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**Casio CZ-101 Digital Synthesizer**

A close up of a synthesizer

Description automatically generated

Short Description: One of the first programable polyphonic (8 simultaneous voices) digital synthesizers for less than $500.00. Used a form of digital synthesis known as *Phase Distortion* to obtain a rich variety of dynamic timbres. Could be used with batteries or plugged in to power. This one was given to me at the product launch.

Bill Buxton’s Notes

One of the first programable polyphonic (8 simultaneous voices) digital synthesizers for less than $500.00. Used a form of digital synthesis known as *Phase Distortion* to obtain a rich variety of dynamic timbres. Could be used with batteries or plugged in to power. This one was given to me at the product launch.

The inclusion of this synthesizer in the collection is as a small reminder of the diversity of keyboard types, and especially, as an example to shed light on chord keyboards. In entering text, for example, chord keyboards are those where more than one key must be simultaneously pressed to enter a single character. Technically, this includes any keyboard with a SHIFT key. Interestingly, piano-type like keyboards like that on the Casio-CZ-101 probably don’t conform to this definition of chording, despite its ability to play musical chords. On the other hand, flutes and trumpets definitely *do* fall within the definition. Why? With piano-like keyboards, each unique note has a single unique key dedicated to it. When one plays a chord, i.e., simultaneously presses multiple keys, the result is a chord of notes – the note associated with each depressed key sounds. On the other hand, with trumpet valves or flute keys, only one note is produced at a time. It is the combination of keys pressed (coupled with breath) which determines the pitch of that single note. This is far closer to entering text with a chord keyboard, where each chord enters a single unique character.

Device Details

Company: Casio | Year: 1984 | Original Price (USD): $499.00

Degrees of Freedom: 1

Dimensions (L x W x H): 20 x 65.7 x 58 (mm) 25.9” x 8” x 2.25”

Key Words

Primary: Synthesizer

Secondary: Chord Keyboard, Keyboard, Wheel, reference Object

Links

* <http://www.vintagesynth.com/casio/cz101.php>
* <https://sonicstate.com/synth/cz101/>
* Owner’s Manual: <https://archive.org/details/synthmanual-casio-cz-101-owners-manual>
* pdf file
* powerpoint
* Vimeo video link
* XXX

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| **Image** | **File Name** | **Caption** |
|  | Casio\_CZ-101\_01.JPG | The Casio CZ-101. One of the first low cost polyphonic digital synthesizers. |
|  | Casio\_CZ-101\_02.JPG | Detail of the Casio CZ-101 Digital Synthesizer |
|  | Casio\_CZ-101\_03.JPG | Backplate of the Casio CZ-101. |
|  | Casio\_CZ101\_Sep\_1985\_kbd\_p15.jpg | Advertisement for the Casio CZ-101 Digital Synthesizer from the September 1985 issue of Keyboard Magazine, page 15. |
|  | Casio\_CZ\_101\_Manual.jpg | Casio CZ 101 Operation Manual. Click on image of cover to access full document. |