

MIKE CROFTS

QSC have been major players in the portable powered speaker world for some time, and their systems have gained a reputation for power, performance and build quality. However, their range has, until now, lacked what you might call an entry-level product. The recently released CP Series speakers (the CP meaning 'Compact Powered') have now arrived to firmly plug that particular gap. The philosophy behind the introduction of the CP Series is all about providing a more affordable entry point into the QSC speaker range, but without simply producing a 'cut-down' version of an existing design. Pricing for the CP speakers is certainly below that of the established K Series, but these designs are new in almost every way; the cabinet size and shape is very different from the K Series and the processing, amplifiers and drivers are also — as far as I can tell — unique to the CP boxes.

When any of the big-name manufacturers tag a new product as 'entry-level' my first questions are always, "Does it perform like you'd expect from (insert manufacturer name) at this price?" and "Does it fly the company flag in terms of performance expectations and build quality?" QSC gear isn't known for being inexpensive or indeed entry-level, and so the CP speakers have quite a lot to live up to if they are to assume their intended place as part of a popular and well-regarded live-sound brand.

There are, at present, only two models in the CP series: the CP8 and CP12. Both have moulded polypropylene cabinets, and both have three inputs on the rear panel and use the same power-amp

# QSC CP Series

## Active PA Speakers

The CP Series speakers represent QSC's first attempt at an 'entry level' range. We put them to the test!

configuration. The obvious differences between the two are all related to the LF driver size, and include physical dimensions and weight, the overall frequency response and the maximum SPL available. Both models are genuinely compact for their driver size and are squarer in appearance than the taller K Series; the CP12 measures a bit over 13 inches wide and 20 inches high, and the diminutive CP8 stands a shade over 16 inches. Weight-wise they are 13.7 and 9.5 kg respectively, and consequently easy to handle, if a little heavier than their appearance suggests due to what seems like a very solid build. You can find slightly lighter speakers on the market, but these CP models have a substantial feel about them and are very stable when

used as floor monitors due to good weight distribution, good cab angles and excellent rubber feet that give a good grip on shiny floors. Both the CP8 and the CP12 share the same amp module, which contains a very efficient Class-D amplifier, peak-rated at 800W for the LF and 200W for the 1.4-inch HF compression driver. It's worth noting that the current draw of these speakers is under 1A (only 0.31A running on 240V mains at one-eighth power) so you can use quite a few of them on a single domestic circuit.

On opening the shipping boxes I liked the appearance and shape of the CP



### QSC CP Series

**\$399/\$499**

#### PROS

- Compact and powerful.
- Solid build quality.
- Flexible input options.
- Attractive looks.

#### CONS

- None.

#### SUMMARY

The CP12 delivers a big performance for the money, and the CP8 is a very powerful compact unit that could see excellent use as a monitor, instrument reinforcement or small PA.

speakers, and I was particularly impressed with the large, strong carry handle on the top of the cabinet. This is the same on the both speakers, while the CP12 also has a recessed shape on the side that helps with lifting and positioning on a stand or pole. The black metal grilles cover and protect the full face of the cabinets, and the moulded housing itself feels strong and doesn't have a tinny ring if you tap it. I did take a quick look inside, by

**“The system performed admirably in a hall of about 180 people, and we had no trouble at all in maintaining vocal clarity no matter what the overall level.”**

removing the pole sockets on the bottom of each speaker, and the integral cabinet bracing is evident, along with some neatly fitted acoustic wadding, substantial driver magnets and some very neat cabling. Interestingly, the dividing wall between the speaker cab volume and the amp module is not simply part of the plastic enclosure but a neat punched-metal panel, which I assume is to provide additional cooling — these units are convention-cooled and don't need a fan.

### Face The Panel

The rear control panel contains all the CP's I/O connections and controls, and is nicely recessed and protected by the contours of the enclosure. There are three inputs available, labelled as A, B and C. Inputs A and B are provided with combi XLR/TRS connectors and input C is a 3.5mm TRS jack socket intended for connection of stereo sources such as media players (these will be summed to mono before being routed to the power amp). Two input level knobs control the three channels; the channel A control also trims input C so if both are used together, some external control may be required to balance between them; input B has its

### Alternatives

It's not that easy to compare these to other brands, as their performance and price overlaps larger and smaller format products, so you'd have to include 8-, 10- and 12-inch models to look at similar performance. However, other powered speakers in this price range (not an exhaustive list) include the **E-V ELX200** series, **HK Audio Premium Pro** range, the **FBT EVO 2 Maxx**, **Yamaha DXR/DBR** speakers and the **RCF Art 700** series.

own level control and also has an optional mic boost, which increases the input gain by 25dB on channel B only. The extra mic gain is applied by a single press of the Boost button, which toggles between mic and line settings and has an associated LED to indicate the current status.

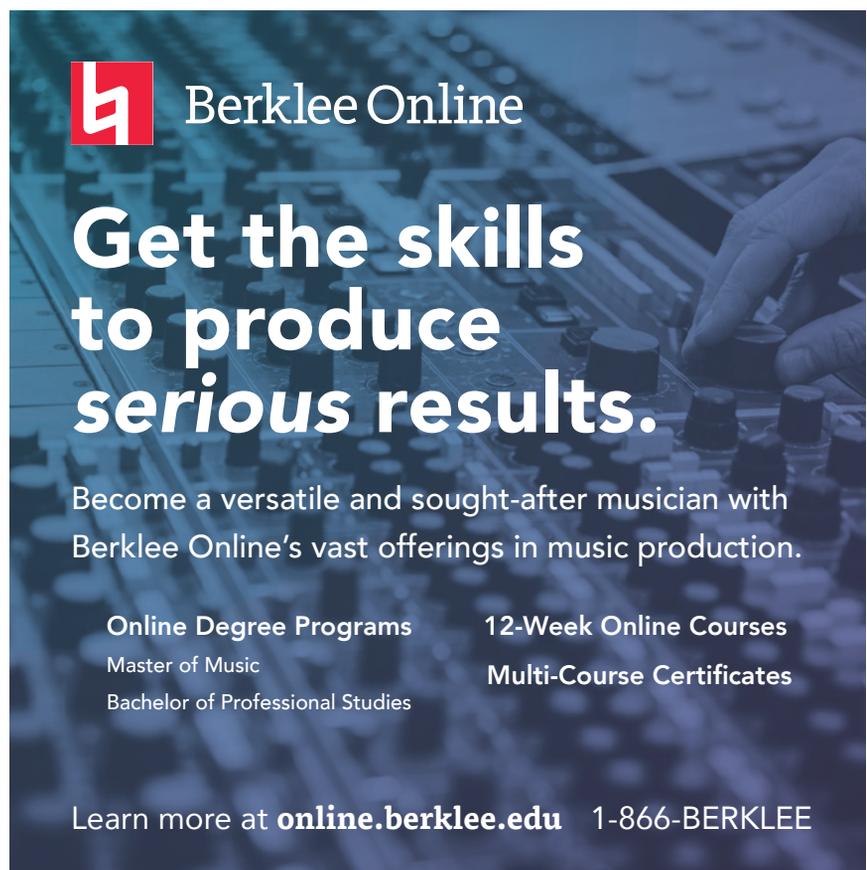
The CP Series speakers incorporate various EQ contour presets to cover different live applications, and a simple rotary selector switch changes to the

desired curve. There's no menus or anything like that: the functions are printed on the panel and you just turn the knob to where you want to be. As the EQ changes the system is temporarily muted, and there are no clicks or spikes as the selector is rotated to different settings. The preset contours are Default, Dance, Floor Monitor and Speech, and the default and dance positions also have

a 'with sub' option, making a total of six. The preset names describe what they do, but there is some interaction between the contour and mic boost settings, in that if the system contour is set to Dance or 'Dance with sub' and the input B mic boost is switched in, input B automatically changes to the Speech contour in addition to adding 25dB of input gain. For anyone running a simple dance setup where you have a music source and a mic plugged directly into the CP speakers, using the two inputs gives suitable EQ for both without the need for an external mixer. I know of at least two local DJs who would make good use of this function!

### Powering Up

My first test was to run some known programme music through the CP8 and CP12 in the workshop, and gain some initial impressions of how these boxes sound. The first words to enter my head were 'unexpectedly' and 'loud', as these small boxes really do deliver a lot more output than you might expect from either their size or their published 124/126 dB SPL figures. They punch well above their size, you might say. Both units have a very >>



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» forward and crisp top end, with plenty in the mid-range to support this. The CP8 delivered a strong mid-range, and I rolled off the top end to achieve a more mellow balance with my test tracks, then put it back in again with a live singer/guitarist who happened to be in the studio. The Dance contour extends the LF output somewhat and would be perfectly adequate in a smaller space; however, everything about this speaker was telling me to try it as a live monitor, so that's what I did a few days later.

The CP12 had a much bigger, fuller bottom end and reproduced thumping, punchy lows and mid-range. Using the Dance contour fattened out the LF and seemed to smooth out the mids somewhat. This one would be excellent for any DJ job, and my next-unit-but-one neighbours told me that they went home with 'Good Times' stuck firmly in their heads... Whilst messing about with EQ and boost combinations I noticed that toggling the mic boost on channel B muted the whole system for a (very short) time, even if there was material playing through channel A only.

QSC have a reputation for producing quiet active speakers, and there was very little (as in ear-to-the-grille virtually inaudible) background noise or hiss from the CP units when idling; power-up and down was an almost silent process with auto-mute on the audio signal, and I like the way the input level controls go all the way down to nothing. My obsessive side also likes the way the mechanical detents (steps) line up exactly with the printed scale markings right around the dial.

### Live Action

I took the CP speakers out on a couple of live gigs and used them on main and monitor duties. Used on their own, the CP12 units made a very impressive vocal/piano/brass PA, and I used the CP8 as a floor monitor for the main vocalist. All I can say is that the system performed admirably in a hall of about 180 people, and we had no trouble at all



The CP8 and CP12 share the same Class-D power amp, and both feature a three-channel input section and six EQ presets.

in maintaining vocal clarity no matter what the overall level. Our singer also loved the CP8 as a monitor and said it was able to cut through and remain articulate and clear without sounding too loud or harsh on stage. I also used the CP12s as floor monitors on a larger outdoor stage, and they delivered the goods very well indeed. Then I tried the CP8 out as a keyboard amp/monitor in a pit band, and finally used it as stage reinforcement for piano in an orchestral concert, where it was ideal: physically unobtrusive, lots of clean middle dynamics (in other words it didn't make the real piano sound like an electric one), and very clean, tight bass with no hint of flabbiness or hype in the bottom end. I imagine that it would be equally effective as a guitar amp and I'd definitely like to have one in the studio.

### Back At The Shop

I ran the CP speakers again in the studio, and spent my last day before handing

them back by throwing all kinds of material at them, at everything up to and including full volume into limiting. I was impressed by the way the limiter slipped in smoothly — the sound thickens a bit as you might expect but this is a nice implementation of the technology. In order to unleash the maximum available output, I hooked up the CP12s with a pair of subwoofers and used the 'Default with sub' contour. Used in this way, the powerful top end of the CP boxes really comes into its own, and I was disappointed not to have had an opportunity to use this setup live.

For my final test I just had to try the little CP8 with a sub, and was more than impressed with what it achieved — way more than I had expected. Even a single CP8, perhaps with a mini-sub (the nearest QSC product would be the KS112) would easily provide the levels needed for more modest venues such as lounges and bars.

### Summary

Having spent some time with the CP Series speakers I'd say that QSC have met their objectives very well. These are not by any means 'cheap' speakers, and although they are certainly more affordable than the K Series, they are by no means significantly inferior for general live use provided the venue size is appropriate. They are not 'cut down' K Series speakers, but a completely new and different product with their own technology. The CP Series benefit from excellent quality build, are ergonomically very good and practical as portable powered speakers, and both models have ample power and make truly excellent monitors. Anyone buying into the QSC product line with these and making a future step up to the K Series would already own a great set of monitors as part of a scalable branded rig — just don't plan on trading them in at a later date, as you'll want to keep them! **///**

\$ CP8 \$399, CP12 \$499.

Prices are per speaker.

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