

WANG

SPECIAL
PRODUCTS
IDEAS
BOOK

1986

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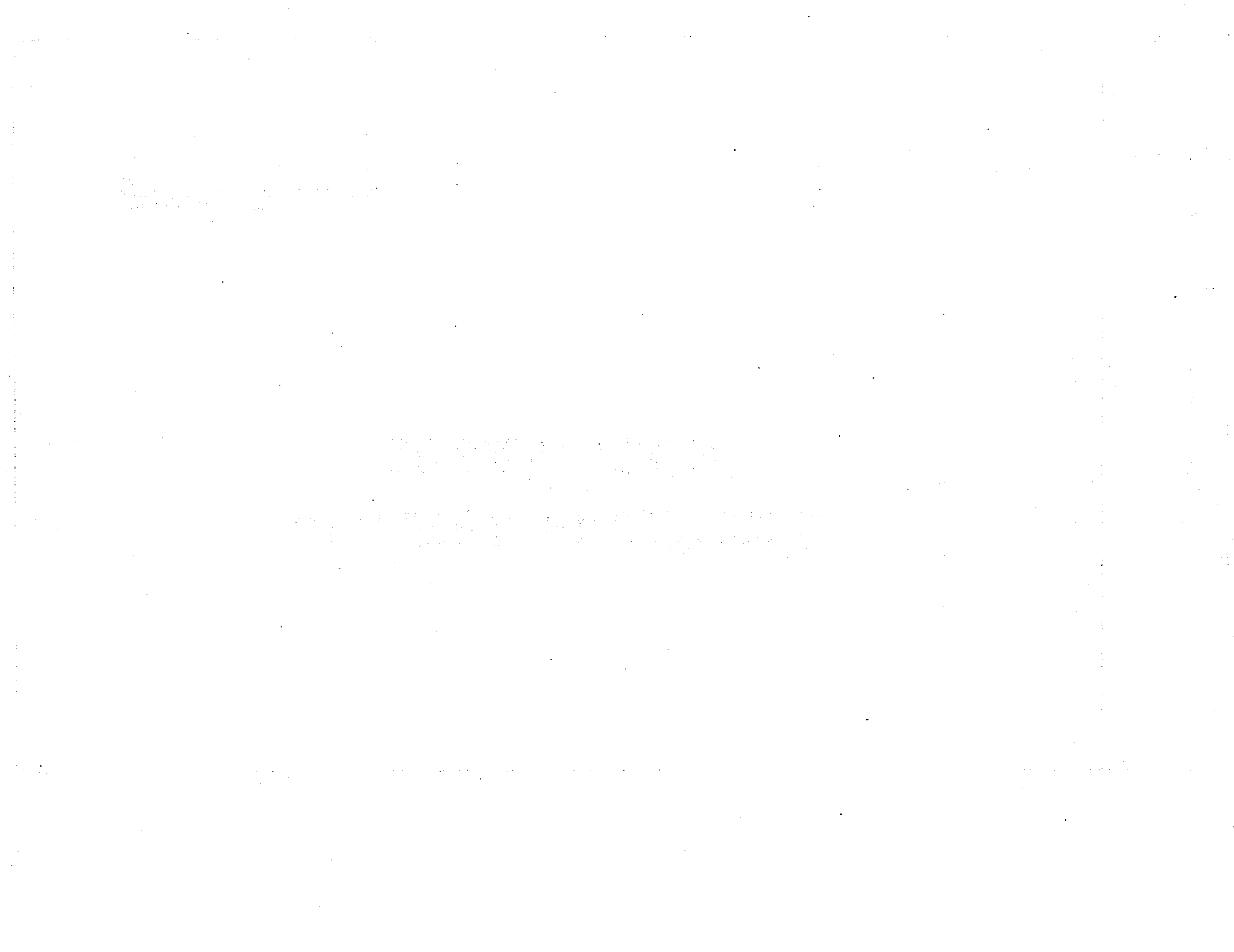
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SPECIAL PRODUCTS IDEAS BOOK

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PREFACE

Special Products is proud to present its second annual Special Products Ideas Book. The Special Products Ideas Book is a publication directed toward the Wang sales force to promote the services that the Special Products Development group offers, and to describe the products that the group has already developed. This 1986 updated version of the Ideas Book features 14 new products added over the past year to a continuously growing selection.

Ideally, the publication works as a catalyst to generate ideas about how Special Products can tailor Wang systems to fit specific customer needs. Throughout the year, sales personnel are kept informed of released special products with Ideas Sheets, each corresponding to a category in the Special Products Ideas Book and detailing the purpose, specifications, and potential applications of the new product. This year's publication includes a system compatibility/customer installation matrix, which provides a convenient means of determining which systems each special product works with, as well as a simple way of referencing the products that are customer-installable.

The 36 orderable special products included in this Ideas Book are grouped into seven sections. An eighth section describes how to submit a request for a special product. Specifically, Section 1 features interfaces to non-Wang systems, and Section 2 deals with applications for selling to retail markets. Section 3 presents our line of electronic and mechanical switches, while Section 4 centers on security devices. Section 5 highlights customized enhancements. Section 6 focuses on the special products with ergonomic designs, Section 7 on software. Section 8 explains "How To Request a Tailor-Made Solution," and provides forms for requesting a quotation for the development of a new special product. Appendix A is a numerical listing by model number of all items in the Special Products Ideas Book; Appendix B contains an easy-to-reference matrix outlining which Wang systems the special products work on, and featuring a column that designates whether or not the product is customer-installable.

1. The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that proper record-keeping is essential for the integrity of the financial system and for the ability to detect and prevent fraud. The text notes that without reliable records, it would be difficult to verify the accuracy of financial statements and to identify any discrepancies or irregularities.

2. The second part of the document focuses on the role of internal controls in ensuring the reliability of financial information. It describes how internal controls are designed to prevent errors and fraud by establishing a clear separation of duties and by implementing a system of checks and balances. The document stresses that internal controls are not just a set of rules, but a dynamic system that must be regularly reviewed and updated to reflect changes in the business environment.

3. The third part of the document addresses the need for transparency and accountability in financial reporting. It argues that stakeholders, including investors, creditors, and the public, have a right to know how the organization is performing financially. This requires the organization to provide clear, concise, and accurate financial statements that are prepared in accordance with established accounting standards. The document also highlights the importance of disclosing any potential risks or uncertainties that could affect the organization's financial performance.

4. The fourth part of the document discusses the impact of external factors on financial reporting. It notes that changes in accounting standards, tax laws, and regulatory requirements can significantly affect the way financial information is presented. The organization must stay up-to-date on these changes and ensure that its financial reporting practices are compliant with the latest regulations. Additionally, the document mentions that external factors such as economic conditions and market volatility can also influence the organization's financial performance and, consequently, its financial statements.

5. The fifth part of the document concludes by emphasizing the overall importance of financial reporting for the success of an organization. It states that accurate and transparent financial reporting is not just a legal requirement, but a key component of good corporate governance. By providing reliable financial information, the organization can build trust with its stakeholders, attract investment, and ensure its long-term sustainability.

6. The final part of the document provides a summary of the key points discussed. It reiterates that maintaining accurate records, implementing strong internal controls, and ensuring transparency are all essential for the integrity of financial reporting. The document also notes that financial reporting is a continuous process that requires ongoing attention and improvement. By following these principles, the organization can ensure that its financial statements are reliable and that it is meeting its obligations to its stakeholders.

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1. The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that this is crucial for ensuring the integrity of the financial statements and for providing a clear audit trail. The text notes that any discrepancies or errors in the records can lead to significant complications during an audit and may result in the disallowance of certain expenses.

2. The second part of the document outlines the specific procedures for recording transactions. It details the requirements for receipts, invoices, and other supporting documents. It states that all receipts must be properly dated, itemized, and signed by the individual receiving the goods or services. Additionally, it mentions that invoices should be clearly marked and filed in a systematic manner to facilitate easy retrieval and verification.

3. The third part of the document addresses the issue of expense reporting. It explains that employees are required to submit a detailed report of their expenses at the end of each month. This report should include a breakdown of all expenses, categorized by type (e.g., travel, meals, entertainment). The text also notes that any expenses that are not directly related to the business or that exceed certain limits may be subject to review and disallowance.

4. The fourth part of the document discusses the process of reconciling the expense account. It states that the expense report should be compared against the actual receipts and invoices to ensure that all expenses are properly documented and supported. Any unexplained or unsupported expenses should be identified and investigated immediately. The text also mentions that the reconciled expense report should be submitted to the appropriate authority for approval and payment.

5. The fifth part of the document provides a summary of the key points discussed. It reiterates the importance of accurate record-keeping, proper documentation, and timely reporting of expenses. It concludes by stating that adherence to these procedures is essential for maintaining the accuracy and reliability of the organization's financial records and for ensuring compliance with applicable regulations.

INTRODUCTION

The Special Products group promotes sales of standard Wang products and systems by offering the field made-to-order equipment and software to meet specific customer requirements. When a client has a need that cannot be satisfied by an offering from the Wang standard product line, you can call upon Special Products to evaluate a request for the development of a customized product.

In keeping with the aims of the group, Special Products presents its second annual Ideas Book -- a combination catalog of orderable special products, as well as an overview of the services offered.

You can also request additional copies of this publication and information on specific special products by contacting:

Product Planning and Management
Special Products
Mail Stop 13A1B
One Industrial Avenue
Lowell, Massachusetts 01851
(617) 967-6546

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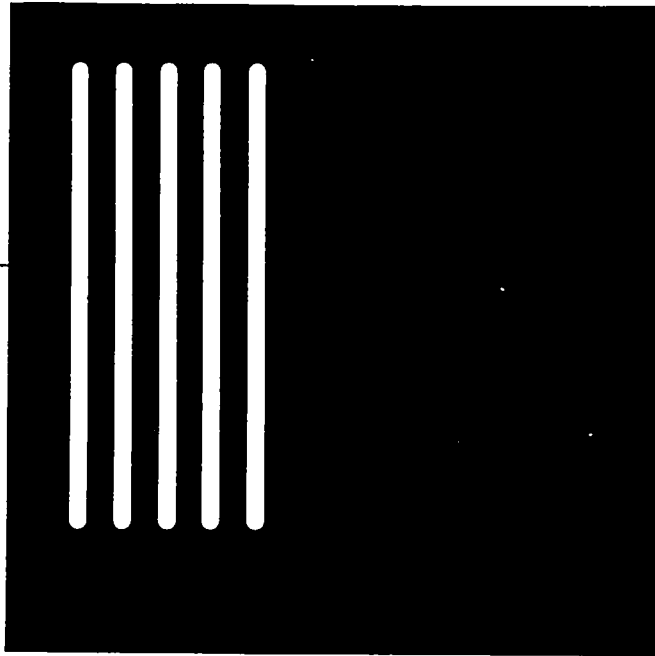
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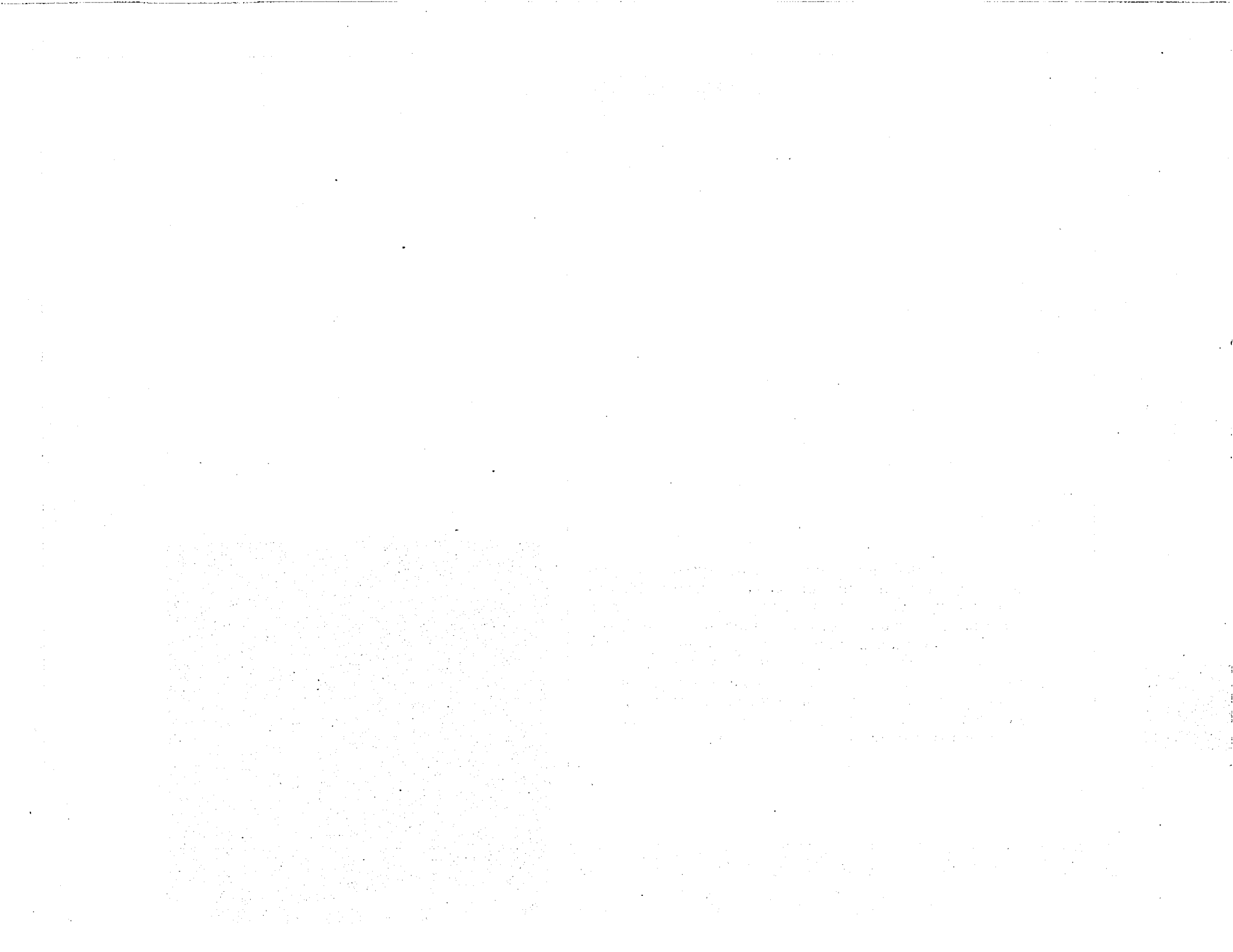
INTERFACES TO NON-WANG SYSTEMS



A Special Products interface is synonymous with compatibility. You can sell Wang systems to customers who have other vendors' peripherals, or extend the capabilities of a system that's already in place. As a result, your client can take full advantage of the versatility of the Wang system, without purchasing costly new equipment. Interfaces consist of hardware, or a combination of hardware and software. Whatever the application, a Special Products interface promises limitless possibilities for system integration.



Section 1



Model 9144

RS-232/Keyboard Multiplexer for the VS or PC

The Special Products Model 9144 is an easy-to-connect RS-232/keyboard multiplexer. With it, you can connect most asynchronous RS-232 input devices that use ASCII code to a PC or VS 4200 Series workstation having a universal serial keyboard (both U.S. and non-U.S.). The Model 9144 emulates the serial keyboard, so that data from the input device is displayed on the workstation screen, just as if you entered it from the keyboard. The RS-232 input device has priority over the keyboard.

The Model 9144 offers these features:

- Requires no additional software
- Is totally transparent to any program
- Does not interfere with normal keyboard operation
- Does not use an additional I/O slot
- Is compact, measuring 9.37 by 8.75 by 2.5 inches

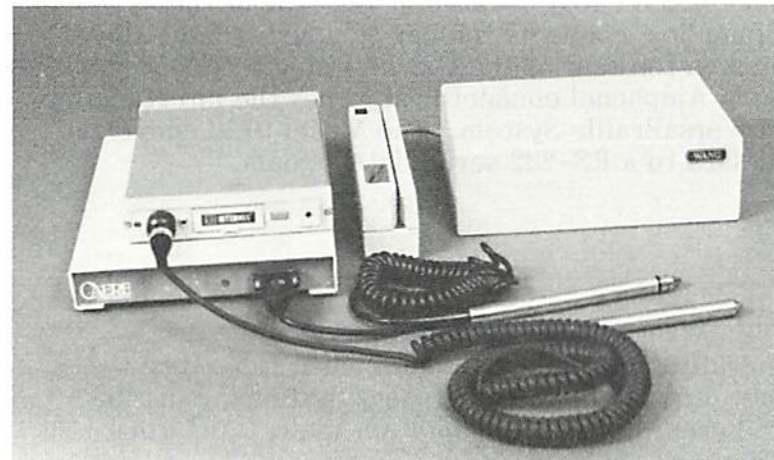
Possible RS-232 input devices you can use with the Model 9144 include, but are not limited to, the following:

- Bar code reader
- Magnetic stripe reader
- Optical character reader (OCR)
- Digitizer (mouse)
- Generic keyboard
- Measurement device (scale)
- Badge reader

Special Products offers two versions of the Model 9144, depending on the type of workstation and system. For a 4200 Series workstation connected to a VS system, order Model 9144-VS. For a PC, order Model 9144-PC. Both versions can be installed by the customer.

The Model 9144 accepts data at rates ranging from 50 to 19200 baud*. It conforms with EIA RS-232C standard, and operates from 120 or 220 VAC.

***NOTE:** Although the input device can communicate at rates up to 19200 baud, the speed at which information can be displayed on the screen is approximately 50 ms per character (20 characters per second).



With the RS-232/keyboard multiplexer, you can connect most RS-232 input devices that use ASCII code to a Wang PC or VS 4200 Series workstation.



Model 9126 VersaBraille System Interface to the OIS/VS

The Special Products Model 9126 is a VersaBraille System interface that enables a blind person to edit WP documents using the VersaBraille System*. The Model 9126 interface box translates whatever document appears on the WP screen to the VersaBraille System. The blind user can then read the VersaBraille and edit the document on-line with the workstation using the glossary functions. Attaching a VersaBraille System to a workstation with the Model 9126 does not interfere with normal workstation operation. The Model 9126 works with any OIS**.

A dual coaxial cable, located at the rear of the interface box, connects the box to any available slave channel on the rear of the OIS. A cable terminated with a 24-pin Amphenol connector attaches the interface box to the VersaBraille System. The Model 9126 converts serial data to a RS-232 serial data stream.

***NOTE:** Wang neither sells nor services the VersaBraille System. Customers must order this product directly from Telesensory Systems, Inc., 455 North Bernardo Avenue, Mountain View, California 94043.

****NOTE:** The Model 9126 can also work on a VS system with Word Processing utilities. In this case, the interface box is configured as a 5521 matrix printer. If a customer is interested in the VersaBraille System interface to the VS, contact Special Products, Product Planning and Management, at Corporate Headquarters, Mail Stop 13A1B, in Lowell, Massachusetts 01851 for details.

The interface box houses the memory, CPU, I/O, and VersaBraille interface boards. The dimensions of the box are 6.5 by 19 by 9 inches.

In order for the VersaBraille System to operate correctly with the Model 9126, the customer engineer must set a series of configuration parameters within the VersaBraille System to match those of the interface box.



A blind person can edit OIS or VS WP documents using the VersaBraille System interface.

Model 9082/-1 Intermec Bar Code Reader Interface to a VS 2246S/C Workstation

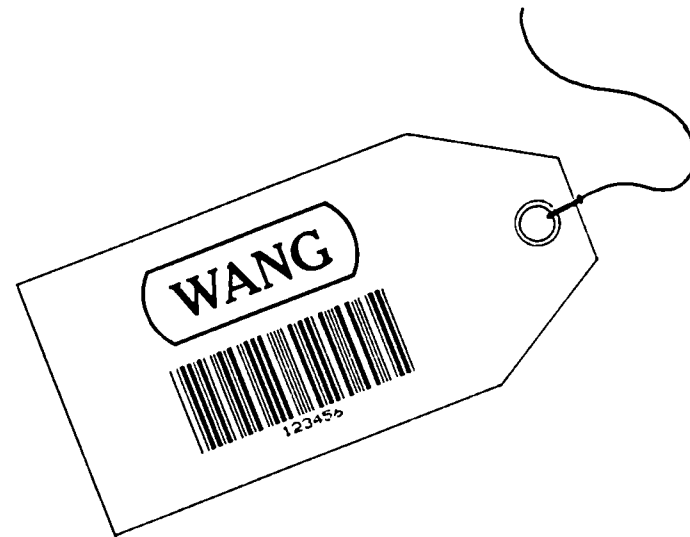
The Special Products Model 9082 directly connects an Intermec 9300* bar code reader to a VS 2246S or 2246C workstation. (You must have a standard two-board workstation with a minimum of 32K memory.) The interface consists of a Special Products board that a customer engineer installs into the VS workstation. You attach the Intermec bar code reader to the RS-232 connector located at the rear of the workstation housing.

The programming of the Model 9082 is similar to that of standard VS workstations. The added capability of the bar code reader is under application program control. All functions of the standard VS workstation are available on the Model 9082. Therefore, all application programs designed for the standard VS workstation run on the Model 9082.

The Special Products Model 9082 consists of the hardware for modifying each workstation; the Model 9082-1 consists of the software for each VS CPU installation.

If your customer is interested in a general-purpose RS-232 interface for the VS 4200 Series or PC, refer to the description of Model 9144.

***NOTE:** Wang neither sells nor services the Intermec 9300 bar code reader. Customers must order this directly from Interface Mechanisms, Inc., 4405 Russell Road, P.O. Box N, Lynnwood, Washington 98036.



Model 9074 Printronix Printer Interface to the VS or OIS

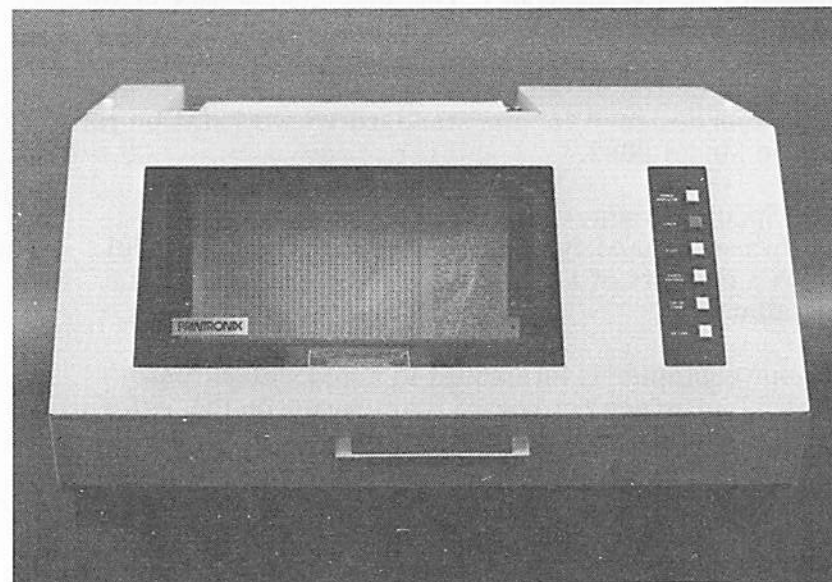
The Special Products Model 9074 provides an interface between a VS or WPS/OIS and a Printronix* P300 printer having a Centronics parallel I/O interface. Serial data from the Wang system is converted to parallel data through the Model 9074 interface box before it is transferred to the Printronix printer.

The Special Products Model 9074 consists of an interface box that houses the memory, CPU, and printer interface circuits. The interface box measures 6.5 by 19 by 9 inches. A 25-foot dual coaxial cable is also provided, which connects the rear of the interface box to any available slave channel on the rear of the VS or OIS. You connect the interface box to the Printronix printer using a cable terminated by a 36-pin AMP connector.

By installing a Quality Micro Systems (QMS) Magnum 3000* printer controller option board into the Printronix matrix printer, you can print plot drawings, graphs, charts, characters of different sizes and shapes, large labels, retail store shelf labels, and many other images. This option also enables the printer to print bar codes such as UPC, Code 39, Codabar, Interleaved 2 of 5, and Code 128.

***NOTE:** Wang neither sells nor services the Printronix P300 printer nor the Magnum 3000 PC Board, nor provides any applications software. The address for Printronix is: 17421 Derian Avenue, Box 19559, Irvine, California 92713. The address for Quality Micro Systems (QMS) is: P.O. Box 81250, Mobile, Alabama 36689.

All Magnum 3000 functions are options of the Printronix printer; the Model 9074 interface simply facilitates data transfer between the VS or OIS and the Printronix printer. The Magnum 3000 utilizes a special plug-in PROM (I09FA 2000) designed for use with Wang systems. The PROM is factory-installed by Quality Micro Systems.



The Model 9074 converts serial data from the Wang system to parallel data before transferring it to the Printronix printer.

Model 9067

Paper Tape Punch Interface to the WPS or OIS

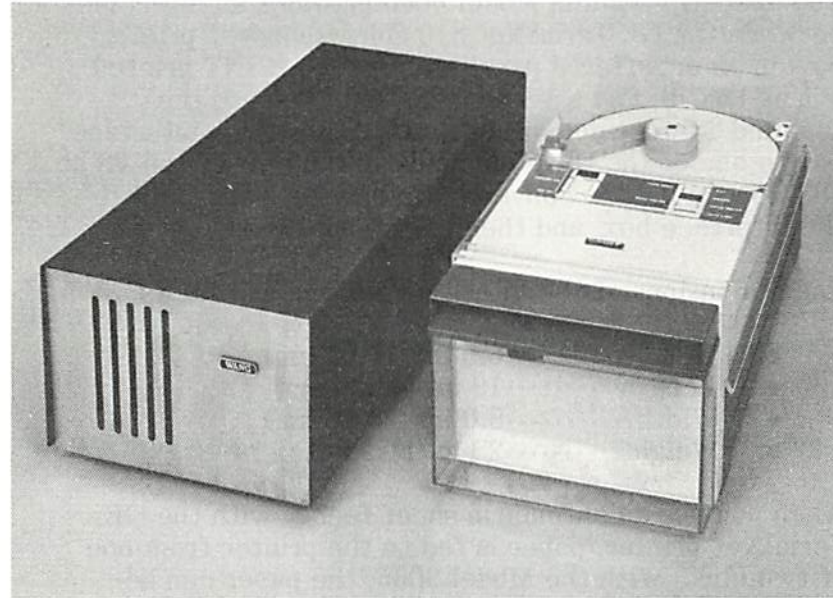
The Special Products Model 9067 is a paper tape punch and an interface box that translates documents from a WPS or OIS system disk or diskette to 5-, 6-, 7-, or 8-level coded paper tape.

This interface consists of an electronic translator box and a self-contained paper tape punch (Facit Model 4070). The interface is compatible with the WPS 20, 25, and 30, and with the OIS 105, 115, 125, 130, 140, and 145. The Model 9067 is also compatible with a VS system with WP utilities that supports a Wang 5548z typesetter.

The paper tape punch has an operating speed of up to 75 characters per second. It uses ISO standardized paper tape.

The dimensions of the translator box are as follows:

- Height.....7.40 in. (18.8 cm)
- Depth18.7 in. (47.6 cm)
- Width9.0 in. (22.8 cm)
- Weight.....25 lb (11.3 kg)



The paper tape punch option translates documents on a Wang system disk or diskette onto coded paper tape.



Model 9065 GE TermiNet Printer Interface to the VS, WPS, or OIS

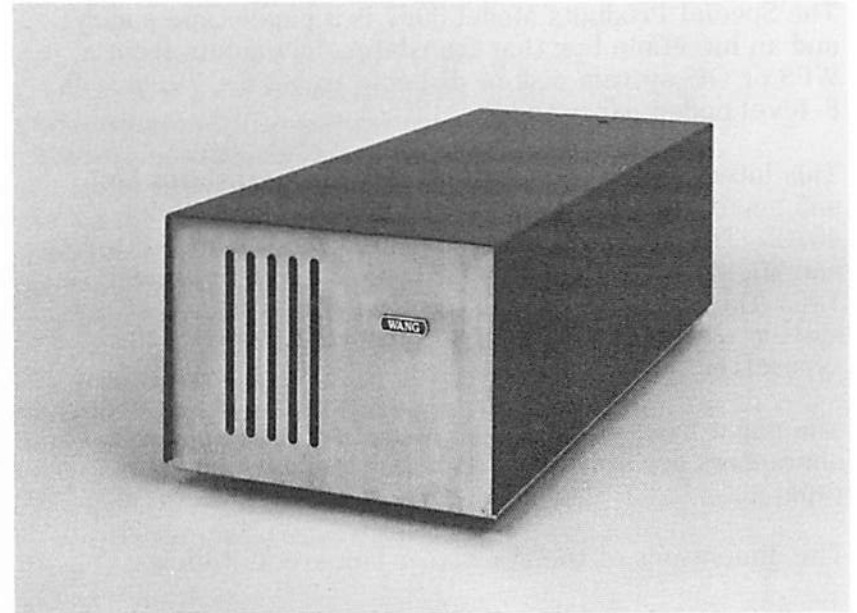
The Special Products Model 9065 provides an interface between the GE TermiNet 510 Corresponder* printer, having an unbuffered parallel interface (CINT printed wiring board), and a VS or WPS/OIS. You use the supplied 25-foot coaxial cable to connect the interface box to one of the slave channels at the rear of the VS or OIS. Serial data is converted to parallel data through the interface box, and then transferred to the printer.

The dimensions of the interface box are as follows:

- Height.....6.5 in. (16.51 cm)
- Length.....19 in. (48.26 cm)
- Width.....9.0 in. (22.86 cm)
- Weight.....25 lb (11.3 kg)

When you use an automatic sheet feeder with the GE TermiNet printer, paper is fed to the printer from one of two bins. With the Model 9065, the paper can be selected from either bin under program control.

*NOTE: Wang neither sells nor services the GE TermiNet 510 Corresponder printer. The 510 printer has been replaced by the 340 line of printers. The Model 9065 works with the 340 line (with unbuffered parallel interface), in addition to the 510 printer, without modification. Customers can order the 340 line of printers directly from General Electric Company, Waynesboro, Virginia 22980.

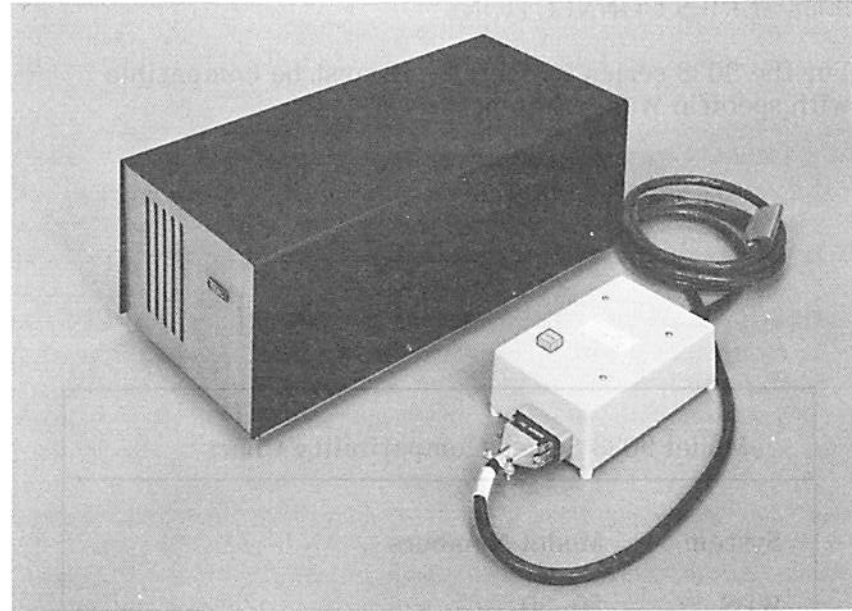


Model 9065 interface box connects a TermiNet 510 Corresponder to a Wang system.

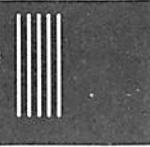
Model 9038 Series Photocomposer Interfaces General Product Overview

The Special Products Model 9038-(X) and 9038-(X)-(1) photocomposer interface series directly connects a WPS, an OIS, a VS system with Word Processing utilities, or a 2200 System to a variety of photocomposers (phototypesetters). The Model 9038 series replaces both paper tape punch and photocomposer paper tape readers for text entry. The Model 9038-(X) or 9038-(X)-(1) connects a WPS, OIS, VS, or 2200 System in the same manner as does a paper tape punch. The (X) designates the particular photocomposer for which the interface is designed; you can connect all Model 9038-(X) interfaces to a WPS, OIS, or VS. The designation (X)-(1) means that you can connect the interface to a 2200 System.

All Model 9038 series devices are parallel interface devices; you connect them to an on-line parallel interface port or a paper tape reader port on the photocomposer. The on-line interface has a dedicated parallel I/O port, while the paper tape reader interface bypasses the built-in tape reader and goes directly into the paper tape reader controller.



The Model 9038 series links a WPS/OIS/VS or a 2200 System to a variety of photocomposers. The Model 9038-(X)-(1) series is shown.



9038 SERIES CONNECTIONS

For the 9038 series to operate, it must be compatible with specific Wang systems.

Model 9038 Series Compatibility Chart

System	Model Numbers
WPS	20, 30
OIS	105, 115, 125A, 130A, 140, 145A
2200	T, VP, LVP, MVP
VS	Any VS system with WP utilities that supports a Wang 5548z typesetter

SYSTEM CONFIGURATIONS

In a WPS or OIS configuration, the Model 9038-(X) includes a photocomposer input/output (PIO) box and an interface box with a select switch. A 25-foot coaxial cable (available in lengths up to 2000 feet) connects the WPS or OIS to a 9038-(X). You should edit word processing documents according to the code translation tables used for punching paper tape.

The VS system configuration operates the same as a WPS or OIS; it also requires a PIO box and an interface box. The word processing software with PHOTASET is required, and the interface port must be configured as a Wang 5548z typesetter.

The Model 9038-(X)-(1) works with a 2200 System, Models T, VP, MVP, or LVP. Interface between the CPU and the typesetter is accomplished with the Model 9005-2, a modified paper tape punch controller and an 8-foot interface cable. The controller is located in the CPU, and the interface cable connects to the 9038-(X)-(1) interface box. The Model 9005-2 is under program control to generate 5- 6- 7-, or 8-level codes that pass through the 9038-(X)-(1), then to the typesetter. A second 8-foot cable (part number varies from typesetter to typesetter) extends from the interface box to the typesetter.

In the WPS/OIS/VS configuration as well as the 2200 System configuration, the connection between the interface box and photocomposer differs for each model. The switch settings and jumpers on the PIO box are the same for all photocomposers. Some models in the Model 9038 series require an additional PC board to operate -- either a driver or a FIFO board.

PIO BOX DIMENSIONS

The dimensions of the PIO box are as follows:

- Height6.5 in. (16.51 cm)
- Length..... 19 in. (48.26 cm)
- Width 9 in. (22.86 cm)

INTERFACE BOX DIMENSIONS

The dimensions of the interface box are as follows:

- Height.....2.5 in. (6.5 cm)
- Length.....7.5 in. (18.7 cm)
- Width.....4.5 in. (11.4 cm)

MODEL 9005-2 SPECIFICATIONS

The Model 9005-2 is a controller with an 8-foot I/O cable.

SOFTWARE INSTALLATION FOR WPS/OIS AND VS SYSTEMS

The Model 9038 series uses the translation tables for photocomposer codes to simulate the punching of paper tape. The only difference is that the data is fed directly to the photocomposer, eliminating the need for punching, handling, and reading the paper tapes. An archive diskette, which features some of the general translation tables* (standard 6-level TTS codes, 7-level ASCII, and 8-level ASCII with parity), is included with the Model 9038-(X), and should be installed into the WPS/OIS or VS operational software.

***NOTE:** Use these tables as a starting point only. It is the customer's responsibility to modify the tables with respect to special character and command codes of the photocomposer. Consult your local Wang office for the translation table modifications for photocomposers.

ORDERING INFORMATION

Each model in the Model 9038 series consists of two parts: a PIO box, and an interface box with a select switch. To order the WPS/OIS or VS system photocomposer interfaces, use model number 9038-(X), entering the alpha designation corresponding to the desired model within the parentheses in place of the "X." To order a 2200 System photocomposer interface, use model number 9038-(X)-(1), entering the alpha designation corresponding to the desired model within the parentheses in place of the "X."



Photocomposer Interface Chart -- (X) Series

Model Number	Wang System	Manufacturer/Model of Photocomposer
9038-A	WPS/OIS/VS	Autologic APS-5 and MICRO-5 Phototypesetters
9038-F	WPS/OIS/VS	Compugraphic 8600 Phototypesetter
9038-L	WPS/OIS/VS	Mergenthaler Linotron 202/404
9038-LN	WPS/OIS/VS	Mergenthaler 202N Phototypesetter
9038-M	WPS/OIS/VS	Mergenthaler VIP Phototypesetter
9038-V	WPS/OIS/VS	Varityper Comp/set and VDI Phototypesetters

Photocomposer Interface Chart -- (X)-(1) Series

Model Number*	Wang System	Manufacturer/Model of Photocomposer
9038-A-1	2200	Autologic APS-5 and MICRO-5 Phototypesetter
9038-F-1	2200	Compugraphic 8600 Phototypesetter
9038-L-1	2200	Mergenthaler Linotron 202/404
9038-LN-1	2200	Mergenthaler 202N Phototypesetter
9038-M-1	2200	Mergenthaler VIP Phototypesetter
9038-V-1	2200	Varityper Comp/set and VDI Phototypesetters

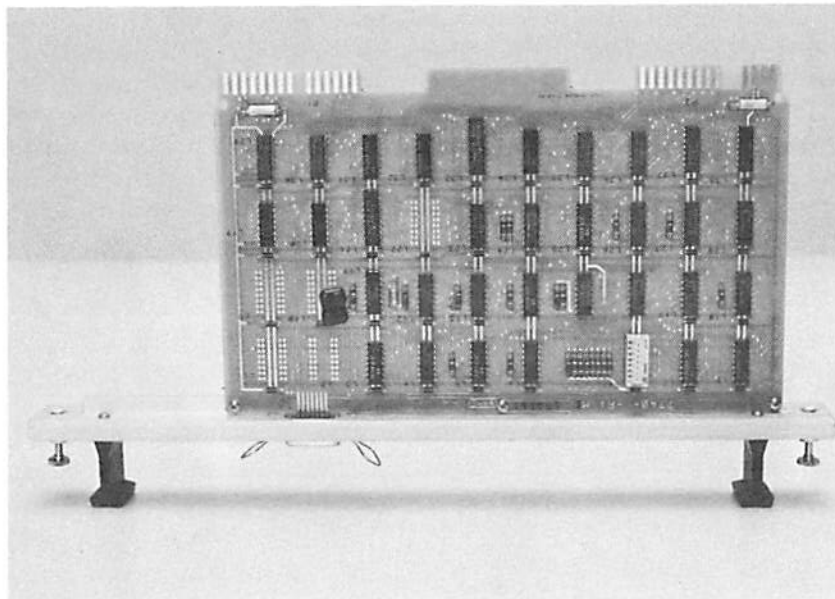
***NOTE:** You must purchase the Model 9005-2 (Controller and Cable for Paper Tape Punch Interface) when ordering any of these photocomposer interfaces.

Model 9005-2 Controller and Cable for Paper Tape Punch Interface

The Special Products Model 9005-2 consists of a controller board and an 8-foot I/O cable for connecting a Model 9068 paper tape punch to a 2200 System. The interface between the central processing unit (CPU) and the paper tape punch is accomplished by means of the interface cable: you plug one end into the paper tape punch controller, and the other end into the Model 9068 paper tape punch.

The Model 9068 can punch 5-, 6-, 7-, or 8-level codes, providing 5 through 8 channels of data information. The punch responds to signals generated by the CPU to encode information on tape by perforating it.

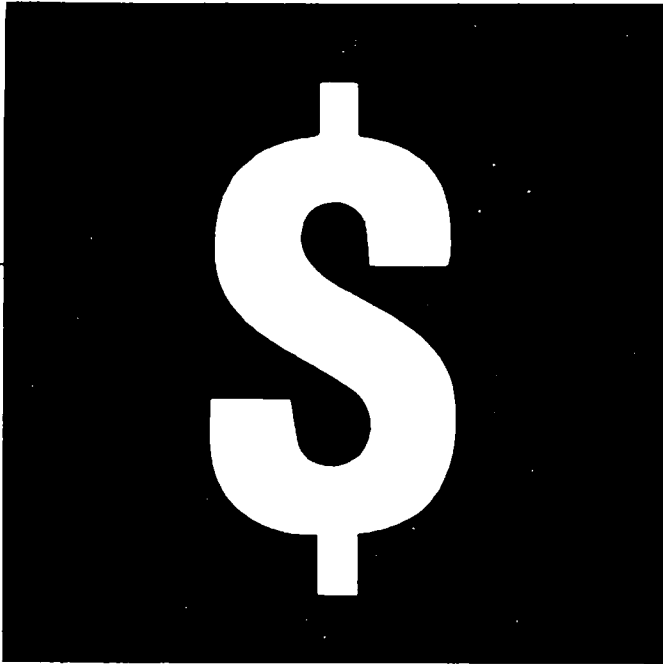
You can also use the Model 9005-2 in the Special Products photocomposer interface series (the 9038-(X)-(1) series) with the 2200 System.



The controller board for Model 9005-2 connects a Model 9068 paper tape punch to a 2200 System and is also used in the Model 9038-(X)-(1) series.



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RETAIL MARKETS

Special Products can create entire retail systems for vertical markets by linking a VS to a commercial cash register. Integrated systems include printer/cash drawer interfaces supported with microcode, with options ranging from bar code readers and magnetic stripe readers to any number of RS-232 input devices. Currently, the group is involved with establishing communications between retail or point-of-sale equipment and a VS CPU. Within such configurations, you can connect numerous point-of-sale/retail terminals to one master register. Whether it's for a single point-of-sale workstation or a cluster of workstations, Special Products can develop a retail system to suit customer needs.



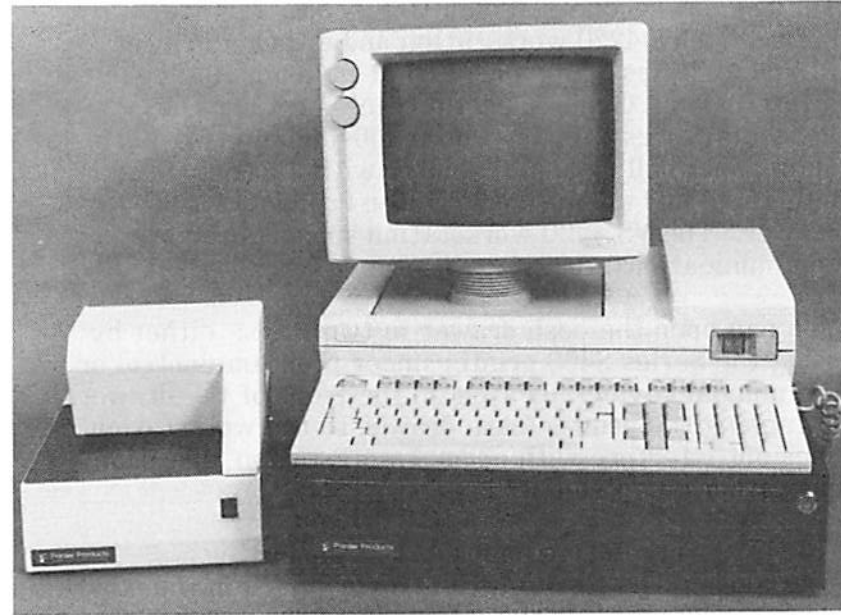
Section 2

Model 9147 Cash Drawer/Slip Printer Interface to the VS 4210 Workstation

The Special Products Model 9147 is an interface between a Printer Products Series S400* printer (40-column slip/document printer with an RS-232C interface) and an optional Printer Products cash drawer to a VS 4210 workstation. The VS 4210 workstation supports local communications only.

You can open the cash drawer in two ways: either by using the Series S400 printer under program control or the manual keylock located on the front of the drawer. Attaching the slip printer/cash drawer to the workstation does not interfere with normal workstation operation, but rather complements it. If the customer wants to attach a roll printer/cash drawer (rather than a slip printer) to a 4210 workstation, refer to Special Products Model 9121.

The supporting microcode is contained in the 4210 workstation. The RS-232 port on the 4210 workstation provides the interface to the printer. The printer file format for Printer Products conforms to standard VS system printer file format. The VS data management system printer support software applies to the Printer Products printers as well.



You can either manually operate the cash drawer using the keylock on the front, or open it electronically from the Printer Products slip printer.

*NOTE: Wang neither sells nor services the Series S400 printer nor the optional cash drawer. Customers must order these products directly from Printer Products, 24 Denby Road, Allston, Massachusetts 02134.



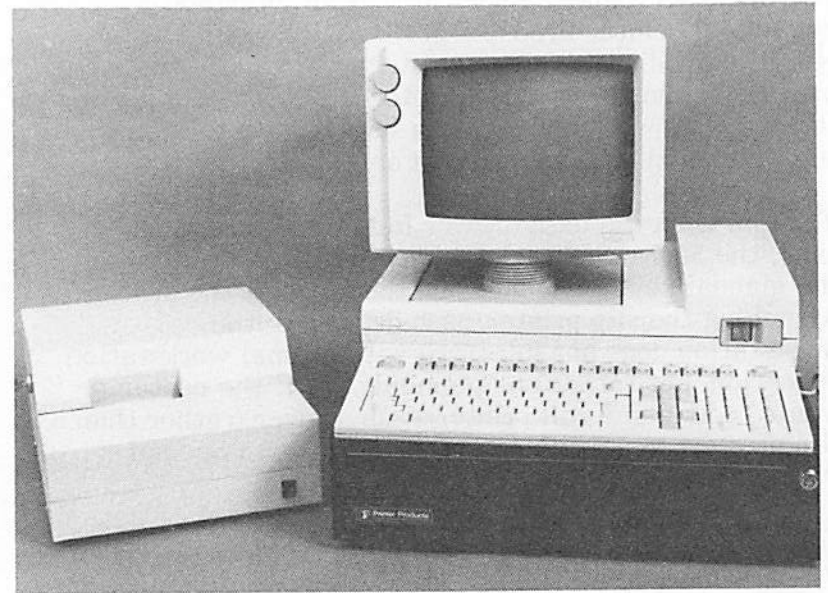
Model 9136 Cash Drawer/Roll or Slip Printer Interface to the VS 4220 Workstation

The Special Products Model 9136 is an interface between a VS 4220 workstation and either a Printer Products Series S400* printer (40-column slip/document printer with a Centronics interface) or a Printer Products Series S400T* printer (40-column two-ply plain paper roll financial printer with a Centronics interface) and an optional Printer Products cash drawer. The VS 4220 workstation supports remote communications.

You can open the cash drawer in two ways: either by using the Series S400 printer under program control or the manual keylock located on the front of the drawer. Attaching the printer/cash drawer to the workstation does not interfere with normal workstation operation, but rather complements it.

The 4220 workstation contains the supporting microcode. The parallel (Centronics) port on the 4220 workstation provides the interface to the printer. The printer file format for Printer Products conforms to standard VS system printer file format. The VS data management system printer support software applies to the Printer Products printers as well.

***NOTE:** Wang neither sells nor services the Series S400 printer, the Series S400T printer, nor the optional cash drawer. Customers must order these products directly from Printer Products, 24 Denby Road, Allston, Massachusetts 02134.



The Model 9136 is an interface between a VS 4220 workstation and either a Printer Products roll printer (shown) or a Printer Products slip printer and an optional Printer Products cash drawer.

Model 9129 Indiana Cash Drawer Interface to the 2336DW/DE Workstation

The Special Products Model 9129 serves as an interface between an Indiana cash drawer* and a 2200 System 2336DE/DW workstation. This is accomplished by an interface box that is attached to both the parallel printer port on the workstation and the keyboard connector. The interface box decodes a user-selected HEX code from the parallel printer port of the workstation and sends a signal to the cash drawer, triggering the solenoid to open the cash drawer.

The Indiana cash drawer model EL4-WANG I is equipped with a mechanical access lock, which you can use to open the drawer in the event of a power or system failure. The cash drawer can be counter-mounted, placed adjacent to the workstation, or placed under the workstation.



The Model 9129 serves as an interface between an Indiana cash drawer and a 2336 DE/DW workstation.

***NOTE:** Wang neither sells nor services the Indiana cash drawer. Customers must order the cash drawer directly from Indiana Cash Drawer Co., 1315 S. Miller Street, Shelbyville, Indiana 46176. Use "ICD Model EL4 CCC SOP Oyster White FMR O/C 1AT" as the model number, and "EL4-WANG I" as the part number when ordering.



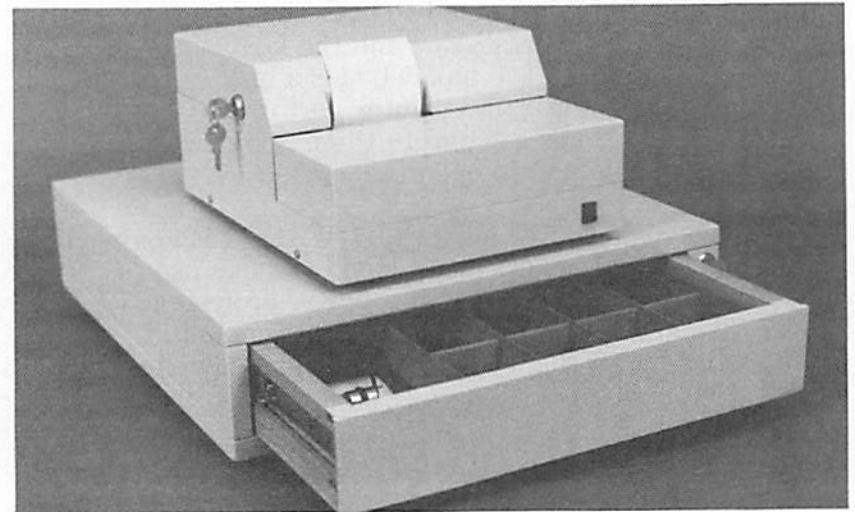
Model 9121 Cash Drawer/Roll Printer Interface to the VS 4210 Workstation

The Special Products Model 9121 is an interface between a VS 4210 workstation and a Printer Products Series S400T* printer (40-column two-ply plain paper financial roll printer with an RS-232C interface) with an optional cash drawer*. The VS 4210 workstation supports local communications only.

You can open the cash drawer in two ways: either by using the Series S400 printer under program control or the manual keylock located on the front of the drawer. Attaching the roll printer/cash drawer to the workstation does not interfere with normal workstation operation, but rather complements it. If the customer wants to attach a slip printer/cash drawer (rather than a roll printer) to a 4210 workstation, refer to Special Products Model 9147.

The 4210 workstation contains supporting microcode. The RS-232 port on the 4210 workstation provides the interface to the printer. The printer file format for Printer Products conforms to standard VS system printer file format. The VS data management system printer support software applies to the Printer Products printers as well.

*NOTE: Wang neither sells nor services the Series S400T printer nor the optional cash drawer. Customers must order these products directly from Printer Products, 24 Denby Road, Allston, Massachusetts 02134.



With the Model 9121, you can connect a Printer Products financial roll printer and an optional cash drawer to a VS 4210 workstation.

Model 9085

Cash Drawer/Roll or Slip Printer Interface to the VS 2246S/C Workstation

The Special Products Model 9085 is an interface between either a VS 2246S or 2246C workstation and a Printer Products Series S400* printer (40-column slip/document printer), or a Series S400T* printer (40-column two-ply plain paper financial roll printer), and an optional cash drawer*. Both Printer Products Series S400 and Series S400T printers use an RS-232 interface. With the Model 9085, you must also order the Model 9085-1, which contains the software.

Attaching the printer/cash drawer to the workstation does not interfere with normal workstation operation, but rather complements it. If the VS is configured for a 2246S, you can attach any number of type S workstations/printers to the system, but you cannot mix 2246 workstation types. For example, you cannot mix 2246C workstations/printers with 2246S workstations/printers.



You can add a Printer Products roll or slip printer and an optional cash drawer (all shown) to a VS 2246S/C with the Model 9085.

*NOTE: Wang neither sells nor services the Series S400 or Series S400T printers or the optional cash drawer. Customers must order these products directly from Printer Products, 24 Denby Road, Allston, Massachusetts 02134.



Model 9085-1

Software for the Model 9085

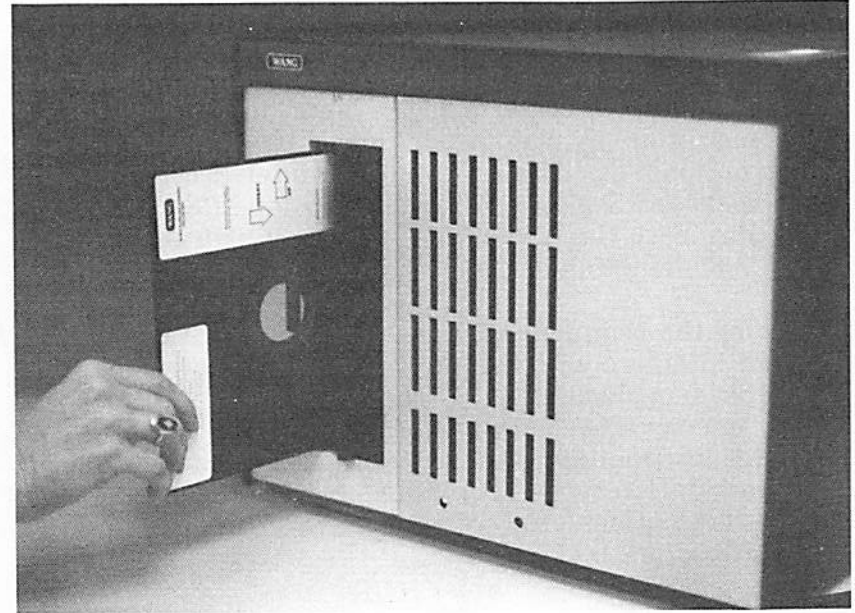
Cash Drawer/Printer Interface

The Special Products Model 9085-1 contains the software necessary for interfacing a Printer Products Series S400 or Series S400T printer (each with an RS-232 serial interface) and optional cash drawer* to a VS 2246S or 2246C workstation. The Model 9085 contains the hardware, which you must order separately.

To operate the printer/cash drawer, you must load the Model 9085-1 microcode onto the VS system disk. You can operate the cash drawer independently of the printer under the control of the application program, or you can operate it by issuing a PRINT PAGE command from the VS workstation.

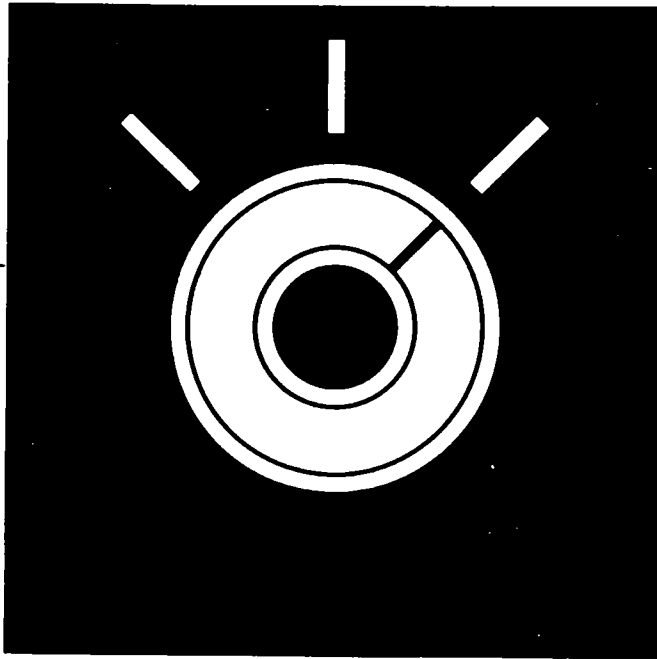
The printer must run on a 2246C or 2246S two-board workstation having a minimum of 32K memory with the Model 9085 installed. You connect the printer to the RS-232 port on the workstation.

***NOTE:** Wang neither sells nor services the Series S400 or Series S400T printers or the optional cash drawer. Customers must order these products directly from Printer Products, 24 Denby Road, Allston, Massachusetts 02134.

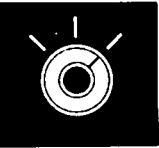


The Model 9085-1 consists of the software you use with the Model 9085 cash drawer/printer interface.

ELECTRONIC AND MECHANICAL SWITCHES



In 1985, Special Products expanded its line of electronic and mechanical switches. Each switch provides the customer with optimal equipment usage and reduced downtime. Because the switches allow you to share CPUs and peripherals in a variety of configurations, they are cost effective. In short, the capabilities of a Special Products electronic or mechanical switch are as varied as you need them to be.



Section 3

1. The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that proper record-keeping is essential for ensuring the integrity and reliability of financial data. This section also outlines the various methods and tools used to collect and analyze data, highlighting the need for consistency and precision in data entry and reporting.

2. The second part of the document focuses on the role of technology in modern data management. It explores how advanced software solutions and cloud-based platforms have revolutionized the way organizations store, access, and analyze their data. This section discusses the benefits of automation and the challenges associated with data security and privacy in a digital environment.

3. The third part of the document addresses the importance of data governance and compliance. It discusses the various regulations and standards that organizations must adhere to when handling sensitive information. This section also provides guidance on how to establish a robust data governance framework to ensure that data is used responsibly and in accordance with applicable laws and industry best practices.

4. The fourth part of the document discusses the importance of data quality and accuracy. It highlights the various factors that can lead to data errors and provides strategies for identifying and correcting these errors. This section also discusses the impact of poor data quality on decision-making and the overall performance of an organization.

5. The fifth part of the document discusses the importance of data security and protection. It outlines the various threats to data security and provides guidance on how to implement effective security measures to protect sensitive information. This section also discusses the importance of regular security audits and the role of incident response plans in minimizing the impact of data breaches.

6. The sixth part of the document discusses the importance of data privacy and the rights of individuals. It outlines the various regulations and standards that govern data privacy and provides guidance on how to ensure that an organization's data handling practices are compliant with these regulations. This section also discusses the importance of transparency and communication with individuals regarding their data.

Model 9139 Three-Way Switch Box

The Special Products Model 9139 three-way switch box lets up to three CPUs share one peripheral (the peripheral must have a dual coaxial cable connection*), or up to any three peripherals share one CPU at a time. The benefit of the switch box is increased equipment usage. In some cases, it saves the purchase of a new system or drive by providing extended use of the current system(s). To select a channel, you simply turn the dial located at the front of the switch box to the desired setting.

The Model 9139 three-way switch box is compact (approximately 5 by 5.25 by 2.25 inches) and can be used with the following CPUs: VS, OIS, WPS, and PC with OIS/VS Local Communications Option. The Model 9139 can be installed by the customer.

*NOTE: The only Wang tape drives that have dual coaxial cable connections are the Model 6509 for the OIS, and the Model 2509V for the VS. There are no Wang disk drives with a dual coaxial cable connection.



One benefit of the three-way switch box is increased equipment usage.



Model 9130 Video Display Device Adapter

The Special Products Model 9130 lets you attach another vendor's video display device to a PC workstation with a monochrome monitor, or any monochrome VS/OIS 4200 Series workstation.

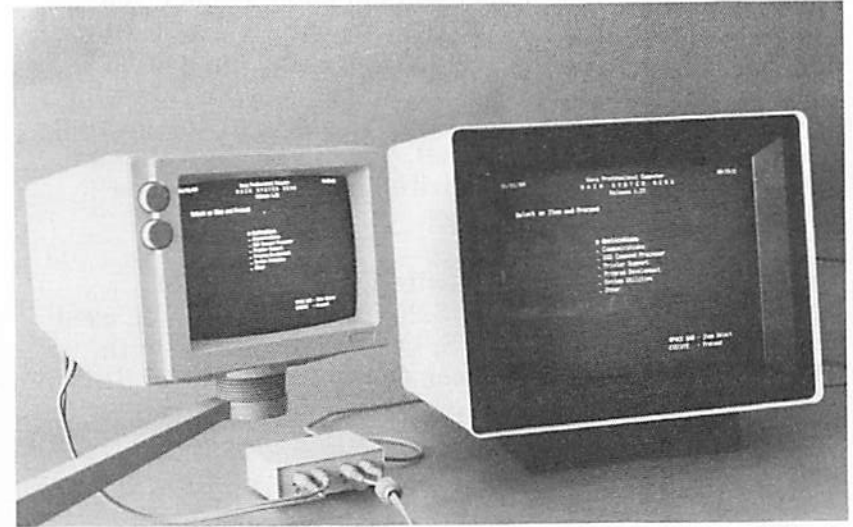
The Model 9130 converts the separate video signals used in the monochrome PC or 4200 Series workstation into a single output composite video signal and/or TTL video signals. You can attach another vendor's video display monitor or projector* to a PC or 4200 Series CPU, using either the TTL output port, the BNC connector for composite video output, or both the output port and connector (for two additional video display devices) simultaneously.

The Model 9130 has the following specifications:

- Vertical frequency of 60 Hz
- Horizontal frequency* of 18.824 kHz
- Peak-to-peak voltage of 1 volt
- Input impedance of 75 ohms

The customer supplies the appropriate cables and connectors as well as the particular video display device(s) to be used with the Model 9130. The video monitor adapter measures 6 by 4.5 by 2 inches. This product is customer-installable.

*NOTE: Compare the horizontal frequency of the external video device you wish to attach with that of the Model 9130. Some adjustment to the video display device may be necessary to make the horizontal frequency compatible.



The Model 9130 lets you attach another vendor's video display device to a Wang PC or 4200 Series workstation.

Model 9095 Disk Drive Switch

The Special Products Model 9095 is a disk drive switch that lets you electronically switch a disk drive between two VS CPUs*.

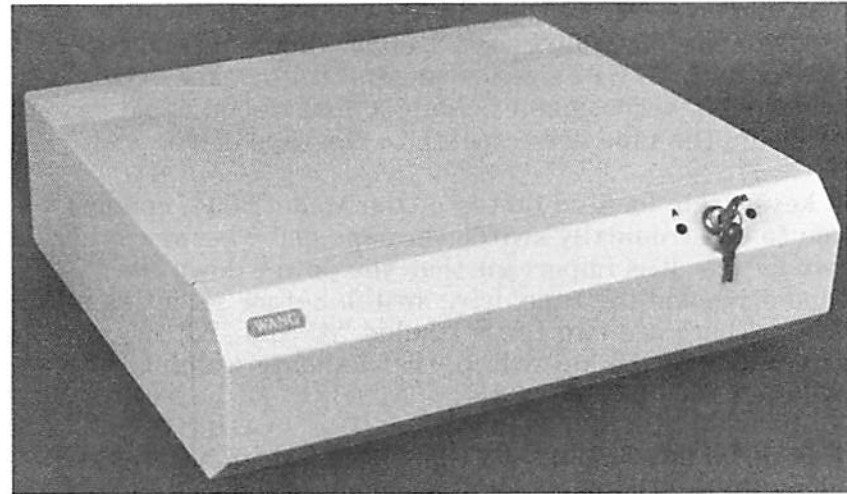
You can connect the disk drive switch between any combination of two VS100 or VS80 CPUs and one disk drive. All connections are made via A and B cables. The customer must order the cables to use with the Model 9095 separately.

A keyswitch, located on the front of the Model 9095, enables you to electronically switch the disk drive between the two CPUs. Two LEDs located on either side of the keyswitch are labeled "A" and "B," and indicate (LED on) which CPU is selected. It is important that you power down the disk drive and the Model 9095 before switching between CPUs.

This disk drive electronic switch box operates at 115V, 60 Hz, and .5 amps. The physical dimensions of the box are as follows:

- Height..... 5.75 in. (14.6 cm)
- Width..... 18.75 in. (47.6 cm)
- Depth..... 16.75 in. (42.5 cm)

*NOTE: You can use only the following VS system disk drives with the Model 9095: 2280V, 2265-V1, 2265-V2, or 2265-V3.



The keyswitch on the front of the Model 9095 lets you electronically switch the disk drive between two CPUs.



Model 9094 Tape Drive Switch

The Special Products Model 9094 is an electronic tape drive switch that enables you to switch a 2209V tape drive between two VS CPUs*.

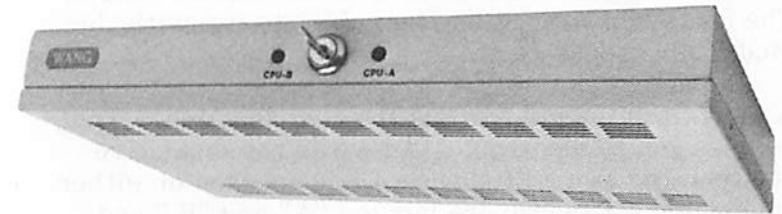
You can connect the tape drive switch between any combination of two CPUs (VS100 or VS80) and one tape drive. Both VS CPUs are connected to the tape drive switch via 15-foot cables, while a dual ribbon cable connects the tape drive switch to the tape drive.

A keyswitch, located on top of the Model 9094, enables you to electronically switch the tape drive between the two CPUs. It is important that you power down the tape drive and the tape drive switch before selecting a CPU. There are two LEDs labeled "A" and "B," on either side of the keyswitch, that indicate which CPU is selected.

The Model 9094 includes a tape drive switch box and four cables. The physical dimensions of the switch box are as follows:

- Height.....14.13 in. (35.3) cm
- Width6.88 in. (17.5) cm
- Depth.....1.63 in. (4.2) cm

*NOTE: For the Model 9094 to operate, you must install a 22V05-2 Input/Output Processor (IOP) into the VS80 system and a 22V25-2 IOP into the VS100 system.



With the Model 9094, you can switch a tape drive between two Wang CPUs.

Model 9069/-1,-2,-3 Adapter and Cable for Auxiliary Display Monitor

The Special Products Model 9069 provides a convenient method for attaching an auxiliary display monitor* to a one-piece 2200/OIS/VS workstation with a composite video input display monitor. The Model 9069 consists of an adapter and a coaxial cable.

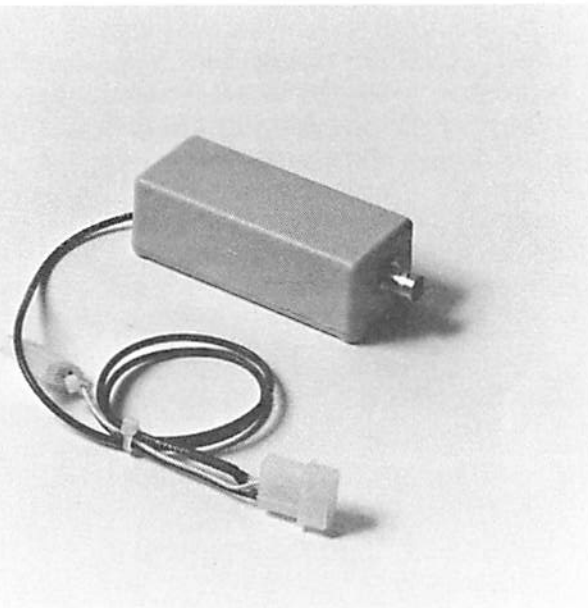
The length of the coaxial cable for each model is as follows:

- 25 feet for Model 9069-1
- 50 feet for Model 9069-2
- 75 feet for Model 9069-3

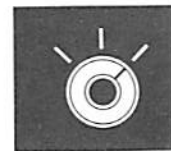
To be compatible, the display monitor (either Wang or non-Wang) must have these specifications:

- Vertical frequency of 60 Hz
- Horizontal frequency* of 17.0 kHz
- Peak-to-peak voltage of 1 volt
- Input impedance of 75 ohms
- 525 lines/second
- 60 frames/second
- BNC male connector

*NOTE: Compare the horizontal frequency of the auxiliary display monitor with that of the Model 9069. Some adjustment to the display monitor may be necessary to make the horizontal frequency compatible.



The Model 9069 provides a convenient way of attaching an auxiliary display monitor to a one-piece workstation.



1. The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that this is crucial for ensuring the integrity of the financial data and for facilitating audits.

2. The second part of the document outlines the various methods used to collect and analyze data. It includes a detailed description of the sampling techniques employed and the statistical tests used to evaluate the results.

3. The third part of the document presents the findings of the study. It shows that there is a significant correlation between the variables being studied, and it provides a clear explanation of the reasons behind this relationship.

4. The fourth part of the document discusses the implications of the findings for practice. It suggests that the results can be used to improve the efficiency of the process and to reduce the risk of errors.

5. The fifth part of the document concludes the study and provides a summary of the key points. It also includes a list of references and a list of appendices.

6. The final part of the document is a list of references, which includes a list of books, articles, and other sources used in the study.

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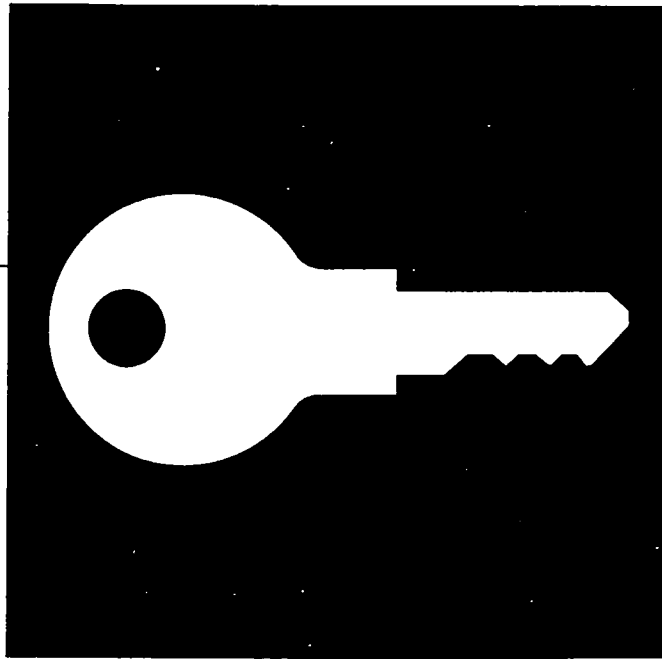
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SECURITY DEVICES



Special Products security devices offer the customer peace of mind by preventing unauthorized personnel from accessing a system from the keyboard. The selection of keylocks increased in 1985 with the addition of the 4200 Series keyboard keylock. The keylocks are intended for government or commercial use -- anywhere that on-line proprietary information needs to be protected.



Section 4

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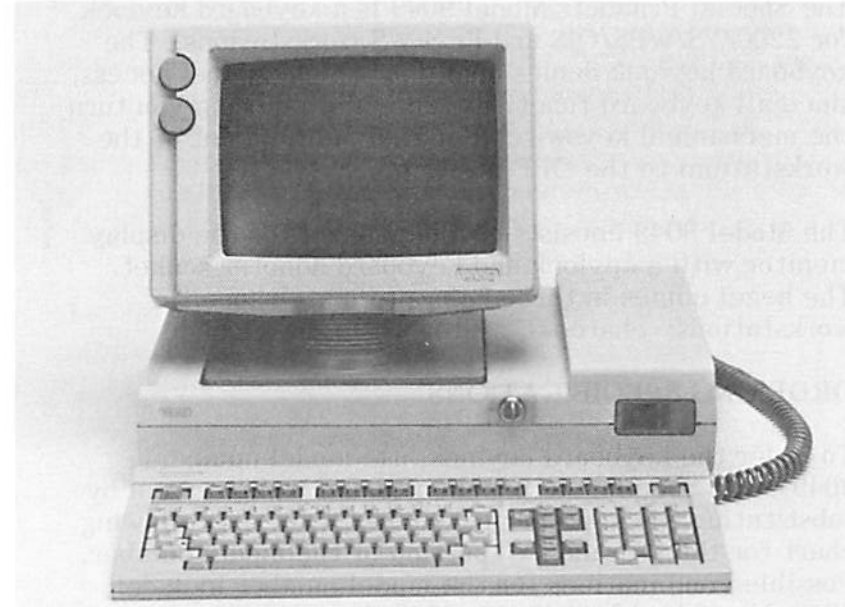
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Model 9132 Keyboard Keylock for the 4200 Series Workstations

For those applications where unauthorized personnel must be prevented from gaining access to the workstation, Special Products offers the Model 9132 keyboard keylock for 4200 Series workstations (i.e., VS or OIS Models 4205, 4210, 4220, and 4230). When you turn the mechanical keyswitch located at the top of the electronics box to the OFF position, keyboard functions are inhibited. When you turn it to the ON position, normal operation is allowed.

The Model 9132 includes a top cover for the electronics box with a keylock that has already been installed.



Simply turn the keyswitch, located at the top of the electronics box, to the OFF position to inhibit keyboard function.



Model 9049 Keyboard Keylock for One-Piece Workstations

The Special Products Model 9049 is a keyboard keylock for 2200/VS/WPS/OIS and PCS/WS workstations. The keyboard keylock denies unauthorized personnel access, since all keyboard functions are inhibited when you turn the mechanical keyswitch (located on the front of the workstation) to the OFF position.

The Model 9049 consists of a new bezel for the display monitor with a keylock and keyboard adapter socket. The bezel comes in three colors to match specific workstations: charcoal, oyster white, or avocado.

ORDERING SPECIFICATIONS

To order the keyboard keylock, use model number 9049-XY. Specify the bezel color and Wang system by substituting the appropriate number from the following chart for the "X" and "Y" portion of the model number. Possible combinations for the model number include: 9049-11, 9049-12, 9049-13, 9049-21, 9049-22, and 9049-23. For example, to order a charcoal bezel for a VS workstation, use Model 9049-11.

X = SYSTEM	Y = COLOR
X = 1 = 2200/ VS/WPS	Y = 1 = Charcoal
X = 2 = PCS/WS	Y = 2 = Oyster White
	Y = 3 = Avocado

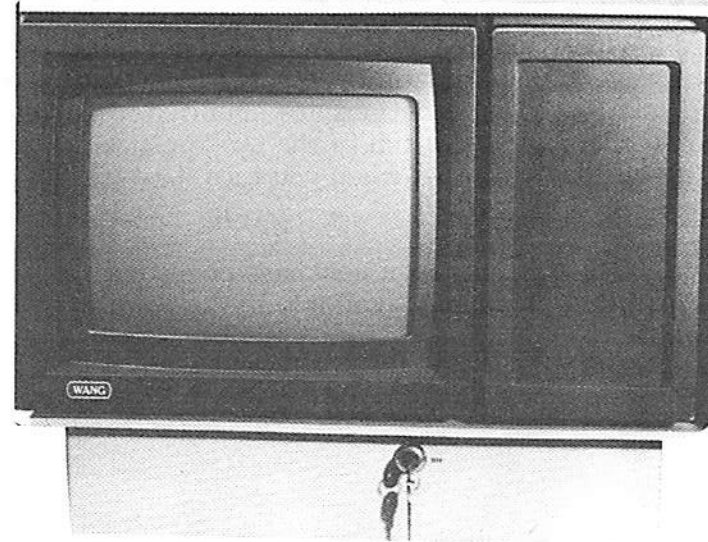


The Model 9049 keyboard keylock prevents unauthorized personnel from gaining access to the workstation.

Model 9049-14 Keyboard Keylock for VS/OIS Ergo-2 Workstations

The Special Products Model 9049-14 is a keyboard keylock designed for VS/OIS Ergo-2 workstations. When you turn the mechanical keyswitch located at the base of the display monitor to the OFF position, keyboard functions are inhibited. Normal operation is allowed when you turn the switch to the ON position. The keyboard keylock prevents unauthorized personnel from using the workstation.

The Model 9049-14 consists of a new front panel for the display monitor base cover with a keylock already installed. Model 9049-14 is available in oyster white color only.



The Model 9049-14 keyboard keylock is designed for Ergo-2 workstations.



Model 9049-31 Keyboard Keylock for 2336DE/DW Workstations

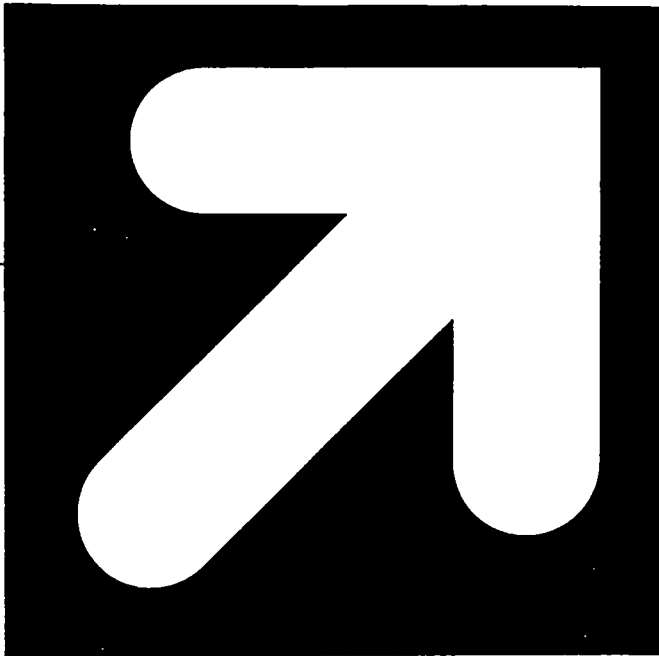
The Special Products Model 9049-31 is a keyboard keylock for 2200 System 2336DE/DW workstations. The keyboard keylock, located at the base of the display monitor, prevents unauthorized personnel from using the workstation. Keyboard functions are inhibited when you turn the mechanical keyswitch to the OFF position; normal operation is allowed when you turn it to the ON position.

The Model 9049-31 contains a new base cover with a keylock installed. It is only available in the color of oyster white.



A keyswitch at the base of the 2336DE/DW Ergo workstation secures the terminal.

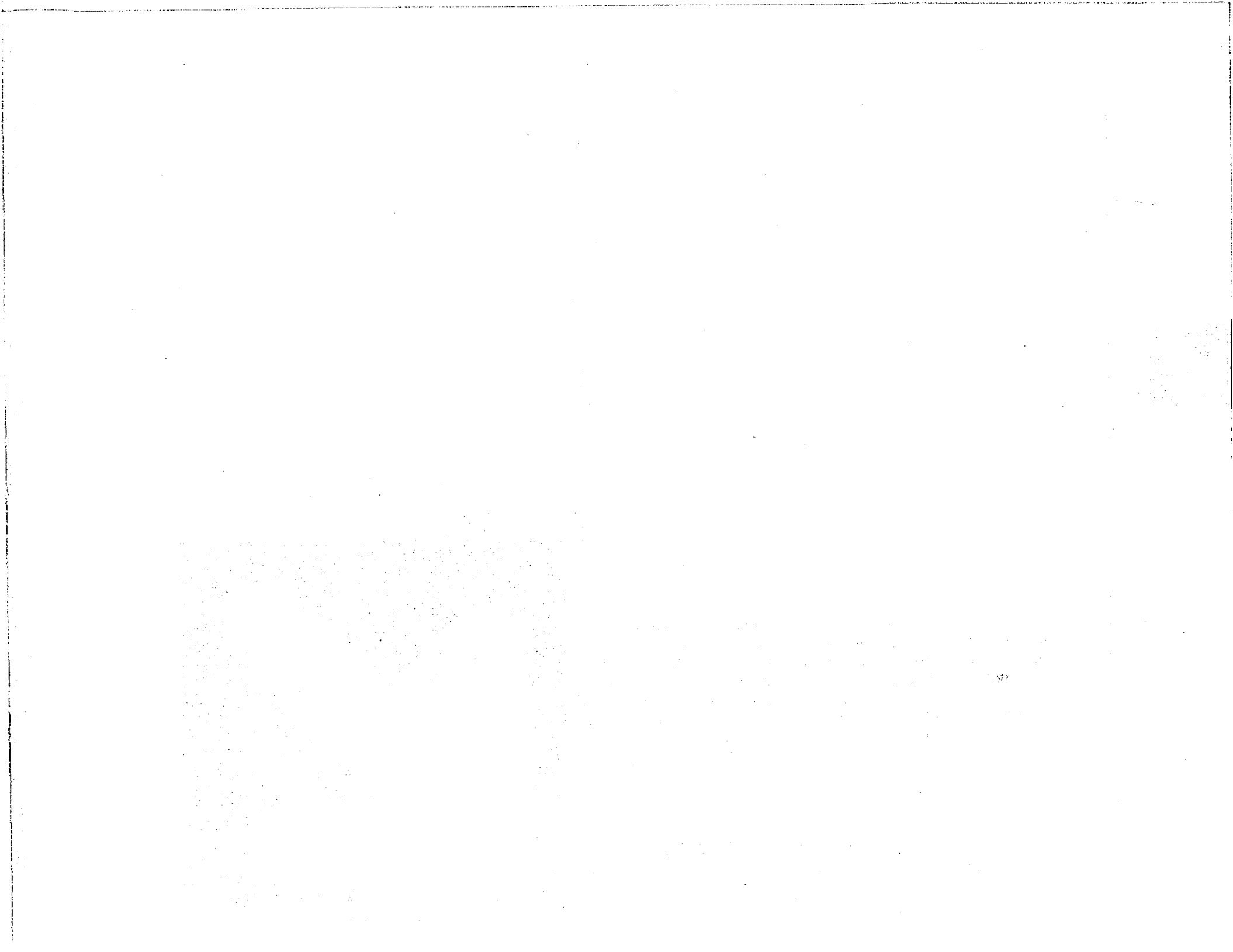
CUSTOMIZED ENHANCEMENTS



If a client needs to expand the capabilities of any component of a current Wang system, Special Products can help. In the past, enhancements have included font options, specialty character bands for printers, and extra slots in a 2200 System CPU chassis. Each product is designed to provide the client with increased system capabilities, without costly ramifications.

Section 5



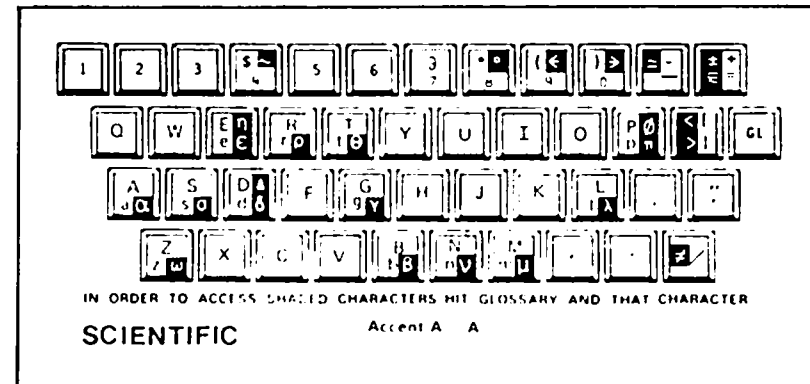


Model 9512-01/-02 Scientific CRT PROM

The Special Products Model 9512-01 is a scientific CRT PROM for any three-board OIS/WPS workstation (5526 Series), while the Model 9512-02 is a scientific CRT PROM for any two-board OIS/WPS workstation (5536 Series). With these scientific PROMs, you can print out a "Scientific Gothic" character set -- which includes 115 characters in all. (The standard character set includes 96 characters.) Besides adding certain special characters, substitutions have been made for four standard characters: #, ?, %, and @.

To access these special scientific characters, you must attach the glossary to your system by installing the archive diskette (included with the Model 9512-01/-02). You can then press the GL (glossary) key followed by the corresponding key from the keyboard to print out the special characters. The character that appears on the screen is a third character (neither the special character that is printed, nor the corresponding character on the keyboard).

The Special Products Model 9512-01/-02 also requires you to install a PROM into a PC board in the workstation. Model 9512-01/02 includes a sticker that you attach to the workstation to identify the special characters and their corresponding keys. To print out the special characters, a Scientific Gothic printwheel is required. You can order the printwheel from Express Products, using part number 719-8051-3 for PolymerPlus plastic, or 720-8051 for Duralife Metal.



The Model 9512-01/02 enables a user to print a Scientific Gothic character set.



Model 9142

OCR-A/OCR-B Font Option

With the Special Products Model 9142, a 2281W or 2281W-WC printer for the 2200 System can use either a standard printwheel (such as Prestige or Courier), an OCR-A printwheel, or an OCR-B printwheel. Use the printwheel select switch located inside the front panel to choose the standard, OCR-A, or OCR-B options.

The Model 9142 installation kit contains a PC board, a three-position switch cable assembly, and 18-inch ribbon cable, as well as all the hardware necessary to install the Model 9142.

Standard

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_/_;^-+?="|('`~)*'. ,/_;^-+?="
%&"'1$[[:]°£#0987654321%&"'1$[
ÄÅßÇÐÉÊËÏJKLMNÖPQRSTUVWXYZ
abcçdefghiîjklmnopqrstuvwxyçz
    
```

OCR-A

```

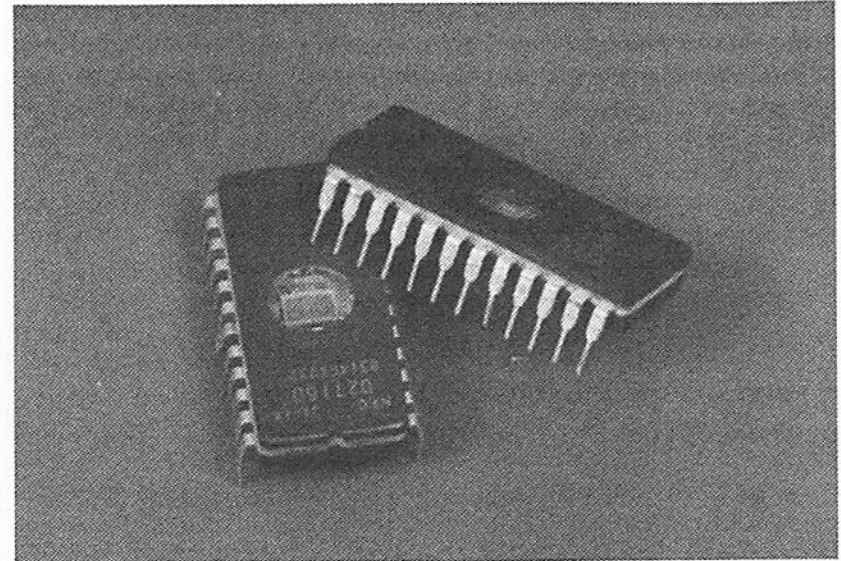
&|Äö{[[:]1£#0987654324&|Ä
/Ü;[-+?="H]#(J_!)*'. ,%/_Ü;[-
ABCDEF GHIJKL MNÖPQRSTUVWXYZ
abcdefghi jklmnopqrstuvwxyçz
    
```

OCR-B

```

_/_;^-+?="|('`~)*'. ,/_;^-+
%&"Äö{[[:]1£#0987654321%&"
ÜÅßÇÐÉÊËÏJKLMNÖPQRSTUVWXYZ
abcçdefghiîjklmnopqrstuvw
    
```

NOTE: The characters on the screen differ from the characters printed, depending on the option you choose.



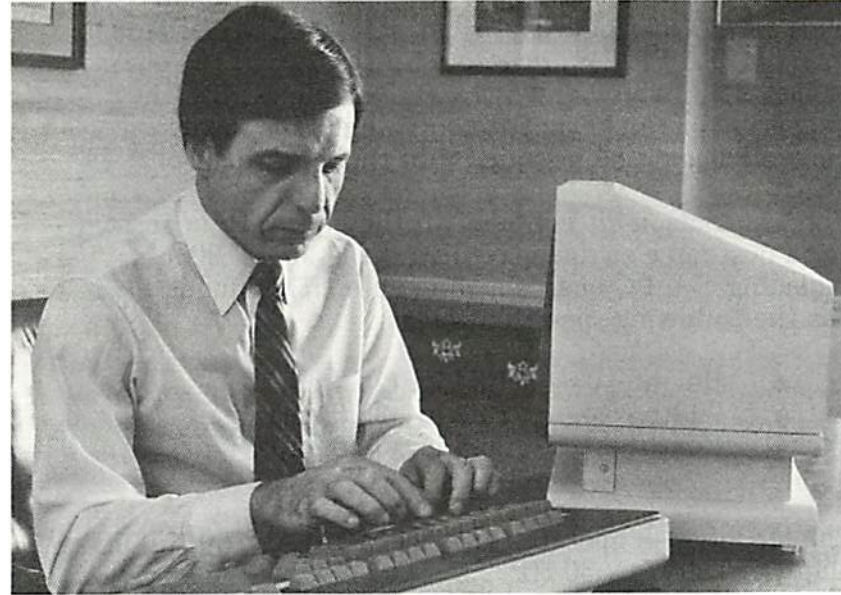
The Model 9142 contains a PC board with a special PROM so that you can use either a standard, an OCR-A, or an OCR-B printwheel.

Model 9072/-1 Legal Character Band

The Special Products Models 9072 and 9072-1 are legal character bands that replace the standard character bands on 5574 (600 lines per minute) and 5573 (300 lines per minute) printers, respectively. These printers work either on the OIS or VS. The legal character band has section (§), paragraph (§§), cent (¢), and degree (°) symbols, replacing the less than (<), greater than (>), up arrow (^), and tilde (~) symbols found on a standard character band. In all, the Model 9072/-1 contains four character changes on a 96-character band.

For the Model 9072/-1 to operate, the customer must install the legal character print band; a Legal Image PROM (into the printer processor PC board); and the glossary document software for either the OIS or VS system.

You can access the cent symbol directly from the keyboard; you access the section, degree, and paragraph symbols by pressing the GL (glossary) key and the other corresponding appropriate key.



The Model 9072/-1 provides the four character changes most in demand by the legal profession.



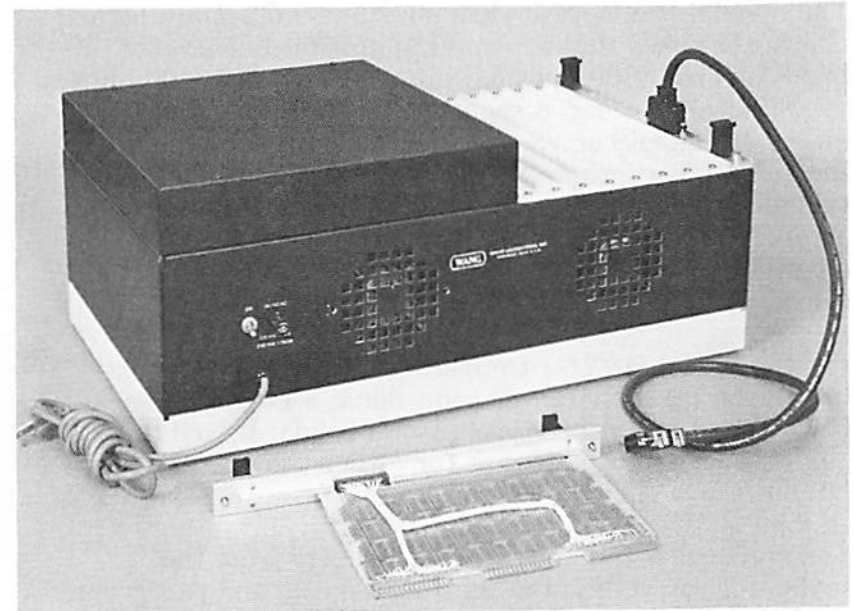
Model 9048 Extended I/O Chassis for the 2200 System

The Special Products Model 9048 extended I/O chassis adds seven I/O slots to an existing 2200 System, Models T/VP/MVP/LVP CPU chassis. The extended I/O chassis supports all available Wang I/O controllers with the exception of the keyboard controller. The keyboard controller must be installed into the main CPU chassis.

The installation kit contains all the hardware necessary for a customer engineer to install the Model 9048, including two PC boards and a cable. The Model 9048 has the following specifications:

- Height..... 10.4 in. (26.4 cm)
- Width 13.8 in. (35.0 cm)
- Depth..... 25.6 in. (65.0 cm)

The Model 9048 operates at either 115VAC, 60 Hz, 5 amps, or 230VAC, 50 Hz, 2.5 amps.

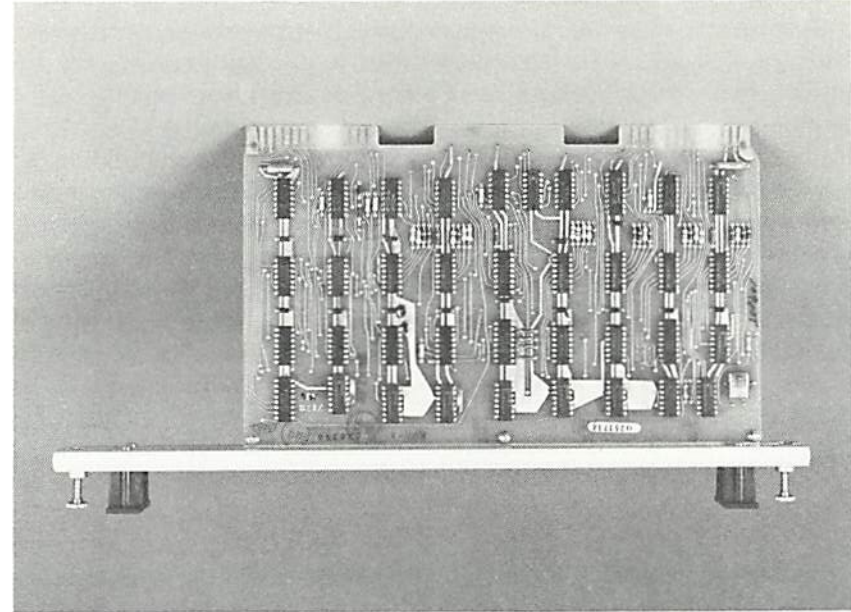


The Model 9048 adds seven I/O slots to a 2200 System.

Model 9020-24 24-Hour Time-Of-Day Clock for the 2200 System

The Special Products Model 9020-24, a 24-hour time-of-day clock, provides a convenient means of reading the time from the display monitor of a 2200 System. After starting up the system, the customer programs the clock, which provides the time of day in hours, minutes, and seconds upon request. The Model 9020-24 is a controller board that the customer can install into any available I/O slot in a 2200 System, Models T/VP/MVP/LVP.

The Model 9020-24 accepts and displays the time in a 24-hour format. The customer sets the time using simple BASIC commands.

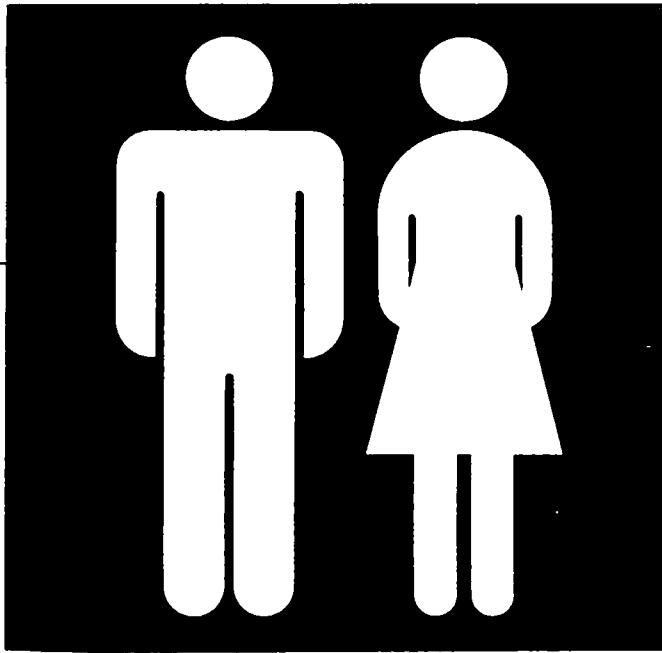


The logic of the Model 9020-24 is contained on a controller board that the customer can install into any available I/O slot in a 2200 System.





ERGONOMICS



Special Products knows that comfort leads to greater productivity in the work environment. That's why we've developed three monitor arms -- each with a different office work-top in mind. Once secured, all the arms can pivot 90°, 180°, or 360°. This year, Special Products also introduced a mounting bracket that enables you to mount the electronics box of a 4210 workstation vertically on a wall or flat wooden surface. Special Products takes comfort, versatility, and space into consideration during the development of an ergonomically designed product.



Section 6



Model 9158 Amber-Colored Display Monitor for IWS and 4200 Series Workstations

The Special Products Model 9158 is an amber-colored display monitor for an IWS (OIS 40, 50, or 60) or 4200 Series workstation. The Model 9158 includes the monitor with an amber screen rather than the standard green screen, as well as a dual-headed cable. Some customers find the amber screen more soothing to the eyes than the green screen.

When ordering an IWS or 4200 Series system, you cannot order the Model 9158 in place of the standard green screen; you must order it in addition to the green screen. However, if you are ordering a 4230 workstation and want an amber screen, refer to Model 9157.



Specify the Model 9158 when ordering an amber screen for a 4200 Series or IWS workstation.



Model 9157 VS 4230 Workstation with Amber-Colored Display Monitor

The Special Products Model 9157 is a display monitor for the VS 4230 workstation with an amber-colored screen instead of the standard green screen. The amber screen is preferred by customers because it seems to lessen eye fatigue.

The Model 9157 is identical to the 4230 workstation, except it has an amber screen.



The Model 9157 is a complete 4230 workstation with an amber screen rather than the standard green screen.

Model 9146 Flat-Mounted Extending PC Monitor Arm

Special Products Model 9146 flat-mounted extending PC monitor arm allows the user to view the workstation screen comfortably. You can use the Model 9146 with any PC monitor except the color monitor (PC-PM005). You can also use the PC monitor arm with a monochrome 4200 Series or IWS monitor. The customer can install the Model 9146 after drilling two holes through the mounting surface.

When secured to a table or desk top through these pre-drilled holes, the customer can set the arm to pivot 90°, 180°, or 360°. With the 8-inch extension, a depth adjustment feature, you can be as close to or far away from the screen as you prefer. The arm provides a more customized office environment, and offers additional space on the desk surface. One advantage of the flat-mounted extending PC monitor arm is that you do not have to place the arm near the edge of the work surface; you can drill the holes and mount the arm anywhere you like.

Like the Model 9123 flat-mounted PC monitor arm, the Model 9146 is designed for desks and table tops that are 1-1/4 inch maximum in thickness. If the mounting surface is thicker than 1-1/4 inches and the customer would like a flat-mounted extending PC monitor arm, contact Special Products, Product Planning and Management, at Corporate Headquarters, Mail Stop 13A1B in Lowell, Massachusetts 01851.



With the 8-inch depth adjustment feature, you can move the screen as close to or far away as you like.



Model 9140 C-Clamp Extending PC Monitor Arm

The Model 9140 C-clamp PC monitor arm, once secured to a table or desk top, enhances viewing comfort. In addition to having the capacity to pivot 90°, 180°, or 360°, the 8-inch extending feature allows the arm to be adjusted so that the screen is as close as the user likes. You can use the Model 9140 with any PC monitor except the color monitor (PC-PM005). You can also use the PC monitor arm with monochrome 4200 Series or IWS monitors. The Model 9140 is customer-installable.

The Model 9140 offers increased mobility over the flat-mounted arm, because it is secured to the work top surface near its edge by a C-clamp. You can move the Model 9140 from desk top to desk top simply by loosening and tightening the clamp. The work surface must have a sufficient overhang to accommodate the clamp.

CAUTION: When mounting the arm near the edge of a desk or table, we recommend that you do not allow the arm to pivot 360° off the end of the table or desk. Uneven weight distribution could cause the table or desk to tip.



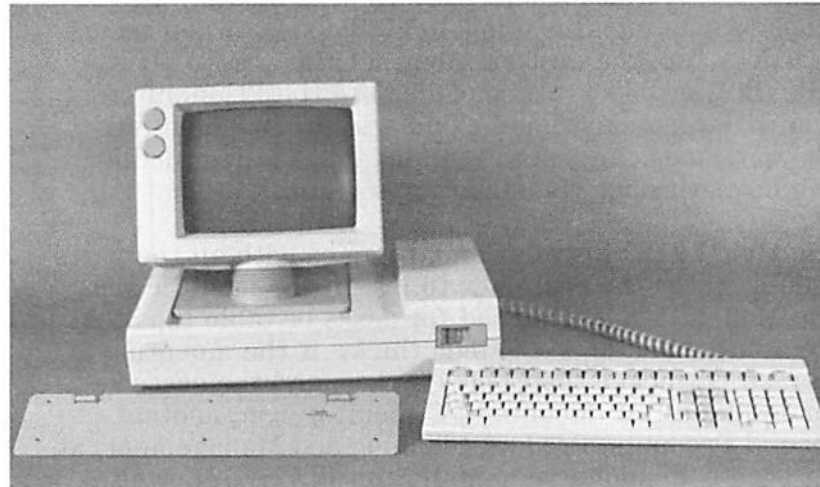
You can move the C-clamp extending arm from desk top to desk top, simply by loosening and tightening the clamp.

Model 9133/9133-I VS 4210 Workstation with Mounting Bracket

The Model 9133/9133-I is a 4210 workstation with a mounting bracket that allows you to mount the electronics box vertically on a wall or flat wooden surface. The bracket is particularly suited for teller units or point-of-sale systems, where the electronics box can be mounted under the counter, leaving more space on the counter top for the cash drawer, monitor, and keyboard.

The Model 9133 comes complete with a mounting bracket, six wood screws, two extra-long cables, and the 4210 workstation with monitor, electronics box, and a standard U.S. keyboard. For those applications that require an international keyboard, you can order the Model 9133-I, choosing any standard Wang international keyboard.

The mounting bracket is recommended for wood, plaster, and other permeable materials.



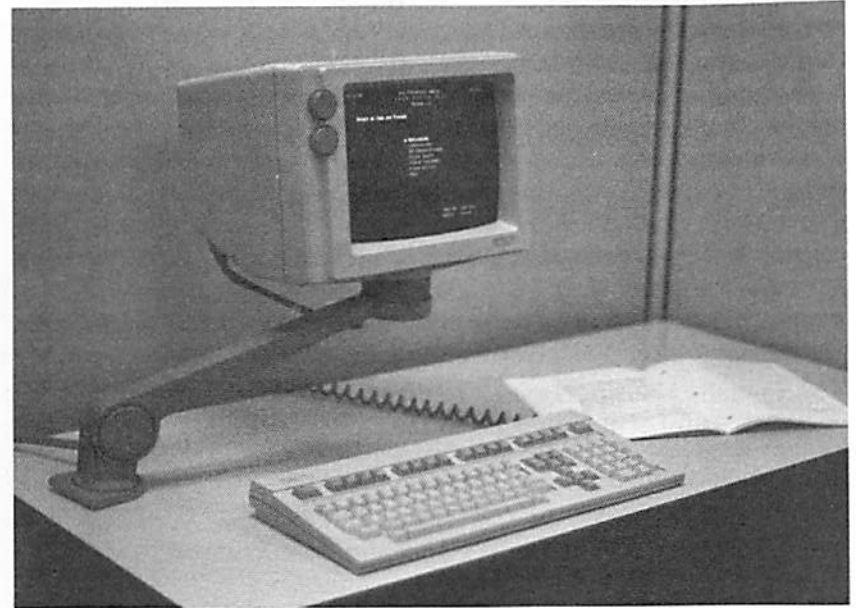
The Model 9133 comes with a mounting bracket, and a 4210 workstation with monitor, electronics box, and a standard U.S. keyboard.



Model 9123 Flat-Mounted PC Monitor Arm

The Special Products Model 9123 is a flat-mounted PC monitor arm that enables easy viewing of the Wang monochrome monitor (Model PC-PM004). When secured to a desk top, the customer can set the arm to pivot 90°, 180°, or 360°. You can also use the PC monitor arm with a monochrome 4200 Series or IWS monitor. The customer can install the Model 9123 after drilling two holes through the mounting surface.

The Model 9123 installation kit comes with all the parts necessary for the customer to install the monitor arm. The Model 9123 is designed for desks or table tops that are a maximum of 1-1/4 inch thick. If the mounting surface is thicker than 1-1/4 inches, and the customer would like a flat-mounted PC monitor arm, contact Special Products, Product Planning and Management, at Corporate Headquarters, Mail Stop 13A1B in Lowell, Massachusetts 01851.

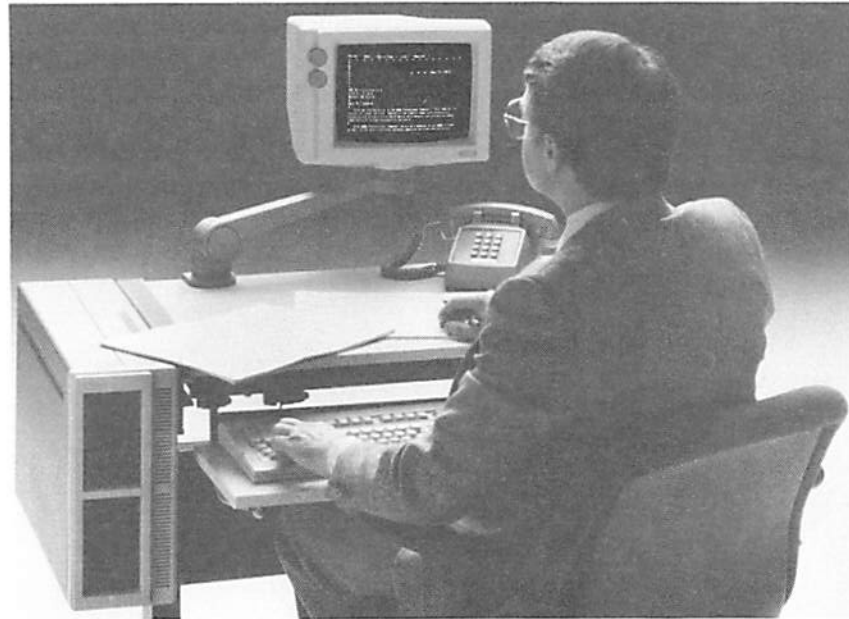


The flat-mounted PC monitor arm enables comfortable viewing of the workstation screen.

Model 9116 Amber-Colored Display Monitor for the PC

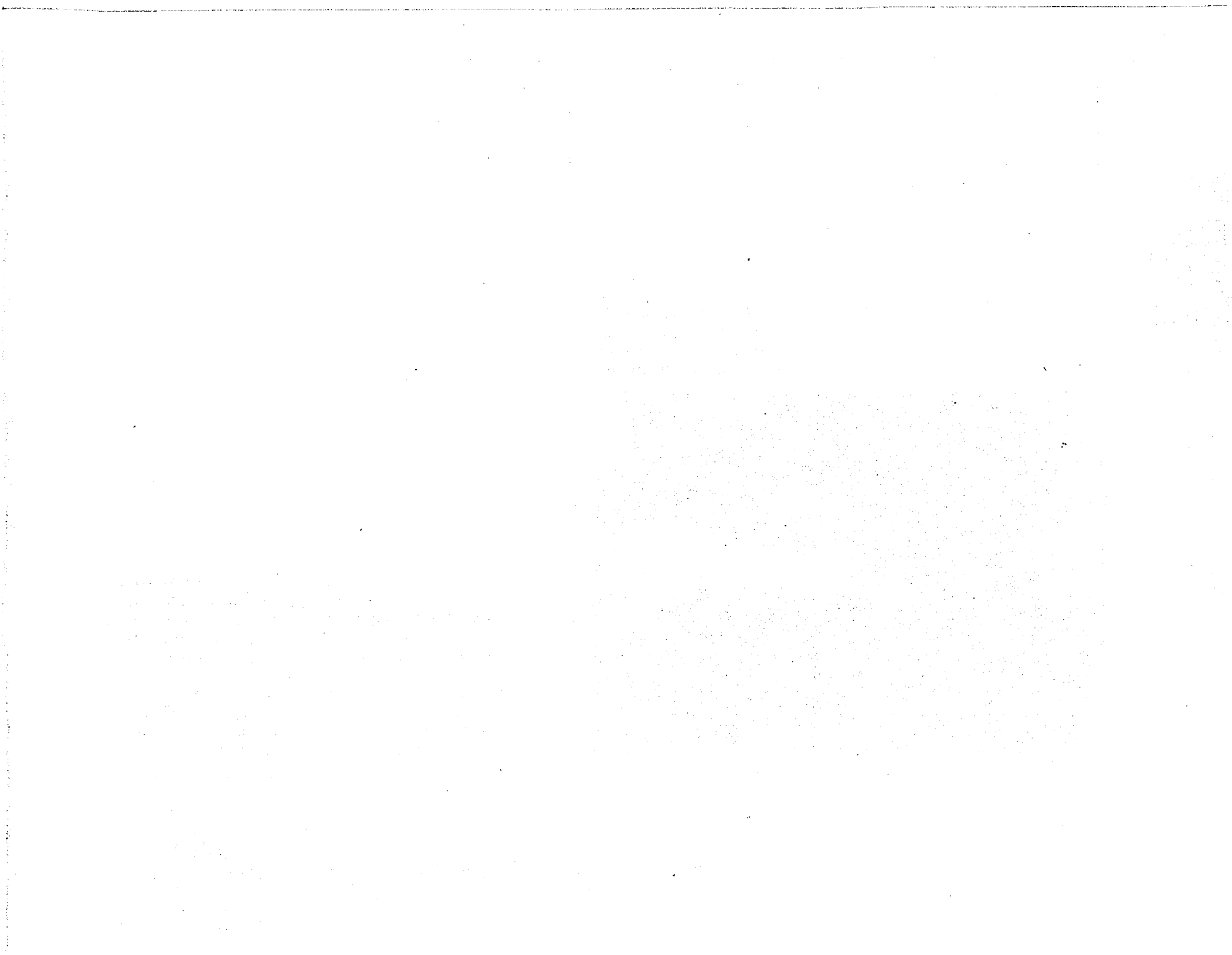
The Special Products Model 9116 is a display monitor for the PC with an amber screen instead of the standard green screen. The amber screen is preferred by customers because it seems to lessen eye fatigue.

With a PC system, the customer can order the Model 9116 instead of the PC-PM004 monochrome monitor. The Model 9116 includes both the amber display monitor as well as a dual-headed cable, and is customer-installable.

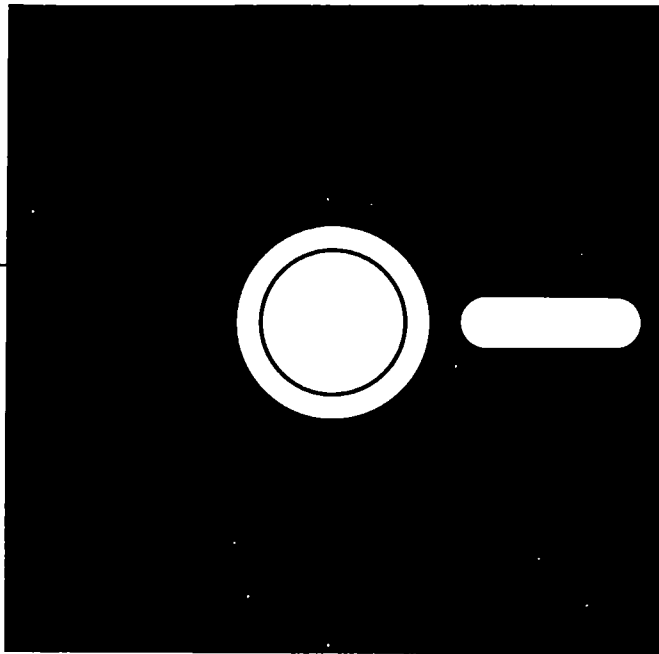


The amber-colored display monitor for the PC is preferred by users because it seems to lessen eye fatigue.





SOFTWARE



The development of innovative and one-of-a-kind software is integral to many of our hardware products. Special Products also develops software-only solutions for a variety of customers. Presently, our software group is working on interfaces to point-of-sale systems. Ongoing work includes the creation of a software package that tracks word processing documents through a sophisticated telecommunications network, and a cost-saving package that allows the user to access a leased telecommunications line only when necessary. Although the customers for both of these telecommunications projects are international banking institutions, Special Products has also developed a variety of cash drawer interfaces for the retail community. If requested, Special Products keeps the development of software proprietary.



Section 7

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Model 9156 PC Printer Access from the VS

The Special Products Model 9156 consists of software that allows you to print VS print files (not WP documents) on any printer connected to a PC, while the PC is in VS terminal emulation mode. In other words, when the PC is emulating a VS workstation under 928 terminal emulation, you can access the default printer* on the PC without suspending or terminating the emulation, or logging off the VS. If the PC is configured as a local archiver for the VS, then you cannot use the Model 9156 in addition to that.

***NOTE:** You can have both a serial and parallel printer connected to the CPU board in the PC at the same time, and, with a Multiple Communications Card (MCC) option, up to three printers connected to the ports on the MCC. However, the Model 9156 will access only the printer designated as the default printer.

The customer can install both the VS and PC microcode. The customer must supply the printer as well as the appropriate serial or parallel cable that connects the mother board in the PC to the printer.

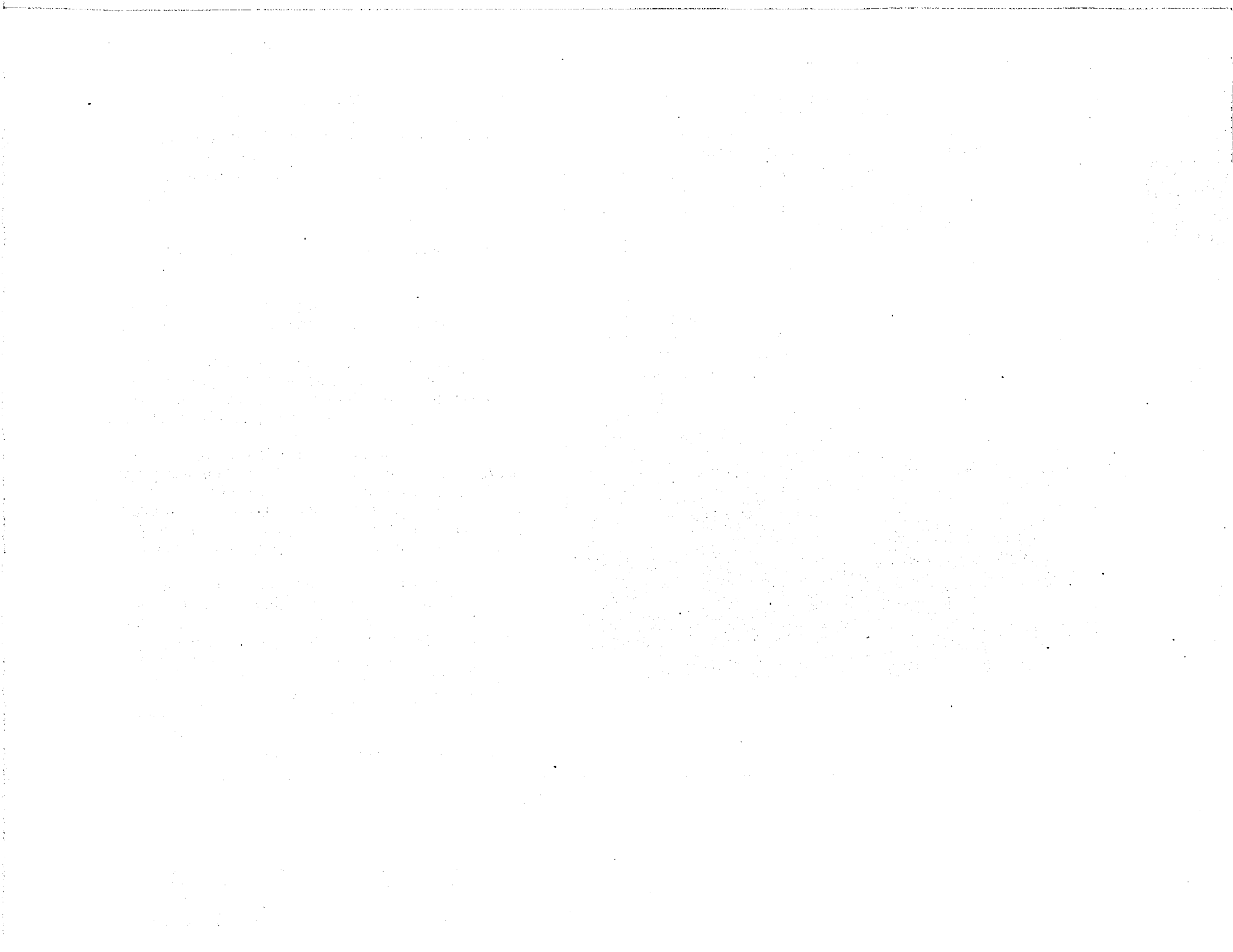
The hardware and software requirements for the printer, PC, and VS are as follows:

- Printer:
 - Any printer, either parallel or serial, that is compatible with the PC
- VS System:
 - Any VS system that supports a 2246 workstation
 - VS operating system release 6.40 or later
 - Coaxial cable to connect the VS to the local communications option card in the PC



The Model 9156 permits you to send VS print files to a printer connected to a PC under 928 terminal emulation.

- PC:
 - Local Communications Option (LCO)
 - Version 2.13 or later of the LCO software
 - BIOS release 1.65 or later
 - MSDOS release 2.01 or later
 - The general parallel driver, or the general serial driver, or the MCC driver (all must be release 2.00 or later), depending on which PC printer being used



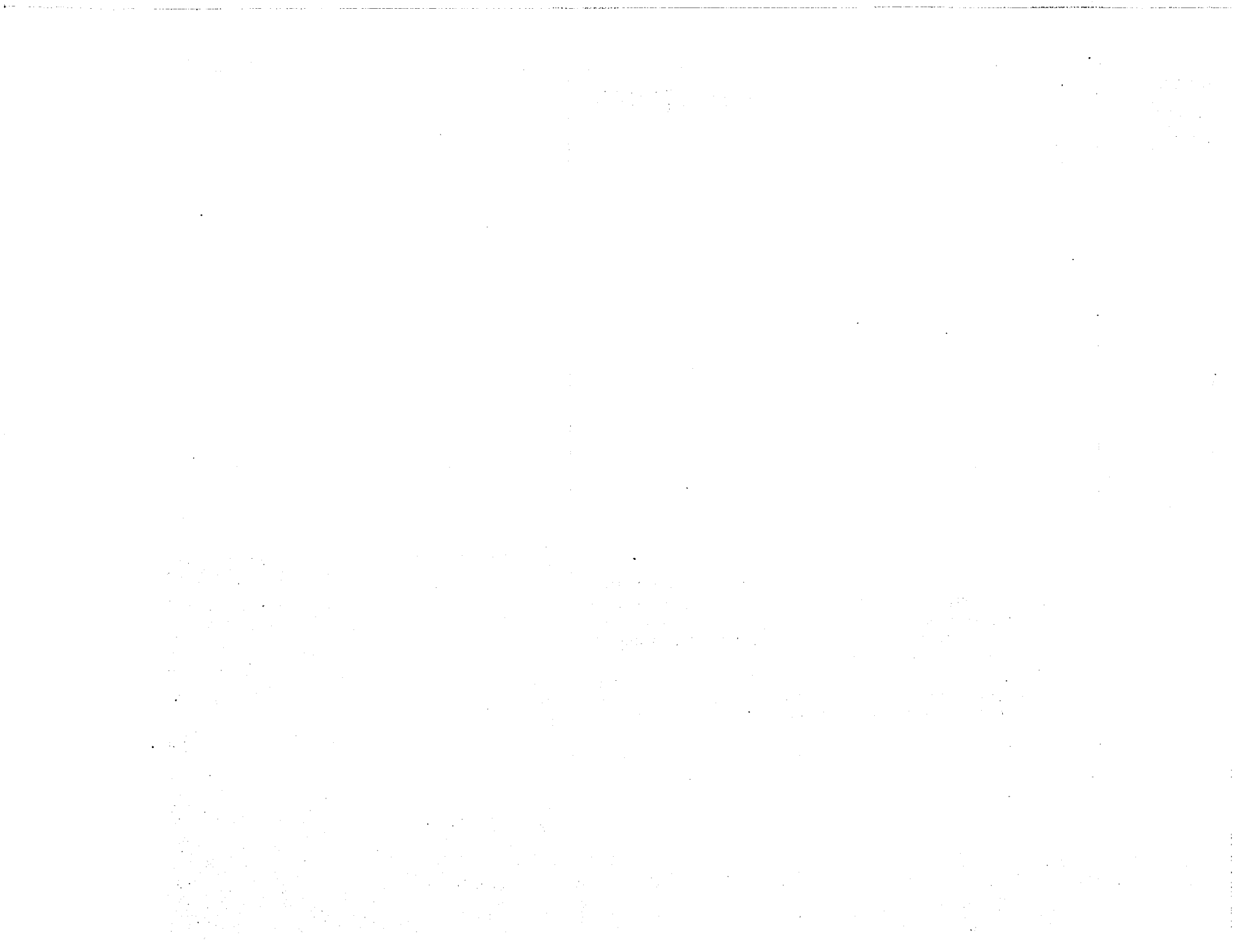
HOW TO REQUEST A TAILOR-MADE SOLUTION

SPQR

In Special Products, product development is an ongoing process, where customers can submit a request for a product that suits their office needs in the form of a Special Products Quotation Request (SPQR). Whether the requirement is for an upgrade to a current system, or a brand-new product to improve efficiency, we will evaluate the request. Special Products is a group of hardware, software, information, and administrative professionals working as a team to provide the customer with a quality product.

Section 8

SPQR



ORDERING INSTRUCTIONS

The Special Products Development group helps to sell Wang systems. To order any of the special products contained in this publication, use the Wang model number and follow the same procedure you would use for ordering other Wang products. If a customer wants a special product that is either not listed here or is not in the Pricing Manual, Special Products will consider the request on its merit. For such requests, fill out a Special Product Quotation Request (SPQR) form and mail it to:

Wang Laboratories, Inc.
Product Planning and Management
Special Products
Mail Stop 13A1B
One Industrial Avenue
Lowell, Massachusetts 01851
(617) 967-6546

If the request is approved, you will be notified as to the model number, selling price, and delivery date.

On the subsequent sheets, you will find SPQR forms. When we receive the SPQR, we will respond within two to three weeks of your request.

SPQR

1. The first part of the document discusses the importance of maintaining accurate records of all transactions.

2. It also emphasizes the need for regular audits to ensure the integrity of the financial data.

3. The document further outlines the responsibilities of the accounting department in providing timely and accurate information to management.

4. It also discusses the role of the accounting department in budgeting and financial forecasting.

5. The document concludes by stating that the accounting department is committed to providing the highest quality of service to the organization.

6. Finally, it expresses the department's confidence in the future and its commitment to continuous improvement.

WANG

SPECIAL PRODUCT QUOTATION REQUEST

Send to: Product Planning and Management, Special Products
Mail Stop 13A1B, One Industrial Avenue, Lowell, Massachusetts 01851

ORIGINATOR: _____ DATE: _____

ORIGINATOR'S ADDRESS: _____ PHONE: (_____) _____

CUSTOMER: _____ CUSTOMER CONTACT: _____

CUSTOMER'S ADDRESS: _____ PHONE: (_____) _____

PLEASE CHECK ONE OF THE FOLLOWING:

- Hardware Request _____
- Software Request _____
- Hardware/Software Request _____

WANG EQUIPMENT ASSOCIATED WITH SPECIAL PRODUCT: _____

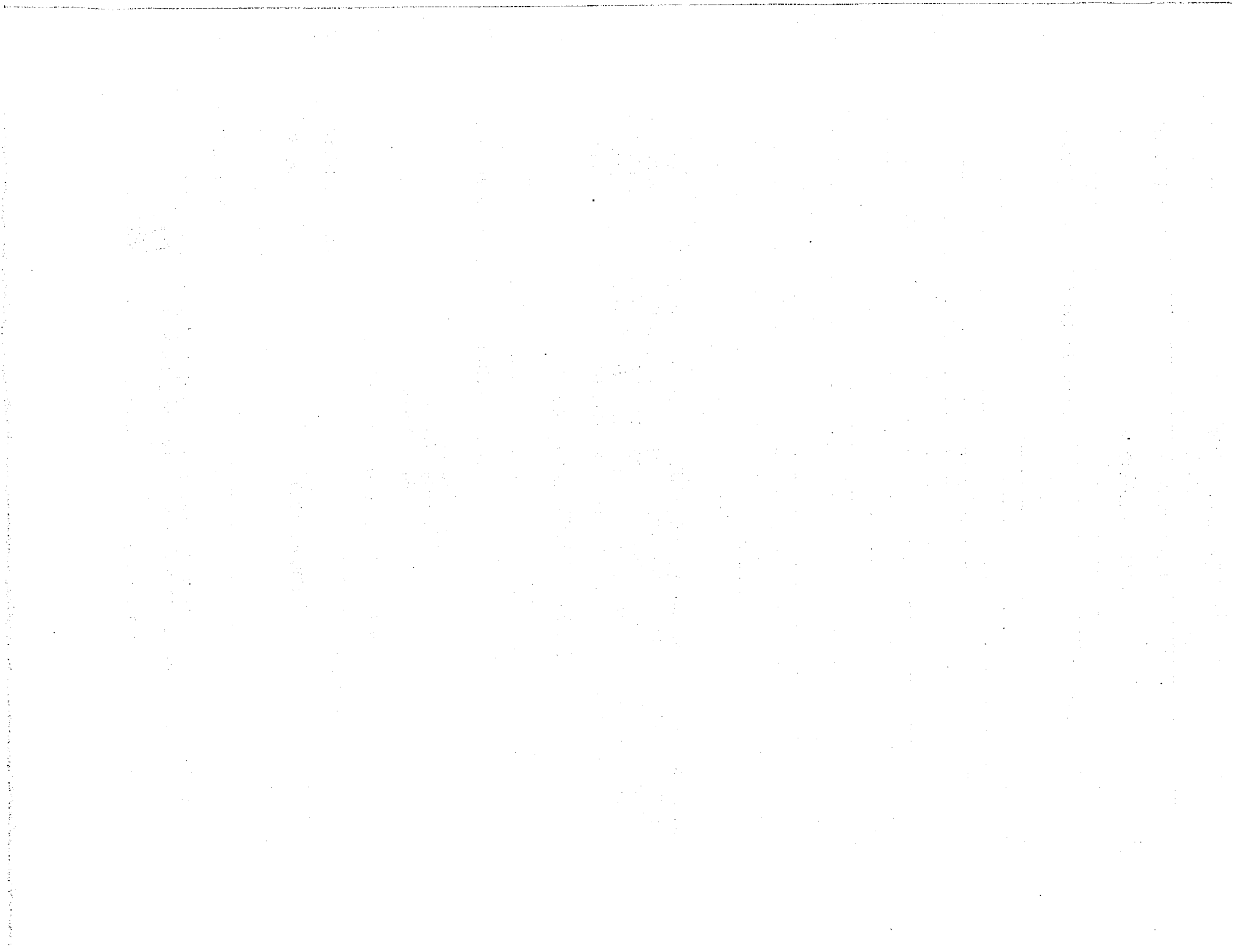
DETAILED DESCRIPTION OF SPECIAL PRODUCT

Please supply as much information as possible, such as powerline voltage and frequency, data rates, codes, protocols, control methods, required software, suppliers of associated equipment, etc. Attach system configuration diagram, and describe system application. If an interface involves customer-supplied equipment, you must provide complete technical documentation. Use the reverse side of this form if necessary.

APPROVAL: DISTRICT/COUNTRY MANAGER: _____ DATE: _____

FOR HOME OFFICE USE ONLY

DATE RECEIVED: _____ SPQR NUMBER: _____



SPECIAL PRODUCT QUOTATION REQUEST

Send to: Product Planning and Management, Special Products
Mail Stop 13A1B, One Industrial Avenue, Lowell, Massachusetts 01851

ORIGINATOR: _____ DATE: _____

ORIGINATOR'S ADDRESS: _____ PHONE: (_____) _____

CUSTOMER: _____ CUSTOMER CONTACT: _____

CUSTOMER'S ADDRESS: _____ PHONE: (_____) _____

PLEASE CHECK ONE OF THE FOLLOWING:

- Hardware Request _____
- Software Request _____
- Hardware/Software Request _____

WANG EQUIPMENT ASSOCIATED WITH SPECIAL PRODUCT: _____

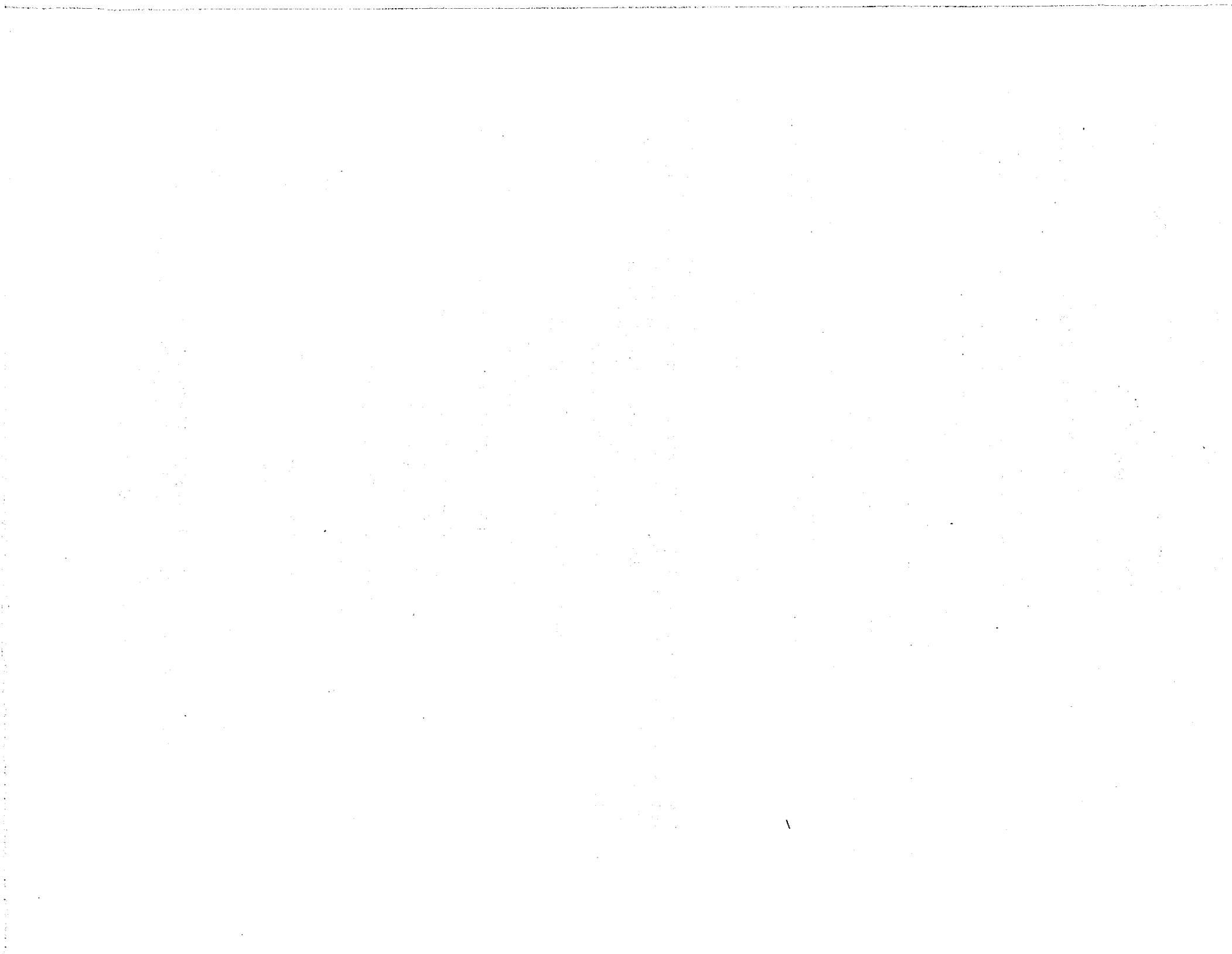
DETAILED DESCRIPTION OF SPECIAL PRODUCT

Please supply as much information as possible, such as powerline voltage and frequency, data rates, codes, protocols, control methods, required software, suppliers of associated equipment, etc. Attach system configuration diagram, and describe system application. If an interface involves customer-supplied equipment, you must provide complete technical documentation. Use the reverse side of this form if necessary.

APPROVAL: DISTRICT/COUNTRY MANAGER: _____ DATE: _____

FOR HOME OFFICE USE ONLY

DATE RECEIVED: _____ SPQR NUMBER: _____



APPENDIX A

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APPENDIX B

SYSTEM COMPATIBILITY/CUSTOMER INSTALLATION MATRIX

The following pages of Appendix B feature a System Compatibility/Customer Installation Matrix. The Matrix provides a convenient means of determining which systems the special products described in this Ideas Book work with, in addition to indicating which products are customer-installable.

SYSTEM COMPATIBILITY/CUSTOMER INSTALLATION MATRIX

MODEL NUMBER	VS		OIS		2200	
	Workstations	CPUs	Workstations	CPUs	Workstations	CPUs
9005-2						T,VP, LVP,MVP
9020-24						T,VP, LVP,MVP
9038 Series		ANY w/WP, supporting 5548z typstr		105,115,125 130,140,145		T,VP, LVP,MVP
9048						T,VP, LVP,MVP
9049-XY	ANY one piece		ANY one piece		ANY one piece	
9049-14	Ergo-2		Ergo-2			
9049-31					2336DE/DW	
9065		ANY		ANY		
9067		ANY w/WP, supporting 5548z typstr		105,115,125 130,140,145		
9069/ -1,-2, -3	ANY one piece		ANY one piece		ANY	

SYSTEM COMPATIBILITY/CUSTOMER INSTALLATION MATRIX (continued)

MODEL NUMBER	PC	WPS		PERIPHERALS			CUSTOMER INSTALL
		Workstations	CPUs	Printers	Tape Drives	Disk Drives	
9005-2							
9020-24							YES
9038 Series			20, 30				
9048							
9049-XY		ANY, also PCS/WS					
9049-14							
9049-31							
9065			ANY				
9067			20, 25, 30				
9069/ -1, -2, -3		ANY					

SYSTEM COMPATIBILITY/CUSTOMER INSTALLATION MATRIX (continued)

MODEL NUMBER	VS		OIS		2200	
	Workstations	CPUs	Workstations	CPUs	Workstations	CPUs
9072						
9072-1						
9074		ANY		ANY		
9082/-1	2246S 2246C					
9085	2246S 2246C					
9085-1	2246S 2246C					
9094		80,100				
9095		80,100				
9121	4210					
9123	ANY 4200 monitor, but 4245		4230-OA, 4230TC, or IWS monitor			

SYSTEM COMPATIBILITY/CUSTOMER INSTALLATION MATRIX (continued)

MODEL NUMBER	PC	WPS		Printers	PERIPHERALS		CUSTOMER INSTALL
		Workstations	CPUs		Tape Drives	Disk Drives	
9072				5574			YES
9072-1				5573			YES
9074			20,25,30				
9082/-1							
9085							
9085-1							
9094					2209V		
9095						2280V, 2265- V1/V2/V3	
9116	ANY						YES
9121							
9123	Mono- chrome monitor						YES

SYSTEM COMPATIBILITY/CUSTOMER INSTALLATION MATRIX (continued)

MODEL NUMBER	VS		OIS		2200	
	Workstations	CPUs	Workstations	CPUs	Workstations	CPUs
9126		VS w/WP		ANY		
9129					2336DE/DW	
9130	ANY 4200 Series, but 4245		ANY 4200 Series			
9132	ANY 4200 Series		ANY 4200 Series			
9133/-I	4210					
9136	4220	Rel. 6.40, or later				
9139	ANY w/dual coax conn.	ANY	ANY w/dual coax conn.	ANY		
9140	ANY 4200 monitor, but 4245		4230-OA, 4230TC, or IWS monitor			
9142						
9144	ANY 4200 Series					

SYSTEM COMPATIBILITY/CUSTOMER INSTALLATION MATRIX (continued)

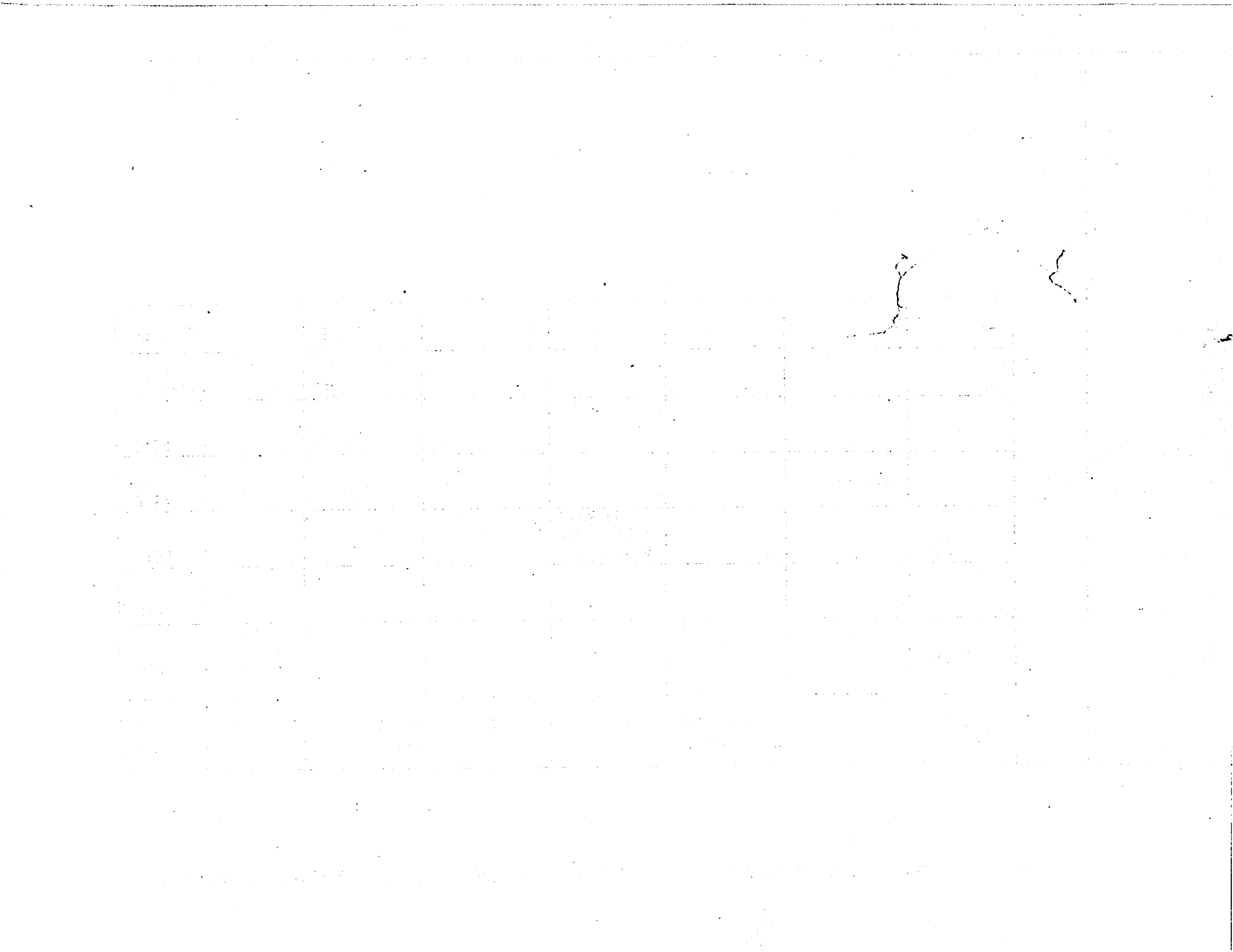
MODEL NUMBER	PC	WPS		PERIPHERALS			CUSTOMER INSTALL
		Workstations	CPUs	Printers	Tape Drives	Disk Drives	
9126	Mono-chrome monitor						YES
9129							
9130							
9132							
9133/-I	w/ OIS/VS LCO	ANY w/dual coax conn.	ANY	ANY w/dual coax conn.	6509 (OIS) 2509V (VS)		YES
9136	Mono-chrome monitor						YES
9139				2281W 2281W-WC			
9140	ANY						YES
9142							
9144							

SYSTEM COMPATIBILITY/CUSTOMER INSTALLATION MATRIX (continued)

MODEL NUMBER	VS		OIS		2200	
	Workstations	CPUs	Workstations	CPUs	Workstations	CPUs
9146	ANY 4200 monitor, but 4245		4230-OA, 4230TC, or IWS monitor			
9147	4210					
9156	4250	Rel. 6.40, or later				
9157	4230					
9158	ANY 4200 monitor, but 4245		4230-OA, 4230TC, or IWS monitor			
9512-01			5526			
9512-02			5536			

SYSTEM COMPATIBILITY/CUSTOMER INSTALLATION MATRIX (continued)

MODEL NUMBER	PC	WPS		Printers	PERIPHERALS		CUSTOMER INSTALL
		Workstations	CPUs		Tape Drives	Disk Drives	
9146	Mono-chrome monitor						YES
9147							
9156				ANY printer compatible with PC			YES
9157							
9158							
9512-01		5526					
9512-02		5536					



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