

ACTIVE COMPONENTS



Broadcast-Channel

The broadcast channel is a channel strip with a classic design to record and edit for broadcasting and post-production. It offers a microphone preamplifier with transistor technology, with a 48 V phantom power supply and a subsonic noise filter, a filter section with bass range filter, parametric mid and high range filters, and a compressor/limiter section. The compressor allows very easy and variable

PRODUCT ADVANTAGES:

- Switchable microphone/line input, transmitter free, balanced (optionally with transmitters)
- Microphone preamplifier with discrete transistor pairs, very low tolerance
- Input level display
- Head room of 22 dB for safe operation even if EQ- and compressor values are not adjusted to an optimum
- Line OUT balanced, not grounded
- Output level LED display with a resolution of 3 dB and controls +/- 20 dB
- Additional Meter OUT at the rear of the units
- High quality headset amplifier for pre-lists
- Simple and fast operation – primarily used for standard moderating stations

processing of spoken voice dynamics, thus providing an effective tool for moderating and sound editing.

The switching functions were designed in close observance of the ARD Performance Specifications.



K-BR-CH1

Made
in Germany

TECHNICAL DATA:

Line In: Nominal level +6 dBu / max. level: +28 dBu

Input balance damping: 60 dB

Input impedance: >10 kΩ

Distortion factor: < 0.01 %

External voltage: -99 dBq

Mic In: Max. input level: 0 dBu

Input balance damping: 60 dB

Input impedance: 1.2 kΩ +/- 10 %

Distortion factor: < 0.01 %

Noise floor: 1 dB

Amplification: Adjustable from 24 dB to 60 dB

Phantom voltage: "Soft"-switchable +48 VDC

Filter: Highpass filter (subsonic noise) 80 Hz (-3 dB)

LOW shelving filter frequency: 300 Hz (increase/decrease 15 dB)

HIGH shelving filter frequency: 1500 Hz (increase/decrease 15 dB)

Parametric center (profile) filter with a high density and adjustable frequency (500 Hz to 3000 Hz)

Increase/decrease: 15 dB

Compr: With "soft-knee" characteristic, optimized for language signal processing

Attack time: approx. 10 ms (duration limiter for control of +10 dB to 10 % of the original level at overmodulation)

Decay time: approx. 20 ms (duration limiter after overmodulation of +10 dB for level jump of -10 dB to 10% of original level)

Threshold: -30 dBu to "OUT"

Ratio: 0 to 10

Gain: +/- 20 dB

Frequency: (EQ and compr. OFF):

Line: 20 Hz to 20 kHz: (-3 dB)

Mic: 20 Hz to 100 kHz: (-1 dB)

Connections rear: MIC IN - 3-pin XLR

LINE IN - 3-pin XLR

IEC-socket

LINE OUT - 3-pin XLR

PPM OUT - 3-pin XLR

Front: HP 6.3 mm jack socket

ORDER-NO.

DESCRIPTION

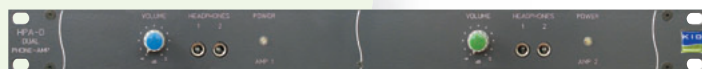
K-BR-CH1 19"/1 U, broadcast channel

K-HPA-D – dual headset amplifier

The **K-HPA-D** is a high quality dual-channel headset amplifier with balanced inputs. Each unit has 2 headset sockets and 1 speaker controller on the front. Both units can be operated separately or in combination with each other. The external power supply can be connected to a tough, lockable XLR 5-pin socket.

The **K-HPA-DBC** version for broadcasting also has an additional XLR 3-pin socket looped to the rear to allow the connection of headsets without adaptation.

A luminous button with labeling option and switching contacts, exited via XLR 3-pin installation plug at the rear, is also available for free assignment. (It can be used as a mute-button for cutting systems or for "ON AIR" signals, e.g. KID-Broadcast red light signal "ON AIR" or "MIC ON").



K-HPA-D



ORDER-NO.

DESCRIPTION

K-HPA-D 19"/1 U, headset amplifier

K-HPA-DBC 19"/1 U, headset amplifier, broadcast version

Made
in Germany

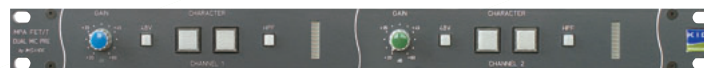
K-MPA-FET/T (Fetty) – Microphone Preamplifier

The **K-MPA-FET** is a high end microphone preamplifier available in single and dual construction. It has a well thought-out switching design that can affect the sound characteristics and adapt them to the necessary requirements. The preamp has 2 levels, a transistor level with a very "smacky" and precise sound, and an FET-level with a rather soft and warm sound character, due to the creation of harmonic waves

TECHNICAL DATA:

Max. input level:	0 dBu
Input balance damping:	60 dB
Input impedance:	1.2 kΩ +/- 10 %
Distortion factor:	< 0.01 %
Noise floor:	1 dB
Phantom supply:	"Soft"-switchable +48 VDC
Frequency response:	20 Hz to 100 kHz: (-1 dB)
Amplification:	Adjustable from 24 dB to 60 dB
Line OUT:	Balanced ungrounded
The output level is shown on an LED display at a resolution of 3 dB	
Additional Meter OUT at the rear of the unit	

(similar to a tube). It is possible to switch between the different levels and pass the switching characteristics on to the preamp. This feature alone makes the **K-MPA-FET** a versatile tool. But the clou is the level mixing option. The respective ratio between transistor and FET-level is infinitely variable.



K-MPA-FET



Made
in Germany

ORDER-NO.	DESCRIPTION
K-MPA-FET	19"/1 U, microphone preamplifier
K-MPA-FET-D	19"/1 U, microphone preamplifier/dual

Monitor Controllers MC-B and MC-XXL

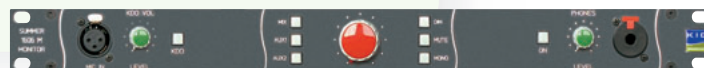
The MC-B/ MC-XXL is a 19" studio monitoring control unit. It has analog, balanced stereo inputs or optional AES-inputs. An additional composite video input is assigned to each of the inputs, activated parallel to the audio signal.

Available are a controllable monitor output (2 switchable outputs for the MC-XXL) for the connection of active monitors or amplifiers, a main mix output, and a meter output to connect a PPM or a portable monitor. Three active, split composite video outputs issue the active video signal.

The interception section offers selection buttons for the sources, a DIM-button (to decrease the monitor level by 20 dB), a MUTE- and a MONO-button, as well as a phase reverse button for L/R. The MC-XXL has balanced loop-in paths for external peripherals (inserts). These inserts can be switched to bypass on the front of the unit. The scales and switches on the controller have background lighting for comfortable operation.

The command section has a headset output with volume control and a microphone input for the connection of a talkback microphone.

The talkback microphone can be activated with the KDO-button, while the DIM-function is activated parallel. The volume for the microphone can be adjusted on the KDO-volume controller. All connections are equipped with high quality XLR-connectors made by Neutrik-XLR or BNC-connectors made by Damar & Hagen. Data sheets and a product description are available on our website: www.kid-broadcast.de/Ausbeschreibungstexte.htm



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ORDER-NO.	DESCRIPTION
K-MC-B	Monitor controller broadcasting

- 3 x stereo audio balanced IN
- 3 x composite video IN – parallel to each stereo audio input
- Controlled monitor output
- Main mix output
- Meter output
- 3 x composite video output (active, split)
- DIM (-20 dB), mute- and mono-function
- Phase reverse L/R
- Talkback input (adjustable) on the front
- Headset output (separately adjustable) on the front
- Background-lit scales and LUMITAS switches
- Active relay switching with high quality NAIS relays
- 19"/1 U, 483 mm x 43.6 mm x 300 mm (W x H x D)

IEC-plug 230 V/ 50 Hz

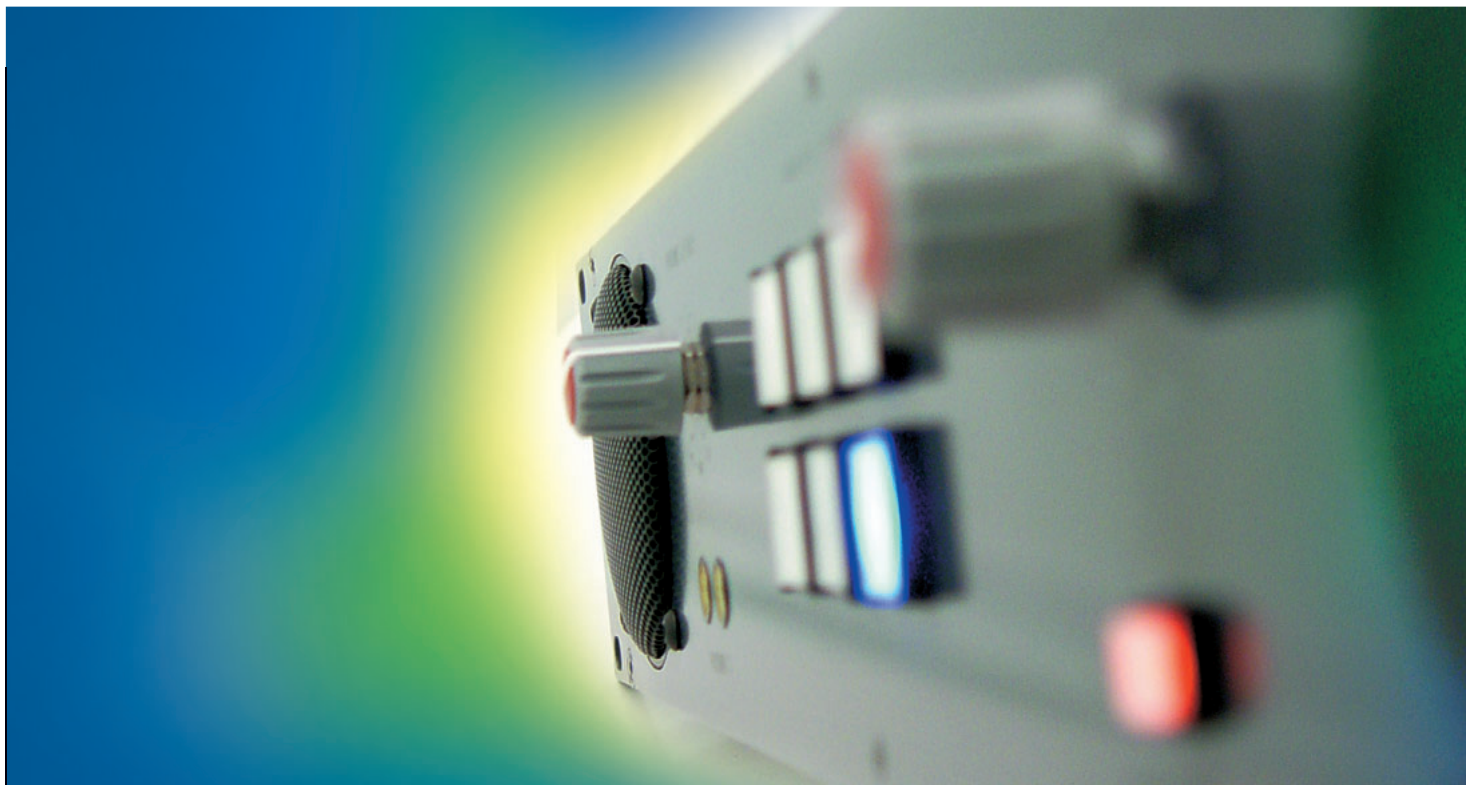
Optional 24 V – XLR 4-pin for transmission vehicle operation

Optional AES IN – XLR 3-pin socket (each one replaces one analog input)

Optional S/PDIF IN – cinch (each one replaced one analog input)

ORDER-NO.	DESCRIPTION
K-MC-XXL	Monitor controller studio

- 6 x stereo audio balanced IN
- 6 x composite video IN – parallel to each stereo audio input
- 2 controlled monitor outputs, switchable
- Balanced stereo main mix output
- Balanced stereo meter output
- 2 balanced AUX outputs
- Balanced talkback output
- 3 x composite video outputs (active, split)
- Balanced master insert, bypass switchable with button
- Input 5 – 8 and AUX output via SubD25 (Tascam format)
- DIM (-20 dB), mute- and mono-function
- Phase reverse L/R
- Talkback input (adjustable) on the front
- Headset output (separately adjustable) on the front
- Background-lit scales and LUMITAS switches
- Active relay switching with high quality NAIS relays
- 19"/2 U, 483 mm x 88.1 mm x 300 mm (W x H x D)



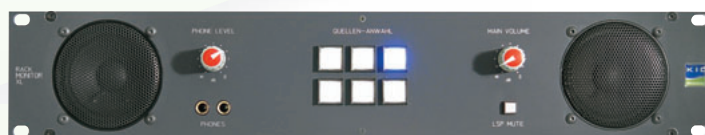
Rack Monitor M - L - XL

The rack monitor was developed for application in booths, rack units in control rooms, or in transmission vehicles. It is a great tool for selecting, viewing, checking, and recording various sources (e.g. MAZ, VHS, DVD, DVCAM, etc.). A great advantage is the option to simultaneously select stereo audio sources and their respective video sources.

PRODUCT ADVANTAGES:

- 3 (M/L) or 6 sources selectable with lit and labeled LUMITAS buttons
- 2 balanced audio inputs and 1 composite video inputs per source
- Signals are controlled separately with high quality NAIS relays
- 3 active, split video outputs for simultaneous viewing and recording
- 2 active, split stereo audio outputs (1 x balanced L/R, 1 x unbalanced L/R) e.g. for external metering or for playback of viewed material
- 2 integrated speakers / amplifiers (2 x 20 W an 4 Ω)
- High quality headset amplifier with 2 headset outputs
- Level adjustment for speakers and headset amplifier, as well as mute-button for speakers on the front panel
- S/PDIF- and AES-input board optional
- Output level display on the front

The audio output is splitted into 4 outputs: Loudspeakers on the front, Headphoneamplifier and the 2 Stereo Outputs (one balanced, one unbalanced) on the back. The video signal is issued by three active, split video outputs at the rear. Data sheets and a product description are available on our website www.kid-broadcast.de/Ausreibungstexte.htm



ORDER-NO.	DESCRIPTION
K-RM-XL	Rack monitor XL

3 x stereo audio balanced IN – XLR 3-pin socket
 3 x stereo audio balanced IN – cinch socket
 6 x composite video IN – BNC
 1 x stereo audio balanced OUT – XLR 3-pin plug
 1 x stereo audio unbalanced OUT – cinch socket
 3 x composite video OUT – BNC
 2 x headphone OUT – 2 x 6.3 mm jack socket
 Dimensions: 19" / 2 U, 483 mm x 88.1 mm x 300 mm (W x H x D)

ORDER-NO.	DESCRIPTION
K-RM-M	Rack monitor M
K-RM-L	Rack monitor L

3 x stereo audio balanced IN – XLR 3-pin socket
 3 x composite video IN – BNC
 1 x stereo audio balanced OUT – XLR 3-pin plug
 1 x stereo audio unbalanced OUT – cinch socket
 3 x composite video OUT – BNC
 2 x headset OUT – 2 x 6.3 mm jack socket
 Dimensions M: 19" / 1 U, 483 mm x 43.6 mm x 300 mm (W x H x D)
 Dimensions L: 19" / 2 U, 483 mm x 88.1 mm x 300 mm (W x H x D)

IEC-plug 230 V / 50 Hz
 Optional 24 V – XLR 4-pin for transmission vehicle operation
 Optional AES In – XLR 3-pin socket (each replaces one analog input)
 Optional S/PDIF In – cinch (each replaces one analog input)

K-HU – Breakdown Changeover Switch AES/EBU-suitable

In the main control rooms at broadcast stations and control rooms for live events, preventive measures have to be taken to avoid breakdowns. If a mixing board or a complete control room breaks down, where does the music come from?

KID Broadcast has developed a compact system that can switch over digital serial data lines in compliance with AES/EBU in case of a breakdown. The basis is an 8-channel 2 :1 converter. Initially 8 program lines are on Input 1 and can be simultaneously switched over to Input 2. For one, control is provided by an integrated monitor for the power supply. If it fails the breakdown paths get activated.

Dimensions: Breakdown converter 19" 2 U
Remote unit 19" 1 U

APPLICATION:

- For broadcasting, to switch over audio signals between sending and breakdown panel
- For events, to switch over between FOH and breakdown panel, or for automatic switching between 2 redundant playback machines (e.g. DA88 or sequencer interfaces, e.g. by Logic or ProTools)

ORDER-NO. DESCRIPTION

K-HU224R	19"/2 U, 2 x 8 XLRf + 1 x 8 XLRm, incl. remote
K-HU116R	19"/1 U, 2 x 4 XLRf + 1 x 4 XLRm, incl. remote
K-HU224RT	19"/2 U, 2 x 8 XLRf + 1 x 8 XLRm, incl. remote, transmitter
K-HU116RT	19"/1 U, 2 x 4 XLRf + 1 x 4 XLRm, incl. remote, transmitter
K-HU124D	19"/1 U, 3 x SubD25
K-HU124B1	19"/1 U, 2 x 4 BNC + 4 x XLRm, 8 integrated impedance converter from 75 to 110 Ω
K-HU124B2	19"/1 U, 4 x BNC + 2 x 4 XLRf, 4 integrated impedance converter from 110 to 75 Ω
K-HU124S	19"/1 U, 2 x Siemens type female 30-pin + 1 x Siemens type male 30-pin
K-HU224H	19"/2 U, 2 x rectangular MP 24-pin socket + 1 x rectangular MP 24-pin plug
K-HU224V	19"/2 U, 2 x LK 37-pin socket + 1 x LK 37-pin plug

A remote unit is included in the delivery for activation.

Depending on the number of breakdown paths the unit is equipped with XLR-female sockets for the inputs and XLR-male sockets for the outputs. System versions with other interfaces and connections are optionally available. Rectangular multipin; LK; Siemens 30-pin; DSUB 25.

For application with AES/EBU-signals a version with impedance conversion (110 Ω/ 75 Ω) with BNC-connections either on inputs or outputs is also available.



K-HU224R



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IM – Impedance Converter for AES/EBU

The IM-series is intended for impedance conversion of digital audio signals. The impedance converters come in a compact 19" format, in a small casing for rack installation on the side and as a standard cable adapter. They technically comply with the ARD Performance Specifications and the AES Norms and can therefore be used without limitations for broadcasting, of course in the studio, and for special events. All controls are furnished by XLR and Damar & Hagen BNC.

APPLICATION:

- Impedance adaptation of digital audio signals
- Transmission of digital audio signals across long cable distances
- Use of reasonably priced 75 Ω cables (e.g. Slimline or Focusline) to transmit AES-signals

Sample installation:



ORDER-NO. DESCRIPTION

K-IMR12M	19"/1 U, 12 x XLRm to 12 x BNC (12 x 75 to 110 Ω)
K-IMR12F	19"/1 U, 12 x XLRf to 12 x BNC (12 x 110 to 75 Ω)
K-IMR06/06	19"/1 U, 6 x XLRm + 6 x XLRf to 12 x BNC (6 x 75 to 110 Ω + 6 x 110 to 75 Ω)
K-IMR06M	19"/1 U, 6 x XLRm to 6 x BNC (6 x 75 to 110 Ω)
K-IMR06F	19"/1 U, 6 x XLRf to 6 x BNC (6 x 110 to 75 Ω)
K-IMM-M	For side rack installation 2 x XLRm to 2 x BNC (2 x 75 to 110 Ω)
K-IMM-F	For side rack installation 2 x XLRf to 2 x BNC (2 x 110 to 75 Ω)
K-IMH-M	Adapter in Hicon housing XLRm to BNC (75 to 110 Ω)
K-IMH-F	Adapter in Hicon housing XLRf to BNC (110 to 75 Ω)

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The PICOLINO Series

convinces with **high quality broadcast quality** and a very **small design**. This makes it very suitable for space-saving universal applications. The DI-boxes can e.g. be plugged directly into the stagebox and function unobtrusively, just like a standard adapter. We supply active and passive DI-boxes as well as AES/EBU-impedance converters in different designs.

Picolino DI-box passive – for impedance adaptation of high resistance sources and for electrical isolation. With groundlift switch and loop out for instrument signals.

TECHNICAL DATA:

Connection input:.....Jack 6.3 mm, unbalanced
 Loop out, parallel to input:Jack 6.3 mm unbalanced
 Input impedance:.....66 k Ω
 Max. input level:.....+6 dBu
 Connection output:.....XLR 3-pin, transformer balanced
 Output impedance:600 Ω
 Transformation behavior:.....10 : 1.1
 Frequency range:.....20 Hz – 30 kHz +/- 1 dB ref. 1 kHz
 Distortion factor:.....0.01 % at 1 kHz
 Test voltage:.....1.5 kV/AC
 Dimensions:.....H: 31 mm, W: 26 mm (as D-hole), L: 106 mm

ORDER-NO. VERSION

K-PDI-P	Jack-F 6.3 mm $\longleftrightarrow$ XLR-M + jack loop out
K-PDI-P-L	Jack-F 6.3 mm $\longleftrightarrow$ XLR-M + jack loop out, long – directly pluggable

Picolino DI-box active – for impedance adaptation of high resistance sources (e.g. guitar, bass). Active switching enables an input impedance of up to 1 MΩ. With –20 dB PAD-switch and loop out for instrument signals.

TECHNICAL DATA:

Connection input: Jack 6.3 mm, unbalanced
 Loop out, parallel to input: Jack 6.3 mm unbalanced
 Input impedance: 1 M Ω (20 dB PAD - 10 k Ω)
 Max. input level: +10 dBv (20 dB PAD - +30 dBv)
 Connection output:..... XLR 3-pin, balanced
 Output impedance: 600 Ω
 Max. output level: +10 dBv
 Frequency range: 20 Hz - 30 kHz $\pm$ 3 dB
 Distortion factor: 0.01 % at 100 Hz - 20 kHz
 Power supply: 48 V via phantom supply
 Dimensions: H: 31 mm, W: 26 mm (as D-hole), L: 106 mm

ORDER-NO. VERSION

K-PDI-A	Jack-F 6.3 mm ↔ XLR-M + jack loop out
K-PDI-A-L	Jack-F 6.3 mm ↔ XLR-M + jack loop out, long – directly plugable

PICOLINO AES-impedance converter – for impedance adaptation of digital audio signals, AES/EBU – AES3 (110 Ω) and AES3id, or S/PDIF (75 Ω) as well as electrical isolation of signals. Technically it complies with the AES Norm, thus it can be used for broadcasting, and of course studio and event technologies without limitation. Neutrik or HICON XLR- and Damar&Hagen BNC-connectors are used for accessories.

TECHNICAL DATA:

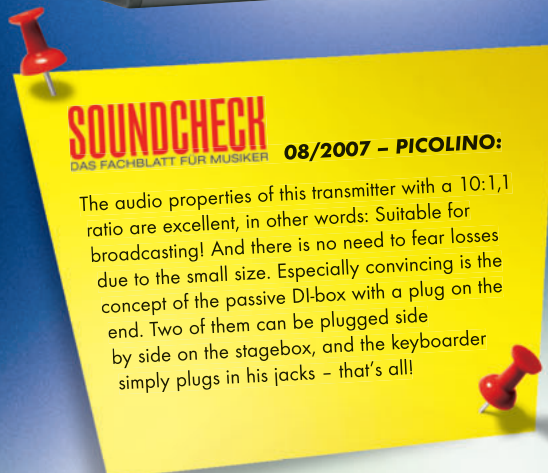
Transformation behavior:..... 110 : 75 Ω / 75 : 110 Ω
Test voltage:..... 0.5 kV/AC
Coupling capacitance:..... < 20 pF
 11 dB PAD for AES 3id (3.3 V to 1 V) and
 17 dB PAD for S/PDIF (3.3 V to 0.5 V) available
Dimensions: H: 31 mm, W: 26 mm (like D-flange), L: 50 mm

APPLICATION:

- Impedance adaptation of digital audio signals
- Transmission of digital audio signals over long cable lengths
- Use of more reasonably priced 75 Ω cables (e.g. Slimline or Focusline) to transmit AES-signals

ORDER-NO.	VERSION
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K-IWP75-110	75 Ω $\Rightarrow$ 110 Ω, BNC $\Leftrightarrow$ XLR-M
K-IWP75-110-L	75 Ω $\Rightarrow$ 110 Ω, BNC $\Leftrightarrow$ XLR-M, long - directly plugable
K-IWP110-75	110 Ω $\Rightarrow$ 75 Ω, BNC $\Leftrightarrow$ XLR-F
K-IWP110-75-L	110 Ω $\Rightarrow$ 75 Ω, BNC $\Leftrightarrow$ XLR-F, long - directly plugable



Studio & stage equipment / Accessories ► **DI-BOXES****DI-BOXES**

are used for adaptation. The DI-box can convert high resistance, unbalanced signals coming from electrical music instrument, such as keyboard, CD-players as well as speaker outputs and adapt them for low resistance, balanced microphone input on stageboxes or mixing boards.

The passive DI-box covers more than 90 % of all standard applications. We have selected a few high quality DI- and split boxes made by **Palmer** just for you.

Passive DI-box with stainless steel casing. Jack input with parallel output to loop the signal through. Transformer-balance XLR-output. Input sensibility adjustable. Line and speaker signal levels can be processed. Input impedance: 68 k Ω , output impedance 600 Ω .

Transmission ratio balancing transmitter: 10 : 1

Max. output level: +6 dBu, ground lift switch

The **Media-DI-Box** PLI04 is ideal for interference-free audio connection of PCs, laptops, or other consumer units to a professional sound system or studio console. The unbalanced signals are connected via 2 x 6.3 mm jack sockets or 2 x cinch sockets, or a 3.5 mm stereo jack socket and balanced onto 2 x XLR male outputs. A mono-switch creates a balanced mono-signal on both outputs. The ground lift switch has an additional soft-ground function.

ORDER-NO.	DESCRIPTION
PAN01	DI-box passiv mono
PAN04	DI-box passiv stereo
PLI04	Pro media DI-box passive stereo

Professional DI-box

No loss in sound with an extremely high quality balancing transmitter made of MU-metal, a balanced frequency response characteristic for the entire audio range of 40 to 20 kHz, max. overmodulation stability due to the large adaptation range. Mechanically extremely robust with a die-cast casing made of a special alloy that additionally protects against interference. Triple attenuator: 0 dB, -20 dB, -40 dB

Input: Jack, parallel socket for looping

Output: Insulated XLR/m-socket, Pin 2 hot, ground lift switch

Input level max: +50 dB in -40 dB position

Input impedance: 68 k Ω , transformer 10:1 ratio

ORDER-NO.	DESCRIPTION
PDI01	DI-box passive mono

Active DI-box. Battery operation or 48 V-phantom supply possible. Active switching enables a high input impedance of 1 M Ω and increased sensibility for input signals. (Typical difference between in- and output -4 dB). The max. output voltage for the phantom supply is +10 dBu.

Output: trafo-balanced. Due to special "floating ground" switching the ground lift switch also functions with phantom supply.

Steel panel casing 110 x 73 x 42 mm.

ORDER-NO.	DESCRIPTION
PAN02	DI-box active mono

Active 4-fold DI-box in 19" casing. The technical data is identical with that of the PAN 02. But the PAN 03 is generally mains-operated (power supply fix-installed on the unit). All connections and switches are located on the 1 U front panel, in addition the XLR-output is available as a parallel socket at the rear. 19" / 1 U casing, 90 mm deep.

ORDER-NO.	DESCRIPTION
PAN03	DI-box active 4 channel

Studio & stage equipment / Accessories ► **SPLIT BOXES**

...are used if a signal source is to be split onto several inputs. For example, if the microphone signal is to be transmitted simultaneously to the hall mixing board on the hall system, the monitor mixing board on stage, and - because the event is also being broadcast - into the transmission vehicle.

ORDER-NO.	DESCRIPTION
PRM-MS	Passive split box 4 channel

Made
in Germany



Studio & stage equipment /Accessories ► **HI-TFO***Happy little helpers...*

Laptop on balanced input? Fast and easy isolation of a channel? No problem! Our happy little helpers offer fast solutions for many problems.

The HI-TFO-004 split adapter has 3-pin XLR-connectors on both sides for your cable connections. The signal is galvanically separated by an integrated 1:1 transmitter. The HI-TFO-003 stereo balancing adapter has a 3-pin XLR-socket on the laptop side and a 5-pin XLR-plug on the opposite side. To connect your laptop, all you need is our cable with mini-jack stereo male $\longleftrightarrow$ 3-pin XLR-connector. On the 5-pin XLR-output you can now use a second cable to separate your signal onto two balanced 3-pin XLR's in order to connect a professional mixing board.

The robust metal housing holds high quality **SOMMER CABLE** transmitters with large windings and metal XLR-mounting plugs/sockets made by HICON.

ORDER-NO.	DESCRIPTION
HI-TFO-004	Split adapter XLR 3-pin $\longleftrightarrow$ XLR 3-pin
HI-TFO-003	Stereo balancing adapter
CSDQ-0025-SW	Adapter cable 0.25 m for HI-TFO-003 to mini-jack laptop
PCGU-0500	Adapter cable 5.0 m for HI-TFO-003 on mix. board

Other lengths and version are available upon request.

Studio & stage equipment /Accessories ► **A/V INTERFACE**

For the connection of DVD- and video recorders for consumer use up to studio interfaces via SCART-connection with balancing and level adaptation for DVD-players, DVD-recorders, VHS-recorders, S/VHS-recorders, etc.

Usually video units for consumer use only have a SCART-connection for audio and video signals up to technical media units. The audio interfaces on consumer units are unbalanced. The influence of inductive and capacitive external magnetic fields on asymmetric leads worsen the signal and increase the noise potential of the whole system. Differing level and impedance ratios can lead to faulty adaptations in connection with professional audio cross-tracks and A/V routers.

System Series V58 was especially developed to solve these problems. In order to get a galvanic detachment between the summer electronic parts and the media technical system, we install high end transformers. All systems and system

components have a chassis connection to enable infeed of a PE-potential accord. to VDE Guidelines.

The power is supplied by a 24 V system power supply, Protection Class II. Because of the shallow installation depth the systems can be installed on the second level of media units and table constructions. This makes installation easier, because balancing and level adaptation can be executed directly at the consumer unit installation site.

ORDER-NO.	DESCRIPTION
IFV58-19	A/V interface, 19", 1 U, installation depth 120 mm; front plate black anodized, operating voltage and power consumption: 24 VDC ; < 100 mA; incl. system power supply

Studio & stage equipment /Accessories ► **HDMI-SPLITTER**

This practical HDMI-splitter, in compliance with the 1.3 Standard, enables signal distribution from an HDMI-source (SAT-receiver, DVD-player, media computer, etc.) onto 4 or 8 HDMI-receivers. It is ideal for media, dealer, presentation, and training facilities. It supports 480i/p, 576i/p, 720i/p, and 1080i/p, DTS, and Dolby 7.1. The max. cable length is 15 m. Dimensions (W x H x D): 334 x 36 x 156 mm. Power is provided by a 12V power supply (included in the delivery).

ORDER-NO.	INPUTS/OUTPUTS
HDMI-SP14	1 / 4
HDMI-SP18	1 / 8



HDMI-SP14



HDMI-SP18

KVM TECHNOLOGY

One for all...

Today PC's are standard equipment in professional media technologies, e.g. control systems, to record sound and images, as well as monitor and record camera signals for security purposes.

Most of the time the PC's operate in the background, but from time to time the computer has to be accessed to activate operations or for monitoring purposes. So we need a keyboard, a monitor, and a mouse (Keyboard, Video, Mouse = KVM).

The PC can be a real nuisance in the sound studio or control room, because it is noisy, heats up, and takes up valuable space.

If we hide it underneath the table or deep inside a rack it will overheat without sufficient ventilation or also heat up the effect units and that is not a good thing.

1. MINI KVM Extender

Remote control from 1 PC via CAT.5 cable up to a max. of 70 m, consisting of a transmitter and a receiver.

TECHNICAL DATA:

Dimensions [WxHxD]: 46 x 25.3 x 89 mm

Connection cable: CAT.5/6/7 cable with RJ45-connector

Max. length: 70 m

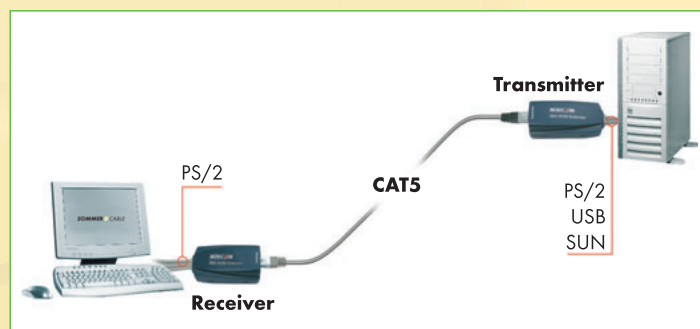
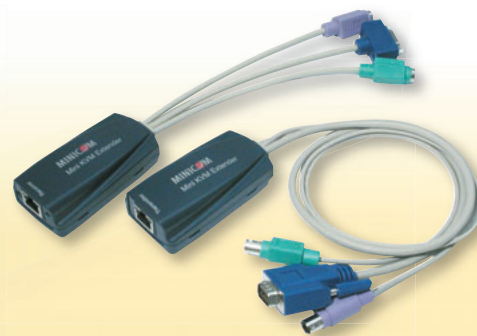
Mouse specification: 2-; 3- or 5-button mouse; wheel mouse

Image resolution: max. 1600 x 1200; 75 Hz

Temperature range: 0 °C...+40 °C operation/storage: -40 °C...+70 °C

Weight: 0.55 kg

ORDER-NO.		KVM-ME08	KVM-ME10
Connection cable transmitter/sender	System	RJ45	RJ45
	Local PC	VGA HDD15M	VGA HDD15M
	Keyboard	MiniDIN 6M	USBM
	Mouse	MiniDIN 6M	USBM
	Power supplied by the PC		
Connection cable receiver/sender	System	RJ45	RJ45
	Local PC	VGA HDD15F	VGA HDD15F
	Keyboard	MiniDIN 6F	USBF
	Mouse	MiniDIN 6F	USBF
	+ External power supply 5 VDC		



2. SMART KVM Extender

1 transmitter and 1 receiver are needed for easy remote control of a PC from one or two work stations. With this solution e.g. a PC in a technician room can be accessed from 2 direction booths.

TECHNICAL DATA:

Version: For 230 VAC units

Connection cable: CAT.5/6/7 cable with RJ45 -connector

Max. length: 110 m

Mouse specifications: 2-; 3- or 5-button mouse; wheel mouse

Resolution: max. 1600 x 1200; 75 Hz

PC selection: Button on receiver or switch; hotkey

Temperature range: +5 °C...+50 °C operation/storage: -40 °C...+70 °C

Weight: 0.40 kg

ORDER-NO. complete		KVM-SE01
KVM PS/2 transmitter	System	RJ45
	Local PC	VGA HDD15M
	Keyboard	MiniDIN 6M
	Mouse	MiniDIN 6M
	Dim. [WxHxD]	113 x 25.0 x 85 mm
Receiver	Power supply from PC, 240 mA or external via 6 VDC-connection	
	System	RJ45
	PC1 + PC2	VGA HDD15F
	Keyboard	MiniDIN 6F
	Mouse	MiniDIN 6F
	Dim. [WxHxD]	149 x 25.0 x 85 mm
	External power supply 6 VDC, 2 A	

Example: One PC and one work station



Rear transmitter



Rear receiver



3. SMART KVM-Switch

The elegant solution to control several PC's (depending on either 8 or max. 16 ports) from one work station. The PC's are connected to the PC-interface modules with a CAT5-cable (max. 10 m) – see below.

TECHNICAL DATA:

Number of ports:	8,16, with cascading > 100
Connection cable:	CAT.5/6/7 cable with RJ45-connectors
Max. length:	10 m
Image resolution:	max. 1600 x 1200; 75 Hz
PC selection:	Push button on receiver; hotkey; serial
Temperature range:	Operation: +5 °C...+50 °C Storage: -40 °C...+70 °C
Power supply:	85 – 265 VAC 50/50 Hz
Connections:	System: RJ45, serial RJ11 Local PC: VGA HDD15F Keyboard: MiniDIN 6F Mouse: MiniDIN 6F



KVM switch 8-port; front + rear



KVM-switch 16-port; front + rear

Type/connection	Dimensions [W x H x D]	Weight	ORDER-NO.
Smart KVM-switch CAT.5, 8-port	122 x 41,5 x 215 mm	0.92 kg	KVM-SS02
Smart KVM-switch CAT.5, 16-port	122 x 41,5 x 215 mm	0.92 kg	KVM-SS03

Interface modules

Connections	KVM-SP23	KVM-SU24
System	RJ45, serial	RJ45, serial
Local PC	VGA HDD15M	VGA HDD15M
Keyboard	MiniDIN 6M	USBM
Mouse	MiniDIN 6M	USBM
Power supplied by PC		

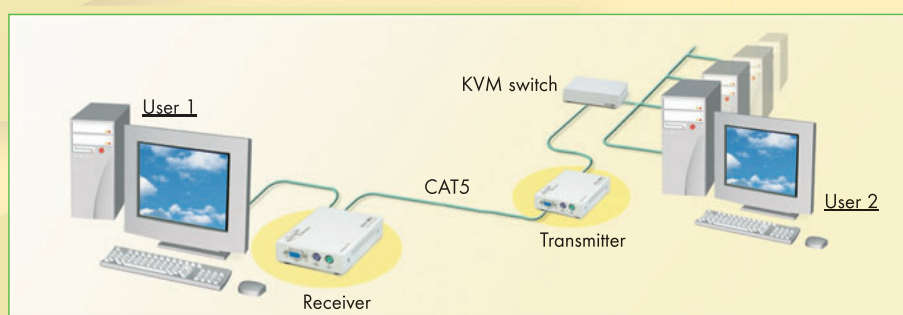


Type/connection	Dimensions [W x H x D]	Weight	ORDER-NO.
Interface module on switch PS/2	113 x 25,0 x 85 mm	0.10 kg	KVM-SP23
Interface module on switch USB	113 x 25,0 x 85 mm	0.10 kg	KVM-SU24

Combination

SMART KVM & SMART KVM-switch

The PCs in the technical area are connected up to the KVM switch via interface module. A work station (USER 2), e.g. for service, can be set up here. With the use of a SMART KVM-extender (transmitter and receiver) a second work station (USER 1) can be set up to allow operation of the connected PC via the KVM-switch.



Active Video Signal Distribution - Why?

Contrary to analog audio technology, image signals require the transmission of significantly higher signal frequencies.

The transmission of TV-images (PAL, 625 lines, 50 half images) requires a transmission band width of > 6 MHz (comparison: audio band width 20 kHz). Coaxial cables are used for image transmission. The conditions for power adaptation apply, based on the technical principles of high frequency technology. This means that the video source has an impedance of $75\ \Omega$.

Video inputs have an input impedance of $75\ \Omega$.

For Video Technology:

Performance adaptation

Source impedance = load impedance

Thus:

Contrary to audio technologies, the option to connect two units up to the same video source is not available here.

The result is that **active components** are required for the distribution of one video source to several users.

And what about the Loop Outputs?

Many video technology units, e.g. monitors, high quality VTR machines, and signal processors have loop outputs parallel to the output.

Here the terminating resistance on the input can be deactivated. The video signal can be looped on these units, but the chain has to be completed with $75\ \Omega$ on the last unit. The cable lengths should also be taken into consideration. The signal gets dampened somewhat on each BNC-connection, so that in the worst case the level will be insufficiently on the last unit. This cable also is not free of return effects. If the line is interrupted due to an operating error, service work being performed, or a short circuit the signal will be missing on all units.

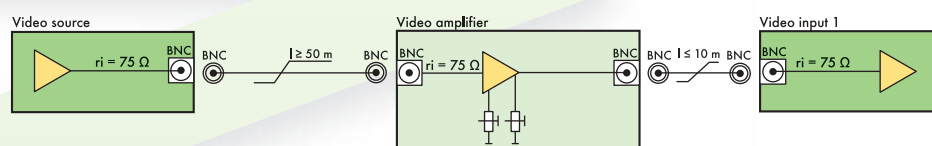
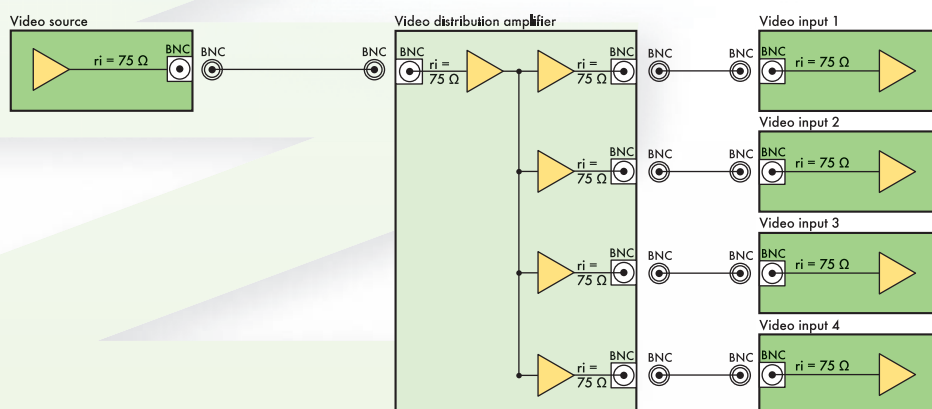
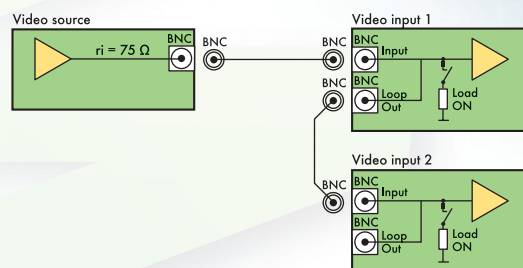
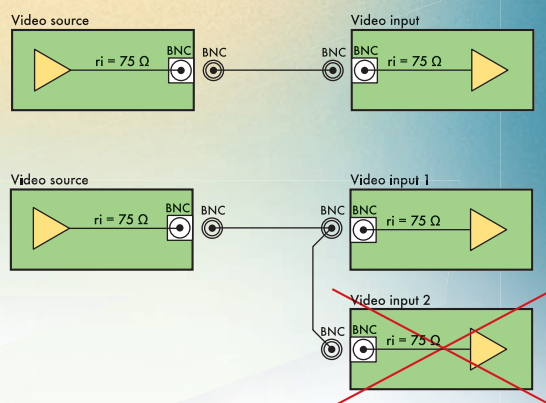
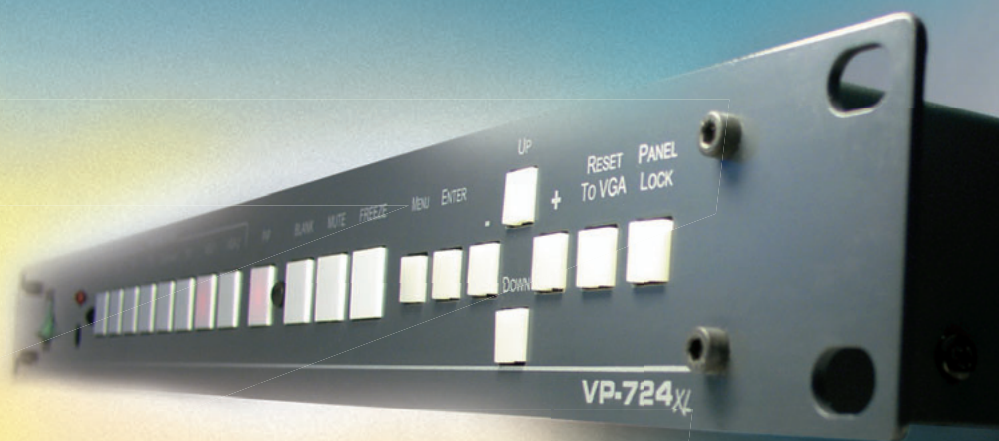
That is why Distribution Amps are required

The diagram shows a video distributor (FBAS) with one input and 4 outputs. Each output drives one video line at an adaptation suitable to the norm, free of return effects. This enables start-shaped distribution and minimizes performance losses.

Compensation of Performance Losses

The longer the path for the video signal, the higher the losses on the line. The resistance parameters on the line and the cable capacity create a low pass. The upper frequency decreases with each meter.

The useful signal level also decreases. That is why an amplifier is needed to increase the level and to optimize the frequency response starting at a cable length of approx. 50 m. Thus the image is noise-free and the color segments remain unaffected. But there are limitations, starting at approx. 100 m cable length one should think about other types of transmission, e.g. twisted pair.



Performance compensation after 50 m; example

Analog Video Formats

If we want to transmit video signals we have to observe the different video signals. They determine the specifications for the amplifier.

FBAS analog video; composite

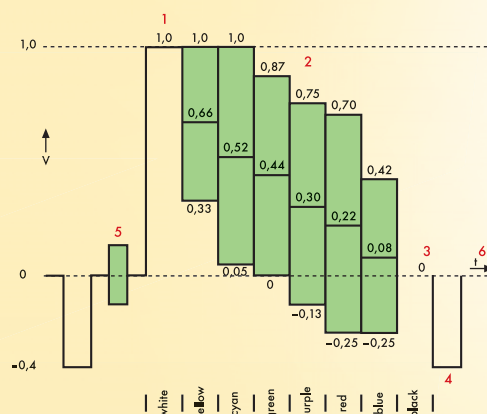
– transmission with one cable; 1-channel amplifier

TV-images are still based on two different norms, one from Europe and one from the USA

In Europe it is **PAL Norm with 25 images/sec. and 625 lines**
In the USA it is **NTSC Norm with 30 images/sec. and 525 lines**

For optimum image transmission with a coaxial cable, band widths of >8 MHz are sufficient for a good image quality. Here a normed composite video signal can be used, an FBAS-signal. This signal contains all TV-image information for serial analog transmission.

F = Color information
B = Image information
A = Blank signal for image change
S = Synchronized impulse for line change

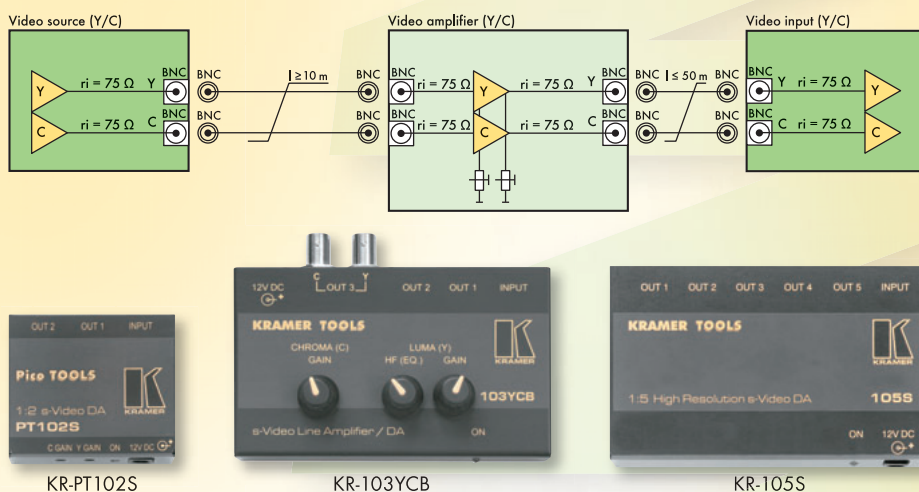


ORDER-NO.	Signal	Band width	Level	IN	OUT	Connector	Other properties
KR-PT102VN	FBAS	430 MHz	1Vpp nominal; 75 Ω	1	2	BNC	Gain + EQ; screw driver
KR-104LN	FBAS	400 MHz	1Vpp nominal; 75 Ω; Δ -1.3/+6dB	1	4	BNC	Gain + EQ; screw driver
KR-VM51	FBAS	400 MHz	1Vpp nominal; 75 Ω; Δ -0.9/+1.9dB	1	5	BNC	Gain + EQ; screw driver
KR-105VB	FBAS	280 MHz	1Vpp nominal; 75 Ω	1	5	BNC	-

Y/C; (S-video) Analog video

– transmission with two cables; 2-channel amplifier

Y = Luminance Cable 1 transmits Image information
Blank signal for image change
Synchronized impulse for line change
C = Chrominance Cable 2 transmits Color information



ORDER-NO.	Signal	Band width	Pegel / Level	IN	OUT	Connect.	Other characteristics
KR-PT102S	S-video (Y/C)	100 MHz	1Vpp nominal; 75 Ω	1	2	S-video	Gain Y + C; screw driver
KR-103YCB	Y/C	400 MHz	1Vpp nominal; 75 Ω; Y: Δ -1/+6.5dB; C: Δ -0.6/+5.9dB	1	3	BNC/S-video	Poti: Gain (Y); Gain (C); Luma (Y) EQ
KR-105S	Y/C	230 MHz	1Vpp nominal; 75 Ω;	1	5	S-video	=

For RGBHV (VGA/XGA)

The significant difference between the transmission of TV images and computer image is the number of lines per image and the image change frequency.

**The number of lines for TV images is odd.
The number of lines for computer is even.**

This makes the two signal types incompatible.

Usually the analog output on our PC is a 15-pin HD-socket. Five signals are available here, each transmitted on one line:

Line 1	Red	Analog image signal red;	0.7 V _{ss} on 75 Ω
Line 2	Green	Analog image signal green;	0.7 V _{ss} on 75 Ω
Line 3	Blue	Analog image signal blue;	0.7 V _{ss} on 75 Ω
Line 4	Horizontal frequency	Line change impulse	TTL-level (2-10 V _{ss})
Line 5	Vertical frequency	Line change impulse	TTL-level (2-10 V _{ss})

The signals for horizontal and vertical deflection differ widely, depending on the PC manufacturer. This also handicaps transmission over long distances. The higher image resolutions on the PC require significantly higher band widths (stated in MHz). The following chart clarifies the issue.

width	height	Name	Image pions	50 Hz	60 Hz	72 Hz	100 Hz
640	x	480	VGA	307.200	15.360	18.432	22.118
800	x	600	SVGA	480.000	24.000	28.800	34.560
1024	x	768	XGA	786.432	39.321	47.185	56.623
1152	x	864	XGA+	995.328	49.766	59.719	71.663
1280	x	768	WXGA	983.040	49.152	58.982	70.778
1280	x	1024	SXGA	1.310.720	65.536	78.643	94.371
1400	x	1050	SXGA+	1.470.000	73.500	88.200	105.840
1600	x	1024	SXGAW	1.638.400	81.920	98.304	117.964
1600	x	1200	UXGA	1.920.000	96.000	115.200	138.240
1680	x	1050	WSXGA+	1.764.000	88.200	105.840	127.008
1920	x	1080	HDTV	2.073.600	103.680	124.416	149.299
1900	x	1200	UXGAW	2.280.000	114.000	136.800	164.160
1920	x	1200	WUXGA	2.304.000	115.200	138.240	165.888
2048	x	1536	QXGA	3.145.728	157.286	188.743	226.492

To transmit a Powerpoint presentation with a resolution of only(!) 800 x 600 pixels and a screen change frequency of 60 Hz we need a band width of at least 30 MHz.

The following distribution amplifiers have a band width of > 400 MHz (depending on the damping value on the connection cables).



KR-VP200N

KR-VP200NA

KR-VP200DXL

ORDER-NO.	Signal	Band width	Level	IN	OUT	Connect.	Other characteristics
KR-VP200N	VGA/XGA	400 MHz	0.7V _{pp} 75 Ω; H+V = TTL-level	1	2	HD-15	-
KR-VP200NA	VGA/XGA + bal. St-audio	440 MHz	0.7V _{pp} 75 Ω; H+V = TTL-level	1	2	HD-15	Audio: Screw clamp
KR-VP200DXL	VGA/XGA	400 MHz	0.7V _{pp} 75 Ω; H+V = TTL-level	1	2	HD-15	Poti: level; EQ switch: ID-bit
KR-VP210XL	VGA/XGA	400 MHz	0.7V _{pp} 75 Ω; H+V = TTL-level	1	1 + loop	HD-15	Poti: level; EQ switch: ID-bit

All other KRAMER products are available short-term.

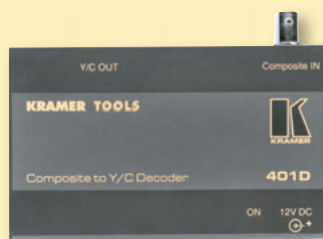
- Subject to change • See the price list for prices • The General Terms and conditions apply (see www.sommecable.com) -

Converters

Different transmission format are not compatible. A converter is required for conversion. Such units are easily realized for analog use. To convert analog TV signals into image signals for PC monitors, analog-digital converters that recalculate the image line by line on a digital level are needed. This also applies for the conversion to digital TV formats (SDI).



KR-401C



KR-401DN



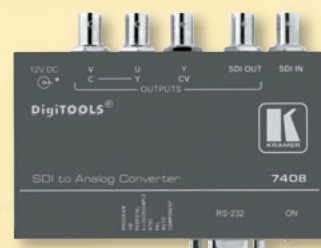
KR-VP100



KR-VP414



KR-VP416



KR-7408



KR-7508

ORDER-NO.	Function	Inputs	Outputs	Band width	Level	Connection
KR-401C	Format converter	1 x Y/C	2 x Y/C + 2 x FBAS	160 MHz	1Vpp nominal; 75 Ω	S-Video / BNC(FBAS)
KR-401DN	Format converter	1 x FBAS	1 x Y/C	3.6 MHz (Y)	Y= 1Vpp; 75 Ω C= 1Vpp; 75 Ω	BNC (FBAS); S-video
KR-VP100	Standard PC-interface	1 x VGA	1 x VGA + 1 x RGBHV	360 MHz	0.7Vpp 75 Ω; H+V = TTL-level	HD-15; 5 x BNC
KR-VP414	Scaler/format converter to VGA, HD	1x FBAS; 1x Y/C	analog: RGBHV digital: YPbPr	Output RGBHV for VGA, SVGA, XGA + WXGA	1Vpp 75 Ω	HD-15
KR-VP416	Scaler/format converter to VGA, HD, DVI-I	1x FBAS; 1x Y/C	analog: RGBHV digital: YPbPr	Output RGBHV for VGA, SVGA, XGA + WXGA	1Vpp 75 Ω	HD-15 DVI-I
KR-7408	Format converter programmable via RS 232	1 x SDI	1 x SDI; 1 x FBAS; 1 x Y/C / YUV	5.7 MHz (analog)	SDI ref. SMPTE-259M;	BNC; DSUB 9p
KR-7508	Format converter programmable via RS 232	1x FBAS; 1x Y/C	2 x SDI	Digital Res: 10 Bit	SDI ref. SMPTE-259M;	BNC (FBAS); S-video DSUB 9p

All other KRAMER products are available short-term.

Signal generators

Of course you can make a quick check of the video connection, but it is better to have a reference signal available in the form of generators that fit any tool box.



KR-810



KR-VP800



KR-840

ORDER-NO.	Signal	Level	Connection	Other properties
KR-810	Y/C + FBAS + bal. audio	PAL/NTSC 1 Vpp nominal; 75 Ω, +6 dBu 1 KHz	S-video / BNC (FBAS) Screw clamp	Test generator; color beams + 1 KHz
KR-VP800	VGA; SVGA; XGA; SXGA	0.7 Vpp 75 Ω; H+V = TTL-Level	HD 15	Test generator color beams
KR-840	DVI-D	1,2 Vpp	DVI-I	Test image generator

DVI

The DVI-signal enables direct digital signal transmission from a graphic card to an image for TFT or a beamer. And because the digital DVI-format is not compatible with the analog VGA-signal, special switches and splitters are needed to distribute and convert the signal. Long distance transmission is also possible with suitable amplifiers.

KR-PT101DVI-R



KR-610



KR-621T



KR-621R



KR-VS21DVI-R



KR-VM4HDCP



ORDER-NO.	Function	Inputs	Outputs	Max. data rate	Dimensions [WxDxH]
KR-PT101DVI-R	DVI-repeater with reclocking	DVI-I, 24+5 sockets	DVI-I, 24+5 sockets	1,65 GBit/s	6.0 x 6.5 x 3.0 cm
KR-610	DVI-D optical set, not HDCP-compatible!	1xDVI-D (single Link) 4xLC	4xLC 1xDVI-D (single Link)	1,65 GBit/s	3.8 x 7.2 x 1.9 cm
KR-621T	DVI-optical transmitter	DVI-D, 24+5 sockets	4xLC, 1xRJ45	1,65 GBit/s	12.0 x 8.05 x 2.75 cm
KR-621R	DVI-optical receiver	4xLC, 1xRJ45	DVI-I, 24+5 sockets	1,65 GBit/s	12.0 x 8.05 x 2.75 cm
KR-VS21DVI-R	DVI-changeover switch with reclocking	2xDVI-I	1xDVI-I	1,65 GBit/s	12.0 x 7.5 x 2.5 cm
KR-VM4HDCP	DVI Verteilverstärker	1xDVI-I	4xDVI-I	1,65 GBit/s	48.3 x 17.8 x 4.5 cm

HDMI

The HDMI-standard not only plays an ever increasing role in media/presentation technologies. Just like with DVI, splitters and amplifiers are needed for successful HDMI-transmissions. One bit of information: HDMI-image signals can be encoded with HDCP. We have identified these HDCP-compatible units accordingly in the chart.

KR-631T



KR-631R



KR-VS41HDMI



KR-2HDMI



KR-VS21HDMI



KR-VM4HDMI

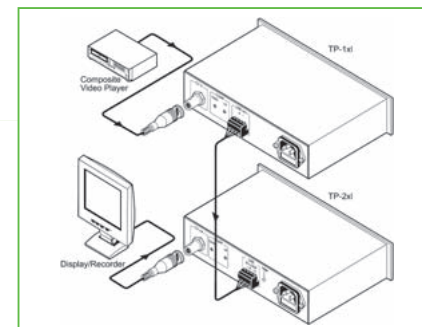


KR-VM28HDMI



ORDER-NO.	Function	Inputs	Outputs	Max. data rate	Dimensions [WxDxH]
KR-631T	HDMI-optical transmitter	HDMI	1 x RJ45, 4 x LC	1.65 GBit/s	12.0 x 7.95 x 2.76 cm
KR-631R	HDMI-optical receiver	1 x RJ45, 4 x LC	HDMI	1.65 GBit/s	12.0 x 7.95 x 2.76 cm
KR-VS21HDMI	HDMI-changeover switch	2 x HDMI	1 x HDMI	1.65 GBit/s	12.0 x 7.15 x 2.76 cm
KR-VS41HDMI	HDMI-changeover switch	4 x HDMI	1 x HDMI	1.65 GBit/s	48.3 x 17.8 x 4.5 cm
KR-VM2HDMI	HDMI-distribution amplifier	1 x HDMI	2 x HDMI	1.65 GBit/s	12.0 x 7.5 x 2.5 cm
KR-VM4HDMI	HDMI-distribution amplifier	1 x HDMI	4 x HDMI	1.65 GBit/s	48.3 x 17.8 x 4.5 cm
KR-VM28HDMI	HDMI-distribution amplifier	2 x HDMI	8 x HDMI	1.65 GBit/s	48.3 x 17.8 x 4.5 cm

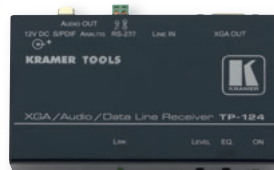
For long distances it may be easier to transmit the signal with a twisted-pair cable. The cost of the unit can simple be compensated for with the money saved on cabling. It is important to use the cable types recommended, otherwise the max. transmission lengths may be shortened. The drawing on the right schematically shows the functional principle with TP1XL and TP2XL. The principle is the same for the other units.



KR-705XL



KR-TP122



KR-TP124

ORDER-NO.	Signal / Function	Input	Output	Cable / length	Remarks
KR-705XL	FBAS / CV-transmitter	BNC	2 x twisted pair / clamps BNC Loop out	UTP / 1000 m	
KR-706XL	FBAS / CV-receiver	Twisted pair / clamps	2x BNC parallel Twisted pair / clamps loop-out		
KR-TP1XL	FBAS / CV-transmitter	BNC	Twisted pair / clamps	UTP / 1000 m	
KR-TP2XL	FBAS / CV-receiver	Twisted pair / clamps	BNC Twisted pair / clamps loop-out		
KR-TP41	YUV + SPDIF-transmitter	3x cinch (YUV) + 1x cinch (SPDIF)	RJ45	UTP / 100 m	
KR-TP42	YUV + SPDIF-receiver	RJ45	3x cinch (YUV) 1x cinch (SPDIF)		
KR-TP121	VGA + audio transmitter	SubD15HD (VGA) 3.5mm jack (audio)	RJ45	UTP / 100 m	
KR-TP122	VGA + audio receiver	RJ45	SubD15HD (VGA) 3.5mm jack (audio) cinch (SPDIF audio)		Audio out parallel Analog and digital
KR-TP123	VGA / audio / RS232-transmitter	SubD15HD (VGA) 3.5mm jack (audio) Twisted pair/clamps (RS232)	RJ45	UTP / 100 m	
KR-TP124	VGA / audio / RS232-transmitter	RJ45	SubD15HD (VGA) 3.5mm jack (audio) Cinch (SPDIF audio) Twisted pair / clamps (RS232)		Audio out parallel Analog and digital
KR-TP300FW	Firewire transmitter / receiver	6-pin firewire (input and output) RJ45 Loop In	RJ45	STP / 100 m	Max. band width 100MBit/s

KR-VP724XL Seamless Switcher for Conference Applications

A seamless switcher is primarily a selection switch that can switch different image sources onto one output. But the KR-VP724XL can even do more. Video sources in FBAS-formats; Y/C and component (YUV), and sources with VGA- and DVI-formats can be connected. Digital processing takes place internally so that an optimized high resolution image arrives at the projector. The switcher can be operated with the IP-remote control included in the delivery. The input and output formats as well as the picture-in-picture function (PIP) can be programmed very easily on the keyboard or the remote control via OSD (On Screen Display).



TECHNICAL DATA:

Input: 2 x FBAS (composite); 2 x Y/C (S-video); 1 x component (YUV) or RGB, 2 x VGA graphic or HDTV-video; 1 x DVI

Output: 2 x output VGA-graphic or HDTV-video (parallel outputs!)

Audio: One unbalanced audio-stereo input is also available for each input and can be activated on 2 outputs simultaneously with the image. Parallel outputs, Output 1 for line level, Output 2 for speaker control 2 x 5 W

Dimensions: 19" 1 U; installation depth without plug connector 240 mm; weight 3 kg;

Power: 100-240V AC; 50/60 Hz; 30 VA

ORDER-NO.

KR-VP724XL

Of course we have all KRAMER products available, further articles can be found on our website www.sommecable.com or upon request.



Available in three colors.
RAL-special finish upon
request !



black



anthracite



white



UNIVERSAL SPEAKER BOX CARDINAL DVM-SP0801

NEW!

The DVM-SP0801 is equipped with a high quality 8" high performance Neodymium-chassis and a 1" compression driver on a turnable 90° x 60° horn. It is very suitable for music and language transmission in small and midsize rooms, as well as for midsize stage monitoring, and ensures optimum performance and audibility.

The use of high quality materials and a modern casing make the **DVM-SP0801** easy to transport and has also proven itself for tough everyday touring.

The passive concept ensures that the **DVM-SP0801** can handle any acoustic task without additional electronics.

A very adequate, yet economical product.

The integrated tripod flange, the M8 mounting holes, and the two monitoring angles of 40° or 50° make the system with numerous accessories extremely flexible and support the expectations placed on a universally applicable speaker system.

As a special feature the **DVM08** is equipped with an additional SPEAKON-connecting panel on the bottom, enabling uncomplicated speaker connection even

in tight places (e.g. on a stand or on stage).

As a standard the surface of the wooden casing has a high-tech plastic coating in black. A special finish in RAL-colors is available upon request (even for smaller quantities).

The front of the speaker box is protected by a robust front grid with a honeycomb structure, backed with stainless steel webbing.

SOMMER CABLE also supplies the high quality speaker boxes made by **CARDINAL DVM** as a touring set. It includes 4 x **DVM-SP0801**, a touring case (truck dimension), 4 x transport straps incl. screws, 4 x steel, as well as 4 x SUPER-CLAMP with mini TV-pegs.

The transport strap can also be ordered separately, incl. steel and super-clamp.

For planners and architects, a dimensioned drawing in a DXF-format can be called up under www.sommercable.com/cardinal.

PRODUCT ADVANTAGES:

- Detailed sound rendition
- Compact, light casing
- Passive, separate 8"/1" speaker system
- Turnable 90° x 60° horn
- Multi-function casing design
- 2 monitor angle (40° or 50°)
- No system controller required
- 4 SPEAKON connections
- 16 Ω system impedance
- U-strap receptacle for vertical and horizontal straps
- Various M8 and M10 mounting holes
- Made in Germany

APPLICATIONS:

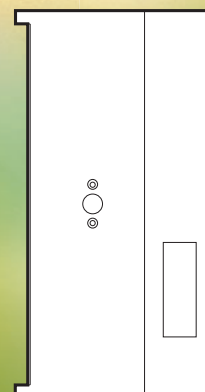
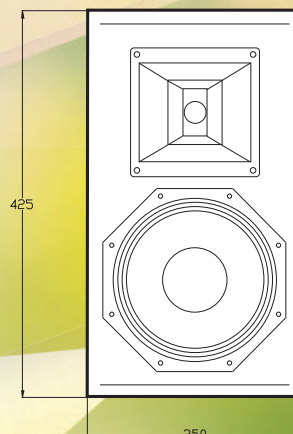
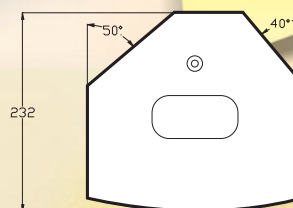
- Speech transmission
- Stage monitoring
- Trade fair construction, conference technology
- Permanent installation
- PA system, club

TECHNICAL DATA:

Casing:	Very solid birch-multiplex casing with a mat black, scratch- and beat-resistant textured surface. 2 x transport strap receptacles (M10) on the side, 4 x M8 mounting holes (top, bottom, 2 x rear) 1 x tripod flange 35 mm
Speaker:	1 x 8" High performance Neodymium-chassis 1 x 1" compression driver on turnable 90° x 60° horn
Capacity:	200 W cont. program / 400 W peak
Nominal impedance:	16
Acoustic pressure:	SPLmax 124 dB, 1 W / 1 m
Transmission range:	68 – 18.000 Hz
Angle of reflected beam:	90° horizontal x 60° vertical (horn turnable)
Connections:	4 x Speakon NL4 Pin1 1+/-
Dimensions H x W x D:	425 x 250 x 232 mm
Weight:	11.8 kg
Accessories available:	Flight case, pivoting handle

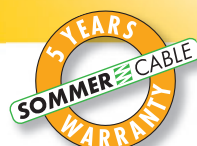


Transport strap



ORDER-NO.	DESCRIPTION
DVM-SP0801-SW	Box 8", black
DVM-SP0801-WS	Box 8", white
DVM-SP0801-AZ	Box 8", anthracite
DVM-SP08FB-SW	Transport strap, black
DVM-SP08FB-AZ	Transport strap, anthracite
DVM-SP08FB-WS	Transport strap, white

Further information and pictures can be found on our website www.sommercable.com/cardinal



CARDINAL DVM Amplifiers



CARDINAL DVM Linear Amplifiers for Live Sound & Installation "Made in Germany"

Amplifiers made by the German company DVM, located in Ratzenow near Berlin, are considered to be extremely dependable and maintenance-free, and that is why we grant you a **5 Year Warranty** on each unit!

At last year's Prolight+Sound we proudly introduced to you:

Series CARDINAL DVM-A: Linear, maintenance-friendly amplifiers for live sound with a performance of 2 x 340 W up to 2 x 950 W (on 4 Ω). A solid high end concept that perfectly combines the advantages of analog audio amplifiers and the light weight of switching power supply systems.

Series CARDINAL DVM-C: Installation amplifiers with digital controller and RS232-interface, incl. remote control + mute function.

Series CARDINAL DVM-D: Digital high performance amplifiers – available upon request.

Series CARDINAL DVM-E: Extremely dependable and maintenance-free audio amplifiers with a shallow installation depth (280 mm) for installation & ELA-technology 100 V.

"There is a Brit in every German..."

at least when it comes to sound. While the **CARDINAL** is a German engineering product, it still sounds a little British, regardless of the required sound level: Spacey, fast, powerful, and extremely linear.

Each unit has been manually constructed at our plant in Ratzenow near Berlin, and each assembly is tested several times before it can be installed. Before a **CARDINAL** Series is introduced on the market it is tested continuously for up to 14 months. This is one of the reasons why the audio amplifiers in the **CARDINAL** Series are considered to be extremely dependable and the purchase is rewarded with a **5 Year Warranty**.

As far as the variety of models is concerned, we are very conservative. All products have a consistently **timeless** and **unobtrusive design** that is favored in the business and across the borders. All products are designed to be very **service-friendly** and can be technically upgraded for years to come. And you will not be "attacked" by a supposedly revolutionary novelty every 6 months.

ORDER-NO. DESCRIPTION

DVM-C0720	Control amplifier 2x720 W RMS, 4 Ω, 2 U
DVM-A0340	PA-amplifier 2x340 W RMS, 4 Ω, 2 U
DVM-A0480	PA-amplifier 2x480 W RMS, 4 Ω, 2 U
DVM-A0720	PA-amplifier 2x720 W RMS, 4 Ω, 2 U
DVM-A0950	PA-amplifier 2x950 W RMS, 4 Ω, 2 U
DVM-A4X040	Installation-amplifier 4x40 W, 4 Ω*, height 92 mm
DVM-E4X040	ELA-amplifier 4x40 W, 100 V*, height 92 mm
DVM-E2X100	ELA-amplifier 2x100 W, 100 V, 2 U; depth 290 mm
DVM-E1X300	ELA-amplifier 1x300 W, 100 V, 2 U; depth 290 mm

* Combinations with 4 Ω and 100 V are available upon request.

Series CARDINAL DVM-A

Linear, maintenance-friendly amplifiers for live sound with a performance of 2 x 340 W to 2 x 950 W (on 4 Ω). A solid high end concept that perfectly combines the advantages of analog amplifiers and the light weight of switching power supply systems.

Frequency range (0 dB ... -1 dB):	23 - 23.000 Hz
Distortion factor (at 1 kHz at 95% nom. perf.):	< 0.04 %
Interference voltage clearance:	> 105 dB
Damping factor (internal 1 kHz):	> 600
Environmental temperature:	-5°...+45 °C
Protective circuit:	DC, overheating, short circuit, HF-vibrations
Dimensions W x H x D (without handles):	483 x 88.1 x 360 mm



DVM-A



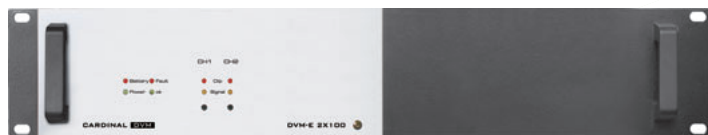
Technical data	DVM-A 0340	DVM-A 480	DVM-A 0720	DVM-A 0950
Power at 8 Ω (RMS)	2 x 200 W	2 x 270 W	2 x 430 W	2 x 630 W
Power at 4 Ω (RMS)	2 x 340 W	2 x 480 W	2 x 720 W	2 x 950 W
Power at 2 Ω (RMS)	2 x 440 W	2 x 670 W	2 x 1.060 W	2 x 1.410 W
Power bridged at 4 Ω	1 x 975 W	1 x 1.220 W	1 x 2.110 W	1 x 2.820 W
Power input max.	1.750 W	2.100 W	2.530 W	3.090 W
Weight	12.8 kg	13.3 kg	14.2 kg	15.5 kg

Other Amplifiers in the DVM-Assortment

Series CARDINAL DVM-E

Extremely dependable and maintenance-free amplifiers with a shallow installation depth (290 mm) for installation & ELA-technology 100 V.

Technical data	DVM-E4X040	DVM-E2X100	DVM-E1X300
Power at 100 V:	4 x 40 W	2 x 100 W	1 x 300 W
Frequency range:	40 – 20.000 Hz	70 – 20.000 Hz	70 – 20.000 Hz
Distortion factor:	< 0,06 %	< 0,8 %	< 0,8 %
Interference voltage clear.:	> 91 dB	> 95 dB	> 95 dB
Input sensitivity:	1 V	775 mV/10 kΩ	775 mV/10 kΩ
Inputs:	2 x cinch per channel	Phönix	Phönix
Outputs:	LS-clamps up to 4 mm ²	Phönix	Phönix
Dimensions [W x H x D]:	483 x 92 x 290 mm	483 x 88 x 290 mm	483 x 88 x 290 mm
Weight:	12.0 kg	11.8 kg	11.8 kg



DVM-E 2x100



DVM-E 1x300



DVM-E 4x040



CARDINAL DVM



DVM-C



Series CARDINAL DVM-C

2-channel amplifier with digital controller and RS32-interface incl. remote switching and mute function. Up to two more audio amplifiers of the DVM-A-Series can be connected up to 4 XLR-male outputs. CD with controller software is included.

Technical data	C0720
Perform. at 4 Ω (RMS):	2 x 720 W
Frequency range:	20 – 21.000 Hz
Distortion factor:	< 0,03 %
External voltage clear.:	> 93 dB
Input sensitivity:	1 V/10 kΩ
Inputs per channel:	XLR male/female
Outputs:	2 x Speakon 4-pol (1+/1-...) 4 x XLR male programmable
Dimensions [W x H x D]:	483 x 88 x 365 mm
Weight:	8.5 kg



ULTRASONE HEADPHONES

trust your ears



ULTRASONE

ULTRASONE's goal is to develop ergonomic headsets with a perfect sound for easy listening, based on the latest technological standards. The patented **ULTRASONE S-Logic™** Technology helps to create a special listening experience without the use of electronic aids. No difference in sound can be detected between "live listening" and the pleasure of an excellently tuned audio system. All **ULTRASONE** products have been used for more than 15 years in professional audio applications (broadcasting/sound stations/musicians) worldwide, in over 50 countries.



Natural Surround Sound?

The patented **ULTRASONE S-Logic™** Technology includes the entire outer ear. In all S-Logic™ headsets the sound converter is not seated in the center of the ear capsule, as in most headsets, but is displaced toward the front. Thus the sound coming from the set does not hit the hearing channel directly, which previously kept the user from perceiving the natural direction of the sound. S-Logic™ creates a special listening experience via "detour across the resonating outer ear" without filter equipment for all common stereo sound sources. Directions and distances can be experienced original, undistorted, and realistic.

Reduced radiation

All **ULTRASONE** headsets have reduced radiation values (without ULE Technology) and up to 60 % lower magnetic field emission values than the headsets commonly available on the market.

Healthy listening

Resulting from the use of the S-Logic™ Technology, the natural sound of all **ULTRASONE** headsets has a sound pressure that is reduced by approx. 3 - 4 dB, at a sound level perceived to be the same. Your hearing will be stressed up to 40 % less, which significantly reduces the risk of damages to the hearing. This is a significant feature for users spending a lot of time wearing headsets.

ULE Technology

The **ULTRASONE ULE** (Ultra Low Emission) Technology was especially developed for people who spend long hours wearing headsets. To further decrease the radiation, **ULTRASONE** especially developed MU metal shielding (ULE Technology). The use of ULE Technology results in a radiation reduction of up to 98 % when compared to common headsets. As a standard all **ULTRASONE PROline** models, the DJ1 Pro and the HFI-2200 ULE, are based with this technology.

TÜV Germany Test Seal

TÜV for Southern Germany conducted stringent testing on **ULTRASONE** products. It verified the low magnetic field values of **ULTRASONE** product with the patented shielding procedure and awarded the ULE Technology the test seal "very low in radiation".

EXCLUSIVE AT SOMMER CABLE

...with each **ULTRASONE** headset you receive the brand new **HATTLER CD "Rare Cuts"**. We have specially compiled a few new songs and **7 (!) unpublished HATTLER tracks**.

Active components ► **HEADPHONES**

ULTRASONE HFI-15G

Low weight, high wearing comfort, and a consistent sound image turns this classic all-rounder into an **ULTRASONE** bestseller.

PRODUCT ADVANTAGES:

- Tight fit, very light, high quality, small headset with S-Logic™ Natural Surround Sound
- Reduced radiation
- Standard LE (= Low Emission)
- Free demo-CD included
- 2 Year Warranty
- Spare parts available long-term



TECHNICAL DATA:

Frequency range:	20 - 20,000 Hz
Impedance:	32 Ω
Characteristic sound level:	96 dB
Weight (without cable):	85 g
3.5/6.3 mm jack plug, gold-plated	
Dynamic concept	

ORDER-NO.

HFI-15G

ULTRASONE HFI-550

Drummers, bassists, and price-conscious musicians are now able to find what they were looking for: A robust, tightly closed professional headset with increased dynamics and a larger performance range. The special performance-oriented 50 mm mylar sound converter creates an outstanding sound pressure level and is designed for high input performance. Also advantageous are the hinged, folded ear capsules for "one-eared" listening or compact storage.

PRODUCT ADVANTAGES:

- Collapsible, high quality headset with S-Logic™ Natural Surround Sound
- Reduced radiation
- Standard LE (= Low Emission)
- Free demo-CD included
- 2 Year Warranty
- Spare parts available long-term



TECHNICAL DATA:

Frequency range: 10 – 22,000 Hz

Impedance: 64 Ω

Characteristic sound level: 100 dB

Cable length: ca. 3 m

Weight (without cable): 265 g

3.5/6.3 mm vario jack plug, gold-plated

Dynamic concept

ORDER-NO. HFI-550

ULTRASONE HFI-650

The new standard in music. The HFI-650 is a tightly fitting, robust studio headset with a high degree of acoustic shielding and an excellent, balanced, and clean sound image. A special extra is the pivoting and folding function on both ear capsules: This also makes the HFI-650 suitable for "one-eared" listening and compact storage.

PRODUCT ADVANTAGES:

- Collapsible, closed, high quality headset, with S-Logic™ Natural Surround Sound
- Reduced radiation
- Standard LE (= Low Emission)
- Free demo-CD included
- 2 Year Warranty
- Spare parts available long-term



TECHNICAL DATA:

Frequency range: 15 – 25,000 Hz

Impedance: 75 Ω

Characteristic sound level: 99 dB

Cable length: approx. 3 m

Weight (without cable): 265 g

3.5/6.3 mm vario jack plug, gold-plated

Dynamic concept

ORDER-NO. HFI-650

ULTRASONE HFI-700

Developed for the "home cinema" with a frequency response specially adapted for DVDs - the HFI-700 combines the advantages of closed headsets with the first class sound of open systems, turning "listening" to DVDs into an acoustic adventure! ULTRASONE offers an interesting partial solution with the option to pivot the ear capsule to the outside or up to allow interaction with the surrounding. This feature also allows for compact storage.

PRODUCTS ADVANTAGES:

- Collapsible, closed, high quality headset with S-Logic™ Natural Surround Sound
- Reduced radiation
- Standard LE (= Low Emission)
- Free demo-CD inclusive
- 2 Year Warranty
- Spare parts available long-term



TECHNICAL DATA:

Frequency range: 10 – 25.000 Hz

Impedance: 75 Ω

Characteristic sound level: 96 dB

Cable length: approx. 3 m with extension cable, approx. 4 m

Weight (without cable): 265 g

Each with 6.3 mm jack plug, gold-plated

6.3/3.5 mm adapter, gold-plated

Dynamic concept

ORDER-NO. HFI-700

Included with all models:
HATTLER "Rare Cuts"

ULTRASONE DJ1

The first DJ headset with reduced radiation, gentle to the ears. A very potent 50 mm mylar sound converter, designed for high input performance, creates an outstanding sound pressure level even in very noisy surrounding. Especially appreciated by DJs: "One-eared" listening and space-saving transport.

TECHNICAL DATA

Frequency range: 10 - 22,000 Hz

Impedance: 64 Ω

Characteristic sound level: 103 dB

Spiral cable, cable length: approx. 3 m

Weight (without cable): 265 g

3.5/6.3 mm vario jack plug, gold-plated

Dynamic concept

Reduced radiation

Standard LE (= Low Emission)

ORDER-NO.

DJ1

DJ1-PRO



PRODUCT ADVANTAGES:

- Collapsible, closed, high quality DJ headset with S-Logic™ Natural Surround Sound
- Free demo-CD included
- 2 Year Warranty
- Spare parts available long-term

Included with all models:
HATTLER "Rare Cuts"



ULTRASONE PROline 550

The 50 mm mylar sound converter on the PROline 550 produces a clear sound in combination with an impressive sound intensity and strength. This headset also offers powerful basses and allows precise identification of the instruments. Its closed design provides consistent protection against environmental noises. The PROline 550 is equipped with standard accessories and has a lot of fans among bassists and drummers.

TECHNICAL DATA

Frequency range: 10 - 22,000 Hz

Impedance: 64 Ω

Characteristic sound level: 102 dB

Weight (without cable): 295 g

Sound converter: 50 mm mylar

Dynamic concept

MU metal shielding

Reduced radiation accord. to ULE Standards
(= Ultra Low Emission)

ORDER-NO.

PROLINE-550



PRODUCT ADVANTAGES:

- Collapsible, closed professional headset with S-Logic™ Natural Surround Sound
- MU metal shielding (ULE Technology)
- Gentle to the ears
- PROline box incl. accessories
- Free demo-CD included
- 2 Year Warranty
- Spare parts available long-term



PROline Box

ULTRASONE PROline 650

The PROline 650 stands for linearity, precision, and natural sound. The high quality 40 mm gold-plated sound converter enables a very fine sound rendition and a maximum of transparency. The new design in combination with the resulting spacial sound will take you to a spectacular world of sound. Like all closed headsets, the ULTRASONE PROline 650 also offers excellent protection against outside noises.

TECHNICAL DATA

Frequency range: 10 - 25,000 Hz

Impedance: 75 Ω

Characteristic sound level: 95 dB

Weight (without cable): 295 g

Sound converter: 40 mm gold-plated

Dynamic concept

MU metal shielding

Reduced radiation accord. to ULE (= Ultra Low Emission)

Standard

ORDER-NO.

PROLINE-650



The PROline box contains:

- Professional headset
- 2 removable cables:
 - 1 straight cable (length 3 m),
 - 1 spiral cable (length > 3 m)
 with gold-plated 6.3 mm jack plug and gold-plated adapters 6.3/3.5 mm
- Replacement set of "speed-switch" ear cushions
- Free demo-CD included
- Transport pouch

PRODUCT ADVANTAGES:

- Collapsible, closed professional headset with S-Logic™ Natural Surround Sound
- MU metal shielding (ULE Technology)
- Gentle to the ears
- PROline box incl. accessories
- Free demo-CD included
- 2 Year Warranty
- Spare parts available long-term

ULTRASONIC iCans

Piece Of Art

It is designed as an eye catcher on the outside - developed as a sound miracle on the inside.

A foldable, semi-open, small headset with a tight fit to the ears. This headset was especially designed and developed for MP3-players and other portable music players. It has S-Logic™ Natural Surround Sound and nickel iron shielding, including a tough iCans for storage and transport.

New sound perspectives for mobile music players

The iCans headset was especially developed for mobile music players and introduces a whole new world of sound. Would you like to know why? Because the iCans integrates the S-Logic™ Natural Surround Sound Technology developed and patented by ULTRASONIC. This technology makes it possible to render the high quality music coming from your iPod or MP3-player with a very high sound level. This makes the iCans state-of-the-art, because in the past this technology has only been implemented in professional headsets.



Made in Germany

TECHNICAL DATA

- Frequency range: 20 - 20,000 Hz
- Impedance: 35 Ω
- Characteristic sound level: 101 dB
- Cable length: approx. 115 cm
- Weight (without cable): 82 g
- Sound converter: 30 mm mylar
- S-Logic™ Natural Surround Sound
- MU metal shielding (ULE Technology)
- Gentle to the ears
- Reduced radiation accord. to ULE Standards (=Ultra Low-Emission)
- Dynamic concept
- 2 Year Warranty



Okta



Naos



Aurum



iCans box and folding mechanism

Your iCans can be stored easily and safely in the special iCans box. And with the simple folding mechanism it can be folded very quickly. Please read the folding instructions showing you the simple steps. A description of the folding mechanism on your iCans is automatically included with the product description.

ORDER-NO. VERSION

ICANS	Standard, clip white
ICANS-OKTA	Ear capsules silver-chrome, clip black
ICANS-NAOS	Ear capsules black-chrome, with additional noise insulation
ICANS-AURUM	Ear capsules 24-carat genuine gold-plating

ULTRASONIC HFI-2200 ULE

The unique "natural concept" look, state-of-the-art technology, and quality make the HFI-2200 ULE a top product for the non-professional user who does not need any additional equipment for professional applications (see PROline box under PROline headsets). This is the only headset in the HFI-line equipped with MU metal shielding (ULE technology), previously only a requirement for professional headsets. The new design with an enlarged ear capsule and a gold-plated 40 mm sound converter has a fine, smooth, 3-dimensional sound rendition with an unusually airy character.

PRODUCT ADVANTAGES:

- Collapsible, open, high class headset equipped with S-Logic™ Natural Surround Sound and MU metal shielding, thus with reduced radiation accord. to ULE (=Ultra Low Emission) Standards
- Free demo-CD included
- 2 Year Warranty
- Spare parts available long-term

ORDER-NO.

HFI-2200



TECHNICAL DATA:

- Frequency range: 10 - 25,000 Hz
- Impedance: 75 Ω
- Charact. sound pressure: 94 dB
- Sound converter: 40 mm gold-plated
- Weight (without cable): 292 g
- Removable cable (length approx. 3 m)
- MU metal shielding
- Gentle to the ears
- Incl. 3.5/6.3 mm adapter, gold-plated
- Dynamic concept

ULTRASONE PROLINE 750

Due to the titan-coated sound converter, the newly developed PROline 750 and the PROline 2500 are the top of the PROline series when it comes to exclusiveness and sound precision. Titan is the toughest and fastest reacting material imaginable and

helps to create a very precise and crystal clear sound rendition. Specially developed velvet ear cushions round off the listening pleasure by providing comfort to the ears, with a maximum of outside insulation on this closed headset.

PRODUCT ADVANTAGES:

- Collapsible, closed professional headset with S-Logic™ Natural Surround Sound
- MU metal shielding (ULE Technology)
- Gentle to the ears
- PROline box incl. accessories
- Free demo-CD included
- 2 Year Warranty
- Spare parts available long-term

TECHNICAL DATA:

- Frequency range: 8 – 35,000 Hz
- Impedance: 40 Ω
- Characteristic sound pressure: 94 dB
- Sound converter: 40 mm titan-coated
- Weight (without cable): 295 g
- MU metal shielding
- Reduced radiation accord. to ULE Standards (= Ultra Low Emission)
- Dynamic concept

ORDER-NO.

PROLINE-750 closed version

PROLINE-2500 open version

PROline Box

PROline box includes:

- Professional headset
- 2 removable cable: 1 straight cable (length 3 m), 1 spiral cable (length > 3 m) with gold-plated 6.3 mm jack plugs and 6.3/3.5 mm gold-plated adapters
- Replacement set "speed-switch" ear cushions
- Free demo-CD included
- Transport pouch



trust your ears



ULTRASONE

ULTRASONE EDITION 9

Made in Germany. You have selected a headset of unparalleled quality – in an uncompromising design, manufactured and equipped with a high quality S-Logic™ Natural Sound System. You can enjoy sleek elegance in combination with sophisticated technology. We only chose part suppliers who can fulfill the highest of demands and quality in the high end automotive market.

The Edition 9 is delivered in a specially designed Edition 9 box, ideal for safe storage and transport.

The ear capsules are chromed in black and the nameplates are made of chromed brass. The dark grey ear and head cushions are made of original Ethiopian long hair

sheep leather. This leather is so soft that you can barely feel it and it provides excellent insulation as well.

The Edition 9 is equipped with titan-coated sound converters. They are right at the top when it comes to sound refinement and precision. Titan is the hardest and fastest reacting material, ensuring a precise and crystal clear sound rendition. Naturally a headset of this class has integrated MU-metal shielding (ULE) to reduce magnetic radiation. And included with the Edition 9 is a gold-plated adapter 6.3/3.5 mm. Our demanding customers have called the sound on this headset analytical, with dynamics as fast as an arrow, and ideal for continuous listening.

PRODUCT ADVANTAGES:

- Collapsible, closed professional headset equipped with S-Logic™ Natural Surround Sound
- Professional standard with ULE-Technology (MU-metal shielding)
- 5 Year Warranty
- Handmade in Germany

TECHNICAL DATA:

- Frequency range: 8 – 35,000 Hz
- Sound converter: 40 mm titan-coated
- Impedance: 30 Ω
- Characteristic sound pressure: 96 dB
- Cable length: 3 m
- 6.3 mm gold-plated plug connector
- 3.5 mm adapter
- Weight (without cable): 310 g
- Dynamic concept

ORDER-NO.

EDITION9



Active components ▶ HEADPHONES "STAX"

STAX – "EAR SPEAKERS" – the Electrostatic Headset

SOMMER CABLE is proud to present the world's best headsets, from the Japanese company STAX. They are unbeatable when it comes to neutral sound, impulse rendition, high resolution, and low distortion.

Since STAX introduced the SR-1 as the first capacitor headset worldwide in 1960, their headsets have become a standard for reference monitoring. An extremely 1.35 µm thin high polymer membrane, biased with 580 V, moves between two perforated metal electrodes, onto which the amplified musical signal is applied. A power supply is required for just that reason.

*Our freelancer...*

Guido Apke, sound technician and studio consultant in mastering since 1992 has gained much experience through working for a long time with STAX. In his spare sound technician time he often had, despite owning his own speakers, difficulties in finding his way around the different acoustics in studios, until he found a neutral reference with STAX.

Guido has listened to just about all the STAX models in order to choose the most interesting combination among the different products from **SOMMER CABLE**. Here you will find his three favourite sets. Guido will be glad to answer any questions you may have under E-mail ga@sommecable.com. Of course **SOMMER CABLE** also has all other STAX models and combinations available.

STAX – SRM-001 MK2

The high end solution for mobile application.

A very light, portable in-ear electrostat with rotating capsules that are directly inserted into the ears. Two sizes of silicone rings are included for tight sealing of the auditory channel. The result is a surprisingly good base rendition as well as electrostatic advantages. The power supply is fed by two Mognon batteries and can be operated using NI-MH rechargeables for approx 5 hours. For stationary operation a power supply can be connected (optional). It fits into most jacket pockets and is delivered with a 30 cm long mini-jack cable. Including the batteries the supply part weights 140 g, size 60 x 24 x 120 mm.

"The reasonably priced introduction to the world of STAX, but still a genuine STAX: Great authenticity and attention to detail. For all STAX-freaks (and the ones to be) there is no alternative when listening to DVD, CD, MP-3 Portis, or for use with your laptop. For jogging, on vacation, in the office..."

ORDER-NO.**SRM-001MK2****STAX – SRS-3020**

This set consists of the legendary SR-303 Classic headset – except for the cable, which is the same as for the SR-404 Signature – and the completely new developed SRM-310. The SRM-310 is a headset amplifier with integrated stand, a practical and space-saving solution. With the new arrangement of FET-input and driver levels it almost sounds as pleasing and warm as the larger tube hybrid models.

"A bargain when it comes to price and performance - there is no more sound to be had anywhere for around 1000 €, except with a real professional solution..."

ORDER-NO.**SRS-3020**

STAX – SRS-4040 II

SR-404 Signature headset with the cable lowest in capacity (such as the top model OMEGA II), producing increased high sound rendition especially for the high impedances of the electrostats. Part of the set is the SRM-006t MKII, a Class A amplifier with low-noise dual FET's on the input and two tubes on the output. Switching is fully balanced with a quadruple precision potentiometer, but without inverters or transformers. This amplifier also has two inputs that can be switched over automatically on the input printer circuit board via relay. One input is equipped with cinch sockets, the other one either with cinch or XLR-sockets to provide a fully balanced signal path for balanced sources.

*"My daily work horse: Reference converter via short **SOMMER EPILOGUE** in Input 1, all units or cables to be tested on 2; there hardly is any way for comparison. So I can, e.g. compare different digital/analog converters, compressors, equalizers, and cables to each other. For modification on certain units I can hear the difference between individual condensers in the signal path, while never losing sight of the reference. Besides this combi sounds incredibly musical and (yet) has a very high resolution".*

ORDER-NO.

SRS-4040-II Lambda Signature System II



STAX – SRS-007 / SRS-717

Without a doubt a top model. The SR-007 OMEGA II headset is the ultimate in precision and power. A deep bass and dynamic rendition with very high linearity. The robust metal casing prevents vibration. The new clip system ensures very comfortable wearing comfort.

The rotating ear cushions can be precisely adapted to different head shapes. For an amplifier you can either choose the SRM-007t, basically constructed the same as the SRM-006t, but with 4 tubes for the output level, resulting in a higher output performance, yet lower in distortion with an even more extensive frequency range.

The alternative is the SRM-717, a fully balanced Class A transistor amplifier, offering the highest possible output performance and precision. The SRM-717 only has one input, but offers cinch and balanced XLR-sockets.

"Can the SRS-4040 set be beat? – Yes, with this combination!

A real manifest! A few hours with your favorite CDs - and you will call your bank...

Both amplifier alternatives are fantastic:

The SRM-717 is somewhat louder and more precise, the SRM-007t somewhat warmer, with two switchable inputs. Choices, choices... "



SRS-717

ORDER-NO.

SRS-007-II

SRS-717



SRS-007

