

Collage

Character Generators
Stills & Graphics

PixelPower
broadcast graphics solutions

COLLAGER

The Collage 2 Family - fast, reliable and future proof

Background

▼ Since its establishment in 1987, Pixel Power has built a world class reputation for providing innovative, powerful, award winning graphics products for the television broadcast and post production industries.

Launched in 1993, Collage has become the character and graphics generator of choice for both national and commercial television broadcast companies around the world. A marriage of cutting edge hardware technology and innovative graphics software, Collage has been continuously enhanced in response to the increasingly sophisticated needs of our customers. ▲

Introducing Collage 2

▼ Building on the experience gained from over 1200 Collage systems in operation worldwide Collage 2 takes this evolution to new heights. By placing proven Collage character generator and graphics tools on an entirely new dedicated hardware platform and leveraging the very latest technologies, Collage 2 offers performance between 5 and 10 times faster than competitive systems.

Collage 2 is a proprietary broadcast character generator and graphics system which incorporates innovative technology with dual Power PC processors and multiple pixel processors, giving unprecedented speed and flexibility. The proven Collage software toolset and user interface has been enhanced to make operation even faster and more intuitive. Featuring dual output on a single system Collage 2 delivers features previously available only on more expensive dual channel systems, including the ability to edit pages while others are being aired. ▲

The Collage 2 Family

▼ The Collage 2 family offers integrated character generation, still store, painting and graphics functionality. Tight integration of these normally separate capabilities makes Collage 2 the most productive character generator and graphics system available.

The Collage 2 Family is designed to cover the differing requirements of the layout and graphics production areas. Offered in 4 basic configurations, Collage 2 TG, CG, GX and Stills, additional options allow the system to be configured to meet your specific requirements - operational, technical and budgetary. Collage 2 can be supplied as a complete turnkey system or as an upgrade to any existing Collage system.

Collage 2 Stills offers a fully featured two-channel still store to fulfil any dedicated still store requirement, either in the control room or for mobile production. ▲

Interfacing & Connectivity

▼ The Collage 2 range fits effortlessly into a broadcast facility and communicates with a wide range of third party products. In addition to interfaces with all the major station automation systems including Omnibus, Sony, Harris, Encoda, Thomson and Pro-Bel. Collage 2 also operates with newsroom systems such as ENPS and iNews. The evolving MOS standard for media control is also an integral part of Collage 2.

Operating over 100 Base TX ethernet, the powerful new DCOM interface allows control of the Collage 2 system by a remote PC. The DCOM interface also enables Collage 2 to extract data automatically from external applications such as Word documents, Excel spreadsheets and the internet. Titles, election results, sports and financial data can all be inserted quickly and reliably into Collage 2 pages.

Collage 2 is easily integrated with existing graphics systems. The Collage 2 family can import and play out graphics from Quantel, Aston and Chyron as well as support a variety of PC file formats including JPEG, TIFF, TARGA, CGM, EBU, and ASCII. Collage 2 can read and write to PC formatted disks (FAT16 and FAT 32) for fast, easy access to existing disk media. Network file sharing is possible via both NFS and FTP.

Collage 2 uses native TrueType and Postscript fonts giving easy access to a vast library of typefaces. All Collage 2 systems include a comprehensive library of 500 Bitstream Latin typefaces.

Designed to fill the whole range of broadcast and post production requirements, anything created on the top of the range Collage 2 GX can be played out on Collage 2 TG or CG. ▲

Collage 2 Standard features

- Dual Power PC CPUs and multiple pixel processors
- Unlimited foreground layers
- Built in 100 BaseTX networking
- Compatible with all existing Collage jobs
- Import TIFF, TARGA, JPEG, CGM, EBU, ASCII and Quantel files
- Available as CCIR 601 serial digital, analog component, or both
- Built in downstream keyer
- Min 18 GB internal LVD SCSI drive
- Built in 250MB Zip drive for fast, reliable backup and import
- 1.44Mb Floppy disk drive
- Ability to read from a SCSI CD-ROM drive
- Ability to scan flat art using a Hewlett Packard flatbed scanner

Collage 2 TG - Text Generator and Graphics Playout Station

▼ Collage 2 TG is designed as a simple, fast and reliable text generator. The system sports a streamlined feature set optimized for live-to-air applications including sports, news control rooms and master control. Collage 2 TG can playout complex animated pages prepared on either Collage 2 CG or GX, giving you maximum creative capability in all of your graphics playout areas.

Collage 2 TG can be customized from a range of optional features to bring together precisely the text generation tools required, in one affordable, dedicated system. It can also be simply and easily upgraded to Collage 2 CG or GX as your requirements evolve.

Ideal for connection to automation and newsroom systems, Collage 2 TG provides a fast, reliable and flexible basic text generator at the heart of your production system. With its optional subtitling and timeline modes it also makes a useful addition to a non-linear edit system where high quality, real-time character generation is required. ▲



Collage 2 TG pages may include full color backgrounds as well as field based templates with logos for use with station, election or newsroom automation.

▼ PixelCOM is a Microsoft compatible COM object which allows data download and control for any member of the Collage2 family. This control can either use DCOM communication over the Collage2 Ethernet interface or a traditional RS232 cable.



PixelCOM can be used directly in a wide range of popular applications including Excel, Word, and Visual Basic. Data can be extracted directly from the desktop application for immediate display within a Collage page. PixelCOM is available free of charge from our web site. ▲

Standard features

- Rolls, crawls and crolls - smooth at any speed
- 28 variable pre-programmed transitions between pages
- Full text manipulation - kern, skew or lead in any direction
- 1024 text styles per job (assign 26 to keys on the keyboard)
- Playout of multiple cell animations and animated logos
- Flexible shape tools
- Dedicated RapidAction keyboard
- 500 Postscript fonts
- Logo fonts allow images to be recalled by keyboard letter/number
- WYSIWYG templates - for fast update of data
- Easy to operate keyboard macro capability
- Full language support, including Arabic, Chinese, Cyrillic, French, Hebrew, Japanese, Spanish, etc.
- Networking and automation connectivity via 100 Base TX ethernet and RS232
- Playout of real-time 3D animation

Options

- Video grab - for fast image capture with key channel
- Cool and Smart Move libraries of real-time animations
- Digital and Date clocks
- Typing on a curve and perspective
- Edit-While-Live
- Extended memory
- Spell checking
- Remote protocol newsroom automation and DCOM interface
- On-board still store
- Subtitling with time code follow and RS-422 timeline control
- Graphics tablet and pressure sensitive pen
- Upgrade to Collage 2 CG or GX



Collage 2 CG - Character Generator and Still Store

▼ Collage 2 CG builds on the feature set available in Collage 2 TG to offer a fully featured character generator with a tightly integrated on board still store. This gives access not only to a comprehensive suite of character generator functions, but also the creative tools to produce a vast range of visually stunning and sophisticated graphics over the backgrounds of your choice.

Collage 2 CG features Cool and Smart move animations for text and logos, as well as Cut & Paste tools for image manipulation. Cell animation playout capability offers multiple animated areas of screen in a single channel, in addition to character and transition effects.

While its character generation features are impressive, Collage 2 CG is also a capable dual channel still store. With fast access to over 10,000 stills with key, the right background will always be available instantly. The on-board 250 MB Zip drive and 100 BaseTX ethernet ensure that you can exchange images with other graphics systems and provides a convenient means of backup.

With the standard RapidAction keyboard, the most common character generation functions are just a single keystroke away, making Collage 2 CG ideal for live broadcast environments, including newsrooms, master control and remote production vehicles.

With standard support for most automation interfaces Collage 2 CG is an easy fit in sophisticated news, channel branding and live sports applications. ▲

Standard features

- All the features of Collage 2 TG
- Spell checking capability
- Cool and Smart Moves libraries of real-time character and logo animations
- Digital and Date clocks
- Typing on a curve
- Remote protocol newsroom automation interface
- Dedicated RapidAction keyboard
- On-board still store with image numbering
- Video grab - for fast image capture with key channel
- Picture Cut & Paste with programmable preset positions
- Subtitling with time code follow and RS-422 timeline control
- Live video squeezeback

Options

- Graphics tablet and pressure sensitive pen
- Edit-While-Live
- Quick recall keypad for still store applications
- Extended memory
- Upgrade to Collage 2 GX
- DCOM Interface



Realtime live video squeezeback function along X axis



Realtime live video squeezeback function along X and Y axis



Realtime live video can be resized and placed behind picture or cell animation layers



Collage 2 CG is easily interfaced to news, station and election automation systems including AP, ENPS, iNews, Harris, Probel, Video Design and Vertigo multimedia

Collage 2 GX - Graphics Generator

▼ Designed with the graphic artist in mind, Collage 2 GX is aimed at the graphics preparation area in a larger broadcaster or as a multipurpose graphics powerhouse in the smaller regional station, post facility or corporate edit suite.

Collage 2 GX provides much more than a dedicated character generator. Collage 2 GX further expands system capabilities to include a comprehensive on board paint system with freehand brushes, image effects, color correction, matte creation, roto-scoping and VTR control. It also adds cell animations, an enhanced range of flexible shapes and analog clock functions.

Tight integration of paint and character generation tools streamlines your workflow, making Collage 2 GX exceptionally flexible and productive. Imagine creating an over-the-shoulder graphic then quickly recalling a CG template to place the story title in precisely the correct location. With one keystroke the font, color, edge and shadow are instantly recalled.

Optional 2D and 3D animation software enables the creation of keyframe based animations with unlimited objects, dimensional extrusions, lighting and texture mapping. Final animations may be rendered to Ramcorder, hard disk, VTR or cell animations.

Newly developed "Live Texture" capability extends the 3D animation toolset for real-time presentations. Using "Live Textures" regions from normal CG pages can be mapped to the surfaces of 3D objects in preproduced cell animations. The result is a powerful tool for creating real-time 3D animations that include live data such as stocks, sports scores or weather reports. ▲



3D objects with foreground texture maps that can be updated in realtime



Any page within a job can be updated automatically from one or more websites using the optional PixelWeb software

Standard features

- All the features of Collage 2 CG
- Create and playout multiple cell animations on a page
- Extended set of flexible shapes tools
- Analog, digital and date clocks (multiple clocks on a page)
- Video paint system with programmable freehand brushes
- Color processing tools in YUVK and RGBK space
- Effect filters including blurs, ripples, waves, warps and lighting
- 120 frame ramcorder with key channel (625 line)
- Rotoscoping and VTR control
- Creation and playout of real-time 3D animation

Options

- 2D animation software
- 3D animation software
- Edit-While-Live
- Extended ramcorder with key channel (600 frames 625 line and 700 frames 525 line)
- A3 graphics tablet
- DCOM interface



Dedicated RapidAction keyboard

Collage 2 Stills - Dedicated Still Store

▼ Based on the new Collage 2 architecture, Collage 2 Stills is ideally suited to live still store operations, including sports, news and studio applications.

Offering dual-channel capability, with preview and status output on a third monitor, a wide range of transition effects between stills are available simultaneously on each channel.

With a recall time of a fraction of a second, the internal hard drive holds a minimum of 10000 stills with key. Backup storage is provided by the internal 250Mb Zip drive with capacity for further expansion through external SCSI disks.

Prime features include real-time frame grab with key channel. This makes light work of building a comprehensive stills database from existing graphics equipment.

Comprehensive video paint features, including matte creation and retouching, provide built-in creativity, allowing operators to swiftly change raw images into station styled, ready-to-air graphics via the tablet and pressure-sensitive pen.

Automation-ready, Collage 2 Stills supports various standard newsroom and playout automation protocols via RS232 or ethernet. ▲



Fast recall keypad

Standard features

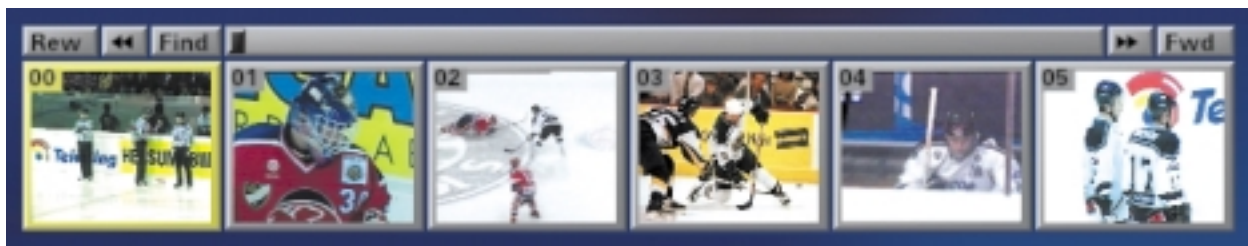
- Dual channel still store
- Minimum 10000 stills with key on 18 Gb internal hard drive
- Comprehensive video paint features
- Real-time video grab with key
- Remote protocol newsroom automation interface
- Edit-While-Live
- Ramcorder with key channel (120 frames 625 line or 60 frames 525 line)
- Text line editing for story slugs, name straps etc
- Import images in many common formats including CGM, TIFF, TGA, JPEG and Quantel VPB
- Playout of jobs prepared on Collage character generators

Options

- Fast recall keypad with display
- Collage Browser software for browsing a network of Collage still stores from a PC
- Extended ramcorder with key channel (600 frames in 625 line or 700 frames in 525 line)
- 36 Gb or 72 Gb internal hard disk
- DCOM interface



Still store browsing



Ramcorder frames grabbed from VTR

Features and Options

- ✓ Standard
- Optional
- Not available/applicable

Collage 2 Stills
Collage 2 TG
Collage 2 CG
Collage 2 GX

Collage 2 Stills
Collage 2 TG
Collage 2 CG
Collage 2 GX

SOFTWARE FEATURES				HARDWARE FEATURES				
PixelWeb software	0	0	0	0	0	0	0	
Compatible with existing Collage jobs	✓	✓	✓	✓	—	○	✓	
500 Postscript Type 1 fonts	✓	✓	✓	✓	✓	—	—	
Unlimited foreground layers	✓	✓	✓	✓	✓	—	—	
Text page	—	✓	✓	✓	✓	○	✓	
Text line	✓	✓	✓	✓	✓	✓	✓	
Text on a curve	—	○	✓	✓	0	0	0	
Spell checker	—	○	✓	✓	0	0	0	
Tabs	—	✓	✓	✓	HARDWARE FEATURES			
Templates	—	✓	✓	✓	Dual Power PC CPUs	✓	✓	
Text import	—	✓	✓	✓	Multiple pixel processors	✓	✓	
Edge effects	✓	✓	✓	✓	Internal 18Gb (min) LVD SCSI drive	✓	✓	
Transparency and shading	✓	✓	✓	✓	Internal 250 Mb Zip drive	✓	✓	
Logos and Logofonts	—	✓	✓	✓	Internal 1.44 Mb Floppy drive	✓	✓	
Any speed rolls & crawls	—	✓	✓	✓	Downstream keyer	✓	✓	
Type/wipe/flash effects	—	✓	✓	✓	100 Base TX networking	✓	✓	
Cool Moves character animations	—	○	✓	✓	LVD/SE SCSI Port	✓	✓	
Smart Moves character animations	—	○	✓	✓	Extended memory	0	0	
Digital clocks/date clocks	—	○	✓	✓	Edit while live	✓	○	
Analog clocks	—	—	—	✓	RapidAction keyboard	0	✓	
Freehand Painting	✓	—	—	✓	Mouse	—	✓	
Mattes	✓	—	—	✓	A5 Tablet and cordless pen	✓	○	
Cut & paste	✓	○	✓	✓	A3 Tablet and cordless pen	0	0	
Enhanced cut & paste	✓	—	—	✓	OPTIONS			
Still store (dual channel)	✓	○	✓	✓	Internal 36 Gb or 72 Gb LVD SCSI drive	0	0	
Page transitions	✓	✓	✓	✓	External CD ROM drive	0	0	
CD ROM software driver	✓	✓	✓	✓	Scanner	0	0	
Scanner software driver	✓	✓	✓	✓	Chyron/Aston file import	0	0	
Cell animation creation	✓	—	—	✓	Collette offline page preparation software	0	0	
Cell & Realtime 3D animation layout	✓	✓	✓	✓	Collage Browser software	0	0	
Perspective	✓	○	✓	✓	3D Manipulator	—	—	
Standard Shapes	✓	○	✓	✓	Keypad	0	0	
Picture file import/export	✓	✓	✓	✓	Easy reader 1 (battery)	0	0	
Color processing	✓	—	—	✓	Easy reader 2 (ac powered)	0	0	
Filter effects	—	—	—	✓	Arabic font pack	0	0	
2D Animation software	—	—	—	○	Arabic upgrade	0	0	
3D Animation software	—	—	—	○	Cyrillic upgrade	0	0	
Newsroom automation	✓	○	✓	✓	Remote station	0	0	
Collage remote protocol	✓	○	✓	✓	Upgrade to Collage 2 CG	—	○	
RS422 Timeline control	—	○	✓	✓	Upgrade to Collage 2 GX	0	0	
Realtime live video squeezeback	✓	○	✓	✓		0	0	

TECHNICAL SPECIFICATIONS

PHYSICAL

	Height	Width	Depth
3RU System unit	132mm	450mm	630mm
Keyboard	66mm	468mm	214mm
Tablet	14mm	334mm	258mm

POWER

System unit	110/220V 50/60Hz auto switching 350W typical
Tablet	110V or 220V plug in power adaptor

VIDEO

Menu selectable	625/50 or 525/60
Aspect ratio	4:3, 14:9, 16:9 or user defined (13.5MHz)

INPUTS

Ref1 and Ref2	1 to 4 volts pk-pk mixed syncs or standard color black with loop-through. Internal sync source provided when external sync source not present. Independent references for input and output timing with menu control of lock position.
Video	RGBK / YUVK software selectable 0.7 volt pk-pk into 75 ohms with internal 75 ohm termination and/or serial digital 4:2:2:4
GPI	2 contact closure trigger inputs

OUTPUTS

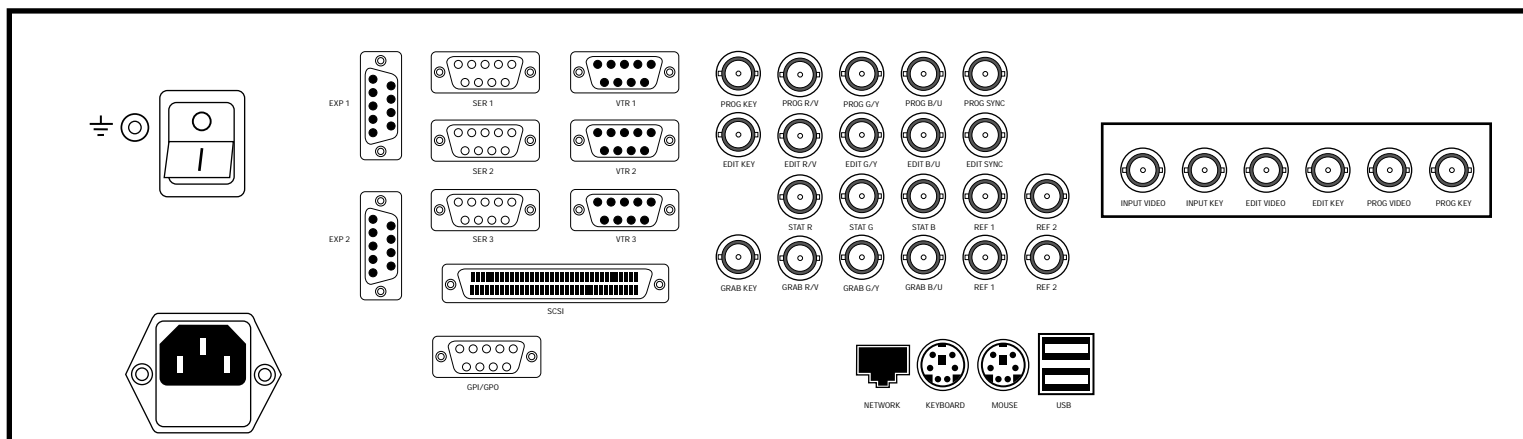
Edit and Prog	RGBK / YUVK software selectable 0.7 volt pk-pk into 75 ohms software selectable sync on G/Y and selectable sync on K Mixed syncs 2V pk-pk nominal into 75 ohms and/or serial digital 4:2:2:4
Status GPO	RGB 0.7 volt pk-pk into 75 ohms with sync on RGB 2 contact closure trigger outputs

STORAGE

320 Mb system memory expandable to over 1Gb
 18Gb (minimum) Internal LVD SCSI hard disk storing over 10000 pictures with key
 1.44 Mb PC compatible floppy disk
 250 Mb Internal Iomega Zip drive

INTERFACE CONNECTIONS

Keyboard	PS 2
Mouse	PS 2 or serial port
VTR1, VTR2, VTR3	RS422 Sony 9 pin VTR controller ports
Serial	3 RS232 ports for tablet, remote control, keypad, trackball or 3D manipulator
SCSI	SCSI compatible 68 pin LVD/SE
Ethernet	100 Base TX
USB	2 ports



Tel UK: +44 (0) 1223 721000
 Fax UK: +44 (0) 1223 721111

Tel USA: +1 561 395 4801
 Fax USA: +1 561 395 4065

E-mail: info@pixelpower.com
 Website: www.pixelpower.com