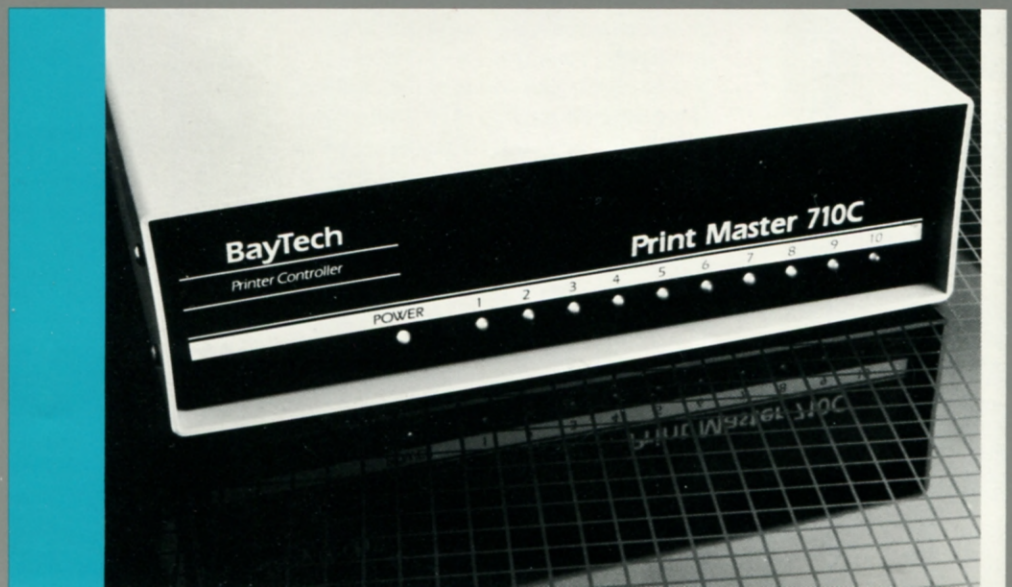
BayTech

Print Master

PRINTER CONTROLLERS

BUFFERED 700-SERIES PRINT MASTERS

NON-BUFFERED 500D-SERIES



BayTech

Print Master Series 700

Automatically share one printer

Select a specific printer or contend for multiple printers

Store data in 512K or one megabyte buffers

Interface with serial or parallel ports

Set up the in-out ports in any arrangement

The Series 700 Print Masters are printer control units with up to one megabyte common pool buffers. Print Masters allow computers to share, select and/or contend for printers easily and economically, without switching cables. The internal buffering system allows simultaneous, high-speed input from all connected computers and output to all printers.

Print Masters are user-configured for any combination of printers and computers. All models allow automatic sharing of one printer and specific printer selection or printer contention in multiple printer applications.

CHOOSE FROM ELEVEN FLEXIBLE MODELS

There are eleven models in the Print Master 700 series to satisfy different interface requirements.

- Model 706A with six parallel ports
- Model 706C with six serial ports
- Model 708C with eight serial ports
- Model 710C with ten serial ports
- Model 706D with four parallel and two serial ports
- Model 708D with six parallel and two serial ports
- Model 706E with four serial and two parallel ports
- Model 708E with six serial and two parallel ports
- Model 710E with eight serial and two parallel ports
- Model 708F with four serial and four parallel ports
- Model 710F with six serial and four parallel ports

FLEXIBLE IN-OUT PORTS ARE USER SET

Print Master's ports are easily configured by the user for any combination of printers and computers. For example, with a ten port Print Master, nine computers can share one printer, eight computers can share two printers, seven computers can share three printers, and so on, to one computer which can share nine printers.

With models with combination serial and parallel ports, any port can be a computer or a printer port, allowing serial or parallel in, and serial or parallel out. Print Master internally converts serial-to-parallel and parallel-to-serial on these models.

From the factory, Print Masters are preset to allow multiple computers to share one printer. Individual in-out port setup is accomplished by responding to prompts in the menu-driven configuration mode.

SHARING ONE PRINTER AUTOMATICALLY

In applications where several computers are sharing one printer, printer sharing is automatic. The user performs his normal print operation. There are no codes to send.

If several computers are sending data to the printer at the same time, Print Master will buffer all print jobs and connect the first computer starting a print job to the printer. The other print jobs are queued and connected to the printer in the order in which they were received in the buffer, i.e. first-in-first-out.

SHARING AND SELECTING MULTIPLE PRINTERS

To select a specific printer in multiple printer applications, the computer sends the Printer Select Code (factory default is $PRINTER; other codes are user-programmable) followed by the printer port number. These characters are trapped if they are valid and not passed through to the printer.

The printer port number then becomes a printer assignment number for that particular computer. This printer assignment number is stored in non-volatile memory and becomes a default value on all subsequent print jobs, until the user again sends the Printer Select Code followed by a new printer request.

If a computer wishes to select another printer without changing the default assignment number, this is accomplished by sending the Printer Select Code followed by T followed by a printer number. Subsequent print jobs will be sent to the default printer.

CONTENDING FOR MULTIPLE PRINTERS

In multiple printer applications, if no specific printer is desired, i.e. if the print job may be sent to any printer, the computer sends the Printer Select Code followed by 0 (zero). Data is sent to the Print Master buffer and passed to the next available printer on a contention or first-come-first-serve basis.

Print Master powers-up from the factory in this contention mode.

SENDING THE PRINTER SELECT CODE

A Printer Select Code may be sent from a computer to Print Master in a number of ways. It may be sent as the first characters of the text or data, or a separate file containing only the Printer Select Code may be created and sent prior to any print job.

Rear 708D

Programs such as Word Perfect and Word Star 2000 send a printer setup string before any data. The Printer Select Code may be embedded in this string to automatically select a printer.

If a user is running an application program such as a spreadsheet or word processing program where the above methods may be cumbersome, BayTech provides a diskette for a memory-resident program that allows selection of a printer via a keyboard sequence. In this program a window appears displaying a menu of printers and corresponding function keys. Once selection of a printer has been made, the window goes off-screen and the running program will continue unaltered.

BEGINNING AND ENDING PRINT JOBS

A print job is started when Print Master sees characters from a computer. A print job is ended when no characters are received by Print Master from the computer for the user-programmed time-out period.

There are two modes for selecting a printer by sending the Printer Select Code.

In Printer Select Mode 1, printer selection is accomplished at the beginning of printing. Print Master looks for the Printer Select Code in the first 16 characters received.

In Printer Select Mode 2, printer selection may be accomplished prior to or during printing, as Print Master looks for a Printer Select Code any time.

In Printer Select Mode 2, a print job may be ended manually when the computer sends the Printer Select Code followed by a printer port number.

Print Master can send a form feed to the printer at the beginning of printing, at the end of printing, or at the beginning and end of printing. Form feeds may also be disabled by the user. The Header Page Message, which is an identifying message that prints on a separate sheet of paper before any data, can also be user enabled or disabled.

BUFFERING OF PRINT DATA

All Print Masters feature a standard 512K common pool buffer, with one megabyte of buffer optionally available.

When a user makes a request to print, data is sent to Print Master and stored in the buffer. All connected users may simultaneously input data to this common buffer. The entire buffer memory is available to one user or is dynamically allocated between all users, maximizing buffer utilization.

Print jobs are buffered and queued in the same order in which they were sent to Print Master. These print jobs are then sent to the printer in the same order in which they were queued, i.e. first-in-first-out.

CONFIGURING PRINT MASTER TO INDIVIDUAL APPLICATIONS

In addition to the number of printers, many other features of Print Master are user-programmable, allowing adaptability to different applications. Standard factory preset of these features is as follows: The time-out is set at 20 seconds. XON/XOFF, form feed and header page message are disabled. The Printer Select Code is set at $PRINTER. The selected Printer Select Mode is Mode 2. On models with serial ports, the ports are configured at 9600 baud rate, 8 word size, 1 stop bit and no parity.

If these configurations correspond to a user's application, there is no need to access the configuration mode. Operation may begin immediately.

If a change is necessary, Print Master may be easily reconfigured via the menu-driven configuration mode. This configuration mode is accessed by connecting a dumb terminal to a specified configuration port on Print Master. BayTech provides a terminal emulation disk with Print Master, allowing the user to put IBM PCs or compatibles into a dumb terminal mode. This allows characters to be sent from the keyboard to Print Master and also allows Print Master to send menus back to the CRT. (Note: On the Model 706A which has six parallel ports, menus are sent to a printer connected to the 706A's printer port.)

All configuration changes made in this menu-driven mode are saved permanently in non-volatile memory.

AVAILABLE OPTIONS

Print Masters come standard with 512K buffer, DB-25 connectors, power and port-activity LEDs, and 115VAC 50/60 Hz. power. Optionally available are an additional 512K buffer memory expansion board (for a total of one megabyte), 230VAC power, 19-inch rack-mount enclosures and compatible cables.

In addition, RS422A and current loop interfaces to allow data communication at greater distances are available on some models.

700-Series Specifications

INTERFACE:
Serial ports—Asynchronous RS232C (CCITT V.24), —12v mark, +12v space.
Parallel ports—Centronics compatible (DB-25 connectors)

USER-PROGRAMMABLE CONFIGURATION:
(Reconfigurable in menu-driven mode through configuration port. Saved in non-volatile memory to become the new power-up default configuration.)
SERIAL PORTS (for each individual port):
BAUD RATE: 110, 135, 300, 600, 1200, 2400, 4800, 9600, 19200. Other rates optional.
WORD SIZE: 5, 6, 7 or 8 bits.
STOP BITS: 1, 1½ or 2.
PARITY: Even, odd or none.
XON/XOFF: Enabled or disabled.
TIMEOUT: 0 to 200 seconds.
PORT ASSIGNMENT: Any port user-programmed as computer or printer port.
PRINTER SELECT CODE: 1 to 8 ASCII characters.
PRINTER SELECT MODE:
MODE 1: Printer selection at beginning of printing.
MODE 2: Printer selection anytime while printing.
FORM FEED MODE:
MODE 1: No form feed.
MODE 2: At beginning of printing.
MODE 3: At end of printing.
MODE 4: At beginning and end of printing.
HEADER PAGE MESSAGE: 80 characters.

STANDARD FACTORY-SET POWER-UP DEFAULT CONFIGURATION:
SERIAL PORTS:
BAUD RATE: 9600.
STOP BITS: 1.
XON/XOFF: Disabled.
WORD SIZE: 8.
PARITY: None.
TIME-OUT: 20 seconds.
PORT ASSIGNMENT: Port 1—printer port. All other ports—computer ports.
PRINTER SELECT CODE: $PRINTER.
PRINTER SELECT MODE: Mode 2 (printer selection anytime while printing).
FORM FEED MODE: Mode 1 (no form feed).
HEADER PAGE MESSAGE: Off. "This print job is for:"

INTERNAL BUFFER: 512K. Additional 512K optional.
POWER: 115VAC, 50/60 Hz., .6A. Optional 230VAC, 50/60 Hz., .3A.
ENVIRONMENT: 0° to 55° C temperature; 5% to 95% humidity.
DIMENSIONS: 10⅛ x 8 x 3 inches.
WEIGHT: 6 pounds.
INDICATORS: 1 green power LED; six, eight or ten red port-activity LEDs.
CONNECTORS: Six, eight or ten female DB-25s. Serial ports—DCE.
HANDSHAKING: Parallel ports—Busy (pin 11). Serial ports—CTS/DTR and selectable XON/XOFF.
MOUNTING: Desk top. Rack mount optional.
WARRANTY: One year on parts and labor.

BayTech

Series 500D Printer Controllers

BayTech's non-buffered series

Automatically share one printer

Select a specific printer or contend for multiple printers

RS232C serial interface

The 500D series of non-buffered printer controllers allows computers to share one or more printers without switching cables. They connect easily to RS232C serial ports on computers and printers. If configurations do not match, the printer controllers may be easily reconfigured via a menu-driven configuration mode. Configuration data is stored in non-volatile memory.

THE DSP SERIES FOR SHARING ONE PRINTER

The DSP models allow from four to seventeen computers to share one printer automatically. Operation is as simple as using a printer. No control sequences are required. When a user wishes to print, he sends a normal print command. The computer and the printer are connected with full duplex communication unless the printer is busy.

If the printer is busy, the requesting computer or computers wait until the printer becomes available and are then connected in a round-robin fashion determined by port number, i.e. 1, then 2, then 3, then 4, and so on.

Data flow and printer connection are controlled by CTS/DTR handshaking or XON/XOFF, which are user-selectable by port. Also user-programmable are the baud rates, word size, stop bits, parity, and timeout interval.

There are five DSP models: 524DSP (4 to 1), 528DSP (8 to 1), 5212DSP (11 to 1), and 5218DSP (17 to 1).

THE DB SERIES FOR SHARING ONE OR SEVERAL PRINTERS

The DB-models operate similarly to the 700 series Print Masters, except that they have no spooling buffer. They are flexible, user-programmable printer controllers that allow computers to share one printer automatically, or in multiple printer applications, code-select a specific printer or contend for the next available printer.

There are four DB-models. The Model 525DB has a total of five available serial ports. From one to four of these ports may be user-selected as printer ports with the remainder used as computer ports. The 525DB has a standard 3.7K or an optional 7.7K receive buffer for each port.

The 528DB has a total of nine available ports of which one to eight may be selected as printer ports. The 5212DB has a total of twelve available ports of which one to three may be selected as printer ports. The 5218DB has a total of eighteen available ports of which one to eight may be selected as printer ports. The 528DB, 5212DB and 5218DB have 256-character receive buffers for each port.

The following features are also user-programmable on the DB-models: the serial port configuration (baud rates, word size, stop bits, parity) and XON/XOFF for each individual port, the timeout interval, and the printer select code. Also, the printer select mode, the header-page message, and the form feed mode. Menu-driven programming is saved in non-volatile memory.

500D Series Specifications

INTERFACE: RS232C (CCITT V.24), −12v mark, +12v space.
TRANSMISSION: Asynchronous.

USER-PROGRAMMABLE CONFIGURATION:
(Reconfigurable in menu-driven mode. Saved in non-volatile memory to become new power-up default configuration.)

ALL 500D SERIES MODELS:
- ***BAUD RATES:*** 110, 135, 300, 600, 1200, 2400, 4800, 9600. Other rates optional.
- ***WORD SIZE:*** 5, 6, 7 or 8 bits.
- ***STOP BITS:*** 1, 1½ or 2.
- ***PARITY:*** Even, odd or none.
- ***XON/XOFF:*** Enabled or disabled.
- ***TIMEOUT INTERVAL:*** 1 to 200 seconds.

DB MODELS ONLY:
- ***NUMBER OF PRINTERS:*** Maximum 4 on 525DB; maximum 8 on 528DB and 5218DB; maximum 3 on 5212DB.
- ***PRINTER SELECT CODE:*** 1 to 8 ASCII characters.
- ***PRINTER SELECT MODE:***
  - ***MODE 1:*** Printer selection at beginning of printing.
  - ***MODE 2:*** Printer selection anytime while printing.
- ***FORM FEED MODE:***
  - ***MODE 1:*** No form feed.
  - ***MODE 2:*** At beginning of printing.
  - ***MODE 3:*** At end of printing.
  - ***MODE 4:*** At beginning and end of printing.
- ***HEADER PAGE MESSAGE:*** 80 characters.

FACTORY-SET POWER-UP DEFAULT CONFIGURATION:

ALL MODELS:
- ***BAUD RATE:*** 9600.
- ***STOP BITS:*** 1.
- ***XON/XOFF:*** Disabled.
- ***WORD SIZE:*** 8.
- ***PARITY:*** None.
- ***TIMEOUT:*** 20 seconds.

DB MODELS ONLY:
- ***NUMBER OF PRINTERS:*** 1.
- ***PRINTER SELECT CODE:*** $PRINTER.
- ***PRINTER SELECT MODE:*** 1 (printer selection at beginning of printing).
- ***FORM FEED MODE:*** 1 (no form feed).
- ***HEADER PAGE MESSAGE:*** Off.

524DSP DIP-SWITCH CONFIGURATION FOR PRINTER PORT:
- ***BAUD RATES:*** 150, 300, 600, 1200, 2400, 4800, 9600, 19200.
- ***WORD SIZE:*** 7 or 8 bits.
- ***STOP BITS:*** 1 or 2.
- ***PARITY:*** Even, odd or none.

POWER: 115VAC, 50/60 Hz., .6A. Optional 230VAC, 50/60 Hz.
ENVIRONMENT: 0° to 50° C temperature; 5% to 95% humidity.
DIMENSIONS: 524/525 UNITS: 2¼ x 8 x 7½ inches. ***528 UNITS:*** 10⅛ x 3 x 8 inches. ***5212/5218 UNITS:*** 16¾ x 3½ x 10 inches.
WEIGHT: 524/525 UNITS: 3 lbs.; ***528 UNITS:*** 5 lbs. ***5212/5218 UNITS:*** 9½ lbs.
INDICATORS: 1 green power LED. Red port-activity LED for each port.
CONNECTORS: DB-25s with female DCE ports; any combination of DTE/DCE ports optionally available.
HANDSHAKING: CTS/DTR and selectable XON/XOFF.
WARRANTY: One year on parts and labor.

BAY TECHNICAL ASSOCIATES, INC.
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BayTech

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PRINTER CONTROLLERS • PRICES

PRINT MASTER 700-SERIES WITH BUFFER:

706A-6 parallel ports	$ 795
706C-6 serial ports	$ 795
708C-8 serial ports	$ 895
710C-10 serial ports	$ 995
706D-4 parallel and 2 serial ports	$ 795
708D-6 parallel and 2 serial ports	$ 895
706E-4 serial and 2 parallel ports	$ 795
708E-6 serial and 2 parallel ports	$ 895
710E-8 serial and 2 parallel ports	$ 995
708F-4 serial and 4 parallel ports	$ 895
710F-6 serial and 4 parallel ports	$ 995

500D-SERIES WITHOUT BUFFER—ALL SERIAL:

524DSP-fixed 4 to 1	$ 339
528DSP-fixed 8 to 1	$ 629
5212DSP-fixed 11 to 1	$1,095
5218DSP-fixed 17 to 1	$1,495
525DB-5 flexible ports	$ 395
528DB-9 flexible ports	$ 649
5212DB-12 flexible ports	$1,095
5218DB-18 flexible ports	$1,495

OPTIONS:

No. 4-230 VAC, 50/60 HZ. power

All 700, 524, 525, 528 units	$ 30
All 5212, 5218 units	$ 40

No. 15-Buffer expansion to one megabyte

700 series units only	$ 249

RACK MOUNTS:

700, 528 rack mount enclosure-19-inch:	
#M140C050	$ 99
524, 525 rack mount adapters-19-inch:	
Single unit #M140C089	$ 45
Double unit #M140C090	$ 60
5212, 5218 rack mount adapters:	
19-inch #M140C100	$ 20
23-inch #M140C101	$ 65

Prices are F.O.B. Bay Saint Louis, Mississippi
All prices are subject to change without notice.
Quantity and dealer discounts are available.
Foreign orders, add 5% handling charge.

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