QSC CP SERIES

Evaluating a new line of compact, powered loudspeakers.

by Craig Leerman

he just-introduced CP Series of compact powered loud-speakers from QSC are available in 8- (CP8) and 12-inch (CP12) versions, both with a 1.4-inch compression driver. The components are driven by a class D amplifier stated to deliver peak power of 800 watts (LF) and 200 watts (HF). One-touch preset DSP contours are also provided for the most common applications.

Both models include a stage monitor angle and can be polemounted as well as yoke-mounted via M8 attachment points. Available accessories include carrying tote, outdoor cover and quick-connect yoke mount.

The two-way models basically differ in terms of size and coverage angle. The CP8 incorporates an 8-inch woofer, has stated axisymmetric (conical) dispersion of 90 degrees and frequency response of 56 Hz - 20 kHz. The larger CP 12 sports a 12-inch woofer, axisymmetric dispersion of 75 degrees, and frequency response of 49 Hz - 20 kHz.

Both models share the same DSP features and connections. The rear of the cabinet provides a combo XLR/TRS line input channel with gain control, along with a combo XLR/TRS mic/line input with gain control. Both channels have signal LED lights, and the mic/line channel also offers a Mic Boost button that selects mic level (+25 dB) for the input. In addition, an 1/8-inch 3.5 mm TRS jack fosters connection of music players.

A male XLR Mix output sends all three inputs downstream for connection to another cabinet. A power LED shows that the unit is powered up and a limiter LED lets the user know that the incoming signal has hit the DSP limiter. The DSP Contour rotary knob provides selection of optimized presets, including Default, EXT Sub, Dance, Dance EXT Sub, Floor Monitor and Speech. A power switch and IEC power cable connector complete the facilities.

The enclosures are made of black polypropylene with an 18-gauge powder-coated steel grille. The CP12 measures $20.3 \times 13.8 \times 12.7$ inches (H x W x D) and weighs 30.3 pounds, while the CP8 checks in at $16.2 \times 10.7 \times 10.1$ inches and weighs 21 pounds. A molded plastic handle on the top of the cabinets makes transportation easy.



CP8 and CP12 loudspeakers from QSC.

FORM & FUNCTION

As I unboxed one of the two CP8s that QSC provided for this evaluation, the first thing I noticed was the full front grille, which I prefer because it lends a more professional look. Overall, these cabinets look very sharp. The plastic handle on top is large and comfortable, working well with my big hands wearing gloves.

Many folks seem to prefer loudspeakers with 12- or 15-inch woofers for "speaker on a stick" applications, while my company often tends to side with smaller models with 8- to 10-inch cones. They perform very well for corporate events with mainly speech programming joined by playback/background music, and from an aesthetic standpoint, we prefer less conspicuous models.

The CP8 is perfect for many of our primary events because it's miniscule and lightweight but still able to deliver enough low-end for music playback. And when the application is supporting a band or bass-heavy music tracks, we can simply add subwoofers.

On the test bench, I quickly wired up the loudspeaker and ran a few of my favorite test tracks through it. The controls on the rear panel are well labeled and even a novice can make sense of the DSP without having to consult the manual.

The CP8 has a surprisingly amount of low-frequency output for such a small box, and an overall pleasing sonic signature. The default DSP setting is "flat" and the EXT Sub setting rolls off the bottom for use with an external sub. While there are no subs in the CP Series lineup as of yet, QSC has plenty of models that will do the trick, including the KS212C dual 12-inch cardioid-pattern

model that I evaluated reviewed earlier this year (LSI April 2018).

The Dance EQ setting seems, at least to my ear, to provide the response of a typical "smiley face" curve that appeals to many DJs (and listeners), boosting both the lows and highs. It turns the CP8 into a thumping little box that is ideal for low- to medium-volume playback applications.

The Dance EXT Sub setting rolls off the low end to mate with a sub while retaining the remainder of the Dance EQ parameters. The Floor Monitor setting tailors the output for monitoring duties, compensating the response for the LF coupling that occurs when placing a monitor against the stage floor.

Finally, the Speech setting emphasizes the upper midrange where vocal frequencies reside in addition to rolling off a little of the lows to avoid making voices too boomy. I found this setting to work well with my voice,

but the Default setting also handled my vocal just fine as well, so I'd probably defer to it the majority of the time to support full-range playback. Also note that when the Speech contour is selected, it only applies to input B. Inputs A/C remain in the Default contour so that playback music is unaffected by the Speech contour.

QSC was also gracious enough to provide a pair of CP12s as part of the evaluation. I found them to meet the same high sonic performance standard as their smaller brethren, with a bit more low-end presence due to the 12-inch woofer, as expected.

SMALL YET POWERFUL

Satisfied that everything was working correctly and nothing was damaged in shipping, we took the pair of CP8s out to a few gigs. The first stop was a corporate event in a meeting room measuring approximately 70 by 30 feet. The loudspeakers were placed on tripod stands to the left and right of the stage, with the coverage pattern of 90 degrees (again, axisymmetric) proving just right for the space. Set on Default, there was more than enough low end for the music tracks while both male and female presenter voices were very intelligible.

Next up were a few concerts with Lizzie Sider, a singer-song-



Accessories include a pole and a yoke.



The back panel facilities of the CP8.

writer performing at local schools. At one show, the mix position was located backstage behind a heavy velour stage curtain and I couldn't hear the PA very well at all. We set up a larger CP12 as a cue loudspeaker adjacent to the console and balanced the cue volume with the low end that was coming off the back of the subs, and it provided clear and detailed output, helping me to better mix the show.

On another date, we set up a pair of CP12s as stage monitors, using the Floor Monitor setting. I stood next to Lizzie during sound check to make sure that she could clearly hear her guitar, vocal and tracks, as well as an accompanying keyboard. Once I dialed in the levels (I actually had to turn the boxes down as compared to the previous wedges that we'd used for her), she was very happy with the result.

These boxes are an excellent option for

monitors for an act that plays small stages – they're very compact, particularly the CP8s – but they still get plenty loud. They also don't take up much space in a truck/van/bus.

FURTHER DATES

Following this, we deployed the CP8s for a corporate presentation in a casino ballroom. Again placing them left-right on tripod stands, they easily covered the seated audience of more than 100. The voices of the female hosts were full and present, and for one part of their program, they rolled some video and asked me to turn up the audio – the little CP8s thumped a Michael Jackson tune like we were at a club. I'm sure we were hitting the limiter but it sure wasn't audible.

The final date was a "Get Out The Vote" rally, a larger application where a CP8 once again served as a cue loudspeaker at our side-of-stage mix position. It performed just as well this time out, with my A2 noting that he was impressed by the output and clarity of such a compact loudspeaker.

The CP Series is a winner in my view, based upon this variety of field uses. The loudspeakers handled everything we threw at them with ease. I also really like the fact that they can be yoke-mounted for installs or used with a yoke on portable gigs, flown from a truss or atop a tall stand.

For corporate and rental companies, they're more than capable of filling a lot of roles, including mains and fills, and as noted, they're also excellent as stage and cue wedges. I also see them as a winning choice for performing artists and DJs.

U.S. MAP: CP8 \$399; CP12 \$499

Senior contributing editor **Craig Leerman** is the owner of Tech Works, a production company with offices in Reno.