Default

COLLABORATORS

	TITLE : Default	

ACTION	*NAME*	*DATE*	*SIGNATURE*
WRITTEN BY		June 25, 2022	

REVISION HISTORY

NUMBER	DATE	DESCRIPTION	NAME

Contents

Chapter 1

Default

1.1 X-DVE English Manual

X-DVE v1.xx English Manual

INDEX

1.2 1

1) INTRODUCTION

X-DVE's story starts by a lighted and crackling chimney in a cold autumn evening in Tuscany.

Those sparks and evolutions that performed, recalled to mind the incredible outputs of hundreds of Video-Professional men and their omnipresent mate D.PAINT.

We were searching for inspiration; a product which could help and solve many of the problems which afflicted the Amiga' s users whose aim was to produce videos.

Something new, which let you carry out what we had seen in countless professional studios.

The examples did not surely miss: perspectives, rotations, movements put together with infinite passion in order to obtain surprising results; Titles, presentations, animations and something more, for those millions frames which have invaded the televisi

n advertising and the video-tapes all over the world.

So we had made up our minds to combine the animations potentialities with the simpleness of use in a new product which allowed you to build titles in a simple way, and yet assuring you the results obtainable with D.PAINT.

Reflections, comparisons of ideas, lively discussions, sleepless nights and that product which was more and more growing up, coming out from our first perspective.

Doubts and questions followed one another at an incredible rate:

-Why to compel the user to cut the brush out of a image ?

-Why to oblige him to use the brush with the same palette ?

-Why not to give him the chance to move the Anim-brush as well ?

-Why to restrict the effects to perspectives only ?

-The ANIM-5 is too slow, why don't we use a format of ours ?

Thousands of whys later, we had obtained the final question:

How are we going to name it ?

X-DVE ! (it stands for eXtended-Digital Video Effects generator)

By this time came the best of it; the codification of ideas into facts that AMIGA only can comprehend!

What X-DVE is

X-DVE consists in an integrated environment for the development, the layout and the carrying out of Animations tending towards the Video-Titling.

It is capable of running Animations till 10,000 frames, made up of a Maximum of 100 objects which are simultaneous and independent from each other.

The objects can contain texts, drawings and Animations of different resolutions and can be programmed independently.

X-DVE has been studied to avoid the "Sequentiality Syndrome" which is typical of all the titling software available on the market.

The Editor particular organization, together with the programming flexibility, allows you to obtain the Animations of objects which are totally independent, making the approach to titles thoroughly parallel.

This means that it is not necessary to wait for an object to end its evolutions, before another could do its apparition.

X-DVE puts at your disposal 3 different types of basic effects (shiftings- 3d rotations, curtains (24 all different from each other), crumbling effects which are typical of very expensive DVE generators).

The tracing of the single frames can be even made in a way called Light, which considers a revolving and adjustable light source.

X-DVE permits to produce Animations in broad-cast resolutions

1472*566 in 256 colours (35 nS Super-HiRes).

The Animation format is called XFA C eXtra Fast Animation equipped with programmable compression mode) and it permits a very high fluency of play.

Who is X-DVE intended for?

X-DVE is prevalently intended for those who work in the Video field and it can be used at different levels of skill, from the Amateur to the Professional man.

X-DVE has been made to permit the development of various applications, among which;

-Plain Video Titling (presentation of a sequence of titles together with effects).

-Normal Video Titling (texts, images, parallel Animations. For instance; the titles of the newcasts which are typical of our National TV channels).

-Complex Video Titling (Titlings with a light source etc.)

-Presentation of results\statistics (on the ground of data processing already available it is possible to achieve the typical "sign-board" of our Television News).

-Presentation of animated sport results (as for example The USA 94' s titles)

-Editing of sequences which are made up of animated objects (AnimBrush).

-Titlings of Animations already available and produced with other programs.

-Creation of complex Animations to insert into MultiMedial sequences run by outward programs (X-DVE could represent the best mate of your favourite Multimedia program, making possible the carrying out of sequences otherwise unattainable).

Technical References

First of all we have to clear up some matters as concerns Animation and Graphics runned by computer.

It is widely known that nowadays computers have a particular bent for the running and Handling of Graphic images, this is due to the unceasing technological developments as concerns the graphic processors.

This means that now we can work at home with a plain A1200 which permits better Resolutions than the graphic terminal Tektronix on which, 8 years ago, I and my colleague get trained at school.

Nevertheless the computer processing power is not always adequate to the possibilities offered by the present graphic processors and so very often we have memory and quickness of execution to reckon with.

The choice concerning the working resolutions, using a program like X-DVE, should be made cautiously, taking into considerations these warnings.

-To use very high resolutions with many colours is not always necessary in order to obtain a good titling (consider for instance the number of colours in the titles to which we are used to when watching TV (It is very difficult for them to be more than 8

.

-To double the working resolutions (usually) means to quadruplicate the indispensable quantity of graphic memory and to quadruplicate the tracing rates of a frame.

Besides this implies a larger occupation of the animation and a slower compression and execution speed.

Recommended Configuration

The Minimum configuration to make X-DVE run is:

-Computer Amiga-1Mb or more of Chip Memory + 1 Mb or more of Memory (chip or Fast).

-a Floppy Disk Drive

-Processor 68000 or following ones.

-Mathematical co-processor is not necessary.

-Operating System Version 2.0 or the following one.

This is actually the basic configuration on which X-DVE can run, though you had better not cherish an illusion about the possibilities that such a system can offer.

As concerns those who have already heard talking of Compatible, they could compare the basic configuration to make a game run on a P.C., with the previous one aimed to use a professional product(!).

The recommended configuration, in order to use X-DVE, is:

-Computer Amiga-2Mb or more of Chip Memory + 2Mb or more of Memory fast (Recommended).

-A Floppy Disk Drive.

-A Hard Disk (basic capacity 40Mb).

-Processor 68020 or following ones.

-Mathematical co-processor is not necessary (though useful).

-Operating System Version 2.0 or the following one.

With this basic configuration is already possible to make X-DVE work at the top of its potentialities and it is surely the most recommended for a not fully professional use.

It is obvious that the more the configuration is, the better the attained results are.

This means that X-DVE will reward the Amiga 4000's users because its rendering and compression speed is higher than that performed by A.1200.

Resolutions supported by X-DVE

X-DVE supports either the resolutions of the old graphic chip-set or the resolutions of the new AGA.

The modes HAM-6 HAM-8 and EHB are not supported for reasons which are dependent on our choices, due to the actual running complexity and to the ensuing slowness with which the single frames would be traced.

The allowed resolutions are.

ECS

Normal OverscanMax Colours

320*512 384*566 32

640*512 786*566 16

AGA

Normal OverscanMax Colours

320*512 384*566 256

640*512 786*566 256

1280*512 1472*566 256

1.3 2

2) INSTALLATION

Packing List

Inside the X-DVE's package is contained:

1 Disk by 3.5 inches containing the program

1 Disk by 3.5 inches containing the program's supporting data

1 User's Manual

1 Registration card

Registration Card

The program's registration card is the best guarantee for those who have invested money in software.

It grants you the right to be recognized by the publisher and to enjoy the benefits which are for the original program's users only.

Only the recorded users can enjoy the privileged rights as: The telephonic consultation, the reductions over the program's following versions and finally the working guarantee as concerns the magnetic supports.

So it is necessary to fill up the card and to send it immediately.

The names will be filed into our database in order to check at once the recording regularity in case a consultation call should take place.

The users not recorded will not be taken in any consideration.

The Installation

It is necessary, to install X-DVE on Hard Disk, to call the program "X-DVE_Install" which is contained into the floppy Disk 1 of the package.

The installation procedure is altogether automatic and it is interactively "steered" by the user.

The X-DVE's complete setting-up includes the program, the supporting files and finally some images and scripts which are to be used as examples.

Setting the Overscan

X-DVE runs its own working screens, using the Overscan's parameters set up into the system preferences.

In this way the user can regulate the Overscan in order to meet satisfactorily his requirements, getting animations which are always perfectly balanced.

The Overscan's setting up procedure is very simple, and it is run by the program "Overscan" which is part of the drawer "prefs", this one is installed inside the Operating System.

After calling the program "Overscan" and after selecting the Monitor "PAL" (we want to remind you that X-DVE uses such a monitor in order to perform Animations), It is recommendable to give dimension both to the text area and to the graphic area at the m

ximum range, in order to obtain the best video extension.

At the end of the setting up, you had better save the Overscan preferences, in order to fix them permanently into the setting system.

Organization X-DVE's Directories/files

At the end of the setting up, the drawer X-DVE will contain the main program and its respective supporting files.

Besides, inside the drawer will be created other drawers, whose target is to make the users' tasks still more organized.

Drawer AnimBrush - containing all the Animbrush objects equipped with X-DVE.

Drawer Brush - containing all the brush objects equipped with X-DVE.

Drawer Script - containing all the scripts equipped with X-DVE

Drawer Palette - containing all the working palettes developed for X-DVE.

Drawer Script - containing all the scripts equipped with X-DVE

Drawer XFA - containing all the Animations by IFF-XFA format produced by X-DVE.

It is recommendable to use these drawers to store your own objects, in order to avoid "scattering", either your own objects or the necessary resources to carry them out, all over the disk.

X-DVE, in accordance with the operation that should be made, is programmed to use automatically these drawers.

File names by convention

In order to make files' preserving operations on disk (included objects etc.) still easier, we usually recommend using appropriate names, chosen on the ground of small but sound daily rules that permit reducing the searching rates a good deal.

If, for instance, we had to save a X-DVE's script relative to Piero and Francesca's marriage it would be recommendable to use the name "Marr_Piero_Franc.Script" and the respective animation with "Marr_Piero_Franc.xfa".

The prefix "Marr" will make you understand at once that you are dealing with a Marriage, whereas the suffixes ".script" and ".xfa" would indicate the kind of file.

Generally speaking, the prefix should indicate the file's category (for instance; "Marr_", "Abbreviation_", "Title_" etc), whereas the suffix would indicate its type (for instance; ".iff", ". xfa", ",script", ".anbr" etc).

Software Protection

X-DVE is an execution protected program.

This means that it is possible to have any number of copies duplicated, but it is not possible to make the program run in case you should not have got the original Manual.

When working, X-DVE presents a keyboard just like the telephone one (pic. 1), through which it is necessary to enter the program's access code.

(PIC 1)

Just below the keyboard, a display will show you a message of the kind "C:xx R:yy".

The two numbers represent, respectively, the column and the line of the access code, this one is to be searched for into the code-board which is enclosed to the Manual.

It should be consulted following the classical Naval Battle Method, remembering that the number C: tallies with a horizontal coordinate and R: with a vertical one.

After having matched the code you should type it in, either through keyboard or through mouse, as to be able to access directly to X-DVE.

In case the code should be the wrong one, you have to call the program again.

The buttons "#" and "*" can be used to correct an incidental wrong formulation of the code.

1.4 3

3) USER'S GLOSSARY AND INTERFACE

Requester

Requester is the name commonly used to indicate a "Conversation" window between the program and the user:

The requester is generally made up of graphic informative and interactive elements through which the user can communicate with the program.

Some among the most used elements as concerns Amiga will be treated later on.

Gadget

A gadget is a graphic element which allows interacting with a program.

Most programs for Amiga, available on the market, have got a graphic interface, i.e. a system of interaction with the user based on mouse, windows and gadgets.

Even X-DVE is equipped with a graphic interface and it uses the most common kinds of gadgets.

The most common gadgets are usually sensitive to the mouse click, but some others can even react to double click and to sliding (see sliders).

To make the visual identification and several other peculiarities easier, we have tried to class them in the following way:

Button

The button is made recognizable by a rectangular area with a central text (see Pic. 2)

(Pic. 2)

If selected, it changes aspect as to indicate that it has been pressed.

Each button is usually combined with a function. This one allows you to carry an operation out as, for instance, opening a requester, showing an image, choosing a font etc. etc..

Cycle (cyclic button)

The cycle appears like a button, inside which there is a little crooked arrow (see Pic. 3)

(Pic. 3)

The text of the button indicates a selection among all the possible ones.

In fact if you repeatedly press the button, the text cyclically changes in order to show you all the possible choices.

If you press it together with the shift button, all the selections will be shown following the opposite direction.

The cycle is used for making the user select one of the many possible choices which are shown by means of the same button.

A classical use of the cycle could be represented by the selection between high and low resolutions when setting a screen.

Checkbox

This button is made recognizable by a small and blank rectangular area, with a side-text which represents the respective function (see Pic. 4)

(Pic. 4)

When the checkbox is enabled (by means of the usual selection through mouse), it shows you a graphic symbol, similar to "V", just to indicate that checkbox is active.

Checkbox is used to enable some functions that will be performed later on, as for instance it can assign the Italic character to a text that will be shown only later on.

Mutual-Exclusive Buttons

They are graphically and functionally comparable to a keyboard equipped with circular keys, at which side is a wording showing the respective function.

These buttons have a very particular role, since they permit you to carry out just one selection (among all the possible ones).

A classical application is when it is necessary to choose, among the available Resolutions, the graphic Mode to open a screen.

Field

This button is made recognizable by a rectangular area which is surrounded by a border, (as Pic. 5 shows).

(Pic. 5)

the field permits typing in or showing either a digital or alphanumeric information.

It is used, for instance, when it is necessary to insert a customer’s personal data into a managerial program.

The field is sensitive to the mouse since it is sufficient to click inside it, in order to make the cursor take that very position. Now it is ready to store information.

After selecting it, it is even possible, pressing simultaneously

the keys AMIGA(right)-X, to delete its contents altogether.

Pressing simultaneously the key shift (that is represented, on the keyboard, by an arrow pointing upwards), with one of the slider keys, which is on the right side or on the left one, it is possible to take place at the beginning or at the end of the str

ng.

If in a requester there are more than one field, it is possible to make the cursor pass to the following one pressing the key "TAB" (left on the "Q"), or to the previous one pressing simultaneously "TAB" with "SHIFT".

Slider

A slider is usually represented by a horizontal and vertical bar inside which there is a coloured rectangle (Pic. 6) called pot or knob, this one can be moved throughout the gadget length.

(Pic. 6)

The slider is very often equipped with two little arrow-shaped buttons, which are used for making the pot move step by step.

The parts on each side of the pot are sensitive to the click too and they permit the pot to move.

The slider is very used and you can find it in a lots of X-DVE's requester, as for instance inside the palette-requester or into the Editing main window, on the right side.

List-Box

A List-Box is graphically made recognizable by a rectangular area which is used for gathering information. (see Picture 7)

(Pic. 7)

On the right side of each list-box you can find two arrow-shaped buttons and a rectangle made up of different colours (usually deeper than the contents of the list-box), called scroll bar or slider.

The contents of a list-box can be skimmed through, by clicking one of the two buttons, or by clicking on the scroll bar and finally by moving the mouse without releasing the left button.

The task of the list-box is to show all the elements of a data list and to give the user the chance to pick one of them up.

For instance, the list-box can be used in a managerial program, in case it is required to select a customer out of a list.

Icon

The icon is graphically made recognizable by a rectangular area containing an image that represents the respective function (see Pic. 8)

(Pic. 8)

The icon's working is comparable to the button one, and it can be used to perform some particular applications, as, for instance, to save a file on disk, or printing etc. etc..

Colour Registers

When opening a screen, the Operating System links to it a predetermined palette of colours.

Each colour is codified on the ground of numerical values indicating the quantity of Red (R), of Green (G) and of Blue (B).

Each colour and so each triple RGB is stored on a colour register of the screen.

The colour registers are numbered using progressive indices from 0 to the maximum number of colours of the screen -1.

This means that, if for instance it has been opened a screen using 16 simultaneous colours, the colour registers are numbered from 0 till 15.

All what we have just said will turn out to be useful when you have to work using a Genlock. (The genlock is a device which permits superimposing the image of the computer over a video signal).

Most Genlocks, available on the market, use the Amiga's colour Register 0 considering it to be transparent in order to make the Input Video signal pass through.

In this way any colour RGB, that has been ascribed to the colour register 0, will be ignored. (This is the reason for which the colour index 0 is null, namely black)

There are some Genlocks which permit choosing what kind of colour register to use (though the colour registers can be more than one) in order to make the video signal pass through. Even in this case the colour assigned to the register will be ignored.

To achieve a professional result, it is necessary to get to a very thorough choice about the colours you are going to use.

Through the Palette Requester you can check the shade of colour of any RGB Registers which are available on the screen.

Palette Requester

When used, it presents itself showing all the colours of the screen on which it works, in order to create a lots of coloured rectangular areas, which are sensitive to the mouse click.

When opening the requester we can see that, the selected colour is the first one on the upper and left part of the palette, namely the color register 0 (see picture 9)

(Pic. 9)

To select another colour, it is sufficient to click on the mouse left key, upon the colour we want to pick up.

After selecting it, it is sufficient to act upon the three sliders RGB, which are below the palette, in order to redefine the basic colours Red, Green and Blue.

Beside each slider there will be a display showing steadily the vale RGB which has been previously defined. In this way the ultimate regulation of the colour will be easier.

The colour selected will change hue according to the new values RGB in confirmation of the new formulations.

To make the palette's changing operation easier, there are some efficacious and useful functions which are assigned to the three buttons "Copy", "Sprd", "Exch" which are on the upper and right part of the requester.

The three functions always operate in the same way; to pick a colour up, to click the button indicating the function which has been chosen (the button of the function will be disabled) and finally to select another colour (the button of the function will

be enabled again).

"Copy" is used to copy a colour upon another in order to have, inside the palette, two identical colours but with different index.

"Exch" (abbreviation for exchange) exchanges two colours in the palette.

"Sprd" (abbreviation for spread) creates a range of different colours, i.e. it changes all the colours between the first selected one and the second one, in order to create a steady shading off.

Look Out! The palette requester uses some of the colour registers out of the screen on which it is opened.

To be exact, the registers used by the palette requester are the following ones.

Register 0 - Screen and requester background

Register 1 - Texts and knobs of the sliders

Register 2 - Sliders inside

Register 3 - Title Bar

So there could be situations in which the data shown by the requester will be nearly impossible to distinguish.

In such a case, keeping the right key of the mouse pressed, the first 4 available colours will be temporarily replaced with the default ones, when releasing it the original colours will be available again.

To quit the palette requester two buttons are necessary; "OK" and "CANCEL".

Through "OK" the changed colours are confirmed and consequently you can quit the requester.

Through "CANCEL" the requester will ignore the alterations, so the previous palette will be consequently restored.

Colour Selector

There are some applications that permit choosing a colour among all the possible ones as to carry out several purposes (for instance; the colour of the text, etc.).

To meet this kind of requirements, there is a particular Requester called "Colour Selector" (See Pic. 10).

(Pic. 10)

Just like the Palette Requester, even the Selector presents itself showing all the colors of the screen on which it is going to work, i.e. it allows the creation of a lots of coloured rectangular areas which are sensitive to the Mouse click.

To select a colour, you have only to click on the Mouse left key, choosing a colour and finally, if you want to confirm the choice, it is sufficient to press the button "OK", or obviously "CANCEL", if you don't.

When you switch on the Palette Requester, the colour, which is going to operate, can coincide with a selection previously achieved.

Even for this Requester there could be situations in which the buttons of the requester will be nearly impossible to distinguish, since, just as the Palette Requester, the colours are the same ones of the screen on which it has been opened.

To make things easier, keeping the Mouse right key pressed, the first four colours available will be temporarily replaced with the default ones, when releasing the key, the original colour will be available again.

1.5 4

4) THE EDITOR

The Editor

X-DVE's Interface has been planned in order to permit running all the objects during their several functions.

To make using easier, we have subdivided the Editor into several areas, as Picture 11 shows.

(Pic. 11)

First of all, on the window title bar is displayed your own program's version and date of issue.

The first column, left on the panel, has got the mere function to show the number corresponding to each inserted object.

It can be used as reference to the copying or cancelling operations.

The following column, on the right side, shows the object's type and name assigned by the user.

The other columns respectively show: The object starting frame, the input-effect icon, with the respective length (by Frames), the Pause Frames and finally the output-effect icon, together with the respective length (by Frames).

The slider, on the right side, permits skimming through the List of the Objects which have been inserted and the respective information.

The Editor lower part is meant for the several functions relative to the check of all the program potentialities.

Preferences

The button "Prf" in the Panel "Project" checks the program preferences, i.e. permits programming the configuration with which X-DVE will have, when starting, to initialize itself.

The possible alterations over the X-DVE's configuration concern only the Workbench closing and the Palette used by the Editor. Pressing "Prf" a window, containing some buttons, will open. (as Pic. 12 shows).

(Pic. 12)

Opening/Closing the Workbench

The "WorkBench" Checkbox permits opening or closing the Workbench screen.

By Closing the Workbench we would not waste much memory, that instead will turn out to be useful when rendering the objects. Opening the Workbench we could make use of every function of the Operating System.

X-DVE usually, for its own working, uses several screens. Therefore if you want to find out the Workbench one, you have to press simultaneously either the keys "Amiga-N" or "Amiga-M" in order to skim through the various screens till when you find the one

you have chosen.

Temporarily you can even open the Workbench in order to perform any operation (for instance calling a new program).

Look out! It is not possible to close the Workbench if some windows of the "Shell" type have been opened on it or anyway belonging to programs which do not belong to the Workbench.

In this case it is necessary to close the not-Workbench Windows and operating again with the respective checkbox.

Modifying the Editor Palette (Colours Panel)

The possibility to modify the Editor Palette is very useful, in case the colours, that have been defined by ourselves, should not be welcome or in case they should not be deemed suitable.

X-DVE's Editor Screen puts at your disposal 16 ultimate colours but only the first 8 are alterable (the others are meant for the program only).

The button "Edit" permits regulating, through the Palette Requester, the colours you are doing to use on the V-DVE's Editor, whereas "Load" permits you to load, by means of the File Requester, a previously defined Palette picking it up from a file of the

IFF-ILBM type.

Quitting Preferences

The defined alterations to Preferences can be temporary or final.

If after, modifying Preferences, the button "OK" is clicked, the program will assume a new configuration, though it will not be stored.

On the contrary, if the button "Save" is clicked, the Preferences will be saved on disk, in this way they can be loaded everytime X-DVE is activated.

Technical Reference: The File Configuration is called X-DVE.prf" and you can find it in the Program's same drawer.

Starting up a new Project

It is necessary, to start a new project up, to open a screen where you should render the objects and have the working play developed.

As previously stated, the selection concerning the working screen and the respective Palette should be done thoroughly, in order to get the best out of the video quality, the processing speed and the Animation size.

The Button "New"

The Button "New" permits checking the working Screen Resolution and the cancelling of the current Scripts.

It should be used every time you are going to begin a new project, since X-DVE does not allow any Editing Operation on the Script in case the working Screen should not be previously created.

If the Script had not been stored, clicking on "New", the screen Requester would show itself, through which you could select modes and number of colours concerning the screen on which you want to perform Animations.

If, instead, the button is being clicked when a script has been already saved, X-DVE will permit changing the working screen resolution or deleting the Script.

It is very important for you to see that X-DVE permits the user to define the working screen even during the Script drawing up in order to make the choice (about what kind of Rendering Resolution you want to choose) easier.

If, for instance, we had already defined and rendered a script using the Resolution 640*512*16 colours, we could increase the number of colours on the working screen in order to get better results in a following Rendering.

This should permit getting several versions of the same Animation: a few colours as concerns not AGA Machines and a lots of for speeder and more powerful Computers (and all without touching the Script).

N.B. If you have the intention to change the working screen resolution, X-DVE keeps, if possible, the previous Palette.

It is obvious that if the number of colours of the new screen are less than the ones belonging to the previous screen, the palette will be incomplete.

The Screen Requester

Such a Requester is really very simple to run.

The possible Resolutions have been predefined by X-DVE, and you can see them left on the Requester, marked by circular buttons (Mutually Exclusive).

(Pic 13)

Right on the requester the horizontal and vertical dimensions (by pixel) of the selected working screen are displayed, whereas in the lower part on the left side, the checkbox "Overscan" permits forcing or not the screen's Overscan (an Overscan screen ca

be useful when you want to genlock the animation with a video signal, without using manifest borders, which are annoying and not much professional).

The slider "Colours" is used for choosing the maximum number of simultaneous colours operating on the working screen.

After defining the working resolution, clicking on "OK" the setting of the screen will be confirmed, whereas clicking on "Cancel" the operation is going to be nullified an everything will keep on being as ever.

Look Out! X-DVE cannot change the working screen if an animation is already in memory.

In such a case, X-DVE asks you for a confirmation before cancelling the Animation and then, it will open the new screen.

Colours

When the Working Screen has been crated, X-DVE assigns to it a Default Palette of its own.

This Palette is taken from the Workbench Screen or anyway it has not been assigned thoroughly. Therefore its own alteration will turn out to be very likely in order to allow a better Animation Rendering.

The panel "Palette" of the Editor consists of two buttons to which the usual functions have been assigned. Through the two buttons it is possible to modify the Working screen's Palette.

The button "Edit" permits modifying the Palette out of any graphic file of the "IFF" type (included Anim/Animbrush), making possible the use of either outer files or of images that have been used in the Script (in this way you can avoid calculating the c

lours again).

Inside the drawer "Palette" there are some files containing the recommended Palettes (Recommended by virtue of the number of colours of the Rendering Screen).

Each file has been named in order to make you understand at once what kind of screen it is referring to, in fact the first three figures of the name indicate the number of colours contained inside the file (for example: "008col.palette" is the recommende

Palette for a working screen made up of eight colours).

The Working Screen's Palette can be changed at any time, not only at the beginning of a new project, but even during Editing that very project.

Besides, modifying the Working Screen's Palette, even the Palette of the Animation will be changed, in this way you can correct the hues of the titles without having to render the whole script again.

1.6 5

5) THE OBJECTS

Objects

Every Script is made up of one object or more, each of them has got life and peculiarities of its own.

X-DVE presently recognizes three kinds of objects: Texts, Brush, Animbrush.

The object "Text" represents a typically typographic writing.

It is suitable to title Animations in a very fast and flexible way.

The object "Brush" represents a static image and it permits inserting into the Animation drawings, graphics, digitalizations etc..

The object Animbrush represents a sequence of frames and it is useful for "building" Animations made up of animated objects in order to get astonishing results.

Inserting-Modifying-Deleting an Object

After setting the rendering screen, X-DVE is ready for the objects' editing operations.

On starting up a program, the Object List is altogether empty.

It is sensitive to the Mouse click, and it is just through Mouse that you can select the object or where it has to be inserted (column "Object").

The button "Add" is to be used for the creation and the introduction of an object, whose type is specified through the cyclical button which is inside the panel "Object".

Pressing the button "Add" a requester will present itself, through which you will have to specify some information which are necessary in order to define the object (How the Requester works (as concerns the various kinds of objects,) is explained in the

ollowing paragraphs).

At the end of the introduction, the name of the object will make its apparition into the list.

To modify an object you can act in the same way; selecting it (the Object) through Mouse and then either clicking on "Mod" or achieving a double click on the very object.

To cancel one object or more, you have only to select the first one an then clicking "Del".

In this way a requester will appear into which it is possible to insert the opening and final identifier numbers about the objects you want to cancel (the Requester has already been arranged in order to cancel the current object only) (see Pic. 14)

(Pic. 14)

Object "Text"

This kind of object can be used whenever you think to insert a text into the Animation necessary.

The Object "Text" is, for X-DVE, a sequence of typographic characters among which there are Font and Style.

It is obvious that the possibility, offered by X-DVE, to create texts, turns out to be very useful and it permits you not to resort to external graphic programs in order to create brushes containing writings, since this is a very intricate operation and

inally it is not within everyone’s reach.

Besides, each text can be personalized. This is possible by choosing Font, Style (underline, bold, italic), Border, Background and main Colours.

X-DVE supports Amiga normal Fonts, ColorFont (Kara Computer Graphics’ famous Fonts) and the Agfa CompuGraphic fonts (vectorial Fonts).

On creating the Object "Text", X-DVE permits performing writings much wider than the working screen, so it makes the carrying out of horizontal scrolls possible, in a very simple way.

Adding an Object "Text"

After selecting "Text" among the several Object typologies, by clicking the button "Add", the Requester, as (Pic. 15) shows, will present itself.

(Pic. 15)

As it is possible to see, the requester is very intuitive, and to use it will turn out to be very simple.

First of all it is necessary to write into the field "Text", the text you want to create, this should be done within the limit of 80 characters.

Now, through the button "Font" you can choose the kind of character and size. This is made possible by selecting it out of the system Font-Requester that will appear on clicking.

The Font-Requester will display the selected font at once in order to make the choice easier.

We usually recommend to be careful about the fact that, if the dimension required is not present, Amiga will rescale a Font at once.

Anyway this very useful peculiarity cold be the cause of some problems which are unpleasant to look at, since it is likely that the rescaled fonts to be squared up owing to the very fast (and not thorough) scalature procedures of the Operating System.

On choosing the font, the Requester will display its name and the vertical dimension (by point).

Now, through the checkboxes, which are below the button "Font", you can select the various styles (underline, bold, italic).

As we have previously mentioned, it is possible to have the text bordered and the background coloured.

These styles are runned by the checkboxes "Outline" and "BackGnd" (Background).

To regulate the outline size (by pixel), it is sufficient to act on the slider relative to "Outline" (X-DVE runs borders from 1 to 9 points).

Inside the Requester you can see some coloured buttons.

They are used for choosing the text main colours, namely of the body, of the border and finally of the background.

By clicking one of these buttons, the selector, containing the Working Screen’s complete Palette, will appear, by which you can choose the hue you want to.

To get a quick showing of the Animation, it is sufficient to click "Show" and to wait for the object rendering, then if you want to come back to the Requester, you have only to click on the Mouse left key.

ColorFont

ColorFonts have a very particular structure and need, compared to the normal Fonts, a slightly different way to be run, since the former has got a Palette of its own.

For this reason when you choose the various colours of the text, the Palette displayed by the selector will not exactly match with the one belonging to the rendering screen, but it will be mixed with the one belonging to ColorFont.

To be precise, the first colours of the object text's Palette (just alike to the working one) will be replaced with the ColorFont's colours.

Colours Remapping

In case the selected Font, meant for the text, should be of the ColorFont type, X-DVE enables the checkbox "Remap". In this way it indicates that the object's Palette is different from the one belonging to the rendering screen.

For this reason it is often necessary the text's colours to be computed again in order to make them match the ones selected for the rendering screen.

Selecting the checkbox corresponding to Remap, it is possible to make X-DVE compute automatically the colours, when this is necessary.

The Remap quality depends very much on the assonance (Lett.) between the text's Palette and the one belonging to the working screen and finally on the latter's number of colours.

It is obvious that, to try to remap a text, which is made up of 256 colours over a working Palette made up of 4 colours, will not grant you great results.

The remapping system is basically simple: for each colour of the text, X-DVE will look for, into the working Palette, the colour which is optically closest to it.

Therefore to get the best results, it is necessary to create the Working palette in order to make it contain the most common and most used hues.

With reference to what has been above mentioned, we have inserted, into the working screen, the Palettes we deem to be the most worthwhile.

N:B: When "Remap" is active, some working phases could require a bit more of time to be performed (object loading-initialization, modifying frames-effects).

Masking and Transparencies

Whenever we want to use a text and when we want to make it pass through the background, we have to deal with transparencies (Mask).

If, for instance, we had to achieve the Animation of the writing "CIAO" over any background, we need all the points, which are not part of the text, to be transparent, in order to let the image below pass through.

Selecting the checkbox "Mask" (usually previously selected), we can get the object to be considered transparent, i.e. we can trace it in such a way as to let the image on the background pass through.

X-DVE is able to discern the object's transparent parts, as they are traced using the colour Register 0 (as concerns the programs meant for pictorial drawings, thanks to default the working screen is always cleared by means of the colour 0, namely black)

If "Mask" is not enabled, the object is traced as it is, so that it will completely cover the rectangular area on which it has been drawn.

How to assign the name to an Object

The Field "Object Name" is used for containing the identification name about the inserted/modified object.

This peculiarity turns out to be very useful when, skimming through the object list, we want to identify one object in particular.

If the Field is empty, X-DVE will complete it assigning to the object a name which recalls the text from which the object comes.

If, for instance, we want to create the text "Tuscany District", the name, assigned by X-DVE, will be "Text: Tuscany Distr."

Quitting the Requester

When you have created the text, by clicking the button "OK" the modifying/inserting operations will be confirmed, and the object list will be consequently up-dated.

If, instead, you click either the closing button (in the upper part on the left side) or "Cancel", the operation will be deleted and the object list will remain as it was before.

In this way it is possible to achieve all the tests you want, without changing the object list.

Object Brush

This kind of object should be used whenever you want to insert an image into the Animation.

The name "Brush" is commonly used to indicate an Image, a Logo, a drawing traced either by means of programs of pictorial graphics or by equipment like scanner digitizers.

The Brush is usually stored on disk in the form of file IFF-ILBM (which is the Amiga's standard data storing supported by X-DVE).

X-DVE easily runs this object in order to permit the tracing of titles using marks, logos and any kind of images.

The only limit is that, at present, X-DVE cannot support Brush with more than 256 simultaneous colours or using resolutions of the HAM or EHB type (as we have previously stated).

How to add an Object Brush

Clicking the button "Add", after selecting "Brush" among all the objects typologies, the Requester (as Pic. 16 shows) will present itself.

(Pic. 16)

If you want to choose a Brush you have to click the button "Select".

This button permits X-DVE to open a file-Requester, out of which you can select the name of the Brush you want to load.

If the selected file is not of the IFF-ILBM type, X-DVE will warn you of the mistake, so that the user can understand that the loading operation in not successful.

If the selected file is correct, all the information concerning the file will be displayed, namely the name, the dimension (Size?), the number of colours of the Brush (for instance X:640 Y:512 C:1 means that the Brush is by 640 points horizontally placed

by 512 points vertically placed and is made up of 16 simultaneous colours).

Clicking the button "Show", it is possible to show the Brush selected, so that you can check at once if the image is the right one.

Colours Remapping

The Brushes' Palette and resolution are independent from the working screen, and it is not likely the brush to have the very same colours (unless, through the button "Load" in the panel "Palette" of the Editor, the colours of the Brush have been loaded i

to the rendering screen).

For this reason it is often necessary the colours of the Brush to be computed again in order to make them match the ones selected for the rendering.

Selecting the checkbox concerning the Remap, it is possible to make X-DVE compute the colours automatically.

The remap quality depends very much on the assonance between the Palette of the Brush and the one belonging to the working screen and on the latter's number of simultaneous colours.

It is obvious that, to remap a brush made up of 256 colours over a working Palette made up of 4 colours, would not grant you great results.

The remapping system is basically simple: for each colour of the text, X-DVE will look for, into the working Palette, the colour which is optically closest to it.

Therefore, to get the best results, you should create the working Palette so that it can at least contain the most common and most used hues.

With reference to what has just been said, we have inserted into the working screen the Palettes we deem to be the most worth-while.

N:B: When Remap is activated, some working phases could take a bit more of time to be performed (Object loading-initialization, modifying frames-effects).

Masking and Transparencies

Whenever you want to use a logo or a mark or a drawing and then you want to make them pass through the background, you have to deal with transparencies.

If, for instance, we had to achieve the Animation of a magnifying glass, we need the glass part to let the image below pass through, and that only the handle and the ring, holding up the glass, could be traced.

Selecting the checkbox "Mask", we can arrange the object to be considered transparent, i.e. we can trace it in such a way as to let the image on the background pass through.

X-DVE is able to discern the object's transparent part, since they are traced (or should be traced) using the colour Register 0 (as concerns the programs meant for pictorial drawings, thanks to default, the working screen is always cleared by means of th

colour 0, namely black).

If "Mask" is not enabled, the object is traced as it is, so that it will completely cover the rectangular area on which it has been drawn. This opportunity will turn to to be useful when you wish to trace digitized images, backgrounds, weavings etc.

How to assign the name to an Object

The Field "Object Name" is used for containing the identification name concerning the object inserted/modified.

This peculiarity turns out to be very useful when, skimming through the object list, we want to identify one object in particular.

If the field is empty, X-DVE will complete it assigning to the object a name which recalls the file from which the object comes.

If for instance we are going to load the Brush "DH1:Images/Home.iff", the name, assigned by X-DVE will be "Brush:home.iff".

Quitting the Requester

When you have selected the Brush, by clicking the button "OK", the modifying/Inserting operations will be confirmed and the object list will be consequently up-dated.

If, instead, you click the closing button (in the upper part on the left side) or "Cancel", the operation will be deleted and the object list will remain unchanged.

In this way you can make any loading tests, in order to look for an image without quitting X-DVE and without changing the object list.

Object AnimBrush

This kind of object should be used whenever you think an animated image into the script necessary.

The name "AnimBrush", in fact, is commonly used in order to indicate a sequence of images of the Brush type.

A walking man, a rebounding ball, a pendulum clock, these are all classical examples of "AnimBrush".

The "AnimBrush" is usually stored on disk in the form of file

IFF-ANBR (which is the Amiga's standard data storing supported by -DVE).

We want to point out the fact that you should not confuse the format "AnimBrush" with the Anim one, even if apparently they are both used in order to store Animations, since the former does not intrinsically allow the double-buffering.

X-DVE can perform any effect "AnimBrush" in such a way as to offer astonishing results.

The only limit is that, at present, X-DVE cannot support AnimBrush with more than 256 simultaneous colours or with resolution of the HAM or EHB type (as we have previously stated).

How to add an Object AnimBrush

Clicking the button "Add", after selecting "AnimBrush" among all the object typologies, the Requester (as Pic. 19 shows) will present itself.

(Pic. 17)

If you want to choose AnimBrush, you have only to click the button "Select".

This button permits X-DVE to open a file requester, out of which you can select the AnimBrush name you want to load.

If the file requester is not of the IFF-ANBR, X-DVE will warn you of the mistake, so that the user can understand that the loading operation is not successful.

If the selected file is correct, the information concerning the file will be displayed; namely the name, the size, the number of colours of the AnimBrush (for instance X:640 Y:512 C:16 means that the Animbrush is by 640 points horizontally placed, by 512

points vertically placed and is made up of 16 simultaneous colours).

On the same line, beside "Frames", you can see the number of Frames of the AnimBrush.

Clicking the button "Show", it is possible to have the selected AnimBrush displayed, so that you can check at once if the Animation is the right one.

Speed of AnimBrush

X-DVE permits regulating exactly the AnimBrush's execution speed.

Let's suppose, for instance, to trace the Animation of a Pendulum Clock using 10 frames.

Using such an AnimBrush into a X-DVE sequence, without the suitable settings, the execution would be very fast. It would get the pendulum achieved 5 complete movements each second (X-DVE's play speed is typically of 50 frames/s).

Now the parameter "Skip" comes into play.

It permits you to define the number of Frames you want to skip, before passing to the next AnimBrush image.

In our case, defining a skip of 5 steps, the Pendulum oscillation would turn out to be perfectly synchronized.

N:B: The parameter "Skip" has been necessarily introduced from lack, in the format ANBR, of information as concerns the play speed.

Colours Remapping

The AnimBrush's Palette and Resolution are independent from the Rendering screen, besides it is not very likely the AnimBrush to have the very same colours (unless, through the button "Load" in the panel "Palette" of the Editor, the Animbrush colours hav

been loaded into the Rendering screen).

For this reason it is often necessary the colurs of the AnimBrush to be computed again, in order to make them match the ones selected for the rendering.

Selecting the Checkbox concerning the Remap, it is possible to make X-DVE compute automatically the colours.

The Remap quality depends very much on the assonance between the AnimBrush Palette and the one belonging to the working screen and on the latter's number of simultaneous colours.

It is obvious that to Remap an AnimBrush, made up of 256 colours, over working Palette, made up of 4 colours, will not grant you great results.

The remapping System is basically simple: for each AnimBrush colour and for each frame, X-DVE will look for, into the working Palette, the colour which is optically closest to it.

Therefore, to get the best results, you should create the working Palette so that it can contain, at least, the most common and most used hues.

With reference to what has just been said, we have inserted into the working screen the Palettes we deem to be the most worth-while.

N.B. When Remap is active, some working phases can take a bit more of time to be performed (Object loading/Initialization, modifying frames -effects).

Masking and Transparencies

Whenever you want to use o logo or a mark or an animated drawing and then you want to make them pass through the background, you have to deal with transparencies.

If, for instance we had to achieve the Animation of a magnifying glass, we need the glass to let the image below to pass through, and that only the handle and the ring (which hold up the glass) were traced.

Selecting the Checkbox "Mask" we can arrange the object to be considered transparent, i.e. we can trace it in such a way as to let the image on the background pass through.

X-DVE is able to discern the object's transparent parts, since they are traced (or at least they should be traced) using the colour Register 0 (as concerns the programs meant for pictorial drawings, thanks to default, the working screen is always cleared

by means of the colour 0 , namely black).

If "Mask" is not enabled, the object is traced as it is ,so that it will completely cover the rectangular area on which it has been drawn. This opportunity will turn out to be very useful when you wish to trace digitized images, backgrounds, weavings etc

).

How to assign the Name to an Object

The field "Object Name" is used for containing the identification name concerning the Object Inserted/modified.

This peculiarity turns out to be useful when skimming through the Object List, we want to identify one object in particular.

If the field is empty, X-DVE will assign a name to the Object which recalls the file from which the Object comes.

If, for instance, we are going to load the AnimBrush "DH1:AnimBrush/Ball.anbr", the name assigned by X-DVE will be "AnBrusg:Ball.anbr".

Quitting the Requester

When you have selected the AnimnBrush, by clicking the Button "OK", the modifying/Inserting operation will be confirmed, and the Object List will be consequently up-dated.

If, instead, you click the closing button (in the upper part on the left) or "Cancel", the operation will be deleted and the Object List will remain unchanged.

In this way you can make any loading test in order to look for an AnimBrush without quitting X-DVE and without changing the Object List.

1.7 6

6) THE EFFECTS

Life of an Object

X-DVE is a program whose aim is the objects' Animation and Titling. It is based on Frames and this is the reason for which the performance timing of each Object is described by frames.

Such a method permits accuracy of timing equal to 1/50 per second over PAL systems (we want to remind you that the PAL Video Frequency is 50 Hz), as to offer perfect syncs.

X-DVE uses, for the various objects presentation, a rather common method, which is also used by almost all Amiga Titling Programs.

The method consists of "describing" The "life" of each object in order to permit it to achieve the sequence Input-Pause-Output.

Both in Input and in Output, the object can have DVE effect with programmable length, such an effect has to be chosen among the ones that the program puts at your disposal.

X-DVE obviously permits regulating the object's pause point thoroughly, and, as concerns the 3d effect, it permits regulating even the input and output points by three-dimensional coordinates (X,Y,Z).

The tracing of movements, timings and effects is entrusted to the Requester "Object Setup".

This is activated by clicking the column right on the Editor, obviously corresponding to the Object you are interested in.

Object Settings

This Requester covers several functions and it has a fundamental role as concerns the Object's Movements and Effects.

It is subdivided into two main parts: The first one is marked with the wording "Frames" and it permits defining the Object's setting and Timings, whereas the second one, (on the right), is subdivided into three areas and it permits defining the Input Out

ut effects and the Object's pause point as well (see Pic 18)

(Pic 18)

Each time this Requester is being loaded, X-DVE creates or loads the selected Object, and if necessary it Remaps its colours.

For this reason, the Requester could take a bit more of time to put the defining on any setting at your disposal.

Setting up the Frames

In the Unit corresponding to "Frames", you can find the digital fields into which you have to insert the information.

The first Field "Start:" (beginning) corresponds to the number of Frames concerning the Object's beginning Animation.

If you are going, for instance, to input "50", X-DVE will render the Object starting from the 50(th) frame.

This means that the Object will begin its own performances a second after the play of the Animation is started off.

In this way it is possible to create sequences into which the Objects enter independently, avoiding the classical sequentiality which is a peculiarity of a lots of Titling Software.

The second Field "In:" corresponds to the number of Frames concerning the length of the input effect.

The third Field "Pause" (Pause) corresponds to the number of Frames during which the Object keeps still, since it is on its pause point.

Likewise, the fourth Field "Out:" corresponds to the number of Frames concerning the length of the output effect.

During the Frames setting up, it is always possible, both by frames and by seconds, to verify the ultimate length of the Object movement, this is possible thanks to the display visible into the panel "Frames".

Setting the Pause Point

This function, linked to the button "Pause", permits setting the pause position, i.e. the point in which the object will have to be displayed during its pause time.

The button "Pause" is followed by two fields "X" and "Y" which are the coordinates, by pixel, of the object's upper and left corner.

These fields can be set either through keyboard or automatically through the button "Pause".

Clicking the button, the rendering screen will be shown together with the dashed borders of the other possible objects making up the script, so that you can check alignment and position in a better way.

All the objects are discernible trough name, which is displayed inside their outline.

To make alignment still easier, X-DVE will only display the Objects which are on pause position simultaneously with the current Object.

To proceed with the alignment is very simple; it is sufficient to move the Mouse keeping the left key pressed.

The object position will be steadily displayed, by means of coordinates X Y, in the upper part of the rendering screen.

When the alignment is over, pressing the key "ESC" (in the upper part , left on the keyboard), you can come back to the Requester. Now the Fields XY have been defined.

During the alignment it is possible to centre automatically the Object, vertically (Key "Y") and horizontally (Key "X").

Effects

X-DVE, as we have previously stated, puts three different kinds of effects at your disposal.

The first category "3D" is made up of three-dimensional movements, and it permits tracing the objects in perspective, together with rotations over all the three axes.

The second category "Slide" is subdivided into 24 different curtain effects, which are a peculiarity of the most known titling software.

The third category "Wind" is subdivided into countless kinds of different effects. It works on a mathematical base, for this reason it has no limit as concerns the possible combinations.

"Winds" are represented by the "usual" crumbling effects, which are a classical peculiarity of the DVE devices (it is called Wind just owing to the visual effect which is comparable to the Wind blowing over a heap of small squares of paper).

How to select an Effect

In the column relative to the DVE effects (the pause same one) there are two panels marked with "DVE In" and (DVE Out".

They work in the same way, therefore the explanation will be only one for both.

First of all we have to say that the panel "DVE" is made up of three button: "SET", "COPY", "PASTE", and of a button representing, at first, a black square, at which side there is a display showing the mnemonic name of the effect you have selected.

The first thing to do, in order to select an effect, is to push the button "SET", so that you can choose the typology out of the requester. (as Pic. 19 shows)

(Pic. 19)

AT present the choice possibilities are 4: 3D, Slide, Wind and empty or blank (this is an effect graphically represented by a black square).

The effect "Empty" permits the Object to be ignored during the rendering of the phase in which it has been selected, so that X-DVE will pass on to the next stage.

As soon as the effect type has been chosen, a requester will appear (one for each typology) in such a way as to permit setting the effect parameters.

After defining the parameters, the effect's icon, and the name assigned to it, will appear into the setup requester in order to confirm the selection.

The effect's icon is, as a matter of fact, a button through which you can pass directly into the requester Parameters, without having to achieve the selection again (which is anyway possible through "SET".

The buttons "Copy" and "Paste" will turn out to be very useful if you want the defined effects to work elastically.

If, for instance, we wanted to use the Input effect even for the object Output, we have only to define the effect and then clicking "Copy" in "DVE In" and finally clicking "Paste" in the panel "DVE Out".

This process easily works even among several objects, since "Copy" permanently stores the effect you have chosen.

The Requester 3D

The Requester 3D is vertically subdivided into two main parts.

The first one, on the left side, contains a list ("Effects") made up of names indicating the available effects, this part is sensitive to the mouse click.

The second one, on the right side, contains a button "Pos" and a succession of numerical fields into which you should define the several parameters of the 3D effect (as Pic. 20 shows)

(Pic. 20)

When one of the effect is clicked, X-DVE automaically fills up the parameters according to what has been chosen.

In this way X-DVE computes values on the ground of the object size and of the Pause Point.

Therefore the effect list makes the defining of the various fields easier.

The names of the effects have been chosen in such a way as to render at once what kind of performance has been assigned to them.

They are made up of key words which have the following meanings:

USER-Values have been defined by hand

LEFT-The object has been placed left on the Pause Point (outside the screen)

RIGHT-The object has been placed right on the Pause Point

(outside the screen)

CENTER-The object has been placed in the middle of the screen

UP-The object has been placed in the upper part of the Pause Point (outside the screen)

DOWN-The object has been placed in the lower part of the Pause Point (outside the screen)

ZOOM-The object has been placed deeper than the Pause Point

ROT(X-Y-z)-The object wheels round for one time on its axis (X-Y-Z)

Therefore if the effect "Up-Right" is selected, the object will be automatically placed in the upper part on the right outside the screen.

Look out! If the object is changed, even the Input and Output and Pause Point coordinates will have to be changed in such a way as to make them assume the ones belonging to the new dimensions.

You should always remember that the computing of the parameters and coordinates of the 3D effect, is achieved only when clicking the list into the 3D requester and not during the rendering.

The fields, right on the Requester, respectively correspond to:

Coordinate X,Y.Z ("X:","Y:","Z:") and number of rotations X,Y,Z ("NumRotX:","NumRotY:","NumRotZ:").

The coordinates X,Y can assume values from -32000 to +32000, whereas Z can range from -32000 (deep) to 0 (at the same level of the Pause Point, till to +450 (very close).

The numerical fields, concerning the rotations, work in a particular way, since they do not represent an angular quantity (as instead you could think) but the number of rotations over the axis you have selected.

This means that, if you are going to input 2 into the field "NumRotZ:", the object will achieve two complete anticlockwise rotations (720 degrees) on its own axis Z (if you are going to define a negative number, then the rotation will be achieved in a cl

ckwise way).

The object’s coordinates can even be defined through mouse, following a method very similar to the one we have examined concerning the Pause Point setting.

Clicking "Pos", X-DVE will present you the rendering screen, on which the (dashed) object and the object in Input and Output will be displayed (DVE In or DVE Out).

You can, as usual, move the object through X and Y, this is possible by keeping the mouse left key pressed.

If instead you keep ,the right key pressed and move the mouse, you can define the object depth (Z).

The current coordinates are always displayed in the upper part of the panel, and even in this case they correspond to the upper and left part of the object.

Pressing the key "ESC" (on the keyboard) the object new coordinates will be confirmed and so X-DVE will display again the 3D Requester.

The 3D effect usually requires, during the Animation rendering, a lots of mathematical calculations.

For this reason the 3D effect is slower, as concerns the animation rendering, even if it is, likely, the most used.

Anyway X-DVE is so developed as not to require the use of routines in order to perform the calculations of an object in perspective (when it is supported on the level of pause (Z=0) and when there are no rotations).

In this case, the tracing of the 3D effect is very fast and it permits getting astonishing results, as, for instance, horizontal and vertical scrolls, objects coming from (or going to) any directions etc..

Finally, the 3d requester contains a checkbox called "Ramp" that, if enabled, makes the object movement faster (DVE Out) or slower (DVE In), all this smoothly and automatically, giving to titling that touch of professional competence which is never enoug

.

The requester Slide

The Requester Slide is very simple.

It displays 24 different icons which are ranged on 3 lines. Each of these icons symbolize a different effect (as Picture 21 shows)

(Pic. 21)

Through Mouse it is possible to select the effect you want, whose name will be displayed inside the Requester "Effect name".

As concerns the several available effects, they range from curtains (coming from each side with or without sliding), to the several compression effects; crossing, shutters till to the various unrollings.

Even the requester slide contains a checkbox called "Ramp" that, if enabled, permits the effect to be performed in a faster way (DVE Out) or in a slower way (DVE In), all this smoothly and automatically, giving to titling that touch of professional compe

ence which is never enough.

The Effects Rendering Speed is very high, this is true even for those effects which are more elaborate, so we recommend using such effects on any kind of computer.

The Requester Wind

The effects "Wind" work on a mathematical base, and even if they could turn to to be more elaborate, conceptually speaking, than the others, they are very easy to use thanks to the Requester's particular structure.

Each effect is mainly grounded on a mathematical base (or on the combinations of more), and finally on some alterable parameters.

X-DVE already contains the mathematical bases (they are six and are not alterable). These have been studied by the programmers in order to get a set of different Effects out of each of them.

Each base can be checked by means of the above mentioned parameters, which are inside the Requester (panel "Parameters"), so that you can modify their conduct (as Picture 22 shows).

(Pic. 22)

Even if it is impossible to give them a mathematical meaning, it is, at least, possible to give them a logical one, that could be intelligible for everybody.

Each parameter is represented by a number with floating point, so that you can input positive and negative decimal numbers.

Parameter Sx:

It consists in a multiplication coefficient that permits contracting or expanding the effect size.

Parameter Px:

Bases 1,2,3,4 - It consists in a multiplication coefficient which acts on the period of a sinusoidal function over the axis X.

Base 5,6 - It consists in a multiplication coefficient which acts on an inside parameter connected with calculations over the axis X of the function.

Parameter Py:

Bases 1,2,3,4 - It consists in a multiplication coefficient which acts on the period of a sinusoidal function over the axis Y.

Bases 5,6 - It consists in am multiplication coefficient which acts on an inside parameter connected with calculations over the axis Y of the function.

As concerns each effect, it is even possible to define the centre, around which the function will be calculated, thanks to the buttons "Center".

These buttons indicating, by means of a shining point, the object centre, permit getting different results out of the same effect, without modifying any parameters.

In this way it is possible, for example, to select the point in which the effect sphere is calculated in order to get fountains or unrolling of sheets.

The last possible setting out over the effects "Wind" is relative to the block size during the rendering.

The effect "Wind" is, in fact, rendered by X-DVE through a set of rectangular blocks. These are proportional to the object size on which the effect has been applied.

In case the effect "Wind" should be Input, the object will be made up of these objects which begin their movements small sized and then they grow up till when they are perfectly linked.

In case the effect "Wind" should be Output, the object will be resolved into blocks which begin their movement normal sized, and then they get smaller till when they completely fade away.

The panel "Blocks" contains three buttons "Fine", "Medium", "Large".

Through these buttons you can select the block size into which the object will have to be resolved.

Choosing "Fine", the blocks will be very small, therefore the object is going to be resolved into a lots of parts.

Choosing "Medium" the blocks will be middle sized, whereas through "Large" the blocks will be very few but quite large.

The Rendering Rate is proportional to the number of blocks, though usually the tracing speed is very high.

To permit an easy access to the "Wind", X-DVE already includes a set of effects which have been previously defined and are ready to be used.

The panel "Effects" contains a list of names which represent the various effects available and which can be selected by means of the mouse.

Whenever you click the name of an effect, the fields relative to parameters are filled up, the centre and the block size are set and finally the number of mathematical base you are going to use is shown into the display "Fx".

The effects, we are going to offer, are really numerous and they range from the classical flags (several models) to any kind of explosion, till whirls, spheres, fountains and so on.

Some of them have fanciful names, since it is difficult to give verbal explanation to their evolutions or to what they represent.

It is actually sufficient to modify a parameter or to increase a value in order to get something new.

For this reason we want to recommend the trial-and-error to get the most satisfying outputs.

The adjustments to the various parameters should be made following a certain rule, avoiding, for instance, to input too high values, since inside the Preset "Effects" you usually find very low ones.

It is a good rule to test the effects, you should start from one that has been previously set and then you could modify one parameter at a time, even doubling its value or halving it, finally the results can be shown by means of a Preview.

We recommend not cramming the Video with little squares, since they have contraindication and even side effects.

First of all they are not much suitable in order to perform a "reliable" Titiling and then they turn out to be very muddling, and surely they are not much extraordinary.

Besides they usually cover, to a great extent, the Video with little lively rectangles which are very difficult to compress (when the frame complexity grows up the ensuing compression is very low and the Animation takes a long time to be performed).

This means that the Animation fluency will remarkably suffer from it, causing jerks even if you are using a rather powerful equipment.

The most welcome effects are those which keep the object as close as possible or anyway well in sight, though there could be evolutions or "Crumplings".

Testing the Effects

Inside the Requester "Object Setup" you can find the button "Preview". This button is used for checking the object evolutions before the rendering, obviously this is possible after setting the effects and frames.

During the preview, the Mouse buttons have two different functions: If you keep the left one pressed, the frames tracing is suspended, instead by pushing the right one you can quit the test, coming back to the Requester.

Inside the preview, the several kinds of effects are represented in different ways.

If you get the preview of an object with 3D effect performed, only the outer border will be displayed (by wire frame).

As concerns the preview of an effect "Slide", the object is traced altogether (as if we were dealing with a rendering), whereas as concerns the effects Wind, only monochrome little rectangles are traced, this is so in order to permit the tracing to be sh

wn at its best.

During the Pause, just like the effects "Slide", the object is traced altogether so it is possible to check the quality of a possible Remap.

The tracing of the Pause Point takes into consideration even the possible mode "Light", therefore it is easy to control the setting correctness as concerns lighting (During these modes it is not possible to interrupt the tracing).

N.B. As concerns the objects of the AnimBrushn type, you should remember that during the preview, only the first frame (of the object) is traced and likely remapped, this is so in order to optimize the tracing speed.

Frames Setting/graphic Display

The frame’s setting method (which has been previously described) permits checking the various object timings in a very prompt but not much intuitive way, making the drawing up of a script (made up of several objects) quite slow.

For this reason we have supplied X-DVE with an alternative system which makes the timings setting faster.

This system is grounded on the graphic representation of the Input - Pause - Output frames length as concerns every object. Besides it permits displaying and modifying the timings in a very fast and successful way.

Clicking the Chronometer-shaped Icon, which is inside the Editor of the panel "Script", the requester Display/Setting will present itself. (picture 23)

(Pic. 23)

It is made up of two main parts, the first one is used for the display of the objects’s name list and the second one for the graphic representation of the timings (to the scale of 1 horizontal pixel for each frame).

Inside the Requester you can see two sliders, which are respectively used for skimming through the object list and the relative graph.

As you can see , the object’s various evolutions phases have been traced using several colours that have been represented even in the Requester lower part.

This implies a better display clearness and besides it permits picking out properly the several stages as concerns the object evolutions.

Thanks to the simultaneous display of 10 objects, to programme the timing becomes very easy and it will not be difficult to trace very elaborate scripts.

The object list is sensitive to the Mouse click and it permits the frames’ numerical display/setting, by means of the relative Requester "Display/Setup frames" (Pic. 24)

(Pic. 24)

The fields of the Requester have been defined using the object original timings though they can be changed at any time.

If the new timings are confirmed (Through the button "OK") the graph will be automatically updated and everything will be ready for new settings.

Objects Lighting

X-DVE has got a peculiarity which makes it unique in comparison with the common titling software: the Objects Lighting

Even if this peculiarity cannot (and must not) be compared with what you could find into the elaborate Ray-Tracing and 3D Graphics programs, anyway it permits X-DVE and its users to be a cut above.

X-DVE allows shining upon its own objects by means of a spherical source of light (comparable to a sun) which is adjustable as concerns Hues and Power.

Therefore you can accomplish astonishing titlings.

Each object can be set as to make, during the animation tracing, consider or not the source of light.

The tracing systems derive from the classical Ray-Tracing methods, besides each object is traced using a random dithering in order to achieve a better likeness of colours to the reality (the points are calculated by 16 million of colours and then "Lowere

" in order to permit displaying them over the standard graphic chips).

the X-DVE’s tracing system is programmed to consider only the object colours. It does not take in any consideration the shadows, the material, the presence of other objects and the possible reflection of light.

How to use the Light Source

Inside the Requester "Object Setup", you can find the checkbox "Light" that, if enabled, makes X-DVE consider the source of light even during the object rendering.

Therefore each object can be lighted or not, this means that you could mix during the animation lighted objects with normal ones.

The rendering of a lighted object requires a lots of calcutations, and all the effects consider the source of light (not only the 3D one, as you could believe) and this makes things more difficult.

For this reason, the object rendering speed can take a bit more of time , so take care to plan in advance the use of such a peculiarity.

The rendering of an object following the mode "Light" requires the use of working screens which can have at their own disposal the right number of colours and a proper palette, since this is necessary in order to perform shades as satisfactorily as possi

le.

It is actually unuseful to render Animations using only 4 colours, since they (the colours) would not be sufficient to make the tracing quality decorous.

A sound method to get nice results could be the following one:

To create, inside the Palette, at least 5 shades (though the more they are, the better it is) tending towards black, this for each basic hue used by the objects (for instance red, yellow, white).

A palette made up of 32 colours could create at least 6 different shades and, thanks to the random dithering, they would be quite uniform during the rendering.

It is obvious that using a working screen with 256 colours and the palette "256col.palette" there should be no problems.

N.B. The lighted objects are automatically remapped, even if it is not explicitly stated during the script drawing up.

Light Setting

Light can be adjusted calling upon (through the button marked by an electric bulb into the Editor window) the requester "Light Settings".

The Requester is divided into two separate parts: the first one is devoted to the light adjustment and the second one to its power.

When starting, X-DVE initializes the source of light in such a way as to make it exploitable without further alterations.

The three fields (X,Y and Z), below the button "Position", are used to set a new light position in the space.

The coordinate Z should be runned just like the 3D effect, considering that it can range from 450 (very close to the observer) to -32000 (very far from the observer).

If the coordinate Z is 0, the light is on the same level of the object Pause Point and the coordinates X and Y match exactly with the screen ones (origin 0,0 in the upper part on the left side).

You had better not locate the light too close to the object level, since it would shine upon the closest ones and would keep the furthest ones in the shadow. In this way it would turn out to be badly spread.

By clicking the button "Position", X-DVE will present the usual seeking screen, on which the (dashed) objects in pause point, are displayed together with a little square indicating the light.

Even in this case keeping the Mouse left key pressed, light can be moved through X and Y.

Through the right one you can define the light depth (Z).

It is steadily possible to check the current coordinates which are always displayed in the upper part of the requester.

If you push the button "ESC" (on the keyboard) the new light coordinates will be confirmed and X-DVE will show again the Requester "Light Settings".

To adjust the light power, it is sufficient to act upon the sliders R-G-B, inside the Panel "Intensity", you can even check the hue through the coloured rectangle right on the sliders.

Light is, by default, 50% grey coloured (midway between white and black) and it permits getting good results as concerns the rendering phase.

Setting the most shining colours you could incur into overexposed images, so we usually recommend adjusting the light power afterwards. First of all you should verify through preview (inside the Requester "Object Setup") the rendering quality.

The light position and its power can be set at any time, but it is not possible to make the light move since it is not an object and its characteristics will keep on being unchanged throughout the Animation.

Anyway it is possible to build the Animation later on, by changing for each object the light position. Though this is an operation which could provide you with not much realistic results, since in the same scene you could incur into frames where two obje

ts are lighted with two different and independent light sources. (It is as if, switching on the light inside a dim kitchen, the table got floodlighted and the refrigerator did not!).

1.8 7

7) EDITING AND UPKEEPING THE SCRIPT

How to duplicate an Object

It very often happens that you have to create lists consisting of names, sport results or object sequences even having the same input and output effect, though slightly different placed.

Through the button "Rep", in the Editor lower part, it is possible to achieve various operations that, in addition to the usual duplication, permit creating lists consisting of objects and their relative positions by means of one operation only.

To duplicate, you have only to select the object which you want to work upon, and then by clicking the button "Rep" (abbreviation for "Replicate"), you will open the requester (Pic. 25)

(pic. 25)

The requester has been previously defined in order to perform a duplication of the object you have chosen, therefore confirming the operation (Through the button "OK") the object will be duplicated one time only.

N.B. Duplicating an object means to create another exactly alike to it, included the setting of the frames, Pause Point and effects.

The requester displays, in its upper part, the object maximum horizontal and vertical size (by points) and, vertically four numerical fields into which you can insert the information relative to the new objects you want to create.

The first field "Number of copies" has been previously defined to 1 and, it contains the number of copies you want to create.

The following one "Start Frame +" contains the number to add to the Frame information as concerns the beginning of the object.

Finally "Pause X +" and "Pause Y +) contains the number of horizontal and vertical points to add to the coordinate of the object's Pause Point.

For example: Let's suppose to have an object text whose size is 120 50, with a Pause Point in X = 20, Y = 20 and with a starting frame = 0.

If we want 10 objects texts to be just alike to the first one, though vertically arranged, you can avoid a lots of operations by using "Rep" and finally defining the various Requester field with the number of copies = 10, starting frame + = 0, pause + =

, pause Y + = 60 (the objects will be vertically spaced out by 10 points, since they are 60 points high).

X-DVE creates the objects at once, the only operation you have to perform, is the possible alteration of the text for each object.

To make things more complex you could wish the objects to come in sight progressively and not simultaneously (the starting frame is always the same one).

This obtainable by defining into "Start Frame +" the number of Frames you want to add per object.

If you are going to input 25, the objects would come in sight one behind the other, at a distance of 25 frames (1/2 second) the one from the other.

If you want them to be placed diagonally, as concerns the example above mentioned, it would be sufficient to Input a positive value into the field "Pause X +" which corresponds to the number of horizontal shift points of each object from the previous one

How to save a Script

X-DVE's Script is made up of objects, effects, information about the working screen, Palette and finally of information about the light.

When the Script has been edited, it is usually necessary to save it on disk permanently, so that you can load and process it later on.

This is possible by clicking the button "Save". Pressing this button the file-requester will present itself and it will permit assigning the name to the file you want to save.

If the file is already existing, X-DVE will ask you for a confirmation before writing over it.

To save a script does not mean to save the Animation, which must be stored using a proper Requester.

How to load a Script

The button "Load" inside the panel "Script" is used to load a script stored up on disk.

The loading of a script can be made at any time, even if an Animation is already in memory.

X-DVE permits running the loading of a script in a flexible way, thanks to the Requester shown by picture 26

(Pic. 26)

By defining the checkbox and the numerical field properly, you can choose if using or not the settings of the script's screen/palette, or to link it to the current one.

The checkbox "Load Screen", if enabled, permits changing the working screen's settings in accordance with the ones that have been stored up into the script you want to load.

If the new screen's settings are different from the current ones and an Animation has been saved, then X-DVE will ask you for a confirmation before loading and therefore deleting the Animation.

In case "Load Screen" should not be enabled, the working screen and the possible Animation that has been previously saved will not be changed.

The checkbox "Load Palette", if enabled, changes the working palette's settings in accordance with the ones saved into the Script you want to load.

If the checkbox is not enabled, the current palette will be preserved.

The checkbox "Append Script", if enabled, makes X-DVE load the Script behind the current one.

Look out! Such an operation can mix the objects (You can easily verify this situation through the play stage) In case the starting frame of the script you want to load should be part of the range as concerns the frames of the current script.

To perform a real chaining you have to enable the checkbox "From Frame", this one will permit adding the value contained into the numerical field to the starting frame of each object belonging to the script you want to load.

This field has been previously defined, besides it has been automatically linked to its proper frame. Nevertheless it is still possible to change its contents so that you can advance or postpone the scripts' linking point.

1.9 8

8) RENDERING AND ANIMATION

The Rendering

When the Script Editing Operations are over, the ultimate target is taking shape: The carrying out of the Animation through the Rendering. Now X-DVE is ready to trace and assemble all the frames following step by step the instructions dictated by the use

.

The rendering can be performed following two different ways; (each of them is useful according to necessities) on disk or using the memory.

Rendering Priority

When the Animation Rendering is started up, X-DVE is going to trace the objects one at a time, beginning from the first one.

The tracing order is very important, it actually defines the priority with which the objects will be displayed during the Animation carrying out.

This means that an object, inside the list, takes visual priority compared to the previous one (and if necessary the second object will be traced over the first one). Obviously the second object gives visual priority to the following one (which will cove

the second object).

Even if the script has been edited without considering the priority of the objects, it is still possible to change their position.

The task of the little arrows which are inside the Panel "Object" of the Editor, is to move the object you have selected upwards or downwards, in this way you modify the rendering order and so the visual priority.

How to render on Disk

As concerns the rendering on disk, X-DVE creates a sequence of files of the IFF-ILBM type. Each of these files contains an Animation frame.

This mode has got a basic advantage:

The RAM memory (not to be mistaken for the memory on disk), is not much exploited during the tracing. Therefore this permits complex Animations to be performed even by Computers not much powerful.

At the end of the tracing, you will have on disk all the animation frames which will be placed according to their ascending order. Now they are ready to be processed together with the other programs.

This means that, having at your disposal graphic processing programs like ADPro, ImageFX, ImageMaster and so on, it is possible to modify every Animation frame in order to get astonishing effects.

Using such programs, it is very easy to elaborate each frame, applying light filters, solarizations, relieves, modifying the colour balance etc..

Besides, using proper supporting software, it is possible to turn frames into Animations suitable to get played on cards made up of 16 millions colours.

Finally the frames sequence can be imported and converted out of the most famous Multimedia programs, in this way you make presentations, titlings and scripts still more interesting.

The Iff format frames are the most useful means to put X-DVE in touch with all the Amiga graphic programs. For this reason you should always consider the disk-rendering mode, especially when X-DVE is not the one which supplies you with the "finished prod

ct".

N.B. To render an animation on disk implies that the disk is able to contain all the frames and is fast enough to permit an easy use. (X-DVE will have steady reading and writing accesses during the rendering).

For this reason we usually recommend not to render on floppy disk, since it has not the suitable technical peculiarities that could permit it to use satisfactorily such a mode.

How to render using the Memory

The Rendering using the Memory, compared to the Rendering on disk, gives X-DVE much more flexibility. This means that this mode is more useful when you want the Animation to get performed at once.

The operations inside the memory could actually be much faster, since the disk is not used for the frames storage.

Rendering, using the Memory, offers you the advantage to be able to perform directly the animation, without further conversions or supplementary programs.

Besides the memory is much better exploited, since all the frames are compressed (taking away the not necessary information out of each frame, it is possible to reduce the quantity of memory to exploit).

Therefore you will be able to contain complex animations into comparatively small spaces, without taking up too much room on disk.

Plainly the memory rendering implies the computer to be powerful enough, otherwise the animation could not be performed.

On getting an animation performed the quantity of memory exploited is usually proportional to its (The Animation) length, therefore the more the available Memory is, the longer and more elaborate Animations you will get.

Requester Rendering on Disk

Clicking the button "Dsc" inside the panel "Animation" of the Editor, the Requester "Render disk Panel" will present itself.

The requester is horizontally divided into two main parts, which are used, respectively, for the file name path inside which you want the frames to be saved and the buttons relative to the Requester control (Pic. 27).

(Pic. 27)

The first part is made up of the button "Path" and of two alphanumeric fields into which you should insert, respectively, the frames' track to save and the basic name of each frame.

An example can help you to understand how it works:

If you want to save the frames into the track "DH1:FRAMES" , you have only to insert the string "DH1:FRAMES" into the first field. Inside the following field you should insert the basic name of each frame for example "TITLE".

During the rendering on disk, a number will be automatically chained to the basic name, such a number corresponds to the respective frame.

If Animation were 100 frames long, at the end of the Rendering inside the drawer "DH1:FRAMES" there would be the files "TITLE00000" till the file "TITLE00099".

As you can see, the frame number, chained to the name, is formatted using 5 characters, from "00000" to "99999".

Look out! The field of the basic name MUST NOT contain the numerical extent (Frame number) and MUST NOT contain the characters "#", "*","?" since they are meant for the Operating System only.

Clicking the button "Path" it is possible to make use of the standard file requester in order to select the recording path and to check, visually, the files contained inside the track you have chosen.

The Recording Track should be thoroughly chosen, for this reason we usually recommend creating a drawer which is the most free and finally assigning it to the frames storage.

You had better remember that using the virtual disk "RAM:" (That Amiga puts at your disposal), could turn out to be useful only when the computer Ram Memory is wide enough.

The second part of the Requester consists of a keyboard, to which the task of checking the Rendering on Disk is assigned.

The button "Render" starts up the Animation’s tracing procedure, which is represented by a little informative window, this one contains a bar showing the percentage of work you have achieved, a display showing the name of the object which is currently be

ng processed and a button stop which is to be used for interrupting the procedure (see Pic. 28).

(Pic. 28)

In addition to the button "STOP", after switching on the above mentioned window, you can stop the tracing even pressing the key "ESC", which is in the upper part left on the keyboard.

Look out!: in case the key "STOP" should be pressed it is not possible to start tracing from the point in which it (the tracing) has been interrupted, but you have to start rendering again by means of the respective button.

The button "View" is used to show the rendering result (This one is not to be mistaken for a "Play").

As the animation lies on more than one IFF file, this kind of operation is not fast and can be used only to check the quality of the single frames and the movements correctness.

During this operation, it is possible, by clicking the Mouse left key, to stop a frame, whereas keeping the right key pressed you can come back to the Editor Screen.

Through "Clear" you start a procedure up which deletes both all the frames on disk and those that belong to the specified track.

This procedure is quite dangerous so you had better think twice before using it.

X-DVE makes use of a certain "cleverness" as concerns the deletion of frames, in fact it operates only over the ones which are effectively of the IFF-ILBM type (Images) and leaving the others (Data, Icons etc.). This kind of cleverness permits limiting t

e damages due to human errors.

Clicking "Done", X-DVE will save the last track you have defined, so it can be used later on, while through the Requester closing button, any alterations will be cancelled.

N.B. It can happen that the frames succession is not continuous, this situation could be due to a particular script setting (for example an object which enters some frames later than the exit of the previous one. This situation does not cause the product

on of in-between frames.

As concerns a correct interpretation of the Animation, The in-between frames above mentioned should be considered as blank images.

Requester Memory Rendering

Clicking the button "Mem" inside the Panel "Animation" of the Editor, the Requester "Render Memory Panel" will present itself. (See Pic. 29).

(Pic. 29)

Through this requester it is possible to achieve the classical rendering operations, the ones concerning the animation running, which has been previously defined, and finally the ones relative to the play.

The cyclic button "Compression" permits selecting the animation's Compression mode (see the paragraph "Compression Mode"). This mode is to be defined only when there are no frames inside the Memory.

The button "Render" starts up the Animation's tracing procedure, which present itself through a little window that contains a bar representing the percentage of work you have achieved, a display showing the name of the object, which is being currently pr

cessed, and finally a button "Stop" in order to interrupt the procedure.

Look Out! If the button "Stop" is pressed, it is not possible to start tracing from the point in which it has been interrupted, but you have to begin the render again by means of the respective button.

In addition to the button "Stop", after switching on the window above mentioned, it is possible to stop tracing even by pushing the key "ESC" which is in the upper part left on the keyboard.

When the tracing is over (or has been interrupted), the animation can be performed through the button "View".

"View" will get the animation performed one time only and without automatic halts, following the mode described inside the chapter "Animation Execution".

The button "Clear" is used for the deletion of the whole animation, so it should be use only when you are no more interested in the Animation (to delete the animation means to delete the frames but not the script which has produced them).

As everybody knows, the Memory rendering supplies you with a finished product (by XFA format) either ready to be performed at its top speed, or if you want you can store it directly on disk.

For this reason clicking the button "Save XFA" you can save the whole animation, without further processing.

the file produced by X-DVE during the saving operation, is of the IFF-XFA type and it contains all the information concerning the Animation, included the frames length, resolution and the Palette used, obviously in addition to the Compression Mode and to

the contents of each single Frame.

Through the button "Load XFA" it is possible to load an animation previously stored on disk, so that it can be either changed or performed.

When you start loading, the rendering screen and the respective Palette are changed in accordance with the information contained by the Animation.

Besides the loading will completely replace any Animation previously saved, so you should be much careful in order to avoid damage.

X-DVE permits creating Animations considering more phases, since it is possible to load an animation, ready to be performed, and then you can modify it adding objects and effects.

Starting from a basic image you can perform images more and more elaborate, adding objects, effects and titles during the following phases.

A classical example could be represented by titles for the sport results using a basic animation representing a moving playground on which you could get sport results performed.

Compression Mode

The XFA format has been developed in order to permit the Animation's Execution Rate to be much higher than the famous Anim 5 could ever be.

XFA is particularly suitable to be used by accelerated Amiga Computers by means of 32 bit processors, since, if thoroughly programmed, they grant much better performances.

The XFA format supports 4 different methods of compression: two with 16 Bit and two with 32 bit.

They are marked by the following titles:

16 Bit (16 bit compression)

16 bit I (16 bit compression with interlace-cunning)

32 Bit (32 bit compression)

32 Bit I (32 Bit compression with interlace-cunning)

The interlace-cunning is a very useful technique which permits obtaining the best results out of both the compression and execution of Animations which have to appear on screens "Pal-interlaced".

It is based upon the fact that to show an image on a screen "PAL-interlaced" using 50Hz, two half-frames are necessary (an even one and an odd one).

This technique halves the space that a single image occupies, permitting a remarkable compression percentage and a much better execution speed.

When the animation is compressed, following this mode, it is not possible to trace to the source of the single frames, since they have got only half information compared to the original image.

During the rendering, to use the interlace-cunning means to get the working screen (Where the objects appear) flickered.

You should not get worried about this situation, since, as concerns the execution, the animation will appear compact and without any flickering.

The 16 and 23 Bit modes differ from each other as concerns the execution rate since they use Memory in a different way.

The 16 Bit mode makes the compression of a single frame more efficiently than the 23 Bit one, though it takes more time to carry it out.

During the play, the 16 Bit mode is slower than the 32 Bit one, but it anyway permits reaching remarkable quickness of execution.

The animation fluency is linked to the quickness of display (Decompression) of each frame, which is called frame rate.

If the frame rate is equal to the screen refresh rate, the Animation will surely be perfect.

Each time the frame rate gets lower, the Animation fluency will resent it, causing some jerks.

What we want to make you understand is that if an Animation, compressed using the 16 Bit mode is fluent, there’s no need to use the 32 Bit Compression.

The compression mode, we usually recommend, is "16 Bit I" since it permits good results both as concerns the compression and the quickness, especially for working screens which use 32 colours.

As concerns screens with more than 32 colours, you had better use the "32 Bit I" mode, since, in this case, it is quicker than the 16 Bit one.

The modes without interlace-cunning are useful when performing Animations out of disk (viable through XFA-UTIL) since the quickness of such a device does not permit performing Animations, which use such a compression, thoroughly.

Animation Execution

Through the requester "Play Panel", represented by the button "Play" inside the panel "Animation" of the Editor, it is possible to control the execution of the animation.

Through the usual selecting buttons you can define 4 different performing modes (AS Picture 30 shows)

(Pic. 30)

Through the panel "Play Mode", you can choose either if performing the Animation one time only "One" or if performing it endlessly "Loop".

At present X-DVE does not permit linking the first frame to the last one, so the mode "Loop" only if the first image and the last one are blank or equal.

Through the panel "Pause" you can choose if the pauses should be automatically controlled by X-DVE "Auto" or by mouse "Mouse".

By pause we mean a succession of frames where there are no moving object, or rather the moment in which the frames have reached the Pause Point and there they remain for some time (The time to make some frames pass by).

After setting the definitions up, you can start, by ckicking the button "Play", the Animation up.

When playing, the working screen (completely blank) is displayed, and if you release the Mouse left key, the Animation starts.

If you want to get the animation stopped into the Pause Mode (Through mouse), you have only to press the right and left keys simultaneously.

In the same way you can get the animation stopped into the Automatic Pause Mode, you have only to consider that the keys should be kept pushed until the Animation is actually still.

If pauses have been defined according to the Automatic Mode, X-DVE will have the Animation performed till pausing automatically upon each frame where there are no moving objects. If you want to start the Animation up again, you have only to click the Mou

e left key.

This expedience permits you to sync an animation with spoken or music commentaries without being obliged to define, inside the script, very long pauses, in this way you can save memory and rendering rate.

A classical example: To perform titling on video, in which the pauses are not known or predictable, you have only to draw a script up using fixed pauses distant at least 4 frames from each other and then you can have the rendering.

The Play of such an Animation using automatic pauses, permits displaying titles synchronizing them by means of the mouse, setting aside all the effective pause frames defined into the script.

Anyway it is always possible, keeping the mouse left key pressed, to halt any frame as concerns the Animation in progress.

N.B. Blocking the Animation following the method above mentioned, you could see some tremblings of the moving object, this is due to the interlace-cunning system and it does not happen when using the other compression system. Therefore we usually recomme

d halting the progress of an animation when all the objects have reached the pause point (namely when they are still).

1.10 9

9) SUGGESTIONS

Information concerning the state of the program

It can be useful, using X-DVE, to know some information about the space of available memory, the script length and other important information.

To get such information, you have only to click the Button "Inf" of the Panel "Script" of the Editor and then you can skim through the list-box contents following the usual way (as Picture 31 shows).

(Pic. 31)

General Advice about Using

X-DVE is a program which can be exploited at several levels and it permits developing many tricks in order to get the best results concerning the output of Titles and Animations.

During the last working months even we (Programmers) realized how to exploit some program's peculiarities and the way we could avoid possible problems and limits concerning the equipment on which X-DVE is installed.

For example:

-How to create a succession of Titles arranged into pages

First of all we recommend dividing the Titling project into a lots of different sub-projects (i.e. using scripts with the same resolution and Palette), one each page, and then, through the button "Load", joining them into an unique script before renderin

.

In this way the project can be managed as if it were made up of a lots of pages, each of them with a life of its own.

-How to use Backgrounds

X-DVE has been studied in order to run pauses intelligently, therefore it permits saving time as concerns the Memory Rendering. If we wanted a Background to last throughout the Animation, we should select an object "Brush", and then we should place it in

o the Pause Point and finally programming its permanence by frames.

If you had defined 300 frames as pause, X-DVE should render them all, but thanks to X-DVE's thorough characteristics, tracing and compression are automatic.

Obviously, Backgrounds should not have top priority compared to the other objects, so they should be placed first on the list.

-How to get the best out of Animations

X-DVE, as other countless packages devoted to Animation, uses a Frame Compression System based on a comparative method.

To make things easier we can say that for each Animation, only the first frame is stored, whereas, as concerns the other frames only the differences from the previous one are stored (Shifting one point is considered as a difference).

Besides, as it is obvious, during the execution the decompression rate of each frame is proportional to the number of differences from the previous frame.

You can easily understand that to get Animations performed quickly, you should use effects which do not "Liven up" the screen too much.

Very often, to change a bulky "Wind" into a quiet "Slide" could make you gain much space as concerns memory and much quickness as concerns the execution.

-How to get the best out of the Memory-Compression Rate

Just a little tip to make you halve the compression rate of an Animation:

If rendering an object, X-DVE finds the following frame to be blank (not initialized, i.e. not used by any object), X-DVE achieves the compression twice as quick.

N.B. This always happens during the first object rendering, if an Animation has not been loaded yet.

-Animation's effective Preview

After editing and saving a Script, you can get a preparatory Animation displayed rather quickly, so that you can check syncs and timings previously defined.

The trick is very simple: You have only to start the rendering up after defining 2 as the number of simultaneous colours of the working screen, taking care to modify the Palette using two hues much different from each other (Black and white are the best

nes).

Naturally you will have to load the original script before starting the ultimate rendering up.

Programming Errors

X-DVE has been developed following exclusively the Commodore's programming statements, besides it has been testing for a long time over several configurations.

The program should be free either from illegal access to Memory (Checked by the fabulous Enforcer) or from problems caused by the release of resources, fully observing the Amiga's Multitasking Operating System.

Being tested and developed by Human beings, X-DVE could be suffering from problems which have never been discovered during the tests, so whoever has noticed any imperfection please send us (Through letter or fax) a message mentioning the possible fault.

To make the message as useful as possible, in order to resolve the problem, it (The Message) should specify.

-Type of Computer.

-Kickstart and Workbench Version (into the Workbench Menu/Model of the Workbench).

-Maximum quantity of graphic Memory (Chip).

-Maximum quantity of other kind of Memory (fast).

-Pattern of Genlock you have used.

-Possible supplementary graphic Cards.

-Outer Hardware Equipment.

-X-DVE Version (On the X-DVE's title bar).

-Detailed description about the sequence of operations which has led to the error.

Inside the program has been inserted a particular system which permits recovering the fated errors, due exclusively to the deficiency of free RAM Memory.

When an error of this kind happens, a yellow flashing rectangle (labelled by the message "X-DVE Unrecoverable Low-Memory Error $xxxx") will appear, announcing the X-DVE's abnormal ending.

In case the state of the memory should be badly arranged, it is likely X-DVE not to be able to carry out all the "Recovery" operations so everything would lead to an Unrecoverable "Software Failure".

If instead there is enough Memory to carry out all the operations, X-DVE will release all the allocated resources, storing the current script into the file "T:X-DVE_Crash.script".

The file should be duplicated on disk at once, since the drawer "T:" usually lies into RAM and so it would not resist to a possible Reset.

Cooperation

Have you any new ideas in order to improve X-DVE ?

Have you found out any exceptional effect "WIND" ?

Have you suggestions and/or constructive criticism ?

Any message of this kind will be seriously taken into consideration and will be appraised for the development of a X-DVE's next Version.

File Format

X-Dve uses several kinds of file format:

X-DVE-SCRIPT for the script recording, X-DVE-PRF for the Preferences, X-DVE-EFX for the effects and finally X-DVE-XFA for the Aniamtions.

Such Formats have been conceived by class X and they are, by previous written agreement, at everyone's disposal.

Very Important

Nothing, as concerns the contents of this manual, will give rise to either insurance or guarantee, expressed or explicit, as concerns the products above mentioned or about their practical qualities, compatibility or availability.

Besides, ClassX does not assume any obligation or responsibility for statements or assertions made by the very firm or by a third party or inside the printed matter here reproduced.

In no case, ClassX will be responsible for direct, indirect, incidental or consequential damages deriving from any complaint that might arise from statements here reproduced, even if you have been informed about the possibility of such damages.

1.11 10

How to contact ClassX

---

by Snail-Mail:

ClassX Development

Via Francesca 463

I-56030 Montecalvoli (PI)

---

by E-Mail: classx@pisoft.it

---

by Phone/Fax:

phone +39 587 749206

fax +39 587 749206

Developers interested in the XFA format will be pleased to know that we have developed a PD library and a developer's kit to gain complete access to this incredible animation format.