Axel CG Live

Broadcast graphic device server

User Manual

(Rev. 1.1)





Via Caduti Di Sabbiuno 6/F 40011 Anzola Emilia - Bologna - Italy Tel. +39 051 736555 - Fax. +39 051 736170

e-mail: info@axeltechnology.com web site: www.axeltechnology.com

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1 Introduction

1.1 Minimum requires

GLIVE hardware and software requires are:

\rm 🖌 HARDWARE

- CPU: Intel QuadCore
- RAM: 4Gb
- VIDEO: BlackMagic video board.

SOFTWARE

- OS: Windows XP SP3 or higher. Preferred Windows 7.
- Microsoft Framework 3.5 installed.
- Microsoft Framework 4 installed.

2 Installation

CGLIVE has a very simple setup configuration and it's not necessary the PC restarting after the installation.

2.1 Setup

Start the "CGLIVESetup.exe" file:

Click on "Next" button:

Then, click on "Install" button:

When the CGLIVE installation finished, click on "Finish" button:

Now, Axel Multimedia Pack is going to be installed automatically:

Axel Multimedia Pack - InstallShield Wizard	x
Setup Status	24
The InstallShield Wizard is repairing Axel Multimedia Pack	
Installing	
C:\\Common Files\Axel Technology\Utility\FFMpeg\ffmpeg.exe	
InstallShield	
	Cancel

When Axel Multimedia Pack installation finished, please set the check on "No, I will restart my computer later" and then click on "Finish" button:

Axel Multimedia Pack - InstallShield Wizard		
	InstallShield Wizard Complete The InstallShield Wizard has successfully installed Axel Multimedia Pack. Before you can use the program, you must restart your computer. Yes, I want to restart my computer now. No. I will restart my computer later. Remove any disks from their drives, and then click Finish to complete setup.	
< <u>B</u> ack Finish Cancel		

Now, CGLIVE program is installed on you pc!

2.2 Hardware Key

Now, you must insert the hardware key on your PC.

WARNING: If you don't insert the hardware key on your PC, CGLIVE will start on Demo Mode.

3 Configuration

CGLIVE configuration requires only the manual insertion of a standard format for the video card Blackmagic installed on your PC. The program automatically will set the format for all Blackmagic's output channels. After, the user can set for each channel a different format to suit your needs.

3.1 Start the program

Please, start the "Axel Logo Generator.exe" file:



WARNING: If you don't have any BlackMagic video board installed into your PC an error message will appear and CGLIVE will be closed.

Digital Logo Gene	rator Wizard	
	Please, choice the channel resolution for all the BlackMagic cards found.	
Resolution	SD PAL 576i50 4:3	•
	SD PAL 576i50 4:3	-
	SD PAL 576i50 16:9	Ξ

Now, you must choose a BlackMagic supported format from the list:

After that, click on "OK" button and waiting until the program finishing to set all the necessary configurations. When CGLIVE configuration finished, the main program screen will appear:

🔐 CG Live				by Axel	Fechnology 🗕 🗖 🗙
LIVE Multichannel	1 - Channel 1	Main	/ Pages 📳	Scheduler 🤤 Se	tup 🔖 Log
Preview - Running					
PREVIEW CHANNEL	T Z F T	567	890		4 D Bark
	1234	567	89101		B B
Channel 1 - Running					
			PROGRAM		
	2 3 4 Pag_ Pag_ Pag_ Pag_ Pag_	5 6 7	89101		4 E B Bank
Las som Manifely Italian	1234	567	8910		4 D 😈
					ı
					Works with Blackmagic design

3.1.1 Playout - Multichannel



The CGLIVE's Playout Multichannel is the starting page layout. It's the summery of all the output channels setted during the configuration. You will see all the supported BlackMagic video board's available channels.

Channel

- For each channel you can choose from 16 available pages for the Program channel and from 16 available pages for the Preview channel.
- The Preview channel choice is exclusive: only one Preview channel is allowed.
- At any time you see the status of each channel BlackMagic

It's possible to change channels' layout page simply by clicking on the available page you want to send to output.

3.1.2 Playout - Single Channel

😭 CG Live	by Axel Technology 🗕 🗖 🗙
	in 📈 Pages 🛃 Scheduler 🧐 Setup 🚿 Log
LIVE Multichannel 1 - Channel 1	
PREVIEW	PROGRAM
	LIVE <mark>24</mark>
	DEMO MODE
	John Live from Wembley stadium
1 2 3 4 5 6 7 8 Page1 Page2 Page3 Page4 Axel Axel	9 10 11 12 13 14 15 B Blank
PREVIEW 1 2 3 4 5 6 7 8	
Take Pr	ogram
	General Remote
R AXEL	Works with Blackmage design

In addition to multichannel, the Playout menu offers a view for each channel. Each channel it shows the visualization of what is going on the air in real time. This view shows the page description of the selected channel.

CGLive automatically grabs and saves a still frame of the output every 5 seconds (user-definable).

3.1.3 Pages

🚰 CG Live	by Axel Technology 🗕 🗖 🗙
Main ∠ Pages LIVE Channel 1 - Channel 1 Page 1 ↓ Label Page1 Shortco	s Scheduler 🚱 Setup 💊 Log ut GPI ự 🔁 Undo 📮 Save
Clear Page Import Page Import From File Export To File SPORT 24	Logo Library albero.swf Add to Page 720x150 Browse Delete Download
John Brown Live from Wembley stadium	Logo Logo 1 Remove Play-Mode Loop Locked Position X: 35 Y: 50 Z-Order F: B: K Transparency % 100 T Mantain Aspect Ratio R Mantain Aspect Ratio R Shadow Glow
Take Program	Anchor MiddleCenter M. Blur Blur Percent Smooth Edge Smooth Edge Smooth Edge Smooth Edge Smooth Edge Align To Align To
	Works with Blackmagic design

Every page can be easily composed by any kind of object (text, crawl, roll, shape, ticker, logo and clock) with virtually no limit, supporting multiple layers and saved as template.

Object can be easily moved on the GUI by drag and drop, copy, cut and paste. Safe area margin are always visible.

The Pages Tab is used to create or edit output's pages for each channel. It is possible also see the changes made to the temporary page with the buttons Take Preview (to the Preview channel) and Take Program (on the current channel).

GCLive features the "intelligent" page switching: in multiple object environment only new/modified object will be replaced/displayed with transition, while the others will stay on air.

You can choose the available channel:



And then the available page:



You can also add a key combination (shortcut) to bring up the page making it online:

	200	000	0000	
CI				
Shortcut				
	_	_		_

Any changes to the page can be undone using the "UNDO" button, or saved by the "SAVE". In addition, you can see real-time changes to the page without saving using the buttons and "Take Preview" and "Take Program".



If you click on Update button you can choose a supported CGLIVE logo from your PC. The supported file types are:

*.tga, *.swf (flash animation), *.bmp, *.jpg, *.gif (animation), *.png, image sequence and video

Images and video can be uploaded, selected, downloaded from/to the internal storage.

Preview window:



Click on "Add" button to add it into the page:

GPI

It is also possible also add a GPI device to select the page: the CGLIVE accepts commands from MOXA boards and RS232 commands:



GPIO E
Device
MOXA
☑ Is Counter Password
IP Address
Port 502 Timeout 5000
Channels 🧧 🚔 🔳 Ch 0 🔳 Ch 1 🔳 Ch 2 🔳 Ch 3 🔲 Ch 4 🔳 Ch 5
ОК

GPIO
Device
R5232 •
COM Port COM5
CTS DSR
ОК

Logo TAB:

The Logo TAB allows to add logo into the page, from the internal storage as above described. The external data source engine allows also to retrieve data from third parties to display line/bar/graph.



Now you can change the logo added as see fit with all the "Logo Properties" functions. The following properties are available for any object (text, crawl, roll, shape, ticker and clock).



You can change the logo position:



Or move the added logo to the "**safe areas**" (safe area is customizable and default values are. 5% and 10%):



You can also change its size maintain aspect ratio or not. But if you click on "Restore Original Size" the added logo returns on its original size:



When you change the logo size, it's possible to anchor the added logo to the panel.

Now, you can add some effects to the added logo modifying its transparency and adding some effects or movement effects:

Transparency	% 100 🚑
Effect	
Shadow 📃	Glow 🔲
M. Blur 🔲	Blur 🔲
Smooth Edg	e 0 ᆍ
IN:	🗹 Fade
🗹 Move	None 💌
🔲 Squeeze	XY 💽
OUT:	🔽 Fade
🗹 Move	None 💽
🔲 Squeeze	XY 💌

Finally, you can change the logos' Z-Order on the page clicking on "Bring to front" or "Send to back" buttons:



The following images show additional properties available for specific object.

Text TAB:

The Text object allows to add single and multiple lines where content can be typed or retrieved from external data souces. From this TAB you can also set all the parameters, such as: font, position, fill, border, bacckground, color, spell check, etc.



Color setting for background, fill and border:



Font selection and settings (antialiasing is set as enable by default): Note: the list of available font is retrieved from windows system

Character Type			Style & Effec	ts
Microsoft Sans Serif			Italic	
Microsoft JhengHei		Live 🔺	Bold	
Microsoft New Tai Lue		Live	🔲 Underline	
Microsoft PhagsPa		Live 🗐	Strikeout	
Microsoft Sans Serif		Live 🚽		
Example-	Live		00	₩ OK
				Cancel

Crawl / Roll TAB

From this TAB you can select and add Crawl and/or Roll objects and set all the parameters, such as: font, direction, speed, position, fill, border, background, color, etc.



Ticker TAB

From this TAB you can select and add Ticker objects (single and multiple line) and set all the parameters, such as: font, image/animation, direction, lines, position, fill, border, background, color, etc.



Clock TAB

From this TAB you can select and add clock/count-up/count-down objects (analogue and digital) and set all the parameters, such as: format, position, dimension, transparency, etc.



You can also import from another channel's page all its logos into the current page. If the importing channel's page has a different resolution, you can choose to add the logos and resize them into the current channel resolution.

Clear Page	Import Page	Import From File	Export To File
CG Live Please, select the page	e to import.	by Axel Technolo <u>O</u> k <u>C</u> ancel	рду
1-Channel 1 2-Page2			

Finally, you can delete the selected logo with the "Delete" button or you can delete all the current page's logos with the "Clear" button.

3.1.4 Setup

😭 CG Live		by Axel Technology 🗕 🗖 🗙
LIVE	Main 🖊 Pages 💽 Scheduler	😧 Setup 🔌 Log
General		
Web port 5640 TCP/IP log	Debug Verbose log	🔒 Save
Service port 8090 Form Messag	e Async 🛛 Real-Time Preview	
1 - Channel 1 Up	Channel Setup	1 BlackMagic card found.
	Video Settings	
\mathbf{O}	VideoDevice Decklink Video Render	
Down	Description Channel 1	
	Video Format SD PAL 576i50 16:9	
	KeyMode Internal	
	Fields Order Auto	
	Active	
	Set this channel as Preview	
	Remote Control	
	TCP port 201	
	Axel Keyboard Settings	
	Use left Axel keyboard shortcuts (PREVIEW)	
	Use left Axel keyboard shortcuts (PROGRAM)	
	Use right Axel keyboard shortcuts (PROGRAM)	
	✓ Apply Settings ✓ Scan for Video Devices	Wizard
	BlackMagic De	sign PTY is a registered Trade Mark.
		Works with Blackmagic design

In the left list of the Setup page, you can choose the channels order clicking on "Up" and "Down" buttons. In the rest of the Setup page you can change the selected channel properties:

- Description: the channel's user description. User can distinguish from the others by setting this property page.
- Format: the channel's resolution and aspect ratio. User can choose from all the supported BlackMagic format video resolution.
- KeyMode: the channel's output mode. User can choose between off, internal or external mode.
- Fields Order: the channel's fields order. User can choose between Auto, First Field, Second Field or Progressive order.
- Is Preview: sets whether the channel to the preview channel. User can choose to set the selected channel to be the preview channel. ATTENTION: User can also choose to set all the available channel with no preview. Automatically a virtual VGA channel will be created as a preview channel.
- Active: sets whether the channel is active. User can uncheck this property whether the channel is not enabled.
- Remote Port: the remote connector's channel port. User can upgrading the CGLIVE to an ALG (Advanced Logo Generator) and set the remote port to waiting remote command from other program like Axel DigiTV.
- Use left Axel Keyboard shortcuts: specifies whether the user can use, for the selected channel, the left keyboard of the Axel Keyboard commands shortcuts*.
- Use right Axel Keyboard shortcuts: specifies whether the user can use, for the selected channel, the right keyboard of the Axel Keyboard commands shortcuts*.

When you want to save the channel's changes, click on "Set Channel". You can also "Re-Scan All" the available BlackMagic channels installed on the PC or "Reset All" the channels settings and restart the Wizard procedure (see 3.1).

3.1.5 Scheduler

The Scheduler allows to schedule to automatically palyout any template at specific date an time.

😭 CG Live						by	y Axel Techno	ology 🗕 🗆 🗙
20			2	Main 🖊 P	ages	Scheduler	🔉 Setup	🔖 Log
LIVE								
				SCHEDULER				
Channels							31/01/	2012 18:13:44
Channels	Page	Recurrer	су	Start Time		Has end time		
1 - Channel 1	▼ 1	Page1 Just one	time 💌	31/01/2012 18:0	9:53 💌			
							🐥 Add	Remove
Channel	Page Recu	rrency Start	Time	End Time	Next Start	Time		
								with Blackmagicdesign

3.1.6 Log

The Log page is a popup which shows all the saved CGLIVE's user actions.

Se c	G Liv	e									by Axel Technology 🗕 🛛	= x
(C							💓 Main	/ Pages	📑 😨 Scheduler 🧐 Setup 💊 Log	
	liv	E										
									REPORT			
C	Calendar 31/01/2012 Log 52 (5										(52)	
	•		nove	embre	2011			DatTime	Application	LogType	Message	
Ľ	lun	mar	mer	gio	ven	sab	dom	31/01/2012 18:10	Channel 1	INFO	Remote connector started	=
	31	1	2	3	4	5	6	31/01/2012 18:10	Channel 1	INFO	Channel 1 channel panel has been initialized.	
	7	8	9	10	11	12	13	31/01/2012 18:10	Channel 1	INFO	Initializing connection	
	14	15	16	17	18	19	20	31/01/2012 18:10	Channel 1	INFO	StopServer	
	21	22	23	24	25	26	27	31/01/2012 18:10	Preview	INFO	Preview channel panel has been initialized.	
	5	6	7	8	9	10	11	31/01/2012 18:09		INFO	Application started. Version: 1.0.0.0	
	Toda	v: 31/	01/20)12				31/01/2012 18:09		INFO	Buildtime: 31/01/2012 15:19:43	
	2 	,,			_	_		31/01/2012 18:09		INFO	Runtime version: 32bit	
	Filt	ers	_	_	_	_		31/01/2012 18:06	Channel 1	INFO	Remote connector started	
								31/01/2012 18:06	Channel 1	INFO	Channel 1 channel panel has been initialized.	
		POP						31/01/2012 18:06	Channel 1	INFO	Initializing connection	Ŧ
			h				-	Show Logs			h 📁 🗩	
	/ (er	npty)										
	Pre	eview						Remote co	nnector sta	rted		
	Ch	annel	1									
2	1/01	/2012	12.1	2.24 -	KEAC'	Al+ - /	\]+				KEVBOARD	
3	1/01	/2012	2 18:1	2:34 -	KEYS:	Contr	ol - Cont	trol			KEYBOARD	
3	1/01	/2012	2 18:1	2:37 -	KEYS:	V - V					KEYBOARD	-
K	ev In	fo							_			
	ey in											
	Key r	ot fou	ind.								Sefre:	sh
6	Works with Backmagedesge											

4 HowTo

4.1 Create a CGLIVE channel page

The following procedure is the same for Logo, Text, Crawl, Roll, Ticker, Shape and Clocks. Click on the menu's Pages Tab and choose the channel where you want create/add the page (for example page #6):

G Live	by Axel Technology 🗕 🗖 🗙
Main Z Pages	Scheduler 🧐 Setup 🔖 Log
LIVE Channel 1 - Channel 1 - Page 6 🚭 Label Shortcut	GPI 🕂 🔄 Undo 📮 Save
Clear Page Import Page Import From File Export To File	TAROF
Logo Play-Mo Position × 35 Dimension	Axel.tif Axel.tif Add to Page Browse Upload Download Control Cocked Control Cocked
Mantain Anchor	n Aspect Ratio V Effect Shadow Glow MiddleCenter M Blue Blue
Pixe W: 17 ITake Preview Take Program	I Percent Smooth Edge 0 8 ↓ I: Image: Constraint of the second seco
	Works with Blackmagicdesign

Now, you can add a page's label:

😭 CG Live			by Axel Technology 🗕 😐 🗙
25	📎 Mai	n 🟒 Pages 📰 Sch	eduler 🥸 Setup 💸 Log
LIVE Channel 1 - Channel 1	Page 6 Label Page 6	Shortcut	GPI 11 - Undo Save
Clear Page Import Page	e Import From File Expo	rt To File	
			Axel.tif 🔹
			🚽 🕂 Add to Page 🛛 👩 Delete
		310v310	🖉 🔎 Browse 😽 Upload
			🕡 Download
		Logo	• 🖊 📟 Remove
		Play-Mode	Loop • Locked
		Position	Z-Order F: 🛄 B: 🛄
		X: 35	¢ Y: 50 ¢
		Dimension Mantain As	spect Ratio
	•••••••	Anchor M	Shadow Glow
		 Pixel 	Percent Smooth Edge 0
		W: 178	🗘 H: 68 🗘 Transitions
		Restore	e Original Size IN: 🗸 Fade
		Align To	Move None ▼ Squeeze XY ▼
			OUT: 🗸 Fade
			Move None •
Take Previe	ew Take Program		Squeeze XY •
			Works with Blackmagic design

And, if you want, you can add the Shorcut:

😭 CG Live			by Axel Technology 🗕 😐 🗙
27	🎾 Main	🗾 🟒 Pages 💽 😨 Schedule	er 🧐 Setup 🔖 Log
LIVE Channel 1 - Channel 1	▼ Page 6 ▲ Label Page 6	Shortcut Ctrl+Alt+M	GPI 🕡 🦝 Undo 📮 Save
Clear Page Import Page	Import From File Export	Logo Library	
			Axel.tif 🔹
			Add to Page 👩 Delete
		310x310	Browse
			OD Download
		Logo	Remove
		Play-Mode Loop	
		Position	Z-Order F: 🕄 B: 🕄
		X: 35 🛟 Y:	50 C Transparency % 100 C
		Dimension Mantain Aspect	Ratio V Effect
		Anchor Middle	Center Shadow Glow M. Blur Blur
		O Pixel	Percent Smooth Edge 0 🗘
		₩: <u>178</u> ‡ H:	68 ↓ Transitions
		Restore Orig	Move None -
		Align To	Squeeze XY •
			Move None -
Take Preview	Take Program		Squeeze XY 🔹
			Works with Blackmagic design

Now, you can add (or import) some logos:



You can resize (maintaing the aspect ratio) your logo and put it into the bottom right position of the panel (see at the following three figures):

😭 CG Live	by Axel Technology 🗕 🗖 🗙
Main ∠ P	Pages 🛃 Scheduler 🧐 Setup 🔖 Log
LIVE Channel 1 - Channel 1 🔽 Page 6 🛨 Label Page 6 Sh	hortcut Ctrl+Alt+M GPI 🕡 🖾 Undo 🔒 Save
Clear Page Import Page Import From File Export To File	Image: Constraint of the second s
Take Preview Take Program	Anchor MiddleCenter M. Blur Blur Pixel Percent W: 50 H: 60 Transitions Restore Original Size Align To F + + + + F Squeeze XY V UT: Squeeze XY V Squeeze XY V Squeeze XY V Squeeze XY V Mone XY V Mone V Squeeze XY V Mone V Squeeze XY V Mone

G Live	by Axel Technology 🗕 🗖 🗙
Main Z Page	s 🛃 Scheduler 🤤 Setup 🔖 Log
LIVE Channel 1 - Channel 1 🔽 Page 6 🜩 Label Page 6 Shorto	cut Ctrl+Alt+M GPI 🕩 🚝 Undo 🔒 Save
Clear Page Import Page Import From File Export To File	Logo Library Axel.tif Axel.tif Add to Page 310x310 Browse Upload
	Logo Logo 1 V Remove Play-Mode Loop V Locked
	Position Z-Order F: B: Constraints X: 329 Y: 414 Transparency 8: Constraints Dimension Mantain Aspect Ratio Image: Constraints Effect Shadow Glow
	Anchor MiddleCenter M. Blur Blur O Pixel Percent Smooth Edge W: 60 H: 60 Transitions
	Restore Original Size Move None Align To Squeeze XY □ ← ←
Take Preview Take Program	Move None Squeeze XY Works with Blackmagedesign

🔐 CG Live	by Axel Technology 🗕 🗖 🗙
Main Z Pag	j <mark>es 🔁</mark> Scheduler 🤤 Setup 💸 Log
LIVE Channel 1 - Channel 1 Page 6 🕞 Label Page 6 Shor	rtcut Ctrl+Alt+M GPI 🕂 🗁 Undo 🗐 Save
Clear Page Import Page Import From File Export To File	Logo TA
	Axel.tif Axel.tif Axel.tif Axel.tif Axel.tif Axel.tif Delete Browse Dupload Download
	Logo Logo 1 🔹 🖌 🛶 Remove Play-Mode Loop 🔹 Locked
	Position Z-Order F: B: F: X: 587 Y: 414 Transparency % 100 F: Dimension Mantain Aspect Ratio V Effect Shadow Glow
	Anchor MiddleCenter M. Blur Blur O Pixel Percent Smooth Edge 0
	Restore Original Size Nove None
	Align To Squeeze XY • OUT: 💟 Fade Move None
Take Preview Take Program	Verta with Badringe design

Finally, you can see on the preview channel the temporary result with the "Take Preview" or you can see it on the current channel with the "Take Program" button. However, you can also save the current page with the "Save" button.

😭 CG Live	by Axel Technology 🗕 🗖 🗙
Main 🖌 Pag	jes 💽 Scheduler 🦃 Setup 🔖 Log
LIVE Channel 1 - Channel 1 V Page 6 📑 Label Page 6	rtcut Ctrl+Alt+M GPI 🕂 🦢 Undo 🔒 Save
Clear Page Import Page Import From File Export To File	Logo Library
	Axel.tif
	Add to Page Delete
	310x310 Browse Upload
	D Download
	Play-Mode Loop V Locked
	Position Z-Order F: 🛄 B: 🛄
	X: 587 • Y: 414 • Transparency % 100 •
	Dimension Mantain Aspect Ratio
	Anchor MiddleCenter Anchor Mi
	Pixel Percent Smooth Edge
	W: 60 H: 60 Transitions
	Restore Original Size
	Align To
	Move None
Take Preview Take Program	🚺 🖡 🔔 🔳 Squeeze 🛛 XY
	Works with Blackmagic design

And see the result on the Playout – Multichannel:

😭 CG Live					by Axel Techno	ology 🗕 🗖 🗙
LIVE Multichannel	1 - Channel 1	🄰 Main	Pages	Scheduler	Ϛ Setup	🔅 Log
Preview - Running						
PREVIEW CHANNEL	1234	567	8910	11 12	88	
•	1234	567	8910	11 12	13 14 1	B
Channel 1 - Running						
			PROGRAM			
DEMO MODE	1 2 3 4 Pag Pag Pag Pag	5 6 7		102		Bark
¢	1234	Page 6	PREVIEW	Û U	13 14 U	B
						with Blackmagicdesign

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