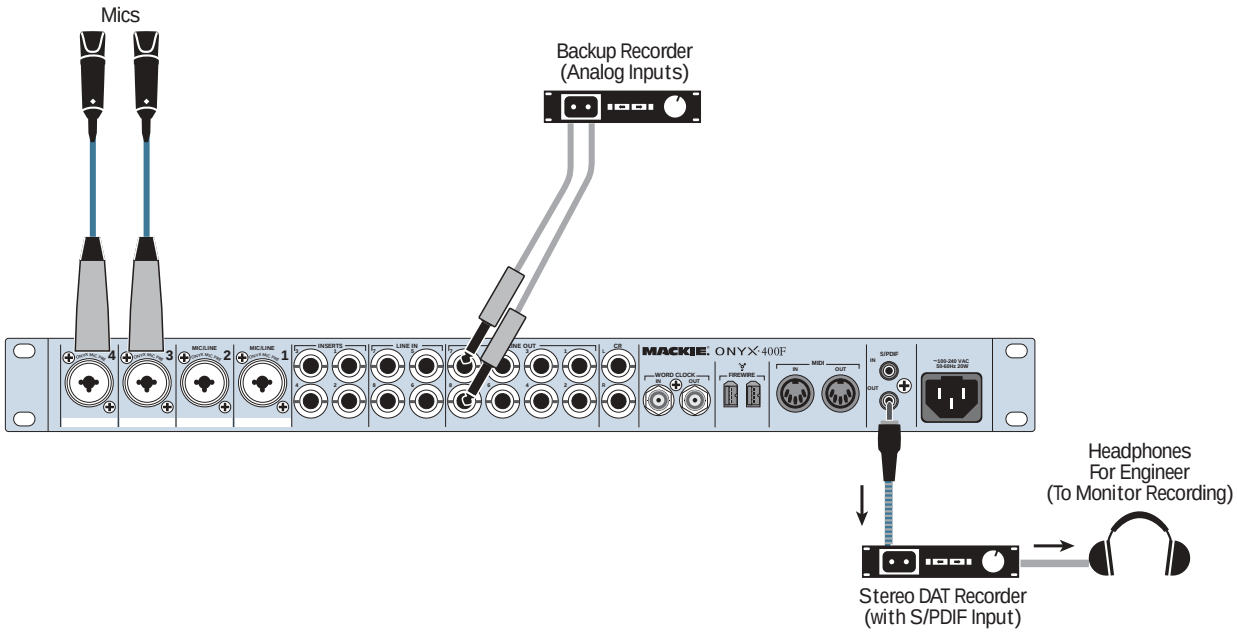
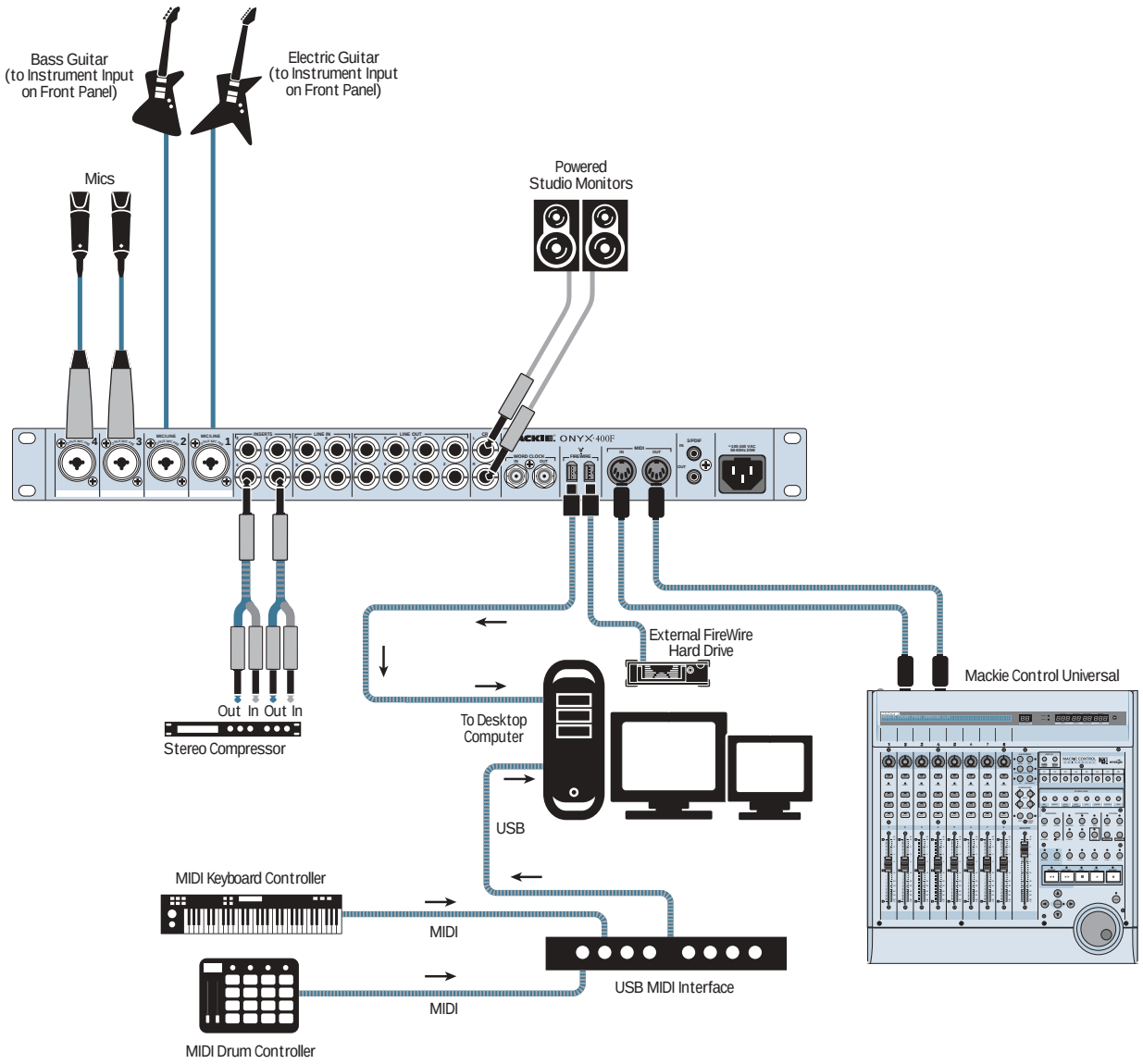


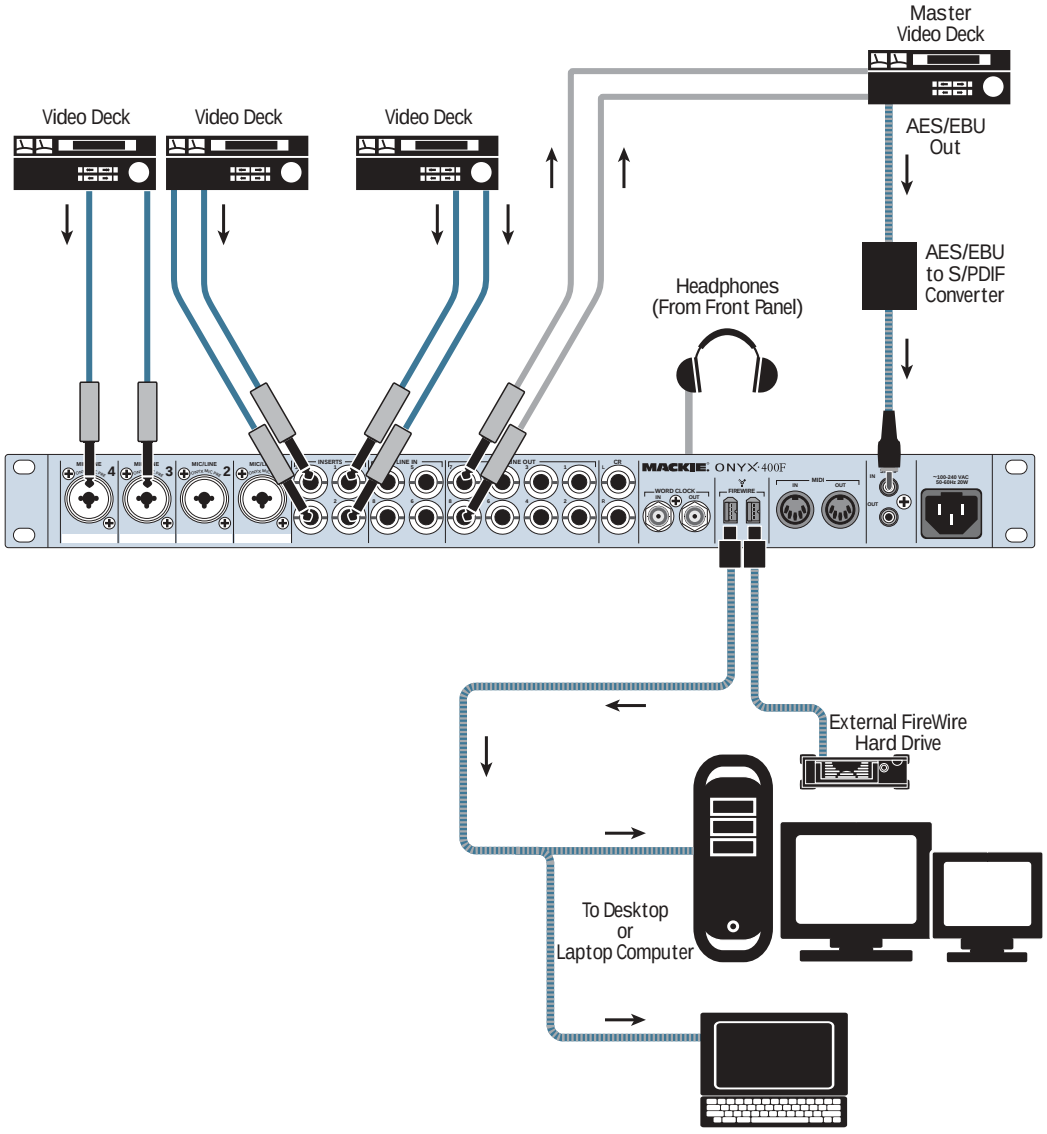
This illustrates a simple direct to 2-track recording setup. You can configure the Onyx 400F beforehand with the desired sampling rate and Inputs 1 and 2 routed to the S/PDIF output. Analog LINE OUTPUTS 1 and 2 on the Onyx 400F are connected to the analog inputs on a second stereo recorder for backup.

Onyx 400F 2-Track Recording



This illustrates the potential of the Onyx 400F to do entire band recordings with a minimum of physical gear or large recording spaces. Everything except the singers are "virtual!" A USB MIDI interface is used to connect an external MIDI keyboard controller and MIDI drum controller to the computer running the DAW software, and a Mackie Control Universal connected to the MIDI I/O on the Onyx 400F to control the DAW. The DAW is running an amp emulation plugin for the guitars and virtual instrument plugins for the keyboard and drum controllers.

Onyx 400F with DAW and External Controllers



This illustrates an audio/video application where several video decks are connected to the inputs on the Onyx 400F, and use the Console control panel to route the audio to the Master Video deck. The AES/EBU digital audio output from the Master Video deck is converted to S/PDIF format and connected to the S/PDIF input on the Onyx 400F (select Professional S/PDIF format in the 400F Console). This is routed to the DAW software application on a laptop or desktop computer via the FireWire connection.

Onyx 400F Audio/Video Application

Onyx 400F Features

Front Panel

There are ten channels in the Onyx 400F. Channels 1-4 share the same features with the exception that channels 1 and 2 have a high-impedance 1/4" input jack on the front panel for connecting electric instruments directly to the preamp without a direct box. Channels 5-8 are line-level inputs and have no front panel controls. Channels 9-10 are the stereo digital S/PDIF inputs.

1. Power Switch

This is self-explanatory. When the POWER switch is turned ON (up), power is supplied to the Onyx 400F.

2. CLOCK SOURCE Indicators

These three LEDs indicate the clock source currently selected for the Onyx 400F. The selection is made in the Onyx 400F Console (on the PC or Mac).

Note: Since one of the clock source indicators is always lit when the power is on, it serves as a "power on" indicator as well.

The three options are:

INT: This is the default selection. The Onyx 400F runs on its own internal, extremely accurate, low-jitter clock. Select INT when using the 400F as the master clock in a system of digital devices, or if no other clock source is available.

WORD: The Onyx 400F uses the clock signal that appears at the WORD CLOCK IN [18] connection on the rear panel. Select WORD when you want the 400F to be a slave in a system of digital devices.

S/PDIF: The Onyx 400F uses the clock signal embedded in the S/PDIF digital input [21] signal.

Tip: It's always best to use the highest quality clock as the master. Experimenting with different clock sources, and using your ears, is the best way to determine which clock source to use.

3. FireWire Indicator

This LED illuminates when a valid FireWire connection is made between the Onyx 400F and a computer.

4. MIDI Indicators

These two LEDs flash whenever MIDI data appears at the MIDI IN and MIDI OUT connections.

5. CONTROL ROOM Level

Use this knob to adjust the signal level at the CR Out jacks on the rear panel. It adjusts the signal for both the left and right Control Room outputs, ranging from off (∞) to maximum gain (MAX).

Connect the CR outputs directly to the inputs of a pair of powered studio monitors. No mixer required!

6. PHONES 1 and 2 Level

These two knobs adjust the signal level at the PHONES Out jacks [7] on the front panel. They range from off (∞) to maximum gain (MAX).

Having independent level control for each headphone output means that in an overdub situation, for example, the musician and the engineer can each adjust their own headphone volume to taste.

7. PHONES 1 and 2 Outputs

This is where you plug in your stereo headphones. These are 1/4" TRS stereo jacks. The same signal appears at both PHONE jacks, but each has its own individual level control [6]. The same signal is also routed to the CONTROL ROOM outputs [17].