



AUDIO TOOLS CATALOGUE





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Palmer® is a brand of the Adam Hall Group.

#### ABOUT US

Palmer stands for 35 years of experience in analog audio technology. Our Audio Tools have proved themselves to be dependable and practically invaluable helpers in all fields from pro audio installations/live sound production to recording situations. In spite of tremendous developments in digital technology, sound technicians and musicians are still faced with some age-old problems for which Palmer offers the perfect solutions.

We are proud to present our new catalogue, featuring some tried and true pieces of equipment along with several new devices.

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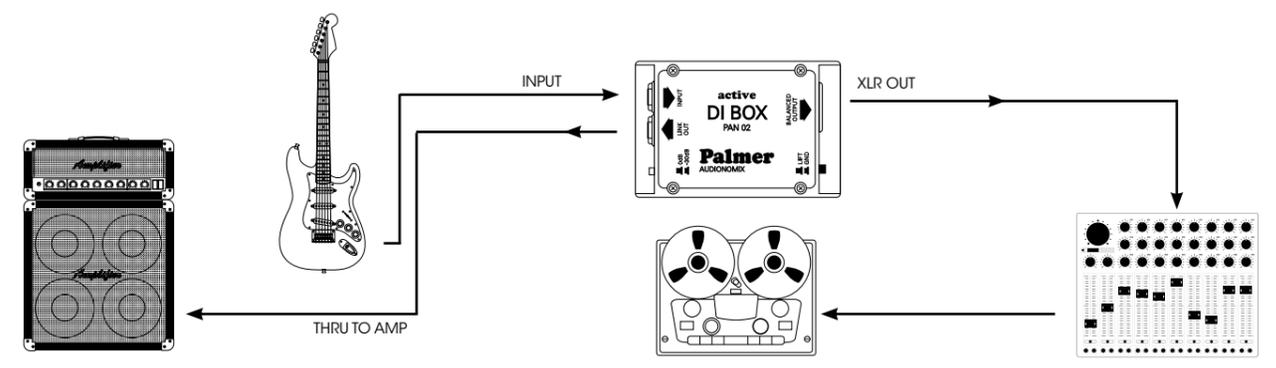
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# PALMER DI BOXES



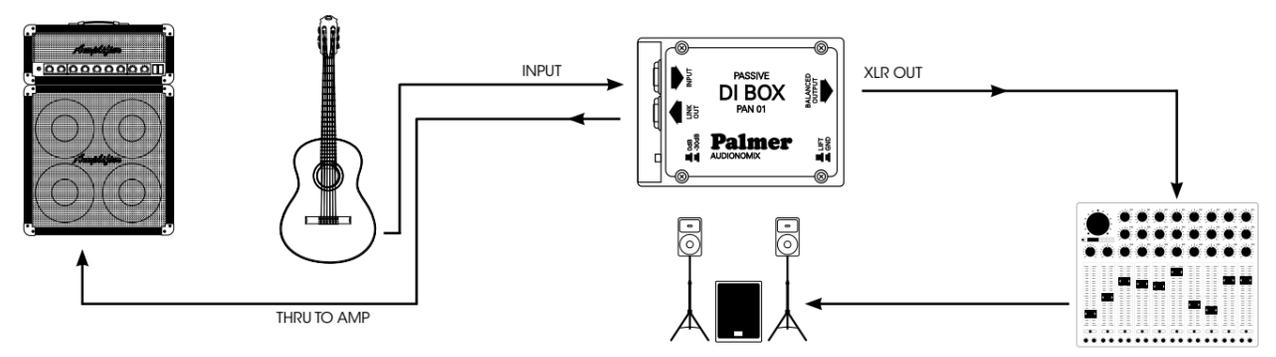
### SETUP 01

DI boxes are mainly used to connect an instrument to a mixing desk or PA. A good DI box should not impair the sound in any way. This Diagram shows a typical application for an active DI Box. The guitar is connected to the input jack, this signal is looped through to the "Through" or "Link" jack where an amplifier can be connected. The XLR out is connected to the mic input of a mixer.



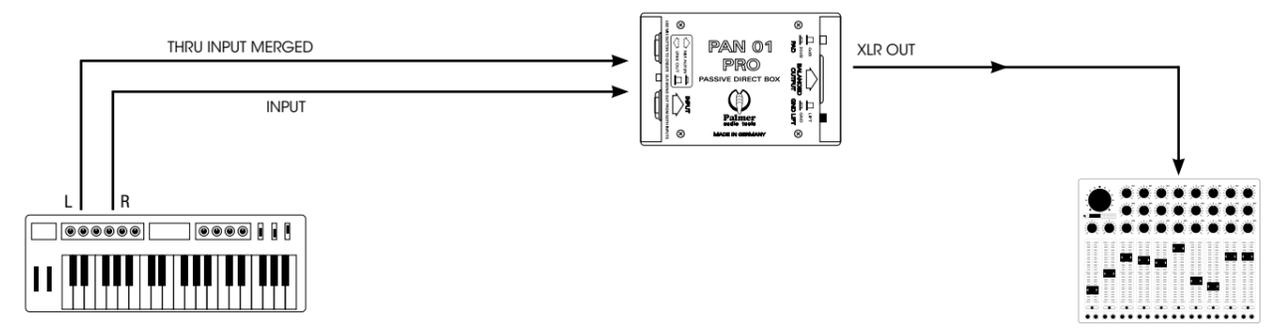
### SETUP 02

This is a similar setup as above. Depending on if you are using an active or passive instrument, you should use either a passive or active DI-Box. For active Instruments (often recognizable in that they have a battery compartment or are mains powered such as a keyboard), a passive DI Box is sufficient. Passive Instruments (such as a normal electric guitar) work best with active DI Boxes. Passive DI-Boxes can lead to a muffled indirect sound in this case.



### SETUP 03

The PAN01PRO offers an additional function that is particularly interesting in combination with keyboards. With the merge function you can use the thru output as an additional input and merge these together thus saving one channel on the mixer.





## PAN 01/02/04 DIRECT BOXES

Streamlined production methods and large runs have enabled us to offer you high quality DI boxes at an affordable price.

PAN 01 - Passive DI box. Jack input with parallel "THRU" output, transformer balanced XLR output. Attenuable input sensitivity, can handle both line level and speaker level signals.

PAN 02 - Active DI box. Both battery or 48 V-phantom power operation possible. Active circuitry allows for high input impedance (1 M $\Omega$ ) and higher input sensitivity (typical difference between in and out -4 dB). Maximum output level with phantom power operation +10 dBu. Output: transformer balanced. The special "floating ground" circuitry enables ground lift even during phantom power operation.

PAN 04 consists of a housing containing the equivalent of two PAN-01s, making it a dual channel passive DI box. This "stereo" configuration makes it ideally suited for use with certain keyboards and devices which have several outputs.

### SPECIFICATIONS

Model:	PAN01	PAN02	PAN04
No of Channels:	1	1	1
Active/passive:	passive	active	passive
Transformer balanced:	yes	yes	yes
Attenuator:	-30 dB	-30 dB	-30 dB
Input/output gain:	-20 dB	-4 dB	-20 dB
Ground lift switch:	yes	yes	yes
Maximum input level:	+ 54 dBu	+ 45 dBu	+ 54 dBu
Maximum output level:	+ 4 dBu	+ 10 dBu	+ 4 dBu
Frequency range @ 2k source imp. -1dB:	10 Hz - 40 kHz	10 Hz - 20 kHz	10 Hz - 40 kHz
Input impedance @ 60Hz:	60 k $\Omega$	1 M $\Omega$	60 k $\Omega$
Nom. output impedance:	600 $\Omega$	600 $\Omega$	600 $\Omega$
Housing:	Steel	Steel	Steel
Dimensions (W x H x D):	110 x 73 x 42 mm	110 x 73 x 42 mm	110 x 110 x 45 mm
Weight:	0.34 kg	0.38 kg	0.48 kg



## PDIR 01 BALANCED IN - UNBALANCED OUT

Many try using a DI-Box "backwards" in order to convert a balanced signal to unbalanced. The resulting mismatch generally leads to disappointing results. The PDIR (DI-Reverse) offers a clean and reliable solution whilst additionally isolating the two connected devices via transformer.

### SPECIFICATIONS:

No. of channels:	1
Type:	passive
Input / Output impedance (nominal):	2 kOhm
Transformer balanced:	yes
In/out gain:	0 dB
Ground lift switch:	yes
Max. input / output:	+6 dBu
Housing / Dimensions:	Steel / 110 x 35 x 39 mm



## PAN 01 PRO PROFESSIONAL DI BOX

PAN01 PRO is the deluxe version of Palmer's top selling passive DI box PAN01. It features a 2mm steel housing and heavy duty metal switches for the PAD and ground lift functions to withstand the rigors of the road and stage. The transformer has been completely redesigned and upscaled with a larger core for increased dynamic range and headroom, and a metal cover for improved shielding. Also, the PAN01 PRO's parallel out is switchable to double as additional input. This feature enables the summing of a stereo output (e.g. of a keyboard) with the resulting mono signal present at the PAN01 PRO's balanced XLR output. The PAN01 PRO comes with a high quality reinforced nylon bag with cutouts for connecting the box inside the bag.

### SPECIFICATIONS

Model:	PAN01PRO
No of Channels:	1
Features:	Passive, transformer balanced, ground lift switch, pad switch, mono merge function
Attenuator:	-30 dB
Input/output gain:	-20 dB
Maximum input level:	+ 56 dBu
Maximum output level:	+ 6 dBu
Frequency range @ 2k source imp. -1dB:	10 Hz - 40 kHz
Input impedance @ 60Hz:	60 K $\Omega$
Nom. output impedance:	200 $\Omega$
Housing:	Steel
Dimensions (W x H x D):	110 x 75 x 44 mm
Weight:	0.75 kg



## PAN 02 PRO PROFESSIONAL DI BOX

The Palmer PAN02 PRO is an active DI-box with outstanding additional functions. These include an unbalanced XLR input, in addition to the 3-way attenuator -10, -20, -30 dB and a switchable gain of 12 dB, connected with a maximum output voltage of +20 dBu. The Groundlift switch has a „lift“ position allowing adjustments between a „soft and hard grounding“. The balanced output is achieved with a high quality transformer in the Mumetall housing that was specially developed for this purpose. The PAN02 Pro can be powered either with a 9 V battery or 48 V phantom power. A two-colour LED indicates which source supplies the power.

### SPECIFICATIONS

Product type:	active DI box
Channels:	1
Inputs:	2
Input connectors:	6.3 mm Jack, XLR
Max. input level:	+ 45 dBu
Input impedance:	0dB & 12 dB: 1 M, -10 & -20 dB: 70 k, -30 dB: 40 k Ohm(s)
Input pad:	0 dB, -10 dB, -20 dB, -30 dB
Outputs:	1
THRU outputs/channel:	1
Output connectors:	XLR, 6.3 mm Jack
Max. output level:	+ 20 dB
Output impedance:	600 Ohm(s)
Frequency response:	20 - 20000 Hz
Transformer balanced:	yes
Ratio:	3.16:1, 10:1, 31.6:1, 1:4
Controls:	attenuator, battery / + 48 V Power, Boost, ground lift
Operating voltage:	9 V block, +48 V phantom power
Cabinet material / surface:	sheet steel / powder coated
Dimensions (W x H x D):	116 x 43.5 x 140 mm
Weight:	0.85 kg



## PAN 03 ACTIVE DI-BOX 4 CH

Active 4 ch. DI box. The technical specifications are identical to the PAN-02, however, the PAN-03 is built for mains operation (power supply included). All connections and switches are located on the front panel, additional parallel XLR outputs are located on the back. A power supply is included with the unit.

### SPECIFICATIONS

Model:	PAN03
No of Channels:	4
Active/passive:	Active
Transformer balanced:	yes
Attenuator:	-30 dB
Input/output gain:	-4 dB
Maximum input level:	+ 45 dBu
Maximum output level:	+ 10 dBu
Frequency range @ 2k source imp. -1 dB:	10 Hz - 20 kHz
Input impedance @ 60Hz:	1 MΩ
Nom. output impedance:	600 Ω
Housing:	Steel
Dimensions:	19" / 1 U / 90 mm
Weight:	1.9 kg



## PAN 03 PASS PASSIVE DI-BOX 4 CH

Passive 4-channel DI BOX in a 19" housing. Each channel has a jack input with a parallel output for looping the signal through. An attenuation switch (-30dB) permits connection of a line or speaker signal at the user's choice. The specifications are identical with those of the PAN 01 / PAN 04. All connections and switches are on the 1 U front panel; the XLR output is additionally present as a parallel socket on the rear panel.

### SPECIFICATIONS

Model:	PAN03PASS
No of Channels:	1
Active/passive:	Passive
Transformer balanced:	yes
Attenuator:	-30 dB
Input/output gain:	-20 dB
Maximum input level:	+ 54 dBu
Maximum output level:	+ 4 dBu
Frequency range @ 2k source imp. -1 dB:	10 Hz - 40 kHz
Input impedance @ 60Hz:	60 kΩ
Nom. output impedance:	600 Ω
Housing:	Steel
Dimensions:	19" / 1 U / 90 mm
Weight:	1.7 kg



## PAN 08

### DI-BOX / LINE ISOLATOR/ BOOSTER

The PAN08 is a multifunctional device. Each of the four channels can be used independently as an active DI box, line isolation box or booster. The combination input socket accepts unbalanced and balanced signals. The output has dual transformer balanced XLR jacks (front and rear). The signal level can be attenuated by 20 dB for microphone inputs, but can also be boosted in three stages by up to 18 dB for LINE inputs if necessary. With an output level of +12 dBu on a load of 600  $\Omega$  with 0.05 % THD / 40 Hz and an output noise level of less than -110 dBu, the unit meets highest professional standards.

#### SPECIFICATIONS

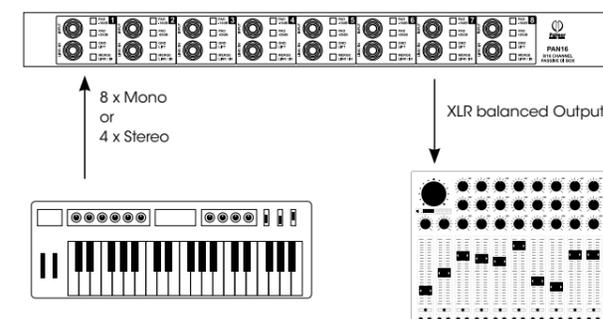
Type:	Booster and active DI box with 4 independent channels.
Input (per channel):	Electronically balanced combination connector XLR Pin 2 = hot (+phase) pin 3 = cold (-phase) pin 1 = shield, ground TRS (stereo) jack plug: Tip = hot (+phase) ring = cold (-phase) housing = shield, ground GND-LIFT switch disconnects PIN1 and jack plug ground from the electronics Input impedance 20k $\Omega$ balanced, 10k $\Omega$ unbalanced Maximum input level: +12dBu
Channel boost switchable:	+6 db, +12 dB, +18 dB
Outputs:	2x XLR/m parallel, transformer balanced. XLR: Pin 2 = hot (+phase) pin 3 = cold (-phase) pin 1 = shield, ground
Output impedance:	600 $\Omega$
Maximum output level:	+12 dBu
Output PAD switch:	20 dB attenuation
Power supply:	9V to 18V DC
Power consumption:	9V/ 250mA, 18V/125mA (power requirement approx. 2.25W)
DC Connector:	Socket for 5.5 mm DC barrel connector with 2.1 mm pin receiver
Housing:	19", 1HU, approx. 90mm behind the front panel
Weight:	1.9 kg



## PAN 16

### 19" PASSIVE DI-BOX 8 CH

The Palmer PAN16 is an 8 channel passive DI box in a 19" 1U rack format. Through the special MERGE THRU/IN function, the parallel THRU output can be connected as a second input for looping the signal. The signal is fed with the one from the INPUT jack as a mono sum into the output. Thus, the PAN16 offers a maximum of 16 inputs, two PAD buttons enable an attenuation of 10, 20 or 30 dB. The outputs are on XLR connectors and are electrically isolated and balanced by a transformer. They are available with 8 additional THRU-sockets on the rear panel of the device.



#### SPECIFICATIONS

Product type:	DI box
Type:	passive
Channels:	8
Inputs:	8 / 16
Input connectors:	6.3 mm Jack
Max. input level:	54 dBu
Input impedance:	((at) 60 Hz) 1 M Ohm(s)
Input pad:	0 / -30 dB
Outputs:	4 (+ 4 Parallel Thru out)
THRU outputs/channel:	2
Output connectors:	XLR, 6.3 mm Jack
Max. output level:	54 dB
Output impedance:	600 Ohm(s)
Frequency response:	10 - 40000 Hz
Transformer balanced:	yes
Ratio:	10 : 1
Controls:	PAD -20dB, PAD -10dB, merge, ground lift
Cabinet material:	sheet steel
Cabinet surface:	powder coated
Dimensions (W x H x D):	480 mm / 19" x 45 mm / 1 U x 200 mm
Weight:	2.39 kg

# PALMER LINE ISOLATORS



## PLI 04 USB USB MEDIA LINE ISOLATOR 2 CH

The PRO MEDIA DI / PLI04, focuses on the discerning needs of the computer-age media in mind. With the PLI04 personal computers and other consumer equipment with unbalanced outputs can be converted to balanced signals. The PLI 04 accommodates all the common input types: TRS jacks accepting mono or stereo plugs, RCA sockets and a 3.5mm stereo jack input for use with the headphone output of a Laptop or similar device. The outputs are conventional transformer balanced XLR sockets, as used in professional PA systems, guaranteeing an electrically decoupled signal. Although the PLI 04 is primarily a stereo unit, it can be switched to mono, in this setting the two stereo signals are summed and fed to both XLR outputs.



### SPECIFICATIONS

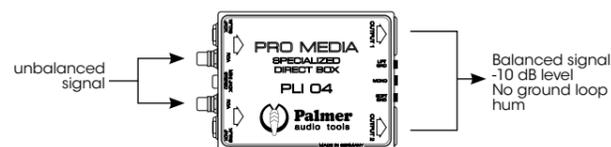
Passive DI-box, stereo unit, transformer balanced outputs, mono switch

Input:	2x 6.3 mm TRS-Jack, Tip = +phase (hot), Ring = -phase (cold), Sleeve = screening, ground, 2x RCA phono sockets and 1x 3.5mm stereo jack
Input impedance:	6 k $\Omega$ at 600 $\Omega$ load
Input level:	6 dBu @ 30 Hz/0.05% THD, 16 dBu @ 30 Hz/0.33% THD, All measurements taken with 200 $\Omega$ source
Output:	2x XLR male, Pin 1 ground, Pin 2 pos. phase (hot), Pin 3 neg. phase (cold), Transformer balanced
Output impedance:	600 $\Omega$
Gain reduction input to output:	10 dB, transformer ratio: 3.16 : 1
Frequency response:	20 Hz - 20 kHz $\pm$ 0.5 dB
3 position ground lift switch:	lift, ground, soft ground
Housing:	Steel / 140 x 45 x 95 mm
Weight:	0.42 kg



### PLI 04 MEDIA LINE ISOLATOR 2 CH

The PRO MEDIA DI / PLI04, focuses on the discerning needs of the computer-age media in mind. With the PLI04 personal computers and other consumer equipment with unbalanced outputs can be converted to balanced signals. The PLI 04 accommodates all the common input types: TRS jacks accepting mono or stereo plugs, RCA sockets and a 3.5mm stereo jack input for use with the headphone output of a Laptop or similar device. The outputs are conventional transformer balanced XLR sockets, as used in professional PA systems, guaranteeing an electrically decoupled signal. Although the PLI 04 is primarily a stereo unit, it can be switched to mono, in this setting the two stereo signals are summed and fed to both XLR outputs.



#### SPECIFICATIONS

Passive DI-box, stereo unit, transformer balanced outputs, mono switch

Input:	2x 6.3 mm TRS-Jack, Tip = +phase (hot), Ring = -phase (cold), Sleeve = screening, ground, 2x RCA phono sockets and 1x 3.5mm stereo jack
Input impedance:	6 kΩ at 600 Ω load
Input level:	6 dBu @ 30 Hz/0.05% THD, 16 dBu @ 30 Hz/0.33% THD, All measurements taken with 200 Ω source
Output:	2x XLR male, Pin 1 ground, Pin 2 pos. phase (hot), Pin 3 neg. phase (cold), Transformer balanced
Output impedance:	600 Ω
Gain reduction input to output:	10 dB, transformer ratio: 3.16 : 1
Frequency response:	20 Hz - 20 kHz ± 0.5 dB
3 position ground lift switch:	liff, ground, soft ground
Housing:	Steel
Dimensions (W x H x D):	140 x 45 x 95 mm
Weight:	0.42 kg

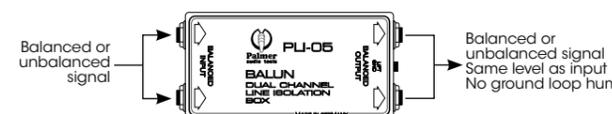


### PLI 05 LINE ISOLATOR 2 CH

Balanced or unbalanced isn't the question here. BALUN stands for Balanced-Unbalanced. Thanks to the stereo TRS jacks used in the PLI05, it can cope with both balanced and unbalanced signals. The PLI05 is so to say the PLI02's little sister. Both use so called line isolating transformers to realize a galvanic separation. They are connected between mains powered devices to reliably prevent ground loop hum. The PLI02 was designed for use with XLR connections and for low impedances (600 Ω). The PLI05 on the other hand with its jack connectors is better for higher impedances. It covers a wide range from 600 Ω to over 10 kΩ. To prevent loss of level make sure that your input impedance is not higher than the output impedance. Both devices are suitable for high levels of up to +20 dBu.

#### SPECIFICATIONS

Line isolating transformer box with 2 separate channels	
Input:	2 x TRS jacks (stereo sockets) Input impedance: nominal 10 kΩ
Output:	2 TRS jacks (stereo sockets), Transformer ratio 1 : 1, Frequency response: 30 Hz - 20 kHz ± 0.5 dB @ 10 kΩ source impedance
THD:	< 0.5% @ 0 dBu @ 10 kΩ source impedance
Housing:	Steel
Dimensions (W x H x D):	140 x 45 x 65 mm
Weight:	0.4 kg



### PLI 06 2 IN 1 CHANNEL LINE ISOLATOR

Today, lectures and presentations are mostly held with audio and visual media support. Connecting laptop computers to the mixing consoles of PA systems, however, can be a major problem due to incompatible connector formats. The Palmer Line Level Converter PLI06 is a dedicated interface to feed the unbalanced stereo signal typically provided by a laptop to the balanced (mono) microphone inputs of professional mixing desks. It mixes the stereo output to mono while impedance matching and signal balancing are achieved by a high quality audio transformer especially designed for the unit. Moreover, it also prevents ground loops and the annoying hum they result in. The PLI06 is entirely passive and does not require mains power or batteries.

#### SPECIFICATIONS

Inputs:	2x RCA sockets unbalanced
Input impedance:	min.600 Ω, max 10 kΩ.
Input level: -	10 dBV to + 6dBu
Features:	Mono merge via resistor network
Output::	1x XLR/m, PIN 1 = Ground, PIN 2 = hot (+phase), PIN 3 = cold (-phase)
Output impedance:	200 Ω at 600 Ω input
Output level:	-4dBu at 0dBu input level mono, depending on the mono-compatibility of the signal.
Housing:	Aluminium diecast
Dimensions (W x H x D):	140 x 45 x 65 mm
Weight:	0.42 kg





**PLI 01**  
LINE ISOLATOR 1 CH

Single channel unit in a small rugged diecast box. Especially useful in guitar rack systems where multiple signal processors and preamplifiers are combined. May also be used to eliminate noise in car hifi systems by isolating power boosters or to balance unbalanced outputs and vice versa.

**SPECIFICATIONS**

No. of Channels:	1
Connectors:	6.3 mm Jack
Input/Output ratio:	1 : 1
Ground lift switch:	no
Max. level:	+ 10 dBu
Nominal Impedance:	10 kΩ
Frequency range:	20 Hz - 40 kHz ± 1dB
Dimensions (Wx H x D):	100 x 40 x 35 mm
Weight:	0.17 kg



**PLI 02**  
LINE ISOLATOR 2 CH

Professional dual channel line isolating unit for stage and studio use. The Neutrik combo input connector accepts both male XLR and jack plugs. The PLI 02 easily converts unbalanced outputs into balanced ones. It may also be used to transformer balance electronically balanced inputs and outputs.

**SPECIFICATIONS**

No. of Channels:	2
Connectors:	XLR/m Combo
Input/Output ratio:	1 : 1
Ground lift switch:	yes
Max. level:	+ 20 dBu
Nominal Impedance:	600 Ω
Frequency range:	20 Hz - 40 kHz ± 1dB
Dimensions (Wx H x D):	140 x 45 x 95 mm
Weight:	0.58 kg



**PLI 03**  
LINE ISOLATOR 2 CH UNBALANCED

The PLI03 is a dual channel isolating transformer designed to help to solve specific problems which may arise when connecting computer sound cards to stereo/recording systems. Firstly, the PLI 03 can safely eliminate any ground loops. Also, by isolating digital and analog ground, it eliminates crackling and hissing noise originating from the computer's highfrequency clock signals. The RCA sockets on the inputs/outputs make the PLI 03 a convenient tool to eliminate ground loops in hifi/stereo systems. The unit also finds applications in car hifi systems, where it can also eliminate unwanted ground noise.

**SPECIFICATIONS**

No. of Channels:	2
Connectors:	RCA/Cinch
Input/Output ratio:	1 : 1
Ground lift switch:	no
Max. level:	+ 6 dBu
Nominal Impedance:	10 Ω
Frequency range:	20 Hz - 30 kHz ± 1dB
Dimensions (Wx H x D):	140 x 45 x 65 mm
Weight:	0.26 kg



# PALMER SPLITTERS

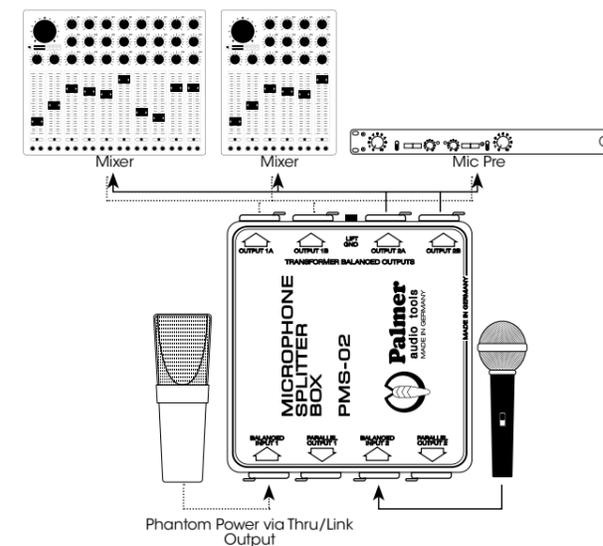


**PMS 02**  
PASSIVE MIC SPLITTER 2 CH

A passive dual channel microphone splitbox. The PMS 02 is designed to produce correct levels and impedances for optimal transmission of microphone signals. Phantom power can be looped through the parallel thru socket, making it possible to use condenser mics.

**SPECIFICATIONS**

Input:	Dual channel "1 in 3" splitbox in an aluminum die-cast housing. Each channel: Input XLR/f, parallel socket XLR/m
Output:	Two outputs XLR/m via a mu-metal-shielded transformer 1 : 1. Nominal impedance for inputs/outputs: 200 Ω / Resistor-decoupled outputs, Max. level: +4 dBu
Housing:	Steel
Dimensions (W x H x D):	140 x 45 x 115 mm
Weight:	0.7 kg

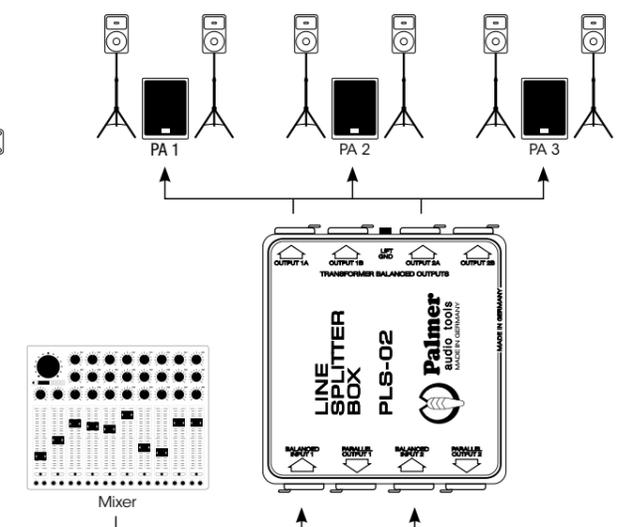


**PLS 02**  
PASSIVE LINE SPLITTER 2 CH

A passive dual channel line splitter that is mainly used to feed the left and rightmaster outputs of a mixer into several inputs such as power amplifiers, recording machines etc. A specially designed audio frequency transformer maintains signal integrity and prevents ground loop hum.

**SPECIFICATIONS**

Input:	2 channel line splitter "1 into 3", each channel: Input: female XLR type with parallel male XLR type output
Output:	2 transformer isolated male XLR type outputs, Transformer ratio 1:1, Nominal level: 0 dBu, max. level: +20 dBu, Nominal impedance input and output: 600 Ω, Ground lift switch, Transformer ratio 1:1, Resistor-decoupled, outputs, Max. level: +4 dBu
Housing:	Steel
Dimensions (W x H x D):	140 x 45 x 115 mm
Weight:	0.82 kg



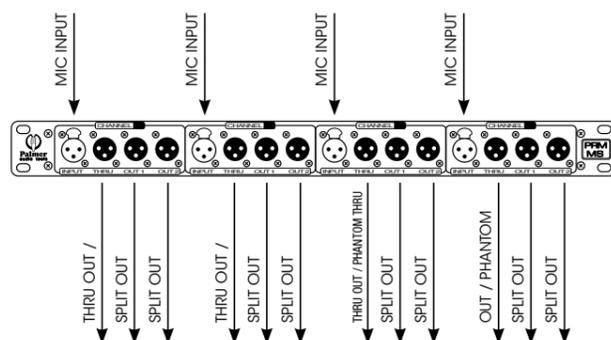


### PRM MS PASSIVE MIC SPLITTER 4 CH

Microphone Splitter, 4 channel passive in a 19" rackmount steel casing. Each channel comprises an input, an output wired in parallel, and two transformer isolated outputs designed with decoupling resistors to minimize interference between adjacent channels.

#### SPECIFICATIONS

Input:	Each channel: Input: female XLR type
Output:	1 parallel male XLR type, 2 transformer isolated male XLR type, Nominal impedance for inputs/outputs: 200 Ω, Max. input level: +6 dBu
Weight:	2.6 kg

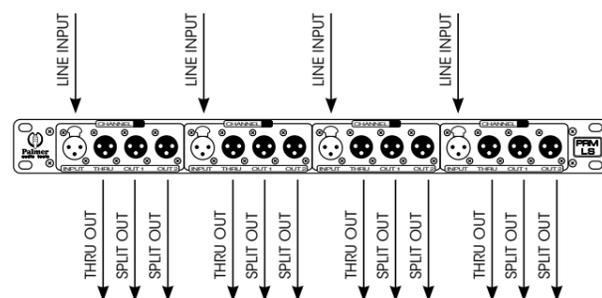


### PRM LS PASSIVE LINE SPLITTER 4 CH

Designed with a special transformer to split line level signals. The features are identical to the PRMMS except that this version does not have decoupling resistors in order to achieve the lowest source impedance.

#### SPECIFICATIONS

Input:	Each channel: Input: female XLR type
Output:	1 parallel male XLR type, 2 transformer isolated male XLR type, Nominal impedance for inputs/outputs: 600 Ω, Max. input level: +20 dBu
Weight:	2.8 kg

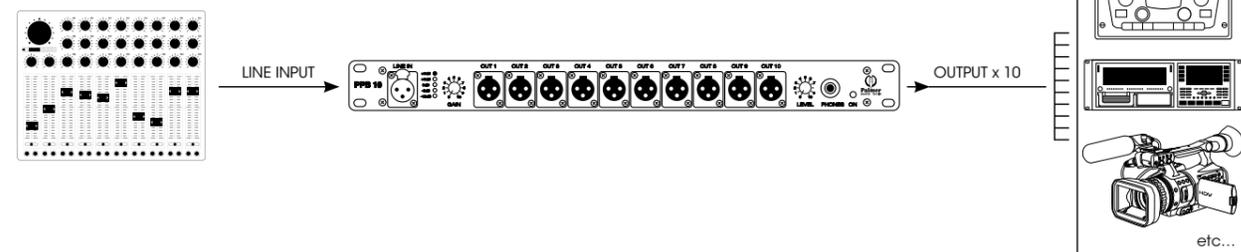


### PPB 10 PRESS PATCH BOX – ACTIVE 1 IN 10 SPLITTER

The PPB10 is a special kind of audio splitter in that it splits one incoming signal up to ten outputs (as opposed to the usual three). This splitter is especially intended for press conferences, in which a speaker addresses a number of journalists. Instead of each journalist having to place his or her own microphone in front of the speaker, the PPB10 splits the signal of one microphone up to ten outputs. The PPB10 comes with a transformer balanced input for line signals. Mechanically the input is equipped with Neutrik XLR/fsockets on the front as well as on the rear of the device. A ground lift switch is located next to the XLR input on the rear, this switch disconnects the pin 1 of both input XLRs from ground. You can adjust the input gain with the gain pot next to the front XLR input, the gain ranges from -∞ to +25dB. The 5-segment LED meter helps you monitor the output level. When this meter indicates 0dB the output level reads +6dBu without a load connected and +4dBu with a load of 600 Ohms. The PPB10 offers 10 balanced outputs which are located on the front of the device in form of Neutrik XLR/m sockets. All 10 outputs are galvanically isolated by the use of transformers. To avoid interferences between the individual channels, 5 low ohmic driver circuits are used to drive 5 transformers, each of which split up the input signal to two outputs. The output pairs coming from each transformer are decoupled from each other by the use of resistors. In case of a short circuit on an output, only one other channel will be affected in that it is dampened by 3dB. All other channels remain completely unaffected. Each output has its individual ground lift switch on the rear of the device. Where more than 10 outputs are required, additional PPB 10 or PPB20 can be hooked up via a rear BUS IN/OUT socket.

#### SPECIFICATIONS

Input:	XLR/f parallel connectors on the front and rear - transformer balanced, ground lift switch. Nominal impedance 10 kΩ Nominal input level: 0 dBu, max. +20 dBu Max. amplification to the outputs: 25dB
Output:	10 transformer-balanced outputs XLR/m with ground lift switch. Nominal output level +4 dBu at 600 Ω load and 0 dB LED meter Nominal output impedance: 300 Ω Headphone output: 6.3 mm (1/4") stereo jack, tip and ring connected together Suitable for headphones from 8 to 200 Ω, volume steplessly variable 5 segment LED chain: -12 dB, -6 dB, 0 dB, +3 dB, +6 dB. To monitor the output level Bus in and out via mono jack to connect several units Power supply 230/240 V AC, max power consumption 10 W
Housing:	Steel
Dimensions:	19", 1U, 205 mm deep
Weight:	4 kg



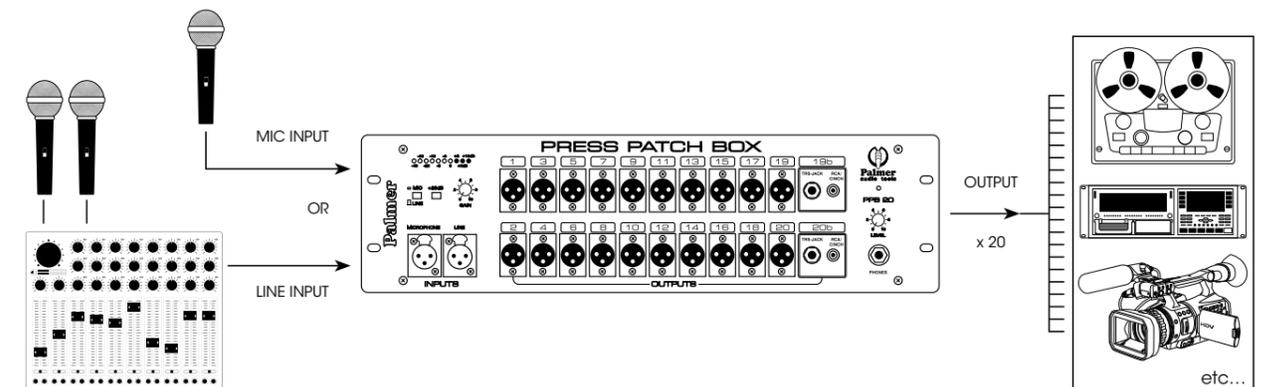


## PPB 20 PRESS PATCH BOX - ACTIVE 1 IN 20 SPLITTER

The Press Patch Box is a special kind of audio signal distributor intended for use at press conferences. It features separate inputs for microphone and line signals. A high quality input amplifier with a transformer balanced input provides a wide dynamic range. A total of 20 transformer-balanced XLR/m outputs with separate paired driver circuits make it possible to connect up video cameras and other recording equipment. The nominal output level is +4 dBu at 600 Ω. Channels 19 and 20 have TRS jack sockets for balanced/unbalanced signals and also RCA sockets (-10 dBu nominal level). Where more than 20 outputs are required, additional PPB 20s can be hooked up via a rear BUS IN/OUT socket. Signal monitoring is provided by a 10 LED strip displaying a range of -40 to +10 dB (0 dB in the display = 4 dBu output) and an adjustable headphones amplifier. The PPB20 has an integral, shielded power supply unit. An extra DC input makes it possible to connect up a (backup) battery power source.

### SPECIFICATIONS

Input:	Transformer-balanced, 4 XLR/f sockets, with paired front/rear parallel connections for separate microphone/line signals. Nominal input impedances: Microphones = 200 Ω, Line = 5 kΩ Max. input levels: microphones = 0 dBu, Line = +20 dBu Max. amplification: microphones = +66 dB, Line = +22 dB (constantly adjustable via switch and potentiometer).
Output:	20 XLR/m, 2x TRS jack, 2 x RCA, all transformer-balanced and floating with separate ground lift switches at rear. Nominal output impedances: XLR = 300 Ω, jack and RCA = 600 Ω. Nominal output levels: XLR = +4 dBu/20 dBu max.; jack/RCA = -10 dBu, + 6 dBu max. Headphones output: Stereo jack socket, with mono tip + ring. Designed for use with 8 Ω - 200 Ω headphones (constantly adjustable level). 10 LED strips displaying a range of -40 to +10 dB. Bus input/output (mono jack)
Power supply:	230 VAC or ±12 V to ± 18 VDC, 15 Watts.
Dimensions:	19", 3 U, approx. 200 mm deep.
Weight:	9 kg



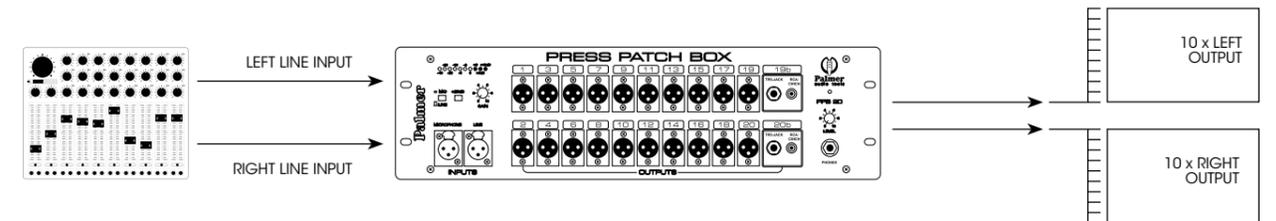


## PPB 20S -STEREO VERSION PRESS PATCH BOX - ACTIVE 1 IN 20 SPLITTER

A stereo version of the PPB20 is also available. Instead of having one microphone and one line input the stereo version has two line inputs. The first input is split on to the upper row of outputs i.e. on to the odd channels whereas the second line input is split on to the lower row of outputs, i.e. the even channels. The PPB20S can be switched to mono mode. In this case both inputs are merged together and the summed signal is split up to the 20 outputs.

### SPECIFICATIONS

Input:	Transformer-balanced, 4 XLR/f sockets, with paired front/rear parallel connections for separate microphone/line signals. Nominal input impedances: Microphones = 200 $\Omega$ , Line = 5 k $\Omega$ Max. input levels: microphones = 0 dBu, Line = +20 dBu Max. amplification: microphones = +66 dB, Line = +22 dB (constantly adjustable via switch and potentiometer).
Output:	20 XLR/m, 2x TRS jack, 2 x RCA, all transformer-balanced and floating with separate ground lift switches at rear. Nominal output impedances: XLR = 300 $\Omega$ , jack and RCA = 600 $\Omega$ . Nominal output levels: XLR = +4 dBu/20 dBu max.; jack/RCA = -10 dBu, + 6 dBu max. Headphones output: Stereo jack socket, with mono tip + ring, Designed for use with 8 $\Omega$ - 200 $\Omega$ headphones (constantly adjustable level). 10 LED strips displaying a range of -40 to +10 dB. Bus input/output (mono jack)
Power supply:	230 VAC or $\pm 12$ V to $\pm 18$ VDC, 15 Watts.
Dimensions:	19", 3 U, approx. 200 mm deep.
Weight:	9 kg



# PALMER MERGERS

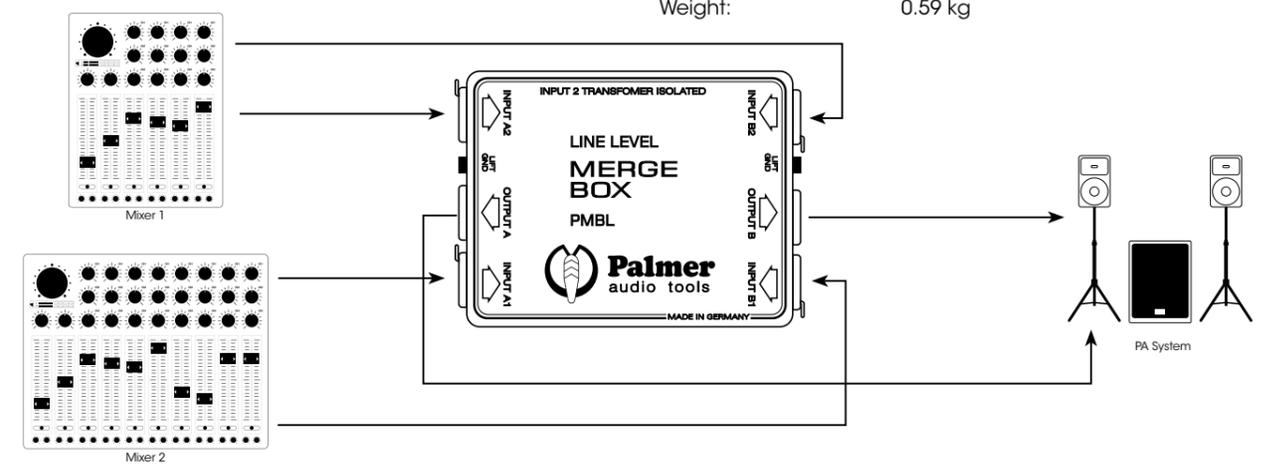


## PMBL PASSIVE LINE LEVEL MERGER

The PMBL is a 2 channel passive line level merge box. Each channel has 2 balanced XLR/f inputs. The input signal is merged via a resistor network to a XLR/m output. The top side input is transformer isolated. Possible applications may be the routing of two mixing desks to one power amp or mixing a stereo signal down to mono. Our transformer technology allows for an unbalanced top side input to be sent out balanced.

### SPECIFICATIONS

Input:	Input 1: transformer balanced XLR/f. Symmetrically decoupled through resistors. Total ohmic value: 2 kΩ. Maximum level for THD < 0.5% @ 35 Hz: +20 dBu. Ground lift switch. Input 2: Balanced XLR/f. Symmetrically decoupled through Resistors. Total ohmic value: 2 kΩ
Output:	XLR/m balanced. For minimum attenuation, the load impedance should be several Kohms. Typical attenuation: 6 dB, Aluminium die cast housing made of a RF-shielding alloy.
Dimensions (W x H x D):	110 x 125 x 38 mm
Weight:	0.59 kg



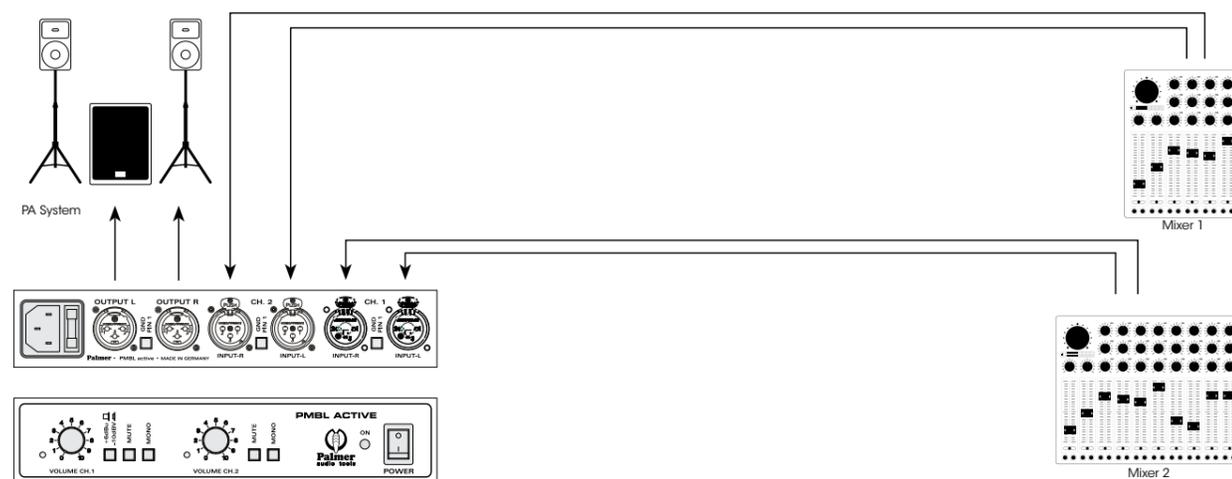


## PMBLA ACTIVE LINE LEVEL MERGER

The PMBL-ACTIVE is a 2-channel stereo line level merge box that can be used to merge two stereo line signals into one stereo output. One classic application: routing two mixing desks to one PA system. The unit has enough amplification to boost even semi-professional levels accordingly. The input channels are galvanically isolated from one another. Each channel offers a mute switch and the ability to mix the stereo signal down to mono. The unit is housed in a 1 U/9.5" case and has a built-in power supply.

### SPECIFICATIONS

Inputs channel 1:	combo sockets L/R for 6.3 mm TRS and XLR connectors transformer balanced (TS input = unbalanced) input impedance: >2 k $\Omega$ , nominal input sensitivity: -10 dBV/+6 dBu switchable
Inputs channel 2:	2x XLR/f for L/R, electronically (servo) balanced input impedance: 10 k $\Omega$ / nominal input sensitivity: +6dBu
Each channel:	rotary gain control, - $\infty$ / +16 dB / mute switch / mono switch
Outputs:	2x XLR/m electronically (servo) balanced output impedance: 300 $\Omega$ / max. output level: 20 dBu into 600 $\Omega$
Mains input:	100V-240V, power consumption approx. 2.5 W
Housing:	powder coated steel with 3 mm aluminium front panel
Dimensions (W x H x D):	222 x 44 x 160 mm, depth without front panel and connector overhang
Weight:	1,3 kg

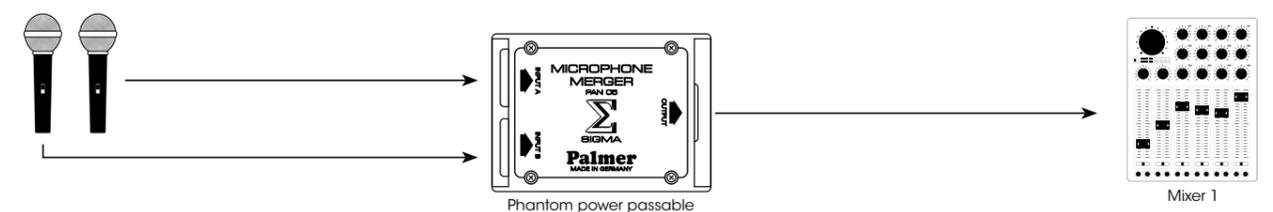


## PAN 05 PASSIVE MICROPHONE MERGER

The PAN 05 enables you to patch two microphones into one single mixing desk channel in situations where you run out of channels. Since decoupling occurs via a balanced resistor network, the PAN 05 also lets phantom power "pass through", useful for condenser microphones. However, due to the difference in sound and signal level, mixing dynamic and condenser mics should be avoided. Best results will be achieved using two identical mics.

### SPECIFICATIONS

Input:	2 x XLR/f balanced, nominal impedance: 200 $\Omega$
Output:	1 x XLR/m balanced, load impedance > 200 $\Omega$ . Symmetrically decoupled through resistors, total ohmic value: 200 $\Omega$ . Typical attenuation: 6 dB
Housing:	Metal casing
Dimensions (W x H x D):	110 mm x 73 mm x 42 mm
Weight:	0.27 kg



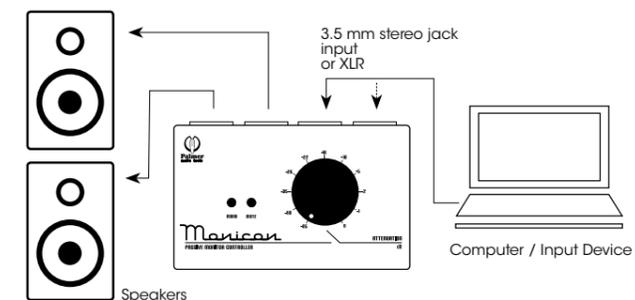
# PALMER SUMMING & MIXING



## MONICON (W) PASSIVE MONITOR CONTROLLER

With Palmer Monicon, your monitor volume is always under control. The passive mini-mixer with the oversized control is inserted between the stereo output of the notebook, PC or interface and an active monitor system and thus permits convenient and precise volume control of the monitors from the workstation. The passive circuitry with only a few components has absolutely no effect on the sound. Mute and mono buttons make it possible to mute the outputs and merge the stereo output signal into a mono master signal.

The inputs and outputs of the controller are equipped with XLR connectors and the 3.5mm stereo TRS sockets usually found on computers. Combo input sockets also permit connection with 6.3 mm TRS plugs. Thus the Palmer Monicon is compatible with both professional and consumer equipment. Genuine wood sides make the practical studio tool in its massive powder-coated sheet steel housing an elegant looking „little helper“ that is a typical Palmer product.



### SPECIFICATIONS

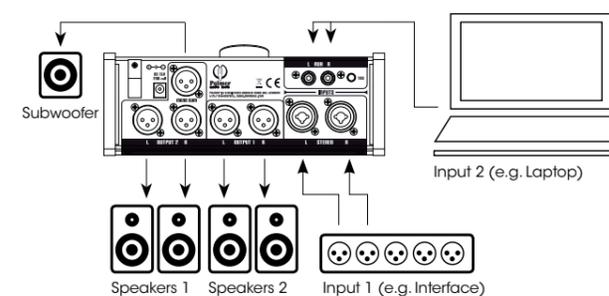
Product type:	Monitor Controller
Type:	passive
Channels:	2
Inputs:	2
Input connectors:	3.5 mm TRS, XLR
Input type:	balanced/unbalanced (depending on TS/TRS connection)
Max. input level:	20 dBu
Input impedance:	(balanced) 10 k $\Omega$ , (unbalanced) 5 k $\Omega$
Outputs:	2
Output connectors:	XLR, 3.5 mm TRS
Output type:	balanced/unbalanced (depending on TS/TRS connection)
Max. output level:	20 dB
Output impedance:	600 $\Omega$
Frequency response:	10 - 40000 Hz
THD:	0.001 %
Max. attenuation:	(Attenuator) 85, (Attenuator + Mute) 112 dB
Controls:	mute, mono, attenuation
Cabinet material:	wood, sheet steel
Cabinet surface:	powder coated
Dimensions (W x H x D):	164 x 62 x 85 mm
Weight:	0.75 kg



## MONICON L PASSIVE MONITOR CONTROLLER

The Palmer Monicon L is a precise analog volume control that connects between computers or audio interfaces and self-powered monitor loudspeakers. To prevent signal coloration the circuitry is all passive, the LED indicators and built-in headphone amplifier are powered by the included DC adapter.

The Monicon L's stereo input is on balanced combo sockets, the AUX input features a 3.5 mm TRS jack and RCA connectors. The compact console sports dual outputs for two pairs of monitor speakers and a summed mono output on XLR connectors. The stereo and AUX inputs are alternatively selectable, the outputs can be activated individually and in tandem. Besides the large stereo volume knob the Monicon L provides mono, mute and PFL switches, a 6.35 mm TRS headphone jack as well as separate AUX and headphone level controls for additional convenience.



### SPECIFICATIONS

Product type:	Monitor Controller
Type:	passive
Channels:	2
Inputs:	2
Input connectors:	XLR, 3.5 mm TRS, RCA
Input type:	balanced/unbalanced (depending on TS/TRS connection)
Max. input level:	20 dBu
Input impedance:	(balanced) 10 k $\Omega$ , (unbalanced) 5 k $\Omega$
Outputs:	3
Output connectors:	XLR
Output type:	balanced/unbalanced (depending on TS/TRS connection)
Max. output level:	20 dB
Output impedance:	600 $\Omega$
Frequency response:	10 - 40000 Hz
THD:	0.001 %
Max. attenuation:	(Attenuator) 85, (Attenuator + Mute) 112 dB
Controls:	mute, PFL source, mono, attenuation, output selector, input selector
Cabinet material:	wood, sheet steel
Cabinet surface:	powder coated
Dimensions (W x H x D):	218 x 77 x 100 mm
Weight:	1.14 kg

# PALMER CABLE TESTERS



## AHMCT 8 CABLE TESTER

The AHMCT 8 tests the most critical cables on the stage itself and flags up whether they are functioning or not, both visibly via LEDs and audibly via a buzzer. This makes it the perfect tool for engineers — both in the workshop and on stage. The Pro AHMCT is operated simply, intuitively and safely via a single rotary switch on the device. The sturdy metal housing withstands even tough on-stage demands. The standard kit comes with two test probes for carrying out fast and simple continuity tests on various cables or installations.

- Solid metal housing
- Powered by a 9-V block battery
- Applications: DIN 5-pin, XLR, RCA, 6.3 mm Jack, Banana plug, Speakon 4-pin
- Additional continuity tester with measuring probes
- Optical display and buzzer



## AHMCT XL CABLE TESTER

As well as standard audio and video cables, the Palmer Pro AHMCT XL also tests the major data cables (USB, RJ45). The test sequence can be either automated or manual, meaning the Pro AHMCT XL from Palmer is as ideal for the layperson as it is for the engineer.

The sturdy metal housing with practical handle effortlessly withstands even the toughest on-stage demands. Yet despite its impressive array of functions, it remains sufficiently compact to fit in any professional workshop or well-equipped tool case.

- Solid metal housing
- Powered by 2 x AA batteries
- Tests DIN 8-pin, DIN/Midi 5-pin, XLR, RCA/Cinch, Jack 3.5 mm, Jack 6.3 mm, Speakon (4 and 8-pole), S-Video
- Additional testing option for data cables (RJ45, USB-A to USB-B)
- Optical display
- Automated test sequence

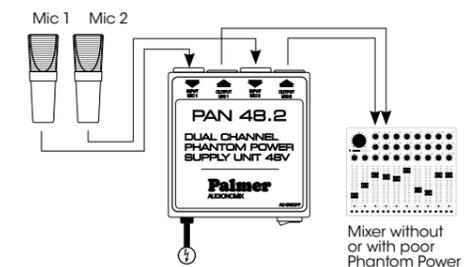
# PALMER MISCELLANEOUS

## PAN 48 PHANTOM POWER 2 CH

The Palmer PAN48 is a unit for the external power supply of phantom powered appliances. Due to the high current level of a maximum of 20 mA, the application is not just limited to condenser microphones. PAN 48 is excellent for supplying phantom powered active DI-boxes. The box has two channels.

### SPECIFICATIONS

Input:	2 channels, each channel: Microphone input: XLR/f Pin 2 & 3 +48 VDC, Pin 1 Ground
Output:	XLR/m no DC voltage, Ground lift switch, Phantom power stabilized $\pm 5\%$ . Low ripple, low noise, Max. current 20 mA, Control LED.
Housing:	Metal casing, Integrated wide range mains supply: 90 - 240 V
Dimensions (W x H x D):	110 x 110 x 45 mm
Weight:	0.9 kg



## PHDA 02 REFERENCE HEADPHONE AMPLIFIER

Reference class headphone amplifier with Stereo, Mono, and Dual Mono operation modes.

- Stereo mode: The L/R input signal is fed to the left and right earphones while the volume level is set by the Stereo/Left control. The front panel inputs provide simultaneous connection of two headphones in parallel.
- Mono mode: The left and right channels are summed, and the resulting mono signal is fed to both the left and right ear phones. Again, volume is governed by the Stereo/Left control.
- Dual Mono mode: The left and right channels can be used independently with individual level controls for the left and right earphones.

The PHDA02 operates with all headphones with an impedance of 8 up to 600 Ohms. Impedance matching is achieved by a specially designed switchable transformer. Uncommon and costly, this solution provides superior performance, dynamic range, and signal-to-noise ratio at all loads. Combo input sockets allow for balanced XLR and unbalanced TS headphone connection while parallel XLR outputs facilitate daisy chaining multiple units.

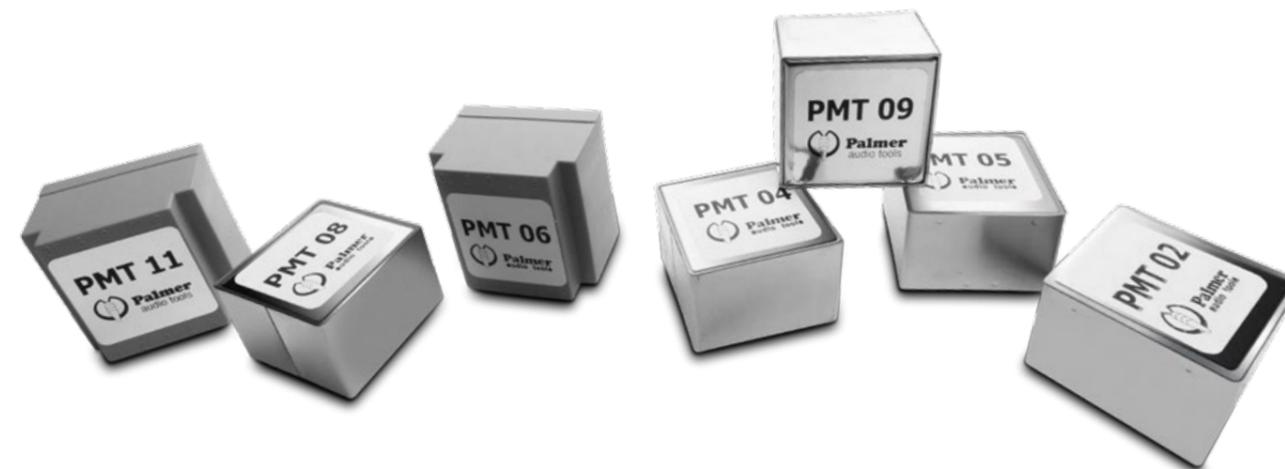


### SPECIFICATIONS

Inputs:	Combo sockets L/R (XLR = electronically balanced)
Input impedance:	10 K $\Omega$ unbalanced, 20 K $\Omega$ balanced
Max. input level:	+22 dBu
Headphones connectors:	2 x 6.3 mm TRS
Headphones impedance:	8 Ohms/200 $\Omega$ switchable
Min. load:	8 $\Omega$ per output
Typical output power:	approx. 2 x 400 mW @ 8 or 200 $\Omega$
Max. gain:	26 dB @ 200 $\Omega$
Frequency response:	20-20,000 Hz +0/-1 dB @ 8 $\Omega$
THD:	typically 0.02 % @ 1V, 8 $\Omega$
Signal-to-noise:	typically -110 dBu @ unity gain, 8 $\Omega$
Power supply:	100 - 240 V AC, 50/60 Hz
Dimensions:	9.5", 1U (222 x 44 mm), depth 175 mm
Weight:	0.7 kg



# PALMER AUDIO FREQUENCY TRANSFORMERS



## AUDIO FREQUENCY TRANSFORMERS

### SPECIFICATIONS

Type	Ratio	Source imped.	Load imped.	Level max.	Frequency range	PCB*	Application
PMT02	10 : 1	< 20 k $\Omega$	> 200 $\Omega$	+ 10 dBu @ 20 k $\Omega$	30 Hz - 20 kHz $\pm$ 1 dB	N EE25	Classic DI box transformer electrostatic & mumetal shielding
PMT04	1 : 1	200 $\Omega$ nom.	> 200 $\Omega$	+ 4 dBu max.	40 Hz - 20 kHz $\pm$ 0.5 dB	N EE25	Microphone balancing, electrostatic & mumetal shielding
PMT05	1 : 1 + 1 : 1	200 $\Omega$ nom.	> 200 $\Omega$	+ 4 dBu max.	40 Hz - 20 kHz $\pm$ 0.5 dB	Y / 4 PCB05	EE25 Microphone split transformer, 3 secondaries electrostatic & mumetal shielding
PMT06	1 : 1 + 1	600 $\Omega$ nom.	> 600 $\Omega$	+ 20 dBu max.	30 Hz - 20 kHz $\pm$ 1 dB	Y / 2 PCB06	EE32 Line isolation & split transformer, electrostatic shielding
PMT08	1 : 1	< 10 k $\Omega$	> 10 k $\Omega$	+ 6 dBu max.	30 Hz - 20 kHz $\pm$ 1 dB	Y / 4 PCB08	EE25 Line isolation consumer level, electrostatic shielding
PMT09	1 : 1 + 1	200 $\Omega$ nom.	> 200 $\Omega$	+ 4 dBu max.	40 Hz - 20 kHz $\pm$ 0.5 dB	Y / 4 PCB09	EE25 Microphone split transformer, 2 secondaries electrostatic & mumetal shielding
PMT11	1 : 1	600 $\Omega$ nom.	> 600 $\Omega$	+ 20 dBu max.	30 Hz - 20 kHz $\pm$ 1 dB	Y / 2 PCB06	EE32 Line isolation & balancing - professional studio level - electrostatic shielding

\* PC board available Y/N / Number of devices per board.

\*\* Size EE25: 30 x 30 x 20 mm / EE32: 35 x 35 x 25 mm

# PALMER TECHNICAL APPENDIX



## DI BOXES

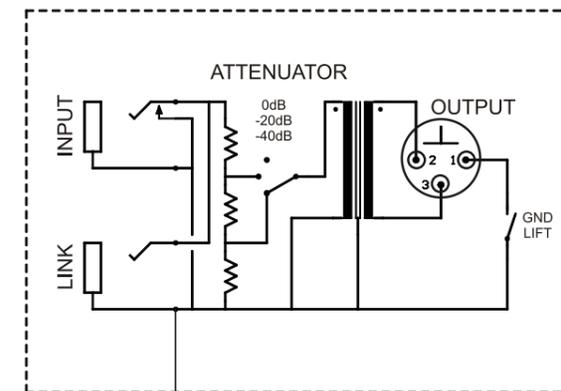
DI boxes are nothing new. So you would think everybody knows how to operate one and where it can be utilized. However, a specialist magazine went so far as to call a DI box a "hum killer" in a 19" rack. We would therefore like to give you some brief details of the capabilities and uses of Palmer DI boxes.

The simplest way to give you a clear picture of how DI boxes work is to look at how they developed. In the "electronic Stone age", only acoustic instruments were recorded using a microphone. When electronic instruments first appeared on the scene, you simply placed a microphone in front of the sound source, i.e. the loudspeaker. Then somebody hit on the idea of cutting out electric/acoustic signal conversion using a loudspeaker/microphone. This was achieved by feeding the electrical signal produced by the electronic instrument directly into the mixing console. However, as the electrical signal from a musical instrument is not necessarily compatible with a microphone output signal, a special signal converter box was required. This was where the DI box came in.

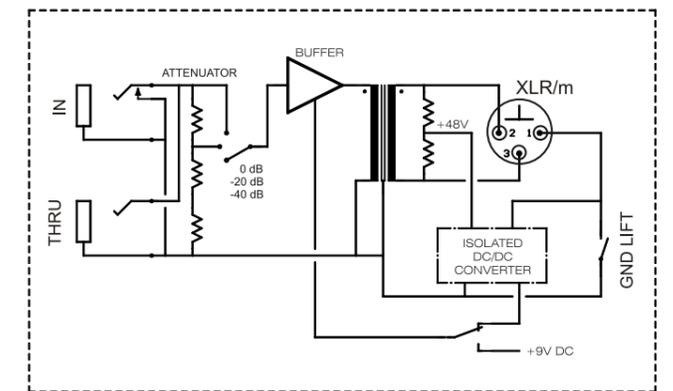
A DI box usually has three functions: 1. It reduces the line output level from electronic musical instruments to microphone level, so as not to cause overloading at the mixing console input. 2. Almost all musical instruments have an unbalanced output level. Microphones, on the other hand, have a balanced level. This means that an unbalanced signal must be converted into a balanced one. 3. Instrument output signal levels are in the mid to high impedance range, whereas microphone levels are in the low impedance range producing a nominal approx. 200 Ω. A DI box must therefore also be able to convert impedance levels. It basically consists of a transformer, which also isolates the electronic instrument from the mixing console. This in turn suppresses ground loops and any associated humming noise. It is obvious that a DI box cannot provide a 1:1 transfer ratio. However, in some cases, it may be possible to do this with an active DI box (PAD in 0 dB position), but only just within the DI box performance range. This is because the DI box output level is designed to operate within microphone level ranges and not at +22 dB line levels, e.g., required by radio stations.

## PASSIVE OR ACTIVE?

People often claim that "Active DI boxes are always better than passive DI boxes". It is true that you can use cheap electronic components to tweak up a "doorbell" transformer and so reduce its ear-piercing frequency response. The question is whether such an active DI box actually produces a better sound than a passive one. We believe that even inexpensive electronic musical instruments have adequate output level ranges to produce satisfactory, if not excellent, results using a passive DI box. A passive DI box is therefore the right choice for most purposes. However, some instruments without electronics, such as passive bass guitars and acoustic guitars fitted with a pick up but no preamp, require very high input impedances which can only be supplied by an active DI box. Experienced professionals also use active DI boxes when transmission routes are severely distorted. The DI box produces higher levels, which can be reduced at the microphone input on the console by pressing the PAD key. This improves the signal-to-noise ratio. If possible, active DI boxes should be connected to a +48 V phantom power supply. This produces a better dynamic range compared to using a 9 V battery power supply.



PDI01



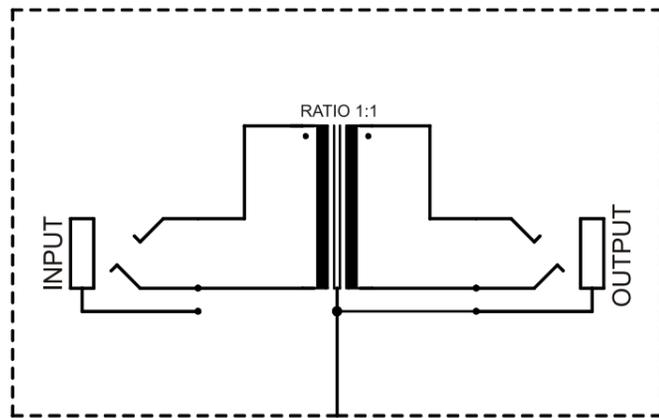
PDI02

### LINE-ISOLATION-BOX

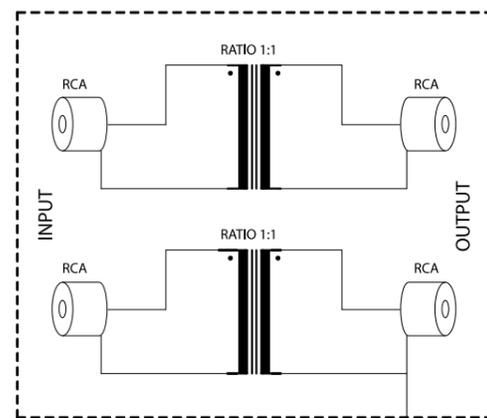
These are also known as "line boxes". With regard to impedance and level, line boxes (in contrast to DI boxes) have an input/output transformer ratio of 1:1. Line boxes are used to solve problems relating to ground loops.

To provide protection against electric shocks, many devices have metal housings and a power plug fitted with a grounding pin. This ensures that the device housing is grounded. If a fault occurs, the grounding prevents users from coming into contact with dangerous voltages. If you connect up two such devices using a screened audio cable, this may cause a ground loop, which produces a (50/60 Hz) humming noise. The reason for this is as follows: In an ideal situation the ground potential should always be 0 Volts. Cable routes with different lengths and many other complications can cause the ground potential to deviate slightly. By connecting up two devices with different ground potentials the screening allows an equalizing current to flow between the devices. This current superimposes itself over the audio signal and causes the humming noise. Here, it is important that you do not disconnect the ground contact. It is your only guarantee that high voltage short circuit current can be grounded if a fault occurs. Screened audio cables cannot be used here because of their cross-sectional size and connector type.

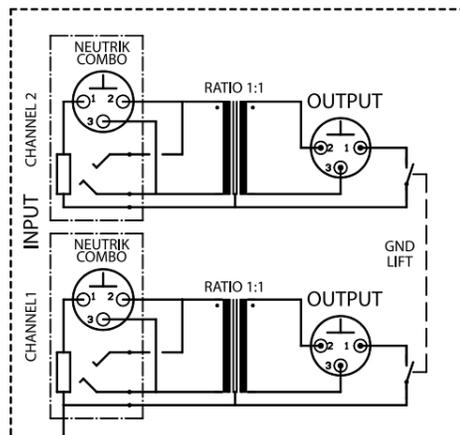
The safest way of preventing a ground loop is to isolate the two devices galvanically, i.e. to ensure that the devices are not DC-connected in any way. The best way to do this is by using a high quality audio transformer. Here, the signals are passed through the transformer by inductive coupling. There is no DC-connection from the primary to the secondary winding. This transformer must be designed for the intended purpose. Use of an incorrectly matched transformer can have severe effects on the frequency response and distortion of the signal. In the field of sound engineering, two types of line levels have become technical standards: Professional line level varying between 0 and 6 dBu (0.775 V to 1.55 V), max. +20 dBu at 7.75 Volts with 600 Ω source impedance and a line level for semi-professional (consumer) equipment which is at -10 dBV nominal (approx. 0.3 V) lower, but which has a nominal impedance of 10 kΩ. As a transformer can operate in both balanced and unbalanced mode, line boxes are also suitable for converting unbalanced lines routes to balanced ones and vice versa.



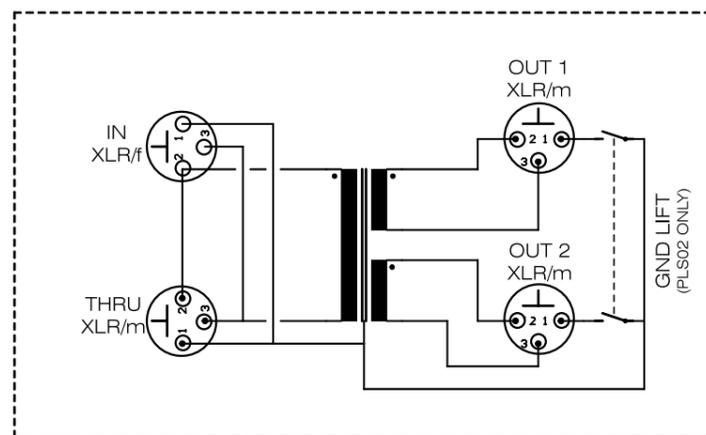
PLI01



PLI03



PLI02



PLS02 / PRMLS (ONE CHANNEL)

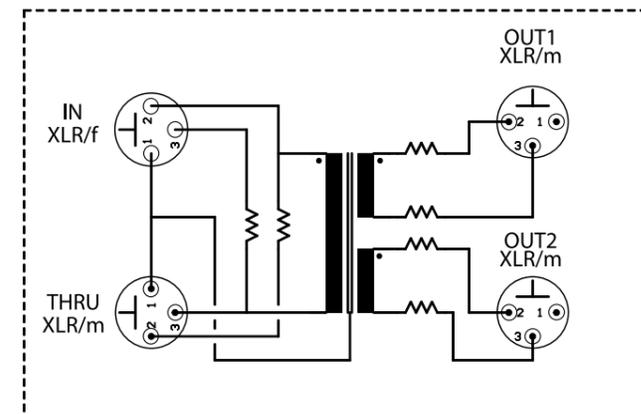
### SPLIT BOXES

Sound engineering not only involves combining signals, but also directing them to different channels. The simplest way to do this is by using a so-called hardware split. The basic design is called a Y cable. But linking several mains-powered devices increases the chance of a ground loop occurring. A passive splitter box eliminates this danger by using so-called "split" transformers. These audio transformers have one input winding and several output windings. This isolates the devices from each other. Nevertheless, it is important to remember that the signal from one source must act as a driver for several loads.

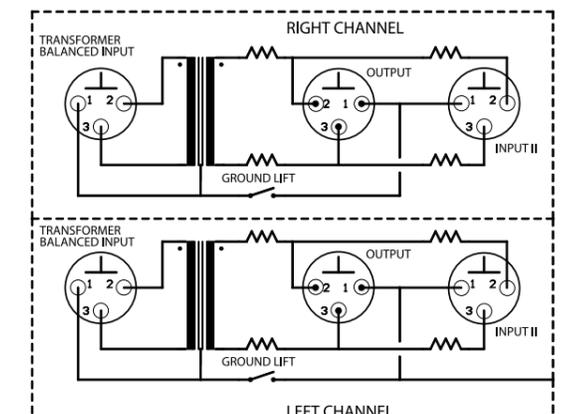
### ACTIVE OR PASSIVE SIGNAL DISTRIBUTORS

A low impedance mixing console output can easily drive a dozen power amplifiers. In most cases, this can be handled by a passive splitter. But do not forget that a short circuit at one of the outputs will be transmitted to the other outputs by the transformer, interrupting or, at the very least, weakening the total signal. Decoupling resistors can reduce this effect but will also cut down the signal level.

Microphone signals, which operate at extremely low levels, are more susceptible to interference. Active splitters are preferable where longer cables are used and where professional standards are required. There are obvious advantages here. The "plug box" is located on stage near the microphones, so only short cable lengths are required. The active splitter can also boost low microphone signals. This considerably improves the quality of the signal before it is transmitted along the multi-core cable.



PRMMS (ONE CHANNEL)



PMBL

# smart, slim & sophisticated.



**LD SYSTEMS** PRO AUDIO  
IN MOTION

## MAUI® SERIES

ACTIVE COMPACT COLUMN PA-SYSTEMS

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- ✓ Multi-amped subwoofer powering the array speaker column
- ✓ Ultra wide 120° horizontal dispersion
- ✓ Extended vertical directivity with reduced level drop
- ✓ All-in-one PA and monitoring thanks to high feedback resistance
- ✓ Ultra fast cableless setup
- ✓ For portable use and unobtrusive installation
- ✓ MAUI 44 : 3200 W (peak) / 1600 W (RMS) / Class D amplification incl. DSP
- ✓ MAUI 28 MIX : 1600 W (peak) / Class A/B amplification
- ✓ MAUI 11 MIX : 1200 W (peak) / Class D amplification incl. DSP
- ✓ MAUI 5: 800 W (peak) / Class D amplification incl. DSP
- ✓ MAUI 5, 28 & 11 MIX: Features an additional integrated 3-channel mixer



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