

# Intecolor 8000 Series OEM Price List



Effective 9/1/79



# ISC: Leading The Way In Low-Cost Color Graphics.

Since its incorporation in 1973, ISC has manufactured highly cost-effective data terminals and desktop computers using color alphanumeric and graphics displays. By combining inspired research and development with aggressive marketing, ISC has accomplished something not even the commercial television industry has been able to manage—bringing the price of color down to the level of black-and-white. This has placed ISC in a unique marketing position: for the first time, OEMs and end-users are able to purchase—at conventional black-and-white prices—intelligent terminals and desktop computers with the extra advantages of color graphics.

Among the first to benefit from ISC's low-cost color graphics was the process control industry. They saw that color graphics could improve comprehension and thus lower user response time—an important factor to consider in critical and often hazardous operations.

Now businesses of all sizes have discovered ISC color graphics. Color is used to distinguish and highlight unique data from less important data. Instead of drab black-and-white alphanumeric, ISC units can produce colorful charts and bar graphs that give clarity and vitality to the overwhelming amount of data encountered in business applications.

ISC's business-oriented Intecolor 8063 is the first CP/M compatible desktop computer with color graphics. An abundance of low-cost CP/M software substantially reduces the need for expensive custom software development.

High-resolution color graphics at low ISC prices provide special applications with critical picture definition. Any ISC 48-line unit can be ordered or *upgraded* with this powerful high resolution package.

Extended Disk BASIC is available on every ISC desktop. System software options include word processing, Microfoft® Business BASIC and FORTRAN IV, plus Arabic and Farsi language packages. All take full advantage of ISC's eight-color displays.

Today, ISC is the largest supplier of color graphics terminals in the world. ISC also manufactures a complete line of color graphic desktop computers as well as color monitors for the OEM and systems houses. The component parts are made by suppliers according to strict specifications drawn up by ISC's Research and Development Department. Units are then assembled and tested in ISC's modern manufacturing facility. Then the completed units are shipped direct to customers all over the world by air freight from ISC's plant in Norcross, a suburb of Atlanta, Georgia.



The burn-in line: When ISC units are completed, they run continuously for seven consecutive days, 24 hours a day, before being shipped out of the plant. This extensive burning-in process is an important step that ISC takes to insure customer satisfaction and faultless machine operation.

# INTECOLOR 8000 SERIES OEM PRICE LIST

Effective 9/1/79

## Limited Warranty and Liability Statement

PURCHASER MUST OBJECT WITHIN 10 DAYS OF RECEIPT OR ACCEPTANCE OF PRODUCT SHALL CONSTITUTE ACCEPTANCE OF THESE TERMS.

**LIMITED WARRANTY:** The Seller warrants that the goods to be delivered will conform to the specifications contained in the contract or order, and advertising materials describing such items, and will be free of defects in workmanship or material. Should any failure to conform to this warranty appear within six (6) months after the initial date of delivery, the Seller shall, upon notification thereof and substantiation that the goods have been stored, installed, maintained and operated in accordance with the Seller's recommendations and standard industry practice, correct such defect by suitable repair or replacement at its own expense. It is agreed between the parties that the foregoing shall be Purchaser's sole remedy for Seller's breach of the foregoing Limited Warranty. The sole purpose of the stipulated exclusive remedy shall be to provide the Buyer with free repair and replacement of the defective parts in the manner provided herein. This **EXCLUSIVE REMEDY** shall not be deemed to have failed of its essential purpose so long as the Seller is willing and able to repair or replace defective parts in the described manner, as to defects brought to Seller's attention during the six (6) month period referred to above.

THIS WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OTHER WARRANTY OF QUALITY WHETHER EXPRESS OR IMPLIED, EXCEPT OF TITLE AND AGAINST PATENT INFRINGEMENT. Correction of nonconformities, in the manner and for the period of time provided above, shall constitute fulfillment of all liabilities of the Seller to the purchaser with respect to, or arising out of the goods, whether based on contract, negligence, strict tort or otherwise.

**LIMITATION OF LIABILITY:** The Seller shall not under any circumstances be liable for special or consequential damages, such as, but not limited to, damage or loss of other property or equipment, loss of profits or revenue, cost of capital, cost of purchased or replacement goods, or claims of customers of Purchaser for service interruptions. The remedies of the Purchaser set forth herein are exclusive, and the liability of Seller with respect to any contract, or anything done in connection therewith such as the performance or breach thereof, or from the manufacture, sale, delivery, resale, installation or use of any goods covered by or furnished under this contract whether arising out of contract, negligence, strict tort or breach of warranty, or otherwise, shall not, except as expressly provided herein, exceed the price of the goods upon which such liability is based.

**IMPORTANT NOTICE ON SOFTWARE:** ALL COMPUTER PROGRAMS ARE DISTRIBUTED ON AN "AS IS" BASIS WITHOUT WARRANTY.

ISC shall have no liability or responsibility to customer or any other person or entity with respect to any liability, loss or damage caused or alleged to be caused directly or indirectly by computer equipment or programs sold by ISC, including but not limited to, any interruption of service, loss of business or anticipatory profits or consequential damages resulting from the use of operation of such computer or computer programs.

**NOTE:** Good data processing procedure dictates that the user test the program, run and test sample sets of data, and run the system in parallel with the system previously in use for a period of time adequate to insure that results of operation of the computer or program are satisfactory.

## Media

All ISC disk drives run with Sof-Disk™ media. These diskettes have a special high output magnetic formulation to minimize read errors. Each Sof-Disk is formatted, tested and certified to offer the reliability demanded by our customers. If any Sof-Disk fails to meet specifications, return to ISC for guaranteed replacement.

## CP/M®

Disk based operating system complete with Text Editor, Assembler, Debug, File Management and System Utilities. Combines the advantages of color alphanumerics and graphics with the versatility of CP/M to provide an abundant selection of readily available programs for most business applications, minimizing the need for custom-tailored software.

CP/M is a registered trademark of Digital Research Corp.

## Pricing Policy

ISC endeavors to sell its products at the lowest price possible. In most instances, we strongly recommend that a customer choose one of our standard configurations which should always be a savings to the customer. Deviations from these standards will be more costly, although we hope you will find optional enhancements are reasonably priced. **PRICES SUBJECT TO CHANGE WITHOUT NOTICE.**

## Terms

NET 20 days from date of invoice.

## Prepayments

5% discount on all prepayments to be shipped within 30 days or money refunded. This does not apply to advertised introductory offers.

## Shipping

FOB our factory. Unless otherwise specified all shipments via our choice of air freight carriers, collect. ISC will only prepay freight on the basis of a charge of \$50 per terminal east of the Mississippi River and \$100 per terminal west of the Mississippi River. Freight charges must be specifically authorized in the equipment purchase order.

## Return Authorizations

If for any reason (warranty repair, updating, etc.) any material is to be returned, a Return Authorization (RA) must be obtained from Intelligent Systems Corporation (404) 449-5961. ISC will not accept any collect or COD deliveries.

## Substitutions

At the time of purchase, substitutions to upgrade printers, system software and disk drives can be made. Substitutions will be charged at the OEM quantity price. A credit at the 100 piece price will be allowed for printers and system software. A credit at the OEM quantity price will be allowed for disk drives.

## Limited Warranty

Replacement of defective or faulty parts within 6 months of delivery, at ISC facility only.



# 8000 Series (Industrial Cabinet)

# 8300/8900 Series

## TERMINALS

## DESKTOP COMPUTERS

## COMPUTER SYSTEMS

DESCRIPTION	UNIT PRICE (U.S.A. Domestic)				DESCRIPTION
	1-24	25-49	50-99	100+	
<b>INTECOLOR 8001</b> Includes RAM Refresh Memory, 8080A CPU, Terminal Control Software, 72 Key Standard ASCII Keyboard, 19" Color CRT, RS-232C I/O, Bell, Keyboard Selectable Baud Rate to 9600 Baud, Page Roll, 8 foreground, 8 background colors, 80 characters per line by 48 Lines, two character heights and user's Manual.	1,695	1,525	1,375	1,235	<b>INTECOLOR 8301</b> Same as 8001 except in Contemporary Cabinet with 13" High Phosphor Density CRT. <b>INTECOLOR 8901</b> Same as 8001 except in Contemporary Cabinet with 19" CRT.
<b>GRAPHICS 8001G</b> Standard 8001 with Special Color Graphics package, additional editing features, ASCII Keyboard with color numeric clusters and user's Manual.	2,195	1,975	1,780	1,600	<b>INTECOLOR 8301G</b> Same as 8001G except in Contemporary Cabinet with 13" High Phosphor Density CRT. <b>INTECOLOR 8901G</b> Same as 8001G except in Contemporary Cabinet with 19" CRT.
<b>INTECOLOR 8051</b> Complete desktop computer with color graphics, 19" CRT, File Handling DISK BASIC 8001 Language, lower case ASCII, Operating System, 48 Lines, 80 Characters per line, 80K byte Mini-Disk drive, Computer Manual and 8K of user RAM.	3,775	3,400	3,060	2,750	<b>INTECOLOR 8351</b> Same as 8051 except in Contemporary Cabinet with 13" High Phosphor Density CRT. <b>INTECOLOR 8951</b> Same as 8051 except in Contemporary Cabinet with 19" CRT.
<b>INTECOLOR 8052</b> Same as 8051 except has 160K byte Dual Mini-Disk drive.	4,275	3,850	3,465	3,115	<b>INTECOLOR 8352</b> Same as 8052 except in Contemporary Cabinet with 13" High Phosphor Density CRT. <b>INTECOLOR 8952</b> Same as 8052 except in Contemporary Cabinet with 19" CRT.
<b>INTECOLOR 8053</b> Same as 8051 except has 590K byte Dual 8" Floppy Disk drive.	5,275	4,750	4,275	3,845	<b>INTECOLOR 8353</b> Same as 8053 except in Contemporary Cabinet with 13" High Phosphor Density CRT. <b>INTECOLOR 8953</b> Same as 8053 except in Contemporary Cabinet with 19" CRT.
<b>INTECOLOR 8054</b> Same as 8051 except has 1180K byte Dual Double Headed 8" Floppy Disk drive.	6,275	5,650	5,085	4,575	<b>INTECOLOR 8354</b> Same as 8054 except in Contemporary Cabinet with 13" High Phosphor Density CRT. <b>INTECOLOR 8954</b> Same as 8054 except in Contemporary Cabinet with 19" CRT.
<b>INTECOLOR 8063</b> CP/M Compatible System, 19" Color Data Display, with 590K byte Dual 8" Floppy Disk Drive, CP/M Operating System Sof-Disk and Documentation, Microsoft® BASIC, Computer Manual and 32K User RAM.	5,995	5,395	4,855	4,370	<b>INTECOLOR 8363</b> Same as 8063 except in Contemporary Cabinet with 13" High Phosphor Density CRT. <b>INTECOLOR 8963</b> Same as 8063 except in Contemporary Cabinet with 19" CRT.
<b>INTECOLOR 8043</b> Word Processing System, 19" Color Data Display, with 590K byte Dual 8" Floppy Disk drive, Formed Character Printer, 24K User RAM and Manual.	9,775	8,800	8,800	8,800	<b>INTECOLOR 8343</b> Same as 8043 except in Contemporary Cabinet with 13" High Phosphor Density CRT. <b>INTECOLOR 8943</b> Same as 8043 except in Contemporary Cabinet with 19" CRT.
<b>INTECOLOR 8070</b> SERIES 1 BUSINESS SYSTEM, 19" Color Data Display, with 590K byte Dual 8" Floppy Disk drive, Matrix Printer, Computer Manual and 8K of User RAM.	7,000	6,300	5,670	5,105	<b>INTECOLOR 8370</b> Same as 8070 except in Contemporary Cabinet with 13" High Phosphor Density CRT. <b>INTECOLOR 8970</b> Same as 8070 except in Contemporary Cabinet with 19" CRT.
<b>INTECOLOR 8080</b> DEVELOPMENT SYSTEM, 19" Color Data Display, with 8080 Assembler and Text Editor in ROM, 160K byte Dual Mini-Disk drive, EPROM Programmer, Matrix Printer, Computer Manual and 8K of User RAM.	6,500	5,850	5,850	5,850	<b>INTECOLOR 8380</b> Same as 8080 except in Contemporary Cabinet with 13" High Phosphor Density CRT. <b>INTECOLOR 8980</b> Same as 8080 except in Contemporary Cabinet with 19" CRT.
<b>INTECOLOR 8090</b> 19" Color Data Display with 1180K byte Dual Double Headed 8" Floppy Disk drive, Light Pen, Matrix Printer, 24K User RAM, File Handling DISK BASIC 8001, Assembler & Text Editor in ROM, PROM/EPROM Programmer and Computer Manual.	12,000	12,000	12,000	12,000	<b>INTECOLOR 8390</b> Same as 8090 except in Contemporary Cabinet with 13" High Phosphor Density CRT. <b>INTECOLOR 8990</b> Same as 8090 except in Contemporary Cabinet with 19" CRT.

**(Contemporary Cabinet)**

**UNIT PRICE (U.S.A. Domestic)**

1-24    25-49    50-99    100+

**INFORMATION**

# Numerical Option List

2,895	2,605	2,345	2,110	Default Mode is 9600 Baud with one stop bit, local mode. Initialization to other default modes must be specified. See Option 47. Includes Option 12.
2,095	1,885	1,695	1,525	
3,395	3,055	2,750	2,475	Standard Graphics 160H x 192V. Includes Options 01, 02, 05, 12, 17A, 22A.
2,595	2,335	2,100	1,890	
4,975	4,480	4,030	3,625	Includes Options 01, 02, 03LC, 05, 12A, 20, 22A, 25, 34A, 42B, 52.
4,175	3,760	3,380	3,045	
5,475	4,930	4,435	3,990	Same as 8051, 8351 & 8951 except Option 52A instead of 52.
4,675	4,210	3,785	3,410	
6,475	5,830	5,245	4,720	Same as 8051, 8351 & 8951 except Option 26A instead of 52.
5,675	5,110	4,595	4,135	
7,475	6,730	6,055	5,450	Same as 8051, 8351 & 8951 except Option 27A instead of 52.
6,675	6,010	5,405	4,865	
7,195	6,475	5,830	5,245	Includes Options 01, 02, 03LC, 05, 12E, 22A, 26A, 34A, 42E. To increase user RAM from 32K to 48K order Option 21.
6,395	5,755	5,180	4,660	
10,975	9,880	9,880	9,880	Includes Options 01, 02, 03LC, 05, 12C, 20, 24A, 21A, 26A, 53, 59, 59K, 64.
10,175	9,160	9,160	9,160	
8,200	7,380	6,640	5,980	Includes Options 01, 02, 03LC, 05, 12B, 20, 22A, 25, 26A, 42C, 46, 49, 62.
7,400	6,660	5,995	5,395	
7,700	6,930	6,930	6,930	Includes Options 01, 02, 05, 12A, 17A, 20, 22A, 25, 34A, 40, 44, 46, 52A, 53, 55, 62.
6,900	6,210	6,210	6,210	
13,200	13,200	13,200	13,200	Includes Options 01, 02, 05, 06, 12A, 13, 17A, 20, 21A, 24A, 27A, 28, 34A, 35, 36, 40, 41, 42B, 43, 44, 45, 46, 49, 53, 55A, 62. Note: 42C not available with Assembler and Editor in ROM.
12,400	12,400	12,400	12,400	

OPTION	DESCRIPTION	PAGE
01	Graphics Plot Hardware	4
02	Expanded Graphics Software	4
03	32 Customer Specified Characters	4
03LC	32 Lower Case Characters	4
05	Insert/Delete-Character/Line	5
06	Protect	5
07	20/60mA Current Loop	7
08	CPU Assembly (Rev 4)	9
10	Male RS-232C Connector	7
11	220V AC Power Operation	9
11A	220V AC Disk Conversion	9
11B	50Hz Disk Conversion	9
11C	220V AC PROM Programmer Conversion	9
11D	220V AC Printer Conversion	9
12	How to use Intecolor 8000 CRT Manual	8
12A	Desktop Computer Manual (8000)—Ext. DISK BASIC	8
12B	Desktop Computer Manual (8000) BUSINESS BASIC	8
12C	Word Processor Manual	8
12E	CP/M Manual	8
13	Maintenance Manual (8000 Series)	8
13A	Maintenance Manual (8300/8900 Series)	8
14	Parity	5
16U	Update 25 Line to 48 Line	9
17	64 Customer Specified Characters	4
17A	64 Standard ISA Characters	4
17C	64 Standard ISC Characters	4
18A	Printer Graphics Package Via Option 46	5
19A	Arabic Package	5
20	24K ROM/PROM Card	6
21	16K x 8 RAM	6
21A	24K x 8 RAM	6
22A	Keyboard, 72 to 101 Key Incremental (CCN)	6
23	Software Update	6
24	Keyboard, 101 to 117 Key Incremental (CCNF)	6
24A	Keyboard, 72 to 117 Key Incremental (CCNF)	6
25	8K x 8 RAM	6
26A	Dual 8" Floppy Disk Drive	7
27A	Dual Double Headed 8" Floppy Disk Drive	7
28	Light Pen	9
30	25" CRT Assembly	9
31	13" High Phosphor Density CRT	9
33	19" High Phosphor Density CRT	9
34A	Debug Monitor ROM	5
35	Source Sof-Disk & Listing for Option 34A	8
35L	Listing only for Option 34A	8
36	Source Sof-Disk and Listing for Terminal Control Software	8
36L	Listing only for Option 36	9
37	3741 Emulator Package	8
38	Special Customer Software (1K x 8)	6
39	Special Customer Software (2K x 8)	6
40	Text Editor 3K ROM	5
40A	Scrolling Text Editor	5
41	Source Sof-Disk and Listing for Text Editor, Option 40	9
41L	Listing only for Option 40	9
42B	Extended DISK BASIC 8001 with Files	5
42C	BUSINESS BASIC®	5
42D	SCIENTIFIC BASIC ROM	5
42E	Color Graphic BASIC for CP/M®	5
43	Source Sof-Disk and Listing for File Control System (FCS)	9
43L	Listing only for FCS	9
44	8080 Assembler 3K ROM	6
44A	8080 MACRO Assembler	6
44E	8080 MACRO Assembler for CP/M	6
45	Source Sof-Disk and Listing for Assembler, Option 44	9
45L	Listing only for Option 44	9
46	2nd RS-232C And 8 bit Parallel I/O Channel	7
47	Special Initialization	7
48	Extender Card	9
49	Static Filter	9
50	19" CRT Non-Glare Filter	9
50A	25" CRT Non-Glare Filter	9
50B	Dark Faced, High Contrast 19" CRT	9
50C	Dark Faced, High Contrast 25" CRT	9
51	Micro-Disk Drive	7
52	Mini-Disk Drive	7
52A	Dual Mini-Disk Drive	7
53	Additional 24 bit I/O Port	7
55	EPROM Programmer	8
55A	EPROM And PROM Programmer	8
56	Third RS-232C Synch/Asynch Channel	7
57	20/60mA Current Loop for 3rd RS-232C	7
58	FORTAN IV Compiler	6
58E	FORTAN IV Compiler for CP/M	6
59	Word Processor	6
59K	Keyboard for Word Processor	6
60	FactoryService Contract	10
61	On-Site Service Contract	10
62	Matrix Printer (Centronics 779)	8
64	Formed Character Printer (NEC 5500B)	8
65A	Graphics Line Printer/Plotter (Printronix 300)	8
66	On-Site Installation	10
67	CP/M Desktop Computer Upgrade	6
68	BASIC utilities	8
70	Test Diagnostics	6
71	High Resolution Graphics	4
72	Source Sof-Disk and Listing for Option 71	9
72L	Listing only for Option 71	9

# OPTIONS

## Graphics and special character options

OPTION	DESCRIPTION	INFORMATION	AFFECTED ASSEMBLY	UNIT PRICE (U.S.A. Domestic)			
				1-24	25-49	50-99	100+
01	<b>GRAPHICS PLOT HARDWARE</b> Adds the Character Plot Mode. This allows the 8 bit word at any character position to define any one of a possible 8 blocks or their combinations within the character position arranged 2 blocks horizontally by 4 blocks vertically.	Allows 160H x 192V plot area.	DG	150	135	120	110
02	<b>EXPANDED GRAPHICS SOFTWARE</b> Software package to facilitate plotting of points, vectors and bar graphs.	**Requires Option 01.	CPU	150	135	120	110
03	<b>32 CUSTOMER SPECIFIED CHARACTERS</b> 32 customer specified characters in a 6 x 8 matrix. See page 11.	Choice of one of the following characters sets may be ordered: 03, 03LC, 17, 17A or 17C.	DG	225	200	180	165
03LC	<b>32 LOWER CASE CHARACTERS</b> Provides 32 standard lower case ASCII.	Same as Option 03.	DG	135	120	110	100
17	<b>64 CUSTOMER SPECIFIED CHARACTERS</b> 64 customer specified 6 x 8 dot matrix characters. See page 11.	Same as Option 03.	DG	450	405	365	330
17A	<b>64 STANDARD ISA CHARACTERS</b> Intelligent Systems "A" character set.	Same as Option 03.	DG	270	245	220	195
17C	<b>64 STANDARD ISC CHARACTERS</b> Intelligent Systems "C" character set. A general purpose set which allows larger characters to be made using line segments.	Same as Option 03.	DG	270	245	220	195
*71	<b>HIGH RESOLUTION GRAPHICS</b> Provides hardware and software to generate 512 programmable characters, each within a 6x8 dot matrix at a 480Hx384V screen resolution. Special character, ISC standard plot and high resolution plot modes available for drawing bar graphs, vectors, point plots, circles and rectangles.	Includes capabilities of Options 01 & 02.	DR HRG CPU	1500	1350	1215	1095

\*Must be installed at factory at time of purchase. \*\*Must know existing options and date of software when updating in field.

# System software options

On systems with **BUSINESS BASIC** or **SCIENTIFIC BASIC** the following ROM Software Options are not available: **Text Editor ROM**—Option 40, and **8080 Assembler ROM**—Option 44.

For field installation of any Software Options, the factory must be informed of the unit serial number, the date and location of the software (EPROMs/masked ROMs) and all options on the unit.

Contact the factory for price and availability of earlier system software releases.

OPTION	DESCRIPTION	INFORMATION	AFFECTED ASSEMBLY	UNIT PRICE (U.S.A. Domestic)			
				1-24	25-49	50-99	100+
05	<b>INSERT/DELETE-CHARACTER/LINE</b> Allows the insertion or deletion of any character or any line on the screen.			150	135	120	110
06	<b>PROTECT</b> Enables user to create fields on the screen.	**Available only on CPU Rev. 7 and above. Not available with 12/76 Software.	CPU	150	135	120	110
14	<b>PARITY</b> Provides user settable parity—even, odd, mark high, mark low, or none.	*Not available with 12/76 Software.	CPU	150	135	120	110
18A	<b>PRINTER GRAPHICS PACKAGE VIA OPTION 46</b> Provides Software graphic interface for Standard Characters Options 03LC, 17A or 17C; for Okidata SL 125/250 or Printronix 150/300/600, via 8 bit parallel port.	**Requires Option 46. Must specify character set and type printer.	ROM/PROM	250	220	205	180
19A*	<b>ARABIC PACKAGE</b> Provides Software and character PROMs for Arabic symbols. Includes high resolution CRT. See specifications page 12.	Includes Option 33.	ROM/PROM DG	2600	2340	2110	1895
23	<b>SOFTWARE UPDATE</b> Includes current software and operating manual.	**Requires return of CPU and ROM/PROM Card. Additional Options at standard Option price.	CPU ROM/PROM	500	500	500	500
34A	<b>DEBUG MONITOR ROM</b> Allows the user from the keyboard to substitute memory, examine registers. Also allows "GOTO" commands with trap setting capability.		CPU ROM/PROM	180	160	145	130
40	<b>TEXT EDITOR 3K ROM</b> Allows text to be created and edited. Can be used to produce documents.	**Requires a disk and a minimum of 8K user RAM. Not available with Option 42C.	ROM/PROM	150	135	120	110
40A	<b>SCROLLING TEXT EDITOR</b> Allows text files to be created and edited using the CRT cursor functions. Includes all features of Option 40.	**Requires a disk and minimum of 16K user RAM.	CPU	150	135	120	110
42B	<b>EXTENDED DISK BASIC 8001 WITH FILES</b> BASIC interpreter with random access files in ROM memory to be installed on ROM/PROM card. See page 12 for specifications.	**Requires a disk, Option 20 and a minimum of 8K user RAM.	ROM/PROM	300	270	245	220
42C	<b>BUSINESS BASIC</b> More powerful ROM BASIC Interpreter including double precision, print using and sequential access files. ISC enhanced version of MICROSOFT's DISK BASIC. See page 12.	**Requires a disk and a minimum of 8K user RAM.	CPU ROM/PROM	600	540	490	435
42D	<b>SCIENTIFIC BASIC ROM</b> Adds double precision transcendental functions (SIN, COS, TAN, ATN, SQR, EXP, LOG) to BUSINESS BASIC.	**Requires Option 42C.	CPU ROM/PROM	270	245	220	195
42E	<b>COLOR GRAPHIC BASIC FOR CP/M</b> Disk based MICROSOFT BASIC with additional commands to utilize color and plotting capabilities of the INTECOLOR system.	Requires a CP/M system.		150	135	120	110
44	<b>8080 ASSEMBLER 3K ROM</b> Allows 8080 Machine Code to be generated from Intel mnemonics instruction set.	**Requires Option 40 or 40A. Not available with Option 42C or 42D.	ROM/PROM	150	135	120	110

\*Must be installed at factory at time of purchase. \*\*Must know existing options and date of software when updating in field.

# System software options (cont.)

OPTION	DESCRIPTION	INFORMATION	AFFECTED ASSEMBLY	UNIT PRICE (U.S.A. Domestic)			
				1-24	25-49	50-99	100+
44A	<b>8080 MACRO ASSEMBLER</b> Allows relocatable 8080 machine code to be generated. Assembler OP codes and Pseudo-OPS are compatible with Intel MACRO Assembler conventions. Includes a relocating linking loader. Object code is compatible with the FORTRAN IV Compiler. MICROSOFT®	**Disk based MACRO assembler requires 16K user RAM (24K recommended) and Option 40 or 40A. Code generated is compatible with Option 58.	CPU	150	135	120	110
44E	<b>8080 MACRO ASSEMBLER FOR CP/M</b> Same as Option 44.	Requires CP/M system.		150	135	120	110
58	<b>FORTAN IV COMPILER</b> ANSI Standard FORTRAN IV with Double Precision less complex variables. Includes relocating linking loader and FORTRAN IV run time library MICROSOFT® See page 12.	**Disk based FORTRAN IV Compiler. Requires 24K user RAM and Option 40 or 40A.	CPU	150	135	120	110
58E	<b>FORTAN IV COMPILER FOR CP/M</b> Same as Option 58.	Requires CP/M system.		150	135	120	110
59	<b>WORD PROCESSOR</b> Allows the preparation of documents with right hand margin justification, automatic word wrap and many other word processing features. Includes a word processing screen editor and text formatting printer program for Option 64 printer.	**Requires a disk, 24K user RAM, 24 or 24A and 59K keyboard. Option 64 printer required to take full advantage of all functions.	CPU	900	810	730	655
67	<b>CP/M DESK TOP COMPUTER UPGRADE</b>	Requires return of CPU and ROM/PROM or additional \$500 in lieu of. Includes 32K RAM and system software. Recommend Option 26A or 27A.		1500	1500	1500	1500
70	<b>TEST DIAGNOSTICS</b> Software and documentation to test memory, I/O ports and plot functions of INTECOLOR units.		CPU	250	220	205	180

## Extra memory options

20	<b>24K ROM/PROM CARD</b> Blank memory board which can utilize: (12) 2716 2K x 8 EPROMs and (4) 4732 4K x 8 Masked ROMs (other combinations possible)		ROM/PROM	100	90	80	75
21	<b>16K x 8 RAM</b>	Maximum of 1 per terminal.	16/64K RAM	700	630	565	510
21A	<b>24K x 8 RAM</b>	Maximum of 1 per terminal.	16/64K RAM	900	810	730	655
25	<b>8K x 8 RAM</b>	Maximum of 24K user RAM per terminal. CP/M systems can have 48K. See Spare Parts List.	4/8K RAM	400	360	325	290
38	<b>SPECIAL CUSTOMER SOFTWARE</b> (1K x 8 EPROM) Includes incorporation of customer specified software in terminal.	Consult factory for non-recurring software generation charge.	CPU ROM/PROM	90	80	70	65
39	<b>SPECIAL CUSTOMER SOFTWARE</b> (2K x 8 EPROM) Includes incorporation of customer specified software in terminal.	Consult factory for non-recurring software generation charge.	CPU ROM/PROM	180	160	145	130

## Keyboard options

22A	<b>KEYBOARD—72 TO 101 KEY INCREMENTAL</b> Includes 8 color, one command and a 16 key numeric cluster.	Incremental price for 72 to 101 keys.		135	120	110	100
24	<b>KEYBOARD—101 TO 117 KEY INCREMENTAL</b> Adds 16 function keys which, with the shift and control modifier keys, provide an additional 64 codes.	Incremental price for 101 to 117 keys.		100	90	80	75
24A	<b>KEYBOARD—72 TO 117 KEY INCREMENTAL</b> Includes 8 color, one command, numeric cluster and 16 function keys to provide an addition 64 codes to 64 ASC II standard keyboard.	Incremental price for 72 to 117 keys.		200	180	160	145
59K	<b>KEYBOARD FOR WORD PROCESSOR</b> 117 keys provide special nomenclature required for Word Processor operation.	Incremental price for 117 keys. Must have option 24 or 24A.		100	90	80	75

\*Must be installed at factory at time of purchase. \*\*Must know existing options and date of software when updating in field.



# Interfacing options

OPTION	DESCRIPTION	INFORMATION	AFFECTED ASSEMBLY	UNIT PRICE (U.S.A. Domestic)			
				1-24	25-49	50-99	100+
07*	<b>20/60mA CURRENT LOOP</b> Adds 20/60mA current loop interface capability to standard unit.	Requires external current source.	CPU	135	120	110	100
10	<b>MALE RS-232C CONNECTOR</b> Used in lieu of standard female connector.		Unit	45	40	35	30
46	<b>2ND RS-232C and 8 BIT PARALLEL I/O CHANNEL</b> Used for interfacing to peripheral or host computer.		CPU	90	80	70	65
47	<b>SPECIAL INITIALIZATION</b> a) Std./High Speed b) Initialized Baud Rate (1 of 7) c) Number of Stop Bits (1 or 2) d) Half, Full, Local Duplex	**The unit can have either standard or high speed Baud rate, but the two rates cannot be mixed.	CPU	180	160	145	130
53	<b>ADDITIONAL 24 BIT I/O PORT</b> Three 8-bit parallel ports for customer designed interfacing.	Used with Printer Option 64 or Options 55 and 55A.		180	160	145	130
56	<b>3RD RS-232C SYNCH/ASYNCH CHANNEL</b> Used for customer created software interfacing.			180	160	145	130
57	<b>20/60mA CURRENT LOOP</b> For Option 56.	Requires external current and Option 56.		135	120	110	100

# Peripherals

26A	<b>DUAL 8" FLOPPY DISK DRIVE</b> Utilizes Sof-Disk media for up to 591K bytes of storage. Includes 5K ROM operating system software (FCS) and disk I/O controller.	**Requires Option 20 and a minimum of 8K user RAM.	I/O CPU ROM/ PROM	2500	2250	2025	1825
27A	<b>DUAL DOUBLE HEADED 8" FLOPPY DISK DRIVE</b> Utilizes Sof-Disk media for up to 1182K bytes of storage. Includes 5K ROM operating system software (FCS) and disk I/O controller.	**Requires Option 20 and a minimum of 8K user RAM	I/O CPU ROM/ PROM	3500	3150	2835	2550
51	<b>MICRO-DISK DRIVE</b> Utilizes 5" Sof-Disk media for up to 51.2K bytes of storage.	Requires Option 46 and either 26A, 27A, 52 or 52A.	I/O CPU ROM/ PROM	500	450	405	365
52	<b>MINI-DISK DRIVE</b> Utilizes 5" Sof-Disk media for up to 80K bytes of storage. Includes 5K ROM operating system software (FCS) and disk I/O controller.	**Requires Option 20 and a minimum of 8K user RAM	CPU ROM/ PROM I/O	1000	900	810	730
52A	<b>DUAL MINI-DISK DRIVE</b> Adds an additional disk drive to Option 52, mounted in a single case.	**Requires Option 20 and a minimum of 8K user RAM.	CPU ROM/ PROM I/O	1500	1350	1215	1095

# MEDIA

PART NO.	DESCRIPTION	LIST PRICE
900047	Sof-Disk™ 5" Formatted for Micro Disk (box of 10).....	50
900040	Sof-Disk 5" Formatted, Mini Disk (box of 10).....	50
900041	Sof-Disk 8" Single Sided, Formatted (box of 10).....	75
900044	Sof-Disk 8" Double Sided, Formatted (box of 10).....	100
996500	Sof-Disk Format Program—5" Mini-Disk (for Option 52, 52A).....	200
996501	Sof-Disk Format Program—8" Floppy Disk (for Option 26A).....	200
996502	Sof-Disk Format Program—8" Double Sided Floppy Disk (for Option 27A).....	200
996503	Sof-Disk Format Program—5" Micro Disk (for Option 51).....	200

All ISC disk drives run with Sof-Disk™ media. These diskettes have a special high output magnetic formulation to minimize read errors. Each Sof-Disk is formatted, tested and certified to offer the reliability demanded by our customers. If any Sof-Disk fails to meet specifications return to ISC for guaranteed replacement.

\*Must be installed at factory at time of purchase. \*\*Must know existing options and date of software when updating in field.

# Peripherals (cont.)

OPTION	DESCRIPTION	INFORMATION	AFFECTED ASSEMBLY	UNIT PRICE (U.S.A. Domestic)			
				1-24	25-49	50-99	100+
55	<b>EPROM PROGRAMMER</b> Programs 2708 and TI type 2716 EPROMs.	**Requires Options 34A, 53, a disk and a minimum of 8K user RAM.	I/O ROM/PROM	450	405	365	330
55A	<b>EPROM AND PROM PROGRAMMER</b> Adds TI type fuseable link programming capability to Option 55.	**Requires Options 34A, 53, a disk and a minimum of 8K user RAM.	I/O ROM/PROM	800	720	650	585
62	<b>MATRIX PRINTER</b> 60 CPS Centronics 779 Impact Matrix Printer. Includes software interface. See specifications, page 14.	**Requires Parallel I/O (Option 46).		1495	1420	1350	1280
64	<b>FORMED CHARACTER PRINTER</b> 55 CPS NEC Spinwriter. Includes Software interface. See specifications, page 14.	**Requires 24 bit I/O (Option 53).		3495	3320	3155	2995
65A	<b>GRAPHICS LINE PRINTER/PLOTTER</b> 300 LPM Printronix Graphics Line Printer/Plotter. Includes software interface, stand and paper holder. See specifications page 14.	**Requires Parallel I/O (Option 46).		6500	6175	5865	5575

# Manuals and source Sof-Disks™

12	<b>HOW TO USE INTECOLOR 8000 CRT MANUAL</b>			20	20	20	20
12A	<b>DESKTOP COMPUTER MANUAL (8001)</b> Includes Extended DISK BASIC.	Includes Option 12.		40	40	40	40
12B	<b>DESKTOP COMPUTER MANUAL (8001)</b> Includes BUSINESS BASIC/SCIENTIFIC BASIC.	Includes Option 12.		40	40	40	40
12C	<b>WORD PROCESSOR MANUAL</b>			40	40	40	40
12E	<b>CP/M MANUAL</b>			60	60	60	60
13	<b>MAINTENANCE MANUAL (8000 SERIES)</b>			100	90	80	75
13A	<b>MAINTENANCE MANUAL (8300/8900 SERIES)</b>			100	90	80	75
35	<b>SOURCE SOF-DISK &amp; LISTING FOR OPTION 34A</b> Provides source Sof-Disk and listing for Debug ROM.	5" or 8" Sof-Disk must be specified when ordering Disk options. Only current versions of software are available.		500	—	—	—
35L	<b>LISTING ONLY FOR OPTION 34A</b>	Only current versions are available.		100	—	—	—
36	<b>SOURCE SOF-DISK AND LISTING FOR TERMINAL CONTROL SOFTWARE</b> Provides source Sof-Disk and listing for terminal control software.	Same as Option 35.		500	—	—	—
36L	<b>LISTING ONLY FOR OPTION 36</b>	Same as Option 35L.		100	—	—	—
37	<b>3741 EMULATOR PACKAGE</b> Will execute IBM® 3741 Model 1 source programs to generate IBM compatible diskettes. Allows the Intecolor to become an IBM Compatible data entry terminal.			200	—	—	—
41	<b>SOURCE SOF-DISK AND LISTING FOR TEXT EDITOR, OPTION 40</b>	Same as Option 35.		500	—	—	—
41L	<b>LISTING ONLY FOR OPTION 40</b>	Same as Option 35L.		100	—	—	—
43	<b>SOURCE SOF-DISK AND LISTING FOR FILE CONTROL SYSTEM (FCS)</b>	Same as Option 35.		500	—	—	—
43L	<b>LISTING ONLY FOR FCS</b>	Same as Option 35L.		100	—	—	—
45	<b>SOURCE SOF-DISK AND LISTING FOR ASSEMBLER, OPTION 44</b>	Same as Option 35.		500	—	—	—
45L	<b>LISTING ONLY FOR OPTION 44</b>	Same as Option 35L.		100	—	—	—
68	<b>BASIC UTILITIES</b> Screen editor and utility package including Renumber, Autoline and Merge.	Same as Option 35. For Extended Disk BASIC (Option 42B) Only		40	35	30	25

\*Must be installed at factory at time of purchase. \*\*Must know existing options and date of software when updating in field.

# Miscellaneous options

OPTION	DESCRIPTION	INFORMATION	AFFECTED ASSEMBLY	UNIT PRICE (U.S.A. Domestic)			
				1-24	25-49	50-99	100+
72	<b>SOURCE SOF-DISK AND LISTING FOR OPTION 71</b> Provides source Sof-Disk and listing for High Resolution Graphics Software.	Same as Option 35.		500	—	—	—
72L	<b>LISTING ONLY FOR OPTION 71</b>	Same as Option 35L.		100	—	—	—
08*	<b>CPU ASSEMBLY (REV 4)</b> For use with 1Kx8 EPROMs.	Does not include software. Substitute for current revision. (Incremental price).	CPU	90	90	90	90
11*	<b>220V AC POWER OPERATION</b> Allows terminal to operate on 220V AC. 50/60 Hz.		Unit	90	90	90	90
11A*	<b>220V AC DISK CONVERSION PER SYSTEM</b> (Single or Dual)	For Options 26A, 27A, 52 and 52A.		50	50	50	50
11B*	<b>50Hz DISK CONVERSION PER SYSTEM</b> (Dual)	For Options 26A, 27A.		90	90	90	90
11C*	<b>220V AC PROM PROGRAMMER CONVERSION</b>	For Options 55 and 55A.		50	50	50	50
11D*	<b>220V AC PRINTER CONVERSION</b>			90	90	90	90
16U	<b>UPDATE 25 LINE TO 48 LINE</b>	Terminal must be returned with Return Authorization and purchase order. See page 1.		1000	1000	1000	1000
28*	<b>LIGHT PEN</b> Adds a light pen that detects the coordinates of a character position and transmits upon comand the XY coordinates to the output port and positions the cursor to that point.	Not available with Option 71.	Unit DG	495	445	400	360
30*	<b>25" CRT ASSEMBLY</b>	Incremental price.	Unit	495	445	400	360
31*	<b>13" HIGH PHOSPHOR DENSITY CRT</b>	Incremental price on Monitors only. Standard on 8300 Series.	Unit	900	810	730	655
33*	<b>19" HIGH PHOSPHOR DENSITY CRT</b>	Incremental price.	Unit	1900	1710	1540	1385
48	<b>EXTENDER CARD</b> Card used to extend mother board out to trouble-shoot any card in card cage.		EXT	45	40	35	30
49	<b>STATIC FILTER</b> For keyboard reset.	Recommended for applications in low humidity areas.	Unit	90	80	70	65
50	<b>19" CRT NON-GLARE FILTER</b>	Plastic, contoured, removable gray filter.	Unit	45	40	35	30
50A	<b>25" CRT NON-GLARE FILTER</b>	Plastic, contoured, removable gray filter.	Unit	90	80	70	65
50B*	<b>DARK FACED, HIGH CONTRAST 19" CRT</b>	Incremental price.	Unit	90	80	70	65
50C*	<b>DARK FACED, HIGH CONTRAST 25" CRT</b>	Incremental price. Requires Option 30.	Unit	90	80	70	65

\*Must be installed at factory at time of purchase.



# Installation and Service

OPTION	DESCRIPTION	INFORMATION	UNIT PRICE (U.S.A. Domestic)
66	<b>ON-SITE INSTALLATION</b> Available in most major cities. See page 16.	Per terminal. Includes power up, convergence, purity alignment and communications checkout.	100
60	<b>FACTORY SERVICE CONTRACT</b> 24 hour factory shipment for replacement of defective part and/or unit.	There is a six (6) month limited warranty (see page 1) on all Intecolor assemblies. (Excluding non-ISC manufactured peripherals). You can, however, obtain a Factory Service Contract which provides a one-year warranty on all ISC assemblies and peripherals including labor. Unit or card sub-assembly replacement will be shipped from factory within 24 hours. If you purchase Option 60 on your initial order, the cost is 8% per terminal, minimum \$250. Contracts purchased after the original shipping date and annual renewals are 10% per terminal, or minimum \$300.	
61	<b>ON-SITE SERVICE CONTRACT</b> Available in most major cities. Will provide on-site repair of defective part. See page 16.	Includes all replacement features of Option 60 plus on-site labor to disassemble, repair and reassemble within a reasonable period of time. Repairs will be made to units which have retained original electrical and mechanical configuration. Customer will be billed for costs incurred if unit is found non-defective. Requires Option 66. If you purchase Option 61 on your initial order, the cost is 12% per terminal, minimum \$400. Contracts purchased after the original shipping date and annual renewals are 15% per terminal, minimum \$500.	

## Monitors

PART NO.	DESCRIPTION	UNIT PRICE				
		1-9	10-24	25-49	50-99	100+
00813H or S	Intecolor 813 Monitor, High Scan or Standard Scan 13" CRT	1,000	600	590	575	550
00819H or S	Intecolor 819 Monitor, High Scan or Standard Scan 19" CRT	1,400	800	760	740	700
00825H or S	Intecolor 825 Monitor, High Scan or Standard Scan 25" CRT	1,800	1,000	960	940	900
01008	Power Transformer, 115V AC	85	85	81	77	73

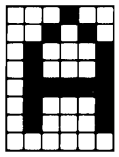
## Spare Parts List

PART NO.	DESCRIPTION	SERIES	LIST PRICE
0099A0	Starter Kit of Assorted Components	8000	\$ 100
0099B0	Starter Kit of Assorted Components	8300/8900	100
100106	CPU PCB Assembly (without software)	All	400
010034	I/O Disk Controller PCB Assembly	All	360
100117	Display Generator, 25 Line PCB Assembly (without PROMs)	8000	360
100200	Display Generator, 48 Line PCB Assembly (without PROMs). For Light Pen DG, add \$40 and specify	All	360
100196	4K RAM PCB Assembly (for 25" units only)	8000	400
101292	32K RAM PCB Assembly	CP/M Only	1,100
101295	48K RAM PCB Assembly	CP/M Only	1,600
100018	Analog PCB Assembly, 25 Line	8000	400
100198	Analog PCB Assembly, 48 Line	8000	400
101167	Analog PCB Assembly, 48 Line	8300/8900	400
100014	Convergence PCB Assembly	8000	120
101164	Convergence PCB Assembly	8300/8900	120
100179	Flyback/Multiplier Assembly/115/220V, includes: 100058 High Voltage Flyback— 110028 High Voltage Multiplier—100150 Mounting Plate	8000	75
010009	Power Transformer, 220V AC	8000	125
010008	Power Transformer, 115V AC	8000	85
100180	Yoke and Convergence Assembly	8000	120
101143	Yoke and Convergence Assembly	8300/8900	120
100923	Keyboard (standard with cursor)	8000	250
100862	Keyboard (standard with cursor)	8300/8900	250
100924	Keyboard (cursor, color & numerics)	8000	385
100922	Keyboard (cursor, color & numerics)	8300	385
100879	Keyboard (cursor, color, numerics & 16 functions)	8000	450
100877	Keyboard (cursor, color, numerics & 16 functions)	8300/8900	450
101289	Keyboard, Word Processor, (cursor, color, numerics & 16 functions)	8000	550
101290	Keyboard, Word Processor, (cursor, color, numerics & 16 functions)	8300	550
101291	Keyboard, Word Processor, (cursor, color, numerics & 16 functions)	8900	550

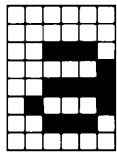
# SPECIFICATIONS

## Characters

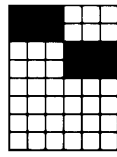
Upper Case



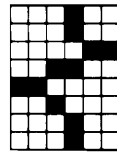
Lower Case



Plot



Special Ch.



## SPECIAL GRAPHIC CHARACTERS

ISC will supply the customer with character work sheets and mark sense cards for either 32 or 64 special characters (Options 03 and 17). These characters can be designed with a 6 x 8 matrix in any configuration the customer desires. It will take 2 to 3 weeks after the marked sense cards have been completed and returned to ISC for shipment of special PROMs.

## ISA CHARACTERS (Option 17A)

	FLAG ON SHIFT A TO Z		SHIFT NOS.			NORMAL KEYS		FLAG OFF SHIFT A TO Z	
	0	1	2	3	4	5	6	7	
0	0	1	2	3	4	5	6	7	
1	!	2	3	4	5	6	7	8	
2	"	3	4	5	6	7	8	9	
3	#	4	5	6	7	8	9	0	
4	\$	5	6	7	8	9	0	1	
5	%	6	7	8	9	0	1	2	
6	&	7	8	9	0	1	2	3	
7	'	8	9	0	1	2	3	4	
8	(	8	H	X	1	2	3	4	
9	)	9	I	Y	2	3	4	5	
10	*	:	J	Z	3	4	5	6	
11	+	;	K	[	4	5	6	7	
12	,	<	L	\	5	6	7	8	
13	-	=	M	]	6	7	8	9	
14	.	>	N	^	7	8	9	0	
15	/	?	O	_	8	9	0	1	

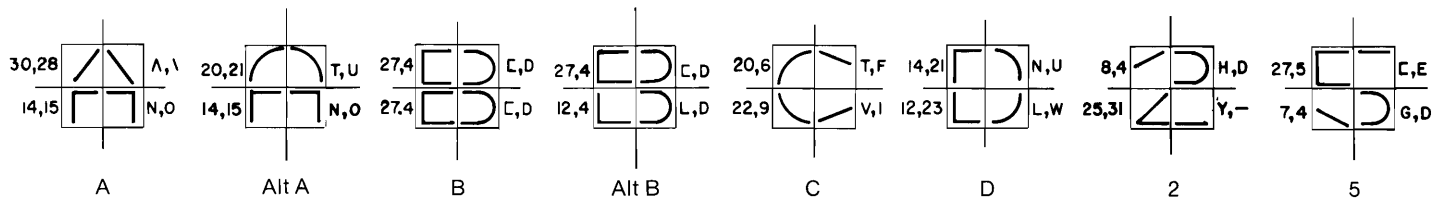
## ISC CHARACTERS (Option 17C)

	FLAG ON SHIFT A TO Z		SHIFT NOS.			NORMAL KEYS		FLAG OFF SHIFT A TO Z	
	0	1	2	3	4	5	6	7	
0	0	1	2	3	4	5	6	7	
1	!	2	3	4	5	6	7	8	
2	"	3	4	5	6	7	8	9	
3	#	4	5	6	7	8	9	0	
4	\$	5	6	7	8	9	0	1	
5	%	6	7	8	9	0	1	2	
6	&	7	8	9	0	1	2	3	
7	'	8	9	0	1	2	3	4	
8	(	8	H	X	1	2	3	4	
9	)	9	I	Y	2	3	4	5	
10	*	:	J	Z	3	4	5	6	
11	+	;	K	[	4	5	6	7	
12	,	<	L	\	5	6	7	8	
13	-	=	M	]	6	7	8	9	
14	.	>	N	^	7	8	9	0	
15	/	?	O	_	8	9	0	1	

## LOWER CASE CHARACTERS (Option 03LC)

	SHIFT NOS.		NORMAL			FLAG OFF SHIFT A TO Z	
	2	3	4	5	6	7	
0	0	1	2	3	4	5	6
1	!	2	3	4	5	6	7
2	"	3	4	5	6	7	8
3	#	4	5	6	7	8	9
4	\$	5	6	7	8	9	0
5	%	6	7	8	9	0	1
6	&	7	8	9	0	1	2
7	'	8	9	0	1	2	3
8	(	8	H	X	1	2	3
9	)	9	I	Y	2	3	4
10	*	:	J	Z	3	4	5
11	+	;	K	[	4	5	6
12	,	<	L	\	5	6	7
13	-	=	M	]	6	7	8
14	.	>	N	^	7	8	9
15	/	?	O	_	8	9	0

## SAMPLE OF 4X CHARACTERS USING ISC CHARACTER SET (Option 17C)



## High Resolution Graphics (Option 71)

The High Resolution Option allows graphics to be displayed on a 480H x 384V grid. This is accomplished by the incorporation of 512 software programmable characters, independent of the standard alphanumeric characters. Each character consists of a 6 x 8 dot matrix with all 48 dots addressable by software. However, foreground and background color is defined on a character by character basis. The graphics generator allows vectors to be drawn by specifying the coordinates of the start point and end point with automatic plotting of all points between them. Circles are drawn by specifying a center and a radius. The High Resolution Option also provides all of the capabilities of the standard resolution graphics. In addition to the other features of this option the user can define up to 128 characters and download them from the host computer or from a disk.

# Display Terminals for Intecolor Line

SERIES:	13" CRT	19" CRT		25" CRT
	8300	8000	8900	8000
Power: 105-125 volts, 60Hz, 250 watts				
Temperature: +10°C—40°C operating -30°C—70°C storage				
Humidity: 0-95% non-condensing				
Terminal Size:				
Height .....	13½"	17½"	17½"	22¼"
Width .....	19¾"	19¾"	26⅞"	25
Depth .....	26⅞"	22½"	23½"	23
Keyboard Size:				
Height .....	53 lbs.	85 lbs.	70 lbs.	115 lbs.
Width .....	Built-in	2¾"	3"	2¾"
Depth .....	Built-in	18½"	25¾"	18½"
Weight .....	Built-in	7"	8¼"	7"
CRT Display	See above	5 lbs.	5.5 lbs.	5 lbs.
Refresh Rate: 60 times/second synchronized to line frequency.				
Screen Size: diagonal measure .....	13"	19"		25"
Display area: .....	90 sq. in. screen area 4 x 3 aspect ratio 72.5 sq. in. Width: 10" Height: 7¼"	186 sq. in. screen area 4 x 3 aspect ratio 130 sq. in. 13" 10"		312 sq. in. screen area 4 x 3 aspect ratio 221 sq. in. 17" 13"

## Languages

### EXTENDED DISK BASIC 8001 interpreter in ROM memory includes:

(Option 42B)

**27 Statement Types:** CLEAR, DATA, DEF, DIM, END, FILE, FOR, GET, GOSUB, GOTO, IF, INPUT, NEXT, ON, OUT, PLOT, POKE, PRINT, PUT, READ, REM, RETURN, STEP, THEN, TO, and WAIT. **5 Command Types:** CONT, LIST, LOAD, RUN, and SAVE. **18 Mathematical Functions:** ABS(x), ATN(x), CALL(x), COS(x), EXP(x), FRE(x), INT(x), INP(x), LOG(x), PEEK(x), POS(x), RND(x), SGN(x), SIN(x), SPC(x), SQR(x), TAB(x), and TAN(x). **9 String Functions:** ASC(x\$), CHR\$(x), FRE(x\$), LEFT\$(x\$, l), LEN(x\$), MID\$(x\$, i, j), RIGHT\$(x\$, l), STR\$(x), and VAL(x\$). **13 Disk File Commands:** COPY, DEVICE, DIRECTORY, DUPLICATE, INITIALIZE, LOAD, MERGE, PRINT, READ, RENAME, RUN, SAVE, and WRITE. (Optional: ASMBLE, CREATE, EDIT.)

### BUSINESS BASIC (Option 42C)

4 Variable Types:

\$ String ..... 0-255 Characters ! Single Precision ..... 7.1 Digit Floating Point  
% Integer ..... -32768 to 32767 # Double Precision ..... 16.8 Digit Floating Point

**19 Commands:** CLEAR, CONT, DELETE, EDIT, LIST, LLIST, LNULL, LOAD, LWIDTH, MERGE, NEW, RENUM, RESET, RUN, SAVE, SYSTEM, TROFF, TRON, WIDTH. **29 Program Statements:** DEF FN, DEF USR, DEFDBL, DEFINT, DEFSNG, DEFSTR, DIM, END, ERASE, ERROR, FOR, GOSUB, GOTO, IF... THEN... ELSE, LET NEXT, ON ERROR GOTO, ON... GOSUB, ON... GOTO, OUT PLOT, POKE, REM, RESTORE, RESUME, RETURN, STOP, SWAP, WAIT. **15 Input Statements:** CLOSE, DATA, FIELD, GET, INPUT, LINE INPUT, LPRINT, LPRINT USING, LSET, OPEN PRINT, PRINT USING, PUT, READ, RSET. **26 Arithmetic Functions:** ABS(x), ATN(x), CDBL(x), CINT(x), COS(x), CSNG(x), ERL, ERR, EXP(x), FIX(x), FRE(x), INP(x), INT(x), LPOS(x), LPEEK(x), POS(x), RND(x), SGN(x), SIN(x), SPC(x), SQR(x), TAB(x), TAN(x), USR(x), VARPTR(x). **15 String Functions:** ASC(x\$), CHR\$(x), FRE(x\$), HEX\$(x), INPUT\$(x), INSTR(x, y\$, z\$), LEFT\$(x\$, y), LEN(x\$), MID(x\$, y, z), OCT\$(x), RIGHT\$(x\$, y), SPACE\$(x), STR\$(x), STRING\$(x, y), VAL(x\$). **9 Input Output Functions:** CVD(x\$), CVI(x\$), CVS(x\$), EOF(x), LOC(x), LOF(x), MKD\$(x), MKI\$(x), MKS\$(x).

### FORTRAN-IV (Option 58)

Is unique in that it provides a microprocessor FORTRAN development package that generates relocatable object modules. This means that only the subroutines and system routines required to run FORTRAN-IV programs are loaded before execution. Subroutines can be placed in a system library so that users develop a common set of subroutines that are used in their programs. Also, if only one module of a program is changed, it is necessary to re-compile only that module.

The standard library of subroutines supplied with FORTRAN-IV includes:

ABS	DEXP	IDINT	SIN	AMIN1	ATAN2	DIM
INT	DLOG 10	AMAX1	TANH	FLOAT	POKE	EXP
AMAXO	DCOS	AMINO	DATAN	DSIGN	AINT	ALOG 10
DMAX1	ATAN	DMIN1	PEEK	DBLE	MOD	COS
MIN1	DMOD	ISIGN	DABS	DLOG	MAX1	DSQRT
SIGN	OUT	SNGL	AMOD	DSIN	MINO	DATAN2
IDIM	IABS	ALOG	MAXO	SQRT	IFIX	INP

The library also contains routines for 32-bit and 64-bit floating point addition, subtraction, multiplication, division, etc. These routines are among the fastest available for performing these functions on the 8080A.

## Arabic Configuration (Option 19A)

All systems are available in ARABIC/English configurations. This includes a dual keyboard, 64 English and over 80 ARABIC characters, and special character adjustment terminal control software. This enables the operator to enter characters without being concerned with upper and lower case or other forms of the character. Therefore only one key per character is entered and the terminal automatically changes the shape of the letters depending upon their position in the word. English and ARABIC characters are completely intermixable letter by letter or line by line. The terminal control software automatically adjusts the position of the characters within a line so that they are read correctly. For example, in the ARABIC mode the numbers are entered in insert mode hence read correctly from left to right. The binary code for ARABIC characters is mapped onto 64 English ASCII codes, therefore each character irrespective of its shape is represented by one binary code. Therefore any data based in ARABIC is easily generated and selection of the shape of characters is handled automatically by the terminal.

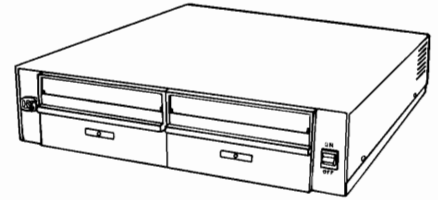
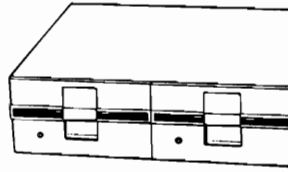
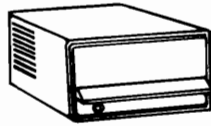
With a complete Intecolor microcomputer system all I/O generated by high level language can be in ARABIC. Sales, service, and maintenance is available in most Middle Eastern countries by factory trained engineers. For further information contact the factory.



# Specifications

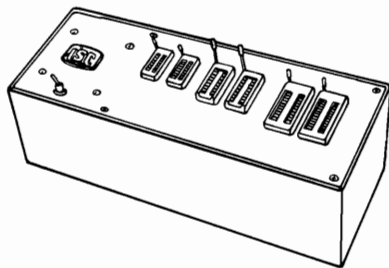
		8000 SERIES										8300 SERIES										8900 SERIES															
		8001G	8043	8051	8052	8053	8054	8063	8070	8080	8090	8001	8301G	8343	8351	8352	8353	8354	8363	8370	8380	8390	8901G	8943	8951	8952	8953	8954	8963	8970	8980	8990					
DISPLAY	All units in the 8300 Series have a 13" High Phosphor Density CRT. All units in the 8000 and 8900 Series have a Standard 19" CRT.																																				
CHARACTER	80 characters/line x 48 lines	STD	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			
CHARACTER STYLE	64 Standard ASCII characters, 5 x 7 dot pattern in 6 x 8 matrix	STD	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			
	32 ASCII lower case characters.	03LC					•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			
	64 Standard ISA characters.	17A		•																														•	•		
CURSOR	White blinking overscore/underscore non destructive.	STD	•	•				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
COLORS	Eight foreground and eight background: Black, Red, Green, Blue, Yellow, Magenta, Cyan, White.	STD	•	•				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
EDITING	Tab; Erase Page; Erase Line; Blink; Color Selection; Cursor Up, Down, Left, Right and Home; Cursor XY Positioning; Transmit.	STD	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
	Insert/Delete-Character/Line.	05						•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
	Page Roll Mode.	STD	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
KEYBOARD	Standard ASCII 4 level coded with 192 codes and cursor.	STD	•																																		
	As above, but with color and numeric clusters.	22A		•					•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
	All above, plus 16 function keys.	24A																																	•		
	Word Processor Keyboard.	59K																																			
COMM MODE	RS-232C Serial, full-duplex/half-duplex/local, keyboard selectable.	STD	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
DATA TRANSFER	No parity, 7 rates from 110 to 9600 Baud, 1 or 2 stop bits, all keyboard selectable.	STD	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
CPU	8080A Central Processing Unit, 2 microsecond cycle.	STD	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
MEMORY	2K ROM, 8001 Debug Monitor	34A																																			
	2K ROM, 8K RAM for refresh.		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
	8K bytes RAM for user workspace.	25																																			
	24K bytes RAM for user workspace.	21A																																		•	
	32K bytes RAM for CP/M.																																				
	EPROM/MROM (up to 24K bytes).	20																																			
STORAGE (see detailed specs. Pg.)	Single mini-disk drive, with 80K bytes of storage.	52																																			
	Dual mini-disk drive with 160K bytes of storage.	52A																																			
	Dual 8" Floppy Disk drive with 591K bytes of storage.	26A																																		•	
	Dual 8" Double Headed Floppy Disk drive with 1182K bytes of storage.	27A																																		•	
LANGUAGE	Extended DISK BASIC 8001 Interpreter in 8K ROM memory includes: 27 statement types, 5 command types, 18 mathematical functions, 9 string functions and 13 File Control Systems (FCS) DISK commands.	42B																																		•	
	BUSINESS BASIC.	42C																																		•	
	COLOR GRAPHIC BASIC for CP/M.	42E																																		•	
GRAPHICS	Plotting on a 160H x 192V grid area. Software for vector, bar graphs and point plot.	01/02																																		•	
TEXT EDITOR	Text Editor 3K ROM.	40																																		•	
ASSEMBLER	8080A Assembler 3K ROM.	44																																		•	
LIGHT PEN	Detects and transmits XY coordinates, positions cursor.	28																																		•	
PRINTER	60 CPS Impact Matrix Printer.	62																																		•	
	Formed Character Printer.	64																																		•	

# Disk Drives



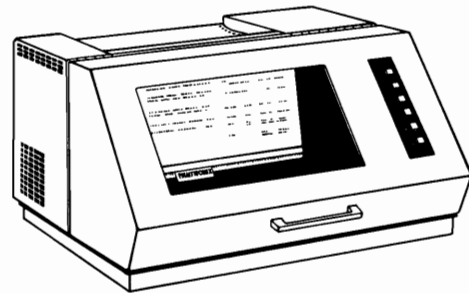
	<b>MICRO</b>	<b>MINI</b>	<b>8" FLOPPY</b>
<b>Size</b> .....	3½H x 5¾W x 8¼D	Single 3¾H x 6W x 12½D Dual 3¾H x 11¼W x 12½D	(Single & Dual) 5½H x 21W x 23½D
<b>Weight</b> .....	4 lbs.	Single 8 lbs. Dual 16 lbs.	Single 25 lbs. Dual 48 lbs.
<b>Tracks</b> .....	40	35	77
<b>Track Density</b> .....	48 tpi	48 tpi	48 tpi
<b>Rotational Speed</b> .....	300 rpm	300 rpm	360 rpm
<b>Power on Delay</b> .....	1 second	1 second	N/A
<b>Access Time</b> .....	200ms (Average 29 tracks)	370ms (Average 35 tracks)	208ms (Average 77 tracks)
<b>Average Latency</b> .....	100ms	100ms	83ms
<b>Transfer Rate</b> .....	76.8 kilobits/sec.	125 kilobits/sec.	250 kilobits/sec.
<b>AC Power Requirements</b> .....	from terminal	120V AC @ .5A maximum	100/115V AC; 60Hz Installations = 85-127V at 1A max.
<b>Performance Specifications:</b> <b>(Capacity Formatted)</b> .....	51.2K bytes/side. Both sides usable by flipping Sof-Disk over.	Per Disk: 80.64K bytes Per Track: 2.304K bytes	Per Disk (800 Single Head) 295K bytes/Drive Per Disk (850 Double Head) 591K bytes/Drive Per Track (800 Single Head) 3.84K bytes Per Track (850 Double Head) 7.68K bytes

## EPROM and PROM Programmings



	(Options 55 & 55A)
<b>Size</b> .....	11½" x 5" x 3"
<b>Weight</b> .....	8 lbs.
<b>Power</b> .....	105-115V AC, 60Hz, 35 watts
<b>Input/Output</b> .....	24 bit bi-directional port
<b>Software</b> .....	provided for all programming
<b>Erasable PROMs</b> .....	Programmable: 1) 1Kx8 Intel, TI and others 2708 Type 2) 2Kx8 TI-2716 Type (not Intel)

## Printers



	<b>MATRIX PRINTER</b>	<b>FORMED CHARACTER PRINTER</b>	<b>GRAPHICS LINE PRINTER/ PLOTTER</b>
	(Option 62)	(Option 64)	(Option 65A)
<b>Size (in inches)</b> .....	8H x 19.5W x 18D	8.7H x 21.8W x 13.6D	16.5 x 30W x 24.2D
<b>Weight (in pounds)</b> .....	45	45.5	185
<b>Print Method</b> .....	Dot Matrix	Character Impact	Dot Matrix Impact
<b>Character Spacing</b> .....	10-16.5 cpi	10/12 Proportional Spacing	10 cpi H, 6/8 lpi V
<b>Max. Paper Width</b> .....	9.8 inches	16 inches	16 inches
<b>Max. Columns</b> .....	80 Characters @ 10 cpi 132 Characters @ 16.5 cpi	136 Characters @ 10 cpi 163 Characters @ 12 cpi	132 Characters
<b>Font</b> .....	7 x 7	Interchange Print Thimble	9x9 Upper/Lower ASCII and Graphics
<b>Print Speed</b> .....	.60 cps @ 10 cpi 100 cps @ 16.5 cpi	.55 cps	300 lpm
<b>Power</b> .....	120V	120V	120/240 @ 60Hz
<b>Pedestal</b> .....	NO	NO	YES

# CUSTOMER LIST

## Systems Development

**Air Products**  
Allentown, PA 18105  
215/398-4911

**Aluminum Co. of America**  
Alcoa, TN 37701  
615/977-2011

**Bethlehem Steel Corp.**  
Bethlehem, PA 18016  
215/694-2424

**Chevron Research**  
San Francisco, CA 94119  
415/894-7800

**Dow Chemical, U.S.A.**  
Midland, MI 48640  
313/636-6155

**IBM Corporation**  
Kingston, NY 12401  
914/383-0123

**IBM Corporation**  
Yorktown Heights, NY 10598  
914/945-3000

**ITT Federal Electric Corp.**  
Vandenberg AFB, CA 93437  
805/866-5954

**Lockheed-California Co.**  
Burbank, CA 91520  
213/847-3251

**NCR Corporation**  
Ithaca, NY 14850  
607/273-5310

**Siemens Electronic Systems**  
Cherry Hill, NJ 08034  
609/424-2400

**Southern Bell Tel. & Tel. Co.**  
Atlanta, GA 30303  
404/529-6050

**Teledyne Geotech**  
Garland, TX 75041  
214/271-2561

**Texas Instruments**  
Dallas, TX 75222  
214/238-3732

**Westinghouse Handford Co.**  
Richland, WA 99352  
509/942-0631

## Process Control

**ACCO Bristol Division**  
Waterbury, CT 06720  
203/756-4451

**Atlantic Richfield Co.**  
Houston, TX 77012  
713/475-4460

**Bailey Controls Co.**  
Wickliffe, OH 44092  
216/943-5500

**Dow Chemical-Louisiana Div.**  
Plaquemine, LA 70764  
504/389-8000

**Dow Chemical, U.S.A.**  
Freeport, TX 77541  
713/238-3806

**E. I. DuPont DeNemours & Co.**  
Wilmington, DE 19898  
302/366-3459

**EMC Controls**  
Hunt Valley, MD 21031  
301/667-4800

**EMR Telemetry**  
Sarasota, FL 33578  
813/371-0811

**Fisher Controls Co.**  
Marshalltown, IA 50158  
515/754-3641

**Harris Corporation**  
Westerly, RI 02891  
203/599-1500

**International Paper Co.**  
Texarkana, TX 75501  
214/796-7101

**Leeds & Northrup Co.**  
North Wales, PA 19454  
215/643-2000

**MCC Powers**  
Northbrook, IL 60062  
312/272-9555

**Monsanto Company**  
Chocolate Bayou, TX 77511  
713/581-2161

**PPG Industries, Inc.**  
Lake Charles, LA 70601  
318/882-1200

**Proctor & Gamble Co.**  
Cincinnati, OH 45224  
513/562-1100

**Rockwell International**  
Golden, CO 80401  
303/497-7000

**Taylor Instrument Co.**  
Rochester, NY 14601  
716/235-5000

**Union Carbide Corp.**  
Oak Ridge, TN 37830  
615/483-8611

**Westinghouse Corp.**  
Orlando, FL 32804  
305/843-7030

## Energy Management

**ADT Security Systems**  
New York, NY 10048  
212/558-1122

**Computer Sciences**  
Falls Church, VA 22046  
703/533-8877

**Econics Corp.**  
Cupertino, CA 95014  
408/725-1700

**Georgia Power Co.**  
Norcross, GA 30092  
404/522-6060

**Iowa-Illinois Gas & Electric Co.**  
Davenport, IA 52804  
319/326-7151

**Johnson Controls**  
Milwaukee, WI 53201  
414/296-9200

**Natural Gas Pipeline Co.**  
Chicago, IL 60603  
312/431-7875

**Northern Natural Gas Co.**  
Omaha, NE 68102  
402/348-4000

**Peoples Gas**  
Chicago, IL 60622  
312/431-7411

**Robertshaw Controls Co.**  
Richmond, VA 23226  
804/288-3081

**Tampa Electric Company**  
Tampa, FL 33619  
813/626-6839

## Management Information Systems

**American Hospital Supply**  
McGaw Park, IL 60085  
312/473-0400

**Battelle Memorial Institute**  
Columbus, OH 43201  
614/424-6424

**Bell Telephone Labs**  
Murray Hill, NJ 07974  
201/582-4761

**Boeing Company**  
Seattle, WA 98124  
206/655-6857

**Citibank**  
New York, NY 10022  
212/559-1000

**Corning Glass**  
Corning, NY 14830  
607/974-9000

**Ford Motor Co.**  
Dearborn, MI 48124  
313/337-8707

**General Electric Company**  
Louisville, KY 40225  
502/452-4311

**Grumman Aerospace**  
Bethpage, NY 11714  
516/575-2419

**Kennecott Copper Corp.**  
Salt Lake City, UT 84112  
801/322-1533

**Lockheed-Georgia Co.**  
Marietta, GA 30063  
404/424-4713

**St. Regis Paper Co.**  
West Nyack, NY 10994  
914/358-3000

**Southern Railway System**  
Atlanta, GA 30303  
404/688-0800

**Western Electric**  
Newark, NJ 07101  
201/468-3838

## General Purpose

**American Microsystems Inc.**  
Santa Clara, CA 95051  
408/246-0330

**Calcomp**  
Anaheim, CA 92801  
714/632-7373

**Granger Associates**  
Menlo Park, CA 94025  
415/321-4175

**Medical College of Ga.**  
Augusta, GA 30904  
404/828-0211

**Northrop Corp.**  
Hawthorne, CA 90250  
213/970-5396

**R.C.A. Corporation**  
Princeton, NJ 08540  
609/452-2700

**University of California**  
Livermore, CA 94550  
415/447-1100

**ICI Ltd.**  
Mond Div.  
The Heath  
Runcorn  
Cheshire  
United Kingdom

**Taylor Inst. Ltd.**  
Stevenage  
Hertfordshire  
United Kingdom

**ICI Ltd.**  
Plastics Div.  
Welwyn Gade Garden City  
Hertfordshire  
United Kingdom



# SALES REPRESENTATIVES

- \*ALABAMA** W. A. Brown Instruments, Inc. 7917-C Charlotte Drive, Huntsville, AL 35802 205/883-8660  
**ALASKA** ISC, Intecolor Drive, Technology Park/Atlanta, Georgia 30092 404/449-5961  
**ARIZONA** BFA Corp., 4426 N. Saddlebag Trail, Scottsdale, AZ 85251 602/994-5400  
**CALIFORNIA** The Thorson Company, 624A North Carfield Avenue, Alhambra, CA 91802 213/281-2280  
 \*340 S. Kellogg Avenue, Suite F, Goleta, CA 93017 805/964-8751  
 \*17775 Main Street, Irvine, CA 92714 714/557-4460  
 \*520 S. Sepulveda, Los Angeles, CA 90049 213/476-1241  
 7841 Balboa Avenue, Suite 108, San Diego, CA 92103 714/292-8525  
 Jay Stone Associates, 339 S. San Antonio Road, Los Altos, CA 94022 415/948-4563  
**COLORADO** The Thorson Company, 7076 S. Alton Way, Building D, Englewood, CO 80112 303/779-0666  
**\*CONNECTICUT** J. & J. Associates, P.O. Box 2241, Goshen, CT 06756 203/624-7800  
**DELAWARE** Demco Data Equipment, 25 Skippack Pike, Suite 107, Ambler, PA 19002 215/542-9876  
**\*DISTRICT OF COLUMBIA (VA)** Intron Corp., 7830 Baclick Road, Suite 306, Springfield, VA 22150 703/569-1502  
**\*FLORIDA** W. A. Brown Instruments, Inc., 961 N.W. 53rd Street, Ft. Lauderdale, FL 33309 305/776-4800  
 701 Lincoln Avenue, Melbourne, FL 32901 305/723-0766  
 222 Weber Street, Orlando, FL 32803 305/425-5505  
 1325 E. Tennessee Street, Tallahassee, FL 32303 904/878-6642  
**\*GEORGIA** W. A. Brown Instruments, Inc., 3070 Presidential Drive, Suite 219, Atlanta, GA 30340 404/455-1035  
**HAWAII** The Thorson Company, 677 Ala Moana Boulevard, Suite 1012, Honolulu, HI 808/524-8633  
**IDAHO** The Thorson Company, 3691 West 1987 South, Salt Lake City, UT 84104 801/973-7969  
**ILLINOIS (No.)** Resource Data Systems, 801 Skokie Boulevard, Northbrook, IL 60062 312/564-5440  
**ILLINOIS (So.)** Digital Systems Sales, Inc. 4006 E. 137th Terrace, Grandview, MO 64030 816/765-3337  
**INDIANA** Resource Data Systems, 801 Skokie Boulevard, Northbrook, IL 60062 312/564-5440  
**IOWA** Digital Systems Sales, Inc., 4006 E. 137th Terrace, Grandview, MO 64030 816/765-3337  
**KANSAS** Digital Systems Sales, Inc., 4006 E. 137th Terrace, Grandview, MO 64030 816/765-3337  
**KENTUCKY** Digital Systems Sales, Inc., 4006 E. 137th Terrace, Grandview, MO 64030 816/765-3337  
**\*LOUISIANA** W. A. Brown Instruments, Inc., 1923 Claiborne, Mandeville, LA 70448 504/626-9701  
**\*MAINE** J. & J. Associates, Inc., 225 East Street, Winchester, MA 01890 617/729-5770  
**\*MARYLAND** Intron Corporation, 7830 Baclick Road, Suite 306, Springfield, VA 22150 703/569-1502  
**\*MASSACHUSETTS** J. & J. Associates, Inc., 225 East Street, Winchester, MA 01890 617/729-5770  
**\*MICHIGAN** Lowery Associates, 135 W. North Street, Suite 4, Brighton, MI 48116 313/227-7067  
 3902 Costa, N.E., Grand Rapids, MI 49505 616/393-9839  
**MINNESOTA** Cost Reduction Services, 3142 Hennepin Ave., So. Minneapolis, MN 55408 612/822-2119  
**MISSISSIPPI** W. A. Brown Instruments, Inc., 7917-C Charlotte Drive, Huntsville, AL 35802 205/883-8660  
**MISSOURI** Digital Systems Sales, Inc., 4006 E. 137th Terrace, Grandview, MO 64030 816/765-3337  
**MONTANA** The Thorson Company, 7076 So. Alton Way, Bldg D., Englewood, CO 80112 303/779-0666  
**NEBRASKA** Digital Systems Sales, Inc., 4006 E. 137th Terrace, Grandview, MO 64030 816/765-3337  
**NEVADA** BFA Corp., 4426 N. Saddlebag Trail, Scottsdale, AZ 85251 602/994-5400  
**\*NEW HAMPSHIRE** J. & J. Associates, Inc., 225 East Street, Winchester, MA 01890 617/729-5770  
**NEW JERSEY (No.)** Technical Marketing Associates, Inc., 2460 Lemoine Ave., Ft. Lee, NJ 07024 201/224-6911  
**NEW JERSEY (So.)** Demco Data Equipment Corp., 25 Skippack Pike, Suite 107, Ambler, PA 19002 215/542-9876  
**NEW MEXICO** BFA Corp., 3705 Westerfield, N.E., Albuquerque, NM 87111 505/292-1212  
 532 Amador Ave., Las Cruces, NM 88001 505/523-0601  
**NEW YORK** Metro/Long Island Technical Marketing Associates, Inc., 2460 Lemoine Ave., Ft. Lee, NJ 07024 201/224-6911  
 Naco Electronics Corp., 17 Meadow Port Trail, Fairport, NY 14450 716/223-4490  
 P.O. Box 276, N. Syracuse, NY 13212 315/699-2651  
 2631 Edgewood Road, Utica, NY 13501 315/732-1801  
**NORTH CAROLINA** W. A. Brown Instruments, Inc., 123 1/2 Orange Street, Durham, NC 27701 919/682-2383  
**NORTH DAKOTA** Cost Reduction Services, 3142 Hennepin Ave., So. Minneapolis, MN 55408 612/822-2119  
**\*OHIO** Lowery & Associates, Inc., 1440 Snow Road, Suite 216, Cleveland, OH 44134 216/398-0506  
 1524 Marsetta Dr., Dayton, OH 45432 513/429-9040  
**OKLAHOMA** U. S. Data Engineering, 4241 Proton Road, Dallas, TX 75240 214/661-9633  
**OREGON** Thorson Company, 7000 SW Hampton St., Suite 207, Portland, OR 97223 503/620-5800  
**PENNSYLVANIA (East)** Lowery & Associates, Inc., Swen Parkway Center, Suite 455, Pittsburg, PA 15220 412/922-5110  
**PENNSYLVANIA (West)** Demco Data Equipment, 25 Skippack Pike, Suite 107, Ambler, PA 19002 215/542-9876  
**RHODE ISLAND** J. & J. Associates, Inc., 225 East Street, Winchester, MA 01890 617/729-5770  
**SOUTH CAROLINA** W. A. Brown Instruments, Inc., 1201 St. Andrews Road, Columbia, SC 29210 803/798-8070  
**SOUTH DAKOTA** Cost Reduction Services, 3142 Hennepin Ave., So. Minneapolis, MN 55408 612/822-2119  
**TENNESSEE** W. A. Brown Instruments, Inc., 733 Emory Valley Road, Oak Ridge, TN 37830 615/482-5761  
**\*TEXAS** U. S. Data Engineering, 4241 Proton Road, Dallas, TX 75240 214/661-9633  
**TEXAS (El Paso Area)** BFA Corp., 532 Amador Ave., Las Cruces, NM 88001 505/523-0601  
**TEXAS (Houston Area)** Data Marketing Associates, Inc., 3330 Bering Dr., Houston, TX 77057 713/780-2511  
**UTAH** The Thorson Company, 3691 West 1987 South, Salt Lake City, UT 84104 801/973-7969  
**\*VERMONT** J. & J. Associates, Inc., 225 East Street, Winchester, MA 01890 617/729-5770  
**\*VIRGINIA** Intron Corp., 1830 Baclick Road, Suite 306, Springfield, VA 22150 703/569-1502  
**WASHINGTON** The Thorson Company, One Lake Bellevue Drive, Bellevue, WA 98005 206/455-9180  
**\*WEST VIRGINIA** Demco Data Equipment Corp., 25 Skippack Pike, Suite 107, Ambler, PA 19002 215/542-9876  
**WISCONSIN** Resource Data Systems, 801 Skokie Boulevard, Northbrook, IL 60062 312/564-5440  
**WYOMING** The Thorson Company, 5290 Yale Circle, Denver, CO 80222 303/759-0809

## INTERNATIONAL DISTRIBUTORS

- EUROPE** Techexport, Inc., 139 First Street, Cambridge, MA 02141 617/661-9424  
**Belgium** Noron S. A., Avenue Emile Zola 53, Bte. 10, 1030 Brussels, Belgium 02-242 36-04  
**France** Tech Data, 90 Avenue Albert 1er, 92500 Rueil Malmaison, France 749-49-37  
**Greece** Infodata Computer Systems, 5 Koniari St., Athens 601 642-1368  
**Italy** Technitron, 20 Via B. Mangili, 00197 Roma, Italy 805-647/872-457  
**The Netherlands** Schreiner Electronics, Rijsenburgerweg 27, Poeldijk, The Netherlands 01749-7640  
**Spain** Sistemas de Organizacion Mecanizada S.A., SOMSA, Los Vergos, 56 bis, entlo. 1.a Barcelona 17 Spain Telephone 204 17 43  
**Sweden** Telesinstrument AB, P.O. Box 490, Maltesholmsvagan 138S, 162-04 Vallingby 4, Sweden 08-380-370  
**Switzerland** W. Stolz A. G., Bellikonstrasse 218, CH-8968 Mutschellen, Switzerland 057-54655  
**United Kingdom** Techex, Ltd., Braidley House, St. Paul's Lane, Bournemouth, BH8 8HN, England 0202-293-115  
**West Germany** Techdata GmbH, Mainzer Strasse 80, D 5400 Koblenz, W. Germany (0261) 31025/6  
**AUSTRALIA & NEW ZEALAND** Anderson Digital Equipment, 1 Expo Court, P.O. Box 322, Mt. Waverley, Victoria, Melbourne, Australia 543-2077  
 ADE Sydney, 6 Angus Street, Meadowbank, N.S.W., Australia 808-1444  
 ADE Brisbane, 10 Florentine Street, Chermside, Qld., Australia 59-6436  
 P.O. Box 43-119, Wainuiomata, Wellington, New Zealand 64-4585  
 P.O. Box 15-204, New Lynn, Auckland, New Zealand 814-9385  
 P.O. Box 16, Charnwood, Australia 2615 58-1811

- CANADA** Datamex, Ltd., 785 Avenue Lajoie, Dorval, Quebec H9P 1G7 514/636-9774  
 1750 Courtwood Cres., Suite 314, Ottawa, Ontario K2C 2B5 613/224-1391  
 14 Leswyn Road, Toronto, Ontario M6A 1K2 416/787-1208  
 420-890 West Pender Street, Vancouver, British Columbia V6C 1J9 604/684-8625

- CENTRAL & SOUTH AMERICA & CARIBBEAN** American Business Systems, P.O. Box 88220, Atlanta, GA 30338 404/394-9603  
**Mexico** TCC, S.A., C.V., Zitacuaro #9-A, Colonia, Del Valle, Monterey, N.L., Mexico 564-876

- FAR EAST** Computers International, 3780 Wilshire Boulevard, Los Angeles, CA 90010 213/382-1107  
**Hong Kong** Armitage Associates Ltd., Suite 3-7, 105 Tomochy Road, Hong Kong 5-742211  
**Japan** Computers International Japan Limited, MKC Shinsen Building, 20-22 Shinsen Cho, Shibuya-ku, Tokyo, Japan (03) 463-9921  
**Taiwan** Syscom Computer Engineering Co., P.O. Box 48-130, Taipei, Taiwan 02-7026284

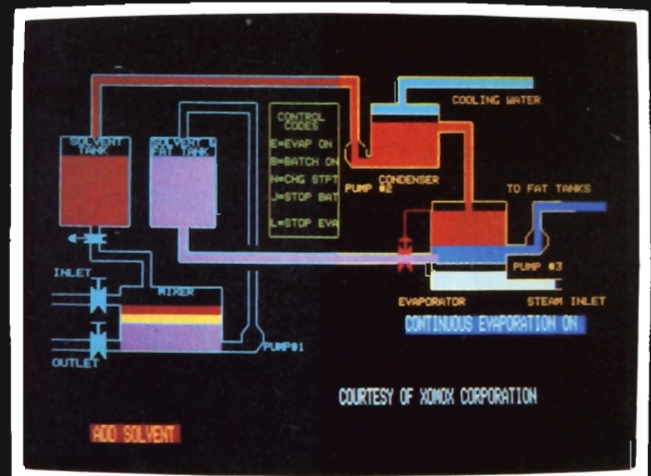
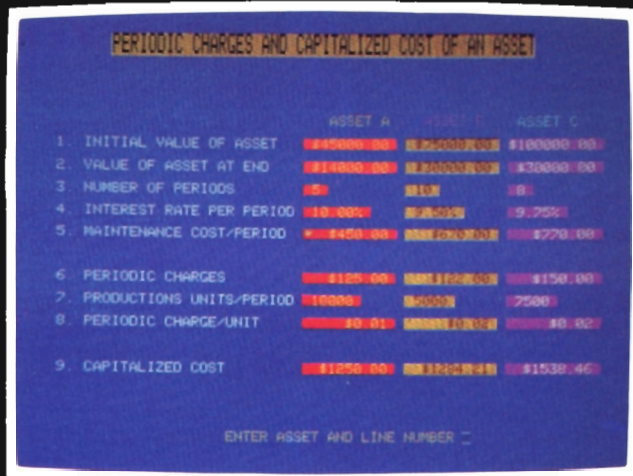
- MIDDLE EAST** ISC Middle East, P.O. Box 48541, Atlanta, GA 30362 404/581-0234

- Iran** Iran Digital Equipment Corp., 222 Building, Karimkhan-zand Ave., Tehran, Iran Telephone 891148  
**Israel** KDM Electronics Ltd., 14 Karilbach St., Tel Aviv, Israel 266-291  
**Kuwait** W. J. Towell & Co., Computer Division, P.O. Box 75, Kuwait Telephone 438 180/1/2  
**Lebanon** Medco, P.O. 11-6274, Dora, Beirut, Lebanon Telephone 221731/260110  
**Saudi Arabia** Jamjoom International Corp., C. R. 7425-P.O. Box 214, Jeddah, Saudi Arabia Telephone 27790 Telex: 401718  
 Jamjoom International Corp., P.O. Box 1230, Riyadh, Saudi Arabia Telephone 25083-39732 Telex: 201523

For sales and service in other countries contact ISC headquarters in Norcross, GA., U.S.A.

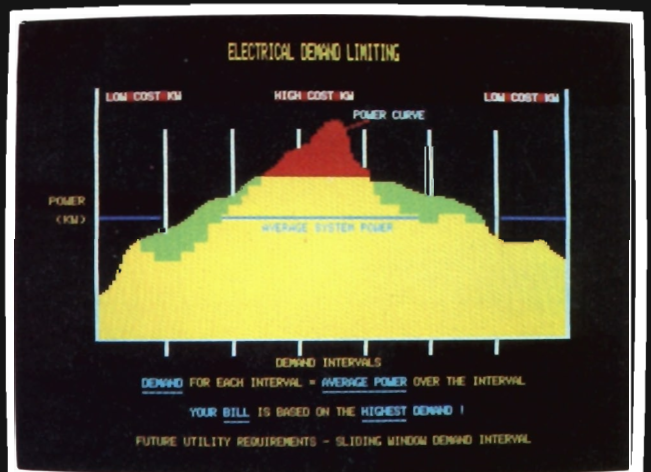
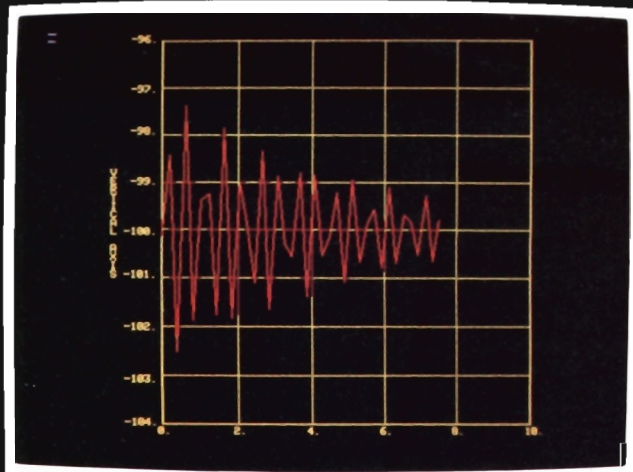
\*Service contract available in these cities plus San Francisco, CA. Consult factory for additional information.

# Typical Graphic and Alphanumeric Applications



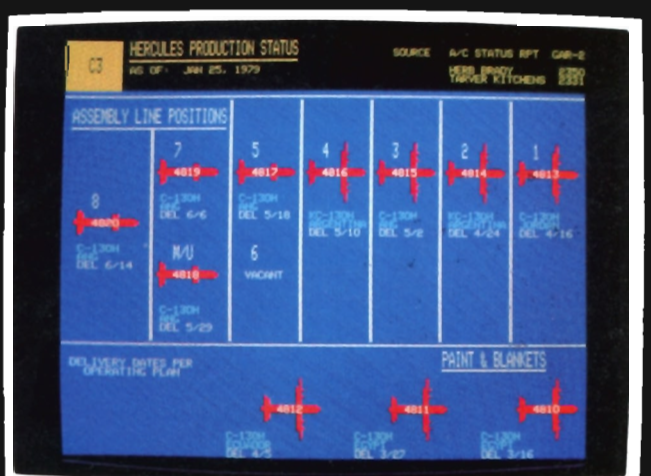
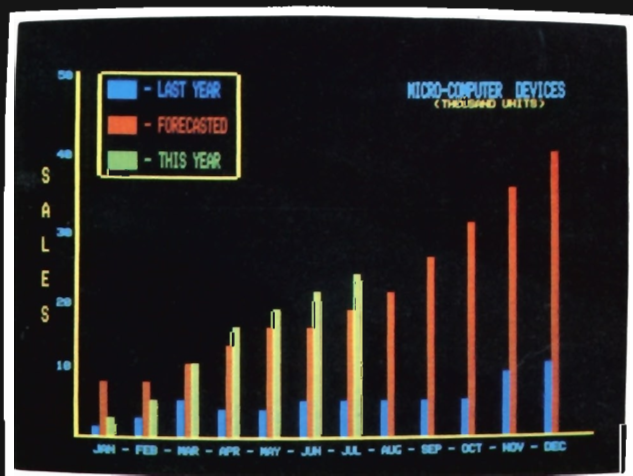
## Financial Analysis

## Process Control



## High Resolution

## Energy Management



## Sales Chart

## Management Information



Front Cover: Intecolor 8351 features sophisticated color graphics in a compact, attractively styled desktop computer.

8063: Desktop computer with color graphics display includes CP/M operating system and Microsoft® Business BASIC on floppy disks.

8301H: ISC high resolution color graphics is the cost-effective approach to applications requiring more critical picture definition.



Intelligent Systems Corp.

Intecolor Drive/Technology Park/Atlanta  
 Norcross, Georgia 30092  
 Telephone: 404/449-5961 TWX: 810/766-1581