

# The Radial intercom

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## Radial nominated!

The WR8™ and H-Amp™ are in the running for a 2011 Technical Excellence & Creativity Award. Winners to be announced at the 27th Annual TEC Awards held in January 2012 at the NAMM Show in Anaheim, California.



The Radial WR8 Workhorse has been nominated in the category of **Outstanding Technical Achievement, Signal Processing Technology/Hardware.**



The Radial H-Amp (speaker to headphone converter) has been nominated in the category of **Amplification Hardware/Studio and Sound Reinforcement.**

## Primacoustic ShowPad 2™



Mic stand adapter for the Apple iPad 2. It features a ball joint swivel mount to set view angle and optimize application in landscape and portrait mode. Dual quick release clamps with adjustable tube clamps fits all mic stands. The ShowPad 2 features a sturdy molded polymer cradle that wraps perfectly around the iPad2 without interfering with buttons or screen.



## Radial introduces the Firefly™ DI

Long awaited Tube DI joins world-renowned product line; delivers warm, vintage character

Radial is pleased to announce the Firefly tube direct box, a class-A fully discrete instrument front-end designed for both studio and live performance.

Radial company president Peter Janis explains: "We have been thinking about launching a tube DI to round out our product range. But over the past two years, we have been focused on developing the Workhorse™ and our many 500 series modules. We got back on this project and are pleased to be able to bring this exciting DI to market."



The Firefly comes with a carry handle that may be removed should rack mounting be needed

The Firefly begins with two inputs to allow quick changes on stage. This can be done using the front panel switch or with a standard latching remote footswitch. The instrument signal is immediately routed to a tuner output that is always on. Following the award winning Radial JDV, the Firefly is also equipped with Drag Control load correction. This enables the artist to adjust the load on the magnetic pickup for a much more natural rendering. When bypassed, the load jumps to 4 meg-ohms enabling the Firefly to be used with piezo pickups.

The class-A circuit features a select 12AX7 tube drive with both gain and trim controls allowing the user to increase the grit and warmth as needed.

## Introducing the Radial PowerTube™ 500



PowerTube 500

Radial has released the Radial PowerTube, an exciting new 500 series tube preamp, a single space module that has been optimized to work within the guidelines of the Whos-DOC format.

Radial President Peter Janis: "The 500 series format is taking the industry by a storm. The compact and flexible format allows the engineer to customize his analogue signal path to suit the recording making it the perfect interface to add warmth and character to today's digital recording environment. The PowerTube is a tube microphone preamplifier that is optimized for the format whereby it cleverly combines the 48V voltage that supplies phantom power with the +/-16V rails to power a select 12 AX7 tube. Best of all, our engineering team managed to squeeze the electronics into a single space thus allowing up to 8 PowerTubes to be used at the same time in a Workhorse™ rack."

Made from 100% discrete electronics, the PowerTube features include variable input trim, fully variable gain control, presence, low cut, phantom power and a full 10 segment LED bar graph. To further add warmth and character, the PowerTube is equipped with a Jensen™ transformer.

Janis continues: "With the PowerTube, we wanted to veer away from the more clinical sound of a mic preamp to a device that would add character and warmth. The PowerTube is rich sounding and will surely please tone aficionados!"

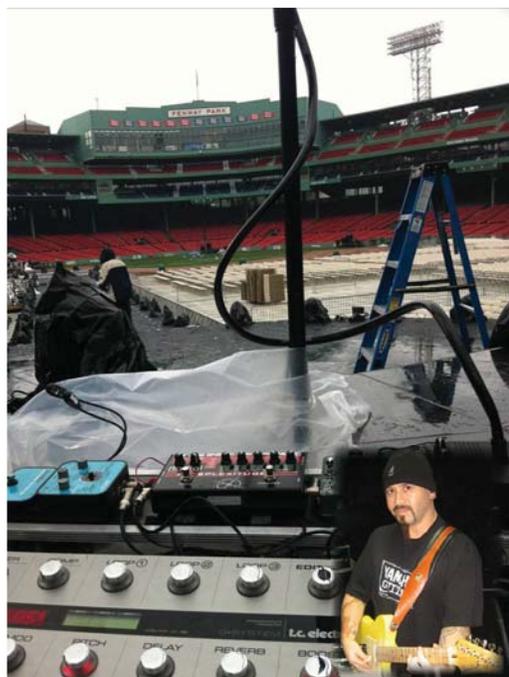
## MC3™ Monitor Controller



The intent is simple: Small studios need to switch between various studio monitors and a sub woofer. There are many controllers on the market. But most are expensive or worse yet, they color the sound of the audio signal. The MC3 is a passive device that switches the signal without introducing any circuitry. The power connection is used to toggle the internal relays, turn on some LEDs, sum the input to mono for the sub woofer and, of course, power up the headphones.

How do you use it? Easy... connect your source (recorder or computer audio output) to the stereo inputs. Then connect your two sets of monitors to outputs A and B. Usually, folks start by recording using smaller monitors and then test with bigger ones. The sub can also be turned on separately.

# Michael "Fish" Herring takes the Plexitube on the NKOTBSB tour



Radial's Plexitube on the New Kids on the Block/Backstreet Boys tour. Inset: Michael "Fish" Herring backstage getting warmed up.

## For those who do not know you, who are some of the artists you have worked with?

I've had the pleasure of working with a great variety of artists over the past 20 years. I've performed and/or recorded with Teena Marie, Dru Hill, Prince, Anastacia, Christina Aguilera, Justin Timberlake, Celine Dion, Leann Rimes, Lionel Richie, Lady Antebellum, 2Pac and many more. I'm currently on the road with New Kids on the Block and Backstreet Boys for the big NKOTBSB tour.

## What is your usual guitar rig for these shows?

For amps, I've been using a pair of Rivera Venus 6 2x12 combos, each with a 2x12 extension cab. It's a stereo rig, all controlled by the TC Electronic G-System. The pedalboard is a 2-level monster, with 4 pedals going through the the G-System loops (including the Plexitube) and a bunch of other fx.

## When did you first start using the Plexitube?

I started using the Plexitube a little over 2 years ago. I had set up my new Rivera rig and loved the tone, but the Venus 6 amps don't have quite as much gain as I was used to from my other Rivera amps. The Tonebone pedals were recommended by a bunch of different people, so I tried them out and the Plexitube had the perfect gain AND tone.

## What do you like about it?

I love the multitude of tonal possibilities of the Plexitube. The different cuts and boosts in both channels, along with the eq and filtering make it an extremely versatile pedal. Overall, it's got killer tone!

## How does it compare to other distortion pedals you have used?

Real tube tone..that makes a huge difference! I've tried a bunch of different overdrive & distortion pedals recently and the tonal variety & warmth of the Plexitube make it stand apart.

## What would you say to someone who is thinking about buying a Plexitube?

Get one now! If you're looking for a super versatile overdrive pedal with awesome tone & sustain, Plexitube is the one!

## ARTIST FILE



"The Reamp is the recording guitar player's best friend."

Joe Satriani  
Guitar God



"What can I say to embellish a product that makes my gig easier? The sonic accuracy of my Radial DIs are amazing!!"

Doug C. Short  
FOH Megadeth



"I recommend this to anyone who is looking for that NATURAL warm sound with sustain for days and days! Buy this now!"

Steve Lukather  
Toto

# Dig out your old spring reverbs, TankDriver is here

For a limited time receive a free Tank with the purchase of a TankDriver™



Designed to fit both the Radial Workhorse and older API type racks, the TankDriver features a wet dry mix to balance the signal and shimmer and boom controls to add top-end or extra boom to the tone. (We could not resist!). For older reverbs that may be less sensitive, a drive switch increases the output to compensate.

For those who are equipped with Workhorse, the Omniport adds a TRS insert point for easy interfacing to a patchbay. Using the TankDriver is easy: You simply patch a set of ¼" to RCA cables from the TankDriver's front panel to the reverb unit, adjust the levels and you are set to enjoy the unique 'twang' that is only possible from a real spring reverb. Changing the length (size) of the reverb further alters the tone. Add some shimmer for extra brightness or boom to the bottom end. Set the wet dry mix and have fun!

FREE Tank with purchase of TankDriver. Limited time offer! (See your local dealer for details)



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# Computers and audio

## How to make computer technology 'get along' in the audio realm

Ready... brace yourself... this one is going to hurt! Computers are not made for audio. Wow... I finally said it! Yup, computers are made for crunching numbers. They happen to be able to manage audio and video really well because of the tremendous processing power but when it comes to good audio practices, they simply are not very good.

But as always, the technology trickle down comes from either military or from consumer goods. Because computers are so cool, you can use them to feed audio tracks into your PA system as a playback machine for backing tracks, instead of a CD player or iPod for background music or even as a full-on video production source. Getting the sound from the computer into your PA system is relatively easy: you connect the 3.5mm (1/8") unbalanced output jack to your PA and away you go! Only if it were that simple... anyone who has done this knows that more often than not, buzz and hum is introduced or clicking noises tend to find a way into the audio signal path. Amplify it with 20,000 watts and you have a problem. This can be in the form of a ground loop, induced noise via the unbalanced line or even PA system noise finding its way into the computer adding noise to the program material output.

**Passive DI Boxes:** Several companies such as Radial, Proco and Whirlwind produce direct boxes that are specifically designed for computers. These are usually stereo and more often than not passive or transformer based. In other words, the transformer not only converts the unbalanced signal into a balanced one, but also introduces galvanic isolation to eliminate stray DC currents from travelling in between the computer and the audio system. When the ground is lifted, all of the audio passes through the transformer disconnecting the ground thus eliminating the ground loop. Because the computer's output is buffered (usually a -10dB consumer level or headphone jack) a passive DI is perfectly suitable for computers. Transformers can usually handle a lot more signal before distortion when compared to phantom powered active DI boxes. This makes them a better choice when using the headphone jack.

**Active direct boxes:** The active direct box was originally developed as a means to eliminate loading that would occur on low output electric bass pickups. By introducing a buffer, the bass signal going to the artist's stage amp would not be affected thus conserving his sound while the PA system would be fed a hotter signal. Buffers are essentially amplifiers. This means that they need power (voltage & current) to make them work. 48V phantom is the preferred power source as this does not require running separate AC for the DI box. The other hidden advantage of a buffer is that the signal will only go one way. Unlike a transformer that is bi-directional, buffers do not allow signals to go backwards. Where this matters in our world is preventing noise from polluting the computer. As most program material is limited during the mastering process, one can get sufficient headroom using phantom power to generate a relatively clean signal. The problem, unless dealt with, is the lack of galvanic isolation; active DIs don't solve ground loop problems.

**The hybrid approach:** There are some DI boxes that combine the benefit of an active direct box with transformer isolation. These are usually a little more expensive than a simple passive or active DI as they combine the best of both worlds. The transformers isolate the computer from the PA while the buffers inhibit PA noise from polluting the computer.

**Getting Connected:** The next thing you may want to look at is the connector options. This may seem trivial, but in the world of pro-AV, you never know what the client may end up giving you as a source connection. To get you as ready proof as possible, some manufacturers have 1/4" jacks, RCA and 3.5mm connectors all of which can be used in tandem. This added connectivity is really helpful when in the heat of action!

*Peter Janis is President and CEO of Radial Engineering Ltd. and its acoustic treatment division Primacoustic. For more articles and tips we invite you to sign up for the electronic version of the Radial Intercom by visiting: [www.radialeng.com/newsletter](http://www.radialeng.com/newsletter)*



Radial's J-PC has been specifically designed for use with computer sound cards and other consumer electronic products.

# New London Kits

## A size for every room!

London room kits include a remarkable combination of acoustic panels and hardware that together solve many of the usual problems associated with studio acoustics. Each kit includes surface impalers, screws, and wall anchors for easy installation. Choice of black, grey, or beige fabric.



London 16™ Room Kit

### London 8™ Room Kit

Starter Kit designed for home recording hobbyists who are serious about their sound! While designed for rooms under 100 sq. ft, the London 8 is also a great way to start treating any room.

### London 10™ Room Kit

The perfect project studio kit for recording hobbyists and professionals alike! The London 10 kit is designed for rooms that are approximately 100 sq. ft., but it also compliments larger rooms when combined with other Primacoustic Bass Traps, Clouds, and Diffusers.

### London 12™ Room Kit

Complete kit designed to address all of the acoustic issues found in any small room! The London 12 kit is designed for rooms that are approximately 120 sq. ft., but includes components that help solve problems in any size of room.

### London 16™ Room Kit

Large sized room kit designed for professional control rooms and music practice facilities. The London 16 kit is designed for rooms 150 sq. ft. and above, or for smaller rooms where maximum absorption and accuracy is required.

## J-Rak 4 and J-Rak 8 available now

Make better use of your DI box inventory plus you can choose to have your connectors in front or back



The Radial J-Rak 4 requires one rack space and allows up to 4 Radial (bookend design) products to be rack-mounted in a standard 19" rack.



The Radial J-Rak 8 requires 2 spaces and allows up to 8 products. Both models feature heavy steel construction.

# Primacoustic™ personalized acoustic panels



The benefits of acoustic treatment are becoming more widely appreciated as this technology moves from traditional studio environments to home theaters and Hi-Fi rooms.

Consumers are quickly learning that money spent on electronics to create these perfect spaces is limited by the natural acoustics of the average room. Treating a room with acoustical panels can be a difficult subject to broach when these spaces are often shared by several people. Let's face it. A great sounding room has to look good too if it's part of a family home!

What if your acoustical treatment could not only vastly improve your acoustical experience but also provide an attractive decorative element to your room? That is exactly what you get with Primacoustic's new Mosaic printable acoustical tiles. Available in two sizes (2"x2" and 2"x4"), these professional (industrial) quality panels employ the same technology as the popular fabric wrapped Broadway panels Primacoustic introduced to the market that are used in many high-end recording facilities today. (For more product specifications on Primacoustic's line of panels visit: [www.primacoustic.com](http://www.primacoustic.com))

You can custom order your panels with any photo or image of your choice. Simply upload your artwork and your panels will be custom printed and built. (There are some technical requirements of course to ensure successful transfer but the helpful customer service team is available to provide assistance if required.)

## New 500 series rack now available

WR3 joins acclaimed Radial Workhorse and TEC Award nominated WR8



WR3 Workhorse

A third variation on the 500 series rack format is now available with the Workhorse WR3, a single space 19" rack that can house three modules.

Senior Engineer Dan Fraser explains: "As with all technology, it usually follows a trickle down effect. We started this ambitious project by developing the Workhorse. This full-function rack incorporates an 8 channel mixer and a tremendous set of connectivity options. We now make the Workhorse available without the mixer section (the WR8) for studios that already have a full-function mixer. The WR3 takes on all of the technical advancements that we have learned while developing the first set and brings them into a more affordable 3 module frame. This not only takes less space, but opens the technology to smaller studios and live touring where a full-size 8 channel rack may be too expensive or may simply not be needed."

The Radial WR3 features standard XLR inputs and outputs for each module. This is augmented with TRS connectors for greater patching capabilities. The innovative Omniport function is also supported whereby a separate 1/4" TRS jack can be purpose designed by the manufacturer to optimize the functionality of a given module. For instance it could be a key input on a gate, guitar input on a preamp, TRS insert point or even a foot switch.

The WR3 employs a 1200 mA external supply that feeds +/-16VDC to the 3 slots while also supporting 48V phantom for mic preamplifiers. For greater patching ease, the Workhorse feed function sends the output of one module into the next, eliminating the need for patch cables between adjacent modules. Stereo modules are also supported via a link function that eliminates the solder point approach on older 500 series racks. The Radial WR3 is compatible with all older API type modules and, of course, fully supports the new Whos-DOC format.

## Color your acoustic world

Are you concerned about how acoustical treatment will affect the 'look' of your space? Decor and function can now work together seamlessly with the new Paintable acoustic panels from Primacoustic. Choose from 2X2" or 2"X4" size panels and let the interior decorator in you shine through! Enjoy all the benefits of acoustic treatment in any color you choose.



Primacoustic paintable acoustic tiles blend into the room color scheme.

## Focus On: Mark King

Level 42's front man Mark King is the latest artist to be added to Radial Engineering's endorsing artist lineup. King's slap and pop bass playing style is world renowned, distinctive and now supported by two Radial products. The Radial ProD8 (DI box) is used to handle all of the signals coming off the stage for the fly rigs and the BassBone now manages Mark's two bass guitars.



Mark King  
Level 42

"When I was looking to fit out our live rack with the best DI box, the guys in the know said "get a Radial ProD8.." and they weren't wrong. It sounds great and is built to last. A fantastic bit of kit!"



The Bassbone is fantastic. I really can't remember the last time I plugged in a foot-pedal and immediately thought "Well, this one's staying in the set-up..."

