

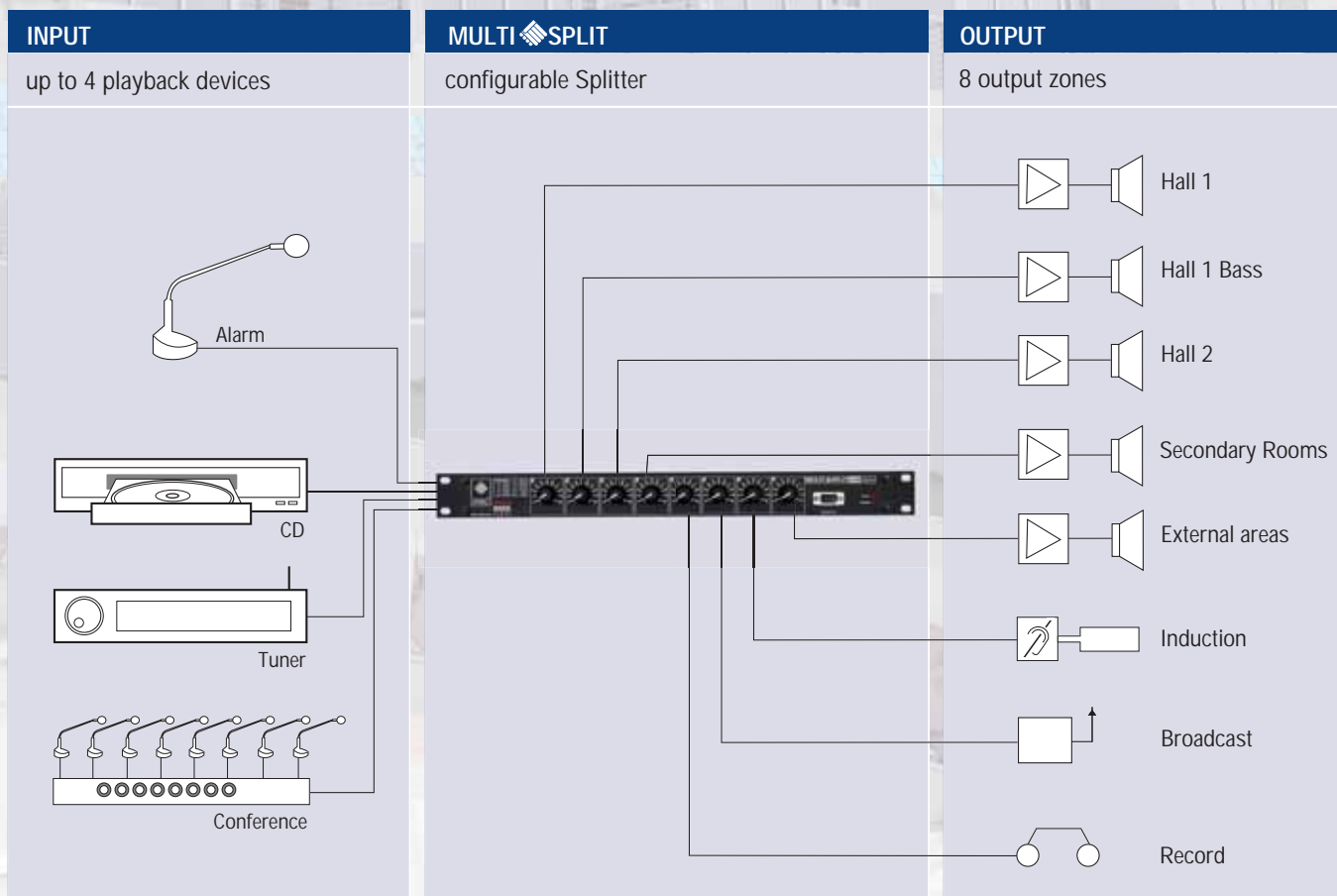


MULTISPLIT 4/8 DIGITAL AUDIO-PROCESSING

FOUR INPUTS, EIGHT OUTPUTS
and in between you get a variety of signal processing
tools that fulfil your most distant wishes.


www.itec-audio.com

MULTISPLIT is based on the well-proven technology of ITEC MULTIMIX. It is a device that is designed specifically for the multiplication of output signals. The MULTISPLIT provides the sound engineer every imaginable possibility of signal processing while offering the operator a very simplistic user interface. The new ITEC MULTISPLIT 4/8 digital is very reasonably priced, so you can also use it for simple sound provisioning setups. Simultaneously, it is perfectly suited for large and complex setups due to the ability to cascade multiple instances, the high audio quality and the remote control and -maintenance features. Connectivity and configuration are both simple and self-explanatory. The configuration software ITEC SPLITDESIGN is clearly arranged and for free download on our homepage: <http://www.itec-audio.com/download/splitter/splittersetup.exe>





With the MULTISPLIT 4/8 digital, it is very easy to do manual adjustments: just use the potentiometers on the front panel. This is a considerable advantage compared to similar devices. This is the perfect answer to implement a user-friendly stand-alone solution. The eight volume controls can be allocated to the in- and outputs as you desired. Obviously, you can also group inputs or outputs to a single control. The volume bandwidth (minimal/maximal volume) can be set as well. The front panel features four LEDs that indicate the input signals, a power indicator and a fault indicator LED.

Serial Interfaces

Two independent RS232 interfaces allow for connectivity to other systems. The 9-pin PC connector is located on the front panel. The configuration software ITEC SPLITDESIGN turns any PC or Laptop into a fully-featured operational console with rich status display. The rear panel also features a 9-pin Sub-Min-D connector to link to media remote controls.



Inputs

4 symmetric inputs on XLR-sockets are located on the rear panel. The maximum input amplification is adjustable for each channel from -20 to +30 dB in Line-operation and from +10 to +60 dB in Mic-operation. That means that you are able to adjust any common playback devices and microphones to optimum levels. Phantom power (12 V) is available and can be activated separately on each channel. Additionally, you can connect a MULTIMIX 8/4 via the RJ45 connector of the MULTISPLIT (ANALOG LINK IN), using its ANALOG LINK OUT connector.

Outputs

8 symmetrical outputs are available as XLR connectors on the rear panel. The maximum output levels are +20 dB (if the DSP module is installed: +10dB)

External Control

Volume remote control is possible using the remote control inputs (15-pin connector on the rear panel). There are 8 remote control inputs that can be connected to external potentiometers (direct current 0-10V). You can allocate any input or output channel to the remote control inputs. Configuration changes can also be performed using these inputs. An external switch can be used to activate one of up to 10 user-defined configurations.

Ethernet Interface (optional)

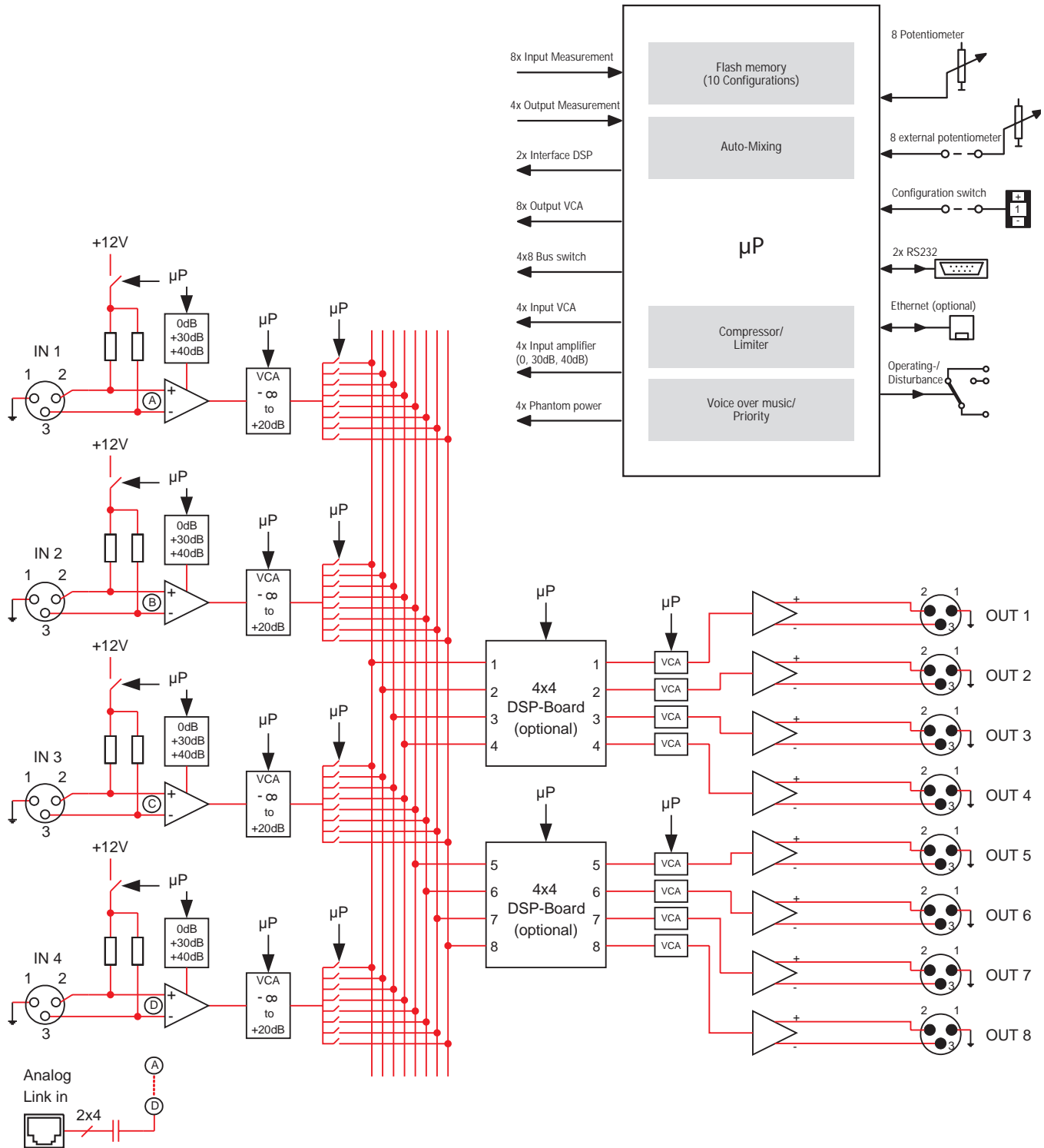
If you order the device with the optional Ethernet interface (RJ45 connector on the rear panel), you can configure and remote control it via your PC or Laptop network connector.

Fault Indicator

A potential-free switch is available for connectivity to external fault indicator systems.

MULTISPLIT 4/8 DIGITAL - BLOCK DIAGRAM

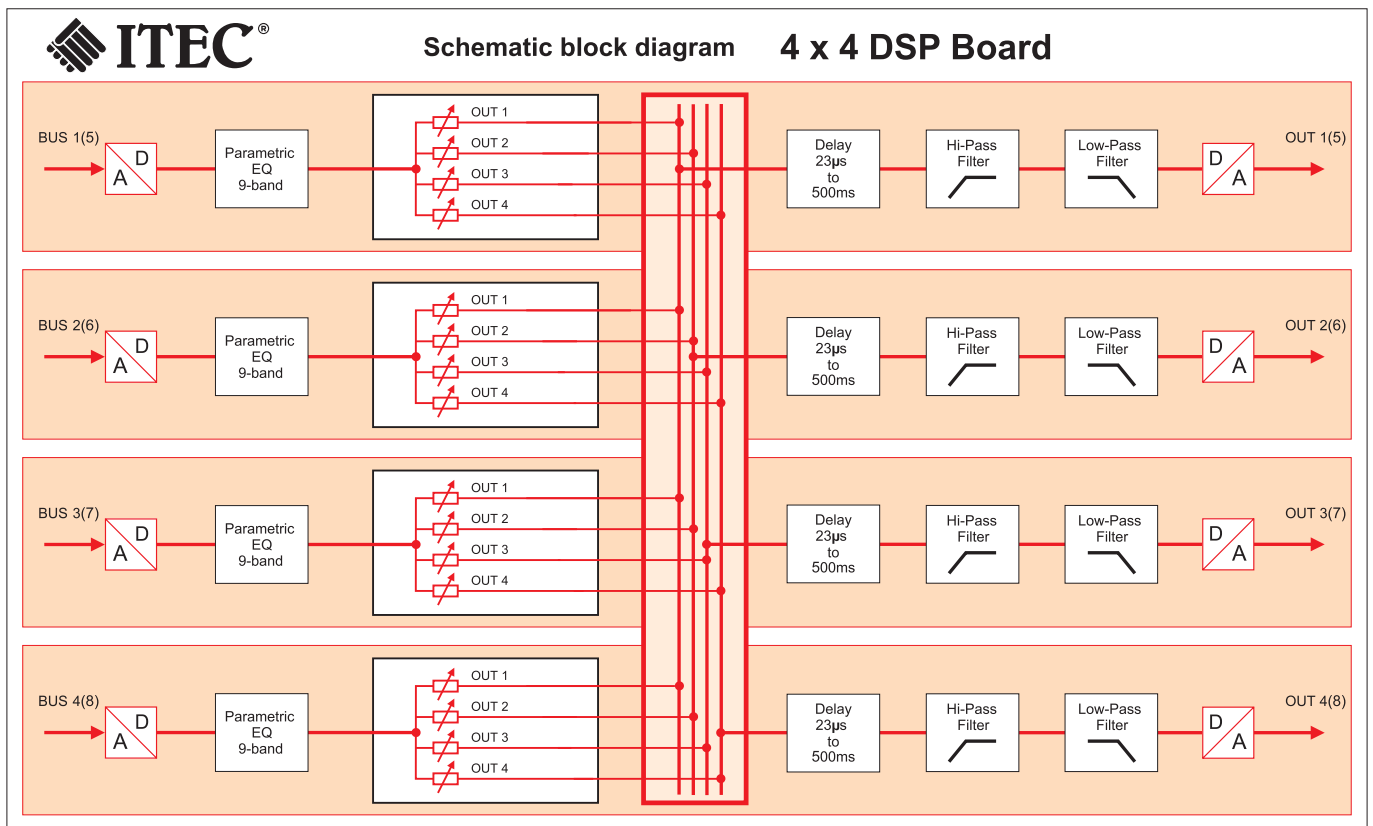
The base architecture of the ITEC MULTISPLIT is built from high-quality analogue audio technology! However, fully digital controlled. Two microprocessors control the VCAs, measure the potentiometers and audio levels, switch the signal paths and communicate with external systems. The analogue base architecture provides for superior quality in terms of signal-noise ratio, dynamics and harmonic distortion. You can optionally extend your device with two DSP modules (for four outputs each) if you like to also perform digital signal processing.



You can optionally add up to two 4x4 DSP matrix modules to your ITEC MULTISPLIT. ITEC SPLITDESIGN includes to configure these DSPs. They operate in 24 Bit / 44,1 kHz mode and provide optimal algorithms. Each DSP has 9 filters per input that can be parameterized. Attenuation, quality and frequency can be adjusted. Each output can be delayed (0.023 – 500 ms) and filtered by setting a high/low-pass filter (1. to 4. order)



DSP Block Diagram

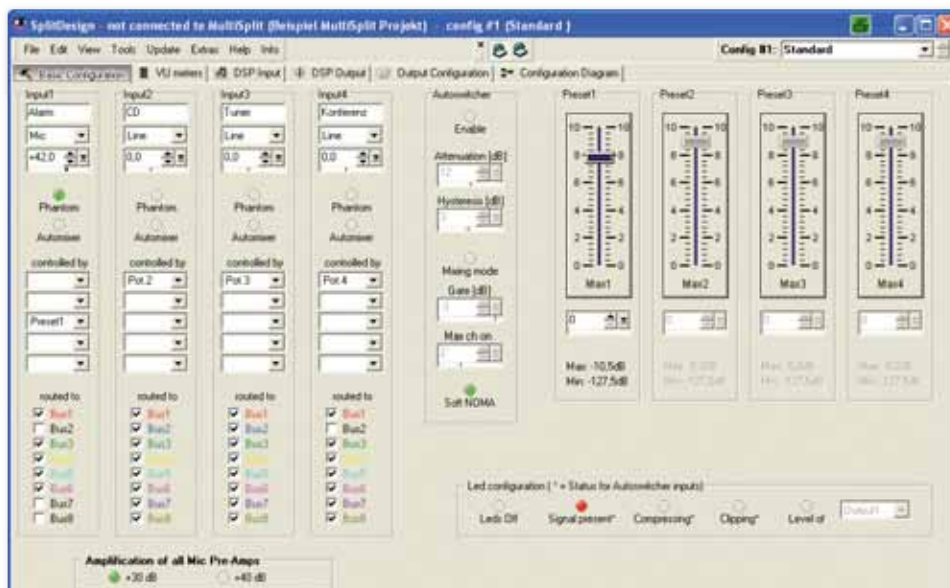


The software SPLITDESIGN is the tool that the sound engineer can use to perform basic configurations as well as to test and adjust the MULTISPLIT in productive operation. Any adjustments can be made in real time, they take effect immediately. Configurations are stored to the flash memory of the MULTISPLIT controller, so they are safe from power-outages. That includes all settings and parameters and the custom names of the inputs and outputs. The sound engineer can access all data of the last configuration at any time. You can save up to 10 different configuration sets in the flash memory of the MULTISPLIT.

You can download ITEC SPLITDESIGN free of charge at:
<http://www.itec-audio.com/download/splitter/splittersetup.exe>

Configuration at a click

All basic settings are performed on this clearly laid-out screen. The pre-amplification (Mic/Line), the volume controls, the allocation from the inputs to the busses and the parameters for the auto-mixing are all configured on this screen.



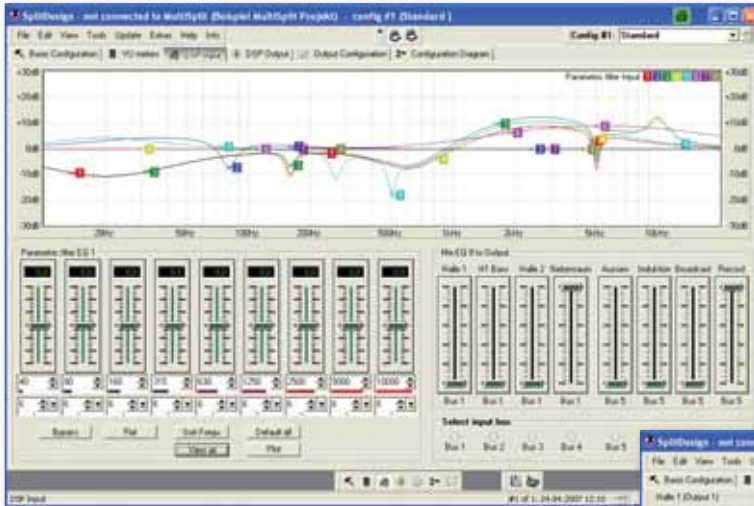
All levels at a glance

The screen "VU DISPLAY" shows the current levels of inputs and outputs during operation. It is a valuable tool to check correct adjustment of the device.



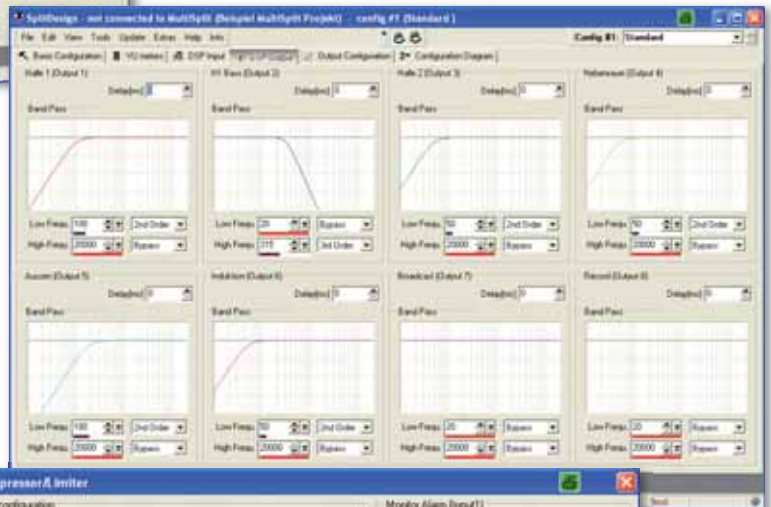
DSP Inputs (only with DSP Option)

This screen allows to configure the 9-band equalizers and the matrix mixer. You can edit settings directly in the graph – it's a breeze!



DSP Outputs (only with DSP Option)

On this screen you can configure the band-pass filters for the 8 outputs. Also, you can comfortably set delays in milliseconds, meters, or feet.



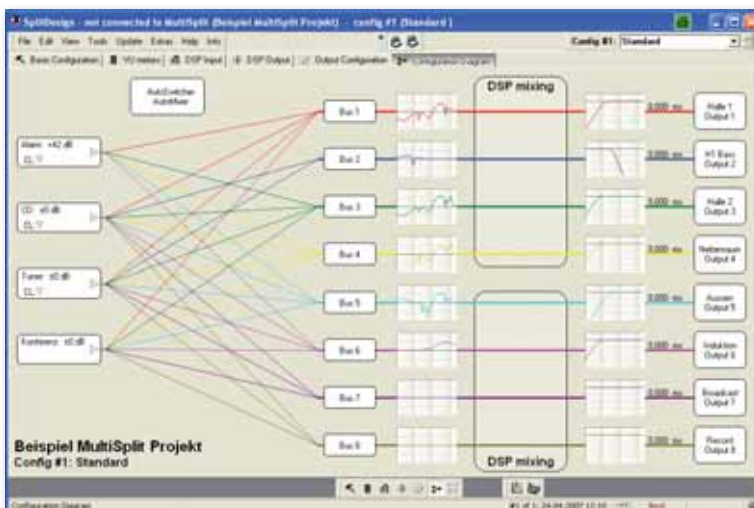
One tool of many: Compressor/Limiter

You will find many valuable features in the corresponding menu "EXTRAS". One of them is the compressor/limiter. The display is real-time to make optimal configuration easy. The compressor operates in analogue mode on the signal path, but is also microprocessor controlled.



Visualization of the configuration

The configuration setup is visualized in this diagram. Signal paths are illustrated as coloured lines, the diagrams of filters and equalizers explain the architecture very well. You can click on parts of the diagram to see current signal levels and additional information.



MULTISPLIT 4/8 DIGITAL - SPECIFICATIONS



GENERAL

Frequency Response	20 Hz - 20 kHz/ -3 dB
Harmonic Distortion	< 0,005 %
Overall Dynamics	103 dB (96 dB with DSP module)
POWER SUPPLY	External power supply unit
Input	115 - 230 VAC
Output	+12 V, -12 V, +5 V/ 20 W
INPUTS	4 x symmetrical
Max. Amplification	Adjustable -20 dB to +60 dB
Phantom Power	+12 V
Input Impedance	6,6 kOhm
OUTPUTS	8 x symmetrical
Max. Output Levels	+20 dB (+10 dB with DSP module)
Output Impedance	symmetrical 300 Ohm, unsymmetrical 150 Ohm
DIMENSIONS	482 x 44 x 180 mm (W x H x D), 19" / 1 rack unit
WEIGHT	2,40 kg

DSP MODULE (OPTIONAL)

General Up to 2 pcs.	24 bit/44,1 kHz
	4 inputs and 4 outputs each
	4 x 4 Matrix each
PER INPUT	9-band equalizer, fully parameterized, ± 15 dB
Middle Frequency	Adjustable, 20 Hz to 20 kHz
Filtering Quality	Adjustable, 0.1 to 70
PER OUTPUT	Delay: 0.023 – 500ms / band-pass filter: 1 st to 4 th order

LAN-MODUL

INTERFACE	Ethernet 10Base-T oder 100Base-TX (Auto-Sensing, Full/half duplex)
PROTOCOLS	TCP/IP, UDP/IP, ARP, ICMP, SNMP, TFTP, Telnet DHCP, HTTP Internet Web Server

SPLITDESIGN-SOFTWARE

You can download the latest version of the software using the link below.

<http://itec-audio.com/download/splitter/splittersetup.exe>

We are happy to inform you about additional ITEC PRODUCTS: e-mail: office@itec-audio.com, www.itec-audio.com



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