

# Hundreds and Thousands

## What is it?

A 1,000W stereo mixer/amp with eight inputs and stereo output. Useful facilities include three-band EQ, built in digital effects, seven-band graphic equalisers and stereo inputs. Comes in a heavy-duty plastic casing with lid and carrying strap.

## Why should I want one?

This is about the ultimate if you want to base your PA on an easy-to-use mixer/amp but still expect the sort of facilities you would find on a dedicated mixing desk and the kind of power levels you would associate with a separate amp. Plus, there aren't many kilowatt PAs compact or light enough to sling over one shoulder.

**GigRac 1000st**  
SRP: £617 incl vat  
01707 665000  
www.soundcraft.co.uk

**We last** looked at a Soundcraft GigRac a little over a year ago, when the original GigRac 300 was launched. Since then, the 300W mixer/amp has been joined by the 600W stereo GigRac 600 and the 1kW GigRac 1000 that I'm looking at here.

It's a sign of the way amplifier technology has come on in recent years that I can even write about a 1,000W mixer/amp without everyone thinking this must be some badly mistimed attempt at an April Fool's joke.

Not so many years ago, a 100W mixer/

amp was pretty much standard issue for club and pub bands, and you can still find plenty of them around today. Yet, here we have a mixer/amp that puts out 10 times the power but weighs only slightly more than the GigRac 300 at 12kg. I'm not pretending that you'd want to walk around with it all day but you can certainly sling it over one shoulder and if you're feeling really butch, you could carry a guitar at the same time.

So, if 100W was the benchmark for years, how come we need 1kW all of a sudden? An important thing to bear in mind is that 1kW is 10 times the power of 100W but it's only twice as loud. (If you want to know why this is so, see

*The Technical Bit.*)

But there are more reasons for wanting a more powerful system than volume alone. If you are putting drums and keyboards as well as vocals through the system, the signal will be more complex than with vocals alone. A larger amp gives you more 'headroom' – the margin of safety between the nominal operating level and the onset of distortion.

In addition, Soundcraft has been a bit more subtle than going for 1kW of brute power. The GigRac 1000 actually contains two 500W amplifiers, allowing you to create a stereo mix. Full power is only achieved with four-ohm cabinets: at eight ohms the power

MY BRAIN HURTS! IT MUST BE...  
**THE TECHNICAL BIT!**

**"A 100W amp is twice as loud as a 10W amp and a 1kW amp is twice as loud as a 100W amp"**

Guaristars often think that a 100W amp must be twice as loud as a 50W amp. This is a confusion between the power of the amp and its loudness, which is not the same thing. Decibels are the true measurement of loudness, not watts, which are a measurement of power. Decibels (dB) have a logarithmic relationship to power (a shortcut using the powers of 10 to represent the actual number).

When you double the power, the volume increase is 3dB, which most people would say was "slightly louder". To be perceived as "twice as loud", the volume has to increase by as much as 10dB, which in turn requires a tenfold increase in power.

This means that - other factors such as speaker efficiency being equal - a 100W amp is twice as loud as a 10W amp and a 1kW amp is twice as loud as a 100W amp. **PM**

## It's even louder than the GigRac 300 but just as pretty! Meet the GigRac 1000!

Words: Simon Croft

is 300W a side, still ample for many applications. But the GigRac 1000 doesn't have to be run in stereo. As an alternative, it can be switched to provide 500W mono Front of House and 500W for stage monitors, which is another good reason for having a bit of extra power in reserve.

### Jumping up and down

According to Soundcraft, the GigRac casing is made from "structural foam copolymer polypropylene resin". I'll take their word for it but it's as tough as old boots. I didn't jump up and down on it but I doubt any harm would have been done if I did.

The material is also surprisingly light and - contrary to the way it may look in pictures - smooth to the touch. As with the lower powered units in the range, you can remove this GigRac from the casing and rack mount it but I can't see many users wanting to do that unless the unit is part of an installation. For most people, the fact that you can put the protective lid on and sling the whole thing into the back of a car is ideal.

Incidentally, the inside of the lid is strung with an elasticated arrangement that holds cables and mics in place, so you can use it for storage without any danger of damaging the front of the unit.

Before we get into that front panel in detail, a quick nose round the back reveals that the two Speakon outputs you'll find on the GigRac 300 have now been augmented by two jack sockets. ▶

**"The GigRac 1000 actually contains two 500W amps, creating a stereo mix."**



## ROADTEST!

**"The design of the GigRac says it all. This is a unit to be mostly left alone, hence the lack of faders and mutes on each channel."**

How to conduct a Roadtest while leaning against a bar: 1) Listen sympathetically while friend explains that he got a bit carried away and offered to put together band for landlord of local pub's charity night. 2) Look concerned when friend admits he's already accepted a few free drinks on back of same offer. 3) Offer to provide PA in exchange for usual liquid courtesies. 4) Set up gear. 5) Accept beer.

The design of the GigRac says it all. This is a unit to be set-up and mostly left alone, hence the lack of faders and mutes on each channel. So when the above challenge presented itself to me, there was no need to pour over the controls trying to look worthwhile.

All we needed was four mics and one electronic keyboard for inputs, the Soundcraft GigRac 1000 and a couple of speakers on stands. Oh yes, and the speaker section of a guitar combo as a stage monitor for the main vocalist. That idea is normally a recipe for disaster but with one graphic EQ on Front on House and the other looking like a donkey's hind leg on monitor we got away with it. In fact, we more than got away with it.

The eventual audience was around 200 and the GigRac 1000 was more than up to the job. To be frank, the band was actually too loud during the first number they did early in the evening as a sound check.

For the second of the two numbers, I turned down the main mix and also the monitor to try to get the guys out of their "Hello New York!" mindset. Finding the perfect level with the GigRac was a breeze.

In the end there was only one snag: the landlord was highly delighted and the band has been asked back. This time, they'll have to get their own GigRac. **PM**



**"The Speakon outputs on the GigRac 300 have been augmented by two jack sockets. Any gigging musician can rustle up a couple of jack-to-jack leads."**

► This strikes me as a good idea because if your Speakon cables go missing it might not be easy to find another pair in a hurry, whereas almost any gigging musician can rustle up a couple of jack-to-jack leads. The back of the unit is completed by a mains switch, socket and fuse. There is also a fan inside.

Round the front, you are given plenty of choice as to what you plug in and how. All eight channels are fitted with Combi sockets that will accept XLR or jack plugs. In addition, the first four channels can be switched to provide 48V phantom power for condenser mics.

Because these inputs are quite sensitive and condenser mics tend to have high outputs, channels 1-4 are also fitted with 'pad' switches. These attenuate the input level by 20dB in the event that the mic is overloading the input.

Any of the channels will work fine with an electro-acoustic guitar but as a general rule of thumb, the second four inputs are less sensitive than the first four, so are more suited to active instruments, whereas the first four are best used with mics and passive instruments.

Additionally, channels 5-8 can be used with stereo inputs, such as MP3 players and keyboards. Channels 5 and 6 both have two phono inputs for this purpose, while channels 7 and 8 use the Combi socket for the left channel and an additional jack for the right. That covers most situations I can think of, including using two CD players.

The facilities on the eight channels are largely identical. They all have three-band EQ, a send to the internal digital effects, a pan control (which becomes balance in the case of stereo channels), a monitor volume and main volume.

The master volumes for monitor and main channels are situated just to the right of channel eight and are at the same height as the same controls for the individual channels. It's a small touch but it makes it so much easier to locate these important controls.

### Routing for more

As you expect from a company that sits in the same family as Lexicon and Dod, the effects section in the GigRac is very good. It offers 10 settings, including a selection of reverbs and delays, plus chorus and rotary. And there are independent effects levels for the main and monitor mixes, which is great.

Above this are two seven-band graphic EQs, designed by Soundcraft's stablemate BSS. You can find BSS gear in almost every pro sound reinforcement rack and the pedigree shows in the sound.

Similarly, Soundcraft's experience is evident in the final section of the GigRac where you are offered features including output meters, recording inputs and outputs, standby mute, and headphone outputs (main and monitor mixes). The standby mute is useful because it doesn't disable the playback in, only the main inputs, effects and monitors. So you can put on background music without suffering an unintended voiceover from the bass player about the MOT on his Renault.

The FX bus output carries the effects mix and allows you to connect another processor. Of course you'll need to bring the signal back into the circuit and the most obvious place is the submix inputs socket, which you could also use to add another mixer to the system. Similarly there are main output sockets should you wish to increase the power of the system by hooking up further amplification and speakers. Soundcraft has also considered what happens between numbers and given you a footswitch socket for switching off the effects.

So is it better than the GigRac 300?

Everything you get with the 1000 is the product of clear thinking and experience, so the short answer is yes, even despite the success of the less powerful system. Soundcraft was already onto a winner, now it's doubly

so. **PM**

