

## **Scala EX**

<b>COLLABORATORS</b>
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# Chapter 1

## Scala EX

### 1.1 Scala EX

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Avideo Colormaster 24  
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Genlock  
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Scala Link

### 1.2 pioneer laserdisc

Pioneer Laserdisc Controller

#### Purpose

Controls the Pioneer VideoDisc players. You can control almost every function of the Laserdisc player: show a single frame, a sequence, select which audio channel to use, and turn the video picture on and

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off. This allows you to create interactive applications containing live video by mixing Amiga graphics and video using a genlock.

#### Required hardware

The following VideoDisc players are supported by the Pioneer

Laserdisc Controller:

- LD-V4100
- LD-V4200
- LD-V4300
- LV-V8000

#### Connections & cables

The Videodisc player is connected to the Amiga's serial port with a custom cable. See the documentation of the player for more information.

#### Control menu

Here is a description of the functionality of the menu, and each button. The top left button is the Command selector. You can use the arrows on this button to cycle through the available commands. The other buttons on the menu will disappear or appear, depending on whether or not they are needed.

#### Play

Use this command to play a sequence of video from the LaserDisk player. You can use the control panel to wind back and forth to find the first and last frame you want to show, and then click the In or Out buttons to copy the value from the counter to the button.

If the In button is turned off (no tickmark), the playback will start from the frame it stopped on the last time the Play command was used.

If the Out button is turned off, the playback will not stop until a Stop or Pause command is issued.

If Wait is turned on, Scala MultiMedia will not proceed to the next page before the Play command has finished.

#### Stop

Halts video film playback and turns off the picture. Playback can be resumed with the Play command.

#### Pause

Halts video film playback and enters still mode. Playback can be resumed with the Play command.

#### Picture on/off

Turns the picture on or off.

#### Audio

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Selects audio channel 1, 2, both or none.

#### Wait

Waits until video film playback has completed before proceeding to the next page.

#### Scala Lingua commands

##### EX PioneerLD AUDIO [1] [2] [OFF]

Controls which audio channels should be active. "1" or "2" enables channel 1 or 2, respectively. Both channels can be enabled at the same time. "OFF" disables all audio.

##### EX PioneerLD PAUSE

Halts video film playback and enters still mode. Playback can be resumed with the PLAY command.

##### EX PioneerLD PICOFF

Turns the picture OFF.

##### EX PioneerLD PICON

Turns the picture ON after the PICOFF command.

##### EX PioneerLD PLAY [framenum1] [framenum2] [WAIT]

If both framenumbers are included, this command will play back a video film, starting from framenum1, ending at framenum2. If only framenum1 is included, the LaserDisk player will show this frame as a still picture. If no frame numbers are included, the player will start playback at the current position. This can be used to resume playback after a PAUSE or STOP command. The optional WAIT keyword causes the player to wait until the film is completed before proceeding with the next event.

##### EX PioneerLD STOP

Halts video film playback and turns off the picture. Playback can be resumed with the PLAY command.

##### EX PioneerLD WAIT

Waits until video film playback has completed. If no video film is playing, the WAIT command will complete immediately.

#### Icon Tooltypes

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DEVICE=serial.device

If you have a third party serial board in your Amiga, you may have to change this line. Consult your serial board manual.

UNIT=0

If you have a third party serial board in your Amiga, you may have to change this line.

BAUD=4800

The baud rate can be set to match your equipment. Consult your Sony manual on setting of DIP switches.

## 1.3 sony laserdisc

SONY Laserdisc EX

Purpose

Controls the Sony LDP Series of VideoDisc players. You can control almost every function of the VideoDisc player: show a single frame, a sequence, select which audio channel to use, and turn the video picture on and off. This allows you to create interactive applications containing live video by mixing Amiga graphics and video using a genlock.

Required hardware

The following VideoDisc players are supported by the Sony LDP Controller:

- LDP-1500
- LDP-1500P
- LDP-1550
- LDP-1550P
- LDP-1600P
- LDP-1200
- LDP-3300P
- LDP-3600D

Connections & cables

The Videodisc player is connected to the Amiga's serial port with a custom cable. See the documentation of the player for more information.

Control menu

Here is a description of the functionality of the menu, and each button. The top left button is the Command selector. You can use the arrows on this button to cycle through the available commands. The other buttons on the menu will disappear or appear, depending on whether or not they are needed.

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### Play

Use this command to play a sequence of video from the LaserDisk player. Use the control panel to wind back and forth to find the first and last frame you want to show, and then click the In or Out buttons to copy the value from the counter to the button.

If the In button is turned off (no tickmark), the playback will start from the frame it stopped on the last time the Play command was used.

If the Out button is turned off, the playback will not stop until a Stop or Pause command is issued.

If Wait is turned on, Scala MultiMedia will not proceed to the next page until the Play command has finished.

### Stop

Halts video film playback and turns off the picture. Playback can be resumed with the Play command.

### Pause

Halts video film playback and enters still mode. Playback can be resumed with the Play command.

### Picture on/off

Turns the picture on or off.

### Audio

Selects audio channel 1, 2, both or none.

### Wait

Waits until video film playback has completed before proceeding to the next page.

### Scala Lingua commands

#### EX SonyLD AUDIO [1] [2] [OFF]

Controls which audio channels should be active. "1" or "2" enables channel 1 or 2, respectively. Both channels can be enabled at the same time. "OFF" disables all audio.

#### EX SonyLD PAUSE

Halts video film playback and enters still mode. Playback can be resumed with the PLAY command.

#### EX SonyLD PICOFF

Turns the picture OFF.

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EX SonyLD PICON

Turns the picture ON after the PICOFF command.

EX SonyLD PLAY [framenum1] [framenum2] [WAIT]

If both framenumbers are included, this command will play back a video film, starting from framenum1, ending at framenum2.

If only framenum1 is included, the LaserDisk player will show this frame as a still picture. If no frame numbers are included, the player will start playback at the current position. This can be used to resume playback after a PAUSE or STOP command. The optional WAIT keyword causes the player to wait until the film is completed before proceeding with the next event.

EX SonyLD STOP

Halts video film playback and turns off the picture. Playback can be resumed with the PLAY command.

EX SonyLD WAIT

Waits until video film playback has completed. If no video film is playing, the WAIT command will complete immediately.

Icon Tooltypes

DEVICE=serial.device

If you have a third party serial board in your Amiga, you may have to change this line. Consult your serial board manual.

UNIT=0

If you have a third party serial board in your Amiga, you may have to change this line.

BAUD=9600

The baud rate can be set to match your equipment. Consult your Sony manual on setting of DIP switches.

## 1.4 canon ion

Canon ION Controller

Purpose

This EX controls the Canon ION StillVideo player (USA: Canon Xapshot). The player is connected to the Amiga's serial port via a special serial interface.

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#### Required hardware

The following Canon still video players are supported:

- RV321
- RV311i
- RV311P
- RV311

You also need one of these serial interfaces:

- IA-V32
- IA-V31

#### Connections & cables

The Amiga is connected to the Canon serial interface with a standard RS-232 serial cable.

#### Control menu

When you click a button in the ION column in the Main menu, the following menu appears. The upper left button is the Command selector. Use the arrows on this button to select one of the following commands:

#### Play

Will show the picture indicated in the control panel to the right. You can use the control panel to select which picture to display.

#### Next

Will show the next picture on the disk.

#### Previous

Displays the previous picture on the disk.

#### Picture off

Turns the picture off.

#### Picture on

Turns the picture on. When you use the Play, Next and Previous commands, the picture is automatically turned on!

#### Scala Lingua commands

#### EX ION PLAY framenummer

Shows a picture with a given number.

#### EX ION NEXTFRAME

Moves to the next picture on the disk.

---

EX ION PREVFRAME

Moves to the previous picture on the disk.

EX ION PICOFF

Turns the picture OFF.

EX ION PICON

Turns the picture ON after the PICOFF command.

Typical applications will only need the PLAY and PICOFF commands, since the PLAY command automatically turns on the picture.

Icon Tooltypes:

DEVICE=serial.device

If you have a third party serial board in your Amiga, you may have to change this line.

UNIT=0

If you have a third party serial board in your Amiga, you may have to change this line.

ADDRESS=FF

If you have more than one Still Video Player connected, you may have to change this line. Consult your Canon IA-V32 serial interface manual.

## 1.5 gvp g-lock

GVP G-Lock EX

Function

This EX will control GVP's G-Lock Genlock. You can select all four keyer modes from Scala (Amiga, External, Overlay and Inverse). Three external video inputs may be selected (CVBS1, CVBS2, Y/C). This means that the EX also can be used as a simple video switcher. The EX even contains a fade option that fades the current video output signal in and out. The EX has full sound support and also contains a sound fading option. Sound and video may be faded automatic and simultaneously. All other G-Lock options may be set by choosing from the three presets configured with the "GL" program.

Installation

Move the G-Lock EX from the EX drawer to the Startup drawer before

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starting Scala. Before using the G-Lock EX, you have to start the GL/SGL program that is supplied with your genlock. If your Amiga is not already genlocked, the GL/SGL program will inform you about this fact. Please select the "Reboot" button if it appears, and remember to start the GL/SGL program after rebooting.

You may now start Scala. If the G-Lock column is not visible, you will have to rearrange their order in the System menu, or drag the columns in the Main menu to the left.

Please note that the G-Lock EX needs the "rexxsyslib.library" to operate. If the G-Lock EX comes up with an error message saying that the library is missing, please contact your dealer.

#### Control Menu

When you press a button in the G-Lock column in the Main Menu, the G-Lock Control Menu appears. The button in the upper left corner of the menu is the command selector. You can use the arrows to switch back and forth between the different commands.

#### Modify

This command is used for modifying the G-Lock settings directly from Scala. Different buttons will appear when they are needed so only two extra command buttons will show up by default. The upper row of commands is used for controlling the G-Lock sound options:

- |            |   |
|------------|---|
| Audio None | will not modify the current G-Lock sound settings at all.                         |
| Audio 1    | will select Audio 1 as sound output.  |
| Audio 2    | will select Audio 2 as sound output.  |
| Audio 1+2  | will combine the two audio inputs, i.e mix them into a single output.             |
| Audio Off  | will turn the sound off, i.e the volume will be set to the lowest possible value. |

If you selected a sound command different from "Audio None" and "Audio Off", a fading button will appear.

- |                 |   |
|-----------------|---|
| Fade Audio None | will leave the current volume unchanged. No fading will be performed.   |
| Fade Audio Out  | will set the volume to the highest previous value and fade down to zero. The number button to the right of this button sets the fading speed. One is the slowest speed. |
| Fade Audio In   | will set the volume to zero and fade up to the highest previous value. The number button to the right of this button sets the fading speed. One is the slowest speed.   |

The bottom row of commands is used for controlling the G-Lock video

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options. The first command button selects the keyer mode:

Video: None will not modify the current G-Lock video settings at all.

Video: External will show only the external video signal.

Video: Amiga will only display Amiga graphics.

Video: Overlay will put the Amiga graphics on top of your external video signal.

Video: Inverse will make the Amiga graphics transparent, i.e the video signal will show through. The background color is solid. This way you can wipe in and out from a black (or any other colored) background.

If you selected a video command different from "Video None", a video-source input button and a fading button will appear.

CVBS1 will select CVBS1 as external video input.

CVBS2 will select CVBS2 as external video input.

Y/C will select Y/C as external video input.

These fading options are available:

Fade Video None will leave the current contrast/ brightness settings unchanged. No fading will be performed.

Fade Video Out will set the contrast/brightness to the highest previous values and fade down to zero. The value button to the right of this button sets the fading speed. One is the slowest speed.

Fade Video In will set the contrast/brightness to zero and fade up to the highest previous values. The value button to the right of this button sets the fading speed. One is the slowest speed.

NOTE: When fading audio and video simultaneously, the fading will be synchronized according to the "Fade Video" speed setting. The "Fade Audio" speed button will therefore disappear from the screen.

#### Load Preset

This command makes it possible to load one of the three presets configured with the GL/SGL program. A button will appear to the right of the command button. Use the switch buttons to select the preset number that you want to load.

Scala Lingua commands

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```
EX G-LOCK MODIFY VIDEO keyermode INPUT vsource
    FADE ftype SPEED fspeed
```

```
EX G-LOCK MODIFY AUDIO asource
    FADE atype SPEED aspeed
```

This modifies the G-Lock settings from Scala:

```
keyermode:  external, amiga, overlay, inverse
vsource:    cvbs1, cvbs2, y/c
ftype:      none, in, out
fspeed:     1-10
```

```
asource:    1, 2, 1+2, off, none
atype:      none, in, out
aspeed:     1-10
```

```
EX G-LOCK PRESET presetnumber
```

This command loads the GL presetnumber specified (1-3)

## 1.6 avideo colormaster 24

Avideo / Colormaster 24

### Purpose

This EX will control the Archos AVideo/ColorMaster 12/24-bit graphic cards. The EX makes it possible to load 12/24-bit IFF pictures from Scala and display them in combination with all the standard Scala text-features and wipes. The EX can also display 12-bit anims in the avnm/avnmd format. Transparency may be turned on and off, and therefore makes it possible to display standard IFF files and animations without interference from the ColorMaster card. The EX also contains an option for clearing the frame buffer.

### Installation

Before using the ColorMaster EX, you have to start the AVideo server program that is supplied with your ColorMaster card. It is probably a good idea to drag this program into the WBStartup drawer. This will assure that the server program is always running after a reboot.

Drag the AVideo EX into the Scala startup drawer and start Scala. The AVideo EX will appear as a separate column in the main menu. If the AVideo column is not visible, you will have to rearrange their order in the System menu, or drag the columns in the Main menu to the left.

### Control Menu

When you press a button in the ColorMaster column in the Main Menu,

the ColorMaster Control Menu appears. The button in the upper left corner of the menu is the command selector. You can use the arrows to switch back and forth between the different commands.

#### Display Picture

This command is used for displaying 12/24-bit IFF pictures. By pressing the "Load Picture" button, the normal file requester will appear on screen. Use it for selecting the IFF 12/24-bit picture you want to display. When you are done selecting, the name of the file will show up on the "Load Picture" button. The "Show" button will now become visible, making it possible to preview the result. Press the Filename button once more to replace the current picture with another.

If you want no Amiga graphics to be displayed in combination with the 12/24-bit picture, this command should be combined with a blank and totally black picture (colors 0,0,0). Otherwise, the 12/24-bit graphics will not shine through. The picture will be displayed in interlace mode if the Amiga foreground is interlaced.

#### Display Anim

Use this command for displaying a 12-bit anim in the avnm/avnmd format. Such anims are normally assembled with the AVRemap command. Please refer to the ColorMaster documentation if you need further information about the AVRemap command.

By pressing the "Load Anim" button, the normal file requester will appear on screen. Use it for selecting the anim you want to display.

When you are done selecting, the name of the anim will show up on the "Load Anim" button. Four other buttons will become visible. Use the "Show" button for previewing the animation. The "Rotations" switch selects how many times/cycles the animation should run. Checkmark the "Stop On Last Frame" button if the last frame (as opposed to the first frame) should stay on screen when the animation stops. Finally, use the "Delay" switch if the animation is running too fast. Each delay unit equals 1/50th second, so 25 equals half a second of delay between each frame. A delay of zero normally gives the best results. Press the filename button once more to replace the current animation with another.

If you want no Amiga graphics to be displayed in combination with the 12-bit animation, this command should be combined with a blank and totally black picture (colors 0,0,0). Otherwise, the 12-bit graphics will not shine through. The animation will be displayed in interlace mode if the Amiga foreground is interlaced.

#### Clear Framebuffer

This command clears the ColorMaster framebuffer. In other words, the current ColorMaster 12/24-bit graphics will completely disappear from screen and no further ColorMaster graphics will appear until you display a new 12/24-bit picture or a 12-bit animation.

This command is very useful in front of events that display 12-bit anims, since animations will appear much nicer on screen if the framebuffer has been cleared in advance.

#### Transparency On

This command will turn the ColorMaster 12/24-bit graphics on again after a "Transparency Off" command. The ColorMaster graphics will now shine through in the black portions of the screen (colors 0,0,0).

#### Transparency Off

This command will turn the ColorMaster 12/24-bit graphics off. The ColorMaster graphics will no longer shine through in the black portions of the screen (colors 0,0,0). The graphics can be turned on again by using the "Transparency On" command or by displaying a new 12/24-bit picture or a 12-bit animation.

#### Scala Lingua commands

##### EX ColorMaster PICTURE filename

This command displays the picture "filename".

##### EX ColorMaster ANIM filename rtnum dlnum [STOPONLAST]

This command display the animation "filename" with 'rtnum' rotations and a delay of 'dlnum' between each frame. If the STOPONLAST flag is added to the end of the line, the animation will stop on the last frame (as opposed to the first frame) when the animation is finished.

##### EX ColorMaster CLEAR

This command clears the framebuffer.

##### EX ColorMaster TRANSP\_ON

This command turns transparency on.

##### EX ColorMaster TRANSP\_OFF

This command turns transparency off.

## 1.7 cdtv

### CDTV EX

#### Purpose

This EX lets you control and use a CDTV player as a remote controlled CD player from Scala. You can play tracks and sequences from any music CD.

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### Required hardware

Commodore CDTV with a floppy disk drive, nullmodem (serial) cable, and of course an amplifier with speaker and cables.

### Connections & cables

Connect the CDTV to your Amiga with a null modem cable connected to the serial ports. Connect the disk drive to the CDTV. Drag the CDTV EX icon into the Scala startup drawer. Insert Scala MM300/IC500 Disk 1 (or the CDTV EX 2.0 disk) in the disk drive, and switch on the CDTV. The CDTV will load a program from the disk; once the disk drive activity stops, you may start Scala.

### Control menu

When you click a button in the CDTV column in the main menu, the CDTV menu will appear. Please note that the CDTV EX re-reads the table of contents (the track list) every time it opens the menu. Typically, you would therefore close the menu and re-open it if you insert a new CD in the CDTV. The CDTV EX automatically detects if a new CD has been inserted and reformats the MSF numbers if necessary.

The upper left button is the Command selector. Use the arrows on this button to select one of the following commands:

### Play

Will play a track or sequence from the CD. Use the Start Track button to select which track to play from. Use the Stop Track button for selecting the last track.

The Start and Stop Track buttons have a button below them that displays the exact start/stop position on the CD in MSF format (Minutes, Seconds, Frames).

The position can be modified by clicking on the arrows related to the number you want to modify. If you choose to modify the start/stop position directly, the script will of course not work very well with a CD different from the one currently inserted in the CDTV.

The Fade In and Out buttons have number arrows that specify the fade duration in seconds. Set the duration to zero if no fading is preferred. The Fade Out function will be activated x seconds before the out point is reached, the number x is defined by the duration in the menu. This means that the track or sequence will end at the exact out point set in the menu even if the fade out function is activated. If the Wait button is checkmarked, Scala will not proceed with the next event until the track/sequence has been played back.

### Sync

Sync's up to a specific point. Halts the current event until the track/MSF position set by the arrows in the menu is reached.

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**Stop**

Stops CD playback. The Fade Out button sets the fade duration in seconds. If set to zero, no fading will be performed.

**Wait**

Halts the current event until CD playback is finished.

**Pause On**

Halts CD playback. Playback can be restarted by using the Pause Off function.

**Pause Off**

Restarts playback if the CDTV is set to pause mode.

**Scala Lingua commands****EX CDTV PLAY tracknumber**

Play a CD track with no fading.

**EX CDTV PLAYTRACK starttrack stoptrack fadeinsecs fadeoutsecs waitflg**

Plays one or more CD tracks with or without fading.

**EX CDTV PLAYMSF starttrack stoptrack startminutes startseconds startframes stopminutes stopseconds stopframes fadeinsecs fadeoutsecs waitflg**

Plays an MSF sequence with or without fading.

**EX CDTV SYNC track minutes seconds frames**

Syncs up to a specific MSF position.

**EX CDTV STOP fadeoutsecs**

Stops CD playback with optional fadeout.

**EX CDTV WAIT**

Halts event until playback is finished.

**EX CDTV PAUSEON**

Halts CDTV playback.

EX CDTV PAUSEOFF

Restarts CDTV playback after issuing a PAUSEON command.

Icon Tooltypes

DEVICE=serial.device

If you have a third party serial board in your Amiga, you may have to change this line.

UNIT=0

If you have a third party serial board in you Amiga, you may have to change this line.

## 1.8 g2 genlock

G2 genlock EX

Purpose

This EX lets you control the G2 genlocks from Scala. The sliders can be changed individually or by using three different key mode presets. Timed fading is also supported.

Required hardware

G2 genlock, G2 parallel port control cable, video source (VCR, Laserdisc, etc), video cables.

Installation

Connect the G2 genlock to your Amiga. Do also remember to connect the G2 control cable to the Amiga parallel port and to set dipswitch A (remote control). Please note that remote control will not work unless a video signal is connected to the G2. Drag the G2 EX into the Scala startup drawer and start Scala. The G2 EX will appear as a separate column in the main menu. If it is not visible, you must drag the columns in the Main menu to the left, or rearrange their order in the System menu.

The Control Menu

When you click a button in the G2 column in the main menu, the G2 menu will appear. The upper left button is the Command selector. Use the arrows on this button to select one of the following commands:

Set Preset

---

Sets one out of three key mode presets:

- Amiga            Display only Amiga graphics  
                  (Amiga Key, all sliders up)
- Video            Display only Video input  
                  (Background, all sliders up)
- Overlay          Video input will shine through in the black areas of  
                  the screen and will be overlaid with Amiga  
                  graphics (Amiga, all sliders up)

Use the Show button for previewing the result. The Show command will automatically look up the previous genlock settings in the event list before previewing. This makes it possible to preview the result several times.

#### Set Sliders

Sets the "fade to black" and "cross fade" values to the positions indicated by the sliders in the menu. The exact slider values will be shown in the main G2 column.

The Key selector button sets one of the following three video modes: Amiga, Video or Overlay. When running the event, the video mode will first be changed and then fading will be done according to the values in the menu.

The FTB Time button sets the duration of the "fade to black" in tenths of a second. Set the duration to zero if the "fade to black" value should be changed instantly.

The CF Time button sets the duration of the "cross fade" in tenths of a second. Set the duration to zero if the "cross fade" value should be changed instantly.

Use the Show button for previewing the result. The Show command will automatically look up the previous genlock settings in the event list before previewing. This makes it possible to preview the result several times. Please note that if both time values are set to a value different from zero, the EX will execute the "fade to black" fade before doing the "cross fade".

#### Scala Lingua commands

##### EX G2 PRESET key

Sets key (genlock) mode preset. Key is a number from 0 to 2.  
(Amiga, Video, Overlay)

##### EX G2 ADJUST key crossfade fadetoblack cftime ftbtime

Sets the "cross fade" and "fade to black" mode to the values present (0-63) and links fade-time values (0-99) to the event

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## 1.9 genlock

### Genlock

This EX will allow you to utilize the new genlocking features of the ECS Denise if you have 2.04 or newer of the operating system. It will appear as a column in the Scala main menu. Every time you click on the Genlock EX button for an event you will cycle through five modes:

Default, do nothing.  
Just a blank box.

Force genlocking of colour zero and transparent border. Icon with black border and white contents.

Turn off all Amiga graphics (the pointer will be there unless you turn it off or more than 16 colours is used on the current picture). Icon completely black

Colour 0 transparent and non-transparent border.  
Icon, white border and black contents

No video  
Icon all white.

### Lingua commands

EX Genlock BORDER ON  
EX Genlock BORDER OFF

Turns the border on or off. When border is turned on, there will be a visible border around the screen.

EX Genlock COLORKEY ON  
EX Genlock COLORKEY OFF

Turns colorkeying on or off. ON means that the graphics is visible.

### EX Genlock COLOR colors

Decides which colors that will be transparent. The variable colors is a hexadecimal number where the bits for each color that is to be replaced with video is set to one. Here is a conversion table for those of you who do not like binary mathematics:

Color	Binary
0	1
1	2
2	4
3	8

The hexadecimal system consists of the numbers from 0 to 9, plus the letters A-F (which represents the numbers 10 to 15). In this example, if you wanted the colors 0, 1 and 3 to be replaced by video, the number would be  $1+2+8$ , which is 11. The number 11 is written B in hexadecimal.

## 1.10 impact vision 24

Impact Vision 24

### Purpose

This EX will control GVP's Impact Vision 24 board. You can control the picture in picture function, the keying modes and you can show 24-bit pictures. You can then create interactive applications that will mix normal Amiga graphics and live video. This means that you can play an Amiga animation and at the same time show live video in a small window on the screen, or use the video signal as background. The EX can also be used as a video mixer.

### Installation

Drag the IV-24 EX into the Scala startup drawer and start Scala. The IV-24 EX will appear as a separate column in the main menu. If the IV24 column is not visible, you will have to rearrange their order in the System menu, or drag the columns in the Main menu to the left.

### ControlMenu

When you press a button in the IV-24 column in the Main menu, the IV-24 control menu appears. The button in the upper left corner of the menu is the command selector. The one below will enable you to set the scan mode of the IV-24, note that this will not be set until you run your script. Set this switch to VScan if you want your output as composite video, set it to HScan if you want RGB deinterlaced output. You can use the arrows to switch back and forth between the different commands. Different buttons will appear when they are needed.

### PIP

Use this command to display an external video signal scaled in a small window on top of the normal Amiga graphics. The Place button, the PIP mode switch and the Show button will now appear.

### Place

This command will open a window with a box, this box will determine the positioning and the size of the PIP screen.

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If you press and hold the left mouse button inside the box, you can move the box to any position on the screen. If you grab the small solid box in the lower right corner of the box, you can size the PIP screen. When you change the size and positioning from this menu, the scaling will be calculated to automatically fit the box. Note that you not always get the whole video image in the box due to hardware limitations. You then have to adjust the size of the box until you get the desired result.

#### Pip mode

Use the arrows on this button to change the mode of the PIP screen, you can choose e.g. Amiga graphics with an external video signal in the PIP screen.

#### KEY

Use this command to use the IV-24 board as a genlock and/or a video mixer. The Key mode switch and the Show button will now be visible.

Key mode      Use the arrows on this button to change the keying modes. You can choose between Amiga, Amiga on extern, Extern, Reverse video and Dual Video.

Amiga              will only display Amiga graphics.

Amiga on  
extern            will put the Amiga graphics on top of your external video signal.

Extern            will show only the external video signal.

Reverse  
video            will make the Amiga graphic transparent i.e. the video signal will show through. The background color is solid. This way you can wipe video in and out from a black (or any other colored) background.

Dual video      will show two video signals, using Amiga graphics as pixelswitch. This mode requires some special setup: On the VIU interface you have two inputs for composite video. CVS1 and CVS2. You can switch very quickly between these two sources using Amiga graphics as a switch. This way the IV-24 EX can be used as a video mixer.

Here is how to set up the equipment: Connect one source to the CVS1 input and another synchronized source to the CVS2 input. To synchronize the two sources you will need a TBC (Time Base Corrector). The Personal TBC card can get this in sync as it has an external ref input. You will also need to set up a few things in IVCP2, the program that comes with the IV-24 board. In the videointerface menu in IVCP2, set videosource to CVS2 and syncsource to CVS1, or visa versa.

Make two blank pictures in the main menu in Scala, preferably with maximum overscan and two colors. In the palette menu set the

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background color on the second picture to color 1 (gray). Press the IV-24 EX column in the main menu in Scala, set Keying to Dual video on the first event. Choose a wipe, newscrollin, and you get this wipe on live video composite output. Note that this will work ONLY on the composite output.

Instead of using the Scala wipes, you can also create your own wipes from e.g. DPaint as animations in 2 colors. A lot of such animation wipes are supplied with the IV-24 EX and are placed in the Animations/Wipes drawer of your Scala drawer, if you choose to install them.

Dual video rev. same as dual video except that the two sources are exchanged. Use this and Dual video alternately to wipe back and forth between the two video sources with the supplied anim wipes.

#### PICTURE

Use this command to display 24-bit IFF pictures. The Load picture button and the Show button will now be visible.

Load picture      This command will present you to the normal file requester, you can now choose the IFF 24-bit picture you want to be displayed. When you are done selecting, the name of the file will be shown on the Load picture button.

OFF                Use this command to return to normal Amiga mode. This command will remove any PIP screen and set the keying back to Amiga only.

#### Scala Lingua commands

EX IV-24 PICTURE filename  
Displays the 24-bit IFF picture "filename"

EX IV-24 KEY rgbkey cvskey  
Will put the IV-24 board into the specified keymode.  
(See the IV-24 documentation for an explanation of the rgbkey and cvskey values.)

EX IV-24 PIP startx starty sizex sizey offsetx offsety scalex scaley mode  
Will put the IV-24 board in picture in picture mode, the PIP screens upper left corner will be at column startx and row starty, the size of the screen will be sizex columns and sizey rows. You can also specify an offset in the picture you want to be displayed in the screen, the offset in columns, offsetx, must be either 0, 64, 128 or 192. The offset in rows, offset y, can range from zero to approx. 566. The scalex will set the horizontal scaling factor of the screen, while scaley will set the vertical scaling factor. scalex must be larger or equal to two. A scale factor of 2 will shrink the picture to



half it's size, a factor of 3 will shrink it to a thirrd of it's size and so on. All coordinates are in hires-interlace resolution.

Icon tooltypes

SCANMODE=VIDEOSCAN

SCANMODE=HISCAN

Use one of these commands to set the default scan- mode, like the VScan/HScan button in the menu.

## 1.11 scala link

Scala Link

This EX has been created to let other programs, such as video editors, and sequencers, control playback of Scala scripts. If you have a program that supports The Scala Link, install the Link EX in your Startup drawer and follow the instructions of your particular program.

Bars & Pipes Professional 2.0, from Blue Ribbon Soundworks Ltd., uses The Scala Link to synchronize Scala scripts to the music.

More programs will support the Scala Link in the future.

## 1.12 midi

MIDI EX

Purpose

This EX lets you play high quality music and samples on external MIDI synthesizers and samplers. It also supports the internal serial port and Blue Ribbon Soundwork's One Stop Music Shop board and TriplePlayPlus interface (BlueRibbon.library is required). The MIDI files can be made with a MIDI sequencer or composition program that supports this format (like Dr.T's KCS and Bars & Pipes from Blue Ribbon Soundworks). The MIDI EX plays back MIDI File Format files of type 0, 1 and 2.

The MIDI EX can also serve as an external timing EX, since it can also read MIDI Time Code (MTC). In the System menu you can select MIDI in the Timer column, and Scala will then use the MIDI Time Code.

Required hardware

You will need a MIDI interface connected to the internal serial port and one or more MIDI compatible instrumens, or the internal

One Stop Music Shop card from Blue Ribbon Soundworks.

#### Connections & cables

The MIDI interface is connected to the internal serial port. Between the interface and your instrument(s) you use standard MIDI cables (DIN style). If you have several instruments and only one MIDI out connector, the instruments have to be daisy-chained. See the manual of your MIDI equipment for more information.

#### The Control Menu

This is the MIDI player control menu.

#### Play

Will play a MIDI file. Click the Load MIDI file button to select which file to play. The file can be repeated several times by setting Loops to the desired number. The speed can be changed by adjusting the value in the Tempo button.

#### Wait

If Wait is turned on, Scala MultiMedia will wait until playback of the MIDI file has finished before proceeding to the next page.

#### Loops

The number of times to play the MIDI file.

#### Stop

Stops playback of the current MIDI song, if any.

#### Scala Lingua commands

EX MIDI PLAY filename [LOOPS n] [TEMPO bps] [WAIT]  
Plays back a MIDI file. Any other song currently playing will stop. The optional WAIT keyword causes the script to wait until the MIDI song complete. The optional LOOPS parameter specifies how many times the song should play. If the MIDI file contains no tempo information, you can use the optional TEMPO parameter.

#### EX MIDI STOP

Stops playback of the current song, if any.

#### EX MIDI WAIT

Waits for MIDI file playback to complete.

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## Icon Tooltypes

### INPUTPORT=SERIAL

Selects the internal serial port for MIDI input.

### INPUTPORT=ONESTOPMIDI

Selects Blue Ribbon's One-Stop Music Shop on-board MIDI interface for MIDI input.

### INPUTPORT=TRIPLEPLAYPLUS

Selects Blue Ribbon's Triple Play Plus interface for MIDI input.

### INPUTINIT=0

Used to select which One-Stop Music shop board or Triple Play Plus input you want to use.

### OUTPUTPORT=SERIAL

Selects the internal serial port for MIDI output.

### OUTPUTPORT=ONESTOP

Selects Blue Ribbon's One-Stop Music Shop board for MIDI output.

### OUTPUTPORT=ONESTOPMIDI

Selects Blue Ribbon's One-Stop Music Shop on-board MIDI interface for MIDI output.

### OUTPUTPORT=TRIPLEPLAYPLUS

Selects Blue Ribbon's Triple Play Plus interface for MIDI output.

## 1.13 supergen

### SuperGen EX

#### Purpose

This EX lets you control the SuperGen genlock from within Scala. The sliders can be changed individually or by using four different key mode presets. Timed fading is also supported.

#### Required hardware

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SuperGen, video source (VCR, Laserdisc, etc), video cables.

#### Installation

Connect the SuperGen to your Amiga. Drag the SuperGen EX into the Scala startup drawer and start Scala. The SuperGen EX will appear as a separate column in the main menu. If the SuperGen column is not visible, you will have to rearrange their order in the System menu, or drag the columns in the Main menu to the left.

#### The Control Menu

When you click a button in the SuperGen column in the main menu, the SuperGen menu will appear. The upper left button is the Command selector. Use the arrows on this button to select one of the following commands:

#### Set Preset

Sets one out of four key mode presets:

Amiga	Display only Amiga graphics (Background 0, Foreground 0)
Video	Display only Video input (Background 63, Foreground 63)
Overlay	Video input will shine through in the black areas of the screen and will be overlaid with Amiga graphics. (Background 63, Foreground 0)
Reverse	Same as above, but reversed (Background 0, Foreground 63)

Use the Show button for previewing the result. The Show command will automatically look up the previous genlock settings in the event list before previewing. This makes it possible to preview the result several times.

#### Set Sliders

Sets the foreground and background mode to the positions indicated by the sliders in the menu. The exact slider values will be shown in the main SuperGen column.

The FG Time button sets the duration of the foreground fade in tenths of a second. Set the duration to zero if the foreground should be changed instantly.

The BG Time button sets the duration of the background fade in tenths of a second. Set the duration to zero if the background should be changed instantly.

Use the Show button for previewing the result. The Show command will automatically look up the previous genlock

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settings in the event list before previewing. This makes it possible to preview the result several times.

Scala Lingua commands

EX SUPERGEN PRESET key

Sets key (genlock) mode preset. Key is a number from 0 to 3. (Amiga, Video, Overlay, Reverse)

EX SUPERGEN ADJUST background foreground bgtime fgtime

Sets the background and foreground mode to the values present (0-63) and links fade-time values (0-99) to the event

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