

PHONIC



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A6200

SupremeDI

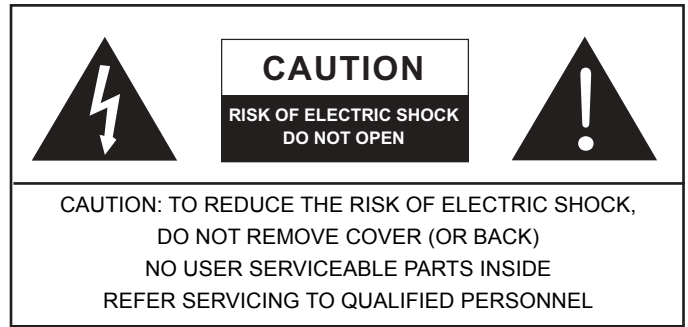
User's Manual

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IMPORTANT SAFETY INSTRUCTIONS

1. Read these instructions before operating this apparatus.
2. Keep these instructions for future reference.
3. Heed all warnings to ensure safe operation.
4. Follow all instructions provided in this document.
5. Do not use this apparatus near water or in locations where condensation may occur.
6. Clean only with dry cloth. Do not use aerosol or liquid cleaners. Unplug this apparatus before cleaning.
7. Do not block any of the ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plug, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING: To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

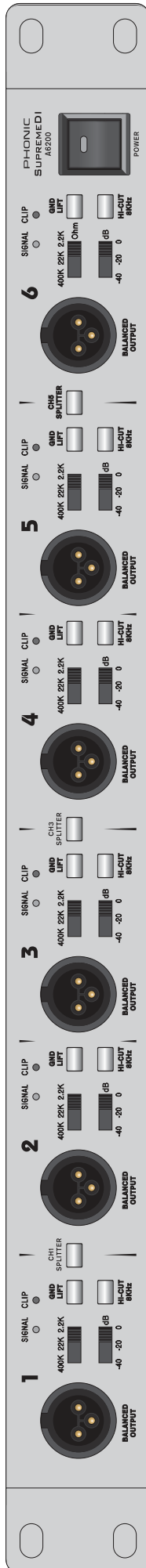
CAUTION: Use of controls or adjustments or performance of procedures other than those specified may result in hazardous radiation exposure.

SUPREME DI A6200

USER'S MANUAL

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INTRODUCTION

Thank you for choosing Phonic, your sound partner and world famous audio equipment manufacturer. The A6200 SupermeDI is a 6-channel active direct box which allows you to connect a high-impedance, unbalanced source, such as your electrical guitar or bass, to the mic input channel on your mixer. In doing so, the A6200 SupermeDI easily eliminates the annoying humming or ground looping that results from using a microphone to pick up the signal in front of the guitar amp. Need not to worry about if you have the appropriate connectors, the A6200 SupermeDI can automatically turn the unbalanced signal into a balanced one before connecting it to your console. Review this manual carefully to learn more about the features and operating procedures for the A6200. Should future questions arise, please refer back to this manual.

FEATURES

- The Professional 6-Channel Active Direct Box includes
- Professional, multi-purpose 6-channel Direct Inject box for stage and studio applications
- Low noise audio operational amplifiers for outstanding sound performance
- Special transformer decoupling to prevent hum and noise pick up
- Converter from unbalanced line inputs to balanced outputs
- Switchable High Cut filter (8 kHz) for guitar applications
- Independent impedance match selection
- Ground Lift switch to eliminate typical ground loop problems
- Illuminated Stereo link switch
- XLR connectors and 1/4" TRS connections for input and output
- Illuminated switches to enable easy operation in dark stage environments
- High-quality components and exceptionally rugged construction ensure long life and durability
- Internal power supply design for professional applications

INITIAL SETUP

The following is the recommended initial setup for your A6200.

For channel 1 to channel 6

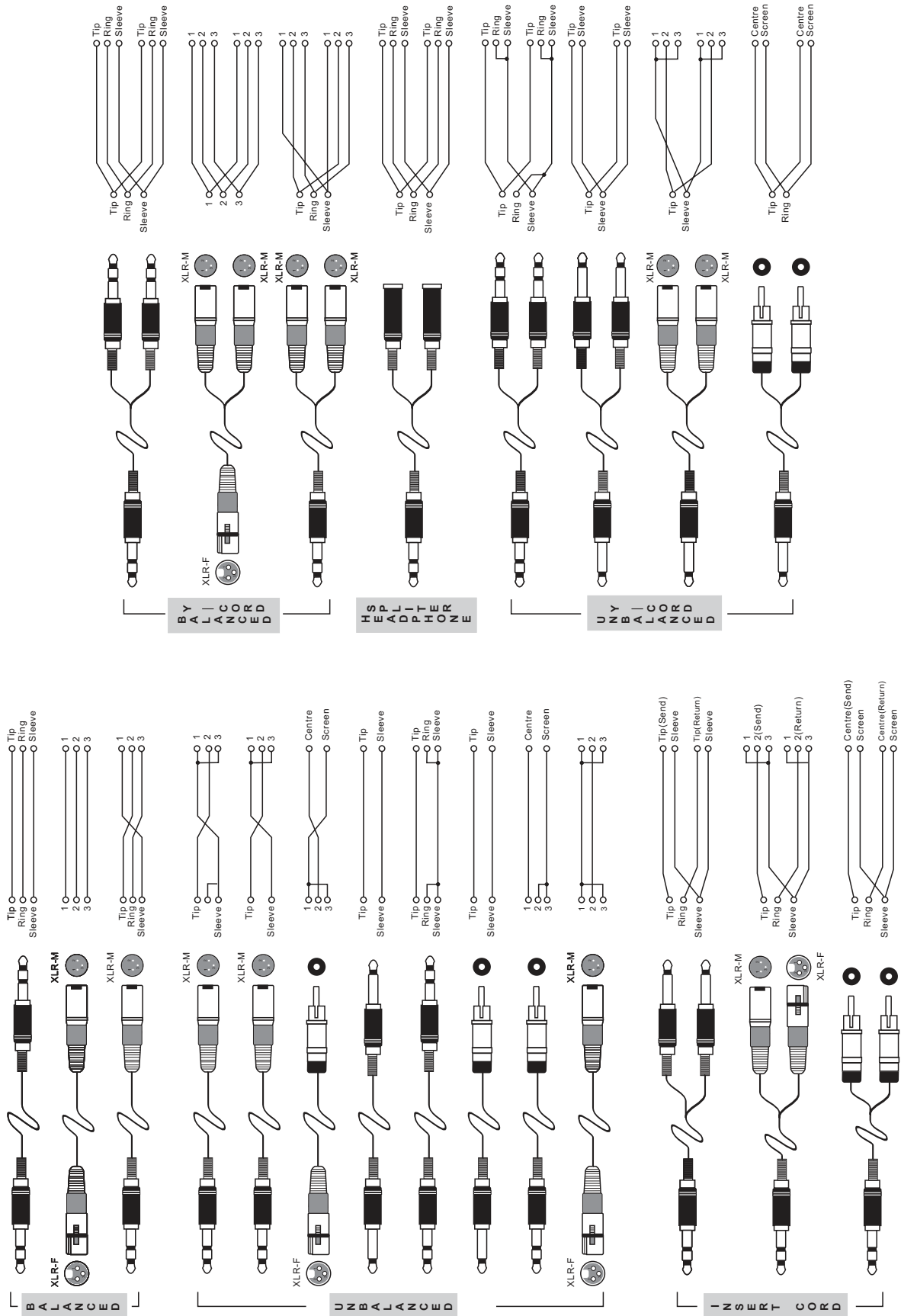
- 1 Set the dB level at -40 (dB)
- 2 Set the impedance level at 400K (ohms)
- 3 Play the connected instrument to test the output:
 - A. If the sound output is not loud enough, adjust the dB level between -20 and 0 (dB) until the output reaches a suitable volume.
 - B. If the sound output is not clear, adjust the impedance level between 22K and 2.2K (ohms) until the output is satisfactory.
- 4 If humming appears in the sound output, press the GND/LIFT button.
- 5 If the connected instrument is a bass guitar, press the HI-CUT button to remove frequencies above 8KHz in the output.
- 6 If the input signal needs to be sent to two mixers, press the CH-SPLITTER button to duplicate the signal. (Please refer to the application for more information.)

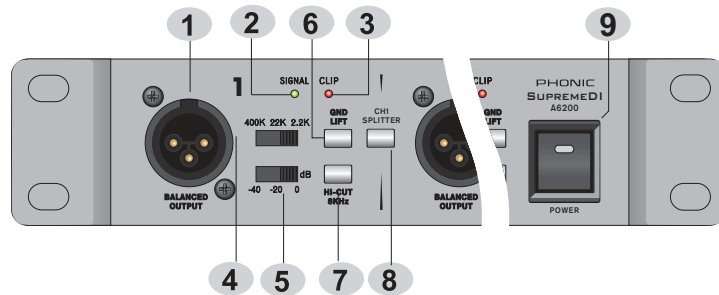
TYPICAL CONNECTING LEADS

On the following page typical connecting leads have been sorted into seven categories: BALANCED, UNBALANCED, INSERT CORD, BALANCED Y-CORD, HEADPHONE SPLITTER, and UNBALANCED Y-CORD.

The wiring for each of these connectors is detailed in each category; please refer to the proper group for your desired application.

All input and output connectors (XLR-male out, 1/4" phone jack SPL/OUT & OUT, XLR-female input) are balanced for the A6200 SupremeDI.





FRONTAL PANEL DESCRIPTION

The six channels on the A6200 all with the same functions and connections.

1 OUTPUT connector

The balanced output accepts an XLR-F connector, and sends a processed signal to the mixing console.

2 OUTPUT SIGNAL indicator

This green LED will turn on when a signal greater than -25dB is present in the signal path.

3 CLIP indicator

This red LED will turn on when a signal of 15dB is present, as a reminder against possible overload.

4 INPUT IMPEDANCE selector

This selector allows the unit to match the impedance of the input at 2.2 K, 22 K, or 400 K ohms.

5 GAIN switch

This switch increases the operating range of the input signal to 0 dB, -20 dB or -40 dB.

6 GND LIFT button

Push this button to separate the ground of the INPUT from that of the OUTPUT, and reduce hum from ground loops.

7 HI-CUT 8kHz

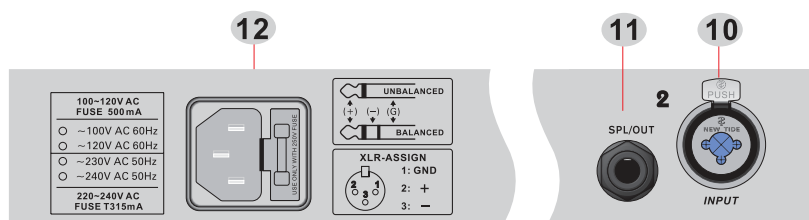
Push this button to filter out frequencies above 8kHz in the signal.

8 SPLITTER switch

Push this switch to duplicate the processed signal from one channel to another (e.g. from CH1 to CH2). The SIGNAL and CLIP indicators will remain in the service of channels 2, 4, and 6.

9 POWER button

Push this button to turn on the SUPREME DI.



CONNECTING PANEL DESCRIPTION

All six channels on the A6200 contain the same connections.

10 AUDIO INPUT

Each input has one combo connector that accepts either an XLR-Male connector or a 1/4" TRS phone jack.

11 OUTPUT & SPL/OUT connectors

A. During normal (non-split) operation: Each channel sends its independent output signals through this balanced 1/4" phone jack.

B. When SPLITTER is activated for a channel pair (e.g. CH1 & CH2): The INPUT signal for the even-numbered channel (CH2) are disabled, and its SPL/OUT signals duplicate the OUTPUT signals of the odd-numbered channel (CH1).

12 AC Power cable socket and fuse holder

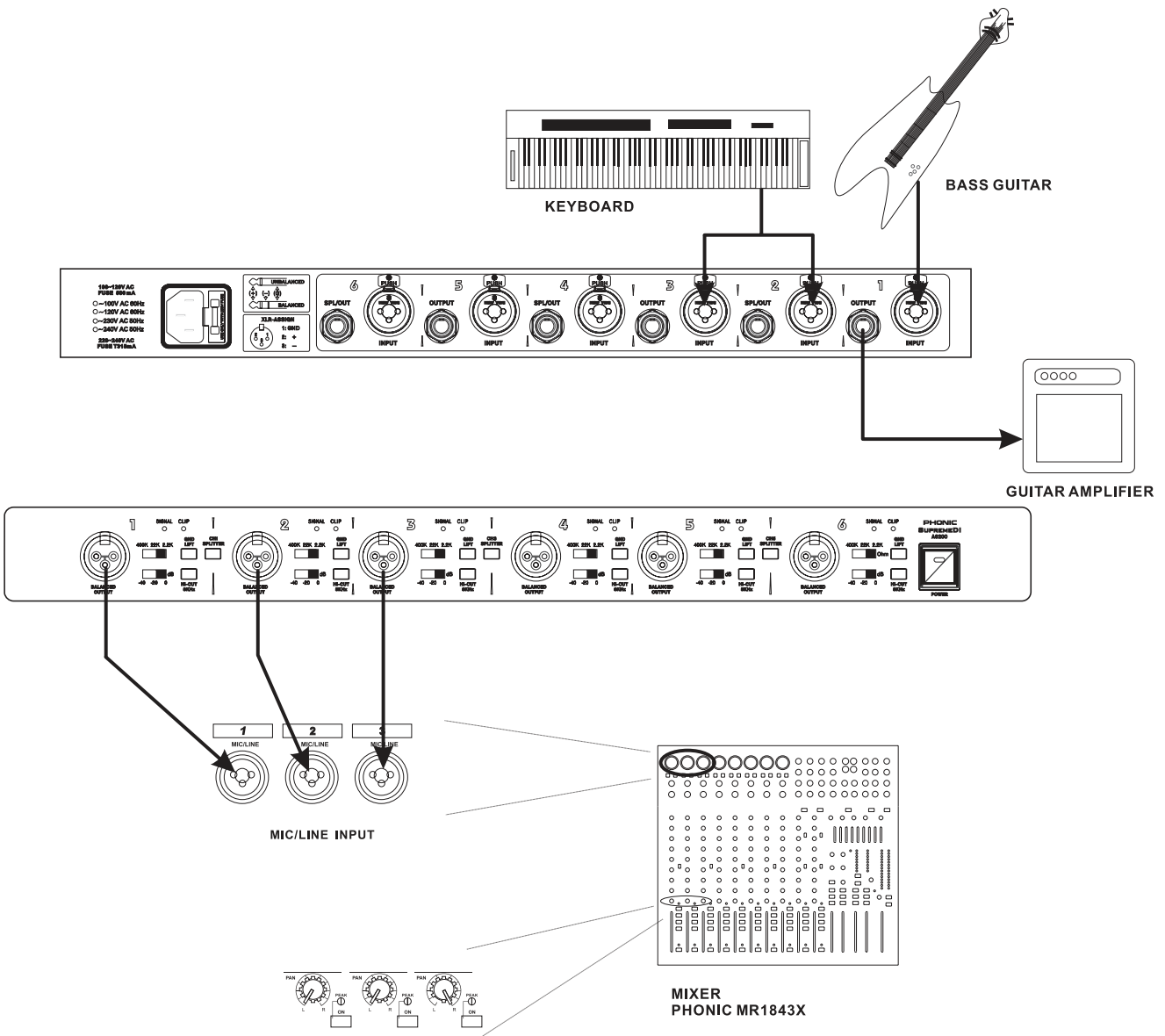
Connect the supplied AC power cord to this socket, then insert the plug into a wall-socket of suitable voltage. The required AC voltage is printed next to the socket. A blown fuse may only be replaced by a fuse of identical type and rating as those listed alongside the fuse holder.

APPLICATION

With A6200, you may directly connect the guitar output to the mic input of a mixer, or convert any unbalanced signal to a balanced signal for long distance cabling.

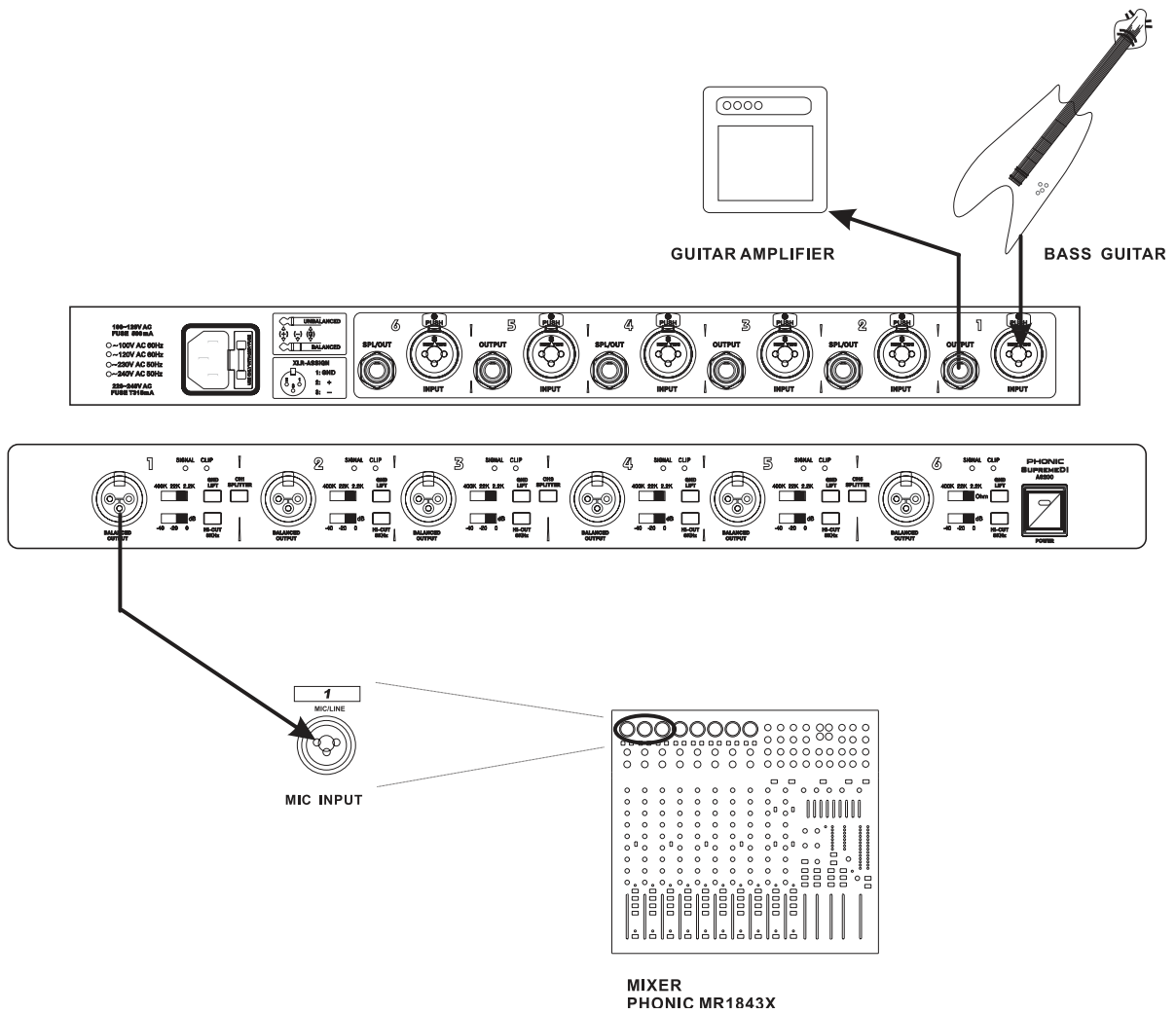
TAPPING SIGNAL FROM A GUITAR

The SupermeDI can send the output from a guitar directly as input to both the the mixer (for mixing) and the guitar amp (for monitoring).



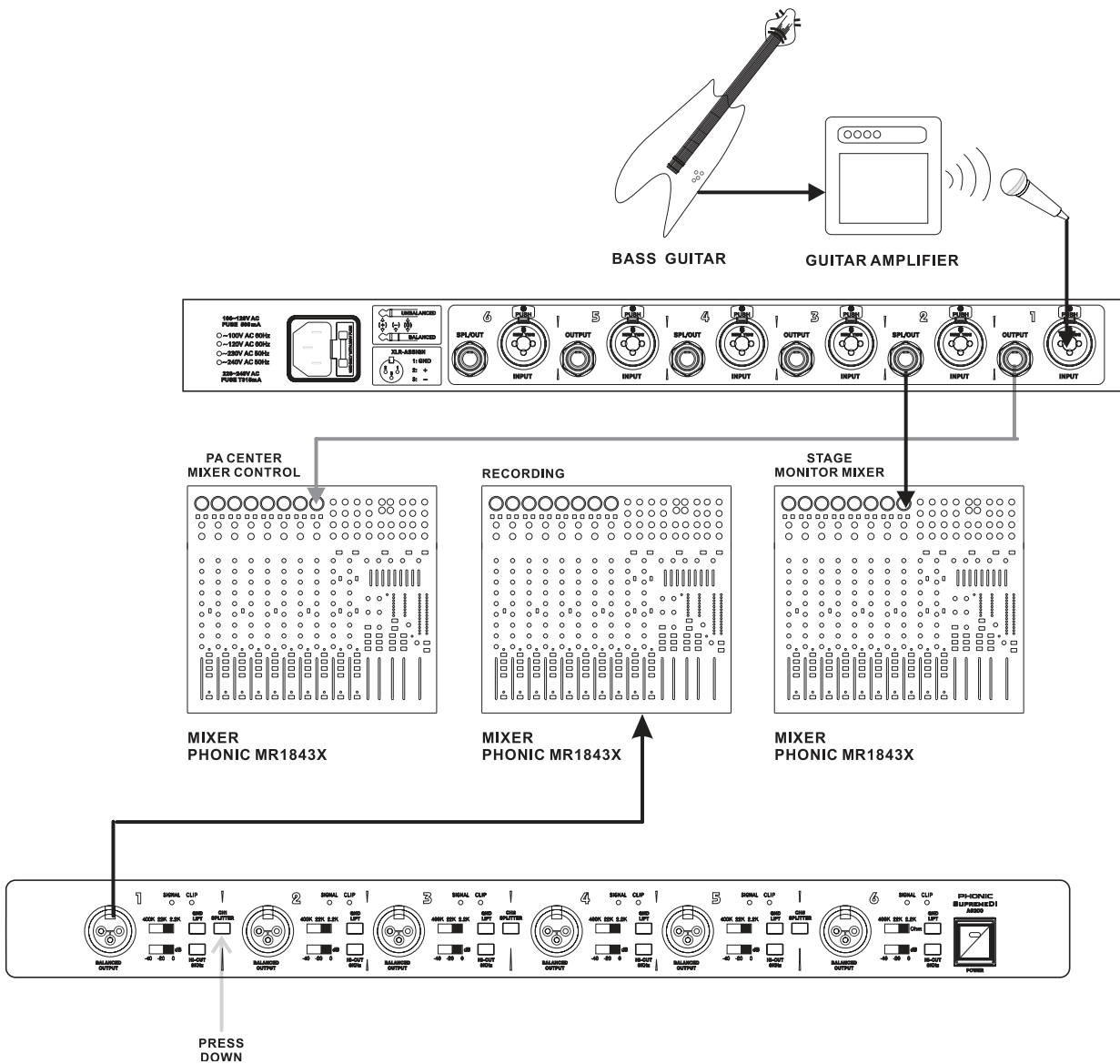
CONVERTING UNBALANCED TO BALANCED OUTPUT

The SupermeDI can convert unbalanced output to balanced output before the signal is connected to the mixer's mic input. When plugging in stereo signals, set the pan controls for the left and right input channels respectively.

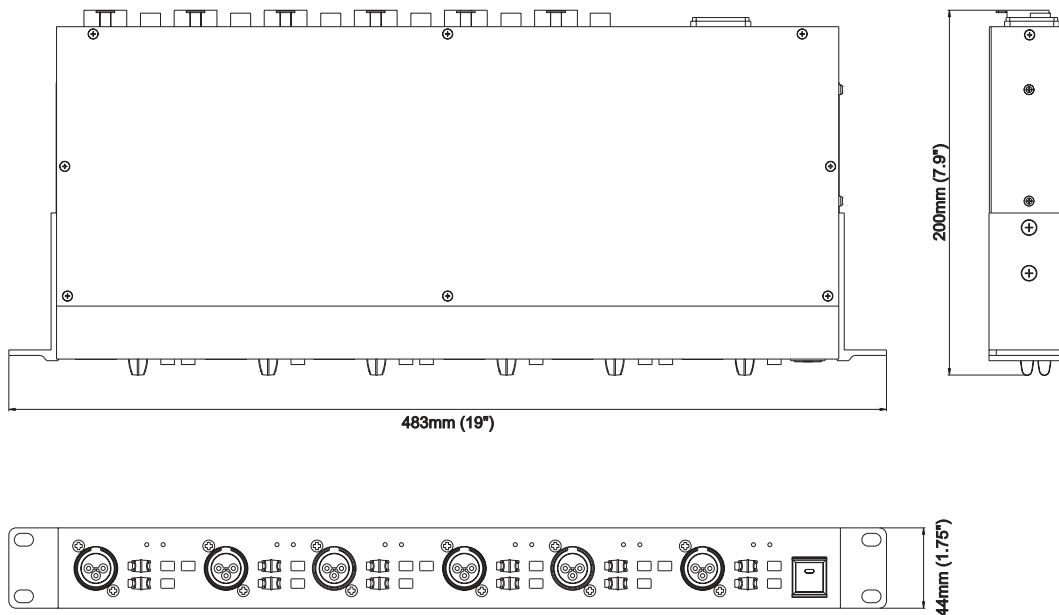


DUPLICATING SIGNAL TO TWO DIFFERENT DESTINATION BY USING THE SPLITTER BUTTON

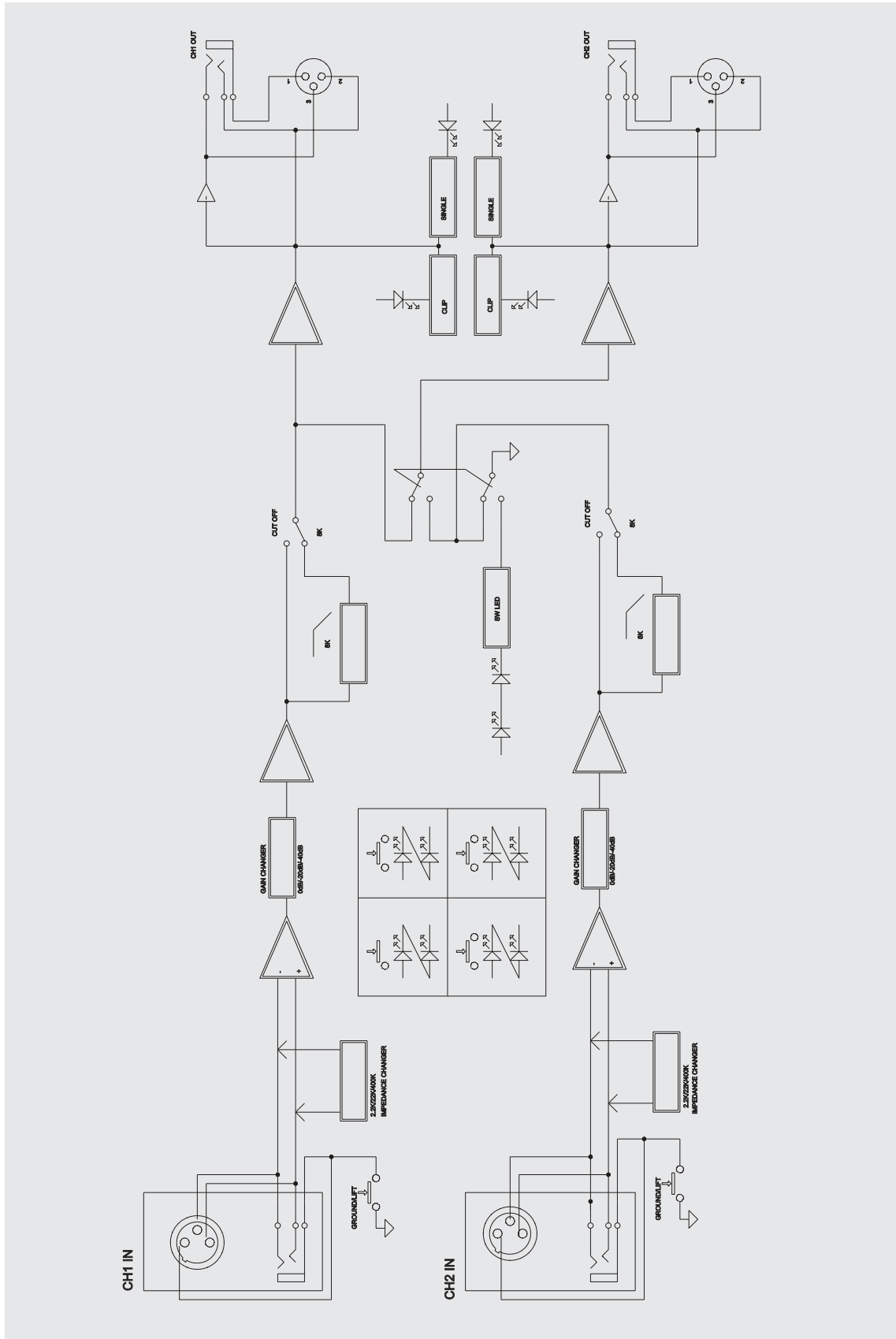
The SupermeDI can duplicate a signal from an odd numbered channel to an even numbered channel (e.g. CH1 to CH2). The duplicate signals can be routed to both a stage mixer and a FOH mixer to ensure an identical source signal for both mixers.



DIMENSIONS



BLOCK DIAGRAM



SPECIFICATIONS

Audio Input	XLR and 1/4" TRS
Connectors	DC-decoupled, unbalanced input
Impedance	Selectable: 400k/22k/2.2k ohms
Maximum Input Level	+20/+40/+60 dBu
Audio Output	
Connectors	XLR and 1/4" TRS
Type	Transformer-balanced output stage
Impedance	600 ohms balanced
Maximum Output Level	+20 dBu
System	
THD	< 0.03 %
Noise	-88 dBu
Crosstalk	-83 dB
Bandwidth (High Cut)	10 Hz to 8 kHz (\pm 3 dB)
Bandwidth Frequency	5 Hz~40 kHz
Frequency Response	5 Hz~50 kHz
Front Panel	
Per System	Power switch
Per Channel Pair (x 3)	Channel-splitter switch
Per Channel (x 6)	Output connector (balanced XLR), output signal LED indicator, clip LED indicator, input impedance selector (400k/22k/2.2k ohms), gain selector (-40/-20/0 dB), ground lift switch, 8-kHz high-cut switch
Rear Panel	
Per Channel (x 6)	Input connector (1/4" TRS/XLR combo), output connector (1/4" TRS phone jack)
Power Supply	
Power Requirement	100~120V, 200~240V AC, 50~60 Hz
Power Consumption	10 watts maximum
Power Connector	Standard IEC receptacle
Physical	
Dimensions (H x W x D)	44 x 483 x 200 mm (1.75 x 19 x 7.9 in.)
Weight	2.5 kg (5.5 lbs)

SUGGESTED READING

Phonic recommends the following books for those interested in advanced audio engineering and sound system operation:

- Sound System Engineering by Don and Carolyn Davis, Focal Press, ISBN: 0-240-80305-1
- Sound Reinforcement Handbook by Gary D. Davis, Hal Leonard Publishing Corporation, ISBN: 0-88188-900-8
- Audio System Design and Installation by Philip Giddings, Focal Press, ISBN: 0-240-80286-1
- Practical Recording Techniques by Bruce and Jenny Bartlett, Focal Press, ISBN: 0-240-80306-X
- Modern Recording Techniques by Huber & Runstein, Focal Press, ISBN: 0-240-80308-6
- Sound Advice – The Musician Guide to the Recording Studio by Wayne Wadham, Schirmer Books, ISBN: 0-02-872694-4
- Professional Microphone Techniques by David Mills Huber, Philip Williams. Hal Leonard Publishing Corporation, ISBN: 0-87288-685-9
- Anatomy of a Home Studio: How Everything Really Works, from Microphones to Midi by Scott Wilkinson, Steve Oppenheimer, Mark Isham. Mix Books, ISBN: 091837121X
- Live Sound Reinforcement: A Comprehensive Guide to P.A. and Music Reinforcement Systems and Technology by Scott Hunter Stark. Mix Books, ISBN: 0918371074
- Audiopro Home Recording Course Vol 1: A Comprehensive Multimedia Audio Recording Text by Bill Gibson. Mix Books, ISBN: 0918371104
- Audiopro Home Recording Course Vol. 2: A Comprehensive Multimedia Audio Recording Text by Bill Gibson. Mix Books, ISBN: 0918371201

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