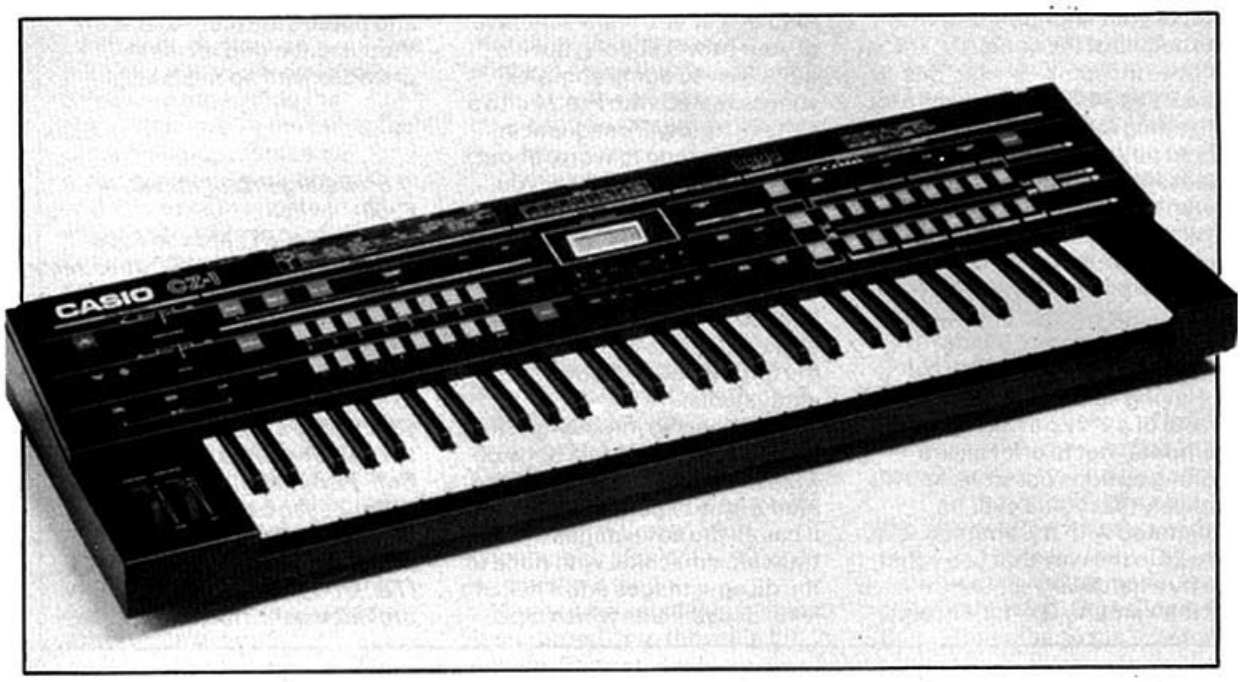
CASIO CZ-1 ● RRP: £975



When Casio brought out their CZ-5000 I couldn't quite believe that it wasn't touch sensitive. A company of this size bringing out a top-of-the-line synth aimed directly at the professional market with a static keyboard — a bit disappointing really. The CZ-1 puts all this to rights and is in my mind what the '5000 should have been. In fact it could be seen roughly as a touch sensitive '5000 minus the built-in sequencer, but plus a number of important additions.

As with the whole of the CZ range the CZ-1 is based on Casio's patented PD (Phase Distortion) method of synthesis which was introduced to counter Yamaha's FM revolution. In principle it isn't a million miles away from FM, although the sounds are more analogue in nature and the programming technique is far more familiar to those versed in analogue synthesis. The CZ-1 is eight-voice polyphonic with two banks of DCOs (digitally controlled oscillators), two banks of DCAs (digitally controlled amplifiers) and two banks of DCWs (digitally controlled wave converters) which are the equivalent of VCFs in a standard analogue synth.

It comes with 64 factory sounds stored in internal RAM, any number of which can be wiped to make room for storage of your own creations, and a further 64 sounds can be stored in a plug-in RAM cartridge. The internal sounds can be renamed at will with up to 16 characters, although the cartridge voices are only identified in the display by their bank and number. It may seem like a small point but the addition of a backlight to the LCD display is actually of huge practical significance if you're prone to attacks of insecurity on stage and need to have the accuracy of the your button pushing confirmed in writing, even in low light levels.

The great thing about the cartridge is that its sounds are instantly accessible and don't have to be loaded into the internal RAM before they can be used. If you wipe the factory sounds from RAM and are then filled with regret, a touch of a reset button will return you instantly to square one. In this way it would be possible to work on your own sounds, dump them to the cartridge and then refill the internal memory with the original factory voicings. All the voices can have chorus added to them, the depth of which can be individually programmed for each voice. There's no tape dump facility and so you will be forced to invest in a few cartridges if you wish to build up a library. Sounds are also transferrable between synths via MIDI.

Operation memories

As with the CZ-5000 it is possible to create 'Key Split' and 'Tone Mix' combinations of these voices: key split allows you to select a split point on the keyboard and select different sounds for each half, while the Tone Mix allows two sounds to be layered on top of each other across the entire width of the keyboard. In each case, because there are two sounds involved, you are restricted to four-note polyphony. An important feature of the CZ-1 not to be found on previous CZ models is that in addition to the 128 individual voice memories there are 64 'operation' memories in which can be stored Tone Mix and Key Split configurations. Though it can be changed overall, the keyboard split point is unfortunately not individually programmable for each memory. An alternative use of an operation memory is to store just a single voice plus an individual set of performance settings such as pitch bend range, portamento rate, etc. Such settings can't be stored along with a Tone Mix or Key Split configuration, so you have a choice as to how you want to use the extra memory facility; you might have 20 Tone Mixes, 30 Key Splits and 10 sets of performance memories — or however you decided to divide them up.

Changing the order in which the internal voices are stored is made easier with the addition of an 'Exchange' button which allows you to select any two of the 64 voices and swap their positions. On the programming front a 'Parameter Copy' facility speeds things up by allowing to copy envelope shapes rather than having to laboriously

program each one individually.

Multi-timbral

Like the rest of the CZ range the CZ-1 is multi-timbral which means that it can be used with a sequencer in MIDI 'Mono' mode to allow up to eight musical parts to be written using eight different voices. There aren't eight separate outputs to allow individual processing via an external mixer, etc, but it is possible to change the balance between each of the eight voices internally. This multi-timbral ability is one of the great advantages of the CZ range.

Key velocity can be applied to any combination of DCAs, DCWs and DCOs to vary volume, timbre and pitch if desired. The after-touch can be applied to either volume or modulation and the depth of modulation can be set independently of the modulation wheel setting which is great when you want subtler effects via the keyboard and wonkier sounds by throwing up the mod wheel. This comes courtesy of the CZ-1's 'Page 2' programming facilities, which is basically another level of programming offering a number of more complex options, the full extent of which we weren't able to plumb without an operator's manual, but it included such things as the ability to independently detune Tone Mix or Split sounds and have chorus, sustain pedal and octave shift individually on or off for either of the two tones involved. Though the lack of a manual once again left us floundering, it is useful addition on the MIDI front is a MIDI on/off button that simply takes the CZ-1 in and out of circuit without any complicated programming procedure.

Conclusion

The sounds that come with the CZ-1 undoubtedly sound better than those with previous CZ models. Whether this is mostly the subjective effect of having touch sensitivity or the product of a more experienced progammer, I'm not sure, but it would seem that Japanese HQ is taking more notice of the advice of its Western colleagues. The voices are punchy, brilliant, round, jagged... there's a whole range of very impressive sounds including a particularly pleasing acoustic/jazz guitar sound that actually sounds like a guitar. The overall tone of the instrument is quite unique and thus it wouldn't replace a Roland or Yamaha instrument, although in some way it does come somewhere inbetween them — in the nicest possible way. The use of the number '1' suggests that the CZ range has reached its peak here, and indeed it seems that it has finally come of age with an instrument that real professionals should feel good about using. It has taken until now to fully shake off the 'fun keyboard' stigma attached to the Casio name, but with the CZ-1 there can be no doubt that they suspected that in the Key Split mode the two halves of the keyboard will be able to be sent on two separate MIDI channels, thus making it possible to independently control two external MIDI instruments simultaneously. A simple but now demand serious consideration at a pro level.

AZ-1 Remote keyboard

Maybe it's because keyboard players are shy retiring types by nature, but the chance offered to them for getting downstage centre for a little posey limelight seems to have been largely ignored — the remote keyboard market is less then thriving. Both Yamaha and Roland with their KX-1/5 and Axis models respectively have seen fit to drastically reduce their prices to the point where the new AZ-1 from Casio is actually not all that cheap at £345. On the other hand it is very lightweight and offers a 3½-octave full size keyboard with velocity and after-touch sensivity. It can transmit on either or both of two MIDI channels and has dedicated buttons for programme number select (1-128), plus a pitch bend wheel and octave shift up or down. There are five user-definable controls, two stitches, a slider and a couple of wheels that would probably normally be used for volume and modulation. An excellent feature is the large LED display that lets you know the programme number you're on and what functions you're selecting. Assuming a reasonable discount in the shops, the AZ-1 should be a good choice as a very playable performance remote.

James Betteridge

Rear features cartridge slot for storing and loading sounds