

ELECTRONICS FOR SPECIALISTS



weltweit  
 mondial  
 på verdensplan  
 svjetski  
 world  
 wid  
 üfemaailmne  
 maailmanlaajuinen  
 σε όλο τον κόσμο  
 dans le monde entier  
 verdensomspennende  
 visame pasaulyje  
 um allan heim  
 in tutto il mondo  
 ar fud an domhain  
 wereldwijd  
 över hela världen  
 mundial  
 світової  
 celosvetovo  
 visā pasaulē  
 világszerte  
 na całym świecie  
 celosvětově

 <b>GERMANY</b> MONACOR INTERNATIONAL GmbH & Co. KG  Zum Falsch 36 28307 Bremen Germany Phone: +49 (0) 4 21/48 65-0 Fax: +49 (0) 4 21/48 84 15 info@monacor.com www.monacor.com	 <b>ANDORRA</b> MONACOR IBERIA, S.A.U.	 <b>AUSTRALIA</b> SOUNDLABS GROUP Pty Ltd	 <b>AUSTRIA</b> MONACOR ELECTRONIC Vertriebs-GmbH	 <b>BELARUS</b> Ltd MuzTorgServis
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**CD-123**

Order No. 21.3070



**Dual CD and MP3 player with pitching function**, USB 2.0 interface and SD/MMC card slot.

- Adjustable reproduction speed (pitching)
- Switchable display of playing time/remaining playing time of one track
- USB storage media can be connected directly
- For SD/MMC cards up to 32GB (FAT16/FAT32), available at option
- Anti-shock system
- Supports ID3 tags
- Folder navigation
- Single play function

- Autoplay function (selectable via jumper)
- Fast forward and reverse
- Track programming
- Repeat function (repeat 1, repeat all)
- Loop A/B
- Random play
- Supplied with infrared remote control
- 482mm (19") rack installation with supplied mounting brackets, 1RS
- Audio CD/CD-R/CD-RW/MP3 CD



Now also with pitching!



**CD-113**

Order No. 21.3060



**CD and MP3 player with pitching function**, USB interface and SD/MMC card slot.

- Adjustable reproduction speed (pitching)
- Switchable display of playing time/remaining playing time of one track
- USB storage media can be connected directly
- For SD/MMC cards up to 32GB (FAT16/FAT32), available at option
- Anti-shock system
- Supports ID3 tags
- Folder navigation
- Single play function

- Autoplay function (selectable via jumper)
- Fast forward and reverse
- Track programming
- Repeat function (repeat 1, repeat all, random repeat)
- Loop A/B
- Random play
- Supplied with infrared remote control
- 482mm (19") rack installation with supplied mounting brackets, 1RS
- Audio CD/CD-R/CD-RW/MP3 CD



Now also with pitching!

Model	CD-123	CD-113
<b>General information</b>		
Frequency range	20-20,000Hz	20-20,000Hz
THD	< 0.1%	< 0.1%
Channel separation	> 60dB	> 60dB
Dynamic range	> 96dB	> 96dB
S/N ratio	> 70dB	> 70dB
Wow and flutter	not measurable, quartz precision	not measurable, quartz precision
Output, analogue	1.2V	1.2V
Power supply	230V~/50Hz/50VA	230V~/50Hz/50VA
Admiss. ambient temp.	0-40 °C	0-40 °C
Dimensions, player mech.	482x44x265mm, 1RS	482x44x265mm, 1RS
Weight	4.3kg	4kg
<b>Connections</b>		
Analogue output	2 x RCA L/R	1 x RCA L/R



### FM-100DAB

Order No. 17.3700



#### Digital stereo tuner for the reception of FM and DAB+

- FM radio reception (87.5-108MHz) with RDS function
- Interference-free reception of digital radio via digital audio broadcasting (DAB+, band III, 174.928-239.2MHz), display of additional broadcasting information, e.g. frequency, name of radio station, genre, track name, artist
- Large backlit dot matrix display
- Field intensity display
- 10 memory places each for FM mode and DAB mode
- 5 station keys with double assignment
- Manual frequency adjustment and station adjustment
- Autoscan
- Mono/stereo selection
- 75Ω antenna input
- Stereo output via RCA jack L/R
- 482mm (19") rack installation, 1RS, removable mounting brackets
- Supplied with infrared remote control and telescopic antenna
- Power supply: 230V~/50Hz/50VA
- Dimensions: 482x44x185mm
- Weight: 3.35kg



### SA-100

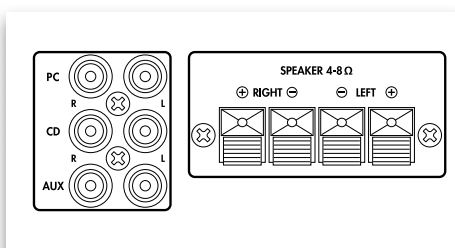
Order No. 25.4120



#### Compact universal stereo amplifier

- Silent operation due to fanless cooling concept
- Additional 3.5mm connection with switchable sensitivity on the front panel
- USB port on the front panel for power supply and for charging external units
- Audio source selector
- Controls for volume, bass and treble
- 6.3mm headphone output
- Robust metal housing

Model	SA-100
<b>Output power</b>	
Max. power	2 x 50W <sub>MAX</sub>
RMS power	
Stereo 4Ω	2 x 25W <sub>RMS</sub>
Stereo 8Ω	2 x 20W <sub>RMS</sub>
<b>General information</b>	
Inputs	PC: 140mV/46kΩ CD: 140mV/46kΩ aux: 140mV/46kΩ player: 140mV/12kΩ (high), 25mV/32kΩ (low)
Frequency range	20-20,000Hz
S/N ratio	> 70dB
Digital echo	-
Equalizer	bass: ±12dB treble: ±12dB
Power supply	230V~/50Hz/150VA
Admiss. ambient temp.	0-40 °C
Dimensions	212x56x250mm
Weight	2.6kg
<b>Connections</b>	
	PC: RCA L/R CD: RCA L/R aux: RCA L/R player: 3.5mm jack speaker: spr.-load. speaker term.





## MPX-40DMP

Order No. 20.2710



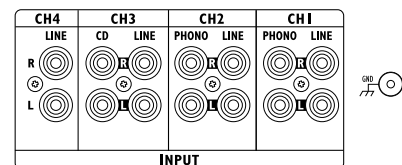
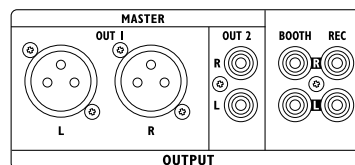
### Stereo DJ mixer with integrated MP3 player Mixer:

- 4 stereo input channels, switchable 2 x line/phono, 1 x line/CD and 1 x line/USB (SD)
- Input channels, each with gain control, 3-way equalizer and PFL push-button, with LED level display of the stereo master
- 1 DJ microphone channel, adjustable, with 2-way tone control and manual talkover
- Adjustable headphone output with pre-fader listening to the stereo input channels and the master output
- Crossfader with assignment switches and switchable characteristic
- Master output with stereo LED level display
- Additional outputs booth and record

MP3 player with USB interface and SD/MMC card slot:

- USB storage media can be connected directly (e.g. USB flash drive)
- For SD/MMC cards up to 32GB (FAT16/FAT 32), available at option
- Supports ID3 tags
- Pitch control:  $\pm 16\%$
- Loop/reloop function
- Brake function and reverse function
- Safe operation also in darkness due to high-quality rubber buttons with colour illumination
- Blue backlit display

Model	MPX-40DMP
<b>Sensitivities</b>	
Mic input	4mV
Line input	300mV
Phono input	6mV
CD input	300mV
Master output	870mV
Record output	800mV
Booth output	950mV
Headphone output	$\geq 8\Omega$
Frequency range	20-20,000Hz
THD	0.04%
S/N ratio	> 60dB
<b>Equalizer</b>	
Channels 1-4, bass	+12dB, -24dB/30Hz
Channels 1-4, midrange	+12dB, -24dB/1.2kHz
Channels 1-4, treble	+12dB, -24dB/15kHz
DJ mic, bass	$\pm 12\text{dB}/70\text{Hz}$
DJ mic, treble	$\pm 12\text{dB}/7\text{kHz}$
Talkover	-15dB
Power supply	230V~/50Hz/20VA
Dimensions	482x190x115mm
Weight	3.4kg



## H-2N

Order No. 20.2720



### Portable digital audio recorder, with USB port and SD card slot.

- 5 built-in electret microphones
- Recording modes: mid/side stereophony (MS), X/Y stereophony (90°), 2-channel surround (360°) and 4-channel surround (360°)
- Supports external SD cards up to 32GB (SDHC), available at option
- Compatible with USB 2.0 or higher
- Can also be used as an audio interface
- Recording formats: WAV (44.1/48/96kHz, 16/24 bits) or MP3 (44.1kHz, 48-320kbps), switchable
- Manual control, AGC function (automatic gain control), compressor function and limiter function, low cut filter
- Convenient recording, reproduction, file processing and conversion functions

- Integrated chromatic tuner for guitar and bass, supports open tunings
- Integrated metronome
- Microphone input/line input: 3.5mm stereo jack
- Headphone output/line output: 3.5mm stereo jack
- Backlit LCD: 4.6cm (1.8")
- 6.3mm (1/4") thread, matching desktop stand TCS-10/SW is available at option
- Supplied with 2GB SD card and audio editing software WAVELAB LE7
- Power supply: 2 x 1.5V battery AA size (not supplied), operating time: approx. 20h
- Dimensions: 68x103x42mm
- Weight: 182g



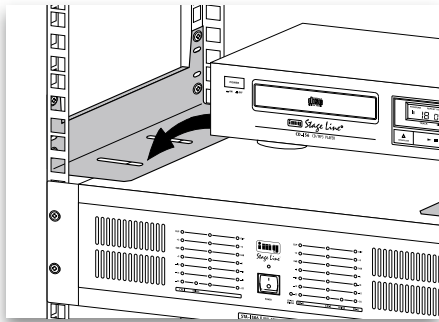
**RTW-400**

Order No. 25.4200



Pair of **mounting rails**, for rack installation of units incapable of being installed into a rack (e.g. HiFi components), suitable for RACK-42, RACK-33 or RACK-21.

- Black powder-coated steel version
  - Mounting depth: 342mm
  - Mounting height: 88mm (2RS)
  - Support area: 80mm
  - Max. load: 50kg
- Supplied without units.**



With the new **TXS-2402SET**, the introduction into the world of digital wireless transmission becomes a special sound experience. The signal transmission in the 2.4GHz range is particularly stable and impresses by a high resistance to interference. The system manages without a compander which results in an impressive dynamic efficiency and a voice transmission with a unique sound quality. The signal will not be compressed. Two systems can be used in parallel operation, thus 4 microphone transmission paths can be used simultaneously. Licence-free system. The particularly easy and convenient use of the units and the appealing design make the TXS-240SET a real digital experience for the user.

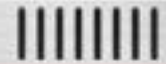
**TXS-2402SET**

Order No. 25.4090

**Digital wireless 2-channel PLL microphone system, 2.4GHz**

- 2 microphone transmitters, 1 receiver, 1 plug-in PSU
  - High resistance to interference due to digital transmission
  - 2 systems can be used simultaneously (corresponds to 4 microphone transmission paths)
  - 16 frequencies (2,404-2,476MHz) for each channel can be selected at the transmitter
  - Receiver with wireless automatic configuration
  - Volume control for each channel
  - 6.3mm output for mixed signal
  - Microphone cartridges of supercardioid characteristic
- Licence-free in the EU!**

Model	TXS-2402SET
Carrier frequency	2,404-2,476MHz
Transmitting power	10mW
RF S/N ratio	-
Audio range	80-12,000Hz
Dynamic range	87dB
THD	< 10%
Audio output	1V/600Ω
Operating range	approx. 30m (free field outdoors) approx. 20m (indoors)
Admiss. amb. temp.	0-40 °C
Power supply	
Transmitter	2 x 1.5V batt. AA size
Receiver	via suppl. plug-in PSU
Dimensions	
Transmitter	ø 54mm x 225mm
Receiver	220x45x150mm
Weight	
Transmitter	120g
Receiver	550g
Connections	1 x 6.3mm jack, unbal.



## ECM-80PC

Order No. 23.6210



### USB electret desktop microphone

- For operating directly at a PC
- Supports USB 2.0/1.1
- No driver installation required, unit will be identified automatically
- Omnidirectional characteristic
- Integrated A/D converter
- 60mm gooseneck
- 1.5m connection cable with USB A plug
- Power supply via USB interface



Model	ECM-80PC
System	electret/omnidirectional
Frequency range	50-20,000Hz
Impedance	-
Sensitivity	10mV/Pa/1kHz
Max. SPL	-
Power supply	5V= via USB interface
Admiss. ambient temp.	0-40 °C
Dimensions	ø 60mm x 140mm
Weight	90g
Connection	1 x USB A plug

## WSW-300

Order No. 23.6180

**Portable absorber and diffuser**, for high-quality microphone recordings in rooms without optimised acoustic noise reduction. Suitable for general applications with microphone stands or for setting up desktop applications.

- Reduces the transmission of unwanted room influences such as reflections, echoes and ambient noise
- Easy mounting to standard microphone stands with screw clamps
- Supporting feet adjustable in height
- Adjustable microphone attachment with thread: 16mm (5/8") and 9mm (3/8")
- Folding side parts, thus space-saving



**Supplied without microphone, microphone holder and stand.**

## PB-05

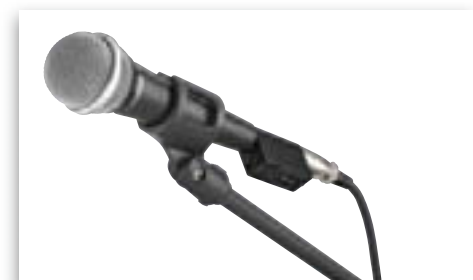
Order No. 25.4130

**Automatic microphone switch**, with optical distance sensor.

The automatic switch will be connected between microphone and cable. The integrated infrared system responds to persons present in the adjustable detection area or anyone leaving this area and then switches the microphone on or off respectively. Acoustic feedback and external noise/ambient noise resulting from open and unused microphones are thus effectively suppressed by an unobtrusively operating gate circuit.

- For dynamic and electret microphones with balanced output configuration
- Simple operation via 48V phantom power
- Adjustable distance: 0-1.5m, detection angle: 15°
- Low-noise semiconductor switch
- Reliable switching operations due to coded infrared signal
- Additional on/off button
- Status LED
- Connections: 1 x XLR inline jack and 1 x XLR plug

**Supplied without microphone and cable.**







With the TRITON-800, IMG Stage Line offers an active subwoofer/satellite system for any user requiring maximum mobility and a high operating convenience. The system is available at an attractive price and is ideally suited for medium-sized events. The high-quality speaker technology allows for a very good sound quality. It provides a transparent and powerful sound. Due to the neat workmanship, the robust, black lacquered MDF cabinets impress by an elegant design as well as a high stability and functionality. For transport purposes, the satellites and cables are simply stored in the rolling subwoofer.

## TRITON-800

Order No. 25.4220



### Compact high-performance active PA system, 1,200W<sub>MAX</sub>, 870W<sub>RMS</sub>

- Subwoofer/satellite system with integrated 3-channel amplifier
- 38cm (15") bass speaker of high power capability and of long excursion
- 25cm (10") midrange speaker and 25mm (1", 44mm voice coil) horn tweeter
- Adjustable volume balance between subwoofer and satellites balanced (XLR) and unbalanced (RCA)
- Inputs and parallel outputs
- Stereo/mono switching
- Surround effect circuit
- Satellites can be transported in the subwoofer
- Supplied with castors and speaker cables
- Stand sleeve in the satellites
- Protective cover

Supplied without stands.

Matching speaker stand set PAST-162SET is available at option.



Model	TRITON-800
Power capability	
Max. output power	1,200W <sub>MAX</sub>
Power rating	600W <sub>RMS</sub> (SUB), 2 x 135W <sub>RMS</sub> (SAT)
Speakers	1 x 38cm (15") bass speaker, 2 x 25cm (10") midrange speaker, 2 x 25mm (1") horn tweeter
Max. rated SPL (system)	122dB
Frequency range	34-20,000Hz
Inputs	
Balanced	comb. XLR jack, 260mV-7V
Unbalanced	RCA, 280mV-7V
Outputs	
Line (par. out)	XLR (bal.) RCA (unbal.)
Satellite speakers (>150Hz)	SPEAKER, 8Ω
S/N ratio	> 80dB
Power supply	230V~/50Hz/1,860VA
Admiss. ambient temp.	0-40 °C
Dimensions	
Subwoofer (WxHxD)	445x613x770mm
Satellite speakers (WxHxD)	290x440x220mm
Weight	
Subwoofer	48kg
Satellite speaker	10kg
System	68kg



## The New XC Speaker Systems in Plastic Cabinets from IMG Stage Line

The PA speaker systems of the XC series provide a nice sound, are available at an attractive price and thus, are the perfect starting equipment for entry-level DJs. Suitable for smaller to medium-sized function rooms. The plastic cabinets of a contemporary design are also lightweight and easy to handle.

### PAB-15XC

Order No. 25.4170



**Full range speaker system, 400W<sub>MAX</sub>, 8Ω**

- 15/2 full range system with a high-quality plastic cabinet
- 38cm (15") bass speaker and 25mm (1", with 44mm voice coil) horn tweeter
- Bass-reflex system
- Element for tweeter protection
- Multi-purpose positioning and installation options
- M8 thread inserts for suspended installation, stand sleeve
- 2 x speaker terminals, IN OUT



### PAB-12XC

Order No. 25.4160



**Full range speaker system, 360W<sub>MAX</sub>, 8Ω**

- Compact 12/2 full range system with a high-quality plastic cabinet
- 30cm (12") bass speaker and 25mm (1", with 34mm voice coil) horn tweeter
- Bass-reflex system
- Element for tweeter protection
- Multi-purpose positioning and installation options
- M8 thread inserts for suspended installation, stand sleeve
- 2 x speaker terminals, IN OUT





### PAB-10XC

Order No. 25.4150



Full range speaker system, 300W<sub>MAX</sub>, 8Ω

- Compact 10/2 full range system with a high-quality plastic cabinet
- 25cm (10") bass speaker and 25mm (1", with 34mm voice coil) horn tweeter
- Bass-reflex system
- Element for tweeter protection
- Multi-purpose positioning and installation options
- M8 thread inserts for suspended installation, stand sleeve
- 2 x speaker terminals, IN OUT



### PAB-8XC

Order No. 25.4140



Full range speaker system, 180W<sub>MAX</sub>, 8Ω

- Compact 8/2 full range system with a high-quality plastic cabinet
- 20cm (8") bass speaker and 25mm (1") horn tweeter
- Bass-reflex system
- Element for tweeter protection
- Multi-purpose positioning and installation options
- M8 thread inserts for suspended installation, stand sleeve
- 2 x speaker terminals, IN OUT



Model	PAB-15XC	PAB-12XC	PAB-10XC	PAB-8XC
Bass-midrange speaker	38cm (15")	30cm (12")	25cm (10")	20cm (8")
<b>Power capabilities</b>				
Music power	400W <sub>MAX</sub>	360W <sub>MAX</sub>	300W <sub>MAX</sub>	180W <sub>MAX</sub>
Power rating	200W <sub>RMS</sub>	180W <sub>RMS</sub>	150W <sub>RMS</sub>	90W <sub>RMS</sub>
<b>General information</b>				
Impedance	8Ω	8Ω	8Ω	8Ω
Frequency range	48-20,000Hz	55-20,000Hz	59-20,000Hz	60-20,000Hz
SPL (1W/1m)	98dB	97dB	97dB	94dB
Max. rated SPL	122dB	120dB	119dB	112dB
Admiss. ambient temp.	0-40 °C	0-40 °C	0-40 °C	0-40 °C
Dimensions (WxHxD)	470x680x390mm	420x585x320mm	360x500x270mm	290x412x220mm
Weight	13.8kg	13.8kg	10kg	6.5kg
<b>Connections</b>	2 x SPEAKER par. in/out	2 x SPEAKER par. in/out	2 x SPEAKER par. in/out	2 x SPEAKER par. in/out



## The New XC Speaker Systems in Plastic Cabinets from IMG Stage Line

The PA speaker systems of the XC series provide a nice sound, are available at an attractive price and thus, are the perfect starting equipment for entry-level DJs. Suitable for smaller to medium-sized function rooms.

The plastic cabinets of contemporary design are also lightweight and easy to handle.

The active version PAK features a digital power amplifier and thus achieves a high power efficiency.

### PAK-15XC

Order No. 25.4250



**Active full range speaker system, 250W<sub>MAX</sub>, 150W<sub>RMS</sub>**

- Compact 15/2 full range system with a high-quality plastic cabinet
- 38cm (15") bass speaker and 25mm (1", 44mm voice coil) horn tweeter
- Bass-reflex system
- Class-D power amplifier technology
- Adjustable microphone input with line input, can be mixed
- 2-way tone control for bass and treble
- Multi-purpose positioning and installation options
- M8 thread inserts for suspended installation, stand sleeve



### PAK-12XC

Order No. 25.4240



**Active full range speaker system, 210W<sub>MAX</sub>, 120W<sub>RMS</sub>**

- Compact 12/2 full range system with a high-quality plastic cabinet
- 30cm (12") bass speaker and 25mm (1", 34mm voice coil) horn tweeter
- Bass-reflex system
- Class-D power amplifier technology
- Adjustable microphone input with line input, can be mixed
- 2-way tone control for bass and treble
- Multi-purpose positioning and installation options
- M8 thread inserts for suspended installation, stand sleeve





### PAK-10XC

Order No. 25.4230



Active full range speaker system, 170W<sub>MAX</sub>, 100W<sub>RMS</sub>

- Compact 10/2 full range bass-reflex system with a high-quality plastic cabinet
- 25cm (10") bass speaker and 25mm (1", 34mm voice coil) horn tweeter
- Bass-reflex system
- Class-D power amplifier technology
- Adjustable microphone input with line input, can be mixed
- 2-way tone control for bass and treble
- Multi-purpose positioning and installation options
- M8 thread inserts for suspended installation, stand sleeve



### PAK-8XC

Order No. 25.4260



Active full range speaker system, 110W<sub>MAX</sub>, 70W<sub>RMS</sub>

- Compact 8/2 full range system with a high-quality plastic cabinet
- 20cm (8") bass speaker and 25mm (1") horn tweeter
- Bass-reflex system
- Class-D power amplifier technology
- Adjustable microphone input with line input, can be mixed
- Multi-purpose positioning and installation options
- M8 thread inserts for suspended installation, stand sleeve



Model	PAK-15XC	PAK-12XC	PAK-10XC	PAK-8XC
Frequency range	48-20,000Hz	59-20,000Hz	59-20,000Hz	60-20,000Hz
Amplifier power	150W <sub>RMS</sub> , 250W <sub>MAX</sub>	120W <sub>RMS</sub> , 210W <sub>MAX</sub>	100W <sub>RMS</sub> , 170W <sub>MAX</sub>	70W <sub>RMS</sub> , 110W <sub>MAX</sub>
Inputs	1 x line (bal.), stereo (unbal.), 1 x mic (bal.)	1 x line (bal.), stereo (unbal.), 1 x mic (bal.)	1 x line (bal.) stereo (unbal.) 1 x mic (bal.)	1 x line, stereo (unbal.), 1 x mic (bal.)
SPL (1W/1m)	96dB	96dB	96dB	93dB
Max. rated SPL	118dB	117dB	115dB	111dB
Admiss. ambient temp.	0-40 °C	0-40 °C	0-40 °C	0-40 °C
Power supply	230V~/50Hz/300VA	230V~/50Hz/225VA	230V~/50Hz/200VA	230V~/50Hz/150VA
Dimensions (WxHxD)	470x680x390mm	420x585x320mm	360x500x270mm	290x412x220mm
Weight	20kg	17.1kg	12.3kg	9kg
Connections	XLR and RCA L/R (line) XLR (mic) 6.3mm jack (mic) par. line out (XLR and 6.3mm jack) 2-band EQ ±12dB	XLR and RCA L/R (line) XLR (mic) 6.3mm jack (mic) par. line out (XLR and 6.3mm jack) 2-band EQ ±12dB	XLR and RCA L/R (line) XLR (mic) 6.3mm jack (mic) par. line out (XLR and 6.3mm jack) 2-band EQ ±12dB	XLR and RCA L/R (line) XLR (mic) par. line out (XLR bal.)
Other features				



## SOUND-6/SW

Order No. 25.4110



Pair of HiFi and monitor speakers, 2 x 100W<sub>MAX</sub>, 2 x 50W<sub>RMS</sub>, 8Ω

- 2-way bass-reflex system
- Linear adjustment and excellent sound quality
- High-quality MDF cabinet in black wood veneer look
- 16cm bass-midrange speaker with glass fibre cone and 25mm dome tweeter
- Removable front grille cloth



Speakers of the SOUND series are now also available as a passive version and in a new design. The acoustic tuning is matching the active SOUND systems. Ideally suited for the application as HiFi speaker systems or as monitor speakers for home recordings. They can perfectly be extended by the subwoofer SOUND-100USB.

## SOUND-4/SW

Order No. 25.4100



Pair of HiFi and monitor speakers, 2 x 70W<sub>MAX</sub>, 2 x 35W<sub>RMS</sub>, 8Ω

- 2-way bass-reflex system
- Linear adjustment and excellent sound quality
- High-quality MDF cabinet in black wood veneer look
- 10cm bass-midrange speaker with glass fibre cone and 25mm dome tweeter
- Removable front grille cloth



Model	SOUND-6/SW	SOUND-4/SW
<b>System</b>	2-way bass-reflex	2-way bass-reflex
Bass speaker	1 x 16cm (6")	1 x 10cm (4")
Tweeter	25mm dome	25mm dome
<b>Power capabilities</b>		
Music power	100W <sub>MAX</sub>	70W <sub>MAX</sub>
Power rating	50W <sub>RMS</sub>	35W <sub>RMS</sub>
<b>General information</b>		
Impedance	8Ω	8Ω
Frequency range	42-20,000Hz	50-20,000Hz
SPL (1W/1m)	86dB	85dB
Max. rated SPL	103dB	100dB
Admiss. ambient temp.	0-40 °C	0-40 °C
Dimensions	230x325x280mm	170x240x190mm
Inputs	1 x spring-loaded terminal	1 x spring-loaded terminal
Outputs	-	-
Weight	2 x 5.9kg	2 x 3.1kg



### PAST-164SET

Order No. 11.1970

**Speaker stand set**, consisting of two aluminium stands PAST-164/SW and a nylon bag for stands. For specifications, please refer to the individual items.



### PAST-164/SW

Order No. 11.1960

**Speaker stand**, extra lightweight aluminium version, height can be adjusted in 6 steps, with locking pin.

- Aluminium, black

Model	PAST-164/SW
Max. load capacity at centr. weight concentration	30kg
Adjustable height	140-200cm
Storage dimensions	103x14cm
Weight	1.6kg

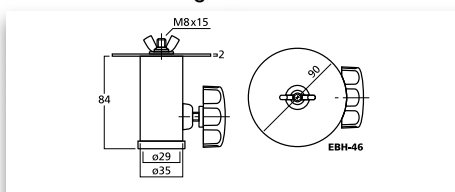


### EBH-46

Order No. 11.1940

**Stand adapter**, e.g. for small light effect units.

- Matching stands with a diameter of 28mm, e.g. PAST-225/SW or PAST-320/SW
- Black lacquered steel version
- M8 x 15mm threaded bolt with wing nut
- Max. load: 7.5kg



### MS-92/SW

Order No. 23.6160

**Microphone floor stand**, high-quality version. With movable boom of adjustable length and shock-absorbing folding feet. Thread: 9mm (3/8").

- Mat black lacquered
- Adjustable boom length: 55-94cm
- Adjustable height: 103-232cm
- Storage dimensions: 10x105cm
- Weight: 2.6kg



## MD-3300P

Order No. 22.1200



### Stereo headphones with integrated MP3 player

- Micro SD card slot for a card up to 16GB, available at option
- Supports FAT16 and FAT32 data formats
- MP3 audio 32-320kbps, 48/44.1kHz
- Supports ID3 tags
- FM radio reception with scan and station memory
- High-resolution matrix display
- Rechargeable lithium-ion battery with 3.7V/1A, charging via USB interface
- 3.5mm jack for headphone operation with an external signal source, supplied with audio cable with 3.5mm plugs
- USB 2.0 interface for data transmission
- Weight: 195g



## MD-6800

Order No. 22.1180

### Professional DJ and HiFi stereo headphones

- Excellent sound quality
- Half-open system
- Very comfortable to wear due to velvet ear cushions and padded headrest
- 3m cable with single-sided cable inlet
- 3.5mm gold-plated plug with 6.3mm screw-on adapter



3m

Model	MD-6800
Driver	neodymium
System	ø 53mm, dynamic
Frequency range	15-28,000Hz
Impedance	60Ω
Max. input power	600mW
Sensitivity	93dB/1mW
Cable	3m, single-sided cable inlet
Plug	3.5mm plug, gold-plated
Adapter	6.3mm plug, gold-plated
Weight w/o cable	345g





### MD-480

Order No. 22.1190

**Stereo headphones**, for general applications.

- Very good sound characteristics, very comfortable to wear
- Closed system
- Padded ear cushions and headband
- 1.2m cable with single-sided cable inlet
- 3.5mm plug with 6.3mm adapter



### MD-20

Order No. 22.1210

**Stereo headphones**, basic version.

- Ideally suited for guided tours, coaches, hospitals or hotels
- Cable length: 1m with 3.5mm stereo plug
- Individually packed in a plastic bag



Model	MD-480	MD-20
Driver	neodymium	ferrite
System	ø 38mm, dynamic	ø 27mm, dynamic
Frequency range	20-20,000Hz	100-18,000Hz
Impedance	32Ω	32Ω
Max. input power	200mW	20mW
Sensitivity	95dB/1mW	102dB/1mW
Cable	1-2m, single-sided cable inlet	1m
Plug	3.5mm plug	3.5mm plug
Adapter	6.3mm plug	
Weight w/o cable	150g	25g



## MetrixLine

With the classic show lasers of the MetrixLine, it is possible to display clear geometrical patterns and figures without any difficulties due to the high-speed motors. Furthermore, with yellow, pink or cyan, selected models of this line provide fresh new colours. The units are conveniently controlled via DMX, music-controlled via an integrated adjustable microphone or via preset programmes. Thus, the units of the Metrix-Line are ideally suited for clubs or discotheques and provide most impressive lighting effects.



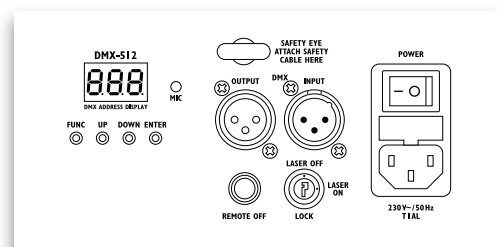
### LSX-402SB

Order No. 38.5780



**Show laser effect unit**, with a blue laser (400mW) and a control facility via DMX or sound.

High-speed scanner motors (speed of scanner: 15,000 points/sec.) allow for a clear display of graphical patterns and figures. With DMX512 interface (17 DMX channels) and operation in stand-alone mode, music-controlled via the integrated adjustable microphone or preprogrammed. 80 basic patterns can immediately be activated via DMX. The master/slave function allows for a simultaneous operation of several units. The address can be adjusted via menu buttons, indication via LED display. Supplied with infrared remote control. Including key-operated switch for a safe operation and aluminium housing with movable mounting bracket and eyelet bolt for fastening a safety rope. The unit is a class 3b laser.



Model	LSX-402SB
Laser diodes	B
Colours	B
Power rating (mW)	400
Wavelength (nm)	450
Laser class	3b
Motor	scanner
kpps	15
Angle	±20°
LED floodlight	-
Full graphics	-
Geometrical patterns	80
<b>Effects</b>	-
Graphics	X
Animated graphics	-
DMX	17
ILDA	-
Autom. show programme/Stand-alone	X
Music show programmes	X (adjustable)
Master/slave	X
Zoom	X
X/Y reflection	X
Strobe	X
Effect disks	-
<b>Rear panel</b>	
Display	LED segment
DMX in	X
DMX out	X
Lock	X
Remote/emergency off	0
ILDA in	0
ILDA out	0
Stand-alone control	0
DIP switches for address	0
Scanner adjustment	-
Suspension device	X
Supporting feet	-
Accessories	-
Dimensions	190x120x195mm
Weight	1.6kg
Power supply	230V~/50Hz/25VA
Housing	metal

The accessible laser radiation is hazardous to the human eye, often also to the skin! It is dangerous to look directly into the beam of class 3b lasers. It may be possible to view a beam safely via a diffusing reflector.

When using a class 3b laser, the operator has to appoint a laser safety officer in writing (BGV B2 = German Accident Prevention & Insurance Association regulation B2)! Laser safety officers must have the requisite qualifications! An approval is required for class 3b lasers!



### TWIST-5LED

Order No. 38.5980



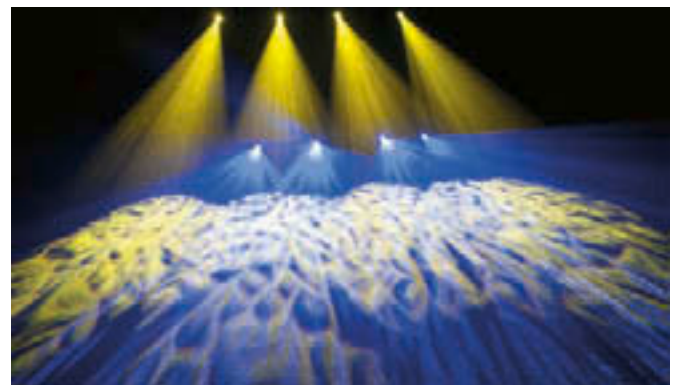
#### Compact LED moving head

- 50W high-power LED
- Controllable via 13 or 8 DMX channels, selectable
- Music-controlled via integrated microphone
- Master/slave mode with automatic run of programmes
- Horizontal resolution and vertical resolution: 65,535 steps each (16 bits)
- Rotating angle: 540° horizontal, 270° vertical
- Angle of rotation limiting can be selected for PAN (540°, 360°, 180°) and TILT (270°, 180°, 90°)
- Colour wheel with 8 dichroic colours plus white, rotating colour wheel (rainbow effect)
- Gobo wheel with 7 gobos plus spot, variable adjustment of rotational speed, shaking effects with variable speed
- Strobe effects with variable speed (1-20 flashes/sec.)
- Electronic dimmer feature (0-100%)
- Prism effect, electronic adjustment of prism rotation speed via DMX
- 8 automatically controlled and sound-controlled programmes each can be activated via DMX
- Blackout while moving function can be adjusted via DMX
- Manual focus adjustment
- Beam angle: 17°
- Control panel with LCD for addressing and preadjustments
- Long life with low power consumption
- Power supply: 110-240V~/50-60Hz/90VA
- Dimensions: 23x28x21cm
- Weight: 5.6kg



With English instruction manual.

Lighting effects with several units.



**LITEBOX-10**

Order No. 38.5970

**Rechargeable battery-operated LED spotlight**

The LITEBOX-10 provides completely new possibilities for every user requiring unrestricted mobility. The LED spotlight provides maximum freedom of movement when operated via the integrated rechargeable lithium-ion battery. In wireless operation, the LITEBOX-10 with its colour effects in 3 basic colours (red, green and blue) plus amber provides an impressive performance of up to 16 hours in the automatic mode. Alternatively, a 230V operation is also possible. The LITEBOX-10 can conveniently be controlled via 8 DMX channels or the integrated microphone for music-controlled operation. The movable mounting brackets allow for a very easy setup and alignment of the LITEBOX.

- Operation via built-in rechargeable lithium-ion battery with charging feature of the rechargeable battery (operating time: up to 16 hours in the automatic mode) or via mains connection
- 198 super bright LEDs, 10mm each (beam angle: 20°), for highest luminous efficiency (red: 48, green: 48, blue: 48, amber: 54)
- DMX control function for 8 channels
- Music-controlled via integrated microphone
- Master/slave mode with automatic run of programmes
- Colour mixer/dimmer and stroboscope feature
- Control panel with LED display for addressing and preadjustments
- Processor-controlled colour change
- Long life with low power consumption and low heat generation
- Slimline black lacquered metal housing
- Also suitable as a standing spotlight due to 2 movable mounting brackets
- Power supply via built-in rechargeable lithium-ion battery or 230V~/50Hz/25VA
- Dimensions: 250x200x110mm
- Weight: 3.2kg

**STROBE-15LED**

Order No. 38.5990

**LED DMX stroboscope**

- 3 high-power LEDs (5W each) for highest luminous efficiency
- 2 DMX control functions: (channel 1: brightness, channel 2: flash frequency)
- Brightness can be adjusted in 4 steps (25%, 50%, 75%, 100%)
- Adjustable flash frequency (1-12 flashes/sec.)
- Music-controlled via integrated microphone, adjustable sensitivity
- Control panel with LED display for addressing and preadjustments
- Long life with low power consumption
- Compact, black lacquered metal housing with eyelet bolt for fastening a safety rope
- Also suitable as a standing stroboscope due to 2 movable mounting brackets
- Power supply: 230V~/50Hz/20VA
- Dimensions: 26x9x8.5cm
- Weight: 1.2kg





### SCAN-22LED

Order No. 38.6010



#### LED DMX scanner

- 1 super bright high-power LED, 10W, for highest luminous efficiency
- 5 DMX control functions: (channel 1: pan, channel 2: tilt, channel 3: strobe, channel 4: gobo, channel 5: dimmer)
- Music-controlled via integrated microphone
- Master/slave mode with automatic run of programmes
- Controllable via optional remote control LC-3 or wireless controller LC-9RTX
- Horizontal resolution: 194 steps, vertical resolution: 91 steps
- Stepper motor controlled mirror, pan: 180°, tilt: 70°
- 8-fold gobo, colours allocated to the patterns plus spot
- Manual focus adjustment
- Long life with low power consumption
- Power supply: 230V~/50Hz/30VA
- Dimensions: 16x19x33cm
- Weight: 3kg



Lighting effects with several units.

### TAR-140DIN

Order No. 11.1930

**Safety rope**, for light effect units in suspended mounting.

- Length: 140cm, diameter: 4mm
- Reinforced lugs at both ends
- Quick-acting closure for ropes (acc. to DIN 56926)
- For units with a weight of up to 20kg



NOTE: Only for installation by experts, as otherwise persons and units will be put at risk.

### TA-110

Order No. 11.1950

**Mounting clamp**, with mounting screw M7 x 30mm.

- For mounting light effect units and spotlights to light supporting systems, e.g. PAST-320/SW
- Robust diecast aluminium version with movable joints
- For tube diameter: 35mm
- Max. load capacity: 50kg



**ATTENTION: Safety ropes must be used!**

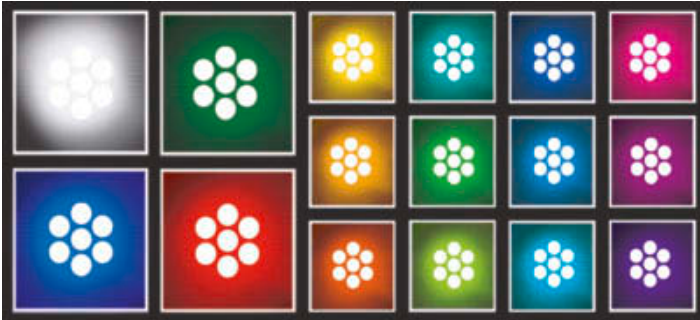
**PARL-73RGB**

Order No. 38.6030

**LED spotlight**, in a compact plastic housing.

3 primary colours (red, green and blue), with colour mixer/dimmer and stroboscope feature via DMX interface.

- 7 extra bright RGB LEDs, 3W each (beam angle: 30°), for highest luminous efficiency
- 6 DMX control functions: (channel 1: dimmer, channel 2: red, channel 3: green, channel 4: blue, channel 5: speed, channel 6: automatic programmes)
- Music-controlled via integrated microphone
- Master/slave mode with automatic run of programmes, 15 show programmes
- 10 colours can be adjusted manually
- Control panel with LED display for addressing and preadjustments
- Processor-controlled colour change
- Long life with low power consumption and low heat generation
- Also suitable as a standing spotlight due to 2 movable mounting brackets
- Power supply: 230V~/50Hz/25VA
- Dimensions: ø 155mm x 180mm
- Weight: 2kg

**PARL-17DMX**

Order No. 38.6040

**LED spotlight**, 3 primary colours (red, green and blue), with colour mixer and dimmer feature via DMX interface.

- 7 super bright RGB LEDs, 3W each (beam angle: 30°), for highest luminous efficiency
- 6 DMX control functions: (channel 1: dimmer, channel 2: red, channel 3: green, channel 4: blue, channel 5: speed, channel 6: automatic programmes)
- Music-controlled via integrated microphone
- Master/slave mode with automatic run of programmes, 15 show programmes
- 10 colours can be adjusted manually
- Control panel with LED display for addressing and preadjustments
- Processor-controlled colour change
- Long life with low power consumption and low heat generation
- Compact black lacquered metal housing
- Also suitable as a standing spotlight due to 2 movable mounting brackets
- Power supply: 230V~/50Hz/25VA
- Dimensions: 240x190x80mm
- Weight: 1.9kg



**PARL-7DMX**

Order No. 38.6020



**LED spotlight**, 3 primary colours (red, green and blue), with colour mixer and dimmer feature via DMX interface.

- 7 super bright RGB LEDs, 3W each (beam angle: 35°), for highest luminous efficiency
- 4 DMX control functions: (channel 1: red, channel 2: green, channel 3: blue, channel 4: master/strobe)
- Music-controlled via integrated microphone
- Master/slave mode with automatic run of programmes, 13 show programmes
- Controllable via optional mini remote control LC-3
- 16 colours can be adjusted manually
- Control panel with LED display for addressing and preadjustments
- Processor-controlled colour change
- Almost silent operation due to fanless cooling concept
- Long life with low power consumption and low heat generation
- Slimline black lacquered metal housing with movable mounting bracket
- Power supply: 230V~/50Hz/25VA
- Dimensions: 270x215x85mm
- Weight: 2.6kg

**PARL-14DMX**

Order No. 38.6000



**LED spotlight**, 3 primary colours (red, green and blue) plus white, with colour mixer/dimmer and stroboscope feature via DMX interface.

- 167 super bright LEDs, 10mm each (beam angle: 30°), for highest luminous efficiency (red: 43, green: 44, blue: 40, white: 40)
- 5 DMX control functions: (channel 1: red, channel 2: green, channel 3: blue, channel 4: white, channel 5: dimmer/strobe)
- Music-controlled via integrated microphone, adjustable sensitivity
- Master/slave mode with automatic run of programmes
- Control panel with LED display for addressing and preadjustments
- Processor-controlled colour change
- Long life with low power consumption and low heat generation
- Slimline black lacquered metal housing with eyelet bolt for fastening a safety rope
- Also suitable as a standing spotlight due to 2 movable mounting brackets
- Power supply: 230V~/50Hz/20VA
- Dimensions: 270x210x100mm
- Weight: 2.2kg





## FM-910

Order No. 38.6140

### Fog machine

- Metal housing with movable mounting bracket
- Fixed tank, level indication
- Activation via supplied cable-connected remote control
- Matching fog liquids: NF-502L and NF-502SL
- Fog scents are available as accessories



## FM-410

Order No. 38.6130

### Compact fog machine

- Metal housing with movable mounting bracket
- Fixed tank, level indication
- Activation via supplied cable-connected remote control
- Matching fog liquids: NF-502L and NF-502SL
- Fog scents are available as accessories



Model	FM-910	FM-410
Heating power	900W	400W
Heating-up time	5 minutes	5 minutes
Tank size	1 l	0.5 l
Fog output	approx. 141m <sup>3</sup> /min.	approx. 71m <sup>3</sup> /min.
Power supply	230V~/50Hz/900VA	230V~/50Hz/400VA
Dimensions	260x190x260mm	140x160x250mm
Weight	3.9kg	2kg





## DMX-4840

Order No. 38.5960



**Professional DMX controller**, with SD card slot, for controlling light effect units with DMX512 interface. Convenient operation with versatile programming facilities.

- 2 DMX outputs
- 484 DMX channels (channel 481 for DMX fog machine, channels 483-484 for DMX strobe)
- SD card slot for storing program data, supplied with 2GB SD card
- Unit library (units can be edited manually, 50 units max.)
- 10 integrated movements, PAN/TILT position, PAN/TILT range, adjustable fading time/waiting time or loop
- 60 programmable chases, each with 200 scenes max.
- 1,200 programmable scenes (60 banks x 20 scenes)
- 400 programmable colours and gobos (20 presets, each with 10 colours and 10 gobos)
- 20 DMX device levels can be controlled, each with up to 24 channels
- 20 device groups can be operated simultaneously
- 24 DMX channel faders
- 20 cues (combination of several chases, each chase can be controlled individually)



- 20 adjustable overrides (assignment of one or several units to perform a special feature, e.g. follow spot during operation)
- 20 x centre for setting central moving positions of each individual unit
- Blackout function
- Password protection
- Supports standard MIDI
- Music-controlled operation via audio input with adjustable sensitivity and built-in microphone
- USB port for supplied gooseneck light
- 2 x 10m remote control cable for LC-3 functions at DMX units like SCAN-20LED, TWIST-52LED, PARL-64PDX
- Backlit LCD (80 characters)
- Connections: 2 x 3-pole XLR (DMX out 1+2), 1 x 6.3-mm jack (strobe), 2 x 5-pole DIN (MIDI in, MIDI thru), 1 x RCA (audio in), 2 x 5-pole XLR
- Power supply: 100-240V~/50-60Hz/10VA
- Dimensions: 482x264x100mm, 6RS
- Weight: 5.3kg

## LC-8DMX

Order No. 38.5800

**Compact DMX controller**, for controlling light effect units with DMX512 interface.

- User-friendly and simple operation
- 8 DMX channels
- 8 channel faders
- 1 master fader
- Start address adjustable via BCD coding switch (decimal)
- Ideally suited e.g. for controlling 2 LED spotlight sets PARL-4..SET

- Can be used as a DMX tester
- Metal housing
- Connections: 1 x 3-pole XLR, 1 x low-voltage jack
- Power supply via supplied plug-in PSU or 9V battery (not supplied)
- Dimensions: 180x68x175mm
- Weight: 975g



## SW-4DMX

Order No. 38.5790

**4-channel DMX switch**

- 4 floating control outputs, suitable for resistive and inductive loads
- Switching current: 4A per output
- LED status indication for each output channel
- Start address can be set via DIP switches
- 4 DMX channels
- Additional analogue control inputs/outputs via 8-pole DIN jack for 0-10V control
- Mains connection via PowerCon® jack

- 4 earthed sockets for connecting lights
- Power supply: 230V~/50Hz/3,680VA max.
- Dimensions: 322x175x110mm
- Weight: 2.8kg

The unit is equipped with a PowerCon® jack. Supplied without mains cable (AAC-115P is available at option).





## STICK-KE1/SW

Order No. 38.6060

### DMX multi-panel

- Touch-panel for controlling LED strips and complex DMX units, e.g. moving heads, scanners, light effect units and lasers
- 12 touch-sensitive sensors and 1 fader sensor for the operation in stand-alone mode
- 25 sides can be switched, 8 scenes (static) or sequences (sequence of scenes) for each side, 200 scenes or sequences in total
- 3 operating modes can be switched for the fader: dimmer, speed and colour
- 2 DMX universes with 512 channels each
- Adjustments, scenes and sequences can be stored on a mini SD card
- Programming via mini USB interface, supplied with software
- Connection facilities for Ethernet (RJ45) and RS-232 for external control
- When connecting an optional WLAN router, an operation via smartphone/iPhone or tablet PC is possible
- 8 switch terminals (binary) for activating up to 255 scenes or sequences externally
- Adjustable via supplied infrared remote control
- Built-in real-time clock and real-time calendar
- Music-controlled via integrated microphone
- Supplied with CD containing extensive software for controlling and programming
- Power supply: 9V $\approx$ /600mA
- Dimensions: 128x169x26mm
- Weight: 210g



## STICK-GU2/SW

Order No. 38.6050

### DMX multi-panel

- Touch-panel for controlling LED strips and complex DMX units
- 3 touch-sensitive sensors for the operation in stand-alone mode
- 24 scenes (static) or sequences (sequence of scenes) can be stored
- Sequence with up to 326 steps can be programmed (with 8 DMX channels)
- 3 operating modes can be selected for the fader: dimmer, speed and colour
- 1 DMX universe with up to 128 channels
- Adjustments, scenes and sequences can be stored internally
- Programming via mini USB interface, supplied with software
- Power supply: 9V $\approx$ /600mA
- Dimensions: 86x86x24mm
- Weight: 113g





### LC-46COL

Order No. 38.6120

**LED multi-panel**, for controlling up to 6 multicoloured LED strips.

- Dimmer, colour change, fading can be adjusted
- 6 scenes can be stored
- 3 (RGB) or 4 (RGBW) DMX channels can be selected for each strip
- 1 push-button for mode, 6 push-buttons for the units, 1 rotary knob
- Rotary knob is illuminated in the colour currently selected, push-buttons are illuminated in the stored colour
- Power supply: 12V $\approx$ /500mA
- Dimensions: 87x87x33mm
- Weight: 160g
- To be operated with: 6 x CPL-3DMX, 6 x CU-4DMX, 6 x CU-4SMART

### LC-4COL

Order No. 38.6100

**LED multi-panel**, for controlling one multicoloured LED strip.

- Dimmer, colour change, fading can be selected
- 1 scene can be stored
- 3 (RGB) or 4 (RGBW) DMX channels can be selected for each strip
- 4 push-buttons and 1 rotary knob
- Rotary knob is illuminated in the colour currently selected
- Power supply: 12V $\approx$ /500mA
- Dimensions: 97x97x50mm
- Weight: 127g
- To be operated with: 1 x CPL-3DMX, 1 x CU-4DMX, 1 x CU-4SMART

### LC-4DIM

Order No. 38.6110

**LED light panel**, for controlling up to 4 unicoloured LED strips.

- Dimmer
- 1 scene can be stored
- 4 DMX channels
- 4 push-buttons and 1 rotary knob
- Rotary knob is illuminated with the brightness level currently selected
- Power supply: 12V $\approx$ /500mA
- Dimensions: 97x97x50mm
- Weight: 127g
- To be operated with: 1 x CU-4DMX, 1 x CU-4SMART

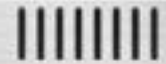
### CU-4SMART

Order No. 38.6090

**RGBW LED controller**, for 12V or 24V LEDs.

- For the individual control of up to four unicoloured LED strips or one multicoloured LED strip
- 3 or 4 DMX channels, selectable
- Can be controlled externally via:
  - DMX control mode
  - Analogue control: 0-10V
  - DALI control (Digital Adressable Lightning Interface)
- Manual control via 4 push-buttons
- 4-digit LED display
- Power supply: 12V $\approx$ /10A or 24V $\approx$ /10A
- Max. load: 5A per channel
- Dimensions: 210x52x33mm
- Weight: 250g





## CU-1RFR

Order No. 38.6080

**LED controller**, for dimming LED strips.

- Wireless single-channel dimmer unit for 12V or 24V LEDs, matching the wireless remote control CU-1RF
- For controlling unicoloured LED lights and LED strips
- 1 control channel
- Carrier frequency: 433MHz
- Status LED
- Plug-in terminals for connecting the LEDs and the power supply
- Power supply: 12V~/10A or 24V~/10A
- Max. load: 5A per terminal/output
- Dimensions: 42x20x176mm
- Weight: 85g



## CU-1RF

Order No. 38.6070

**Wireless remote control**, for dimming up to five LED strips.

- For controlling up to five wireless single-channel dimmer units CU-1RFR
- Transmission frequency: 433MHz
- Channel selection button for selecting the dimmer units
- 2 push-buttons for dimming (+/-)
- On/off button
- Power supply via button cell CR-2032
- Dimensions: 44x25x133mm
- Weight: 52g

**Licence-free in the EU.**



## CU-1RC

Order No. 38.5820

**3-channel wireless LED controller**, for 12V or 24V LED products, with wireless remote control.

- For controlling red, green and blue LEDs
- 3 separate control channels, thus mixed colours possible (with RGB LEDs only)
- Ergonomic, user-friendly wireless remote control:
  - Colour selection via touch-sensitive colour wheel
  - Colour intensity can be adjusted via 2 push-buttons
  - Brightness can be adjusted via 2 push-buttons
  - Automatic switch-off
  - Power supply via 2 x battery AAA size (not supplied)
- Automatic colour change with smooth or hard transitions, switchable, with variable speed
- Transmission frequency: 433.92MHz
- 3 status LEDs (R, G, B)
- Screw terminals for connecting the LED strips
- Connection of the power supply via bare cable ends
- Power supply: 12V~/9A or 24V~/9A
- Max. load: 3A per channel
- Dimensions: 100x28x70mm
- Weight: 110g

**Licence-free in the EU.**





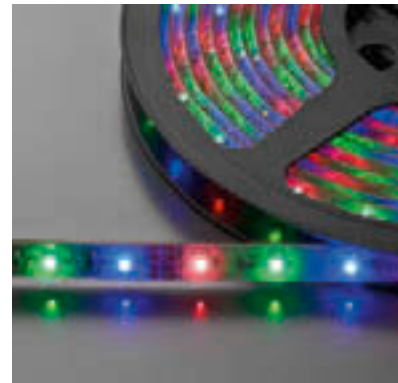
### LEDS-5CP/RGB

Order No. 38.5810



**RGB LED set with infrared remote control, controller and PSU**  
With this LED set, segments of 3 RGB LEDs each can be controlled individually.

- LED strips, self-adhesive, length: 5m, 270 RGB SMD LEDs (type 5050), humidity-proof due to PU sleeving (IP65)
- Infrared remote control with numerous control functions
- Direct colour selection (7 colours)
- Preprogrammed lighting effects (running light, fading, flash, etc.)
- The power supply is connected directly to the controller box
- Common positive pole
- Controllable via 3 x CPL-3DMX, 3 x CU-4DMX, 3 x CU-3IR or 3 x CU-3LED
- Remote infrared sensor with a cable, length: 50cm, thus a concealed installation of the controller box is possible
- Supplied with 5 retaining clips and 4 plug-in connectors



### LEDS-5MP/COL

Order No. 38.5830



**Flexible LED strip, 12V=, humidity-proof version**

Easy installation due to perfect flexibility and self-adhesive rear side which adheres to almost any kind of surface, suitable for indoor and outdoor applications. Ideally suited for decorative lighting. Due to small dimensions, an application is also possible at locations where standard lamps cannot be used. Features bare cable ends for the direct connection to a PSU or alternatively to DMX interface CPL-3DMX, CU-3LED or CU-3IR, available at option.

- Fitted with 270 SMD LEDs (type 3528, 90 x red, 90 x green, 90 x blue)
- Beam angle of each LED: 120°
- Can be cut into segments of variable size (groups of 9 LEDs)
- Humidity-proof PU sleeving for outdoor applications, IP65
- Self-adhesive rear side
- Supplied with 10 retaining clips
- Supplied on a plastic reel, 5m

### LEDS-5MP/CTW

Order No. 38.5840



**Flexible LED strip, 24V=, humidity-proof version**

Due to a separate control of the white and warm white LEDs, the colour temperature from white to warm white can be varied individually. Easy installation due to perfect flexibility and self-adhesive rear side which adheres to almost any kind of surface, suitable for indoor and outdoor applications. Ideally suited for decorative lighting. Due to small dimensions, an application is also possible at locations where standard lamps cannot be used. Features bare cable ends for the direct connection to a PSU or alternatively to DMX interface CPL-3DMX, CU-3LED or CU-3IR, available at option.

- Fitted with 600 SMD LEDs (type 3528, 300 x white, 300 x warm white)
- Beam angle of each LED: 120°
- Can be cut into segments of variable size (groups of 12 LEDs)
- Humidity-proof PU sleeving for outdoor applications, IP65
- Self-adhesive rear side
- Supplied with 10 retaining clips
- Supplied on a plastic reel, 5m



Model	LEDS-5MP/COL	LEDS-5CP/RGB	LEDS-5MP/CTW
Colour	red/green/blue	red/green/blue	white/ warm white
LEDs	270	270 x RGB, SMD 5050	600
	SMD 3528		SMD 3528
Beam angle	120°	120°	120°
Length	5m	5m (LED strips)	5m
Width	10mm	12mm (LED strips)	10mm
Height	3mm	4mm (LED strips)	3mm
Power supply	12V=/1.4A	12V=/3A	24V=/1.8A
Other features		individual control of segments of 3 LEDs	

**LEDC-4L**

Order No. 38.5950

**Quick connector for SMD LED strips**

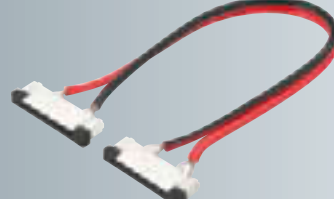
- Allows the direct connection of flexible LED strips to a PSU: for this purpose, the end of the LED strip is inserted into the slot of the connector
- Suitable width: 10mm
- Cable length: 10cm, 2 poles
- Type of connection: strip/DC inline jack,  $\varnothing$  5.5mm/2.1mm
- Current rating: 5A

**LEDC-4S**

Order No. 38.5940

**Quick connector for SMD LED strips**

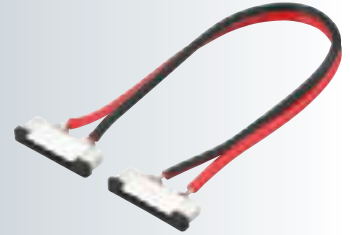
- Allows the direct connection of flexible LED strips to a PSU: for this purpose, the end of the LED strip is inserted into the slot of the connector
- Suitable width: 8mm
- Cable length: 10cm, 2 poles
- Type of connection: strip/DC inline jack,  $\varnothing$  5.5mm/2.1mm
- Current rating: 5A

**LEDC-3L**

Order No. 38.5920

**Quick connector for SMD LED strips**

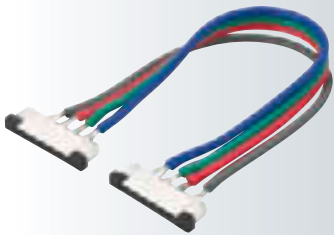
- Allows the direct connection of flexible LED strips: for this purpose, the end of the LED strip is inserted into the slot of the connector
- Suitable width: 10mm
- Cable length: 10cm, 2 poles
- Type of connection: strip/strip
- Current rating: 5A

**LEDC-3S**

Order No. 38.5910

**Quick connector for SMD LED strips**

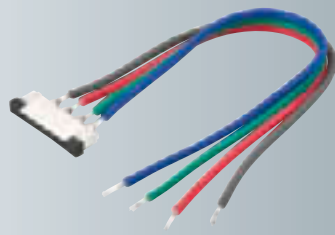
- Allows the direct connection of flexible LED strips: for this purpose, the end of the LED strip is inserted into the slot of the connector
- Suitable width: 8mm
- Cable length: 10cm, 2 poles
- Type of connection: strip/strip
- Current rating: 5A

**LEDC-3RGB**

Order No. 38.5930

**Quick connector for SMD RGB LED strips**

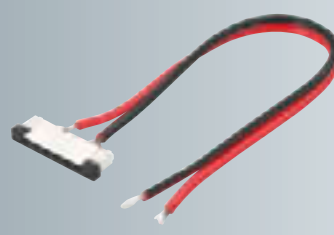
- Allows the direct connection of flexible RGB LED strips: for this purpose, the end of the LED strip is inserted into the slot of the connector
- Suitable width: 10mm
- Cable length: 10cm, 4 poles
- Type of connection: strip/strip
- Current rating: 5A

**LEDC-2RGB**

Order No. 38.5900

**Quick connector for SMD RGB LED strips**

- Allows the direct connection of flexible RGB LED strips: for this purpose, the end of the LED strip is inserted into the slot of the connector
- Suitable width: 10mm
- Type of connection: strip/bare cable ends, 4 poles
- Current rating: 5A

**LEDC-2L**

Order No. 38.5890

**Quick connector for SMD LED strips**

- Allows the direct connection of flexible LED strips: for this purpose, the end of the LED strip is inserted into the slot of the connector
- Suitable width: 10mm
- Type of connection: strip/bare cable ends, 2 poles
- Current rating: 5A

**LEDC-2S**

Order No. 38.5880

**Quick connector for SMD LED strips**

- Allows the direct connection of flexible LED strips: for this purpose, the end of the LED strip is inserted into the slot of the connector
- Suitable width: 8mm
- Type of connection: strip/bare cable ends, 2 poles
- Current rating: 5A

**LEDC-1RGB**

Order No. 38.5870

**Quick connector for SMD RGB LED strips**

- Allows the direct connection of flexible RGB LED strips: for this purpose, the end of the LED strip is inserted into the slot of the connector
- Suitable width: 10mm
- Type of connection: strip/strip, 4 poles
- Current rating: 5A

**LEDC-1L**

Order No. 38.5860

**Quick connector for SMD LED strips**

- Allows the direct connection of flexible LED strips: for this purpose, the end of the LED strip is inserted into the slot of the connector
- Suitable width: 10mm
- Type of connection: strip/strip, 2 poles
- Current rating: 5A

**LEDC-1S**

Order No. 38.5850

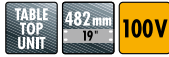
**Quick connector for SMD LED strips**

- Allows the direct connection of flexible LED strips: for this purpose, the end of the LED strip is inserted into the slot of the connector
- Suitable width: 8mm
- Type of connection: strip/strip, 2 poles
- Current rating: 5A



### PA-312Z

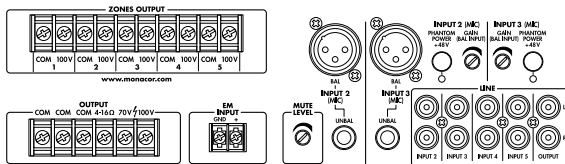
Order No. 17.3650



#### 5-zone mono PA mixing amplifier

- 1x 120W<sub>RMS</sub>
- 5 zones, can be switched individually
- 1 unbalanced microphone input
- 2 balanced microphone inputs, alternatively can be used as line inputs
- 2 aux inputs
- 1 emergency input with adjustable automatic talkover

- Speaker outputs via screw terminals
- 1 line output
- Input and output level controls
- 2-way tone control for the output
- 48V phantom power supply for channels 2 and 3, can be switched on additionally
- 482mm (19") rack installation with supplied mounting brackets

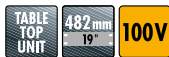


Model	PA-312Z
Output power	120W <sub>RMS</sub> , 160W <sub>MAX</sub>
Mic input	5mV/600Ω (XLR, bal.)
	2.5mV/2kΩ (6.3mm jack)
Line input	775mV/10kΩ
Aux input	350mV/10kΩ
Telephone input	775mV/10kΩ (EMC)
Speaker output	4-16Ω, 70/100V
Frequency range	50-16,000Hz
Equalizer bass	±10dB/100Hz
Equalizer, treble	±10dB/10kHz
S/N ratio	66dB (mic)
	80dB (aux)
THD	< 0.5%
Power supply	230V/50Hz/420VA
Dimensions	430x88x335mm, 2RS
Weight	9.7kg
<b>Inputs</b>	1 x 6.3mm jack (mic 1)
	2 x 6.3mm jack, 2 x XLR (mic 2-3)
	2 x RCA L/R (line 2-3)
	2 x RCA L/R (aux 1-2)
	screw terminals (emergency)
<b>Outputs</b>	2 x RCA L/R (mix out)



### PA-312

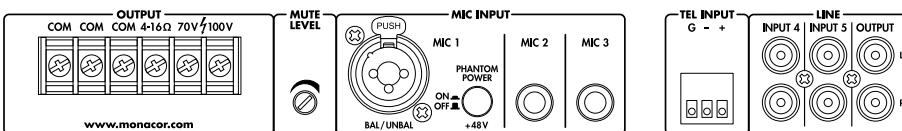
Order No. 17.3640



#### Mono PA mixing amplifier

- 1x 120W<sub>RMS</sub>
- Silent operation due to fanless cooling concept
- 3 microphone inputs, one of which is a balanced input
- Mic 1 with priority circuit and adjustable automatic talkover
- 2 aux inputs

- 1 telephone input for telephone systems with audio output
- Speaker outputs via screw terminals
- 1 line output
- Input and output level controls
- 2-way tone control for the output
- 48V phantom power supply for channel 1, can be switched on additionally
- 482mm (19") rack installation with supplied mounting brackets



Model	PA-312
Output power	120W <sub>RMS</sub> , 160W <sub>MAX</sub>
Mic input	5mV/600Ω
Line input	-
Aux input	350mV/10kΩ
Telephone input	1V/10kΩ
Speaker output	4-16Ω, 70/100V
Frequency range	50-16,000Hz
Equalizer bass	±10dB/100Hz
Equalizer, treble	±10dB/10kHz
S/N ratio	66dB (mic)
	80dB (aux)
THD	< 0.5%
Power supply	230V/50Hz/450VA
Dimensions	430x88x335mm, 2RS
Weight	7.8kg
<b>Inputs</b>	1 x 6.3mm/XLR (combo)
	1 x 6.3mm jack (mic 1)
	2 x 6.3mm jack (mic 2-3)
	2 x RCA L/R (aux 1-2)
	screw terminals (telephone)
<b>Outputs</b>	2 x RCA L/R (line out)



## DMP-250

Order No. 17.3610



**MP3 player insertion module**, with USB interface and SD/MMC card slot.

- USB storage media can be connected directly
- For SD/MMC cards (FAT16/FAT32), available at option
- 12 one-touch buttons for announcements or jingles
- Numerical keys for direct track selection
- Folder navigation
- Autoplay function (selectable via jumper)
- Fast forward and reverse
- Repeat function (repeat 1, repeat all, album)
- Volume control
- Green backlit LCD
- Supplied with infrared remote control



## DMP-200

Order No. 17.3600



**Compact MP3 player insertion module**, with USB interface and SD/MMC card slot.

- USB storage media can be connected directly
- For SD/MMC cards (FAT16/FAT32), available at option
- Folder navigation
- Autoplay function (selectable via jumper)
- Fast forward and reverse
- Repeat function (repeat 1, repeat all, album)
- Volume control
- Green backlit LCD
- Supplied with infrared remote control

Model	DMP-250	DMP-200
<b>General information</b>		
Frequency range	20-20,000Hz	20-20,000Hz
THD	< 0.2%	< 0.2%
Channel separation	> 60dB	> 60dB
S/N ratio	> 75dB	> 75dB
Wow and flutter	-	-
Output, analogue	500mV	500mV
Power supply	12V=/100mA	12V=/100mA
Admiss. ambient temp.	0-40 °C	0-40 °C
Dimensions, player mech.	175x52x82mm	100x52x85mm
Weight	420g	190g



## M-34CDP

Order No. 17.3590



**CD player module with pitching function**, USB 2.0 interface and SD/MMC card slot.

- Adjustable reproduction speed (pitching)
- Slot-in mechanism
- USB storage media can be connected directly
- For SD/MMC cards up to 32GB (FAT16/FAT32), available at option
- Anti-shock system
- Supports ID3 tags
- Folder navigation
- Single play function
- Autoplay function (selectable via jumper)
- Random play, repeat function
- Track programming
- Supplied with infrared remote control
- Power supply: 12V=/800mA
- Dimensions: 174x52x160mm
- Mounting cutout: 155x50x150mm
- Audio CD/CD-R/CD-RW/MP3 CD



## PA-1140RCD

Order No. 17.3530



**RDS tuner/CD player insertion module with USB interface**, for the PA mixing amplifiers with insertion compartment at the front.

- USB flash drive can be connected directly

FM/AM tuner section:

- RDS function for FM
- 24 memory places (18 x FM, 6 x AM)
- Digital display
- Station scanning

CD player section:

- Anti-shock system
- Slot-in mechanism
- Random play, scan and repeat functions
- Display of track/time
- Shock-proof due to oil shock absorber
- Audio CD/CD-R/CD-RW/MP3 CD





**CDP-650**

Order No. 21.3040



**CD and MP3 player**, with USB interface on the front panel.

- Supports iPod and iPhone (with charging feature)
- Reproduction of CD-DA, CD-R/RW, MP3 CDs as well as MP3 files via USB port
- Record function for recording MP3 files onto a USB storage medium
- Fast forward and reverse
- Track programming
- Folder navigation
- Repeat function (repeat 1, repeat all, repeat album)
- Random play
- Adjustable headphone output



- Analogue output and optical digital output
  - Remote control connections for the system remote control in combination with AR-650
  - Supplied with infrared remote control
  - Power supply: 230V~/50Hz/25W
  - Dimensions: 435x85x285mm
  - Weight: 4kg
- Supplied without iPod and iPhone.**

**AR-650**

Order No. 21.3020



**Stereo amplifier**

- 2 x 120W<sub>RMS</sub> (4Ω), 2 x 90W<sub>RMS</sub> (8Ω)
- 7 audio inputs (including RCA)
- 2-way tone control
- Motor-controlled volume control
- A/B speaker selection
- Loudness function and mute function
- Adjustable microphone connection for karaoke applications
- Headphone connection
- Remote control connections for the system remote control in combination with CDP-650
- Switched Euro mains socket for further components



- Supplied with infrared remote control
- Power supply: 230V~/50Hz/300W
- Dimensions: 435x142x335mm
- Weight: 9.7kg

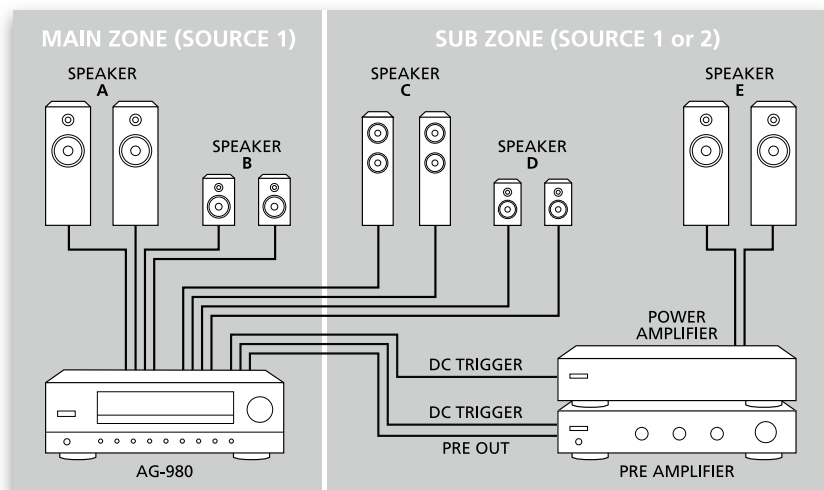
**AG-980**

Order No. 21.3030



**2-zone stereo receiver**, for connecting up to 2 pairs of stereo speaker systems for each zone (main/sub), e.g. for small PA installations in restaurants and shops.

- 2 x 65W<sub>RMS</sub> (4Ω, one pair of speakers connected)
- 5 audio inputs (including RCA), can be assigned to the zones as desired
- 2-way tone control
- 2-band RDS tuner (FM/AM)
- RDS services: PS, PTY, RT, CT
- 30 programmes can be stored
- Automatic station scanning
- Timer function and sleep function
- Antenna connection: 75Ω
- Headphone connection
- Sub-zone preamplifier output
- RS-232 interface for remote control
- Trigger outputs: 12V~/25mA max.
- Supplied with infrared remote control
- Power supply: 230V~/50Hz/330W
- Dimensions: 440x141x330mm
- Weight: 8.4kg





## TXA-910DVD

Order No. 17.3660



**Portable high-power amplifier system**, with integrated wireless receiver and DVD player with USB port and SD card slot.

- Operation via mains connection or built-in rechargeable lead gel battery 12V/7Ah (operating time: up to 8 hours), integrated automatic charging of rechargeable battery
- For mobile applications, e.g. at speeches, lectures, sales events
- High-quality DVD player with slot-in mechanism, USB port for external storage media, SD card slot, RCA video output, supplied with remote control, on-screen menu control (OSD), reproduction formats: MP3, MP4, JPG
- 2-way speaker system with professional PA speakers
- Very high efficiency
- 2 inputs (channels 1+2) via comb. jacks mic (XLR)/line (6.3mm), gain controls, 3-way equalizer, bass boost function
- Link connections (2 x 6.3mm jack) for the combination of several amplifier systems TXA-910DVD or TXA-900CD
- Due to the built-in extractable telescopic handle and 2 castors, the amplifier system can easily be pulled like a trolley
- Wooden cabinet of perfect workmanship with PU coating
- Lateral recessed carrying handles
- Stand sleeve
- Supplied with practical protective bag

**Licence-free in the EU.**

Matching microphone transmitters or pocket transmitters are available at option, e.g. TXS-821HT, TXS-820HSE, TXS-820LT or TXS-820SX.



Model	TXA-910DVD
Output power	75W <sub>MAX</sub> /50W <sub>RMS</sub>
Frequency range	60-19,000Hz
Carrier frequency	863.05MHz
Operating range	approx. 30m
Sensitivities	
Mic inputs	2.5mV
Line inputs	130mV
Link	740mV
Equalizer, bass	±12dB/40Hz
Equalizer, midrange	±6dB/1kHz
Equalizer, treble	±12dB/12kHz
Power supply	230V~/50Hz/40VA, rech. battery: 12V/7Ah
Admiss. ambient temp.	0-40 °C
Dimensions	310x560x285mm
Weight	13.9kg

## TXA-140USB

Order No. 17.3570



**Portable high-power amplifier system**, with integrated adjustable multifrequency receiver unit in UHF PLL technology and integrated USB/SD card player.

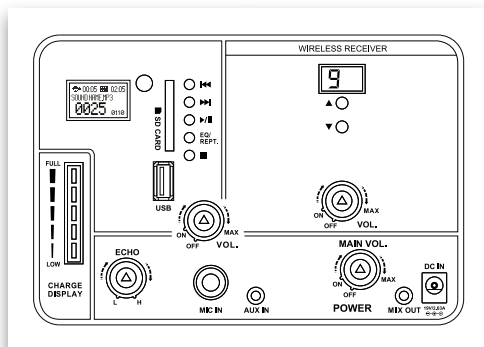
- For mobile applications, e.g. at sales events, lectures
- Robust plastic housing of compact size with carrying handle and carrying strap
- Operation via built-in rechargeable lead gel battery 12V/2.7Ah (operating time: up to 3 hours) or supplied switch-mode PSU
- Integrated automatic charging of rechargeable battery with charging status indicator
- High-power 50W digital amplifier
- Adjustable USB/SD card player with illuminated alphanumeric display, controllable via supplied infrared remote control
- 1 wireless microphone channel with 16 selectable UHF frequencies (863.05-864.925MHz) and volume control
- 1 microphone input via 6.3mm mono jack, 1 line input via 3.5mm mono jack, common volume control and adjustable echo effect
- 1 mix output via 3.5mm mono jack
- 2-way speaker system
- 9mm (3/8") stand thread, can be mounted onto a speaker stand with standard diameter with stand adapter EBH-48 (available at option)
- Supplied with practical protective shoulder bag which can stay on during operation

**Licence-free in the EU.**



Matching microphone transmitter TXA-140HT is available at option.

Model	TXA-140USB
Output power	75W <sub>MAX</sub> /50W <sub>RMS</sub>
Frequency range	60-22,000Hz
Carrier frequency	863.05-864.925MHz
Operating range	approx. 30m
Sensitivities	
Mic inputs	10mV
Line inputs	150mV
Mix output	1V
Equalizer	-
Power supply	rech. batt. 12V/2.7Ah, 19V=2.6A via suppl. PSU
Admiss. ambient temp.	0-40 °C
Dimensions	190x235x330mm
Weight	3.5kg



## TXA-140HT

Order No. 17.3580

**Hand-held microphone with integrated multifrequency transmitter**, with UHF PLL technology. Matching the portable amplifier system TXA-140USB.

- Dynamic microphone cartridge, cardioid characteristic
- 16 selectable UHF frequencies (863.05-864.925MHz)
- Additional audio line input via 3.5mm stereo jack
- Backlit LCD for indicating channel and battery status
- Transmitting power: < 10mW (EIRP)
- Power supply via 2 x 1.5V battery AA size (not supplied)

**Licence-free in the EU.**



Model	TXA-140HT
Carrier frequency	863.05-864.925MHz
Audio frequency range	50-15,000Hz
Frequency stability	±0.005%
Dimensions	39x193x28mm
Weight	260g



## TXA-110USB

Order No. 17.3560



**Portable amplifier system**, with integrated adjustable multifrequency receiver unit in UHF PLL technology and integrated USB MP3 player.

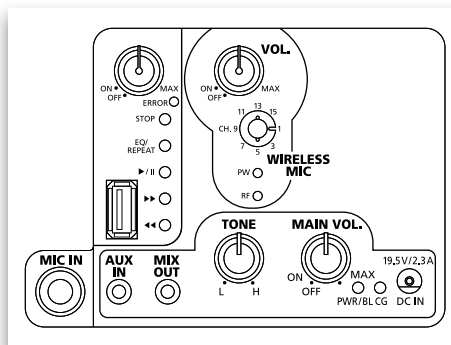
- For mobile applications, e.g. at sales events, lectures
- Robust plastic housing of compact size with carrying handle and carrying strap
- Operation via built-in rechargeable lead gel battery 12V/2.7Ah (operating time: up to 3 hours) or supplied switch-mode PSU
- Integrated automatic charging of rechargeable battery
- MP3 player with USB interface and volume control, USB storage media can be connected directly (e.g. USB flash drive)
- 1 wireless microphone channel with 16 selectable UHF frequencies (863.05-864.925MHz) and volume control
- 1 microphone input via 6.3mm mono jack, 1 line input via 3.5mm mono jack, common volume control and tone control
- 1 mix output via 3.5mm mono jack
- 9mm (3/8") stand thread, can be mounted onto a speaker stand with standard diameter with stand adapter EBH-48 (available at option)
- Supplied with practical protective shoulder bag which can stay on during operation

Licence-free in the EU.



Model	TXA-110USB
Output power	50W <sub>MAX</sub> /36W <sub>RMS</sub>
Frequency range	60-15,000Hz
Carrier frequency	863.05-864.925MHz
Operating range	approx. 30m
Sensitivities	
Mic inputs	10mV
Line inputs	100mV
Mix output	560mV
Equalizer	±8dB/10kHz
Power supply	rech. batt. 12V/2.7Ah, 19V=2.3A via suppl. PSU
Admiss. ambient temp.	0-40 °C
Dimensions	160x210x290mm
Weight	3.2kg

Matching microphone transmitters or pocket transmitters TXA-100HT or TXA-100HSE are available at option.



## TXA-1000WPB

Order No. 17.3630



**Protective bag, splashproof version**, suitable for portable amplifier systems TXA-1000, TXA-1000CD and TXA-1002CD.

- Robust synthetic fibre material, black
- Sound-transparent front of meshed fabric and with additional water protection cover
- The bag can stay on during operation!
- Opening for transport handle and trolley handle
- 2 lateral pockets, each with hook and loop fastener

Supplied without unit.

## TXA-800WPB

Order No. 17.3620



**Protective bag, splashproof version**, suitable for portable amplifier systems TXA-800, TXA-800CD and TXA-802CD.

- Robust synthetic fibre material, black
- Sound-transparent front of meshed fabric and with additional water protection cover
- The bag can stay on during operation!
- Opening for transport handle
- 2 lateral pockets, each with hook and loop fastener

Supplied without unit.



### EDL-603

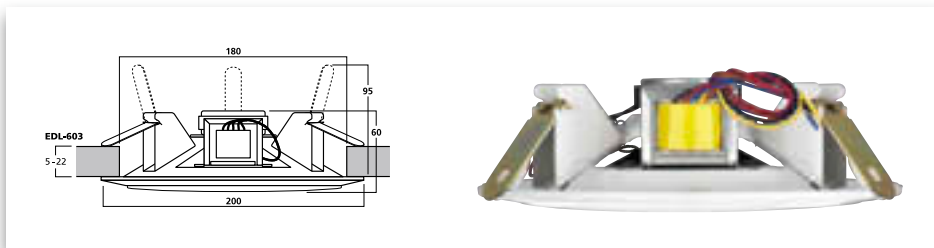
Order No. 16.3110

100V

#### PA ceiling speakers

- 100V line technique via audio transformer with power taps
- For a ceiling thickness from 5 to 22mm
- Full range speaker, type 180
- A more powerful reproduction of the range of fundamental notes
- Robust metal version (basket and protective grille)

► Metal



Model	EDL-603
Frequency range	100-20,000Hz
Power capability, 100V	3/1.5/1/0.75W <sub>RMS</sub>
Type of speaker	180
Mounting cutout	ø 180mm
Mounting depth	65mm
Admiss. ambient temp.	0-40 °C
Dimensions	ø 200mm x 95mm
Weight	700g

### ESP-62/WS

Order No. 16.3030

100V

#### PA wall speaker

- 100V line technique via audio transformer with 3 power taps
- Full range speaker with an excellent sound quality and a clear voice reproduction
- Plastic cabinet of a special design (open rear panel) with protective metal grille
- Due to balanced design, horizontal and vertical mounting possible
- Protected against ball rebound
- Supplied with mounting screws and screw head covers

► Plastic Protected against ball rebound



Model	ESP-62/WS
Frequency range	100-19,000Hz
Power capability, 100V	6/3/1.5W <sub>RMS</sub>
SPL (1W/1m)	93dB
Max. rated SPL	101dB
Type of speaker	130
Admiss. ambient temp.	0-40 °C
Dimensions	240x330x85mm
Weight	1.6kg

**EDL-36C/WS**

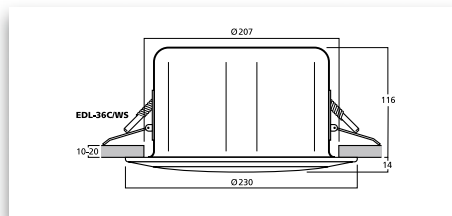
Order No. 16.2980



**PA ceiling speaker**, with EN 54-24 certification.

- Flush-mount version, 100V line technique
- For evacuation systems according to EN 60849 and DIN VDE 0833-4
- 16cm full range speaker
- Fire protection cover
- Robust metal housing and metal grille
- Service-friendly spring mechanism
- 3 power taps via ceramic connection terminal with thermal fuse
- Suitable for a ceiling thickness from 10 to 20mm due to adjustable clamping device

EN 54-24 EN 60849 DIN VDE 0833-4



Model	EDL-36C/WS
Frequency range	170-20,000Hz
Power capability, 100V	10/5/2.5W <sub>RMS</sub>
SPL (1W/1m)	93dB
Max. rated SPL	100dB
Mounting cutout	ø 207mm
Mounting depth	120mm
Admiss. ambient temp.	0-40 °C
Dimensions	230mm x 130mm
Weight	1.78kg

**EDL-35ABC/WS**

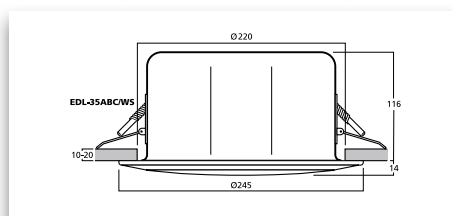
Order No. 16.2970



**PA A/B ceiling speaker**, with EN 54-24 certification.

- Flush-mount speaker, 100V line technique
- For evacuation systems with A/B speaker distribution according to EN 60849 and DIN VDE 0833-4
- 2 separate full range speakers, each with its own transformer
- Fire protection cover
- Robust metal housing and metal grille
- Service-friendly spring mechanism
- 3 power taps via ceramic connection terminal with thermal fuse
- Suitable for a ceiling thickness from 10 to 20mm due to adjustable clamping device

EN 54-24 EN 60849 DIN VDE 0833-4



Model	EDL-35ABC/WS
Frequency range	130-20,000Hz
Power capability, 100V	2 x 6/2 x 3/2 x 1.5W <sub>RMS</sub>
SPL (1W/1m)	88dB
Max. rated SPL	95dB
Type of speaker	2 x oval, 60x110mm
Mounting cutout	ø 220mm
Mounting depth	130mm
Admiss. ambient temp.	0-40 °C
Dimensions	245mm x 130mm
Weight	2.25kg



### EDL-240/WS

Order No. 16.3100



#### Weatherproof PA wall and ceiling speaker, projector speaker

- 100V line technique
- 2 speakers with polypropylene cone for bilateral radiation
- Splashproof due to plastic cabinet with rubber seals
- Connection cable with 3 power taps
- Movable mounting bracket and screws made of stainless steel

Weather 2 x speaker



Model	EDL-240/WS
Frequency range	120-20,000Hz
Power capability, 100V	40/20/10W <sub>RMS</sub>
SPL (1W/1m)	94dB
Max. rated SPL	110dB
Admiss. ambient temp.	-20 °C to +55 °C
Dimensions	ø 180mm x 251mm
Weight	3.13kg

### EDL-120/WS

Order No. 16.3090



#### Weatherproof PA wall and ceiling speaker, projector speaker

- 100V line technique
- 1 speaker with polypropylene cone
- Splashproof due to plastic cabinet with rubber seals and high-strength cable gland
- Connection cable with 3 power taps
- Movable mounting bracket and screws made of stainless steel

Weather



Model	EDL-120/WS
Frequency range	120-20,000Hz
Power capability, 100V	20/10/5W <sub>RMS</sub>
SPL (1W/1m)	94dB
Admiss. ambient temp.	-20 °C to +55 °C
Dimensions	ø 180mm x 251mm
Weight	2.5kg

**ETS-115/SI**

Order No. 16.3040

100V

**ETS-115/WS**

Order No. 16.3050

100V

**PA column speakers**, in extruded aluminium cabinets, silver (SI) or white (WS).

- Elegant design
- 100V line technique
- Strong vertical beaming and wide horizontal radiation
- 9 full range systems
- Design matches light tube systems
- Connection cable with 3 power taps
- Supplied with mounting accessories

**Aluminium**

Model	ETS-115/SI	ETS-115/WS
Frequency range	150-15,000Hz	150-15,000Hz
Number of speakers	9	9
Power rating	15/7.5/3.75W <sub>RMS</sub>	15/7.5/3.75W <sub>RMS</sub>
SPL (1W/1m)	95dB	95dB
Dimensions	ø 75mm x 760mm	ø 75mm x 760mm
Weight	2.9kg	2.9kg

**GLS-351/GR**

Order No. 16.3080

100V

8Ω

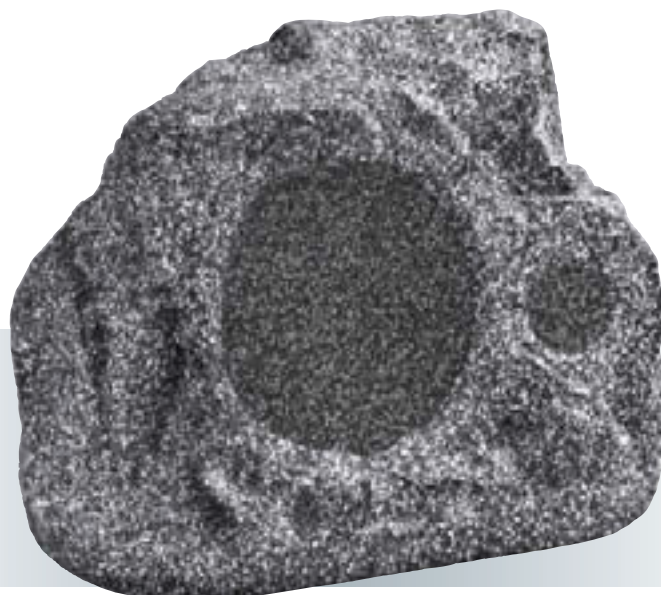


IP55

90 W<sub>MAX</sub>

**Weatherproof PA garden speaker "Rock"**, stone look, for general PA applications, e.g. in gardens, hotels, restaurants and pubs.

- Unidirectional radiation
- 100V line technique or 8Ω operation
- Robust, glass fibre reinforced plastic cabinet
- 2-way speaker system (200mm bass speaker and 13mm tweeter)
- Integrated audio transformer with 4 power taps (30/20/10/5W<sub>RMS</sub>)
- Connection cable with luster terminals

**Weather**






### GLS-301/GR

Order No. 16.3070



Weatherproof PA garden speaker "Rock", stone look, for general PA applications, e.g. in gardens, hotels, restaurants and pubs.

- Omnidirectional radiation
- 100V line technique or 8Ω operation
- Robust, glass fibre reinforced plastic cabinet
- 2-way coaxial speaker system (200mm bass speaker and 13mm tweeter)
- Integrated audio transformer with 4 power taps (30/20/10/5W<sub>RMS</sub>)
- Connection cable with luster terminals

Weather



### GLS-251/BN

Order No. 16.3060



Weatherproof PA garden speaker "Rock", stone look, for general PA applications, e.g. in gardens, hotels, restaurants and pubs.

- Unidirectional radiation
- 100V line technique or 8Ω operation
- Robust, glass fibre reinforced plastic cabinet
- 2-way coaxial speaker system (165mm bass speaker and 13mm tweeter)
- Integrated audio transformer with 4 power taps (20/15/10/5W<sub>RMS</sub>)
- Connection cable with luster terminals

Weather



Model	GLS-351/GR	GLS-301/GR	GLS-251/BN
Frequency range	60-20,000Hz	60-20,000Hz	70-20,000Hz
Number of speakers	2	2	2 (coaxial)
Power rating	30/20/10/5W <sub>RMS</sub> (100V) 90W <sub>MAX</sub> /45W <sub>RMS</sub> (8Ω)	30/20/10/5W <sub>RMS</sub> (100V) 90W <sub>MAX</sub> /45W <sub>RMS</sub> (8Ω)	20/15/10/5W <sub>RMS</sub> (100V) 60W <sub>MAX</sub> /30W <sub>RMS</sub> (8Ω)
SPL (1W/1m)	88dB	85dB	85dB
Dimensions	approx. 370x300x300mm	approx. 310x320x500mm	approx. 340x370x290mm
Weight	6.8kg	9.5kg	5kg

**IT-100**

Order No. 16.3000

**Weatherproof horn speaker**, with very high power capability.

- 100V line technique
- Weatherproof and IP66 tested
- Protected against powerful water jets
- Suitable for general indoor and outdoor applications
- Light grey ABS housing (self-extinguishing, corresponds to the standard UL 94V0)
- Mounting bracket and screws made of stainless steel
- Integrated ceramic connection terminal with thermal fuse
- 4 power taps

ABS Weather UL 94V0

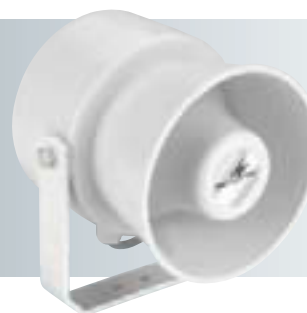
**IT-60**

Order No. 16.2990

**Weatherproof horn speaker**, with high power capability.

- 100V line technique
- Weatherproof and IP66 tested
- Protected against powerful water jets
- Suitable for general indoor and outdoor applications
- Light grey ABS housing (self-extinguishing, corresponds to the standard UL 94V0)
- Mounting bracket and screws made of stainless steel
- Integrated ceramic connection terminal with thermal fuse
- 4 power taps

ABS Weather UL 94V0

**NR-100KS**

Order No. 16.3020

**Weatherproof horn speaker**, with very high power capability.

- 16Ω speaker system
- IP66 tested, protected against powerful water jets
- Suitable for general indoor and outdoor applications
- Robust light grey plastic housing of compact size
- Aluminium mounting bracket

ABS Weather

**NR-60KS**

Order No. 16.3010

**Weatherproof horn speaker**, with high power capability.

- 16Ω speaker system
- IP66 tested, protected against powerful water jets
- Suitable for general indoor and outdoor applications
- Robust light grey plastic housing
- Aluminium mounting bracket

ABS Weather

Model	IT-100	IT-60	NR-100KS	NR-60KS
Power rating	100/50/25/12.5W <sub>RMS</sub>	60/30/15/7.5W <sub>RMS</sub>	100W <sub>MAX</sub> /16Ω	60W <sub>MAX</sub> /16Ω
Frequency range	200-7,500Hz	230-9,000Hz	300-9,000Hz	340-10,000Hz
SPL (1W/1m)	112dB	110dB	106dB	103dB
Radiation angle (hor./vert.)	80°/30°	80°/30°	-	-
Admiss. ambient temp.	-20 °C to +50 °C	-20 °C to +50 °C	-20 °C to +50 °C	-20 °C to +50 °C
Dimensions	ø 305mm x 385mm	ø 305mm x 385mm	ø 146mm x 160mm	ø 146mm x 160mm
Weight	3.9kg	3.9kg	2.2kg	2.2kg
Special feature	IP66, ABS	IP66, ABS	IP66, plastic	IP66, plastic



### Wall-Mount PA Volume Controls

- Attenuation in 10 steps, position 0 is OFF
- Audio transformer for 100V line technique
- White plastic front panel and knob
- Flush mounting, surface mounting with matching housing ATT-200 which is available at option



Model	Order No.	Frequency range	Power rating	Priority facility	Dimensions	Mounting depth	Weight	Surface-mount housing
ATT-224/WS	17.3680	50-18,000Hz	24W <sub>RMS</sub>	no	85x85x66mm	38mm	160g	ATT-200
ATT-212/WS	17.3670	50-18,000Hz	12W <sub>RMS</sub>	no	85x85x66mm	42mm	160g	ATT-200

### Wall-Mount PA Volume Controls with 24V Emergency Priority Relay

- Attenuation in 10 steps, position 0 is OFF
- For 100V line technique
- Snow-white plastic front panel and knob
- Flush mounting in standard 60mm wall sockets
- Surface mounting with matching housing ATT-300, available at option
- Screw plug-in connection



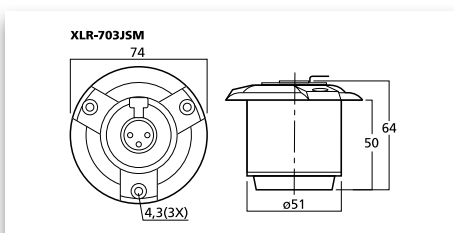
Model	Order No.	Frequency range	Power rating	Priority facility	Dimensions	Mounting depth	Weight	Surface-mount housing
ATT-306PEU	17.3690	50-18,000Hz	6W <sub>RMS</sub>	yes	80x80x67mm	45mm	190g	ATT-300

### XLR-703JSM

Order No. 34.8810

Shock-mount base with XLR socket, for the installation into lecterns, for gooseneck microphones.

- Attenuation of impact noise and structure-borne noise due to rubber-cushioned 3-pole XLR socket
- 1.2m connection cable with 3-pole XLR plug



**DVT-440SET**

Order No. 18.8720

**Wireless digital surveillance set, 2.4GHz, 10mW, with recording function.**

consisting of 4 colour cameras with day/night function and integrated transmitter in an outdoor housing (IP55) as well as a 17.8cm (7") LCD monitor with receiver, USB interface and SD card slot for recording surveillance videos.

- Colour camera with 6.35mm (1/4") CMOS chip, 420 TV lines, transmitting antenna with SMA connection, power supply: 12V $\pm$ /250mA
- Built-in microphone
- Due to 25 infrared LEDs, suitable for application in the dark. For this purpose, the camera switches to B/W operation (IR operating range: 10m, with optimum reflection)
- Lens: 6.0mm/1:2.0
- Operating range: approx. 30m indoors, approx. 80m outdoors
- Monitor with built-in speaker, SD card slot (up to 32GB), mini USB jack, 3.5mm speaker output, power supply: 12V $\pm$ /1.2A
- Supplied with plug-in PSU for cameras and monitor each, omnidirectional antennas, monitor bracket and camera bracket, infrared remote control and AV connection cable

**DVT-410SET**

Order No. 18.8730

**Digital video transmission system, 2.4GHz, 10mW, consisting of one colour camera with day/night function and integrated transmitter in an outdoor housing (IP66) as well as one receiver with AV outputs.**

- Colour camera with 6.35mm (1/4") CMOS chip, 380 TV lines, transmitting antenna with SMA connection, power supply: 5V $\pm$ /850mA
- Due to 27 infrared LEDs, suitable for application in the dark. For this purpose, the camera switches to B/W operation (IR operating range: 10m, with optimum reflection)
- Lens: 6.0mm/1:2.0
- Operating range: approx. 30m indoors, approx. 80m outdoors
- Power supply of receiver: 5V $\pm$ /350mA, audio output and video output via RCA jacks
- Supplied with plug-in PSU for camera and receiver each, omnidirectional antenna, wall bracket and AV connection cable

The operating range indoors very much depends on the built volumes.





### DVT-420USB

Order No. 18.3740



Digital video transmission system, 2.4GHz, 10mW, consisting of one colour camera with day/night function and integrated transmitter in an outdoor housing (IP66) as well as a 4-channel receiver with USB interface for the connection to a PC or notebook.

- Colour camera with 8.5mm (1/3") CMOS chip, 380 TV lines, transmitting antenna with SMA connection, power supply: 5V= /800mA
- Due to 24 infrared LEDs, suitable for application in the dark. For this purpose, the camera switches to B/W operation (IR operating range: 10m, with optimum reflection)
- Lens: 3.6mm/1:2.0
- Operating range: approx. 30m indoors, 80m outdoors
- Power supply of receiver: 5V= via USB interface
- Display: channels 1-4, switchable or 4 channels simultaneously
- Supplied with omnidirectional antenna for receiver and wall bracket for camera transmitter, driver CD
- Supplied with software for live display and recording with timer and motion detection as well as webserver function
- Suitable for Windows\* XP/Vista/7

Matching digital colour camera transmitter TVCCD-420USB for an extension and plug-in PSU PSS-510DC are available at option.



The operating range indoors very much depends on the built volumes.

### TVCCD-420USB

Order No. 18.8750

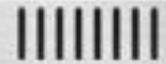


Digital colour camera transmitter, 2.4GHz, 10mW, for the extension of DVT-420USB.

- Fixed focus lens (3.6mm)
- Due to 24 infrared LEDs, suitable for application in the dark. For this purpose, the camera switches to B/W operation (IR operating range: 10m, with optimum reflection)
- 30cm connection cable for power supply
- Supplied with omnidirectional antenna, sunshield, wall bracket and PSU



Model	TVCCD-420USB
Image sensor	8.5mm (1/3")
Number of pixels	hor. 628 x vert. 582
Resolution	380 lines
Lens	3.6mm/1:2.0
Min. illumination	0 lux with IR illumination
Admiss. ambient temp.	-20 °C to +60 °C
Power supply	5V= /800mA
Dimensions	ø 58mm x 100mm
Weight	300g



## Simplified Recording of Network Cameras

The recording of network cameras has been a great challenge up to now. It was necessary to install a special software onto a PC. This software used to operate with one type of camera or one manufacturer only. The new network video recorders (NVR) now allow for a more simplified way of operating.

These products come almost ready to use. Only the required hard disks have to be installed in order for the NVRs to be able to record signals of several hundred different types of camera. After installation, many camera types will be recognised automatically, if they support UPnP. The perfect setting can individually be chosen for each camera type. The NVR recorders can conveniently be accessed from any PC workstation via a web interface. Thus, the advantages of the network technology can perfectly be utilised.



### NVR-216

Order No. 18.7730

16-channel network video recorder (NVR)

### NVR-208

Order No. 18.7720

8-channel network video recorder (NVR)



### NVR-204

Order No. 18.7710

4-channel network video recorder (NVR)

### NVR-202

Order No. 18.7700

2-channel network video recorder (NVR)

#### General specifications:

- H.264 video compression for recordings
- Linux operating system for maximum operating reliability
- Supports 900 different IP cameras. In this case, cameras supporting the UPnP protocol will be identified automatically
- Supports PTZ cameras
- Synchronised audio and video recordings
- 4 different user access levels can be adjusted
- Mobile Client for iPhone, iPad, Android, BlackBerry, Windows Mobile
- E-MAP for displaying the camera positions
- Dual streaming for bandwidth management
- Log system for logging the status of the system, camera and access
- Digital PTZ and multiwindow display

- Intelligent search function, search for distant or foreign objects, general movements, loss of focus, dirty camera
- Data export possible as image file (BMP, JPG), video file (ASF, AVI) or backup file (DAT)
- Automatic backup via FTP
- OSD: German, English, French, Italian, Russian, Spanish and other languages
- Instruction manual: German, English
- Supplied without hard disks. Matching SATA hard disks are available at option

Model	NVR-216	NVR-208	NVR-204	NVR-202
Video inputs	16 IP-based video channels	8 IP-based video channels	4 IP-based video channels	2 IP-based video channels
Video compression	H.264, M-JPEG, MPEG-4	H.264, M-JPEG, MPEG-4	H.264, M-JPEG, MPEG-4	H.264, M-JPEG, MPEG-4
Recording	200 images/sec.	200 images/sec.	100 images/sec.	50 images/sec.
Protocols				
Menu adjustments	on-screen menu (OSD)	on-screen menu (OSD)	on-screen menu (OSD)	on-screen menu (OSD)
Recording mode	alarm, motion detector, continuous recording, digital input, manual, timer	alarm, motion detector, continuous recording, digital input, manual, timer	alarm, motion detector, continuous recording, digital input, manual, timer	alarm, motion detector, continuous recording, digital input, manual, timer
Alarm inputs	-	-	-	-
Interfaces	2 x RJ45 (10/100/1,000Mbps) 2 x USB 2.0 1 x eSATA	2 x RJ45 (10/100/1,000Mbps) 2 x USB 2.0 1 x eSATA	1 x RJ45 (10/100/1,000Mbps) 2 x USB 2.0	1 x RJ45 (10/100/1,000Mbps) 2 x USB 2.0
Hard disks	optional, up to 4 x SATA II, 12TB max.	optional, up to 4 x SATA II, 12TB max.	optional, up to 2 x SATA II, 6TB max.	optional, up to 2 x SATA II, 6TB max.
Admiss. ambient temp.	0-40 °C	0-40 °C	0-40 °C	0-40 °C
Power supply	via supplied PSU	via supplied PSU	via supplied PSU	via supplied PSU
Dimensions	185x140x220mm	185x140x220mm	110x140x220mm	110x140x220mm
Weight	4kg	4kg	2.1kg	2.1kg



The VIEWEX series from MONACOR combines a flexible, modern and reliable video surveillance with a uniform design. The compact and robust design of the different models with integrated infrared LEDs and the reliable operation outdoors (IP66) ensure a perfect protection of the premises with top-quality images. No loss of events, even under severe conditions and in darkness. The appealing design of the system allows for an unobtrusive integration into its environment. The cameras do not appear like foreign objects. This aspect becomes increasingly important for customers, planners and architects.

- Zoom lens (6-15mm)
- Super HAD CCD chip
- Due to 36 infrared LEDs, suitable for application in the dark. For this purpose, the camera switches to B/W operation (IR operating range: 50m, with optimum reflection)
- Automatic switching from colour operation to B/W operation, depending on the illumination
- Mirror function
- Automatic electronic shutter
- Features: BLC, AGC (each can be switched off)
- Supplied with sunshield, camera bracket and 30cm connection cable for power supply and video (BNC)

### VIEWEX-870WDR

Order No. 18.7660



High-resolution colour camera with wide dynamic range function and day/night function.

- Due to the extended dynamic range of the wide dynamic function (WDR), an application is also possible in unfavourable backlighting conditions. This camera allows to display the face of a person standing in front of a bright window or in a doorway

### VIEWEX-850

Order No. 18.7650



High-resolution colour camera, with day/night function.

### VIEWEX-840

Order No. 18.7640



Colour camera, with day/night function.



Model	VIEWEX-870WDR	VIEWEX-850	VIEWEX-840
Image sensor	8.5mm (1/3") CCD	8.5mm (1/3") CCD	8.5mm (1/3") CCD
Number of pixels	hor. 752 x vert. 582	hor. 752 x vert. 582	hor. 500 x vert. 582
Resolution	700 lines	540 lines	420 lines
Lens	6-15mm/1:1.2	6-15mm/1:1.2	6-15mm/1:1.2
Min. illumination	0.5 lux with infrared illumination	0.5 lux with infrared illumination	0.1 lux with infrared illumination
Admiss. ambient temp.	-10 °C to +50 °C	-10 °C to +50 °C	-10 °C to +50 °C
Power supply	12V~/540mA	12V~/540mA	12V~/480mA
Dimensions	110x100x187mm	110x100x187mm	110x100x187mm
Weight	700g	700g	700g
Other features	IP66, AGC, BLC, suit. for IR	IP66, AGC, BLC, suit. for IR	IP66, AGC, BLC, suit. for IR



The VIEWEX series from MONACOR combines a flexible, modern and reliable video surveillance with a uniform design. The compact and robust design of the different models with integrated infrared LEDs and the reliable operation outdoors (IP66) ensure a perfect protection of the premises with top-quality images. No loss of events, even under severe conditions and in darkness. The appealing design of the system allows for an unobtrusive integration into its environment. The cameras do not appear like foreign objects. This aspect becomes increasingly important for customers, planners and architects.

- Zoom lens (4-9mm)
- Super HAD CCD chip
- Due to 42 infrared LEDs, suitable for application in the dark. For this purpose, the camera switches to B/W operation (IR operating range: 40m, with optimum reflection)
- Automatic switching from colour operation to B/W operation, depending on the illumination
- Mirror function
- Automatic electronic shutter
- Features: BLC, AGC (each can be switched off)
- Supplied with sunshield, camera bracket and 30cm connection cable for power supply and video (BNC)

### VIEWEX-670WDR

Order No. 18.7630



**High-resolution colour camera with wide dynamic range function and day/night function.**

- Due to the extended dynamic range of the wide dynamic function (WDR), an application is also possible in unfavourable backlighting conditions. This camera allows to display the face of a person standing in front of a bright window or in a doorway

### VIEWEX-650

Order No. 18.7620



**High-resolution colour camera, with day/night function.**

### VIEWEX-640

Order No. 18.7610



**Colour camera, with day/night function.**



Model	VIEWEX-670WDR	VIEWEX-650	VIEWEX-640
Image sensor	8.5mm (1/3") CCD	8.5mm (1/3") CCD	8.5mm (1/3") CCD
Number of pixels	hor. 752 x vert. 582	hor. 752 x vert. 582	hor. 500 x vert. 582
Resolution	700 lines	540 lines	420 lines
Lens	4-9mm/1:1.2	4.9mm/1:1.2	4-9mm/1:1.2
Min. illumination	0.5 lux with infrared illumination	0.5 lux with infrared illumination	0.1 lux with infrared illumination
Admiss. ambient temp.	-10 °C to +50 °C	-10 °C to +50 °C	-10 °C to +50 °C
Power supply	12V=~/450mA	12V=~/450mA	12V=~/430mA
Dimensions	90x88x160mm	90x88x160mm	90x88x160mm
Weight	500g	500g	500g
Other features	IP66, AGC, BLC, suit. for IR	IP66, AGC, BLC, suit. for IR	IP66, AGC, BLC, suit. for IR





The VIEWEX series from MONACOR combines a flexible, modern and reliable video surveillance with a uniform design. The compact and robust design of the different models with integrated infrared LEDs and the reliable operation outdoors (IP66) ensure a perfect protection of the premises with top-quality images. No loss of events, even under severe conditions and in darkness. The appealing design of the system allows for an unobtrusive integration into its environment. The cameras do not appear like foreign objects. This aspect becomes increasingly important for customers, planners and architects.

- Fixed focus lens (3.6mm)
- Super HAD CCD chip
- Due to 24 infrared LEDs, suitable for application in the dark. For this purpose, the camera switches to B/W operation (IR operating range: 25m, with optimum reflection)
- Automatic switching from colour operation to B/W operation, depending on the illumination
- Mirror function
- Automatic electronic shutter
- Features: BLC, AGC (each can be switched off)
- Supplied with sunshield, camera bracket and 30cm connection cable for power supply and video (BNC)

### VIEWEX-450

Order No. 18.7600



High-resolution colour camera, with day/night function.

### VIEWEX-440

Order No. 18.7590



Colour camera, with day/night function.



Model	VIEWEX-450	VIEWEX-440
Image sensor	8.5mm (1/3") CCD	8.5mm (1/3") CCD
Number of pixels	hor. 752 x vert. 582	hor. 500 x vert. 582
Resolution	520 lines	420 lines
Lens	3.6mm/1:2.0	3.6mm/1:2.0
Min. illumination	0.5 lux, 0 lux with infrared illumination	0.1 lux, 0 lux with infrared illumination
Admiss. ambient temp.	-10 °C to +50 °C	-10 °C to +50 °C
Power supply	12V=/290mA	12V=/280mA
Dimensions	65x66x111mm	65x66x111mm
Weight	200g	200g
Other features	IP66, AGC, BLC, suit. for IR	IP66, AGC, BLC, suit. for IR



The VIEWEX series from MONACOR combines a flexible, modern and reliable video surveillance with a uniform design. The compact and robust design of the different models with integrated infrared LEDs and the reliable operation outdoors (IP66) ensure a perfect protection of the premises with top-quality images. No loss of events, even under severe conditions and in darkness. The appealing design of the system allows for an unobtrusive integration into its environment. The cameras do not appear like foreign objects. This aspect becomes increasingly important for customers, planners and architects.

- Vandal-resistant grey or white (WS) metal housing
- Zoom lens (2.8-12mm)
- Due to 24 infrared LEDs, suitable for application in the dark. For this purpose, the camera switches to B/W operation (IR operating range: 25m, with optimum reflection)
- Automatic switching from colour operation to B/W operation, depending on the illumination
- Mirror function
- Automatic electronic shutter
- Features: BLC, AGC (each can be switched off)
- 40cm connection cable for power supply and video (BNC)

### VIEWEX-370

Order No. 18.8700

### VIEWEX-370/WS

Order No. 18.8710



**High-resolution colour dome cameras with wide dynamic range and day/night function.**

- Due to the extended dynamic range of the wide dynamic function (WDR), an application is also possible in unfavourable backlighting conditions. This camera allows to display the face of a person standing in front of a bright window or in a doorway

### VIEWEX-350

Order No. 18.8680

### VIEWEX-350/WS

Order No. 18.8690



**High-resolution colour dome cameras, with day/night function.**

### VIEWEX-340

Order No. 18.8660

### VIEWEX-340/WS

Order No. 18.8670



**High-resolution colour dome cameras, with day/night function.**

- Super HAD CCD chip



Model	VIEWEX-370	VIEWEX-370/WS	VIEWEX-350	VIEWEX-350/WS	VIEWEX-340	VIEWEX-340/WS
Image sensor	8.5mm (1/3") CCD	8.5mm (1/3") CCD	8.5mm (1/3") CCD	8.5mm (1/3") CCD	8.5mm (1/3") CCD	8.5mm (1/3") CCD
Number of pixels	hor. 758 x vert. 540	hor. 758 x vert. 540	hor. 976 x vert. 582	hor. 976 x vert. 582	hor. 752 x vert. 582	hor. 752 x vert. 582
Resolution	690 lines	690 lines	700 lines (colour), 800 lines (B/W)	700 lines (colour), 800 lines (B/W)	650 lines (colour), 700 lines (B/W)	650 lines (colour), 700 lines (B/W)
Lens	2.8-12mm/1:1.2	2.8-12mm/1:1.2	2.8-12mm/1:1.2	2.8-12mm/1:1.2	4-9mm/1:1.2	4-9mm/1:1.2
Min. illumination	0.1 lux	0.1 lux	0.1 lux	0.1 lux	0.1 lux	0.1 lux
Admiss. amb. temp.	-10 °C to +50 °C	-10 °C to +50 °C	-10 °C to +50 °C	-10 °C to +50 °C	-10 °C to +50 °C	-10 °C to +50 °C
Power supply	12V=/500mA	12V=/500mA	12V=/600mA	12V=/600mA	12V=/500mA	12V=/500mA
Dimensions	ø 118mm x 105mm	ø 118mm x 105mm	ø 118mm x 105mm	ø 118mm x 105mm	ø 118mm x 105mm	ø 118mm x 105mm
Weight	500g	500g	500g	500g	500g	500g
Other features	IP66, AGC, BLC, suit. for IR	IP66, AGC, BLC, suit. for IR	IP66, AGC, BLC, suit. for IR	IP66, AGC, BLC, suit. for IR	IP66, AGC, BLC, suit. for IR	IP66, AGC, BLC, suit. for IR



### TVCCD-390/WS

Order No. 18.8610



High-resolution colour dome camera, with professional day/night function.

- Vandal-resistant white metal housing
- Zoom lens (2.8-12mm)
- Sony EFFIO-E chip
- Due to 36 infrared LEDs, suitable for application in the dark. For this purpose, the camera switches to B/W operation (IR operating range: 30m, with optimum reflection)
- Camera module for panning and tilting
- Automatic electronic shutter
- Multilingual on-screen menu control (OSD)
- 70cm connection cable for power supply and video (BNC)



### Colour Dome Cameras

- Vandal-resistant white metal housing
- Zoom lens (4-9mm)
- Due to 21 infrared LEDs, suitable for application in the dark. For this purpose, the camera switches to B/W operation (IR operating range: 20m, with optimum reflection)
- 3-axis pivoting frame, thus wall mounting possible
- Automatic electronic shutter
- On-screen menu control (OSD)
- 70cm connection cable for power supply and video (BNC)

### TVCCD-370/WS

Order No. 18.8600



High-resolution colour dome camera, with day/night function.



### TVCCD-360/WS

Order No. 18.8590



High-resolution colour dome camera, with day/night function.

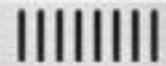
### TVCCD-350/WS

Order No. 18.8580



Colour dome camera, with day/night function.

Model	TVCCD-390/WS	TVCCD-370/WS	TVCCD-360/WS	TVCCD-350/WS
Image sensor	8.5mm (1/3") CCD	8.5mm (1/3") CCD	8.5mm (1/3") CCD	8.5mm (1/3") CCD
Number of pixels	hor. 976 x vert. 582	hor. 976 x vert. 582	hor. 752 x vert. 582	hor. 500 x vert. 582
Resolution	700 lines	700 lines	600 lines	480 lines
Lens	2.8-12mm/1:1.2	4-9mm/1:1.6-2.4	4-9mm/1:1.6-2.4	4-9mm/1:1.6-2.4
Min. illumination	0.01 lux (w/o IR illumination)	0.01 lux	0.1 lux	0.1 lux
Admiss. ambient temp.	-20 °C to +50 °C	-20 °C to +50 °C	-20 °C to +50 °C	-20 °C to +50 °C
Power supply	12V=/350mA	12V=/270mA	12V=/260mA	12V=/260mA
Dimensions	ø 120mm x 80mm	ø 140mm x 100mm	ø 140mm x 100mm	ø 140mm x 100mm
Weight	550g	400g	400g	400g
Other features	IP66, AGC, BLC, suit. for IR	IP66, AGC, BLC, suit. for IR	IP66, suit. for IR	IP66, AGC, BLC, suit. for IR

**TVCCD-340**

Order No. 18.8560

**TVCCD-340/WS**

Order No. 18.8570



**High-resolution mini colour dome cameras, with day/night function.**

- Fixed focus lens (3.6mm)
- Compact design
- Due to 6 infrared LEDs, suitable for application in the dark. For this purpose, the camera switches to B/W operation (IR operating range: 5m, with optimum reflection)
- Automatic electronic shutter
- Automatic white balance, backlight compensation
- 60cm connection cable for power supply and video (BNC)

**TVCCD-340: grey metal housing**

**TVCCD-340/WS: white metal housing**

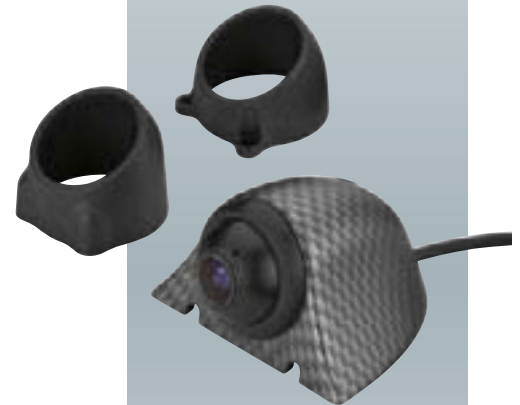
**TVCCD-124COL**

Order No. 18.8620



**Miniature colour camera, due to various supplied supports, suitable for general applications, e.g. in motor vehicles (car rear view systems) or in the surveillance technology.**

- Fixed focus wide angle lens (1.9mm), aperture angle: 140°
- Mirror function
- Automatic electronic shutter
- Power supply: 6-24V=
- 8m connection cable for power supply and video (RCA)



Model	TVCCD-340	TVCCD-340/WS	TVCCD-124COL
Image sensor	8.5mm (1/3") CCD	8.5mm (1/3") CCD	6.35mm (1/4") CCD
Number of pixels	hor. 752 x vert. 582	hor. 752 x vert. 582	hor. 600 x vert. 512
Resolution	600 lines	600 lines	420 lines
Lens	3.6mm/1:2.0	3.6mm/1:2.0	1.9mm/1:1.2
Min. illumination	0.1 lux	0,1 Lux	0.5 lux
Admiss. ambient temp.	-20 °C to +50 °C	-20 °C to +50 °C	-30 °C to +75 °C
Power supply	12V=/70mA	12V=/70mA	6-24V=/60mA
Dimensions	ø 60mm x 60mm	ø 60mm x 60mm	ø 19mm (dome)
Weight	200g	200g	10g
Other features	IP66, AGC, ATW, BLC, suit. for IR	IP66, AGC, ATW, BLC, suit. for IR	IP67, AGC, BLC

**TVD-60**

Order No. 18.7570

**Mini speed dome camera dummy**

- Flashing LED, 2 x 1.5V battery AA size required
- Supplied with bracket for wall mounting and ceiling suspension
- Dimensions: ø 128mm x 240mm
- Supplied without batteries



**WSA-1**

Order No. 25.4210



**Wireless audio transmission adapter**, for Bluetooth audio equipment.

- Audio streaming directly from your Bluetooth device
- Enjoy a great sound and the freedom of movement due to wireless operation
- Almost any active speaker can be used
- LED for status indication
- Supplied with wireless audio streamer, plug-in PSU, audio cable RCA to 3.5mm
- Min. system requirements: active speaker/amplifier with RCA or 3.5mm input, computer, mobile phones and tablet PCs with wireless Bluetooth audio profile (A2DP)



Model	WSA-1
Bluetooth	class 2
Profiles	A2DP
Operating range	10m
Dimensions	80x29x85mm
Weight	200g

**SATA-2000GB**

Order No. 18.8490

**SATA hard disk, 2TB**, especially designed for the application in digital recorders with SATA interface.

**General specifications:**

- Designed for continuous 24-hour operation, thus high operating reliability
- Reduced power consumption, low running noise and low heat generation
- 7,200 rpm, 64MB cache
- Interface: SATA 6 Gbps

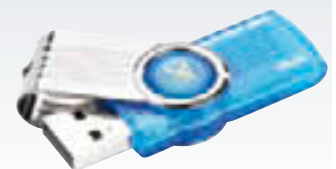


**USB Flash Drives**

**"KINGSTON DataTraveler 101"**

For storing and transporting data when using units with a USB interface, e.g. PCs, media players and digital recorders. Capless design, connector is protected by a robust swivel cover. The housing colour varies, depending on the storage capacity.

- High-speed USB 2.0
- Operating temperature: 0-60°



Model	Order No.	Capacity	Data rate	Colour
USB-16GB/2	18.8530	16GB	10 Mbps (read) 5 Mbps (write)	black
USB-8GB/2	18.8550	8GB	10 Mbps (read) 5 Mbps (write)	red
USB-4GB/2	18.8540	4GB	10 Mbps (read) 5 Mbps (write)	blue



## VB-120VP

Order No. 18.8650

**Passive 2-wire transmission unit**, for video signals.

- For general use as a transmitter or receiver
- For colour signals up to 300m and for B/W signals up to 600m
- For twisted telephone cables and Cat. 5 network cables
- For free cable pairs in existing installations
- Cable connection via plug-in terminal
- 10cm connection cable with BNC plug
- Passive, no power supply required



## VB-120MIC

Order No. 18.8640

**External microphone**, for subsequently upgrading cameras without audio function.

- Microphone cartridge with high sensitivity (5.6mV/Pa/1kHz)
- Power supply: 12V $\pm$ /10mA
- 45cm connection cable for power supply and audio (RCA)

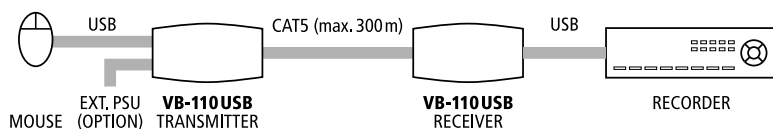


## VB-110USB

Order No. 18.8630

**Transmission set**, for transmitting signals from USB units, e.g. mouse, keyboard or printer via network cables.

- For fitted Cat. 5 network cables
- Passive operation with cable lengths up to 50m. With greater cable lengths (up to 300m), an optional PSU will be required (e.g. PSS-510DC)
- Transmitter with USB A jack, 5.5/2.5mm low-voltage jack and RJ45 jack
- Receiver with USB A plug and RJ45 jack
- Compatible with USB 1.1
- Supplied in pairs





Series of high-performance PA speakers with aluminium basket. These speakers are components of the PA speaker systems PAB-110MK2, PAB-112MK2 and PAB-115MK2 and impress by practice-orientated Thiele-Small parameters and a high efficiency.



## SPA-115PA

Order No. 10.3760



PA bass speaker, 500W<sub>MAX</sub>, 250W<sub>RMS</sub>, 8Ω

- 38cm (15") high-performance bass speaker of high efficiency
- Heat-resistant voice coil and Kapton voice coil former
- Extended radiation range
- Low moving mass of the voice coil system for a dynamic reproduction
- Robust diecast aluminium basket

## SPA-112PA

Order No. 10.3750



PA bass-midrange speaker, 400W<sub>MAX</sub>, 200W<sub>RMS</sub>, 8Ω

- 30cm (12") high-performance bass-midrange speaker of high efficiency
- Heat-resistant voice coil and Kapton voice coil former
- Extended radiation range
- Low moving mass of the voice coil system for a dynamic reproduction
- Robust diecast aluminium basket

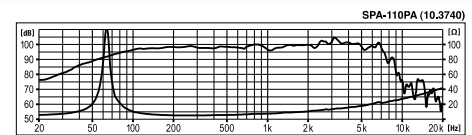
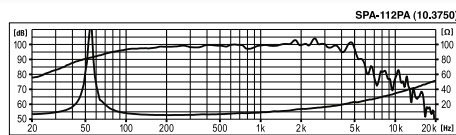
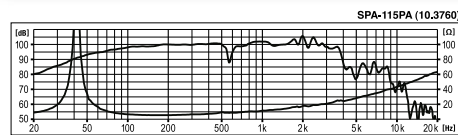
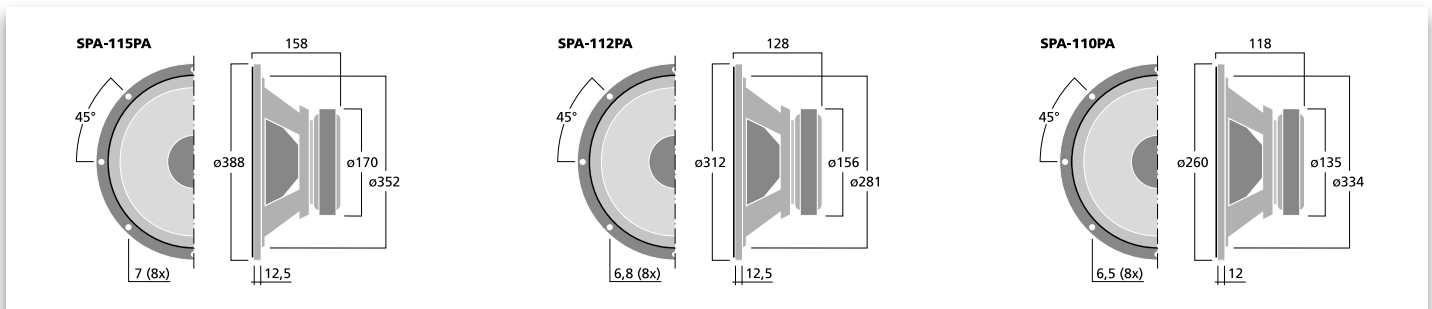
## SPA-110PA

Order No. 10.3740



PA bass-midrange speaker, 300W<sub>MAX</sub>, 150W<sub>RMS</sub>, 8Ω

- 25cm (10") high-performance bass-midrange speaker of high efficiency
- Heat-resistant voice coil and Kapton voice coil former
- Extended radiation range
- Low moving mass of the voice coil system for a dynamic reproduction
- Robust diecast aluminium basket



Model	SPA-115PA	SPA-112PA	SPA-110PA
Impedance (Z)	8Ω	8Ω	8Ω
Resonant frequency (fs)	40Hz	53Hz	61Hz
Max. frequency range	f3-3,000Hz	f3-4,000Hz	f3-5,000Hz
Music power	500W <sub>MAX</sub>	400W <sub>MAX</sub>	300W <sub>MAX</sub>
Power rating (P)	250W <sub>RMS</sub>	200W <sub>RMS</sub>	150W <sub>RMS</sub>
SPL (1W/1m)	100dB	99dB	97dB
Suspension compl. (Cms)	0.18mm/N	0.2mm/N	0.23mm/N
Moving mass (Mms)	75g	44g	29g
Mech. Q factor (Qms)	12.97	11.39	10.68
Electr. Q factor (Qes)	0.41	0.52	0.49
Total Q factor (Qts)	0.40	0.50	0.47
Equivalent volume (Vas)	184 l	77 l	38 l
DC resistance (Re)	5.8Ω	5.4Ω	5.2Ω
Force factor (BxL)	16.3Tm	12Tm	10.4Tm
Voice coil induct. (Le)	1.4mH	0.9mH	0.68mH
Voice coil diameter	75mm	65mm	50mm
Voice coil former	Kapton	Kapton	Kapton
Linear excursion (X <sub>MAX</sub> )	±4mm	±4mm	±4mm
Eff. cone area (Sd)	855cm <sup>2</sup>	530cm <sup>2</sup>	364cm <sup>2</sup>
Magnet weight	1.6kg	1.4kg	1.2kg
Weight	6.4kg	4.4kg	3.2kg



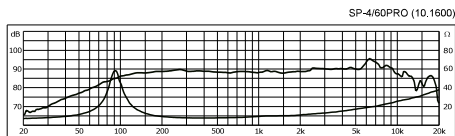
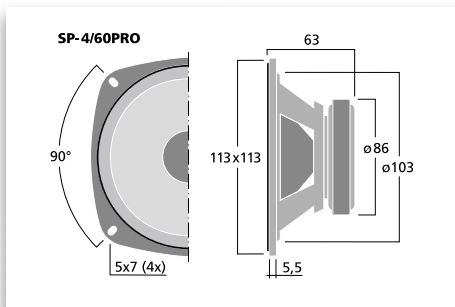
## SP-4/60PRO

Order No. 10.1600



**PA midrange speaker, 60W<sub>MAX</sub>, 30W<sub>RMS</sub>, 8Ω**

- 10cm (4") PA midrange speaker
- Midrange speaker from the L-RAY/1000
- Very linear and wide frequency range
- Excellent sound and dynamic characteristics
- Due to a great linear excursion for a midrange system, a very low crossover frequency at subwoofer systems is possible
- Ideally suited for small PA systems, column speakers and also as a HiFi midrange speaker



Model	SP-4/60PRO
Impedance (Z)	8Ω
Resonant frequency (fs)	92Hz
Max. frequency range	f3-10,000Hz
Music power	60W <sub>MAX</sub>
Power rating (P)	30W <sub>RMS</sub>
SPL (1W/1m)	90dB
Suspension compl. (Cms)	0.47mm/N
Moving mass (Mms)	6.3g
Mech. Q factor (Qms)	5.35
Electr. Q factor (Qes)	0.67
Total Q factor (Qts)	0.60
Equivalent volume (Vas)	3.04 l
DC resistance (Re)	6.76Ω
Force factor (BxL)	5.85Tm
Voice coil induct. (Le)	0.3mH
Voice coil diameter	25mm
Voice coil former	Kapton
Linear excursion (X <sub>MAX</sub> )	± 2.3mm
Eff. cone area (Sd)	68cm <sup>2</sup>
Magnet weight	-
Weight	0.9kg



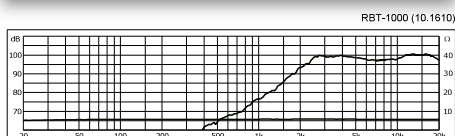
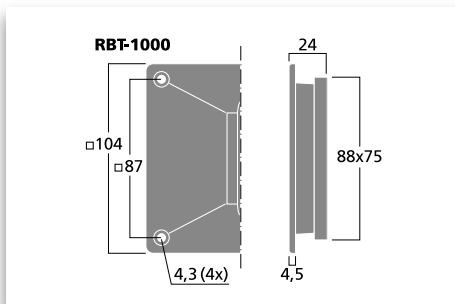
## RBT-1000

Order No. 10.1610

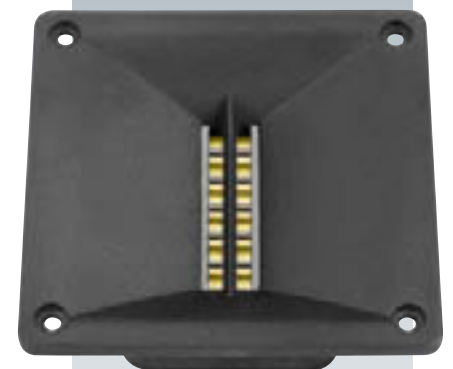


**Ribbon tweeter for PA and HiFi, 80W<sub>MAX</sub>, 40W<sub>RMS</sub>, 6Ω**

- Magnetostatic speaker with waveguide
- Tweeter system from the L-RAY/1000
- Fine and brilliant reproduction of the high range
- Filters from 2,500Hz (HiFi) or 3,500Hz (PA) can be used above 18dB
- Diecast aluminium horn front attachment, neodymium magnet
- Vertical or horizontal mounting possible due to square front panel



Model	RBT-1000
Impedance (Z)	6Ω
Resonant frequency (fs)	1,600Hz
Max. frequency range	fx-22,000Hz
Rec. crossover freq. (12dB)	> 2,500Hz
Music power	80W <sub>MAX</sub>
Power rating	40W <sub>RMS</sub>
SPL (1W/1m)	96dB
Voice coil diameter	-
Magnet diameter	magnetostatic speaker
Mounting cutout	94x94mm
Mounting depth	34mm
Dimensions	104x104mm
Weight	175g







High-quality HiFi speakers for highest sound requirements. The well-known and successful speakers of the SPH series and MSH series are now available with innovative diecast aluminium baskets, rear-ventilated centering spiders and optimised parameters.



## SPH-220HQ

Order No. 10.1580



High-quality HiFi bass speaker,  
180W<sub>MAX</sub> 8Ω

- 200mm (8") bass-midrange speaker, further development of the classic speaker SPH-212
- Equipped with a diecast basket, rear-ventilated centering spider and drilled pole core for minimum mechanical loss
- High-quality coated paper cone of low resonance, low-loss rubber surround
- Wide and linear transmission range
- Ideally suited in 3-way systems and also suitable in classic 2-way systems for an application range of up to 2,000Hz and beyond

## SPH-175HQ

Order No. 10.1470



High-quality HiFi bass-midrange speaker,  
200W<sub>MAX</sub> 8Ω

- 170mm (6 3/4") bass-midrange speaker, further development of the classic speaker SPH-176
- Equipped with a diecast basket and rear-ventilated centering spider for minimum mechanical loss
- Scooped, air-dried, low-resonance paper cone and low-loss rubber surround
- Wide and linear transmission range
- Ideal parameters for bass-reflex systems

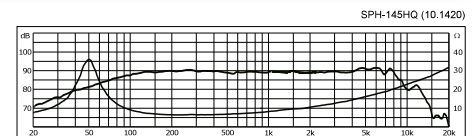
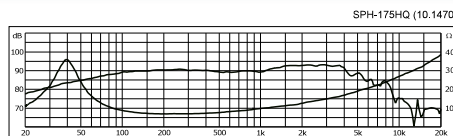
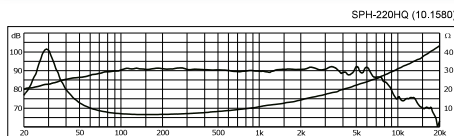
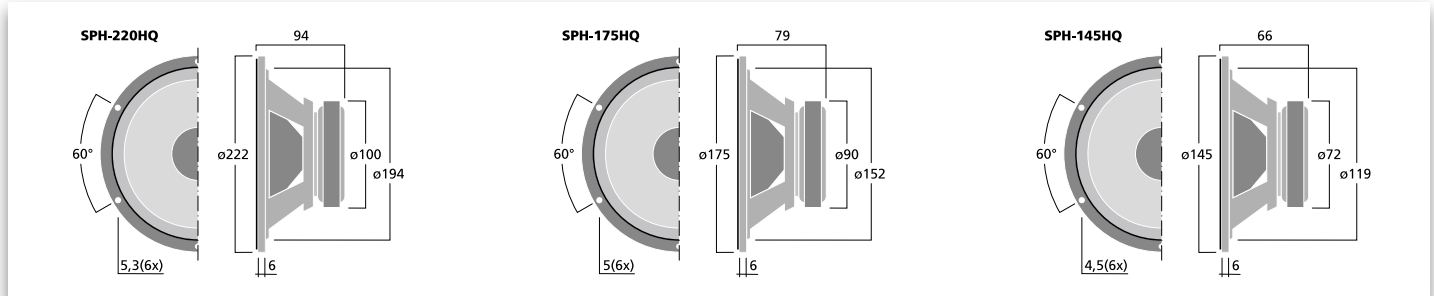
## SPH-145HQ

Order No. 10.1420



High-quality HiFi bass-midrange speaker,  
100W<sub>MAX</sub> 8Ω

- 130mm (5 1/2") bass-midrange speaker, further development of the classic speaker SPH-130
- Equipped with a diecast basket, rear-ventilated centering spider and drilled pole core for minimum mechanical loss
- High-quality, low-resonance paper cone and low-loss rubber surround
- Wide and linear transmission range
- Ideally suited in 2-way systems, D'Appolito arrangements and as a midrange system in large column speakers



Model	SPH-220HQ	SPH-175HQ	SPH-145HQ
Impedance (Z)	8Ω	8Ω	8Ω
Resonant frequency (fs)	30Hz	39Hz	52Hz
Max. frequency range	f3-4,000Hz	f3-4,500Hz	f3-6,000Hz
Music power	180W <sub>MAX</sub>	120W <sub>MAX</sub>	100W <sub>MAX</sub>
Power rating (P)	100W <sub>RMS</sub>	70W <sub>RMS</sub>	50W <sub>RMS</sub>
SPL (1W/1m)	90dB	90dB	88dB
Suspension compl. (Cms)	1.06mm/N	1.13mm/N	1.05mm/N
Moving mass (Mms)	24.7g	13.6g	7.6g
Mech. Q factor (Qms)	3.06	2.32	3.07
Electr. Q factor (Qes)	0.46	0.45	0.51
Total Q factor (Qts)	0.40	0.38	0.44
Equivalent volume (Vas)	80 l	29.4 l	9.4 l
DC resistance (Re)	6.1Ω	6.5Ω	5.8Ω
Force factor (BxL)	7.63Tm	6.83Tm	5.33Tm
Voice coil induct. (Le)	0.9mH	0.71mH	0.53mH
Voice coil diameter	ø 37mm	ø 25mm	ø 25mm
Voice coil former	aluminium	aluminium	aluminium
Linear excursion (X <sub>MAX</sub> )	± 5.5mm	± 5.5mm	± 3.5mm
Eff. cone area (Sd)	232cm <sup>2</sup>	140cm <sup>2</sup>	80cm <sup>2</sup>
Magnet weight	550g	450g	230g
Weight	1.83kg	1.32kg	0.73kg



High-quality HiFi speakers for highest sound requirements. The well-known and successful speakers of the SPH series and MSH series are now available with innovative diecast aluminium baskets, rear-ventilated centering spiders and optimised parameters.

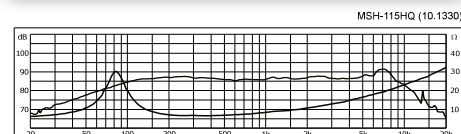
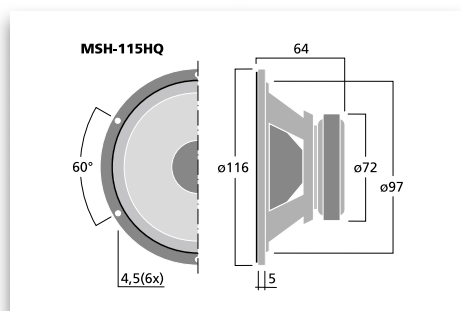
## MSH-115HQ

Order No. 10.1330



High-quality HiFi midrange speaker, 100W<sub>MAX</sub>, 8Ω

- 100mm (4") midrange speaker, further development of the classic speaker MSH-115
- Specialised for the reproduction of the important midrange
- Equipped with a diecast basket and rear-ventilated centering spider for minimum mechanical loss
- High-quality, low-resonance paper cone
- Wide and linear transmission range
- Also ideally suited for the application in small satellite systems with subwoofer support



Model	MSH-115HQ
Impedance (Z)	8Ω
Resonant frequency (fs)	89Hz
Max. frequency range	fx-8,000Hz
Music power	100W <sub>MAX</sub>
Power rating (P)	50W <sub>RMS</sub>
SPL (1W/1m)	87dB
Suspension compl. (Cms)	0.5mm/N
Moving mass (Mms)	5.8g
Mech. Q factor (Qms)	3.26
Electr. Q factor (Qes)	0.66
Total Q factor (Qts)	0.55
Equivalent volume (Vas)	2.2 l
DC resistance (Re)	5.8Ω
Force factor (BxL)	5.35Tm
Voice coil induct. (Le)	0.53mH
Voice coil diameter	25mm
Voice coil former	aluminium
Linear excursion (X <sub>MAX</sub> )	±3mm
Eff. cone area (Sd)	55cm <sup>2</sup>
Magnet weight	230g
Weight	0.67kg



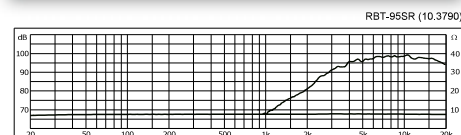
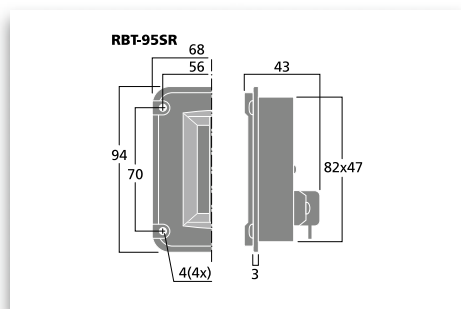
## RBT-95SR

Order No. 10.3790



Ribbon tweeter, 8Ω, 70W<sub>MAX</sub>, 40W<sub>RMS</sub>

- Magnetostatic speakers with horn front attachment
- Compared with RBT-95 and RBT-95SQ, increased power capability
- Neodymium magnetic system
- Fine and brilliant reproduction of the high range, high efficiency
- Ideally suited for 3-way speaker systems, 4-way speaker systems or for adding tweeters to full range speakers
- Longitudinally grooved, slightly convex plastic front panel



Model	RBT-95SR
Impedance (Z)	8Ω
Resonant frequency (fs)	3,500Hz
Max. frequency range	fx-22,000Hz
Rec. crossover freq. (12dB)	5,000Hz
Music power	> 70W <sub>MAX</sub>
Power rating	> 40W <sub>RMS</sub>
SPL (1W/1m)	98dB
Voice coil diameter	-
Magnet diameter	magnetostatic speaker
Mounting cutout	82x47mm
Mounting depth	35mm
Dimensions	95x68mm
Weight	160g





### Active Subwoofer Modules for the Digital Age

Due to state-of-the-art technology in the digital D class, the digital active subwoofer modules from MONACOR provide a powerful bass reproduction in self-built subwoofer systems. The components feature a high power efficiency and provide an energy-saving operation. The lightweight design of these models which are available at an attractive price ensures a low total weight of the speaker system.



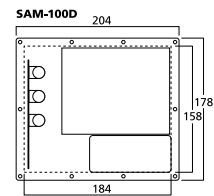
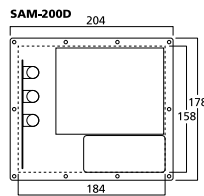
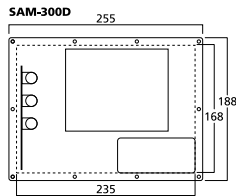
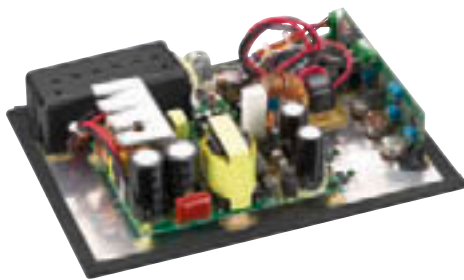
**SAM-300D**  
Order No. 32.0790



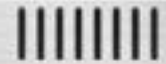
**SAM-200D**  
Order No. 32.0780



**SAM-100D**  
Order No. 32.0770



Model	SAM-300D	SAM-200D	SAM-100D
Output power rms 4Ω	300W <sub>RMS</sub>	200W <sub>RMS</sub>	100W <sub>RMS</sub>
Output power rms 8Ω	150W <sub>RMS</sub>	100W <sub>RMS</sub>	50W <sub>RMS</sub>
Music output power 4Ω	420W <sub>MAX</sub>	280W <sub>MAX</sub>	150W <sub>MAX</sub>
Music output power 8Ω	210W <sub>MAX</sub>	150W <sub>MAX</sub>	75W <sub>MAX</sub>
THD at rms power	< 0.1%	< 0.1%	< 0.1%
Frequency range, subwoofer	20Hz - (var. 40-200Hz)	20Hz - (var. 40-200Hz)	20Hz - (var. 40-200Hz)
Output impedance	4-8Ω	4-8Ω	4-8Ω
Input impedance	22kΩ	20kΩ	18kΩ
Line in	7V max.	7V max.	7V max.
S/N ratio	> 70dB	> 70dB	> 70dB
Power consumption, no load	24VA	24VA	17VA
Power consumption, stand-by	9VA	8VA	8VA
Power supply	230V~/50Hz/440VA	230V~/50Hz/330VA	230V~/50Hz/210VA
Required mounting cutout	240x165mm	185x160mm	185x160mm
Mounting depth w/o front panel	65mm	60mm	60mm
Dimensions	188x255x90mm	178x204x80mm	178x204x80mm
Weight	1.6kg	1.4kg	1.2kg
<b>Connections</b>			
Line in	1 x RCA	1 x RCA	1 x RCA
High power in	1 x speaker terminal	-	-
Line out	1 x RCA	1 x RCA	1 x RCA
Volume control	X	X	X
Freq. cutoff control	X	X	X
Phase control	X	X	X
Mains switch	X	X	X



## Active Speaker Modules, mono, for speaker building concepts.

Beside preamplifier and power amplifier, the active speaker modules for speaker systems also feature a limiter, level control and power supply unit.

The module is flush-mounted into a cutout of the speaker cabinet and thus, is an elegant solution whenever a self-built speaker is designed. These modules can also be used as a replacement module for the speaker systems PAK-115MK2 and PAK-108MK2 (supplied without crossover network).



### AKB-115

Order No. 32.0760

230  
W<sub>MAX</sub>

### AKB-108

Order No. 32.0750

100  
W<sub>MAX</sub>

Model	AKB-115	AKB-108
RMS output power	180W <sub>RMS</sub> /4Ω 100W <sub>RMS</sub> /8Ω	75W <sub>RMS</sub> /4Ω 40W <sub>RMS</sub> /8Ω
Music output power	230W <sub>MAX</sub> /4Ω 150W <sub>MAX</sub> /8Ω	100W <sub>MAX</sub> /4Ω 70W <sub>MAX</sub> /8Ω
THD	< 0.01%	< 0.01%
Output impedance	4-8Ω	4-8Ω
Frequency range	20-20,000Hz	20-20,000Hz
Input impedance	7kΩ bal., 10kΩ unbal.	10kΩ bal., 17kΩ unbal.
Input voltage	500mV	78mV bal., 140mV unbal.
S/N ratio	> 93dB	> 89dB
Standby current	-	-
Power supply	230V~/50Hz/370VA	230V~/50Hz/200VA
Req. panel cutout	180x300mm	120x200mm
Dimensions	195x317x132mm	132x212x135mm
Weight	2.6kg	1.8kg
Inputs	1 x line input (XLR, bal. and RCA L/R), 2 x microphone input (XLR, bal.)	1 x line input (XLR, bal. and RCA L/R), 1 x microphone input (XLR, bal.)
Outputs	1 x line output (XLR, bal. + 6.3mm jack), speaker cable for the connection of 4-8Ω speaker systems	1 x line output (XLR, bal.), speaker cable for the connection of 4-8Ω speaker systems
Integrated limiter	X	X
Level control	X	X
	X	-
Mains switch	X	X



PAAR  
PAIR

**MCA-127J**

Order No. 06.9030

**MCA-327J**

Order No. 06.9050

Audio connection cables, for connecting e.g. a mixer or CD player to an amplifier. 2 x RCA plug to 2 x XLR inline jack

MCA-127J = length: 1m

MCA-327J = length: 3m

**MCA-127P**

Order No. 06.9020

**MCA-327P**

Order No. 06.9040

Audio connection cables, for connecting e.g. a mixer or CD player to an amplifier. 2 x RCA plug to 2 x XLR plug

MCA-127P = length: 1m

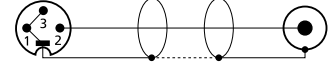
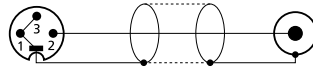
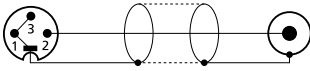
MCA-327P = length: 3m

**Audio Connection Cables**

For connecting e.g. a mixer or CD player to an amplifier.

- RCA plug to XLR inline jack, 3 poles
- Low-noise cable, ø 7mm
- In pairs red/black
- Different lengths

Model	Order No.	Length	Colour
MCA-158J	06.9060	1.5m	red/black
MCA-308J	06.9070	3m	red/black



OFC



NP

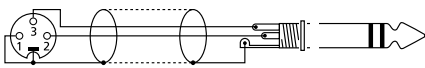


**Line Cables**

"HIGH QUALITY, HIGH FLEXIBLE"

- 3-pole XLR plug and 6.3mm stereo plug, balanced
- Black, shielded low-noise OFC cable material
- Different lengths

Model	Order No.	Length
MEL-402/SW	06.9080	4m



**NP-2XL**

Order No. 34.8860

**NEUTRIK 6.3mm mono plug**

- Nickel-plated
- Strain relief and cable bending protection
- For cables with a large diameter up to: ø 10mm

**NTA-135**

Order No. 06.8100

**Adapter**

1 x 3.5mm stereo inline jack to 2 x RCA plug.

**NTA-335A**

Order No. 06.8110

**Adapter, right-angle**

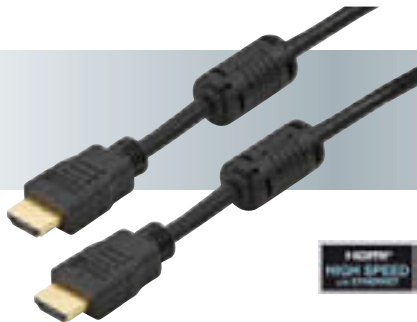
3.5mm stereo plug to 3.5mm stereo inline jack.

**HDMI™ High-Speed Connection Cables**

(High definition multimedia interface) for high-resolution transmission of digital video and audio data.

- Ethernet, audio return channel, HDCP
- HDTV up to 1,080p (full HD), suitable for 3D
- 2 ferrite cores for an interference-free transmission, also with greater cable lengths
- Gold-plated contacts
- Fitted with 2 x 19-pole HDMI™ plug

Model	Order No.	Length	Colour
HDMC-1000/SW	06.9000	10m	black
HDMC-1500/SW	06.9010	15m	black



HDMI™  
HIGH SPEED  
with Ethernet



**PG-203PA**

Order No. 06.8120

**3.5mm stereo plug, right-angle**

- Plastic body
- For cables: ø 4mm

With this cable, it is possible to provide an Internet connection to several units without having to lay a separate Ethernet cable. The HDMI™ cable is downward compatible and can replace all existing HDMI™ cables.



## AES-3

Order No. 28.2550



### Intelligent energy-saving mains socket with zero watt technology

Ideally suited for computers or computer workstations with additional appliances, e.g. monitors, printers, scanners, speakers and many other standby units. The mains socket cuts off connected devices automatically from the mains supply within one minute after one device is set to standby mode.

- The one-time learned standby current serves as an identifier
- For switching the units back on, press the red button for approx. 3 seconds
- No power consumption (0W) in standby mode
- Connected load: 230V~/50Hz/2,500W/10A



## AES-1

Order No. 28.2540



### Shut-off timer socket with zero watt technology

Connected appliances (e.g. fan heaters, irons, pumps, printers, copiers, coffee machines) will automatically and safely be cut off from the mains supply after a preset operating time (15 minutes - 8 hours).

- No power consumption (0W) in standby mode
- Easiest operation with one button only
- Visual LED display of the remaining operating time (15/30 min./1/2/4/8 hrs)
- Connected load: 230V~/50Hz/2,500W/10A or 1,150 VA/5A with an inductive load (e.g. motors)



## MCS-15MS

Order No. 05.9713

### Master/slave multi-socket power strip

When the connected unit is switched on or off, the other sockets are also switched on or off via the master socket. This is particularly useful for IT applications, e.g. when switching on a PC (master), the printer, monitor, modem, active speaker systems, etc. (slave) are also switched on.

- Protection against overvoltage and lightning up to 15,000A, functional test via indicating light
- 1 earthed master socket (550W max.), 5 earthed slave sockets
- Adjustable switching threshold
- Child safety sockets
- Sockets turned by 45°
- Cable specification: H05VV-F3Gx1.0mm<sup>2</sup>, 3,500VA max.
- 3m connection cable with earthed plug



## Series of Rechargeable Lead Batteries, 12V,

maintenance-free, high capacity, for general applications.

- Discharging or storing in any position
- For standby parallel operation (SBPO) and cycle operation (CO)
- 3-5 years service life in standby parallel operation at 25 °C
- VdS (German assn. of property insurers) certified



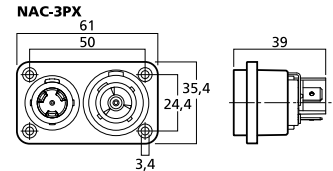
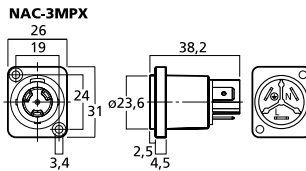
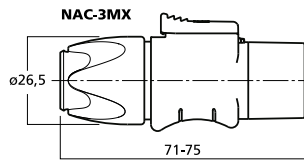
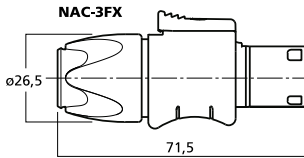
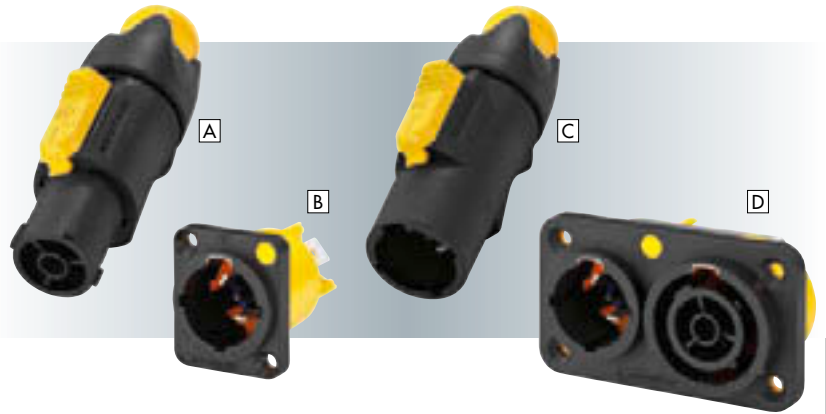
Model	Order No.	VdS (German assn. f. property insurers) no.	Power	Dimensions	Weight
BPA-12/2	28.2490	G107033	12V/2.2Ah	178x66x34mm	1.1kg
BPA-12/7	28.2520	G109009	12V/7.2Ah	151x102x65mm	2.5kg
BPA-12/26	28.2500	G107038	12V/26Ah	166x125x175mm	9.3kg
BPA-12/45	28.2510	G107039	12V/45Ah	198x171x166mm	14.1kg



### NEUTRIK PowerCon® True1 Connectors



- Correspond with safety requirements according to IEC 60320
- For mains connection up to 250V~/16A
- Connections for ground, phase and neutral conductor
- Robust version with latching device and cable inlet with self-adjusting clamps (plugs and inline jacks only)
- Self-extinguishing acc. to UL 94V0



Model	Order No.	Position	Type	Power rating	Insulating resistance
NAC-3FX	34.8820	A	inline jack	250V~/16A	> 100MΩ
NAC-3MX	34.8830	B	plug	250V~/16A	> 100MΩ
NAC-3MPX	34.8840	C	chassis plug	250V~/16A	> 100MΩ
NAC-3PX	34.8850	D	duplex chassis connector plug/jack	250V~/16A	> 100MΩ

### SCNAC-PX

Order No. 34.8870



#### Sealing cover

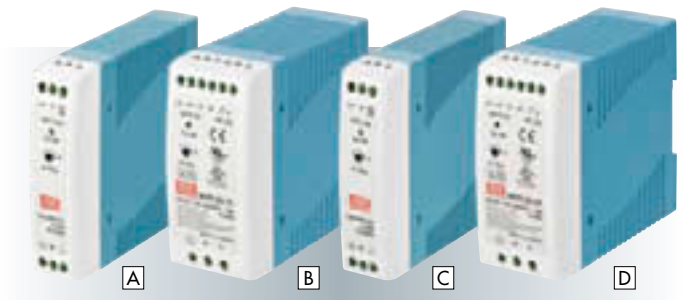
- Suitable for NEUTRIK PowerCon® True1 duplex chassis connector NAC-3PX
- Dustproof and splashproof according to IP65
- Rubber version



### Switch-mode PSUs

For top hat rail mounting.

- Installation onto DIN top hat rails, e.g. in a distribution board, meter panel, fuse box or switch cabinet
- Protected against short circuit, overload and overheating
- Power LED
- All-insulated screw terminal contacts
- Robust plastic housing, slimline design
- PSCS-60/... with additional relay contact



Model	Order No.	Input voltage	Output voltage	Charging/output current	Admiss. ambient temp.	Dimensions	Weight	Position
PSCS-20/12	27.3350	100-240V~/50Hz/60Hz	12V=	1.67A	0-40 °C	22.5x90x100mm	155g	A
PSCS-60/12	27.3370	100-240V~/50Hz/60Hz	12V=	5A	0-40 °C	40x90x100mm	285g	B
PSCS-20/24	27.3360	100-240V~/50Hz/60Hz	24V=	1A	0-40 °C	22.5x90x100mm	155g	C
PSCS-60/24	27.3380	100-240V~/50Hz/60Hz	24V=	2.5A	0-40 °C	40x90x100mm	285g	D

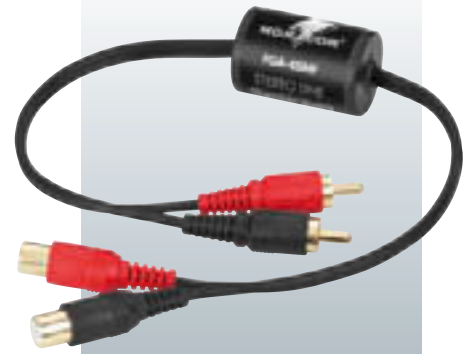


## FGA-40MF

Order No. 21.3050

**Stereo line transformer**, compact design, for preventing signal interference and hum loops which may occur, e.g. when connecting PC sound cards or notebooks to an amplifier.

- Galvanically isolated inputs and outputs
- 2 RCA jacks
- 2 RCA plugs
- Input/output impedance: 20k $\Omega$
- Frequency range: 20-20,000Hz
- THD: < 0.01%
- Transmission ratio 1:1
- $\varnothing$  24mm x 38mm, 32g
- Length including connection cable: approx. 40cm



## FGA-30M

Order No. 21.3010

**Stereo line transformer**, compact design, for preventing signal interference and hum loops which may occur, e.g. when connecting PC sound cards or notebooks to an amplifier.

- Galvanically isolated inputs and outputs
- 2 RCA plugs
- 3.5mm stereo plug
- Input/output impedance: 20k $\Omega$
- Frequency range: 20-30,000Hz
- THD: < 0.01%
- Transmission ratio 1:1
- $\varnothing$  24mm x 38mm, 32g
- Length including connection cable: approx. 115cm



## CTG-1NOISE

Order No. 29.2050

**XLR cable tester, 48V**, with integrated pink noise generator.

- For an easy and fast functional test of balanced microphone cables or of microphone inputs on stage
- Visual fault indication via LED
  - Flashes twice: pin 2 of XLR cable is defective
  - Flashes three times: pin 3 of XLR cable is defective
  - LED is off: pin 1 or phantom power is defective
  - LED lights up permanently: faultless cable, noise generator
- 3-pole NEUTRIK XLR plug
- Power supply via 9-48V phantom power
- Output amplitude: 100mV<sub>pp</sub>
- Dimensions:  $\varnothing$  19mm x 74mm
- Weight: 32g

## CTG-1SINE

Order No. 29.2060

**XLR cable tester, 48V**, with integrated 100Hz sine wave generator.

- For an easy and fast functional test of balanced microphone cables or of microphone inputs on stage
- Visual fault indication via LED
  - Flashes twice: pin 2 of XLR cable is defective
  - Flashes three times: pin 3 of XLR cable is defective
  - LED is off: pin 1 or phantom power is defective
  - LED lights up permanently: faultless cable, 100Hz sine wave generator is on
- 3-pole NEUTRIK XLR plug
- Power supply via 9-48V phantom power
- Output amplitude: 100mV<sub>pp</sub>
- Dimensions:  $\varnothing$  19mm x 74mm
- Weight: 32g





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## COMPANY GROUP



### MONACOR INTERNATIONAL

This sign stands for the company group MONACOR INTERNATIONAL, consisting of the parent company MONACOR INTERNATIONAL GmbH & Co. KG at Bremen, Germany and the international subsidiaries.



This sign is an internationally registered and protected sign of MONACOR INTERNATIONAL GmbH & Co. KG. This sign demonstrates the belonging to the company group MONACOR INTERNATIONAL.

## BRANDS



### MONACOR

These signs are internationally registered and protected brands of MONACOR INTERNATIONAL GmbH & Co. KG. The protection includes the whole product range of the company.



These brands are intended mainly for retailers of surveillance technique and PA technology and their customers.



### IMG Stage Line

This sign is an internationally registered and protected brand of MONACOR INTERNATIONAL GmbH & Co. KG. The protection includes the whole product range of the company. This brand is intended mainly for DJs, musicians, and stage technicians.



### CARPOWER by MONACOR

This sign is an internationally registered and protected brand of MONACOR INTERNATIONAL GmbH & Co. KG. The protection includes the whole product range of the company. This brand is intended mainly for retailers and end users of car HiFi.



## Important Notes – please read very carefully!

All products of MONACOR INTERNATIONAL are tested continuously to ensure a constant quality level and to maintain quality standards. All products which are subject to the CE guidelines as well as the electric and electronic subassemblies which are subject to the directive for motor vehicles, are tested according to the respective standards and carry the CE mark. In consequence, these products can be sold in all EC countries without further tests or approvals.

### General Information

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- \* Windows is a registered trademark of Microsoft Corporation in the United States and other countries.
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- We cannot be held responsible for printing errors, should they occur. We reserve the right to make technical changes without prior notice.
- The technical specifications stated are according to the information of the manufacturer.
- Due to production tolerances, technical data may vary slightly.
- Damage resulting from unauthorised servicing of the products thus causing changes, as well as improper handling resulting in consequential damage are excluded from the warranty. We will not be liable for changes of the state of the products resulting from improper storage, other interventions or improper use.
- If the units are interfered with, the CE approval will no longer apply. All products are always suitable for indoor use only unless stated otherwise. The products are not suitable for installations into aircrafts or surface mounting onto aircrafts.
- The products do not correspond to the medical products directive 2007/47/EC.
- If the products are to be put out of operation definitively, they must be taken to a local recycling plant for disposal which is not harmful to the environment.

### Technical Information

- Before first use of the products please read the instruction manual carefully!
- The products correspond to the directive for electromagnetic compatibility 2004/108/EC, the directive 2002/95/EC (RoHS) and where applicable to the low voltage directive 2006/95/EC with the directive 2009/125/EC (ErP).
- When operating with voltages of over 42V, please always observe the respective safety measures.
- Before opening any products operated with 230V mains voltage, disconnect the products from the mains!
- Make sure that the supply voltage is disconnected before working on components and modules. Existing capacitors must be discharged.
- Mains cables and test cables have to be examined for damage regularly. Never pull on the cable to disconnect the plug from the socket.
- Mains cables and fuses must only be replaced by skilled personnel.
- Unless otherwise stated:
  - protect the products from moisture and heat,
  - always observe the admissible ambient temperature of 0–40 °C.
- Do not use a very high volume level when using headphones. Permanent high volume may damage your hearing!
- A soldering process which is too long and too hot may cause damage to the corresponding products. Choose a soldering temperature that is suitable for the material used. No liability can be assumed for damage to the product or consequential damage caused by improper handling.
- The plugs, jacks, switches rotary switches and potentiometers shown in this catalogue are only suitable for connection to safety extra low voltage (SELV) or signal voltage unless the item is designed for a higher voltage (see text or table).
- If the fixing nuts of chassis jacks or chassis plugs are overtightened, this may cause damage to the whole component. In case of improper handling, no liability can be assumed for this or consequential damage.
- The heat must be eliminated by air circulation. Therefore, do not cover ventilation slots with anything. Do not put or drop anything through the ventilation slots. Otherwise, there will be danger of an electric shock.
- Only use a dry, soft cloth for cleaning the products. Chemicals must not be used in any case.

### Information on the German Product Liability Act

According to the law dated 15 December 1989 governing product liability which was last amended by the law dated 19 July 2002, manufacturers, importers and dealers are obliged to compensate for damage caused by a faulty product under certain prerequisites.

A product can already be considered faulty if its presentation leaves a private, non-commercial end user with a wrong impression as to its safety in use or if it is to be expected that the private end user will not observe the required safety regulations when using the product or will apply an excessive operating voltage to it, except if this user has been informed as to the necessity to observe the safety regulations and specified voltages, etc.

In your own interest and for your customers' safety, therefore please draw your non-commercial customers' attention to the following:

The products listed in this catalogue may only be used for the stated purpose. If there are any doubts as to the purpose of the goods, questions must be clarified with an authorised expert or with the service department of MONACOR INTERNATIONAL.

The following EN standards and VDE (Verband Deutscher Elektrotechniker = Association of German Electrical Engineers) regulations must be observed:

### Electromagnetic compatibility:

EN300422, EN301489, EN55013, EN55020, EN61000-3-2, EN61000-3-3, EN61000-6-1, EN61000-6-3

### Low voltage directive:

DINVDE0100, DINVDE0532, EN60065, EN60742, EN60570, EN60335, EN60598, EN60950, EN61010

### Motor vehicles directive:

directive 72/245/EEC, changed by the directive 2004/104/EC

### In Germany, the above-mentioned regulations can be obtained from:

VDE-Verlag GmbH

Bismarckstraße 33

10625 Berlin - Germany

Phone: +49 (0) 30 / 348001-0

Fax: +49 (0) 30 / 3417093

VDE-Verlag GmbH

Merianstraße 29

63069 Offenbach - Germany

Phone: +49 (0) 69 / 840006-0

Fax: +49 (0) 69 / 84000655

### Notes Regarding the Approval of Wireless Systems

The wireless microphone systems in the frequency range 863MHz to 865MHz and in the range 2.4GHz are generally approved and licence-free!

### These systems are licence-free in the EU!

Every wireless system has been examined by a notified body and has been approved in the EU according to the R+TTE directive. However, a frequency assignment for the systems in the frequency range 175MHz to 223MHz, 672MHz to 697MHz, 740MHz to 767MHz and 790MHz to 814MHz for the corresponding area in which the unit is to be used must be applied for at the respective national authority.

### These systems require a licence in the EU!

In Germany, a licence-free operation of wireless microphones in the frequency range 790MHz to 814MHz (see directive 91/2005) is possible until 31 December 2015.

As of 2016, the frequency range 790MHz to 814MHz can still be used with a frequency assignment. This assignment is subject to a fee.

In Germany, the frequency assignment has to be applied for at the corresponding branch of the Federal Network Agency (BNetzA, Germany).

The declaration of conformity can be found on our website: [www.imgstageline.de](http://www.imgstageline.de).

The forms for the frequency assignment as well as the ruling 91/2005 can be found on the website of the Federal Network Agency: [www.bundesnetzagentur.de](http://www.bundesnetzagentur.de).

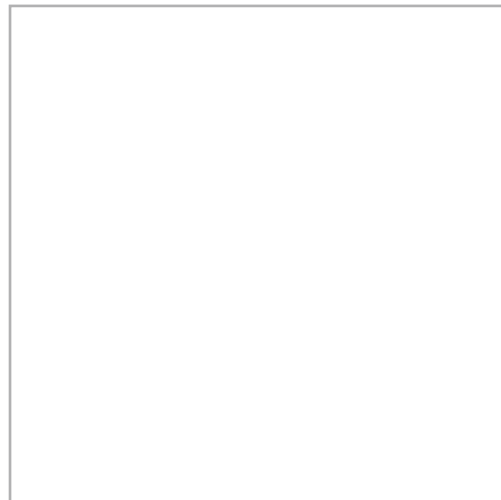
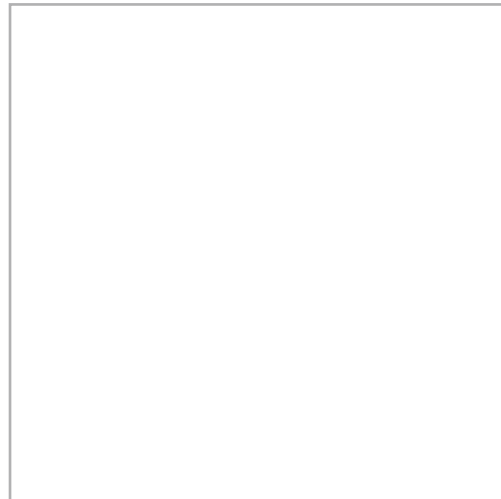
For countries outside of Europe, please consult the authorities of the corresponding country.

**Please observe the notes in the operating instructions!**

MONACOR INTERNATIONAL – Your reliable partner – worldwide.



## ELECTRONICS FOR SPECIALISTS



### **HEADQUARTERS MONACOR INTERNATIONAL**

Zum Falsch 36 · 28307 Bremen · Germany  
Phone: +49 (0) 4 21/48 65-0  
Fax: +49 (0) 4 21/48 84 15  
info@monacor.com · www.monacor.com

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