

FIG. 1: Tascam's FW-1082 has audio and MIDI I/O, an independent audio mixer, and control-surface functionality in one compact device.



TASCAM FW-1082

Tascam creates a compact FireWire control surface. By Orren Merton

Tascam's FW-1082 is a FireWire audio/MIDI interface and control surface that can function as a fully capable stand-alone audio mixer. Tascam and Frontier Design Group have again joined forces to produce the unit, a descendant of Tascam's flagship control surface, the FW-1884. The FW-1082 is designed for those who want an all-in-one control surface but don't need some of the options and capabilities offered by its more expensive sibling.

Jacks-of-All-Trades

The FW-1082 (see Fig. 1) is approximately two inches shorter in each dimension and eight pounds lighter than the FW-1884. Nevertheless, Tascam and Frontier Design Group have packed a full complement of I/O features onto the FW-1082's chassis. The unit's rear panel (see Fig. 2) has eight balanced TRS inputs, which can be switched between line and guitar level. The first two channels have TRS insert jacks. There are four XLR mic inputs with switchable phantom power for channels 1 through 4.

The XLR and TRS inputs for channels 1 through 4 are wired in parallel, and you can't select between the TRS and XLR inputs for them. Tascam warns you to connect a source to either the TRS or the XLR input for a given channel, but not to both inputs simultaneously.

The FW-1082 has two balanced TRS monitor outputs and coaxial S/PDIF I/O. The analog and digital

I/O can operate simultaneously, allowing for a total of ten simultaneous input channels and four simultaneous output channels. It also has two sets of MIDI I/O ports, a stereo-headphone jack, and a power button and DC input jack for the included lump-in-the-line power supply. Interestingly, the unit has two FireWire ports, but the manual strongly suggests that you don't connect anything to the second FireWire port.

Under Control

The top of the FW-1082 contains the main controls for the mixing, monitoring, and control surface functions of the device. The upper-right section houses the monitor and headphones volume knobs, as well as the phantom power, FireWire, external word clock, digital input, and MIDI I/O LEDs. The Mode control buttons are located below that section. Those allow you to switch the unit into Computer Control-, MIDI Control-, or Monitor Mix mode. In a nice touch, there is a dedicated Control Panel button that launches the FW-1082 Manager software (or brings it to the front if it's already running). The software runs on Windows XP or Mac OS X.

The input section of the FW-1082, which is located in the upper-left corner, has a trim control as well as signal and overload LEDs for each channel. The trim knobs on channels 1 through 4 are adjustable from -2 dB to 54 dB of gain, while the trim knobs on channels 5 through 8 provide -2 dB to 44 dB of gain. The four center buttons

FW-1082 SPECIFICATIONS

Analog Inputs	(8) balanced TRS, (4) balanced XLR, (2) TRS insert
Analog Outputs	(2) balanced TRS, stereo headphone
Digital I/O	coaxial S/PDIF I/O, (2) FireWire
MIDI I/O	(2) MIDI In, (2) MIDI Out
Adjustable Gain	+56 dB (channels 1–4), +46 dB (channels 5–8)
Internal Bit Depth	24-bit
Sampling Rates	44.1-, 48-, 88.2-, and 96k Hz
THD (Level +4 dBu)	<.005% line in to insert send <.01% line in to monitor output
Noise Level (20 Hz–20 kHz, Trim Maximum)	<-128 dBu mic in to insert send <-64 dBu line in to monitor output
Crosstalk (@1 kHz)	>80 dB
Dimensions	19.11" (W) × 3.25" (H) × 15.2" (D)
Weight	14.31 lbs.

allow you to select the sampling rate (44.1-, 48-, 88.2-, or 96 kHz) in Monitor Mix mode. In the other modes, the buttons perform control surface functions. (You can also select the sampling rate in the FW-1082 Manager software.)

The input section has no metering other than the signal and overload LEDs, and the monitor section has no output monitoring. Moreover, the FW-1082 Manager software has no software meters, although Tascam leaves open the possibility that that might change. You can monitor levels visually in your DAW application, but that won't help you monitor direct-output levels.

The channel controls consist of eight 60 mm touch-sensitive motorized faders, each with a select, a mute, and a solo button. A separate 60 mm master fader is positioned directly to

the right of the channel faders. The select button becomes a REC enable button when you hold down the REC button. In Monitor Mix mode, the channel controls adjust the input and output channels just as the faders and buttons do on other hardware mixers. The Master Fader can also be set up in the FW-1082 Manager software to control analog monitor levels. In Computer Control mode, the channel controls serve as software controllers.

Finally, the FW-1082 has a complete selection of transport controls: in addition to the standard play, rewind, fast-forward, record, and stop buttons, there are four cursor buttons, two bank-select buttons, locate forward and back buttons, and a jog wheel. Those controls are mainly for use in Computer Control mode, but in Monitor Mix mode, the bank selection keys allow you to monitor either the



FIG. 2: The FW-1082's rear panel contains all of the unit's I/O connectors, including the headphone jack.

analog or the digital inputs. Most DAW applications offer full FW-1082 support either directly (Logic, Sonar, and Digital Performer) or through the FW-1082's built-in Mackie Control or HUI modes (Cubase, Nuendo, and Pro Tools).

In Use

I used the FW-1082 extensively, producing a rock track from recording through mixdown. Configuring the interface is intuitive. The FW-1082 delivers more than enough gain for instruments and most microphones, but its trim control lacked enough headroom for mics that need serious preamplification (such as my Royer R-121 ribbon mic). The converters sound neutral and are not hyped in any particular frequency. The FW-1082 drivers were solid, never crashing or exhibiting audio dropouts during weeks of daily use.

As a software controller, the FW-1082 provided everything I needed for a basic session, including channel faders, pan knobs, and mute, solo, record-enable, and transport controls. The FW-1082 lacks all the assignable function buttons of its larger sibling, the FW-1884, but the newer model's features are more than enough for most jobs. Personally, I rarely use the more in-depth editing functions of other software control surfaces.

I was happy to discover that the motors of the FW-1082's touch-sensitive motorized faders were quieter than those in my Logic Control. At first I missed the 100 mm fader track of the larger control surfaces, but in use I found that the shorter 60 mm one was still usable.

The Tascam FW-1082 ships with a SoftLCD application that provides a resizeable "scribble strip" on your monitor. The utility displays the channel information that a Mackie Control or a HUI would display on its surface LCDs. That utility was of limited use. I don't keep my control surface right under my monitor, and trying to use SoftLCD resulted in a fair amount of neck twisting. I would prefer dedicated LCDs on the control surface.

PRODUCT SUMMARY

TASCAM FW-1082

FireWire control surface/
audio interface
\$999

OVERALL RATING (1 THROUGH 5): 4

PROS: Well-built. Quality converters. Very well supported control surface. Channel inserts for channels 1 and 2. Includes limited versions of Cubase LE and GigaStudio 3 LE.

CONS: Group selection of phantom power. XLR and TRS inputs on channels 1 through 4 cannot be connected simultaneously. No metering. SoftLCD program instead of hardware LCDs.

MANUFACTURER

Tascam
www.tascam.com

Compact Control

Overall, I was left with a good impression of the Tascam FW-1082, despite wishing for certain capabilities. The rear panel I/O is convenient, but I would have liked the headphone jack to be placed on top of the device. It would be nice if the unit allowed users to select between the TRS and XLR input on channels 1 through 4, and select phantom power on those channels individually.

The unit's design compromises make sense, however, and didn't get in the way during actual session use. The FW-1082's knobs, buttons, and scrub wheel are solid, and the device feels sturdy and rugged. It sounds good and is easy to operate. Users looking for an all-in-one recording/control surface solution and who don't need all the I/O and controller functionality of the FW-1884 should give the FW-1082 serious consideration.

Orren Merton is the author of Logic Pro 7 Power! (Muska & Lipman, 2004). He also coauthored Logic 7 Ignite! (Muska & Lipman, 2005).