

## 100T-SCAN



The new EFX: a right box of tricks

# PIONEER EFX-1000

## DIGITAL EFFECTS PROCESSOR

PIONEER ARE PUSHING AHEAD WITH THEIR NEXT GENERATION OF DIGITAL DJ PRODUCTS, OF WHICH THIS NEW EFFECTS UNIT IS THE IDEAL COMPANION FOR THEIR NEW FLAGSHIP ALL-DIGITAL MIXER.

PRICE: £899 INFORMATION: [WWW.DJSOUNDS.COM](http://WWW.DJSOUNDS.COM) CONTACT: 01753 789789

words: David Eserin

**I**f ever there was a sign of changing times for DJ technology, it comes in the form of the latest digital range from Pioneer. The recently released DJM-1000 DJ mixer (reviewed in DJmag no88/vol3) was first out of the stable and after testing we decided it was the tastiest digital mixer out there. It has support for all types of digital connectivity at high definition sample quality, raising the digital DJing game significantly.

Clearly then, the company's other products need to be brought in line with this new benchmark, so in comes the EFX-1000, offering enhancements over the old EFX-500, many specifically intended for marriage with the DJM-1000 mixer.

### DIFFERENCES

The EFX-1000 no longer has its predecessor's three-band isolator at the top; probably because of the three-band isolator on the DJM-1000. There's also no headphone monitor connection at the front of this unit.

It does however boast MIDI functions, 'Digital Link' connection (see below), extra sample memory and an eight-beat button, plus rhythm recording on beat effects. There are also more effects overall with new 'character' control, higher quality processing, a foot switch, and jog-wheel movements that can be recorded and played back looped. The jog wheel and beat effects are now also treated separately so there are individual wet/dry mix controls and the signal flow can be switched around.

### DIGITAL LINK

The EFX-1000 sports a new type of digital connection specifically designed to allow it to connect to the DJM-1000. Digital Link allows the two units to transmit high definition digital audio down a single cable and avoids any loss in quality.

Once the music is inside the DJM-1000 everything is processed in the digital realm. When you connect the EFX-1000 via the Digital Link, it's as if the unit is part of the DJM's core processing, almost like a plug-in with a fancy controller. This connection not only transmits the audio at high definition but also allows the unit to be controlled by the DJM-1000. Certain controls are already implemented to allow parameters such as the jog-wheel to be

## INFO

### T-SPECS

» Effects: delay, echo, pitch echo, cut, flanger, filter, phaser, jet, wah, phase shifter, ring modulator, pitch, humanizer, vocoder  
 » Effect frequency control » Effect depth, mix, character control » 192kHz, 24-bit converters » 32-bit processing » BPM recognition, tap » 16 second memory  
 » Rhythm effector: 8 taps » Signal flow control » Foot switch » Bypass » Jog-wheel recording: 8 sec » Jog-wheel loop and single playback » MIDI I/O, clock » Digital Link control from DJM-1000 » Digital S/PDIF I/O (RCA) » Stereo mono-jack I/O » Stereo RCA I/O » Three-band effect frequency  
 » 220-240V

controlled by the DJM-1000 crossfader. The EFX-1000 works with other standard digital equipment using its S/PDIF digital input and output connections on RCA. Currently there's no mixer available with an effects send and return on digital connections, but it could be connected by other ways to digital equipment and supports up to 96kHz, 24-bit audio. For the majority of us stuck in the analogue world the EFX has every other type of connector. There are unbalanced mono jack connections plus RCA connections for all standard mixers.

### LAYOUT

The EFX-1000 is separated into two parts, which both have their own audio entity. On the left are beat effects such as delay, echo and transpose. There are controls for BPM recognition and a number of buttons to walk the effects through different timings. On the right are the jog effects, which are controlled by a large jog-wheel and include vocoders, humanizers, zip and wah. Each effect area has its own effect mix control to blend between the original signal (dry) and the effected signal (wet). There's also a depth control for intensity of effect and a new character control for twisting up effect parameters even more. At the top of the unit are various controls for setting up the EFX. Primarily there is a volume control for the input and output signal. These signals can be monitored with the level meter at the top, which can be switched between viewing both wet and dry levels at the same time, or individually in stereo.

The order that the dry signal passes through the effects unit can be changed at the flick of a switch, even when the unit is in action. This allows for more experimentation because feeding an effected sound into another effect will create different results, depending on the signal flow. The EFX-1000 jog and beat effects can be switched on and off remotely with a foot pedal. There's a switch to choose between having the foot pedal turn both on at once or either effect individually. This feature frees up your hands for controlling the parameters.

The last controls at the top of the unit are for setting up the MIDI implementation, and there's also a handy bypass switch to immediately turn everything off and revert to the dry signal.

### BEAT EFFECTS

The left-hand side of the unit is dedicated to effects that are triggered by the beat and which revolve in cycles. Delays and echoes are the obvious effects, which need to be in sync with

the beat and the EFX has plenty of controls and options to get the timing right.

The main focus of this effect processor is the round timing area. This is where DJs can quickly jump through different beat increments, set BPM and timing values. There are eight buttons for different beat increments ranging from eight bars (8/1), right up to an eighth of a bar (1/8). Timings can be adjusted manually in milliseconds right down to 1ms and all the way up to 16 seconds. The manual dial works intuitively within limitations - move it slowly and it will step through in milliseconds, or move it very quickly and the same number of clicks will move in hundreds of milliseconds; allowing you to jump from 200 down to 1 with only half a turn.

The EFX remembers which delay setting each effect is set to during a session so it's easy to return to them. The unit has an internal BPM counter that puts all the effects in time when in Auto mode. There's also a large tap button which can be used to manually input BPM. With most of the music we tried, the EFX got the timing right but there are always exceptions. If you are playing 4/4 music such as house and techno then the EFX is almost faultless.

When triggering a beat effect such as the transpose, it's essential to start triggering the effect in time as the chop starts from the point you activate it and continues at the set BPM. It almost seemed that the EFX was monitoring the beat because we attempted to fool it by slowing down the record slightly and it would quite often adjust itself accordingly to stay in time.

The EFX-1000 also has a new trick up its sleeve in that it can record rhythms and play them back. These rhythms can be applied to all the beat effects and can even be changed in speed using the beat increment buttons. Using the tap button simply tap in a rhythm to the beat - up to eight taps - and then the EFX applies that rhythm to a beat increment. Another handy trick passed over from the EFX-500 is the effect frequency buttons. These control which bands are effected by the sound. If using a chop with just the mid and hi frequencies selected, the chop will allow the bass through all the time and cut up the high frequencies. And similarly for a flanger, for example, the effect will only be applied to the selected frequencies.

The effects are very similar to the earlier EFX-500 unit, and existing users who've become bored of those will sadly find no massive improvement.

However, there is a lot more that can be done with the effects, plus a few tweaks to make them sound better.

The character button is one of those new features and can really spice up the way the flanger sweeps to the beat, for example. When used with delay and echo it controls the amount of filter applied to the delay sound. When used with the rhythm tap it gives a proper manual tap delay even in the echo effect. The echo can also be used similarly to a looping sampler because when the depth is at maximum it will keep a loop going forever.

The pitch echo works very like the echo and delay but the echo sound slowly pitches up or down according to where the character dial is set. The transpose effect chops up audio like a gating effect and works with both the BPM and rhythm. The character button causes the left and right channels to be chopped alternately - the best sounding variation of this effect we've heard. The flanger, filter and phaser all sound tasty and can be modified with the character button to make them sound a little more interesting too. The curve shape of the cycle is adjusted so it's either steep near the beginning or end and makes them sound like they have more groove.

### JOG-WHEEL EFFECTS

The other half of the EFX-1000 comprises of the jog-wheel effects. The effects here suit manual control and therefore it has a large wheel to manipulate the main parameter. Again it has a character, depth and mix level control. As with the EFX-500, the jog-wheel movements can be recorded and triggered, but this time the action can also be looped, which is much more practical. When used manually the wheel will jump back to its original position, which is the equivalent of being off. It does this quite rapidly, in fact more quickly than is possible manually. To avoid it doing this when doing slow drawn out sweeps with the jog-wheel there is a hold button.

The actual jog-wheel has been vastly improved over the EFX-500 as it now has an indent in the middle with bumps for grip inside. This allows you to easily spin the controller round. It also has quite a bit of momentum and keeps going when you give it a proper spin.

Certain effects also sound amazing when the jog dial is scratched back and forth, so it really does add a whole new degree of creativity to the effects, especially when these movements can be recorded and coupled with the beat effects.

The vocoder sounds a little cheesy but can be fine-tuned with the character dial to adjust the

## VERDICT

### PROS

- » High definition connection with DJM-1000
- » Connect with any other analogue gear
- » Very good sound quality
- » 'Character' control breathes new life into effects

### CONS

- » No headphone monitor
- » No isolator
- » Quite expensive

VALUE FOR MONEY ★★★

FEATURES ★★★★★

EASE OF USE ★★★★★

SOUND QUALITY ★★★★★

BUILD QUALITY ★★★★★

OVERALL ★★★★★

key slightly. The humanizer is wicked and is loads of fun for the electro freaks and any hard edge beat music fans. It beats the vocoder hands down. The jet is essentially a really full-on flanger and makes things sound like a plane taking off. The wah is pretty much like a filter and does sound very good used with the jog-wheel. The phase shifter does some very odd things to the sound and is another quite full-on effect. The ring modulator is also quite fun and verges on messed up robot noises when used to the extreme. The zip effect changes the pitch of the music so you can achieve the sound of a record stopping even though it's actually still going at the same speed.

### MIDI

The EFX-1000 is capable of outputting MIDI clock according to a tapped tempo. This means that it can control the speed of programs such as Ableton Live and if it's used to effect its output signal all the effects will be perfectly in sync. There's a start and stop button at the top right near the output level, which glows blue when transmitting. The EFX will also output MIDI from many of its controls to be used with other applications and vice versa. There is a MIDI implementation chart in the manual to explain this.

### IN THE MIX

Overall, the sound quality is drastically improved over the original EFX-500. However, the effects aren't exactly revolutionary. If you were already bored with those, then the new character control does add a certain new dimension to the sounds. Coupled with the rhythm control and jog-wheel looping, this actually makes the unit a lot more fun.

Cutting edge MIDI implementation, the Digital Link, remote control features and some of the finer tweaks start to make the unit a respectable choice for the price even when used without the DJM-1000 alongside it.

It's a hassle free option for installers and allows DJs to totally rip their sets to pieces at will. How that received on the dancefloor is down to how appropriate the DJ chooses to be - the EFX-1000 just gives them the power. ■

