

FIELD REPORT



RDL EZ-MCP1 Mic Compressor

By Chris Wygal, CBRE

Broadcast engineers get paid to wear many hats. From brushing snow off uplink dishes, to programming automation systems, we find ourselves with plenty of responsibilities. While many tasks are drudgery, some things are fun to tinker with. For me, I've always enjoyed compression, limiting and other processing-like ventures. From on-air processors to microphone compressors, I take pride in getting as much saturation as is possible, before the process becomes noticeable. Ear fatigue is a big concern of mine, and

Performance at a glance

Transparent control and leveling of dynamically challenging mic levels

Small size

Easy to operate

Accommodates dynamic or condenser mics

Six can be rack-mounted together in 1RU

Compresses mic levels, not line levels

finding that "sweet spot" can take a while. So I was pleased when Radio Design Labs recently unveiled the EZ-MCP1. It's an inline compressor that works its magic at the microphone low-impedance level. It's a neat tool that makes audio work headache-free.

I engineer football broadcasts for Liberty University's sports network. Some of our announcers have really big mouths! For football I have a rack full of equipment, some of which keeps the announcers' levels smooth and in check. However, for basketball, only the announcers travel and take a small case containing headphones and a codec. Because they aren't fond of carrying mic preamps with compression and limiting, I began investigating inline compressors they could easily plug in and use, with little or no settings to contend with. I found the EZ-MCP1 from RDL and was amazed at how it met the need perfectly.

What it's got

The EZ-MCP1 accepts mic level, compresses mic level and outputs mic level. This is somewhat unheard of, as compressors generally process line-level audio on the downhill side of an input amplifier. It has two simple setup trimmers: output level and compression (great for announcers who aren't allowed to push buttons). The output level trimmer has a nominal or "normal" output marking that indicates no adjustment to the mic signal as it passes through. Of course, as is usually the case, some level may need to be recovered after the processing. Setting the compression is as simple as "turn it up, or turn it down." The one-knob operation makes intuitive threshold, ratio, attack and release settings. These built-in compression settings are remarkably intelligent.

The unit ships with a 24Vdc wall wart power supply. It is 1.5" tall, 5" deep and 1/6 of a rack space wide (several units can be ganged together in a rack with available rack hardware from RDL). It weighs next to nothing. Dynamic or condenser mics can be used. The unit provides phantom power when it is supplied by a console or other preamp (indicated by an LED when phantom is present). The EZ-MCP1 handles dynamics unlike any other simple compressor I've used.

When checking levels, speak normally and turn up the compression level until the "compression" LED barely flashes. Then, yell into the mic and see what happens. I found it best to record this experiment and watch the waveform response. The waveform remained consistent throughout, whether I was yelling or speaking normally. Our play-by-play announcers used the EZ-MCP1 during

a basketball game and the results were fascinating. Levels remained consistent and the dynamic control was transparent. Attack and release times aren't noticeable. Absolutely no distortion was found in the chain anywhere. Essentially, during normal speaking the unit simply passes the mic audio along. But when levels exceed the desired threshold it smoothly pulls the level down to match normal speaking level without compromising the quality of the audio. The EZ-MCP1 would be useful in any audio plant as protection against transients, no matter what type of compression or limiting may be downstream. In fact, if the compression adjustment is turned up all the



way, the unit actually makes a punchy little compressor limiter! The simplicity of the EZ-MCP1 is misleading. The lightweight little box with two adjustments and XLR connectors in fact packs a punch. The dynamic control it provides is stellar and it can definitely improve

RDL

P 928-443-9391

W www.rdlnet.com

E sales@rdlnet.com

intelligibility in a live mix or on-air situation where dynamics run amuck. For incessantly loud vocal talent, or environments where consistent voice levels are lacking, an EZ-MCP1 provides great relief from riding gain knobs and constantly tweaking compressors.

Wygyl is the programmer and engineer for Victory FM at Liberty University, Lynchburg, VA.

Editor's note: Field Reports are an exclusive *Radio* magazine feature for radio broadcasters. Each report is prepared by well-qualified staff at a radio station, production facility or consulting company.

These reports are performed by the industry, for the industry. Manufacturer support is limited to providing loan equipment and to aiding the author if requested.

It is the responsibility of *Radio* magazine to publish the results of any device tested, positive or negative. No report should be considered an endorsement or disapproval by *Radio* magazine.