

z4

Digital Mini Mixer



In these days in which flexibility is written with a capital F often the **SMALL** things really matter.

z4 is the small digital Broadcast mixing console for simple but nevertheless ambitious productions of high quality.

- *Intuitive*
Uncomplicated production of interviews, telephone recordings or small features
- *Compact*
Ideally suited to mobile productions in small OB/ENG vans
- *Integrative*
Intelligent integration in a modern broadcast infrastructure
- *Network capable*
Control commands can be sent and received via Ethernet
- *Professional*
High-quality and robust design guarantees reliable operation day after day
- *Easy servicing*
Configuration of several systems can be done from a central servicing workplace via Ethernet link

Simple and confident to operate, flexible and adaptable, robust and reliable, independent yet integrative.

These are the features you can expect from a professional tool. Functional design and reasonable price complete this product.

In this respect, we are setting new standards with the z4.

z4 meets all those demands for which a "regular mixing console" is too complicated or expensive on the one hand and, on the other hand, the audio workstation cannot substitute for the mixing console.

Small productions within an editorial environment with telephone interviews and discussion rounds, dubbing and feature mixes are thus some of the most important applications. In this case you need to produce a professional result in very little time. In the background, the integrated high-quality voice processor provides excellent sound, whilst limiters in the summing buses reliably prevent any overload.

The ENG van as mobile on-air studio often makes other demands. Flexible monitoring possibilities, easy handling and a flexible access to the signal processing are indispensable features for this application.

The operating philosophy of the z4 largely follows that of its "big brother" zirkon. This way, the z4 blends seamlessly into a complex studio environment with large and small mixing consoles.



System Structure

The z4 consists of the remote operating unit and the 1RU 19" base device. They are connected with entirely one single CAN bus cable that also provides power to the control panel.

Base Device

The base device includes the integrated signal processing, system controller, power supply unit, control and all input- and output interfacing ports.

Operating Unit

The operating unit is divided in two sections. Each of the four identical channel strips on the left is fitted with one 100-mm fader, PFL button, rotary knob, and the high-resolution VFD display that clearly shows the source name, the channel format and the summing bus assignment. The right hand section combines the central elements for monitor select, global functional buttons and metering.

Free Channel Assignment

With the rotary knob you can freely assign any of 14 local sources to the channels.

Additional sources are available by intelligently linking up to four digital inputs to a central matrix.

This matrix becomes the remote-controlled pre-selection matrix of the z4, via an IP connection.

This way it is possible that, for example, a news studio can take over all programmes or studios. All central sources are also available for monitoring.

Signal Processing

Each of the four input channels is equipped with one set of high-quality signal processing modules consisting of high pass, gain, phase, expander, de-esser, compressor and three fully parametric equalizers.

Operation is via rotary knobs, PFL/mode buttons and the VFD display of the channel strips. The global functional buttons activate access to the DSP modules, summing bus

assignment, aux-send gain and the channel modes left, right, mono and stereo.

Monitoring, Measuring, Talkback

The monitoring selection and the PFL buttons provide direct access to the four summing buses and all other local sources. This allows direct monitoring and measuring of all currently used signals. Naturally, loudspeaker muting the mic is open can be enabled in self-op mode. The talkback button serves for vari-

VFD Display

Two-line graphic-capable display shows all channel-relevant information

Rotary Knob

Setting of gain, pan, balance, source select, DSP parameters

PFL Button

For quick pre-fade monitoring



Faders

Maintenance-free

Correlation Ratio Meter and Peak Meter

Follows the monitoring or shows a summing bus

Global Functions

6-button block for instant local operations and configuring

Memory

With memory stick as an option.

Monitor Select

Button block for monitoring the four summing buses, each with limiter-signal LED

Programmable Buttons

For DIM, red light etc.

Talkback Button

For communication to the four summing buses

able intercom to headsets and monitor loudspeakers as well as summing buses. This allows an intercom function between studio control room and presenter suites without additional effort.

Settings

Storing and loading of all mixer settings is performed either locally with the base device or optionally with memory stick.

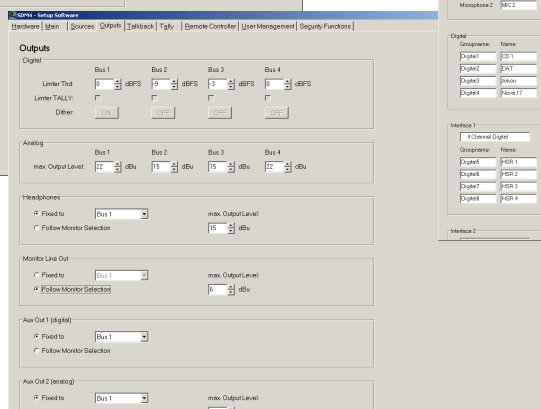
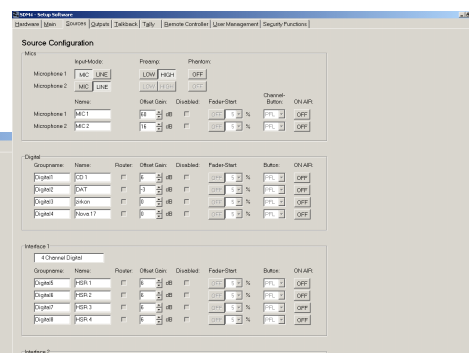
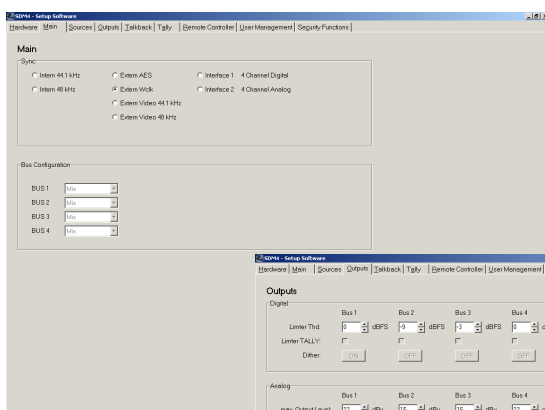
Special functions

Four buttons are freely programmable with special functions like red light or activating a telephone hybrid.

Servicing

The configuration of the z4 can be executed locally with the operating unit or system-wide via the Windows software provided with the mixer.

Here, amongst other parameters, sources are named, user rights are assigned, and opto-couplers and relays are provided with their specific functions.





Performance Features

(Selection)

- 4 stereo channel strips with 100-mm faders, pan/balance, PFL, display
- High-quality signal processing in all 4 channels
- 4 freely configurable summing buses with limiters
- Channel modes stereo, mono, left or right signal
- Integrated PPM with correlation ratio meter
- Monitoring via headphones and loudspeakers with separate volume setting
- 4 freely configurable buttons
- Intercom function to remote presenter suite
- High-resolution two-line VFD display

Signal Processing

- 4 full stereo channels with HP, gain, phase, mono 3* fully parametric EQ, expander, de-esser, compressor pan/balance, fader
- 4 stereo summing buses with limiter

Synchronisation

- Complies with AES11 Grade 2
- Possible clock sources: wordclock, AES3, internal gen.
- 44.1 kHz and 48 kHz
- Wordclock input and output

Audio Interfaces

(At the base device)

- 2 Mic/Line inputs with switchable phantom supply
- Combinable input modules with 4 analogue stereo inputs or 4 AES3 inputs
- 4 AES3/SPDIF inputs with SRC
- 4 stereo outputs, each analogue and AES (doubled)
- 1 loudspeaker analogue stereo
- 2 headphone analogue stereo
- 1 external PPM analogue/digital
- Analogue interfaces are electronically balanced
- AES interfaces (110 Ohm) with transmitter
- SPDIF interfaces (75 Ohm) unbalanced on RCA socket
- Option: plug-in module also as SDI or MADi module

Control Interfaces

(At the base device)

- 6 opto-coupler inputs
- 8 relay outputs
- RS232 for configuration
- CAN bus for connecting the operating unit
- Ethernet 10 Mbit/s for configuration and surveillance and for control of external matrices

Applications

- Editor's workplace
- Copy- and Dubbing Studio
- News Studio
- ENG Van
- Substitution Mixer

Mechanics

- Base device 19", 1RU
- Operating Unit in two variants: Built-in device (24 x 29 x 2,5) Desktop variant (26 x 32 x 5,5)

Software

- Configuration software runs under Win98, NT4, 2000, XP