Knobs Instructions

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Knobs Instructions

1.1   Knobs--a program like no other

K N O B S

by Andrew Forrest

A small program for twiddling bits inside your Amiga.

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"Knobs" V1.0 (5 February 1993) by Andrew Forrest is Public Domain.

1.2   What the program does

Introduction

From Release 2 onwards, the Amiga Operating System has bits set aside inside its various structures to provide some (limited) control over its behaviour. There are a few programs which allow the user to twiddle these knobs, e.g. to switch on the AmigaDOS `asterisk-as-wildcard' feature, but why have lots of little programs cluttering up your "user-startup" sequence when one program can do it all?

This is a small program which allows you to twiddle these hidden knobs.

1.3   How to use this program

Instructions

Knobs is a small CLI command which you should probably stick in your "C:" directory (on your Workbench disk or boot disk). The program should come with its documentation (this file) and the source code, "Knobs.asm".

Knobs can be run (only) from the CLI (Shell) and invoked with a command of the form "Knobs <options>", where <options> represents one or more of the command-line options listed below:

ALERTTIMER/K/N

BBLANK=BORDERBLANK/K

NOCLICK=NODISKCLICK/K

STAR=WILDSTAR/K

So for example, you might type "Knobs ALERTTIMER=-1 BBLANK=ON NOCLICK=1111" to run the program and invoke three of the options.

The effects of the program will not survive when you reboot the machine (except for the ALERTTIMER option, which does survive reboots). If you want to run the program every time you reboot your Amiga, it makes sense to add a line to your user-startup file (in the "S:" directory of your Workbench or boot disk) to run the program.

1.4   alerttimer

ALERTTIMER/K/N

Apparently one of the most requested enhancements by developers for the Amiga Operating system was a means to control the time for which alerts are displayed. For example, with an unattended system controlling a nuclear power plant (as if) you probably want the machine to reboot itself as soon as it crashes rather than wait forever for a user to hit the mouse button.

This option takes one argument, the time in frames (50ths or 60ths of a second) for which an alert should be displayed before the machine automatically reboots. If the number is 0, alerts are never displayed. If it is -1, alerts are displayed until the user presses a mouse button.

1.5   borderblank

BBLANK=BORDERBLANK/K

Look at your workbench screen. Unless you have installed a pattern on the workbench, the background colour probably extends to the edges of the monitor. This looks a bit tacky. It also makes it hard to see where the edges of the (Workbench) screen are.

Help is at hand.

Version 39 (Release 3) of the Amiga graphics.library contains a switch which allows you to make the screen border black, rather than just the same colour as the background (colour #0).

Specify "BORDERBLANK ON" (or "BBLANK ON") to make your screen border black. Specify "BORDERBLANK OFF" to make it the same as colour #0 again. Specify "BORDERBLANK CHANGE" to blank it if it's not blanked or unblank it if it is. "BORDERBLANK <anything else>" has no effect.

1.6   noclick

NOCLICK=NODISKCLICK/K

Amiga disk drives click annoyingly when they do not contain a disk. This option allows you to turn off the clicking. But first a word of warning--if a drive makes funny noises after you have de-clicked it, then the drive was not designed not to click and continued use of the anti-clicking thing could cause it damage (it could put the read/write heads out of alignment).

The noclick option should be followed by a string which specifies which drives should be declicked. The first character of the string controls the first drive ("DF0:"), the second controls "DF1:", the third controls "DF2:" and so on The string may be as long or short as you like. Each character should be one of:

"1" - to stop the drive from clicking

"0" - to switch the clicking back on

"*" - to switch the clicking from on to off, or from off to on

"-" - to leave the drive as it is

If there are more disk drives connected to your computer than there are characters in the string, the extra drives will be left alone.

So for example, to de-click drives "DF1:" and "DF2:", but leave "DF0:" alone, give the argument

NOCLICK="-11"

To make "DF0:" click, but leave "DF1:" alone, you could write

NODISKCLICK 0-

1.7   star

WILDSTAR=STAR/K

The AmigaDOS shell commands often allow the user to specify several files using wildcards and pattern-matching. A discussion of pattern-matching is beyond the scope of this document, suffice to say that normally AmigaDOS uses "#?" (hash-sign, question-mark) as its wildcard, rather than "*" (asterisk) as used on many other operating systems (most notably UNIX and MS-DOS).

The WILDSTAR option instructs AmigaDOS to accept asterisks as wildcards. Use "WILDSTAR ON" (or "STAR ON") to enable the feature, "WILDSTAR OFF" to disable it or "WILDSTAR CHANGE" to toggle the feature on or off, depending on its current state. "WILDSTAR <anythingelse>" has no effect.

1.8   What is an alert?

Guru meditation #1

You mean you've never seen an alert?

It used to be (before Release 2), that when an Amiga crashed, it would put up a black screen with a message in red (with a red flashing border) and a "guru meditation" number, to signify what went wrong.

Putting "guru meditation" on the screen was obviously far too frivolous a thing to do for a machine about to be targeted at serious, non-games-playing markets, so Commodore changed the message to "Unrecoverable alert" (or something), but the idea is much the same--you don't usually see an unrecoverable alert unless your machine is about to crash (or has crashed already).

Another type of alert is the recoverable alert. Instead of an alarming red, this alert is rendered in an optimistic shade of puce (I think). This is usually a message that something has gone a bit wrong, but not to worry about it too much.

1.9   What is `User-Startup'?

The user startup-sequence

The file "User-startup", which goes in the "S:" directory of your Workbench disk, is nothing more than a list of commands, each of which is executed when the Amiga is started up (switched on or rebooted).

If the file does not exist, it can be created in any text editor or word processing program. If it already exists, it can be edited in any text editor or word-processing program.

To run Knobs each time your machine reboots, insert a line of text at the bottom of your "S:User-startup" file, of the form "Knobs <options>", i.e. the same form in which the program is invoked from the CLI. Then just save the file.

1.10   Program history

Revision history

V 1.00 (February 1994)

The first version.

1.11   Plans for this program

Future

I am happy with the form of the program as it is at the moment--a rather minimal CLI command for flicking a few of the operating system's switches.

If I learn of any other such switches in the Operating System, I'll try to add them to the program. (So if you know of any, please contact me.)

I don't want to have this program patch the O.S. in any way. I'd rather keep it small and clean and leave other programs to hack about with the system. This program's `sister', MyMouse installs input handlers, patches libraries and stuff. If I want to implement any system `hacks', it'll be that program to which I add them.

Anyhow, suggestions are welcome, so feel free to tell me if you have any ideas.

1.12   About me

About the author...

Andrew Forrest was born in 1974 and is still not dead---

Sorry, wrong biography.

Okay, basically I've been programming since birth (on a progression of computers [ZX81, Spectrum, Amiga 500, Amiga 1200]). I used to do AMOS, but I hope that I have closed the last page on that chapter of my life (not that AMOS does not have its merits, but it was rather unsuitable for what I really wanted to do).

I'm now on E and Assembler.

I welcome correspondance--bug reports, suggestions, criticisms--on anything I have written. I really prefer electronic mail (at least, during term-time: October to Christmas, February to May), and I usually reply to e-mail (unless I really get a lot).

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