# FIREPOWER FCA1616/FCA610

## FCA1616
**Audiophile 16 In/16 Out, 24-Bit/96 kHz FireWire/USB Audio/MIDI Interface with ADAT and MIDAS Preamplifiers**

- 4 state-of-the-art MIDAS designed mic preamplifiers, with phantom power, individual Pad, Low Cut and Hi-Z

- Streams 16 inputs / 16 outputs plus 1x MIDI I/O with ultra-low latency to your computer, supporting Mac OS X and Windows XP or higher

- All standard I/O formats supported – analog, S/PDIF (coaxial and optical), ADAT, S/MUX

- 8 analog Inserts for use of external effects such as compressors, etc.

- Get 8 additional MIDAS designed microphone inputs and line outputs with the BEHRINGER ADA8200 (not included)

- Powered via external power supply (included)

## FCA610
**Audiophile 6 In/10 Out, 24-Bit/96 kHz FireWire/USB Audio/MIDI Interface with MIDAS Preamplifiers**

- 2 state-of-the-art MIDAS designed mic preamplifiers, with phantom power, individual Pad, Low Cut and Hi-Z

- Streams 6 inputs / 10 outputs plus 1x MIDI I/O with ultra-low latency to your computer, supporting Mac OS X and Windows XP or higher

- Ultra-flexible connectivity via analog and S/PDIF I/O ports (coaxial and optical)

- Powered via external power supply (included) or 6-pin FireWire bus

FIREPOWER AUDIO USB/FireWire audio interfaces are the ideal way to stream audio to and from your PC or Mac computer. These handy interfaces feature state-of-the-art MIDAS-designed mic preamps, legendary the world over for their pristine clarity and high-headroom sonic performance, plus our 24-Bit/96 kHz A/D-D/A converters will really respect your input. Both interfaces support Windows XP/Vista/7 plus Mac OS X and provide onboard phantom power for use with studio-grade condenser microphones. Hook up to the BEHRINGER FCA Series and instantly turn your computer into a powerful recording/editing workstation.

### Your Portal to the Digital Domain

The FCA Series allows you to converse with your computer in a language it understands… digital. When you connect line-level devices, such as synthesizers or the outputs of an audio mixer to an FCA1616 or FCA610, internal 24-bit A/D (Analog to Digital) converters swing into action, turning the audio signal into digital data. Now you can record and play back your masterpiece through a pair of active studio monitors or listen in the privacy of your favorite headphones.

### FCA1616

With its expanded 16 channel I/O, 4 MIDAS-designed mic preamps and ADA8000 ADAT connectivity, the FCA1616 is ideal for more permanent applications, such as home and professional recording studios, as well as live performance multi-track recording rigs. All standard I/O formats are supported including analog, S/PDIF (coaxial and optical), ADAT and S/MUX. Built-in MIDI I/O allows you to connect keyboards and other outboard MIDI hardware. The single rack-space FCA1616 also features 8 analog Inserts for use of external effects such as compressors, gates and EQs, etc. A dedicated power supply is included.

behringer

# FIREPOWER FCA1616/FCA610

## Common Features

- Audiophile audio interface with 24-Bit/96 kHz resolution for virtually any digital recording/mixing environment

- Multi-channel audio and MIDI operation via FireWire or USB2.0

- Compatible with popular recording software including Avid Pro Tools, Ableton Live, Steinberg Cubase, etc.

- Direct Monitoring and Main Volume control with "near-zero" latency

- 2 powerful Headphone outputs with individual Volume control, Mono and Source signal select

- Level control of your stereo or 7.1 active speaker system with a single knob turn

- Smooth cross-fading between inputs and DAW playback signals while your record sessions

- Status and signal presence indication for all analog and digital I/O

- Free audio recording, editing and podcasting software plus 150 instrument/effect plug-ins downloadable at behringer.com

- Standard port for Kensington security lock

- High-quality components and exceptionally rugged construction ensure long life

- Conceived and designed by BEHRINGER Germany

## FCA610

Due to its small size and low-latency operation, 6 In / 10 Out architecture, plus 2 highly-acclaimed MIDAS-designed mic preamps, the FCA610 is a dream come true for traveling musicians who record and edit on their laptops. The portable FCA610 can receive power from your computer's 6-pin FireWire bus or via the included external power supply. Built-in MIDI I/O allows you to connect keyboards and other outboard MIDI hardware. All standard I/O formats are supported including analog and S/PDIF (both coaxial and optical). The half-rack-space FCA610 stows easily in your travel kit.

## Getting Connected

On the rear panels of the FCA1616 and FCA610, you'll find ports for FireWire and USB 2.0. Inputs are balanced ¼" jacks that accept a wide range of line-level devices. Outputs accept both balanced and unbalanced ¼" connections. The two headphones jacks are conveniently located on the front panel, with a dedicated volume control.

## The Technical Stuff

Both FIREPOWER FCA1616 and FCA610 interfaces feature state-of-the-art, high-resolution 24-bit A/D-D/A

converters, supporting up to a 96 kHz sampling rate. Reliable Windows XP, Windows Vista, Windows 7 drivers and Mac OS X support ensure ultra-low latency operation.
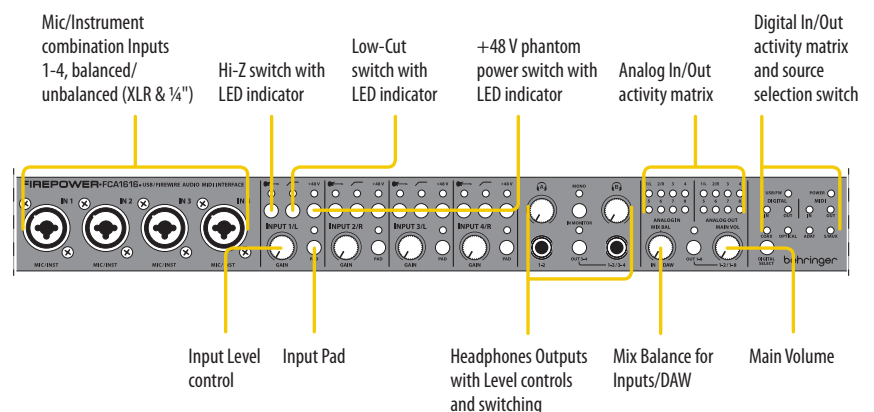
## How About Some Free Software!

Because you'll want to take full advantage of your computer's recording, editing and podcasting potential, we've put together a massive software download at behringer.com that includes Audacity (the most popular open source audio editor), Podifier, Juice, Podnova and Golden Ear (a great selection of podcasting software). You're ready to go live on your PC or Mac right out of the box! You also get more than 100 virtual instruments and 50 FX plug-ins, turning your computer into a complete home-based or mobile recording studio.

## Sound Value

Stop by your authorized BEHRINGER dealer today and join the digital revolution. With our super-affordable FIREPOWER FCA Series FireWire/USB audio interfaces, you'll get blazing-fast streaming to and from your computer, plus our amazingly sweet MIDAS-designed mic preamps, and much more—and we cover you with a comprehensive warranty program.
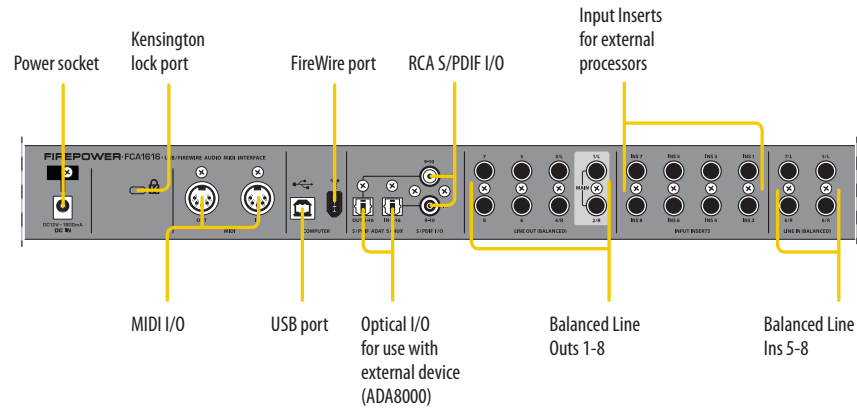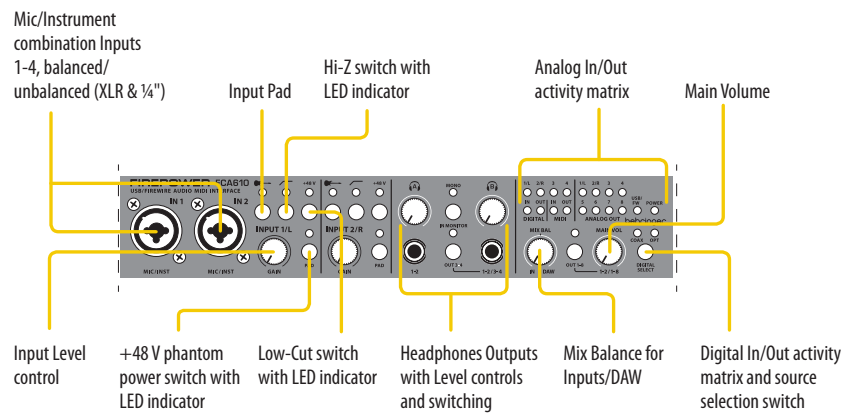
## FCA1616 Front Panel

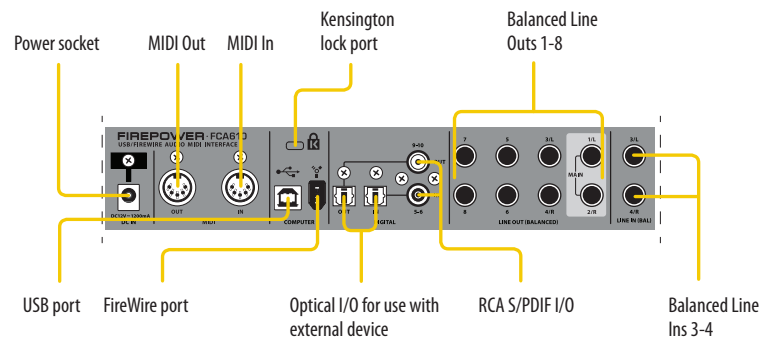Mic/Instrument combination Inputs 1-4, balanced/unbalanced (XLR & ¼")

Hi-Z switch with LED indicator

Low-Cut switch with LED indicator

+48 V phantom power switch with LED indicator

Analog In/Out activity matrix

Digital In/Out activity matrix and source selection switch



Input Level control

Input Pad

Headphones Outputs with Level controls and switching

Mix Balance for Inputs/DAW

Main Volume

# FIREPOWER
# FCA1616/FCA610

## FCA1616 Rear Panel

Power socket
Kensington lock port
FireWire port
RCA S/PDIF I/O
Input Inserts for external processors

MIDI I/O
USB port
Optical I/O for use with external device (ADA8000)
Balanced Line Outs 1-8
Balanced Line Ins 5-8

## FCA610 Front Panel

Mic/Instrument combination Inputs 1-4, balanced/unbalanced (XLR & ¼")
Input Pad
Hi-Z switch with LED indicator
Analog In/Out activity matrix
Main Volume

Input Level control
+48 V phantom power switch with LED indicator
Low-Cut switch with LED indicator
Headphones Outputs with Level controls and switching
Mix Balance for Inputs/DAW
Digital In/Out activity matrix and source selection switch

## FCA610 Rear Panel

Power socket
MIDI Out
MIDI In
Kensington lock port
Balanced Line Outs 1-8

USB port
FireWire port
Optical I/O for use with external device
RCA S/PDIF I/O
Balanced Line Ins 3-4

# FIREPOWER
# FCA1616/FCA610

## FCA1616 Home Recording Studio

Background Vocals

B-2 PRO

Lead vocal

B-2 PRO

Acoustic Guitar

UMX250

B3031A

Computer
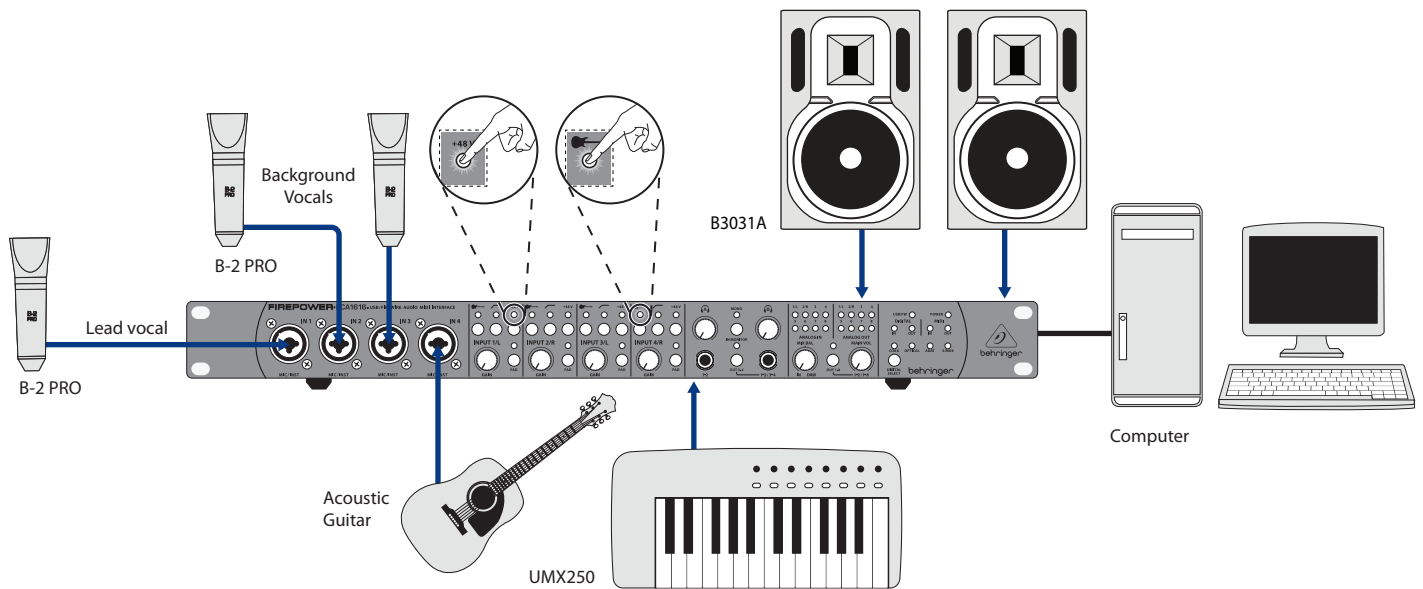
## FCA610 "On-the-Road" Recording Studio

Acoustic Guitar

B-2 PRO

FCA610

Laptop

HPX3000

UMX250
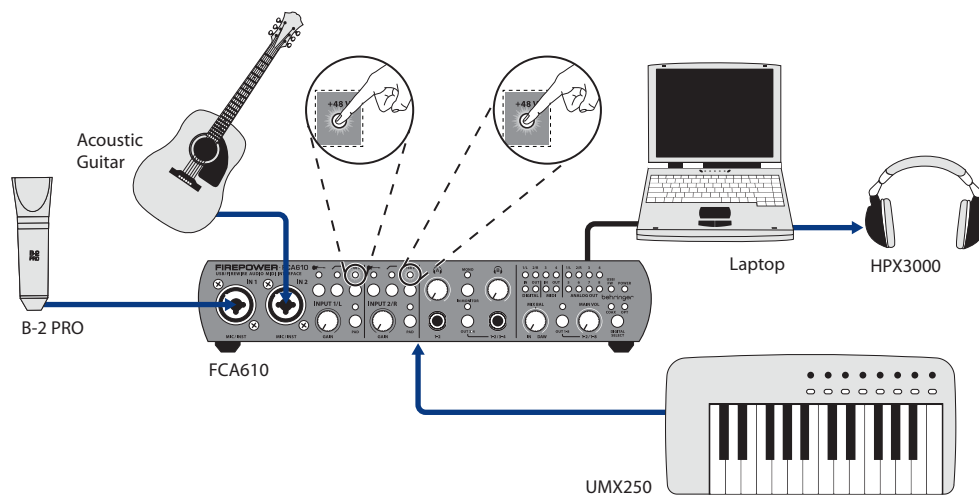
# FIREPOWER
# FCA1616/FCA610

## FCA610 Podcast Setup
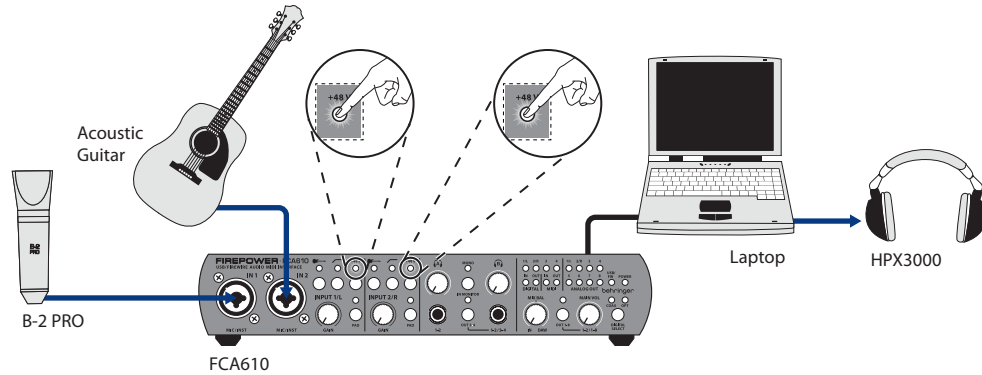


| Feature | FCA1616 | FCA610 |
|---|---|---|
| Total I/O channels | 16 x 16 | 6 x 10 |
| Analog I/O channels | 8 x 8 | 4 x 8 |
| Mic Preamps | 4 | 2 |
| Input Channel Selections with LED control | Ch. 1-4: Each Hi-Z, Low Cut, +48 V, Pad | Ch. 1-2: Each Hi-Z, Low Cut, +48 V, Pad |
| Input Inserts | 8 | 0 |
| Digital I/O connectors | Coaxial-I/O (RCA) + Optical-I/O (TOS-Link) | Coaxial-I/O (RCA) + Optical-I/O (TOS-Link) |
| Digital I/O formats | S/PDIF I/O (2-channel), S/MUX I/O (4-channel), ADAT I/O (8-channel) | S/PDIF I/O (2-channel) |
| Digital Select (front panel) | Coaxial, Optical, ADAT, S/MUX | Coaxial, Optical |
| Phones Outputs | 2 x ¼" jacks with individual level control<br>Monitoring Phones A: Out 1-2<br>Monitoring Phones B: Out 1-2 / Out 3-4 | |
| Direct Monitoring | Mix Balance knob: Smooth crossfading between direct input and DAW playback signal<br>Mono switch: for direct input signal | |
| Main Volume Control | Level Control of Line Out 1-2 or 1-8 simultaneously with a single knob turn | |
| MIDI I/O | 1 x I/O | |
| Metering | Analog In 1-8: Dual color LEDs (Signal/Clip)<br>Analog Out 1-8: Dual color LEDs (Signal/Clip) | Analog In 1-4: Dual color LEDs (Signal/Clip)<br>Analog Out 1-8: Dual color LEDs (Signal/Clip) |
| Additional Status LEDs | Digital I/O, MIDI I/O, USB/FireWire (dual color), Power | Digital I/O, MIDI I/O, USB/FireWire (dual color), Power |
| USB/FireWire Interface | 16 x 16 I/O channels, up to 24-bit/96 kHz | 6 x 10 I/O channels, up to 24-bit/96 kHz |
| Bus-powering | Only via 6-pin FireWire<br>(if computer feeds enough power) | |
| Power Supply | External Power Supply (included) | |
| Form factor | Approx. 19" / 1U | Approx. 9.5" / 1U |
| 19" rack mount brackets | Removable | N/A |

# FIREPOWER
# FCA1616/FCA610

## Specifications

| | FCA1616 | FCA610 |
|---|---|---|
| **Front Inputs** | | |
| Microphone/instrument | 4 | 2 |
| Preamp | MIDAS Design | |
| Type | XLR / TRS combo connector | |
| Frequency response | 10 Hz - 40 kHz (+0 / -3 dB) @ 96 kHz sampling rate | |
| Dynamic range | 102 dB, A-weighted | |
| Impedance | instrument in: 1 MΩ / mic in: 3 kΩ | |
| Gain range | +8 dB to +60 dB | |
| Max. input level | +14 dBu | |
| Low cut filter | 75 Hz (-3 dB); 12 dB / octave | |
| Hi-Z input | 1 MΩ; unbalanced only | |
| Pad attenuation | 15 dB | |
| **Rear Inputs** | | |
| Line in | 4 | 2 |
| Type | ¼" TRS | |
| Frequency response @ 96 kHz | 10 Hz - 40 kHz (+0 / -3 dB) | |
| @ 48 kHz | 10 Hz - 22 kHz (+0 / -3 dB) | |
| Dynamic range | 100 dB, A-weighted | |
| Impedance | 47 kΩ | |
| Max. input level | +14 dBu | |
| **Inserts** | | |
| Input inserts | 8 | N/A |
| Type | ¼" TRS | N/A |
| Impedance | 47 kΩ | N/A |
| Max. input level | +21 dBu | N/A |
| **Outputs** | | |
| Line out | 8 | |
| Type | ¼" TRS | |
| Frequency response @ 96 kHz | 10 Hz - 40 kHz (+0 / -3 dB) | |
| @ 48 kHz | 10 Hz -22 kHz (+0 / -3 dB) | |
| Impedance | 200 Ω | |
| Max. output level | +8 dBu, balanced | |

| | FCA1616 | FCA610 |
|---|---|---|
| **Headphone Out** | | |
| Phones outputs | 2 | |
| Type | ¼" TRS | |
| Frequency response | 22 Hz - 22 kHz (± 1 dB) | |
| Impedance | 10 Ω | |
| Max. output level | +22 dBu | |
| **Digital Audio I/O** | | |
| Type | Coaxial: RCA – 1 In, 1 Out  Optical: TOS-LINK – 1 In, 1 Out | |
| Supported formats | S/PDIF, ADAT, S/MUX | S/PDIF |
| **MIDI I/O** | | |
| Type | 5-pin DIN; 1 In, 1 Out | |
| **Digital Processing** | | |
| Converter resolution | 24-bit | |
| Supported sample rates | 44.1, 48, 88.2, 96 kHz (USB/FireWire) | |
| **Computer Bus Connectivity** | | |
| USB | USB 2.0, type B | |
| FireWire | FireWire 400, 6-pin IEEE 1394 | |
| **Software Support** | | |
| Operating systems | Mac OS X / Windows XP (32-bit),  Windows Vista (32-bit), Windows 7 (64-bit) | |
| Mac operating system drivers | none (CoreAudio/CoreMIDI compliant) | |
| Windows operating system drivers | FCA1616 USB Driver  (ASIO/WDM/MIDI) | FCA610 USB Driver  (ASIO/WDM/MIDI) |
| (download from behringer.com) | Common FCA IEEE 1394 Driver (ASIO/WDM/MIDI) | |
| **Power** | | |
| Voltage | 100 V to 240 V~, 50/60 Hz | |
| Power consumption | 20 W | |
| **Dimensions** | | |
| Dimensions (H x W x D) | 50 x 482.6 x 161 mm  (2.0 x 19 x 6.3") | 50 x 241.3 x 161 mm  (2.0 x 9.5 x 6.3") |
| Weight | 1.8 kg (4.0 lb) | 1.1 kg (2.4 lb) |

behringer.com

behringer