

TEXAS INSTRUMENTS

How To Buy A Printer

by Stan Veit

Printers costing from \$200 to \$20,000 probably represent the widest range of prices for any computer related device. How do you pick the right one for your system? What features must you have and which ones are optional "frosting on the cake?"

This article will discuss how to determine what printer you need and how to get the best value for your money. Paying the highest price will not assure getting the best value. Making the correct selection of the best printer for your needs will be the result of thorough evaluation and careful shopping.

Some points you should consider in your selection process are:

* **Print Quality**--How does the printing look on the page?

* **Print Speed**--How fast does the machine print? How much speed do you need?

* **Duty Cycle**--How big is your printing job? How many hours a day is the printer going to be running?

* **Paper Feed**--What kind of documents are you going to print? In what form is the paper supplied?

* **Paper Thickness**--Are you going to use multi-part forms or card stock?

* **Graphic Capabilities**--Are you primarily printing words, graphic images, or a little of each? Are you going to use monochrome or color printing?

* **Printer Ribbons And Cartridges**--Does the printer require special ribbons or ink cartridges? How much do they cost?

* **Where Is The Printer Going To Be Located?**--Is noise a factor in the office? How far is the printer from the computer? Can you run the cables?

* **How Many Computers Are Going To Be Served?**--Is the printer going to be used in a network or will it serve one computer?

* **Do you Need Special Printer Options?**--Are you going to print inside of forms? Do you need to print individual letter-heads?

* **Does The Printer Require Special Software?**--Are you going to print color? Do you have to change fonts?

* **Buying More Than One Printer**--Will you be better off buying two printers or a

multipurpose machine?

* **Buying Used Printers**--Can you save money by buying a used machine or will it cost more in the long run?

Though some of these subjects will be brief and others will require lengthier discussions, all are important in helping you analyze your needs. Concluding the discussion will be a selection guide to help you determine the best type of printer for your application.

Print Quality

Print quality is the first of the three most important considerations in selecting a printer. Print speed and duty cycle are the other two. For many users an absolute requirement for high quality printing supersedes all the other considerations. The

printing may be needed as the master for offset printing reproduction, for legal documents or for business correspondence. Typeset quality, the highest level of print quality, is equal to the typography produced by typesetting equipment. The next level, letter quality, sometimes called correspondence quality, is equal to the printing produced by an IBM Selectric Typewriter. Near letter quality (NLQ), the third level, produced by a dense dot matrix printer is almost as good as letter quality, but upon very close examination you can see the characters were printed by dot matrix and not by solid type. With no standard developed to define near letter quality the range of appearances is wide from that which you absolutely cannot tell was done by dot matrix equipment to others just a lit-

tle denser than ordinary dot matrix printing. In the past NLQ printing has been unacceptable to many businesses. The lack of acceptance of NLQ printing is largely a social convention dictated by the refusal to accept computer output on an equal basis with typing done on a typewriter. As computer printing quality improves these objections seem to be declining.

Draft quality, the lowest level usually produced by dot matrix printers running at normal speeds or by solid type line printers running at very high speeds, is completely legible but the spaces between dots can be seen. Draft quality is becoming acceptable for many reports generated by computer.

Laser Printers. Laser/xerographic printers produce the best looking printing. The

quality produced is equal to that produced by high quality copy machines and is often equal to offset printing. Though just starting to appear in the business market, the technology has been developed for several years. Up until 1984 the prices were so high only service bureaus with high volume printing requirements could afford them. Laser printers, available now for as low as \$3,495, will print complete pages of text or graphics at the rate of 12 pages per minute. Most laser printers use a xerographic engine unit made by one of the manufacturers of xerographic copiers. The xerographic engine features a replaceable cartridge containing the print drum and toner. Because of their quality, speed and cost effectiveness, Laser printers will make large

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Randy's Ravings

by Randy Holcomb

Now that another year has come and past it's time to see what has happened in the TI World and see what lies ahead.

TI as a whole didn't fare so well in the last quarter reported taking a good-sized loss. However they have made some really powerful inroads into the field of Artificial Intelligence. New custom hardware and software, gives them an edge in a field that is beginning to blossom. The release of the Business Pro micro has been well received, despite its relatively high price tag, and rumors of a Unix machine from TI still keep buzzing here and there. It will be worth watching to see what TI has in store for its users this coming year.

Other TI-related events that happened this year includes the launch of the TI Information Network on Delphi, the revamped Texnet on the Source, and the continued success of the TI Forum on CompuServe. All three services are striving to provide a haven for TI 99/4A users. With more competition for the network dollar heating up we'll probably see maybe

one or two new TI-related services spring up on the new networks.

Freeware software for both the Pro and the /4A was a very hot number this year, with terminal emulators (FASTTERM for the /4A, TERM for the Pro, amongst others), utilities and games being the biggest hits. Unfortunately, many of the freeware offerings have not been a monetary success for the authors of such programs, so PLEASE-if you USE the program, SEND the author a contribution!

The mythical 99/8 or its equivalent may be just around the corner. At the recent TI-Faire in Chicago (which I could not attend, unfortunately) there was a report that Myarc showed a non-functioning prototype of their IBM/TI compatible upgrade. At the time of this writing details are scarce but keep an eye out for an update. Also reported to be present at the show was Craig Miller of Miller's Graphics with the GRAM KRACKER, a GRAM emulator, which is scheduled for a 10/86 release date. If any of our readers attended the TI-Fair in Chicago why not write

an article and send it in!

The Future

Right now its difficult to say what is going to happen because of the recent introductions of the new Atari STs and the Amigas, and the present lack of increased computing power for the 99/4A users. The Pro users have the Business Pro and should see many more IBM programs converted over to the TI. Loyalists and those who can't find anything better than their TIs will stand by their choice, and so will we.

Last month I promised the complete register breakdown of the 9938, but that will have to wait until next month while I try to come up with a more coherent layout that will be easy to understand. Also, for those of you who have asked for the Myarc RS232 fix but have not yet gotten a reply-my apologies for the delay, you should have them in your hand by the time you see this article. And as I have stated before, if you want a quick question answered, drop me Mail on Delphi to username RANDYH and I'll get back to you as soon as I receive it.

Speaking of Miller's

Graphics, his latest release, Night Mission is now available, and it comes as both a cassette and a book, with the book explaining in very good detail how the program itself is structured, written and explains some of the CALL LOADs in Extended Basic that are used in Night Mission. If you wanted to know how a game program is constructed this is a great example of one method of doing so, and is easily understood by someone with some familiarity with Extended Basic. As soon as I can get my cassette cable back I can review the game and report back to you on its playability.

Call for Articles

Most of our readers are the kind of folk who like to share information and report on a good bargain when they see one. This is YOUR opportunity to do so with the rest of the TI community on a nationwide basis! If you have anything on TI computers send it in! Found a novel use of your system? Let others know about it!

This is all that I have for now. Rejoice in the holidays and we'll be back with more news and useful information in the TI world. ●