

**Why should I want one?**

Big mixer performance in a compact package with multitrack recording as well as live sound mixing capabilities.



**Soundcraft LX7 II**  
SRP prices...  
16 input £1,057.50  
24 input £1,645.00  
Tel: +44 (0)1707 665000  
www.soundcraft.co.uk

**WORLD  
EXCLUSIVE!**

**A fully-fledged Soundcraft sound reinforcement desk for around £1,000 – has the world gone mad? Simon Croft sticks on his laminate and heads for the faders**

Those of you who know a thing or two about mixing desks might be thinking: wait a minute, the Soundcraft LX7 isn't a new desk, it's just an upgrade to the Spirit LX7 that Soundcraft has been offering for some time. Well, you'd only be half-right because the new mixer offers much more than a simple upgrade to the earlier model's features.

The clue lies in the fact that the LX7 II is a 'Soundcraft' mixer, not 'Spirit by Soundcraft', as the manufacturer has tended to badge its lower-cost designs in recent years. Behind the upgrade in status lies a completely re-engineered design that has more in common with Soundcraft's top-end MH3 and MH4 touring consoles than the popular Spirit desks. In short, this is a Soundcraft for Spirit money.

Before we get into the detail of how Soundcraft has improved what was already a popular desk, let's just run through what the mixer can do for you.

It doesn't take professional engineer to see that the LX7 II offers a lot of channels, so it's ideal for Front of House duties, particularly if you're intending to use it for more than one act on the bill.

There are three frame sizes in the LX7 II range, offering 16, 24 or 32 input channels, which should be plenty unless you are hell bent on staging your own festival. Peer a bit closer and you will also see that the LX7 II offers four sub groups which are ideal for providing master levels for drum and vocal mixes.

Soundcraft describes these desks as having 'true 7-bus architecture'. What this means in practice is that there are three main outputs in addition to the four group outs. This allows for a centre channel in addition to left and right, which is handy for filling in mix so that there is no 'hole' in the sound for the part of the audience that is closer to the stage than to the left and right speakers.

Something else you've probably taken on board by now is that the master section is not situated at the end of the mixer but is about a third of the way in. The larger the mixer, the more this arrangement makes sense. Chances are, you'll want to get to the master section

often during a gig. Bringing it nearer to the centre places it – and the surrounding input channels – within easier reach.

While we are on the subject of features you can see, I soon noticed while I was playing with the desk that the LX7 II has six aux mixes on the main mic/line channels. Yeah, yeah, yeah I slobbered, that's a lot of on-stage monitor mixes and effects mixes I can rustle up. The more I look at this desk, the more it seems like a mini-MH console, so let's see if it performs like one.

**SOUND IMPROVEMENTS**

Not all of the improvements on the LX7 II are obvious to the eye; the performance has been upgraded too. This coincides with Soundcraft's 30 year anniversary in the console building business. Soundcraft co-founder and technical director Graham Blyth has redesigned the mic amps and the EQ section based on existing developments for Soundcraft's top-end products. The new designs are badged GB30 in their own right, which implies we'll be seeing and hearing them in other Soundcraft/Spirit models in the future.

(It's also worth mentioning at this point that the noise level of the desk has been reduced by a further 6dB, which is one of a number of reasons why the LX7 II would also make a good choice for recording. But I'll come back to that in a while.)

Without boring you with technobabble, the main advantage of the new preamps in a live situation is that they stay sounding cleaner when they are overloaded. That's a real bonus because you'll often find a band plays louder than expected during a gig, making your careful level settings during the sound check pretty academic. Yes, you can back off the input levels to reduce distortion but it's not an easy job to turn down a whole bunch of them in a hurry without making a pig's ear of the sound balance.

While we're up there in input land, I noticed that every mic/line channel has a switchable high pass filter. That's a great inclusion on a mixer at this sort of price because the filters can cut out unwanted low-end on channels

**THE**

**CRAFT**



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including vocals, clean up your mix by taking out rumble and also save your woofers from struggling to reproduce a load of low-end junk when they could be pushing out the bass you want the audience to hear.

The all-purpose nature of the mic/line inputs means you can use the channels for keyboards and the like, as well as mics, but there is also a 48V phantom power switch for condenser mics and DI boxes on every block of four channels. This replaces the previous universal phantom power on/off. I've never personally blown a dynamic mic by sending it phantom power but it's reassuring to know that you can choose which devices get 48V and which don't.

The EQ section is a classic four-band design with sweep frequency mids. As far as I remember, Soundcraft pioneered this EQ arrangement, so I guess they have every right to update it. Although the GB30 EQ is exactly the same to use as other designs of this type, the slopes of the high frequency and low frequency controls have been made steeper. This means that when you turn up the bass, you get less low-mid creeping in and if you turn up the treble, you get less upper-mid you might not have bargained for. There is also an EQ in/out, which allows you to instantly compare your settings to the direct sound.

For a compact desk, the LX7 II is unusual in offering six auxiliary mixes. The first two pairs are switchable pre or post fader. (Pre fader is what you need for monitor mixes because the levels won't be altered by changes you make to the main mix. Post fader is for effects, where you do want reverbs etc to go up and down in level with the fader.) The final two aux mixes are set to post fader, making them dedicated effects sends. Working live, you could have four different monitor mixes going to stage, plus two separate effects. Or you could have two monitor mixes and four separate effects.

If you are using the LX7 II for recording, you might want to switch all the aux mixes to post fader during mixdown, so that you had control of six different effects. While we are on the subject of recording, all but the last eight input channels have direct outputs, so you could feed a 16-track recorder from a 24 input board. This is in addition to the insert points, which are typically used to connect compressors and outboard equalisers on a per-channel basis.

Beneath the pan control, there is a LED-indicated mute and four routing buttons. These send the channel to any of the following: centre, mix (L/R), group 1-2 and group 3-4. Each channel has a pukka 100mm fader, which gives much more accurate level setting than the 60mm variety. Below this is the PFL button, again LED-indicated. This allows you to hear any channel in isolation to check gain and EQ settings.

For a moment, I had feared that Soundcraft had overlooked the obvious and forgotten to include an overload LED for each channel. No worries, when PFL isn't on, the same LED flashes 4dB

before clipping occurs, helping you to set the maximum level before distortion.

### **MORE CONTROL**

**Above the group faders** are two stereo channels that can be used for sources such as CD players, or as a pair of well-equipped stereo returns for effects. These have an input gain, two-band EQ and control that can be routed to aux 1-2 or 3-4. A rotary control is used for level but the stereo channels can be sent to the main mix output or the group faders below, which would effectively give them a their own faders if nothing else was routed to that group at the time.

Group faders can be routed to the main mix but also have their own outputs, which further enhances this desk's usability in multitrack recording. (You could, for instance, record all the backing vocals to a pair of tracks, regardless of how many mics you were using.) The groups also have insert points, making it easy to slap a compressor or Exciter on that vocal mix.

Between the stereo channel and the group faders you'll find the aux master levels that feed each monitor mix or effect. These are equipped with AFL (After Fade Listen) buttons that give you a similar soloing capability to the PFL (Pre Fade Listen) buttons on the mic/line channels.

Below this are the 12-segment bargraph meters that tell you how much level you are putting out and where. The first two pairs meter the group outputs. The final pair will probably spend most of their time metering the main L/R mix but can also be switched to monitor group, centre output or two track levels, depending how the control room monitor buttons above it are set.

At the top of this section is a headphone output, the level control for which is next to the control room monitor switches. Below this there is a talkback level and routing to aux mixes 1-2 and 3-4 as well as main mix (ideal for singing along with the band!). The talkback mic input is on the back panel.

There are two dedicated stereo returns that could be used in conjunction with the stereo input channels to provide as many as four effects returns if required. (If you need more, you can always use any spare mic/line channels and pan left/right.)

The button described as '2 trk to mix out' is actually marked '2 TRACK REPLACES MIX!' on the desk. While it's useful to hear the master stereo recorder in the studio, I think you can work out why it wouldn't be a good idea to hit this button mid-gig!

Round the back of the desk, all the mic inputs and main outputs are on XLRs, while everything else is on 1/4 inch jacks, with the exception of the 2-track input phonos and the mains socket for the internal power supply.

All in all, this is a tidy desk at a very tidy price, especially considering the double duty it will perform on tour and in the studio. Soundcraft seems to have set a bit of a benchmark here. Still, after 30 years practice, you'd be pretty good too. **PM**