Readme

COLLABORATORS			
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Contents

Chapter 1

Readme

1.1 Readme.guide

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REAL 3D V.2.34
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Thank you for purchasing Real 3D, the fastest and most impressive ray
tracing, modelling and animation software in the Amiga market.

This file contains information about the new features not described in
the manual.



1. NEW TOOL ICONS
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The collection of built-in tool icons has been extended. You can
easily check the function of a tool icon by pressing the left mouse
button down above the icon; then the top bar of the tool window displays
the name of the function. If you do not want to select the function,
move the mouse pointer outside the tool window before releasing the
left mouse button.


2. HELP FEATURE
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An Amiga-Guide based help system has been added for your convenience.
It provides you with a context sensitive on-line help. The help system
can be activated by pressing the Help key. The feature requires
'amigaguide.library' to be installed.


3. NEW RPL-BASED SPECIAL TOOLS
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Some useful tools has been added. These tools are implemented
using RPL. They are good examples of customizing the working
environment, demonstrating how poweful feature RPL is.
```

You can access the tools by inserting the environment 'SpecialTools'
of the Environments drawer to your user interface; use Project/
Environment/Insert function for this purpose. A new tool window appears
to your user interface.

4. PROCEDURAL TEXTURES

A new menu has been added to the material editor: 'Define/Procedures'.
With this function you can select a RPL file, which contains RPL code
needed in RPL material handlers. Usually, the file defines some new
RPL words, which are referred then in RPL handlers. For example,
the material initialization procedure may be a file called
'r3d2:macros/myproc.rpl' with the following contents:

```
: MyProcTxr

    RANDOM 0.5 F>~
    IF
        255 R !
        128 R !
        0   G !
    ELSE
        155 R !
        120 G !
        100 B !
    ENDIF
;
```

Then the color handler cycle gadget can be set to 'RPL' and the
'Expression' can be simply 'MyProcTxr'.

For more information see Procedural Materials.

5. MODIFY/PROPERTIES/ATTRIBUTES/PROTECTED2

New gadget called 'Protected2' added to the requester Modify/Properties/
Attributes.

Protected2 attribute flag makes it easier to handle freeform objects,
which have been animated using sub-groups. If an object has this
flag set, normal shape modify functions do not affect the object,
but Animation System does. For example, you cannot move a subgroup
of a mesh using Modify/Linear/Move, but the PATH method can still
move it.

The feature can be used to prevent double-modification effects in
certain hierarchical systems. This is demonstrated by the 'walker'
example project in the 'Projects' directory: the sub-groups, animated
using the SWEEP method, must not be placed under the meshes themselves,
because the parameter curves of the sweep methods should move when
the whole 'walker' object is moved. On the other hand, if subgroups are
located at the same level with the meshes, double modification happens
whenever the whole walking object is modified. In the latter case,

setting Protected2 flag for the subgroups solves the problem.

6. TAG ISKE

The manual contains very little documentation about this tag. Please consult Animation Examples section in the manual and TAGs for more information about the purpose of this tag.

7. COLLISION DETECTION HOOKS

The file R3D2:macros/collide contains some example hooks for collision detection system.

In order to use them, execute that file as a macro (or add the command "r3d2:macros/collide" LOAD to your s:rpl-startup file) and associate the following tag with your collision detection method object:

```
SRPL CollXxxx
```

where CollXxxx is one of the procedures defined in r3d2:macros/collide file. When your objects collide, the contents of the SRPL tag is executed and then its completely up to your procedure what to do.

8. ENVIRONMENTS

Currently the 'environment' data section of Real 3D v.2 data files does not contain certain information, which may be desirable to include as a part of a customized default real-startup file. For example, grids and named colors are such 'permanent' settings. This has caused confusion, since the term 'environment' suggests that these are included.

In order to make sure that all customized settings are saved to the startup file, save the modified 'real-startup' file to 's:' directory using Project/Project/Save sections menu, activating all sections except objects and materials.