The Hi-Res board can emulate the original IBM color mode, CGA (color graphics adapter), and also one of the improvements upon that—the Plantronics color mode. However, in the same way that many history texts do not cover current events, the Hi-Res board does not include the current IBM graphics standard, EGA (enhanced graphics adapter). A more expensive Paradise board, the AutoSwitch EGA, covers this most recent development. At $299, the suggested sales price of the Hi-Res board is about $150 less than the AutoSwitch EGA.

Just like a history book condenses events of our time, the Hi-Res card condenses what were once four separate full-size boards into a board small enough to fit in a short slot of an IBM PC/XT. Among other things, the board includes the standard 6845 video controller, and two custom VLSI chips from Paradise. A slide switch on the board lets you select monochrome or color, and a 2-position DIP switch lets you configure the parallel port as LPT1, 2, 3 or disabled. A row of six pins at the top of the card is for a light pen, and a row of four pins adjacent to it is for use with a composite monitor. The usual DB-9 and DB-25 connectors on the edge of the board are for TTL or RGB monitors and parallel port, respectively.

Installing the board is routine; all that needs to be set are the switches. These are situated at the top end of the board for easy access. (As with any video adapter, if you expect it to work properly, you must set switches on the IBM PC or PC/XT or run the Setup program on the PC/AT. These procedures are documented in the well-written and illustrated Hi-Res Graphics card manual.)

In IBM monochrome mode, the Hi-Res card has a text resolution of 720 by 350, and a character matrix of 9 by 14 pixels. This gives you 25 lines by 80 columns. Hercules graphics mode gives you, additionally, dot-addressable graphics at the same resolution.

In the IBM color graphics mode, the Hi-Res board gives you text resolutions of 320 by 200 or 640 by 200 with an 8 by 8 pixel character matrix. This allows for 25 lines by 40 or 80 columns, respectively. In the lower resolution, four colors are available; in the higher, only two. In the Plantronics color graphics modes, 16 colors can be displayed at the low 320 by 200 resolution and four colors at 640 by 200.

A Hi-Res Workout

We tried the board in all of its modes, with monochrome and RGB color monitors, and it worked perfectly. The character set emulated IBM's just fine. Among other software, we used Lotus 1-2-3 (V. 1A) to test Hercules mode, and Lotus Symphony to test Plantronics mode. A utilities disk included with the card has a program called Hires.com that must be run before 1-2-3 can take advantage of Hercules mode (you type Hires Full at the A   prompt), which makes it possible to use 1-2-3's graphics.

This is necessary because when you first turn on your computer, the Hi-Res card is in the IBM monochrome mode. some software packages, such as Lotus 1-2-3 (V. 2.0), recognize the Hercules mode automatically, but 1-2-3 (V. 1A) doesn't. Naturally, if you use 1-2-3 (V. 1A) often, Hires.com should be added to your boot disk or root directory and Hires Full added to your autoexec.bat file so that it's loaded automatically.

Other utilities worth mentioning are Hires Save and Hires Print. The former blanks the monochrome screen after a certain amount of time has elapsed during which a key has not been pressed. The latter lets you print graphics that's on your monochrome display to an IBM graphics printer or graphics-equipped Epson dot-matrix printer, much as a full screen of text can be dumped. Again, all you need do to use these utilities is to type them in at the system prompt.

We tried hooking two monitors up at the same time using the Hi Res card for monochrome and an IBM CGA for color graphics. The manual cautions that in this configuration you cannot use the Hires Full command to enable Hercules mode. Instead you must use Hires Half. This command enables page 0 graphics, but not page 1 as in full Hercules mode. We found that we could run 1-2-3 normally in monochrome, but could not produce graphs on the screen with the board configured for Hi-Res Half. The reason you cannot configure the board for Hi-Res Full is basically due to the fact that the full Hercules mode uses the same area of video memory as the CGA mode and they cannot coexist in memory at the same time.

Conclusions

One question that needs to be asked about the Hi Res card is: Who is it for? It seems that there are a few audiences it should interest. There are the first-time buyers who want a monochrome/color board from a reliable manufacturer, but can afford neither the extra $150 for EGA compatibility, nor the additional cost for an EGA monitor. Then there are those who use an IBM monochrome system but never upgraded from the original monochrome adapter. The Hi Res card would give them graphics capability and a fairly low-cost way to gain a color display. Another group might be those who have CGA capability and now want better resolution at a minimum cost, but do not have a slot available for a second video adapter.

We found the performance of the Paradise Hi-Res Graphics card to be excellent. The board does nothing new, but what it does do, it does well. Like the good history text that retells the past succinctly and accurately, the Hi-Res Graphics card brings the most popular video displays of the past five years together on a short-size card, and all modes run without a hitch. The crucial question for the buyer of this board is not related to its quality, but to whether he is interested in the lower-cost past or the more dear present and future?

—Joe Desposito