

# **NewMenu**

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**COLLABORATORS**

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

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# Chapter 1

## NewMenu

### 1.1 Intuition Menu Replacement System

NewMenu Version 5.2 - Copyright © 1993-1996 by Brian Gontowski.

This software requires AmigaOS 3.0 (V39) or higher.

Starting NewMenu

Menu Preferences

Features

History

Notes

Developing for NewMenu

Example Menu

Tested Software

Credit

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or correctness of this software.

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## 1.2 Intuition Menu Replacement System - Startup

```
NewMenu may be started from the
Shell
  or from
Workbench
. It will add
```

the input handler, preferences process, and system patches and then exit.  
Running NewMenu again has no effect.

### NOTE:

Due to the changes NewMenu makes to the system, there is no safe way to remove it.

## 1.3 Intuition Menu Replacement System - Shell Startup

For automatic startup, place in s>User-Startup.

A single argument may be provided...

PRI/K/N - The priority of the input handler. PRI must be between 51 and 127 (inclusive). Defaults to 60.

## 1.4 Intuition Menu Replacement System - Workbench Startup

For automatic startup, place in SYS:WBStartup.

A single argument may be provided...

PRI - The priority of the input handler. PRI must be between 51 and 127 (inclusive). Defaults to 60.

## 1.5 Intuition Menu Replacement System - Preferences

"Menu Preferences" is used to configure NewMenu. The options include...

Mode - Use either pulldown menus ("MenuBar Only"),  
popup style menus ("PopUp Only"),  
or choose by whether the pointer is in the  
menu bar area ("MenuBar and PopUp").

Mouse Toggle - Toggle "Never", "Always", or use a click timer ("Auto").

Keyboard Toggle - Same as the "Mouse Toggle", except for Right-Amiga/Right-Alt.

Screen Snap - Replaces "Screen Menu Snap" preference item in IControl.

Pointer Snap - Move the mouse pointer to the top/left of the popup menu panel.

Keyboard - Allow the arrow keys, return, escape, backspace, and space,  
to function as menu controls.

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- Quick Keys           - Provide underlined characters which can be selected by the keyboard to move the pointer to an item.
- Single Select       - Changes the behaviour of the left mouse button to immediately select an non-disabled item. The shift key overrides this back to the multi-selection mode. Also, the left button outside the menu panel area will cause the menus to finish.
- Enhanced NewLook   - A new mode which requires at least an 8 color screen. In this mode, panels are shown connected to the owner menu/item, ← disabled menus and items are shown with a recessed look, and the shadow, shine, and outline pens are chosen when appropriate.
- Panel Delay         - Delay displaying and removing panels.

Please refer to the documentation on the AmigaOS 3.0 preferences programs. This program has been designed to behave like these programs.

## 1.6 Intuition Menu Replacement System - Features

Features:

- Replaces most of the Intuition and GadTools menu code.
- Provides 3D appearance on NewLook screens using pens from Palette Preferences.
- Automagically lays out all the menus to conform to the Amiga Style Guide, shifting and making columns when needed.
- Tricks are used on the menus to figure out where separator bars should be and when someone is using "stupid checkmarks" (either using "\*" or changing the color).
- The menu panels revert to Topaz 8 if they don't fit with the screen font.
- Menus that "fall off the edge" are not displayed.
- Disabled menus with items and disabled items with subitems are shown with some highlighting. I believe this should be correct since there is still some action taking place (a panel is being displayed).
- Multiselecting items are shown pushed in as a visual cue that there are more than one item selected. This will never happen with an item with subitems.
- The menus may be toggled on/off for each click of the right mouse button or the keyboard equivalent.
- Double Menu Requesters (Yuck!) are supported.
- PopUp menus are supported. The mouse pointer will always start at the top/left corner of the menu (shifting as required).
- Arrow keys move around the menus, items, and subitems.
- Return and Esc function as accept/cancel.
- Space functions as left mouse button.
- Quick keys are chosen automatically and allow easy access to menu items.
- Panel delay helps speed up moving around menus and avoids accidentally choosing the incorrect panel.
- Help text available either through Intuition or GadTools.
- The priority of the input handler may be selected (use with understanding).

## 1.7 Intuition Menu Replacement System - History

Version 5:

- The new "8 color GUI" approach is used by NewMenu. Set the shine and shadow

- pens to light and dark shades of the background color. A black border will surround this border.
- The space key now functions as the left mouse button.
  - Escape now cancels the entire menu operation (restoring checked menus, etc...).
  - Menu help has been added, providing real time help text with menu items.
  - Displaying and removing menu panels is now delayed as specified in Menu prefs.
  - Quick keys are now chosen automatically, displayed as underlined characters, and cause the pointer to move to a item when the corresponding key is pressed.
  - The toggle modes have been split in preferences for mouse (RMB) and keyboard (Right-Amiga/Right-Alt)
  - A new toggle mode has been added which selects between toggle and no toggle based on the speed the mouse or keys are released.
  - "Single Style" left mouse button now provides a more intuitive approach when using menu toggle. In this mode, if the left button is pressed on a selectable (non-disabled) menu item, the item is chosen right away. Holding the shift key while clicking the left button allows multiple selection. If the left mouse button is pressed on a menu or item with sub items, the sub item panel is shown right away (bypassing panel delay). Clicking the left button outside the menu area ends the menus.
  - Enhanced NewLook expands on the 8 color GUI idea with connecting panel tabs, a recessed disabled look, and smart pens (shine, shadow, and outline pens are chosen if better pens than the defaults are available).
- ,
- Version 4:
- "
    - Menu Preferences
    - " has been added. NewMenu's command line arguments have been reduced to "PRI/K/N".
  - MIFLG\_HIGHIMAGE is now supported.
  - Menu events are now ignored during screen dragging (I read a flag from IntuitionBase->Flags - truly nasty!)
  - Disabled popup menus on non-newlook screens no longer have invisible text.
  - ActiveMenuVerify now protects its PutMsg with Forbid()/Permit().
  - Backspace now goes to the parent Menu/Item, or cancels if no parent.
  - The keyboard code now checks for menus/items beyond the Intuition limits.
  - Pointer Snap has been added to enable the popup pointer snap.
  - The Workbench icon bug has been fixed (kyarnall).
  - Menus/Items are now placed in order to fix programs that don't put them from top to bottom, i.e. Thinker (mwm).
  - BOOPSI image classes are now supported. Refer to the
    - development
    - section
 for the image states.
  - All menus/items are now checksummed. If the checksum fails, the menus get layed out over again. This saves MANY programs that mess with menus while attached to the window (refer to
    - notes
    - ).
  - MenuLending is now supported (refer to
    - notes
    - ).
  - Mutual excluding (MX) menu items now unpick the items they exclude. In other words, the item be "pop back out" (the recessed border will be removed), and no event will be sent for that item. This fixes programs that don't handle MX items correctly.
  - Radio button images are now used instead of checkmarks for MX items.
-



- GadTools checkbox images are used for the checkmarks.
- Mouse move events no longer get sent to the window while menus are displayed.
- Disabled checkmarks are no longer redrawn when another item's checkmark is changed.
- NewMenu may now be started from Workbench. The PRI tooltype can be used to set the input handler priority.

#### Version 3:

- PopUp menus are supported. The mouse pointer will always start at the top/left corner of the menu (shifting as required).
- All menus are reset when NewMenu starts.
- The "unfreed signal" error has been fixed.
- The internal menu data is no longer stored in the Jazz section. This fixes programs that do "Menu->Flags=..." while the menu is attached. This allowed me to remove the window counter.
- Arrow keys move around the menus, items, and subitems.
- Return and Esc function as accept/cancel.
- The priority of the input handler may be selected.
- Running NewMenu more than once will modify the arguments (except the priority).

#### Version 2:

- Items that are usable (width>0, height>0, MIFLG\_HIGHCOMP or MIFLG\_HIGHBOX, and MIFLG\_ENABLED) are not treated as separator bars, even with empty or --- text.
- Multiple separator bars in sequence are now eliminated.
- String gadgets that are active do not stop menus from taking place. The side effect is the right mouse button won't cancel a menu event. This is the best I can do since I'm a separate beast from Intuition.
- Menus in wierd patterns that cause menus to column off the screen or be all in the first column are now "recolumned".
- The menu preferred font is now used. This is the first font found when ← searching through the menu items.
- GadTools menu functions have been replaced. LayoutMenus() and LayoutMenuItems() are now do nothing functions.
- Startup arguments include  
TOGGLE - allows menu operation to turn on and off with each right button click.  
SCREENSNAP - same as preferences' "Screen Menu Snap".
- MIFLG\_HIGHLIGHT is for "special" labels.
- There is a counter now for programs that SetMenuStrip() the same strip to ← multiple windows
- Menu verify has been added for active windows. "Tricky", but seems to work. I picked 2 seconds for a timeout (this seems to be what Intuition uses).
- Double menu requesters now function. I tested this with "DiskX".

#### Version 1:

- My latest attempt at replacing the menu system. The original NewMenu I wrote replaced the GadTools system only. Although it worked, only menus that used gadtools.library got the 3D look and layout.

## 1.8 Intuition Menu Replacement System - Notes

#### Notes:

- I'm kinda hacking the way Intuition and Layers get locked during menus.
-

- There seems to be no supported way of doing this right now.
- I should ignore items that fall off the right hand edge in topaz 8.
  - Custom CheckMarks and AmigaKeys aren't supported. They probably would look real ugly with the new look anyway.
  - MenuVerify doesn't respect inactive windows.
  - MenuLending sends the menu events to the currently active window instead of the lending window.
  - The pointer can go above the screen while the menus are active (who cares?).
  - There is a slight chance that programs can mess up the menus by modifying the menu structure while the menu strip is attached to the window. The Amiga ROM Kernel Reference states that "direct changes to a menu strip attached to a window may be made only after the menu strip has been removed from the window." (see page 175 of the third edition of the RKM). In other words...  
NO CHANGES SHOULD BE MADE TO A MENU STRIP WHILE IT IS ATTACHED TO A WINDOW. This includes anything in the Menu and MenuItem structures, or any attached IntuiText or Image structures.
  - The localization catalog for "Menu Preferences" is not available. Anyone who wishes to localize the strings can get the catalog info from me.

## 1.9 Intuition Menu Replacement System - Development

The NewMenu system allows a few features not available with Intuition. The following is a list of defines that replace the "intuition/intuition.h" defines.

### WARNING:

Programs using these defines should always check that FindPort(NEWMENUPORTNAME) is non-zero.

### Menu Flags:

MFLG_MENUENABLED	Whether or not this menu is enabled.
MFLG_NOGHOST	No ghosting when disabled.
MFLG_LAYOUT	Let NewMenu layout this menustrip, the items and the subitems. With this flag set, LeftEdge, TopEdge, Width, and Height, are ignored for the Menu, MenuItem, and IntuiText. LeftEdge and TopEdge are ignored for the Image structures.
MFLG_HELPTEXT	Help text is available on this menustrip, items, and subitems

### MenuItem Flags:

MIFLG_CHECKIT	Set to indicate checkmarkable item.
MIFLG_ITEMTEXT	Set if textual, clear if graphical item.
MIFLG_COMMSEQ	Set if there's a command sequence.
MIFLG_MENUTOGGLE	Set for toggling checks (else mut. exclude).
MIFLG_ITEMENABLED	Set if this item is enabled.
MIFLG_SBAR	Separator bar.
MIFLG_NOGHOST	No ghosting while disabled.
MIFLG_NEXTCOLUMN	Place in the next column if possible.
MIFLG_HIGHLIGHT	Special color text.
MIFLG_HIGHFLAGS	The highlight bits of the flags.
MIFLG_HIGHIMAGE	Use the user's "select Image" (images only).
MIFLG_HIGHCOMP	Highlight by complementing the selectbox.

MIFLG\_HIGHBOX Highlight by "boxing" the selectbox (images only).  
 MIFLG\_HIGHNONE Don't highlight.  
 MIFLG\_CHECKED State of the checkmark.

Other Menu Defines:

NEWMENUPORTNAME Port name created by NewMenu (see warning above).  
 IDS\_MENUNORMAL Image state - Normal.  
 IDS\_MENUHIGH Image state - Pointer is over item (not MIFLG\_HIGHNONE).  
 IDS\_MENUDISABLED Image state - Disabled item.  
 IDS\_MENUPICKEDNORMAL Image state - Item has been picked (left button).  
 IDS\_MENUPICKEDHIGH Image state - Pointer is over picked item.

## 1.10 Intuition Menu Replacement System - Tested Software

The following software has been tested with NewMenu 5.0. Feel free to e-mail results from other software not listed here.

Name	Comments	Results
Workbench		OK
WB Prefs		OK
WB IconEdit		OK
WB DiskSalv	MENUHELP	OK
WB Commodities		OK
WB Clock		OK
WB ASL FileReq		OK
WB MultiView		OK
WB AmigaGuide		OK
WB MEmacs	Uses Topaz 8 on WB screen	OK
NewZap		OK
FED		OK
DiskX	DMRequest	OK
ShowPrint	MenuVerify	OK
Quarterback	Changes text after SetMenu	OK
A64		OK
Draw2000	Uses columns and HIGHBOX	OK
PW2	Can create wierd menus	OK
LogicWorks		OK
GadToolsBox		OK
B&P Pro		OK
DeluxeMusic 1	Uses colors as checkmarks	OK
DeluxeMusic 2		OK
Spectrogram		OK
Studiol6	Backwards menus	OK
PSound		OK
Excellence!		OK
Pen Pal	Changes text after SetMenu	OK
Transfer24		OK
PhotonPaint	MenuVerify and custom Glyphs	OK (Glyphs are ignored)
DPaintIII	MenuVerify and * checkmarks	OK
DigiPaint3	* checkmarks	OK
SceneGenerator		OK
TAS	Uses MOUSEMOVE events to draw	OK
Imagine		OK
Shanghai	* checkmarks	OK
AmigaVision		OK

VLT	Can create empty usable items	OK
Diga!	Custom Glyphs	OK (Glyphs are ignored)
Analyze!		OK
Graph Print		OK
Formula!		OK
AmigaMOP		OK
FinalCopy	(msinz)	OK
FinalCopy-II	(msinz)	OK
WShell w/Menus	(msinz)	OK
Thinker	Uses wierd ordering (mwm)	OK
AudioMasterIV	(mwm)	OK
Term 3.3/3.4	(csbailey)	Menus disappear
DOpus V3		OK
DOPus V4	(djunod)	Menus are right justified
TurboText	(vertex)	OK

## 1.11 Intuition Menu Replacement System - Credit

The following people have been very helpful testing NewMenu, along with the former C= engineers who've been instrumental in developing this software.

Michael Sinz (msinz)  
Peter Cherna (pchern)  
David Junod (djunod)  
Martin Taillefer (vertex)  
Kenneth Yarnall (kyarnall)  
Chris Bailey (csbailey)  
Mike Meyer (mwm)  
Doug Keller (dkeller)  
Glyn Gowing (querist)

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