



OPAL Series DPR-944

2+2 Parametric Compressor-Gate



DPR 944

Four discrete channels of Gating and Compression in a single rack space, with the quality that only BSS Audio can provide, and a price that you'll appreciate.

Features include

- 2 noise gates
- 2 compressors
- Parametric compression (frequency-selective)
- Frequency-conscious gating

Preliminary Information
December 1997

BSS Audio

The value of four channels of dynamic processing in one unit needs no explanation, but the combination of gates and compressors in such a device brings further cost, space, and application benefits.

Add to that the unique ability of the **DPR-944** to provide frequency-selective compression (through its parametric filter) and frequency conscious gating, and you'll soon see just how indispensable the **DPR-944** can become.

Coupled with BSS's proprietary subtractive compression technology, the parametric filter means you can compress specific frequency bands. Now you can effectively eliminate sibilance, microphone popping and proximity effects, and tame instrument and voice tonal characteristics that vary with level.

The compressor also utilises BSS's proprietary 'progressive knee' ratio control which ensures soft-knee musicality at low ratios and hard-knee precision at higher settings.

Frequency-conscious gating allows you to precisely select the frequencies that will trigger the gate, eliminating false triggering (for example from rack tom spill).

If you need more gates and compressors, just add more DPR-944's. All inputs and outputs are independent, so you can patch them how you like, rather than being constrained to how some manufacturers think you need them patched.

Mechanically road-worthy, with intuitive metering and indication, the **DPR-944** saves you rack space and equipment cost, also vital as part of a fixed installation. In distributed sound reinforcement systems, for example Corporate production, the **DPR-944** can be an effective part of small, more generic processing racks.

To top all this off, you can relax in the knowledge that the audio path in the **DPR-944** is clean, quiet and uncompromised, like all BSS products.

Compressor section



Side Chain filter frequency

Used to provide frequency-selective compression (dynamic equalisation). Adjust the frequency and width for fixes or creative effects.

Side Chain Listen switch

Allows the engineer to monitor the effect of the side chain filter and so tune in to the required frequency.

Side chain filter width

Adjusts the width of the passband. If set to OUT, the compressor is set to wide-band mode (full-bandwidth).

Threshold

Sets the threshold of the compressor. Signal level relative to threshold is continuously metered above.

Release Fast switch

In the OUT position, the attack and release time constants are set automatically, and are dependent on the musical programme material. When IN, the attack time is automatically controlled, with a faster release time.

Ratio

Continuously variable "progressive-knee" compression ratio from 'OUT' (no compression) to infinity (limiter action).

Gain

Gain make-up for signal reduction due to compression. Use this to match clean and compressed signals to unity.

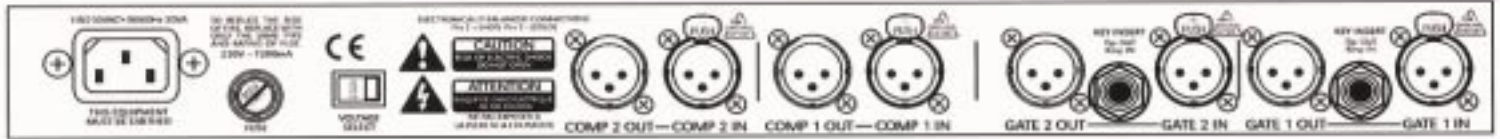
Gain reduction metering

A single led meter shows both the signal level relative to the threshold and the amount of gain reduction being applied.



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Gate Section



Key Filter

Used to isolate a particular frequency range as the key trigger for the gate (known as frequency-conscious gating). This frequency control, used in conjunction with the filter width switch, is a single-handed way of adjusting the key filter, and makes for very quick setup. When set correctly, the gate will respond only to the frequency selected ignoring even louder signals outside this band.

Width switch

Selects the key filter width. Wide or Narrow settings, the default is normal.

Key Listen switch

Allows the engineer to hear the effect of the key side-chain filter on the key signal, to make adjustment more precise.

Threshold

Sets the level at which the gate opens.

Attack switch

In the normal mode, sets the attack time of the gate opening to be fast. Can be switched to slow if needed.

Release

Adjusts the release time of the gate. Continuously variable from 1 millisecond to 4 seconds.

Open/Shut LEDs

Provide an easy visual check of the gate status, and mimic the attack/release times.

Stereo Link

If you want to use both gates on a stereo program source, this enables both channels to respond to the controls on Gate 1.

Technical Specifications

All Inputs

Input Impedance 10kOhm, electronically balanced
Maximum Input Level +20dBu
CMRR <-50dB (30Hz-20kHz)

All Outputs

Output Impedance < 50 Ohms, electronically balanced
Maximum Output Level +20dBu into 600 Ohms or greater

Gate Section

Key filter Variable 63Hz to 12kHz, 0.5 or 3 octaves wide
Threshold range -50dB to +20dB, variable
Gate Attenuation range 80dB/20dB switchable
Noise <-97dBu
Dynamic Range >117dB
Frequency Response 20Hz-20kHz (+/-0.25dB)
Distortion <0.05% 20Hz-20kHz

Compressor Section

Parametric filter Variable 60Hz to 12kHz, 0.40 octaves to 'out'
Threshold range -30dB to +20dB, variable
Ratio 1:1 to infinity:1, variable
Noise <-100dBu
Dynamic Range >120dB
Frequency Response 20Hz-20kHz (+/-0.25dB)
Distortion <0.005% 20Hz-20kHz at 1kHz, 0dB with 10dB gain reduction

General

Dimensions 19" x 1.75" x 7.1"
(483mm x 45mm x 180mm)
Weight 6.6lbs (3kgs), unpacked
AC Power 115/230V AC, 50/60Hz, 30VA.

The DPR-944 offers unparalleled dynamic control in a single rack space package. It's benefits of saving rack space, keeping costs down and creative application will be appreciated by sound reinforcement engineers in touring sound, corporate production and fixed installations.

Knowing that the audio performance is uncompromised makes it the obvious choice.

BSS Audio

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DPR 944

Also in the OPAL Series:



DPR-422
Dual Compressor /
De-Esser



DPR-522
Advanced Dual
Noise Gate