INPUT PANEL

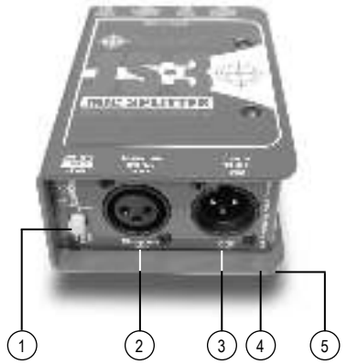
1. -30dB PAD Allows line-level sources to connect to the JS•3's input.

2. Mic input For low impedance microphone signals.

3. Direct-1 thru 600 ohm mic-level direct output will pass phantom power to microphone.

4. Bookend design 14 gauge steel outer shell creates protective zone around connectors and switches.

5. Full-bottom no-slip pad This provides electrical isolation and plenty of "stay-put" friction to keep the JS•3 in one place.



OUTPUT PANEL

6. Isolated output-2 600 ohm mic-level transformer-isolated.

7. Ground lift (isolated-2) Lifts the ground pin-1 on the isolated-2 XLR output connector.

8. Isolated output-1 600 ohm mic-level transformer-isolated.

9. Ground lift (Isolated-1) Lifts the ground pin-1 on the isolated-1 XLR connector.



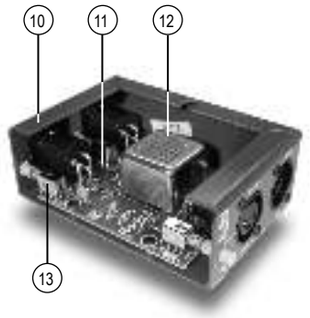
CONSTRUCTION

10. Steel I-beam enclosure eliminates stress that could torque the PC board and cause solder joint failure.

11. Military-grade double-sided PCB with plated through-holes is bolted to welded steel standoffs.

12. Jensen transformer offers outstanding audio performance.

13. Sturdy PC mounted switches are high-cycle rated for long life.



JS•3 SPECIFICATIONS	
Frequency response	10Hz to 40kHz +/- 1dB
Max 20Hz input level	+2.0dBu (1% THD)
Phase distortion	+2.8° @ 20Hz
Total harmonic distortion	0.001% THD @ 1kHz (0.05% @ 20Hz)
Common-mode rejection	130dB @ 60Hz (96dB @ 3kHz)
Input	Balanced 600-Ohm, mic-level, pin-2 hot
Outputs	Balanced 600-Ohm, mic-level, pin-2 hot
Input pad	-30dB
Power requirement	None, completely passive
Size	3.25" x 5" x 1.875"
Weight	2 lbs.

RADIAL ENGINEERING 3 YEAR LIMITED WARRANTY

RADIAL ENGINEERING (a division of J.P. Cabletek Electronics Ltd.) warrants this product to be free from defects in material and workmanship to the original owner and will remedy any such defects free of charge according to the terms of this warranty.

Radial will repair or replace (at its option) any defective component(s) of this product (excluding batteries, finish and wear and tear on components under normal use) for a period of three (3) years from the original date of purchase. In the event that a particular product is no longer available, Radial reserves the right to replace the product with a similar product of equal or greater value.

To make a request or claim under this limited warranty, the product must be returned prepaid in the original shipping container (or equivalent) to Radial or to an authorized Radial repair center and you must assume the risk of loss or damage. A copy of the original invoice showing date of purchase and the dealer name must accompany any request for work to be performed under this limited warranty. This limited warranty shall not apply if the product has been damaged due to abuse, misuse, misapplication, accident or as a result of service or modification by any other than an authorized Radial repair center.

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www.radialeng.com

JS•3©

3-Way Microphone Splitter

Users Guide



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Radial JS•3 Users Guide V2.0- Feb. 2010 - Part #: R870 1060 00
Specifications and appearance subject to change without notice.
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WELCOME

Congratulations on your purchase of the Radial JS•3 mic splitter. This simple yet extremely handy device will likely find its way into all types of applications such as splitting mic signals and distributing signals throughout your sound system.

The Radial JS•3 is equipped with the world's finest Jensen bridging transformer to ensure the audio signal is transferred and distributed without distortion and is built using the finest materials to ensure years of trouble-free performance.

We have purposely written this manual to be short, as most users will likely be familiar with the JS•3's applications. We do suggest that you take a moment to read through this document to familiarize yourself with the features that are built in. For more detailed information, please visit the Radial website. This is also where we post questions and answers that come from users after the product is released. If you do not find an answer, we invite you to send us an email at info@radialeng.com and we will do our best to answer your query in a prompt and professional manner.

The Radial JS•3 is a wonderful device that will surely provide you with years of problem-solving connectivity. Enjoy!

INTRODUCTION

Upon inspection, you will notice the Radial JS•3 is equipped with four XLR connectors: the MIC INPUT connector; the DIRECT-1 THRU; the ISOLATED-1 OUTPUT with ground lift switch and the ISOLATED-2 OUTPUT with ground lift switch.

Normally, the source microphone connects to the MICROPHONE INPUT and the DIRECT-1 THRU connects to the mixing console that supplies phantom power back to the microphone. If the source is a line-level device such as a CD player, the input pad should be engaged to ensure the signal does not saturate the transformer, causing distortion. ***Note that the JS•3 will always output a mic-level signal.***

The JS•3's isolated outputs will then feed a tape recorder, broadcast truck or other PA system. The advantage of using the transformer-isolated output is that it creates a magnetic bridge between the source and the destination, thus eliminating any direct electrical current from passing. This eliminates problems such as ground loops, which can cause buzz and hum in a sound system. A ground lift switch is provided to disconnect the ground path between the input and output to further suppress noise.

The JS•3 is completely passive. This means that it does not require a power supply of any kind. The magic lies in the quality of the transformer we use. Jensen transformers are famous for their exceptional signal handling and low distortion. The JS•3 is equipped with a Jensen JT-MBD mic-bridging transformer that features a laminated nickel core and Faraday shield for optimum signal transfer. You will find the JS•3 to be transparent and very efficient, making it the perfect choice in professional installations.

USING THE JS•3

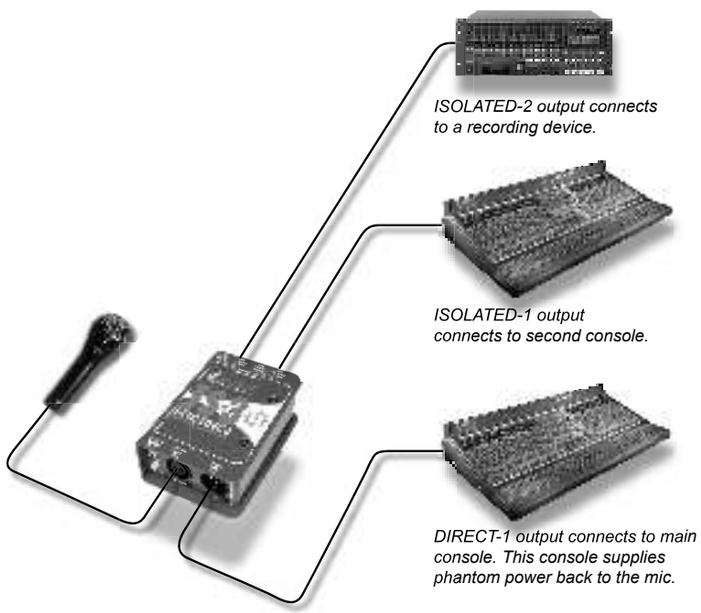
As with all Radial products, using the JS•3 is simple and straight ahead. Make sure the sound system is turned off and all levels are set to zero before making audio connections. This will avoid any pops in the sound system that could cause damage to speakers.

Connect a microphone or line-level source to the MICROPHONE INPUT on the JS•3. Connect the DIRECT-1 THRU output to the console that supplies phantom power and then the ISOLATED-1 and ISOLATED-2 outputs to your monitor console and recording systems. Both isolated outputs are identical and electrically separate from each other. If you encounter noise, simply depress the ground lift switches.

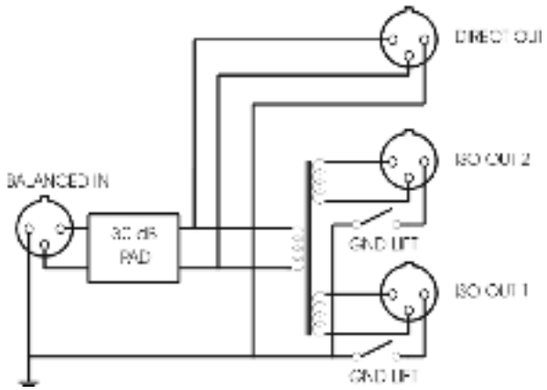
If you are using the JS•3 with a line-level device such as a keyboard, CD player or line mixer, depress the -30dB input pad. This will reduce the level going into the transformer and eliminate transformer saturation .

Start by turning up your sound system slowly to test connections before driving at full volume. You are now ready to go!

3-Way Microphone Splitting



JS•3 BLOCK DIAGRAM



J-RAK

The optional J-RAK is a high density rackshelf for Radial DI's and splitters. It's a 2RU rack chassis that allows up to 8 Radial devices in one neat 19" package. The DI's can be mounted with either the input side or output side facing the front. Ideal for studio or touring. Constructed of 14 gauge steel with a baked enamel finish.



J-CLAMP

The optional J-CLAMP can mount a single Radial device to virtually any surface. Perfect for hiding away inside racks, on podiums or under tables. Constructed of 14 gauge steel with a baked enamel finish.

