Dieter’s

Nixie Tube Data Archive

This file is a part of Dieter's Nixie- and display tubes data archive

If you have more datasheets, articles, books, pictures or other information about Nixie tubes or other display devices please let me know.
Thank you!

Document in this file	EEE magazine – article about the B-5750 Nixie tube
Display devices in this document	B-5750

File created by Dieter Waechter
www.tube-tester.com

less dough per digit

The many vendors shooting for part of the numerical-display market that Burroughs dominates are going to have a tougher time. For Burroughs, at booth 2D39, has a new Nixie at the lowest price ever — $3.95 in 1000-up quantities.

This is a dollar cheaper than the lowest-cost gas-ionization readouts now on the market. The new tube, the B-5750, has other features that can be just as attractive as the price. First, it's small. It's not quite as small as the smallest Nixie, the B-4998, but that tube, with a 0.31-in. character height, goes for $13.95.

Height of the characters in the new tube is 0.515 in., which is almost unnoticeably smaller than the 0.61-in. characters in the $4.95 B-5440. But the maximum diameter of the new tube, at 0.53 in., is substantially smaller than the 0.75 in. of the 5440. So it's possible to stack seven 5750s in slightly less than the width required by only five 5440s. This can prove a boon to manufacturers of desk calculators and other multi-digit instruments.

A second attraction of the B-5750 is the fact that the price includes two decimal points. In the 5440, an option for two decimals costs 50 cents more.

And there's still another attraction. In all other gas-ionization readouts—those made by Burroughs as well as its licensees—excess current causes the leads and pins at the bottom of the numerals to glow. Unless the current is too heavy and too prolonged, this glow won't damage the tube, but it doesn't look good. In the 5750, thanks to new construction techniques, there is no lead glow—even with the overdrive that's common in time-sharing circuits that use anode strobing.

The tube does have an aspect that some users won't like. It uses flying leads instead of rigid pins so it can't easily be poked into a socket or PC board.

Burroughs tackles this limitation by shipping the 5750 with a plastic lead holder and positioner that also serves as a standoff. To install the tube, a user slides the plastic disk down the wires away from the envelope till just a short length of the wires protrudes. These wire ends, now relatively rigid, can easily slip into holes in a PC board and the remaining lengths of wire can slide through the holes in the disk till the tube sits atop it.

The wire ends, now on the other side of the PC board, can be snipped to length before soldering. And—here's a nice touch—the bottom of the disk has tiny bumpers like those on a transistor pad. So there's a small clearance between the disk and the PC—enough to allow solder fumes to escape.

The lead layout is almost like that of a dual-inline IC. There are two rows of inline leads but the decimal-point leads flank the two rows.

The lead arrangement and spacing are compatible with DIL packaging so an IC decoder/driver can be mounted close to the tube with the four lead rows (two for the tube, two for the IC) sharing the same centerline. With such placement, the tubes can be mounted on 0.54-in. centers.

Reprinted courtesy of EEE Magazine 3/68