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By Brandon Hickey

Tech // reviews

RADIAL GOLD DIGGER AND CHERRY PICKER

Desktop Microphone and Preamp Switchers

Radial Engineering is known for releasing a steady stream of handy products that provide simple solutions to common problems. One of the best things about Radial gear is that every one of the company's reasonably priced boxes feels sturdy and well built, using high-quality, clean-sounding components. The latest pair of units in the fleet are the Gold Digger microphone selector and the Cherry Picker mic preamp selector. Both are small, portable units that offer a streamlined feature set, keeping the operation mindlessly intuitive.

GOLD DIGGER

The purpose of the Gold Digger is to allow an engineer to audition up to four mics with ease. When working in a room with a large-format console, it is easy enough to connect different mics to different I/O strips, bus them to a common path, and mute or solo between them. In today's DAW-centric world, however, more engineers are investing in one golden vocal chain and using that with a variety of mics. Switching mics can then mean re-patching or re-cabling, and by the time everything is un-muted and level-matched, it can be difficult to remember exactly what the last combination sounded like. The Gold Digger fixes all of this.

The Gold Digger is housed in a thick steel enclosure with four female XLR connectors and one male XLR bolted firmly to the back panel. The AC adaptor attaches snugly to an input on the back panel. The front panel provides buttons for switching between each of the four mics, as well as recessed rubber trim knobs for each input and a recessed phantom-power button per channel. A green LED below each selector button indicates which mic is live, and a red LED indicates that phantom power has been engaged. The overall weight is substantial, but a soft foam-rubber pad covers the bottom of the unit, alleviating concerns about scratching whatever surface it sits upon.

Because it's heavy, you may think that this box is full of transformers that will color the signals passing through. That's not the case. The circuit path in and out of the unit is completely passive and devoid of all circuitry. Aside from wire, the only thing in the path is the trim control, which is a variable resistor, not an active amplifier. The power supply is only for phantom power and the active, relay-based switching circuitry. That switching uses toggle switches, so you never have to turn one mic off to turn the next one on.

I used the Gold Digger for vocal, ADR and guitar tracking. The ability to provide phantom power from the unit itself is a huge bonus. For one, when switching between a U 87 and a Shure SM7 on vocals, the idea that phantom power can already be applied to the U 87 on standby, and ready to go when that mic is tapped, is pretty convenient. Switching mics with phantom power active on the preamp would mean audible power arcs with every switch. The Gold Digger's onboard phantom power overcame that nicely. The trim controls were equally handy. Naturally, a passive ribbon mic has a lower output than a condenser, so your brain's louder-is-better mechanism can easily cloud decision-making. The trim control eliminates this and kept

TRY THIS

When recording dialog replacement for a film, the goal is to match the tonality of the original production sound recorded on set. This way, it will be easier to blend production sound that is kept with the new ADR vocals to complete the scene. For this reason, it is helpful to set up a close shotgun mic and a distant shotgun mic on the ADR stage and pick which mic to record based on the nature of the shot. The Gold Digger is a great way to switch back and forth between these two mics and speed an ADR session along.

me from having to make dramatic changes to my signal chain's compressor after each mic selection.

My only dig on the build would be that the toggle buttons have a little wiggle to them. Given that they never actually "click in," but instead just depress, it's relatively easy to slide off the button with your finger before a mic selection is made. There was also a noticeable popping sound when switching mics. It wasn't nearly as loud as a phantom-power spike, but it was a little jarring at first. This was present whether using dynamic mics or condensers, so I'd assume the relays were the culprit. Aside from that, though, the Gold Digger worked great. *[Editor's Note: Radial Engineering states that the problem is not in the relays but an inherent problem when interfacing various pieces of gear together. Rather than adding any form of buffers or filters as preventative solutions, Radial feels this is a small tradeoff.]* When I compared recordings with or without the unit in the circuit path, I heard no noticeable noise or coloration imparted into the audio by the Gold Digger. The transient response did not seem to be affected in any way, nor was any signal subject to any greater likelihood of distortion.

If you have a studio or setup that focuses primarily on mono vocal tracking, this is a buy that will greatly improve your workflow. Similarly, if you like to have everything set up for large sessions before the artist arrives, but want to present options for your vocal mic, this is your box. The ability to quickly switch between mics, the cleanliness of the circuit and Radial's dedication to preserving the integrity of the input signal make this a great choice for any studio.

CHERRY PICKER

The Cherry Picker is kind of the opposite of the Gold Digger, in that it allows an engineer to connect one microphone to a selection of four preamplifiers and compare their sounds. The Cherry Picker is built into the same type of enclosure as the Gold Digger, with thick steel walls and a generous weight supported by foam-rubber pads at the bottom. Again, XLRs are bolted firmly to the back, but this time it's four male and one female. The front panel also echoes the Gold Digger with slightly wiggly selector switches, each accompanied by a selection-indicator LED. Each input features a lift button to eliminate ground loops. On the Cherry Picker, one recessed phantom-power button engages 48-volt phantom power to the mic before its signal is fed to any of the preamps. An input mute button is provided, which can be handy for avoiding noise and pops when engaging phantom power or moving mics around.

The Cherry Picker is also designed with the same type of colorless, noise-free circuitry as the Gold Digger. "Military grade" active relays are employed for switching between signal paths; selecting one mic pre overrides another with toggling selection buttons. Naturally, there aren't gain controls for each channel path as seen on the Gold Digger, because the signal will be fed to a gain control directly, so with this unit, audio literally encounters straight wire between the input and output.

At times, using the Cherry Picker was an eye-opening experience. There were certain subtle details unique to different familiar mic pre's that I had never really noticed until quickly A/B'ing them using this unit. Little noise issues or over-enunciation of particular frequencies were revealed with much more prevalence than I had noticed before. After use, I've never felt more confident that I had the right pre for the job when hitting Record. The only thing that could make this work more smoothly would be if they could fix the small popping sound during switching—much slighter than the Gold Digger's, but it was still quite audible. If there were an auto-mute during switching, that would be preferable. Instead I found myself manually engaging the onboard Mute button before each switch.

Monitoring and comparing the pre's required using four inputs to the DAW interface. If you're working with an interface that has limited I/O, eating up four of them for one mic signal could quickly become a problem. If you're accustomed to using a high-end, 2-channel A/D converter like a Benchmark ADC1 USB, then the Cherry Picker will not even be able to stand on its own. Some sort of mixer to combine the outputs of the different pre's together to one input will be necessary. If Radial combined the Cherry Picker, the Gold Digger and a mixer like its WM8 into one box, it could still price out for significantly less than the cost of the Manley MicMaid, and offer a nearly identical feature set as that unit.

While the original intent of these tools was to choose between different preamps and microphones, I found this unit to be really helpful in a variety of other ways. Given the passive nature of the signal paths and the absence of amplifiers in the circuit, these units were also able to switch between line-level equipment without any problem. I started playing around with different possibilities like comparison-testing different compressors limiting a single mic pre's signal on the way to Pro Tools, or testing different equalizers in the same vocal chain. Chaining the Gold Digger and The Cherry Picker together didn't seem to add any noise, so I could imagine buying a few of these units, building an active relay-switched patching system where a great variety of signal chains could be auditioned before committing and recording.

HERE TO STAY?

If you have a studio that primarily focuses on vocals or voice-over work, then it is likely that you have already envisioned the Gold Digger and wished that you had one. For those who have been in that position, I can say that it works just like you would hope. As far as the Cherry Picker, if you have the DAW inputs to support it, it too does just what it is supposed to do. Neither unit is overwhelmingly feature-packed, but every essential feature is provided. The end result is a pair of well-designed, well-executed, purpose-driven tools at a reasonable cost. ■

Brandon T. Hickey is a freelance engineer and audio educator.

PRODUCT *SUMMARY*

COMPANY: Radial Engineering
PRODUCT: MS4 Gold Digger/ PS4 Cherry Picker
WEBSITE: radialeng.com
PRICE: $349 street
PROS: Clean circuits, quality builds
CONS: Subtle noise during switching