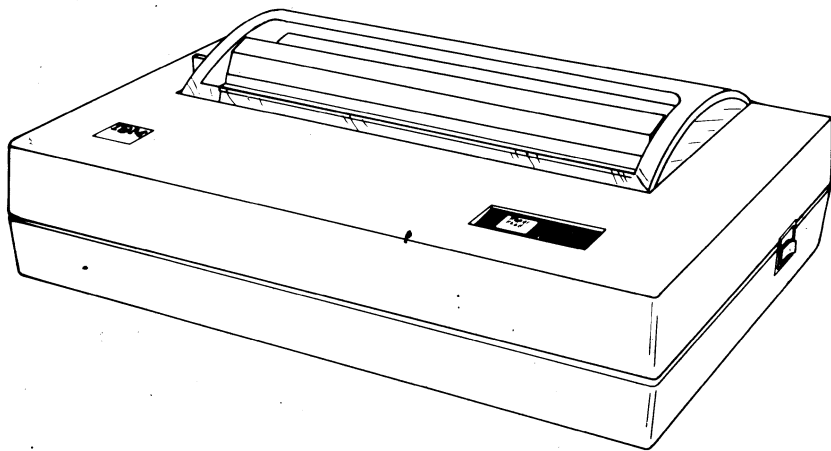


IBM PC Compact Printer Installation and Operating Instructions



If your computer has not been set up at this time, do so now.

This carton contains the following:

- IBM PC Compact Printer
- Power Cord
- Installation/Operation Manual
- Three sheets of thermal paper

If any items are missing or damaged, notify your place of purchase.

LIMITED WARRANTY

The International Business Machines Corporation warrants this IBM Personal Computer Product to be in good working order for a period of one year from the date of purchase from IBM or an authorized IBM Personal Computer dealer. Should this Product fail to be in good working order at any time during this one-year warranty period, IBM will, at its option, repair or replace this Product at no additional charge except as set forth below. Repair parts and replacement Products will be furnished on an exchange basis and will be either reconditioned or new. All replaced parts and Products become the property of IBM. This limited warranty does not include service to repair damage to the Product resulting from accident, disaster, misuse, abuse, or non-IBM modification of the Product.

Limited Warranty service may be obtained by delivering the Product during the 1-year warranty period to an authorized IBM Personal Computer dealer or IBM Service Center and providing proof of purchase date. If this Product is delivered by mail, you agree to insure the Product or assume the risk of loss or damage in transit, to prepay shipping charges to the warranty service location and to use the original shipping container or equivalent. Contact an authorized IBM Personal Computer dealer or write to IBM Personal Computer, Sales and Service, P.O. Box 1328-W, Boca Raton, Florida 33432, for further information.

ALL EXPRESS AND IMPLIED WARRANTIES FOR THIS PRODUCT INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO A PERIOD OF ONE YEAR FROM THE DATE OF PURCHASE, AND NO WARRANTIES, WHETHER EXPRESS OR IMPLIED, WILL APPLY AFTER THIS PERIOD. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU.

IF THIS PRODUCT IS NOT IN GOOD WORKING ORDER AS WARRANTED ABOVE, YOUR SOLE REMEDY SHALL BE REPAIR OR REPLACEMENT AS PROVIDED ABOVE. IN NO EVENT WILL IBM BE LIABLE TO YOU FOR ANY DAMAGES, INCLUDING ANY LOST PROFITS, LOST SAVINGS OR OTHER INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OF OR INABILITY TO USE SUCH PRODUCT, EVEN IF IBM OR AN AUTHORIZED IBM PERSONAL COMPUTER DEALER HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, OR FOR ANY CLAIM BY ANY OTHER PARTY.

SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR CONSUMER PRODUCTS, SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU.

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH MAY VARY FROM STATE TO STATE.

FEDERAL COMMUNICATIONS COMMISSION RADIO FREQUENCY INTERFERENCE STATEMENT

WARNING: This equipment has been certified to comply with the limits for a Class B computing device, pursuant to Subpart J of Part 15 of FCC rules. Only peripherals (computer input/output devices, terminals, printers, etc.) certified to comply with the Class B limits may be attached to this computer. Operation with non-certified peripherals is likely to result in interference to radio and TV reception.

INSTRUCTIONS TO USER

This equipment generates and uses radio frequency energy and if not installed and used properly, i.e., in strict accordance with the operating instructions, reference manuals, and the service manual, may cause interference to radio or television reception. It has been tested and found to comply with the limits for a Class B 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 residential installation.

If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

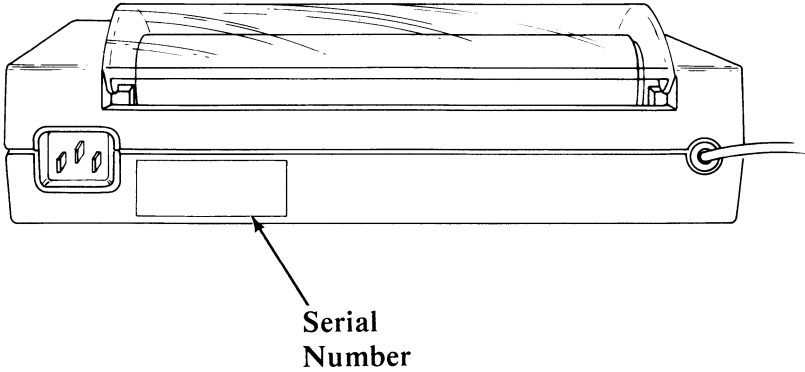
- Reorient the receiving antenna.
- Relocate the equipment with respect to the receiver.
- Move the equipment away from the receiver.
- Plug the equipment into a different outlet so that equipment and receiver are on different branch circuits.
- Ensure that card mounting screws, attachment connector screws, and ground wires are tightly secured.
- Ensure that card slot covers are in place when no card is installed.
- If peripherals not offered by IBM are used with this equipment it is suggested to use shielded, grounded cables, with in-line filters if necessary.

If necessary, consult your dealer service representative for additional suggestions.

The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. It is the responsibility of the user to correct such interference.

CAUTION: This product is equipped with a UL-listed and CSA-certified plug for user's safety. It is to be used in conjunction with a properly grounded receptacle to avoid electrical shock.

IBM PC Compact Printer



Record the serial number located on the rear of your IBM PC Compact Printer below:

Serial Number

When you have finished installing this option, insert these instructions into the Options section of your Guide to Operations manual.

It is possible that this material may contain reference to, or information about, IBM products (machines and programs), programming, or services which are not announced in your country. Such references or information must not be construed to mean that IBM intends to announce such IBM products, programming, or services in your country.

Contents

Introduction	3
Installing Your Printer	4
Installation Requirements	4
Tools Required	4
Printer Power Cord Installation	5
Printer Power Switch	6
Ready Light	7
Paper Feed Button	8
Thermal Paper Handling	9
Paper Installation	10
Roll Paper	10
Single Sheet	16
Fan-fold Paper	17
Printer Self-Test	18
Cabling the Printer to Your Computer	19
IBM PC Jr Configuration Considerations	20
Device Configuration Table	21
Operating Your Printer	22
Power On Sequence	22
Number of Copies	22
Left Margin	22
Top-of-Page Setting	22
Introduction to Printer Control Codes	24
Examples of Printer Control Codes	25
List of Printer Control Codes	26
Print Modes	33
Printer Control and Character Chart with ASCII Decimal Value	34
Quick-Reference Chart	36
Connector Information	37

Notes:



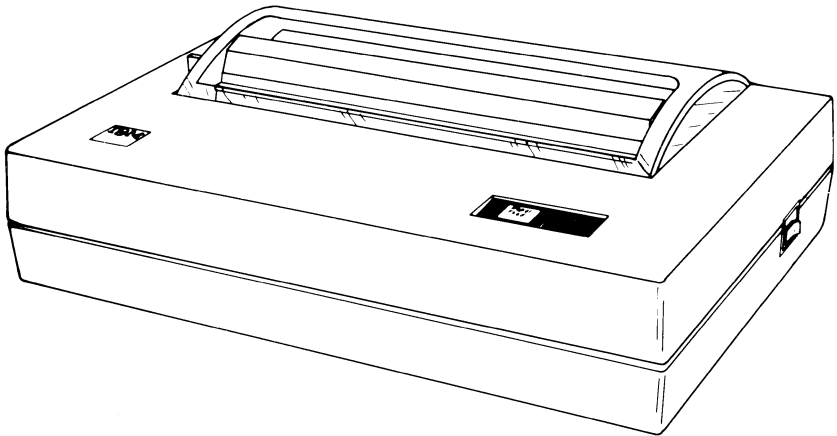
Introduction

This Manual contains directions for the installation, operation, and self-testing procedures for the IBM PC Compact Printer.

This printer can print several character sizes in one direction using 216 mm (8-1/2 in.) wide thermal paper. Thermal paper is available in a continuous roll, fan-fold form, and single sheets.

CAUTION: Serious shock hazards exist inside the IBM PC Compact printer. Do not attempt to service this printer under any circumstances. There are no user-serviceable parts inside.

As a safety feature, the IBM PC Compact Printer has a 3-wire plug (the third pin is a grounding pin). This plug will fit only into a grounding type of power outlet. If you do not have the correct type of outlet, ask your electrician to install one. Do not defeat the purpose of the grounding pin.



Installing Your Printer

Installation Requirements

Thermal paper is required to complete the installation of your printer.

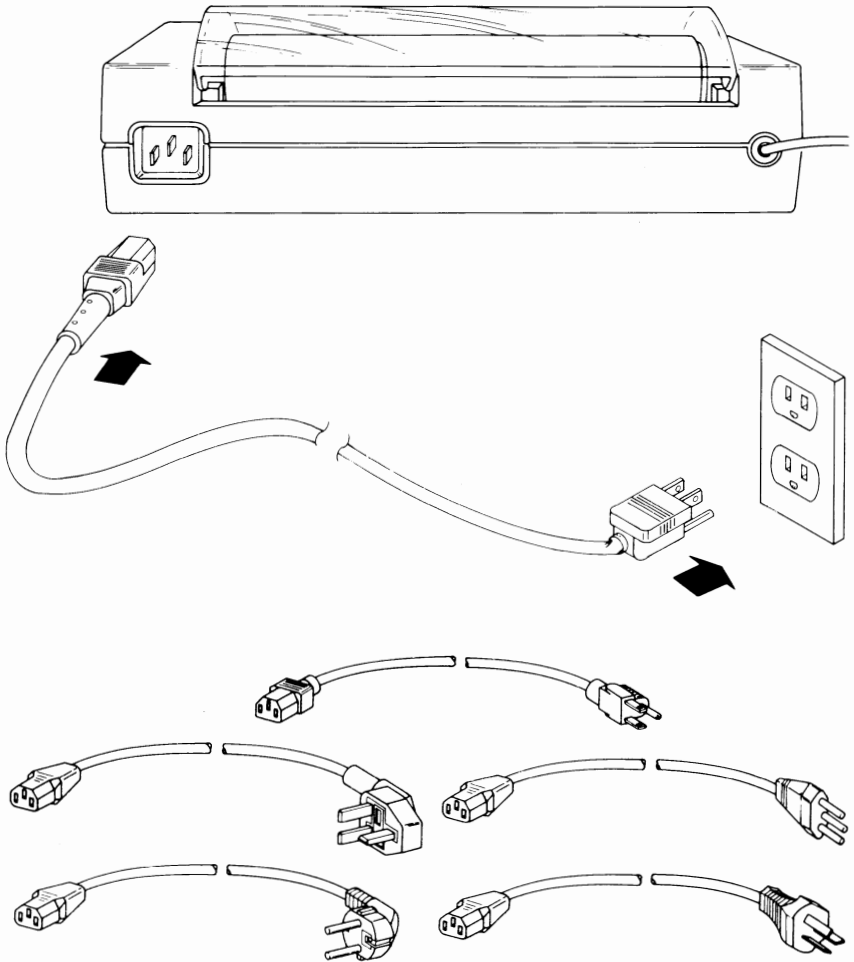
Tools Required

- None

Printer Power Cord Installation

1. Plug one end of the power cord into the opening in the rear of the printer as shown.
2. Plug the other end into a standard 3-wire grounding electrical outlet.

CAUTION: Connect the printer power cord to a properly grounded electrical outlet.

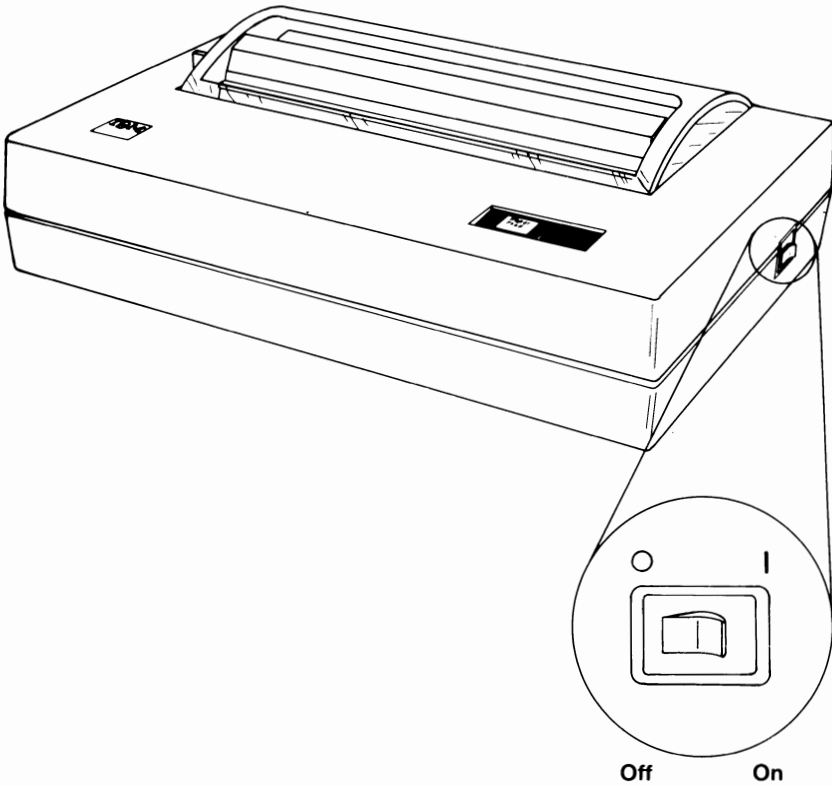


Use only the proper power cord certified for use in your country!

Printer Power Switch

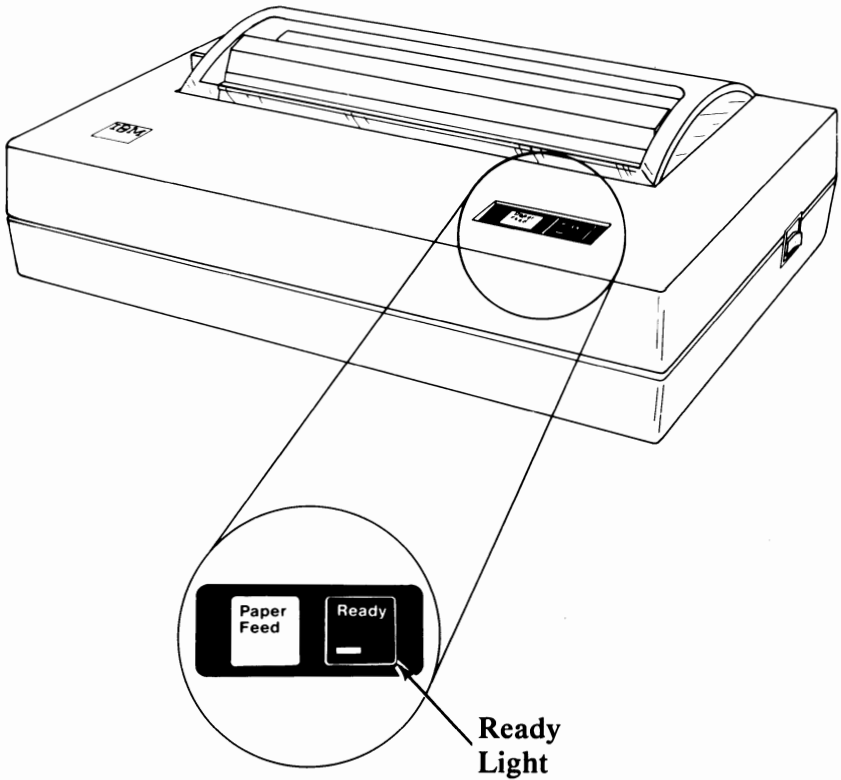
- The printer **Power Switch** is on the right side of your IBM PC Compact Printer.

Note: Do not cable your printer to your computer until you are instructed to do so, later in this manual.



Ready Light

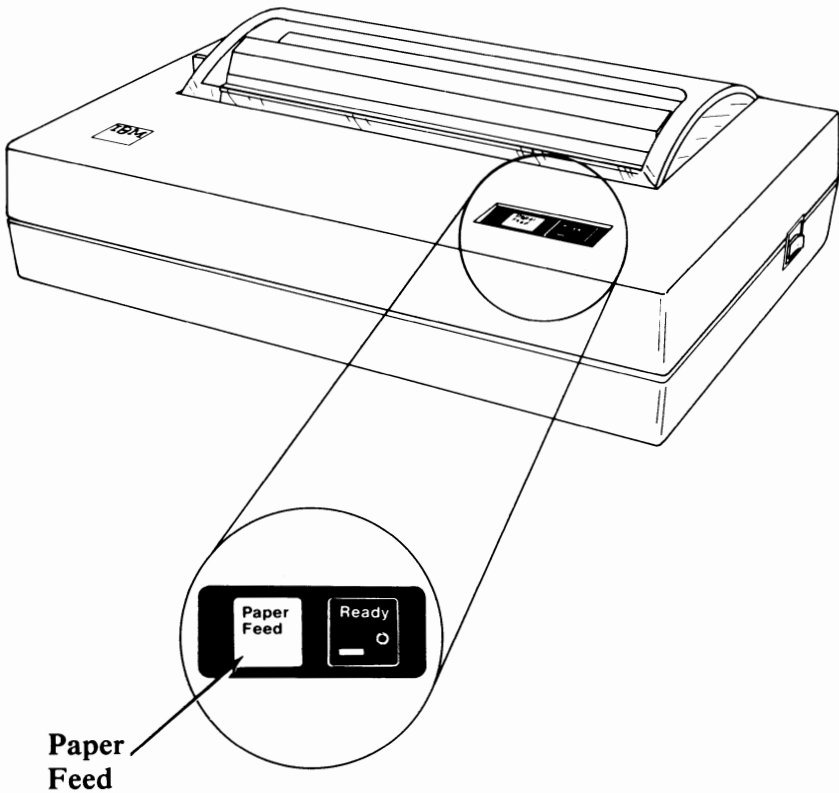
- The Ready light is on when the printer power switch is set to the On position.
- The Ready light is also on during the printer self-test.
- The Ready light blinks if the print head becomes jammed.



Paper Feed Button

The following describes the use of the **Paper Feed** button.

- Press the Paper Feed button once to advance the paper to the next line.
- Press and hold down the Paper Feed button to advance the paper continuously. Release the Paper Feed button to stop the paper advance.



Thermal Paper Handling

Your IBM PC Compact Printer prints by applying heat to specially processed paper. Because of this special processing, the thermal paper requires special handling:

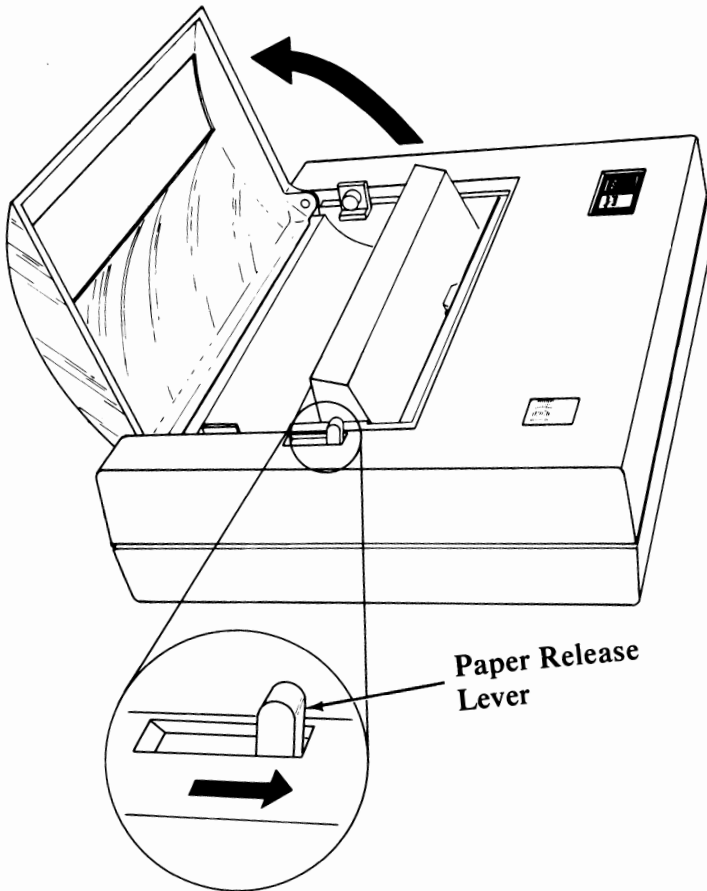
- All thermal paper fades with time.
- Thermal paper with printer text should be stored in a file or some other dark place to reduce fading.
- Do not leave thermal paper in direct sunlight or direct fluorescent light for long periods or the printed images will fade.
- When thermal sheets are stored with their printed surfaces together, the printed images might transfer from one surface to the other.

Paper Installation

This section describes how to install the paper.

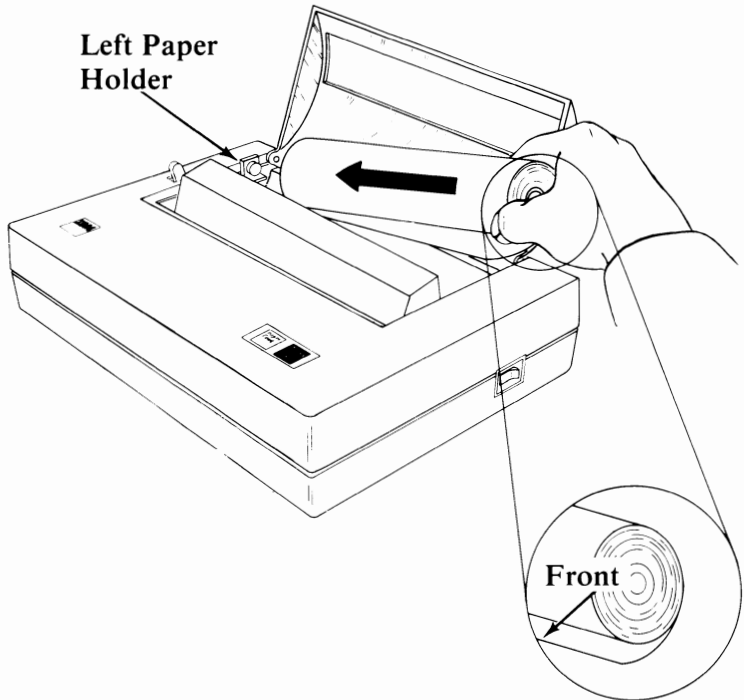
Roll Paper

1. Raise the printer access cover until it rests in the open position.
2. Move the paper release lever toward the front of the printer.

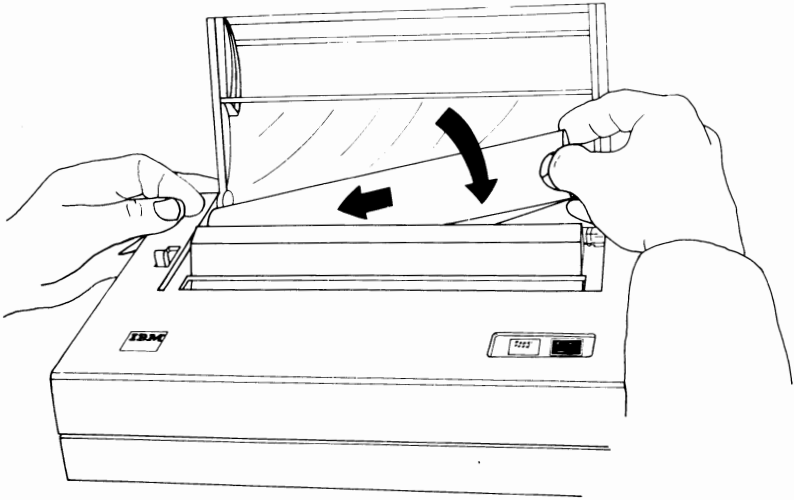


3. Insert the left end of the roll onto the left paper holder.

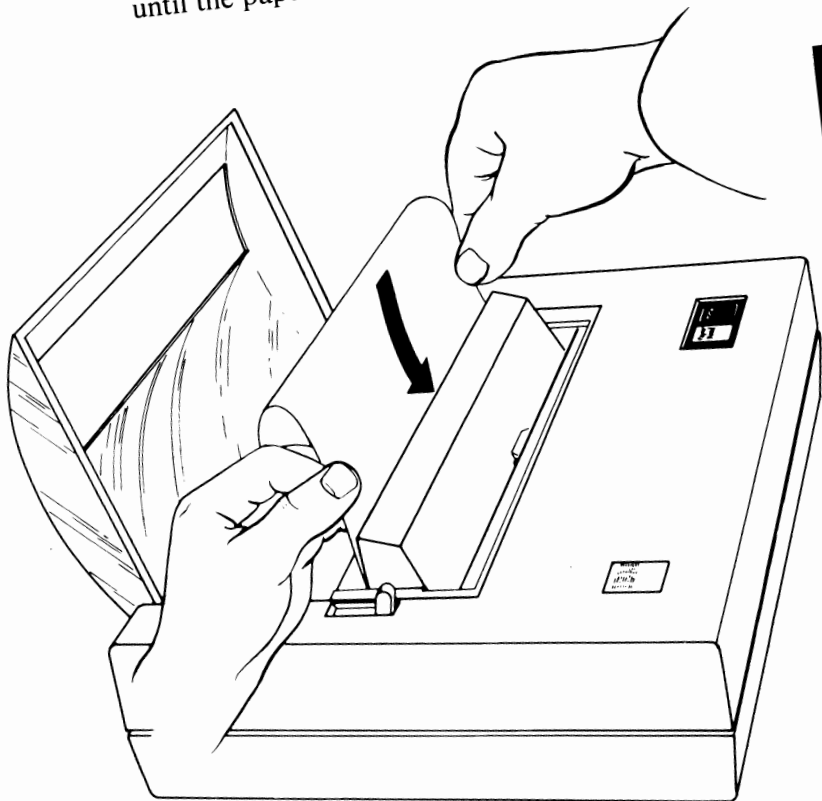
Note: Be sure that the paper unrolls from the bottom to the front, as shown.



4. While you push the roll to the left, slip the roll down onto the right paper holder.

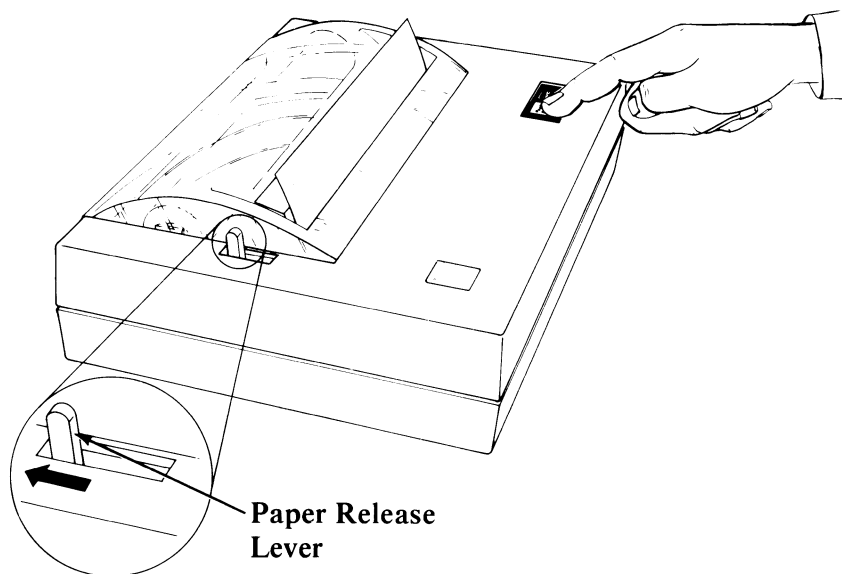


5. Unroll about 305mm (12 inches) of paper.
6. Insert the paper into the rear of the paper path slot until the paper stops.

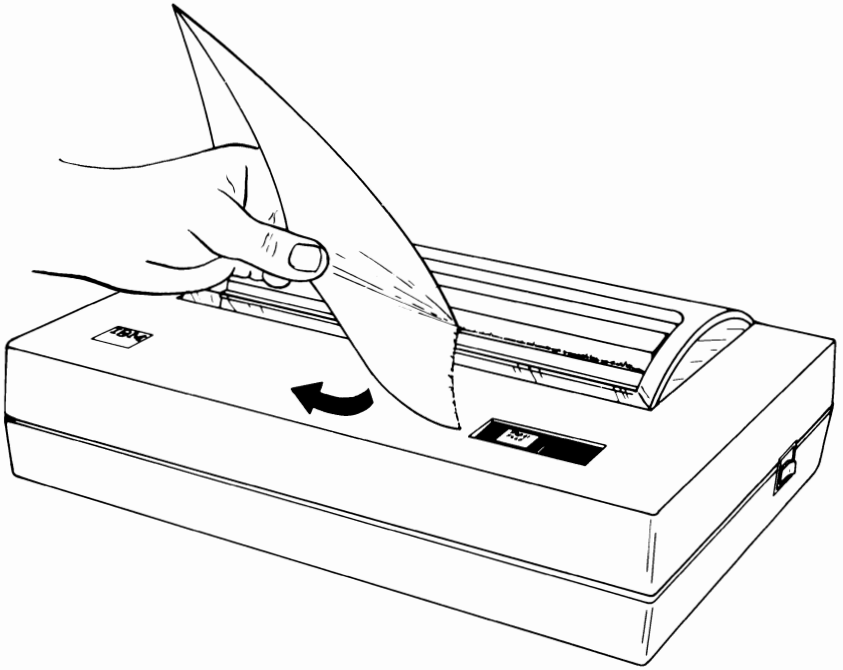


PRINTERS

7. Move the paper release lever toward the rear of the printer.
8. Close the access cover and set the printer power switch to the On position.
9. Press and hold down the Paper Feed button until the paper advances to the desired top-of-page position.

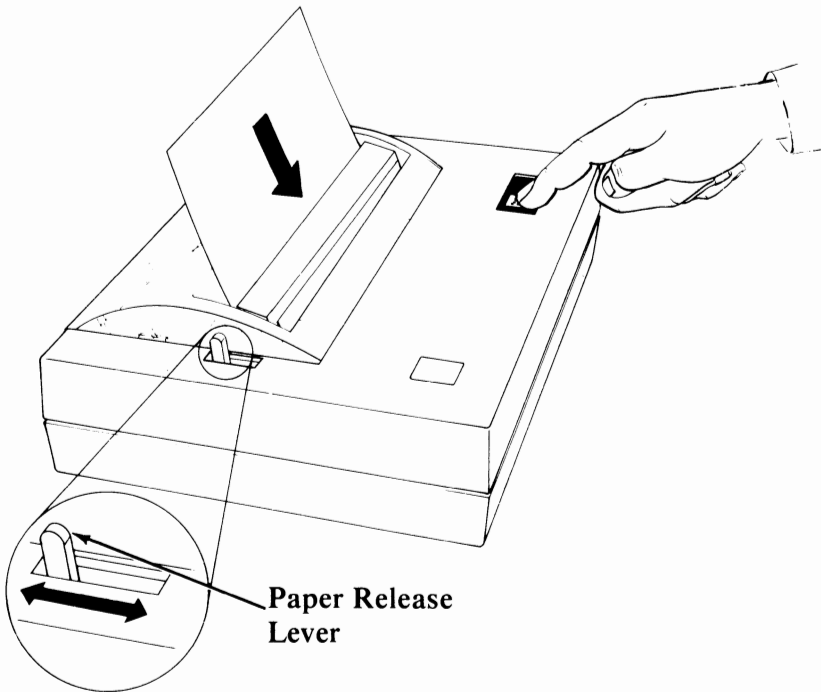


10. For an even edge at the top of your page, grasp the paper at one corner. Cut the paper by pulling it quickly against the edge of the paper access cover, as shown.



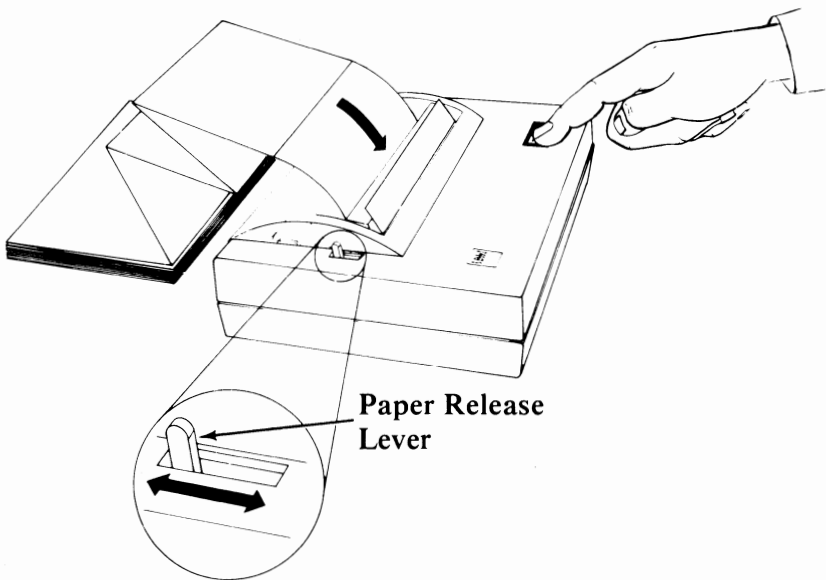
Single Sheet

1. Close the access cover and set the printer power switch to the On position.
2. Move the paper release lever toward the front of the printer.
3. Insert a single sheet of thermal paper into the rear of the paper path until the paper stops.
4. Move the paper release lever toward the rear of the printer.
5. Press and hold down the Paper Feed button until the paper advances to the desired top-of-page position.



Fan-fold Paper

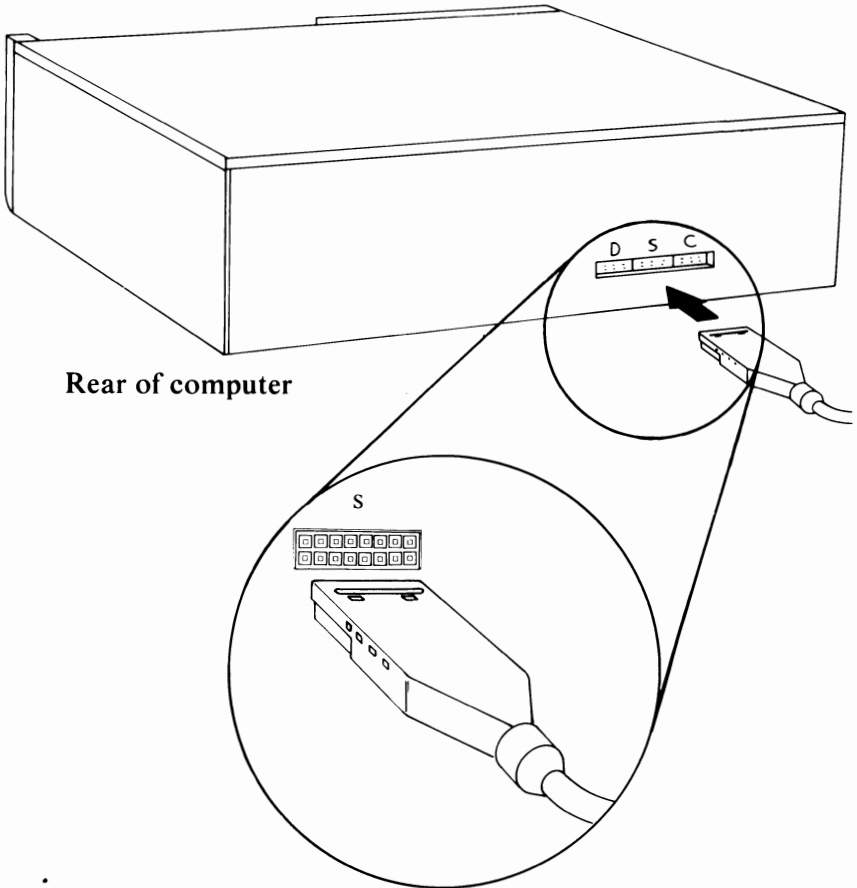
1. Close the access cover and set the printer power switch to the On position.
2. Place a stack of fan-fold thermal paper to the rear of the printer, as shown.
3. Move the paper release lever toward the front of the printer.
4. Insert the first sheet of fanfold thermal paper into the rear of the paper path until the paper stops.
5. Move the paper release lever toward the rear of the printer.
6. Press and hold down the Paper Feed button until the paper advances to the desired top-of-page position.



Cabling the Printer to Your Computer

Before cabling the printer to your computer, make sure your printer is operating correctly by running the printer self-test. (See "Printer Self-Test" in this manual).

1. Set the power switches on your printer and your computer to the Off position.
2. Plug the printer cable into the connector labelled "S", as shown, until it is fully seated.
3. To verify proper operation, run the Diagnostics as described in your *Guide to Operations* manual.



IBM PCjr Configuration Considerations

When the IBM PC Compact Printer is used with an IBM parallel printer attachment or an IBM internal modem installed on the IBM PCjr, the following information is helpful.

Use the table on the following page with this information to address these devices in the various configurations.

Follow these steps:

1. Select the row with your "configuration."
2. Select the column with the device you want to address.
3. Use the logical device address in the box where the row and column intersect to address that device.

Device Configuration Table

		Logical Device Addresses		
		IBM PC Compact Printer	IBM PCjr Internal Modem	IBM PCjr Parallel Printer Attachment
C O N F I G U R A T I O N S	IBM PC Compact Printer ONLY	LPT1:* or COM1:	N/A	N/A
	IBM PC Compact Printer and IBM PCjr Internal Modem	LPT1:* or COM2:	COM1:	N/A
	IBM PC Compact Printer and IBM PCjr Parallel Printer Attachment	COM1:	N/A	LPT1:
	IBM PC Compact Printer and IBM PCjr Parallel Printer Attachment and IBM PCjr Internal Modem	COM2:	COM1:	LPT1:

***Note:** When possible, use LPT1: for the IBM PC Compact Printer.

The following parameters must be specified when using COM1: or COM2:

- Baud Rate: 1200
- Parity: n
- Data Bits: 8
- Stop Bits: 2

Operating Your Printer

Power On Sequence

Always set the power switch on your computer to the On position before you set the power switch on your IBM PC Compact Printer to the On position.

Number of Copies

The IBM PC Compact Printer takes only one original of thermal paper in continuous rolls, in fan-fold form, or in single sheets.

Left Margin

The left margin is fixed at 8mm (5/16 inch) from the left edge of the paper. To change the margin, simply add spaces to the beginning of each line.

Top-of-Page Setting

The position of the paper when you set the printer power switch to On determines the Top-of-Page position. You can change the page length by entering printer codes from your computer. (See "Printer Control Codes").

Caution:

Do not allow your IBM PC Compact Printer to operate without paper. This could cause a printing problem. If this should occur, you can normally restore printing with the following steps:

1. Insert a sheet of non-thermal paper into your printer.
2. Follow the instructions for the printer "Self-Test" in your printer manual and allow the printer "Self-Test" to run for the entire sheet of paper. (No printing will appear on the non-thermal paper.)
3. Insert thermal paper into your printer and re-run the printer "Self-Test."

Introduction to Printer Control Codes

You tell your printer how and what to print by sending special characters from your computer to your printer. These special characters are called *printer control codes*.

On the following pages you will find examples of the printer control codes, a detailed printer control codes listing, a print modes chart, a quick reference chart, and a printer control codes chart with ASCII decimal values.

The examples given in the detailed descriptions of the printer control codes listing are written in BASIC. Some knowledge of BASIC programming is needed to understand these codes. Some of the printer control codes also show a "Format" description when more information is needed for programming considerations.

In the charts listing the ASCII decimal values, the printer control codes and characters are in ASCII decimal, numeric order (for example, NUL is 0 and ESC W is 87).

The Printer Control Codes Quick-Reference Chart in the back of this section will help you to find printer control codes you need without having to look through the entire Printer Control Codes listing.

Examples of Printer Control Codes

The following are two examples using printer control codes with IBM Personal Computer BASIC.

Example 1 This example gives the printer an instruction to print in the Double Width print mode.

1 Set the switches on your computer and your printer to the On position. Do not load a diskette or cartridge. The system will come up in IBM Personal Computer BASIC.

2 Type: `LPRINT CHR$(14);"IBM PERSONAL COMPUTER"`


3 Press Enter 

Your printer will print:

`IBM Personal Computer`

Example 2 This is an example of Condensed mode printing. An ASCII Escape character and an ASCII Character are used to give the printer the Condensed mode command.

1 Type: `LPRINT CHR$(27);CHR$(15);"IBM Personal Computer"`

2 Press Enter 

Your printer will print:

`IBM Personal Computer`

List of Printer Control Codes

CODE	PRINTER FUNCTION
CAN	Cancel Clears the printer buffer. Control codes, except SO, remain in effect. Reinitializes the printer to the power on defaults. LPRINT CHR\$(24);
CR	Carriage Return Ends the line the printer is on and prints any data remaining in the printer buffer. The logical character position is moved to the left margin. (No Line Feed operation takes place.) Note: IBM Personal Computer BASIC adds a Line Feed unless 128 is added. LPRINT CHR\$(13);
DC2	Device Control 2 (Compressed Off) Stops printing in the Compressed mode. LPRINT CHR\$(18);
DC4	Device Control 4 (Double Width Off) Stops printing in the Double Width mode. LPRINT CHR\$(20);
ESC	Escape Informs the printer that the following data is a printer command. (See the following ESC commands.) LPRINT CHR\$(27);

CODE PRINTER FUNCTION**ESC B Escape B (Set Vertical Tabs)**

Sets vertical tab stop positions. Up to 64 vertical tab stop positions are recognized by the printer. Tab stop positions must be received in ascending numeric order. The tab stop numbers do not become valid until you type the NUL code. Once vertical tab stops are established, they are valid until new tab stops are specified. (If the printer is reset or switched Off, set tab stops are cleared.) If no tab stop is set, the Vertical Tab command acts as a Line Feed command. ESC B followed only by NUL cancels tab stops. The form length must be set by the ESC C command prior to setting tabs.

```
LPRINT CHR$(27);CHR$(66);  
CHR$(10);CHR$(20);CHR$(40);  
CHR$(0);
```

ESC C Escape C (Set lines per page)

Format: ESC C;n; Sets the page length. The ESC C command must be followed by a value to specify the length of page desired. (Maximum form length for the printer is 127 lines.) The following example sets the page length to 55 lines. The printer default is 66 lines per page when switched On or reset.

```
LPRINT CHR$(27);CHR$(67);  
CHR$(55);
```

CODE PRINTER FUNCTION

ESC D Escape D (Set Horizontal Tab Stops)
Sets the horizontal tab stop positions. The following example shows the horizontal tab stop positions set at printer column positions of 10, 20 and 40. The horizontal tab stops are followed by CHR\$(0), the NUL code. They must also be in ascending numeric order as shown. You can set tab stops between 1 and 80. When in the Compressed print mode, you can set tabs up to column 136. The maximum number of tabs that can be set is 112. HT (CHR\$(9)) is used to execute a tab operation.

```
LPRINT CHR$(27);CHR$(68);  
CHR$(10);CHR$(20);CHR$(40);  
CHR$(0);
```

ESC K Escape K (480 Bit Image Graphics Mode)
Format: ESC K;n₁;n₂; v₁; v₂;.....v_k;
Changes the printer to the Bit Image Graphics mode. Dot density is 82.5 by 82.5 dots per inch. If the graphics data exceeds the space remaining on the line, the printer ignores the excess data. Only the excess data is lost.

The numbers n₁ and n₂ specify, in binary form, the number of bit image data bytes to be transferred. Assign values to n₁ to represent values from zero to 255 and assign values to n₂ to represent values from 0-1 x 256. The total number of bit image data bytes cannot exceed 480. (n₁ + (n₂ x 256)).

CODE PRINTER FUNCTION

The bit image data bytes are v_1 through v_k .

Bit image graphics is printed with all eight print head wires. Each bit of a bit image data byte represents a dot position within a vertical line. The least significant bit (LSB) represents the bottom dot position, and the most significant bit (MSB) represents the top dot position. For example, if vX is hex 80, the top dot will print only in that vertical position, if vX is hex 01, the bottom dot will print, and if vX is hex FF, all eight dots will print.

	DOT	Bit Number
Top	0 ---	8
	0 ---	7
	0 ---	6
	0 ---	5
	0 ---	4
	0 ---	3
	0 ---	2
	Bottom	0 ---

LPRINT CHR\$(27);CHR\$(75);n₁;n₂

ESC N Escape N (Set Skip Perforation)

Format: ESC N;n; Sets the Skip Perforation function. The number following ESC N sets the number of lines to be skipped. The example shows a 12-line skip perforation. This command will print 54 lines and feed the paper 12 lines. The value of n must be between 1 and 127. ESC N must be reset anytime the page length (ESC C) is changed. The default for skip perforation is 25.4 mm (1 inch).

**LPRINT CHR\$(27);CHR\$(78);
CHR\$(12);**

CODE	PRINTER FUNCTION
ESC O	Escape O (Cancel Skip Perforation) Cancels the Skip Perforation function. LPRINT CHR\$(27);CHR\$(79);
ESC R	Escape R (Clear Tabs) Resets all tab stops, both horizontal and vertical to the powered-on defaults. LPRINT CHR\$(27);CHR\$(82);
ESC W	Escape W (Double Width) Format: ESC W;n ; Changes the printer to the Double Width mode when ESC W is followed by 1. This mode is not canceled by a line feed operation. It is canceled when ESC W is followed by 0 (zero). LPRINT CHR\$(27);CHR\$(87); CHR\$(1);
ESC 0	Escape Zero (2.82 mm (1/9 inch) Line Feed) Changes the line feed to 2.82 mm (1/9 inch). LPRINT CHR\$(27);CHR\$(48);
ESC 1	Escape One (2.82 mm (1/9 inch) Line Feed) Changes the line feed to 2.82 mm (1/9 inch). This command functions the same as ESC 0 . LPRINT CHR\$(27);CHR\$(49);
ESC 2	Escape Two (Start Variable Line Feeding) Resets line spacing to 4.23 mm (1/6 inch). This is the powered-on default for vertical line spacing. LPRINT CHR\$(27);CHR\$(50);

CODE	PRINTER FUNCTION
ESC 5	Escape Five (Sets Automatic Line Feed) With automatic line feed on, when a CR code is received, a line feed automatically follows after the carriage return. ESC 5 (1) sets auto line feed; ESC 5 (0) resets it. LPRINT CHR\$(27);CHR\$(53);
ESC -	Escape Minus (Underline) Format: ESC -;n; ESC - followed by 1, prints all of the following data with an underline. ESC - followed by 0 (zero), cancels the Underline print mode. LPRINT CHR\$(27);CHR\$(45); CHR\$(1); [or CHR\$(0);]
ESC <	Escape Less Than (Home Head) The print head returns to the left margin to print the line following ESC <. This occurs for one line only. LPRINT CHR\$(27);CHR\$(60);
FF	Form Feed Advances the paper to the top of the next page. Note: The location of the paper, when the printer power switch is set to the On position, determines the top of the page. The next top-of-page is 279 mm (11 inches) from that position. ESC C can be used to change the page length. Note: Always separate multiple Form Feed commands with spaces. LPRINT CHR\$(12);
HT	Horizontal Tab Tabs to the next horizontal tab stop. Tab stops are set with ESC D. (Tab stops are automatically set at every 8 columns when the printer power switch is set to the On position.) LPRINT CHR\$(9);

CODE	PRINTER FUNCTION
LF	<p>Line Feed Advances the paper one line. Line spacing is 4.23 mm (1/6 inch) unless reset by ESC 0, ESC 1, ESC 2. LPRINT CHR\$(10);</p>
NUL	<p>Null Used with ESC B and ESC D as terminator for the tab set and clear commands. LPRINT CHR\$(0);</p>
SI	<p>Shift In (Compressed On) Changes the printer to the Compressed Character mode. This command is canceled by a DC2 code (Compressed Off). LPRINT CHR\$(15);</p>
SO	<p>Shift Out (Double Width) Changes the printer to the Double Width mode. Note: A Carriage Return, Line Feed or DC4 code cancels Double Width mode. LPRINT CHR\$(14);</p>
VT	<p>Vertical Tab Spaces the paper to the next vertical tab position. VT are set by the ESC B sequence. The VT command is the same as the LF command, if no tabs are set. The paper is advanced one line after printing or advanced to the next vertical tab stop. LPRINT CHR\$(11);</p>

Print Modes

The chart below shows combinations of print modes that you can select.

The IBM PC Compact Printer can print any of the combinations shown and can change print modes at any place within a line.

Note: Print modes in the same vertical column of the chart can be selected and combined.

Print Modes					
Standard	XXX				
Compressed		XXX		XXX	XXX
Double-Width			XXX	XXX	XXX
Underline	XXX	XXX	XXX		XXX

Printer Control and Character Chart with ASCII Decimal Value

0	1	2	3	4	5	6	7	8	9
NUL			♥	♦	♣	♠	●	●	HT
10	11	12	13	14	15	16	17	18	19
LF	VT	FF	CR	SO	SI	▶	◀	DC2	!!
20	21	22	23	24	25	26	27	28	29
DC4	⊗	■	↕	CAN	↓	→	ESC	L	↔
30	31	32	33	34	35	36	37	38	39
▲	▼	SP	!	"	#	\$	%	&	'
40	41	42	43	44	45	46	47	48	49
()	*	+	,	-	.	/	0	1
50	51	52	53	54	55	56	57	58	59
2	3	4	5	6	7	8	9	:	;
60	61	62	63	64	65	66	67	68	69
<	=	>	?	⊙	A	B	C	D	E
70	71	72	73	74	75	76	77	78	79
F	G	H	I	J	K	L	M	N	O
80	81	82	83	84	85	86	87	88	89
P	Q	R	S	T	U	V	W	X	Y
90	91	92	93	94	95	96	97	98	99
Z	[\]	^	_	`	a	b	c
100	101	102	103	104	105	106	107	108	109
d	e	f	g	h	i	j	k	l	m
110	111	112	113	114	115	116	117	118	119
n	o	p	q	r	s	t	u	v	w
120	121	122	123	124	125	126	127	128	129
x	y	z	{		}	~	DEL	Ç	ü

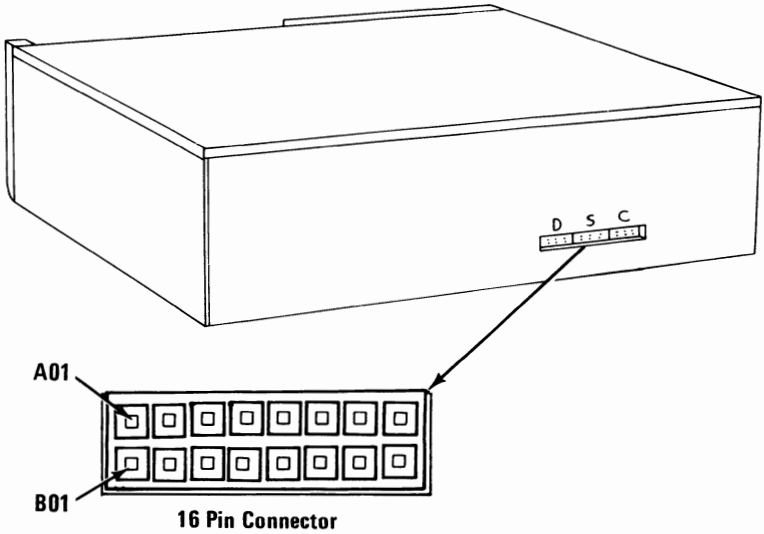
Printer Control and Character Chart with ASCII Decimal Value (continued)

130	131	132	133	134	135	136	137	138	139
é	â	ä	à	å	ç	ê	ë	è	ï
140	141	142	143	144	145	146	147	148	149
î	ì	Ä	Â	É	æ	Æ	ô	ö	ò
150	151	152	153	154	155	156	157	158	159
û	ù	ÿ	ö	ü	ç	£	¥	₪	₯
160	161	162	163	164	165	166	167	168	169
á	í	ó	ú	ñ	Ñ	à	ó	¿	⌂
170	171	172	173	174	175	176	177	178	179
⌂	½	¼	¡	<<	>>				
180	181	182	183	184	185	186	187	188	189
190	191	192	193	194	195	196	197	198	199
200	201	202	203	204	205	206	207	208	209
210	211	212	213	214	215	216	217	218	219
220	221	222	223	224	225	226	227	228	229
				α	β	Γ	Π	Σ	σ
230	231	232	233	234	235	236	237	237	239
μ	τ	ϕ	θ	Ω	δ	∞	∅	€	∩
240	241	242	243	244	245	246	247	248	249
≡	±	≥	≤	∫	J	÷	≈	°	■
250	251	252	253	254	255				
-	√	∩	2	■	SP				

Quick-Reference Chart

Cancel	CAN
Carriage Return	CR
Compressed Character Off	DC 2
Double Width OFF	DC 4
Escape	ESC
Vertical Tab Set	ESC B
Set Lines Per Page	ESC C
Set Horizontal Tab Stops	ESC D
480-Bit Image Graphics Mode	ESC K
Skip Perforation	ESC N
Cancel Skip Perforation	ESC O
Tabs Clear	ESC R
Double Width (Multiple Lines)	ESC W
1/9-Inch (2.82 mm) Line Feeding	ESC 0
1/9-Inch (2.82 mm) Line Feeding	ESC 1
Set Variable Line Space	ESC 2
Line Feed (Automatic)	ESC 5
Underline	ESC -
Home Head	ESC <
Form Feed	FF
Horizontal Tab	HT
Line Feed	LF
Null	NUL
Compressed Character	SI
Double Width (One Line)	SO
Vertical Tab	VT

Connector Information



	Signal Name - Description	Pin	
	Not Used	A01	
	Data Terminal Ready	A02	
	Request To Send	A03	
	Carrier Detect	A04	
	Data Set Ready	A05	
	Clear To Send	A07	
	Not Used	A08	
	Not Used	B01	
	Not Used	B02	
	Not Used	B03	
	Ground	B04	
	Not Used	B05	
	Not Used	B06	
	Ground	B07	
	Not Used	B08	

Asynchronous Communications Connector (RS-232-C)

Printer

Data Terminal Ready Looped in Cable To Data Set Ready
 Request To Send Looped in Cable To Carrier Detect

Notes:



Notes:

