

NW

COLLABORATORS

	<i>TITLE :</i> NW	
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WRITTEN BY		June 15, 2022
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REVISION HISTORY

NUMBER	DATE	DESCRIPTION	NAME

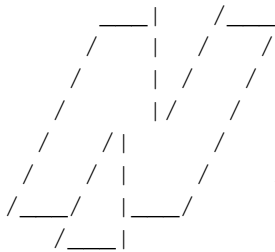
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Chapter 1

NW

1.1 NW User Manual



NAVIGATOR WIPER 1.0
(NWiper 2.0)

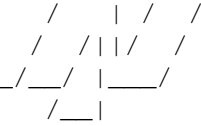
A realtime 3D texture mapping IFF picture wiper

Introduction
Design and Coding by :
Distribution

System requirements
Michiel den Outer
Installing
Populierenlaan 59
How to make a simple show
2925 CP Krimpen a/d IJssel
Gadget functions
The Netherlands
Menu functions
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Program history
after 10/95 +31(0)180-520798
FAQs
This program is shareware
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1.2 NW Introduction

NTITLER INTRODUCTION



NWiper is presentation system that uses texture mapping to make three dimensional IFF picture wipes. Using an extremely simple to use graphical user interface you can make all kinds of 3 dimensional effects.

NWiper can be used in the following ways :

1) Computerpresentations / demos

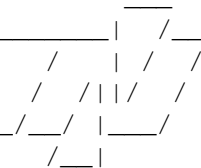
 You can start NWiper animations from an Amiga DOS script by using a .NW file as an argument.

2) Videopresentation

 It's easy to connect a VCR to your Amiga and record the animation to tape.

1.3 NW How to make a simple show

NTITLER HOW TO MAKE A SIMPLE SHOW



First select the menu item NEW SHOW. A requester will be presented allowing you to enter the total show length. Since this is an example let's limit ourselves and enter 3 seconds.

Then use the IFF BUTTON in the upper right to load an IFF picture that will be used for the texture data. For this example choose 'Demo.IFF'.

Now is the time to think out the 3D effect you want to make. Let's make a simple zoom. We need 2 keys to do that.

To make the first key, set the TIME SLIDER to 0. Set the EDITMODE GADGET below the VR MODE BUTTON to EYE POSITION and set the DEPTH SLIDER to -16000. The polygon will now appear very small. Press the CREATE KEY BUTTON and the first key is stored. A small vertical line representing this key is now visible above the TIME SLIDER.

Then press the <spacebar> and the polygon will completely fill the preview window. Don't forget to store this second key by pressing the CREATE KEY button.

You have now defined 2 keys and it is time to watch the preview. Press the BEGIN BUTTON first before the PREVIEW BUTTON and watch the result.

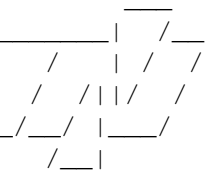
If everything looks fine, select the menu item SHOW/START or press the START BUTTON and enjoy the show in all it's glory !

If you start experimenting with more exciting effects, always remember to use the right sequence to make a key:

- 1) Drag the TIME SLIDER to the time you want to create a new key.
- 2) Use the EDITMODE CYCLE GADGET and the 3 sliders below to get the right picture.
- 3) Press the CREATE KEY BUTTON.

1.4 LSD System Requirements

NTITLER SYSTEM REQUIREMENTS



NWiper requires - a 020 CPU or higher
 - AmigaDOS 2.0 or higher
 - a 15 KHz monitor or TV

AGA users will enjoy 256 colours on screen, ECS users are limited to 32 colours.

You can make your animation more smooth by installing :

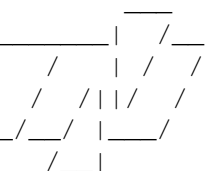
- fast ram
- a faster/newer processor

-NWiper is not very memory hungry, but be sure to have some fast ram because it's twice as fast !

-Since this program uses integer maths the use of a FPU will not affect performance at all.

1.5 NW Installing

NTITLER INSTALLING



To install NWiper simple drag the NWiper drawer to the desired place on your harddisk.

The workbench files you need are:

- asl.library in the libs directory
-

1.6 NW Gadgets Functions

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NTITLER GADGET FUNCTIONS

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TIME SLIDER

Indicates the current time. Everytime you drag the time slider, the preview window will be updated. Left to the slider is the time printed in standard time code format: minutes:seconds.frames.

LOAD IFF BUTTON

```

                Load Texture Data
            EDITMODE CYCLE GADGET

```

The effect of the 3 sliders below this gadget depends on the state of this gadget.

You can choose 4 editmodes:

- 1 Polygon Position
- 2 Polygon Rotation
- 3 Eye Position = Camera Position = Observer Position
- 4 Eye Rotation = Camera Rotation = Viewdirection

If you hold the shift key down while clicking, the list will cycle backwards.

Press the <spacebar> to make the polygon completely fill the screen.

VR MODE BUTTON

It is also possible to change the eye position and eye rotation in this virtual reality mode. Use your mouse to navigate, press <Esc> to quit.

- Use mouse up/down to walk forward/backwards
- Use mouse left/right to change direction
- Use mouse left/right with right button pressed to step to the left/right
- Use mouse up/down with left button pressed to look up/down
- Use mouse up/down with both buttons pressed to control height

Use the + and - keys to adjust your speed.

Also try out the following keys:

- <F1> Walk Mode
- <F2> Drive Mode
- <F3> Fly Mode

CREATE KEY BUTTON

Stores the current key. Memory is reserved for 100 keys.

DELETE KEY BUTTON

Deletes the current key. Use the PREV/NEXT BUTTON to select a key.

COPY KEY BUTTON

Copies the current key into a buffer.

PASTE KEY BUTTON

Copies the buffer to the current time.

BEGIN BUTTON

Jumps to the beginning of the show.

PREVIOUS BUTTON

Jumps to the previous key.

NEXT BUTTON

Jumps to the next key.

PREVIOUS BUTTON

Starts the show from the current time in the preview window in the editor window. Press the STOP BUTTON to stop the show.

START BUTTON

Starts the real show from the current time in full screen and full colour. If you want to start the show from the beginning, use the menu item SHOW/START or press the BEGIN BUTTON first.

STOP BUTTON

Stops the show in the preview window.

If you started the show from the menu item SHOW/START SHOW you can stop the show by pressing the left mouse button or pressing the <Esc> key.

1.7 NW Menu Functions

NTITLER MENU FUNCTIONS

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      /_/_/ |_/_/
     /  /  |  /  /
    /  /  |  /  /
   /_/_/ |_/_/
  /_/_/

```

PROJECT/NEW

Select this to begin a new project. Don't forget to save the current project.

PROJECT/LOAD

A file requester will be presented, allowing you to select and load a show from disk.

PROJECT/SAVE

Saves the current show in the current name.

PROJECT/SAVE AS...

A file requester will be presented, allowing you to save the show to disk.

PROJECT/DELETE...

You can use this Menu item to delete a file.

PROJECT/SET LENGTH

Use this Menu item to change the show length. The maximum length is 8 minutes (480 seconds). You can either stretch the show to the new length, add some workspace or throwing away some keys.

PROJECT/DEMO MODE

Plays all the saved shows stored in the NWiper:shows directory in an eternal loop. Press the left mouse button to stop.

PROJECT/ABOUT

Check this one out for yourself.

PROJECT/QUIT

Quits NWiper. Don't forget to save your current show.

SHOW/START

Starts the show, full colour and full screen. Press the left mouse Button to stop the show. After the show, don't forget to reselect the NWiper window by clicking somewhere in the window.

You can also play a show from the CLI by using the NW filename as an argument.

Example: NWiper:NWiper NWiper:shows/Test.NW

This option can be handy if you use NWiper in a script based computer

presentation.

SHOW/HIRES

Uses a slightly bit higher resolution

SHOW/INTERLACE

Turns interlace on/off. Use interlace for Video and non interlace for a computer monitor.

SHOW/FADING

Fades in from black in the first second and fades out in the last.

SHOW/DIMMED

The Amiga is capable of producing 'Video illegal colours'. This option tries to prevent them by keeping the colour values below 200.

SHOW/BLANKING

Adds 3 seconds blanking before and after the show, letting you start and stop your VCR.

SHOW/MOUSE CLICK

Allows you to start the show by pressing the right mouse button.

SHOW/TRANSPARANT

This will make colour 0 of the foreground picture transparant, making the background picture visible. You will have to make special pictures for this effect.

SHOW/GREY

Makes the picture turn grey.

SHOW/CUBE

Animates a texture mapped cube instead of a single polygon.

SHOW/BACKGROUND

Turns the background picture on.

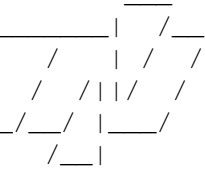
SHOW/LOOP

Plays the show in an eternal loop. Press the left mouse button to stop.

All the above preferences flags are stored in the .NW file. So if you start a NWiper animation from the shell or a script, you immediately got the right prefs !

1.8 NW FAQs

NTITLER FREQUENTLY ASKED QUESTIONS



Why is Texture Mapping so slow on the Amiga, compared to the PC ?

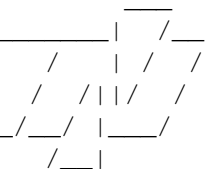
On the Amiga a 256 colour screen is divided into 8 bitplanes (planar). So if you want to set a single pixel you have to address 8 different memory locations. The PC has a 1 byte per pixel (chunky) screenmode which makes plotting single pixels a lot faster and easier.

The trick NWiper uses is to make a virtual chunky screenmode in fast ram, render everything into that space and in the end convert and copy everything to the planar screenmode. This chunky to planar routine is a big bottleneck.

I am afraid that, while NTitler uses all the advantages of the Amiga planar screenmode, NWiper uses all the disadvantages...

1.9 NW Program History

NTITLER PROGRAM HISTORY



Name 3DWiper 1.0

Released Februari 1995

Price NLG 25,-

Initially released as shareware, soon after that bundled with all BLUFFTITLER registrations.

First release

Name NWiper 1.0

Released September 1995

Price NLG 25,- , Navigator shareware

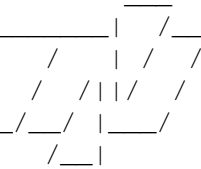
To promote my NAVIGATOR VR engine I renamed the program to NAVIGATOR Wiper : NWiper

-better looking user interface

-wait mouse key flag

1.10 NW Load Texture Data

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NTITLER LOAD TEXTURE DATA
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Pressing the 'Load IFF' button, a filerequester will be presented allowing you to load an IFF picture that will be used as texturedata.

The IFF picture can be anything from 2 to 256 colours but must have the following limitations :

- Resolution of 320*256 (PAL:low resolution no interlace)
- No stencil information (my IFF reader does not like it)

The IFF picture will be split into 4 quadrants and used in the following way:

Quadrant	Left	Top	Right	Bottom	Polygon mode	Cube mode
1 Upper Left	0	0	159	127	frontside	front/back face
2 Upper Right	159	0	319	127	background	background
3 Lower Left	0	128	159	255	backside	right/left face
4 Lower Right	160	128	319	255	-not used-	top/bottom face

0	159	160	319	0
1		2		
			127	
			128	
3		4		
			255	

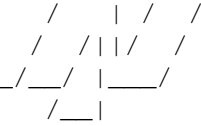
See the Demo.IFF picture in the textures drawer for an example.

Because all 4 quadrants share the same palette, the paint package you are using must have some kind of palette merge function. My favorite painting program is Personal Paint from Cloanto because it is capable to merge the color palettes of all brushes and images currently in use.

1.11 NW Distribution



NTITLER DISTRIBUTION



NWiper is released as shareware.

Apart from the keyfile, all NWiper files can be freely distributed.

This keyfile called 'Navigator.KEY' is strictly personal and must not be spread.
