CADAC CDC SIX

CLASSIC BRAND REBORN

By Julius **Grafton**

If you've been near theatre sound over the past decades you'll know the Cadac brand ruled Broadway and the West End. Cadac migrated from recording studios into theatre in the 1980's.

Their analogue consoles were made for the genre, where massive cue stacks and pernickety matrix sends rule. Shows where the designer had the budget to specify two completely separate systems side by side, 'System A' and 'System B', to eliminate proximity phase problems for two singers side by side.

Then the shift to digital caught Cadac out – in the early years of last decade it wasn't clear what the user interface should look like, and the development costs mounted. In 2009 the firm was purchased by Soundking from China, who then invested heavily in R & D.

With UK designers, they launched the CDC line, starting with the CDC Eight. It was a fairly revolutionary step – the console featured a large 24" swipe touch screen, allowing the operator to scroll across the surface rather than use layer switches.

Under the screen are 16 faders, you just scroll left to right or v-v to access all the available channels. It came with one screen and 16 faders, or two screens over

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32 faders. You could get up to 128 channels.

The Eight broke with Cadac tradition by moving the LED signal ramps from next to the fader, placing them up on a meter bridge. This left the theatre engineers cold, but placed the console in the sights of broader live sound applications.

CDC SIX

Blake Kirby at Hills in Sydney showed me the console, with a multitrack feed from Waves populating a bunch of the 64 possible inputs. It has a healthy 48 assignable busses, with 8 onboard inputs and outputs.

Let's talk wiring. From the console ('work surface' as these are now classed) you run out on Cadac's proprietary MegaCOMMS protocol (128 bidirectional channels at 96kHz, 24bit) with up to 150 metres of coax cable. MegaCOMMS has blindingly low latency, quoted at less than 0.4 milliseconds. They count this from analogue in, down 150m of coax, through the system (including input to buss, buss to master and master to matrix latency management), back 150m to the stage and then converted out of digital to analog. That's fast.

You have two options for stage boxes – a 32/16 or a 64/48. If you opt for the latter, you lose the 8 in and 8 outs on the console. Or you could patch them if you needed them, and lose a corresponding 8 in and 8 out on that largest of stage boxes.

There is a Dante interface, as well as AES and MADI options. The console runs at 96kHz.

Networking more than one console is also easy via the optional CDC MC Router.

ON TOP

At the console the screen dominates, sitting over 16 motorised 100mm faders, each with a 20 segment led ramp on the left for very positive input gain monitoring. These are single or dual (stereo), depending how the fader is assigned.

Having the ramp next to the fader is a return to the way Cadac did with the famous 'J Series', which you'll still find in many a theatre.

There's a rotary encoder, and an OLED alphanumeric display strip above. The square shaped OLED goes to 15 characters wide, strangely bunched at the top, leaving the bottom of the thing 60% vacant.

It's in the preamps that the Cadac magic happens, along with the myriad of user interface screens. What is very good is the visual patching display, which shows what is sending to where. With 48 busses, this vertical visual stack of little ramps saves a lot of time.

Those 48 busses can be whatever you choose - groups, auxiliary sends, matrix sends or FX sends.

You'll read the specifications, so I'll skip a lot of stuff. Of note is the master section on the right, with a 6.5" screen for all that pesky stuff. A bunch of user definable keys are there too, of course.

Brand: Cadac
Model: CDC SIX
Price: from 50k
Product info: www.cadac-sound.com
Distributor:: www.hills.com.au

IN FLIGHT

My digital console test is whether I can pass audio without a user manual, and CDC -SIX passes with flying colours. I loved the expanding EQ display for each channel – hit SEL, see the strip, touch the EQ world, do the thing.

I wanted to tweak the input gain on channel one – and the rotary encode above the fader didn't do this. Instead I hit the mic pre module at the top of the channel strip on the screen, which expanded so I could see my control options. The input gain was accessed from one of the eight encoders stacked to the right of the screen.

I love the scene recalls or cues. This is 'theatre cool', you know, where those crazy audio designers sometimes program a cue per LINE OF DIALOGUE. So your average theatre sound engineer knows about following along and not getting lost.

Creating and editing cues is dead easy, as is inserting and moving cues around the list.

It has a 64 x 64 Waves sound grid built in, so you can run tracks live with multi channel record and playback or plug in a server and run your favorite Waves plugins instead, or even a combination of the two!

The Fader Follow outputs feature is for stage monitor uses, and it is easy to set channels and sends pre or past fader, pre or post EQ. This also allows you to access any one of the 48 bus sends with a single touch which then solo's that bus, filters what inputs are views with the mix focus feature, and display the GEQ too, which is then accessed with only a single press of the screen. This makes mixing large numbers of mixes a breeze, and super fast too!

Overall the feel and features seem right on the CDC SIX. Cadac have steered the design a little more towards live audio generally, and away from theatre (at least on the SIX, which doesn't have enough inputs for BIG theatre musicals).