TASCAM
TEAC PROFESSIONAL

FW-1884

Professional Control Surface and FireWire Audio/MIDI Interface

The FW-1884 is a professional DAW control surface and audio/MIDI interface that uses the FireWire high-speed data transfer protocol. With FireWire's high-bandwidth capabilities, the FW-1884 provides audio and MIDI interfacing to computers as well as control of DAW parameters via eight 100mm motorized touch-sensitive channel faders, one master fader, and controls for pan, solo, mute and select functions on each channel. Tactile control for four bands of parametric EQ, a weighted jog wheel and a variety of shortcut keys for various popular software applications are also included.

Control Surface and Audio/MIDI Interfacing
Co-designed between TASCAM and Frontier Design Group, the FW-1884 is an expandable audio and MIDI interface and control surface for professional DAW users. Its DAW control capabilities include comprehensive mixing, automation, editing and navigation tools. In addition to its faders, dedicated controls and assignable/pre-assigned shortcut keys, the FW-1884 provides eight balanced XLR analogue mic/line inputs with high quality mic preamps, phantom power (switchable in groups of four channels) and inserts on every channel. Using 24-bit/96kHz A/D and D/A converters, the FW-1884 offers full 96kHz operation on all analogue I/O channels with compatible DAW software.

Digital I/O and Surround Tools
In addition to its two FireWire (IEEE 1394) computer interfaces, the FW-1884 gives users eight channels of ADAT lightpipe as well as stereo S/PDIF inputs and outputs. Perfectly suited to multi-channel surround production as well as standard stereo mixing, the FW-1884 has eight analogue outputs that default in L/R and 5.1 surround modes. A headphone output is also provided.

MIDI and Word Clock for Digital Production
Four MIDI inputs and four MIDI outputs on the FW-1884 allow users to connect with a wide variety of MIDI sound generation and timing tools. Its Word Clock in and out jacks allow computer systems to maintain accurate clock synchronization in digital recording environments. Also, its assignable footswitch jack can be used for tasks such as hands-free punching or MIDI control.

In use, the FW-1884 allows up to 18 audio inputs (including its eight analogue channels, eight ADAT Optical channels and stereo S/PDIF channels) to be accessed at once. As a DAW controller, the FW-1884 is compatible with a wide variety of popular applications including MOTU Digital Performer, Steinberg Cubase, Steinberg Nuendo, Cakewalk Sonar, and more.

The FW-1884 can sum all of its inputs (18 in addition to the outputs of a DAW), and send them back to the DAW. Using this flexible capability, users can (for example) attach analogue synthesizers, inputs from a GigaStudio sampling rig and so on, mix them with the outputs of their DAW software, and then send the summed signals back into the DAW software to print a stereo mix.

Main Features

Control Surface

- **Highly programmable control surface for digital audio workstation (DAW) systems**
- **9 x 100mm touch-sensitive motorized faders (8 for channel and 1 for master)**
- **Mixing parameters / HDR edit / Transport / Record function / Automation control**
- **Shortcut keys for various popular audio software applications**
- **Compatible with a wide variety of popular DAW applications**
- **Mackie Control Emulation**

Audio/MIDI Interface

- **High-resolution professional multi-channel audio interface (18 in and 10 out)**
- **24-bit resolution**
- **44.1 / 48 / 88.2 / 96kHz sampling frequencies**

Other features

- **2 x IEEE-1394 (FireWire) interfaces**
- **ASIO and WDM compatibility for Windows 2000 / XP**
- **ASIO, Sound Manager and Core Audio compatibility for Mac OS 9 / OS X**
- **LED indicators (Functional status, Control key, Signal level, Control surface mode, MIDI and other I/O status)**
- **Stand-alone mixing console mode (18 in and 2 out, Trim, Phantom, Insert, Solo, Mute, Pan, Fader)**
- **Footswitch connector (6.3-mm jack)**
- **SoftLCD application (for OS X only) simulates a "scribble strip" by displaying what each channel is controlling (screenshot)**
- **Minimum hardware requirements under Mac operating systems: Macintosh G4 processor**

Specifications

Analogue inputs and outputs	
MIC IN (Balanced)	XLR-3-31 x 8 (1: = GND, 2: = Hot, 3: = Cold)
Input impedance	2.2k ohm
Input level	-58dBu (TRIM = max) to -2dBu (TRIM = min)
Maximum gain	+54dBu
Headroom	16dB
Phantom power	+48V switchable in block of 4 channels
LINE INPUT 1-8 (Balanced)	6.3-mm TRS jack x 8
Input impedance	10k ohm at LINE/MIC 1M ohm at Guitar (LINE input 8 switchable)
Input level	-44dBu (TRIM = max) to +12dBu (TRIM = min)
Maximum gain	+54dBu
Headroom	16dB
INSERT 1-8 (Unbalanced)	6.3-mm TRS jack x 8
Impedance (Send)	100 ohm
Nominal level (Send)	-2dBu
Maximum level (Send)	+14dBu
Impedance (Return)	10k ohm
Nominal level (Return)	-2dBu
Headroom	16dB
STEREO / SURROUND MONITOR OUTPUT (Balanced)	6.3-mm TRS jack x 8
Output impedance	100 ohm
Nominal output level	+4dBu
Maximum output level	+20dBu
PHONES OUTPUT (Stereo)	6.3-mm TRS jack (T = L, R = R, S = GND)
Maximum output power	52mW + 52mW (32 ohm)

Digital inputs and outputs	
DIGITAL INPUT (Coaxial)	RCA jack
Input impedance	75 ohm
Format	AES3-1992 or IEC64958 (automatically detected)
Audio bit length	24bit
DIGITAL OUTPUT (Coaxial)	RCA pin jack
Output impedance	75 ohm
Format	AES3-1992 or IEC64958 (selectable)
Audio bit length	24bit
ADAT / OPTICAL INPUT (Light-pipe)	Light-pipe optical
Format	ADAT OPTICAL at ADAT AES3-1992 or IEC64958 (automatically detected) at OPTICAL
Audio bit length	24bit at ADAT 24bit at OPTICAL
ADAT / OPTICAL OUTPUT (Light-pipe)	Light-pipe optical
Format	ADAT OPTICAL at ADAT AES3-1992 or IEC64958 (selectable) at OPTICAL
Audio bit length	24bit at ADAT 24bit at Optical
WORD SYNC INPUT	BNC
Input impedance	75 ohm
Input level	TTL level
WORD SYNC OUTPUT	BNC
Output impedance	75 ohm
Output level	TTL level
MIDI INPUT 1-4	5-pin DIN connector - conform to MIDI specification
MIDI OUTPUT 1-4	5-pin DIN connector - conform to MIDI specification
IEEE 1394 (FireWire)	IEEE 1394 connector x 2
Transmit rate	400Mbps
FOOT SW	6.3-mm TRS jack

AD and DA specifications

MIC / LINE INPUTS, STEREO / SOUND MONITOR OUTPUTS	
AD resolution	24bit
AD SN / Dynamic range	104dB (Fs = 44.1kHz, A-weighted) 98dB (Fs = 96kHz)
DA resolution	24bit
DA SN / Dynamic range	106dB (Fs = 44.1kHz, A-weighted) 100dB (Fs = 96kHz)
CODEC: AK4528	
ADC Resolution	24bit
ADC SN / Dynamic range	108dB (Fs = 44.1kHz, A-weighted) 103dB (Fs = 96kHz)
Group delay	31 samples
DAC Resolution	24bit
DAC SN / Dynamic range	110dB (Fs = 44.1kHz, A-weighted) 104dB (Fs = 96kHz)
Group delay	30 samples
PHONE OUTPUTS	
DA Resolution	24bit
DA SN / Dynamic range	
DA maximum output level	+3.8dBu (0dBFs)
DA Nominal output level	-12.2dBu (-16dBFs)
DAC Resolution	24bit
SN / Dynamic range	100dB (Fs = 44.1kHz, A-weighted, -60dB output)
Group delay	19.1 samples

Audio specifications

Signal delay	<1.5 ms (Fs = 48.0 kHz, LINE IN to STEREO OUT) <0.75 ms (Fs = 96.0 kHz, LINE IN to STEREO OUT)
THD (Level: +4dBu)	<0.1% (20Hz - 20kHz, LINE IN to INSERT SEND) <0.013% (1kHz, LINE IN to STEREO OUT)
Frequency response (@ nominal level)	MIC/LINE IN to INSERT SEND: 20Hz - 25kHz (+0.5dB / -1.5dB) MIC/LINE IN to INSERT SEND: 20Hz - 40kHz (+0.5dB / -3.0dB) MIC/LINE IN to SURROUND/STEREO MONITOR OUT: 20Hz - 20kHz (+0.5dB / -1.0dB) MIC/LINE IN to SURROUND/STEREO MONITOR OUT: 20Hz - 40kHz (+0.5dB / -3.0dB)
Noise level (20Hz - 20kHz, TRIM max, 150 ohm)	MIC IN to INSERT SEND: <-128dBu (EIN) LINE IN to STEREO OUT: <-68dBu LINE IN to SURROUND MONITOR OUT: <-68dBu
Crosstalk (@ 1kHz)	STEREO / SURROUND MONITOR OUT: >80dB

Power supply and other specifications

Voltage requirements	120V AC, 60Hz / 230V AC, 50Hz
Power consumption	
Dimensions (W x H x D)	582mm x 136mm x 481mm
Weight	10.3kg

Design and specifications subject to change without notice.

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