Apex II ™

By

COMPSEE®

PORTABLE DATA
COLLECTION TERMINAL

Manual #: COAMIIUG0000

Operations & Programming Manual

PART 4 – Apex Glossary

COMPSEE, INC.

A SUBSIDIARY OF MCRAE INDUSTRIES, INC.

This glossary contains those terms most frequently used in this manual. In addition, several *industry-standard* terms are provided.

AIM	Automatic Identification Manufacturers, Inc. This is the organization supported by suppliers and manufacturers of automatic identification products and services.
Aiming LED	Synonymous with aiming spot which acts as a positioning marker and should be centered on the bar code label.
Alphanumeric	Containing letters, numbers, and other characters, such as "$".
Analog Voltage Detector	A voltage detector is a device used to detect the amount of electrical current. An analog voltage detector utilizes analog (continuous) representation.
ANSI	American National Standards Institute. A non-governmental group responsible for a number of bar code symbology specifications and other standards.
Application	The use to which a data processing system is put, for example, an inventory application.
Aperture	The opening through which the laser beam exits the Apex II terminal.
ASCII	A standard for data transmission. Stands for American Symbol Code for Information Interchange.
Aspect ratio	The ratio of bar height to symbol length.
Autodiscrimination	The capability of bar code reading devices to recognize and decode more than one symbology.
Bar code	A collection of parallel bars and white spaces that represent data elements or characters.
Bar code character	A single group of parallel bars and white spaces used to represent a number, letter, punctuation mark, or other symbol.
Bar code density	The number of characters represented in a lineal inch.
Bar code symbol	A collection of rectangular, parallel bars, and white spaces used to represent a single data element or character in a certain symbology.
BASIC	A programmer's language primarily designed for numerical applications. It stands for Beginner's All-purpose Symbolic Instruction Code.
BASICA	A particular type of BASIC programming language.
Baud rate	A communications speed that is measured by the number of bits per second.
Boot up	The process of restarting the Apex II. This automatically clears the memory and loads the original factory operating system. Instructions are located in Part 1.
Buffer	The assigned part of memory used as a temporary holding area.
Bulletin Board Service	(BBS) The Compsee, Inc. 24-hour electronic information service that can be used to leave messages, participate in roundtable discussions, retrieve and send programs and files, etc.
CCD	Charge Coupling Device. A type of scanner that uses an LED to illuminate the bar code. The reflected light passes through a lens and is focused on the a light sensitive sensor.
CDRH	Center for Devices and Radiological Health.
CFR	Code of Federal Regulations.

Check character	As referred to as check digit. A character included within a message whose value is used to perform a mathematical check for the purpose of ensuring the accuracy of the message.
Clear area	A clear area or space, containing no dark marks.
Codabar	A bar code symbology which supports characters 0-9, plus "S", "-", ":", "/", ".", and "+". Start and stop codes include a combination of any four a/t, b/n, c/*, d/e.
Codablock	A stacked bar code symbology which supports numbers and characters 0-9, A-Z, ".", "$", "/", "+", "%", and "-".
Code 11	A bar code symbology which supports numerics 0-9 and the "-" character.
Code 128	A bar code symbology which supports the full ASCII character set. Included here is 128A, 128B, and 128C.
Code 39	A bar code symbology which supports alphanumeric characters, plus ".", Space, "$", "/", "+", "%", and "-".
Contrast	The amount of reflectance difference between the black bars and white spaces.
CTS	Clear To Send.
Data acquisition	The process whereby data is moved to an environment in which it can be processed into purposeful information.
DCE	Data Communications Equipment.
Debug	The process of finding and eliminating errors or malfunctions.
Density	The mass of a unit volume.
Depth of field	The amount of distance between the minimum and maximum plane in which the code can be read.
DIAGNOSTIC mode	The Apex II mode used for debugging a program, single stepping through a program, input values for variables, printing the values of variables, setting break points, etc.
Download	The process of transferring files or programs from the host to the Apex II.
DTE	Data Terminal Equipment.
EAN	European Article Numbering system. This is the standard bar code for retail food packages.
EAN-8	A bar code symbology that is a shortened version of EAN 13.
EAN-13	A bar code symbology that is similar to UPC-A, with two extra characters which are used.
EPROM	Erasable Programmable Read Only Memory. Programmable memory that, as opposed to RAM, can only be read and normally cannot be changed or written to.
Firmware	Program or data stored in RAM which are not alterable by software nor lost when the power of the hardware device is turned off.
Fixed length	A symbol or code whereby the data elements must be a specific length.
Hardware	Physical equipment, such as a PC or printer.

IMMEDIATE mode	The Apex II mode used to send information such as a program, an operating system update, or a file from the host to the Apex II, or from the Apex II to the host.
Infrared	Invisible light.
Interleaved 2 of 5	A bar code symbology which supports numerics 0-9 only.
Laser diode	A laser made from a semiconductor material and powered by supplying electrical power.
Laser scanner	An optical bar code reading device that uses a low energy laser light beam as its illumination source.
LCD	Liquid Crystal Display. A standard display technology used for the Apex II's viewing area.
LED	Light Emitting Diode. Used as the light source for bar code scanners.
Light pen	A hand-held scanning device used as a contact bar code reader.
Margin	See Quiet zone.
Mil	One thousandth of an inch or approximately 0.0254 millimeter.
Misread	The bar code decodes, but the data is incorrect.
Mode command	Sets protocol parameter syntax that is used to set baud rate status including flow data bits, parity, etc. on a device so that it can communicate with another device.
Modem	The device used to convert binary digital data to audio tones for transmission over phone lines.
Nanometer	The unit of measure used to define the wavelength and color of light (1×10^9m).
Numeric	Containing numbers only.
Operating system	Firmware that controls the execution of programs.
Orientation	The alignment of a bar code symbol with respect to horizontal. Two different orientations are possible: horizontal with vertical bars and spaces (picket fence type) and vertical with horizontal bars and spaces (ladder type).
Pen scanner	A device used to read bar codes. Requires direct contact with the bar code.
Paper bleed	The optical phenomenon which causes bar code bars to appear larger and the spaces smaller than actually printed.
Quiet zone	A clear space, containing no machine readable marks, that precedes the bar code's start character and follows the stop character. Also referred to as the Clear Area.
RAM	Random Access Memory.
Random errors	Errors encountered during a particular scan which may not be encountered during subsequent scans.
Read area	The area covered by a scanner.
Reader	A device used to read bar codes.
Reboot	The procedure used to set conditions to their original state.
Reflectance	The amount of light reflected from a surface.

Resolution	The ability of the scanner to read the narrow bar code bars.
ROM	Read Only Memory.
RS-232-C	An interface standard that permits DTEs and DCEs to connect successfully.
RUN mode	The Apex II mode where the unit is being controlled by the instructions of a BASIC program.
RTS	Request To Send.
Scanner	Electronic device used to read bar codes.
Skew	The scanner's angle of rotation around an axis parallel to the direction of the bars.
Software	The computer programs concerned with the operation of a computer system.
Start/stop characters	The characters used at the beginning and end of every bar code symbol which provide initial reference and read information.
Symbol	With reference to bar codes, the combination of characters (including start and stop) and white and black bars and spaces used to form a complete scannable entity.
Symbology	Expression by means of symbols.
SYSPARMS Statement	COMPSEE BASIC instruction used to specify certain Apex II device parameters. See COMPSEE BASIC Programmer's Manual for more information.
Turnkey	A system or installation that is complete and ready to run without further additions or modifications.
UCC	Uniform Code Council.
UPC	Uniform Product Code.
UPC-A and UPCA+	A bar code symbology that must start with a number system character followed by 10 bar code numbers.
UPC-E	A bar code symbology that must start with a number system character followed by 6 bar code numbers.
UPCC	Universal Product Code Carton.
USS	Uniform Symbol Specification. The current series of symbology specifications published by Automatic Identification Manufacturers, Inc.
Upload	The process of transferring files or programs from the Apex II to the host.
VAR	Value Added Reseller. Also referred to in this manual as the Compsee dealer. A VAR adds value to Apex II software and hardware to provide support solutions.
Variable length code	A code that can be any length within a range of lengths.
Verification	The process used to evaluate a symbol in order to determine whether it meets specifications required for the symbol.
Verifier	Equipment used to analyze whether or not a bar code symbol is in accordance with a specific industry standard.
VIN	Vehicle Identification Number. Vehicle identification numbering system used by the automobile industry.
Visible Laser	A scanning beam of light visible to the human eye.

Wand scanner	A hand-held scanning device used as a contact bar code reader.
Wavelength	Used to describe the frequency of light radiated by a scanner's emitter.
Wide-to-narrow ratio	The ratio between the width of the wide and narrow elements in a two-level bar code.
XMODEM	A common error correction protocol used to specify how files are sent and received between two devices. Refer to your communications software documentation for details.
XON/XOFF	A communications flow control that uses two control characters (XON and XOFF) to start and stop data transmission.
YMODEM	A protocol used to specify how files are sent and received between two devices. Refer to your communications software documentation for details.
Zero suppression	A technique used to shorten UPC codes by omitting certain zeroes from the bar code.