CalComp
Graphics Products

Graphics

Pen Plotters

Since its start in 1958, CalComp has been both an innovator and a leader in the world of computer graphics.

We developed the first digital drum plotter—which taught computers to draw. And most recently we've introduced a full line of complete electrostatic systems...plotters, plotter/printers, controllers and plot media to meet every need.

Today there are more than 15,000 CalComp graphic systems in use.

And, there are more than 3,000 employees in our worldwide network of sales and service offices in more than 37 countries.

CalComp excels in creating quality graphics products. That's why we've earned our reputation as the best single source supplier of complete graphics systems: hardware, software, supplies and service.

CalComp's experienced graphics systems teams—sales specialists and systems analysts can offer solutions to your graphics needs.

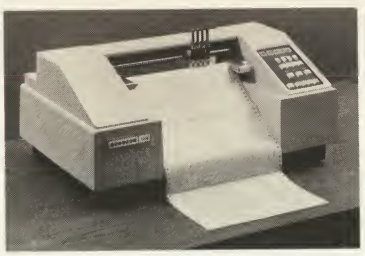
Our continuing commitment to help you get maximum benefits from CalComp systems and software assures you of quality, profitable product performance.

All CalComp plotters feature DC servomotor drives and linear pen actuation mechanisms for faster throughput, smoother lines and finer quality. They are easy to operate in online, remote/timesharing or offline environments.

Drum Plotters

The Model 1012 is a high-speed desk-top plotter with performance features never before available at such a low price.

Designed primarily for remote and timesharing applications, the 1012 offers full four-color plot versatility for the production of "A" and "B"-size drawings at 10 inches per second axial speed and 14.1 inches per second diagonal speed. The Z-fold paper format provides continuous plotting without a paper change.



1012 Drum Plotter

The 103X Family of drum plotters provides a generous working area in a table top size. Consisting of three models (1037, 1038, and 1039), the 103X Family gives you the speed and precision CalComp is known for.

The single-pen operation of Models 1037 and 1038 is sufficient for a wide range of graphics requirements. The triple penmanship of Model 1039 allows multiple line widths and colors within a single plot. Axial speeds range from 2 inches per second (Model 1037) to 4.5 inches per second (Models 1038 and 1039).

1039 Drum Plotter

The 105X Family of drum plotters is ideal for companies needing faster, more sophisticated means of processing graphics data.

Consisting of Models 1051 and 1055, this family offers 4-pen flexibility plus the speed and convenience of a free-standing drum.

Model 1055 is the highest performance digital incremental drum plotter available, with an axial speed of 30 inches per second and a diagonal speed of 42.4 inches per second.

Model 1051 offers an axial plot speed of 10 inches per second, and can easily be upgraded at your facility to a 1055.

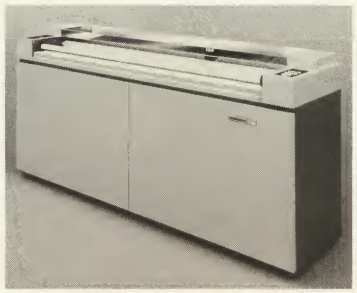
1055 Drum Plotter

The new Model 1060 provides a plot width of 52 inches. An optional narrow paper adapter produces 34 inch wide plots.

The 1060 features operator selectable speed and acceleration controls. This flexibility provides optimum performance for the media and pen types required for a variety of applications.

The Model 1065 is the widest high performance drum plotter on the market today. The 72 inch wide plotting area provides drum plotter convenience to those users formerly forced to use flatbed plotters.

This model is a four-pen plotter with a velocity of 30 inches per second, a 2G acceleration rate, and a resolution of 0.0125mm (≈ 0.0005 in.).

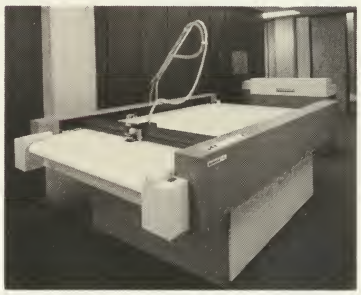


1065 Drum Plotter

Flatbed Plotters

The 748 Flatbed Plotter has a completely visible drafting area of 48 x 82 inches. The 4-pen pressurized liquid inking system allows much faster liquid inking speeds with far better line quality. Ballpoint pens, tangential scribes and film cutters can also be accommodated.

This high precision plotting system plots at 30 inches per second, and the diagonal speed is 42 inches per second with both liquid ink and ballpoint pens.



748 Flatbed Plotter

Beltbed Plotters

The Model 960 Beltbed Plotter approaches the ease of operation, economy, and space-saving convenience of a drum plotter, while performing with the high speed of a flatbed system.

The 960 Plotter uses two pens and accommodates liquid ink, ballpoint, nylon tip, or liquid ballpoint pens. It has an axial plot speed of 30 inches per second.

CalComp's Model 970 High-Performance Beltbed Plotter provides quality line drawings on preprinted and cut-sheet drafting media for those graphics applications requiring a large plot area. The 970 provides a plot size (52" by 80") normally associated with large flatbed plotters, while providing the convenience, efficiency and economy of a beltbed.

All four pens of the Model 970 access the entire plotting area; each has its own selectable force control to coordinate the proper pen force-to-media mix.

970 Beltbed Plotter

Electrostatic Plotter/Printers

The 5000 Series Electrostatic Plotter/Printers produce fast, high quality, high resolution hardcopy in seconds, regardless of plot complexity. They are ideal for plot previewing and checking at a surprisingly low price/performance ratio.

CalComp's exclusive patented closed loop toning system ensures complete, high density toning of the electrostatic image for high contrast output at the highest plotting speeds.

Models 5000, 5005 and 5200 use both roll and fanfold 11 inch paper and film with a choice of resolutions of 100 or 200 dots per inch determining the plotting speed.

Models 5100, 5105 and 5300 accommodate 22 inch roll paper and film. Resolutions of 100 or 200 dots per inch are available.

The new Model 5500 plots on 36 inch wide paper or film and has a resolution of 200 dots per inch.

Optional hardware character generators provide line printing capability at speeds up to 1625 lines per minute on 11" models and up to 1160 lines per minute with 22" versions.

These extremely versatile electrostatic plotters and plotter/printers are supported by a wide range of powerful software packages. Hardware interfaces are available for most popular minicomputers.

5500 Electrostatic Plotter

Computer Output Microfilm Plotter/Printer

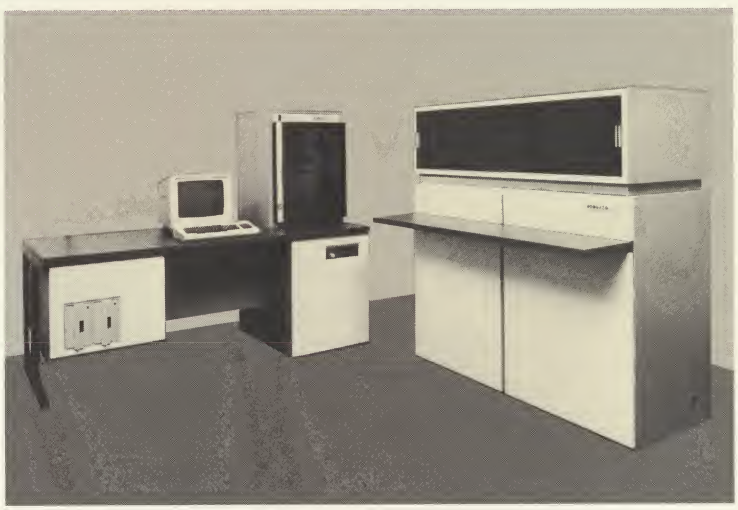
CalComp Graphics COM systems are designed to meet user requirements and achieve the exceptionally high level of performance required for large-scale service bureaus, engineering drawings, businesses, and an ever-widening range of scientific applications.

CalComp COM systems are particularly applicable for volume output where highest resolution is a prime consideration.

The 1581 Graphics COM Plotter configuration consists of a Graphics Formatter, a stored program controller that receives input from an integral magnetic tape unit, and a Graphics COM Plotter for output on 16mm or 35mm perforated or non-perforated film. The effective integration of these components produces a highly efficient and flexible system.

The 1681 Graphics COM Plotter/Printer configuration uses a CalComp-produced universal camera and hardware forms flash. With a change of lenses the universal camera can produce output on 16 and 35mm film as well as 105mm microfiche.

The electronic printer mode of operation produces alphanumeric output at the rate of 15,000 lines per minute or 250 pages per minute on microfiche.



1681 COM Plotter/Printer

Plotter Controllers

CalComp presently manufactures five families of graphics controllers: the 90X family, 91X family, 92X family, 93X family and the 95X family. All five families receive data in a highly compacted format, contain an integral processor, and have memory capability to reduce host computer time.

90X Controllers

The 906 Online Plotter Controller is a versatile, microprocessor-based device that operates locally with RS-232-C asynchronous, IEEE 488 Parallel, CDC Cyber-18 or HP 3000 Parallel interfaces. It can be an integral part of most CalComp plotters, or it can be a separate unit.

The 907 Online Plotter Controller offers the same 906 features plus circle, arc, and dash line generators.

907 Controller

91X and 92X Controllers

The Model 916 Magnetic Tape Reader is ideal for present users of the Model 907 Online Plotter Controller seeking offline capability and a Universal Magnetic Tape option.

The Model 918 Offline/Online Controller is a full magnetic tape controller that directly drives CalComp plotters. It reads ASCII plot data from prerecorded magnetic tapes in NRZI or Phase-Encoded format.

The Model 920 Magnetic Tape Reader adds offline capability or convertibility to an online Model 907 Plotter Controller. It plots CalComp 925 tapes.

The Model 922 is a stand-alone, reel-to-reel magnetic tape plotter controller. It's an offline controller with an on-line option and a UMT option to plot Model 925 tapes.

The Model 925 Controller is a stored program controller with magnetic tape input as well as program loading from a magnetic tape cartridge. The magnetic tape input is a read-only, reel to reel unit. The magnetic tape cartridge is an integral read/write unit for Graphics Controller Software program entry.

Programmable, versatile and sophisticated, the 925 Controller is designed to drive all CalComp plotters.

91X/92X Controllers

95X Controllers

The new Model 95X Controllers read and process vector plotter data and output to CalComp electrostatic or pen plotters. Both controllers offload the vector sorting and rasterization tasks from the mainframe CPU.

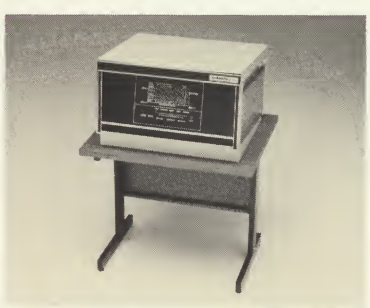
One CalComp pen plotter and up to eight CalComp electrostatic plotters can be attached to a Model 95X Controller at the same time.

The new Model 951 is a microprocessor-based data control system which functions as an online intelligent vector-to-raster convertor.

The Model 951 uses the same compact coding technique as the Model 907. It reads vector plot data via an RS-232-C or a Bi-synchronous serial interface from the host computer and outputs to an operator selectable CalComp electrostatic plotter or pen plotter.

The new Model 953 reads vector plot data from prerecorded magnetic tapes in NRZI or Phase-Encoded format. It uses the same compact coding technique as the Model 925 Controller and allows for an optional online data input module.

When there is a requirement to efficiently process high density plot data, both models can be upgraded to a 21 megabyte disk drive which can handle plots with up to 2 million vectors.



951 Controller

93X Controllers

The Model 93X family of plotter controllers presently has one member, the Model 930-100 Stored-Program Offline Controller.

The Model 930-100 is CalComp's minicomputer-based entry into offline controllers, and consists of a processor, two floppy disks for graphics controller software program loading, a magnetic tape read-only input for NRZI or PE formats, and an operator console.

With the Model 930-100 Controller you have today's finest graphics controller and the ability to expand your graphics capabilities as future requirements dictate.

930-100 Controller

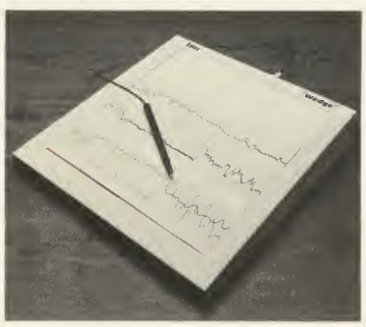
Digitizers

CalComp now offers the full line of Talos digitizers. These high accuracy, high resolution graphic input devices transmit points, lines and curves from a drawing to a computer for immediate processing or future use and modification.

Three series of digitizers are available:

The compact, convenient 400 Series (The Wedge) is designed for applications using small systems. It offers end users and OEMs an affordable yet highly dependable alternative to traditional CRT control devices. Resolution of 400 lines per inch and selectable output rate up to 240 coordinate points per second are key features.

The 600 Series operates on electrostatic "active inch" technology and consists of three cable connected components: a transducer, a free standing remote electronics unit and the digitizer surface.



The 400 Series

The 600 Series offers an active area size range from 11" x 11" to 44" x 60" in solid formica, backlighted or rear-projected surfaces. A choice of transducers: a pen stylus, and 12 or 16-button cursors is available.

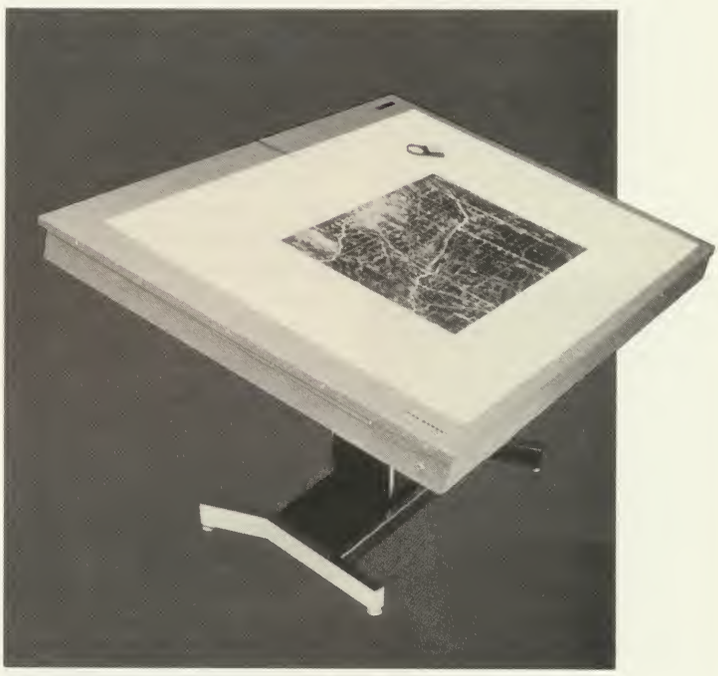
Standard accuracy is ±0.0105 inch with 1000 counts-per-inch resolution.

The advanced 800 Series operates on electromagnetic technology permitting digitizing from conductive materials. Active area sizes range from 12" x 12" to 44" x 60".

Digitizer Tablets

Expanded system capabilities are possible via dual digitizing surfaces, dual cursors and multiple interface compatibility... with expansion possibilities for various output peripherals.

Precise data input and greater data stability may be accomplished at a solid formica surface or an optional backlighted or rear-projected surface. The standard resolution is 1000 counts per inch with accuracy of ±0.0105 inch. Optional accuracy of ±.0055 inches is available.



Large Backlighted Digitizer

CalComp offers a complete line of reliable equipment that can perform many computer graphics tasks, and CalComp software makes sure our equipment will perform your task to your standards...quickly, easily, accurately, and economically.

This essential element of your graphics capability is provided by the plotting industry's largest, most experienced programming staff.

Four levels of software are available to CalComp customers:

- Host Computer Basic Software—programming subroutines that provide the basic commands to do every kind of computer graphics task.
- Graphics Controller Software—resides and runs in CalComp programmable controllers. It performs the basic operations necessary to interpret the formatted Host Computer Basic Software data and drive a plotter.
- Functional Software—an intermediate level of software that relieves the user of programming many graphics functions.
- Application software—a library of problem-solving programs designed to provide graphics display capabilities.

CalComp software and systems analysts are available throughout the world to assure maximum customer benefits from CalComp graphics systems.

CalComp plotters are designed to provide high-quality, low cost drawings in a wide range of applications. Our supplies and accessories are carefully matched to the plotting hardware to assure the highest plotting quality.

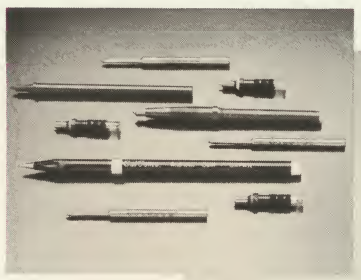
A complete line of CalComp supplies comprises a variety of drawing media, pen types and ink colors. CalComp plotters are warranted with CalComp supplies.

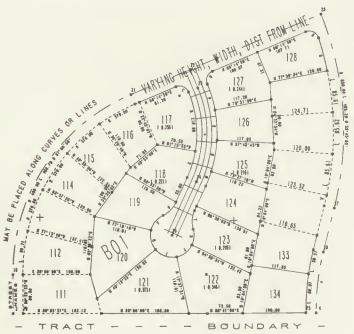
Paper, chemicals and accessories are available for our electrostatic plotters.

Each of CalComp's Field Service Engineers is a highly qualified, customer-oriented technician who handles each call, whether for remedial or for scheduled preventive maintenance, as a priority situation.

Supporting each Field Service Engineer is a sophisticated organization —management, support specialists, instructors, dispatchers, material coordinators—regulating maintenance activities on a world-wide basis.

CalComp monitors maintenance trends, providing valuable input to manufacturing and quality assurance. This information is also used to continually upgrade service techniques and develop improved preventive maintenance procedures to increase equipment uptime.





For detailed specifications on the products in this category, contact your local CalComp sales representative. Continuing research and improvement may result in specification changes at any time.

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