



## Standard Terminology Relating to Laser Printers<sup>1</sup>

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### 1. Scope

1.1 These definitions are intended for users of laser printers, so that they will be able to better understand the terminology used by others in the field. For general terms related to printers, see Terminology F909.

### 2. Referenced Documents

2.1 *ASTM Standards:*<sup>2</sup>

F909 Terminology Relating to Printers

F1125 Terminology of Image Quality in Impact Printing Systems

### 3. Terminology

3.1 *Definitions:*

**A4A**—symbol for ISO standard metric cut-size paper which is nominally 20 by 30 cm or exactly 210 by 297 mm.

**ACK**, *n*—a communication control character transmitted by a receiver as an affirmative response to a sender; a signal that the printer receiver sends to the host indicating that the printer has received a message and is ready to receive the next message.

**ADC**—abbreviation for **automatic density control**.

**American Standard Code for Information Interchange**—a data communications code set consisting of a 7-bit-plus-parity code that can be translated with a leading “0” as an 8-bit set. (See **ASCII**.)

**ASCII**—American Standard Code for Information Interchange.

**asynchronous**, *adj*—a data transmission in which the time between transmitted characters can vary, it is controlled by start and stop codes at the beginning and end of data sets. (See **synchronous**.)

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<sup>2</sup> For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard’s Document Summary page on the ASTM website.

**automatic density control**, *n*—the process whereby the toner layer deposited on the substrate is controlled by the printer. (See **ADC**.)

**baud**, *n*—a measure of data transmission speed; ideally one baud equals one bit per second.

**BCD**—abbreviation for **block circuit diagram**.

**bead carryover**—beads of developer appearing on a print or copy, or both; a deletion around each particle is common.

**binary digit**, *n*—a unit of electronic data. (See **bit**.)

**binary synchronous transmission**, *n*—a form of data sending. (See **binary digit**, **synchronous**, and **asynchronous**.)

**bisync (BSC)**, *n*—an IBM-developed method of binary synchronous transmission.

**bit**—binary digit.

**bit map**—a pattern of bits representing the dots in a printed image.

**block**, *n*—a group of data transmitted as a unit.

**block circuit diagram**, *n*—an illustration of the interconnection of the major elements of a system, each element being presented by a block. (See **BCD**.)

**bridging**, *v*—the clumping of toner which causes a hollow area in the toner supply that prevents the free flow of toner to the dispenser auger.

**DISCUSSION**—Bridging is a different phenomenon from the image quality bridging as defined in Terminology F1125.

**byte**, *n*—a set of seven or eight bits used to represent a character or control function.

**carrier detect**, *n*—a communication control character used in an RS232 system to signal the sender that the receiver is on-line. (See **CD**.)

**carriage return**, *n*—an operation which advances the cursor to the beginning of a new line. (See **CR**.)

**carrier return**, *n*—a code which instructs the printer to begin a new line.

**centronics interface**, *n*—a parallel interface standard that connects elements of a communications system.

- character cel**, *n*—the rectangular-shaped areas on a page containing a single character with its portion of the space which separates it from adjacent characters.
- character pitch**, *n*—the number of characters that can be printed in a horizontal 1 in. (25.4 mm).
- character set**—the collection of all the characters available in a given font.
- CCITT**—abbreviation for **Comite Consultatif International Telegraphique et Telephonique (Consultive Committee for International Telephone and Telegraph)**.
- CD**—abbreviation for **carrier detect**.
- clear to send**, *n*—a control circuit that indicates to the data terminal equipment that data can or cannot be transmitted. (See **CTS**.)
- cluster controller**, *n*—a device in an IBM Model 3274, 3276, or equivalent that controls the flow of information in a local area network.
- command**, *n*—a byte or sequence of bytes from the host computer which invokes options available with the laser printer.
- Comite Consultatif International Telegraphique et Telephonique (Consultive Committee for International Telephone and Telegraph)**, *n*—a committee established under the United Nations to recommend worldwide communication usage standards. (See **CCITT**.)
- configuration**, *n*—the state of the various interface and printing options that are set for the host and printer.
- constant velocity transport**, *n*—a mechanism which feeds the paper through the printer at a steady rate. (See **CVT**.)
- corotron**, *n*—a name for a specific type of corona.
- corona**, *n*—a device used to place a uniform electrical charge on the surface of a xerographic photoreceptor.
- CR**—abbreviation for **carriage return**.
- CRC**—abbreviation for **cyclic redundancy check**.
- CTS**—abbreviation for **clear to send**.
- customer video**, *n*—a printer control printed wiring board that receives video data and commands from a host to transfer them to the image output terminal control. (See **C-Video**.)
- C-Video**—customer video.
- CVT**—abbreviation for **constant velocity transport**.
- cyclic redundancy check**, *n*—an error checking system used in data transmission. (See **CRC**.)
- data monitor**, *n*—a mode of printer operation in which the information transmitted to the printer is printed in hexadecimal numbers.
- data set**, *n*—data communications equipment for transmitting coded data over phone lines.
- data products interface**, *n*—a parallel interface standard that is used to connect elements of a communications system.
- data stream compatibility**, *n*—the extent to which an electronic signal agrees with the signal requirements of a system. (See **DSC**.)
- data terminal equipment**, *n*—any piece of equipment at which a communications path ends or begins, a terminal or a printer. (See **DTE**.)
- data terminal ready**, *n*—an electronic signal from the printer to the host that the printer is ready to be used. (See **DTR**.)
- DC1/DC3**, *n*—a control sequence used with asynchronous transmission that enables the printer to signal the host to start and to stop transmitting data.
- descender**, *n*—that portion of an alphabetic character that extends below the baseline.
- DIP switch**—**dual in-line package switch**.
- direct memory access**, *n*—an input/output facility which allows transfers directly in or out of main storage without passing through the processors general registers. (See **DMA**.)
- distorted image**, *n*—a character, symbol, line drawing, or halftone that is deformed in shape or is vague and lacking a definite outline.
- DMA**—abbreviation for **direct memory access**.
- download**, *v*—to transfer data from the host to a server, in this case a printer.
- DRAM**—**dynamic random access memory**.
- dry toner**, *n*—the material in a dry developer system which when deposited on a substrate by the field of an electrostatic charge pattern, becomes the visible record.
- DSC**—abbreviation for **data stream compatibility**.
- DTE**—abbreviation for **data terminal equipment**.
- DTR**—abbreviation for **data terminal ready**.
- dual in-line package switch**, *n*—a device used to direct the signal line to or from one component or another. (See **DIP switch**.)
- duplex channel**, *n*—a data transmission system capable of transmitting in both directions at once.
- dynamic random access memory**, *n*—RAM than cannot be retained without continuous or regular stimulation. (See **DRAM**.)
- EBCDIC**—**extended binary code decimal interchange code**.
- electronic scanning system**, *n*—a device used to look at readable pages and convert the text found there to an electronic signal. (See **ESS**.)
- EM**—abbreviation for **end of message**.