brother ||| M-1324
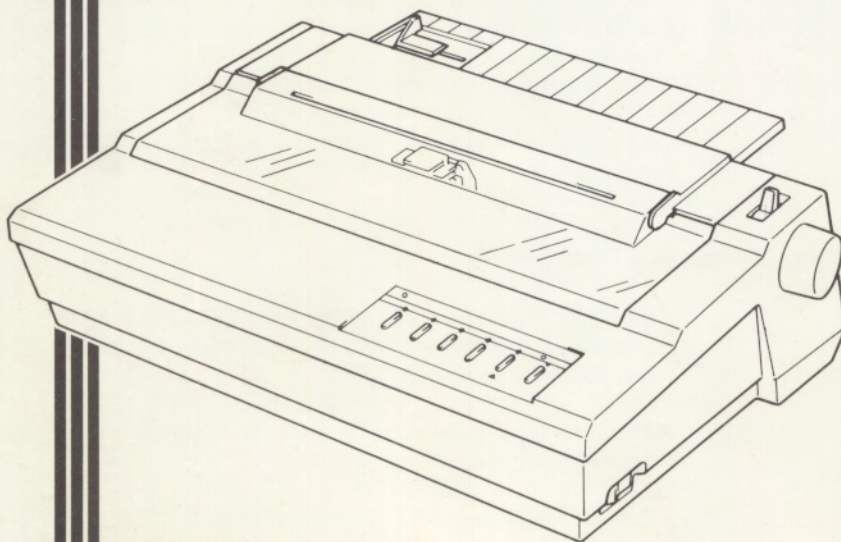## DOT MATRIX PRINTER

OWNER'S MANUAL

STANDARD FEATURES AND OPTIONS

Standard Features

Your dot matrix printer has the following main standard features.

- 24-pin letter-quality print head
- Print speed of 180 cps in draft pica mode
- Print speed of 60 cps in LQ pica print mode
- 80 pica characters per line
- Enhanced paper handling capabilities:
  - Rear "push type" tractor
  - Top "pull-up" bottom feed tractor
  - Automatic paper loading
  - Automatic tear-off advance with the push tractor feeder
  - Paper parking with the push tractor feeder
- 360 x 360 dpi high resolution graphics
- 7 resident LQ fonts:
  - Roman   •Sans serif   •Brougham   •Prestige
  - Script   •OCR-B   •Gothic
- Easy loading black fabric ribbon cassette
- Centronics parallel interface
- 3 emulation modes:
  - EPSON LQ-550/LQ-510 printer (They are equivalent.)
  - IBM Proprinter X24E
  - NEC Pinwriter P2 PLUS/P2200XE printer (They are equivalent.)

Options

To enhance the capabilities, the following optional accessories are available:

- **Auto cut sheet feeder** for loading cut sheet paper without manual insertion
- **RS-232C serial interface** for connection to the serial interface of the computer
- **Expansion RAM chip** for more input and download buffer capacity
- **Font chip**, which includes the following LQ fonts:
  - Super Grande   •OCR-A
  - Quadro   •Symbol

Standard and Optional Fonts

■ Standard LQ Fonts

Roman
```
!"#$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNOPQRSTU
VWXYZ[ \]^_`abcdefghijklmnopqrstuvwxyz{¦}~
```

Sans Serif
```
!"#$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNOPQRSTU
VWXYZ[ \]^_`abcdefghijklmnopqrstuvwxyz{¦}~
```

Brougham
```
!"#$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNOPQRSTU
VWXYZ[ \]^_`abcdefghijklmnopqrstuvwxyz{|}~
```

Prestige
```
!"#$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNOPQRSTU
VWXYZ[ \]^_`abcdefghijklmnopqrstuvwxyz{|}~
```

Script
```
!"#$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNOPQRSTU
VWXYZ[ \]^_`abcdefghijklmnopqrstuvwxyz{|}~
```

OCR-B
```
!"#$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNOPQRSTU
VWXYZ[ \]^_`abcdefghijklmnopqrstuvwxyz{|}~
```

Gothic
```
!"#$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNOPQRSTU
VWXYZ[ \]^_`abcdefghijklmnopqrstuvwxyz{|}~
```

■ Optional LQ Fonts

OCR-A
```
!"#$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNOPQRSTU
VWXYZ[ \]^_`abcdefghijklmnopqrstuvwxyz{|}~
```

SUPER GRANDE
```
!"#$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNOPQRSTU
VWXYZ[ \]^_`ABCDEFGHIJKLMNOPQRSTUVWXYZ{¦}~
```

Quadro
```
!"#$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNOPQRSTU
VWXYZ[ \]^_`abcdefghijklmnopqrstuvwxyz{|}~
```

Symbol
```
≠®°¨±∫÷,√¦·˙`˜´ 0123456789 ′ ¦ ⌐¬½ˆ˜∇∞ΨΦ↔<ΛΠ↑Π§ΩΣ~↓ℓΓΘΣ→Ξ
∝ΔΞΤ≅† ˜-_′αβφφεзλημικωμνοργθστ℈ξ×δχυς{}≦≧
```

SPECIFICATIONS

Printing

Items	Specifications
Print Method	Impact dot matrix printer
Print Pins	Number of pins: 24 pins Pin diameter: 0.2 mm
Dot Pitch	Vertical: 1/180" (pica draft) Horizontal: 1/120" (pica draft)
Graphics Capability	Max. 360 x 360 dpi resolution
Print Head Service Life	Approx. 200 million dots/pin
Print Speed	Draft pica: 180 cps Draft elite: 216 cps Draft 15 cpi: 270 cps LQ pica: 60 cps LQ elite: 72 cps LQ 15 cpi: 90 cps
No. of Characters per Line (Max. 8 inches/line)	Pica: 80 chars/line [10 cpi] Pica condensed: 137 chars/line [17 cpi] Elite: 96 chars/line [12 cpi] Elite condensed: 160 chars/line [20 cpi] 15 pitch: 120 characters/line [15 cpi]
Characters Sets	EPSON & NEC Emulation Modes: ASCII 96 characters and 43 international characters (18 countries), plain and italics IBM Emulation Mode: 160 standard characters + 12 Scandinavian characters Multilingual Character Table (CODE 850)
Print Characters	Quality: Draft and LQ Type: Original and download Pitch: Pica, elite, 15 cpi, and proportional spacing
Print Enhancement	Condensed, emphasized, double-strike, under-/overline, italic, super-/subscript, double-height/width, shadow, & outline
Standard LQ Fonts	Roman, Sans serif, Brougham, Prestige, Script, OCR-B, & Gothic
Optional Font Chip	Super Grande, OCR-A, Quadro, & Symbol

Mechanical and Electrical

Items	Specifications
Paper Feed Method	Cut Sheet Paper: Friction feed Continuous Form Paper: Push and pull-up tractor feed (The auto cut sheet feeder is optionally available.)
Fabric Black Ribbon	Size: 1.8 m long x 8 mm wide Life: 3.5 million pica characters in draft mode
Standard Input Buffer Size	8 KB max (Input buffer size is dependent upon the emulation, download function, and optional RAM chip.)
RAM Expansion	Optional 32 KB RAM Chip available
Emulation Mode	EPSON LQ-550/LQ-510 printer, IBM Proprinter X24E, and NEC Pinwriter P2 PLUS/P2200XE printer
Interface	Centronics parallel (RS-232C serial interface is optionally available.)
Voltage	115V or 220V to 240V (±10%)
Frequency	50 or 60 Hz (±2 Hz)
Power Consumption	Pica draft self-test printing: 115VA or less Idling: 40VA or less
Noise	58 dB max, ISO 7779 (when printing in draft mode with the push tractor feeder.)
MTBF	4,000 hours or more (MTBF does not apply to print head.)
MTTR	20 minutes
Temperature	Operating: 5°C to 35°C [41°F to 95°F] Storage: −20°C to 60°C [−4°F to 140°F]
Humidity	Operating: 30% to 80% (no condensation) Storage: 5% to 95% (no condensation) (Wet bulb temperature should be less than 27°C (80.6°F) with no condensation.)
Dimensions	Approx. 444 (W) x 318 (D) x 137 (H) mm [17.48 (W) x 12.52 (D) x 5.39 (H) inches]
Weight	Approx. 5 kg [11 lbs.]

QUICK REFERENCE: SWITCH PANEL IN MENU MODE

LAMPS A B C D	MENU ITEMS • Choices	SEE PAGE
○ ○ ○ ○	QUALITY/PITCH • LQ or draft • 10, 12, 15, 17, 20, PS, or PS condensed	2-11
○ ○ ○ ●	LQ FONT • Roman, Sans serif, Brougham, Prestige, Script OCR-B, Gothic, or Optional LQ fonts	2-12
○ ○ ● ○	EMULATION/CHARACTER SET • IBM, IBM AGM, EPSON, or NEC • Set 1, Set 2, Multilingual, Graphics, or Italics	2-13
○ ○ ● ●	PRINT DIRECTION/CHARACTER SELECT • Uni- or bidirectional printing • Slashed or unslashed zero • Scandinavian characters • 20 CPI (IBM)	2-14
○ ● ○ ○	BUFFER • Input buffer on/off • Download buffer on/off • Clear buffer	2-15
○ ● ○ ●	PAPER FEED CONTROL • Tear-off function on/off • Print start position 1/2" or 0" (FORM mode) • Print start position 1" (25.4mm) or 1/4" (5.9mm) (SHEET mode) • 1" skip perforation on/off	2-16
○ ● ● ○	LINE FEED CONTROL/SLCT IN • 6 or 8 LPI • Auto LF on/off • Auto CR on/off • SLCT IN on/off	2-17
○ ● ● ●	PAGE LENGTH • 4", 5", 6", 8", 10", 11.75", 12", or 11"	2-18
● ○ ○ ○	INTERNATIONAL CHARACTER • U.S.A., France 1, German, U.K. 1, Denmark 1, Sweden, Italy, Spain 1, Netherlands, Norway 1, Denmark 2, Spain 2, U.K. 2, France 2, Norway 2, or South Africa	2-19
● ● ● ●	RESET • Factory reset or user reset	2-20

Symbols:　○ – OFF　　● – ON

COMPUTERS

Speed at your fingertips

THIS IS THE QUICKEST 24 PIN PRINTER IN ITS CLASS.

YOU'LL HAVE TO BE QUICK TO GET ONE AT ONLY $499.

brother

If you're a student and want to get 1992 off to a great start the Brother M-1324 is the fastest 24-pin, 80-column printer in its class. It prints at a speedy 270 characters per second, draft, and a very impressive 90cps for letter quality. While most printers have either push or pull tractor functions, the Brother M-1324 has both. The unique bottom feed lets the paper supply flow easily without buying a special slotted table, which is ideal for multi-part forms like invoices, thick paper and labels. The paper parking facility allows you to switch from multi-part forms to cut sheet feed and vice versa with ease. The Brother M-1324 has 8 type faces which enables you to create 29 type styles and combined with 3 emulations this makes the Brother M-1324 fully compatible with today's popular software… Probably the most appealing features of these two remarkable printers are their remarkable prices. The Brother M-1324 is only $499. The Brother M-1309 a mere $399.

Character Per Inch (CPI) settings -

5   6   7   8   10   12   15   17   20

Special Codes (SC) -

1.   Italic Begin
2.   Italic End
3.   Double-Strike
4.   LQ Font

       - follow SC 4 with one of the following font codes:

       0   Roman
       1   Sans Serif
       2   Brougham
       3   Prestige
       4   Script
       5   OCR-B
       6   Gothic

5.   Double Height On
6.   Double Height Off

*Photo of actual printout from Brother M-1324
24-pin dot-matrix printer*