

JDK AUDIO 8MX2

Linkable 8x2x8 Mixer/Preamps for Mobile and Studio Use



The 8MX2 is a recent addition to the JDK product line, but its history traces back to the AT1 product of the same name. AT1 manufactured high-quality mixing consoles for live sound, and its Paragon desk set a benchmark for many years (AT1 changed its name to API after acquiring API in 1999). The microphone preamps in the 8MX2 are derived from circuitry employed in the Paragon, and though the 8MX2 can be viewed as an 8-channel mic pre/mixer, that description belies its capabilities. A closer look unveils its ability to help solve some of the issues arising during mobile and studio recording applications.

ON THE OUTSIDE

The front panel of the 8MX2 is arranged as eight inputs and a master output. Each input has push-button switches for Return, +48-volt phantom power, phase, cue and mix. Phase and +48V are self-explanatory. Mix assigns the input channel to the L/R Mix bus, which may be monitored via front panel headphone jack or rear panel TRS Monitor outputs. The Return switch is similar to a mic/line switch, swapping the mic for a line-level signal connected to the rear panel Return input.

Pressing a channel's Cue button PFLs that channel in the headphones and temporarily assigns the two meters on the unit's far right to show PFL and Limiting. An LED in the master section indicates when cue is engaged. The ability to meter via the cue bus is crucial since the input channels lack metering. Concentric controls on each channel set input level (up to 65 dB of gain) and limiting (counterclockwise for no limiting), while another pair set level and pan to the L/R mix. The Master section provides level and balance pots for the main mix, plus a monitor level control for adjusting speaker and headphone volume.

There are three pushbuttons in the master section: Mix Return routes the signal at the rear panel 2-track return input

to the L/R outs for playback from a stereo device. The other two switches determine what signal is routed to the cue bus. When both buttons are in the up position, cue taps the channel output post-limiter. When "Pre" is pressed, the cue signal is tapped off the preamp output, pre-limiter. Depressing "Ret" enables cueing of signals routed to the rear panel return inputs. Space is tight around the push-buttons; I found it easier to switch them using a pencil eraser.

In addition to eight XLR microphone inputs (each of which has a ground lift switch), the rear panel features two DB-25, two DB-9 and six TRS connectors. The DB-25s follow the Tascam standard pinout for eight balanced audio channels. The DB-25 labeled "Output" carries direct outs from each mic preamp (pre-fader, -phase switch and -limiter) for patching directly to a tape machine or DAW interface. The remaining DB-25 is labeled "Returns," which I initially mistook as line inputs. I soon found that there is more to using these connections than just feeding in line level signals. Two DB-9s allow multiple units to be linked; in addition to providing a path for the L/R bus from a slave to a master 8MX2, these connectors allow the Cue function to operate across all linked units.

RETURN TO THE RETURNS

The 8MX2's return inputs are fixed-gain, designed to accept

TRY THIS

To use the 8MX2 as a summing box for your DAW, route your tracks to output pairs—for example, drums to outputs 1 and 2, bass to output 3, lead vocal to output 4, guitars and keys to outputs 5 and 6, and perhaps effects to outputs 7 and 8. Patch the individual outputs of your audio interface to the Return inputs of the 8MX2. Set all of the 8MX2's level controls and Master out to unity (indicated by the white hash mark) and set pan controls to reflect the DAW output panning. Patch the 8MX2's monitor outputs to your studio monitors. You can patch the 8MX2's stereo mix output back into a pair of inputs on your interface and record the summed mix back into your DAW, or use the 8MX2's Mix Out to record the summed mix on an external 2-track machine.

+4dB signals from the output of a DAW interface or tape machine. This is a good thing because when using the return, you won't be tempted to use the input level control to make the return louder—thus screwing up your record level and possibly creating level mismatches for subsequent punches. In a mobile or location recording situation, you can use the 8MX2 to monitor microphone signals going to your recording device when tracking, then switch the channels to "Ret" and monitor the outputs from the recording device for playback.

Because each channel may be switched independently between input and return, the 8MX2 permits latency-free DAW monitoring. When doing mobile overdub sessions with the 8MX2, I used the first two channels as returns from the L/R output of my DAW. A vocal microphone was plugged into channel 3 and patched to input 3 of the interface. The vocalist and I monitored via the output of the 8MX2 (as opposed to monitoring the output of the DAW interface), allowing us to hear the

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vocal mic on the way in to the DAW combined with the L/R outs coming from the DAW (i.e., there was no latency in the monitor path). When it came time to listen back, we switched channel 3 from Mic to Ret so we could hear the output of the vocal track, which was routed to output 3 of the interface. If you are using

a hardware recorder, the Returns can be used for monitoring multitrack outputs, negating the need to carry a separate mixing console. The Returns may also be used for analog summing of DAW outputs, with the output of the 8MX2 patched back into the DAW for stereo mixdown, or to an external stereo recorder (see the "Try This" sidebar).

CLEAN MACHINE

The mic preamps on the 8MX2 are clean, quiet and flat (I measured 20 to 20k Hz +/- 0.3 dB)—just what you want for a mobile tracking setup. Ditto for the returns. Limiters and phase switches apply only to the mic preamps (not the returns), which is a good thing because it confirms that what you hear is being committed to the recording. In most cases the limiter will be used to prevent distortion, though I liked what it did sonically for snare drum and voice-overs. When used on a bass DI, the limiter held the bass to a consistent level without making itself obvious.

The 8MX2's cue function is set up as an ei



ther/or system whereby the switch in the master section decides whether cue applies to the mic inputs or the returns. You can simultaneously cue any of the eight channels, but you cannot simultaneously cue the return on one channel and the mic input on another channel, a minor inconvenience. The engineers at JDK made the smart decision to start the meter scale at -3 and run it up to +24, with red LEDs at +21 and +24. This means you won't see very low signal levels when you PFL, but I'd rather have the resolution at the top of the scale, especially since what you'll hear accurately reflects the meters; when you hit the +24 segment you will hear distortion.

GREAT PERFORMER

If I were creating a mobile recording rig, I'd build it around several 8MX2s because they simplify the process, occupy only a single rackspace and eliminate the need for a mixing console. As an added benefit, the 8MX2's robust headphone amp had no trouble powering my old and notoriously difficult-to-drive AKG K240 'cans. Combine those attributes with excellent preamps and the ability to expand the system at any time, and you have a formidable tool for mobile work. ■

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PRODUCT SUMMARY

COMPANY: JDK Audio (designed and manufactured by API)
PRODUCT: 8MX2
WEBSITE: JDKAudio.com
PRICE: \$3,195
PROS: Clean, quiet audio path with plenty of headroom. Versatile routing options. Built-in power supply.
CONS: Master metering is summed for left and right output buses. Headphone output level is tied to monitor output level.