



Soundcraft Signature 22 MTK **£791**

PROS

- Neat, attractive and compact desk with flexible routing options.
- Multitrack bi-directional USB interfacing.
- Great preamps.
- Two lots of Lexicon effects.
- dbx input limiters.
- A lot of functionality for the money.

CONS

- No hardware inserts on the channels.
- I'd have really liked XLR outputs on the aux and/or group sends.

SUMMARY

Combining a respected lineage with multitrack USB interfacing, this attractive, well-made and easy-to-use console is sure to find favour with many engineers, both live and in the studio.



Soundcraft Signature 22 MTK

Analogue Mixing Console With Multitrack Audio Interfacing

Venerable British company Soundcraft have delved into their past to create this analogue mixer with a USB-flavoured twist...

MIKE CROFTS

There has never been a shortage of small-format analogue mixers aimed at the live-sound market, and these days, as digital consoles become more affordable and user-friendly, it takes something a little different in the analogue catalogue to catch the eye and excite interest among potential users. The new Signature range from Soundcraft could well be one such, as it uses respected technology from the company's established and successful product lines. Models with the MTK suffix also include a built-in, bi-directional multitrack USB recording and playback interface.

Many users still prefer the look and feel of an analogue control surface, with one-knob-per-function simplicity on every channel, but some of the features found on the latest digital mixers are very desirable, especially the ability to capture the input sources for later production and live soundchecks, or to play back and mix multiple synchronised show tracks. With all this in mind, and a street price around the £650 mark, the Signature 22 MTK is a very interesting prospect...

Arts & Crafts

The Signature model line-up currently comprises six variants: the Signature 10, 12, 16 and 22, plus the 12 and 22 MTK

versions with integrated multitrack USB interfaces. I had an opportunity to try out the 22 MTK, which is an in-line 22:4:2 console with 16 mic preamps. The first 14 channels are mono with XLR and TRS inputs and can handle mic or line levels; 15-16 and 17-18 can be used as mono mic/line channels but alternatively offer stereo TRS inputs, while the last two strips are stereo only. Channels 19-20 have standard TRS inputs, while 21-22 offer phono and USB ins, which are summed if a USB input is present.

The console itself is a pleasing thing to look at, and has a nice low profile. There are no connections, controls or ventilation holes on the rear panel — even the IEC mains input plugs in underneath — and consequently the 22 MTK can be pushed right up against a wall if necessary, which might be a consideration in a compact studio setup. Although the user manual says that the power switch is on the “rear underside”, I couldn't find one anywhere.

The mix controls are nicely spaced, and somehow Soundcraft have managed to fit everything on the one compact surface without resorting to really thin knobs, which would be awkward to use. As it is the controls are easily accessible and there's enough finger space around each rotary knob for your average operator. However, as a new and unfamiliarised user, I did find that the printed characters, though classy-looking (grey, on a contrasting grey background), were small and not all that easy to read in the fluorescent gloom of my workshop. There is another USB socket provided purely to power a lamp, but I didn't have a suitable one to hand. There are no per-channel level meters, other than limit and clip indicators, but the main »

» output/monitoring meters are clear, bright and easy to use.

The basic mix functions are exactly as you'd expect to find them, and the channel, bus and effects layouts are logical and neat. The mixer is housed in a slim but very rigid steel housing which appears to be very nicely put together, and there is only minimal flexing of the case when you lift one corner, meaning that the internal boards should be well protected. The controls are, unfortunately, not nutted to the top surface, though this does make for a neat appearance. They do at least seem to be firmly mounted to whatever lies beneath, and don't exhibit undue sideways movement. The faders have a moderate amount of resistance, which makes fine control easy; pushing hard on the leading edge of the fader knobs doesn't result in sticking or jamming, and I like the fact that the 'fader feel' is consistent right across the board, including stereo controls and master buses. The overall impression is one of good quality and solid build.

Heritage Matters

If you read the beginning of the 22 MTK user manual there's some description of the various features and designs from established and successful Soundcraft products that have been incorporated into the Signature series of consoles. This historical lineage is also indicated by a discreet set of logos printed on the top and rear panels.

The all-important front end of the Signature series uses low-noise ProMic preamps from the well-respected Soundcraft Ghost console, providing ample headroom and allowing the inputs to be operated with high trim settings if needed. Four of the mono channels (7-10) have high-impedance switches for the jack inputs; with these switches active, the inputs present an optimum input impedance so that instruments with pickups can be connected directly without detrimental loading effects. The input gain range is -5dB to +58dB, and there's a peak warning LED to help avoid clipping.

The first eight channels have a built-in dbx limiter, which is engaged with a single button. The limiter parameters are factory-set and apply a pretty high ratio of around 7:1. A red LED inside the button lights up to indicate limiter operation, getting brighter as the limiter works harder. The limiter threshold is set below the clip point of the input channel, so there's a certain amount of headroom to cover things like



Two independent and adjustable Lexicon effects engines are present above the master section.

that extra little bit of care to place the frequency controls in just the right place. Flexible control is catered for by a nominal 1.6kHz overlap between the lower and higher mid-band sections, which could come in very handy if two close problem frequencies need to be addressed.

Staying with the EQ for the moment, the

EQ boost in the following stages. This is an excellent feature, and one which I'm sure will avoid problems in all sorts of live situations. It's not an excuse to work with inappropriate input level settings, but it will get an inexperienced operator through a potentially tricky situation while the necessary adjustments are made, or even provide a deliberate high-ratio compression feature if one is needed.

Each input section has a switchable 100Hz high-pass filter and a USB return selector, which routes the corresponding incoming USB channel into the strip instead of the live input — more about the USB interface later...

Relight My 'Phyre

Soundcraft have always been proud of their 'British EQ' and the design used in the Signature is based on that of the Soundcraft Sapphyre consoles, with fixed high and low shelving bands, two frequency-adjustable mid-range bands on the first 18 channels, and a single swept mid on channels 19-22. The Sapphyre EQ uses asymmetrical bell curves to control the mid range; when boosting around the selected centre frequency the curve is relatively wide, but when applying cut it is a sharper (higher-Q) curve, giving more precise attenuation of unwanted frequencies and avoiding too much collateral damage, if you will. This approach to EQ make a lot of sense in a live context, especially when there are two mid-band controls for greater control, and it doesn't impact on the engineer's ability to find problem frequencies by artificially boosting and sweeping the mid range then applying just enough reduction at the right place — if anything it makes you take

high and low shelving controls also each have a neat little trick of their own, which Soundcraft describe as 'cut at boost' and 'boost at cut'. The shelving bands are fixed at 12kHz and 60Hz respectively and when, say, an amount of boost is dialled in to the high band, the circuit applies a small cut at the start frequency before boosting everything above it in accordance with the shelving curve. The opposite applies when cut is applied, and the result achieves the desired effect of cutting/boosting 'highs above' or 'lows below' but shapes the response so that, to my ears anyway, the corner frequency remains unaffected and the shaping seems more precise. As with all EQ designs and implementations it's always a matter of personal taste, but I do like the combination of smoothness and precision that this particular console offers.

Heebie GB

As far as the routing is concerned, again there's a 'heritage' link, as the Signature mixers employ Soundcraft's GB-series routing design. Each channel can be routed to the main stereo output (called 'MST' for master on this surface) and/or to any or all of the four subgroups, which are arranged in two pairs, with a mono sum option on each pair and onward routing to master. There are four physical TRS outputs for these mono groups, and mute switches are provided for all channels and buses, along with a nice bright red LED which doubles as a clip light, and there's a really useful 'interval mute' function over in the master section that interrupts the front-of-house send for all channels except 21-22, which is the phono/USB input, allowing the house track to play with all the stage feeds off. It is worth noting that this is not a global

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The Signature 22 MTK acting as a 24-in/22-out USB audio interface.

» mute function — when this button is engaged, all the aux and group sends remain active, so it's not exactly the same as pressing the mutes on every channel individually.

The 22 MTK has a total of five aux send buses, of which auxes 4 and 5 are internally routed to the two Lexicon effects processors (see below) but can also be used independently, as they have physical output sockets. Every aux bus can be globally switched to pre- or post-fader operation, though the aux 1 and 2 sends on stereo channel 21-22 can be overridden as post-fader if necessary for house/playback tracks and so on.

Lex Education

The 22 MTK boasts two independent Lexicon digital effects processors, which are pre-programmed with a set of standard presets but can be adjusted as required. There are two internally routed aux buses that feed the input signals to the effects section, and they have two dedicated return channels which offer full routing to the output buses (and to each other, for cascading effects). This arrangement makes it very easy to feed wet signals to monitor mixes — something not always as simple on some digital mixers!

The quality of the Lexicon effects goes without saying, and even allowing for personal preferences, there has to be something in here which will work well in any live situation where this mixer would be used. External effects can of course be patched in using the other auxiliary buses, but as there's no dedicated

external effects return, these would be returned into one or more spare input channels. The 22 MTK doesn't have insert points, though if any clever processing were needed on individual channels, the multitrack send and return could be used to apply effects within a DAW, without using up any additional channels.

USB Today

It is quite common to see analogue mixers described as 'USB' these days, but on small-format desks, this usually means that the main stereo mix can be obtained from a USB port; if you're lucky, it might also be possible to feed in a stereo track over USB for walk-in music and so on. By contrast, the MTK versions of the Soundcraft Signature mixers have a full bi-directional multitrack USB interface. On the 22 MTK, this outputs all 22 input channels individually for capture or live processing within a connected computer, and accepts 22 incoming tracks at the same time. A further bonus is that, additionally, the stereo master mix is also sent out on tracks 23 and 24, so you can record the whole, analogue-summed live mix — including any processing applied — as well as the individual 'clean' sources. The individual channel signals are sent post-gain, pre-EQ, and are returned to the same point in the signal path. As such, the USB facility can be used exactly like a complete set of insert points, with external processing applied via whatever plug-ins are available in your DAW application.

I normally use a MacBook running Logic for live capture via my digital

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The first eight channels each have a fixed dbx compressor, while channels 7-10 have a Hi-Z switch, allowing them to accommodate instrument signals.

» consoles, so I connected a single USB cable between that and the 22 MTK, and sure enough there it was in the audio device list — the 22 MTK is class-compliant, so no additional drivers are necessary on Mac OS. It should, and did, just... work! The multitrack output is always track-for-track, ie. channel 1 will be input 1 in your DAW input list and so on, but of course routing within the recording software application is whatever you want it to be.

For live work, one of the most useful tools available with full digital mixers is the ability to carry out a 'virtual soundcheck', where the band can be recorded live during a real soundcheck, after which the engineer has the luxury of playing the captured multitrack over again and making fine adjustments long after the performers have left to satisfy their special dietary requirements. Alternatively, a pre-recorded

multitrack can be used to get everything checked out before the musicians even arrive. This highly desirable feature is possible on the analogue 22 MTK thanks to the USB interface, and can be used in exactly the same way. The USB 2.0 interface is stated as compatible with Windows 7, 8 and 10 and Mac OS 10.7 'Lion' through to 10.11 'El Capitan' if you have already made the leap.

Best Of British

In a review of any manageable length, it's impossible to go into depth about every feature on such a well-specified desk as the Signature 22 MTK. Every potential buyer will have his or her own requirements and expectations, and there is more detail available on the Soundcraft web site, which you should definitely check out if you're in the market.

In my own view, though, this attractive and flexible little console is a highly desirable analogue mixer in its own right. The Signature 22 MTK has an abundance

of goodies built right in — Ghost preamps, Lexicon effects, asymmetric EQ and so on — in a highly flexible and nicely laid-out design. Add to this the multitrack USB interface, and this console will surely become a favourite for live shows and studios alike. As a recording interface, the audio performance is impressive and very stable. I certainly didn't experience any setup or configuration issues, as it all worked like a charm straight out of the box. I can think of several events where one of these would have been an ideal resource, and the sheer simplicity of operation and audio quality must make the 22 MTK worthy of serious consideration wherever a small-format mixer with a decent input count and computer interfacing is part of the requirement. ■■■

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