

# User's Manual

**CITIZEN**  
**DOT MATRIX PRINTER**  
**MODEL iDP3540/3541**

Japan CBM Corporation

## Declaration of Conformity

Manufacturer's Name : Japan CBM Corporation  
 Manufacturer's Address : CBM Bldg., 5-68-10, Nakano, Nakano-ku,  
 Tokyo, 164-0001, Japan

### Declare the Product

Product Name : Dot Matrix Printer  
 Model Number(s) : iDP3540, 3541 Series  
 (iDP3540R, iDP3540P, iDP3541R, iDP3541P)  
 (S.No. 0090001 ~ )

### Conform to the following Standards

LVD	: EN60950	: A4:1997
EMC	: EN55022	: 1998 Class B
	: EN61000-3-2	: 1995+A1:1998+A2:1998
	: EN61000-3-3	: 1995
	: EN55024	: 1998
	: EN61000-4-2	: 1995 ±4KV CD, ±8KV AD
	: EN61000-4-3	: 1996 4.5V/m, 80MHz-1000MHz AM 1KHz 80%
	: EN61000-4-4	: 1995 ±1.0KV(AC Mains), ±0.5KV(Signal Lines)
	: EN61000-4-5	: 1995 ±1KV (Normal mode), ±2KV (Common mode)
	: EN61000-4-6	: 1996 3V, 0.15MHz-80MHz AM 1KHz 80%
	: EN61000-4-8	: 1993 50Hz, 3A/m
	: EN61000-4-11	: 1994 0%, 5000ms/ 70%, 500ms/ 0%, 10ms

### Supplementary Information

“The product complies with the requirements of the Low Voltage Directive 73/23/EEC, 93/68/EEC and the EMC Directive 89/336EEC, 92/31/EEC, 93/68EEC”

Place : Tokyo, Japan

Signature

Date : September, 2000



Full Name : Mikio Moriya

Position : General Manager  
 R & D Department

Europe Contact :

Norco Declaration AB  
 Box 7146 S-250 07 Helsingborg Sweden

This declaration is applied only for 230V model.

## IMPORTANT SAFETY INSTRUCTIONS

- \* Read all of these instructions and save them for later reference.
- \* Follow all warnings and instructions marked on the product.
- \* Unplug this product from the wall outlet before cleaning. Do not use liquid or aerosol cleaners. Use a damp cloth for cleaning.
- \* Do not use this product near water.
- \* Do not place this product on an unstable cart, stand or table. The product may fall, causing serious damage to the product.
- \* Slots and openings on the cabinet and the back or bottom are provided for ventilation. To ensure reliable operation of the product and to protect it from overheating, do not block or cover these openings. The openings should never be blocked by placing the product on a bed, sofa, rug or other similar surface. This product should never be placed near or over a radiator or heat register. This product should not be placed in a built-in installation unless proper ventilation is provided.
- \* This product should be operated from the type of power source indicated on the marking label. If you're not sure of the type of power available, consult your dealer or local power company.
- \* Do not allow anything to rest on the power cord. Do not locate this product where the cord will be walked on.
- \* If an extension cord is used with this product, make sure that the total of the ampere ratings on the products plugged into the extension cord do not exceed the extension cord ampere rating. Also, make sure that the total of all products plugged into the wall outlet does not exceed 15 amperes.
- \* Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a risk of fire or electric shock. Never spill liquid of any kind on the product.
- \* Except as explained elsewhere in this manual, don't attempt to service this product yourself. Opening and removing those covers that are marked "Do Not Remove" may expose you to dangerous voltage points or other risks. Refer all servicing on those compartments to service personnel.
- \* Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
  - A. When the power cord or plug is damaged or frayed.
  - B. If liquid has been spilled into the product.
  - C. If the product has been exposed to rain or water.
  - D. If the product does not operate normally when the operating instructions are followed. Adjust only those controls that are covered by the operating instructions since improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to normal operation.
  - E. If the product has been dropped or the cabinet has been damaged.
  - F. If the product exhibits a distinct change in performance, indicating a need for service.

**IMPORTANT:**

This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instruction manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference, in which case the user at his own expense will be required to take whatever measures may be necessary to correct the interference.

**CAUTION: Use shielded cable for this equipment.**

**Sicherheitshinweis**

Die Steckdose zum Anschluß dieses Druckers muß nahe dem Gerät angebracht und leicht zugänglich sein.

**For Uses in Canada**

This digital apparatus does not exceed the class A limits for radio noise emissions from apparatus, as set out in the radio interference regulations of the canadian department of communications.

**Pour L'utilisateurs Canadiens**

Cet appareil numérique ne dépasse pas limites de catégorie a pour les émissions de bruit radio émanant d'appareils numériques, tel que prévu dans les règlements sur l'interférence radio du département canadien des communications.

## CONTENTS

<b>1. Introduction .....</b>	<b>1</b>
1.1 Features .....	1
1.2 Accessories.....	1
<b>2. Basic Specifications .....</b>	<b>2</b>
2.1 Type classifications .....	2
<b>3. Specifications.....</b>	<b>3</b>
3-1. General Specifications .....	3
<b>4. Block Diagram .....</b>	<b>5</b>
<b>5. External Appearance and Parts Description .....</b>	<b>6</b>
5.1 External appearance and parts names Model : iDP3540 .....	6
5.2 External appearance and parts names Model : iDP3541 .....	7
5.3 Parts Descriptions.....	8
<b>6. Preparation .....</b>	<b>9</b>
6.1 Setting / Removing the Printer Cover .....	9
6.2 Opening and Closing the Cutter Unit (iDP3541) .....	9
6.3 The Ribbon Cassette Installation .....	10
6.4 Loading and Changing the Paper .....	11
6.4.1 Using Paper Roll (iDP3540F, 3541).....	11
6.4.2 Using Fan-Fold Paper (iDP3540P).....	12
6.5 Setting / Removing the Paper Cover and Stacker.....	12
6.6 Self Test Printing.....	13
6-7. Alarm and Paper Near-End Detection .....	13
<b>7. Input Buffer Back-up Function .....</b>	<b>13</b>
7.1 Input Buffer Back-up .....	13
7.2 Clearing the Input Buffer .....	13
<b>8. Parallel Interface .....</b>	<b>14</b>
8.1 Specifications .....	14
8.2 Connector Pin Assignment.....	14
8.3 Description of Input / Output Signals .....	15
8.3.1 Input / Output Signals .....	15
8.3.2 Electrical Characteristics.....	16
8.3.3 Timing Chart.....	17
8.3.4 Data Receiving Control.....	17
8.3.5 Buffering .....	17
<b>9. Serial Interface .....</b>	<b>18</b>
9.1 Specifications .....	18
9.2 Connector Pin Assignment.....	19
9.3 Description of Input / Output Signals .....	20
9.3.1 Input / Output Signals .....	20
9.3.2 Data Composition .....	21
9.3.3 Error Detection.....	21
9.3.4 Data Receiving Control.....	22
9.3.5 Buffering .....	22

9.3.6 Electrical Characteristics.....	23
<b>10. External Output.....</b>	<b>25</b>
<b>11. Function Selection.....</b>	<b>26</b>
11.1 Setting DIP Switch DS1.....	26
11.2 Setting DIP Switch DS2.....	26
11.3 Slide Switch Setting (Serial interface specifications only) .....	27
11.4 Dip-Switch Location .....	27
<b>12. Print Control Functions.....</b>	<b>28</b>
12.1 Control Codes .....	28
12.2 Input Data Formats.....	29
12.2.1 Paper feed command for “n” lines .....	29
12.2.2 Enlarged character command.....	29
12.2.3 Enlarged character cancel command.....	29
12.2.4 Paper feed command.....	30
12.2.5 Print command .....	30
12.2.6 Clear command .....	30
12.2.7 Red color print command.....	30
12.2.8 Initial Set Command .....	31
12.2.9 Inverted character command .....	31
12.2.10 Buzzer Command.....	31
12.2.11 Underline Command .....	32
12.2.12 Graphic Command (Graphic Type Only).....	32
12.2.13 1/9 inch Line Feed Pitch Set Command (Graphic Type).....	33
12.2.14 2/9 inch Line Feed Set Command (Graphic Type).....	33
12.2.15 Page Length Set Command .....	34
12.2.16 From Feed Command.....	34
12.2.17 Skip Perforation Command.....	34
12.2.18 Skip Perforation Cancel Command.....	35
12.2.19 Full Cut Command (iDP3541 Only) .....	35
12.2.20 Partial Cut Command (iDP3541 Only) .....	35
12.2.21 Drive Pulse Duration Setting Command For the First Drawer.....	36
12.2.22 First Drawer Drive Command.....	37
12.2.23 First Drawer Quick Drive Command .....	37
12.2.24 Second Drawer Derive Command.....	37
<b>13. Initial Setting .....</b>	<b>38</b>
<b>14. Maintenance .....</b>	<b>39</b>
14.1 Maintenance Procedures .....	39
14.1.1 Exterior .....	39
14.1.2 Interior.....	39
<b>15. General Cautions .....</b>	<b>39</b>
<b>16. Character Code Tables.....</b>	<b>40</b>
<b>17. External Dimensions .....</b>	<b>42</b>
17.1 Model : iDP3540.....	42
17.2 Model : iDP3541.....	43

**ATTENTION** : Please **RESET** the printer to clear the input buffer before getting started.(Ref. to Chapter **7.2**)

[Click here to download the full manual at THE-CHECKOUT-TECH.COM](http://THE-CHECKOUT-TECH.COM)