

**TSMorph**

**COLLABORATORS**

	<i>TITLE :</i> TSMorph		
<i>ACTION</i>	<i>NAME</i>	<i>DATE</i>	<i>SIGNATURE</i>
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**REVISION HISTORY**

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# Chapter 1

# TSMorph

## 1.1 TSMorph.guide

TSMorph 2.0 Contents

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Overview

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Installation

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Software and Hardware required

Parameters

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Control Window

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Internal file formats

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Algorithms	Morphing algorithms
File Names	File naming
Error Messages	Error Messages
Bugs	Known (and unknown) errors
Hardware&Software	Hardware and Software used in development
Distribution	Copyright and distribution requirements
Index	The index for this guide

## 1.2 TSMorph.guide/Overview

Quick overview

\*\*\*\*\*

TSMorph is a set of morphing programs. It consists of two programs:

TSMorph	Edit the Morph parameters
TSMorph-render	Generate the morphed images

TSMorph is used to create a  
parameter file  
which is used by

TSMorph-render to produce the morphed images. TSMorph-render works with  
24 bit images Run times are about 12 seconds per frame for a 228x240  
image on a 28Mhz 68040.

TSMorph-render can be used to morph one image to another in a set  
number of frames with a number of control points, just distort one  
image with control points. It can also be used to morph or warp a series  
of images (e.g. to morph between two animations). When TSMorph is run  
without parameters it will display an ASL file requester for a file  
created by TSMorph, it will then create the images, displaying a

Progress Requester

on the default (or named) public screen allowing the  
process to be interrupted and/or stopped.

ARexx

scripts are run before and after each image is processed, and also

before each image is loaded. These allow the changing of movement and colour to be controlled along with the ability to only generate some frames, and also pre and post image processing (e.g. to change to a non-24-bit format and build an animation).

TSMorph is used to generate the parameter file . When run it displays an

Information Window

on a public screen. This allows the input of the file names to morph between, the number of frames, the start frame, the output file names, and the type of morph (single or dual images) to be changed.

It also allows the editing of control points on the images. This requires the 24 bit images to be morphed to be also held in a normal ILBM file (or opal.library to be available). The images are displayed on a public screen in resizable, scrollable windows

. One way is to

convert the images to be morphed to 4 colour images using the Workbench palette.

When the images are displayed control points can be edited in various

modes

. These modes allow the addition, deletion, linking and unlinking of the control points.

Context sensitive help is displayed using amigaguide (if available). The 'Help' key can be pressed in the gadgets, over the gadgets, on menus or anytime a window is active.

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The author can be contacted by EMail as mpaddock@cix.compulink.co.uk.

### 1.3 TSMorph.guide/Installation

Installation instructions

\*\*\*\*\*

The following files are included in this distribution:

TSMorph-render.881	The rendering program 68020/68881 version
TSMorph-render.881.info	Icon
TSMorph	The parameter set up program

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TSMorph.info	Icon
TSMorph-render	The rendering program
TSMorph-render.info	Icon
TSMorph.guide	Documentation in amigaguide format (this file)
TSMorph.guide.info	Icon
Install	Installation script for Installer
Install.info	Icon
Read.Me	Short read me file
Read.Me.info	Icon
Env.info	Icon
Env/TSMorph.info	Icon
Env/TSMorph/def_points.info	Default project Icon
Env/TSMorph/def_iff.info	Default OpalVision IFF Icon
Env/TSMorph/def_ilbm.info	Default ILBM Icon
Env/TSMorph/def_jpg.info	Default OpalVision JPEG Icon
Env/TSMorph/def_ppm.info	Default PPM Icon
Env/TSMorph/def_prefs.info	Default prefs Icon
Rexx.info	Icon
Rexx/FadeToBlack.TSM	Example prescript script
Rexx/FadeToBlack.TSM.info	Icon
Rexx/FadeToWhite.TSM	Example prescript script
Rexx/FadeToWhite.TSM.info	Icon
Rexx/Loadscript.TSM	Example loadscript script
Rexx/Loadscript.TSM.info	Icon
Rexx/PixelMorph.TSM	Example prescript script
Rexx/PixelMorph.TSM.info	Icon
Rexx/PixelWarp.TSM	Example prescript script
Rexx/PixelWarp.TSM.info	Icon
Rexx/Postscript.TSM	Example postscript script
Rexx/Postscript.TSM.info	Icon
Rexx/Prescript.TSM	Example prescript script
Rexx/Prescript.TSM.info	Icon
Rexx/ToHam.TSM	Example postscript script
Rexx/ToHam.TSM.info	Icon
Brush.info	Icon
Brush/1st	Brush
Brush/1st.info	Icon
Brush/Add	Brush
Brush/Add.info	Icon
Brush/Del	Brush
Brush/Del.info	Icon
Brush/Goto	Brush
Brush/Goto.info	Icon
Brush/Last	Brush
Brush/Last.info	Icon
Brush/Link	Brush
Brush/Link.info	Icon
Brush/Next	Brush
Brush/Next.info	Icon
Brush/None	Brush
Brush/None.info	Icon
Brush/one	Brush
Brush/one.info	Icon
Brush/Prev	Brush
Brush/Prev.info	Icon
Brush/Rel	Brush
Brush/Rel.info	Icon

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Brush/Two	Brush
Brush/Two.info	Icon
Brush/Unlink	Brush
Brush/Unlink.info	Icon
Cursor.info	Icon
Cursor/XAdd	Pointer
Cursor/XAdd.info	Icon
Cursor/XDel	Pointer
Cursor/XDel.info	Icon
Cursor/XL1	Pointer
Cursor/XL1.info	Icon
Cursor/XL2	Pointer
Cursor/XL2.info	Icon
Cursor/XMov	Pointer
Cursor/XMov.info	Icon
Cursor/XOne	Pointer
Cursor/XOne.info	Icon
Cursor/XRel	Pointer
Cursor/XRel.info	Icon
Cursor/XTwo	Pointer
Cursor/XTwo.info	Icon
Cursor/XU1	Pointer
Cursor/XU1.info	Icon
Cursor/XU2	Pointer
Cursor/XU2.info	Icon

If you have Installer then TSMorph can be installed using the supplied script. If not then the following is a description of what the script does.

- \* 1) Make a new drawer for the executables - default Work:TSMorph,
- \* 2) Copy TSMorph, TSMorph-render, TSMorph.guide and the Rexx drawer and its contents and all their icons to the drawer created in 1) above (if you have a 68020/030 with 68881/2 or a 68040 then copy the FPU version TSMorph-render.881 and rename it as TSMorph-render instead of copying TSMorph-render),
- \* 3) If required copy the Brush and Cursor drawers and contents.
- \* 4) Make new drawers ENVARC:TSMorph and ENV:TSMorph,
- \* 5) Copy the default Icons to the directories created above.
- \* 6) Amend your s:user-startup to assign TSMorph: to the drawer created in step 1).
- \* 7) Manually perform the assign in step 6).
- \* 8) If you are running system version 3.0 (or greater) change the default tool for TSMorph.guide to MultiView.

## 1.4 TSMorph.guide/Requirements

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## Software and Hardware required

\*\*\*\*\*

The following libraries (with minimum version) are required to run TSMorph:

intuition.library	37
iffparse.library	37
graphics.library	37
layers.library	37
gadtools.library	37
asl.library	37
utility.library	37
diskfont.library	36
icon.library	37
rexxsyslib.library	0

The following will also be used if present:

amigaguide.library	34	
opal.library	0	Note: OpalVision board is not required
reqtools.library	38	reqtools is ©1991/1992 Nico François This is required for Animated Warps/Morphs

TSMorph-render requires a large amount of chip memory (or opal.library). If you have 1Mb then 512x512 images can be morphed (though you may have to run workbench on a 2 colour 640x200 screen). 640x512 is probably impossible without 2Mb of chip memory.

The amount of chip memory required by TSMorph can be reduced to 1/5 by setting the

```
ZOOM
parameter to OFF.
```

## 1.5 TSMorph.guide/Par

## Tool types and Shell parameters

\*\*\*\*\*

Both TSMorph and TSMorph-render can be run from the Shell or the Workbench. Most be edited using the Settings menu.

NOTE: TSMorph and TSMorph-render both require a stack size of more than 4096. 8192 should be OK. If the stack is set large enough then the programs will probable just crash.

Parameters can be supplied, normally either on the Shell command line, as Icon Tool Types on the Project, TSMorph or TSMorph-render Icon, or in a settings file.

The format of settings files is a text file with lines in the format:

```
Settingstype=settingsvalue
```

Blank lines or lines starting with a ; (semi-colon) are treated as comments. Any settings supplied on the Shell command line or as an Icon Tool Type override values specified in this file. Parameters on the Project Icon override parameters on the Tool Icon.

Note: All the Project Icon tool types are used if the project is run with a default tool or by double clicking a tool, some are not used if the project is selected using a file requester, if the Tool was run from the Shell then file requester selected project tool types are ignored. Also some settings can not be changed on open projects,

The Settings file name used is first file found from:

- 1) The name supplied in the SETTINGS= parameter on the project.
- 1) The name supplied in the SETTINGS= parameter on the tool.
- 2) TSMorph.prefs  
in the project directory for the workbench,  
the current directory from the Shell.
- 3) TSMorph.prefs  
in the directory TSMorph was loaded from.
- 4) ENV:TSMorph/TSMorph.prefs

Unless

```
KEEPSETTINGS
```

```
is set to NO current settings are saved in
```

```
ENV:TSMorph/TSMorph.prefs when TSMorph is quit. Settings can be saved  
and loaded from the
```

```
Settings  
menu.
```

```
TSMorph
```

```
Parameters to TSMorph
```

```
TSMorph-render
```

```
Parameters to TSMorph-render
```

## 1.6 TSMorph.guide/Par-TSMorph

```
Parameters to TSMorph
```

```
=====
```

The following parameters can be supplied, normally either on the Shell command line, as Icon Tool Types on the Project or TSMorph Icon, or in a settings file:

CHANGEPALETTE	Change screen palette to match image
CREATEICONS	Create project Icons
CREATEICONSP	Create prefs Icons
FILES	Specify file to open
KEEPSETTINGS	Save settings on Quit
OPENMODE	How to open images
PUBSCREEN	Public screen to use
SETTINGS	Settings file name
ZOOM	Zoom image 2 times

## 1.7 TSMorph.guide/P-CHANGEPALETTE

CHANGEPALETTE=YES/NO/OFF  
-----

Sets the default value of the Change Palette? settings menu item - defaults to YES.

This item toggles if each images palette should be used to display the image when the window is active. Each image window can have its own palette.

Since the ability to change screens colour palettes is not supported by CBM this menu option can be disabled by setting this parameter to OFF.

## 1.8 TSMorph.guide/P-CREATEICONS

CREATEICONS=YES/NO  
-----

Sets the default value of the Create Icons? settings menu item - defaults to YES.

---



This item toggles if Icons are to be saved with parameter files . If it is selected then an Icon will be saved. The icon will come from 'ENV:TSMorph/def\_points' if this exists, secondly from 'ENV:SYS/def\_points', otherwise the default project Icon is used.

This parameter is not changed by Requester loaded projects.

## 1.9 TSMorph.guide/P-CREATEICONSP

CREATEICONSP=YES/NO  
-----

Sets the default value of the Create Prefs Icons? settings menu item - defaults to YES.

This item toggles if Icons are to be saved with Settings files. If it is selected then an Icon will be saved. The icon will come from 'ENV:TSMorph/def\_prefs' if this exists, secondly from 'ENV:SYS/def\_prefs', otherwise the default project Icon is used.

## 1.10 TSMorph.guide/P-FILES

FILES=filename  
-----

This is only relevant to the Shell, only one name can be supplied - default is to open a new unnamed project.

Only one filename can be supplied.

## 1.11 TSMorph.guide/P-KEEPSETTINGS

KEEPSETTINGS=YES/NO  
-----

By default current settings are saved in 'ENV:TSMorph/TSMorph.prefs' when TSMorph is quit. This parameter and menu item enable this behaviour to be turned off.

Default value is YES.

---

## 1.12 TSMorph.guide/P-OPENMODE

OPENMODE=ALWAYS/IFILBM/IFCOLOURS/OPAL

-----

This parameter and menu item specify how images should be loaded for displaying by TSMorph. It is only relevant if opal.library is present. If opal.library is not present then only standard ILBM images can be loaded. Otherwise TSMorph can load any image which opal.library supports (EHB, HAM, JPEG, 24 bit ILBM). The images are loaded and mapped to the screens current colour palette.

ALWAYS - Only try and load normal ILBM images. Fail if not.  
 IFILBM - First try to load as an ILBM image, try opal.library if the image is not an ILBM or has 24 planes.  
 IFCOLOURS - As IFILBM but use opal.library if the number of planes in the image exceed the number of the screen.  
 OPAL - Always use opal.library to load the image.

Using opal.library to load the image means most images can be loaded. However the load process may be slow as the images are loaded and converted to 24 bit internally and then remapped to the screen palette.

An alternative is to use the  
     Loadscript  
     ARexx script to convert each  
 image before loading.

## 1.13 TSMorph.guide/P-PUBSCREEN

PUBSCREEN=pubscreenname

-----

This gives the name of the Public Screen on which to open all TSMorph windows - default is the default public screen.

This parameter is not changed by Requester loaded projects.

It can be changed using the menu item (if reqtools.library is available), a requester is displayed allowing the input of the screen name, but any change is ignored until TSMorph is reloaded.

## 1.14 TSMorph.guide/P-SETTINGS

---

SETTINGS=filename  
-----

This can only be supplied on the Shell command line, or an Icon Tool Type. It specifies the name of a file for more parameters. See

parameters  
.

This parameter is not changed by Requester loaded projects.

## 1.15 TSMorph.guide/P-ZOOM

ZOOM=YES/NO/OFF  
-----

Sets the default value of the Zoom? settings menu item. If set to YES then images will be initially displayed 2x normal size, if set to NO then images will be initially displayed normal size, setting to OFF disables the Zoom? option, this reduces chip memory usage to 1/5 - defaults to NO.

## 1.16 TSMorph.guide/Par-TSMorph-render

Parameters to TSMorph-render  
=====

The following parameters can be supplied, normally either on the Shell command line, as Icon Tool Types on the Project or TSMorph-render Icon, or in a settings file:

CREATEICONS	Create image Icons
DEPTH	Depth for search algorithm
DX	Horizontal Pixelation
DY	Vertical Pixelation
FILES	Specify file to open

LOADSCRIPT	Script before each image loaded
MODE	Mode for rendering algorithm
POSTSCRIPT	Script after rendering frame
PRESCRIPT	Script before rendering frame
PUBSCREENR	Public screen to use
QUALITY	JPEG Quality
SAVEFORMAT	Format to save images
SETTINGS	Settings file name
TOOLPRI	Priority of TSMorph-render

## 1.17 TSMorph.guide/P-CREATEICONSR

CREATEICONSR=NO/YES

-----  
This parameter and menu item selects if Icons are to be saved with image files. If it is YES then an Icon will be saved. The icon depends on the

save format

.

'ENV:TSMorph/def\_ilbm' - 24 bit ILBM saved without opal.library  
'ENV:TSMorph/def\_iff' - 24 bit ILBM saved using opal.library  
'ENV:TSMorph/def\_jpg' - JPEG files saved using opal.library  
'ENV:TSMorph/def\_ppm' - PPM files

If the file does not exist then 'ENV:SYS/def\_ilbm' (etc.) is tried, if this does not exist then the default project Icon is used.

Default value is NO.

---

## 1.18 TSMorph.guide/P-DEPTH

DEPTH=number  
-----

This parameter indicates how deep the Morphing algorithm should search to find the points to use for morphing.

Default value is 2.

It can be changed using the menu item (if reqtools.library is available), a requester is displayed allowing the input of the value.

## 1.19 TSMorph.guide/P-DX

DX=number  
-----

This parameter can be used to speed up the rendering process. The default value is 0.

If set to a number then only some Horizontal pixels will be generated. e.g. if set to 3 then only every 4th pixel will be generated. The others will be copied from the previous pixel. This can be overridden by using

ARexx  
. Also see  
DY  
.

It can be changed using the menu item (if reqtools.library is available), a requester is displayed allowing the input of the value.

## 1.20 TSMorph.guide/P-DY

DY=number  
-----

This parameter can be used to speed up the rendering process. The default value is 0.

If set to a number then only some Vertical pixels will be generated. e.g. if set to 1 then only every other line will be generated. The others will be copied from the previous line. This can be overridden by using

ARexx

---

```
. Also see
DX
.
```

It can be changed using the menu item (if reqtools.library is available), a requester is displayed allowing the input of the value.

## 1.21 TSMorph.guide/P-FILES-R

```
FILES=filename
-----
```

This is only relevant to the Shell, only one name can be supplied - default is to show an ASL file requester for the file to run.

Only one filename can be supplied.

## 1.22 TSMorph.guide/P-LOADSCRIPT

```
LOADSCRIPT=Scriptname/OFF
-----
```

This specifies the name of an  
 ARexx  
 script to run before each image 24  
 bit image is loaded. This can be used to e.g. hold the images on disc  
 in JPEG format to save space and convert each image back to 24 bit ILBM  
 when required.

The default script is REXX/Loadscript  
 "REXX/Loadscript.TSM/Main}.

The version supplied does nothing.

Set to OFF to run no script.

It can be changed using the menu item (if reqtools.library is available), a requester is displayed allowing the input of the value.

## 1.23 TSMorph.guide/P-MODE

```
MODE=0/1/2/3
-----
```

This parameter and menu item indicate how the Morphing

---

algorithm  
should  
search to find the points to use for morphing.  
  
Default value is 0.

## 1.24 TSMorph.guide/P-POSTSCRIPT

POSTSCRIPT=Scriptname/OFF  
-----

This specifies the name of an  
ARExx  
script to run after each image is  
rendered. This can be used to build an animation or change the image  
format from 24 bit.

The default script is Rexx/Postscript  
"Rexx/Postscript.TSM/Main}.

The version supplied does nothing.

Set to OFF to run no script.

It can be changed using the menu item (if reqtools.library is  
available), a requester is displayed allowing the input of the value.

## 1.25 TSMorph.guide/P-PRESCRIPT

PRESCRIPT=Scriptname/OFF  
-----

This specifies the name of an  
ARExx  
script to run before each image is  
rendered. This can be used to produce only some of the frames and  
control the movement and colour of the images.

The default script is Rexx/Prescript  
"Rexx/Prescript.TSM/Main}.

The version supplied does nothing.

Set to OFF to run no script.

It can be changed using the menu item (if reqtools.library is  
available), a requester is displayed allowing the input of the value.

---

## 1.26 TSMorph.guide/P-PUBSCREENR

PUBSCREENR=pubscreenname  
-----

This gives the name of the Public Screen on which to open TSMorph-render windows - default is the default public screen.

It can be changed using the menu item (if reqtools.library is available), a requester is displayed allowing the input of the screen name.

## 1.27 TSMorph.guide/P-QUALITY

QUALITY=number  
-----

This specifies the quality of output files. This option only applies if opal.library is available and

SAVEFORMAT  
is JPEG or JPEGT. Possible values are 0 to 100.

Default value is 75.

It can be changed using the menu item (if reqtools.library is available), a requester is displayed allowing the input of the value.

## 1.28 TSMorph.guide/P-SAVEFORMAT

SAVEFORMAT=ILBM24/OPAL24/OPAL24T/OPAL24F/OPAL24FT/JPEG/JPEGT/PPM  
-----

This parameter and menu item specify the the format TSMorph-render should use to save the output images. OPAL and JPEG formats are only available if opal.library is available.

ILBM24	- IFF 24 bit ILBM with no CAMG chunk
OPAL24	- IFF 24 bit ILBM saved using opal.library
OPAL24T	- as OPAL24 with a Thumbnail
OPAL24F	- as OPAL24 in Fast Format
OPAL24TF	- as OPAL24F with a Thumbnail
JPEG	- JPEG format using opal.library
JPEGT	- as JPEG with a Thumbnail
PPM	- PPM format

---



The quality of JPEG images can be set using the  
QUALITY  
parameter.

PPM format is basically uncompressed 24 bit. The files are therefore very large and it is suggested that a compressing file handler (such as XFH or EPU) is used. This format is provided mainly to allow the easy production of MPEG movies.

## 1.29 TSMorph.guide/P-SETTINGS-R

SETTINGS=filename  
-----

This can only be supplied on the Shell command line, or an Icon Tool Type.

This specifies the name of a file to contain settings. See  
parameters  
.

## 1.30 TSMorph.guide/P-TOOLPRI

TOOLPRI=number  
-----

This can only be supplied as a Tool Icon tool type. It sets the priority of the rendering process.

Setting to -1 is a good idea if you wish to run the program in the background. The default value is 0. Setting to positive values is generally \*not\* a good idea.

## 1.31 TSMorph.guide/Info

The Information Window

\*\*\*\*\*

This window is always displayed when TSMorph is running. It displays information about the current project. The window title is "TSMorph", the screen title will be displayed as the project name if the project has a name. It is used to set up all the information required by TSMorph-render.

---

```

Gadgets
    Gadgets displayed in the Info Window

Menus
    Menus available in the Info Window

Keyboard
    Keyboard controls in the Info Window

```

## 1.32 TSMorph.guide/l-gad

Gadgets in Info Window

=====

The Information Window appears with gadgets:

```

-----
|. |TSMorph          | | |
-----|
| File One ..... X |
| File Two ..... X |
|24 File 1 ..... X |
|24 File 2 ..... X |
|   Width ... Height ... |
| Single Frames .. Start . |
|   Name ..... X |
|   Edit Points          |
-----

```

File One

The first image file for point editing

Get file

Get file gadget for above

File Two

The second image file for point editing

Get File

Get file gadget for above

24 File 1

The first 24 bit image file to morph

Get File

Get file gadget for above

24 File 2

The second 24 bit image file to morph

Get File	Get file gadget for above
Width	Read only gadget showing width
Height	Read only gadget showing Height
Single	Checkbox to morph only one image
Frames	Number of frames to generate
Start	Frame number to start at
Name	File name of animation frames
Get File	Get file gadget for above
Edit Points...	Display images to edit points
Close gadget	Quit program
Zoom gadget	Standard zoom window
Depth gadget	Standard depth gadget

### 1.33 TSMorph.guide/l-gad-File\_One

File One gadget

-----

This gadget allows the editing of the file name of the first image to be used when editing points. This gadget is disabled if the

Edit Windows  
 are currently open. The file name can be either edited in  
 the string gadget or by using the  
 Get File  
 to display an ASL file  
 requester.

---

This image should be a Workbench displayable version of the

```
first 24 bit file
. It is displayed in the first
Edit Window
when
```

editing points.

'o' can be used to activate this gadget - See  
Keyboard

.

See

```
File naming
for how to specify the file name.
```

### 1.34 TSMorph.guide/l-gad-Get\_File\_One

```
Get File One gadget
-----
```

This gadget displays an ASL file requester to select the file to appear  
in the

```
File One
gadget.
```

'o' with shift is the same as using this gadget - See  
Keyboard

.

### 1.35 TSMorph.guide/l-gad-File\_Two

```
File Two gadget
-----
```

This gadget is the same as the  
File One  
gadget for the second  
displayable image. This image should be the same size as the first.

't' can be used to activate this gadget - See  
Keyboard

.

See

```
File naming
for how to specify the file name.
```

---

### 1.36 TSMorph.guide/l-gad-Get\_File\_Two

Get File Two gadget  
-----

This gadget displays an ASL file requester to select the file to appear in the

File Two  
gadget.

't' with shift is the same as using this gadget - See  
Keyboard

.

### 1.37 TSMorph.guide/l-gad-24\_File\_1

24 File 1 gadget  
-----

This gadget allows the editing of the file name of the first image to be used when morphing. The file name can be either edited in the string gadget or by using the

Get File  
to display an ASL file requester.

This image should be a 24 bit version of the  
first displayable file

.

'1' can be used to activate this gadget - See  
Keyboard

.

See

File naming  
for how to specify the file name.

### 1.38 TSMorph.guide/l-gad-Get\_24\_File\_1

Get 24 File 1 gadget  
-----

This gadget displays an ASL file requester to select the file to appear in the

---

24 File 1  
gadget.

'1' with shift is the same as using this gadget - See  
Keyboard  
.

### 1.39 TSMorph.guide/l-gad-24\_File\_2

24 File 2 gadget  
-----

This gadget allows the editing of the file name of the last image to be used when morphing. The file name can be either edited in the string gadget or by using the

Get File  
to display an ASL file requester.

This image should be a 24 bit version of the  
second displayable file  
.

If

Single Image  
mode is selected then this is ignored.

'2' can be used to activate this gadget - See  
Keyboard  
.

See

File naming  
for how to specify the file name.

### 1.40 TSMorph.guide/l-gad-Get\_24\_File\_2

Get 24 File 2 gadget  
-----

This gadget displays an ASL file requester to select the file to appear in the

24 File 2  
gadget.

'2' with shift is the same as using this gadget - See  
Keyboard  
.

---

## 1.41 TSMorph.guide/l-gad-Width

Width gadget  
-----

This gadget displays the width of the images being edited. If images have not been selected then it should display the maximum width of the current points.

## 1.42 TSMorph.guide/l-gad-Height

Height gadget  
-----

This gadget displays the height of the images being edited. If images have not been selected then it should display the maximum height of the current points.

## 1.43 TSMorph.guide/l-gad-Single

Single image gadget  
-----

This gadget cycles between Morphs, Warps, Animated Morphs and Animated Warps.

In Warp mode one image is distorted based on the control points.

In Morph mode one image is distorted/recoloured into a second image based on control points.

In animated Warps and Morphs the input images can change on each output frame.

'r' and 'R' can be used to cycle this gadget forward and backward - See

Keyboard  
.

Note: Animated Warps/Morphs are only available if Reqttools is available.

---

## 1.44 TSMorph.guide/l-gad-Frames

Number of Frames gadget  
-----

This gadget can be used to specify the number of frames to generate.

In

Single

mode the total number of frames will be this number plus the first image.

In dual mode the total number of frames is the first image, this number and the last image.

'f' can be used to activate this gadget - See  
Keyboard

.

This gadget is disabled if Images are displayed and an animated Morph/Warp is being editited.

## 1.45 TSMorph.guide/l-gad-Start

Start Frame gadget  
-----

This gadget can be used to specify the number to use in the

Name

of the

first generated file. This number is then incremented by 1 for each subsequent frame.

'a' can be used to activate this gadget - See  
Keyboard

.

This gadget is disabled if Images are displayed and an animated Morph/Warp is being editited.

## 1.46 TSMorph.guide/l-gad-Name

Anim file Name gadget  
-----

This gadget is used to name the files produced by TSMorph-render.

The file name can be either edited in the string gadget or by using the

---



Get File  
to display an ASL file requester.

The file name should contain the characters '%ld'. These characters will be replaced by the frame number, starting from that specified in the

Start  
gadget.

'n' can be used to activate this gadget - See  
Keyboard

.

See

File naming  
for further information on how to specify the file name.

## 1.47 TSMorph.guide/l-gad-Get\_Name

Get Anim file Name gadget

-----

This gadget displays an ASL file requester to select the file to appear in the

Name  
gadget.

'n' with shift is the same as using this gadget - See  
Keyboard

.

## 1.48 TSMorph.guide/l-gad-Edit\_Points

Edit Points... gadget

-----

This button gadget has the same effect as the  
Edit Points  
menu option.

It opens the

Control Window  
and  
Edit Windows  
to allow editing of the

control points. If these windows are already open then the Control Window is activated.

---

'p' is the same as using this gadget - See  
Keyboard  
.

## 1.49 TSMorph.guide/l-gad-Close

Close gadget  
-----

This is a standard close gadget. Clicking quits the program.

If the current project has been changed but not saved then the

Unsaved Project requester  
is displayed.

## 1.50 TSMorph.guide/l-gad-Zoom

Zoom gadget  
-----

This is a standard Zoom gadget which switches the window between full  
size and a title bar.

## 1.51 TSMorph.guide/l-gad-Depth

Depth gadget  
-----

This is a standard depth gadget.

## 1.52 TSMorph.guide/l-men

Menus on the Info Window  
=====

The following menus are available on the Information Window:

Project

---

Project menu

Settings

Settings menu

## 1.53 TSMorph.guide/I-men-P

Info Window Project menu

-----

This menu contains the following items with their associated Amiga short-cuts in the Info Window:

New	N	Create a new project
Open...	O	Open a file
Save	S	Save file
Save As...		Save named file
Delete...		Delete a Project
About...		Show about requester
Quit	Q	Quit program
Edit Points	E	Open windows to edit points

## 1.54 TSMorph.guide/I-men-P-New

Info Window Project/New menu item

.....

This menu item creates a new project.

If the current project has been changed but not saved then the

---

Unsaved Project requester  
is displayed.

## 1.55 TSMorph.guide/l-men-P-Open

Info Window Project/Open menu item  
.....

This menu item allows the loading of a previously created

Parameter file  
.

If the current project has been changed but not saved then the

Unsaved Project requester  
is displayed.

## 1.56 TSMorph.guide/l-men-P-Save

Info Window Project/Save menu item  
.....

This saves the current project using the current name. If the project  
does not yet have a name then an ASL file requester is displayed.

See

File Format  
.

## 1.57 TSMorph.guide/l-men-P-Save\_As

Info Window Project/Save As... menu item  
.....

This saves the current project using a name chosen using an ASL file  
requester.

See

File Format  
.

---

## 1.58 TSMorph.guide/l-men-P-Delete

Info Window Project/Delete... menu item

.....

This can be used to delete a Project. It will delete the main file, its icon (if present) and any associated Anim points files.

See

File Format

.

## 1.59 TSMorph.guide/l-men-P-About

Info Window Project/About... menu item

.....

This displays some program version information in the About Requester

.

## 1.60 TSMorph.guide/l-men-P-Quit

Info Window Project/Quit menu item

.....

This quits TSMorph.

If the current project has been changed but not saved then the

Unsaved Project requester  
is displayed.

## 1.61 TSMorph.guide/l-men-P-Edit\_Points

Info Window Project/Edit Points menu item

.....

This is the same as the Edit Points gadget.

It opens the

Control Window  
and  
Edit Windows  
to allow editing of the  
control points. If these windows are already open then the Control  
Window is activated.

## 1.62 TSMorph.guide/I-Key

Keyboard controls in the Info Window

=====

The following keyboard controls are available in the Info Window:

- o Activate
  - File One  
gadget
  - With shift - show file requester - See  
Get File One
  - .
- t Activate
  - File Two  
gadget
  - With shift - show file requester - See  
Get File Two
  - .
- 1 Activate
  - 24 File 1  
gadget
  - With shift - show file requester - See  
Get 24 File 1
  - .
- 2 Activate
  - 24 File 2  
gadget
  - With shift - show file requester - See  
Get 24 File 2
  - .
- rR Cycle
  - Single image  
gadget.
- f Activate
  - Frames  
gadget.
- a Activate
  - Start  
gadget.

```

n  Activate
    Name
    gadget
    With shift - show file requester - See
    Get Name
    .

p  Same as
    Edit Points
    gadget

```

'Help' displays context sensitive help using amigaguide if available.

## 1.63 TSMorph.guide/Con

The Control Window

\*\*\*\*\*

The control window displays various gadgets for different for different point editing modes. The title bar displays the current editing mode as does the Mouse pointer. The screen title bar displays "TSMorph" for non-animated Warps/Morphs and "TSMorph - Frame nnn" for animated Warps/Morphs.

Gadgets

Gadgets displayed in the control window

Menus

Menus on the Control Window

Modes

Point editing modes

Keyboard

Keyboard controls in the Control Window

## 1.64 TSMorph.guide/Con-gad

Control and Image Window gadgets

=====

The Control Window appears with gadgets:

```

-----
|. |Mov| |

```

```

-----|
|ONE TWO|
|REL ADD|
|DEL LNK|
|UNL MOV|
|<<?>>|
-----

```

Most are used to set the edit mode. The rest except the close and depth gadgets are used to set the current

Frame Number

.

One	Move points in one window
Two	Move points in both windows
Rel	Move points relatively in both windows
Add	Add a new point
Del	Delete an existing point
Lnk	Link two points
Unl	Unlink two points
Mov	Scroll the window
<	First Frame
<	Previous Frame
?	Goto Frame
>	Next Frame
>	Last Frame
Close	

---



Close window

Depth

Depth gadget

## 1.65 TSMorph.guide/Con-gad-First

Control Window First Frame gadget

-----

This gadget goes to the first frame. This is the same as the  
First  
menu  
item.

This gadget is disabled if the Morph/Warp is not animated, or the first frame is already displayed.

## 1.66 TSMorph.guide/Con-gad-Previous

Control Window Previous Frame gadget

-----

This gadget goes to the previous frame. This is the same as the

Previous  
menu item.

This gadget is disabled if the Morph/Warp is not animated, or the first frame is currently displayed.

## 1.67 TSMorph.guide/Con-gad-Goto

Control Window Goto Frame gadget

-----

This gadget goes to a chosen frame. This is the same as the  
Goto  
menu  
item. It displays the  
Frame Number  
Requester.

This gadget is disabled if the Morph/Warp is not animated.

---

## 1.68 TSMorph.guide/Con-gad-Next

Control Window Next Frame gadget

---

This gadget goes to the next frame. This is the same as the

Next  
menu

item.

This gadget is disabled if the Morph/Warp is not animated, or the last frame is currently displayed.

## 1.69 TSMorph.guide/Con-gad-Last

Control Window Last Frame gadget

---

This gadget goes to the last frame. This is the same as the

Last  
menu

item.

This gadget is disabled if the Morph/Warp is not animated, or the last frame is already displayed.

## 1.70 TSMorph.guide/Con-gad-Close

Control Window Close gadget

---

This closes the

Control Window  
, and the  
Edit Windows

.

---

## 1.71 TSMorph.guide/Con-gad-Depth

Control Window Depth gadget  
-----

This is a standard depth gadget.

## 1.72 TSMorph.guide/CI-men

Control and Edit Windows menus  
=====

The following menus are available on the

Control  
and  
Edit  
Windows:

Project                      Project menu

Edit                              Edit menu

Settings                      Settings menu

## 1.73 TSMorph.guide/CI-men-P

Control and Edit Windows Project menu  
-----

This menu contains the following items with their associated Amiga short-cuts in the

Control  
and  
Edit  
Windows:

New Points            N                      Delete all points

Open Points... O

		Read points from a file
Save	S	Save file
Save As...	A	Save named file
About...		Show about requester
Exit Points		Open windows to edit points
Quit	Q	Quit program

## 1.74 TSMorph.guide/CI-men-P-New

Control and Edit Window Project/New Points menu item  
 .....

This menu item deletes all existing points.

## 1.75 TSMorph.guide/CI-men-P-Open

Control and Edit Window Project/Open Points menu item  
 .....

This menu item allows the loading of a previously created

Parameter file  
 .

Only the points are loaded from the file. Other parameters are retained.

If the current project has been changed but not saved then the

Unsaved Project requester  
 is displayed.

## 1.76 TSMorph.guide/CI-men-P-Save

Control and Edit Window Project/Save menu item

.....

This saves the current project using the current name. If the project does not yet have a name then an ASL file requester is displayed.

See

File Format

.

### 1.77 TSMorph.guide/CI-men-P-Save\_As

Control and Edit Window Project/Save As... menu item

.....

This saves the current project using a name chosen using an ASL file requester.

See

File Format

.

### 1.78 TSMorph.guide/CI-men-P-About

Control and Edit Window Project/About... menu item

.....

This displays some program version information in the About Requester

.

### 1.79 TSMorph.guide/CI-men-P-Exit\_Points

Control and Edit Window Project/Exit Points menu item

.....

This is the same as closing the Control Window or either of the

Edit Windows

. It closes all of these windows.

## 1.80 TSMorph.guide/CI-men-P-Quit

Control and Edit Window Project/Quit menu item  
 .....

This quits TSMorph.

If the current project has been changed but not saved then the

Unsaved Project requester  
 is displayed.

## 1.81 TSMorph.guide/CI-men-E

Control and Edit Window Edit menu  
 -----

This menu contains the following items with their associated Amiga short-cuts in the

Control  
 and  
 Edit  
 Windows:

Add Grid...	Add a grid of points
Frame	Change the Frame Number
Edit Mode	Set the edit mode.

## 1.82 TSMorph.guide/CI-men-E-Grid

Control and Edit Window Edit/Add Grid... menu item  
 .....

This menu item displays the

Add Grid  
 requester to add a grid of points

to the images.

---

## 1.83 TSMorph.guide/CI-men-E-Frame

Control and Edit Windows Frame sub menu

.....

This sub menu contains the following items with their associated Amiga short-cuts in the

Control  
and  
Edit  
Windows:

First	<	First Frame
Previous	-	Previous Frame
Goto...	.	Goto Frame
Next	+	Next Frame
Last	>	Last Frame

## 1.84 TSMorph.guide/CI-men-E-Frame-First

Control and Edit Windows Frame/First item

\*\*\*\*\*

This menu item goes to the first frame. This is the same as the First gadget.

This menu item is disabled if the Morph/Warp is not animated, or the first frame is already displayed.

## 1.85 TSMorph.guide/CI-men-E-Frame-Previous

Control and Edit Windows Frame/Previous item

\*\*\*\*\*

This menu item goes to the previous frame. This is the same as the

Previous  
gadget.

This menu item is disabled if the Morph/Warp is not animated, or the first frame is already displayed.

## 1.86 TSMorph.guide/CI-men-E-Frame-Goto

Control and Edit Windows Frame/Goto item

\*\*\*\*\*

This menu item goes to a chosen frame. This is the same as the  
Goto  
gadget. It displays the  
Frame Number  
Requester.

This menu item is disabled if the Morph/Warp is not animated, or the first frame is already displayed.

## 1.87 TSMorph.guide/CI-men-E-Frame-Next

Control and Edit Windows Frame/Next item

\*\*\*\*\*

This menu item goes to the next frame. This is the same as the  
Next  
gadget.

This menu item is disabled if the Morph/Warp is not animated, or the last frame is already displayed.

## 1.88 TSMorph.guide/CI-men-E-Frame-Last

Control and Edit Windows Frame/Last item

\*\*\*\*\*

This menu item goes to the last frame. This is the same as the  
Last  
gadget.

This menu item is disabled if the Morph/Warp is not animated, or the last frame is already displayed.

---



## 1.89 TSMorph.guide/CI-men-E-EMode

Control and Edit Window Edit/Mode sub menu

.....

This sub menu contains the following items with their associated Amiga short-cuts in the

Control  
and  
Edit  
Windows:

Edit One	1	Move points in one window
Edit Two	2	Move points in both windows
Edit Rel	3	Move points relatively in both windows
Add	4	Add a new point
Delete	5	Delete an existing point
Link	6	Link two points
Unlink	7	Unlink two points
None	8	Scroll the window

## 1.90 TSMorph.guide/men-Settings

Settings menu

-----

This menu contains the following items with their associated Amiga short-cuts in the

Control  
,  
Info



	ARexx pre frame script
Post Script...	ARexx post frame script
Depth	Morphing algorithm depth
Mode	Morphing algorithm mode
Save Format	Image save format
JPEG Quality	Quailty of JPEG images
Render Screen...	Public screen for TSMorph-render
Reset To Defaults	Reset to default settings
Last Saved	Restore from ENVARC:TSMorph/TSMorph.prefs
Restore	Restore from ENV:TSMorph/TSMorph.prefs

## 1.91 TSMorph.guide/men-S-LoadS

Setting menu/Load Settings...

.....

This displays an ASL requester to load settings into the currently running program.

The default name is TSMorph.prefs.

## 1.92 TSMorph.guide/men-S-SaveS

Setting menu/Save Settings

.....

This saves the current

settings  
 in 'ENVARC:TSMorph/TSMorph.prefs' and  
 'ENV:TSMorph/TSMorph.prefs' .

If

CREATEICONSP  
 is set then an Icon is saved as well

Unless

KEEPSETTINGS  
 is set to NO current settings are saved in  
 'ENV:TSMorph/TSMorph.prefs' whenever TSMorph is quit.

### 1.93 TSMorph.guide/men-S-SaveSAs

Setting menu/Save Settings As...

.....

This displays an ASL requester to save the current  
 settings

.

If

CREATEICONSP  
 is set then an Icon is saved as well

The default name is TSMorph.prefs.

### 1.94 TSMorph.guide/men-S-ResetD

Setting menu/Reset To Defaults

.....

This resets

settings  
 to there default values.

If some

Image windows  
 are open and  
 CHANGEPALETTE  
 is set to OFF then it

will stay OFF. The same applies to

ZOOM

.

## 1.95 TSMorph.guide/men-S-LastS

Setting menu/Last Saved

.....

This reset

settings  
to the values last saved in

ENVARC:TSMorph/TSMorph.prefs (overridden by any TOOLTYPES).

If some

Image windows  
are open and  
CHANGEPALETTE  
is set to OFF then it

will stay OFF. The same applies to  
ZOOM

.

## 1.96 TSMorph.guide/men-S-Restore

Setting menu/Restore

.....

This resets

settings  
to the values last saved in

ENV:TSMorph/TSMorph.prefs (overridden by any TOOLTYPES). Settings are  
saved in this file whenever TSMorph is quit if

KEEPSETTINGS  
is set to

YES.

If some

Image windows  
are open and  
CHANGEPALETTE  
is set to OFF then it

will stay OFF. The same applies to  
ZOOM

.

## 1.97 TSMorph.guide/Con-Key

Keyboard controls in the Control Window

=====

'Help' displays context sensitive help using amigaguide if available.

## 1.98 TSMorph.guide/Edit

The Edit Windows

\*\*\*\*\*

The Edit windows display Workbench displayable versions of the images to be morphed along with the control points. The window title displays the file name, the screen title displays the full file name. The mouse pointer shows the current editing mode. The windows are sizeable and have scrollbars. The menus displayed are the same as the Control Window

.

The first click in these windows is ignored.

Gadgets

Gadgets on the Edit Windows

Menus

Menus on the Edit Windows

Keyboard

Keyboard controls on the Edit Windows

Modes

Point editing modes.

## 1.99 TSMorph.guide/E-gad

Gadgets on the Edit Windows

=====

The Edit Windows appears with gadgets:

```

-----
|.filename | | |
-----|
|           | | |
|           | | |
|           | | |
|           | | |
|           | | |
|           |/\|
|           |\| |
|---|---|
| ----- <- ->|//|

```

|-----

Horizontal scroll gadget	Scrolls image horizontally
Vertical scroll gadget	Scrolls image vertically
Up gadget	Scroll image up
Down gadget	Scroll image down
Left gadget	Scroll image left
Right gadget	Scroll image right
Close gadget	Close Edit and Control Windows
Zoom gadget	Zoom window
Depth gadget	Depth gadget
Sizing gadget	Sizing gadget

### 1.100 TSMorph.guide/E-gad-Horiz

Edit Windows Horizontal gadget  
-----

This gadget can be used to scroll the image horizontally.

### 1.101 TSMorph.guide/E-gad-Vert

Edit Windows Vertical gadget  
-----

This gadget can be used to scroll the image vertically.

---

## 1.102 TSMorph.guide/E-gad-Up

Edit Windows Up gadget  
-----

This gadget can be used to scroll the image up.

Holding down shift will cause the window to scroll one pixel at a time.

## 1.103 TSMorph.guide/E-gad-Down

Edit Windows Down gadget  
-----

This gadget can be used to scroll the image down.

Holding down shift will cause the window to scroll one pixel at a time.

## 1.104 TSMorph.guide/E-gad-Left

Edit Windows Left gadget  
-----

This gadget can be used to scroll the image left.

Holding down shift will cause the window to scroll one pixel at a time.

## 1.105 TSMorph.guide/E-gad-Right

Edit Windows Right gadget  
-----

This gadget can be used to scroll the image right.

Holding down shift will cause the window to scroll one pixel at a time.

## 1.106 TSMorph.guide/E-gad-Close

Edit Windows Close gadget  
-----

This closes the  
Control Window

---



, and the  
Edit Windows  
.

## 1.107 TSMorph.guide/E-gad-Zoom

Edit Windows Zoom gadget  
-----

This is a standard Zoom gadget. It swaps the size between maximum and minimum

Maximum is the smaller of the size of the image or the size of the screen.

Minimum is the minimum required for all gadgets to still be visible.

## 1.108 TSMorph.guide/E-gad-Depth

Edit Windows Depth gadget  
-----

This is a standard depth gadget.

## 1.109 TSMorph.guide/E-gad-Size

Edit Windows Sizing gadget  
-----

This a standard sizing gadget. See  
Zoom  
gadget for the sizing limits

## 1.110 TSMorph.guide/E-Key

Keyboard controls in the Edit Windows  
=====

'Help' displays context sensitive help using amigaguide if available.

---

## 1.111 TSMorph.guide/EModes

Point editing modes

\*\*\*\*\*

The following edit modes are available to edit points:

One	Move points in one window
Two	Move points in both windows
Relative	Move points relatively in both windows
Add	Add a new point
Delete	Delete an existing point
Link	Link two points
Unlink	Unlink two points
Move	Scroll the window

Note: The menu button can always be used to abort the current operation before releasing the select button.

Modes can be set using gadgets in the  
Control Window  
or by using  
menus  
on the  
Control  
and  
Edit  
Windows.

## 1.112 TSMorph.guide/EMode-One

Edit Mode One

=====

This mode is used to move a point in one of the

---

```
Edit Windows
```

```
.
```

The

```
Control Windows  
title is set to "One".
```

The Mouse Pointer is set to "ONE".

Points can be clicked and moved in either of the windows with the mouse - the point will only move in the selected window.

### 1.113 TSMorph.guide/EMode-Two

```
Edit Mode Two
```

```
=====
```

This mode is used to move a point in both of the  
Edit Windows

```
.
```

The

```
Control Windows  
title is set to "Two".
```

The Mouse Pointer is set to "TWO".

Points can be clicked and moved in both of the windows with the mouse - the point will move in both windows to the same absolute position.

### 1.114 TSMorph.guide/EMode-Relative

```
Edit Mode Relative
```

```
=====
```

This mode is used to move a point in both of the  
Edit Windows

```
.
```

The

```
Control Windows  
title is set to "Rel".
```

The Mouse Pointer is set to "REL".

Points can be clicked and moved in both of the windows with the mouse - the point will move in both windows to the same relative position.

---

## 1.115 TSMorph.guide/EMode-Add

Edit Mode Add

=====

This mode is used to add a point in both of the  
Edit Windows

.

The

Control Windows  
title is set to "Add".

The Mouse Pointer is set to "ADD".

Points can be added in either of the windows by clicking the mouse - the  
point will added to both windows to the same absolute position.

## 1.116 TSMorph.guide/EMode-Delete

Edit Mode Delete

=====

This mode is used to delete a point in both of the  
Edit Windows

.

The

Control Windows  
title is set to "Del".

The Mouse Pointer is set to "DEL".

Points can be deleted in either of the windows by clicking the mouse -  
the point will deleted from both windows. Any  
links  
will also be  
removed.

## 1.117 TSMorph.guide/EMode-Link

Edit Mode Link

=====

---

This mode is used to link two points in both of the  
Edit Windows  
.

The  
Control Windows  
title is initially set to "L1".

The Mouse Pointer is set to "L1".

A point can then be selected in either of the windows by clicking the  
mouse.

The  
Control Windows  
title is then set to "L2".

The Mouse Pointer is set to "L2".

Another point can then be selected in either of the windows by clicking  
the mouse. The points will be joined by a line.

Note: this line is to enable points to be identified more easily. It is  
not used by the rendering process.

## 1.118 TSMorph.guide/EMode-Unlink

Edit Mode Unlink  
=====

This mode is used to unlink two linked points in both of the

Edit Windows  
.

The  
Control Windows  
title is initially set to "U1".

The Mouse Pointer is set to "U1".

A point can then be selected in either of the windows by clicking the  
mouse.

The  
Control Windows  
title is then set to "U2".

The Mouse Pointer is set to "U2".

Another point can then be selected in either of the windows by clicking  
the mouse. If the points are currently joined then the line will be  
removed.

---

## 1.119 TSMorph.guide/EMode-Move

Edit Mode Move

=====

In this mode no points are edited.

The

Control Windows  
title is set to "Mov".

The Mouse Pointer is set to "Mov".

Clicking in the window and moving the mouse will scroll the window.

This is the initial mode when the  
Edit Windows  
are opened.

## 1.120 TSMorph.guide/Req

Requesters which appear

\*\*\*\*\*

The following requesters are produced:

Unsaved Project  
    Quitting having not saved

About requester  
    Version Information

Error requester  
    Error messages

Add Grid  
    Add a grid of points

Frame Number?  
    Choose a Frame Number

Progress  
    Progress

```
Really quit?  
Really quit?
```

## 1.121 TSMorph.guide/Req-Unsaved

```
Unsaved project requester  
=====
```

This requester is displayed when attempting to quit with having saved a project.

It displays 3 or 4 options (depending on if amigaguide is available):

```
Save:    Save the project and quit  
Help:    Display help (only shown if available)  
Abandon: Quit without saving the project  
Cancel:  Do not save and do not quit
```

If reqtools.library(38) is available then this will be used and keyboard short-cuts (the first character of the option) will be available and underlined.

## 1.122 TSMorph.guide/Req-About

```
About requester  
=====
```

This requester is displayed when About... is chosen on a menu on the

```
Info Window  
or  
Control or Edit Windows  
. It displays version information.
```

If reqtools.library(38) is available then this will be used and keyboard short-cuts (the first character of the option) will be available and underlined.

## 1.123 TSMorph.guide/Req-Error

```
Error requesters  
=====
```

This requester is displayed if an error occurs. It displays an error message and gives one (or two) options.

---

If amigaguide is available then the first option will be "Help" - this will display detailed information on the error message.

The last option is "Quit" for fatal errors, and "OK" for non fatal errors.

See

Errors  
for details on error messages.

If reqtools.library(38) is available then this will be used and keyboard short-cuts (the first character of the option) will be available and underlined.

## 1.124 TSMorph.guide/Req-Add\_Grid

Add Grid requester

=====

The Add Grid requester appears as below when the

Add Grid...  
menu item

is chosen

```

-----
|. |Add Grid| |
-----|
| X Cells .. |
| Y Cells .. |
|           |
| OK  Cancel |
-----

```

The following gadgets are displayed in the requester with their associated keyboard equivalents:

X Cells	X		Set number of X cells
Y Cells	Y		Set number of Y Cells
OK	O		Add points
Cancel	C		Cancel requester
Close			Close gadget



Depth

Depth gadget

### 1.125 TSMorph.guide/Req-Add\_Grid-gad-X\_Cells

Add Grid X Cells gadget  
-----

This gadget is used to input the number of horizontal cells of points to add. The minimum number is 1. The default value displayed is 5.

This gadget can be activated by using the X key.

### 1.126 TSMorph.guide/Req-Add\_Grid-gad-Y\_Cells

Add Grid Y Cells gadget  
-----

This gadget is used to input the number of vertical cells of points to add. The minimum number is 1. The default value displayed is 5.

This gadget can be activated by using the Y key.

### 1.127 TSMorph.guide/Req-Add\_Grid-gad-OK

Add Grid OK gadget  
-----

Selecting this gadget adds points of cells to the images. The number of horizontal cells can be set in the

X Cells

gadget and the number of

vertical cells in the

Y Cells

gadget.

The O key is the same as using this gadget.

### 1.128 TSMorph.guide/Req-Add\_Grid-gad-Cancel

Add Grid Cancel gadget  
-----

This gadget cancels the Add Grid requester without adding any points.

The C key is the same as using this gadget.

### 1.129 TSMorph.guide/Req-Add\_Grid-gad-Close

Add Grid Close gadget  
-----

This is the same as the

Cancel

gadget and cancels the requester.

### 1.130 TSMorph.guide/Req-Add\_Grid-gad-Depth

Add Grid Depth gadget  
-----

This is a standard depth gadget.

### 1.131 TSMorph.guide/Req-FrameNumber

Choose a Frame Number requester  
=====

This requester is displayed when the

Edit Points

gadget is selected

(and there is more than one frame) on an animated Morph/Warp, or the

Goto

gadget or

Goto

menu item is selected.

It displays the first and last frame number and allows input of the required frame number.

It displays 'Ok', 'Help' (if amigaguide is available) and 'Cancel' gadgets. The keyboard shortcuts (O,H and C) are underlined.

---

### 1.132 TSMorph.guide/Req-Progress

```

Progress requester
=====

```

This requester is displayed by TSMorph-render. It shows an information line, and the current frame and line being calculated.

It also displays a "stop" button and a zoom and depth gadget.

The "stop" gadget is checked every line. Clicking it displays the

```

Really quit?
requester allowing the program to be stopped.

```

The 'Help' key displays help.

### 1.133 TSMorph.guide/Req-Really\_quit

```

Really quit? requester
=====

```

This requester is displayed when the "stop" gadget is clicked on the

```

Progress
requester. It displays two (or three) options "Quit" ("Help")
and "Continue". "Quit" quits the program, "Continue" restarts the
calculation, "Help" is displayed if amigaguide is available and
displays help.

```

If reqtools.library(38) is available then this will be used and keyboard short-cuts (the first character of the option) will be available and underlined.

### 1.134 TSMorph.guide/Interface

```

Changing the Interface
*****

```

All the gadgets in the Control window, and the mouse pointers can be edited.

The brushes are stored in the directory "Brush/". All may be edited and using e.g. DPaint.

The following brushes are size 38x34:

---

```
add
del
link
none
one
rel
two
unlink
```

The following are 15x15:

```
1st
Last
Next
Prev
```

The following is 16x15:

```
Goto
```

The mouse pointers are stored in the directory "Cursor/". All may be edited using the Workbench Pointer editor,

The following Pointers can be edited:

```
Xadd
Xdel
Xl1
Xl2
Xmov
Xone
Xrel
Xtwo
Xu1
Xu2
```

## 1.135 TSMorph.guide/File\_Format

Internal file formats

\*\*\*\*\*

The file format is subject to change at any time.

The current format for the main file is:

```
TSMorph 1.2
file_name_one
file_name_two
24_bit_file_name_1
24_bit_file_name_2
anim_file_name
w=a,h=b,Frames=c,Single=d,Start=e
```

```

x=n,y=m,x1=o,y1=p
.
.
.
p1=i,p2=j
.
.
.

```

where "TSMorph 1.2" is a header record (not present in the previous version of TSMorph, old formats can still be loaded producing a

```

warning message
), a is the width, b the height, c the number of frames,
d is 1 for single mode, 0 for dual, n,m are coordinates on the first
image, o,p on the second image, and i and j are the number of the
points to join (starting from 0).

```

For animated Warps and Morphs the main file contains no points. Each frame has a set of points held in a file named with .nnn after the main file name, where nnn is the frame number. This file has a header of 'TSMorph 2.0' and then has the Points details.

## 1.136 TSMorph.guide/AR

```

ARexx interface to TSMorph-render
*****

```

ARexx scripts are run before and after each image is rendered, and before each 24 bit image is loaded. The script names can be supplied as parameters (

```

LOADSCRIPT
,
PRESCRIPT
and
POSTSCRIPT
) to TSMorph-render.

```

The suffix to each ARexx script should be .TSM.

Loadscript	Run before loading 24 bit image
Prescript	Run before rendering
Postscript	Run after rendering

## 1.137 TSMorph.guide/AR-Loadscript

ARexx script run before loading 24 bit image

=====  
 This script is run before each 24 bit ILBM image is loaded.

It is passed the following parameters:

```

Frame      : The current frame number, starting at
            Start
            .
TotalFrames : The total number of frames being rendered.
Single      : Set to 1 if a Warp, 0 for a Morph, 2 for Anim Morph, 3 for Anim ↔
            Warp.
Image       : Set to 0 for 1st image, 1 for second.
FileName    : Name of file just rendered.
  
```

This script can be used to change the format of the input file (by running it through a conversion program).

One example is included:

Loadscript.TSM

## 1.138 TSMorph.guide/AR-Prescript

ARexx script run before rendering

=====  
 This script is run before each image is rendered.

It is passed one parameter - Base - the address of a structure which contains the following:

```

Frame      = 0 : The current frame number, starting at 1 - read only.
TotalFrames = 1 : The total number of frames being rendered - read only.
Single      = 2 : Set to 1 if a Warp, 0 = Morph, 2 = Anim Morph, 3 = Anim ↔
            Warp - read only.
Movement    = 3 : 0 to 1024 - the proportion of movement from first to ↔
            second image.
Red1        = 4 : 0 to 1024 - the proportion of Image 1 Red to use.
Green1      = 5 : As Red1 for Green.
Blue1       = 6 : As Red1 for Blue.
Red2        = 7 : 0 to 1024 - the proportion of Image 2 Red to use.
Green2      = 8 : As Red2 for Green.
Blue2       = 9 : As Red2 for Blue.
Produce     = 10 : Set to 0 to not render this frame, 1 otherwise.
RPlus       = 11 : 0 to 255 to add to Red in rendered image.
GPlus       = 12 : As RPlus for Green.
BPlus       = 13 : As RPlus for Blue.
RMinus      = 14 : 0 to 255 to subtract from Red in rendered image.
  
```

```

GMinus      = 15 : As RMinus for Green.
BMinus      = 16 : As RMinus for Blue.
DX          = 17 : 0 to ? - X amount to skip - See
              parameters
              .
DY          = 18 : 0 to ? - Y amount to skip - See
              parameters
              .
Start       = 19 : Starting frame number.

```

The values of these parameters may be set and read using the GetValue and StoreValue functions:

```

/* To read the value of e.g Movement use:
   integer_variable = GetValue(Base,Movement)
*/

/* To set the value of e.g. Produce to 0 use:
   call StoreValue(Base,Produce,0)
*/

GetValue:Procedure
  Parse arg XBase, XAdd
  return C2D(IMPORT(D2C(STRIP(XBase) + (STRIP(XAdd) * 4)),4))

StoreValue:Procedure
  Parse arg XBase, XAdd, XVal
  call EXPORT(D2C(STRIP(XBase) + (STRIP(XAdd) * 4)),RIGHT(D2C(XVal),4,D2C(0) ←
    ),4)
  return

```

The default values passed to the script for modification are:

```

Movement      : (1024 * Frame)/(TotalFrames + 1) Morphs
                (1024 * Frame)/TotalFrames           Warps

Red1,Green1,Blue1 : Movement                        Morphs
                  1024                               Warps

Red2,Green2,Blue2 : (1024 - Movement)              Morphs
                  0                                Irrelevant for Warps

Produce        : 1
RPlus,GPlus,BPlus : 0
PMinus,GMinus,BMinus: 0
DX,DY          : Initially set by
                  DX
                  and
                  DY
                  parameters

```

Changing these values allows acceleration of movement, colour fades etc. and the generation of only some images (to check a long animation).

Example scripts include are:

```
FadeToBlack.TSM - Warp fade to black
```

```
FadeToWhite.TSM - Warp fade to white
PixelMorph.TSM  - Morph by pixelating
PixelWarp.TSM   - Warp pixelating
Prescript.TSM   - Do nothing example
```

### 1.139 TSMorph.guide/AR-Postscript

```
ARexx script run after rendering
```

```
=====
```

This script is run after each image is rendered.

It is passed the following parameters:

```
Frame      : The current frame number, starting at
            Start
            .
TotalFrames : The total number of frames being rendered.
Single      : Set to 1 if a Warp, 0 for a Morph.
FileName    : Name of file just rendered.
```

This script can be used to change the format of the output file (by running it through a conversion program) or build an animation.

Two examples are included:

```
Postscript.TSM
ToHam.TSM
```

### 1.140 TSMorph.guide/Algorithms

```
Morphing algorithms
```

```
*****
```

The morphing algorithm is defined using the parameters

```
MODE
and
DEPTH
to TSMorph-render.
```

The basic algorithm is to find 3 points which make a triangle around the point and morph this triangle between the start and end images.

The DEPTH parameter controls how many points will be checked to form a triangle. 0 means just the closest 3 points are examined, 1 the closest 4, 2 the closest 5 etc.

The MODE parameter controls both which triangle is chosen and what to

---



do if no surrounding triangle is found.

If MODE=0 or MODE=2 then if no triangle surrounding the point is found examining the closest points then the 3 closest points are used to decide how to morph. If MODE=1 or MODE=3 then the point is assumed to be stationery.

If MODE=2 or MODE=3 then all the closest points (the exact number defined by DEPTH) are examined to determine the smallest triangle. If MODE=0 or MODE=1 then the first surrounding triangle found is used.

Therefore MODEs 0 and 1 should be faster than modes 2 or 3. The DEPTH parameter can also have a major effect on the rendering speed.

## 1.141 TSMorph.guide/File\_Names

File naming  
\*\*\*\*\*

File names can include the frame number.

The format of the frame number in the file name is specified using the following formats:

```
%ld      : Number left justified e.g. '1','2',...,'10',...,'123',...
%3ld     : Number right justified e.g. ' 1',' 2',...,' 10',...,'123',...
%03ld    : Number right justified e.g. '001','002',...,'010',...,'123',...
```

Where the number can be changed e.g.

```
pic.%04ld  for Imagine 2.0 produced files
pic%03ld   for Vista produced files
name%ld    for files to run through mpeg
```

## 1.142 TSMorph.guide/Errors

Error Messages  
\*\*\*\*\*

The following messages can be displayed in an  
Error Requester

.

Both Images must be the same size

Unable to Open Grid Requester

Both X Cells and Y Cells must be > 0

Out of memory for points

No ILBM.BMHD chunk

Failed to allocate raster

No ILBM.BODY chunk

Not an ILBM

Clipboard open failed

xxxx; File open failed

Parsing error; no top chunk

Not enough memory

Failure opening TSMorph Window

Failure setting up screen

Can not Open xxxx.library(n)

Unable to Allocate FileRequest

Unable to Create Window Message Port

Can not Open input.device

Image smaller than points

Images different sizes

Unable to Allocate Zoom raster

Unable to SetMenuStrip

Unable to OpenWindowTags

Unable to AllocMem for Filename

Unable to Allocate xxxx Gadget

Unable to Allocate xxxx Image

Failure loading Image 'xxxx'

Unable to AllocIFF

Unable to AllocMem for ILBMInfo

Unable to GetScreenDrawInfo

Unable to LockPubScreen(xxxx)

---

Invalid file format - Line 'xxxx'

Images are too small

Point out of range - Line 'xxxx'

Out of memory for points

Invalid point link - Line 'xxxx'

Error closing file 'xxxx'

Error opening file 'xxxx'

Error writing to 'xxxx'

Point already linked to 4 points

Point not linked

Cannot link point to itself

Points already linked

Cannot unlink point from itself

Error no memory for new point

Unable to Open xxxx.library(n)

Error saving file 'xxxx'

Error AllocVec for output

Error Opening points file

Error opening progress window

Unable to allocate memory for bitmap

Image must be 24 bit 'xxxx'

Error loading 'xxxx'

Size does not match image - Line 'xxxx'

Out of memory for points

Must have at least 3 points

Error sending ARexx message - 'xxxx'

Assuming version 1.0 file format

Must have at least one frame

---

```
Frames must all be the same size

Failure - yyyy - loading 'xxxx'

Error Saving Settings 'xxxx'

Error Loading Settings 'xxxx'

No opal.library
```

### 1.143 TSMorph.guide/Err-Size

```
Error - Both Images must be the same size
=====
```

This message should never be displayed.  
Images different sizes  
should  
be displayed instead.

Resolution - None required.

### 1.144 TSMorph.guide/Err-OpenGrid

```
Unable to Open Grid Requester
=====
```

TSMorph is unable to open the  
Add Grid  
requester. The normal reason  
would be lack of memory.

Resolution - Free up some memory and retry.

### 1.145 TSMorph.guide/Err-Grid0

```
Error - Both X Cells and Y Cells must be > 0
=====
```

This message is displayed if the  
Add Grid  
requester is used and either  
the  
X Cells  
or

Y Cells  
is set to 0. The minimum allowed value is 1.

Resolution - Input at least 1 in both gadgets, or cancel the requester.

### 1.146 TSMorph.guide/Err-MemoryPoints

Error - Out of memory for points  
=====

This message is displayed after the  
Add Grid  
requester has been used  
and points and lines are being added to the images. Insufficient memory  
is available.

Resolution - Since it is possible that some of the points have been  
added to the images then you may wish to use the  
New Points  
menu item  
to delete all points. Then free up some memory and retry.

### 1.147 TSMorph.guide/Err-IFFBMHD

Error - No ILBM.BMHD chunk  
=====

The Image being loaded has no BMHD chunk.

Resolution - Specify the name of a correct ILBM image.

### 1.148 TSMorph.guide/Err-IFFRaster

Error - Failed to allocate raster  
=====

There is insufficient memory to load the ILBM image.

Resolution - Free up some memory and retry.

---

### 1.149 TSMorph.guide/Err-IFFBODY

Error - No ILBM.BODY chunk  
=====

The Image being loaded has no BODY chunk.

Resolution - Specify the name of a correct ILBM image.

### 1.150 TSMorph.guide/Err-IFFILBM

Error - Not an ILBM  
=====

The Image being loaded is not and ILBM file.

Resolution - Specify the name of a correct ILBM image.

### 1.151 TSMorph.guide/Err-IFFCLIP

Error - Clipboard open failed  
=====

The program is unable to open the specified clipboard.

Resolution - Retry with the correct clipboard number, or use a different file name.

### 1.152 TSMorph.guide/Err-IFFFileS

Error - xxxx: File open failed  
=====

File xxxx can not be successfully opened. The file does not exist (if trying to read), is already in use, or the filename is invalid.

Resolution - Retry with a valid file name.

### 1.153 TSMorph.guide/Err-IFFTop

---

Error - Parsing error; no top chunk  
=====

This is a technical error which should never occur.

Resolution - Unknown.

### 1.154 TSMorph.guide/Err-IFFMemory

Error - Not enough memory  
=====

There is insufficient memory to save or load the IFF ILBM file.

Resolution - Free up some memory and retry.

### 1.155 TSMorph.guide/Err-OpenTSMorph

Error - Failure opening TSMorph Window  
=====

The

Information Window

window could not be opened. There is probably  
insufficient memory.

Resolution - Free up some memory and retry.

### 1.156 TSMorph.guide/Err-SetupScreen

Error - Failure setting up screen  
=====

The

Information Window

window could not be opened. Either the

Public Screen

is not open or there is insufficient memory.

Resolution - Free up some memory and retry, or correct the  
PUBSCREEN  
parameter.

---

### 1.157 TSMorph.guide/Err-Library

Error - Can not Open xxxx.library(n)  
=====

The library xxxx version number n could not be opened. See  
Installation  
for a list of libraries required. It could just be a lack of ←  
memory.

Resolution - Ensure you are running at least version 2.04 of the  
operating system, or free up some memory and retry.

### 1.158 TSMorph.guide/Err-FileReq

Error - Unable to Allocate FileRequest  
=====

Insufficient memory is available.

Resolution - Free up some memory and retry.

### 1.159 TSMorph.guide/Err-WPort

Error - Unable to Create Window Message Port  
=====

Insufficient memory is available.

Resolution - Free up some memory and retry.

### 1.160 TSMorph.guide/Err-IDevice

Error - Can not Open input.device  
=====

Insufficient memory is available.

Resolution - Free up some memory and retry.

---



### 1.161 TSMorph.guide/Err-ISmall

Error - Image smaller than points

=====

The image trying to be loaded is smaller than the points already defined.

Resolution - Load a larger image, or select the  
New  
menu item and  
restart.

### 1.162 TSMorph.guide/Err-IDifferent

Error - Images different sizes

=====

This can be displayed when opening the second image in TSMorph. Both images must have the same horizontal and vertical resolutions. The image depths can be different.

Resolution - Either use a different pair of images, or change the size of one of the images using some image-processing program.

### 1.163 TSMorph.guide/Err-ZRaster

Error - Unable to Allocate Zoom raster

=====

Insufficient memory is available.

Resolution - Free up some memory and retry. If you still do not have enough memory then specify  
ZOOM=OFF  
as a parameter.

### 1.164 TSMorph.guide/Err-Menu

Error - Unable to SetMenuStrip

=====

Insufficient memory is available.

---

Resolution - Free up some memory and retry.

### **1.165 TSMorph.guide/Err-OpenWindow**

Error - Unable to OpenWindowTags  
=====

Insufficient memory is available.

Resolution - Free up some memory and retry.

### **1.166 TSMorph.guide/Err-MemFile**

Error - Unable to AllocMem for Filename  
=====

Insufficient memory is available.

Resolution - Free up some memory and retry.

### **1.167 TSMorph.guide/Err-AllocGadget**

Error - Unable to Allocate xxxx Gadget  
=====

Insufficient memory is available.

Resolution - Free up some memory and retry.

### **1.168 TSMorph.guide/Err-AllocImage**

Error - Unable to Allocate xxxx Image  
=====

Insufficient memory is available.

Resolution - Free up some memory and retry.

---

### 1.169 TSMorph.guide/Err-LoadImage

Error - Failure loading Image 'xxxx'  
=====

There was an error loading the image xxxx. Another error message should previously have been displayed.

Resolution - See previous error message.

### 1.170 TSMorph.guide/Err-AllocIFF

Error - Unable to AllocIFF  
=====

Insufficient memory is available.

Resolution - Free up some memory and retry.

### 1.171 TSMorph.guide/Err-AllocLBM

Error - Unable to AllocMem for ILBMInfo  
=====

Insufficient memory is available.

Resolution - Free up some memory and retry.

### 1.172 TSMorph.guide/Err-GetDRI

Error - Unable to GetScreenDrawInfo  
=====

Insufficient memory is available.

Resolution - Free up some memory and retry.

### 1.173 TSMorph.guide/Err-LockScreen

Error - Unable to LockPubScreen(xxxx)  
=====

Either the

---

Public Screen  
is not open or there is insufficient memory.

Resolution - Free up some memory and retry, or correct the  
PUBSCREEN  
parameter.

### 1.174 TSMorph.guide/Err-FileFormat

Error - Invalid file format - Line 'xxxx'

=====

The points file being loaded is in an incorrect  
Format  
or is not a  
points file.

Resolution - Specify a correct points file or manually edit the file  
and retry.

### 1.175 TSMorph.guide/Err-TooSmall

Error - Images are too small

=====

The images specified in the input file are too small.

Resolution - Either edit the input file - See  
Format  
, or select the  
New  
menu item and retry.

### 1.176 TSMorph.guide/Err-Range

Error - Point out of range - Line 'xxxx'

=====

The point coordinates specified in the input file is larger than the  
image size.

Resolution - Manually edit the input file - See  
Format  
and retry.

---

### 1.177 TSMorph.guide/Err-MemPoints

Error - Out of memory for points  
=====

Insufficient memory is available.

Resolution - Free up some memory and retry after selecting either

New

or

New Points

to delete existing points.

### 1.178 TSMorph.guide/Err-InvalidLink

Error - Invalid point link - Line 'xxxx'  
=====

The points linking specified in the input file is invalid.

Resolution - Manually edit the input file - See

Format

and retry.

### 1.179 TSMorph.guide/Err-CloseFile

Error - Error closing file 'xxxx'  
=====

The file xxxx could not be successfully closed. The disc may be full.

Resolution - If saving then save the file to a different disk or free up some disk space and retry with another name. The original file may not be accessible until after a reboot.

### 1.180 TSMorph.guide/Err-OpenFile

---

Error - Error opening file 'xxxx'

=====

The file xxxx could not be opened. The file does not exist (when reading), the name is invalid, the file is already in use, or the disk is write protected.

Resolution - Use a different file name or allow the disk to be written to.

### 1.181 TSMorph.guide/Err-WriteFile

Error - Error writing to 'xxxx'

=====

The file xxxx could not be successfully written to. The disc may be full. The file has not been successfully saved.

Resolution - Save the file to a different disk or free up some disk space and retry.

### 1.182 TSMorph.guide/Err-4Points

Error - Point already linked to 4 points

=====

Any point can only be  
     linked  
     to up to 4 other points. Note the links  
 are only for clarity and do not effect the rendering process.

Resolution -

    Unlink  
     the current point from some other point and retry.

### 1.183 TSMorph.guide/Err-NotLinked

Error - Point not linked

=====

The points just selected are not currently  
     linked  
     and cannot  
 therefore be  
     unlinked

Resolution - None required.

### 1.184 TSMorph.guide/Err-LinkSelf

Error - Cannot link point to itself

=====  
A point can not be  
    Linked  
    to itself.

Resolution - Select another point to link to.

### 1.185 TSMorph.guide/Err-Linked

Error - Points already linked

=====  
The points you are trying to  
    link  
    are already linked.

Resolution - None required.

### 1.186 TSMorph.guide/Err-UnlinkSelf

Error - Cannot unlink point from itself

=====  
A point can not be  
    unlinked  
    from itself.

Resolution - Select another point to unlink from.

### 1.187 TSMorph.guide/Err-MemNewPoint

---

Error - Error no memory for new point  
=====

There is no memory to add the new point.

Resolution - Free up some memory and retry.

### 1.188 TSMorph.guide/Err-LibraryR

Error - Unable to Open xxxx.library(n)  
=====

The library xxxx version number n could not be opened. See  
Installation

for a list of libraries required. It could just be a lack of ↔  
memory.

Resolution - Ensure you are running at least version 2.04 of the  
operating system, or free up some memory and retry.

### 1.189 TSMorph.guide/Err-Saving

Error - Error saving file 'xxxx'  
=====

Some error occurred saving the IFF ILBM output file. Another error  
requester may have previously appeared. Alternatively there could be a  
lack of memory.

Resolution - See the previous error message, or free up some memory and  
retry.

### 1.190 TSMorph.guide/Err-AllocVec

Error - Error AllocVec for output  
=====

Insufficient memory is available.

Resolution - Free up some memory and retry.

---



### 1.191 TSMorph.guide/Err-OpenPoints

Error - Error Opening points file

=====  
 The input file specified to TSMorph-render does not exist or is in an  
 invalid

format

.

Resolution - Either specify a valid input file, or manually edit the  
 points file.

### 1.192 TSMorph.guide/Err-Progress

Error - Error opening progress window

=====  
 Some error occurred opening the  
 Progress  
 requester in TSMorph-render.  
 Probably a lack of memory, or the  
 PUBSCREENR  
 parameter specifies a not  
 open public screen name.

Resolution - Free up some memory or correct the parameter and retry.

### 1.193 TSMorph.guide/Err-AllocPlanes

Error - Unable to allocate memory for bitmap

=====  
 Insufficient memory is available for some bitmap planes.

Resolution - Free up some memory and retry.

### 1.194 TSMorph.guide/Err-24

Error - Image must be 24 bit 'xxxx'

=====  
 The image xxxx being loaded by TSMorph-render is not a 24 bit image.  
 Only 24 bit ILBM images can be rendered.

---

Resolution - Use TSMorph to specify a valid 24 bit ILBM image.

### 1.195 TSMorph.guide/Err-Load

Error - Error loading 'xxxx'  
=====

The image xxxx being loaded by TSMorph-render could not be loaded. A previous error requester could have appeared. The file name could be invalid.

Resolution - See the previous error message.

### 1.196 TSMorph.guide/Err-SizeMatch

Error - Size does not match image - Line 'xxxx'  
=====

The points file being loaded - See  
File Format  
- has an image size  
specified which does not match the image being loaded.

Resolution - Change the image size, manually edit the input file, or respecify the image name using TSMorph.

### 1.197 TSMorph.guide/Err-MemPointsR

Error - Out of memory for points  
=====

Insufficient memory is available.

Resolution - Free up some memory and retry.

### 1.198 TSMorph.guide/Err-3Points

Error - Must have at least 3 points  
=====

In order to correctly render an image at least 3 points must be defined.

---

Resolution - Use TSMorph to define at least 3 points - e.g. in 3 of the corners.

### 1.199 TSMorph.guide/Err-ARexx

Error - Error sending ARexx message - 'xxxx'

=====

TSMorph-render has had a problem sending the  
ARexx  
message. ARexx may  
not be running, or the script may not exist or have errors.

Resolution - Ensure ARexx is running, check the scripts - See parameters

PRESCRIPT  
,  
POSTSCRIPT  
and  
LOADSCRIPT  
- exist and have TSM as a suffix.

If the above is OK then use TCO and TS to interactively trace the script.

### 1.200 TSMorph.guide/Err-OldFormat

Error - Assuming version 1.0 file format

=====

The current version of the  
File Format  
has a header record. This error  
is saying no header is present, it is assumed that the file is in an  
old format.

Resolution - Select OK to continue. Load and Save in TSMorph to save in the new format if required.

### 1.201 TSMorph.guide/Err-OneFrame

Error - Must have at least one frame

=====

---

This is displayed when trying to edit points on an Animated Morph/Warp when the number of frames is 0.

Resolution - Set the number of  
frames  
to at least 1.

## 1.202 TSMorph.guide/Err-AllSize

Error - Frames must all be the same size  
=====

This is displayed when trying to change to a different frame. The size of all input images must be the same.

Resolution - Ensure all input images are the same size.

## 1.203 TSMorph.guide/Err-OpalVision

Error - Failure - yyyy - loading 'xxxx'  
=====

opal.library had a problem loading image xxxx.

Resolution - yyyy should describe the problem.

## 1.204 TSMorph.guide/Err-SaveS

Error - Error Saving Settings 'xxxx'  
=====

This message is displayed when TSMorph has been unable to save settings in the named file. If KEEPSETTINGS is set to YES then settings are saved in 'ENV:TSMorph/TSMorph.prefs' when the program is quit.

Resolution - Supply a correct filename, set KEEPSETTINGS to NO, or create the directory ENV:TSMorph

---

## 1.205 TSMorph.guide/Err-LoadS

Error - Error Loading Settings 'xxxx'  
=====

TSMorph has had a problem loading the specified file. The file probably does not exist.

Resolution - Specify a correct file name

## 1.206 TSMorph.guide/Err-NoOpal

Error - No opal.library  
=====

TSMorph is trying to load an image using opal.library but it could not be opened.

Resolution - If you do not have opal.library do not specify

OPENMODE=OPAL

.

## 1.207 TSMorph.guide/Bugs

Known (and unknown errors)  
\*\*\*\*\*

Width and Height in the parameter file may not be correctly set and require manual editing.

Image validation requires tidying up - especially with anim morphs/warps.

Unsaved project does not check that gadgets really have been edited.

Edit Points should be somewhere else on the menu.

This guide sometimes has very long lines. This appears to be due to a problem with MakeInfo and menus.

Please report any other bugs by EMail to mpaddock@cix.compulink.co.uk.

## 1.208 TSMorph.guide/Hard-Software

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## Hardware and Software used in development

\*\*\*\*\*

- \* HSPascal                    Editor.
- \* SAS C                      Code.
- \* GadToolsBox                Info, Add Grid and Progress Windows.  
GadToolsBox is © Copyright 1991,92 Jaba Development.
- \* DPaint                     Control Window gadgets/Pointers.
- \* Workbench 2.04            GUI.
- \* MakeInfo                  Documentation.
- \* Iff2Src                    Control Window gadgets. Iff2Src is © J  
Tyberghein.
- \* ILBMtoC                    Pointers.
- \* IconEdit                   Pointers.
- \* NewIff                     Various IFF routines.
- \* ReqTools                  For nicer requesters. ReqTools is © 1991/1992  
Nico François
- \* OpalVision                 For opal.library for easy file loading and  
saving. OpalVision is a trademark of Opal Technology Pty Ltd.
- \* Commodore Amiga 2000 with 1MB chip ram,
- \* Commodore 1960 monitor,
- \* GVP SCSI hard card with 52MB Quantum disc,
- \* RCS Fusion Forty accelerator with 8MB fast ram.

**1.209 TSMorph.guide/Distribution**

## Copyright and distribution requirements

\*\*\*\*\*

TSMORPH IS PROVIDED "AS-IS" AND SUBJECT TO CHANGE; NO WARRANTIES ARE MADE. ALL USE IS AT YOUR OWN RISK. NO LIABILITY OR RESPONSIBILITY IS ASSUMED.

TSMorph is ©1993 Topicsave Limited.

TSMorph is freely distributable provided all files (listed in

Installation

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) are included.

TSMorph is EMailWare - If you use it please send any criticisms, bugs, etc. by EMail to mpaddock@cix.compulink.co.uk.

## 1.210 TSMorph.guide/Index

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## Overview

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Unsaved project	Req-Unsaved
Up gadget	E-gad-Up
Vertical scroll bar	E-gad-Vert
Width gadget	I-gad-Width
X Cells gadget	Req-Add_Grid-gad-X_Cells
Y Cells gadget	Req-Add_Grid-gad-Y_Cells
Zoom gadget	E-gad-Zoom
Zoom gadget	I-gad-Zoom
ZOOM=	

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Par-TSMorph

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