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INTER-AMERICAN INSTITUTE FOR
COOPERATION ON AGRICULTURE (IICA)

Centro Interamericano de
Documentación e
Información Agrícola
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AGRICULTURAL DEVELOPMENT THROUGH COMMUNICATIONS

Project to Upgrade IICA's Publishing and Video Production Capabilities

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May, 1990

INTER - AMERICAN AGRICULTURAL DOCUMENTATION
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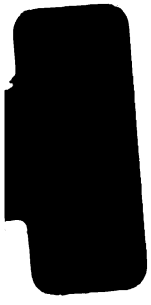

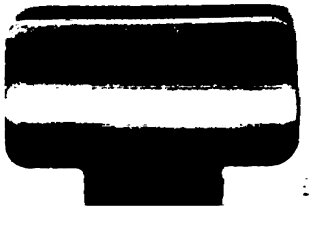

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IICA AND COMMUNICATIONS FOR AGRICULTURAL DEVELOPMENT

Since its inception in 1942, the Inter-American Institute for Cooperation on Agriculture (IICA) has been dedicated to stimulating agricultural development and improving rural well-being throughout the Americas, principally Latin America and the Caribbean. From the beginning, the production and dissemination of technical and educational materials has been an important facet of IICA's work. Only through the accesible, timely and attractive publication of its programs, projects and numerous other activities (seminars, symposia, networking between governmental agencies and technical specialists, newsletters) can IICA demonstrate its technical accountability to its Member States, the Inter-American Board of Agriculture, and the Permanent Observer Countries of IICA.

Over the years, IICA has produced more than 90 high-quality text books, primarily in Spanish, for students, professors, and technicians/extensionists in Latin America and the Caribbean. As of 1990, IICA produces five different technical monograph series, a world-renowned quarterly journal *(Turrialba)*, numerous technical bulletins and newsletters, official and administrative documents series, the annual report (in Spanish and English), and several informative brochures directed to the general public, as well as all internal printed materials (stationary, envelopes, folders, diplomas, certificates, business cards, posters). Each year, the in-house editorial and print shop facilities of IICA produce around 10 million printed pages, and distribute more than 15,000 IICA publications around the hemisphere and the world.

The last major purchases of publications-related equipment were made before 1980, with the help of Kellogg Foundation grants. With the advent of the desk-top publishing revolution, IICA must "re-tool" to maintain the generally acclaimed high quality of all its publications. Only one desk-top system is currently in use, and print shop equipment is now pushed beyond its capacity to produce the four-color publications IICA increasingly needs; 1970s equipment is failing to meet the publication demands of the 1990s (see Annexes 1, 2, 3).

But in 1990, IICA does not only produce printed materials. The communications capacity of video productions is just beginning to be tapped. Their utility and effectiveness in the more than 20 training courses offered by IICA for agricultural

journalists, teachers, extentionists and rural development groups (especially those focusing on rural women and youth) have been clearly recognized. Now IICA needs the necessary equipment to produce them capably (see Annexes 4, 5).

Excellence in quality and efficient production of both publishing and video communications resources will be mandatory for the success of the Plan of Joint Action for Agricultural Reactivation in Latin America and the Caribbean (PLANLAC), approved by the ministers of agriculture in 1989, and now underway. The PLANLAC is the banner under which all IICA cooperation actions will be carried out in the coming years, and the communications materials which will make it known to its intended beneficiaries must be produced with the utmost expediency.

ANNEX 1: Desk-Top Publishing Equipment

1. Computers

5 IBM Personal System/2

Model 50 Z

OR EQUIVALENT

2. Laser Printers

5 IBM Personal Pageprinter

(Post Script capacity)

OR EQUIVALENT

3. Scanner

2 Flatbed Scanners

(Datacopy Model 830)

OR EQUIVALENT

(a.1)

Right for today, ready for tomorrow

IBM Personal System/2 Model 50 Z

All work, no wait

With IBM Personal System/2® Model 50 Z, the "Z" means "zero wait states"—which translates into faster, more efficient personal computing for you. This new PS/2™ gives you all the advantages of the popular Model 50 and many extras: faster processing...greater storage capability... and more room to grow.

Whether you use Model 50 Z as a stand-alone system or make it part of your office network, you'll be set to push productivity to impressive heights.

Handle more than one task at a time. Model 50 Z's 80286 microprocessor, one megabyte of memory, and 30MB or 60MB fixed disks add up to plenty of computing power. And you can apply that power to support advanced productivity programs of every kind.

What's more, you're not confined to single applications with this system. You can take advantage of IBM Operating System/2™—and Model 50 Z's Micro Channel™ architecture—to handle more than one task at a time.

You can, for example; carry out a data base search while creating a report with a word processing program. Keep several accounting files active in memory—and quickly switch among them to compare bottom lines. Build graphics and text with two separate programs and view both on-screen at the same time.

Take advantage of resources beyond your workstation. With Model 50 Z and your choice of PS/2 connectivity options, you can make use of computing resources throughout your company. You can send a document to be printed on your network's printer while accepting data from a colleague across the hall. Or even hold communications sessions with more than one host computer at a time.

Highlights

Like all PS/2 models, Model 50 Z is based on advanced technology that pays off in superior performance and provides a platform for future growth. This PS/2 also arrives with a wealth of integrated features and functions that give you a versatile computing solution right from the start.

IBM

The Bigger Picture

IBM Personal System/2 Model 50 Z at a glance

Machine numbers	**8550-031**	**8550-061**
80286 microprocessor	10 MHz, 0 wait states	10 MHz, 0 wait states
Optional 80287 Math Co-Processor	10 MHz	10 MHz
Permanent memory (ROM)	128KB standard	128KB standard
Memory (RAM)		
Standard	1MB (85ns)	1MB (85ns)
Maximum on system board	2MB	2MB
System maximum	16MB	16MB
Integrated functions	Video Graphics Array (VGA) and display port, serial port, parallel port, pointing device port, keyboard port and diskette controller, clock/calendar	
System expansion	Three available expansion slots	
Operating systems	DOS 3.30, IBM Operating System/2	
Storage		
1.44MB 3.5-inch diskette drives		
Standard	1	1
Maximum	2	2
Fixed disk		
Standard	30MB (39ms)	60MB (27ms)
Maximum	60MB	60MB
Optional	Either a second 1.44MB diskette drive or IBM 5.25" External Diskette Drive; IBM 3363 Optical Disk Drive, IBM 6157 Streaming Tape Drive	
Text/graphics support	VGA supports CGA, EGA and MCGA modes and provides up to 256 colors (from a palette of over 256,000) and 64 shades of gray (monochrome)	
Display modes	All CGA and EGA modes plus: 320 x 200 pels x 256 colors—all points addressable 640 x 480 pels x 16 colors—all points addressable 9 x 16 character box—16 colors (text)	
Keyboard	101 keys, including 12 function keys, 3 lighted mode indicators; 6-foot coiled cable	
Supported displays	IBM Personal System/2 Color Displays 8512, 8513 and 8514; IBM Personal System/2 Monochrome Display 8503	
Supported printers	IBM Proprinter™ family, IBM Quietwriter® printers, IBM Wheelprinters, IBM Pageprinter, IBM Color Jetprinter	
Communications support	IBM Token-Ring Network Adapter/A, IBM PC Network Adapter II/A, IBM PC Network Baseband Adapter/A, IBM 3270 Connection, IBM System 36/38 Workstation Emulation Adapter, IBM Dual Async Adapter/A, IBM Multi-Protocol Adapter/A, IBM 300/1200 Internal Modem/A, IBM Realtime Interface Co-Processor Multiport/2	
Power supply	94-watt worldwide autosensing and autoswitching	
Size	Approx. 5.5" H x 14" W x 16" D (140mm x 360mm x 420mm); 21 lbs. (9 kg)	

graphics capabilities—plus built-in support for your display, printer, keyboard, even for a modem and pointing device. All these features are packed into just a few components, making Model 50 Z both streamlined and reliable.

Built-in Video Graphics Array (VGA) capabilities provide videolike clarity for business graphics, text, even digitized photos. These advanced capabilities result in a screen image that's brilliant and natural looking. VGA also supports CGA, EGA and MCGA graphics and text.

A palette of over 256,000 colors plus 64 shades of gray is built in to add interest and impact to your reports and presentations. Up to 256 colors can be viewed at a time—and colors automatically convert to up to 64 shades of gray on a monochrome display.

Three expansion slots let you customize Model 50 Z as your business grows.

Switchless setup means all you do is connect your system and begin. Convenient ports and plugs keep things simple.

Four superior analog displays offer you a choice of price and function. Whether you need crisp text or vivid, detailed color graphics, you'll find the right display to suit your work and your budget.

Wide range of communications options makes Model 50 Z right for use within a number of networks and larger system environments.

What you get

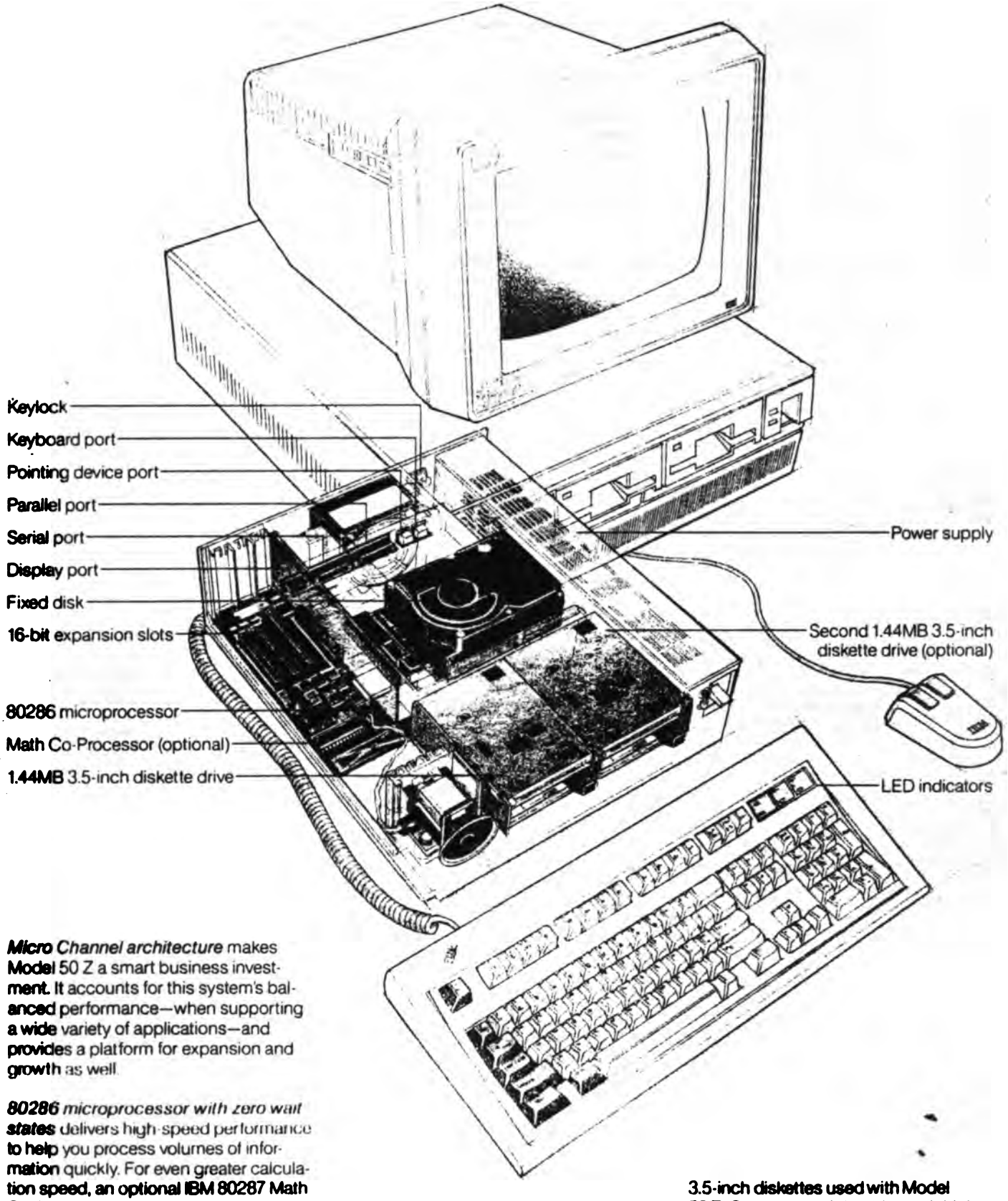
IBM Personal System/2 Model 50 Z is packaged in two cartons, one containing the system unit. The other contains:

- One-page customer setup sheet
- System unit power cord
- Keyboard and cable
- Quick reference manual
- System reference diskette with tutorial and diagnostics
- Technical directory

Options

Model 50 Z supports a wide array of optional devices - including many of the peripherals currently available for IBM Personal Computers. What follows is a listing of some of the options available for Model 50 Z:

- IBM Personal System/2 80287 Math Co-Processor (10 MHz)
- IBM 80286 Memory Expansion Option



Micro Channel architecture makes Model 50 Z a smart business investment. It accounts for this system's balanced performance—when supporting a wide variety of applications—and provides a platform for expansion and growth as well.

80286 microprocessor with zero wait states delivers high-speed performance to help you process volumes of information quickly. For even greater calculation speed, an optional IBM 80287 Math Co-Processor can be installed.

1MB user memory—expandable to 2MB on the system board and to 16MB with memory expansion options—gives you plenty of room to work with lengthy programs.

30MB or 60MB fixed disks provide ready-access storage for more than 15,000 or 30,000 pages' of information.

1.44MB diskette drive lets you easily load files and programs stored on the 3.5-inch diskettes used with Model 50 Z. Compact and durable, each high-density diskette can hold as many as 720 pages' of information.

Integrated functions give you significant capability from the start. Model 50 Z comes ready with advanced color and

IBM 80286 Memory Expansion Kit
IBM Personal System/2 0-8MB Expanded Memory Adapter/A
IBM 0.5MB Memory Module Kit
IBM 2MB Memory Module Kit
IBM Personal System/2 Mouse
IBM Personal System/2 5.25" External Diskette Drive Model 4869-001
IBM 60MB Fixed Disk Drive
IBM Personal System/2 Data Migration Facility
IBM 6157 Streaming Tape Drive
IBM 3363 Optical Disk Drive
IBM 300/1200 Internal Modem/A
IBM Dual Async Adapter/A
IBM Multi-Protocol Adapter/A
IBM 3270 Connection
IBM System 36/38 Workstation Emulation Adapter
IBM Token-Ring Network Adapter/A
IBM PC Network Adapter II/A
IBM PC Network Baseband Adapter/A
IBM Personal System/2 3117 Adapter/A
IBM Personal System/2 High Speed Adapter/A

Warranty/Service

Every IBM product is built to meet high standards of quality and reliability. So you can count on Model 50 Z to perform smoothly year after year.

Model 50 Z is backed by a one-year limited warranty. And extended service terms are available from IBM and from IBM Authorized Advanced Products Dealers.

With an IBM Maintenance Agreement, you can arrange for on-site service.

IBM, Personal System/2, and Quietwriter are registered trademarks of International Business Machines Corporation.
PS/2, Operating System/2, Micro Channel and Proprinter are trademarks of International Business Machines Corporation.
8½ x 11-inch, double-spaced typewritten pages.

IBM Personal System/2 Model 50 Z features

Feature	Function	Benefit
Intel 80286 microprocessor	Processes data at a clock speed of 10 MHz	Enhanced performance contributing to greater system throughput
Zero wait states	Give processor instant access to information from memory	Faster, more efficient personal computing
128KB of permanent memory	Includes security features and Advanced BIOS functions	Data and program security; support for concurrent operations
1MB of memory (RAM), expandable to 16MB with expansion options	Provides electronic workspace for programs and files, and/or for multiple applications	Rapid data processing; support for advanced applications, including multitasking
Micro Channel architecture	Delivers rapid processing and throughput	Fast, efficient, balanced system performance; foundation for future growth
Integrated functions and streamlined design	Pack more capabilities into fewer components; reduce footprint; eliminate internal cables	Easy setup, operation and expansion; better price/performance; enhanced reliability
Internal fixed disk drives	Provide 30MB or 60MB of storage for up to 15,000 or 30,000 pages[1] of information, 27ms or 39ms average access (based on model); user-selectable software disk cache memory; 1:1 disk interleave factor	Faster, more convenient access to programs and data than with diskettes; support for advanced applications and data bases; enhanced throughput via reduced storage and retrieval time on fixed disk
1.44MB 3.5-inch diskette drive	Stores up to 720 pages[1] of information on a double-sided diskette; second diskette drive optional	High-density storage; low-profile drive
3.5-inch diskettes	Protect media in hard plastic enclosure	Smaller, more portable; reliable storage
Built-in VGA capabilities	Include up to 256 colors (from a palette of over 256,000) plus 64 shades of gray (monochrome); support for new modes of display	High-quality, high-detail graphics and text; improved on-screen readability
IBM PS/2 Enhanced Keyboard	Has 101 keys, including 12 function keys and 3 lighted mode indicators	Simplified command entry; less chance of accidental printing or erasing
Network and host emulation capabilities	With the appropriate hardware and software, offer network services and connection to larger systems	Shared hardware and software; electronic mail capability; workgroup productivity benefits; access to mainframe functions, files and applications
5.25-inch external diskette drive option	Provides capability to interchange data and software with systems that use 5.25-inch diskettes	Compatibility with IBM PC 360KB diskettes
200MB optical disk drive option	Writes once, reads many times; holds up to 100,000 pages[1] of information on one cartridge	Fixed disk backup; large permanent storage; media removable for archiving
Tape drive option	Saves/restores data for using systems	Fast, convenient save/restore and data exchange between systems
IBM support and service	Assure parts and service nationwide; offer 12-month limited warranty	Customer purchase backed by IBM support and service

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IBM Personal Pageprinter

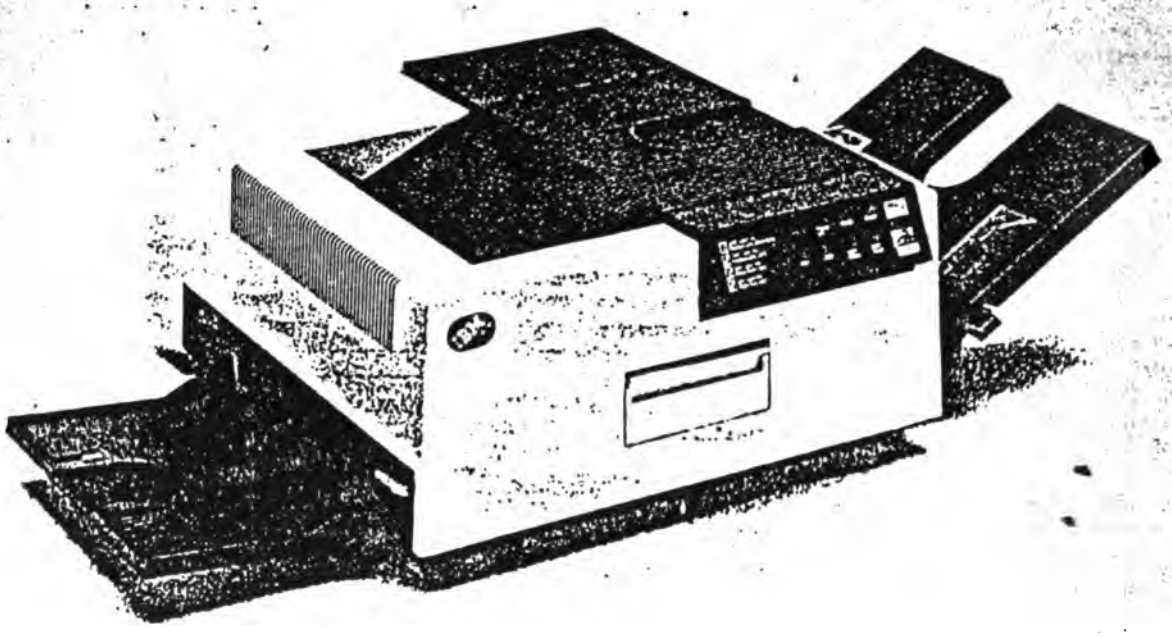
Speed, versatility, quality and convenience have made IBM personal printers leaders in a crowde field. A key member of the IBM printer family is the IBM Personal Pageprinter with its own printe controller and adapter software which reside inside the computer. Versatile features are combine into a printing subsystem that produces crisp graphics and near-typeset quality text for a variety desktop publishing, word processing and spreadsheet applications. All this and PostScript® too.

The IBM Personal Pageprinter is a desktop, all-points-addressable (APA) laser printer...which attaches to the IBM Personal System/2™ Model 30, Model 50, Model 60, Model 80, Personal Computer XT™ Model 286 and selected Personal Computer/AT® models... and provides 300 dots-per-inch print density... on pages produced at up to six pages per minute.

The Personal Pageprinter prepares high-quality pages with denser, more uniform blacks... It also produces the first copy sooner. The printer is exceptionally quiet during operation... so it's eminently suitable for offices with a requirement for high-quality printed documents.

The Personal Pageprinter Adapter Program, including the PostScript interpreter, executes on the Personal Pageprinter Adapter, a high-speed controller and video interface containing 2.5 megabytes of RAM memory... the program provides 43 PostScript typeface styles, all printer controls and the page description language called PostScript.

Another feature that sets the Personal Pageprinter apart: its controller and adapter software both reside inside the host... this pays off in performance advantages, including producing more total pages in less time.



IBM

Model 50, 60 & 80 Adapter now available

ghlights

ere's a quick look at what the M Personal Pageprinter, its ntroller and page description nguage have to offer.

ser printer with all-points-ddressable printing at resolutions up to 300 x 300 dots per uare inch.

ages with denser, more iform blacks for high-quality inted documents and camera-ady copy.

mpatible with IBM Personal stem/2 Model 30, Model 50, odel 60, Model 80, IBM Personal mputer XT Model 286, and rsonal Computer/AT Models 99, 239, 319 and 339.

mpatible with application ograms (IBM and non-IBM) oviding numerous applications r business and personal use. ditional information on software mpatibility is provided in this chure.

tomatic feeding of cut tionery of sizes ranging up to S Legal, from a 150-sheet paper ay with output sequenced or nsequenced.

ted speed of up to 6 pages er minute. Throughput is pendent on host system plications and the complexity of he page to be printed.

exibility to print labels, nsparencies and envelopes, hich can be fed through the inter manually.

Extremely quiet operation and mall footprint suitable for office desktop use.

Customer setup and ease of peration lets you be productive quicker.

Printer controller and adapter software both reside inside the PC increasing performance and producing more total pages in less time.

High speed video interface provides for moving data faster from the computer to the printer and increased performance.

Printing of mixed text/graphics documents via an implementation of the widely accepted page description language, PostScript, by Adobe.

Emulation of IBM 4202 Proprinter™ XL provides the ability to carry out workstation (ASCII) printing functions and support existing PC applications in addition to its use as a PostScript printer.

43 Typeface styles included with the adapter program: 13 integrated with the PostScript interpreter, and an additional 30 downloadable typeface styles available. Typeface style usage is dependent on the application programs used.

Font caches provide improved performance using rastered text characters which can be saved and restored for later use.

What you need

The IBM Personal Pageprinter must be attached to the IBM Personal Pageprinter Adapter or Adapter/A installed in an IBM Personal System/2 Model 30, Model 50, Model 60, or Model 80, an IBM Personal Computer XT Model 286, or the IBM Personal Computer/AT Models 099, 239, 319 or 339. The printer and controller require that the IBM Personal Pageprinter Adapter Program and IBM PC-DOS 3.30 or higher be installed.

What you get

The IBM Personal Pageprinter comes with:
- Guide to Operations
- Printer power cord
- Paper input and exit trays
- Initial supply items (Toner cartridge and Photoconductor kit with cleaning unit)

The IBM Pageprinter Adapter or Adapter/A comes with:
- Guide to Operations
- 2-meter cable (adapter to printer)
- Wrap plug for diagnostics
- Diagnostic diskette

The IBM Personal Pageprinter Adapter Program comes with:
- User Guide
- Program Diskettes (either 3.5" or 5.25") containing the PostScript interpreter, 43 typestyles and printer driver.

Ordering Information

Contact your certified IBM Authorized Advanced Products Dealer or your local IBM Marketing Representative for ordering information. The printing subsystem described in this brochure includes:
- IBM 4216 Personal Pageprinter Model 020 - P/N 90X6300
- IBM Personal Pageprinter Adapter– P/N 75X8248 (AT, XT286, PS/2 Model 30)
- IBM Personal Pageprinter Adapter/A– P/N 75X8267 (PS/2 Models 50, 60, 80)
- IBM Personal Pageprinter Adapter Licensed Program
  - P/N 6280182 for 3.5 inch diskettes (Model 30)
  - P/N 6280184 for 3.5 inch diskettes (Models 50, 60, 80)
  - P/N 6280229 for 5.25 inch diskettes (AT, XT286)

IBM Personal Pageprinter Printing Subsystem at a glance

Description	A desktop laser page printer Video interface adapter Licensed adapter program
Weight	37.5 lbs. (17 kg)
Dimensions	Height: 8.4" (212 mm) Width: 16.5" (418 mm) Depth: 17.7" (449 mm)
Power	Low voltage (110–127 VAC: 50 to 60 Hz) 6-foot power cable standard
Acoustics	52 dBa printing, 48 dBa standby
Paper Width	Cut sheets: 3.9–8.5" (98.4–216 mm) Envelopes: 3.9–6.9" (98.4–176 mm)
Paper Length	Cut sheets: 7.4–14.0" (187–356 mm) Envelopes: 7.4–9.8" (187–250 mm)
Printing Width	8.0" (203 mm)
Paper Weight	16–24 lb. bond (See note below)
Sheet feed	150-sheet tray input Sequenced or unsequenced output Manual feed capability
Graphics	All-points-addressable, up to 300x300 DPI
Interface	Adapter (installed in host computer) – 10 MHz Motorola M68000® Processor – 0.5 Mb of program memory (RAM) – 2.0 Mb of page buffer memory – 16 Kb of EPROM (boot code & diag.) – High-speed video interface – 2-meter cable Adapter Licensed Program – PostScript interpreter with 43 typeface styles – IBM 4202 Proprinter XL emulation
System Units	IBM Personal System/2 Models 30, 50, 60, 80 IBM Personal Computer XT Model 286 IBM Personal Computer/AT Models 099, 239, 319 & 339
Operating System	IBM PC-DOS 3.30 or higher
Printer Supplies	Toner Cartridge – 6/ctn (P/N 6190603) Photoconductor Unit Kit (P/N 6190604) Cleaning Unit Kit (P/N 6190605) IBM Multi-System Paper – letter (8 reams) (P/N 7034548) – legal (8 reams) (P/N 7034550)

NOTE: For additional information on recommended paper characteristics, refer to the IBM Page Printers Paper Reference Booklet G544-3178 (P/N 1685710).

IBM Personal Pageprinter Compatibility Guide

Software Compatibility Table
This table explains the compatibility of the IBM Personal Pageprinter and selected application software. Testing by the software publisher forms the basis for the compatibility results indicated, using a specific version of the software package, operating on one or more members of the IBM Personal Computer Family or the IBM Personal System/2 Model 30 running under IBM PC-DOS 3.30. Compatibility may not be the same for all software versions or computer models.

The software listed in this brochure is not necessarily an exhaustive list of software products that may be compatible with the IBM Personal Pageprinter.

This information does not imply any lack or limitation on the part of the software application. However, the printer-related commands available in the software application may not take advantage of all of a printer's capability and features.

The user should contact the software publisher for the specific version/release of the software required and the most recent information regarding support for the IBM Personal Pageprinter.

Warranties and Representations
Representations relating to software compatibility with the IBM Personal Pageprinter are provided to IBM by various software publishers. The software publishers should be contacted directly for specific questions. Warranty, if any, is provided by the software publisher. IBM MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Address any questions pertaining to warranty coverage to the relevant software publisher.

Please contact the nearest certified IBM Authorized Advanced Products Dealer, your IBM Marketing Representative, or software publisher for additional information concerning compatibility.

The information presented herein is current through 10/16/87. IBM, other equipment manufacturer, or non-IBM logo software publisher may choose to modify or not modify the products. Such modifications may affect compatibility. IBM reserves the right to update this brochure.

The following application programs are compatible with the IBM Personal Pageprinter using PostScript commands; all PostScript operators issued by the software will be correctly performed by the printer.

Software Title	Publisher	#Typeface Styles	Point Sizes Available per Typeface Style
AutoCAD®	AutoDesk, Inc.	N/A	N/A
CyberMerge HIP™	Cyber Publishing, Inc.	31	Unlimited
CyberMerge TARGA™	Cyber Publishing, Inc.	31	Unlimited
CyberType™	Cyber Publishing, Inc.	31	Unlimited
First Impression™	Megahaus Corp.	Unlimited	4 through 72
GEM® Desktop Publisher™	Digital Research, Inc.	Unlimited	6 through 100
GEM® Draw™ Plus	Digital Research, Inc.	Unlimited	7,10,14,20,28,36,72
GEM® Graph™	Digital Research, Inc.	Unlimited	10 through 100
GEM® WordChart™	Digital Research, Inc.	Unlimited	14,20,28,36,48,72
GML/PC™	Command Technology Corp.	43	Unlimited
Harvard™ Graphics	Software Publishing Corp.	3	Unlimited
Iprint™	Indigo Software, Ltd.	43	6,8,10,12,14,18,24,30
Microsoft® Chart	Microsoft Corp.	12	0.5 through 120
Microsoft® Windows	Microsoft Corp.	35	6,8,10,12,14,18,24,30,36,48
Microsoft® Word	Microsoft Corp.	13	8,10,12,14,18,24
PageMaker®	Aldus Corp.	Unlimited	4 through 127
PC Paintbrush®+	ZSoft Corp.	N/A	N/A
PFS:®First Publisher	Software Publishing Corp.	12	7,9,10,12,14,18,24,36,48
Publisher's Paintbrush™	ZSoft Corp.	N/A	N/A
Q & A™ Write™	Symantec Corp.	Unlimited	Unlimited
Quattro™	Borland International	10	Total of 4 user-specified
Samna™ Plus IV	Samna Corp.	29	Unlimited
Samna™ Word IV	Samna Corp.	29	Unlimited
Sprint®	Borland International	Unlimited	Unlimited
Total Word™	Lifetree Software, Inc.	41	6,7,8,9,10,11,12,14,18,24,30
WordPerfect®	WordPerfect Corp.	16	Total of 5 user-specified
Xerox Ventura Publisher®	Ventura Software, Inc.	Unlimited	1 through 254
XyWrite® III Plus	XyQuest, Inc.	43	Unlimited
85 mm Express™	Business and Professional Software, Inc.	2	Software determined

NOTE: N/A = Not Applicable

The publishers of the following application programs have represented to IBM that they will take reasonable steps to make a future release of their listed application programs compatible with the IBM Personal Pageprinter using PostScript commands. These publisher representations are provided for information only and the publisher should be contacted directly for more specific information on future compatibility before a decision is made based upon these representations.

Software Title	Publisher	Software Title	Publisher
Byline™	Ashton-Tate Corp.	PC-Write®	Quicksoft, Inc.
Lotus® Freelance® Plus	Lotus Development Corp.	PFS:®Professional Write	Software Publishing Corp.
Lotus® Graphwriter® II	Lotus Development Corp.	WordMARC® Composer+	MARC Software International, Inc.
Lotus® Manuscript™	Lotus Development Corp.	WordStar® 2000 Plus	MicroPro International Corp.

rranty/Service

y. IBM Personal Pageprinter is designed and manufactured to meet IBM's high standard of quality and reliability.

n IBM Personal Pageprinter and Adapter is backed by a one-year limited warranty. Post-warranty service options are available. For additional anty information, contact your certified IBM Authorized Advanced Products Dealer or your local IBM Marketing Representative.

IBM Personal Pageprinter Adapter Program is licensed under terms and conditions of the IBM Program License Agreement. A copy of the ement is included in the program package. The program warranty is 3 months.

Trademark Acknowledgement

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osoft is a Registered Trademark of Microsoft Corporation
000 is a Registered Trademark of Motorola, Inc.
eMaker is a Registered Trademark of Aldus Corporation
Paintbrush is a Registered Trademark of ZSoft Corporation
Write is a Registered Trademark of Quicksoft, Inc.
: is a Registered Trademark of Software Publishing Corporation
tScript is a Registered Trademark of Adobe Systems, Inc.
int is a Registered Trademark of Borland International
rdMARC is a Registered Trademark of MARC Software International, Inc.
rdPerfect is a Registered Trademark of WordPerfect Corporation
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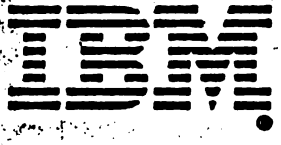

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International Business Machines Corporation

Information Systems Group

Dept. KPE

900 King Street

Rye Brook, NY 10573

Printed in the United States of America

10-87

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THE PROSCAN SERIES 800

DATACOPY

MODEL 830 FLATBED SCANNER

High Quality Image Scanning The Model 830, the most affordable member of the ProScan Series, is at home with the most discerning users of desktop publishing systems. An able companion to the finest laser printers, the Model 830 is capable of extremely high-quality output.

High Resolution Model 830 provides resolutions from 75 to 300 dpi plus a special 300 by 600 mode for even greater image detail. This resolution is a perfect match for the most popular laser printers now in use for desktop publishing.

Outstanding Grayscale Response Six bits of gray provide 64 levels of information for picture perfect scanning. This number of gray levels exactly matches the reproduction capability of modern printing techniques.

Image Processing Scanned information may be modified by one of five halftone patterns, five levels of brightness control, three levels of contrast (Gamma or response curve) control. These controls give the publisher ultimate control over image quality. Further image manipulating controls include: 1) Resolution selection from 75 to 300 by 600 dots-per-inch in 9 steps to control image size; 2) Mirror image selection to quickly switch the image left to right; 3) Inverse image to reverse the image tones white to black.

Flatbed Scanning Technology Only flatbed scanning technology gives you the finest control in image placement, quality and convenience of operation. By not moving the original during the scan, alignment and rescanning are easy. Because the original is not touched by the scanning mechanism, three dimensional objects such as bound books and oversized originals can be scanned without fear of damage. Operated like most of the popular office copiers, the original is placed face-down on a glass platen and the cover is closed. The rest of the operation is controlled from the host computer.

Optional Sheet Feeder For those occasions when you need to automatically feed documents in sheet form, the optional Automatic Document Feeder (ADF) will handle up to 30 sheets per load. The ADF optimizes the Model 830 for use with application programs such as Datacopy's MacOCR, OCR Plus™ and MicroFax™ where automatic feeding increases efficiency. Use of the ADF does not reduce the Model 830's flatbed performance.

Easy To Learn And Use Users of the Model 830 do not need the mechanical dexterity of a neurosurgeon to successfully operate the scanner. Operated like most of the popular office copiers, the original is placed face-down on a glass platen and the cover is closed. The rest of the operation is controlled from the host computer.

Rugged Unlike most graphic arts scanners, the Model 830 does not require a special environment or need special installation. Treat it as you would a personal computer – protect it from extreme shock, vibration, dust and heat.

THE PROSCAN SERIES 800

DATACOPY

Model 830 with optional ADF

MODEL 830 SPECIFICATIONS

Page Scanning Speed (in seconds)

	Resolution 300	240	200	180
Line Art	14	11	9	9
4-bit Grayscale	30	28	28	28
6-bit Grayscale	60	N.A.	N.A.	N.A.

Scan Densities	(300x600), 300, 240, 200, 180, 150, 120, 100, 75	
	830	830 with ADF
Document Type	Cut sheet or bound	Cut sheet
Document Size		
Width	8.5" max	7.1" min, 8.5" max
Length	11" max	5.0" min, 14.0 max
Weight	6.6 lbs. max	10-24 lbs (per 500 sheets)
Margins	0.25" min	0.25" min
Input Capacity	Single Sheet	30 pages (typical)
Scannable colors	Black, Blue, Green, Red	
Drop-out colors	Yellow, light blue	
Acceptable Paper Colors	All common stationery and photocopier colors except dark red/black	
Scan width	8 inches	
Interface	Bi-directional, Centronics-like	
Image modification	Mirror, Invert	
Response (Gamma) control	3 curves	
Halftones	5 patterns	
Brightness Control	5 levels	
Physical		
Size	5.6" x 15.2" x 19.5"	7.4" x 15.2" x 19.5"
Weight	19.8 lbs	23.2 lbs
Power		
Voltage	110 +/– 20%	
Frequency	60Hz + 10%, –20%	
Consumption	95 Watts, max 220V international	105 Watts, max 220V international
Environment	Normal office conditions	

Toll-Free Hotline: 800-821-2898

Note: Specifications shown in this datasheet represent the capabilities of the Model 830 and not the system of which it may be a pa You are encouraged to review the overall system capabilities which are usually defined by the application program that controls the scanner. Not all specified capabilities of the Model 830 will necessarily be exercised by any single application program.

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ANNEX 2: Darkroom/Photomechanical Equipment

1. Photo Negative Processor

Loge Tek Model 26

OR EQUIVALENT

2. 1 Digital Light Indicator

OLEX model A1-970, 960

3. 1 Densitometer

X-Rite model 418

OR EQUIVALENT

Luis Valverde & Asociados Ltda.

f-g-h
fotomecánica

San Jose, 08 Noviembre 1989

Senores
INSTITUTO INTERAMERICANO DE COOPERACION
PARA LA AGRICULTURA (I.I.C.A.)
Presente

COTIZACION # 607

Presentamos a su consideracion nuestra oferta por un Procesadora de Pelicula, marca LOGE, modelo LogeTek 26, para ser instalada en sus talleres.

f)

CARACTERISTICAS PROCESADORA DE PELICULA LOGETEK 26

SISTEMA DE REVELADO
- Capacidad de tanque 18.93 litros
- Control de temperatura ajustable
- Regeneramiento automatico
- Ajuste independiente de rangos de oxidacion
- Capacidad del tanque de regeneramiento 28.39 litros
- Tiempo de revelado ajustable de 15 hasta 120 segundos

SISTEMA FIJADOR
- Capacidad de tanque 18.93 litros
- Control temperatura ajustable
- Regeneramiento automatico
- Capacidad.del tanque de regeneramiento 28.39 litros

SISTEMA DE LAVADO
- Capacidad 18.93 litros
- Circulacion del agua maximo durante la operacion 3.785 litros por minuto.

SISTEMA DE SECADO
- Control de temperatura ajustable

Miembro de AIGA ASOINGRAF

REQUERIMIENTO ELECTRICO
220V 60Hz

MATERIALES
- Pelicula, papel y quimico tipo RC disenados para proceso en alta temperatura y de rapido acceso.

TAMANO DEL MATERIAL
- Ancho: 7.62 cm. a 66.04 cm.
- Largo: 12.70 cm. a 6.09 m.
- Grosor: 0.004" a 0.007"

DIMENSIONES DE LA CASSETERA
- Ancho: 66.04 cms.
- Alto: 17.76 cms.
- Profundidad: 17.76 cms.

DESEMPENO ESPECIFICO
Para trabajar tanto en el cuarto oscuro como procesador de acceso rapido y trabaja tambien con luz normal junto con los equipos de fotocomposicion convencionales.

PRECIO CIF SAN JOSE:

$ 15.617,10 (Quince Mil Seiscientos Diecisiete Dolares con 10/100). VITAL

Entrega: 45/60 Dias

Vigencia de la Oferta: 15 Dias

Forma de Pago: Remesa Directa a:

LOGETRONICS CORP.
7001 Loisdale Road,
Springfield, Virginia 22150
E.U.A.

Luis Valverde & Asociados Ltda.
Apartado 24 1007 Reson de los Estudiantes
Tel. 21-05-89
Calle 11 Avenidas 8 y 10 San José, Costa Rica
Facsimile: 33 58-61
Cédula Jurídica: 3 102-055507-10
Responsable No. 11-0116-L-196-38

Orden de: Cotización (XX) Pedido ( )

22 de FEBRERO de 1990

Cliente I.I.C.A.

Dirección CORONADO

Condiciones de pago: CHEQUE A FAVOR DE GRAFITEC INTERNATIONAL INC.

Tiempo de entrega: 30 DIAS Vigencia de la oferta: 30 DIAS

Cantidad	Código	DETALLE	Precio Unidad	TOTAL
1	361TR	DENSITOMETRO DE REFLECCION Y TRASMISION MARCA X RITE MODELO 361 TR.		
		PRECIO F.O.B. FABRICA		$3,950.00

Subtotal $	$3,950.00
I.V.	------
Valor Total $	$3,950.00

Cliente

Representante

Luis Valverde & Asociados Ltda.
Apartado 24-1002 Pavas de los Estudiantes
Tel: 21-05-60
Calle 11 Avenidas 8 y 10 San José, Costa Rica
Facsimile: 33-58-61
Cédula Jurídica: 3-102-055597-10
Responsable No. 11-0118-L-198-38

Orden de: Cotización (XX) Pedido ( )

22 de Febrero de 19

Cliente I.I.C.A.

Dirección CORONADO

Conciciones de pago: CHEQUE A FAVOR DE GRAFITEC INTERNATIONAL INC.

Tiempo de entrega: 30 DIAS Vigencia de la oferta: 30 DIAS

Cant.	Código	DETALLE	Precio Unidad	TOTAL
1	AI980X	INTEGRADOR DE LUZ PARA CAMARA FOTOMECANICA MARCA QLEX MODELO AI980X CON CAPACIDAD DE 85 MEMORIAS.		
		PRECIO F.O.B		$1,265.00
		EN EL PRECIO SE ENCUETRA INCLUIDA LA INSTALACION.		

Sub-total ¢	$1,265.00
I.V.	--------
Valor Total ¢	$1,265.00

Vital

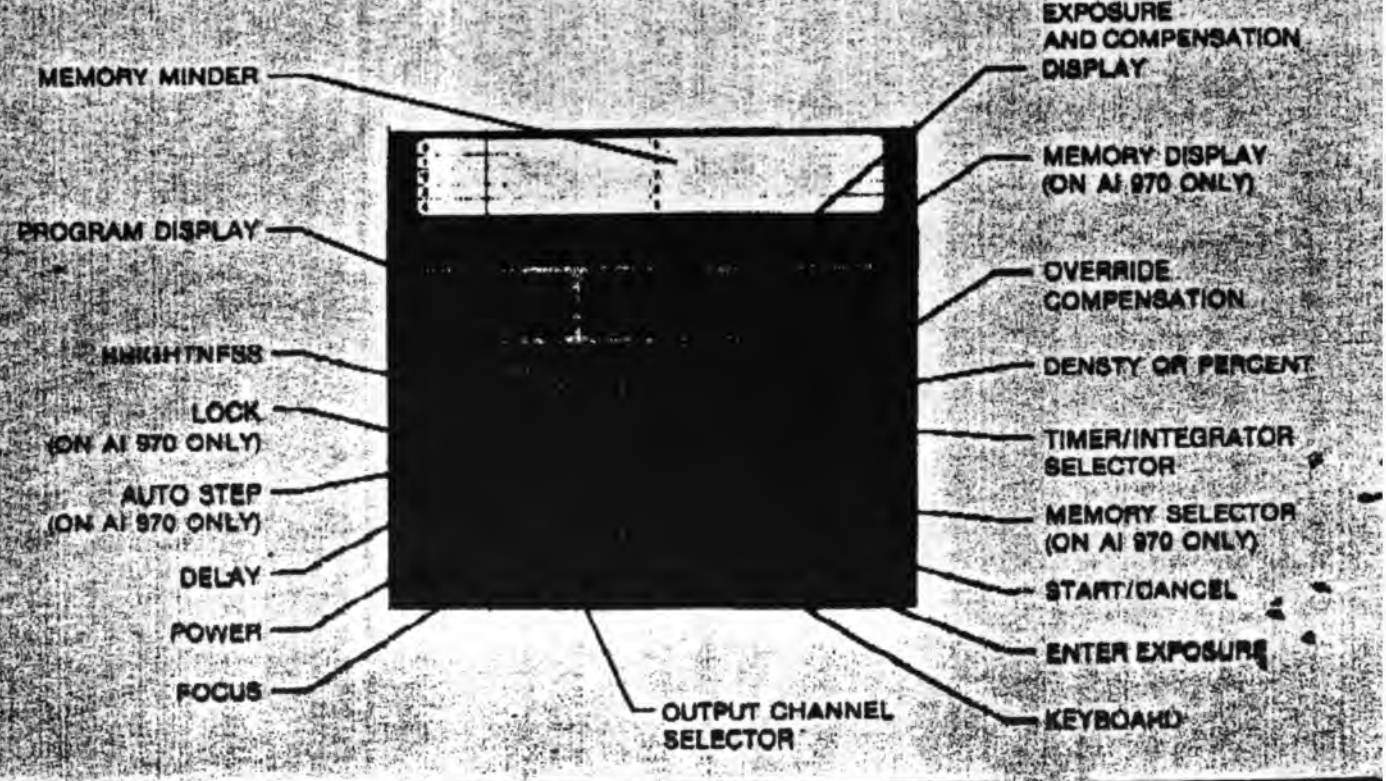
Cliente

Representante

OLEC

AI 970 and AI 960 Features:

- Can be used either as a Timer or Light Integrator.
- Digital compensation of exposures in density steps and %, plus or minus.
- Dual channel output with remote control of 2 lights or HI/MED/LO power on OLITE printing light package.
- AC power control for integrator and OLITE printing lights.
- Low voltage cable for remote control of all OLITE printing light functions.
- Timer/Integrator from .1 to 999 seconds.
- Focus — manual ON button.
- Delay feature for vacuum pump on contact frame or shutter on camera to be used with QX control box.
- 120 Volt output for low power lights and all high power lights with contactors.
- QX box for Quartz Lights to 1,000 W.
- Brightness control for display lights.
- Electronic calibration of photocell from integrator.
- Lock programmed exposure sequences. (on AI 970 only)



Numerous accessories are available for specialized applications, for information please write or call

16761 Hale Ave., Irvine, CA 92714 USA • (714) 474-3944

PREPRESS COMBINATION DENSITOMETER PREPRESS COMBINATION DENS

the most versatile prepress quality
tation.
ned two superb densitometers . . . the 418
eflection Unit and the 361 Black and
ion Unit . . . creating a system that pro-
ement capability and versatility than
ination densitometers. With simple
ration, electronic filter selection and a
ction Unit, X-Rite sets a new standard
ency, accurate data collection and cost
ontrol.

signed to meet your needs for film inspec-
oofing, print quality assurance, statistical
tracking.

ny
omputers make the 361TR smarter and
than other prepress densitometers. As you
o button, the densitometer scrolls through
ions. The interactive display clearly guides
ugh all the steps required for measure-
, or mode selection. With each reading
ites the precise measurement data as well
nd color. The potential for operator error

n"
Quick Cal™ greatly simplifies the calibra-
ues from the reference standard are stored
nory and may never need to be re-entered.
ation, simply select Q CAL™ and take a sin-
reading.

X-Rite's patented two-way RS-232 interface allows the 361TR to send readings to a printer or computer through a single cable. Plus, the computer can take control and direct the operator's measurement sequence. Your system software can select filters, function, and modes of operation without operator intervention.

For your convenience X-Rite has designed the 361TR system so the Transmission and Reflection units work as well individually as they do together. A single, quick release, telephone-type connector allows you to take the Reflection Unit anywhere in the plant for press sheet or other measurements.

The Transmission Unit

The Transmission Unit is ideal for measuring density, and both positive or negative dot values on a wide range of films. Either Ortho or UV response can be selected by pressing the color button. Both density x 10 and dot x 10 are available where higher resolution is required.

Interactive display

As you select functions, the display indicates DEN, + DOT, – DOT and SEQUENCE. Plus, the display guides the operator through the steps for calibrating the unit and programming other modes of operation.

Measurement sequencing

A unique Sequence function allows you to program repetitive step wedge, gray scale, or scanner calibration measurements. You may establish up to thirty-six separate measurement steps. Each step may be a different function. The sequence function then prompts the operator step-by-step until all data is properly entered. Then measurement data can be reviewed on the LCD display or transmitted to an external printer or computer.

Backlit display

X-Rite's backlit display makes it easy to see your readings in any lighting environment. A thumbwheel contrast control allows you to adjust the viewing angle to fit your needs.

Mode selection

Mode selection enhances the versatility of the 361T Transmission unit. Density x 10, dot x 10 and remote control can be activated and baud rate changed using the three buttons and the interactive display.

System interaction

When the Reflection Unit is operated, the Transmission Unit will not interrupt the RS-232 data channel and vice versa. This permits data transfer to, or control by, an external device using a single cable.

The Color Reflection Unit

The Color Reflection Unit delivers the ultimate in convenience, efficiency, accuracy, and versatility for all your prepress or pressroom quality control needs. The on-board microcomputer has been made an integral part of the measurement and control circuits to give you unparalleled performance in a hand-held densitometer. And, its size, weight, and feel make it easy to move and comfortable to work with.

Electronic Function Selection™

The Reflection Unit incorporates X-Rite's new Electronic Function Selection™. With each reading along the color bar, it will identify whether you are reading a solid, tint, or overprint. In less than a second, it displays the correct reading, plus indicates the selected function . . . density, dot, or trap . . . and color being measured. An entire color bar can be read in seconds.

Measurement versatility

Pressing the function button quickly cycles the unit through its full range of print quality measurements including print contrast, hue error/grayness, as well as density, dot area, dot gain, or trap. Each function is clearly indicated on the display as you press the control.

Computerized Color Response™

Computerized Color Response (CCR)™ accurately calculates the value of each measurement over the full range of normal printing densities. The microcomputer provides a corrected filter response from the actual filters used in the instrument. This makes possible both Graphic Arts and Status T response in the 361TRG. In the 361TRE, the optics allow both 47B and narrowband SPI-type response. CCR™ gives you unparalleled accuracy, stability, and inter-instrument agreement. Plus, it allows you to calibrate the Reflection Unit to match the response of any other densitometer.

Dual Response

The Reflection Unit is available as a narrowband or wideband densitometer. Euro-response optics provide both 47B-type and narrowband SPI-type responses. Graphic Arts optics allow you to read both X-Rite Graphic Arts and ANSI-Status T responses.

Polarization filters (optional)

Polarization filters cause wet and dry inks to read virtually the same for printers who wish to minimize the "dry back" effect of inks in measuring density. CCR™ makes it possible to use polarization filters with narrowband optics.

Automatic turn-off

The Reflection Unit, when it is not connected to the 361T, will automatically turn off in less than 50 seconds of non-use. While off, calibration data and measurement values are stored in non-volatile memory.

Replaceable optics

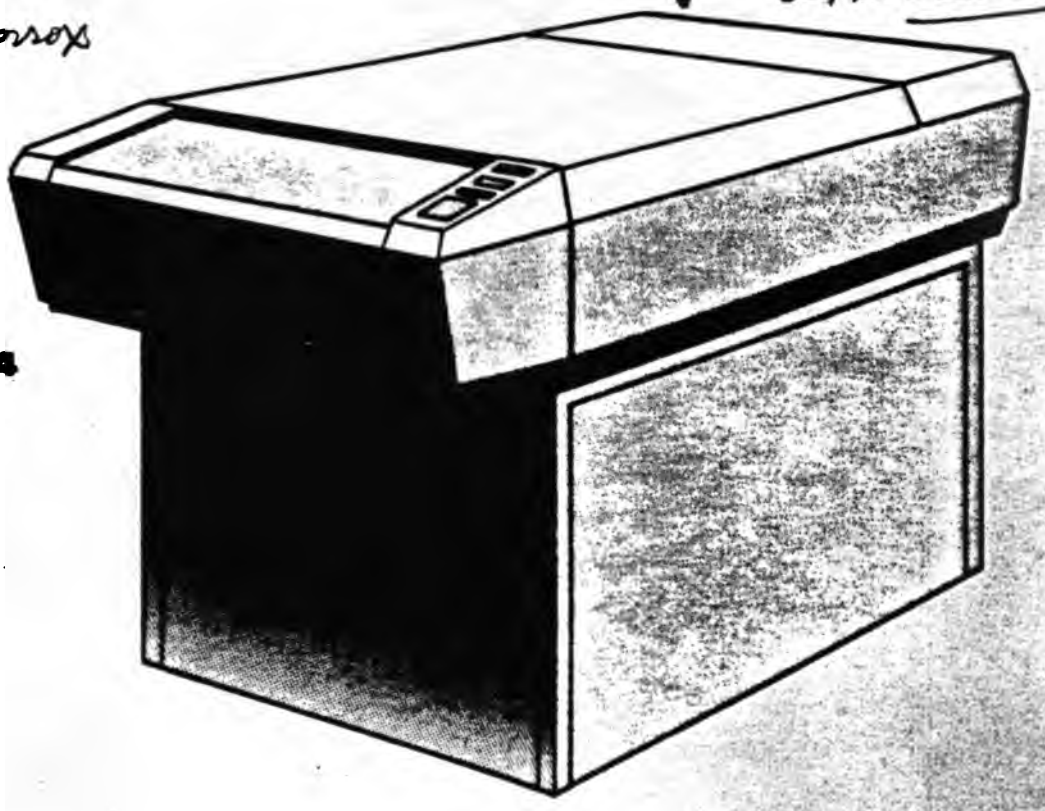
By removing two screws, the optic assembly can be easily changed from C to E. The software recognizes the optics and changes mode designations and calibration data automatically. This is our answer to the wideband/narrowband question. You get the best of both worlds without having to purchase more than one densitometer.

02 23 90 15:40 LUIS VALVERDE & ASOCIADOS LTD 007

The LogE ColorTEK®

Revela, Fija
Lava y Seca.
en 2½ min. aprox

f-2 OPCIÓN
de Procesadora



PROCESSORS FOR EP-2 AND RA-4 COMPATIBLE MATERIALS

LogEtronics Corporation has been a leading supplier of sturdy, reliable, and affordable black and white film and paper processors to the graphic arts industry for the last 35 years. LogE is pleased to introduce it's first color processor: The LogE ColorTEK·. Backed by the LogE reputation for quality and yeare of technical expertise, the ColorTEK· provides efficient and trouble-free performance for all your color processing needs. ColorTEK· processors offer these features:

para IICA 26"

- **Two models, in 21" and 26" widths**
- **Processes all EP-2 compatible materials**
- **Easily converts for processing RA-4 materials**
- **Simple operation with variable speed transport**
- **Maintenance-free injection molded tanks**
- **High capacity forced air dryer system**
- **Automatic replenishment**
- **High quality output at an affordable price**

APROX $8000 -

LogE

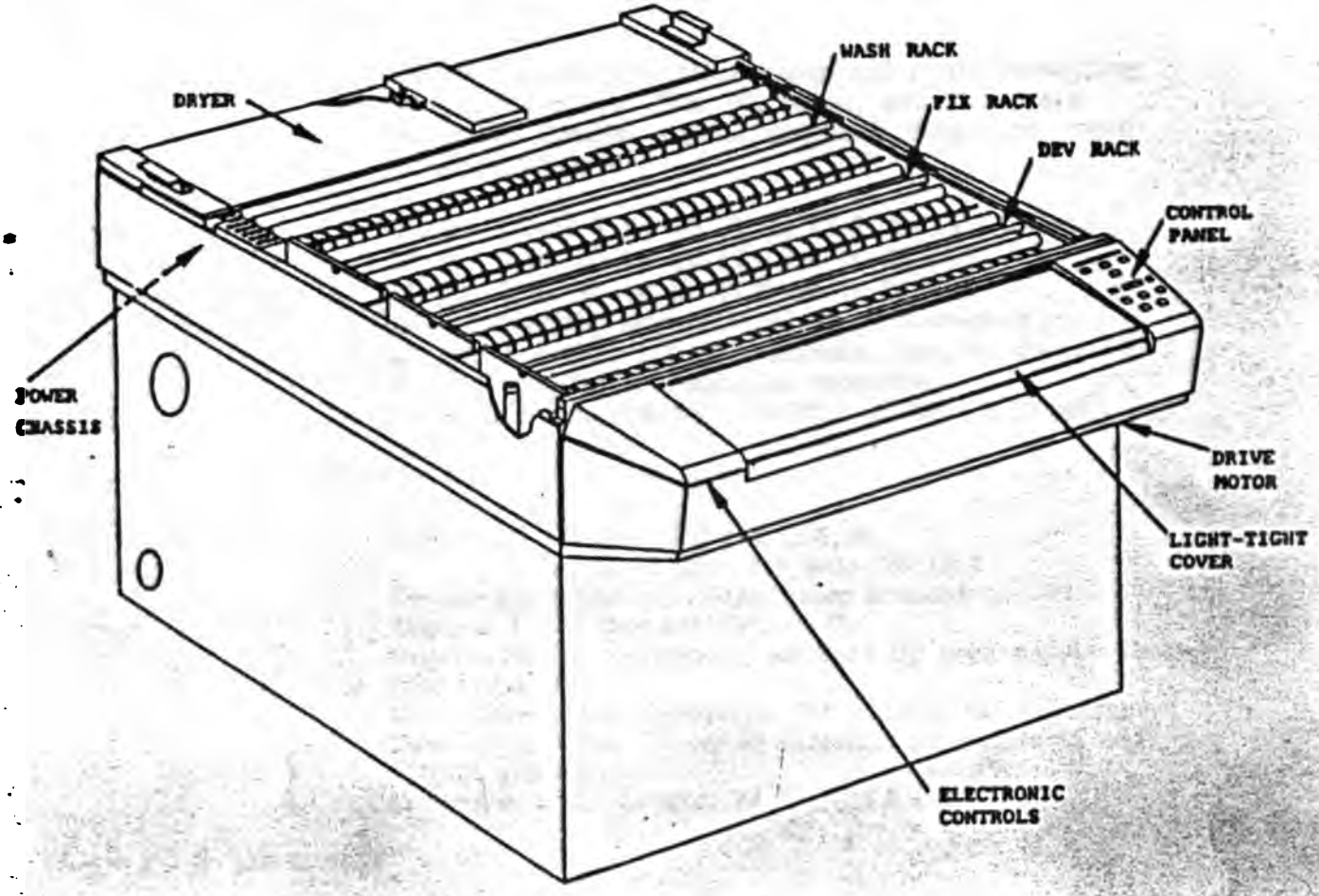


Figure 1-1, Major Sections and Components

Description

LC-Series processors are designed to develop, fix, wash and dry exposed phototypesetting papers and films. Compatible rapid access sheet films and papers may also be processed.

NOTE: The terms "film" and "paper" are used interchangeably to describe the material being processed. "Right" and "Left" refer to the sides of the processor as viewed from the feed end.

Specifications

Materials and Sizes

- RC type phototypesetting paper and phototypesetting film, rapid access film, RC paper, and film plate materials. Special applications with compatible rapid access materials.

Width: LC-21 3 in. to 21 in. (7.6 cm to 53.3 cm)
LC-26 3 in. to 26 in. (7.6 cm to 66 cm)
LC-28 3 in. to 28 in. (7.6 cm to 71 cm)
(Narrow widths may require use of a leader)
Length: 5 inches (13 cm) minimum, lengths above 10 feet (3 meters) are material dependent.
Base thickness: 0.0035" - 0.0075" (0.09 - 0.20 mm)

Developer System

Capacity: LC-21 - 4.2 gal. (16 lit.)
LC-26 & 28 - 5.3 gal. (20 lit.)
Temperature Control: Adjustable, ambient to 104 degrees F (40 degrees C)
Replenishment: Automatic, metered by area and/or time, rate adjustable
Replenisher Tank Capacity: 7.5 gallons (28.4 liters)
Developing Time: 20 to 90 seconds, selectable in one second increments.
Developer Path Length: 14.5" (36.8 cm)

Fixer System

Capacity: LC-21 - 4.2 gal. (16 lit.)
LC-26 & 28 - 5.3 gal. (20 lit.)
Temperature Control: Adjustable, ambient to 104 degrees F (40 degrees C)
Replenishment: Automatic, metered by area and or time, rate adjustable
Replenisher Tank Capacity: 7.5 gallons (28.4 liters)

Wash System

Capacity: LC-21 - 4.2 gallons (16 liters)
LC-26 & 28 - 5.3 gallons (20 liters)
Flow: 2 GPM maximum.
Temperature and volume controlled water source recommended.

Dryer System

Temperature Range: Adjustable, ambient to 135 degrees F (60 degrees C)

Figure 1-4, Specifications

Specifications, Continued

Feed Speed

3.6 feet per minute @ 20 seconds developing time.

Electrical Requirements

208-240 VAC, single phase, 23 Amps, 50/60 Hz.
208-240 VAC, three phase, 17 Amps, 50/60 Hz.
220/380 VAC, three phase, 12 Amps, 50/60 Hz.

Dimensions

Width: LC-21 - 32" (81 cm); LC-26 & 28 - 39" (99 cm)
Depth: 54" (137 cm) plus 9.25" (23.5 cm) for receiving bin
Height: 39" (99 cm) excluding leveling feet adjustment (NOTE: 43" high on tall stand)
Cassette Compartment: LC-21 - 9" H; 20.25" W; 8.5" D
LC-26 & 28 - 9" H; 27.5" W; 8.5" D

Plumbing Connections

Water Supply: Garden hose connector, 1-2 GPM (4-8 LPM)
Drains: 1" ID (21 mm) hose from Developer, Fix, Wash Tanks, routed to a manifold requiring 1" ID flexible hose or 1" threaded PVC pipe connections.

Accessory Kit

Operating Manual, including Illustrated Parts List
Two 7.5 Gallon (28.4 L.) Replenisher Tanks.

Optional Accessories

15 Gal. (56.8 L) Replenisher Tanks.
Deluxe Water Package
Comprehensive Spare Parts Kit
Developer Filter Kit

Weight

	LC-21	LC-26 & 28
Shipping:	552 lbs. (250 kg)	570 lbs. (262 kg)
Operating:	560 lbs. (254 kg)	590 lbs. (268 kg)

Origin

Made in U.S.A.

Figure 1-4, Specifications

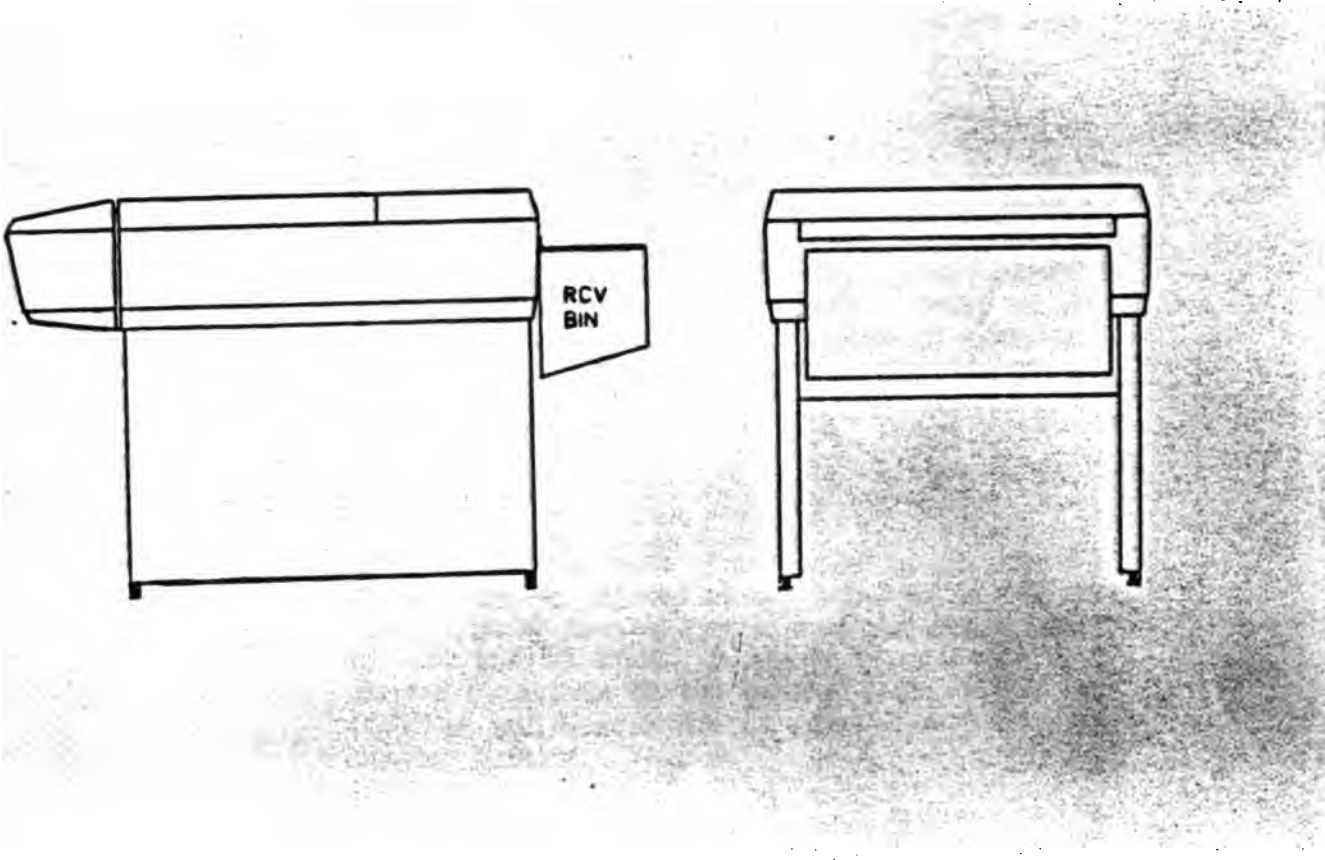


Figure 1-3, Plumbing Diagram

Operation, Continued

The developing time is continuously selectable, in one second increaments, from 20 to 90 seconds, by use of a touch control on the front panel. Selected developing time is displayed in the control panel display window.

After being powered up for the day, the processor is normally in the "Standby" mode. Feeding in material shifts the processor to the "Operate" mode, bringing the transport to the selected developing time, switching the dryer on, opening the wash water solenoid valve, and activating the replenishment system. Shortly after the trailing edge of the material has passed into the receiving bin the processor automatically returns to the standby mode.

Developer and Fixer

Developer and fixer are constantly recirculated by individual pumps that draw chemicals from the bottom of the tanks and return them to the tanks through a port at the opposite end of each respective tank.

Replenishment

Replenishment for developer and fixer is provided by a pair of 208-240 VAC, halfwave, oscillating pumps. Commands to these pumps are made by a user selected *Replenishment Rate* control on the control panel. Frequency of replenishment commands is based on length and width of material fed. Provision is made on the control panel to manually activate the replenisher pumps.

Solution Level

Solution level in each of the tanks is limited by a fixed standpipe located at the left side of the tank. The processor control system monitors liquid levels in the dev and fix tanks. A low level condition is indicated by a light on the control panel. A low level condition will deactivate the circulation pumps and solution heaters.

Wash

The wash section removes excessive chemicals from the material being processed before it enters the dryer. The wash solenoid valve, which provides for a continuous flow of fresh water from the water panel, is activated at all times during the "Operate" cycle. Wash water temperature is externally controlled by the water panel.

Dryer

The dryer is composed of two 1000 watt heating elements and two fractional horsepower squirrel cage fans located under the dryer rack assembly.

Dryer temp is user adjustable; over heat protection is provided by a pair of KLIXON thermal safety switches which will open at 200 degrees F and will remain open until manually reset.

Description, Continued

The *LC-Series* processors can process cassette-loaded materials in normal room light by using the standard daylight loading hood. For cut or sheet materials the feed end, or the entire processor, must be located in a darkroom equipped with appropriate safelighting.

The processors are capable of maintaining pre-selected temperatures in the chemical solutions as well as in the dryer. By replenishing for losses from exhaustion as well as oxidation they are capable of maintaining developer and fixer strengths at the desired levels.

The *LC-Series* processors include space for two 7.5 gallon replenisher reservoirs or two 5 gallon cubitainers, within the base.

Operation

Film fed into the processor progresses through the developer, fixer and wash tanks, then through the dryer, into the receiving bin.

Transport rack modules are driven from a common drive shaft that extends the length of the right side of the machine. A permanently lubricated DC drive motor, with integral gear reduction, provides drive to the drive shaft via a short drive chain.

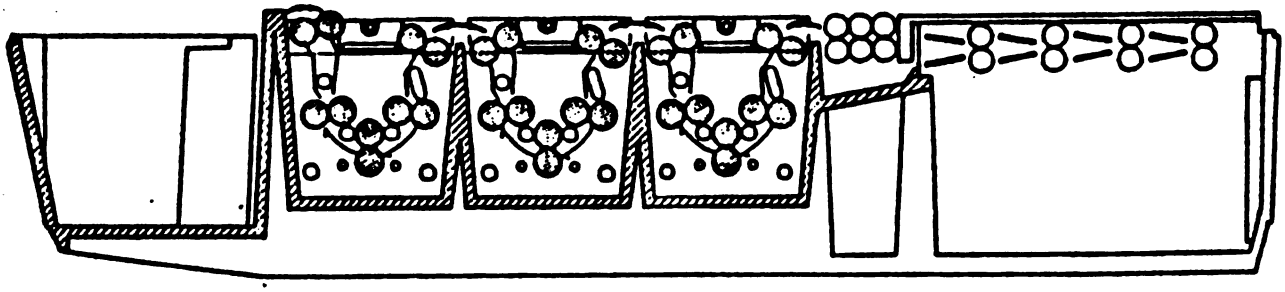
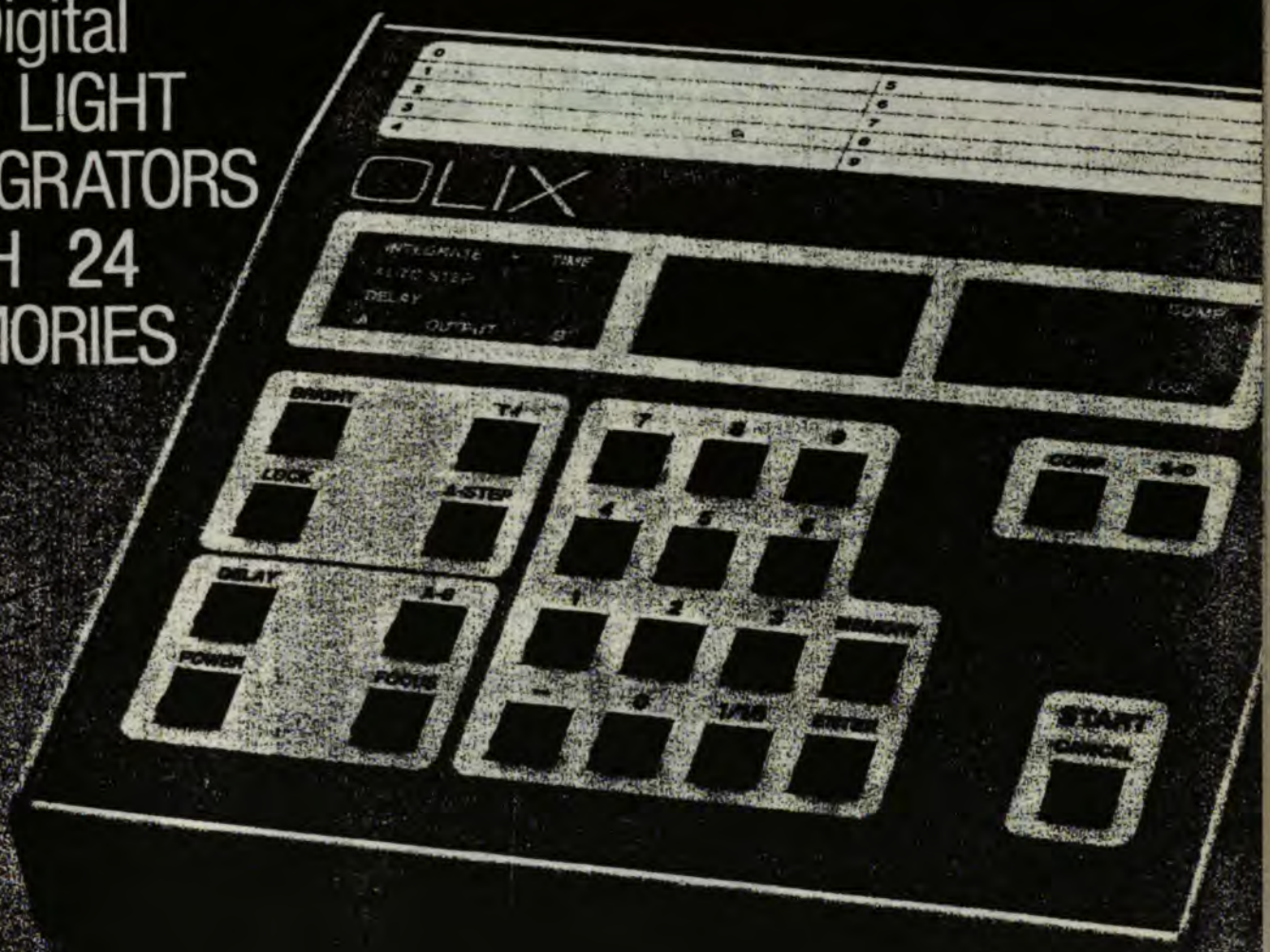


Figure 1-2, Functional Diagram

OLEC

AI 970 - AI 960

All-Digital OLIX LIGHT INTEGRATORS WITH 24 MEMORIES



■ Automatically compensates for all power, [illegible] and other variations to provide exact programmed exposure for consistent results.

■ Auto Step used when several exposures follow each other such as Main, Flash and Bump on a camera or four colors in proofing.

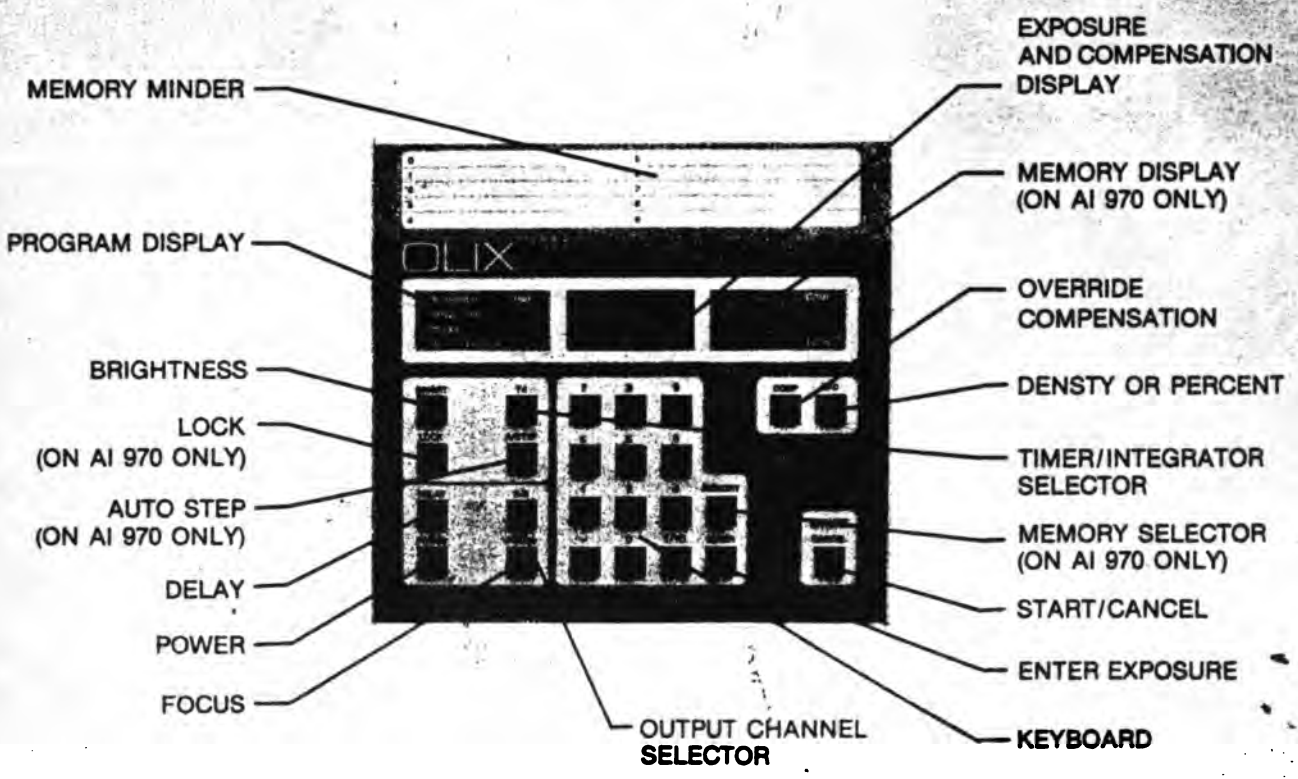
■ 24 memories with instant access in AI 970. 2 memories on AI 960, one for A channel, one for B channel. Digital count down and reset. 1/10 sec. to over 16 minutes.

■ Convenient compensation control can vary exposures in either per cent or log density for corrections in processing chemistry, density of overlays, correction filters, magnification ratio, etc. without reprogramming basic exposure input.

OLITE

AI 970 and AI 960 Features:

- Can be used either as a Timer or Light Integrator.
- Digital compensation of exposures in density steps and %, plus or minus.
- Dual channel output with remote control of 2 lights or HI/MED/LO power on OLITE printing light package.
- AC power control for integrator and OLITE printing lights.
- Low voltage cable for remote control of all OLITE printing light functions.
- Timer/Integrator from .1 to 999 seconds.
- Focus — manual ON button.
- Delay feature for vacuum pump on contact frame or shutter on camera to be used with QX control box.
- 120 Volt output for low power lights and all high power lights with contactors.
- QX box for Quartz Lights to 1,000 W.
- Brightness control for display lights.
- Electronic calibration of photocell from integrator.
- Lock programmed exposure sequences. (on AI 970 only)



Numerous accessories are available for specialized applications, for information please write or call.

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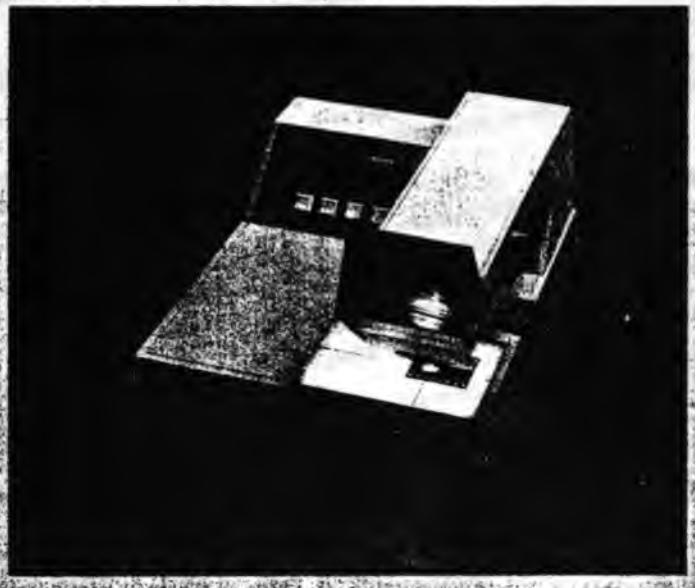
X-Rite



- Sala de pruebas
- Premátisis de copias separadas por scanner
- Sala de fotocomposición
- Cuarto oscuro

X-Rite

Estimados señores:

Nos agrada presentar información acerca de nuestra sociedad y nuestra participación en el ramo de las artes gráficas.

En 1977 decidimos adaptar la tecnología de la era espacial en el diseño y fabricación de instrumentos para medir colores. A la vez logramos desarrollar densitómetros con los requisitos del mercado. Los instrumentos detallados en este folleto son el resultado de sus sugerencias y de nuestra innovación.

Con su respaldo fue posible construir un nuevo edificio de 125,000 pies cuadrados cerca de la ciudad de Grand Rapids, Michigan. Nuestros laboratorios de ingeniería están equipados con un sistema CAD, instrumentos para medir colores y la maquinaria más moderna para desarrollar instrumentos de la más avanzada tecnología. Nuestras facilidades de producción están equipadas de manera semejante.

Los densitómetros X-Rite les ofrecen las ventajas más avanzadas, son fáciles de usar, son de un tamaño compacto y se venden a un precio económico.

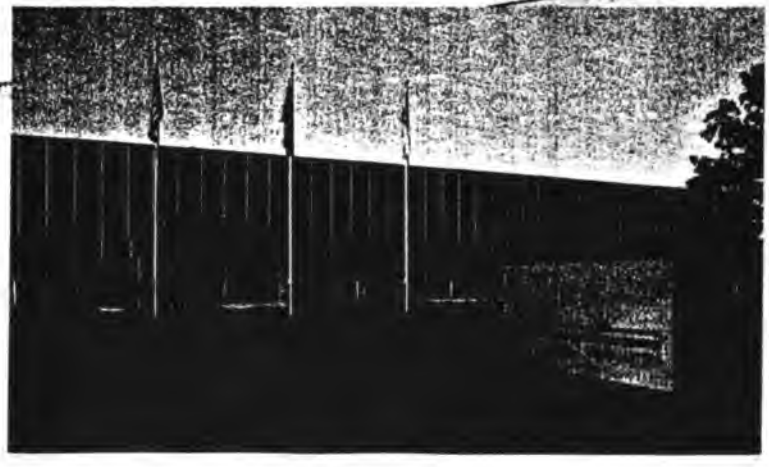
Ahora fabricamos más densitómetros para las artes gráficas, el fotoacabado, el mercado médico y la industria de radiografía que cualquier fabricante del mundo.

Agradecemos el interés expresado en nuestros productos y en X-Rite.

Atentamente,

D. Ted Thompson
Presidente

X-Rite, Incorporated • División América Latina/Caribe
Grafitec International Inc. • P.O. Box J • Wheeling, Illinois 60090
Teléfono 312-520-1450 • Telex: 4330141 GRAFUI • Fax: 312-520-4294



Términos de la densitometría

Densitómetro a reflexión Instrumento que mide sobre material opaco, por ejemplo, el papel.

Densitómetro de transmisión Instrumento que mide sobre material transparente, por ejemplo, la película.

Densidad La capacidad de un material para absorber la luz; o más oscuro, la más alta la densidad. Medidas de un sólido se utilizan para controlar la tinta impresa en la hoja.

Area de punto En transmisión indica el porcentaje de luz que no pasa a través del área de la película que se mide. En reflexión indica el área impresa en la hoja de un tramado.

Aumento de punto Representa el aumento del punto en la hoja impresa cuando se compara a la película original. Por ejemplo, un tramado del 40% en la película que mide el 62% en la hoja impresa representa un aumento de punto del 22%.

"Trap" (Sobreimpreso) Muestra la aceptación de la tinta siguiente a una tinta impresa.

Contraste del impreso Compara las medidas en un tramado de 3/4 a un sólido. Es un buen indicador de cómo se va a imprimir el área de sombra; los valores más altos indican los detalles más destacados en la sombra. Se sugieren valores del 25 al 40 para distintos trabajos cuando se utiliza un densitómetro X-Rite.

Error de matiz Mide las variaciones en los colores puros de tintas y materiales de pruebas. Cambios indican contaminación.

Grisado Indica el claro y oscuro de tintas y materiales de pruebas. Cambios en el grisado se pueden considerar el aumento de blanco o negro en una tinta.

Status T El stándard de respuesta espectral para densitómetros a reflexión de banda ancha. Status T es un stándard de las organizaciones ANSI e ISO, ambas que se dedican a establecer normas.

Status E En unos países se utiliza filtro con banda estrecha (47B). Densitómetros X-Rite de la serie 400 se puede proveer con estos filtros. El filtro E se puede especificar al pedir los densitómetros X-Rite o se puede instalar fácilmente después.

"Heatset" Tintas de secado rápido al calor, lo que se utiliza para trabajos comerciales.

"Nonheatset" Tintas de no secado rápido al calor, lo que se utiliza para la producción de periódicos.

Selección electrónica de operación (EFS) Modelos que ofrecen esta operación automáticamente determinan si el densitómetro mide un sólido, un tramado o un sobreimpreso sin la necesidad de pulsar ninguna tecla. Esta operación facilita las medidas sobre una barra de colores.

Selección electrónica de la operación para operaciones en "Nonheatset" (NEFS) Hace lo mismo que EFS pero en operación "nonheatset".

Filtros polarizados Compensan por la diferencia en densidades de tintas húmedas al compararlas a tintas secas. Densitómetros X-Rite se puede pedir con filtros polarizados como opción para aplicaciones específicas.

Aberturas Densitómetros X-Rite disponibles con abertura de 3.4mm ó 1.7mm. Se recomienda utilizar la abertura 1.7mm para medir un área mayor y obtener una medida más precisa. Para ciertas aplicaciones se puede requerir abertura de 3.4mm.

Saturación La pureza de un color es su saturación. El color se hace más puro o saturado cuando se disminuye el gris en la tinta. Por ejemplo, un verde grisado tiene baja saturación mientras un verde esmeralda tiene alta saturación.

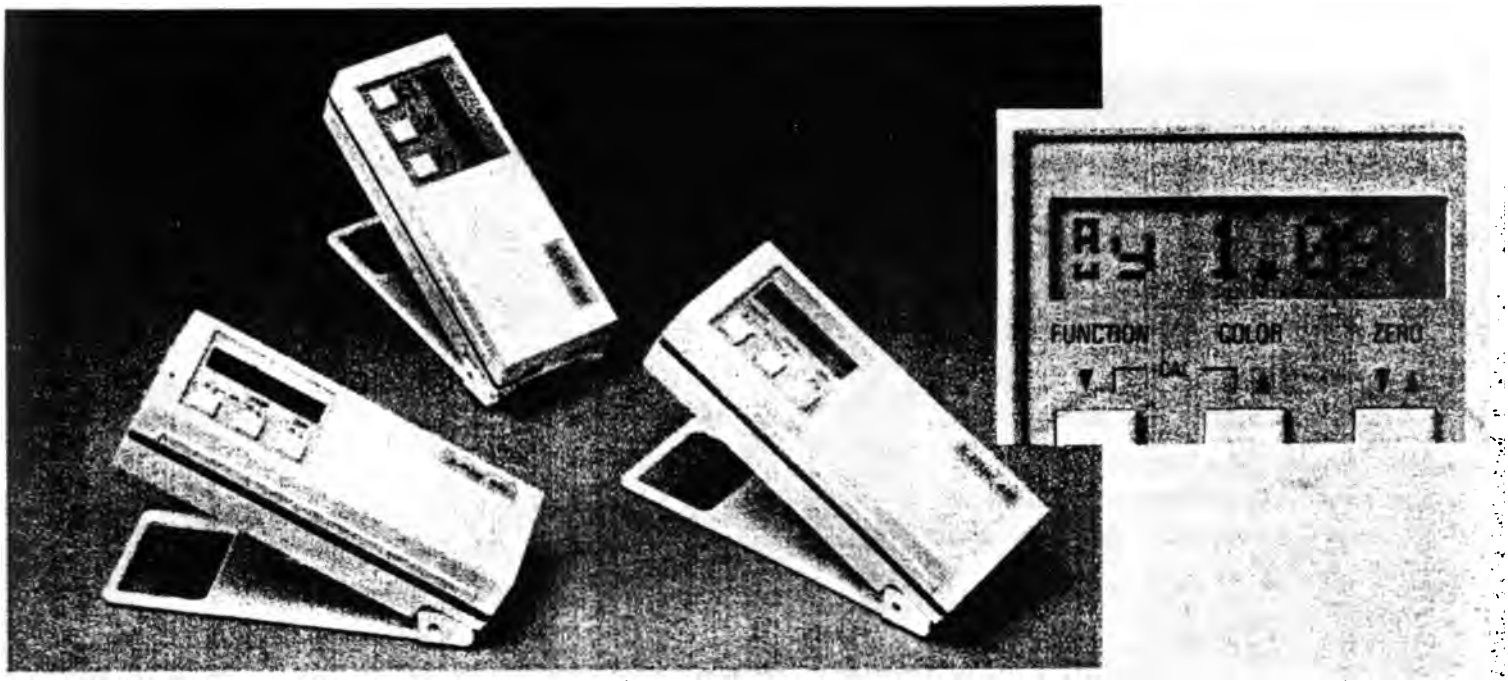
Brillo Se refiere al factor de reflectancia que contiene el papel.

Matiz de papel Se refiere al color del papel en que se va a imprimir. Por ejemplo, la impresión sobre papel con mucho amarillo será distinta a la impresión sobre papel con alto brillo.

Reflectancia Es la reflectancia de luz del papel. Normalmente para la reproducción es mejor tener la óptima luz reflejada del papel.

Cero sobre el papel Para comparaciones de una tinta a otra, es necesario eliminar los valores del papel de la medida. Todos los densitómetros X-Rite ofrecen esta ventaja.

X-Rite 404, 408 y 418 densitómetros de reflexión a color



Características de los modelos 404, 408, 418

Todos estos densitómetros portátiles miden densidad, hacen comparación de densidad a una referencia establecida y se ajustan a cero en el blanco del papel. Pueden calibrarse en segundos a base de la computadora integrada. La calibración es estable y se mantiene sin variación por semanas.

Cuentan con interfaz RS232 para conectarse a una impresora de líneas, computadora o sistema de control de exposición de cámaras. Todos los modelos incorporan selección electrónica de los filtros. Reconocen el color que se mide y muestran la medida sin la necesidad de pulsar ninguna tecla ni girar filtros.

La pantalla muestra claramente la operación y la medida. Todos los modelos tienen "CCR", significando que se puede calibrar para medir igual que otros densitómetros X-Rite o con densitómetros de otra marca con filtros semejantes.

Accesorios Filtros polarizados; impresora de líneas permite imprimir medidas para referencia.

Se puede utilizarse en los mismos procesos que el 400 y cuenta con la capacidad de medir todos los colores.

X-Rite 404 es el densitómetro de reflexión a color más sencillo para operar y el más económico. Mide densidades y hace comparaciones de densidad a una referencia establecida.

X-Rite 408 incorpora todas las ventajas del modelo 404 y aún más.

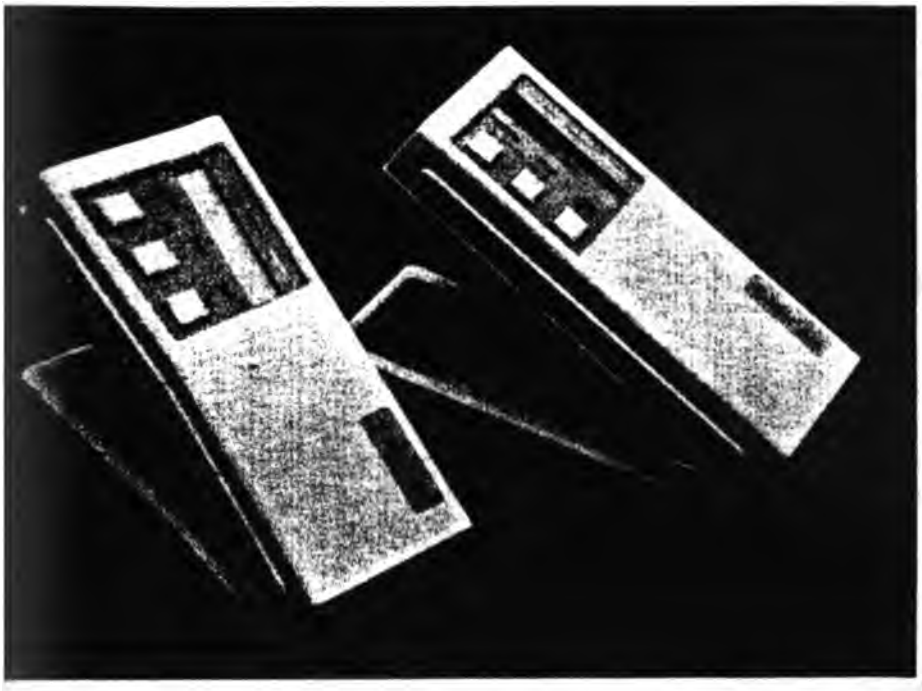
Mide densidad y puede hacer comparaciones de densidad a una norma establecida. Determina si se mide un sólido o un tramado. Precisamente mide el área de punto hasta el 1%.

Se puede almacenar hasta tres valores de tramados de acuerdo con la barra de colores que se utiliza. Al medir los tramados impresos, se restan estos valores de los valores almacenados, mostrando los verdaderos aumentos de punto.

X-Rite 418 es el densitómetro que permite tomar medidas de la barra de colores fácil y rápidamente a través de la operación EFS. Automáticamente identifica si se mide un sólido, tramado o "trap", y muestra el valor correcto, la operación y el color.

Tiene todas las características del 408 y además mide "trap", contraste del impreso y grisado.

·Rite 414 y 428 densitómetros de reflexión a color



Los densitómetros 414 y 428 cuentan con una pantalla de 16 caracteres que permite mostrar una variedad de operaciones a la vez.

modelo 414 incorpora todas las operaciones del odelo 408 y aún más.

medir los cuatro colores, muestra simultáneamente densidades de magenta, cian y amarillo sin la necesi- d de seleccionar ni girar filtros.

lide grisado. Esta operación es muy útil para ajustes de alanza de scanners. Se puede medir varias áreas grises la unidad indica digitalmente el grisado, con una edida del 100% indicando el gris máximo. **Mide la alanza gris** utilizando escalas grises de tres colores. La nidad indica la densidad del color predominante y los justes necesarios en las otras dos tintas para lograr la alanza perfecta. Facilita mucho el ajuste de la prensa.

as respuestas ópticas se pueden programar para medir gual que los scanners Hell, Crosfield y DS. El 414 se tiliza para el preanálisis de copia de reflexión y deja ibre el scanner para hacer separaciones.

Operación especial para periódicos NEFS Muchos eriódicos incorporan barras impresas a dos colores en el liseño del periódico. Estas barras funcionan para dar una uena presentación al periódico y al mismo tiempo para ontrolar densidades impresas. Por ejemplo, un periódico puede incorporar una bandera verde. El densitómetro indica que está midiendo verde y muestra simultánea- mente las densidades de cian y amarillo, los dos colores que componen el verde. Se hace lo mismo con el azul y rojo.

En la impresíon de flexografía es necesario controlar el aumento de punto precisamente. El 414 mide punto hasta el 100% sin confundirlo con un sólido.

El modelo 428 cuenta con todas las ventajas citadas bajo las características del 414 y 418. Este instrumento es el densitómetro más avanzado y completo. Cuenta con capacidades nunca incorporadas en otros densitómetros: el control de tintas y papel; el establecimiento de tolerancias; estadística.

Saturación y error del matiz ayudan a determinar la pureza de una tinta. Para el control del papel en que se va a imprimir, el densitómetro mide el **matiz/brillo** y **reflectancia del papel.** Al poder medir las características de la tinta y el papel, se puede llevar un control mejor del proceso de impresión.

Se establecen las **tolerancias** para comprobar y controlar la impresión. El modelo 428 contiene estadística para calcular el promedio y la desviación del promedio de hasta 255 muestras.

Se puede establecer un minilaboratorio de control de calidad para el taller sólo con este densitómetro.

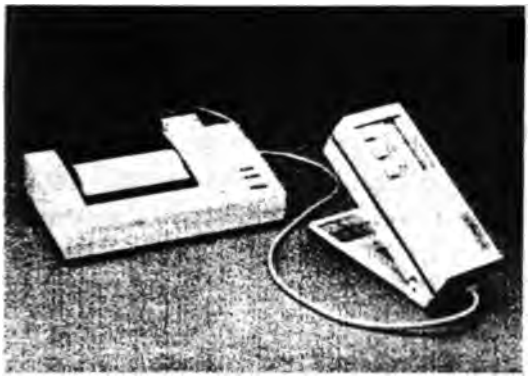
Densitómetros de reflexión

Ofrecemos ventajas verdadamente únicas co

Fabricamos equipos que el mercado demanda

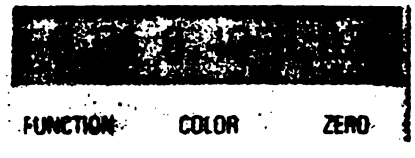
Tres filtros para cada color permiten medidas más precisas.

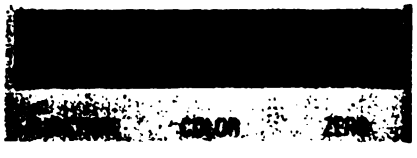
La compañía X-Rite entró en una nueva era de tecnología con la introducción de la rueda de filtros sellados. Todos los modelos incorporan 12 filtros (tres para cada color) sellados para protegerlos contra la humedad y el polvo. La selección de los filtros se hace electrónicamente sin la necesidad de seleccionar el color apropiado ni girar filtros. Los filtros son garantizados contra desgaste por cinco años.



Se utilizan los densitómetros a lo máximo con una impresora de líneas.

Pueden acoplar una impresora de líneas a todos los modelos, lo cual permite mantener archivos de todas las medidas importantes. Recomendamos que siempre se utilice una impresora de líneas con ciertos modelos como el 410 y el 428 para poder aprovechar de toda la capacidad de estos modelos.





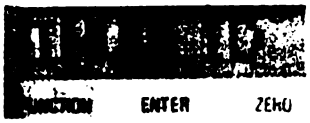
Pantallas indicadoras de operaciones especiales

Los modelos que ofrecen la operación para medir balanza gris indican el color predominante y el ajuste que se requiere en las otras dos tintas para obtener balanza perfecta. Ayuda mucho al medir escalas grises de tres colores.

Para periódicos los modelos 414 y 428 ofrecen una operación especial para medir banderas de dos colores. La pantalla indica el color que se mide y las densidades de los dos colores que componen el color.

Calibración en segundos

La calibración es sumamente fácil para todos los modelos de la serie 400. Es completamente a base de teclas. El densitómetro pregunta si se desea calibrar; se oprime la tecla indicando que "SI"; el densitómetro pide que se mida el blanco del papel; y el densitómetro está calibrado. En segundos se hace la operación.



color serie 400 X-Rite

tecnología más avanzada debido a que

Somos los innovadores de la tecnología

Al incorporar la microcomputadora en el circuito de medir, X-Rite inventó de nuevo el densitómetro. Nos permitió sobrepasar las capacidades de los densitómetros anteriores.

En 1979 fuimos los primeros de seleccionar electronicamente los filtros que permitió seleccionar los cuatro colores simultáneamente. Desde entonces hemos logrado muchas otras innovaciones.

La respuesta de colores computadorizada ("Computerized Color Response") CCR provee más precisión y permite que todos los instrumentos X-Rite o de otra marca midan igual. Es una gran ventaja cuando se trabaja con dos o más instrumentos porque no habrá variación de medidas entre los densitómetros.

También se puede calibrar los densitómetros X-Rite para que midan igual que densitómetros de otra marca con ópticos semejantes, algo que los otros fabricantes no ofrecen. Esta gran ventaja se incorpora en cualquier tipo de densitómetro serie 400 que se selecciona, sea Status T, banda ancha o estrecha, abertura de 1.7mm ó 3.4mm, con o sin filtros polarizados.

Cuenta con hasta tres referencias para medir **aumento de punto**. Permite medir tramados del 25%, 50% y 75% ó del 40% y 80% al seleccionar esta operación. Estos porcentajes de tramados son los que normalmente incorporan las barras de colores. Mide la diferencia entre la referencia almacenada y la tinta impresa, mostrando solamente el aumento del punto. No es necesario hacer el cálculo manualmente. Se puede cambiar estas referencias fácilmente de acuerdo con sus requisitos y la barra de colores utilizada.

La selección electrónica de operación permite la medición rápida y precisa de una barra de colores sin la necesidad de pulsar ninguna tecla. El densitómetro determina si se mide un sólido, un tramado o un sobreimpreso ("trap"), y muestra el valor digitalmente en la pantalla. Cuando se mide un sobreimpreso, indica que es necesario medir la segunda tinta impresa y entonces la primera tinta para obtener el valor del sobreimpreso.

Interfaz RS232 Los densitómetros X-Rite se pueden acoplar a impresoras de líneas y computadoras. El programa integrado del densitómetro lo hace fácil programar el densitómetro para que comunique con la computadora.

Estadística y tolerancias son unas operaciones que se prestan a utilizarse con computadoras desde modelos pequeñas como Tandy® Modelo 100 hasta modelos IBM® PC o más grandes. Densitómetros X-Rite ayudan a establecer una historia de su proceso de impresión y de las tintas y el papel que se utilizan para un mejor control de calidad.

Todos los modelos son **portátiles con operación por pilas recargables**. Puede trabajar conectado a la red eléctrica y al mismo tiempo se recargan las pilas.

X-Rite 361TR densitómetro de transmisión y reflexión

$3950

Presentamos el modelo 361TR que es un sistema completo, combinando el densitómetro 418 de reflexión a color con el densitómetro 361T de transmisión a blanco y negro. La combinación de estas unidades permite la inspección de películas, mediciones de pruebas y el control completo de calidad de la hoja impresa.

El densitómetro 418 se detalla por completo en una hoja anterior. Funciona en combinación con el 361T o se puede desconectar para llevarse a la sala de prensas o cualquier sitio del taller.

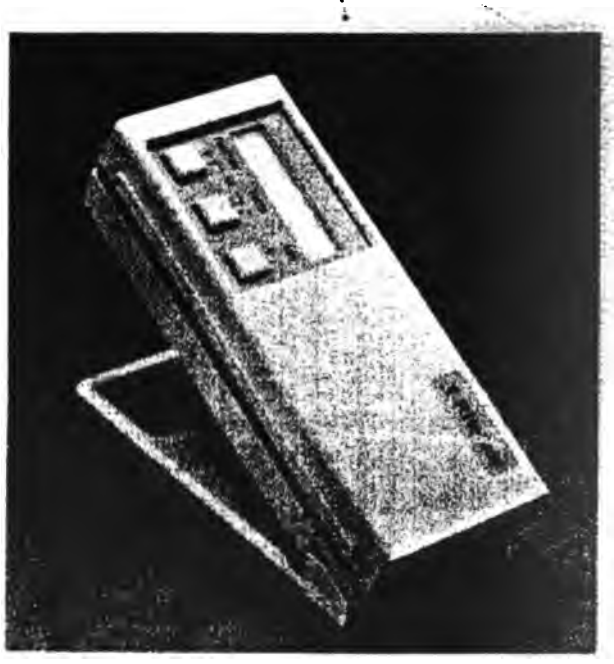
El modelo 361T también puede funcionar solo. Aunque se tira un trabajo a color, la película utilizada para este trabajo es a blanco y negro, y se puede medir con el densitómetro 361T.

Mide el porcentaje del punto del tramado negativo o positivo. Permite ajustarse a cero sobre el base de la película para permitir medidas de densidad y porcentaje de punto absoluto. Puede hacer comparaciones de densidad. Cuenta con respuesta ortocromática o UV. No es necesario cambiar el sistema de ópticos para medir distintas películas.

La unidad es de construcción sólida con el cuerpo construido de una sola pieza. El brazo largo permite medir hasta el centro de una película de 50x60 cms. El brazo no se mueve al hacer medidas sino el cilindro localizado en el frente del brazo. Esto es una gran ventaja porque el brazo no se va a desalinear causando medidas incorrectas.

El 361T se puede calibrar en segundos a base de la computadora integrada.

X-Rite 400 densitómetro de reflexión a blanco y negro



El densitómetro modelo 400 es una unidad portátil a un precio económico, disponible con respuesta roja u ortocromática. Mide densidad, porcentaje de punto y aumento de punto, y hace comparaciones de densidades. Se utiliza en una variedad de procesos.

Cuarto oscuro Hace el cálculo del rango de un tono continuo. Automáticamente calcula la diferencia entre densidades máximas y mínimas, y muestra digitalmente esta diferencia; es lo que se requiere para determinar exposiciones cuando se hace un tramado.

Sala de prensas Controla la densidad de la tinta negra. Ayuda a establecer y mantener la norma para la impresión de un solo color.

Sala de fotocomposición Controla la densidad negra para asegurar que la misma densidad se mantenga por todo el trabajo. **Scanner plano** El modelo 400R (Rojo) tiene la misma respuesta que los rayos láseres utilizados en scanners, lo cual permite que se usen con estos scanners debido a que miden igual

X-Rite 410 densitómetro de transmisión a color para uso con scanners

¡Es verdaderamente único!

El modelo 410T es el instrumento perfecto para usar con scanners Hell, Crosfield y Dainippon Screen. Esta unidad se utiliza para el preanálisis de copia y permite dejar libre el scanner para hacer separaciones.

Permite la evaluación de las densidades mínimas y máximas, saturación, aparencia del color y rango de la copia. Debido a que el tiempo del scanner es muy costoso, es mejor hacer este trabajo fuera del ambiente del scanner.

Con esta información toda copia se puede clasificar de acuerdo con sus distintas características y se puede hacer apuntes para el operador del scanner. En unos casos permite que varios trabajos con carácter semejante se puedan montar en el scanner al mismo tiempo. Copia que podría causar problemas se puede identificar antes de programarse en el sistema. Esto permite mayor producción porque el tambor del scanner puede hacer separaciones en vez de evaluar copia.

Se puede almacenar medidas de densidades mínimas y máximas en la memoria del densitómetro. Al determinar las medidas apropiadas, se puede enviarlas a una impresora de líneas al pulsar una tecla. Se recomienda como accesorio la impresora de líneas porque las medidas impresas sirven como guía para el operador del scanner.

El densitómetro 410T es único debido a que se han duplicado las respuestas ópticas de los scanners Hell, Crosfield y Dainippon Screen. Se selecciona la respuesta adecuada para su scanner al pulsar una tecla. Además, cada respuesta óptica cuenta con nueve canales y cada canal se puede calibrar a una escala gris o directamente al scanner.

La abertura de 0.4mm permite medir áreas pequeñas. El visor grande aumenta el área de medición 6X. El blanco calibrado asegura que se posicione con precisión el área de medir.

X-Rite 341 densitómetro de transmisión portátil y medidor de área de punto

El 341 es el densitómetro para medir las tiras de control utilizadas con procesadoras automáticas de película. Permite medir densidad y área de punto.

Se puede ajustar a cero sobre la base de la película para tomar medidas absolutas de densidad o de punto. Funciona con pilas o se puede conectar a la red eléctrica con el adaptador incluido.

Esta unidad compacta y portátil tiene un rango de medición de 0-4.0D, exactitud de ±.02D

Guía de comparación de densitómetros de reflexión

Operación	404	408	414	418	428
Densidad	•	•	•	•	•
Diferencia de densidades	•	•	•	•	•
Aumento de punto		•	•	•	•
Normas de referencia para aumento de punto		•	•	•	•
"Trap"				•	•
Contraste del impreso				•	•
Error de matiz				•	•
Grisado			•	•	•
Saturación					•
Matiz y brillo del papel					•
Reflectancia del papel					•
Estadística y tolerancias					•
Selección electrónica de operación				•	•
NEFS					•
Balanza gris			•		•
Cero en el blanco del papel	•	•	•	•	•

Ventajas

Selección automática de filtros	•	•	•	•	•
Muestra valores de tres colores a la vez			•		•
Interfaz RS-232	•	•	•	•	•
Calibración rápida	•	•	•	•	•

Accesorios con cargo adicional

Filtros polarizados	•	•	•	•	•
Impresora de líneas	•	•	•	•	•

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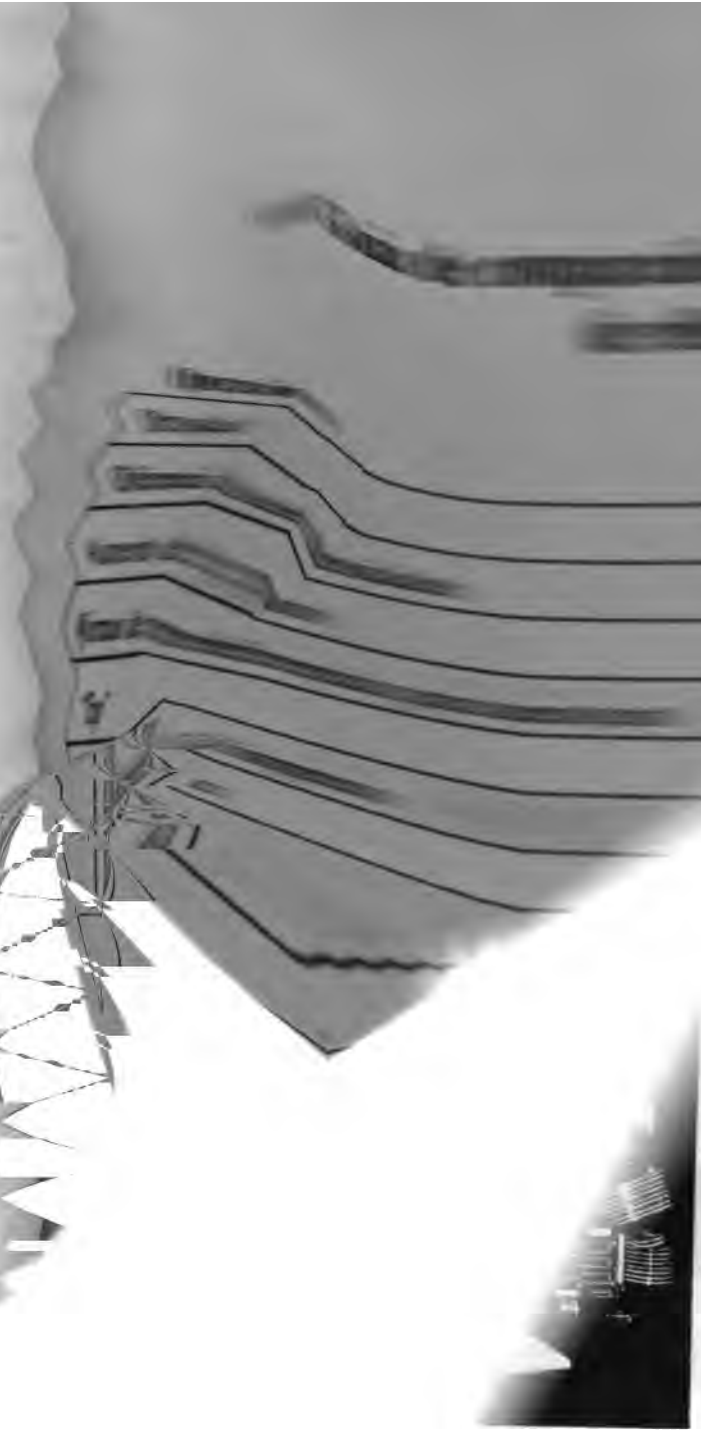
nuestros densitómetros.



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npletamente para evitar

prueba final. Cada densitómetro se mantiene en operación por 24 horas y tiene que funcionar dentro de todas las especificaciones rígidas establecidas y publicadas por X-Rite antes de ser embarcados a ustedes.

Compren con confianza. X-Rite garantiza la calidad.

ío solamente hablamos de calidad pero la **garantizamos debido al control de calidad** de nuestra producción. Tomamos toc**os pasos para asegurar que el instrumento embarcado funcione sin problemas** y dé satisfacción a nuestro cliente.

Parte de la calidad es la consistencia. Los tableros de circuitos son ensamblados con la asistencia de computadora. La computadora le indica al obrero qué pieza se debe insertar al tablero y cuándo se debe insertar. Esto asegura que cada tablero de circuitos sea igual.

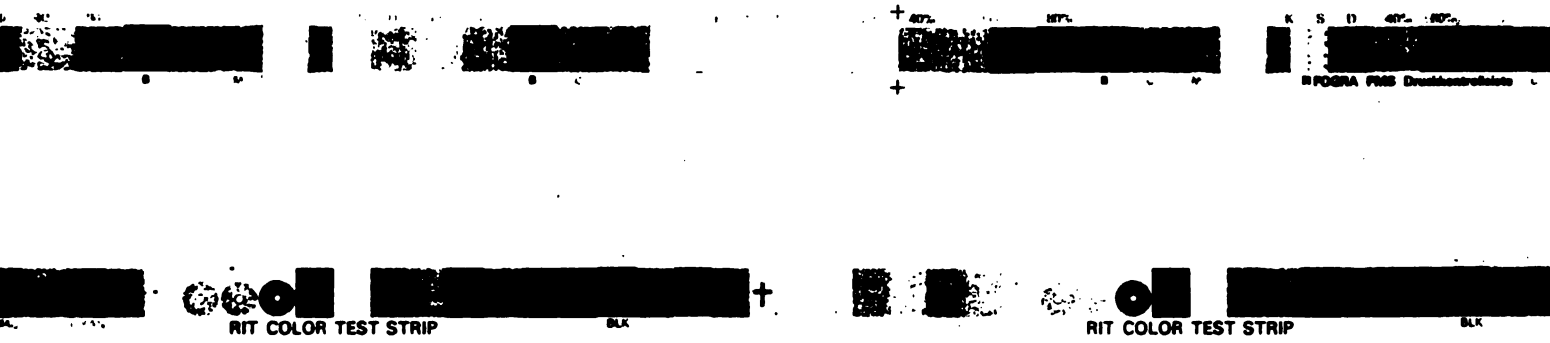
Componentes confiables significan productos confiables. Por esta razón cada tablero de circuitos es probado por 100 horas a distintas temperaturas. Sin esta prueba, no se utilizan en nuestros densitómetros.

Exigimos equipos sin ningún defecto y esto requiere pruebas extensas. Por esta razón utilizamos computadoras para verificar que todos los componentes digitales y análogos están funcionando correctamente. Cada memoria digital se utiliza completamente para evitar cualquier problema.

La prueba final. Cada densitómetro se mantiene en operación por 24 horas y tiene que funcionar dentro de todas las especificaciones rígidas establecidas y publicadas por X-Rite antes de ser embarcados a ustedes.

Si se puede medir, se puede controlar.

No importa cuál barra de colores se utiliza, todas incorporan áreas donde se puede hacer medidas de densidad, aumento de punto, sobreimpreso ("trap") y contraste del impreso. Si no se utiliza una barra de colores en las tiradas, es muy difícil llevar a cabo un control de calidad de la hoja impresa.



X-Rite, Incorporated

Agente en su país -

Grafitec International Inc.
División América Latina/Caribe
P.O Box J • Wheeling, Illinois 60090
Teléfono: 312-520-1450
Télex: 4330141 GRAFUI • Fax: 312-520-4294

Contacto en Illinois, USA : Judy

X-Rite ®, Quick Cal™, Electronic Function Selection™, Nonheatset Electronic Function Selection™ y Computerized Color Response™ son marcas y nombres registrados de X-Rite, Incorporated. Especificaciones sujetas a cambio sin notificación. Impreso en EE.UU.

Equipo tiene soporte técnico en Costa Rica por medio

ANNEX 3: Print Shop Equipment

1. Half-sheet Two-color Press

(20 ½ x 28 ½ inches/520 mm x 724 mm)

Suggested: Heidelberg, Roland, Komori

OR EQUIVALENT

2. 1 Folder (23 inches/584 mm width)

Suggested: a- Stahl -- b- Baum

OR EQUIVALENT

3. 2 Folder-Staplers

Suggested: Standard Booklet-maker 1200,

Baum model 714 air

or O&M System 80

OR EQUIVALENT

4. 2 Collators - vertical bins

Standard Duplo model 12/24

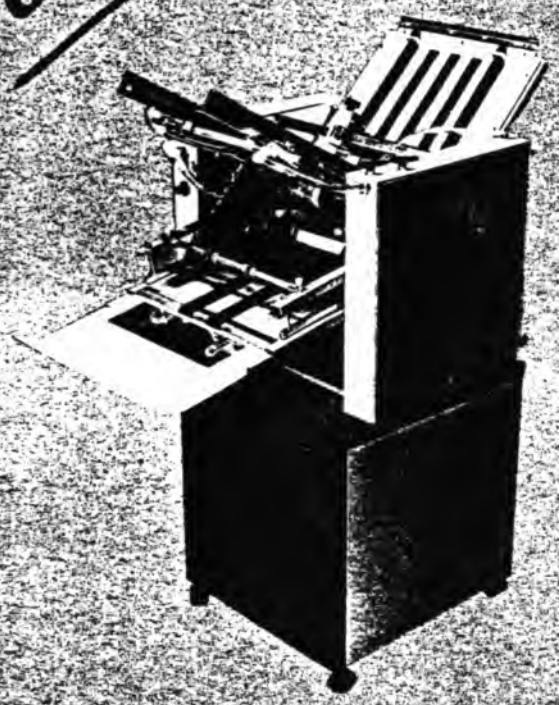
and Standard Duplo model 12/24

with Stitcher/Folder/Trimmer

OR EQUIVALENT

OK!

Nothing Folds Like Pro-Fold



Standard Pro-Fold 5

Model 5

5″ x 5″ to 14″ x 20″

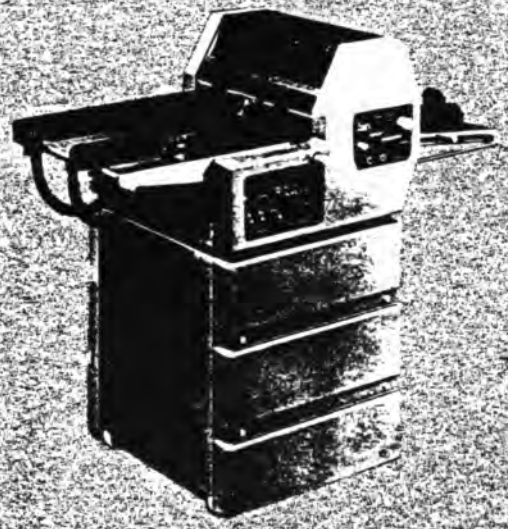
Featuring:

- Vacuum bottom feed
- Up to 30,000 sheets per hour
- Ideal for hard to handle stocks—up to 67 lb cover
- No marking—even if sheets are not dry
- Easy to operate
- Continuous production—top loading
- Rugged Construction
- Stapled sets / Refolds

Standard SRN 9

The SRN 9 combines the superior impression quality, flexibility and reliability of a rotary head numberer with the increased efficiency and production of suction feeding.

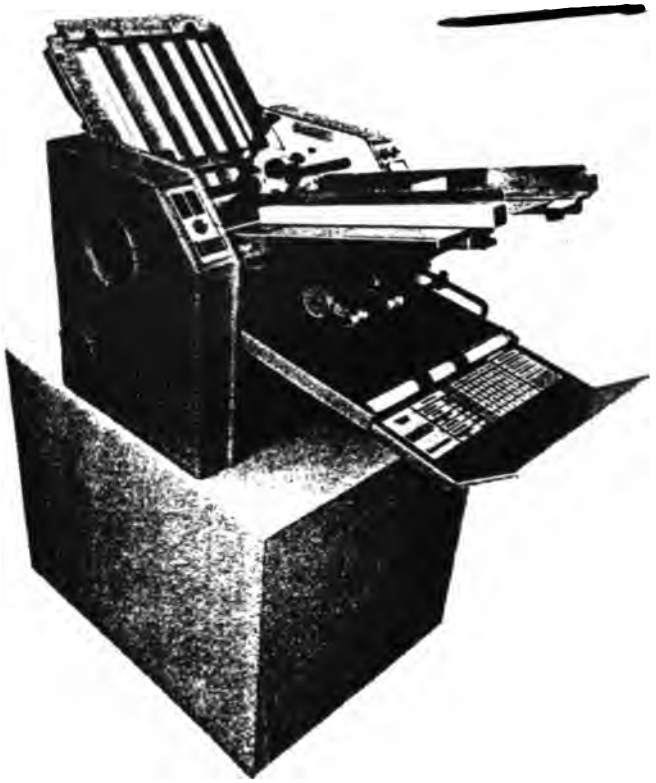
- Minimum sheet size 4″W x 6″L
- Maximum sheet size 18″W x 18″L
- Up to 7 part carbonless set
- Up to 9000 sheets per hour
- Up to 4 heads
- Perfing, slitting, scoring are standard
- Form roller inking for consistent numbers—5 colors
- Caster mounted



The Worlds' Only Free-Standing, Suction-Feed, Rotary Numbering System

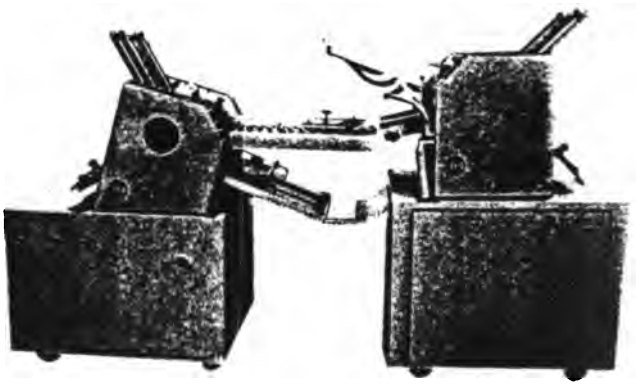
BAUM USA

714 AIR **OK!**



STAND OPTIONAL

714 RIGHT ANGLE IN TANDEM



ULTRAFOLD™ 714 FRICTION, (714 FRICTION)
THE TABLE TOP CHAMP

The 714 Friction combines all the rugged reliability of the larger model Baum folders in a compact, convenient size. The Ultrafold is ready to go to work for you anytime and any place you need it. It will work hard for you - job after job, year after year. The Champ is compact and convenient but it's no "bantam-weight" folder:

- 3/4" steel cross tie bars
- 1/4" side frames
- professionally designed controls
- sound covers available

ULTRAFOLD™ 714 AIR SUCTION, (714 AIR)
THE ULTIMATE TABLE TOP FOLDER

The 714 Air is considered the most prestigious tabletop folder in the world. It has out-classed every other tabletop folder.

Along with all the unique features that make the 714 Friction the most successful folder of this decade, the 714 Air adds the capability of handling coated stock (the kind of stock that usually requires a floor-model folder). With the 714 Air's positive suction wheel, you no longer have to overload other equipment to eliminate marking problems.

ULTRAFOLD™ 714A FEEDER

The 714 Air Feeder eliminates the potential for human error with a self-compensating caliper. This new double sheet control will do the actual caliper setting for you. You don't have to decide where the caliper should be set.

The unique suction wheel has two rows of vacuum openings to keep the paper from skewing as it feeds into the machine. Air blasts are provided from the front of the paper as well as the sides. Just like the suction, control valves provide 100% settings of the air blast.

ACCLAIMED AS TH

SYSTEM 80

O&M OK!

The Compact. . .
Newly Designed. . .
High Speed. . .
STAPLER/FOLDER

O & M System 80

The System 80 is a compact newly designed, high speed stapler-folder. It is capable of producing finished booklets with up to 80 pages at a rate of 1600 per hour. The once extremely long process of booklet production is obsolete with the System 80. The process which started with collating is continued with the System 80 until the booklets are completed. The extremely compact and mobile unit jogs, places two staples in the middle and folds collated/sorted sets into booklets. Once the booklets are ready, they are fed out by a conveyor belt stacker. This unique design makes it possible to feed the System 80 manually from a separate sorter/collator. It can be combined with the System 12 and 30 collator for in-line operation.

- Production rate 1600 booklets per hour.
- Up to 20 perfectly stapled and folded sheets (80 pages) per booklet.
- Easily adjusted to handle sheet sizes from 8-½" x 11" to 8-½" x 14".
- Adjustable built in jogger for perfect alignment.
- Conveyor belt stacker with a capacity of up to 200 booklets.
- When stacker is full an indicator lights up and the machine stops. It starts again automatically when emptied.
- Indicator lights up when reloading of staples is required.
- Easy and fast loading at a convenient working height.

O & M System 80 Off-line Specifications

Capacity:	20 sheets (60 lb.) offset to 110 lb. index
Speed:	Variable. Maximum 1600 booklets per hour
Sheet size:	8-½" x 11" to 8-½" x 14"
Staple magazine:	420 chisel point staples between reloads per stapling head
Dimensions:	Length 35" - Width 26" - Height 33"
Weight:	183 lbs.
Voltage:	115V 60Hz

O & M System 80-30 Automatic Stapler-Folder

Just wheel it up to the System 30 collator and the total collating/stapling/folding system is ready to use. The modular concept allows the operator to change from the System 80 to corner stapling with the System 36 in seconds with no installation work.

O & M System 80-30 Specifications

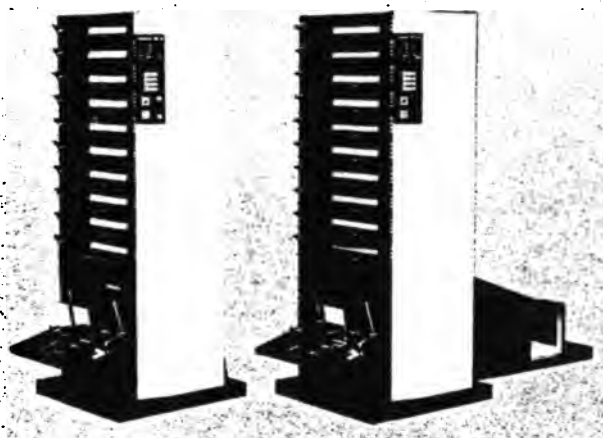
Capacity:	20 sheets (60 lb.) offset paper
Speed:	Variable. Maximum 1600 booklets per hour
Sheet size:	8-½" x 11" to 8-½" x 14"
Staple magazine:	420 chisel point staples between reloads per stapling head
Dimensions:	Length 35" - Width 26" - Height 33"
Weight:	183 lbs.
Voltage:	115V 60Hz

O & M System 80-12

The O & M System 80 in in-line operation with the System 12 collator makes a fully automatic collating/stapling/folding system at a rate of 1200 booklets per hour. The switchover time to corner stapling with the System 36 takes only a few seconds.

O & M System 80-12 Stapler-Folder Specifications

Capacity:	12 sheets (60 lbs. offset paper) (offline 20 sheets)
Speed:	1200 booklets per hour (offline 1600 booklets per hour)
Sheet size:	8-½" x 11" to 8-½" x 14"
Staple magazine:	420 chisel point staples between reloads per stapling head.
Dimensions:	Length 35" - Width 26" - Height 24"
Weight:	165 lbs.
Voltage	115V 60Hz



Collate Easier in a Fraction of the Space

Standard Duplo 10 and 10S Collators

Featuring:

- Space saving, takes up about the size of a vertical file
- Automatic self-setting electronic miss, double and jam detectors
- Up to 24,000 sheets per hour
- Operator friendly
- Minutes to set-up
- Caster mounted for easy movement around shop
- 25"L x 25"W x 65"H

Model 10
Straight or offset stock of up to 10 sheets

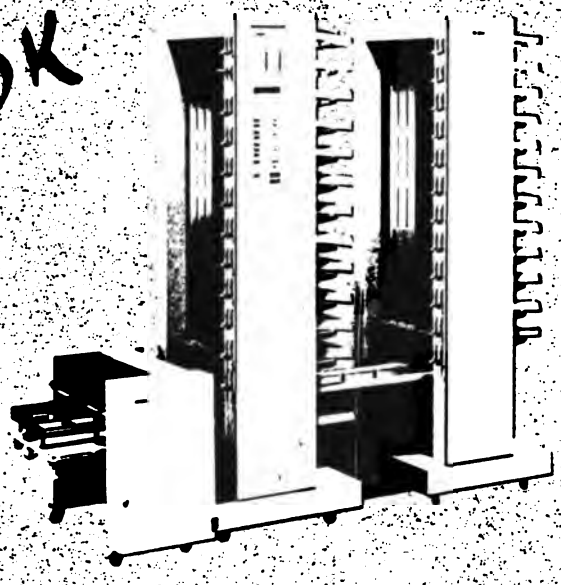
Model 10S
Same as Model 10 plus optional corner stapling unit can be added at anytime

Standard Duplo 12/24 Modular Collator

Featuring:

- Automatic self-setting miss and double detectors allow complete "hands-off" operations
- Collates NCR, onion skin, most coated stocks, fold-outs, and tab stock
- Paper weights from 11 to 110 lbs
- Friction separation feed system ensures 100% feeding accuracy with no set-up
- Capable of single tower (12 sections) or double tower (24 sections) collating
- Variable speeds up to 42,000 sheets per hour
- 3 minute set-up time
- Rollaway stacker automatically recedes and shuts down when receiving tray is full
- Straight or offset stack

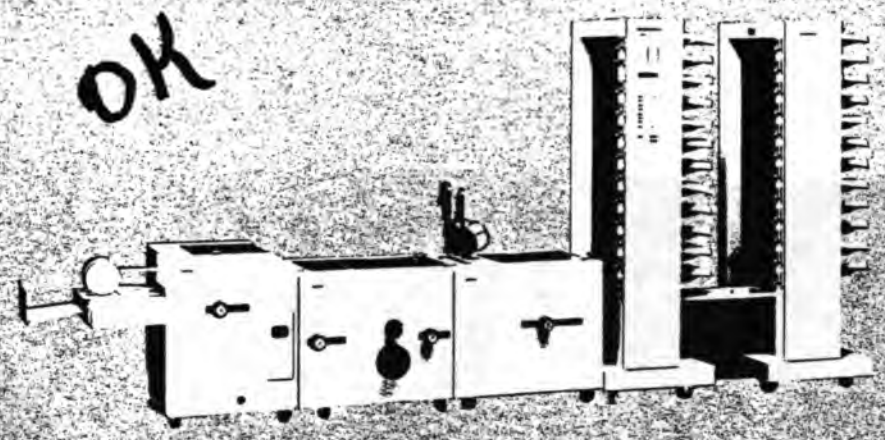
OK



Collating Has Never Been so Easy

Paper Size: 5" x 8" to 11" x 17"
Station Capacity: 250 sheets
Speed: 12 Stations—up to 2400 sets per hour
24 Stations—up to 1800 sets per hour

COLLATORS

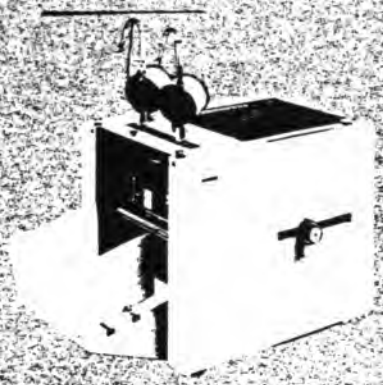


Standard Duplo 12/24 with Stitcher/Folder/Trimmer

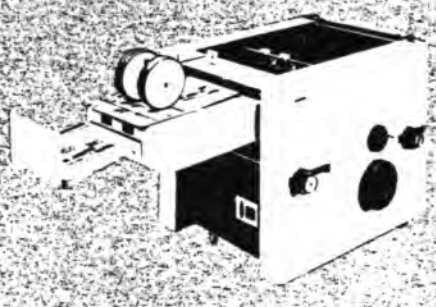
Advantages at a Glance:

- Modular system expands to suit your needs
- Tool-less, make-ready, and change-over
- Corner stitch–Side stitch–Saddle stitch
- Runs most coated stocks, NCR, Tabs, Foldouts
- Solid state electronics
- Simple to operate–even for first time users
- All units caster mounted for easy mobility
- Paper size from 5″ x 8″ to 12″ x 17½″

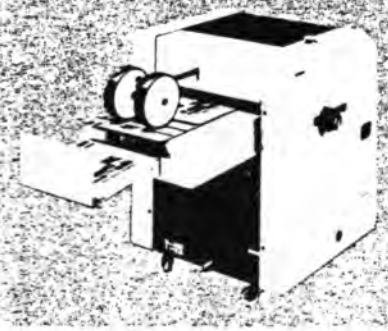
Stitcher



Folder



Trimmer



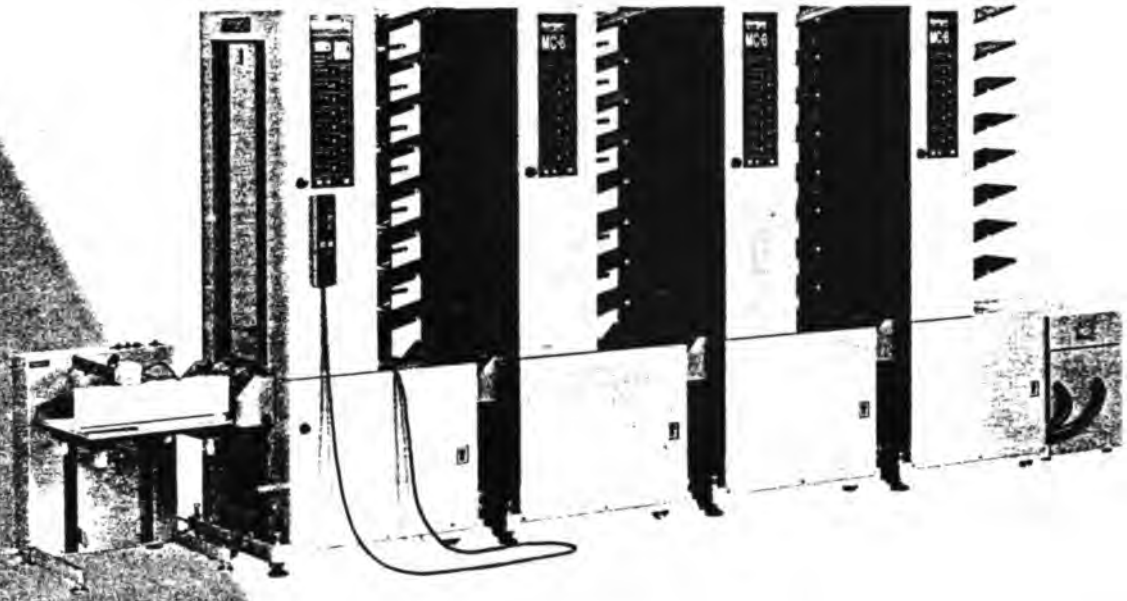
Heavy duty stitcher, simple to set and run.
The Standard Duplo dual head stitcher gives you heavy duty performance with minimum set-up. Self aligning stitcher heads and clinchers eliminate wasted set-up time. Side, corner or saddle stitch at the press of a button. Simple rugged design gives you all the advantages of a stitcher without the operator problems.
30″L x 25″W

Compression roller system gives crisp, tight folds.
Standard Duplo knife folder is capable of handling a wide variety of stock with consistent accuracy. Caster mounted for easy hook up. Sets up in minutes to produce sharp defined folds, up to 24 sheets.
40″L x 25″W

Ruggedly built to give simple, accurate face trim.
The Standard Duplo trimmer sets up easily for on-line face trimming of booklets with precision and consistency. Conveyor belt delivery gives neat, compact stacking of booklets. Efficient design makes set-up a snap.
30″L x 25″W

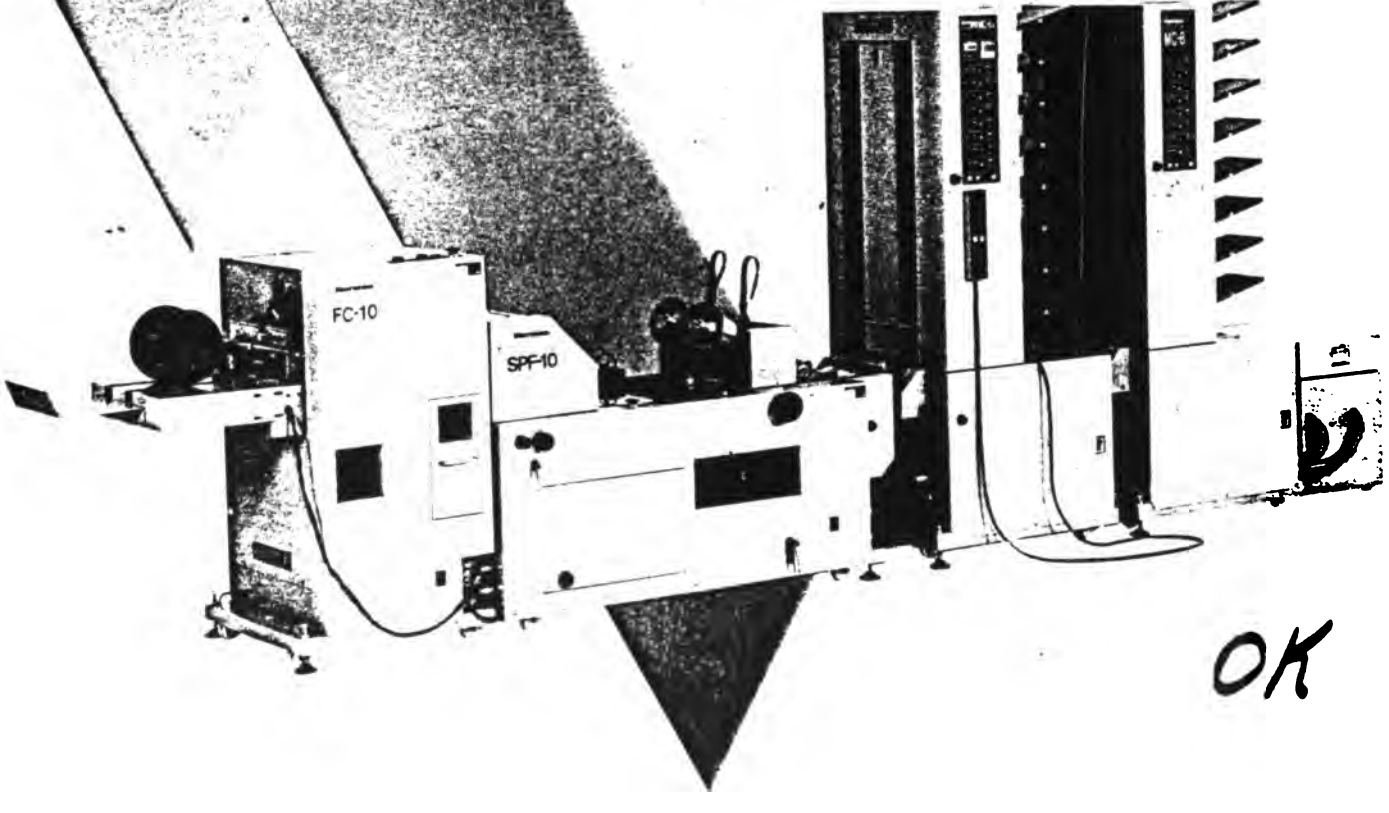
Expandable up to Four Modules (32 Bins)

MC-32 with Stacker Receiving Tray



Combined with Stitcher, Folder, and Trimmer

MC-16 + SPF-10 & FC-10



OK

Major Specifications

Number of Bins	8, 16, 24, and 32 bins
Maximum Sheet Size	318 mm x 470 mm (12.5" x 18.5")
Minimum Sheet Size	148 mm x 210 mm (5.8" x 8.3")
Paper Weight Range	52 gsm to 260 gsm
Pile Height (bin)	50 mm (2")
Error Detectors	Jam, Double, and Misfeed
Production Speed	8 bins ... 3,500 sph (sets per hour)
(with A4 size sheets)	16 bins ... 1,900 sph
	24 bins ... 1,800 sph
	32 bins ... 1,300 sph
Power	200 V 3-Phase 50/60 Hz
	380 V 3-Phase 50 Hz
	415 V 3-Phase 50 Hz
Power Consumption	0.2 kW (per a module)
	1.5 kW(air pump)
Machine Weight	Receiving Tray : 66 kg (145 lb)
	Each Module(a) : 227 kg (499 lb)
	Each Module(m): 209 kg (459 lb)
	Air Pump 74 kg (162 lb)

Note : The machine design and specifications are subject to change without notice.

Machine Dimensions : *(Unit : mm)*

Machine Height : 1640

Other Accessories:

- Preset Counter
- Preset Tabbing on Top Two Bins
- Total Counter
- Automatic Sheet Caliper Memorizing System
- Detector Sensitivity Selector Switch

Distributed by

STANDARD

Standard Duplicating Machines Corporation
10 Connector Road, Andover, MA 01810
800-626-4774, In Massachusetts: 508-470-1920
Fax: 508-470-0819, Telex: 95-1017

HORIZON INTERNATIONAL, INC.

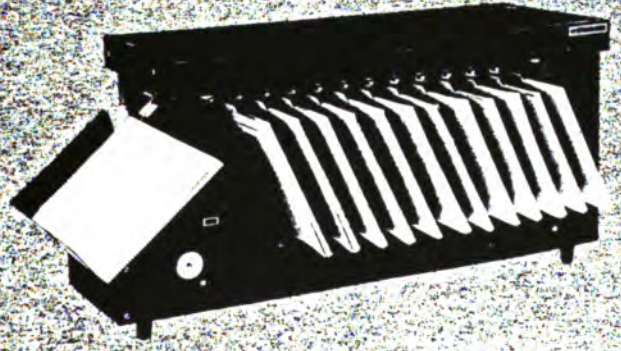
BOOKLETMAKER, TABLE-TOP COLLATOR

Standard Bookletmaker 1200

Staple and Fold Up to 25 Sheets

- Heavy duty construction
- Simple set-up and adjustments
- Up to 1200 books per hour
- Integrated conveyor stacker
- Automatic side jogging of sheets
- Ideal working height
- Caste mounted for easy movement
- Weight: 191 lbs

Simple, Reliable and Productive



Standard Setmatic 1117 & 814

Table-Top Collators

The Standard SM1117 is the only machine in its class that can collate 11″ x 17″ sheets as well as collate and crisscross stack 8½″ x 11″ sheets.

- Up to 1800 cycles/hour
- Photocell mode can adjust speed to suit operator
- Exclusive "True Sponge" feed rollers are self cleaning for longer lasting and more accurate pick up
- Collates 5″ x 8″ to 11″ x 17″ sheets
- 12 stations
- Weight: 117 lbs

The SM814 is built to the same specifications, except for the photocell, as the SM1117 but is designed for 5½″ x 8″ to 8½″ x 14″ sheets.

- Weight: 92 lbs

ANNEX 4: VIDEO Production Equipment

Radio Nederland

IICA

MEMO: IICA/RNTC -020-

FROM: F. Clercx

TO: M.P. Torres

RE: Video equipment

****

1- As promised here by the latest information from Panasonic and JVC Professional Super VHS cameras and recorders.

2- Prices are indications and subject to change.

3- At present system choosing and selecting is quite a gamble. It frankly depends on the use and destination of the recorded and edited end-product.
Super VHS could (soon) be replaced or get under competitive cross-fire from HI-Band pro 8 (Sony) and in the very near future by ever more sophisticated digital equipment.

Div. de Comunicacio-
12 MAR 199(
RECIBIDO P

Radio Nederland

IICA

JVC Dutch Prices

BRS Recorder	Fl. 9000	US.$ 4,500.00

Special Prices USA

BRS Recorder	US.$ 2,500.00
BRS-810U Edit Recorder	4,800.00
BRS-610U Recorder Player	2,900.00
KY-15U Color Camera	4,100.00
Video Tripod Sachtler Video 10	975.00
KMF 2500 TBC Time Base Corrector (optional)	4,500.00
Editing Controler	3,000.00
Light Set	1,500.00
Microphones	1,000.00
Two Color Monitors	1,000.00
S-VHS Tape $12.00 each	500.00
TOTAL	$26,775.00

Prices are without transport and or insurance and import duties. An unforseen of about 10% on these prices is advisable. Audio amplifier with monitor not forseen.

Panasonic

Total set-up with Panasonic equipment will not differ too much from mentioned JVC prices.

ow Good is Our 3rd Generation? Take a Look at Our 5th!

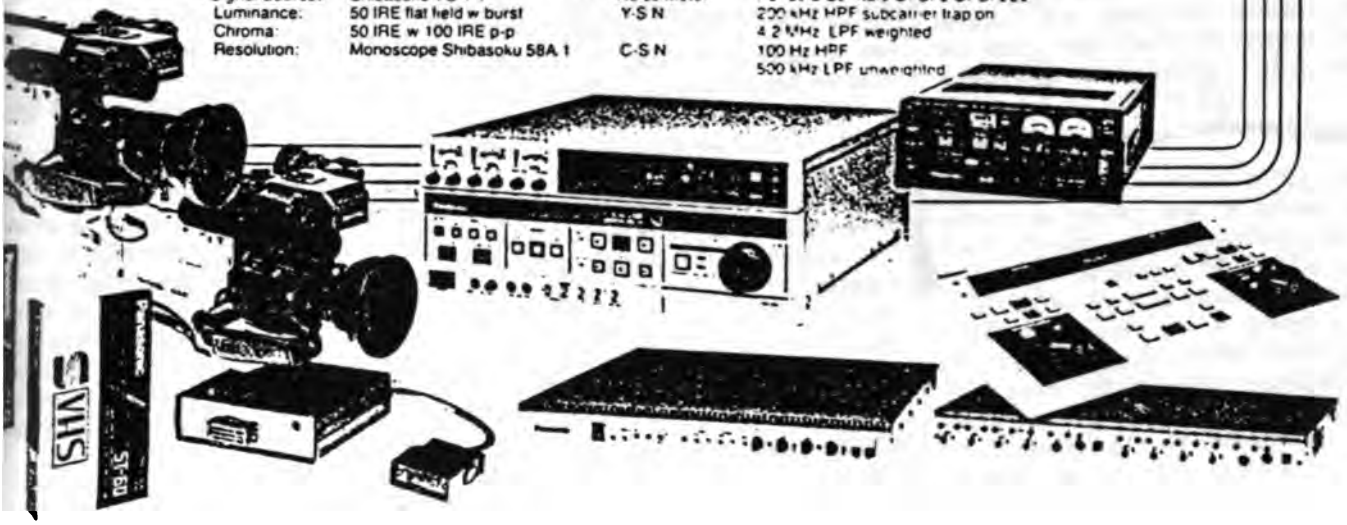
PERFORMANCE DATA (AG-7500A)

	1st Generation	3rd Generation w/o TBC	3rd Generation w/ TBC-200	5th Generation w/ TBC-200
Horizontal Resolution (Color Mode)	400	370	360	350
S/N Ratio (dB)				
Luminance (Color Mode)	57.2	51.7	52.0	49.0
Chrominance (AM)	51.8	47.5	51.4	44.5
Chrominance (PM)	44.3	40.1	43.8	35.2

Data represents measurements by independent engineering evaluation. VCRs taken at random from inventory

- Signal Source: Shibasoku TG-7 1
  - Luminance: 50 IRE flat field w burst
  - Chroma: 50 IRE w 100 IRE p-p
  - Resolution: Monoscope Shibasoku 58A 1
- Noise Meter
  - Y-S N
  - C-S N

Rohde & Schwarz UPSF2 UPSF2E2
200 kHz HPF subcarrier trap on
4 2 MHz LPF weighted
100 Hz HPF
500 kHz LPF unweighted



n the first to the third, even to
e 5th generation Panasonic•
Pro Series specifications
: for themselves. And they
utstanding." Here are some
reasons:

AG-7500A editing VCR
s new laminated amorphous
produces superb quality
ation after generation.

AG-A750 editing
oller has everything you
lor highly accurate single
editing.

d the AG-7400 portable
r VCR is a natural
mer in the field.

r TBC-200 time base
ctor has a 16-line correction window, chroma plus/ enhancement, chroma noise reduction and no-roll circuitry To make multi-generation recordings even better.

The UTP-1 signal transcoder is more than ready to transcode virtually any component signal into any other component signal. Saving you an extra generation

The IFP-44 editing interface controls Pro Series decks on both the source and edit side. To easily integrate into selected 3/4" systems

Our CCD Cameras are equally spectacular And with the Panasonic SVHS Pro Series you not only get outstanding performance, you also get the added economy of 2-hour operation in the field and in the studio.

The Panasonic SVHS Pro Series. In a word it's outstanding.

For more information and your local dealer, call your nearest regional office.
Eastern Zone: (201) 348-7620
Central Zone: (312) 981-4826
Southern Zone:
Dallas Region: (817) 685-1122
Atlanta Region: (404) 925-6837
Western Zone:
Seattle Region: (206) 285-8883
Los Angeles Region: (714) 373-7275

S-VHS

Panasonic
Professional · Industrial Video

See us at NAB Booth #4142

ex

300, a lightweight, high-resolution video camcorder, combines an ced 670-line resolution 3-CCD camera with an on-board Betacam TR. A fully loaded CVR-300 includ- ttery and cassette weighs about 15 ls—half the weight of a conven- l camcorder system. Ampex claims CVR-300's high resolution sets a standard of quality for ENG and camcorders. The CCD sensors are ded directly to the prism block to ce possible damage in the field and a system that never needs regis- on or adjustment. The unit accepts o 30 minute cassettes (Betacam or cam SP) and can provide up to 55 tes of continuous operation from a le battery.

VC-70 is a high-resolution studio, l and portable camera which pro- es images sharp enough to rival se of tube-type camera performance. new CCD chip generates pictures h 700 lines of resolution and 420,000 els. Blooming and vertical smear is minated by the presence of two P- lls in the CCD chip. It has a built-in ed-selectable electronic shutter to ture objects moving at high speeds. will be available in September.

nasonic

)-20 was premiered as the first nera ever to use completely digital nal processing. The camera uses ee recently developed 400,000 pixel ame Interline Transfer (FIT) CCD age sensors to achieve picture quality oducing more than 750 lines of resolu- n and a signal-to-noise ratio of more an 60 dB. The AQ-20 is dockable with the M-II AU-400 VTR, but is suited for a range of applications from studio use to ENG. A variable speed electronic shutter offering numerous settings help capture images moving across the field of focus at very high speeds. It will be available in mid 1990.

AK-450 is Panasonic's new ENG/EFP dockable analog camera which uses 2/3 inch format FIT CCD chips with 450,000 pixels. Resolution is better than 800 TV lines and signal-to-noise ratio is 62 dB. Numerous electronic shutter speeds assure high performance when capturing moving images. Designed to dock with the AU-400, and weighing just 7.5 lbs, the AK-450 offers ease of handling and operation.

WV-F70 2-CCD color video camera is designed to satisfy the needs of the industrial videographer. Two CCD's, each of which have more than 335,500 pixels, are connected to a high-definition F1.4 prism, providing users with 500 lines (typical) of horizontal resolution. The camera's separate Y/C output provides for direct S-VHS compatibility and offers the high picture quality required by the S-VHS format.

SK-F1, the new 3-CCD chip camera which Hitachi claims redefined the world's standard for picture and versatility in an ENG/EFP camera, has a horizontal resolution of 650 TV lines. With the latest FIT technology, smear is virtually eliminated. A built-in six-speed electronic shutter ensures clarity even when shooting fast-moving objects. Yet, the SK-F1's most obvious advantage is its compact, lightweight design—it's the smallest ENG/EFP camera ever. Designed for both multi-core and triax operation, the SK-F1 functions as a recording camera, a stand-alone camer or a remote EFP system.

SK-F3 is Hitachi's newest CCI broadcast camera for ENG/EFP applica tions. This lightweight camera produce 400,000 pixels, 650 lines of high resolu tion, and eliminates smear and fixe pattern noise. The built-in six-spee electronic shutter allows for image clar ity when capturing moving objects Using triax, SK-F3 allows remote con trol operation up to 2,400 m from th base station.

SK-F700/710 is the newest studio field camera. The new SK-F700 serie is the studio version of the SK-F camera, including a 2/3 inch 400,00 pixel FIT CCD. The series offer horizontal resolution of 700 TV lines along with a signal to noise ratio of 6 dB. The SK-F700 series cameras in clude a built-in linear matrix maskin amplifier to ensure high-fidelity colo rendition.

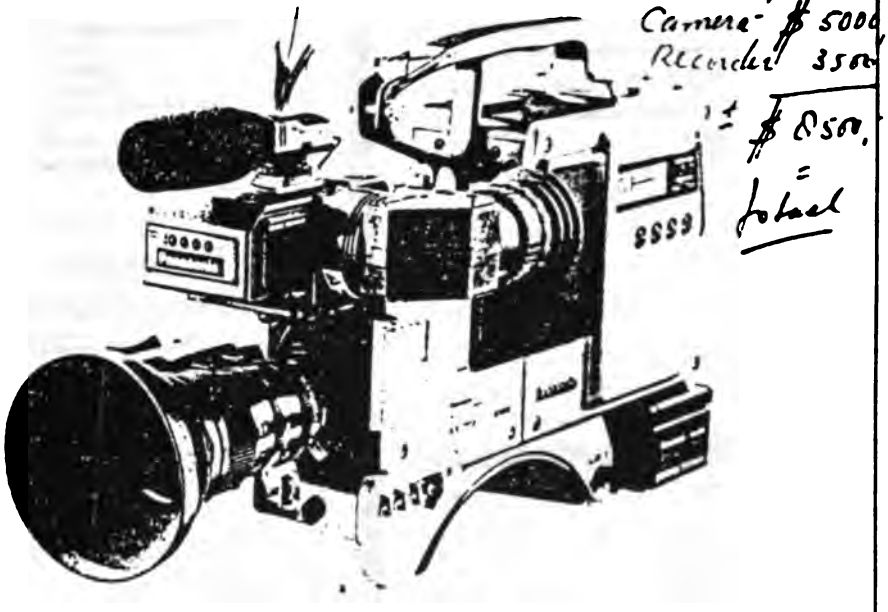
CK-2B is a portable 3-CCD chi camera for broadcast applications. I offers high resolution (660 TV lines) high sensitivity, a signal to noise ratio o 60 dB and a built-in six-speed electronic shutter. For enhanced mobility an versatility, the CK-2B is compact an lightweight and dockable with a wid variety of 1/2 inch VTRs.

JVC

KY-17U is JVC's latest 3-CCD chi camera in the KY line. It carries 64 lines of horizontal resolution and signal-to-noise ratio of 59 dB. The KY- 17U can be used in studio and stand alone applications and is designed fo direct docking with the BR-S410U pro fessional S-VHS recorder. It can also b docked to MII and Betacam SP record ers with an optional adapter. A tw channel preamplifier allows stere sound recording when the KY-17U i used with the BR-S410U in a camcorde arrangement. Other features on the KY 17U include multi-format output signal color matrix circuit and negative/pos tive image reversal.

KY-25U is a 3-CCD chip color vide camera that delivers 700 lines of resol tion and a signal-to-noise ratio of 60 d The KY-25U uses 2/3 in. CCDs wi 380,000 pixels and has three electron shutter speeds. A two-channel prear plifier allows stereo sound to be recor ed when the camera is used with t BR-S410U camcorder.

KY-15CI is a high-resolution, easy use, 3-CCD color camera for ima capture in computer graphics appli tions. It is designed for direct conn tion to TARGA, VISTA and Raster O



Panasonic WV-F70 Camera Docked to AG-7450 VCR

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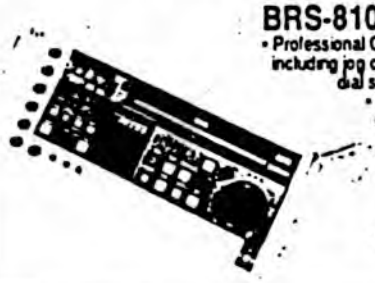

BRS-810U Edit Recorder

- Professional Quality editing functions including jog control and variable speed dial search (from still to 10x)
- Y/C 3.58 or Y629 Dub
- Half Loading mechanism to enable reading of CTL in FF and REW
- Many other features

...UNDER $4800

BRS-610U Recorder/Player

- Interfacing source machine for edit system
- Hi-Fi and Linear Audio w/Dolby
- Dub Connector for Y/C 3.58 or Y629
- Front Panel Test points
- Many other Features

...UNDER $2900

BRS-410U

- Standalone portable or direct dock with KY-15U, BY-110U or BY-10U
- Source machine for simple edit system
- Hi-Fi and Linear Audio w/ Dolby
- Switchable Camera / Line / Y/C input
- Many other features

...UNDER $2500

KY-15U 3 Chip Color Camera

- 500 lines horizontal resolution in each of R.G.B. channels
- 58 dB S/N
- Multiformat output signals - RGB, MII, S-VHS and composites
- S-VHS Camcorder capability with BRS-410U (no adapter required)
- 3 speed electronic shutter
- Available with 10x or 16x lens

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SPECIAL PRICING ON S-VHS EDIT SYSTEMS.

Videotek AVM-13S Color Monitor with Audio

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TOTAL PERFORMANCE, TOTAL FLEXIBILITY

ultimate dream for video professionals, rb picture performance of Super-VHS, ine camcorder flexibility, full multi- at editing capabilities and at an dibly cost-effective price.

is totally integrated system starts with rior quality footage from the light- ht portable camcorder. Then, the isticated circuitry of the rugged 810E S-VHS Editing Recorder helps o create a product that is one step r to perfection. With JVC's unique in remote control system, both the editing recorder and its natural complement, the BR-S610E S-VHS Recorder, also become feeders for the RM-G810U Editing Control Unit. The result is high accuracy, multi-function editing from one of the world's most compact and powerful editing suites.

But JVC flexibility doesn't stop there. VHS, PAL, SECAM, NTSC and MII feeders can all be linked to the Editing Control Unit. And the inputs can be converted and edited into a high quality S-VHS product.

But, perhaps the most exciting feature for video professionals is Multi-Format Integration. Now, the superb first-generation performance of S-VHS footage can be transferred through a KM-F250E Multi-Format Frame-Synchronized/Time-Base Corrector to an MII editing recorder. The component format of the edited master can then be copied in MII, 3/4", S-VHS or VHS.

Yet another example of JVC's total system approach providing total performance, total flexibility and keeping you one step ahead.

For further information, please contact

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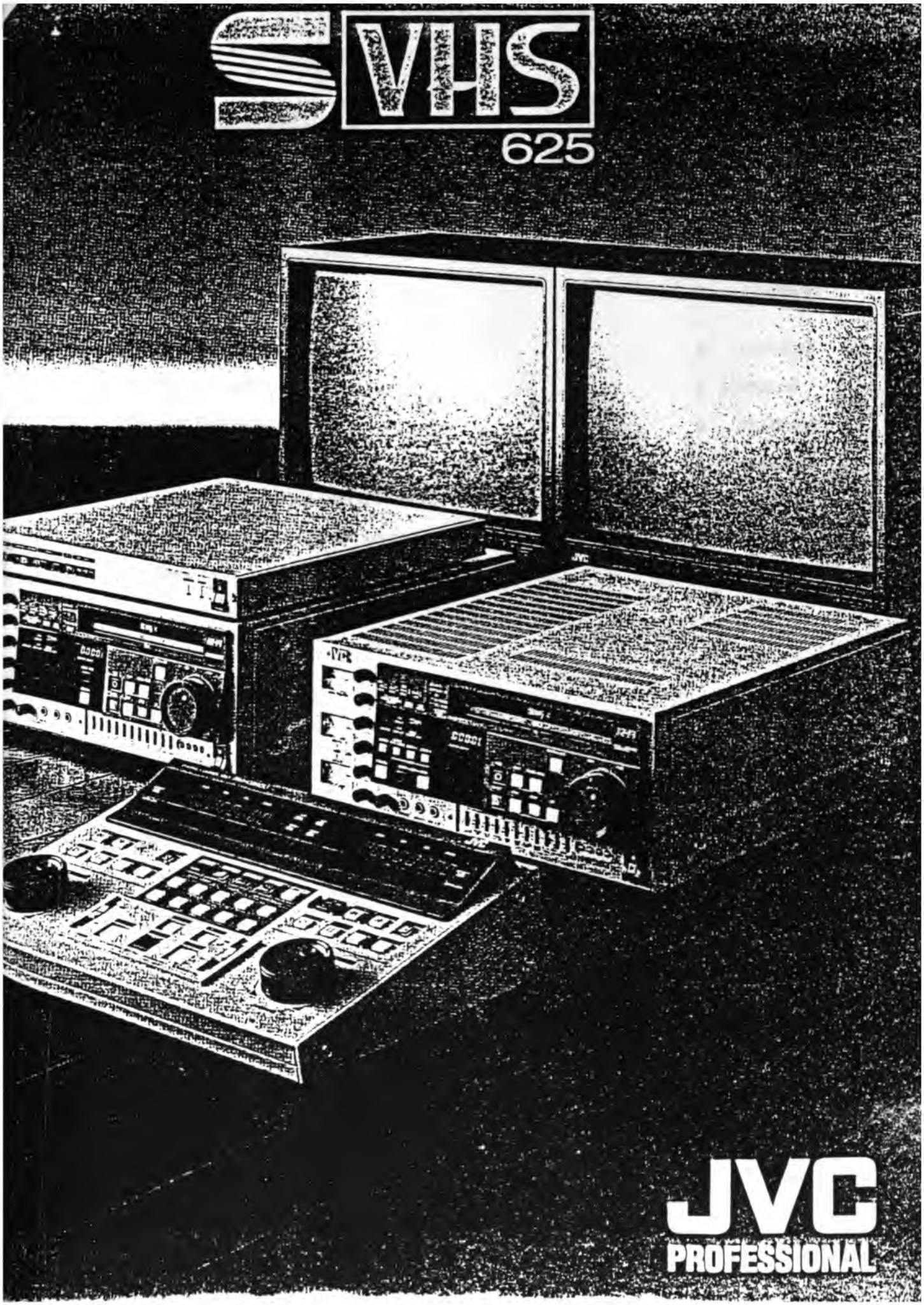
ANNEX 5: Ideal BETACAM System


S-VHS
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PROFESSIONAL

Video production studio and control

3	Prof. camera's	$ 60.000.00
	Acc.for camera's	$ 9.000.00
	Audio:amplifier, microphones, loudspeakers etc	$ 5.000.00
	Light (spots) +m 30Kw	$ 10.000.00
	Dollys's (3)	$ 12.000.00
	Digital vision mixer	$ 15.000.00
1	Recorder Betacam	$ 32.000.00
2.	Play back Betacam	$ 45.000.00
1	Title generator combined with IBM-AT computer	$ 1 2.000.00
1	Intercom system camera's and controls	$ 2.000.00
	Mon itors 14"	
	3 pré camera's	
	1 pré slides	
	2 pré video	
	1 spare (line)	$ 5.000.00
	Mon itors 20" Programme 20"	$ 5.000.00
1	Routing switcher	$ 10.000.00
2	Studiomonitors 20"	$ 2.500.00
Cables and plugs		$ 2.000.00
1	Teleprompter	$ 6.000.00
1	Slideprojector	$ 2.500.00
	TOTAL	$ 235.000.00

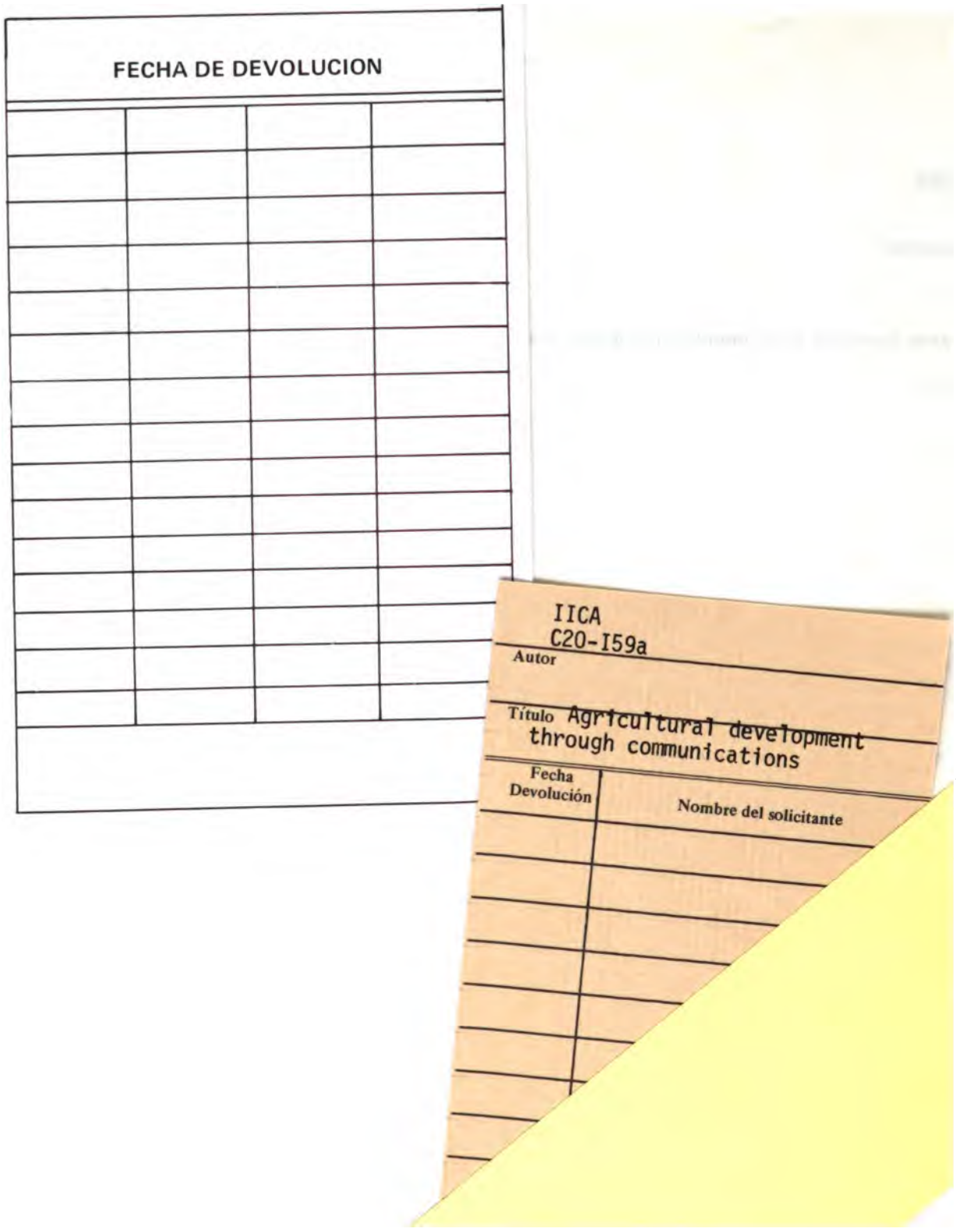
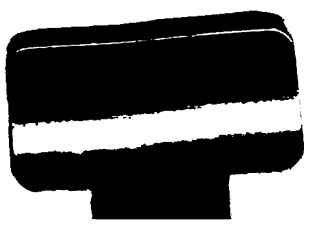
Not forseen spare parts and installation

Portable Video

1	Camcorder	$ 36.000.00
1	Tripod	$ 3.500.00
Set:	chargers, batteries, port, monitor, pin mikes, port, mixer	$ 5.000.00
1	Lightset	$ 2.000.00
	TOTAL	$ 46.500.00

Video Editing unit

2	Playback Betacam	$ 45.000.00
1	Recorder Betacam	$ 32.000.00
1	Switcher	$ 15.000.00
1	Editing control	$ 13.000.00
1	Set monitors	$ 6.000.00
Loudspeakerr with amplifier		$ 1.000.00
Audio mixer		$ 2.000.00
	TOTAL	$ 114.000.00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C20-I59a
Autor
Título Agricultural development through communications
Fecha Devolución
Nombre del solicitante