutionary ultra-low latencies with multiple I/O channels, realizing a performance comparable to the best PCI Express interfaces.

## **NEW!** Fireface UC

### 36-Channel USB High-Speed Audio Interface

8 x Analog I/O . ADAT I/O or SPDIF I/O optical

SPDIF I/O . 2 x MIDI I/O

2 x Mic Preamp with digitally controlled gain

**RME**

The compact Fireface UC has been uncompromisingly optimized for highest performance under Windows and Mac OS. Based on a newly developed RME Hammerfall core the Fireface UC provides revolutionary ultra-low latencies even with multiple channels. It uses two different firmware versions with different transfer methods to remove current restrictions of typical USB audio interfaces. The unit's operating mode Win or Mac can be changed directly at the unit at any time. Under Mac OS the Fireface's MIDI ports are class compliant, the operating system therefore automatically uses the included MIDI driver.

Under both Operating Systems the available latencies\* are simply sensational. The smallest buffer offered under Windows Vista has 48 samples, under Mac OS X 14 samples. With this RME provides a performance comparable to PCI Express interfaces - under USB 2.0.

The new interface not only makes the leading-edge RME Fireface technology available for every PC and Mac computer, it also provides a unique low-latency concept and a high grade of performance and compatibility, making the dream of the perfect and future-proof mobile pro audio recording solution come true.

The Fireface UC features all of the proven RME analog and digital circuitry. It is the only device in its class with active jitter suppression, enhanced stand-alone functionality and complete controllability from the front panel, highly flexible I/Os in professional quality, and an unsurpassed 648-channel matrix router – at sample rates of up to 192 kHz.

**Integrated DSP mixer** . All inputs and outputs can be freely mixed, routed, and distributed with RME's TotalMix software. Up to 9 totally independent stereo submixes can be set up. Every output channel, and every submix channel can be recorded directly and without external cable loops. TotalMix can be completely MIDI remote controlled. The DSP-based hardware calculates RMS and Peak levels for all channels, without causing any significant CPU load.

**Analog I/O** . Eight analog inputs and outputs (all balanced, except outputs 7/8) with software controlled reference levels (-10 dBV, +4 dBu, Lo/HiGain), realized discretely in the analog domain, ensure highest dynamic range and fidelity. Inputs 5 to 8 on the rear feature RME's proven level references, -10 dBV, +4 dBu and Lo Gain can be selected in the settings dialog, equivalent to +2 dBV, +13 dBu and +19 dBu for digital full scale. The same applies to the balanced rear analog outputs 1 to 6. The hi-power phones output offers high volumes even with low-impedance headphones.

**Preamps** . The Fireface UC features 2 balanced microphone inputs with a digitally controlled input stage, individually switchable 48V phantom power, and Neutrik Combo connectors for XLR and TRS. These can also be used as additional line inputs. A pre-amplification of up to 65 dB (adjustable in 1 dB-steps over a range of 55 dB), exceptional EIN (Equivalent Input Noise) performance even at low pre amplification settings, and extremely low THD+N let these preamps surpass many reference devices. All level settings are 100% reproducible and can also be comfortably adjusted by software. Inputs 3 and 4 are flexible universal balanced inputs. They operate exactly like inputs 5 to 8 on the rear and can be adjusted to accept standard studio input levels (+4 dBu, LoGain). The input impedance can be switched from line (10 kOhm) to instrument (470 kOhm), and offers an additional analog input amplification of up to 18 dB in steps of 0.5 dB.

**Digital I/O** . One ADAT I/O provides digital connection to mixers and converters. In combination with an ADI-8 DS/QS or OctaMic II, there are up to 16 analog inputs (respectively 12 @ 96 kHz). The coaxial SPDIF I/O (up to 192 kHz) is fully AES/EBU compatible. SPDIF can also be accessed through the optical I/O.

**Word Clock & MIDI** . A Word Clock input and output plus two MIDI I/Os (special breakout cable included) complete the list of features and turn the Fireface UC into an entire audio system of the highest quality.

\* Minimal latencies are not guaranteed as they depend on the specific computer and application.

## Features

- Sample rates up to 192 kHz on all I/Os (including 2 ADAT channels with SMUX4)
- Two digitally controlled Mic Preamps in high-end quality
- Two balanced universal inputs for line and instrument signals
- SteadyClock for maximum jitter suppression and clock refresh
- Enhanced stand-alone operation with rotary encoder and front panel display
- TotalMix: 648-channel mixer with 42-bit internal resolution
- 54 Level Meter Peak/RMS, hardware-calculated

## I/O Connectivity

18 Input / 18 Output channels

8 x Analog I/O

1 x ADAT I/O or 1 x SPDIF I/O (optical)

1 x SPDIF I/O (coaxial)

2 x MIDI I/O

2 x Mic Preamp with digitally controlled gain

## Specifications

- **Input AD:** 6 x 1/4" TRS (4 x Line, 2 x Line/Instrument), 2 x XLR/TRS Combo connector (2 x Mic/Line), all servo-balanced.
- **Output DA:** 6 x 1/4" TRS, servo-balanced, DC-coupled signal path. 1 x 1/4" TRS unbalanced
- **Input Digital:** 1 x ADAT optical or SPDIF optical, SPDIF coaxial (AES/EBU compatible)
- **Output Digital:** 1 x ADAT optical or SPDIF optical, SPDIF coaxial (AES/EBU compatible)
- **MIDI:** 2 x MIDI I/O via breakout cable (4 x 5-pin DIN jacks), for 32 channels low jitter hi-speed MIDI
- **Dynamic range AD:** 110 dB RMS unweighted, 113 dBA
- **THD AD:** < -100 dB (< 0.001 %)
- **THD+N AD:** < -98 dB (< 0.0012 %)
- **Crosstalk AD:** > 110 dB
- **Dynamic range DA:** 110 dB RMS unweighted, 113 dBA (unmuted)
- **THD DA:** -100 dB (0.001 %)
- **THD+N DA:** -96 dB (0.0015 %)
- **Crosstalk DA:** > 110 dB
- **Input/Output level for 0 dBFS @ Hi Gain:** +19 dBu
- **Input/Output level for 0 dBFS @ +4 dBu:** +13 dBu
- **Input/Output level for 0 dBFS @ -10 dBV:** +2 dBV
- **Sample rate internally:** 32, 44.1, 48, 64, 88.2, 96, 128, 176.4, 192 kHz
- **Sample rate externally:** 28 kHz - 200 kHz
- **Frequency response AD/DA, -0.1 dB:** 5 Hz - 20.4 kHz (sf 44.1 kHz)
- **Frequency response AD/DA, -0.5 dB:** 1 Hz - 43.3 kHz (sf 96 kHz)
- **Frequency response AD/DA, -1 dB:** 1 Hz - 80 kHz (sf 192 kHz)

## Drivers

- Windows Vista / 7 / XP SP2 (32 & 64 Bit)
- Apple Mac OS X 10.5