



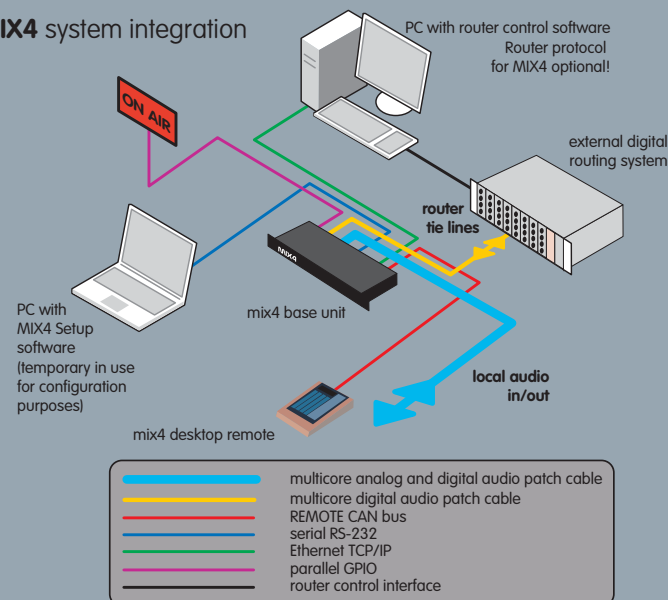
digital desktop mixer MIX4



digital desktop mixer

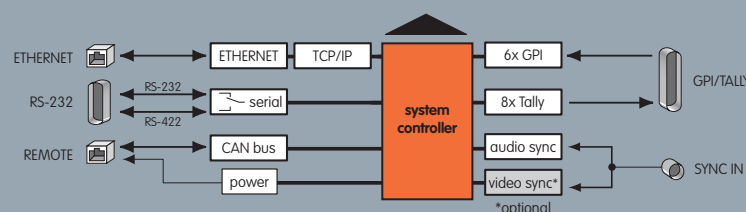
MIX4

MIX4 system integration

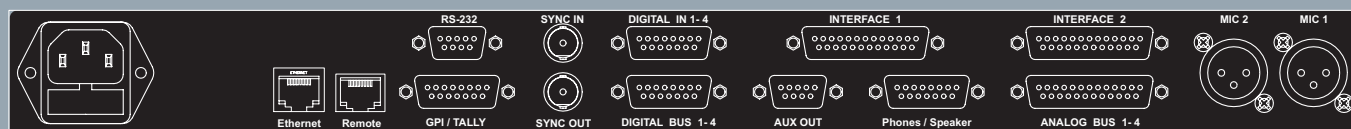


MIX4 remote capabilities

For remote control purposes the MIX4 is equipped with 8 tally outputs and 6 GPI inputs. Their functions will be set by set-up software. An Ethernet interface allows the remote control of external routers via TCP/IP as well as the integration of the MIX4 into a centralized user and data management. Finally there is a serial interface for connection to a PC via RS 232 that serves for configuration of the MIX4. This interface can also be used in RS 422 mode.



MIX4 base unit rear panel



The desktop remote will be connected to the base unit by the CAT5 cable. Microphones can be connected directly to the XLR connectors. For all other connections you need to make adaptation cable to the multi pin connectors.

MIX4 technical specifications

Microphone inputs

2x XLR Transformer balanced / 10kOhm / phantom power 48V
Gain Digital gain (0 ... +70dB in 1dB steps) +18dBu, digital
Equivalent input noise
@ 200Ohm -126dB (RMS) / +10dBu maximum mic input level
+22dBu maximum line input level
CMMR -95dB @ 50Hz / -85dB @ 15kHz

Line inputs

4 x 2 channel analogue +22dBu @ 10kOhm electronically balanced
CMRR -80dB @ 50Hz
4 x 2 channel digital AES/EBU 110Ohm balanced (or S/PDIF unbalanced)
with sample rate converter (SRC)
4 x 2 channel digital AES/EBU 110Ohm, balanced

Line outputs analogue

4 x stereo bus +22dBu @ 0dBFS / 500Ohm - electronically balanced
2 x headphone +10dBu @ 0dBFS / 50Ohm
1 x monitor + 6dBu @ 0dBFS / 500Ohm
1 x AUX +22dBu @ 0dBFS / 500Ohm

Line outputs digital

2 x 4 x stereo bus AES/EBU balanced 110Ohm
1 x AUX AES/EBU balanced 110Ohm

GPI / Tally

6 GPI in TTL low / 4,7kOhm internal pull up
8 Tally out TTL rising edge or 100ms puls / 4,7kOhm internal pull up

Interfaces

Video sync (optional)
Ethernet 100Mbit/s RJ45 - TCP/IP stack (device server and router client)
Serial interface 9-pin Sub-D - RS232 or RS422 (auto sense)
MIX4 remote RJ45 - CAN bus, external power (CAT5 cable) 10m standard
> 10m Remote PSU necessary

General

Power 100 - 230V AC base unit
optional 100 - 230V AC / 5V remote PSU for cable length > 10m
base unit: 19", 1RU, 255mm depth, appr. 2,8kg
desktop remote: 320mm x 255mm x 53mm, appr. 2,2kg
with wooden frame as desktop unit
or table fitting

digital AV-workstation mixer
ENG / SNG / location
shared talk-room
editorial workplaces / newsroom
Emergency On-Air mixer (Radio/TV)
video editing suites
local radio

- 2 Mic inputs
- 12 stereo/2-channel inputs,
- 4x AES+SRC on board and two I/O interface slots
- various interface cards available
 - 4x analog stereo in
 - 2x Mic in
 - 4x AES/EBU in/out
 - SDI in/out (4ch in/out)
 - MADI in/out (future option)
- 4 configurable stereo busses (mix, mix-1, premix, postmix, direct out)
- 4-fader desktop remote
- 19", 1RU base device



MIX4 is a compact four channel mixer built in a 19" 1RU unit that carries all necessary I/O connectors. Except of the two XLR microphone inputs all other audio connectors are of Sub-D type. A separate desk top remote control unit provides all controls to operate the MIX4.

The target markets are editorial working environments and small "one man" broadcasters (radio DJ's / TV VJ's) where the MIX4 completes audio / video work stations but can also be used to complete smaller video editing rooms as well as ENG's / SNG's. Within bigger studio installations the connection to and the remote control of such central routers is possible. The remote control of the router is done by TCP/IP via Ethernet. The unit provides a serial interface to remote control the MIX4. To move personalized set up data (snap shots) between several units a PC based software is available



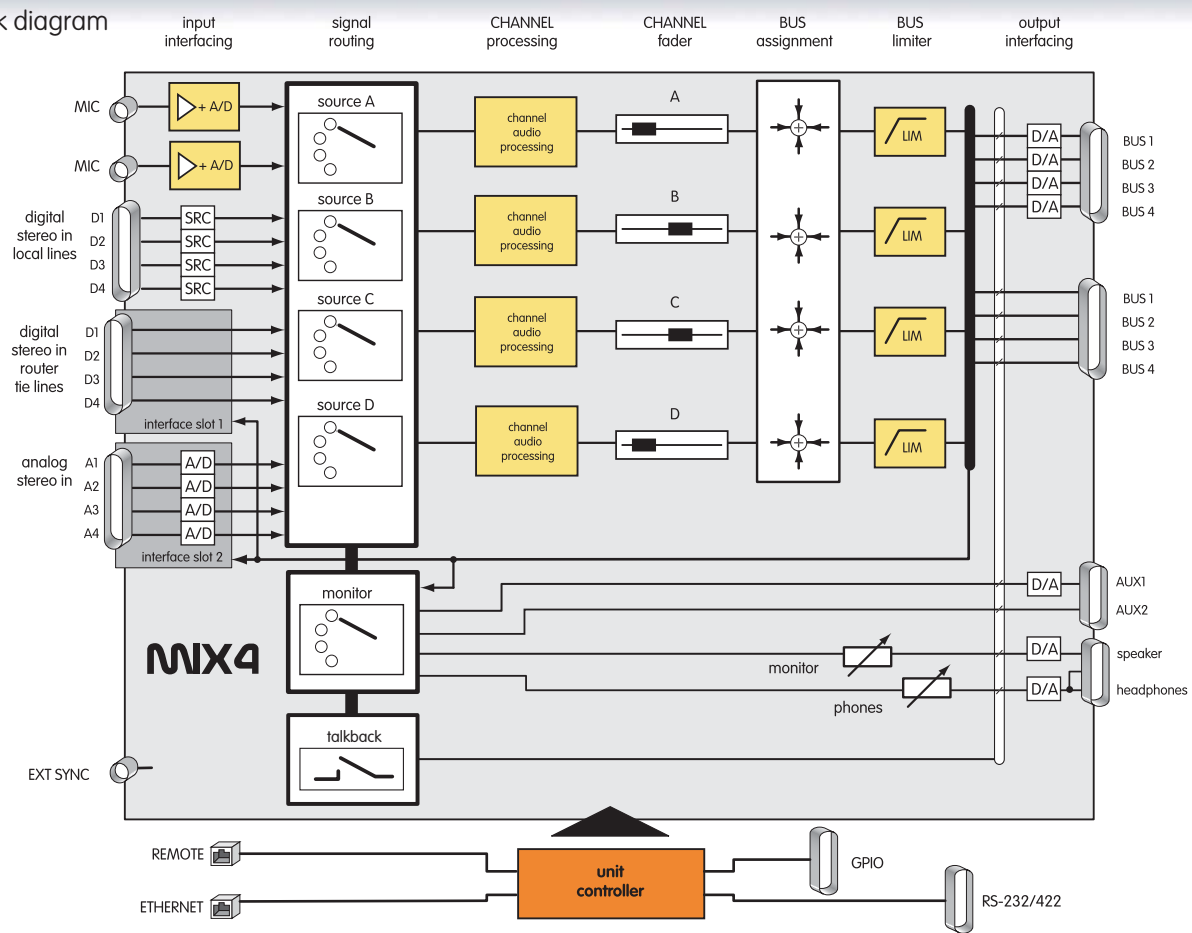
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digital desktop mixer

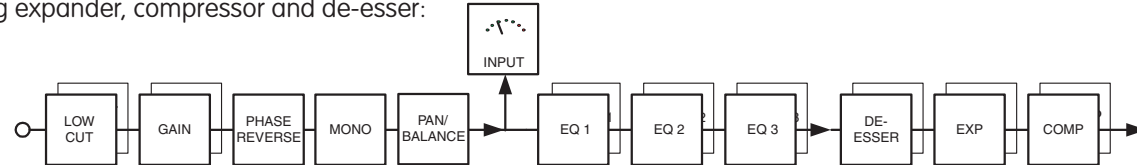


MIX4 block diagram



MIX4 channel strip

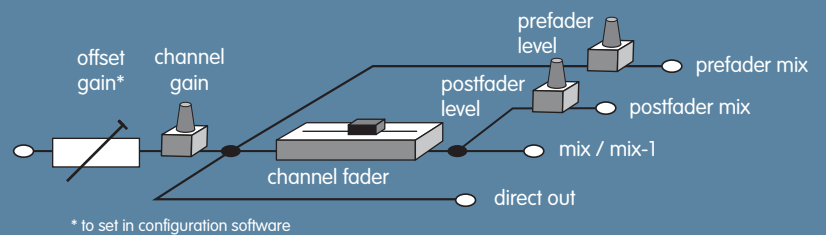
The MIX4 has a so called "channel strip" per channel that offers a high pass, 3 parametric equalizers and a complete dynamic section including expander, compressor and de-esser:



MIX4 principal functions

MIX4 is a digital 4 stereo channel mixer that offers 4 independent mix busses which can be used for common mixing modes in any order :

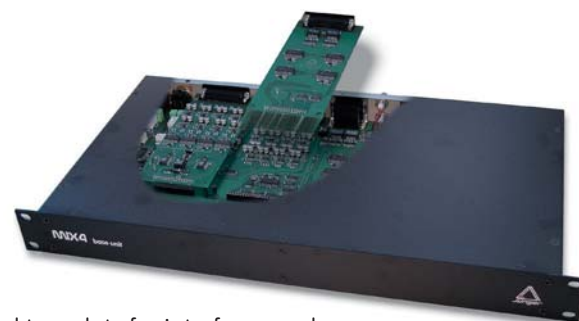
- Mix** - all 4 channels will be mixed to one bus
- MixMinusOne** - a certain source is not part of a mix
- PreMix** - pre fader-mix (pre fader aux send)
- PostMix** - post fader-mix (post fader aux send)
- DirectOut** - one source will be directly switched to that bus (pre fader)



Each bus utilizes a separate distortion free "brick wall limiter" with look-ahead function. A system controller controls the source selection for each channel, the parameter of filter and dynamic section as well as the coefficients for the multipliers of the mix matrix.

MIX4 base unit audio interfacing

- on board
- 2 x Microphone inputs incl. phantom power
 - 4 x 2 channel digital line inputs AES/EBU or S/PDIF incl. SRCs
 - 4 x stereo bus outputs (1 x analog, 1 x AES/EBU)
 - 2 x Headphone outputs (individual headphone amplifier)
 - 1 x Monitor line output
 - 2 x AUX outputs (1 x analog, 1x digital) for meter, talkback...



and two slots for interface cards:

- 4 x 2 channel analog line inputs (standard option)
- 4 x 2 channel AES/EBU input and output (standard option) or optional
- 4 channel SDI input and output
- 2 channel Mic input incl. phantom power

channel rotary control channel fader channel button and LED desktop remote control MIX4

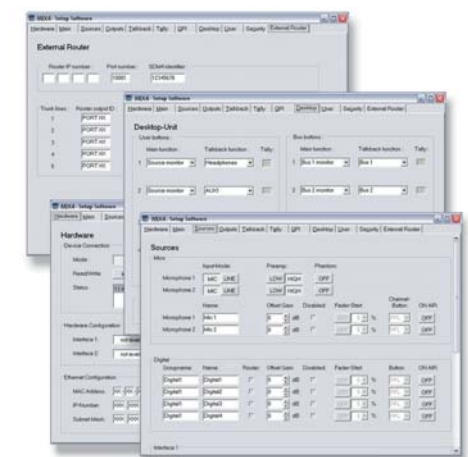


- Desk top with wooden frame or table fitting
- 4 x 100mm Alps fader
- 4 x Channel Rotary Control (turn & push)
- 4 x Channel Buttons (PFL/MUTE/START/HYBRID)
- 6 x Setup Buttons to control device functions (USER / MON / SOURCE / BUS / DSP)

- 4 x configurable USER buttons
- 4 x Bus monitor buttons
- 4 x BUS limiter LEDs
- 1 x Talk-Back button, 1 x DIM button
- Two channel level display (16 LEDs), phase display (5 LEDs)
- Connects to the base unit by CAT5 cable

MIX4 SetUp software

The basic idea is that all relevant parameters that can not be altered by MIX4 remote will be set by the SetUp software. Herewith the MIX4 can be adopted to various conditions and production environments. So one application for example may require 3 different PreMixes (pre fader mixes) for headphones while an other application needs 2 or 3 MixMinusOne mixes. In some installations the remote control of devices like CD-players or HD based jingle machines is required while other people need fast and random shuffle of sources including all preset parameters including activating of an OnAir signal. All of these requirements can be configured very easy by the SetUp software.



MIX4 External router control

MIX4 can select sources from external routing devices connected via tie lines by TCP/IP over Ethernet connection. Router protocol is optional and available for different hardware manufacturers. Ask for details!