



Pro Audio & Broadcast Catalog

HIROSYS
BROADCASTING PRODUCTS

HIROSYS

HiroSys is a professional audio brand, specializing in the design, development and manufacture of broadcast-grade audio systems. Our team is dedicated to the creation of high-technology audio electronics, translating conceptual innovations into practical broadcasting applications.

HiroSys products are focused on high performance systems that address both the general professional audio market, as well as the specific requirements of the installation sector. Reflecting our stringent quality control policy, our engineers pay meticulous attention to electronic component selection, accurate PCB layouts and precise system integration. Our goal is to develop and manufacture the highest quality products at economic prices.

Our products include a range of practical, problem-solving devices, such as multi-channel microphone and line distribution systems; cabling systems; signal splitters, combiners and converters, plus microphone and headphone amplifiers. Our dedicated professionalism, and uncompromising attitude to quality, is reflected in the high engineering standards of our products. We are proud of our successful 10-year track record in serving the pro-audio industry.

HB SERIES

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MULTI-CHANNEL SPLITTER

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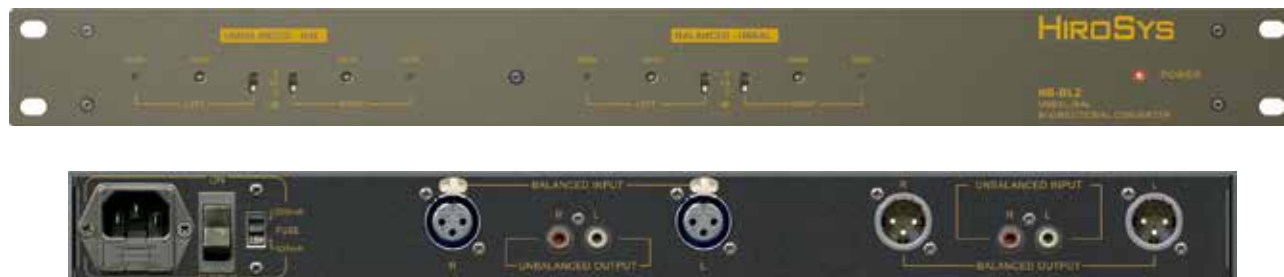
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The HB series are the best solutions for solving even the most audio distribution, monitoring and interfacing on stage or in the studio.

1U rack-mountable compact design, provided switchable power supply and IEC-AC power receptacle.

RFI Filters on all inputs. EMC-proof case significantly improves rejection of radio frequency interference.





DESCRIPTION

The HB-BL2 is a Bi-Directional stereo balancing, unbalancing and level-shifting interface used to inter-connect consumer, semi-professional and professional audio equipment. In addition, the HB-BL2 is a high-quality line driver for sending and receiving audio signals over long distances.

The HB-BL2 is also a gain conversion, it can take +4dBu balanced signals and convert to -10dBV unbalanced with a gain adjustment within 12dB. For the unbalanced to balanced channels there is a corresponding gain conversion from unbalanced -10dBV to balanced +4dBu with 12dB adjustment range.

EASY OPERATION

The HB-BL2 are individual attenuate switches within 3dB step for equipment input level matching quickly. Input signals have two corresponding LED's that indicate signal content.

The normal gains setting are indicated for the multi-turn trimming. For produce +4dBu balanced input to -10dBV unbalanced signal, these setting are possible to Max +12dB unity gain. For produce -10dBV unbalanced input to +4dBu unbalanced signal, these setting are possible to Min -12dB unity gain.

SPECIFICATIONS

AUDIO SPECIFICATIONS	
Frequency Response	+0dB 20Hz~20kHz
Input Impedance	10kΩ Balanced 10kΩ Unbalanced
Maximum Input Level	+30dBu Balanced +16dBu Unbalanced
Balanced Input, at 1kHz	70dB Typically
Output Gain Adj. Range	-12dB~+12dB
Output Impedance	20Ω Balanced 20Ω Unbalanced
Maximum Output Level	+27dBu
Output Noise (A-wtd, rms)	-100dB (Referred to +4dBu In/-10dBV Out) -98dB (Referred to -10dBV In/+4dBu Out)
THD+Noise	0.01% @ 1kHz at +24dBm
CONNECTIONS	
Input	2 × XLR (Balanced) 2 × RCA Phono (Unbalanced)
Output	2 × XLR (Balanced) 2 × RCA Phono (Unbalanced)
Power Requirement	IEC, 110~120V or 220~240V
PHYSICAL SPECIFICATIONS	
Dimensions	W482 × H44 × D122 (mm)
Nett Weight	2.5 kg

FEATURES

- Correct interfacing of consumer and professional equipment with proper gain offset
- Independent gain adjustment 12dB on each channel allows for precise level adjustment with provides signal boost for long runs
- 3dB step attenuate switches for equipment input level matching
- High quality line driver for sending and receiving audio signals over long cable with Balanced transmission for better CMRR
- RFI Filters on all inputs and outputs. EMC-proof case significantly improves rejection of radio frequency interference
- LED indicators show signal content of each input feed
- Switchable power supply (110V~120V or 220V~240V)
- IEC-AC power receptacle

HB-DA6EX

Electronic Balanced 6-way Stereo Distribution Amplifier



DESCRIPTION

The HB-DA6EX is a professional audio distribution amplifier designed for broadcasting station and recording studio. The unit is suitable for mono, dual mono and/or stereo applications. It provides 2 inputs and 12 outputs. Each output can also be configured to receive Input A, Input B or a mono-derived sum from Input A+B. This is achieved via front panel toggle switches. Each output has own separate amplifier with individual gain-adjustable preset that can be accessed via the front panel.

The HB-DA6EX inputs and outputs are electronically balanced and can be wired unbalanced. Each output is individually buffered so that unbalanced or short-circuit on one output has no effect on any other output.

EASY OPERATION

The front panel is laid out clearly with 12 toggle switches and individual trim control for outputs configuration. Input A and Input B signals has two corresponding LED's that indicate signal content. The inputs level are adjustable using rotary control on the front panel.

The rear panel is equipped with two COMBO inputs to accept XLR or 6.3mm TRS jack balanced line level signals, and 12 XLRs outputs that can be selecting input source and adjust the output level.

SPECIFICATIONS

AUDIO SPECIFICATIONS

Frequency Response	+0dB /-0.1dB 20Hz~20kHz
Input Impedance	30kΩ Balanced 15kΩ Unbalanced Override
Maximum Input Level	+27dBu
Balanced Input, at 1kHz	70dB Typically
Master Input Control	-85dB~0dB Gain
Output Gain Adj. Range	-12dB~+12dB
Output Impedance	20Ω
Maximum Output Level	+27dBu
Output Noise (A-wtd, rms)	-88dB (Unity Gain)
THD+Noise	0.01% @ 1kHz at +24dBm

CONNECTIONS

Input	2 × COMBO XLR + 6.3mm TRS (Balanced Can Be Wired Unbalanced)
Output	12 × XLRM (Balanced Can Be Wired Unbalanced)
Power Requirement	IEC, 110~120V or 220~240V

PHYSICAL SPECIFICATIONS

Dimensions	W482 × H44 × D122 (mm)
Nett Weight	2.8kg

FEATURES

- High density, 2 balanced COMBO line level inputs, 12 electronically balanced outputs.
- Gain adjustment 12dB via multi-turn preset on each output.
- Master Level controls for Input A and Input B.
- Inputs and Outputs can be wired for unbalanced connection.
- Mono / Stereo selection; each output can be individually to either input or to a stereo-summing of the inputs.
- RFI Filters on all inputs and outputs. EMC-proof case significantly improves rejection of radio frequency interference.
- Output to connect additional HB-DA6EX for extra audio outputs.
- LED indicators show signal content of each input feed.
- Switchable power supply (110V~120V or 220V~240V).
- IEC-AC power receptacle.



DESCRIPTION

The HB-DA6TX is a professional audio distribution amplifier designed for broadcasting station and recording studio. The unit is suitable for mono, dual mono and/or stereo applications. It provides 2 inputs and 12 outputs. Each output can also be configured to receive Input A, Input B or a mono-derived sum from Input A+B. This is achieved via front panel toggle switches. Each output has own separate amplifier with individual gain-adjustable preset that can be accessed via the front panel.

The HB-DA6TX outputs are transformer balanced for better CMRR and offer total Isolation. Each output is individually buffered so that short-circuit on one output has absolutely no effect on any other output.

EASY OPERATION

The front panel is laid out clearly with 12 toggle switches and individual trim control for outputs configuration. Input A and Input B signals has two corresponding LED's that indicate signal content. The inputs level are adjustable using rotary control on the front panel.

The rear panel is equipped with two COMBO inputs to accept XLR or 6.3mm TRS jack balanced line level signals, and 12 XLRs outputs that can be selecting input source and adjust the output level.

SPECIFICATIONS

AUDIO SPECIFICATIONS	
Frequency Response	+0dB/-0.1dB 20Hz~20kHz
Input Impedance	30kΩ Balanced
Maximum Input Level	+27dBu
Balanced Input, at 1kHz	70dB Typically
Master Input Control	-85dB~0dB Gain
Output Gain Adj. Range	-12dB~+12dB
Output Impedance	60Ω
Maximum Output Level	+27dBu
Output Noise (A-wtd, rms)	-88dB (Unity Gain)
THD+Noise	0.01% @ 1kHz at +24dBm
CONNECTIONS	
Input	2 × COMBO XLR + 6.3mm TRS
Output	12 × XLRM
Power Requirement	IEC, 110~120V or 220~240V
PHYSICAL SPECIFICATIONS	
Dimensions	W482 × H44 × D202 (mm)
Nett Weight	6.0kg

FEATURES

- High density, 2 balanced COMBO line level inputs, 12 transformer balanced outputs.
- Gain adjustment 12dB via multi-turn preset on each output.
- Master Level controls for Input A and Input B.
- Mono / Stereo selection; each output can be individually to either input or to a stereo-summing of the inputs.
- RFI Filters on all inputs and outputs. EMC-proof case significantly improves rejection of radio frequency interference.
- Output to connect additional HB-DA6TX for extra audio outputs.
- LED indicators show signal content of each input feed.
- Switchable power supply (110V~120V or 220V~240V).
- IEC-AC power receptacle.

HB-HD6

Headphone Distribution Amplifier



DESCRIPTION

The HB-HD6 is a professional studio headphone distribution amplifier designed for broadcasting station and recording studio. It provides up to six channel headphone outputs with individual control. Each of the six channels can drive up to three set of headphones for a total of eighteen at the same time. The HB-HD6 also provides Parallel Thru main outputs which allows user to daisy-chain more headphone amplifiers together.

The HB-HD6 offers a stereo auxiliary input that allows user to sum an additional signal with the MAIN INPUT signal connected at the rear panel. An input mix control and a mono/stereo selector are on the front panel.

EASY OPERATION

The front panel is laid out clearly with six 6.3mm stereo headphone jack outputs with individual volume control and MUTE switch. A clip LED indicates that the headphone output level is too high and should be reduced in each channel. A rotary control can adjust the MASTER LEVEL from -9dB to +9dB with two clip LEDs indicate the left / right master input signal.

The rear panel is equipped with two COMBO inputs to accept XLR or 6.3mm TRS jack balanced line level signals, and two XLRs providing simultaneous line level thru outputs. Two stereo headphone outputs parallel through the front output on each channel.

SPECIFICATIONS

AUDIO SPECIFICATIONS

Input Impedance	Main Input	30k Ω Balanced (Main),
	Aux Input	15k Ω Unbalanced Override
		30k Ω Balanced (Main),
		15k Ω Unbalanced Override
Frequency Response		+0dB / -0.1dB 20Hz~20kHz
Maximum Input Level		Main Input +20dBu
		Aux Input +20dBu
Power Output (8~600Ω Headphones)		Max. 500mW Per CH
		Max. O/P Level +20dB Per CH
THD+Noise		0.05% @ 1kHz at 500mW
Noise		-79dB (A-Weighted)
Individual VOL Control		-70dB~+18dB
Master Level Control		-9dB~+9dB

CONNECTIONS

Main Input	2 $\times$ COMBO XLR + 6.3mm TRS (Balanced Can Be Wired Unbalanced)
Output	2 $\times$ 6.3mm TRS (Balanced Can Be Wired Unbalanced)
Main Output	2 $\times$ XLRM
Headphone Output	18 $\times$ 6.3mm TRS (Stereo)
Power Requirement	IEC, 110~120V or 220~240V

PHYSICAL SPECIFICATIONS

Dimensions	W482 $\times$ H44 $\times$ D230 (mm)
Nett Weight	3.8kg

FEATURES

- Three parallel headphone outputs with individual level and mute control for each channel.
- Two balanced COMBO line level inputs.
- RFI Filters on all inputs. EMC-proof case significantly improves rejection of radio frequency interference.
- Loop output to connect additional HB-HD6 for extra headphone outputs.
- Stereo auxiliary input.
- Main input and Auxiliary input mix control.
- Master level adjustable with in 9dB.
- Stereo / Mono switch.
- Peak indicators show overload of each headphone feed.
- Switchable power supply (110V~120V or 220V~240V).
- IEC-AC power receptacle.

Transformer Coupled Dual Microphone Amplifier



DESCRIPTION

The HB-MA2 is a dual channel professional studio microphone stage with Low Frequency Filter. Perfect for studio recording in direct to tape or hard disk recorder, the audio quality surpasses that found in most professional mixing consoles.

Each microphone XLR input is LUNDAHL transformer coupled for better CMRR and offer total Isolation. The input features switchable 48V Phantom Power and Input Gain control. A balanced, line-level XLRM output with -60dB attenuator provided for each Channel.

EASY OPERATION

The front panel is laid out clearly with Phantom Power LED indicators and corresponding LED's that indicate signal content of both channel. The inputs level are adjustable using rotary control and low frequency filter switches on the front panel.

The rear panel is equipped with a XLRF input connector and a XLRM output connector of each channel. There are -60dB attenuate switch for special purpose and Phantom Power switch of both channels.

SPECIFICATIONS

AUDIO SPECIFICATIONS	
Frequency Response	+0dB /-0.5dB 20Hz~20kHz
Input Impedance	1.2kΩ Balanced
Maximum Input Level	+3.5dBu (Referred to Min Gain) -33dBu (Referred to Max Gain)
Balanced Input, at 1kHz	80dB Typically
Output Gain Adj. Range	+22dB~+60dB
Output Impedance	20Ω Balanced
Maximum Output Level	+27dBu
Output Noise (A-wtd, rms)	-90dB (Referred to Min Gain) -65dB (Referred to Max Gain)
THD+Noise	0.005% @ 1kHz at +24dBm (Min Gain) 0.02% @ 1kHz at +24dBm (Max Gain)
Low Frequency Roll-off	120 @ 6dB/octave
Phantom Power	+48V (Switchable)
Output Attenuate	-60dB (Switchable)
CONNECTIONS	
Microphone Input	2 × XLRF (Balanced w/+48V Phantom)
Main Output	2 × XLRM (Balanced Condition Only)
Power Requirement	IEC, 110~120V or 220~240V
PHYSICAL SPECIFICATIONS	
Dimensions	W482 × H44 × D230 (mm)
Nett Weight	2.5kg

FEATURES

- Dual Microphone stage can be used of stereo recording.
- Provided switchable +48V Phantom Power for condenser microphone with LED indicators.
- RFI Filters on all inputs. EMC-proof case significantly improves rejection of radio frequency interference.
- Input level gain and Output attenuate switch control.
- Switchable Low Frequency Filter to remove mic bumps and rumble.
- LED indicators show signal contented of each microphone input feed.
- Switchable power supply (110V~120V or 220V~240V).
- IEC-AC power receptacle.
- Standard 19" 1U welded steel chassis.

HB-MM31

Three-channel Microphone Mixer



DESCRIPTION

The HB-MM31 is a professional three-channel microphone mixer for multi-element microphone or combine more audio inputs.

The three microphone inputs are XLR-type balanced, with 48-volt phantom power available on pins 2 and 3. The outputs are XLRM-type balanced and RCA jack unbalanced terminated.

The HB-MM31 can be daisy-chained via 3.5mm stereo jack Link Cable on the rear panel. The result is that all microphones on a multi-mixer system can be controlled by one microphone connected to any mixer. Since all of the mixers are independently powered, there is no practical limit to number of the mixer that can be daisy-chained.

SPECIFICATIONS

AUDIO SPECIFICATION

Input Impedance (Balanced)	Mic.	10k Ω ,
	Line	12k Ω
XLR Output Impedance (Balanced)	Mic.	320 Ω ,
	Line	200 Ω
RCA Output Impedance		1k Ω (Unbalanced)
Maximum Input Level	Mic.	-22dBu @ Min. Gain,
	Line	+28dBu @ Min. Gain
XLR Max. Output Level (Balanced)	Mic.	-27dBu (600 Ω) @ Max. Gain,
	Line	+23dBu (600 Ω) @ Max. Gain
RCA Max. Output Level		-13dBm @ -22dBu Input Level (Unbalanced)
Maximum Gain		62dB
Frequency Response		20Hz~20kHz @ +0dB, -1.2dB Points
THD+Noise		0.03% Max. (From 20Hz~20kHz @ -22dBu)
Signal to Noise Ratio		56dB
Headphone Output Level		150mW (40 Ω Load)
Input Attenuation		10dB
Mic. / Line Input Pads		50dB
Mic. Phantom Power		+48V DC
Operating Temp.		0°C~40°C

CONNECTIONS

Microphone Input	3 $\times$ XLR, D-sub 9-pin
Master Output	XLRM (Balanced), RCA (Unbalanced)
Link In / Output	3.5mm TRS / Stereo
External Mute Switch	4 Pin Mini-DIN
Headphone Output	6.3mm TRS / Stereo
Power Requirement	12V DC, 1A with AC Adapter

PHYSICAL SPECIFICATION

Dimensions	W210 $\times$ H50 $\times$ D230 (mm)
	(Including Feet, Knobs and Connectors)
Weight	1.54kg (3.4lb.)
Included Accessories	AC Adapter, Link Cable, Rack Ears and 6 Screws
Optional Accessory	Double Rackmount Joining Plate

FEATURES

- Three balanced microphone level inputs
- Both balanced and unbalanced line level outputs
- The level of each microphone channel can be independently control via the front panel
- Switchable 48V phantom power for condenser microphones
- D-sub input connector for the special three elements microphone
- Daisy-chained input to connect additional HB-MM31 for extra microphone inputs
- Monitor headphone output with level control
- Mute function with LED indicated in two color, external contact closure capability permits control of remote devices from the mute switch and TTL state outputs
- Mounts in a half single 19" rack space via integral rack mount, and allows two units to be connected side-by-side in a single rack space

SERIES

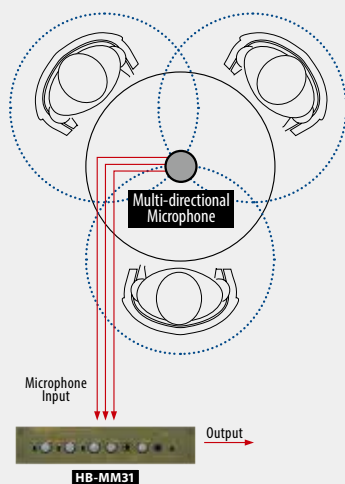
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HB SERIES

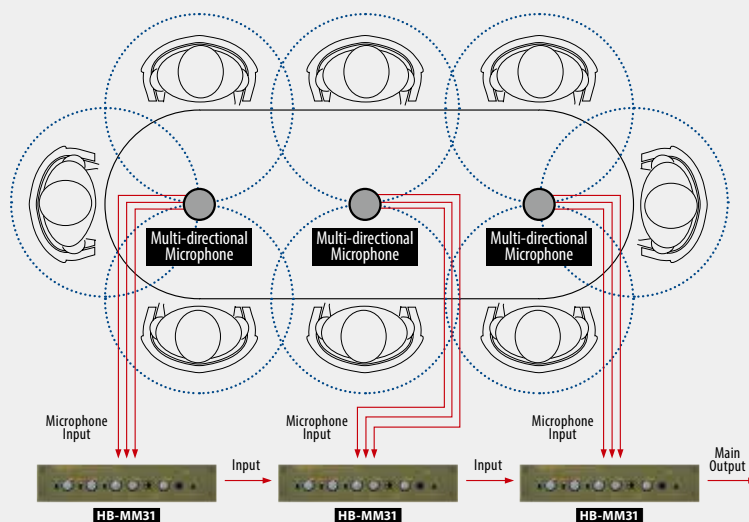
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USE EXAMPLE 1



USE EXAMPLE 2



STAND ALONE UNIT

The stand alone unit is a range of problem-solving installation tools to assist the installer of professional audio systems, these designs have evolved from practical experience in the field.

The units are passive and housed in aluminum enclosures, to withstand rugged treatment and provide shielding.

Isolation transformers and ground lift are designed in all of the units for better performance.



Single Channel Passive Bi-directional Balanced - Unbalanced Converter

FEATURES

- Broadcast quality
- Compact design
- Transformer isolated outputs
- Ground difference options
- Use of highest quality components
- Use of military grade toggle switch



DESCRIPTION

The BALUN is a passive Bi-directional stand alone unit for interfacing consumer or semi-professional unbalanced audio signal to professional balanced line level, and vice-versa.

There are one XLR-F-3 balanced input and one parallel XLR-M-3 balanced output that have an isolation transformer which is routed to one unbalanced RCA and one parallel 6.3mm jack connector.

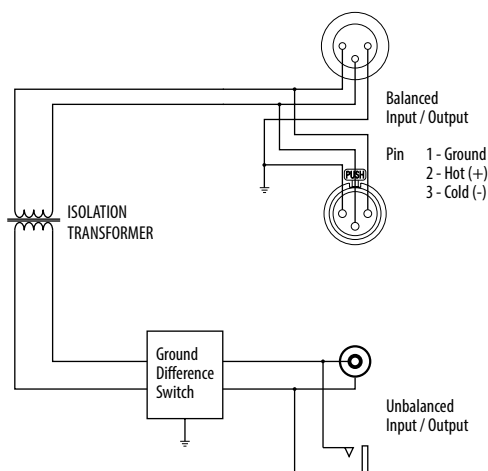
Unbalanced input / output has a ground difference switch is fitted to help combat ground loop. Left side is resistance linked to ground while right side offers full grounding chassis connection.

The BALUN professional quality balanced / unbalanced converter is designed for use in applications where exceptional audio performance is required.

SPECIFICATIONS

Frequency Response	-0.05dB/-0.03dB 20Hz~20kHz
Maximum Input Level	+28dBu, (1% 30Hz) +30dBu, (0.01% 1kHz)
Distortion	0.003% (0dBu, 1kHz)
Insertion Loss	-1.5dB into 600Ω Load <0.1dB into 50kΩ Load
Connections	XLR Male Input / Output, XLR Female Input / Output, 6.3mm 2 Pole Jack Input / Output, RCA Input / Output, Ground Difference Switch
Dimensions	W41 × H85 × D122 (mm)
Net Weights	0.43kg

BLOCK DIAGRAM



PLC21

Single Channel Passive LINE Combiner



FEATURES

- Broadcast quality
- Compact design
- Two-way combine
- Transformer isolated output
- Ground lift option
- Use of highest quality components
- Use of military grade toggle switch

DESCRIPTION

The PLC21 is a stand alone line-level combiner which is the ideal choice for requiring the passive, isolated mixing of two balanced line-level audio sources to feed a balanced audio output.

The input circuits of PLC21 are line-level and are each isolated from each other. Therefore the unit may be used to bridge a balanced stereo source without affecting the stereo separation. The output from the PLC21 is a mono mix of the stereo signal. The PLC21 may also be used to mix two separate sources into a single output.

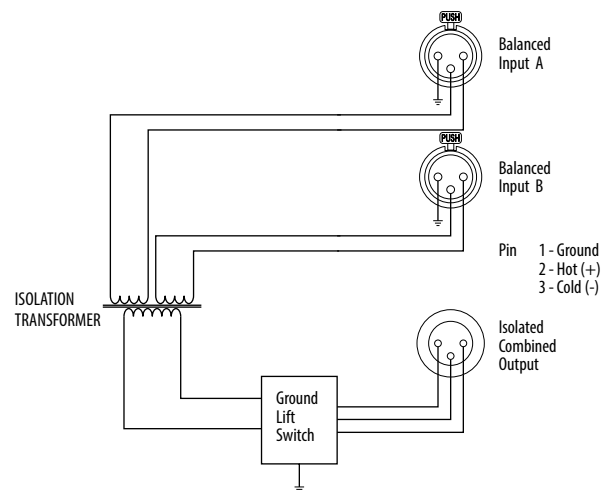
The balanced output has a Ground Lift switch that is fitted to help combat ground loop. Left side is capacitor linked to ground while right side offers full grounding chassis connection.

The PLC21 professional quality line-level combiner is designed for use in applications where exceptional audio performance is required.

SPECIFICATIONS

Frequency Response	0dB/-0.15dB 20Hz~20kHz
Maximum Input Level	+20dBu, (1% 50Hz) +28dBu, (0.1% 1kHz)
Distortion	0.002% (0dBu, 1kHz)
Insertion Loss	-2.5dB into 600Ω Load <0.1dB into 50kΩ Load
Shorted Input Loss	A or B -6dB
Connections	XLR Female Input × 2, XLR Male Output, Ground Lift Switch
Dimensions	W41 × H85 × D108 (mm)
Net Weight	0.45kg

BLOCK DIAGRAM



Single Channel Passive Microphone Combiner

FEATURES

- Broadcast quality
- Compact design
- Two-way combine
- Transformer isolated output
- Ground lift option
- Use of highest quality components
- Use of military grade toggle switch



DESCRIPTION

The PMC21 is a stand alone microphone level combiner which is the ideal choice for requiring the passive, isolated mixing of two balanced microphone sources to feed a balanced audio output.

The microphone inputs of PMC21 are each isolated from each other. Therefore the unit may be used to mix two separate microphone sources into a single output. There are two switches can be routed the Phantom Power from the mixer to microphones individually.

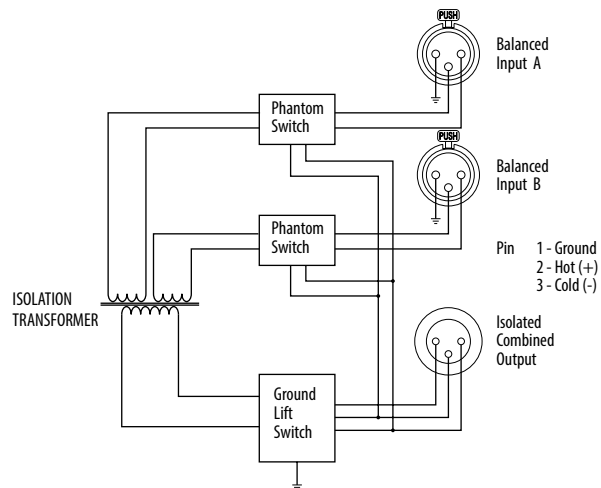
The balanced output has a Ground Lift switch that is fitted to help combat ground loop. Left side is capacitor linked to ground while right side offers full grounding chassis connection.

The PMC21 professional quality microphone combiner is designed for use in applications where exceptional audio performance is required.

SPECIFICATIONS

Frequency Response	0dB/-0.15dB 20Hz~20kHz
Maximum Input Level	+15dBu, (1% 50Hz) +26dBu, (0.1% 1kHz)
Distortion	0.003% (0dBu, 1kHz)
Insertion Loss	-1.5dB into 600Ω Load <0.1dB into 50kΩ Load
Shorted Input Loss	A or B -6dB
Connections	XLR Female Input × 2, XLR Male Output, Ground Lift Switch, Phantom Switch × 2
Dimensions	W41 × H85 × D108 (mm)
Net Weight	0.37kg

BLOCK DIAGRAM



PLS13

Single Channel Passive LINE Splitter



FEATURES

- Broadcast quality
- Compact design
- Three-way split
- Transformer isolated outputs
- Ground lift options
- Use of highest quality components
- Use of military grade toggle switch

DESCRIPTION

The PLS13 is a professional quality stand alone line splitter. The applications include live broadcasting and recording, press conferences and on-stage monitoring.

The input circuit of PLS13 is line-level and also be used an isolation transformer for long audio lines feeding. The transformer isolation in such situations minimizes inter-fereces from SCR lighting dimmers, radio transmitters and AC power wiring. The transformer-isolated feeds retain the advantage of common-mode noise rejection inherent in the use of balanced lines.

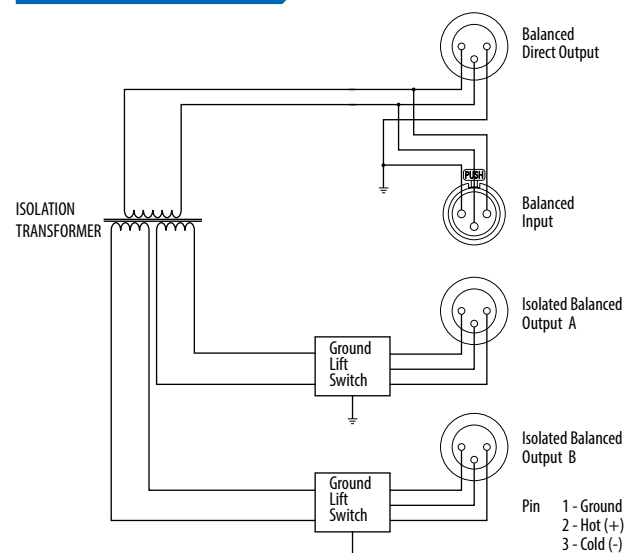
The splitter has three outputs - one is direct and two are transformer coupled. Two-way Ground Lift switches are fitted to help combat ground loop. Left side is capacitor linked to ground while right side offers full grounding chassis connection.

The PLS13 professional quality line-level splitter is designed for use in applications where exceptional audio performance is required.

SPECIFICATIONS

Frequency Response	0dB/-0.2dB 20Hz~20kHz
Maximum Input Level	+18dBu, (1% 50Hz) +24dBu, (0.1% 1kHz)
Distortion	0.002% (0dBu, 1kHz)
Insertion Loss	-2.5dB into 600Ω Load <0.1dB into 50kΩ Load
Shorted Input Loss	A or B -1.5dB
Connections	XLR Female Input, XLR Male Direct Output, XLR Male Isolated Output × 2, Ground Lift Switch × 2
Dimensions	W41 × H85 × D108 (mm)
Net Weight	0.45kg

BLOCK DIAGRAM



PMS13a

Single Channel Passive Microphone Splitter

SA UNIT
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FEATURES

- Broadcast quality
- Compact design
- Three-way split
- Phantom power connected in all outputs
- Transformer isolated output
- Ground lift options
- Switchable phase
- Die-cast case made
- Use of military grade components



DESCRIPTION

The PMS13a is a professional quality stand alone microphone splitter. The applications include public speeches, live recording, press conferences and musicians' monitoring.

The input circuit is used an isolation transformer for long microphone lines feeding and a polarity reversing switch to change the microphone phase cancellation. The transformer isolation in such situations minimizes interference from SCR lighting dimmers, radio transmitters and AC power wiring. The transformer-isolated feeds retain the advantage of common-mode noise rejection inherent in the use of balanced lines.

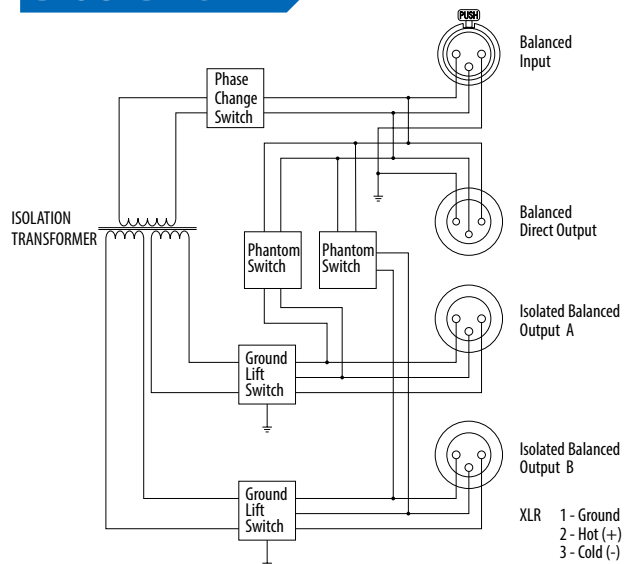
The splitter has three outputs - one is direct and two are transformer coupled. The outputs can be also used as connected Phantom Power for microphone. Two-way Ground Lift switches are fitted to help combat ground loops. Left side is capacitor linked to ground while right side offers full grounding chassis connection. There are two switches for A and B outputs*. They can be routed the Phantom Power from each mixer to microphone individually.

The PMS13a professional quality microphone splitter is designed for use in applications where exceptional audio performance is required.

SPECIFICATIONS

Frequency Response	20 Hz to 20 kHz ± 0.2 dB
Maximum Input Level	+16dBu (1% at 50 Hz) +24dBu (0.1% at 1 kHz)
Distortion	0.003% (0dBu at 1 kHz)
Insertion Loss	-4.5dB into 600 Ω Load 0.9dB into 50,000 Ω Load
Shorted Input Loss	A or B -2dBu (Measured from Input Port)
Connections	XLR Female Input, XLR Male Direct Output, XLR Male Isolated Output $\times 2$, Ground Lift Switch $\times 2$, Phantom Switch $\times 2$, Phase Change Switch $\times 2$
Dimensions	W41 $\times$ H85 $\times$ D108 (mm)
Net Weight	0.37kg

BLOCK DIAGRAM



SDI

Single Channel Passive Direct Injection Box



FEATURES

- Broadcast quality
- Compact design
- Transformer isolated output
- Ground lift option
- Use of highest quality components
- Use of military grade toggle switch

DESCRIPTION

The SDI is a passive stand alone direct injection box which is ideal for bass guitar and acoustic instruments, electric guitars, keyboards, synthesizers audio signal pickup.

There are one unbalanced line-level input, one instrument input jack with a directly link via the parallel jack, one high level speaker input for capturing the live sound of the instruments amplifier and allows a speaker lead to pass through the unit.

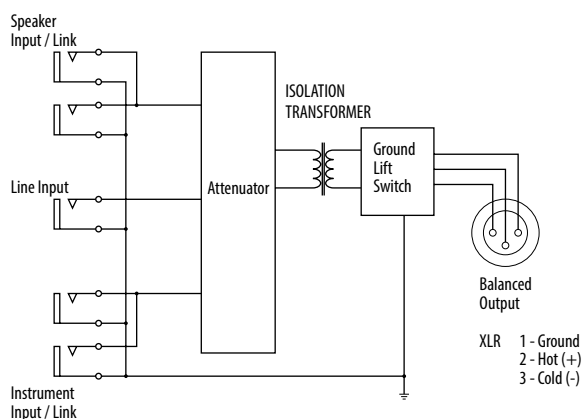
The XLRM-3 balanced output has been isolated by transformer and a Ground Lift switch that is fitted to help combat ground loop. Left side is capacitor linked to ground while right side offers full grounding chassis connection.

The SDI professional quality direct injection box is designed for use in applications where exceptional audio performance together with the ability to handle signal level up to 100V line P.A. system is required.

SPECIFICATIONS

Frequency Response	0dB/-0.1dB 20 Hz~20 kHz
Maximum Input Level	Speaker : -60dB (ATTN) 100V (Max Input) Line : -40dB (ATTN) 10V (Max Input) Instrument : -20dB (ATTN) 1V (Max Input)
Distortion	0.003% (0dBu, 1kHz)
Insertion Loss	-0.5dB into 600Ω Load <0.1dB into 50kΩ Load
Connections	XLR Male Output, 6.3mm 2 Pole Jack Input × 3, 6.3mm 2 Pole Jack link × 2, Ground Lift Switch
Dimensions	W41 × H85 × D108 (mm)
Net Weights	0.34kg

BLOCK DIAGRAM



Mini Microphone Pre-amplifier



DESCRIPTION

The MA-1 is a high quality 48 volt phantom power, compact, variegated applications microphone pre-amplifier. It is perfectly suited to internet conference systems, or computer based acoustical analysis systems .

This pre-amplifier features a XLR balanced Microphone input, output gain control with clip indicator, XLR balanced Line level output and a 3.5mm mini-jack Microphone output for connection to standard computer soundcard microphone input.

The panel is laid out clearly with Phantom Power LED indicator and switch. A corresponding LED that indicate signal content of microphone input. A switchable Low Frequency Filter can remove mic bumps and rumble.

The MA-1 mini microphone pre-amplifier is designed for use in application where exceptional audio performance is required.

SPECIFICATIONS

AUDIO SPECIFICATIONS

Frequency Response	-0.2/-1dB 20Hz~20kHz -6dB/-1dB 90Hz~20KHz (LFF Switch On)
Input Impedance	10kΩ Balanced
Maximum Input Level	-3dBu (Referred to Min Gain) -34dBu (Referred to Max Gain)
Maximum Output Level	+26dBu XLR Balanced -24dBu Ø3.5mm Unbalanced
Balanced Input, at 1KHz	70dB Typically
Output Gain Adjustable Range	+30dB~+60dB
Output Impedance	200ohm (XLR Balanced) 200ohm (3.5mm Mini-Jack Unbalanced)
Output Noise (A-wtd)	-80dB (Referred to Min Gain) -52dB (Referred to Max Gain)
THD+Noise	0.03% @ 1kHz at +21dBm (Referred to Min Gain)
Phantom Power	48V (Switchable)

CONNECTIONS

Input / Output / Power	XLR Female Input, XLR Male Output, 3.5mm Mini Jack Output, DC Power Jack (12~16 VDC)
Switch	Phantom Switch, LFF Switch, Power Switch
Power Requirement	12 VDC Adaptor

PHYSICAL SPECIFICATIONS

Dimensions	W41 × H85 × D108 (mm)
Net Weight	0.3kg

FEATURES

- Compact design
- Switchable +48 volt phantom power supply for condenser microphone with LED indicators
- Balanced Input Microphone circuitry
- Input signal indicator and Output level gain control with Clipping Indicator
- Switchable Low Frequency Filter to remove mic bumps and rumble
- External power supply for superior low-noise performance
- Use of highest quality components

MA-1B

Mini Microphone Amplifier (support internal batteries)



DESCRIPTION

The MA-1B is a high quality 48 volt phantom power, compact, variegated applications microphone preamplifier. It is perfectly suited to internet conference systems, or computer based acoustical analysis systems. MA-1B can operate with internal batteries or an external power supply.

This pre-amplifier features a XLR balanced Microphone input, output gain control with clip indicator, XLR balanced Line level output and a 3.5mm mini-jack Microphone output for connection to standard computer soundcard microphone input.

The panel is laid out clearly with Phantom Power LED indicator and switch. A corresponding LED that indicate signal content of microphone input. A switchable Low Frequency Filter can remove mic bumps and rumble.

The MA-1B mini microphone pre-amplifier is designed for use in application where exceptional audio performance is required.

SPECIFICATIONS

AUDIO SPECIFICATIONS	
Frequency Response	35Hz~20kHz (-3dB/0dB)
(Low Cut)	90Hz~20kHz (-3dB/0dB)
Input Impedance	6kohm Balanced
Maximum Input Level	-30dBm
(0dB=775mV)	
Nominal Output Level	0dB XLR Balanced
(0dB=775mV)	-6dB Ø3.5mm Unbalanced
THD+Noise	<1%
Output Gain Range	0dB~60dB (Adjustable)
Phantom Power	48V (Switchable)
CONNECTIONS	
Input/Output/Power	XLR Female Input, XLR Male Output, 3.5mm Mini Jack Output, DC Power Jack (12~16 VDC)
Switch	Phantom Switch, LPF Switch, Power Switch
Batteries (Not Included)	Two 1.5V AA Alkaline
Accessories Furnished	12 VDC Adaptor
PHYSICAL SPECIFICATIONS	
Dimensions	W41 × H85 × D157 (mm)
Net Weight	0.5kg

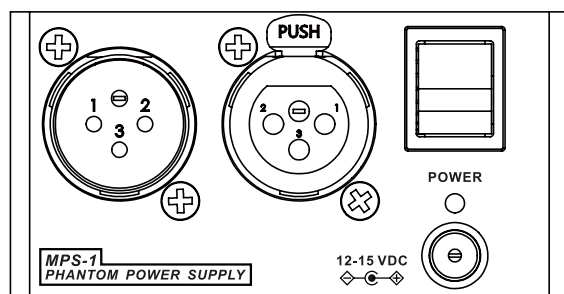
FEATURES

- Compact design
- Switchable +48 volt phantom power supply for condenser microphone with LED indicators
- Balanced Input Microphone circuitry
- Switchable internal batteries or external power supply
- Input signal indicator and Output level gain control with Clipping Indicator
- Switchable low frequency filter to remove mic bumps and rumble
- External power supply for superior low-noise performance
- Use of highest quality components

MPS-1

Phantom Power Supply

SA UNIT
19



DESCRIPTION

MPS-1 is a 48-volt phantom power supply capable of powering most condenser microphones. It provides clean, reliable phantom power for a condenser microphone in a rugged, compact, and portable unit. Innovative low power circuitry generates the higher voltage necessary for powering microphones while maximizing battery life.

The MPS-1 is an invaluable and reliable tool in application areas including home or professional recording studios, live sound, PA, permanent installations, DJ, AV, podcasting and broadcasting. Use it with mixers, audio processors, digital audio workstations or anywhere you need phantom power for your microphones.

The MPS-1 can be powered by two AA size batteries or by external 12~15V DC. Long battery life and a bright LED low battery indicator is on the front panel to ensure that the microphone is properly powered during your recording session.

The battery compartment is sealed with a double locks as an extra safeguard measure using the MPS-1 in the field. When opening the battery compartment door it is necessary to slide and push the release latches together.

SPECIFICATIONS

AUDIO SPECIFICATIONS	
Number Of Channels	1 Channel
Phantom Voltage	48V +/- 2V DC
Short Circuit Output Current	14 mA
Power Requirement	2 AA Alkaline Batteries (Internal) 12~15V DC Adaptor (External)
LED Indicator	Green - Power On Orange - Low Battery
CONNECTIONS	
Input / Output / Power	XLR Female Input, XLR Male Output, DC Power Jack (12~15 VDC)
Switch	Battery / OFF / External Power
Accessories Furnished	12 VDC Adaptor, Power Cord
PHYSICAL SPECIFICATIONS	
Dimensions	W87 × H50 × D82 (mm)
Nett Weight	430g / 0.94 lb (Unit Only)

FEATURES

- Compact design
- 48 volt phantom power supply for condenser microphone
- Balanced microphone input and output circuitry
- Dual color LED indication for power on and low battery
- Double locks battery compartment as an extra safeguard measure
- Use of popular AA size batteries
- Over 8 hours for operational battery life (alkaline)

MULTI-CHANNEL SPLITTER

The multi channel splitter systems are 2U rack-mountable compact design, offer up to 16 channels Microphone or Line level three way splitting.

The passive splitter systems are designed for use in applications where exceptional audio performance together with high performance transformer.

Some models are designed for flexible Front/Rear side rack installation, and some models are used of feed-through terminal strips minimize installation time and cut down labour cost.



08PLS, 12PLS, 16PLS

8, 12, 16 Channel Line Splitter System

SPLITTER
21

DESCRIPTION

The Line Splitter Systems are designed for flexible installation applications. The use of XLRs connector for easy change the input / output channel location.

There are three new models for different applications:

- 08PLS – 8 Channel Line Splitter
- 12PLS – 12 Channel Line Splitter
- 16PLS – 16 Channel Line Splitter

The professional quality line splitter systems are designed for use in applications where exceptional audio performance.

Each channel Line Splitter has three outputs - one is direct and two are transformer coupled. Two-way Ground Lift switches are fitted to both isolated outputs to help combat ground loops. Left side is capacitor linked to ground while right side offers full grounding chassis connection.

FEATURES

- Broadcast quality.
- Compact Design.
- Three way split.
- Transformer isolated outputs.
- Ground lift options.
- Standard XLR type connectors.
- Standard 2U-19" rack mount case.
- Use of highest quality components.
- Use of military grade toggle switch.

SPECIFICATIONS

Frequency Response	0dB/-0.2dB 20Hz~20kHz
Maximum Input Level	+18dBu, (1% 50Hz) +24dBu, (0.1% 1kHz)
Distortion	0.002% (0dBu, 1kHz)
Insertion Loss	-2.5dB into 600Ω Load <0.1dB into 50kΩ Load
Shorted Output Loss	A or B -1.5dB
Features	XLR Female Input, XLR Male Direct Output, XLR Male Isolated Output × 2, Ground Lift Switch × 2
Dimensions	W483 × H88 × D104 (mm)
Net Weights	16PLS - 6.4kg 12PLS - 5.3kg 08PLS - 4.2kg

CONTROL

Front Panel Includes:

- Isolated Balanced Output A, (XLRM-3 Connector)
- Isolated Balanced Output B, (XLRM-3 Connector)
- Ground Lift Switches A and B

Rear Panel Includes:

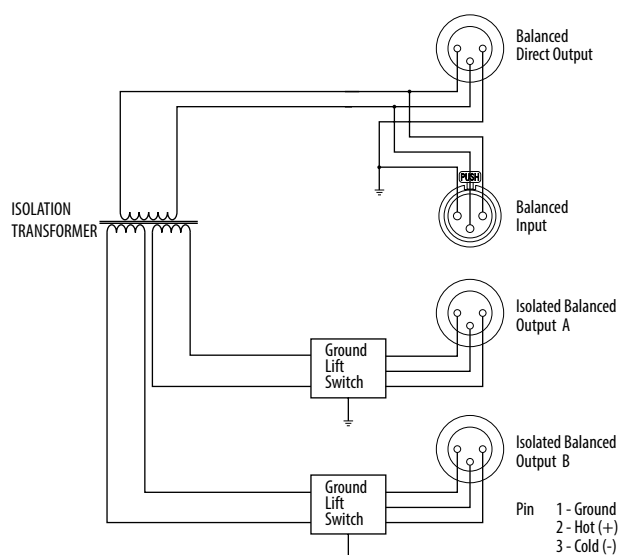
- Balanced Input, (XLRM-3 Connector)
- Direct Output, (XLRM-3 Connector)


08PLS | 8 Channel Line Splitter System

12PLS | 12 Channel Line Splitter System

16PLS | 16 Channel Line Splitter System

BLOCK DIAGRAM



08PMSa, 12PMSa, 16PMSa

8, 12, 16 Channel Microphone Splitter System

16PMSa | 16 Channel Microphone Splitter System

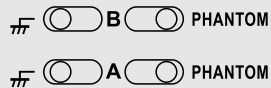


CONTROL

Front Panel Includes:

- Isolated Balanced Output A, (XLRM-3 Connector)
- Isolated Balanced Output B, (XLRM-3 Connector)
- Ground Lift Switches A and B
- Phantom Power Switches

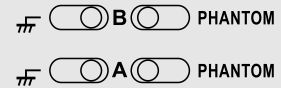
Grounded and Phantom Power ON



Rear Panel Includes:

- Balanced Input, (XLRM-3 Connector)
- Direct Output, (XLRM-3 Connector)

Ground LIFT and Phantom Power OFF



DESCRIPTION

The PMSa – Passive Microphone Splitter Systems are designed for flexible audio system installation applications such as radio / television studios and stage monitoring. The use of XLRs connector for easy change the input / output channel location.

There are three new models for different applications:

- 08PMSa – 8 Channel Passive Microphone Splitter
- 12PMSa – 12 Channel Passive Microphone Splitter
- 16PMSa – 16 Channel Passive Microphone Splitter

The input circuit of the Microphone Splitter is used a higher quality isolation transformer for long microphone lines feeding. The transformer isolation in such situations minimizes interferences from SCR lighting dimmers, radio transmitters and AC power wiring. The transformer isolated feeds retain the advantage of common-mode noise rejection inherent in the use of balanced lines.

Each channel Microphone Splitter has three outputs - one is direct and two are transformer coupled. The outputs can be also used as connected Phantom Power for microphone. Two way Ground Lift switches are fitted to both isolated outputs to help combat ground loops. Left side is capacitor linked to ground while right side offers full grounding chassis connection. There are two switches for A and B outputs*. They can be routed the Phantom Power from each mixer to microphone individually.

The professional quality microphone splitter systems are designed for use in applications where exceptional audio performance.

12PMSa | 12 Channel Microphone Splitter System



08PMSa | 8 Channel Microphone Splitter System



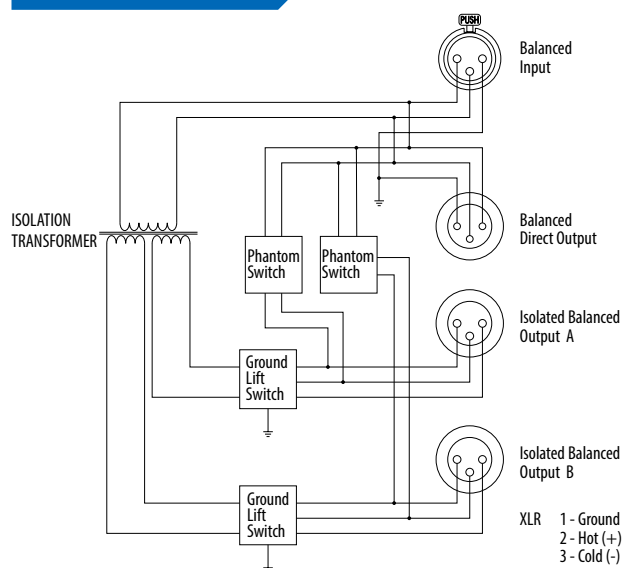
FEATURES

- Broadcast quality.
- Compact design.
- Standard XLR type connectors.
- Three-way split.
- Phantom power connected in all outputs.
- Transformer isolated output.
- Ground lift options.
- Standard 2U-19" rack mount case.
- Front/rear side rack installation.
- Die-cast case made.
- Use of military grade components.

SPECIFICATIONS

Frequency Response	20 Hz~20 kHz ± 0.2 dB
Maximum Input Level	+16dBu (1% at 50 Hz) +24dBu (0.1% at 1 kHz)
Distortion	0.003% (0dBu at 1 kHz)
Insertion Loss	-4.5dB into 600 Ω Load 0.9dB into 50k Ω Load
Shorted Output Loss	A or B -2dBu (Measured from Input Port)
Connections	XLR Female Input, XLR Male Direct Output, XLR Male Isolated Output $\times$ 2, Ground Lift Switch $\times$ 2, Phantom Switch $\times$ 2
Dimensions	W483 $\times$ H88 $\times$ D104 (mm)
Net Weights	16PMSa - 5.2 kg 12PMSa - 4.6 kg 08PMSa - 4.0 kg

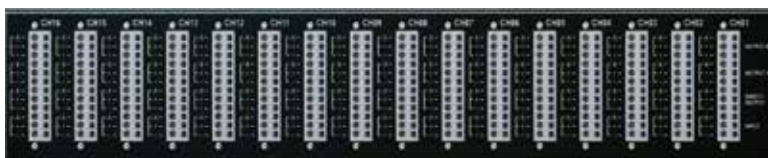
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16PLS-W

16 Channel Line Splitter with feed-through terminal

16PMS-W

16 Channel Microphone Splitter with feed-through terminal

FEATURES

- Broadcast quality.
- Compact design.
- Three way split.
- Transformer isolated outputs.
- Ground lift options.
- Standard 2U-19" rack mount case.
- Output A front / rear selectable.
- Use of highest quality components.
- Use of military grade toggle switch.

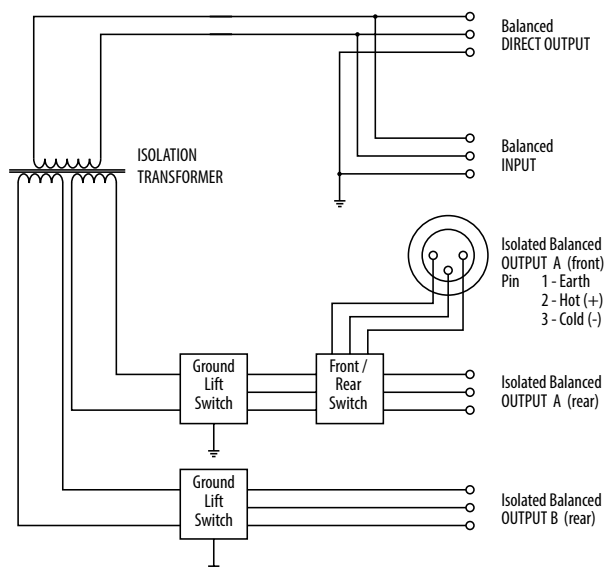
DESCRIPTION

The 16PLS-W and 16PMS-W are designed for permanent fixed installation applications. The use of feed-through terminal strips minimize installation time and cut down labour cost. No input and output connectors are necessary unless parallel 'Output A' XLR connectors on the front panel are used. No soldering is required.

The professional quality 16PMS-W microphone splitter system and 16PLS-W line splitter system are designed for use in applications where exceptional audio performance.

Each channel of both Splitters have three outputs - one is direct and two are transformer coupled. Two-way Ground Lift switches are fitted to both isolated outputs to help combat ground loops. Left side is capacitor linked to ground while right side offers full grounding chassis connection.

BLOCK DIAGRAM



SPECIFICATIONS

	16PLS-W	16PMS-W
Frequency Response	0dB/-0.2dB 20Hz~20kHz	-0.2dB/-0.2dB 20Hz~20kHz
Maximum Input Level	+18dBu, (1% 50Hz) +24dBu, (0.1% 1kHz)	+16dBu, (1% 50Hz) +24dBu, (0.1% 1kHz)
Distortion	0.002% (0dBu, 1kHz)	0.003% (0dBu, 1kHz)
Insertion Loss	-2.5dB into 600Ω Load <0.1dB into 50kΩ Load	-3dB into 600Ω Load <0.1dB into 50kΩ Load
Shorted Output Loss	A or B -1.5dB	A or B -1.2dB
Features	XLRM Isolated Output, Feed-through Terminal Strip, Output A Front / Rear Switch, Ground Lift Switch × 2	XLRM Isolated Output, Feed-through Terminal Strip, Output A Front / Rear Switch, Ground Lift Switch × 2
Dimensions	W483 × H88 × D205 (mm)	W483 × H88 × D205 (mm)
Net Weights	6.5kg	5.5kg

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