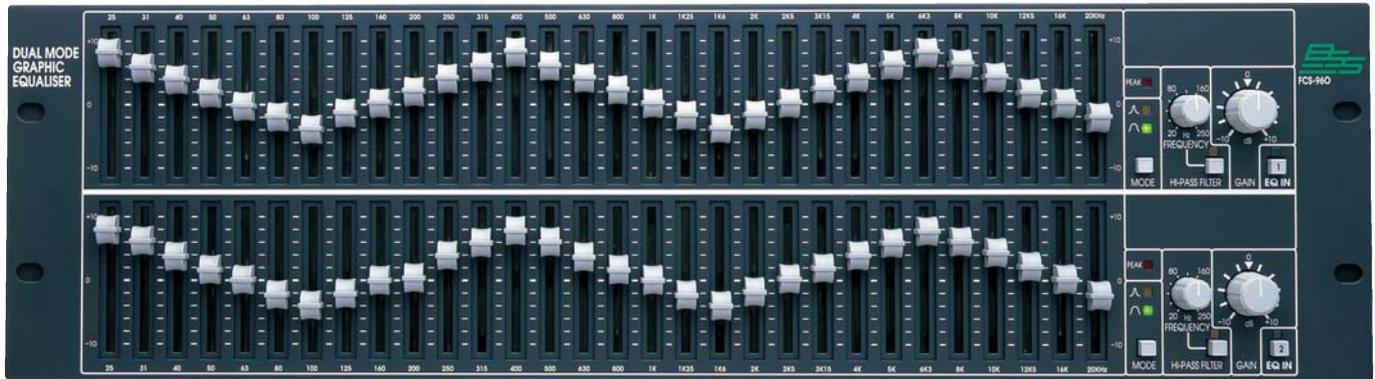


## Dual Mode Graphic EQ

## FCS-960



In most sound systems, the graphic equaliser is an essential element in sweetening and response contouring a system or program channel, or tuning out room resonances or onstage feedback. Of the units available, many are only suited to one function or the other.

In the BSS FCS-960 you have an equaliser which is ideally suited to either task through front-panel filter WIDTH switching, allowing you the option to select between smooth or fine control characteristics which have been carefully optimised for each application. The same unit may be used throughout an installation, making it interchange trouble-free, and ensuring operator familiarity.

Many conventional equalisers using a gyrator filter design produce undesirable contours and colourations when adjacent filters are boosted or cut together, producing a response which affects the overall sound, in some cases dramatically.

BSS's design, using a MFB constant-Q topology, results in a smooth contour in such situations, producing a response that you would expect from combined filters, and a sound that is free from non-musical colourations. Long travel 45mm faders provide accurate control resolution while the constant-Q filters ensure consistent selectivity at any fader setting.

Faders are positioned on the 30 standard 1/3 octave ISO centres from 25Hz to 20kHz with filter by-pass and have centre detents with filter by-pass for absolute zero accuracy.

This also means that you have the reassurance that if a filter is not being used, it is absent from the signal path.

For touring systems use, the dual channel FCS-960 is already hugely popular. In just 3U of rack space (5.25"), the FCS-960 provides two channels of 30 band equalisation, each channel independently switchable to operate with normal or fine filter widths. Patching the two channels in series combines the options, allowing you to apply smooth or fine boosts or cuts at any isocentre frequency.

PA companies and Artists around the world specify the FCS-960 Dual Equaliser for all acts, major and support, and the same model is being installed in major entertainment venues such as Theatres and Performing Arts Centres.

In fixed installations, the FCS-960, with its choice of filter bandwidths, means that you'll never be compromising on the use to which you put the equaliser.

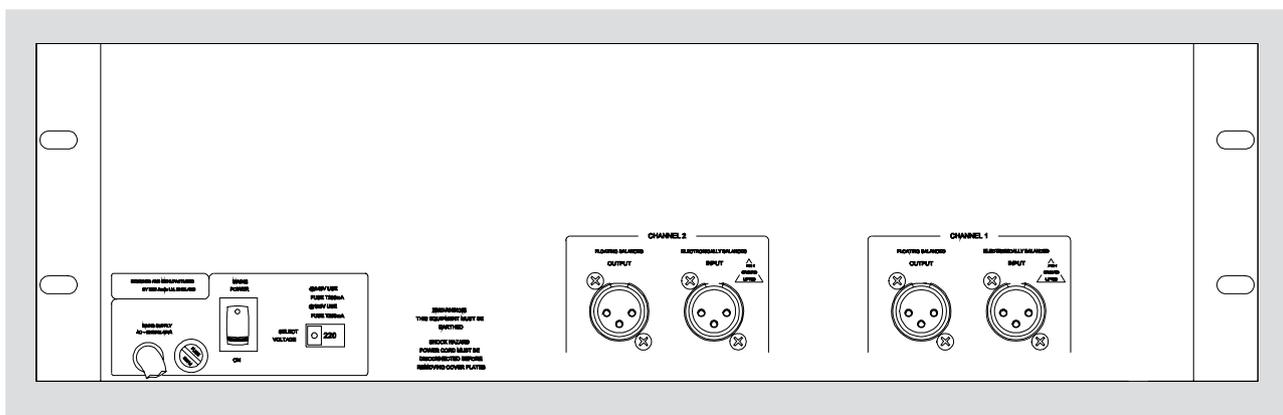
The FCS-960 is ideally suited for installations in Conference Centres, Performing Arts Centres, Airport PA systems, Hotels, Houses of Worship, Discotheques, and many other such installations.

## FEATURES

- Long, 45mm fader travel for precise adjustment
- Advanced constant-Q filter topologies for sonic transparency and consistent selectivity
- Fader centre-tap by-passes filter at zero setting
- Selectable normal or fine filter response modes provide the choice between response contouring or selective tuning in the same unit
- Fully variable 18dB per octave high-pass filter with by-pass
- GAIN control for system loudness normalisation
- Peak CLIP led for channel overload warning
- Custom-designed fader knobs for better viewing angles
- ETL (UL) Approved
- Power fail relay by-pass
- Electronically balanced inputs and outputs as standard, with optional transformer balancing



# FCS-960 Dual Mode Graphic EQ



## TECHNICAL SPECIFICATIONS

Both inputs and outputs on the FCS-960 are fully balanced as standard, with the outputs floating, and use standard XLR-type 3-pin connectors. Transformers are available as options, should isolation be required.

One common problem with graphic equalisers is the inability to view the fader positions accurately from various operating positions and under low-light conditions. BSS has produced a custom-designed control knob with ribbed edges which is highly visible under extreme conditions, and virtually eliminates parallax errors.

Signal headroom indication is provided by a peak clip led which monitors a number of points within the circuitry, indicating signal levels within 2dB of clip at any of those points.

Since its release the FCS-960 has steadily increased in popularity to become an industry standard. Combining all the required features with a superlative sonic performance has meant that the FCS-960 is now demanded by discerning engineers all over the world.

***Choosing a graphic equaliser for your application is now much easier.***

### Input Section

IMPEDANCE  
MAX. INPUT LEVEL  
CONNECTOR

10kOhm, Electronically Balanced  
+20dBu  
XLR331 or equivalent

### Output Section

OUTPUT  
MAX. OUTPUT LEVEL  
CONNECTOR

Electronically Balanced & floating  
+20dBu into 600 Ohms  
XLR332 or equivalent

### System Performance

FREQUENCY RESPONSE  
DISTORTION (THD)  
OUTPUT NOISE (flat)  
CHANNEL SEPARATION  
GAIN CONTROL RANGE  
PEAK INDICATOR  
BYPASS

+/-0.25dB 20Hz to 20kHz  
<0.005% 20Hz to 20kHz @+4dBu  
<90dBu, 22Hz to 22kHz, unweighted  
Better than 80dB from 20Hz to 20kHz  
+10dB  
+18dBu  
Passive failsafe bypass relay

### Filters

TYPE  
FREQUENCIES PER CHANNEL  
  
BOOST/CUT RANGE  
MODE  
HIGH PASS FILTER

MFB Constant Q  
30 off, on 1/3 octave ISO centres,  
25Hz to 20kHz  
Nominal +10dB \*  
Selectable normal or fine response  
18dB/octave Butterworth, 20Hz to 250Hz

### General

POWER REQUIREMENTS  
  
DIMENSIONS  
  
WEIGHT

AC 30VA 50/60Hz, selectable 90/120v or  
190/250v. IEC AC power cord.  
3U 19 " x 5.25" x 8.9"  
(482mmx132mmx227mm)  
11lbs gross shipping (6kg)

### Options

Transformer Balancing (Input and Output)  
Security Cover (2U, 3U)

In keeping with our policy of continued improvement, BSS Audio reserves the right to alter specifications without further notice. This product was designed developed and produced by BSS Audio, Hertfordshire, England.

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