

Based on a newly developed RME Pro Audio core the UFX provides revolutionary ultra-low latencies with USB or FireWire.



Fireface UFX

60-Channel 192 kHz USB & FireWire audio interface

30 Input / 30 Output channels

12 x Analog I/O

4 x Mic / Instrument preamp with Advanced Parallel Conversion

1 x AES/EBU I/O

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

2 x MIDI I/O

1 x Word Clock I/O

FireWire and USB operation

TotalMix FX with internal effects

Integrated Monitoring Control



60 channels of audio! Digitally controlled high-end preamps, reference class converters and complete 192 kHz operation. Ultra-low latency operation with USB OR FireWire combined with the legendary RME driver stability and maintenance.

Including active jitter suppression, professional reference level support, advanced stand-alone functionality, RME's unique DIGiCheck metering and analysis toolbox and – of course – identical operation on Windows PC and Mac.

On top of it: TotalMix FX, the new digital high-end mixer and signal router, driven by two powerful DSP, with integrated EQ, Dynamics and Reverb/Echo effects up to 192 kHz plus built-in monitoring control.

The full-blown feature set is backed up by an extraordinary usability. At its heart is a bright multi-functional color display with full front panel metering for all 60 channels plus effect bus, and complete control of all key features - directly from the front of the UFX.

Sound Quality

When it comes to sound quality and price to performance ratio RME plays in its own league. The Fireface UFX is no exception. Like any other RME product it combines excellent analog circuit design with high-grade AD/DA converter chips. Therefore all balanced TRS & XLR I/Os and both phones outputs guarantee outstanding low noise and distortion values. In best RME tradition and product philosophy converters and preamps don't produce "sound", they do not add or remove anything from the source signal, just capture it as it is.

Due to its efficient jitter reduction, RME's superior SteadyClock guarantees state-of-the-art AD/DA conversion, even when clocking to an external digital source.

All I/Os operate up to 192 kHz and reach 118 dBA dynamic range on playback - even both headphone outputs. Their high power technology delivers high volume no matter if high or low impedance phones are used. The balanced analog inputs are based on RME's low-latency converter design from the high-end converter ADI-8 QS. The DA section is based on RME's M-Series. Both designs guarantee excellent S/N and THD specs across a wide analog level range.

Every input *and* output channel comes with a luxury feature set, comparable to a full-scale digital console. The effects per channel include 3-band parametric EQ, adjustable Low Cut, Auto Leveler, Compressor, Expander, MS Processing and phase reversal. The Reverb and Echo effects unit is available for all channels by a stereo send and return bus. The UFX easily tops the competition by offering all these effects even at 192 kHz operation.

USB & FireWire

The UFX now combines USB and FireWire, Made by RME, within one interface and has been uncompromisingly optimized for highest performance under Windows and Mac OS. It uses a special customized firmware for every operating system. Like other RME interfaces, the UFX provides revolutionary ultra-low latencies even with multiple channels.

Connectivity

- 30 Input / 30 Output channels
- 12 x Analog I/O
- 4 x Mic/Instrument Preamp (digitally controlled) using Advanced Parallel Conversion
- 1 x AES/EBU I/O
- 2 x ADAT I/O (or 1 x ADAT I/O plus 1 x SPDIF I/O optical)
- 1 x Word Clock I/O
- 2 x MIDI I/O
- FireWire and USB operation

Analog I/O

The UFX provides 12 analog I/O.

- Back:**
- Inputs 1-8** (TRS - balanced)
 - Output 1-2** - Main Output (XLR – balanced)
 - Output 3-8** (TRS – balanced)
- Front:**
- Inputs 9-12** (XLR/TRS Combo - balanced)
 - Outputs: 9/10, 11/12** (TRS - Stereo)

Every input and output is *individually* switchable to all common professional studio levels:

- 10 dBV, +4 dBu, HiGain (equivalent to +2 dBV, +13 dBu and +19 dBu for digital full scale).
- Directly on the device or via TotalMix.
- The balanced XLR outputs even provide a level of up to +24 dBu.



Preamps

The UFX provides four high-transparency preamps backed up by four stereo converters with RME's new Advanced Parallel Converter technology. The fully symmetrical preamp design impresses with extremely low distortion, excellent signal to noise ratio and a perfect linear frequency response.

Mic and Instrument preamps of the UFX use the core technology from RME's Micstasy – a high-end preamp for supreme sonic demands and critical applications, like the professional recording of classical concerts.

The *digitally controlled* gain of up to 65 dB, adjustable in steps of 1 dB over a range of 55 dB, is individually set for every preamp by the display-supported controls on the front of the UFX. All level settings are 100% reproducible and can also be adjusted comfortably with the TotalMix software from the host computer or via a MIDI remote controller.

The four inputs on the front use balanced XLR/TRS combo sockets and operate alternatively as Hi-Z inputs. Directly plug in up to four guitars or other instruments - it does not require any other hardware.

Advanced Parallel Conversion . All four UFX preamps are feeding not only four, but eight AD converters. Every Mic-pre channel uses a double, parallel AD conversion on two AD converters at the same time to reach exceptional signal-to-noise values and a performance not available with a classic converter design.

Monitor Controller

The UFX is not only a perfect desktop level controller, but a monitor switcher and source selector with integrated talkback function for modern Mix-In-the-Box studios which are based on software DAWs. As the UFX includes the usually externally added monitoring controller, it also preserves the original sound, as its hardware output stays directly connected to the studio monitors.

The control room features work hand in hand with the control room section of TotalMix. A flexible management allows you to assign any physical output to the three, directly knob-controlled monitor outputs. E.g. just assign the AES/EBU output as Main Out, or as Phones Out - any output can be used. Talkback, Listenback, Mono, Dim - all these features work automatically for the assigned outputs in the expected way. Convenience at its best.

Display

To maintain the best usability for this huge feature set, RME integrated a high resolution color display into the front panel. In combination with a trio of rotary encoders all features of the UFX can be manually controlled directly on the UFX itself. TotalMix, connected PC or Mac, is synced to the interface controls and follows all changes automatically.

Digital I/O

AES/EBU

The UFX provides a professional AES/EBU I/O with 192 kHz support.

ADAT

Two 8-channel ADAT I/Os expand the UFX and allow a connection of two additional AD/DA converters or the insertion of effects devices and mixing consoles. Both I/Os support sample rates with up to 192 kHz (S/MUX4).

Like AES/EBU, these 16 ADAT channels are available simultaneously with the analog channels. Using two external converters like the ADI-8 QS, the UFX will provide 28 analog inputs and outputs, 20 with a sample rate of 96 kHz, and still 16 at 192 kHz.

SPDIF

The second ADAT I/O can be used as optical SPDIF I/O, making the UFX connections even more flexible.



TotalMix FX

The DSP-based TotalMix mixer allows fully independent routing and mixing of all 30 input and playback channels to all 30 physical outputs. Up to 15 totally independent stereo submixes plus a luxury Control Room section offer unrivalled monitoring capabilities and unsurpassed routing flexibility.

There is more: The next generation of TotalMix delivers hardware mixing/routing with lots of new features and a highly improved usability. For a seamless integration of the new features TotalMix has been rewritten from the ground up. The DSP mixer now not only matches features of high-end digital consoles but even adds the following effects on all input and output channels:

- 3-band parametric EQ plus Low Cut (up to 24 dB/Oct)
- Dynamics: Compressor/Expander
- Auto Level

The UFX provides a separate FX send bus feeding two effect engines: Reverb and Echo.

All effects are available even at 192 kHz.

The complete effects section not only adds a lot of flexibility to the recording chain, but makes latency burdened software dispensable.

TotalMix can easily replace any external mixer, e.g. to create different latency-free monitoring mixes with EQ and Reverb for the main studio monitors and the headphone of the vocalist(s) in the recording chamber.

Drivers

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

Article No.: FFUFX1

Package weight: 7 kg

Package size: 56 x 32 x 11 cm (B x H x T)

Package contains

- USB cable: 1,8 m
- FireWire cable: 4 m
- Optical cable (TOSLINK) 2 m
- Power cable
- Installation CD (WIN & MAC): Drivers • DIGICheck • Manual (PDF)
- Printed manual

Question & Answers

Is the Fireface UFX the successor of the Fireface 800?

No. The Fireface 800 still remains as a state-of-the-art FireWire audio interface.

Can I use the Fireface UFX stand-alone?

Yes. The Fireface UFX is completely usable without any connection to a PC or Mac. All important features are controllable with the display and the encoder buttons.

Can I use the UFX on a USB and FireWire port at the same time?

No. Only one connection at the same time.

What is better: USB or FireWire?

Depends on your specific system. Just try it out!

Can I use the UFX on a FireWire 800 port?

Yes. It just needs a FireWire 800 <> 400 cable.

Can I use the UFX on a USB 3.0 port?

Yes. The Fireface UFX is compatible to USB 3 chipsets.

Can I use the Fireface UFX with bus-power?

No. Neither a FireWire or USB port can deliver the necessary amount of power.

Why is there a USB front-port?

In a later firmware update it will enable recording and playback using USB memory sticks and hard disks.