Digital Instruments

BFM-V01

Amplifier and BF Monitor

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Overview

BFM-V01 is a device that contains a number of features related to digital processing of audio signals. Its main function is to process in real-time audio signal present at the two XLR inputs. The hardware platform on which **BFM-V01** is implemented has very high performance thanks to the use of a cluster of 32-bit DSP. The applications that **BFM-V01** is able to realize are manifold; from simple measures of statistical type in Fourier transforms, from sub audio modem digital delays. In effect **BFM-V01** is a powerful computer that uses modern techniques of numerical analysis of processors DSP at a high speed.

On the front panel of the **BFM-V01** is also a bargraph high resolution capable of displaying the level sound according to DIN 45406. The scale used has a dual representation very practical in the broadcasting industry, as well as the representation.

Traditional logarithmic type, between - 40 dB to + 5 dB, a second scale allows viewing of the signal according to the percentage of modulation with the convention that corresponds to 100% no + 6 dBu. The front panel also provides information through a graphical display, the operator can easily set the parameters without necessarily using a PC with the help of the keyboard joystick.

The dynamic range of the **BFM-V01** is 96 dB with a bandwidth that extends from 20 Hz to 100 kHz with frequency linearity of the measure in between + / - 0.5 dB. The technology used in **BFM-V01** is fully digital rendering the device particularly reliable in terms of precision and repeatability eliminating the drawbacks associated with traditional analog approach. Phenomena of aging, temperature drift and long term stability are completely overtaken by delegating all calculation processes very fast microprocessors.

BFM-V01 version is made of rack 19" 1U.

Features

· Analog audio L & R balanced on XLR connectors,

· Digital audio AES-EBU,

· 32 bit DSP cluster,

· HD bargraph display,

· Signal range between - 40 dB to + 5 dB,

· Display & Keyboard,

· Dynamic range of 96 dB bandwidth extension from 20 Hz to 100 kHz,

· System in format 19" Rack 1U.

BF inputs

Bandwidth Analog-Digital: 20 Hz to 100 KHz
Maximum Input Level: 12 dBu (8.7 Vpp)
Maximum Output Level: 20 dBu (22 Vpp)
THD + N: -75 dB at 400 Hz (Input at 0 dB gain)
Background noise: -80 dB (input to 0 dB gain)
Level: -50 dBu (7 mVpp) to 5 dBu (3.9 Vpp) (Input at 0 dB gain)
Linearity: + / - 0.1 dB
Input Connectors: Balanced XLR transformer
Output connector: Balanced XLR transformer

Signaling

RS232: DB9 Male ± 15kV electrostatic discharge (ESD) shocks
RS-485 (optional) DB9 Male ± 15kV electrostatic discharge (ESD) shocks

Supply

Network: 95 Vac - 240 Vac Plug IEC320 integrated EMI / RFI filter
Battery: 20 Vdc - 60 Vdc EMI / RFI filter integrated

Size

Width: 1 Unity 19".
Depth: 300 mm connectors excluded.
Weight: 1.5 Kg.