

# **BFS-V01** Amplifier / Audio Switch and TX Remote Controller





# **BFS-V01**Amplifier / Audio Switch and TX Remote Controller

**Overview** 

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BFS-V01 is a device that contains a number of features related to digital processing of audio signals. Its main function is to measure in real time the audio signal level present at the two XLR connectors for input, one regarded as preferential and the other as a reserve. The two levels are constantly compared with a preset threshold and in the case of the absence of one of the two an alarm is triggered. Upon the occurrence of the alarm condition BFS-V01 is able to operate to switch the audio output on the channel considered as reserve. Both the intervention time and the recovery can be set through the front keypad of a minimum of 100 ms and a maximum of 59 seconds.

On the front panel of the BFS-V01 there are also two bar graphs of precision that can view the two input audio level. These bargraph are calibrated according to DIN 45406. The scales used for bargraph range from -40 dB to +5 dB according to specification. There is also a scale which expresses the percentage of the level in function of the 100% modulation at 0 dB. Also on the front panel is an alphanumeric display and a keypad for access to configuration parameters. It is also possible to perform the switching output of the two channels by means of two keys with LEDs indicating which of the two signals is in transit. The dynamic range of the BFS-V01 is 96 dB with a bandwidth that extends from 20 Hz to 16 kHz with frequency linearity of the measure in between + / - 0.5 dB.

The signal level of the two signals is amplifiable in such a way as to align the chain to 0 dB. The range of amplification ranging from a minimum of -10 dB to + 30 dB. The second feature of the apparatus which **BFS-V01** consists in demodulating the remote control switching on and off for the transmitter. These commands are composed of packets to 5KHz duration of 100 ms modulated on-off signals on the audio channel. The arrival of a particular remote control realizes the closure of the ralay associated with it. The closure mode can be impulsive type, with a duration of 200ms, or permanent.

Upon arrival of the particular remote control, in the mode of permanent closure, the relay concerned will remain active until the opposite command (opening). The Handler of the transmitter can also be done by the clock wake-up inside. The princpio of operation is identical to that of an alarm clock. One hour set from the front panel, the relay closes ssociato to the transmitter in the preset mode. The technology used in the **BFS-V01** is fully digital making the apparatus particularly reliable in terms of precision and repeatability, eliminating the drawbacks associated with the traditional analog approach. Phenomena of aging, temperature drift and long term stability are completely overtaken by delegating all computational processes very fast microprocessors.

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



**Features** 

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- · Display & Keyboard,
- · Internal programmable clock,
- · 4 dry contact independent signal usable as device's status remote-signalling,
- · 4 photo-coupled inputs usable as event logger,
- · Serial Connection in RS-232 standard,
- · Size: 1U/19' depth 300 mm (connector excluded),
- · Weight: 1.5 Kg,
- · Certification CE.



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Tech. Spec.

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### **BF** inputs

Bandwidth: 30 Hz to 16 KHz

Maximum Input Level: 12 dBu (8.7 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 (7mVpp) 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.

TLC-TX: DB-24 female AMPHENOL.

## 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.