

DENON DN-X1500

Four-Channel Install Mixer

Words: David Eserin



Denon bring their mixer range up to date with a popular format, four-channel mixer with FX, sampler and a few other tricks up its sleeve.

AT A GLANCE

Price: £800 Web: www.denon.co.uk/pro Contact: 01753 888 447

are currently seeing an increasing number of mixers coming onto the market that process all audio completely digitally. In the case of Denon's new DN-X1500 this means that from the point of connection, once amplified, analogue audio is instantly converted into a digital signal. The major advantage of this is that in the digital domain there is no possibility of external audio interference or degradation to the audio quality. With the X1500's processing power, what would previously require external hardware and complex configuration is now looked after as a matter of course internally. The X1500 has internal limiters (which they call 'noise gates') that prevent the unit from being seriously overdriven. Regardless of how high you pump the gains and EQs on all the channels it's very hard

to get this unit to croak. That being said, with every possible signal path, including the EQs pumped up to the top the X1500 sounds a bit throaty. But considering the tests we put it through, our amplifiers were nearly pumping out to their full capacity with the volume set to three out of ten. This demonstrates that the X1500 has a huge amount of headroom, which avoids distortion in the signal path - the ultimate cause of damage to both the sound system and our precious ears.

INPUT MATRIX

A rare feature that the X1500 possesses is an input matrix, which allows any input to be routed to any channel. This might not mean much to the average DJ, but for complicated systems and for the more kit-hungry DJ who wishes to use their

console as an all encompassing mixing 'nerve centre' for a multitude of sources, this feature comes in very handy.

Users options will not be restricted with the X1500 yet equally they don't need to be lumbered with a cumbersome ten-channel mixer.

For such a compact unit it has the advantage of allowing the DJ to set the channels up to their own particular taste. For club installations this allows multiple formats, such as MiniDisc, CD players, multiple turntables and any other gear to be connected up and then routed to any of the four channels. These are more than adequate to control everything as, let's face it, we're not going to need more than four channels at once in a hurry during a mix. This feature can also be used to route the same signal to more than one channel for some highly creative mixing potential.

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>> INTERNAL MEMORY

The Denon DN-X1500 has another unusual facility on board, which is the preset mode. Various features of the mixer can be configured according to desired use and saved to the internal memory. This feature is accessed with the effects assign dial at the off position and pressing the tap button for a couple of seconds allowing a number of different adjustments. The first item to be displayed is control for the EQ. It is defaulted to automatic mode, but pressing the mode/parameter button changes settings and in this case alters the consequence of scrolling through the settings further, actually bringing up parametric EQ settings. Each of the three band's frequencies can be adjusted by scrolling through the range and width can also be adjusted to narrow, normal, or wide on the main channels. This is useful for limiting a club mixer which prevents damage, or to simply tune the EQ character to taste - a great feature.

Following that is a headphone EQ mode for boosting high and low frequencies together or independently, which is useful to pick out the beat for the DJ. There's also a channel volume fader curve option that allows a sharp normal or slow setting. The sharp setting is ideal for bringing in samples by using the fader starts on CD players so the volume is almost at peak on triggering, but it's not as sharp as the cross fader's sharpest setting.

The cross fader start-up curve slope, auto BPM mode and talk over level can also be adjusted and stored. The internal 'noise gate' for the mic can be on or off and either high, low or off for the main channels. And finally the internal effects can also be preset to an on or off position independently.

The whole mixer is then reset to the presets on restarting, but all faders and switch positions are accounted for. The buttons are digitally toggled on and off and illuminate when active. All are reset when turning on the mixer, so if you get a bit lost a restart takes you back to default settings.

FFFECTS

The effects can all be controlled by the BPM. They can also be cued in the headphones before being switched on to get them sounding just right. There's a wet and dry mix dial, which also acts as the max and min setting for filter one.

The effects can only be switched on when a channel is selected with the assign pot. They can then be assigned to any of the four channels, the main microphone, master and sampler. The Aux Mic is the only input that can't be processed by the internal effects or the effects loop.

Effects are selected by use the mode/parameter button and are adjusted by pushing the same button to get at the parameters settings flashing. The first effects are delay and echo, which can both be set to manual or beat. The beat can be adjusted by pushing the parameter dial again to vary between different beat length variations. The echo can be used to get a complete loop of a track when the depth is fully up, similar to how James Zabiela says he uses the Pioneer EFX-500 (on p.96 of this issue). There are two types of filter, the first is controlled by the min/max dial and can be either a low, mid, or high pass. The second is controlled by the BPM to the beat increments described above, or manually set the delay time in milliseconds. Both sound very



good. Also providing very rich and clear results is the flanger which has the same timing settings. Finally we have auto pan, transpose and even a key adjustment (with plus and minus 100%). This key adjust function sounds quite good at medium levels. The X1500 also features an effects loop with send and return on stereo jacks. The loop can be routed to any of the four channels, the main mic (only), sampler or the master output.

BPM SECTION

The BPM is an integral part of the effects section and can be tapped in manually, or read according to the channel the effect section is assigned to. We found this to work well for most 4/4 music but fell short a little with breaks and electro. A welcome feature would be the ability to tap in a four beat guide for the auto BPM, but this is not the case with most DJ gear. The X1500 has a USB port on the back which enables software updates. Denon are always tweaking features and should already have an improved BPM algorithm available by the time you read this.

SAMPLER

The X1500 also features a sampler section, allowing eight seconds of CD quality audio to be recorded using the A and B buttons (in and out). The sample can then be assigned to either side of the cross fader and can also be cued in the headphones. The source is selected allowing any channel to be sampled. Adjusting parameters is achieved by rotating the parameter dial to bring up the settings on the screen. Samples can be triggered as with the fader start by the cross fader. Samples can also be looped, played in forward and reverse, and played once. The sample level, A/B points and sample pitch can be adjusted.

MIC CHANNELS & FADERS

There are two mic channels, both have three-band EQ with a reasonable plus and minus gain of 12dB. The channels must be switched on with a soft button and similarly across the mixer, other functions that relate to the mics can not be activated until they are switched on, such as talkover and post/pre. The X1500 uses the widely acclaimed Penny & Giles cross fader. Every channel, including the line faders, have fader start. This can be set to either side of the

cross fader. Every channel, including the line faders, have fader start. This can be set to either side of the cross fader using two switches or all of the channel faders using one switch for all. All the faders are incredibly smooth and feature curve adjustment.

FAIR THE WELL?

We've yet to mentioning comparisons to the Pioneer DJM-600 four channel mixer. Though the mixers both look very similar in layout and shape, the only major similarities are the four channels and similar effect features. The Denon DN-X1500 also has two mic channels with talkover, a separate sampler section with comprehensive editing features and playback control. It also has a unique digital display to give instant feedback on mixer settings, a real bonus. The effects sound really good and fit in well to mix. Control isn't immediately available without scrolling a menu or two, but once you're there it's easy to manipulate in real-time to achieve transient effects. What brings this mixer into its element is the sheer degree of customisability. The level of control over all the various features is second to none. This mixer is ideally suited to even the most complicated club installs and brings advanced mixing features to this realm. Overall, the DN-X1500 is a unique concept from Denon, providing groundbreaking new levels of professional control.

OVERVIEW

- Balanced and unbalanced master (XLR/RCA)
- ► Booth and Record (RCA)
- Effects Loop (Jack)
- ➤ Main Mic (dual XLR/Jack)
- Aux Mic (balanced Jack)
- ► Five Line inputs (RCA)
- ➤ Three Phono/Line inputs (RCA)
- Four fader starts (minijack)
- USB update connection

CONNECTIONS

DETRILS>>>

- Four channels
- Internal limiters
- Matrix input system
- Sampler
- ▶ Tempo effects
- Fader start
- Three-band EQ (with on/off)
- Cross fader curve adjust
- ▶ Booth channel assign
- Master attenuator

UERDICT

PROS

Unique input matrix Sampler and effects with loop Extremely customisable Very high audio quality

CONS

Fractional fader reaction delay No digital inputs Not the most intuitive effects

VALUE FOR MONEY

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USER FRIENDLY

SOUND DURLITY

MICROLI