The Model 2221W Line Printer provides high quality printed output, fast and quiet operation, and a full ASCII set of 96 characters containing both upper and lowercase letters. Its quiet and rapid operation, high quality output and an outstanding group of standard features make the 2221W one of the finest printers available in its price range. The printer uses a nominal 9 x 7 dot matrix to form uppercase letters and a nominal 9 x 9 dot matrix for lowercase letters. It can output up to 132 characters per line and prints at a rate of 200 char/sec, outputting 65 to 300 lines/min, depending on line length. The printer has many standard features such as: a CLEAR switch, an alarm lamp and tone, a paper rack, deselection without data loss, fine forms adjustment, and manual line advance.

**FEATURES**
1. 9 x 9 matrix nominal.
2. 96-character set.
3. A DC servo-motor drives the print head.
4. Up to 300 lines/min can be printed.
5. Full 132-character line buffering.
6. Audio alarm.
7. Deselection of printer without loss of data in the print buffer.
8. Paper rack with adjustable guide is standard equipment.
10. The character set elongates the zero and squares the letter 'O'.
12. Fine horizontal and vertical forms adjustment.

**BENEFITS**
1. High quality characters provide superior readability and improve document appearance.
2. A full ASCII set of characters including both upper and lower-case letters is provided.
3. Quiet operation with few mechanical shocks.
4. Job throughput is accelerated.
5. CPU and print operations can overlap fully to increase throughput.
6. Operator is freed from constant printer monitoring since printer can signal error conditions, job completion, under program control; and an automatic paper-out tone is provided.
7. Forms alignment can be done even during program execution; data is not lost.
8. Paper feeding is guided automatically.
9. Enlarged titles and headings for highlighting documents can be programmed.
10. Zeros are easily distinguished from 'O's and can be printed without a slash.
11. Provides automatic movement to top-of-form when end-of-page is reached.
12. Pre-printed forms can be accurately aligned both horizontally (with vernier knob) and vertically (with platen knob).

**Sample of Expanded Print**

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

Speed
200 characters per second
up to 300 lines per minute

Character Configuration
9 x 9 dot matrix, nominal
(dots not in adjacent columns of the same row)

Character Set
full ASCII

Line Width
132 characters maximum
(66 characters expanded)

Switches/Lamps
ON/OFF, SELECT, TOP OF FORM, FORMS
OVERRIDE, CLEAR, LINE FEED, paper out,
power on, alarm lamp, select lamp

Control Codes
Audio Alarm (HEX(07)), Line Feed (HEX(0A)),
Vertical Tab (HEX(0B)), Form Feed (HEX(0C)),
Carriage Return (HEX(0D)), Expanded Print (HEX
0E), Delete (to clear buffer of partial line)
(HEX(7F)).

Printer Size
Height ............. 12 in. (31 cm)
Width ............ 29 in. (74 cm)
Depth ............. 25 in. (64 cm)

Site Depth:
must extend 16 in. (41 cm) behind printer to ac-
commodate paper rack; rack extends 6 in. (16 cm)
below bottom of printer.

Site Width:
not less than 50 in. (1.3 m) to accommodate
opening side covers.

Approximate Net Weight
85 lb (38.6 kg)

Fuses
3A(SB) for 115 VAC, 2A(SB) for 230 VAC

Cable
6 ft (1.8 m) to power source
12 ft (3.7 m) to controller

Power Requirements
115 or 230 VAC ± 10%
50 or 60 Hz ± 1 Hz
255 Watts

Operating Environment
50° to 90°F (10° to 32°C)
40 to 80% relative humidity, non-condensing,
allowable; 40 to 65% recommended.

Non-operating Environment
-40° to 130°F (−40° to 55°C)

Paper Specifications
Maximum width .......... 14.9 in. (37.8 cm)
Minimum width .......... 5.0 in. (12.7 cm)
Material: margin perforated fan-fold or paper
stock
Maximum form length ....... 11 in. (27.9 cm)

Paper Stock:
maximum number: four copies plus original.
For single part forms:
15 to 20 lb bond (20 lb recommended)
For multipart forms:
2 ply:  13%/13% bond, 8 lb carbon
3 ply:  13%/13%/13% lb bond, 8 lb carbon
4 ply:  12/12/12 lb bond, 6% lb carbon
5 ply:  12/12/12/12 lb bond, 6% lb carbon
Carbon:
8 lb (med. hard) for 1 and 2 ply; 6% lb, 3, 4 and
5 ply.

Fastening multipart forms:
for improved forms handling, use glued margins;
otherwise fasten with crimps every two inches
(5.1 cm) along both edges; crimps must not
come closer than 0.5 in. (1.3 cm) to the fan-
fold; each crimp must have four prongs, two to
enter both form and carbon, and two to enter
forms only.

Forms thickness:
maximum in the print area: 0.018 in. (0.046
cm); over crimps in margin: 0.030 in. (0.076
cm); when using forms with wide and narrow
copies in the same set, the top copy should be
fullest width,

Sprocket holes:
must run along both margins 0.25 ± 0.03 in.
(0.635 ± 0.076 cm) from paper edge to hole-
center lines;
distance between hole-centers must be 0.5 ±
0.006 in. (1.27 ± 0.013 cm) non-accumulative
in any five inch (12.7 cm) length; hole diam-
eters must be 0.156 ± 0.005 in. (0.396 ± 0.013
cm); the two top and bottom drive holes (four
per sheet) can be up to 0.200 in. (0.508 cm)
in diameter to permit post or ring binding of
output; distance between hole centers across
the sheet must be uniform within 0.015 in.
(0.038 cm) to a maximum of 1¼ in. (36.8 cm).

For pre-printed forms:
pin-hole center in left margin to left side of
left-most character not less than 3/8 ± 1/16 in.
(1.0 ± 0.2 cm); pin-hole center in right margin
to right side of last character not less than
3/8 ± 1/16 in. (1.0 ± 0.2 cm).

Standard Warranty Applies.

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Wang Laboratories reserves the right to change specifications without prior notice.