

Fostex LR16

It's rare to encounter a product these days that truly adheres to the 'less is more' ideology. **ROB JAMES** is delighted with this 'live recording mixer' and says it has masses of mass appeal.



Thanks to the low cost and ubiquity of digital technology, manufacturers, goaded on by marketing departments, can load their products with stuff you're never going to use in a million years in the real world. One reasonable definition of a professional product is something that does a lot less than its consumer equivalent but costs a lot more. Audio mixers and recorders make good examples. Even the cheapest digital mixer or recorder is usually burdened with a raft of bells and whistles, useless to most users and only very rarely do you encounter a reasonably priced product that embodies the minimalist principle of 'less is more'.

A good number of applications require no-frills mixers and recorders at sensible prices. Add real versatility by enabling it to be used as a PA mixer and stage box as well and you have Fostex's new UK£1349 (plus VAT) LR16.

Presented as two rackmount units — a mixer control surface and a recorder/I-O interface — the first impression is that they are built like the proverbial outbuilding. Both are cased entirely in metal. Between them, they weigh a total of 13kg. Massive steel hoops are billed as 'cable guides' for the Cat5 connectors, but they will also make padlocking these desirable items as simple as possible.

As a foretaste to the LR16's versatility, the control surface's removable rack ears can be used to integrate both units by relocating them to alternative screw holes and using the short Cat5 cable supplied for the connection. Thanks to the sloping front panel on the main unit this configuration leaves the display, Record arm buttons, transport controls and other buttons at a good angle. Alternatively, for PA use, the recorder/I-O box can be positioned up to

Mix and immortalise Each of the 16 input strips has Mic/Line inputs with digitally controlled analogue gain trim, 12dB/octave 80Hz low cut filter switch and fixed limiter. A peak LED lights to indicate overload. A Source button switches between external Input and Track output. Equalisation is post fader with fixed frequency high and low shelves at 12kHz and 80Hz respectively, and a 100Hz-8kHz peaking mid. All bands offer up to 18dB of boost or cut.

Aux 1 is switchable pre or post fader, Aux 2 is pre fader, and Aux 3 is post fader. The Effects send is post fader. Last knob is the pan control with the Mute button below. Stereo, Bus 1-2, Bus 3-4 and solo buttons are to the right of the 60mm throw fader. All the buttons are positive in action, the faders are smooth and the serried ranks of knobs are quite tall which aids access in a compact surface. To the right of the inputs, the master section has four bus master faders with Assign to Stereo out L&R buttons above, and the stereo output fader has the output limiter switch above it.

Moving up the panel, the next row has Monitor output volume, Effects bus send level and Solo button. Above are the three Effects bus sends with individual Solo buttons. Next row has three Effects To Aux send pots and the next has two Effect to Group pots for buses 1-2 and 3-4 and the Effect to Stereo bus control.

The three Transport Control buttons are well chosen for recording with the main unit at a distance, New Record Project/Record, Stop and Play. New Record Project creates a new project so long as at least one track is record armed and begins the recording. Stop does what it says and locates to the beginning of the current project. Play, unsurprisingly plays the current project. In the monitor section a single button cycles through Effect Return, Stereo, Groups 1-2 and Groups 3-4 with an LED for each and the global Solo indicator adjacent. Twelve-segment LED bargraph meters follow the selected monitor output. Individual ¼-inch jacks feed the local LR monitors and a stereo ¼-inch jack with level pot deals with headphones.

Effects are basic but useful. Up and Down buttons cycle through a choice of 12, each with its own indicator LED and a button turns the effect on or off. Phantom

power is switched in blocks of eight inputs on the rear of the main unit with two LEDs indicating the current state on the control surface. Last but by no means least, there is pair of Sub input phono sockets for a local CD player, for example. The Sub Input goes to channels 15 and 16 by default, but can be assigned to any of the inputs via a menu on the main unit.

Meanwhile the 3u main unit has 16 XLR/Jack combi sockets for the inputs, eight jacks for Y insert cables for channels 1-8, a further eight jacks for the three aux outs, effect send and group outs, Main stereo out on a pair of XLRs and also at -10dB on phonos. The MIDI out DIN sends MTC to an external device. USB Host accepts a FAT16 or FAT32 formatted memory stick for copying and transporting files. USB PC enables the internal hard drive to be mounted as a mass storage device on a PC or Mac. Small slide switches select phantom power in blocks of eight. There



is also a small panel lock switch that prevents the main unit controls from operating — useful when using it as a stage box. A footswitch jack, the RJ-45 controller port, IEC mains in and a latching push switch complete the socketery.

Around the front, the keys are internally illuminated. Sixteen individual track-arm and one stereo mix track-arms stretch in a row across the panel. The display is a little small and rather dingy regardless of what you do with the contrast control. However, it does contain everything you need, including vertical bargraphs for the 16 tracks and the stereo mix, time counter in Absolute or Time remaining, Project Number and Name, sample rate and bit depth, lock status of the current project, and panel lock indicator.

Menu navigation is ridiculously simple with a rotary shaft encoder that also enters the menu system when pressed and doubles as the Enter key. Above this is the Exit/No key and to the right a block of 10 numeric keys. Clear is backspace when editing names and clears when editing time values. Memory Stop just stops playback in memory Play mode. Memory Setup opens the setup screen for Memory Play. The transport controls are big and friendly and up to 99 markers may be added to facilitate locating.

50m away with a single Cat5 cable providing power, control, local audio monitoring/metering and a stereo, Sub In, input on the control surface.

As you might guess from the name, this is a 16-channel device. You get 16 input channels, four mono groups and a stereo output. You can record all 16 channels from the prefader, preEQ direct outputs and a stereo mix, postfader and processing, simultaneously.

I am delighted to note that the recorder has NO editing functions. This is a pure mixer/recorder and all the better for it. If you want to edit, then file transfer is simple and you can edit in the DAW of your choice, make a CD, etc.

Two record modes further enhance the versatility. Default is to begin a new project every time Record is invoked. Alternatively, Insert mode allows destructive overdubbing and punch-ins on an existing Project. If you need a sound effects playback machine then the LR16 can help. Memory Play Mode enables up to 10 audio files to be assigned to the numeric keypad buttons for instant playback.

LR16 has no exotic sample rates and is none the worse for that with 44.1 and 48kHz at 24-bit more than adequate for most purposes. There is no MP3 or other horrors although 16-bit recording is also available.

In a unit at this price point the remote mixing control surface is priceless. No need for bulky and unreliable analogue or digital multicore snakes, keep the I-O where it belongs — over there. The control surface even has rudimentary transport controls, more than enough to record a show. And, thanks to sensible record signal sourcing, you can mix for PA without compromising the recording or thinking about it. The local monitoring outputs and selector enables you to check the things you need to check and the

Sub In means you can keep an external source, CD, iPod, Laptop, etc. adjacent to the control surface.

Internal effects are basic but fine with a couple of halls and auditoria, a room, two plates, three vocal settings and mono, pan and short delays. There are no variable parameters so there's a lot less to get screwed up by casual users. If you need something more sophisticated then there are inserts on the first eight channels and aux outs to incorporate outboard processors.

Maximum Mic input gain is a little low at 60dB but this shouldn't prove a problem with the kind of mics the LR16 is likely to be used with.

High capacity hard disk drives are now ridiculously cheap so I cannot see why on earth Fostex has chosen to hobble the LR16 with a mere 80Gb drive. The FAT32 file format also means the 4Gb maximum file size limitation applies. On the other hand, the internal drive is easily mounted via USB2 on either PCs or Macs and you can also dump the contents onto a memory stick. Also slightly annoying is the fact that the only way to playback the recorded stereo mix is via the Memory Play function. It would have been nice to have this returned to the console as an alternative, like the Sub input. The only other gripe is the orange display which is a bit dingy by current standards.

Notwithstanding these minor irritations, I love this device. It is by far the most focused and well executed machine I've seen in ages. If I was walking into a strange place to do a small PA mix and/or recording I would be delighted to find an LR16.

The learning curve is almost non-existent. Anyone who has ever used a small analogue console or, indeed, an analogue recorder will be immediately at home. Fostex seems to have hit the nail squarely on the head with this one. For once, the digital revolution is making life easier instead of more difficult. It will also make an ideal teaching tool for newcomers. The only area that requires a little bit of concentration is project management. The effects are well chosen as are their parameters, the EQ is forgiving and the faders are smooth. Versatility with simplicity, everything about the LR16 seems designed to extract the best results with the least effort from anyone, experienced or not. If I had any excuse for doing so, I would buy one. ■

PROS Near perfect for the intended market; versatility with simplicity; robust

CONS Display is a bit dingy; mic gain could be higher; 80Gb hard disk is a bit small.

Contact

FOSTEX, JAPAN:
Website: www.fostexinternational.com
UK, SCV London: +44 208 418 0778

