

GEAR SHOOTOUTS: Results You Can Actually Use!

RECORDING

The magazine for the recording musician

TRACK the Truth MIX the Magic

Exciting Tracks make for Powerful Mixes
Let the Players Play—Catch the Stage Vibe in the Studio
How To Use EQ To Balance Your Mix

Acoustics:
What Your Room Is REALLY Doing To Your Audio!

AEA R88 mk2:
classic ribbon sound—in stereo



Apogee Symphony I/O:
clarity, flexibility... and Thunderbolt



Radial Gold Digger and Cherry Picker:
mic and preamp comparisons made simple

OCTOBER 2013
USA \$5.99
CANADA \$5.99

VOL. TWENTY SEVEN
NUMBER ONE



12 Products On Review:
ADAM Audio • Echo Digital Audio
iMusicAlbum • IsoAcoustics • Slate Digital



Publication Mail Agreement No.: **40612608**
Ref #: YYZS-0001 9-6LT7C4
DMMPO016 02



REVIEW

BY PAUL VNUK JR.

Radial Engineering Gold Digger and Cherry Picker

When you're comparing gear in the studio, these boxes are the answer to your prayers

Radial Engineering, a Canadian company, is well known for making some of the highest-quality and darn near bulletproof direct boxes on the planet. Radial is also home to the Workhorse system of 500-series rack enclosures, along with its own unique lineup of 500 series modules. In addition to the above—and one of my favorite things about Radial—it's also a gizmo company, known for creating a host of unique studio tools, many of which you did not know you needed until you needed them.

Today we are looking at a pair of Radial boxes that fall into this latter category: the Gold Digger and The Cherry Picker. The Gold Digger is a 4-channel microphone selector, and the Cherry Picker does the same with microphone preamps. Each box is built to aid you in quickly finding the best mic or preamp for a given recording job.

Common ground

Both boxes are physically identical, measuring 4.5" x 2" x 6" and weighing 2.8 lbs. The units are constructed from 14-gauge steel with Radial's standard baked-enamel finish, the Cherry Picker in cherry red with white lettering, the Gold Digger in a matte black with gold and white lettering.

Each unit's fascia with the front controls is entirely recessed to prevent damage and accidental bumping of controls. This is a long-standing feature found on many of Radial's upper-end DIs and boxes, along with the wrapped-steel enclosure that makes them virtually indestructible. Both units can generate +48 V of phantom power and are powered from an (included) 15 V DC wall wart power supply.

Internally each unit is passive, described by Radial as a "straight wire" device making use of completely discrete components, with heavy-duty switches, gold-sealed relays and isolated XLRs. Each part of the chain insures that the unit is quiet, clean and stays out of the way.

Tech Specs

Both units are unity-gain devices with a listed maximum input and output of +26 dBu, a total harmonic distortion of 0.0003% and an intermodulation distortion of < 0.001%.

Radial lists the frequency response of the The Gold Digger as 10 Hz to 100 kHz ± 0.0 dB (i.e. flat as flat can be!), with a dynamic range of >140 dB, an equivalent input noise of -115 dBu, residual noise of -140 dB, phase deviation of < 0.001 degrees at all frequencies, a 600 ohm input impedance and a common mode rejection of -92 dBu @ 55 Hz.

Radial's numbers for the Cherry Picker: frequency response 10 Hz to 40 kHz, a >115 dBu dynamic range, equivalent input noise of < -115 dbu, 10,000 ohms input impedance, and a -97 dBu common mode rejection.

Digging for gold

The Gold Digger is 4-in, 1-out device. On its rear are four female XLR inputs and a single XLR male output. On the front are four matching channels. Only one is active at a time.

Controls for each input include a radio-style push button, a trim knob, and a recessed phantom power button. The push button has a green LED to indicate that the channel is active. These buttons are silent, spring loaded and non-latching. The phantom-power button combines with a red LED that lights up when phantom power is active.

The concept is simple: You connect any four of the Gold Digger's inputs, you connect the output to a single channel of a microphone pre-amp. Since the Gold Digger supplies phantom power individually to each mic, it's easy to mix and match ribbons, tubes, condensers and dynamics and attenuate them to taste.

Picking cherries

The Cherry Picker is like the reverse of Gold Digger. On its rear is a single XLR microphone input, but four XLR outputs that go to any four mic preamps.



Its front side starts with an LED equipped, recessed phantom power button, which supplies phantom power to your mic. The advantage of this is that if each of the connected preamps were to supply the phantom power there would be a power drain and re-buildup of power to the mic as each preamp is selected. This would result in pops and artifacts in the audio signal.

Next to the phantom power is a latching mute button which is handy to avoid pops and bursts when switching microphones. Channels 1-4 follow, each with a radio style push button, again with green indicator LEDs, and a recessed ground lift button.

Fast and convenient mic and pre selection

In the studio, speed and ease are major factors in a performer's inspiration. The quicker you get them sounding good and laying down tracks, the better, and that is what each of these Radial boxes was designed to offer: speed and ease.

Most studios, large and small, have not just a selection of mics but also of mic pres, with multiple flavors to choose from. In most sessions, initial mic selection goes something like this: Set up a few mics, plug one in, have the singer sing or

the player play, press Record, record a pass, then stop, unplug the mic, plug in the next one, set its level and repeat.

With the Gold Digger you plug in all four mics at once, choose a channel with one button press, record a pass, stop, press and switch to the next channel, rinse and repeat. If you want, you can even set up the box by your singers, allowing them to audition each mic by themselves and find the one that sounds best for them. Additionally, the Gold Digger can be a simple source selector and useful in situations where multiple mic sources share a channel due to limited channel count. The Cherry Picker is similar and just as convenient, as you don't have to wrestle with hooking up and unhooking your preamps, which is especially annoying if they are rack mounted.

I just had a friend tell me about their small portable church setup where the vocal mic had to share the same channel as their pastor's wireless lavalier mic, and how in between singing and speaking, the sound person had to mute the channel and quickly pull out one mic cable and then connect the other and vice versa...ugh! The Gold Digger would be great for this. Also not surprisingly, Radial recommends the Gold Digger as a great way to audition and hear the differences between DI boxes.



Since the Cherry Picker is a "straight wire" line device, it's also possible to connect it to the output of your favorite mic or instrument preamp and then send its outputs to four different compressors or eqs to quickly audition choices there as well.

In my studio

For me, both units have become indispensable, especially the Cherry Picker. If

you go back to any of my mic or mic preamp reviews in the past four issues of this magazine, chances are I used both Radial boxes to facilitate my comparison tests. You may be thinking, "Of course these boxes are great for you—you're a reviewer and test out lots of gear." While that is true, almost every engineer I know sets up multiple mics and preamps at the start of a session to see which combination works best for a given scenario; as I detailed above, these units just make it a faster and more inspiring experience.

At \$349 street they are just a tad more than a high-end direct box, but I can attest to a big reason for their price—each unit uses components that add nothing to the sound of your mics or preamps, and to do what they do, that is critical.

Conclusion

Let's put it this way. If you have more than one microphone, or more than one microphone preamp, and you want to simplify and speed up the selection process in mid-session and have fun while you're doing it, you should definitely check these boxes out. ☺

Prices: \$349 each

More from: Radial Engineering,
www.radialeng.com